Code violations that are found during inspection are required to be corrected. Permit issuance does not grant approval of a code violation.

This plan is reviewed to **IBC** but the existing building is NOT converted to **IBC**. The construction type listed is **UBC.** Occupancy group is **IBC.**

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

Field Inspection consultation is available upon request. Call 303-739-7420 to request a consultation

THE MEDICAL CENTER OF AURORA

HYBRID OR 9 & GE DISCOVERY IGS 730 INSTALLATION

1501 S. POTOMAC ST., AURORA, CO 80012

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

PROJECT TEAM

OWNER

MEDICAL CENTER OF AURORA
1501 S. POTOMAC STREET
AURORA, COLORADO 80012

CONTACT:
REGINA SHKLYAN
303.873.4895
regina.shklyan@healthonecares.com

ARCHITECT

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219

CONTACT:
TOM THOMPSON
720.989.6084
TomThompsonArchitect@gmail.com

DESIGNER / DRAFTSMAN

THE DESIGN PLOT
PARKER, COLORADO 80138

CONTACT:
THOMAS HECKER
303.565.7282 CELL
303.338.7869
thomas.hecker@healthonecares.com

STRUCTURAL ENGINEER

NEXT LEVEL, INC.
7186 SOUTH FOREST LANE
CENTENNIAL, COLORADO 80122

CONTACT:
MATT NICHOLS
303.260.9455
matt@nlengineers.com

MEP ENGINEER

WMACE ENGINEERING CONSULTANTS
9250 EAST COSTILLA AVENUE, SUITE 220
GREENWOOD VILLAGE, COLORADO 80112

CONTACT:
JON GRANT
303.225.6320 OFFICE
JGRANT@WMACE.COM

EQUIPMENT

GE HEALTHCARE

CONTACT:
TONY SCHRADER
800.568.0329 OFFICE
720.467.4290 CELL
tony.schrader@ge.com

STRYKER COMMUNICATIONS

CONTACT:
MARK BRAYTON
PROJECT MANAGER
515.778.7599 CELL
mark.brayton@stryker.com

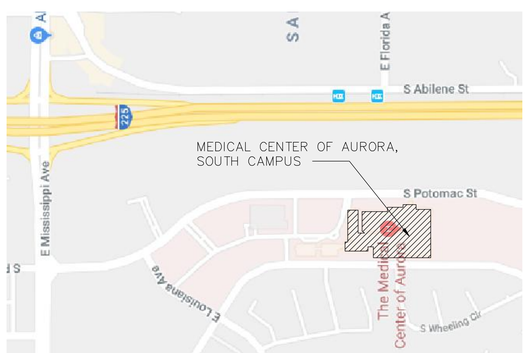
CONTRACTOR

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL LOCAL LAWS, ORDINANCES, RULES, REGULATIONS AND CODES OF THE GOVERNMENT AUTHORITIES HAVING JURISDICTION.
2. DIMENSIONS ARE TO FINISHED FACE OF GYPSUM WALL BOARD OR FACE OF EXISTING BASE BUILDING CONSTRUCTION, UNLESS NOTED OTHERWISE.
3. VERIFY ALL ROUGH-IN DIMENSIONS AND ELECTRICAL REQUIREMENTS FOR EQUIPMENT. COORDINATE OUTLET PLACEMENT WITH CASEWORK.
4. CONTRACTOR SHALL NOTIFY OWNER BEFORE COMMENCING WORK ON ANY ITEMS NOT CLEARLY DEFINED.
5. CHANGES OR DEVIATIONS FROM THE PLANS MADE WITHOUT THE CONSENT OF OWNER ARE UNAUTHORIZED.
6. G.C. TO PROVIDE SEALANT AROUND ALL PLUMBING FIXTURES, PIPING AND EQUIPMENT ABUTTING OR PENETRATING A WALL OR PARTITION. COLOR TO MATCH.
7. INSTALL FIRE-SAFING INSULATION, PUTTY OR FIRE-RATED INTUMESCENT-TYPE SEALANT (INCLUDING PIPE-SLEEVES, DAMMING BOARDS AND ACCESSORIES) AROUND ALL PENETRATIONS THROUGH FIRE-RATED PARTITIONS, FLOORS AND WALLS PER MANUFACTURER'S TESTED INSTALLATION FOR APPLICATION AND REQUIRED RATING.
8. ALL ELECTRICAL AND MECHANICAL DEVICES OR APPLIANCES INSTALLED ON THIS PROJECT SHALL BE UL LISTED.
9. CONTRACTOR SHALL PRESENT A WORKABLE PLAN TO MAINTAIN SECURITY AND SAFETY OF THE OWNER'S BUSINESS FOR AREAS AFFECTED BY CONSTRUCTION DURING THE ENTIRE PHASE OF CONSTRUCTION.
10. CONTRACTOR SHALL MINIMIZE DISRUPTION BY CONSTRUCTION WORK TO THE ONGOING BUSINESSES AND TRAFFIC IN THE VICINITY. CONSTRUCTION AREA SHALL BE ENCLOSED TO KEEP OTHER AREAS FREE OF DUST, DEBRIS & NOISE.
11. EMPLOYEES OR SUBCONTRACTORS OF THE GENERAL CONTRACTOR SHALL REFRAIN FROM PROFANE OR OFFENSIVE LANGUAGE WHILE ON THE PROJECT SITE AND SHALL REFRAIN FROM USING LOUD RADIOS OR OTHER MUSIC PLAYERS WHILE OWNERS AND/OR DESIGN TEAM IS ONSITE.
12. GENERAL CONTRACTOR SHALL COORDINATE APPROPRIATE PARKING ACCOMMODATIONS FOR EMPLOYEE AND SUBCONTRACTOR VEHICLES WITH OWNER PRIOR TO COMMENCEMENT OF WORK.
13. G.C. SHALL COORDINATE APPROPRIATE CONSTRUCTION STAGING AREAS AND TRASH REMOVAL. G.C. WILL BE RESPONSIBLE FOR OBTAINING A DUMPSTER AND TRASH PICKUP FROM JOB SITE ON A REGULAR BASIS.
14. SUBSTITUTIONS OF SPECIFIED PRODUCTS MAY NOT OCCUR UNLESS SPECIFICALLY NOTED ON DRAWINGS THAT "OR EQUAL" IS ACCEPTABLE. OWNER APPROVAL IS REQUIRED FOR ALL SUBSTITUTIONS CONSIDERED BY G.C. TO MEET "OR EQUAL" REQUIREMENTS PRIOR TO BID SUBMISSION/INSTALLATION.
15. APPROVAL OF SHOP DRAWINGS DOES NOT IMPLY APPROVAL OF A SUBSTITUTED COLOR, SIZE OR FUNCTION OF AN ITEM SPECIFIED ON THESE CONTRACT DOCUMENTS UNLESS ATTENTION IS SPECIFICALLY CALLED TO THE REVISION AND APPROVAL IS GIVEN.
16. G.C. SHALL KEEP TOILET FACILITIES ON SITE CLEAN AND USABLE.
17. MULTIPLE SWITCHES SHALL BE GANGED IN SINGLE BOXES WITH COVER PLATE COLORS/ DEVICES TO BE WHITE, SWITCH PLATES SHALL ALIGN.
18. GENERAL CONTRACTOR MUST BE FAMILIAR WITH EXISTING CONDITIONS TO PROPERLY ACCOUNT FOR THE NECESSARY COSTS ASSOCIATED WITH CONSTRUCTION.
19. NO CHANGE ORDERS WILL BE PERMITTED UNLESS OWNER INITIATED OR APPROVED PRIOR TO COMMENCEMENT OF THE CHANGE.
20. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
21. ANTE ROOM SHALL BE CLEAN AT ALL TIMES. WIPE DOWN CARTS IN ANTE ROOM PRIOR TO LEAVING CONTAINMENT.
22. MAINTAIN A CLEAN WORK ENVIRONMENT BY VACUUMING WITH HEPA-FILTERED VACUUMS.
23. CONTRACTOR TO MAINTAIN NEGATIVE ROOM PRESSURE OF MINIMUM -0.03 INCHES WATER GAGE RECORDED BY CONTRACTOR PROVIDED MANOMETER & EXHAUSTED BY HEPA-FILTER NEGATIVE AIR MACHINE.
24. UPON COMPLETION, CONTRACTOR TO DO FINAL CLEAN TO INCLUDE REMOVAL OF ALL DUST AND DEBRIS BY VACUUMING, MOPPING & WIPING DOWN ALL VISUAL SURFACES.

City of Aurora Building Division
Project: ***HYBRID OR 9 RMODEL***
Address: ***1501 S POTOMAC ST***
Occupancy Group: ***I-2***
Construction Type: ***UBC I FR-SPK***
RSN: ***1431550***
Permit: ***20-1751559-LT***

POTOMAC ST.



VICINITY MAP
NTS

NORTH



KEY PLAN
NTS

NORTH

VENDOR LIST

LOW VOLTAGE & DATA

NATIONAL NETWORK SERVICES

ED DYKIEL
SERVICES MANAGER
720.264.1061 OFFICE
ed.dykiel@nnsi.net

FLOORING

RYERSON CONCRETE

KENNY RYERSON
CEO
kryerson@rysonconcrete.com
702.251.0539

SILIKAL MMA

JON KNORR
PROJECT MANAGER
912.230.9324
jonknorr@silikalamerica.com

ELECTRICAL

MC2 ELECTRIC

JULIAN BULL TAYLOR
PROJECT MANAGER
303.453.0284 OFFICE
bull.taylor@mc2electrical.com

FIRE SUPPRESSION

ALL PRO FIRE

CHARLES HARTMAN
PROJECT MANAGER
720.409.9906 OFFICE
charles@allprofire.net

LEAD LINED GLASS

METROPOLITAN GLASS INC.

JIM LYNCH
PROJECT MANAGER
303.853.4527 OFFICE
jlynch@metroglass.com

CODE INFORMATION SUMMARY

PROJECT NAME: HYBRID OR 9 & GE DISCOVERY IGS INSTALLATION

PROJECT ADDRESS: 1501 S. POTOMAC STREET
AURORA, COLORADO 80012

CONSTRUCTION TYPE: 1-A

OCCUPANCY CLASSIFICATION: GROUP I-2 HOSPITAL (IBC)

AFFECTED SQUARE FOOTAGE: 1,241 S.F.

OCCUPANT LOAD FACTOR: 240 SF/OCCUPANT (INPATIENT)

OCCUPANT LOAD: 1,241 S.F./240 = 5 OCCUPANTS

FIRE PROTECTION: EXISTING BUILDING IS FULLY SPRINKLERED. AREAS AFFECTED BY THE WORK UNDER THIS CONTRACT SHALL MAINTAIN FIRE PROTECTION SYSTEM AND BE FULLY SPRINKLERED ON COMPLETION.

EXITS: 10 EXITS ON THE LEVEL 1
8'-0" WIDE EXIT ACCESS CORRIDORS

APPLICABLE CODES:
2015 INTERNATIONAL BUILDING CODE (IBC)
2015 INTERNATIONAL MECHANICAL CODE (IMC)
2015 INTERNAMTIONAL FUEL GAS CODE (IFGC)
2015 INTERNATIONAL FIRE CODE (IFC)
2015 INTERNATIONAL PLUMBING CODE (IPC)
2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2017 NATIONAL ELECTRICAL CODE (NEC)

2009 ICC/ANSI A117.1

CHAPTER 22 BUILDINGS & REGULATIONS
(AURORA BUILDING & ZONING CODES)
CHAPTER 66 FIRE PREVENTION & PROTECTION
(AURORA BUILDING & ZONING CODES)

2012 NFPA 101 LIFE SAFETY CODES

2009 CDPHE LICENSING REQUIREMENTS

CODE NOTES

A. FIRE RATED WALL ASSEMBLIES WILL BE NOT BE MODIFIED.

DRAWING INDEX

GENERAL

G0	COVER SHEET
G100	CONSTRUCTION NOTES
G101	CODE COMPLIANCE PLAN
G102	LEGENDS, SYMBOLS & ABBREV.
G103	SHIELDING PLAN

STRUCTURAL

S1	PROJECT NOTES
S2	FLOOR SLAB PLAN & DETAILS
S3	CEILING MOUNTED EQUIP SUPPORT PLAN & DETAILS

ARCHITECTURAL

AD101	DEMOLITION / TRENCHING PLANS
AD102	CEILING / EQUIP. DEMOLITION PLANS
A101	FLOOR DIM/TAG & FINISHES PLANS
A102	FLOOR EQUIPMENT PLAN
A103	REFLECTED CEILING/EQUIP PLANS
A401	ELEVATIONS
A402	ELEV., SECTIONS & DETAILS

MECH & ELECT

M000	MECHANICAL SYMBOLS & GEN NOTES
M001	MECHANICAL SPECIFICATIONS
M101	HVAC DEMO PLAN
M201	HVAC FLOOR PLAN
M300	MECHANICAL SCHEDULES & DETAILS
P0.0	PLUMBING SYMBOLS, ABBREV., & CODE INFO
P1.0	PLUMBING DEMO & FLOOR PLAN
E000	ELECTRICAL SYMBOLS & GEN NOTES
E001	ELECTRICAL SPECIFICATIONS
E002	ELECTRICAL RISER DIAGRAM
E003	ELECTRICAL DETAILS
ED101	ELECTRICAL DEMO PLAN
E100	ELECTRICAL FLOOR PLAN
E101	ELECTRICAL ENLARGED PLAN

GE SITE SPECIFIC

C1	COVER SHEET
C2	DISCLAIMER - SITE READINESS
A1	GENERAL NOTES
A2	EQUIPMENT LAYOUT
A3	MOVEMENT LAYOUT
A4	SECTION VIEWS
A5	EQUIPMENT DETAILS (1)
A6	EQUIPMENT DETAILS (2)
A7	DELIVERY
S1	STRUCTURAL NOTES
S2	STRUCTURAL LAYOUT
S3	STRUCTURAL DETAILS (1)
S4	STRUCTURAL DETAILS (2)
S5	STRUCTURAL DETAILS (3)
M1	HVAC
E1	ELECTRICAL NOTES
E2	ELECTRICAL LAYOUT
E3	ELECTRICAL ELEVATIONS
E4	ELECTRICAL DETAILS
E5	POWER REQUIREMENTS
E6	INTERCONNECTIONS

STRYKER COMM UNICATIONS

TITLE	COVER SHEET
R-HY 9	EQUIPMENT LAYOUT
P-1	PRE-INSTALL NOTES
P-2	PRE-INSTALL NOTES

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.:	190318
DRAWN BY:	TH, BEPS
CHECKED BY:	TT
SCALE:	N/A
DATE:	01.14.2020
ISSUED FOR:	CONSTRUCTION

REVISIONS:

SHEET TITLE:
COVER SHEET

SHEET NO.:
G.0

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

CONSTRUCTION NOTES

1. GENERAL NOTES:
   A. THROUGH THE USE OF THESE CONSTRUCTION DOCUMENTS, CONTRACTOR ACCEPTS ALL GENERAL CONDITIONS NOTED WITHIN.
   B. CONTRACTOR IS SOLELY RESPONSIBLE FOR REQUESTING ANY NECESSARY CLARIFICATIONS IN THE CONSTRUCTION DOCUMENTS, EXISTING CONDITIONS, AND/OR DESIGN INTENT PRIOR TO PROCEEDING. FAILURE TO DO SO WILL ENSURE THAT ALL COSTS FOR RECTIFICATION SHALL BE INCURRED ON THE PART OF THE CONTRACTOR.
   C. CONTRACTOR SHALL ENSURE THAT ALL WORK AND MATERIALS WITHIN THE PROJECT SCOPE BE IN FULL COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS WITHIN THE GOVERNING JURISDICTION.
   D. CONTRACTOR SHALL WARRANT ALL WORK FOR A PERIOD OF (1) YEAR OR THE CUSTOMARY WARRANTY FOR THE TRADE OR PRODUCT, WHICHEVER IS LONGER.
   E. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE SCOPE AND LIMIT OF ALL REPAIRS AND RECONDITIONING OF EXISTING MATERIALS TO REMAIN IN ORDER TO BLEND WITH NEW MATERIALS AND COMPONENTS. APPROVAL SHALL BE OBTAINED FROM THE OWNER PRIOR TO THE START OF CONSTRUCTION.
   F. CONTRACTOR SHALL SUBMIT ALL REQUESTS FOR SUBSTITUTIONS IN WRITING TO THE OWNER. CONTRACTOR SHALL INCLUDE ANY ADDITIONAL PRODUCT INFORMATION. SUBSTITUTIONS SHALL NOT SACRIFICE QUALITY OR FUNCTION.
   G. REFERENCES:
      1) SEE ALL ENGINEERING AND/OR CONSULTANT DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
   H. DIMENSIONS:
      1) FIELD VERIFY ALL DIMENSIONS AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE DESIGNER. DO NOT SCALE THE DRAWINGS.
      2) ALL WALLS SHOWN TO LOCATED ON A COLUMN CENTERLINE ARE CENTERED ON THE COLUMN CENTERLINE UNLESS NOTED OTHERWISE.
      3) ALL PARTITIONS ENGAGING EXTERIOR AND ATRIUM WINDOW WALLS ARE CENTERED ON THE MULLION.
      4) ALL PARTITIONS THAT EXTEND FROM EXISTING PARTITIONS ARE TO ALIGN WITH EXISTING CONDITIONS.
      5) WHEN UN-DIMENSIONED PARTITIONS OCCUR IN CONJUNCTION WITH DOORS, THE DOOR WIDTH AND DOOR FRAME DETAILS DETERMINE THE LOCATION OF ADJACENT PARTITIONS AND FRAMES.
      6) ALL VERTICAL DIMENSIONS TO BE ABOVE FINISHED FLOOR (AFF), U.N.O.
      7) UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SCALE THE DRAWINGS TO DETERMINE THE DIMENSIONS. DIMENSIONS ARE SHOWN FROM FACE OF DRYWALL OR GYPSUM BOARD CONSTRUCTION, UNLESS OTHERWISE NOTED.
      8) ARCHITECTURAL DIMENSIONS AND DESIGN INTENT TAKE PRECEDENCE OVER MECHANICAL, ELECTRICAL, OR PLUMBING REQUIREMENTS. NOTIFY DESIGNER OF ANY DISCREPANCY BEFORE PROCEEDING WITH CONSTRUCTION.

2. SITE COORDINATION:
   A. THE GENERAL CONTRACTOR AND EACH TRADE IS RESPONSIBLE FOR REVIEWING AND COORDINATING ALL NEW WORK WITH ALL EXISTING CONDITIONS AND WITH ALL OTHER TRADES. NO FIELD WORK ORDERS WILL BE APPROVED FOR ANY CONDITIONS OR CONFLICTS THAT COULD HAVE BEEN ACCOUNTED FOR BY THE BIDDER DURING BID FIELD INSPECTION AND/OR ANY CONDITIONS OR CONFLICTS THAT COULD HAVE BEEN COORDINATED BY THE GENERAL CONTRACTOR AND EACH TRACED AFTER AWARD OF CONTRACT.
   B. THE GENERAL CONTRACTOR SHALL SURVEY ALL LOCATIONS AND CONDITIONS WHERE WORK IS REQUIRED TO BE ACCESSED FROM ADJACENT TENANT OR BASE BUILDING FLOORS OR SPACES (IE., CORING FOR ELECTRICAL DEVISES OR PLUMBING, ETC.) AND COORDINATED/SCHEDULE ALL WORK WITH THE OWNER AND BUILDING MANAGEMENT.
   C. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH ANY CONTRACTORS AND/OR ITEMS/WORK SUPPLIED BY THE OWNER. COORDINATION SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
      1) INCLUDING AND COORDINATING ANY OWNER'S WORK/ISSUES INTO THE PROJECT SCHEDULE.
      2) ESTABLISHING CRITICAL DATES FOR DELIVERY, INSTALLATION, ETC.
      3) PROVIDE/COORDINATE HOISTING, LOADING DOCK, FREIGHT ELEVATOR, AND TEMPORARY SERVICES.
      4) PROVIDE/COORDINATE ANY/ALL BLOCKING, SUPPORT, BRACING, ETC. AS REQUIRED.
   D. WHERE DESIGN INTENT CANNOT BE DETERMINED FROM THE CONSTRUCTION DOCUMENTS, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE DESIGNER PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

3. FIRE PROTECTION:
   I. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FIRE PROOFING REQUIRED BY ANY/ALL CODES, LAWS OR ANY OTHER AUTHORITY HAVING JURISDICTION. FIRE PROOFING SHALL INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:
      1) OPENINGS BETWEEN CONNECTING FLOORS.
      2) WALLS AT RAISED FLOORS OR WHERE SHOWN AND/OR REQUIRED BY CODE.
      3) ALL PIPES, DUCTWORK, SUPPORTS, FRAMING, EQUIPMENT, OR CONDUIT PENETRATING A FIRE-RATED WALL OR FLOOR ASSEMBLY.
      4) FIRE RATED/FULL HEIGHT PARTITIONS AT ADJOINING STRUCTURE TO HAVE FIRE STOPPING.
      5) BEHIND ALL APPLIED WALL FINISHES, PANELS, MILLWORK, ETC.
      6) IN/UNDER ALL APPLIED FLOOR FINISHED, BETWEEN WOOD FLOOR SLEEPERS, ETC.
      7) PATCHING AND/OR ADDING FIRE PROOFING INSULATION TO ALL STRUCTURAL MEMBERS AS REQUIRED FOR BOTH NEW AND EXISTING WORK.
      8) PROVIDE FIRE-RATED CAULK AS REQUIRED AT ALL FIRE-RATED PARTITIONS AS PER U.L. ASSEMBLY.
   B. ALL NON-EXPOSED WOOD, PLYWOOD, WOOD BLOCKING, SHIMMING, FRAMING, ETC. IS TO BE FIRE RETARDANT TREATED.

4. DEMOLITION:
   A. SEE DEMOLITION DRAWINGS PREPARED BY MEP ENGINEERS AND/OR CONSULTANT(S) FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR DEMOLITION OF ELECTRICAL, HEATING, VENTILATING, AIR CONDITIONING PLUMBING VOICE/DATA, ETC., ITEMS AS WELL AS COORDINATION OF DEMOLITION ITEMS.
   B. PRIOR TO DEMOLITION AND BEFORE SUBMISSION OF PROPOSED METHODS AND SEQUENCES OF OPERATIONS, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN FOR REFERENCE ANY EXISTING RECORD DRAWING AND TO CONDUCT ANY APPROPRIATE FIELD TESTING TO DETERMINE THE NATURE OF THE WORK TO BE REMOVED.
   C. DURING DEMOLITION, ALL STRUCTURES, FURNISHINGS, FINISHES, ETC., WHICH ARE NOT TO BE REMOVED OR ARE TO BE SALVAGED, SHOULD BE CAREFULLY PROTECTED FROM DAMAGE. DAMAGE TO THE EXISTING ITEMS OR SURFACES THAT REMAIN SHALL BE REFINISHED, REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, BUILDING MANAGEMENT AND DESIGNER AT NO ADDITIONAL COST.
   D. DURING REMOVAL OF ITEMS INDICATED TO BE SALVAGED, PROTECTION AND CAUTION SHALL BE USED TO ELIMINATE THE POSSIBILITY OF DAMAGE TO SUCH ITEMS. ALL SALVAGED AND/OR REUSABLE ITEMS SALVAGED DURING DEMOLITION OPERATIONS SHALL BE REMOVED AND RETAINED FOR LATER REINSTALLATION. ITEMS INSPECTED AND REJECTED BY THE OWNER OR DESIGNER SHALL BE DISPOSED BY THE GENERAL CONTRACTOR.
   E. FIELD-VERIFY ALL CONDITIONS AND DIMENSIONS AND NOTIFY DESIGNER OF ANY DEVIATION BEFORE PROCEEDING WITH DEMOLITION.
   F. THE GENERAL CONTRACTOR SHALL PROVIDE AS REQUIRED THE MEANS AND METHODS TO MAINTAIN APPROPRIATE VENTILATION, LIGHTING AND SAFETY, ETC. THROUGHOUT THE DEMOLITION PROCESS. GENERAL CONTRACTOR TO VERIFY/COORDINATE WITH BUILDING MANAGEMENT ALL MEANS AND METHODS.
   G. ANY DEMOLITION OR REMOVAL INDICATED IS SHOWN IN GENERAL TO PROVIDE THE EXTENT OF DEMOLITION AND IS NOT TO BE CONSIDERED A RECORD DRAWING OF EXISTING CONDITIONS.
   H. THE GENERAL CONTRACTOR SHALL SUBMIT A SCHEDULE OF METHODS AND OPERATIONS OF DEMOLITION FOR THE OWNER'S REVIEW FOR ALL DEMOLITION AND REMOVAL WORK. INCLUDE IN THE SCHEDULE THE COORDINATION REQUIRED WITH THE BUILDING MANAGEMENT, ALL TRADES FOR SHUTOFF, CAPPING OR REROUTING OF UTILITIES, THE CONSTRUCTION OF ANY TEMPORARY UTILITY LINES, AND PROTECTIVE MEASURES.
   I. SHOULD GENERAL CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER, EXPOSE OR IN ANY WAY BECOME AWARE OF THE PRESENCE OF HAZARDOUS OR QUESTIONABLE MATERIALS ASSOCIATED WITH THIS PROJECT, G.C. SHALL STOP WORK IN THE IMMEDIATE AREA OF DISCOVERY AND NOTIFY OWNER OF ITS FINDINGS. G.C. SHALL NOT DISTURB OR CONTINUE WORK ON OR NEAR MATERIALS IN QUESTION UNTIL RECEIVING FURTHER DIRECTION FROM OWNER.

5. SHOP DRAWINGS
   A. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL CUSTOM FABRICATION AND PHYSICAL SAMPLES OF ALL SPECIFIED FINISH MATERIALS TO THE DESIGNER FOR REVIEW AND APPROVAL BY OWNER AND TENANT.
   B. SUBMITTAL SHALL BE REVIEWED FOR GENERAL COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
   C. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AFFECTING OR AFFECTED BY THIS SUBMITTAL. CONDITIONS TO INCLUDE: DIMENSIONS, CLEARANCES, AND QUANTITIES AND CONDITIONS OF INSTALLATION. CONTRACTOR SHALL INFORM DESIGNER OF ANY CONFLICTS PRIOR TO INITIATING SHOPS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK AND TRADES REQUIRED FOR THE SUBMITTAL.
   D. DESIGNER SHALL CHECK SHOPS AND SCHEDULES FOR CONFORMANCE TO THE INFORMATION GIVEN WITHIN THE CONSTRUCTION DOCUMENTS. DESIGNER ASSUMES NO RESPONSIBILITY FOR DRAWINGS, SCHEDULES, AND/OR SPECIFICATIONS PREPARED BY OTHERS.
   E. DESIGNER SHALL RETURN SUBMITTALS TO THE CONTRACTOR UPON COMPLETION OF REVIEW.

6. BUILDING STANDARDS
   A. ALL COMPONENTS, MATERIALS, FINISHES AND PRODUCTS NOTED AS BUILDING STANDARD HAVE BEEN PRESELECTED OR REQUIRE OWNER APPROVAL TO INSURE THE UNIFORMITY OF ALL TENANT FINISH PROJECTS WITHIN THE BASE BUILDING. THESE INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO: WALL TYPES, CEILING GRID AND TILE, PAINT, CARPET, VINYL TILE, DOORS AND FRAMES, AND HARDWARE.
   B. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THESE BUILDING STANDARDS AND USE THEM AS A BASIS FOR HIS BID.

7. PARTITIONS:
   A. WHEN ACOUSTICAL INSULATION IS SPECIFIED FOR SOUND ATTENUATING PARTITIONS, ANY EXPOSED INSULATION IN A RETURN AIR PLENUM TO BE FACED WITH NON-COMBUSTIBLE MATERIAL, AS PERMITTED BY CODE.
   B. ALL WALLS EXTENDING TO CEILING BUT NOT TO STRUCTURE SHALL HAVE METAL CROSS-BRACING PROVIDED AND INSTALLED BY CONTRACTOR AT 8'-0" O.C.
   C. FLOOR TO STRUCTURE PARTITIONS:
      1) PROVIDE AND INSTALL DRYWALL SLIP AND CONTROL JOINTS OVER ANY BUILDING EXPANSION JOINTS AS RECOMMENDED BY THE BUILDING STRUCTURAL ENGINEER.
      2) PROVIDE FOR PLENUM RETURN AIR FLOW AT ANY FLOOR TO STRUCTURE PARTITION, AS REQUIRED BY THE PROJECT MECHANICAL ENGINEER.
   D. FLOOR TO CEILING ACOUSTICAL PARTITIONS:
      1) PROVIDE AND INSTALL NON-COMBUSTIBLE, FACED, PLENUM RATED ACOUSTICAL BATT INSULATION FOR ANY ACOUSTICAL PARTITIONS NOTED TO RECEIVE ABOVE CEILING LAY-OVER INSULATION OR ANY OTHERWISE EXPOSED ABOVE-CEILING ACOUSTICAL INSULATION.
   E. WALL MOUNTED ACCESSORIES AND MILLWORK:
      1) ANY BLOCKING REQUIRED FOR MILLWORK OR SUPPORT OF WALL MOUNTED ACCESSORIES SHALL BE NON-COMBUSTIBLE SOLID WOOD BLOCKING.
   F. EXTERIOR WINDOW MULLION, EXTERIOR WALL PARTITION AND CONVECTOR CONNECTIONS:
      1) UNLESS NOTED OTHERWISE, CENTER NEW PARTITIONS ON EXTERIOR WINDOW MULLIONS. ALL INTERIOR PARTITIONS SHALL BE CONNECTED TO EXTERIOR WINDOW MULLIONS, INCLUDING ANY GAPS BETWEEN THE WINDOW MULLION AND INTERIOR STRUCTURAL COLUMNS, WHERE PLANS SHOW AN INTERIOR PARTITION CONNECTED TO A STRUCTURAL COLUMN. ALL CONNECTIONS TO THE EXTERIOR WINDOW MULLION SHALL MATCH BUILDING STANDARD OR EXISTING PARTITION CONNECTION TO EXTERIOR WINDOW MULLIONS; HOWEVER, UNDER NO CIRCUMSTANCE, SHALL MECHANICAL CONNECTORS BE USED ON AN EXTERIOR WINDOW MULLION.
      2) PROVIDE A SLIP JOINT AT ALL INTERIOR DRYWALL PARTITION CONNECTIONS TO EXTERIOR WALLS UNLESS OTHERWISE DIRECTED BY THE OWNER.
      3) THE CONTRACTOR SHALL PROVIDE AN ACOUSTICAL BARRIER AT THE INTERSECTION OF THE DRYWALL PARTITION AND THE BASEBOARD HEATING OR CONVECTOR FOR INTERIOR SPACES WITH EXTERIOR WALL BASEBOARD HEATING OR UNIT CONVECTION INTERRUPTED BY DRYWALL PARTITIONS, AS APPROVED BY THE OWNER.
   G. SLAB-ON-GRADE IMPROVEMENTS:
      1) THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND PROVIDING FOR ANY SPECIAL STRUCTURAL CONDITIONS REQUIRING OR AFFECTING THE PROPOSED DESIGN OR METHODS OF CONSTRUCTION FOR THE PROJECT.
      2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF BUILDING ISOLATION, EXPANSION AND CONTROL JOINTS AND FOR PROVIDING SLIP JOINTS, CONTROL AND EXPANSION JOINTS AS MAY BE REQUIRED TO ALLOW FOR FLOOR SLAB OR OTHER DIFFERENTIAL MOVEMENT WITHIN THE BASE BUILDING'S DESIGN ALLOWANCES OR CONDITIONS, AS A MINIMUM.
         a. SLIP JOINTS AT THE INTERSECTION OF ANY INTERIOR PARTITIONS AND EXTERIOR PERIMETER WALLS, STRUCTURE AND OTHER BASE BUILDING ELEMENTS ON FOUNDATIONS AND NOT SUBJECT TO SOILS MOVEMENT.
         b. BASE SLIP JOINTS FOR DRYWALL FURRING SHALL BE PROVIDED IN EXTERIOR PERIMETER WALLS AND OTHER BASE BUILDING ELEMENTS ON FOUNDATIONS NOT SUBJECT TO SOILS MOVEMENT, WHICH ARE ABUTTING FLOOR SLAB CONDITIONS SUBJECT TO STRUCTURAL MOVEMENT. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY REQUIRED PROVISIONS FOR FURRING AT BASE BUILDING DOORS AND WINDOW SUBJECT TO MOVEMENT DUE TO SOILS EXPANSION.
         c. INTERIOR WALL EXPANSION AND/OR CONTROL JOINTS AS REQUIRED OVER SLAB OR STRUCTURAL WALL EXPANSION OR CONTROL JOINTS SUBJECT TO DIFFERENTIAL MOVEMENT.
         d. INDEPENDENTLY SUSPENDED CEILING GRID EDGE ANGLES AT ANY CONDITIONS, WHERE CEILING ABUTS INTERIOR PARTITIONS SUBJECT TO SOILS MOVEMENT. SIMILAR FOR SUSPENDED DRYWALL SOFFITS, FASCIAL AND CEILINGS.
         e. CONTROL OR EXPANSION JOINTS AT ANY INTERSECTIONS OF PARTITIONS AND SUSPENDED FROM STRUCTURE ABOVE. ANY DRYWALL SOFFITS AND FASCIA SHALL BE INDEPENDENTLY SUSPENDED FROM THE STRUCTURE ABOVE AND EXTEND 6" MINIMUM ABOVE ANY ABUTTING SUSPENDED CEILING TREATMENTS.
         f. PROVIDE AND INSTALL CONTROL JOINTS ON BOTH SIDES OF DOOR JAMBS IN ALL INTERIOR PARTITIONS. EXCEPT AS OTHERWISE APPROVED IN WRITING, ALL DOOR FRAMES FOR SLAB ON GRADE CONSTRUCTION SHALL BE RIGID HOLLOW METAL.
   H. DRYWALL CEILING, FASCIAS AND SOFFITS:
      1) EXCEPT AS OTHERWISE NOTED, DRYWALL CEILINGS, FASCIAS AND SOFFITS SHALL BE 5/8" DRYWALL FRAMED OR SUSPENDED AND INSTALLED AS RECOMMENDED BY THE DRYWALL MANUFACTURER FOR SPECIFIC APPLICATION.
   I. DRYWALL PREPARATION AND FINISH:
      1) TAPE ALL DRYWALL JOINTS AND INTERIOR CORNERS, UNLESS OTHERWISE NOTED. TAPE SHALL BE AS RECOMMENDED BY DRYWALL MANUFACTURER AND EMBEDDED IN DRYWALL MANUFACTURER'S RECOMMENDED JOINT COMPOUND AND WIPED WITH A JOINT KNIFE, LEAVING A FILM THAT OF COMPOUND OVER THE TAPE. PROVIDE AND INSTALL BEADED METAL TRIM, AS RECOMMENDED BY THE DRYWALL MANUFACTURER AT ALL CORNERS AND DRYWALL TERMINATIONS.
      2) ALL DRYWALL ACCESSORIES AND/OR FASTENERS SHALL BE COVERED BY THREE (3) SEPARATE COATS OF JOINT COMPOUND. JOINT COMPOUND SHALL BE FINISHED SMOOTH AND FREE OF TOOL MARKS, RIDGES OR OTHER IRREGULARITIES.
      3) PREPARE AND APPLY TO DRYWALL SURFACES WITH AND APPROVED DRYWALL PRIMER PRIOR TO APPLICATION OF THE SPECIFIED FINAL WALL FINISH.

8. DOORS:
   A. DOORS SHALL CONFORM TO AWI CUSTOM GRADE STANDARDS AND BE FREE FROM SCRATCHES OR IRREGULARITIES. DOORS TO BE SOLID CORE FLUSH WOOD FACE MATERIAL CONSTRUCTION WITH SUITE STANDARD FINISH, U.N.O.
   B. FRAMES TO MATCH SUITE STDADARD, U.N.O. FRAMES SHALL BE FREE FROM SCRATCHES OR IRREGULARITIES.
   C. ALL DOORS AND FRAMES SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS AND SHALL BE PLUMBED, ALIGNED, AND SECURED PERMANENTLY WITHIN THE OPENING. CONTRACTOR SHALL REPLACE ANY DOORS, FRAMES, OT TRIM DAMAGED BEYOND SATISFACTORY TOUCH UP AT NO COST TO THE OWNER.
   D. ALL ADJACENT RE-USED AND NEW DOORS TO MATCH IN FINISHED APPEARANCE.
   E. PARTITIONS OVER DOORS SHALL BE CONTINUOUS AND THE SAME AS ADJACENT WALLS WHERE DRYWALL CONTINUES TO STRUCTURE ABOVE, OR ABOVE CEILING, TYPICAL UNLESS NOTED OTHERWISE.
   F. UNLESS NOTED OTHERWISE, ALL HINGE SIDES DOOR FRAMES ADJACENT TO A PERPENDICULAR PARTITION AND/OR ANGLED PARTITION ARE TO BE 4" FROM OUTSIDE EDGE OF DOOR FRAME TO FINISH FACE OF THE PARTITION OR TO MATCH EXISTING CONDITIONS.

9. HARDWARE
   A. ADA COMPLIANT LEVER STYLE HARDWARE SETS AND DELAYED ACTION CLOSERS TO BE APPROVED AT ALL DOORS TO OR FROM PUBLIC AREAS.
   B. HARDWARE SCHEDULE SHALL BE PREPARED AND PROVIDED BY HARDWARE SUPPLIER. SCHEDULE TO INCLUDE TEMPLATES FOR ALL DOOR AND FRAME PENETRATIONS. SUBSTITUTION REQUESTS SHALL BE ACCOMPANIED BY CUT SHEETS.
   C. HARDWARE FINISH TO BE BUILDING OR SUITE STANDARD, U.N.O. DOOR CLOSERS TO MATCH EXISTING. WEATHER/SOUND STRIPPING AND/OR SMOKE SEALS SHALL BE FULL HEIGHT OF BOTH JAMBS AND FULL WIDTH OF HEAD.
   D. HARDWARE MANUFACTURER'S REPRESENTATIVE SHALL INSPECT AND ADJUST ALL DOOR CLOSERS, LOCKS, AND ALL ITEMS REQUIRING ADJUSTMENT PRIOR TO FINAL INSPECTION. ALL KEYING TO BE BY OWNER.
   E. GENERAL CONTRACTOR TO COORDINATE ANY/ALL HARDWARE REQUIRING ELECTRICAL POWER (BOTH HIGH AND LOW VOLTAGE) WITH HARDWARE SUPPLIER/MANUFACTURER, INSTALLER, MILLWORKER, ELECTRICAL AND SECURITY CONTRACTORS.

10. GLAZING:
   A. ALL INTERIOR GLASS TO BE 1/4" THICK, CLEAR FLOAT GLASS, CLEAN AND FREE FROM SCRATCHED AND IRREGULARITIES, UNLESS NOTED OTHERWISE, REQUIRED BY CODE, OR RECOMMENDED BY MANUFACTURER FOR THE INDICATED APPLICATION.
   B. CLEAR FLOAT GLASS TO BE TYPE I, CLASS I; FIRE RATED GLASS SHALL BE TYPE II, CLASS I; LAMINATED SAFETY GLASS SHALL BE (2) LAYERS OF GLASS COMPLIANT WITH CURRENT ANSI SPECIFICATIONS.
   C. FIELD MEASURE ALL FRAME OPENINGS PRIOR TO FABRICATION AND SUPPLY GLASS AS REQUIRED FOR OPENINGS PROVIDED. PROVIDE EDGE CLEARANCES AND TOLERANCES AS RECOMMENDED BY MANUFACTURER.
   D. EXPOSED BUTT JOINTS NOT EXCEED 1/8" WITH FLAT GROUND AND POLISHED EXPOSED EDGES. DO NOT INSTALL WITH EDGE DAMAGE OR DEFECTS.
   E. RAZOR TRIM AND ENSURE THAT ALL EXPOSED SEALANT IS CLEAR AND FREE OF ALL BUBBLES AND IRREGULARITIES. ALL ADDITIONAL PRODUCTS INCLUDING SPACERS, SETTING BLOCKS, AND SEALANT SHALL BE COMPATIBLE WITH ALL ADJACENT SURFACES THAT ARE IN CONTACT WITH SEALANT. REJECTION OF WORK AND INSTALLATION SHALL OCCUR DUE TO ANY SCRATCHING OF GLASS THROUGH NON-COMPLIANCE. ALL COMPONENTS TO BE AS RECOMMENDED BY MANUFACTURER FOR THE INDICATED APPLICATION.
   F. ALL FRAMING MEMBERS TO RECEIVE GLASS INCLUDING CHANNELS SHALL BE CLEANED IMMEDIATELY PRIOR TO RECEIVING GLAZING. CONTRACTOR TO PROTECT GLASS FROM CONTACT WITH CONTAMINATING SUBSTANCES DUE TO CONSTRUCTION, REMOVE ANY CONTAMINANTS BY APPROVED METHODS FROM THE GLASS MANUFACTURER, AND VERIFY THAT NEW MATCHES EXISTING.

11. MILLWORK:
   A. MILLWORK SHALL BE AWI CUSTOM GRADE FLUSH CONSTRUCTION, U.N.O.
   B. SOLID BLOCKING SHALL BE PROVIDED IN PARTITIONS BEHIND ALL WALL MOUNTED MILLWORK, SHELVING, CABINETS, AND WALL STOPS WHERE UNABLE TO ATTACH DIRECTLY TO STUDS.
   C. SHOP DRAWINGS SHALL BE PROVIDED BY CONTRACTOR AND SHALL SHOW THE LOCATION AND FIELD VERIFIED DIMENSIONS OF EACH ITEM IN PLAN AND ELEVATION WITH LARGE SCALE SECTIONS AND DETAILS WITH THE LOCATIONS OF INTERNAL AND FIELD JOINTS, ATTACHMENT DEVICES, PLASTIC LAMINATE OR VENEER JOINTS, AND ANY COMPONENTS AND/OR HARDWARE AS REQUESTED BY OWNER. OWNER SHALL REVIEW SHOP DRAWINGS FOR SIZE AND CONFIGURATION OF MILLWORK. DESIGNER SHALL REVIEW SHOPS FOR CONFORMITY WITH CONSTRUCTION DOCUMENTS. CONTRACTOR ASSUMES ALL RISK ASSOCIATED WITH FABRICATION DONE PRIOR TO SHOP DRAWING APPROVAL.
   D. OWNER REQUESTED SAMPLES OF SPECIFIED STAIN, FINISH, HARDWARE, AND TYPICAL DETAIL TREATMENTS SHALL BE PROVIDED BY CONTRACTOR PRIOR TO FABRICATION.
   E. FIELD VERIFICATION AND REVIEW OF CONTRACT DOCUMENTS FOR ALL PROPOSED AND EXISTING CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. TO INCLUDE APPLICABLE DIMENSIONS AND CLEARANCES ASSOCIATED WITH MILLWORK INSTALLATION. CONTRACTOR SHALL ADVISE THE DESIGNER OF ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS PRIOR TO FABRICATION.
   F. PROVIDE GROMMET HOLES WITH COVER PLATE WHERE INDICATED ON DRAWINGS. EXACT LOCATIONS TO BE SHOWN/NOTED ON MILLWORK SHOP DRAWINGS U.O.N.
   G. GENERAL CONTRACTOR TO COORDINATE LOCATIONS OF ELECTRICAL AND VOICE/DATA DEVICES, PLUMBING, ETC., MOUNTED WITHIN AND/OR ON MILLWORK WITH ELECTRICAL, PLUMBING, AND MILLWORK CONTRACTORS.
   H. PROVIDE FINISHED SCRIBE STRIPS AND FINISHED MILLWORK EDGES TO CREATE A FINISHED REVEAL CONDITION WHERE MILLWORK COUNTERS, CABINETS, ETC/ ABUT ADJACENT CONSTRUCTION, TYPICAL UNLESS NOTED OTHERWISE. ALL EXPOSED REVEAL SURFACES AND EDGES TO HAVE MATCHING COLOR AND FINISH.

12. CEILING:
   A. SEE ENGINEERING AND/OR CONSULTANT(S) DRAWINGS FOR QUANTITY AND LOCATION OF ALL EXIT AND EMERGENCY LIGHTS, THERMOSTATS, SPRINKLER HEADS, LIFE SAFETY SPEAKERS, AND DIFFUSER GRILLES, TYPICAL UNLESS NOTED OTHERWISE.
   B. CONTRACTOR SHALL INSTALL ALL NEW GRID AND TILE PLUMB PER MANUFACTURER'S RECOMMENDATION.
   C. CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGED, DISCOLORED, SCUFFED, SOILED, OR UNMATCHING TILES IN CONTIGUOUS AREAS. CONTRACTOR SHALL GROUP EXISTING MATCHING TILES IN ADJACENT AREAS AS DIRECTED BY OWNER. CONTRACTOR SHALL CUT TILES OVER CENTERS OF PARTITIONS AS REQUIRED TO PRODUCE UNIFORMITY WITHIN ROOMS.
   D. CONTRACTOR SHALL REPLACE EXISTING DAMAGED GRID, TO INCLUDE SCREW HOLES AND/OR IRREGULARITIES, WHERE GRID IS TO REMAIN.
   E. ALL MATERIALS ABOVE CEILING MUST BE NON-COMBUSTIBLE. LOOSE OR UN-FACED INSULATION SHALL NOT BE INSTALLED IN THE RETURN AIR PLENUM.
   F. CONTRACTOR SHALL HAVE MECHANICAL AND ELECTRICAL SUBCONTRACTORS SURVEY EXISTING CONDITIONS AND PROVIDE BIDS ON ANY MODIFICATIONS TO EXISTING SYSTEMS WHICH ARE NECESSARY TO ACCOMMODATE PROPOSED WORK.
   G. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED CONDUITS, PULL BOXES, HOME RUNS, WALL JUNCTION BOXES, PLASTER RINGS, ETC. FOR INSTALLATION OF ALL VOICE/DATE DEVICES, CABLES, SECURITY DEVICES, ETC., TYP. UNLESS NOTED OTHERWISE. GENERAL CONTRACTOR TO COORDINATE.
   H. CONTRACTOR SHALL PROVIDE FIRE PROTECTION SPRINKLER PLANS AS REQUIRED. PLANS SHALL BE PREPARED BY A QUALIFIED ENGINEER FOR APPROVAL BY OWNER.
   I. ALL LIGHT FIXTURES, LIFE SAFETY DEVICES AND SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF A CEILING TILE IN BOTH DIRECTIONS AND SHALL ALSO ALIGN WITH ADJACENT FIXTURES, DEVICES OR HEADS IN A RUN OR ROW, TYPICAL UNLESS NOTED OTHERWISE.
   J. THERE SHALL BE NO LIGHT FIXTURE SUBSTITUTIONS WITHOUT WRITTEN APPROVAL BY DESIGNER AND/OR ELECTRICAL ENGINEER.
   K. ALL EXIT LIGHTS/SIGNS TO MATCH BASE BUILDING UNLESS NOTED OTHERWISE.
   L. ALL DIMENSIONS INDICATING LIGHT SWITCH AND/OR ANY OTHER DEVICE LOCATIONS ARE TO THE CENTER LINE OF SWITCHES AND/OR DEVICES, UNLESS NOTED OTHERWISE.
   M. IF ALLOWED BY CODE, LAW, ETC., PROVIDE ALL LIFE SAFETY DEVICES, SPRINKLER HEADS, ETC. WITH COLOR AND FINISH TO MATCH ADJACENT CONSTRUCTION COLOR AND FINISH.

ELECTRICAL:
   A. ALL ELECTRICAL LIGHTING, OUTLETS, DEVICES AND OTHER EQUIPMENT ARE SHOWN FOR LOCATION PURPOSES ONLY. REFER TO ENGINEERING DOCUMENTS FOR TECHNICAL SPECIFICATIONS AND/OR FOR SCOPE/PERFORMANCE SPECIFICATIONS.
   B. VERIFY WITH THE DESIGNER THE LOCATION OF REMOTE POWER PANELS, DISCONNECT SWITCHES, SPECIAL PANELS, DISCONNECT SWITCHES, ALARMS OR ANY DEVICE EXPOSED TO VIEW AND NOT SHOWN ON THE ARCHITECTURAL DRAWINGS. INSTALLER TO SUBMIT CATALOGUE CUT OF SAME TO THE DESIGNER FOR DESIGN APPROVAL ONLY.
   C. GENERAL CONTRACTOR TO COORDINATE LOCATIONS OF FLOOR PENETRATIONS WITH LAYOUT OF WALL PARTITIONS. ALL CORING LOCATIONS TO BE APPROVED BY THE OWNER, BUILDING ARCHITECT AND BUILDING STRUCTURAL ENGINEER. ALL PLUMBING, SYSTEMS FURNITURE AND FLOOR MONUMENT CORING LOCATIONS TO BE CHALK MARKED AND REVIEWED WITH THE DESIGNER BEFORE CORING. SHOULD ANY CORE INTERFERE WITH EXISTING BUILDING STRUCTURAL, ELECTRICAL, HVAC OR SPRINKLER LINE LOCATIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DESIGNER IMMEDIATELY SO THAT THE CORE CAN BE APPROPRIATELY RELOCATED.
   D. DEVICES MOUNTED IN WALLS SHALL NOT BE INSTALLED BACK TO BACK BUT INSTEAD SHOULD BE STAGGERED BACK TO BACK. BACK AND SIDES OF ALL OUTLET ROUGH-IN BOXES SHALL BE SEALED WITH ACOUSTICAL SEALANT.
   E. GENERAL CONTRACTOR TO COORDINATE LOCATIONS OF ELECTRICAL AND TELEPHONE OUTLETS MOUNTED ABOVE MILLWORK COUNTERS AND WITHIN MILLWORK CABINETS WITH MILLWORK CONTRACTOR.
   F. GENERAL CONTRACTOR TO COORDINATE LOCATION OF WHIPS AND JUNCTION BOXES FOR ELECTRICAL SERVICE AT MILLWORK FOR TASK LIGHT FIXTURES, EQUIPMENT, DEVICES, ETC. WITH ALL OTHER TRADES, TYPICAL. WHIPS MUST NOT BE EXPOSED TO VIEW OR HANG BELOW MILLWORK, ETC.
   G. ALL DEVICES AND/OR SWITCHES ARE TO BE GANGED WITH A SINGLE DEVICE AND/OR SWITCH COVER PLATE WITH ENGRAVED TEXT AS SELECTED BY DESIGNER, TYPICAL UNLESS NOTED OTHERWISE. GENERAL CONTRACTOR TO SUBMIT SH

1ST FLOOR

AFFECTED SQUARE FOOTAGE: 1,241 S.F.

OCCUPANT LOAD FACTOR: 240 SF/OCCUPANT (INPATIENT)

OCCUPANT LOAD: 1,241 S.F./240 = 5 OCCUPANTS

FIRE PROTECTION: EXISTING BUILDING IS FULLY SPRINKLERED. AREAS AFFECTED BY THE WORK UNDER THIS CONTRACT SHALL MAINTAIN FIRE PROTECTION SYSTEM AND BE FULLY SPRINKLERED ON COMPLETION.

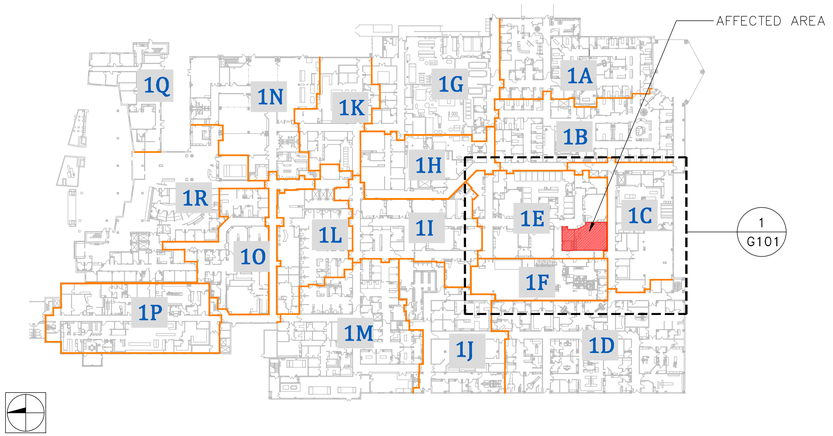
EXITS: 10 EXITS ON THE FIRST LEVEL
8'-0" WIDE EXIT ACCESS CORRIDORS

FIRE RATED WALL ASSEMBLIES WILL BE NOT BE MODIFIED.

CODE INFORMATION SUMMARY

CONSTRUCTION TYPE:	I-A TYPE IBC / I(332) NFPA STEEL STRUCTURE WITH SPRAY FIRE-PROOFING AND CONCRETE STRUCTURE FIVE STORY BUILDING
OCCUPANCY CLASSIFICATION:	IBC - GROUP I-2 HOSPITAL NFPA - HEALTHCARE OCCUPANCY
FULLY SPRINKLED	

SMOKE COMPARTMENT - KEY PLAN



SMOKE COMPARTMENT - KEY PLAN AREAS

1A	11,964 SQ FT	1G	13,464 SQ FT	1M	17,640 SQ FT
1B	13,178 SQ FT	1H	8,719 SQ FT	1N	13,572 SQ FT
1C	10,250 SQ FT	1I	8,334 SQ FT	1O	8,457 SQ FT
1D	19,537 SQ FT	1J	12,003 SQ FT	1P	12,476 SQ FT
1E	12,575 SQ FT	1K	7,434 SQ FT	1Q	3,933 SQ FT
1F	8,732 SQ FT	1L	8,836 SQ FT	1R	16,810 SQ FT

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

SEPARATE FIRE ALARM PERMIT REQUIRED:
Due to the proposed work the general contractor is required to obtain the services of a fire alarm contractor to determine if a separate alarm permit is required. If it is determined that the spacing of the fire alarm devices is not in compliance, then a separate fire alarm permit is required. Approval of the documents is required prior to system installation or any request for inspection. A certificate of occupancy or final approval cannot be issued by the Building Division without this fire protection system. **2015 IFC, Section 105.7.6.**

SEPARATE FIRE SPRINKLER PERMIT REQUIRED:
Due to the proposed work the general contractor is required to obtain the services of a fire sprinkler contractor to determine if a separate sprinkler permit is required. If it is determined that the spacing of the fire sprinkler heads is not in compliance, then a separate fire sprinkler permit is required. Approval of the documents is required prior to system installation or any request for inspection. A certificate of occupancy or final approval cannot be issued by the Building Division without this fire protection system. **2015 IFC, Section 105.7.1.**

LEGEND

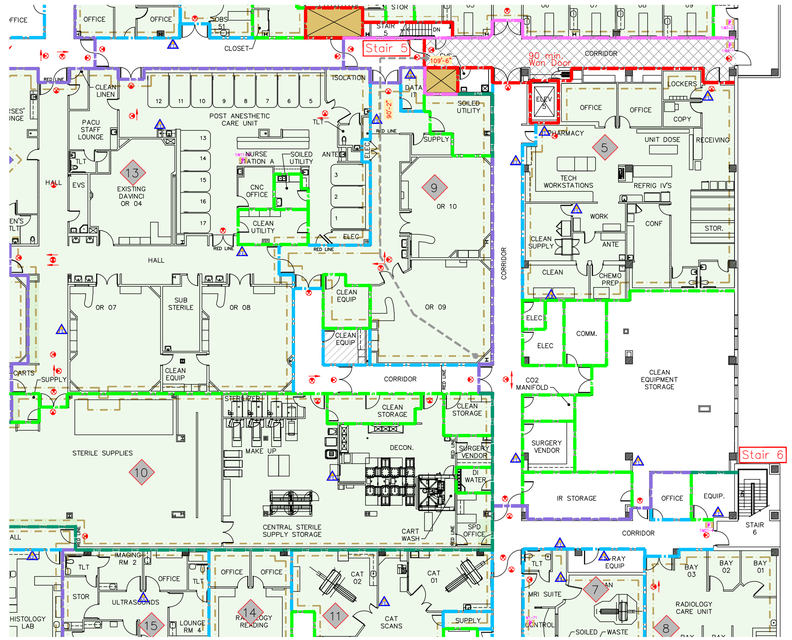
- SMOKE PARTITION
- 1 HOUR SMOKE BARRIER FOR COMPARTMENTATION
- 1 HOUR FIRE BARRIER
- 1 HOUR FIRE/SMOKE BARRIER
- 2 HOUR FIRE BARRIER
- 2 HOUR FIRE/SMOKE BARRIER
- SMOKE COMPARTMENT DESIGNATION
- F - PULL STATION
- EXIT SIGN
- FIRE EXTINGUISHER
- X - NON-SLEEPING SUITE
- SUITE BOUNDARY SEPARATION
- CHUTES & SHAFTS
- EXIT PASSAGEWAY
- UNOBSTRUCTED COURSE & DISTANCE TRAVEL OF THE MOST REMOTE LOCATION TO THE NEAREST AREA OF REFUGE - 90'-2" TO A NEAREST EXIT - 109'-6".

LIFE SAFETY GENERAL NOTES:

A. FIRE ALARM VENDOR TO PROVIDE SMOKE DETECTION WITH TOTAL COVERAGE (COMPLETE) AUTOMATIC SMOKE DETECTION SYSTEM.
B. HVAC SYSTEM WILL BE ISOLATED TO PREVENT CONTAMINATION OF DUCT SYSTEM DURING CONSTRUCTION.
C. NO EGRESS PATHWAY WILL BE OBSTRUCTED DURING CONSTRUCTION.
D. NO ADJACENT TENANT SPACES WILL BE AFFECTED DURING THE COURSE OF CONSTRUCTION.
E. CONTRACTOR TO PERFORM FIRE WATCH THROUGHOUT THE COURSE OF CONSTRUCTION.
F. A CONTRACTOR PROVIDED, CERTIFIED FIRE EXTINGUISHER WILL BE REQUIRED ON SITE, INSIDE CONTAINMENT.
G. EXISTING SHAFTS, STAIRS, AND ELEVATORS ARE TO REMAIN WITHOUT MODIFICATION.
H. FIRE ALARM SYSTEMS WILL INCLUDE NEW PLAN & INSTALLATION FROM LICENSED FIRE ALARM VENDOR.
I. FIRE RATED WALL ASSEMBLIES TO BE UPGRADED AS NEEDED TO MEET CURRENT CODES.

SUITE - AREA KEY NOTES (PARTIAL)

- 5 - 3,446 SQ FT
- 9 - 3,135 SQ FT
- 10 - 5,933 SQ FT
- 13 - 8,682 SQ FT





1 G101 ENLARGED PLAN
SCALE: NTS'

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

DESIGN dp LOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: NTS
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
CODE COMPLIANCE PLAN

SHEET NO.:
G101

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

INTERIOR DESIGN MATERIAL ABBREVIATIONS	
AP	ACRYLIC PANEL
B	WALL BASE
CPT	CARPETING
CST	COLUMN STONE VENEER
CT	CERAMIC TILE
GT	GROUT
GB	GRAB BAR
HD	HARDWARE
LT	LIGHTING
M	MIRROR
MD	MOULDING
OS	ORNAMENTAL SCREEN
PL	PLASTIC LAMINATE
PT	PAINT
QT	QUARRY TILE
RB	RUBBER WALL BASE
S	SOAP DISPENSER (LIQUID)
SC	SEALED CONCRETE
SN	SANITARY NAPKIN
SS	SOLID SURFACING
ST	STONE
SV	VINYL SHEET FLOORING
T	PAPER TOWEL DISPENSER
TP	TOILET PARTITION
TR	TRIM (DOOR)
VCT	VINYL COMPOSITE FLOOR TILE
WC	WALL COVERING
WF	WOOD FLOORING
WST	WOOD STAIN

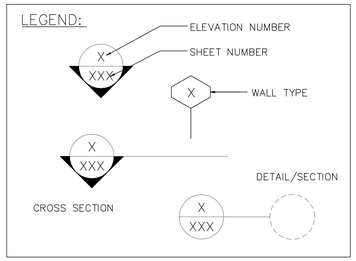
INT. DESIGN MATERIAL DESCRIPTION	
AP-1	ACRYLIC PANEL
B-1	STONE BASE TRIM
B-2	RUBBER BASE TRIM
B-3	WOOD BASE TRIM
CPT-1	CARPET
CPT-4	CARPET BORDER
CT-1	CERAMIC FLOOR TILE
CT-2	CERAMIC WALL TILE
CT-3	CERAMIC WALL TILE ACCENT
CT-5	CERAMIC TILE LINER
DR-1	SOLID CORE WOOD DOOR
DR-2	DOOR
GB-1	GRAB BAR 1.5" X 36"
GB-2	GRAB BAR 1.5" X 42"
GL-1	DECORATIVE GLASS WINDOW
GL-2	CUSTOM ETCHED GLASS WINDOW
GT-1	GROUT
GT-2	GROUT
LT-1	CUSTOM LIGHT SCONCE
LT-2	2 LIGHT BATH BAR
LT-3	ACCENTS LIGHT OVER CENTER TABLES
LT-4	ACCENT PENDANT LIGHTS
LT-5	GOOSENECK LIGHTS
LT-6	EXTERIOR COACH LIGHT
M-1	COUNTER LENGTH MIRROR
M-2	DECORATIVE OVAL MIRROR
MD-1	BASE MOULDING
MD-2	CHAIR RAIL MOULDING
MD-3	CROWN MOULDING
MD-4	DOOR SURROUND TRIM
MD-5	PLINTH MOULDING
MD-6	WOOD TRIM
MD-7	SMALL CROWN MOULDING
OS-1	ORNAMENTAL SCREEN
PL-1	PLASTIC LAMINATE
PL-2	PLASTIC LAMINATE
PT-1	PAINT
PT-2	PAINT
S-1	SOAP DISPENSER
S-2	SOAP DISPENSER
SC	SEALED CONCRETE FLOOR
SF-1	VINYL SHEET FLOORING
SN	SANITARY NAPKIN
SS-1	SOLID SURFACE COUNTERTOP
ST-1	MARBLE
ST-2	MARBLE
ST-3	FAUX CULTURED BRICK
T-1	PAPER TOWEL DISPENSER
W-1	WASTE RECEPTACLE
TP-1	TOILET PARTITIONS
VCT-1	VINYL COMPOSITION FLOOR TILE
VCT-2	VINYL COMPOSITION FLOOR TILE
WC-1	WALL COVERING
WC-2	WALL COVERING
X-1	TOILET PAPER (ROLL) & SEAT COVER DISPENSER
X-2	TOILET PAPER (ROLL) & SEAT COVER DISPENSER

CONSTRUCTION ABBREVIATIONS	
ADA	AMERICANS DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATE
CLG	CEILING
CLR	CLEAR
CONST	CONSTRUCTION
D	DEPTH
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DW	DISH WASHER
EQ	EQUAL
EVS	ENVIRONMENTAL SERVICES
FD	FLOOR DRAIN
FA	FIRE ALARM
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH
GA	GAUGE
GL	GLASS/GLAZING
GYP BD	GYPSUM WALL BOARD
H	HEIGHT
HC	HOLLOW CORE
HM	HOLLOW METAL
HVAC	HEATING, VENTILATION, AIR
IF	INSIDE FACE
IT	INFORMATION TECHNOLOGY
L	LENGTH
MFD	MANUFACTURED
MW	MICROWAVE
MIN	MINIMUM
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OH	OPPOSITE HAND
OCC	OCCUPANT
RO	ROUGH OPENING
REQD	REQUIRED
RM	ROOM
SC	SOLID CORE
STL	STEEL
STS	STAINLESS STEEL SINK
SF	SQUARE FEET
STD	STANDARD
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS OTHERWISE NOTED
VIF	VERIFY IN FIELD
W	WIDTH
WS	WORKSTATION
W/	WITH
WF	WATER FOUNTAIN

FLOOR/CEILING DEMOLITION LEGEND	
	REMOVE CASEWORK, EQUIPMENT & FIXTURES AS INDICATED BY DASHED LINE
	REMOVE EXISTING FLOORING AS INDICATED BY HATCH PATTERN
	REMOVE GYP BRD TO 7'-0" A.F.F. FOR INSTALLATION OF NEW LEAD-LINED DRYWALL
	REMOVE EXISTING POWER OUTLET
	REMOVE EXISTING DATA/PHONE
	REMOVE EXISTING VIDEO CABLE OUTLET
	REMOVE EXISTING 2'x4' LIGHT FIXTURE
AP	REMOVE EXISTING ACCESS PANEL
	REMOVE EXISTING SUPPLY AIR DIFFUSER
	REMOVE EXISTING SUPPLY AIR DIFFUSER
	REMOVE EXISTING RETURN AIR DIFFUSER
	REMOVE & DISPOSE OF EXISTING CAN LIGHT
	EXISTING EQUIPMENT MOUNTS TO BE REMOVED
	REMOVE EXISTING CEILING GRID AND TILE
	REMOVE & DISPOSE EXISTING SOFFIT
	REMOVE CEILING MOUNTED POWER CABLE REEL
C	REMOVE CEILING MOUNTED CAMERA
	REMOVE EXISTING SPRINKLER HEAD
S	REMOVE EXISTING SMOKE ALARM HEAD
	REMOVE EXISTING CEILING MOUNTED SPEAKER
$	REMOVE EXISTING LIGHT SWITCH
	OUT OF SCOPE

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

FLOOR/CEILING LEGEND	
	EXISTING OR NEW POWER OUTLET
	EXISTING OR NEW DATA/PHONE OUTLET
	EXISTING OR NEW LIGHT FIXTURE
AP	EXISTING OR NEW ACCESS PANEL
	EXISTING OR NEW SUPPLY DIFFUSER
C	EXISTING OR NEW CEILING MOUNTED CAMERA
	EXISTING OR NEW SPRINKLER HEAD
S	EXISTING OR NEW SMOKE ALARM HEAD
F	EXISTING OR NEW FIRE ALARM/STROBE
	CEILING HEIGHT DESIGNATION PER AREA
$	EXISTING OR NEW LIGHT SWITCH
	OUT OF SCOPE





DOOR HARDWARE

DC - DOOR CLOSURE HARDWARE

ST - SMOKE TIGHT
HM - HOLLOW METAL
PL - PUSH PLATE
P - PASSAGE
PH - PULL HANDLE
KP - KEYPAD
CR - CARD READER
AS - AUTO SENSOR
CL - CLASSROOM
OF - OFFICE
PB - PUSH BAR
PR - PRIVACY LOCK

CONSTRUCTION LEGEND			
	NEW WALL CONSTRUCTION TYPE		
	EXISTING WALLS		
	EXISTING WALLS TO BE UPGRADED WITH LEAD-LINED DRYWALL TO 7'-0" A.F.F. BACK NEW & EXISTING WALL OUTLETS & SWITCHES WITH LEAD. SEE PHYSICIST REPORT FOR LEAD REQUIREMENTS		
	WP-1 ACROVYN PANEL LOCATIONS	P-2	WALL ACCENT PAINT SELECTION/LOCATION
XX-1	FLOORING TYPE	XX-1	CASEWORK FINISH
			WP-2 CORNER GUARD LOCATIONS

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN LOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
LICENSED ARCHITECT
01.14.20

PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: N/A
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
LEGEND, SYMBOLS ABBREVIATIONS

SHEET NO.:
G102

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

X-RAY SHIELDING DESIGN CALCULATIONS

AND RECOMMENDATIONS

PROJECT:

Hybrid OR 9
The Medical Center of Aurora
1501 S Potomac Ave
Aurora, CO 80012

CONTACT:

Thomas Hecker
The Medical Center of Aurora
Thomas.hecker@healthonecares.com

September 9, 2019
Date

Nathan Busse, M.S., DABR, QE #238
Medical Radiation Physicist

All required shielding is identified on attached layout. Calculations and assumptions are outlined in the report. For further information, please call Nathan Busse at (502) 758-1093 or email at n.busse@campphysics.com

RADIOGRAPHIC SHIELDING

PREFACE

These calculations are done according to, and consistent with recommendations contained in the National Council on Radiation Protection and Measurements (NCRP) Report No. 49 entitled, "Structural Shielding Design and Evaluation for Medical Use of X-rays and Gamma Rays of Energies up to 10 MeV" and Report No. 147 "Structural Shielding Design for Medical Imaging Facilities". The calculations herein are based on a design limit of 20 μGy/week to members of the general public and 100 μGy/week to occupationally exposed workers whose dose is monitored. This is consistent with 10 CFR Part 20, State of Colorado Regulations 6 CCR 1007, and with the International Commission on Radiological Protection Publication No. 26 to keep exposures "As Low As Reasonably Achievable" (ALARA).

FACILITY ASSUMPTIONS

1. Walls are assumed to include two 5/8 inch gypsum sheets, with a 3 inch interspace. Doors are assumed to be 2 inch thick and of solid core construction. Windows are assumed to be glass or acrylic. Windows are assumed to have zero lead equivalence.

2. This portion of the building is slab on grade. The area above the OR room is a mechanical penthouse 13'7" AFF.

3. The occupancy factor (T) is often assumed to be greater than it actually is. This conservative estimate will allow for the occupancy to be upgraded without the need for shielding modifications.

4. Patient workload is assumed to be 20 exams per 40-hour work week.

SHIELDING SPECIFICATIONS

1. Window thickness shall be specified in millimeter lead equivalence (mm Pb e.q.), and for the control area will be at least that of the surrounding wall, 1.19 mm lead (3/64"). Door thicknesses shall be specified in millimeter lead equivalence (mm Pb e.g.). For the double-door entry to the room and the door to the control area, this is 0.79 mm lead (1/32").

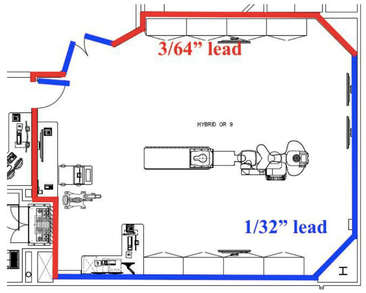
2. The lead shielding shall extend to a height of seven feet. All joints between lead shall be overlapped. All cutouts and openings in the lead will be backed and baffled with lead of at least equivalent thickness.

3. It is important to note that the recommended shielding is the minimum thickness required. However, it may turn out that a thicker lead is less expensive or more easily available. In that case, it is advisable to use the thicker lead as a cost-effective alternative.

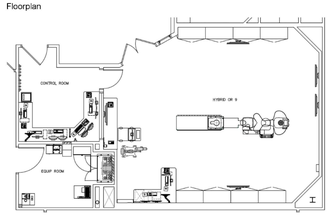
4. See attached color diagram for required lead thicknesses.

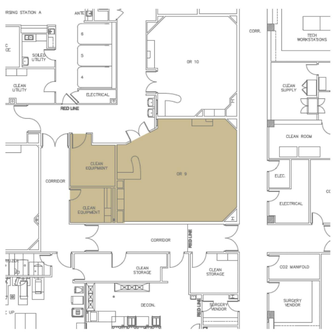
5. No additional shielding is required in the floor or ceiling.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC



Floorplan





		Units	OR 10	Hallway South
Inputs	Location			
	Design Goal	mGy/wk	0.02	0.02
	Occupancy		1	0.2
	Usage Factor		0	0
	Primary/Leakage Distance	m	6	5.5
	Secondary Distance	m	6	5.5
	Primary Source		RR(floor or other)	RR(floor or other)
	Secondary Source		Cardiac Angio	Cardiac Angio
	Side or Forward/Backscatter?		Sidescatter	Sidescatter
	Select Preshielding		Grid/cassette only	Grid/cassette only
	Lead Thickness	mm	1.19	0.79
	Concrete Thickness			
	Expected Weekly Dose	mGy/wk	0.007	0.005
	Fraction of Design Goal		0.367	0.266

Number of patients per week 20

Hallway West	Decon West	Control	Doors	OR Hallway NorEas
0.02	0.02	0.02	0.02	0.02
0.2	1	1	0.125	0.2
0	0	0	0	0
4.5	7	3.8	4	4
4.5	7	3.8	4	4
RR(chest bucky)	RR(chest bucky)	RR(floor or other)	RR(floor or other)	RR(floor or other)
Cardiac Angio	Cardiac Angio	Cardiac Angio	Cardiac Angio	Cardiac Angio
Sidescatter	Sidescatter	Sidescatter	Sidescatter	Sidescatter
Grid/cassette only	Grid/cassette only	Grid/cassette only	Grid/cassette only	Grid/cassette only
0.79	0.79	1.19	0.79	0.79
0.008	0.016	0.018	0.006	0.010
0.397	0.821	0.914	0.314	0.503

bove - Mech Penthouse				
0.02				
0.01				
0				
3.66				
3.66				
RR(floor or other)				
Cardiac Angio				
Sidescatter				
Table or wall bucky				
0.06				
0.018	#VALUE!	#VALUE!	#VALUE!	#VALUE!
0.902	#VALUE!	#VALUE!	#VALUE!	#VALUE!

The Medical Center of Aurora
HealthONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

DESIGN DPLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: N/A
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

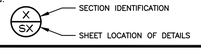
SHEET TITLE:
SHIELDING PLAN

SHEET NO.:
G103

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

GENERAL NOTES

1. Design Standards:
   - A. International Building Code 2015 Edition + Aurora, Colorado Code Amendments
   - B. ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures
   - C. ACI 318-14 Building Code Requirements for Structural Concrete
   - D. ANSI/AISC 360-10 Specification for Structural Steel Buildings
2. Gravity Loads Used in Design:
   - A. Equipment Loads - Per Equipment Supplier
3. Seismic Load Design Criteria:
   - A. Building Risk Category IV
   - B. Site Class D
   - C. Site Spectral Response Accelerations:
     1. Ss = 0.174
     2. S1 = 0.057
     3. SDs = 0.185
     4. SD1 = 0.091
   - D. Seismic Design Category C
4. Concrete:
   - A. Concrete shall be made with stone aggregate (normal-weight concrete) and shall develop the following 28 day compressive strengths (f'c):
     1. Interior slabs on grade pour-back 4,500 psi
   - B. Proportions of materials in concrete mixtures shall be established to provide workability and consistency to permit concrete to be placed readily into forms and around reinforcement, under conditions of placement to be employed, without segregation or excessive bleeding. Contractor shall select an appropriate slump, and admixtures may be used as needed to obtain acceptable results.
   - C. Type I/II portland cement shall be used, unless noted otherwise.
   - D. For concrete mixtures used for floor slabs, the minimum cementitious content shall be 540 lbs. per cubic yard.
   - E. For concrete placed by pumping, the design mixture shall be proportioned to ensure flowability to facilitate pumping. Entrained air may be used to facilitate pumping, subject to the provisions and limits included herein.
   - F. The addition of entrained air is not permitted in mixtures to be used as floor slabs, unless the Contractor can demonstrate to the Architect that such slab mixtures with entrained air will provide an acceptable finish without blisters.
   - G. Verify alkalinity of concrete slab surface, slab vapor transmission and slab flatness/levelness are compatible with floor systems, equipment and adhesives prior to installing flooring.
   - H. No chloride admixtures shall be added to concrete without the approval of the Structural Engineer.
   - I. All reinforcing bars shall be ASTM A615, Grade 60, unless noted otherwise.
   - J. Provide all accessories necessary to support reinforcing at positions shown.
   - K. Concrete Work shall not have joints in a horizontal plane. All construction joints shall be approved by the Structural Engineer.
   - L. New and existing concrete slabs to be tested for the following properties. Coordinate required specifications and mitigation procedures for non-coformance with the equipment & flooring supplier.
     1. Surface Moisture - ASTM F2659
     2. Relative Humidity - ASTM F2170
     3. Calcium Chloride - ASTM F1869
     4. Schmidt Hammer Test - C805
     5. Tensile Strength - ASTM C1583
5. Steel:
   - A. All structural steel shall conform to ASTM A36, except HSS sections which shall conform to ASTM A500 (Grade B).
   - B. Structural steel shall be detailed, fabricated and erected in accordance with the AISC Steel Construction Manual.
   - C. All welders shall have evidence of passing the AWS standard qualification tests, and have a current certification.
   - D. Minimum weld size shall not be less than 3/16" continuous fillet weld, unless noted otherwise.
6. All dimensions on Structural drawings shall be checked against Architectural and equipment supplier's drawings.
7. Structural drawings are not to be scaled to determine dimensional information, to verify or coordinate any information presented, or for any other purpose.
8. Where discrepancies occur between plans, details, general notes and specifications, the more stringent requirement shall govern.
9. Structural Engineer's approval must be secured for all substitutions.
10. Verify all openings through floor, roof and walls with mechanical and electrical contractors.
11. All existing conditions and dimensions shown on the drawings shall be field verified by the contractor. It is the contractor's responsibility to immediately notify the Structural Engineer should any existing condition not be shown, or if any existing condition differs from those indicated on the drawings.
12. Structural Special Inspections shall be provided as specified and in accordance with Chapter 17 of the International Building Code.
13. General Contractor shall inform and update the Structural Engineer as to the status and schedule of Construction, and shall coordinate with the Structural Engineer to schedule periodic site visits to perform visual Structural Observations of completed and ongoing portions of the Work. The Structural Engineer's periodic Observations or presence on site does not replace or preclude the need for any independent third party Structural Special Inspections specified herein.
14. Significant permanent equipment sizes, weights, and locations indicated on the drawings are as provided to the Structural Engineer during design. Changes in sizes, weights, or locations from that indicated must be submitted in writing for review and approval by the Structural Engineer. Required supports or braces not shown on the drawings are the responsibility of the equipment supplier.
15. Post-Installed Anchors:
   - A. The Contractor shall engage the services of a representative of the anchor/adhesive manufacturer to provide on-site installation training for all relevant specified anchor/adhesive types and installation conditions.
   - B. The Contractor shall submit to the Architect and Structural Engineer documented confirmation that all personnel to implement post-installed anchor installations have passed the manufacturer's training course.
   - C. In addition, personnel who will install horizontal or upwardly inclined adhesive anchors in concrete that support sustained tension loads shall be certified by the ACI/CRSI Adhesive Anchor Installer Certification Program.
   - D. Post-installed anchors shall be installed in accordance with all manufacturer's recommendations, specifications and Printed Installation Instructions (MPII), and shall be installed only into dry base materials.
   - E. For expansion anchors installed into concrete, the concrete base material shall reach the required minimum compressive strength (f'c) specified in the drawings prior to anchor installation.
   - F. For adhesive anchors installed into concrete, the concrete base material at the time of anchor installation shall have a minimum age of 21 days, a minimum concrete temperature of 50 degrees F, and shall reach the required minimum compressive strength (f'c) specified in the drawings prior to anchor installation.
   - G. Modular composite mesh sleeves shall be used when anchoring into open cells of CMU or brick masonry.
   - H. The position of existing reinforcing bars in the base material shall be located prior to installing anchors. Existing reinforcing shall be located using a scanner, GPR, X-Ray or other approved methods.
16. Explanation of section designation used:



STRUCTURAL SPECIAL INSPECTIONS

1. General:
   - A. Special Inspections and Tests shall be provided in accordance with Chapter 17 of the International Building Code.
   - B. The Owner or the Owner's Authorized Agent, other than the Contractor, shall employ one or more Approved Agencies to perform Special Inspections and Tests during construction on the types of work outlined herein.
   - C. Approved Agencies shall provide all information as necessary for the Building Official to determine that the Agency meets or exceeds the applicable code-specified requirements.
   - D. Prior to the start of construction, the Approved Agencies shall provide written documentation to the Building Official, Architect and Structural Engineer, demonstrating the competence and relevant experience or training of the Special Inspectors who will perform the Special Inspections and Tests during construction.
   - E. The construction or work for which Special Inspection or Testing is required shall remain accessible and exposed for Special Inspection or Testing purposes until completion of the required Special Inspections or Tests.
   - F. Approved Agencies shall keep records of Special Inspections and Tests and shall submit reports of Special Inspections and Tests conforming to Chapter 17 of the International Building Code to the Building Official, Architect and Structural Engineer. Discrepancies shall be brought to the immediate attention of the Contractor for correction. If not corrected, the discrepancies shall be brought to the attention of the Building Official, Architect and Structural Engineer prior to completion of the applicable phase of the work.
   - G. Special Inspections shall be provided on a Periodic or Continuous basis, as stated or indicated below.
     [P] Periodic Inspection – Part-time or intermittent observation by the Special Inspector of work being performed. Special Inspector shall be present in the area where the work is being performed. Observation of all work (100% visual) shall be made at the completion of the work.
     [C] Continuous Inspection – Full-time observation by the Special Inspector of work being performed. Special Inspector shall be present in the area where the work is being performed. Observation of all work (100% visual) shall be made at the completion of the work.
2. Special Inspection of Steel Construction:
   - A. Welding inspection and welding inspector qualification for structural steel shall be in accordance with AWS D1.1.
   - B. Welding procedure specifications (WPSs), procedure qualification records (PQRs) for WPSs that are not prequalified, welding personnel performance qualification records (WPQRs) and continuity records, as applicable, shall be submitted to the Approved Agency for review and approval.
   - C. Special Inspection of Steel construction shall be provided to verify the following:
     1. Material verification of structural steel [P]
        - a. For structural steel, identification markings to conform to AISC 360
     2. Material verification of weld filler metals [P]
        - a. Identification markings to conform to AWS specification in the construction documents
     3. Inspection of welding of Structural:
        - a. Fit-up of fillet and groove welds [P]
        - b. Control & handling of weld materials [P]
        - c. No welding over cracked tack welds [P]
        - d. Conformance with WPS and welding techniques [P]
        - e. Verify the following for all specified welds: Size, length and location; visual acceptance criteria; arc strikes; repair activities [P]
        - f. Single-pass fillet welds </= 5/16" [P]
     4. Inspection of steel frame and joint details for compliance:
        - a. Details such as bracing and stiffening [P]
        - b. Member locations [P]
        - c. Application of joint details at each connection [P]
3. Special Inspection of Concrete Construction:
   - A. Special Inspection of Concrete construction shall be provided to verify the following:
     1. Inspection of reinforcing steel and placement [P]
        Verify grade, finish, size, bar quantity, location, spacing, cover, surface conditions and supports.
     2. Verify use of approved design mixture for each truck load [P]
     3. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete [C]
     4. Inspection of concrete placement for proper application techniques per ACI 318 26.5.2 [C]
     5. Verify maintenance of specified curing temperature and techniques per ACI 318 26.5.3 [P]
     6. Inspection of formwork for shape, location and dimensions of the concrete member being formed [P]
4. Testing of Structural Concrete:
   - A. Samples for preparing strength test specimens of each concrete mixture placed each day shall be obtained at the point of placement and shall at a minimum be taken as follows: (a) at least once a day (b) at least once or each 100 cu. yd. of concrete (c) at least once for each 5,000 s.f. of surface area for slabs or walls. Sampling of concrete shall be in accordance with ASTM C172.
   - B. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
   - C. Slump: ASTM C143; One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
   - D. Air Content: ASTM C231; Test each composite sample per ASTM C231 (pressure method) for normal-weight concrete or ASTM C173 (volumetric method) for light-weight concrete.
   - E. Temperature: ASTM C1064; Test each composite sample and at 60-minute intervals. Required when air temperature is 40°F and below or 80°F and above.
   - F. Cold Weather Curing: ASTM C1074; Record maximum and minimum concrete temperature during curing period when a daily average air temperature of 40°F or below is expected for 3 successive days during curing period.
   - G. Compression Test Specimens: ASTM C31;
     Cast and cure four (4) 6x12 cylinder specimens or six (6) 4x8 cylinder specimens for each composite sample.
   - H. Compressive Strength Tests: ASTM C39;
     Test one (1) 6x12 or one (1) 4x8 specimen at 7 days
     Test two (2) 6x12 or three (3) 4x8 specimens at 28 days
     Test one (1) 6x12 or two (2) 4x8 specimens at 56 days if 28-day tests do not achieve the specified strength.
     Test specimen acceptance criteria to be in accordance with ACI 318
5. Special Inspection of Post-Installed Anchors, Rods and Reinforcing Steel:
   - A. Manufacturer's Printed Installation Instructions (MPII) and relevant ICC-ES reports shall be used along with the Construction Documents to determine compliance.
   - B. Continuous Inspection of all post-installed anchors shall be required, regardless of whether periodic inspection is permitted by the relevant ICC-ES reports.
   - C. Prior to anchor installation, review and verify Contractor's installation procedure
   - D. Verify that the full cure time as outlined in the General Notes has elapsed prior to application of torque or load to anchor.
   - E. Special Inspection of post-installed anchors shall be provided to verify the following:
     1. Manufacturer, type, diameter, length and finish of anchor [C]
     2. Maximum specified impact wrench torque rating maintained for screw anchors [C]
     3. Acceptability of base material [C]
     4. Inspection during anchor installation [C]
        Verify drilling method, hole dimensions, hole cleaning, anchor and adhesive placement, anchor embedment, wrench torque, edge distances and spacing.
     5. Inspection after installation of attached assembly [C]
        Verify anchor locations, spacing, edge distances, and anchor flush with and perpendicular to the receiving surface. Verify anchor heads have not been cut off and that manufacturer's stamp mark is readable and has not been damaged or obscured.

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

NOTE TO CONTRACTOR

- READ ALL STRUCTURAL NOTES AND COORDINATE WITH THE STRUCTURAL ENGINEER TO RESOLVE ANY QUESTIONS, DISCREPANCIES OR CONFLICTS PRIOR TO COMMENCING WITH CONSTRUCTION OPERATIONS.
- STRUCTURAL ENGINEER'S APPROVAL OF ALL REQUIRED SUBMITTALS INDICATED IN THE GENERAL NOTES SHALL BE PROCURED PRIOR TO FABRICATION OR CONSTRUCTION OF EACH APPLICABLE PORTION OF THE WORK.
- COORDINATE ALL REQUIRED STRUCTURAL SPECIAL INSPECTIONS AND TESTS WITH THE INSPECTION AGENCY ENGAGED BY THE OWNER, AND ENSURE THAT THE STRUCTURAL ENGINEER IS COPIED DIRECTLY AND PROMPTLY ON ALL INSPECTION AND TEST REPORTS.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

The Medical Center of Aurora
HealthONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

nextlevel ENGINEERS & ARCHITECTS
7186 S. Forest Lane
Centennial, CO 80122
303.260.9455
nlengineers.com

dpDESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
01-14-20
PROFESSIONAL ENGINEER

PROJECT NO.: NLI #19-087

DRAWN BY: SAW
CHECKED BY: MWN
SCALE: N/A
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

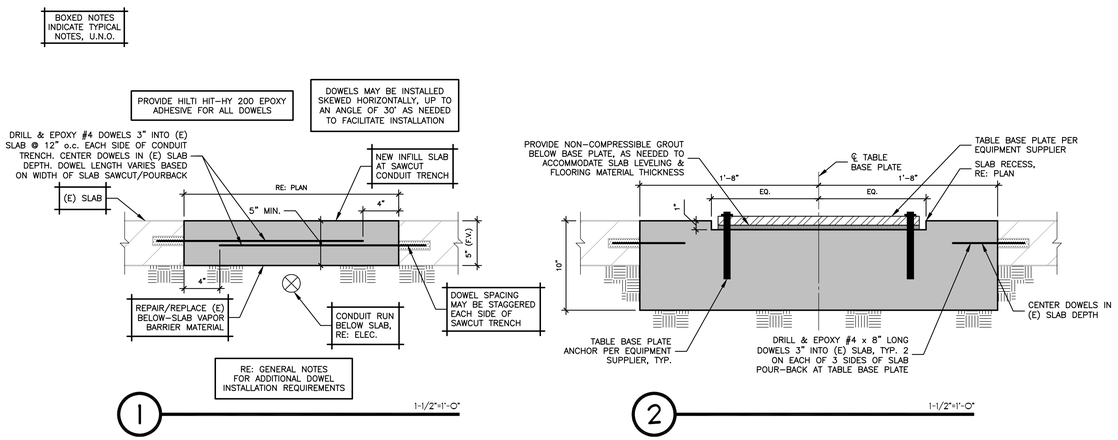
SHEET TITLE:
PROJECT NOTES

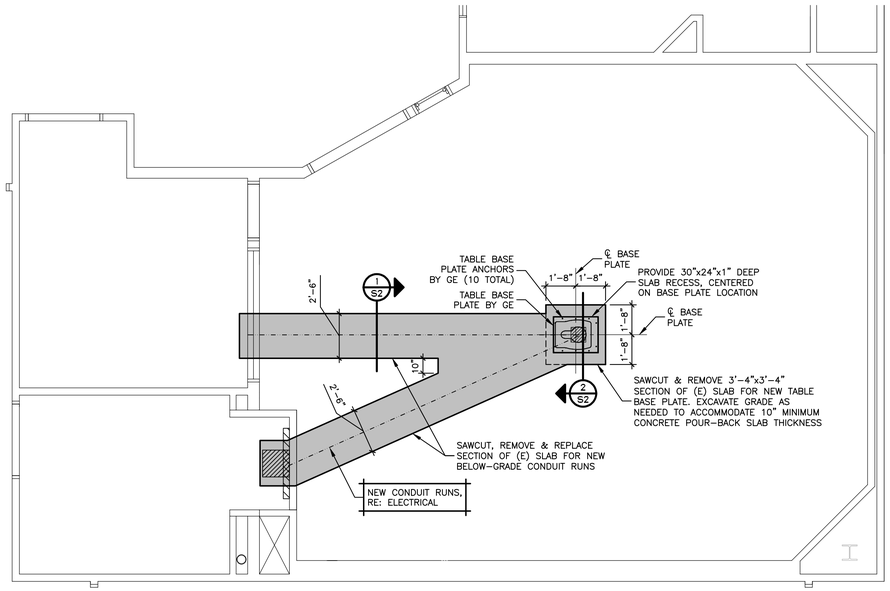
SHEET NO.:
S1

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC





FLOOR SLAB PLAN

1/4"=1'-0"

NOTES:

1. BOXED ⟦ NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. (E) INDICATES EXISTING ITEM OR DIMENSION TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK.
3. TABLE BASE PLATE ANCHOR INSTALLATION SHALL BE AS INDICATED IN THE EQUIPMENT SUPPLIER'S INSTALLATION MANUAL.
4. THE NEW CONCRETE POUR–BACK SHALL ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 psi PRIOR TO INSTALLATION OF THE TABLE BASE PLATE ANCHORS, TO BE VERIFIED BY LABORATORY TESTS OF CURED CYLINDER SAMPLES.
5. EXISTING AND NEWLY PLACED CONCRETE SLAB LEVELNESS AND FLATNESS SHALL BE VERIFIED TO MEET THE MINIMUM REQUIREMENTS SPECIFIED IN THE EQUIPMENT SUPPLIER'S INSTALLATION MANUAL.
6. RE: ARCHITECTURAL, ELECTRICAL AND EQUIPMENT SUPPLIER'S DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING DIMENSIONS AND INSTALLATION REQUIREMENTS.

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

nextlevel PERFORMANCE ENGINEERS
7186 S. Forest Lane
Centennial, CO 80122
303.260.9455
nlengineers.com

DESIGN PLOT
dpteam@thedesignplot.com
(303) 565–7282

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
01-14-20
PROFESSIONAL ENGINEER

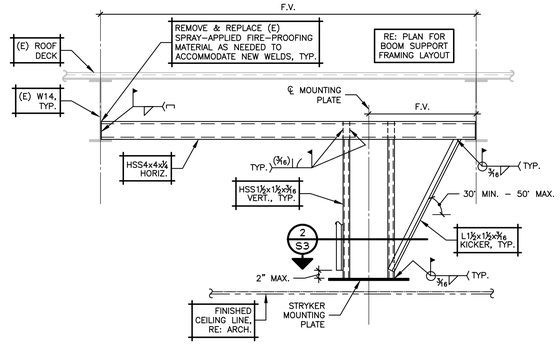
PROJECT NO.: NLI #19–087

DRAWN BY: SAW
CHECKED BY: MWN
SCALE: N/A
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

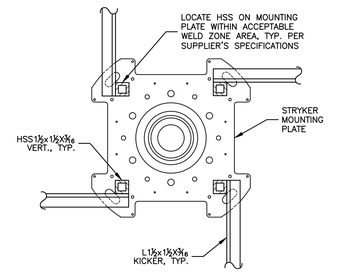
SHEET TITLE:
FLOOR SLAB PLAN & DETAILS

SHEET NO.:
S2

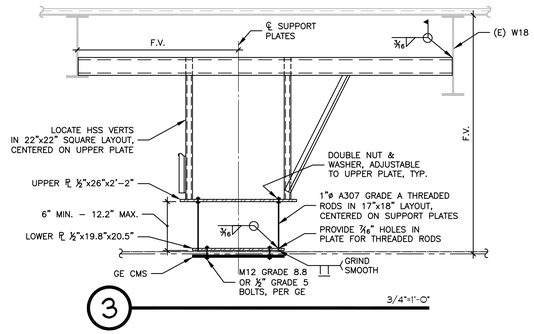
BOXED NOTES INDICATE TYPICAL NOTES, U.N.O.



1 3/4"=1'-0"



2 PLAN DETAIL 1-1/2"=1'-0"

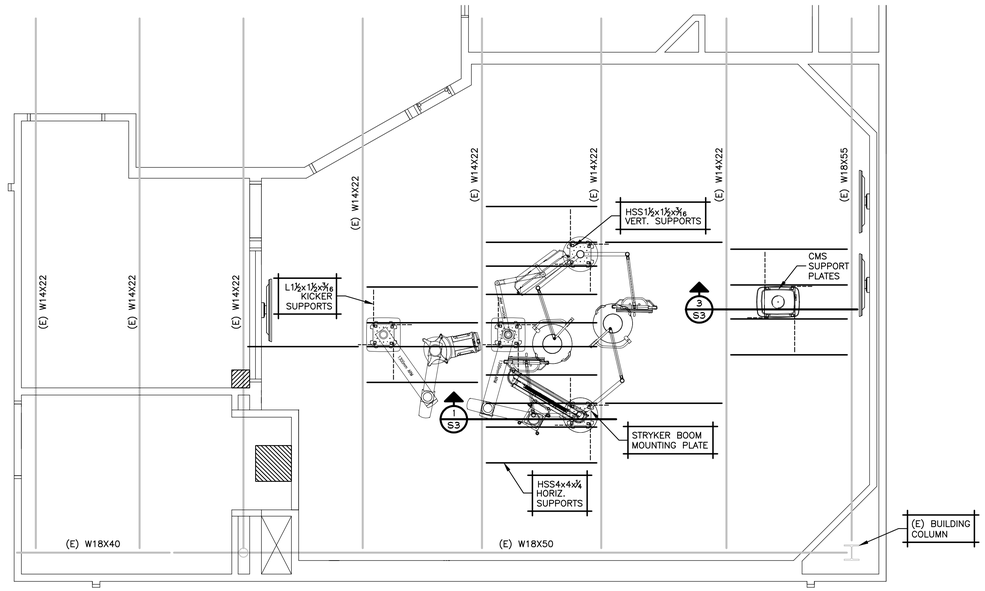


3 3/4"=1'-0"

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

SEE STRUCTURAL CALCS FOR ADDITIONAL INFO



CEILING EQUIPMENT SUPPORT PLAN

1/4"=1'-0"

NOTES:
1. BOXED ⟦ NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. (E) INDICATES EXISTING ITEM OR DIMENSION TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO BEGINNING WORK.
3. ALL EQUIPMENT INSTALLATIONS SHALL BE AS INDICATED IN THE SUPPLIER'S INSTALLATION MANUAL.
4. RE: ARCHITECTURAL, ELECTRICAL AND EQUIPMENT SUPPLIER'S DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING DIMENSIONS AND INSTALLATION REQUIREMENTS.

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

nextlevel PERFORMANCE ENGINEERS
7186 S. Forest Lane
Centennial, CO 80122
303.260.9455
nlengineers.com

DESIGN LOT
dpteam@thedesignplot.com
(303) 565-7282

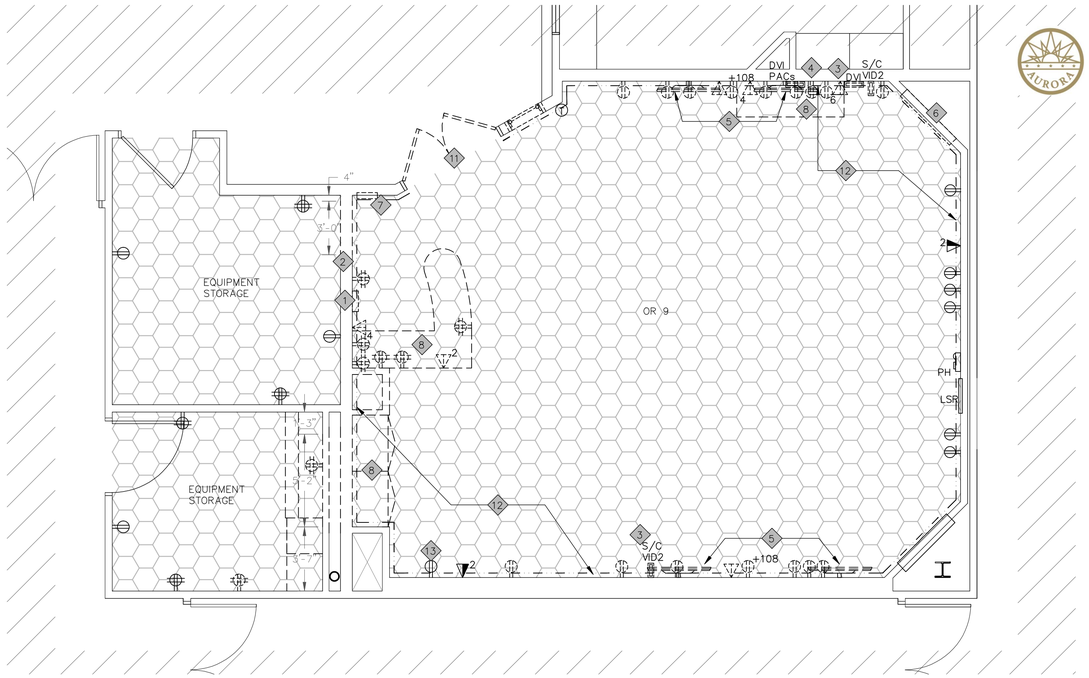
COLORADO LICENSED
MATTHEW W. NICHOLS
36279
01-14-20
PROFESSIONAL ENGINEER

PROJECT NO.: NLI #19-087

DRAWN BY: SAW
CHECKED BY: MWN
SCALE: N/A
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

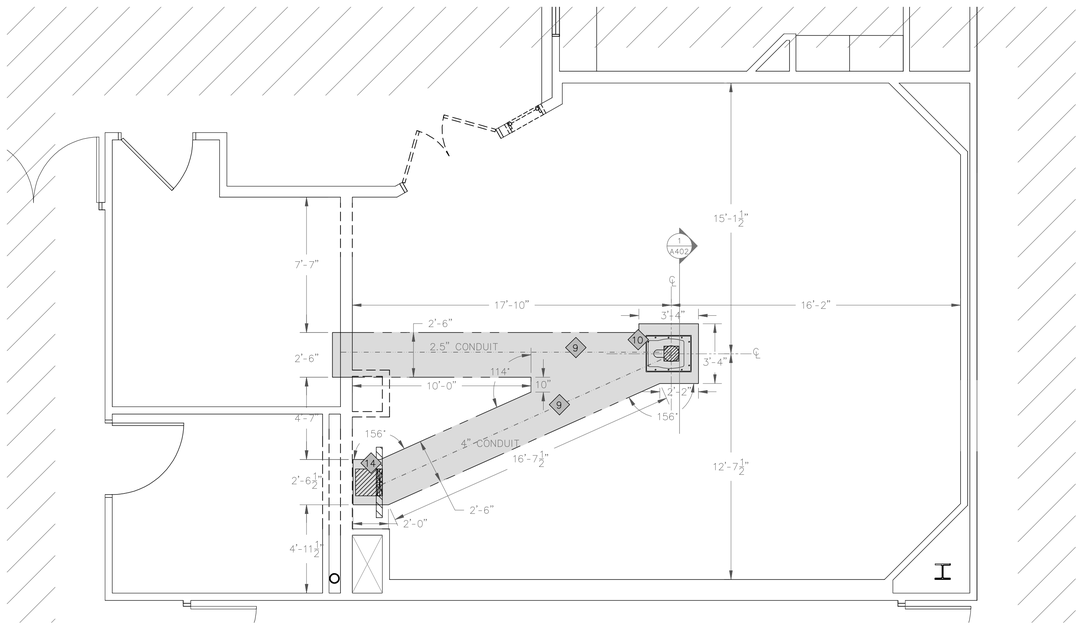
SHEET TITLE:
CEILING EQUIPMENT SUPPORT PLAN & DETAILS

SHEET NO.:
S3



NORTH

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



NORTH

CONDUIT/TRENCH PLAN
SCALE: 1/4"=1'-0"

DEMOLITION LEGEND	
	REMOVE CASEWORK, EQUIPMENT & FIXTURES AS INDICATED BY DASHED LINE
	EXISTING ELEMENT TO REMAIN
	REMOVE EXISTING FLOORING AS INDICATED BY HATCH PATTERN, PREP SURFACE FOR NEW FLOORING
	REMOVE EXISTING GYP BRD ALONG ROOM PERIMETER TO 7'-0" A.F.F. FOR INSTALLATION OF NEW LEAD-LINED DRYWALL
	EXISTING POWER OUTLET LOCATION TO REMAIN
	REMOVE EXISTING POWER OUTLET; SAFE-OFF AND/OR PREP FOR NEW LOCATION
	EXISTING DATA/PHONE OUTLET TO REMAIN
	REMOVE EXISTING DATA/PHONE; TERMINATE, SAFE-OFF AND/OR PREP FOR NEW LOCATION
	REMOVE EXISTING VIDEO CABLE OUTLET PRESERVE CONNECTIONS TO BE RELOCATED IN NEW PLAN
	OUT OF SCOPE

GENERAL NOTES	
A.	CONTRACTOR TO PREPARE FOR LEVEL IV INFECTION CONTROL & CONTAINMENT WITH ALL REQUIREMENTS DESCRIBED IN THE INFECTION CONTROL RISK ASSESSMENT.
B.	ELECTRICAL DEMOLITION IS FOR REFERENCE ONLY. REFER TO ENGINEERED ELECTRICAL FOR DEMOLITION PLANS.
C.	CONTRACTOR TO FIELD VERIFY ALL ASPECTS OF THE SITE & DIMENSIONS BEFORE CONSTRUCTION COMMENCES.
D.	REPLACE OR REPAIR ANY EXISTING SURFACES WHICH ARE DAMAGED DURING DEMOLITION (I.E. - CEILING GRID, CEILING TILE, WALL COVERING, FLOOR COVERINGS, ETC.).
E.	REMOVE EXISTING FLOORING, ADHESIVE AND MASTIC AT ALL LOCATIONS WHERE INDICATED BY HATCH PATTERN. PATCH & PREP SUBFLOOR TO MEET MANUFACTURER'S REQUIREMENTS FOR NEW FLOORING MATERIALS. FLOAT SUBFLOOR AS NECESSARY TO ALIGN FINISHED SURFACE BETWEEN NEW FLOORING AND EXISTING TO REMAIN.
F.	NOTIFY PROJECT MANAGER IMMEDIATELY IF THE REMOVAL OF MECHANICAL, ELECTRICAL, PLUMBING SYSTEMS OR COMPONENTS WILL ADVERSELY AFFECT THE OPERATION OF MEP SYSTEMS OUTSIDE THE LIMIT OF DEMOLITION.
G.	WHERE WALL OUTLETS ARE SHOWN TO BE REMOVED, SAFE-OFF CONNECTION AS REQUIRED BY CODE. PATCH & PREP WALL FOR PAINT.
H.	EXISTING ACROVYN WALL PANELS TO REMAIN WHERE UNAFFECTED BY CONSTRUCTION. REMOVE PANELS WHERE NEEDED & FOR INSTALLATION OF NEW CABINETS/CASEWORK.
I.	ALL EXISTING EQUIPMENT TO BE REMOVED BY HOSPITAL SUPPLIED VENDOR. CONTRACTOR TO PROVIDE SUPPORT AS NEEDED & INCLUDE ALL ELECTRICAL DEMOLITION IN SCOPE OF WORK.
J.	REFER TO STRUCTURAL DRAWINGS FOR REMOVAL & REPLACEMENT OF CONC. FLOOR SLAB.
K.	TRENCH LOCATIONS & DIMENSIONS SHOWN DOWN BELOW CONCRETE TO DEPTH REQUIRED FOR CONDUIT BEND RADIUS DETERMINED BY ELECTRICIAN. RE: STRUCTURAL FOR DETAILS.

KEY NOTES	
1	REMOVE & SALVAGE EXISTING WALL MOUNTED STRYKER LIGHT & CAMERA CONTROL PANEL FOR RELOCATION. RE: FLOOR PLAN, ELECT.
2	REMOVE & SALVAGE EXISTING SURGICAL LIGHT CONTROL PANEL FOR RELOCATION, RE: ELECT LIGHTING PLAN
3	REMOVE & SALVAGE EXISTING S-VID/COMP SINGLE GANG WALL PLATE FOR RELOCATION, RE: ELECT
4	REMOVE & SALVAGE EXISTING COPPER DVI SINGLE GANG WALL PLATE FOR RELOCATION, RE: ELECT
5	REMOVE WALL MOUNTED MONITORS, SALVAGE FOR RELOCATION IN NEW PLAN, RE: ELEVATIONS
6	REMOVE & DISPOSE OF WALL MOUNTED BACK-LIT VIEW BOX. INFILL WALL OPENING W/ LEAD-LINED GYP. BRD. & PREP FOR PAINT.
7	REMOVE & SALVAGE ALL EXISTING NURSE CALL, CONTROLS AND INTERCOM FOR RELOCATION IN NEW PLAN.
8	REMOVE AND DISPOSE OF EXISTING MILLWORK.
9	BELOW FLOOR CONDUIT RUN. COORDINATE W/ ELECTRICIAN FOR PROPER BEND RADIUS ON CONDUITS TO CONFIRM CABLE LENGTHS ARE SUITABLE. INFILL W/ CONCRETE TO SMOOTH, LEVEL FINISH FOR NEW FLOORING.
10	TABLE ANCHORING & BASE PLATE. CONFIRM W/ GE SITE SPECIFIC DRAWINGS FOR MOUNTING LOCATION. BASE PLATE TO BE MOUNTED DIRECTLY TO CONCRETE W/ T.O. PLATE INSTALLED 7mm ABOVE LEVEL CONCRETE FLOOR TO ALLOW FOR THICKNESS OF RPM FLOORING.
11	SALVAGE ALL EXISTING DOOR HARDWARE & OPERATORS TO BE INSTALLED ON NEW LEAD-LINED DOORS. PROVIDE NEW CONTINUOUS HINGES SPECIFIC TO THE WEIGHT OF NEW DOORS.
12	REMOVE EXISTING GYP BRD ALONG ROOM PERIMETER TO 7'-0" A.F.F. FOR INSTALLATION OF NEW LEAD-LINED DRYWALL AS NOTED BY LEGEND'S LINE TYPE.
13	RELOCATE EXISTING OUTLET LOWER IF IT CONFLICTS W/ NEW OPTI-FLEX CABINET. OUTLET WILL SERVE THE CABINET.
14	LOCATION FOR NEW WALL & C-FRT CABINETS.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

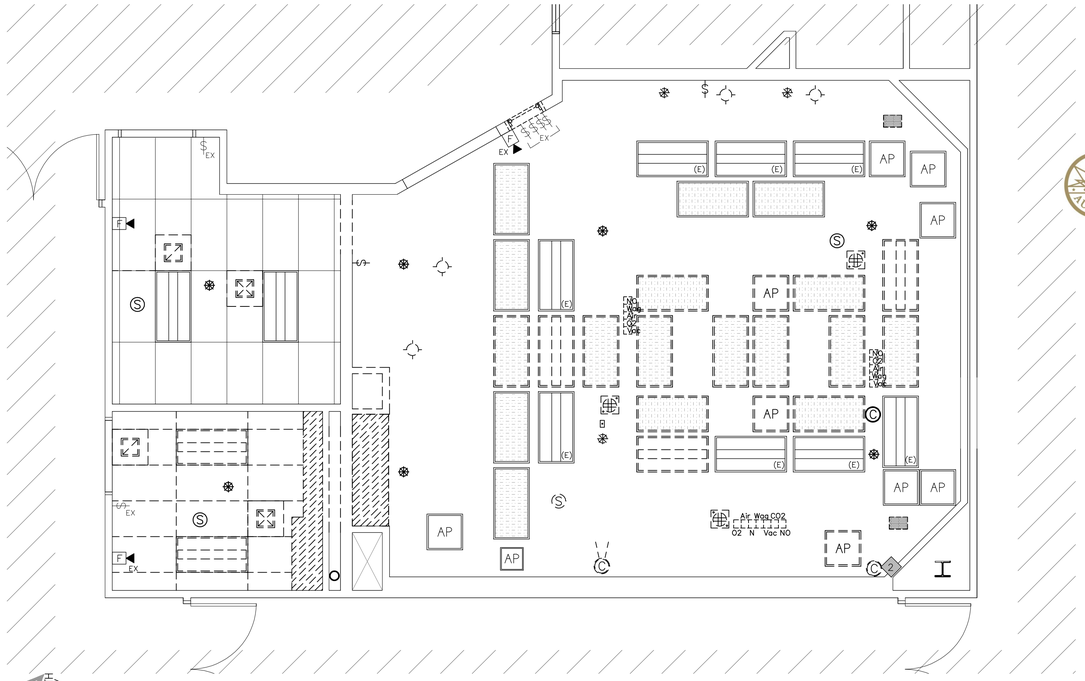
STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.:	190318
DRAWN BY:	TH, BEPS
CHECKED BY:	TT
SCALE:	1/4" = 1'
DATE:	01.14.2020
ISSUED FOR:	CONSTRUCTION
REVISIONS:	

SHEET TITLE:
DEMOLITION PLAN
CONDUIT TRENCH PLAN

SHEET NO.:
AD101

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

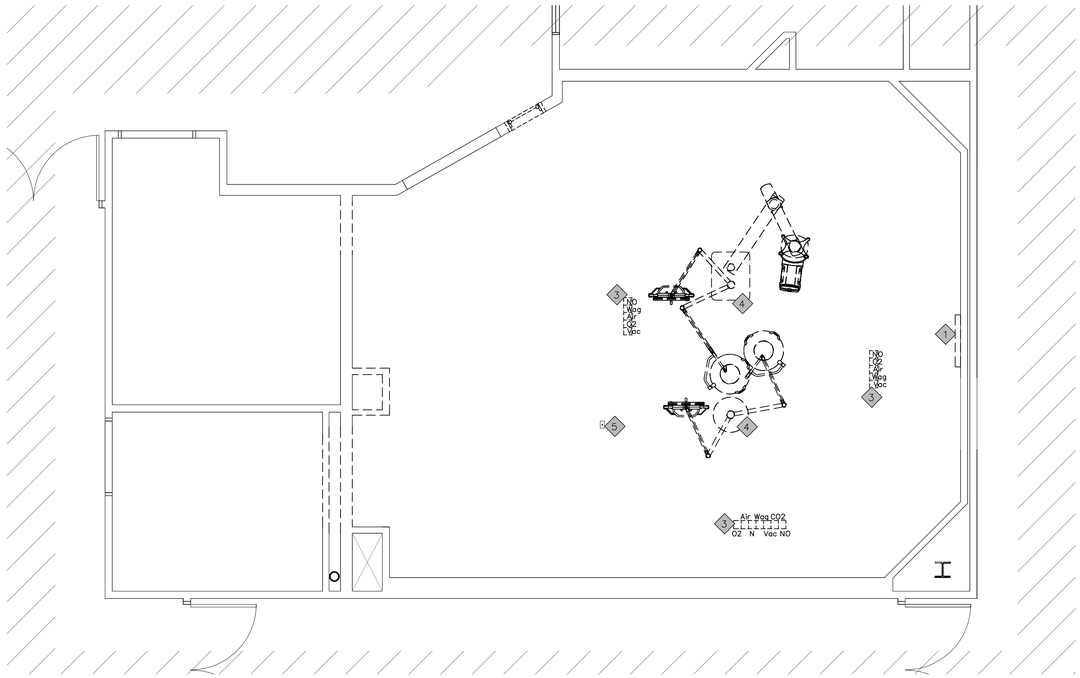


NORTH

CEILING DEMOLITION PLAN
SCALE: 1/4"=1'-0"

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

CEILING DEMOLITION LEGEND	
	REMOVE EXISTING 2'x4' LIGHT FIXTURE, SALVAGE FOR RELOCATION
(E)	EXISTING LIGHT FIXTURE TO REMAIN
AP	REMOVE EXISTING ACCESS PANEL, SALVAGE FOR RELOCATION
AP	EXISTING ACCESS PANEL TO REMAIN
	REMOVE EXISTING SUPPLY AIR DIFFUSER, SALVAGE FOR RELOCATION
	EXISTING SUPPLY DIFFUSER TO REMAIN
	REMOVE EXISTING SUPPLY AIR DIFFUSER, SALVAGE FOR RELOCATION
	REMOVE EXISTING RETURN AIR DIFFUSER, SALVAGE FOR RELOCATION
	REMOVE & DISPOSE OF EXISTING CAN LIGHT
	EXISTING EQUIPMENT MOUNTS TO BE REMOVED. RELOCATE OR ABANDON PER STRYKER DIRECTION.
	REMOVE & DISPOSE OF EXISTING CEILING GRID AND TILE
	REMOVE & DISPOSE EXISTING SOFFIT
	REMOVE CEILING MOUNTED POWER CABLE REEL, SALVAGE FOR RELOCATION. RE: ELECTRICAL
C	REMOVE CEILING MOUNTED CAMERA, SALVAGE FOR RELOCATION. RE: ELECTRICAL
C	EXISTING CEILING MOUNTED CAMERA TO REMAIN
	REMOVE EXISTING SPRINKLER HEAD FOR RELOCATION IN NEW CEILING PLAN
	EXISTING SPRINKLER HEAD TO REMAIN
S	REMOVE EXISTING SMOKE ALARM HEAD FOR RELOCATION IN NEW CEILING PLAN
S	EXISTING SMOKE ALARM HEAD TO REMAIN
	REMOVE EXISTING CEILING MOUNTED SPEAKER, SALVAGE FOR RELOCATION
F	EXISTING FIRE ALARM/STROBE TO REMAIN
	CEILING HEIGHT DESIGNATION PER AREA
$	EXISTING LIGHT SWITCH LOCATION TO REMAIN
$	REMOVE EXISTING LIGHT SWITCH, TERMINATE & SAFE-OFF CONNECTION.
	OUT OF SCOPE



NORTH

CEILING EQUIP DEMO
SCALE: 1/4"=1'-0"

DEMOLITION GENERAL NOTES	
A.	REMOVE EXISTING GYP. BRD. CEILING AREAS AS NEEDED FOR NEW CONDUIT, POWER AND STRUCTURAL ELEMENTS.
B.	EXISTING CEILING HEIGHTS IN OR & CONTROL TO REMAIN.
C.	DISCONNECT EXISTING CEILING MOUNTED EQUIPMENT ELECTRICAL FOR REMOVAL BY VENDOR.
D.	SALVAGE ALL EQUIPMENT & FIXTURES FOR EITHER RELOCATION OR FOR FACILITIES.
E.	REFER TO ENGINEERED MEP PLANS FOR DEMOLITION OF UTILITIES.

KEY NOTES	
1	REMOVE EXISTING FLUSH WALL MOUNTED CLOCK & TIMER W/ BACK BOX, SALVAGE FOR OWNER. PATCH & PAINT WALL.
2	SECURITY VENDOR TO REMOVE & SALVAGE EXISTING ROOM STATUS CAMERA TO NEW LOCATION IN CEILING PLAN, RE: RCP
3	REMOVE EXISTING CEILING MOUNTED MED GAS OUTLETS, SALVAGE MATERIALS & PRESERVE LINES FOR RELOCATION. RE: MED GAS PLAN
4	REMOVE CEILING MOUNTED BOOMS & ARMS WITH MOUNTING PLATES AND ASSOCIATED POWER. SALVAGE FOR OWNER OR RELOCATION IN NEW CEILING, RE: STRYKER & STRUCTURAL PLANS
5	RELOCATE EXISTING DVI OUTLET BOX TO LOCATION SHOWN IN NEW CEILING PLAN. RE: RCP & STRYKER PLANS

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

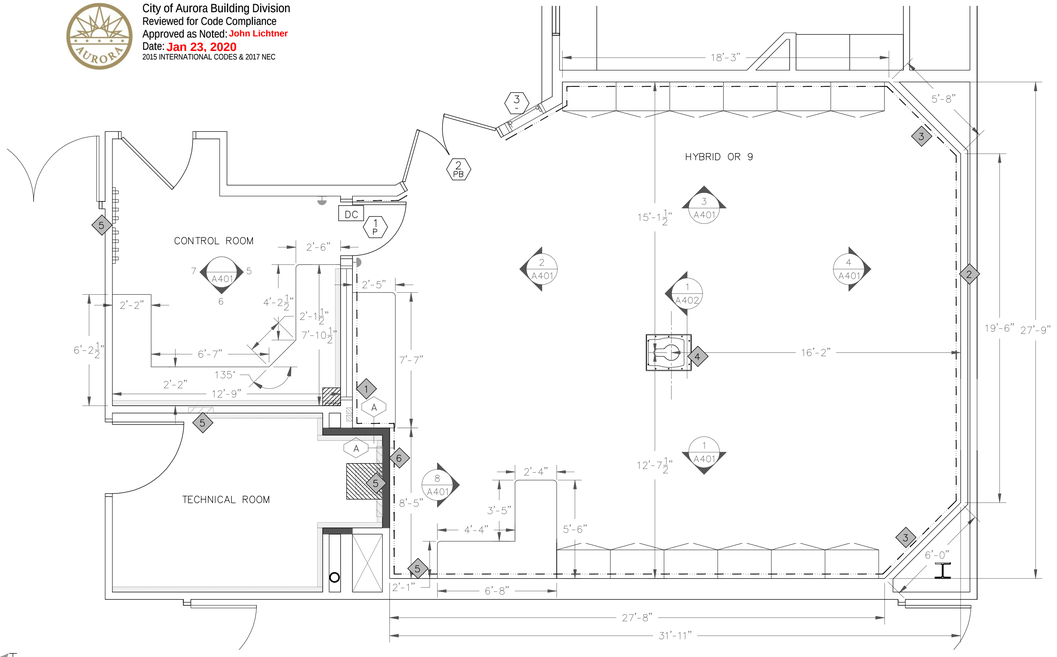
DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: 1/4" = 1'
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
CEILING DEMOLITION PLAN

SHEET NO.:
AD102

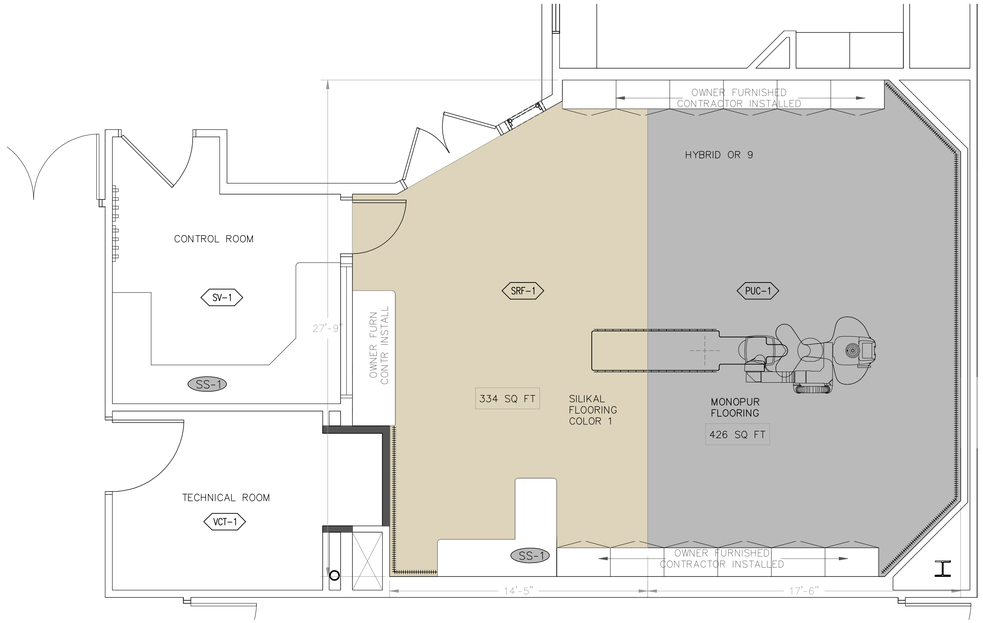
DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC



NORTH

FLR DIM/TAG PLAN
SCALE: 1/4"=1'-0"



NORTH

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

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

SCHEDULED DOOR NUMBER
LOCK TYPE
WALL TYPE
ELEVATION NUMBER
SHEET NUMBER
CROSS SECTION

LOCK TYPE
P - PASSAGE SET
PB- PUSH BAR W/ AUTO OPERATOR FUNCTION
DC - DOOR CLOSER HARDWARE

CONSTRUCTION LEGEND

	NEW WALL CONSTRUCTION TYPE 'A'		SURFACE MOUNTED WALL DUCT.
	EXISTING WALLS		
	EXISTING WALLS TO BE UPGRADED WITH LEAD-LINED DRYWALL TO 7'-0" A.F.F. BACK NEW & EXISTING WALL OUTLETS & SWITCHES WITH LEAD. SEE PHYSICIST REPORT FOR LEAD REQUIREMENTS		
	WP-1 ACROVYN PANEL LOCATIONS	P-2	WALL ACCENT PAINT SELECTION/LOCATION
XX-1	FLOORING TYPE	XX-1	CASEWORK FINISH
	OUT OF SCOPE		WP-2 CORNER GUARD LOCATIONS

GENERAL NOTES

A.	REFERENCE SHIELDING PLAN FOR LEAD-LINED SPECIFICATIONS. ALL LEAD SHIELDING SHALL EXTEND FROM FLOOR TO 7'-0" A.F.F. ALL JOINTS BETWEEN LEAD SHALL BE OVERLAPPED. ALL CUTOUTS AND OPENINGS IN THE LEAD WILL BE BACKED AND BAFFLED WITH LEAD OF AT LEAST EQUIVALENT THICKNESS.
B.	INSTALL ACROVYN SPECIFIED SILICON CAULK TO ALL EDGES OF WALL PANELING, SELECT MATCHING CAULK COLOR TO WALL PROTECTION.
C.	NEW PAINT ON ALL WALLS THROUGHOUT.
D.	SPECIFY BRUSHED NICKEL HARDWARE FOR CASEWORK.
E.	PROVIDE 4" BACKSPLASH OF LIKE MATERIAL AT ALL LOCATIONS WHERE COUNTERS MEET WALLS.
F.	APPLY 3mm PVC EDGES TO ALL NEW PLASTIC LAMINATE COUNTERTOPS, DRAWERS, AND DOORS. PROVIDE EASED RADIUS EDGES FOR ALL COUNTER EDGES & TURNS.
G.	INSTALL ADDITIONAL SUPPORT FRAMING FOR NEW DOOR OPENING W/ KICKERS FOR LATERAL BRACING TO BOTTOM OF DECK ABOVE.
H.	FINISHED FLOOR MUST BE LEVEL TO 1/8" IN 10-0".
I.	DURING LEAD-LINED DRYWALL INSTALLATION, PROVIDE LEAD SHIELDING BEHIND EXISTING OUTLET BOXES BELOW 7'-0" A.F.F.

KEY NOTES

1	DEDICATED DATA PORTS FOR i-STAT, ULTRASOUND & IVUS.
2	DEDICATED POWER FOR LUNG-HEART MACHINE HEATER/COOLER.
3	RELOCATED WALL S/C-VID 2 & DVI OUTLETS INSTALLED @ 18" AFF.
4	GE TABLE FLOOR MOUNTING PLATE. CONFIRM W/ GE PROJECT MGR ON LOCATION BEFORE INSTALL. RE: GE PLANS & PRE-INSTALLATION MANUAL. PLATE NEEDS TO INSET IN THE CONCRETE. BASE PLATE WILL NEED TO BE FLUSH W/ THE FLOOR FINISH SURFACE.
5	INSTALL FIRE RESISTANT WALL BACKING TO SUPPORT GE DISCONNECT, POU CABINET & APRON RACK.
6	NEW RECESSED WALL MOUNTED CLOCK & TIMER W/ CONTROLS. RE: ELEVATIONS & ELECTICAL.

DOOR & GLAZING SCHEDULE

DOOR NO.	DOOR SIZE			TYPE/LABEL	LOCK TYPE	HARDWARE	FRAME	FRAME DEPTH	REMARKS
	WIDTH	HEIGHT	DEPTH						
1	3'-0"	7'-0"	1-3/4"	A/NON RATED	P	SATIN NICKEL	L.H.-H.M.	4-7/8"	SHAKER CHERRY LAMINATE, SOLID CORE, LEAD-LINED DOOR, FRAME & HARDWARE W/ LEAD-LINED, TEMPERED SITE GLASS. USE SARGENT ASSA ABLOY 10 LINE HANDLE HARDWARE & 351 DOOR CLOSER W/ P10 ARM. RE: A402
2	3'-0"/3'-0"	7'-0"	1-3/4"	B/NON RATED	P	SATIN NICKEL	L.H.R.-HM/ R.H.R.-H.M.	4-7/8"	SHAKER CHERRY LAMINATE, SOLID CORE, LEAD-LINED DOOR, FRAME & HARDWARE W/ LEAD-LINED, TEMPERED SITE GLASS. DOORS AUTO ACTIVATION USING SALVAGED HARDWARE. RE: A402
3	2'-0"	3'-0"	2-1/2"	NON RATED	-	-	H.M.	4-7/8"	LEADED FRAME & GLASS PER PHYSICIST REPORT W/ INTEGRAL BLIND INSERT.

FINISHES SPECIFICATIONS

FLOORING

PUC-1: HEAVY DUTY POLYURETHANE CONCRETE FLOOR SYSTEM, MONOPUR 4+3 / CERTIFIED VENDOR REQUIRED FOR FLOOR INSTALL.
SRF-1: EPOXY FLOORING BY SILIKAL MMA
VCT-1: MANNINGTON ESSENTIALS, VINYL COMPOSITE TILE, COLOR: ALMOND BLUFF 167
SV-1: JOHNSONITE SHEET VINYL, MELODIA, 3.0, COLOR: SAND DOLLAR WB 973
B-1: 4" COVED BASE, JOHNSONITE, COLOR BEIGE 49

WALLS

PT-1: SHERWIN WILLIAMS, SEMI-GLOSS INTERIOR PAINT, 2 COATS ON WALLS. COLOR: SW 6106 (KILIM BEIGE) - APPLY TO CONTROL & TECHNICAL ROOM LOCATIONS.
PT-2: SHERWIN WILLIAMS, SEMI-GLOSS INTERIOR PAINT, 2 COATS. COLOR:SW 7038 (TONY TAUPE) - APPLY TO DOOR & WINDOW FRAMES.
EP-1: EPOXY SHERWIN WILLIAMS, SEMI-GLOSS INTERIOR PAINT, 2 COATS ON WALLS. COLOR: SW 6106 (KILIM BEIGE) - APPLY THROUGHOUT HYBRID OR PROCEDURE ROOM.

CASEWORK

SS-1: APPLY TO ALL COUNTER TOP LOCATIONS, CORIAN, PRIVATE COLLECTION COLOR: TUMBLEWEED
INSTALL COUNTER GROMMETS FOR CABLING IN THE FIELD, LOCATIONS BY FACILITIES' DIRECTION. V.I.F. ALL EXISTING CONDITIONS TO ENSURE PROPER FABRICATION. PROVIDE SHOP DRAWINGS FOR APPROVAL.
PL-1: APPLY TO ALL VERTICAL PANEL SURFACES. WILSONART LAMINATE COLOR: SHAKER CHERRY, 7935-07. USE 3MM EDGING TO MATCH. * USE WHITE MELAMINE FOR ALL INTERIOR CABINETS AND DRAWER SURFACES.

WALL PROTECTION

WP-1 - INPRO CORPORATION, OATMEAL 0239, 0.06 THICKNESS, INSTALL W/ TOP CAP TO MATCH ROOM STANDARDS. INSTALL @ 54" AFF (48" SHEETS)

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA
1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

DESIGN dp LOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

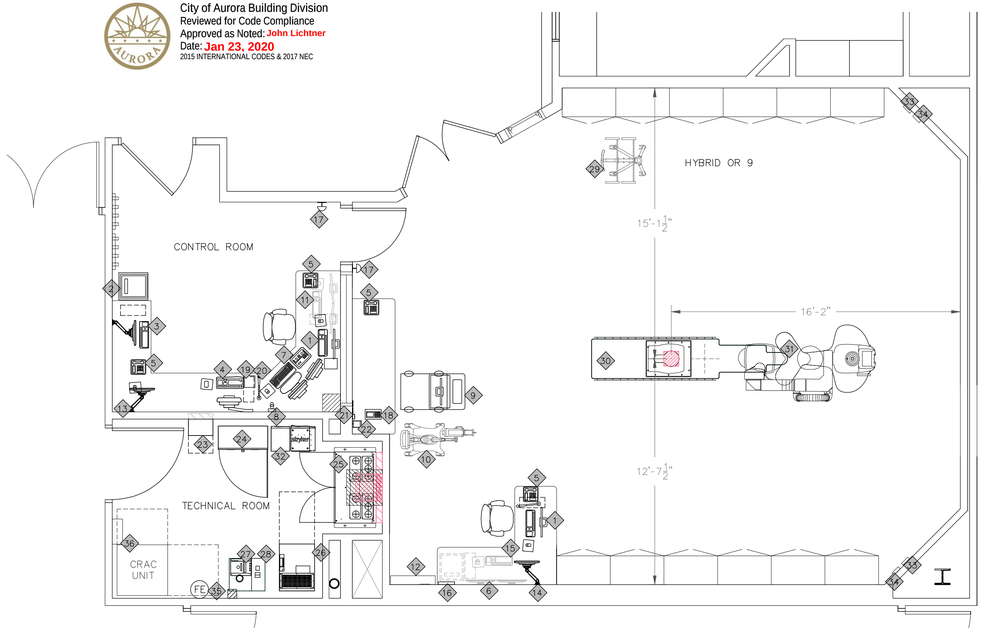
PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: 1/4" = 1'
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
FLOOR DIM/TAG PLAN
FINISHES PLAN

SHEET NO.:
A101

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC



NORTH

FLOOR EQUIP PLAN
SCALE: 1/4"=1'-0"

EQUIPMENT KEYNOTES			
1	MEDITECH WORKSTATION	19	VITA-LINQ CONTROL
2	MAC LAB PRINTER SHARED - HP LASERJET PRINTER P4105, ON STAND	20	VITA-LINQ MICROPHONE
3	PACS WORK STATION	21	AW WIRELESS MOUSE
4	ADVANTAGE WORK (AW) STATION	22	X-RAY BUZZER
5	PHONES	23	MAIN DISCONNECT PANEL
6	MAC LAB RMOT W/ WALL MOUNTED MONITORS (FUTURE)	24	POWER DISTRIBUTION UNIT
7	OPERATOR'S CONSOLE	25	C-FRT CABINET
8	BOLUS CHASE HAND SWITCH	26	FLUORO UPS
9	VOLCANO IVUS ROLL AROUND WORKSTATION	27	DETECTOR CHILLER
10	INJECTOR	28	COOLIX WATER CHILLER
11	MAC LAB ACQUISITION, MAIN W/ UPS (FUTURE)	29	TABLE SIDE CART
12	OPTIFLEX POU CABINET, PC, MONITOR, SCANNER, TYPE TBD	30	TILTING TABLE
13	STRYKER WALL MOUNTED MONITOR	31	GANTRY
14	WALL MOUNTED STRYKER TOUCH PANEL	32	STRYKER UPS & VISUM LED POWER SUPPLY BOX
15	UNDER COUNTER STRYKER PRINTER	33	NEW DVI WALL PLATE
16	WALL MOUNTED STRYKER CONTROL PANEL (with music controls thru Stryker speakers option)	34	S-VID/BNC WALL PLATE
17	EPO SWITCH	35	CONTRACTOR INSTALLED CO2 FIRE EXTINGUISHER
18	i-STAT DOCKING STATION	36	CRAC UNIT W/ DISCONNECT

FLOORING PREPARATION & TABLE BASE PLATE INSTALLATION NOTES	
1.	GENERAL CONTRACTOR TO CONDUCT CONCRETE COMPRESSION STRENGTH TEST AS REQUIRED BY GE & STRUCTURAL PLANS. DELIVER RESULTS TO STRUCTURAL ENGINEER.
2.	FLOORING SYSTEM WITH THIS EQUIPMENT IS THE MONOPOUR 4+3" MONOLITHIC FLOORING. SEE FLOORING INSTALLATION MANUAL.
3.	DIMENSIONS FOR BASE PLATE PLACEMENT LOCATION ARE SHOWN WITHIN 1/16" PRECISION. MARK LOCATIONS & CONFIRM W/ GE INSTALL REP BEFORE DRILLING. REFER TO GE PRE-INSTALLATION MANUAL FOR BOLT HOLE DRILL LOCATIONS FOR BASE PLATE.
4.	BOLTS INSTALLED BY CONTRACTOR SHOWN IN STRUCTURAL PLANS TO BE INSPECTED BY A 3rd PARTY VENDOR DURING THE INSTALLATION. RE: STRUCTURAL
5.	SEAL GAPS AROUND BASE PLATE W/ GE SUPPLIED GE 2000 SILICONE SEALANT.
6.	SEE GE PRE-INSTALLATION MANUAL FOR ANCHOR BOLT RECOMMENDATIONS.
7.	REFERENCE GE PRE-INSTALLATION MANUAL FOR DRILLING AND ANCHORING CHART & REQUIREMENTS. OWNER TO SCHEDULE GE REP TO INSPECT AND VERIFY ANCHOR LOCATIONS PRIOR TO ANY DRILLING.
8.	NO EXPANSION JOINT SHALL BE PRESENT IN THE CONCRETE IN THE AREA WHERE MONOPUR SYSTEM IS TO BE APPLIED. NOTIFY PROJECT MANAGER IF ANY EXISTS.
9.	FLOOR SLAB ON WHICH EQUIPMENT IS TO BE INSTALLED, NEEDS TO BE LEVEL TO 1/8" OVER 10'. OWNER TO CONTACT GE REP TO INSPECT BEFORE FLOOR FINISHES ARE INSTALLED.

GENERAL NOTES	
A.	REFER TO GE & STRYKER SITE SPECIFIC DRAWINGS FOR EQUIPMENT MOUNTING REQUIREMENTS AND CLEARANCES.
B.	REVIEW & INCLUDE ALL NOTES FROM THE GE & STRYKER SITE SPECIFIC PLANS ATTACHED TO THIS CONSTRUCTION DOCUMENT SET AS PART OF CONSTRUCTION.
C.	CONTRACTOR TO PROVIDE WALL BACKING SUPPORT FOR ALL WALL HUNG EQUIPMENT.
D.	CONTRACTOR IS TO COORDINATE WITH OWNER & SUPPORT THE NEEDS OF THE INSTALLATION TEAM BEFORE & DURING SETUP.
E.	CONTRACTOR IS RESPONSIBLE FOR ALL DRILLING & SAW CUTTING NECESSARY TO PREP THE SITE.
F.	VERIFY W/ GE SITE SPECIFIC PLANS ALL DIMENSIONS & PLATE INSTALL INSTRUCTIONS. MOUNTING PLATES WILL BE DELIVERED DURING CONSTRUCTION.
G.	REFERENCE ELECTRICAL PLANS & GE SHEETS E1 & E2 FOR ELECTRICAL CONDUIT RUNS. PLAN TRENCHING & FLOOR/WALL DUCT RUNS ACCORDINGLY.
H.	REFERENCE GE'S PRE-INSTALLATION MANUAL IN CONJUNCTION WITH DRAWINGS & SPECIFICATIONS FOR COMPLETE INFORMATION.
I.	OWNER VENDOR TO INSTALL ALL LOW VOLTAGE CABLING.
J.	MONITORS INSTALLATION & CONNECTIONS TO THE GE EQUIPMENT SHALL ONLY BE MADE IN THE PRESENCE OF A GE REPRESENTATIVE.
K.	FLUSH MOUNT ALL NEW WALL DUCTS WHERE POSSIBLE. PLACE LEAD LINING BEHIND DUCT TO MAINTAIN PROTECTION.
L.	REFERENCE ELECTRICAL PLANS & GE SHEETS 17 - 21 FOR ELECTRICAL CONDUIT RUNS. GC ELECTRICIAN TO CONFIRM CABLE LENGTHS TO CONDUIT RUN DISTANCES. REFERENCE GE PRE-INSTALL MANUAL FOR ALL EQUIPMENT BACK BOX CUT-IN ELEVATIONS & DIMENSIONS.
M.	ELECTRICIAN TO INSTALL PLASTIC FLIP COVERS OVER ON EPO SWITCH LOCATIONS.
N.	CONNECTION OF THE MDP TO THE GE EQUIPMENT SHALL ONLY BE MADE IN THE PRESENCE OF A GE REPRESENTATIVE. RE: PRE-INSTALLATION MANUAL FOR CHECK LIST OF ITEMS PRIOR TO CONNECTING THE MDP.
O.	SEPARATE CONDUITS USED FOR POWER & SIGNAL WIRES. CONDUITS MUST BE LARGE ENOUGH TO PASS CABLE CONNECTORS THROUGH W/ ALL OTHER CABLES ALREADY IN THE CONDUIT.
P.	INSTALL JUNCTION BOXES/POWER OUTLETS ABOVE MOUNTING BRACKETS FOR ALL WALL HUNG MONITORS. ELEVATIONS SHOW APPROX. HEIGHT. VERIFY CLEARANCE OF BRACKET BEFORE CUTTING IN BOX LOCATIONS.
Q.	CONTRACTOR TO STRING & RING ALL NEW BACK BOXES FOR CABLING.
R.	CONTRACTOR TO WORK W/ OWNER TO INSTALL OWNER FURNISHED EQUIPMENT NOT SHOWN ON EQUIPMENT PLAN.
S.	CONTRACTOR WILL RECEIVE A ROOM TEMPLATE FROM GE AS A PRE-INSTALL ITEM TO CLEARLY IDENTIFY MOUNTING POSITIONS AS DESCRIBED IN THE PREINSTALLATION MANUAL, PAGE 99.

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

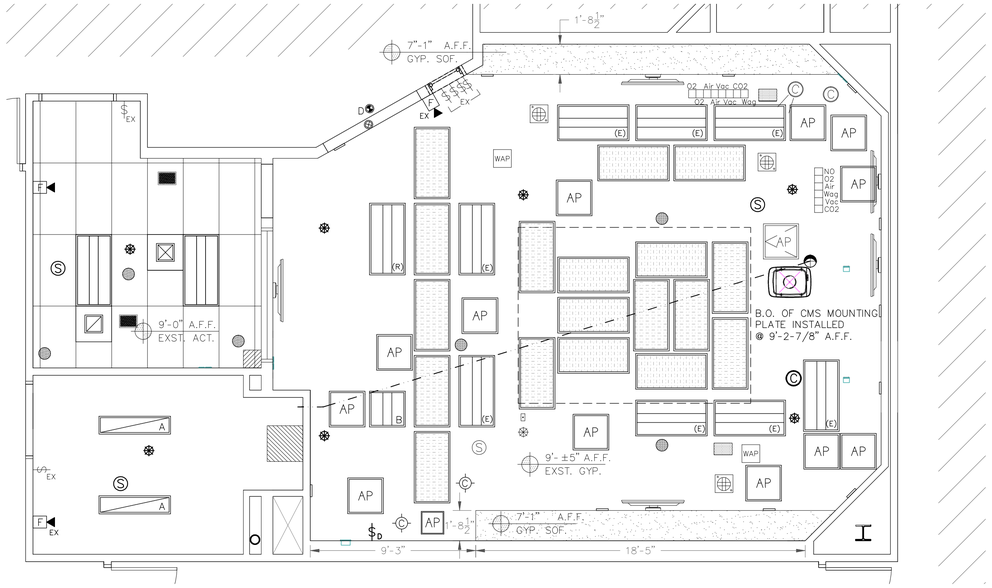
STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: 1/4" = 1'
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
EQUIPMENT FLOOR PLAN

SHEET NO.:
A102

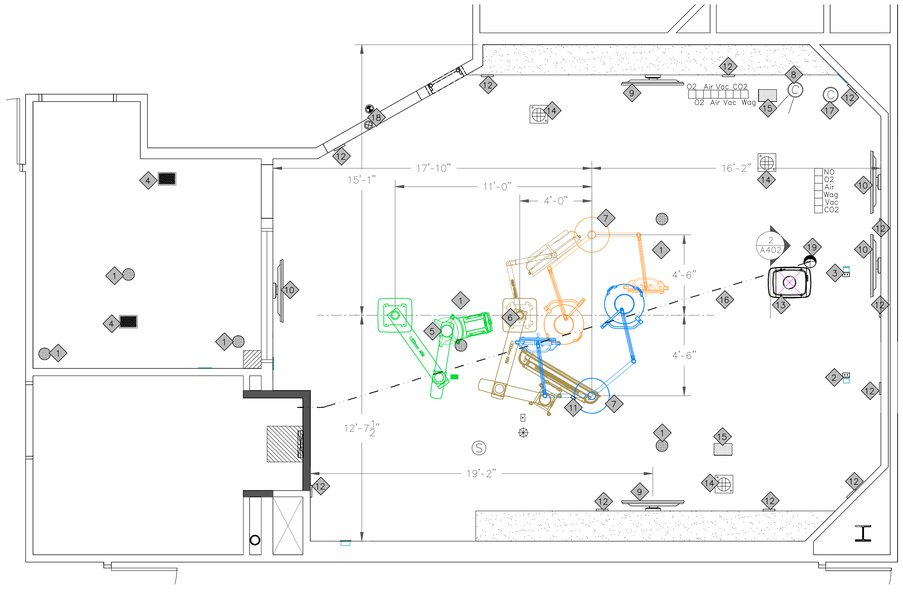


NORTH

REFLECTED CEILING PLAN
SCALE: 1/4"=1'-0"

LIGHT FIXTURE SCHEDULE	
A	LITHONIA 1x4 RECESSED LENSED TROFFER, GTL SERIES GTL-4-48L-A125125-LP840
B	HEALTHCARE LIGHTING, 2x2 TROFFER W/ HIGH CRI ANTIMICROBIAL PAINT, HSTLED22-F-MVOLT
C	KENALL 4" SEALED RECESSED SURGICAL LED DOWNLIGHT, M4DL4-DCFW-14L-40K9-CSS-RIS4-120-DIM1
D	LITHONIA RECESSED LED X-RAY LIGHT, LE-P-W-1-R-120/277-SW16

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC



NORTH

CEILING EQUIP PLAN
SCALE: 1/4"=1'-0"

EQUIPMENT KEYNOTES	
1	VITA-LINQ SPEAKERS
2	DVI CEILING PLATE (TEE)
3	DVI CEILING PLATE (ANES. VITALS)
4	STRYKER SPEAKER
5	STRYKER EQUIPMENT BOOM
6	DUAL FLAT MONITOR BOOM (DVI CABLING)
7	SURGICAL LIGHT & LEAD SHIELD
8	RELOCATED SRYKER HD PAN/TILT/ZOOM CAMERA
9	STRYKER 55" LCD MONITOR
10	OWNER PROVIDED 55" LCD ANESTHESIA, PERFUSION & VITALS MONITOR/CONTRACTOR INSTALL MOUNTING BRACKETS
11	VITA-LINQ MICROPHONE ON BOOM
12	GANTRY POSITIONING TARGETS
13	CABLE MANAGEMENT SYSTEM (CMS)
14	RELOCATED ELECTRICAL MED REEL RETRACTABLE CORD MOUNT
15	RELOCATED SALVAGED SPEAKER
16	GE CABLE FROM CMS TO C-FRT CABINET. LIMITED LENGTH. SET & MAINTAIN CLEAR PATH FOR SHORTEST DISTANCE
17	RELOCATED SALVAGED STRYKER SUITE STATUS CAMERA
18	CONTRACTOR SUPPLIED X-RAY WARNING LIGHT & CONTROL PANEL. AVAILABLE FROM GE SUPPLY
19	7.87" DIA. OPENING IN CEILING FOR CABLE GUIDE KEEP AREA CLEAR OF ANY OBSTRUCTIONS

GENERAL NOTES	
A.	CONTRACTOR SHALL COMPARE THIS REFLECTED CEILING PLAN WITH ELECTRICAL LIGHTING & MECHANICAL PLANS. REPORT ANY OMISSIONS OR INCONSISTENCIES TO THE PROJECT MANAGER.
B.	REFER TO ENGINEERED LIGHTING PLAN FOR LIGHT FIXTURE SELECTION SPECIFICATIONS & EMERGENCY POWERED/CRITICAL CIRCUIT LIGHTING LOCATIONS.
C.	INSTALL GANTRY POSITIONING TARGETS ON SOFFIT & WALLS @ A MINIMUM HEIGHT OF 80.7" & MAXIMUM OF 90.5" ABOVE FINISHED FLOOR.
D.	POSITIONING TARGETS TO BE INSTALLED AT THE TIME OF GANTRY INSTALLATION & SHOULD BE VISIBLE TO THE LASER SOURCE WITHOUT OBSTRUCTIONS.
E.	CONTRACTOR TO BALANCE HVAC SYSTEM TO MEET SPECIFIED REQUIREMENTS FOR TEMP & AIR FLOW AS DESCRIBED IN MECHANICAL & GE SITE SPECIFIC DRAWINGS.
F.	NEW SPRINKLER HEAD LOCATIONS SHOWN ARE PROPOSED. CONTRACTOR TO USE CERTIFIED LICENSED FIRE VENDOR TO INSURE COMPLETE COVERAGE AS REQUIRED BY CODE.
G.	REPAIR AND/OR PATCH FIRE PROOFING ON ALL EXISTING ABOVE CEILING STRUCTURAL STEEL SUPPORT MEMBERS WHETHER AFFECTED BY CONSTRUCTION OR BY EXISTING CONDITION.
H.	REFER TO STRUCTURAL PLANS FOR INSTALLATION OF NEW UNISTRUT SUPPORT MEMBERS ABOVE CEILING.
I.	ALL CEILING MOUNTED FIXTURES TO BE FLUSH MOUNTED OR SHALL NOT EXTEND MORE THAN 1/4" BELOW THE FINISHED CEILING.
J.	CONTRACTOR TO PROVIDE LICENSED FIRE ALARM VENDOR FOR REVIEW & INSTALLATION OF ANY NEW OR RELOCATED DEVICES AS REQUIRED BY CODE.
K.	REFER TO GE & STRYKER SITE SPECIFIC DRAWINGS FOR ALL EQUIPMENT MOUNTING REQUIREMENTS & CLEARANCES ALONG WITH ELECTRICAL, CABLING & MED GAS CONNECTIONS.
L.	REVIEW BOTH GE & STRYKER PRE-INSTALLATIONS FOR IMPORTANT SPECIFICS NOT MENTIONED IN THIS DOCUMENT SET.
M.	MONITORS INSTALLATION & CONNECTIONS TO THE GE EQUIPMENT SHALL ONLY BE MADE IN THE PRESENCE OF A GE REPRESENTATIVE.
N.	VERIFY NEW CAMERA INSTALL LOCATIONS HAVE CLEAR LINE OF SITE BEFORE INSTALLING J-BOXES & MOUNTING.
O.	INSTALL FIRE RESISTANT BACKING FOR ALL WALL MOUNTED MONITOR LOCATIONS.
P.	PAINT ACCESS PANELS TO MATCH CEILING FINISH.

CMS UNIT INSTALLATION NOTES	
1.	CONTRACTOR TO PROVIDE FABRICATION OF CMS CEILING PLATE BASED UPON STRUCTURAL ENGINEER'S DESIGN. RE: STRUCTURAL & PG. 13 OF GE SITE SPECIFIC PLANS.
2.	CMS MOUNTING PLATE HEIGHT BASED ON OPTION 2 OF GE PRE-INSTALLATION MANUAL. COVER PLATE WITH DROP-DOWN BOX OR COVER TO BE CLOSED WITH REST OF CEILING. INCLUDE THE DEPTH OF THE NEW 7mm FLOORING THICKNESS IN THE MOUNTING HEIGHT CALCULATION.
3.	CMS TO C-FRT LIMITED CABLE LENGTH OF 42'-6" SHOWN ON PLANS. CONSIDER UNOBSTRUCTED PATH DURING CEILING INSTALLATION AS MUCH AS POSSIBLE. INSTALL CABLE USING "J" HOOKS.
4.	CONTRACTOR TO CONFIRM AREA OF FREE SPACE ABOVE CEILING ABOVE CABLE GUIDE FOR CABLE BUNDLE ATTACHMENT AS SHOWN ON PG. 114 OF THE PRE-INSTALLATION MANUAL.
5.	NO MOUNTED HARDWARE CAN PROTRUDE BELOW THE FINISHED CEILING HEIGHT IN THE CMS COVERAGE AREA.
6.	CONTRACTOR TO USE IDENTIFIED PIVOT ROTATIONAL CENTER WHEN ALIGNING THE FLOOR TEMPLATE TO THE STRUCTURAL PLATE, NOT THE CENTER OF THE CMS MOUNTING PLATE. THE PIVOT ROTATIONAL CENTER IS NOT CENTERED ON THE PLATE.
7.	SEE PG. 118 OF GE PRE-INSTALLATION MANUAL FOR DIMENSIONAL RELATIONSHIP BETWEEN CMS PLATE PIVOT WITH THE PATIENT TABLE AXIS. NOTICE OFFSET OF 570 MM FROM TABLE LONGITUDINAL AXIS. CMS FIXATION POINT IS A FIXED POSITION W/ RESPECT TO THE TABLE POSITION.
8.	CONTRACTOR TO CONFIRM STRUCTURAL PLATE IS THE CORRECT SIZE FOR THE GE CMS PLATE TO ENSURE PROPER INSTALLATION OF CEILING CABLE GUIDE.
9.	CONTRACTOR IS RESPONSIBLE FOR THE HARDWARE TO MOUNT THE CMS TO THE STRUCTURAL PLATE.

STRYKER EQUIPMENT INSTALLATION NOTES	
1.	REVIEW ALL PRE-INSTALLATION MANUALS' INSTRUCTIONS PROVIDED BY STRYKER FOR COMPLETE & PROPER EQUIPMENT INSTALLATION.
2.	CONTRACT TO PROVIDE ALL ROUGH-IN REQUIREMENTS AS EXPLAINED IN THE PRE-INSTALLATION MANUALS.
3.	INSTALL STRYKER SUPPLIED MOUNTING PLATE AT 3" ABOVE THE FINISHED CEILING & MUST BE LEVEL WITHIN .25".
4.	ALLOW ENOUGH SPACE TO ROUTE CABLES TO SURGICAL LIGHTS AND FLAT PANEL NAVIGATION ARMS.
5.	ALL CONDUITS MUST HAVE INSULATION BUSHINGS ON ALL OPEN ENDS & ALL HARD CONDUITS MUST BE TERMINATED WITHIN 18" OF THE CENTER OF THE MOUNT.
6.	ALL CABLING & ELECTRICAL TO BE COMPLETED PRIOR TO STRYKER EQUIP INSTALLS. WORK MUST BE COMPLETE INCLUDING FLOORING & PAINT AND BE A DUST-FREE ENVIRONMENT.
7.	DO NOT EXCEED FOUR 90 DEGREE BENDS FOR CONDUIT RUNS & MUST BE 50' OR LESS IN LENGTH.
8.	MED GASES MUST BE PIPED TO THE MEDICAL GAS RISER LOCATION PRIOR TO INSTALLATION OF STRYKER BOOM.

The Medical Center of Aurora
HealthONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305892
01.14.20
LICENSED ARCHITECT

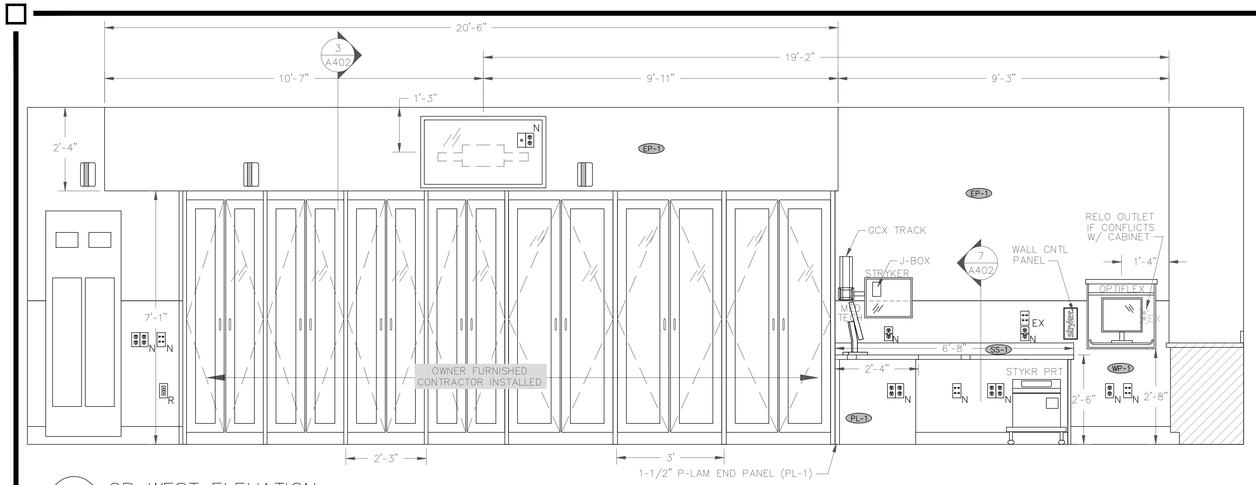
PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: 1/4" = 1'
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:
△
△
△
△
△

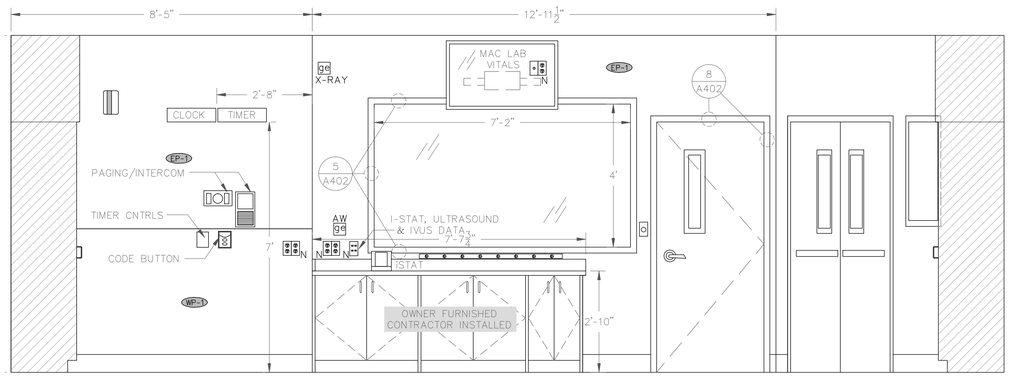
SHEET TITLE:
RFELECTED CEILING PLAN
CEILING EQUIP PLAN

SHEET NO.:
A103

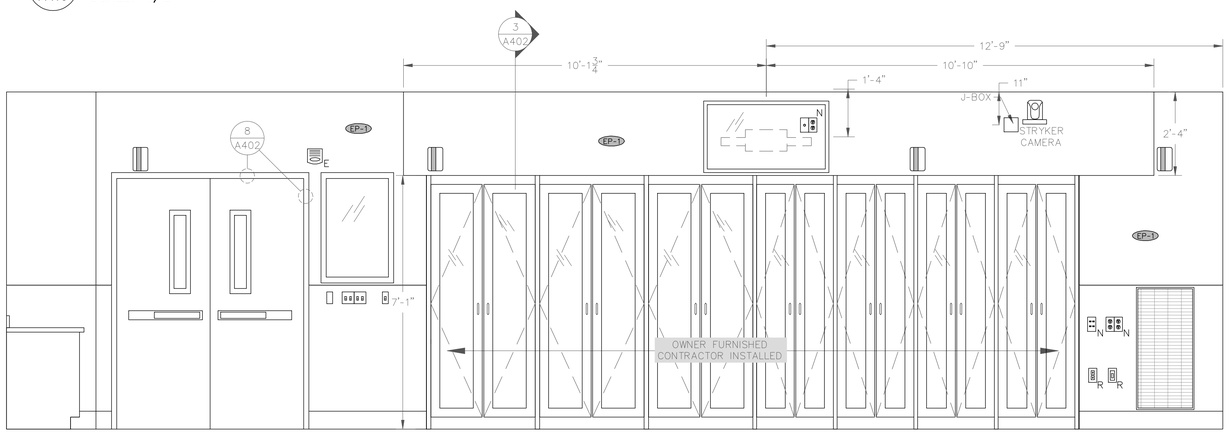
DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"



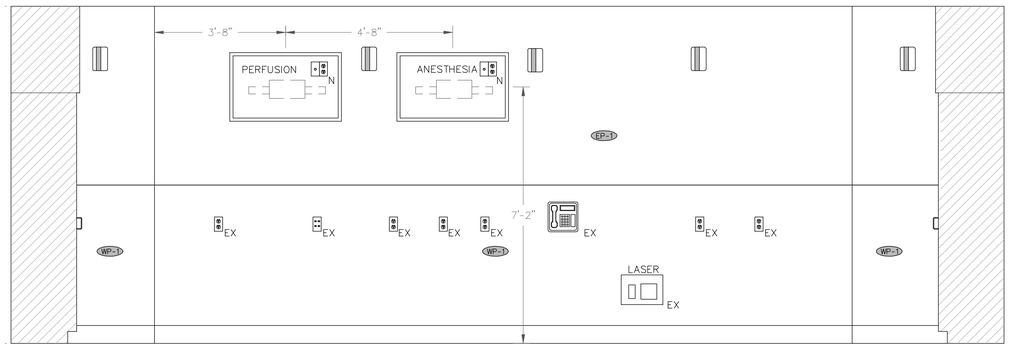
1 A4.0 OR WEST ELEVATION
SCALE: 1/2" = 1'



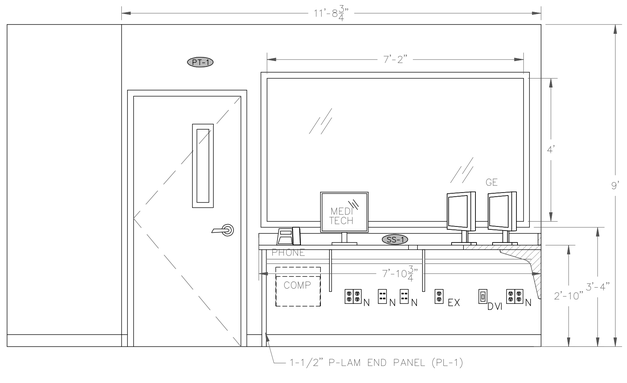
2 A4.0 OR NORTH ELEVATION
SCALE: 1/2" = 1'



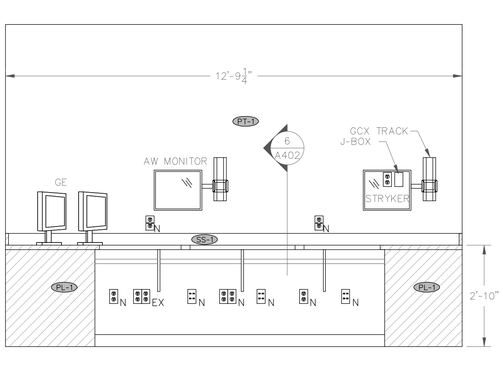
3 A4.0 OR EAST ELEVATION
SCALE: 1/2" = 1'



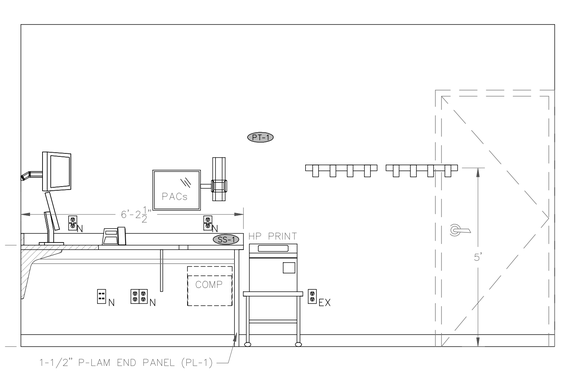
4 A4.0 OR SOUTH ELEVATION
SCALE: 1/2" = 1'



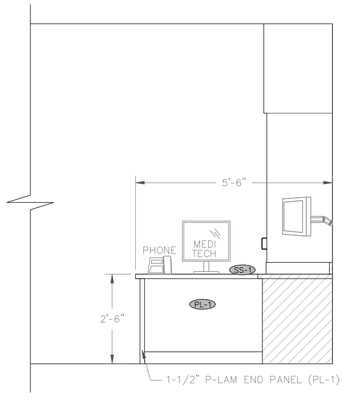
5 A4.0 CONTROL ROOM SOUTH
SCALE: 1/2" = 1'



6 A4.0 CONTROL ROOM WEST
SCALE: 1/2" = 1'



7 A4.0 CONTROL ROOM NORTH
SCALE: 1/2" = 1'



8 A4.0 NURSE STATION
SCALE: 1/2" = 1'

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

The Medical Center of Aurora
Health ONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN PLOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

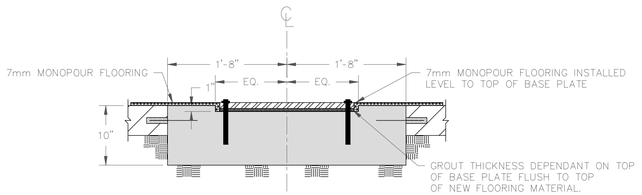
STATE OF COLORADO
TOM THOMPSON
305892
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

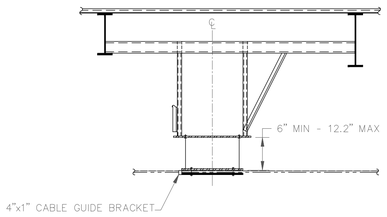
DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: 1/2" = 1'
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
ELEVATIONS

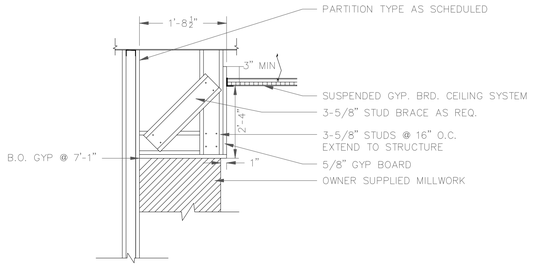
SHEET NO.:
A401



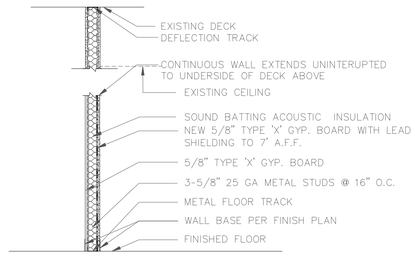
1 A402 FLOOR SECTION
SCALE: 1" = 1'



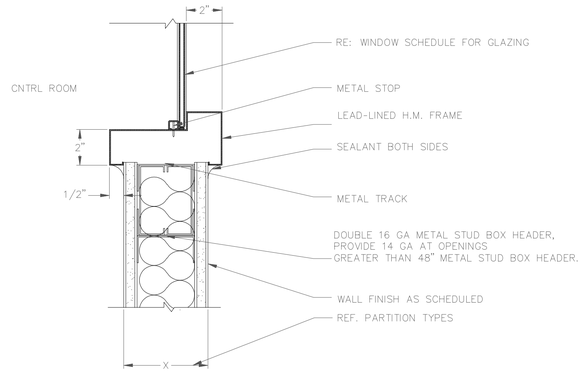
2 A402 CMS MOUNTING PLATE
SCALE: 1/2" = 1'



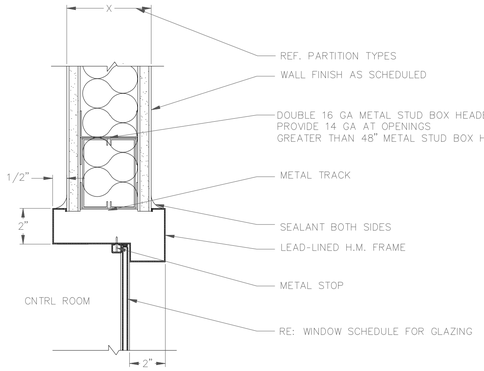
3 A402 SOFFIT FURR DOWN SECT
SCALE: 1" = 1'



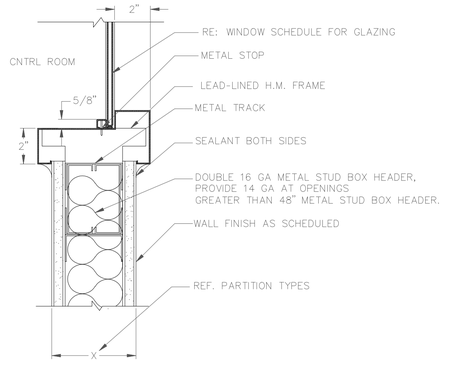
A WALL TYPE "A"
SCALE: NTS



HEAD DETAIL

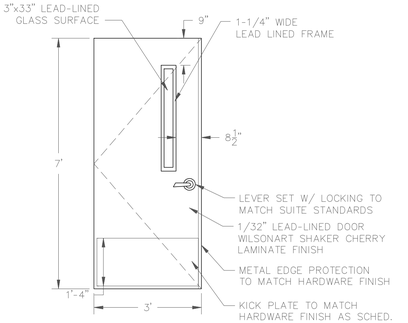


JAMB DETAIL

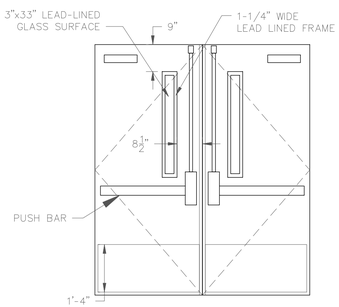


SILL DETAIL

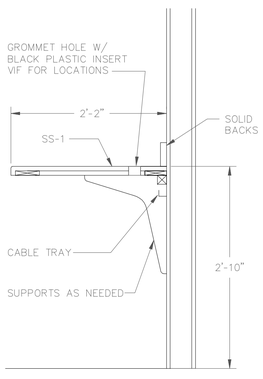
5 A402 WINDOW FRAME DETAILS
SCALE: 3" = 1'



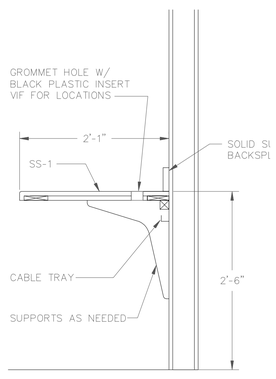
A DOOR TYPE "A"
SCALE: 1/2" = 1'



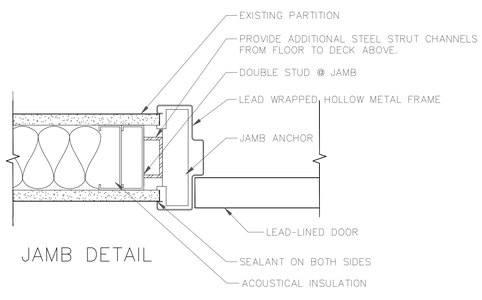
B DOOR TYPE "B"
SCALE: 1/2" = 1'



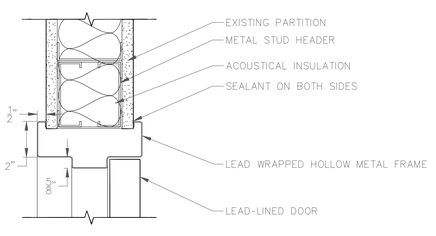
6 A402 CNTRL COUNTER
SCALE: 1" = 1'



7 A402 NURSE STAT COUNTER
SCALE: 1" = 1'



JAMB DETAIL



HEAD DETAIL

8 A402 DOOR FRAME DETAILS
SCALE: 3" = 1'

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

The Medical Center of Aurora
HealthONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

ASSOCIATIONS

dp DESIGN LOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

STATE OF COLORADO
TOM THOMPSON
305692
01.14.20
LICENSED ARCHITECT

PROJECT NO.: 190318

DRAWN BY: TH, BEPS
CHECKED BY: TT
SCALE: AS NOTED
DATE: 01.14.2020
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
ELEVATIONS
SECTIONS/DETAILS

SHEET NO.:
A402

DWG FILENAME: HYBRID OR 9 SHEET SIZE: 36" x 24"

MEDICAL GAS NOTES

PART 1 – BASIC REQUIREMENT

1.01 RELATED REQUIREMENTS

A. THIS SPECIFICATION SHALL CONTROL ALL LABOR, SERVICES, MATERIALS AND EQUIPMENT AND PERFORMANCE OF ALL WORK REQUIRED FOR THE INSTALLATION OF ALL PLUMBING AND MEDICAL GAS WORK AS SPECIFIED IN THE FOLLOWING.

B. DEFINITIONS:

1. "PIPING" INCLUDES, IN ADDITION TO PIPE, ALL FITTINGS, VALVES, PIPE COVERING, HANGERS, AND OTHER SUPPORTS AND ACCESSORIES RELATED TO SUCH PIPING.
2. CONCEALED MEANS HIDDEN FROM SIGHT IN CHASES, FURRED SPACES, SHAFTS, HUNG CEILINGS, EMBEDDED IN CONSTRUCTION, IN CRAWL SPACES OR BURIED.
3. "EXPOSED" MEANS NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE.
4. "PROVIDE" MEANS TO FURNISH AND INSTALL COMPLETE.

1.02 GENERAL REQUIREMENTS

A. MEDICAL GAS WORK TO COMPLY WITH 2012 EDITION OF NFPA #99 STANDARDS.

B. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING BID TO VERIFY SCOPE OF WORK.

C. PRODUCTS AND EXECUTION SHALL BE PROVIDED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM THROUGHOUT THE EXTENT OF THE PROJECT.

D. ALL PRODUCTS AND EQUIPMENT SHALL BE UL LISTED AND APPROVED BY THE FACILITY.

E. ALL NEW DEVICES AND TRIM SHALL COMPLY WITH RECOGNIZED NFPA STANDARDS.

F. EACH MAJOR COMPONENT OR PIECE OF EQUIPMENT TO HAVE THE MANUFACTURER'S NAME, ADDRESS, MODEL NUMBER AND RATING ON A PLATE SECURELY AFFIXED IN A CONSPICUOUS PLACE.

G. CODE RATINGS, LABELS OR OTHER DATA WHICH ARE DIE–STAMPED OR OTHERWISE AFFIXED TO THE SURFACE OF THE EQUIPMENT SHALL BE IN VISIBLE LOCATION.

H. CONTRACTOR SHALL COORDINATE PROPOSED WORK WITH EXISTING FIELD CONDITIONS INCLUDING ARCHITECTURAL BUILDING ELEMENTS, STRUCTURAL CONDITIONS, AND EXISTING MECHANICAL AND ELECTRICAL CONDITIONS.

I. CONTRACTOR SHALL ADHERE TO ALL BASE BUILDING AND CURRENT FACILITY STANDARDS AND REQUIREMENTS. SHUT–DOWN OF EXISTING BUILDING SYSTEMS FOR NEW PLUMBING CONNECTIONS SHALL BE AUTHORIZED, SCHEDULED AND PERFORMED IN ACCORDANCE TO BUILDING MANAGEMENT REQUIREMENTS. BUILDING SHALL BE NOTIFIED NO LESS THAN 72 HOURS PRIOR TO ANY SHUT–DOWNS. ACCESS TO AREAS OUTSIDE WORKS SPACES, SUCH AS ADJOINING SPACES AND SPACES IMMEDIATELY BELOW, SHALL BE PERFORMED IN ACCORDANCE TO BUILDING MANAGEMENT REQUIREMENTS.

1.03 WORK INCLUDED

A. INCLUDE ALL COSTS RELATED TO PROVIDE ALL PERMITS, LICENSES, INSPECTIONS, APPROVALS AND OTHER ARRANGEMENTS FOR WORK.

B. PROVIDE DEMOLITION OF EXISTING SYSTEMS INCLUDING REMOVAL OF ALL DEBRIS. COORDINATE WITH BUILDING MANAGEMENT EXISTING EQUIPMENT, FIXTURES OR DEVICES THAT SHALL BE RETAINED, CAREFULLY REMOVE AND TURN OVER TO OWNER. REMOVE ALL PIPING BACK TO ACTIVE SOURCE AND CAP LEAVING NO DEAD ENDS.

C. PRIOR TO DEMOLITION OF EQUIPMENT, FIXTURES OR TRIM, COORDINATE WITH OWNER ANY ITEMS TO BE RETAINED. CAREFULLY REMOVE SUCH ITEMS AND TURN OVER TO OWNER.

D. PROVIDE FIXTURES AS INDICATED ON PLUMBING AND ARCHITECTURAL DRAWINGS. FOR EXACT LOCATION OF FIXTURES, REFER TO ALL ARCHITECTURAL AND CONSULTANT PLANS AND ELEVATIONS.

E. MAKE NEW CONNECTIONS TO EXISTING BRANCH PIPING AS INDICATED ON PLANS AND RISER DIAGRAMS, AND AS NECESSARY TO COMPLETE THE WORK.

F. INSTALL PIPING WITH ADEQUATE PROVISIONS TO CONTROL EXPANSION AND CONTRACTION.

G. PROVIDE AND SET SLEEVES FOR ALL PIPING SYSTEMS PASSING THROUGH WALLS, FLOORS, PARTITIONS, ETC. SLEEVES SHALL BE SIZED AT LEAST TWO PIPE DIAMETERS LARGER THAN PIPING, OR OUTSIDE DIAMETER OF INSULATED PIPING.

H. ARRANGE FOR POWER TO SUPPORT ALL ELECTRICAL RELATED EQUIPMENT AND DEVICES.

I. PROVIDE ROUGH–IN AND FINAL CONNECTIONS TO ALL APPLIANCES AND EQUIPMENTS FURNISHED BY OTHERS, INCLUDING ALL REQUIRED DEVICES.

J. PROVIDE ALL CUTTING AND PATCHING OF BUILDING ELEMENTS AS REQUIRED FOR INSTALLATION OF WORK HERE IN SPECIFIED. ALL WORK SHALL BE COORDINATED AND APPROVED BY BUILDING AND ARCHITECTURAL FIELD REPRESENTATIVE PRIOR TO ANY WORK BEING PERFORMED.

K. PROVIDE FIRE–STOP AT ALL FLOOR AND WALL PENETRATIONS AS REQUIRED BY PROJECT PARAMETERS AND LOCAL CODE AUTHORITY.

L. PROVIDE ALL ACCESS PANELS. CONTRACTOR TO GIVE ALL LOCATIONS AND DIMENSIONS OF ALL REQUIRED ACCESS PANELS TO GENERAL CONTRACTOR. GENERAL CONTRACTOR WILL SUBMIT TO ARCHITECT FOR APPROVAL AND FINISH REQUIREMENTS PRIOR TO INSTALLATION.

M. COORDINATE PROPOSED WORK WITH ADDITIONAL TRADES AND OTHERS INVOLVED PRIOR TO ANY INSTALLATION WORK.

N. PROVIDE PIPING IDENTIFICATION MARKERS FOR ALL PIPING SYSTEMS WITH ANSI/ASME STANDARD COLORS AND LABELS. MARKERS SHALL BE INSTALLED 20 FEET ON CENTER MINIMUM AND MARKERS INSTALLED IN EACH ROOM.

O. PROVIDE VALVE TAGS OF BRASS OR STAINLESS STEEL HAVING A MINIMUM OF 1–1/2 INCH DIAMETER. PROVIDE COMPLETED VALVE CHART INDICATING VALVE SERVICE AND LOCATION.

P. PROVIDE AS–BUILT DRAWINGS IN AUTOCAD 2017 FORMAT AT COMPLETION OF PROJECT.

Q. PROVIDE TWO COPIES OF OWNER'S OPERATION AND MAINTENANCE MANUALS WITH ALL PLUMBING AND MEDICAL GAS EQUIPMENT, FIXTURES, TRIM AND DEVICES, MANUFACTURER'S MAINTENANCE INSTRUCTIONS AND MANUALS.

1.04 CLEANING

A. COORDINATE GENERAL CLEANUP WITH BUILDING MANAGEMENT.

B. CLEAN ALL PIPING SYSTEMS IN ACCORDANCE TO NFPA STANDARDS.

1.05 FIELD TESTING

A. TESTING SHALL BE IN STRICT COMPLIANCE TO THE APPLICABLE CODES AND NFPA STANDARDS.

B. NO WORK SHALL BE ENCLOSED, CONCEALED, COVERED UP OR USED UNTIL THE SYSTEMS HAVE BEEN INSPECTED AND APPROVED BY THE CODE OFFICIALS AND ARCHITECTURAL FIELD REPRESENTATIVE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALL NECESSARY ARRANGEMENTS FOR INSPECTIONS.

D. MEDICAL GAS SHALL BE TESTED AND CERTIFIED IN ACCORDANCE TO CURRENT NFPA #99 STANDARDS.

PART 2 – BASIC MATERIALS

2.01 PIPES AND FITTINGS

A. MEDICAL GAS: HARD DRAWN SEAMLESS TYPE "K" MEDICAL GAS TUBE; ASTM B819 AND MARKED ACCORDINGLY FOR SERVICE TYPE PER NFPA 99 STANDARDS. FITTINGS SHALL CLEANED AND LISTED FOR OXYGEN SERVICE. JOINTS SHALL BE BRAZED IN ACCORDANCE TO NFPA 99 AND MSS SP–73 BRAZING STANDARDS.

2.02 VALVES

F. PROVIDE VALVES FOR ALL PIPING SYSTEMS FOR PROPER CONTROL AND ISOLATION OF EQUIPMENT, FIXTURES AND DEVICES. PROVIDE VALVES FOR PROPER OPERATION OF EQUIPMENT.

B. MEDICAL GAS VALVES SHALL BE 3–PIECE DESIGN CLEANED AND LISTED FOR OXYGEN SERVICE.

2.03 SUPPORTS AND HANGERS

A. PROVIDE ALL NECESSARY HANGERS, SUPPORTS, BUILDING ATTACHMENTS, SUPPLEMENTAL STEEL, ANCHORS, INSERTS, ETC., AS REQUIRED TO INSTALL THE PIPING WORK. HANGERS AND SUPPORTS SHALL BE CAPABLE OF SUPPORTING PIPE LOADS AND FULL CONTENTS WITH ALL RELATED DEVICES, PUMPS, ETC.

B. HANGERS, SUPPORTS AND RELATED ITEMS SHALL HAVE FACTORY COATED FINISHES THAT WILL NOT PROMOTE GALVANIC OR CORROSION ACTION. RODS, NUTS AND MISCELLANEOUS FASTENERS SHALL BE GALVANIZED.

PART 3 – BASIC EXECUTION

3.01 MEDICAL GAS

A. MEDICAL GAS SYSTEM DEMOLITION AND INSTALLATION SHALL COMPLY WITH CURRENT EDITION OF NFPA 99.

B. SYSTEM TEST & CERTIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH NFPA STANDARDS. TEST & CERTIFICATION SHALL CONSIST OF ALL PIPELINES WITHIN AFFECTED AREA OF SCOPE AND PIPELINE IMMEDIATELY UPSTREAM OF AREA AS PRESCRIBED IN NFPA 99. FINAL CROSS CONNECTION, CERTIFICATION AND PURITY TESTS SHALL BE CONDUCTED BY A THIRD PARTY AS DIRECTED BY THE HOSPITAL.

C. PROVIDE ALL REQUIRED CUTTING AND PATCHING FOR THE NEW MEDICAL GAS SYSTEMS.

D. PROVIDE A NOTORIZED DOCUMENT INDICATING ALL TEST RESULTS FOR SUBMISSION TO ALL NECESSARY CODE AUTHORITIES AND FOR FACILITY RECORDS.

PART 4 – EQUIPMENT, FIXTURES AND DEVICES

4.01 GENERAL

A. INSTALL ALL ITEMS IN ACCORDANCE TO MANUFACTURER'S INSTRUCTIONS. PROVIDE ALL REQUIRED FACTORY AUTHORIZED START–UP SERVICES WHERE REQUIRED.

B. ITEMS SHALL BE SET, LEVELED, FASTENED AND CONNECTED COMPLETE WITH ALL REQUIRED TRIM, SUPPORTS, ETC. ALL FIXTURES SHALL BE PERFECT IN FINISH AND COLOR, SHALL BE SQUARE WITH RELATION TO FINISHED INTERIOR AND LOCATED AS INDICATED ON THE DRAWINGS.

C. ALL ITEMS SHALL BE PROVIDED WITH PROPER SUPPORT. PROVIDE AND ARRANGE FOR ALL NECESSARY WALL FRAMING AND BLOCKING.

D. AFTER WORK HAS BEEN COMPLETED, ALL ITEMS AND TRIM SHALL BE THOROUGHLY CLEANED.

E. PROVIDE ALL MEDICAL GAS EQUIPMENT AND DEVICES AS SPECIFIED. EQUIPMENT DEVICES, VALVES AND RELATED COMPONENTS SHALL BE FROM AMICO PURITAN BENNETT AND IN ACCORDANCE TO CURRENT NFPA #99 STANDARDS.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

CODE REFERENCES

CITY OF DENVER, COLORADO MUNICIPAL PLUMBING CODE
2015 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL PLUMBING CODE
2012 NFPA 99 STANDARDS

DRAWING LIST

P0.0	MEDICAL GAS SYMBOLS, ABBREVIATIONS AND CODE INFO	NO SCALE
P1.0	MEDICAL GAS FLOOR PLANS	1/4"=1'–0"

MEDICAL GAS MATERIAL LIST

SERVICE DESCRIPTION	MATERIAL
MEDICAL GAS	TYPE 'K' HARD DRAWN SEAMLESS COPPER AND WROT FITTINGS CLEANED & CAPPED FOR OXYGEN SERVICE. JOINTS SHALL BE BRAZED IN ACCORDANCE TO CURRENT NFPA 99 STANDARDS.

MEDICAL GAS SYMBOL LIST

SYMBOL	DESCRIPTION
—— O2 ——	OXYGEN PIPING
—— AIR ——	MEDICAL COMPRESSED AIR PIPING
—— VAC ——	MEDICAL VACUUM PIPING
—— N ——	NITROGEN PIPING
—— WAGD ——	WASTE ANESTHETIC GAS DISPOSAL PIPING
—— CO2 ——	CARBON DIOXIDE PIPING
—— NO ——	NITRIC OXIDE PIPING
	NEW PIPE
	EXISTING PIPE
⊠	ZONE VALVE BOX
⋈	SHUT–OFF VALVE
	EXISTING FIXTURE/EQUIPMENT/PIPING TO BE REMOVED
	NEW CONNECTION

MEDICAL GAS ABBREVIATION LIST

ABBREVIATION	DESCRIPTION
AIR	MEDICAL COMPRESSED AIR
O2	OXYGEN
VAC	MEDICAL VACUUM
N	NITROGEN
WAGD	WASTE ANESTHETIC GAS DISPOSAL
CO2	CARBON DIOXIDE
NO	NITRIC OXIDE
ZVB	ZONE VALVE BOX
TYP.	TYPICAL

PLUMBING ABBREVIATION LIST

ABBREVIATION	DESCRIPTION
(N)	NEW PIPING
(E)	EXISTING PIPING

G:\2019\19-00\300 PLUMB\PLB SYMBOLS, ABBREVIATIONS AND CODE INFO.DWG Last edited by: RYB on 10-10-2019 @ 10:37
Copyright © 2017, WMA CONSULTING ENGINEERS, LTD.

The Medical Center of Aurora
HealthONE

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

IN ASSOCIATION WITH
WMA a Salas O'Brien Company
815 South Wabash Avenue, Chicago, IL 60605
9250 East Costilla Avenue, Greenwood Village, CO 80112
WMA Job# 19119-00

DESIGN DOT LOT
dpteam@thedesignplot.com
(303) 565–7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

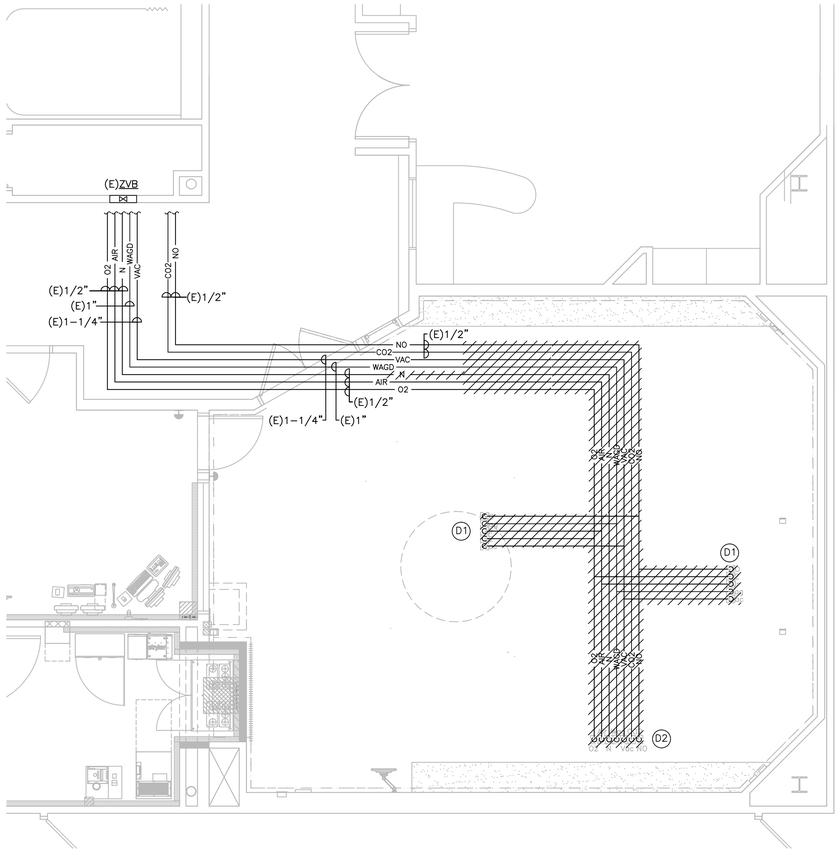
COLORADO LICENSED MICHAEL P. THOMPSON 53150 PROFESSIONAL ENGINEER
10/25/2019

PROJECT NO.: 18–22

DRAWN BY:
CHECKED BY:
SCALE: AS SHOWN
DATE: 10/25/2019
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
PLUMBING SYMBOLS, ABBREVIATIONS, AND CODE INFO

SHEET NO.:
P0.0

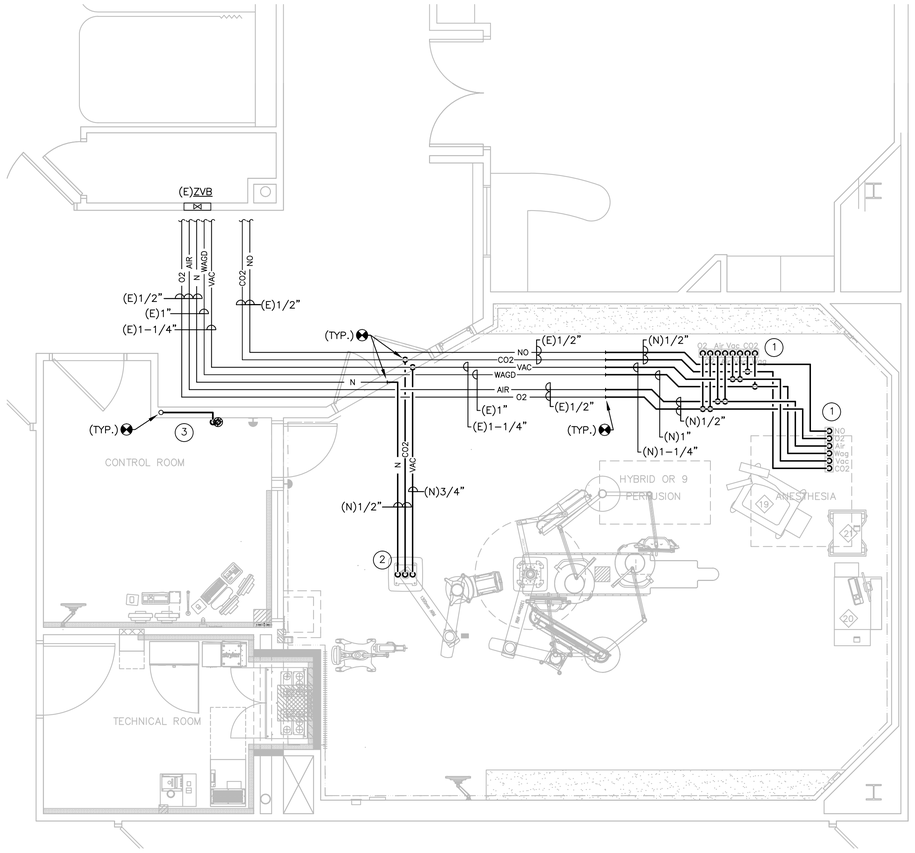


1 PLUMBING DEMOLITION FLOOR PLAN

1/4"=1'-0"

0 2 4 8

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC



2 PLUMBING FLOOR PLAN

1/4"=1'-0"

0 2 4 8

DEMOLITION KEY NOTES:

(D1) MEDICAL GAS OUTLETS TO BE REMOVED WITH MEDICAL GASES RELOCATED TO CONNECT WITH NEW OR BOOM.

(D2) EXISTING MEDICAL GAS OUTLETS AND ASSOCIATED PIPING TO BE REMOVED. REMOVE ALL PIPING BACK TO ACTIVE SOURCE AND CAP. REMOVE ALL ASSOCIATED HANGERS AND SUPPORTS UNUSED.

QUALIFICATION OF MEDICAL GAS INSTALLERS SHALL BE PER NFPA 5.1.10.11.10

CONDENSTE PIPING PER IPC 307

NEW WORK KEY NOTES:

(1) PROVIDE NEW MEDICAL GAS CEILING OUTLETS. MATCH EXISTING CEILING OUTLETS. PIPE SUPPORTING MEDICAL GASES TO NEW OUTLETS.

(2) EXTEND AND CONNECT EXISTING MEDICAL GAS SYSTEMS TO NEW OR BOOM. COORDINATE EXACT ROUGH-IN LOCATIONS AND CONNECTIONS REQUIRED WITH OR BOOM EQUIPMENT INSTRUCTIONS.

(3) PROVIDE NEW 2" OPEN SITE DRAIN/STANDPIPE TO ACCEPT HVAC CONDENSATE. COORDINATE EXACT PLACEMENT WITH HVAC EQUIPMENT AND HVAC CONTRACTOR. CONNECT INTO EXISTING SINK PIPING IN WALL. ALIGN OPEN SITE DRAIN AND TRAP PARALLEL TO WALL. KEEP EXPOSED PIPING TO A MINIMUM.

GENERAL NOTES:

1. CONTRACTOR TO ROUGH-IN AND MAKE FINAL CONNECTIONS TO "STRYKER" CEILING BOOMS IN STRICT ACCORDANCE TO MANUFACTURER'S INSTRUCTIONS. MEDICAL GAS LINES SHALL BE TERMINATED WITH "STRYKER" SUPPLIED GAS RISERS, INSTALLED BY THIS CONTRACTOR. ALL FINAL DISS CONNECTIONS TO BE MADE BY THIS CONTRACTOR AFTER "STRYKER" INSTALLATIONS.

2. CONTRACTOR TO COORDINATE AND ROUTE MEDICAL GASES AROUND PROPOSED STRUCTURAL SUPPORTS FOR CEILING MOUNTED EQUIPMENT. COORDINATE WITH STRUCTURAL DOCUMENTS.

The Medical Center of Aurora
Health

HYBRID OR 9 / DISCOVERY IGS

MEDICAL CENTER OF AURORA

1501 S. POTOMAC ST.
AURORA, CO 80012

SOUTH CAMPUS

TOM THOMPSON ARCHITECT
2510 SOUTH OSCEOLA STREET
DENVER, COLORADO 80219
720.989.6084
TomThompsonArchitect@gmail.com

IN ASSOCIATION WITH
WMA a Salas O'Brien Company
815 South Wabash Avenue, Chicago, IL 60605
9250 East Costilla Avenue, Greenwood Village, CO 80112
WMA Job# 19119-00

DESIGN LOT
dpteam@thedesignplot.com
(303) 565-7282

All drawings and written material appearing herein constitute the original and unpublished work of Tom Thompson, Architect. These documents are strictly proprietary and confidential. They are not to be disclosed to third parties, distributed or reproduced without the express written permission of Tom Thompson, Architect.

COLORADO LICENSED
MICHAEL P THOMPSON
53150
PROFESSIONAL ENGINEER
10/25/2019

PROJECT NO.: 18-22

DRAWN BY:
CHECKED BY:
SCALE: AS SHOWN
DATE: 10/25/2019
ISSUED FOR: CONSTRUCTION
REVISIONS:

SHEET TITLE:
PLUMBING PLANS

SHEET NO.:
P1.0

G:\19119-00\300_PLUM\P1.0 PLUMBING PLANS.DWG Last edited by R19 on 10-17-2019 @ 12:17

COPYRIGHT © 2017, WMA CONSULTING ENGINEERS, LTD.

This sheet of drawings has not been reviewed for code compliance.



REV	DATE	MODIFICATIONS
B	08/AUG/2019	Revised final drawing based on request DC-201370
A	01/AUG/2019	Final drawing based on request DC-201178

01 - C1 - Cover Sheet
02 - C2 - Disclaimer - Site Readiness
03 - A1 - General Notes
04 - A2 - Equipment Layout
05 - A3 - Movement Layout
06 - A4- Section Views
07 - A5 - Equipment Details (1)
08 - A6 - Equipment Details (2)
09 - A7 - Delivery
10 - S1 - Structural Notes
11 - S2 - Structural Layout
12 - S3 - Structural Details (1)
13 - S4 - Structural Details (2)
14 - S5 - Structural Details (4)
15 - M1 - HVAC
16 - E1 - Electrical Notes
17 - E2 - Electrical Layout
18 - E3 - Electrical Elevations
19 - E4 - Electrical Details
20 - E5 - Power Requirements
21 - E6 - Interconnections

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 does not take responsibility for any damages resulting from changes on drawings made by others. Errors may occur by not referring to the complete set of final issue drawing. GE cannot accept responsibility for any damage due to the partial use of GE final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE accepts no responsibility or liability for defective work due to scaling from these drawings.

MEDICAL CENTER OF AURORA
AURORA, COLORADO
USA

GE Healthcare

TONY SCHRADER
720-467-4290
Tony.schrader@ge.com

DISCOVERY IGS 7
FINAL STUDY

Drawn by	Verified by	Concession	S.O. (GON)	PIM Manual	Rev
TST	TST	-	4794421	5730951-1-1EN	3

Format	Scale	File Name	Date	Sheet
A3	1:48	IGS-M118450-FIN-00-B.DWG	08/AUG/2019	01/21

DISCLAIMER

GENERAL SPECIFICATIONS

- GE is not responsible for the installation of developers and associated equipment, lighting, cassette trays and protective screens or derivatives not mentioned in the order.
- The final study contains recommendations for the location of GE equipment and associated devices, electrical wiring and room arrangements. When preparing the study, every effort has been made to consider every aspect of the actual equipment expected to be installed.
- The layout of the equipment offered by GE, the dimensions given for the premises, the details provided for the pre-installation work and electrical power supply are given according to the information noted during on-site study and the wishes expressed by the customer.
- The room dimensions used to create the equipment layout may originate from a previous layout and may not be accurate as they may not have been verified on site. GE cannot take any responsibility for errors due to lack of information.
- Dimensions apply to finished surfaces of the room.
- Actual configuration may differ from options presented in some typical views or tables.
- If this set of final drawings has been approved by the customer, any subsequent modification of the site must be subject to further investigation by GE about the feasibility of installing the equipment. Any reservations must be noted.
- The equipment layout indicates the placement and interconnection of the indicated equipment components. There may be local requirements that could impact the placement of these components. It remains the customer's responsibility to ensure that the site and final equipment placement complies with all applicable local requirements.
- All work required to install GE equipment must be carried out in compliance with the building regulations and the safety standards of legal force in the country concerned.
- These drawings are not to be used for actual construction purposes. The company cannot take responsibility for any damage resulting therefrom.

CUSTOMER RESPONSIBILITIES

- It is the responsibility of the customer to prepare the site in accordance with the specifications stated in the final study. A detailed site readiness checklist is provided by GE. It is the responsibility of the customer to ensure all requirements are fulfilled and that the site conforms to all specifications defined in the checklist and final study. The GE Project Manager of Installation (PMI) will work in cooperation with the customer to follow up and ensure that actions in the checklist are complete, and if necessary, will aid in the rescheduling of the delivery and installation date.
- Prior to installation, a structrual engineer of record must ensure that the floor and ceiling is designed in such a way that the loads of the installed system can be securely borne and transferred. The layout of additional structural elements, dimensioning and the selection of appropriate installation methods are the sole responsibility of the structural engineer. Execution of load bearing structures supporting equipment on the ceiling, floor or walls are the customer's responsibility.

RADIO-PROTECTION

- Suitable radiological protection must be determined by a qualified radiological physicist in conformation with local regulations. GE does not take responsibility for the specification or provision of radio-protection.

ALL DETAILS OF EQUIPMENT AND TECHNICAL DATA ARE SUBJECT TO CHANGE.

THE UNDERSIGNED, HEREBY CERTIFIES THAT I HAVE READ AND APPROVED THE PLANS IN THIS DOCUMENT.		
DATE	**NAME**	**SIGNATURE**

GLOBAL SITE READINESS CHECKLIST (DI)

DOC1809666 Rev. 6

Customer Name:	PMI Name:
GON/SO Number:	Field Service Name:
Equipment:	Country/City or City/State:
Site Visit Date for SRC:	SRC Status:

Site Ready Checks at Installation
General Site Planning
Room dimensions, including ceiling height, for all Exam, Equipment/Technical & Control rooms meets GE specifications.
Ceiling support structure, if on the GE drawing, is at correct location and height according to the drawing specifications. Levelness and spacing has been measured. Overhead support Structure has been confirmed with contractor to meet GE criteria.
Rooms that will contain equipment, including staging areas if applicable, are construction debris free. Precautions must be taken to prevent debris from entering rooms containing equipment.
Finished ceiling is installed. If applicable ceiling tiles installed per PMI discretion.
Delivery route from truck to installation space has been reviewed, all communications have occurred, arrangements made for special handling (if needed). Floors along delivery route will support weight of the equipment, reinforcements arranged if needed.
System power & grounding (PDB/MDP) is available as per GE specifications, installed at point of final connection and ready to use. Lock Out Tag Out is available.
System power and grounded audit has been scheduled to be completed during installation of equipment. (If Required) GEHC PM to confirmed if needed.
Adequate room illumination installed and working.
Cableways (floor, wall, ceiling, etc.) ready for GE cables and are of correct length and diameter. Cableways routed per GE Final drawings and access openings installed as determined by GEHC PM. Surface floor duct installed at time of system installation.
HVAC systems Installed, and the site meets minimum environmental operational system requirements.
Network outlets installed and computer network available and working.
Hospital IT/connectivity contacts have been engaged and information has been added to Project management tool. (If Required)
Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Floor Strength and thickness have been discussed with customer/contractor and they have confirmed GE requirements are met.
Customer supplied countertops where GE equipment will be installed are in place.
Specific for Vascular
Vascular baseplates preparation complete per GE requirements.
For IGS 730/740: Floor finish is according to the GE Specifications and protection is installed . Specifications for concrete substrate & Monopur 7 mm flooring have been met. Table baseplate installed and flush to the finished floor.
For IGS 730/740: Room Interventional Reference Point (RIRP) value has been defined with the customer. Either 1120mm, 1278 mm or 1508 mm.
Ensure that all third party suppliers are identified and have been informed about the project dates and how they need to proceed in accordance with their needs for interfacing to our equipment.
Doors and windows complete or scheduled to be installed. If applicable, radiation protection (shielding) finished & radioprotection regulatory approval for installation obtained.

PMI Signature:	
Customer Signature:	
FS Signatature: optional	

This sheet of drawings has not been reviewed for code compliance.

CUSTOMER SITE READINESS REQUIREMENTS

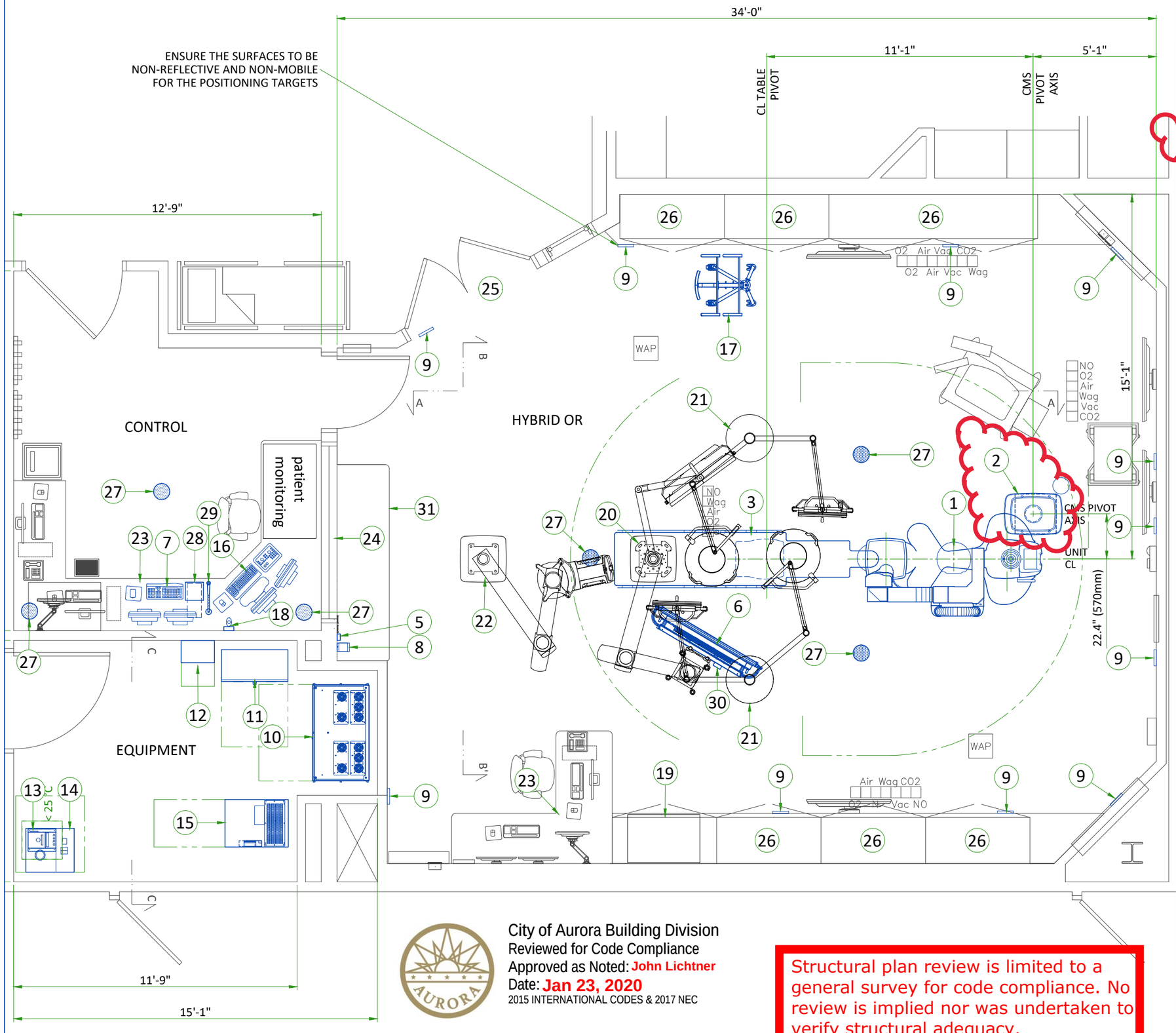
- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE healthcare installation project manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation 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)
- It is the customer's responsibility to contract a vibration consultant/engineer to implement site design modifications to meet the GE vibration specification. Refer to the system preinstallation manual for the vibration specification.

This sheet of drawings has not been reviewed for code compliance.

ELECTROMAGNETIC INTERFERENCE

The IGS System is intended for use in the electromagnetic environment specified below. The customer or user of the system should assure that it is used in such an environment.

EMISSIONS	TEST COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT
Radio–Frequency Emissions CISPR11	Group1 Class A limits	The IGS system uses RF energy only for its internal function. Therefore, its RF emission is very low and not likely to cause any interference in nearby electronic equipment.
		The IGS system uses RF energy only for its internal function. Therefore, the RF emission is very low and not likely to cause any interference in nearby electronic equipment.
Harmonic emissions IEC 61000–3–2	Not applicable	The IGS system is suitable for use in all establishments other than domestic and those directly connected to the low voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuations/ flicker emissions IEC 61000–3–3	Not applicable	The IGS system is suitable for use in all establishments other than domestic and those directly connected to the low voltage power supply network that supplies buildings used for domestic purposes.



City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: **John Lichtner**
Date: **Jan 23, 2020**
2015 INTERNATIONAL CODES & 2017 NEC

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

LEGEND

A	GE Supplied	C	Customer/contractor supplied and installed
B	GE Supplied/contractor installed	D	Available from GE

BY	ITEM	DESCRIPTION	MAX HEAT OUTPUT (btu)	WEIGHT (lbs)
A	1	Gantry	5528	2204
A	2	Cable management system	-	1047
A	3	Tilting table	1614	1750
A	4	Number not used	-	-
A	5	AW wireless mouse	-	-
A	6	Large display monitor with two backup monitors on vendor ceiling boom	1706	784
A	7	Advantage workstation	2019	22
A	8	Xray buzzer	-	1
A	9	Positioning targets (x11)		
A	10	C-FRT Cabinet	2388	1171/ 1193
A	11	Power Distribution Unit	1365	628
B	12	Main Disconnect Panel	205	19
A	13	Detector chiller	717	32
A	14	COOLIX 4100 water chiller	23646	265
A	15	20kVA Fluoro UPS UL	6756	1169
A	16	Operator console	341	19.6
A	17	Table side cart		
A	18	Bolus chase hand switch	-	2
C	19	Storage cabinet		
C	20	Vendor boom with monitors (customer supplied)		
C	21	Vendor boom with rad shield and lamp (customer supplied)		
C	22	Vendor equipment boom		
C	23	Counter top for equipment- provide grommeted openings as required to route cables		
C	24	Control wall to ceiling with lead glass viewing window.		
C	25	Minimum door opening for equipment delivery is 44 in. w x 83 in. h [1118mm x 2108mm], contingent on a 96 in. [2438mm] corridor width		
C	26	Catheter cabinets		
A	27	Vita-linq speakers (x6)		
A	28	Vita-linq control		
A	29	Vita-linq microphone		
A	30	Vita-linq microphone on monitor boom		
C	31	Counter top with base cabinets		
A	35	Printer		
A	36	Tram/PDM net rack on vendor boom D		

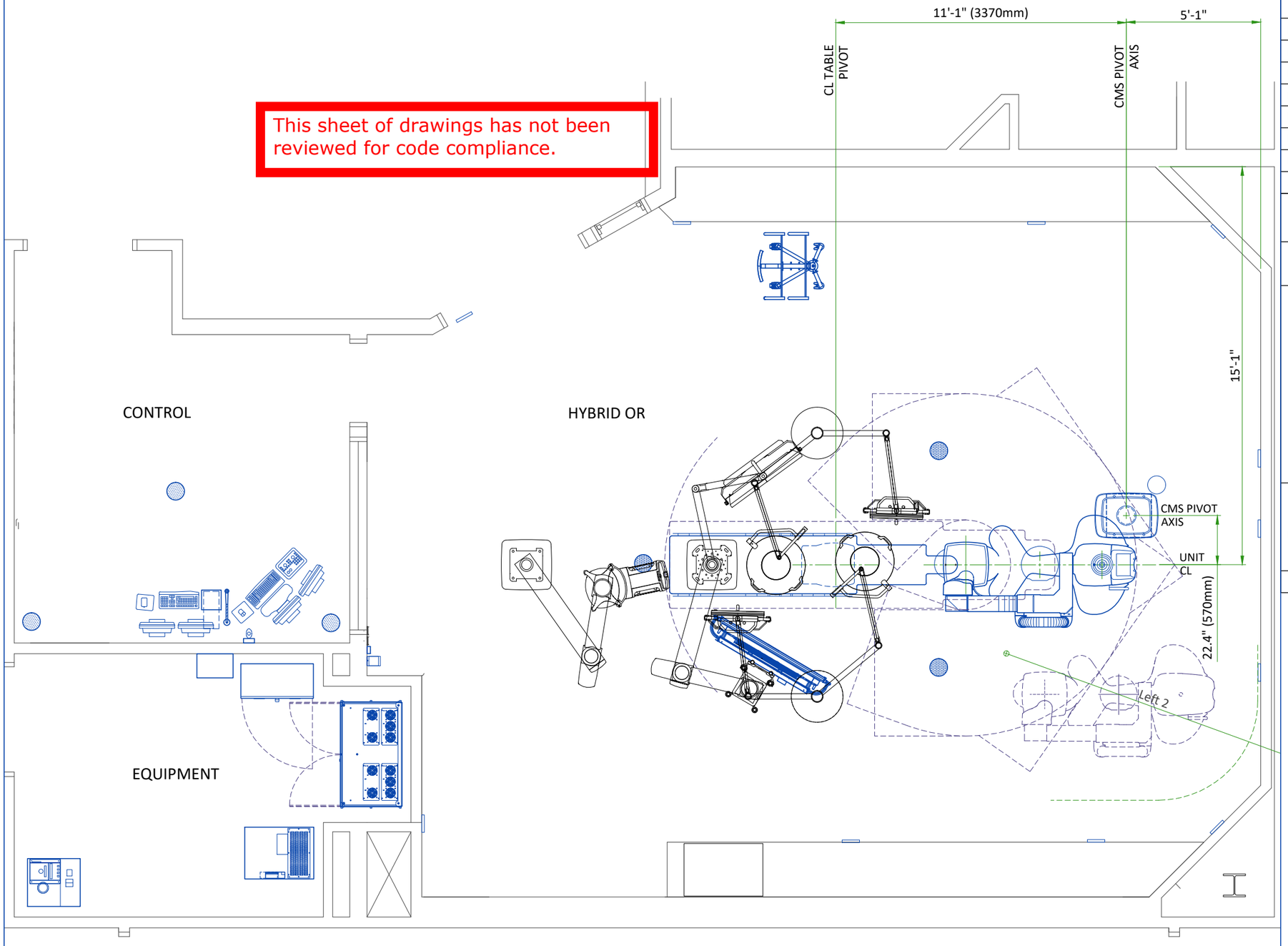
EXAM ROOM HEIGHT

FINISHED FLOOR TO SLAB HEIGHT	T.B.D.
FALSE CEILING HEIGHT	REC. 10'-0"

Note:
- Reflectors to be located above cabinet top; minimum height from finished floor 80.7" [2.05m]
- Ensure the surfaces to be non-reflective and non-mobile for the positioning targets

The GE HPI Technical Support Group is an additional resource that can provide answers for general GE product siting questions and can be reached at (877)-305-9677 or mail to:HPITechCOE@ge.com

This sheet of drawings has not been reviewed for code compliance.



PARKING POSITIONS

NAME	RIRP* 59.4"		FEASIBLE DISTANCE	PROPOSED
	min	max		
Park Head 1	19.7"	154.7"		NO
Park Left 2	19.7"	160.6"		YES
Park Left 3	19.7"	105.9"		NO
Park Left 4	19.7"	52.8"		NO
Park Right 2	19.7"	144.9"		NO
Park Right 3	19.7"	123.6"		NO
Park Right 4	19.7"	98.0"		NO

A maximum of two parking positions can be selected.

BACKOUT POSITIONS

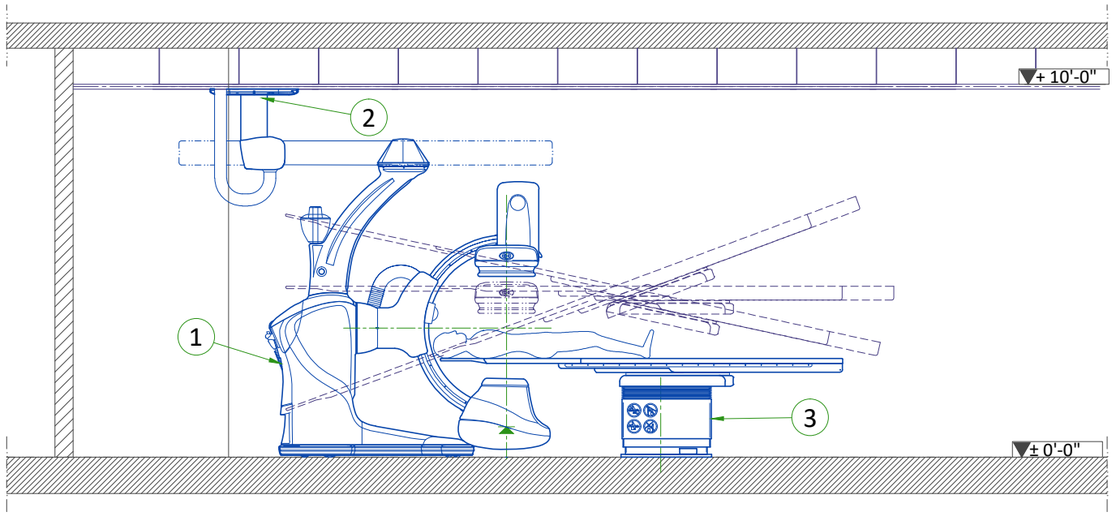
TYPE	NAME	RIRP* 59.4"		TYPICAL
		min	max	
Backouts	**Head Long**	19.7"	169.7"	47.2"
	Left 1	19.7"	169.7"	47.2"
	Right 1	19.7"	169.7"	47.2"
	Head Left	19.7"	106.3"	106.3"
	Head Right	19.7"	141.7"	106.3"
	Left Lat	19.7"	55.1"	35.5"
	Left Feet	19.7"	43.3"	35.5"
	Right Lat	19.7"	94.5"	35.5"
	Right Feet	19.7"	82.7"	35.5"
Arm backouts	**Left Inter**	19.7"	137.8"	-
	Right Inter	19.7"	31.5"	-
	Left Swivel	19.7"	35.5"	-
	Right Swivel	19.7"	67.0"	-

* RIRP: Room Interventional Reference Point

EXAM ROOM VIEW

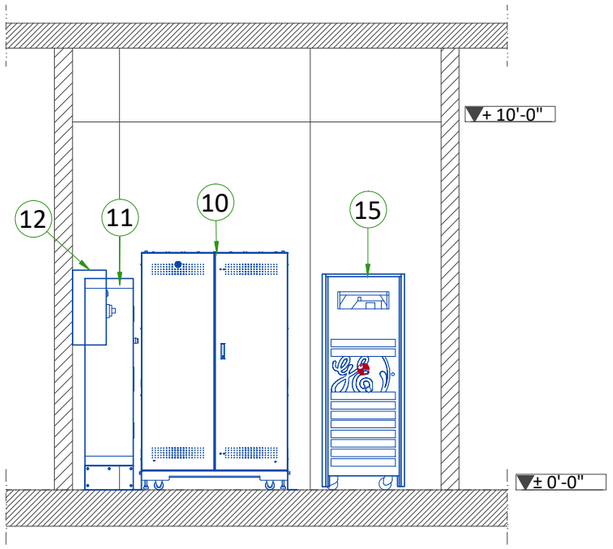
SECTION A-A'

This sheet of drawings has not been reviewed for code compliance.



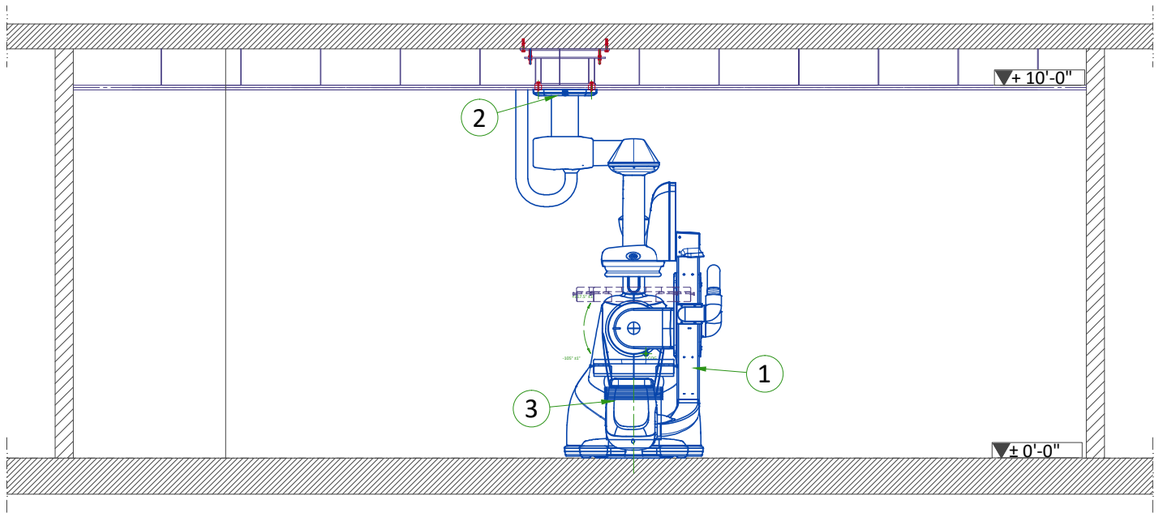
TECHNICAL ROOM VIEW

SECTION C-C'

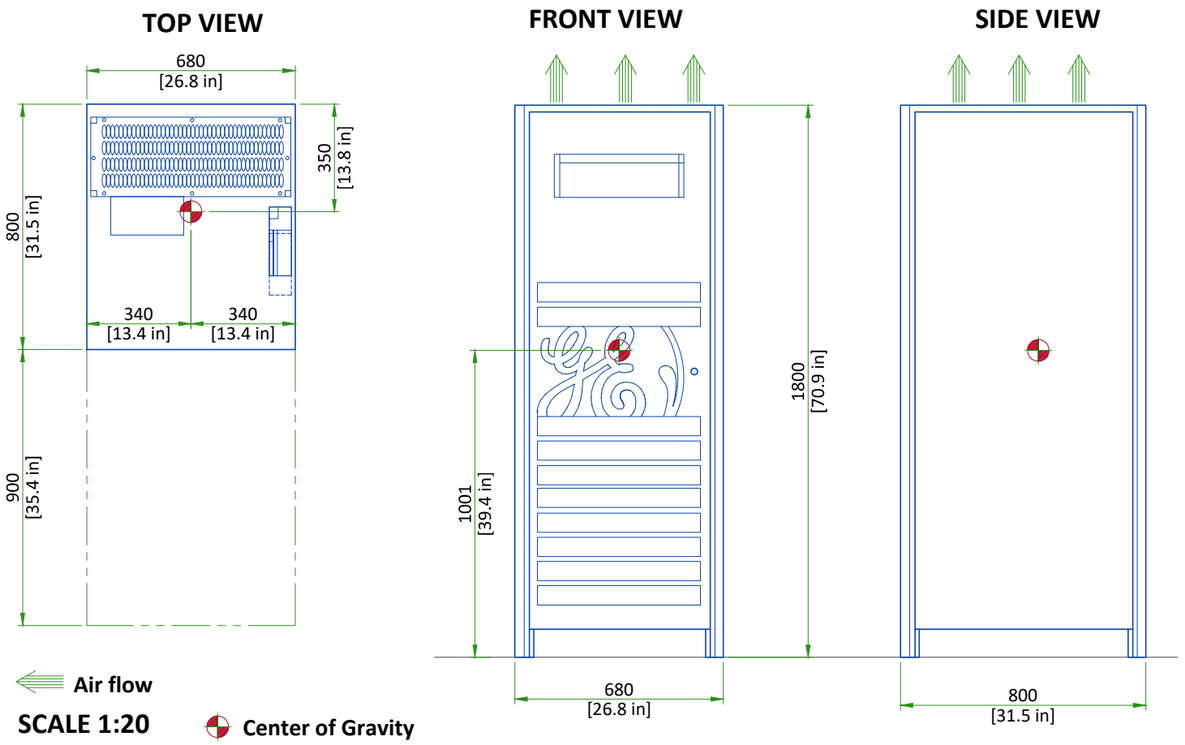


EXAM ROOM VIEW

SECTION B-B'

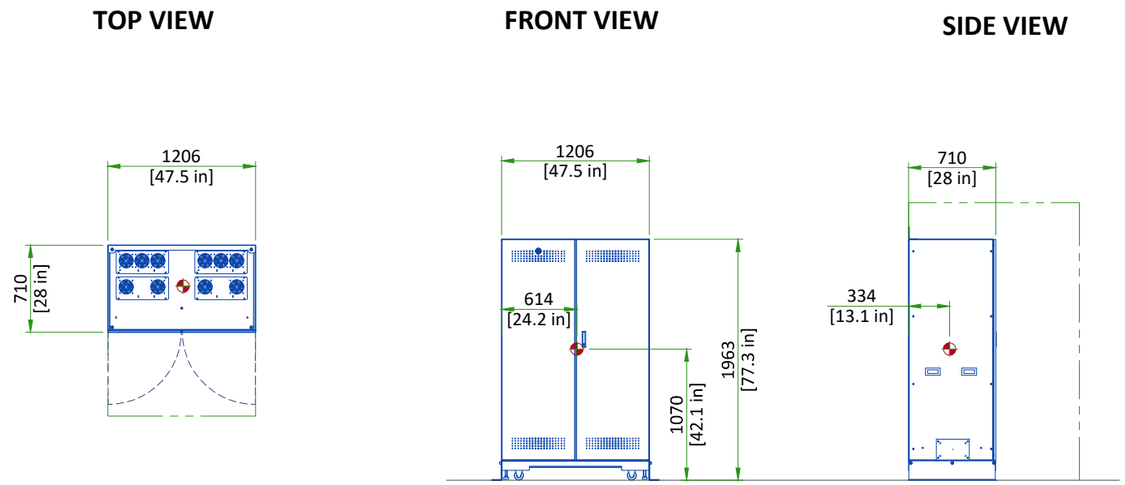


20kVA FLURO UPS



SCALE 1:20

C-FRT CABINET

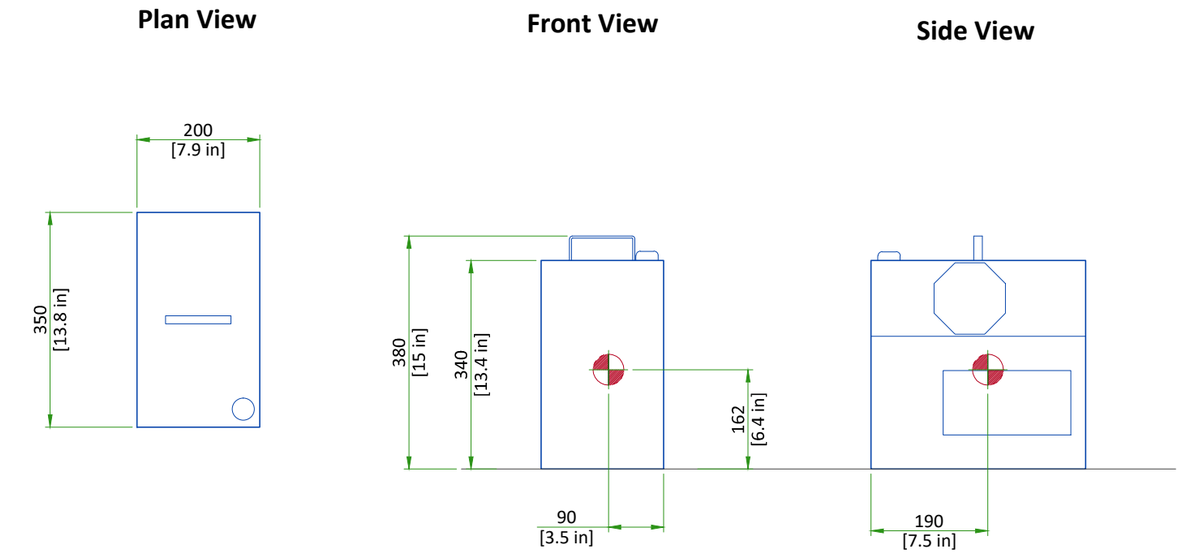


This sheet of drawings has not been reviewed for code compliance.

Center of Gravity

SCALE 1:50

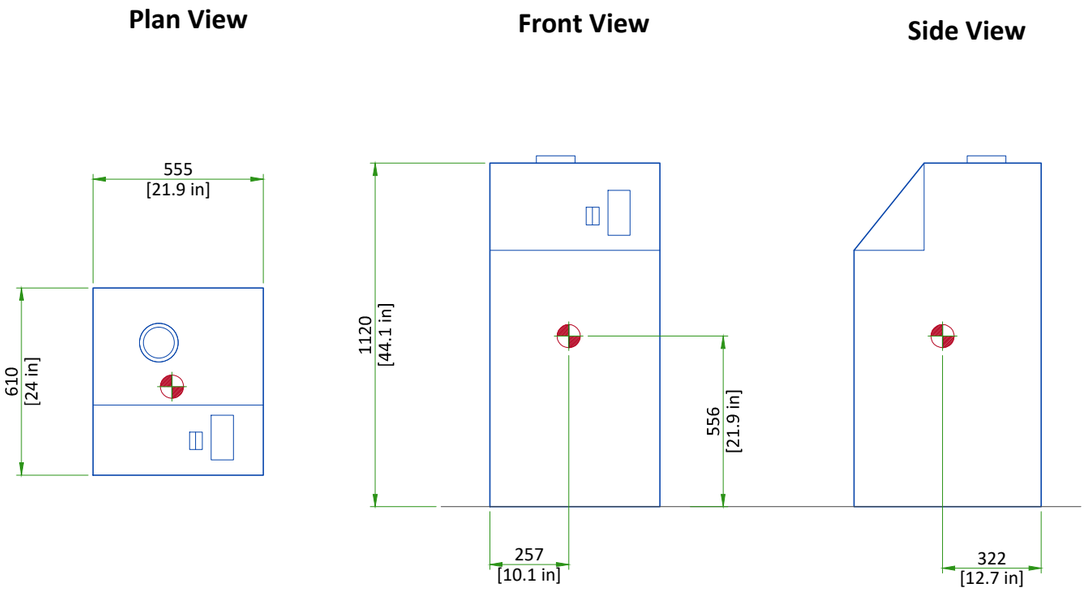
DETECTOR CONDITIONER



Center of Gravity

Scale 1:10

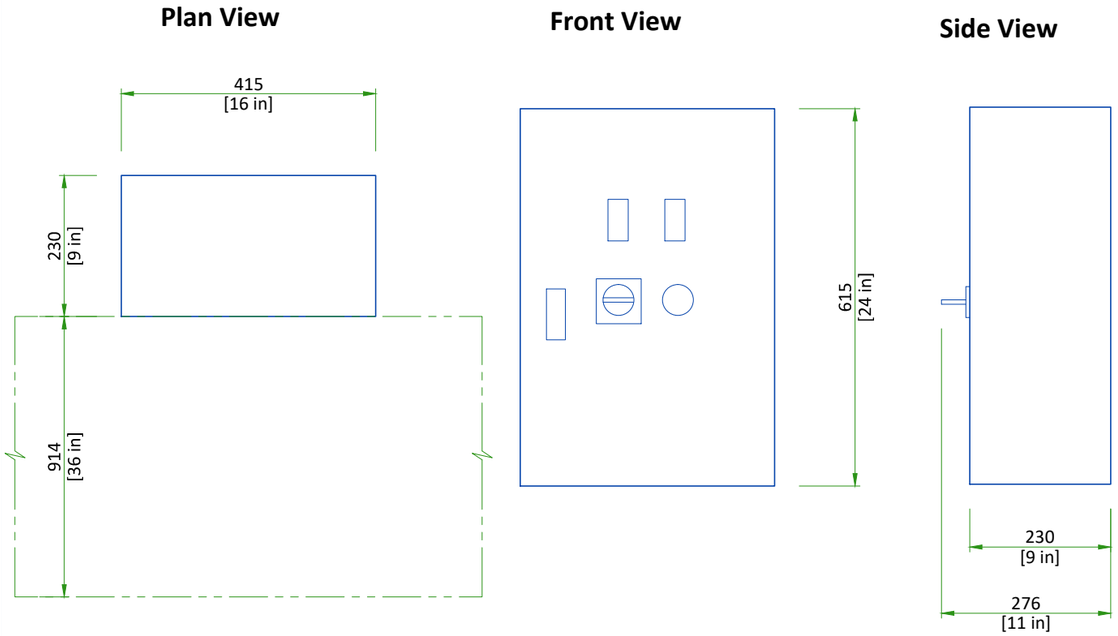
X-RAY TUBE CHILLER



Center of Gravity

Scale 1:20

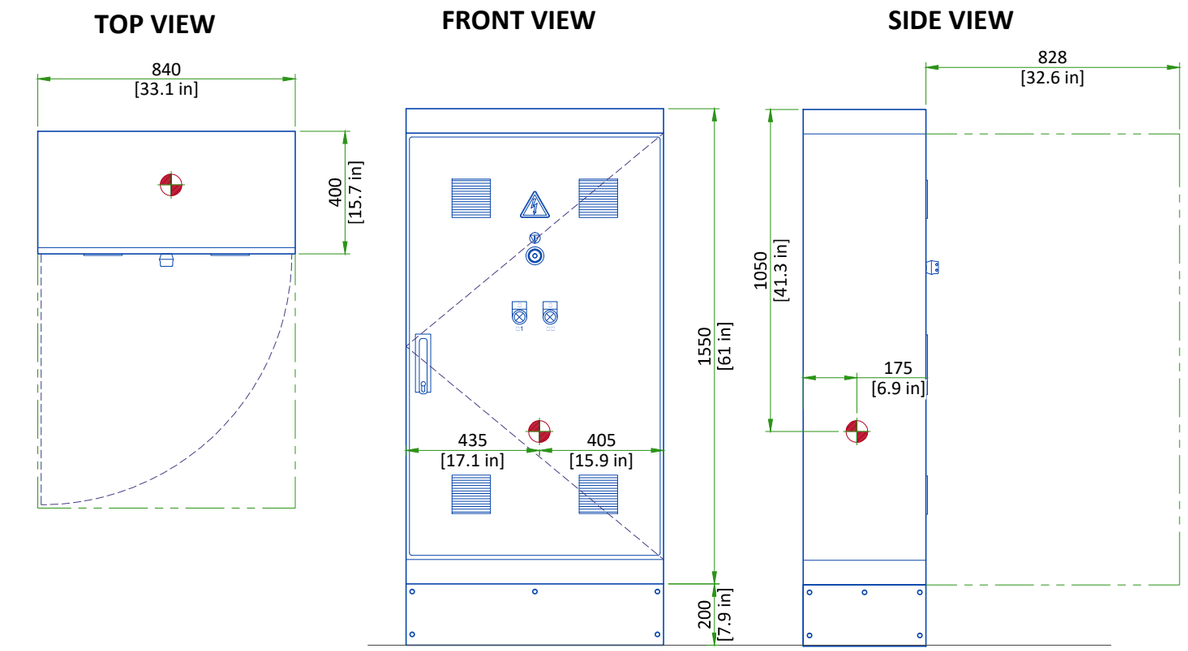
MAIN DISCONNECT PANEL



Scale 1:10

This sheet of drawings has not been reviewed for code compliance.

NPA PDU



SCALE 1:20 **Center of Gravity**

DELIVERY

THE CUSTOMER/CONTRACTOR SHOULD:

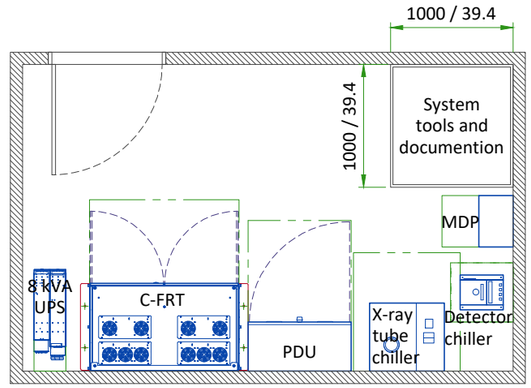
- Provide an area adjacent to the installation site for delivery and unloading of the GE equipment.
- Ensure that the dimensions of all doors, corridors, ceiling heights are sufficient to accommodate the movement of GE equipment from the delivery area into the definitive installation room.
- Ensure that access routes for equipment will accommodate the weights of the equipment and any transportation, lifting and rigging equipment.
- Ensure that all necessary arrangements for stopping and unloading on public or private property not belonging to the customer have been made.

EQUIPMENT	DIMENSIONS			WEIGHT	
		mm	in	kg	lb
Gantry (on dolly)	Length	1410	55.5	1100	2425
	Width	2890	113.7		
	Height	2060	81.1		
Tilting Table base assembly (on pallet)	Length	1000	39.4	700	1534
	Width	2150	84.6		
	Height	1160	45.7		
Tilting Table covers (on pallet)	Length	940	37	50	110
	Width	940	37		
	Height	600	23.6		

RECOMMENDED AREA IN THE TECHNICAL ROOM

THE TECHNICAL ROOM NEED EXTRA SPACE FOR TOOLS AND DOCUMENTATION

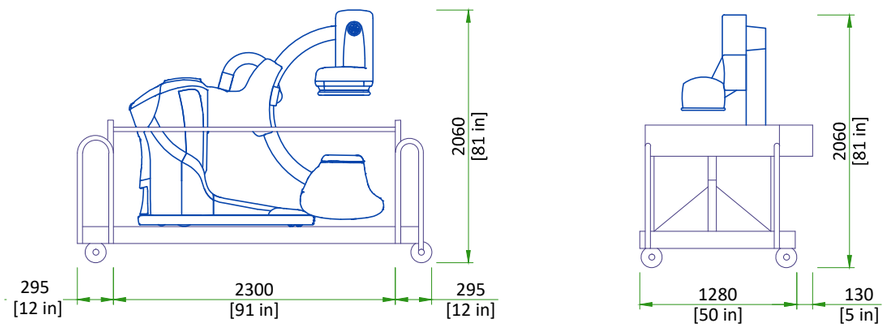
- GE recommend an extra area of 1.0 x 1.0 m (39.4 x 39.4 in) for storage of tools and documention for the system
- This area doesn't need to be inside the technical room, but in a closer space from the system



Dimensions in (mm / in)

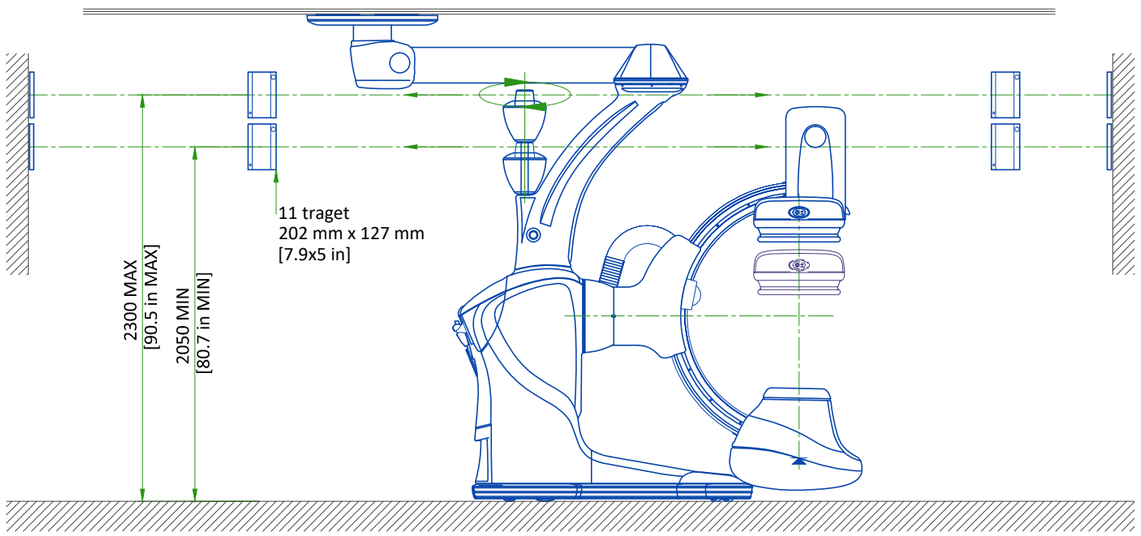
This sheet of drawings has not been reviewed for code compliance.

SHIPPING DOLLY FOR DISCOVERY GANTRY



DIMENSIONS			
	HEIGHT	WIDTH	LENGTH
Full configuration	2060 mm [81.1 in]	1410 mm [55.5 in]	2890 mm [113.7 in]
Left top handle removed and right top handle inside	2060 mm [81.1 in]	1280 mm [50.4 in]	2890 mm [113.7 in]
Short lifts configuration	2120 mm [83.5 in]	1280 mm [50.4 in]	2300 mm [90.5 in]
No dolly configuration	2000 mm [78.7 in]	1260 mm [49.6 in]	2150 mm [84.6 in]
NOTE	Dolly can be removed to facilitate movement of Discovery gantry into exam room. However, if moving the gantry without shipping dolly, there is a risk of damaging the floor surface.		

POSITIONING TARGETS



NOTE
The targets are mounted at the time of the gantry installation.
Targets should be visible to the laser source of the AGV:

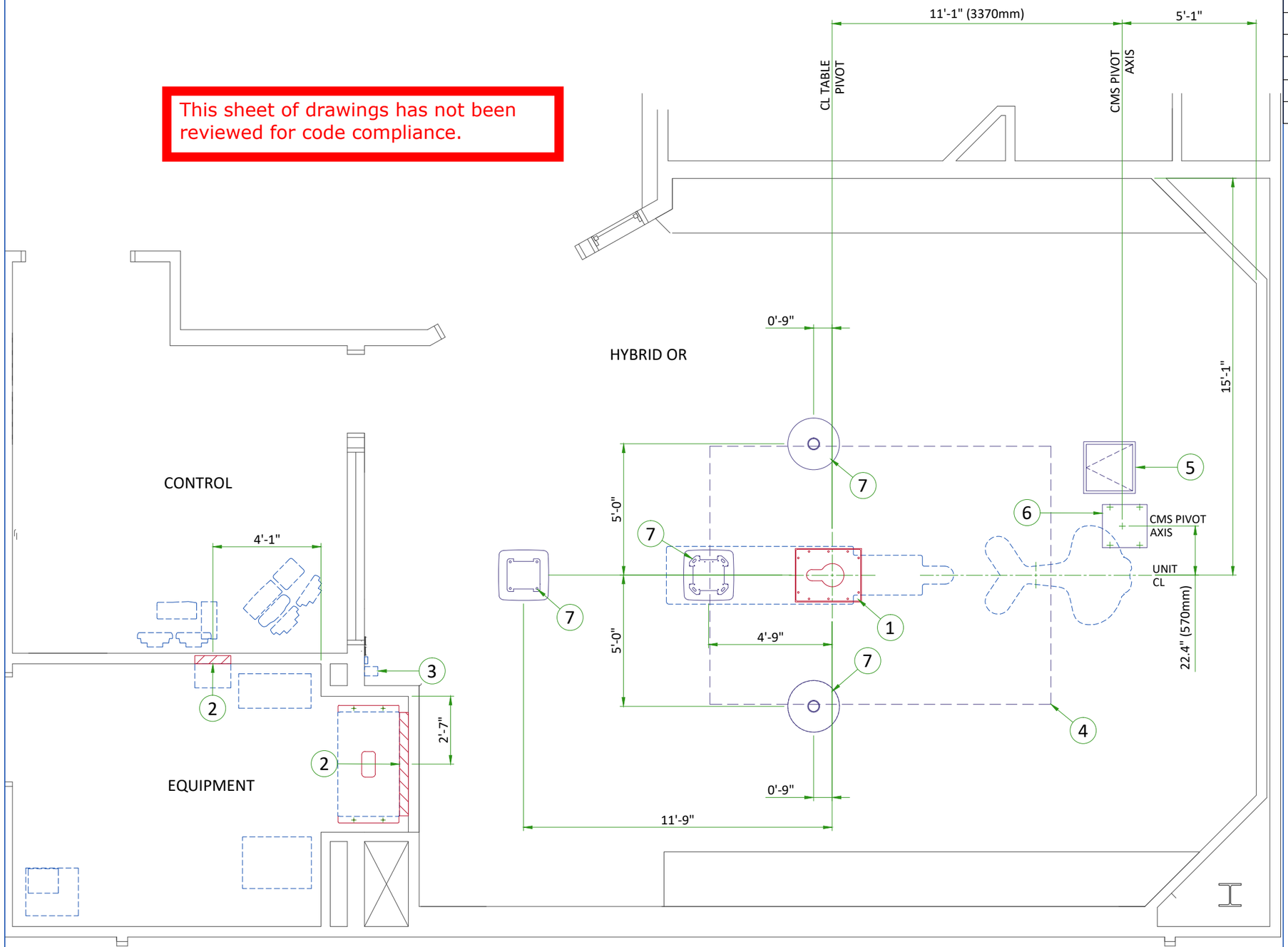
- Shouldn't be mounted on movable surface (door, window, etc.).
- Shouldn't be mounted on a surface that could be hidden in operation by door or movable component.
- Shouldn't be mounted on or near a reflective surface.

STRUCTURAL NOTES

- All steel work and parts necessary to support ceiling mounted tube hanger or other equipment are to be supplied by the customer or his contractors. The structural support should run continuous with no fittings extending below face of structural support channel, run wall to wall, be parallel, square and in the same horizontal plane flush with finished ceiling. The system is to be cross braced vertically, horizontally and diagonally to allow no movement and a maximum of 1,58mm (1/16") deflection. 12,7mm (1/2") dia. X 38,1mm (1 1/2") long bolts with unistrut 12,7mm (1/2") nuts with springs are to be provided by customer or his contractors for each stationary and auxillary support rail. Closure strips shall be provided for areas of unistrut exposed and without mounting units.
- 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 6,35mm (1/4") below the finished ceiling.
- Control walls with tube hanger passage above shall be constructed to 2130mm (7'-0") high.
- Floor slabs on which equipment is to be installed must be level to 3,17mm (1/8") in 3050mm (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.
- It is the customer's responsibility to perform any floor or wall penetrations that may be required. The customer is also responsible for ensuring that no subsurface utilities (e.g., electrical or any other form of wiring, conduits, piping, duct work or structural supports (i.e. post tension cables or rebar)) will interfere or come in contact with subsurface penetration operations (e.g. drilling and installation of anchors/screws) performed during the installation process. To ensure worker safety, GE installers will perform surface penetration operations only after the customer's validation and completion of the "GE surface penetration permit"

This sheet of drawings has not been reviewed for code compliance.

This sheet of drawings has not been reviewed for code compliance.



	STRUCTURAL LAYOUT ITEM LIST (contractor supplied & installed)
1	Area occupied by GE supplied table baseplate
2	support backing, locate as shown.
3	Mount X-Ray buzzer bracket on wall above ceiling
4	Laminar air flow area (to be defined)
5	600 x 600 [24" x 24"] Service access in ceiling
6	Customer supplied plate (520x502 [20.5"x19.8"])
7	Structural support in ceiling for vendor booms

FLOOR SPECIFICATION

IMPORTANT

THE FLOOR SYSTEM COMPATIBLE WITH THE DISCOVERY IGS EQUIPMENT IS THE **"MONOPUR 4+3"** MONOLITHIC FLOORING SYSTEM INSTALLED BY A CERTIFIED APPLICATOR.

CONTACT YOUR LOCAL GE REPRESENTATIVE FOR THE LIST OF APPLICATORS.

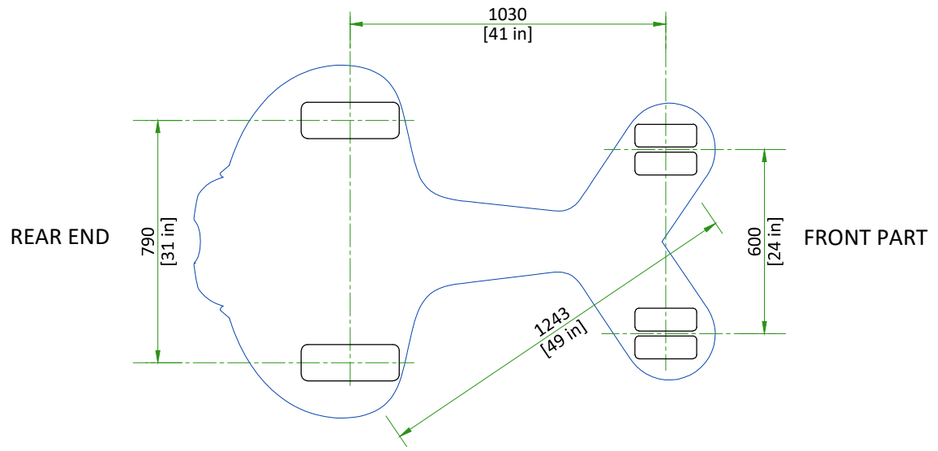
EXAM ROOM FLOOR ACCEPTANCE SPECIFICATION FOR SUBSTRATE BEFORE MONOPUR APPLICATION	
SUBSTRATE FLATNESS	**< 3 mm/2 m [0.12 in/6 ft]**
SUBSTRATE LEVELNESS	**< 1 mm/m [0.04 in/3 ft]**
PULL-OUT STRENGTH (i.e. Elcometer Adhesion Testor)	**> 1.5 MPa**
HARDNESS (i.e. Schmidt Hammer Sclerometer)	**> 30 MPa**
SUBSTRATE HYGROMETRY CaCl (ASTM F1869), RH% (ASTM F2170)	**< 6% surface** **(pin method)**
FINISHED FLOOR SURFACE SPECIFICATIONS	
FLATNESS	**< 3 mm/2 m [0.12 in/6 ft]**
LEVELNESS	**< 1 mm/m [0.04 in/3 ft]**

- (Bare) Concrete floor preparation and floor resin application falls under the customer's contractor responsibility.
- No expansion joint shall be present in the concrete in the area where the flooring system will be applied.
- Electrical connection of the conductive flooring falls under customer's responsibility.

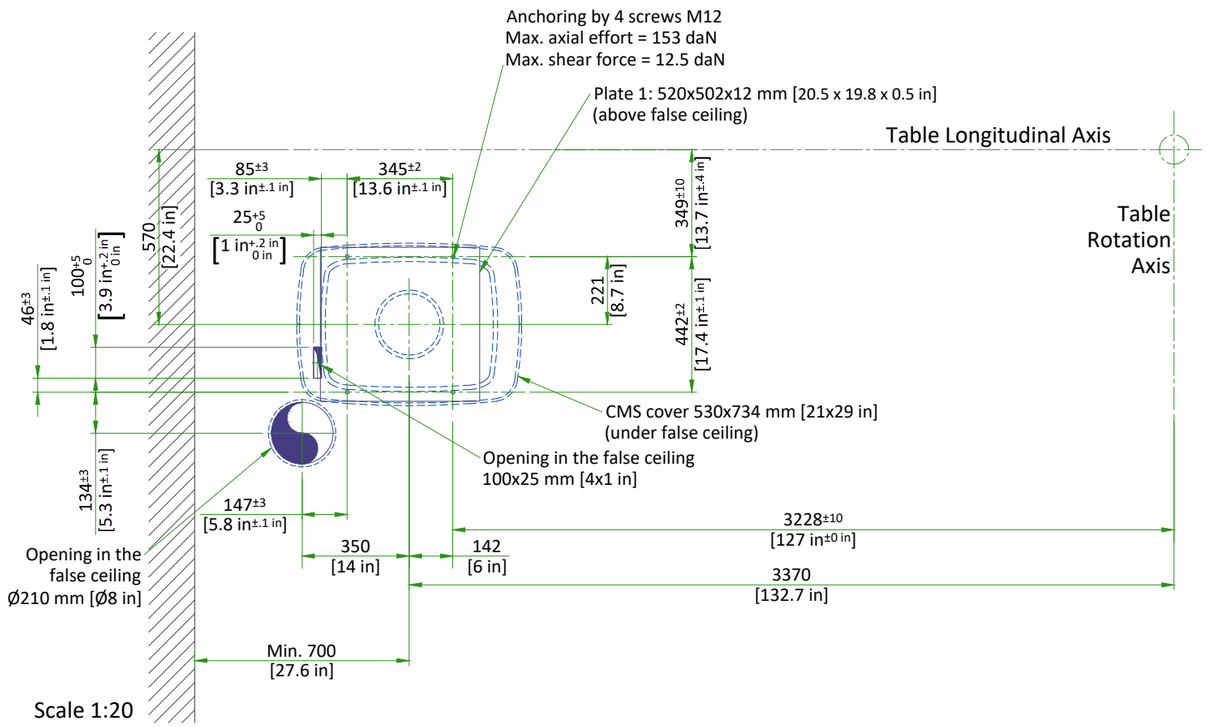
This sheet of drawings has not been reviewed for code compliance.

GANTRY WEIGHT

COMPONENT	NET WEIGHT		LOAD BEARING AREA	WEIGHT/OCCUPIED AREA
GANTRY	TOTAL WEIGHT	990 kg [2183 lb]	1 m² [1550 in²]	990 kg/m² [1.41 lb/in²]
	REAR ISOLATED LOAD	350 kg [772 lb]	640 mm² [0.99 in²]	5.5 MPa [798 lb/in²]
	FRONT ISOLATED LOAD	110 kg [243 lb]	135 mm² [0.21 in²]	8.1 MPa [1175 lb/in²]

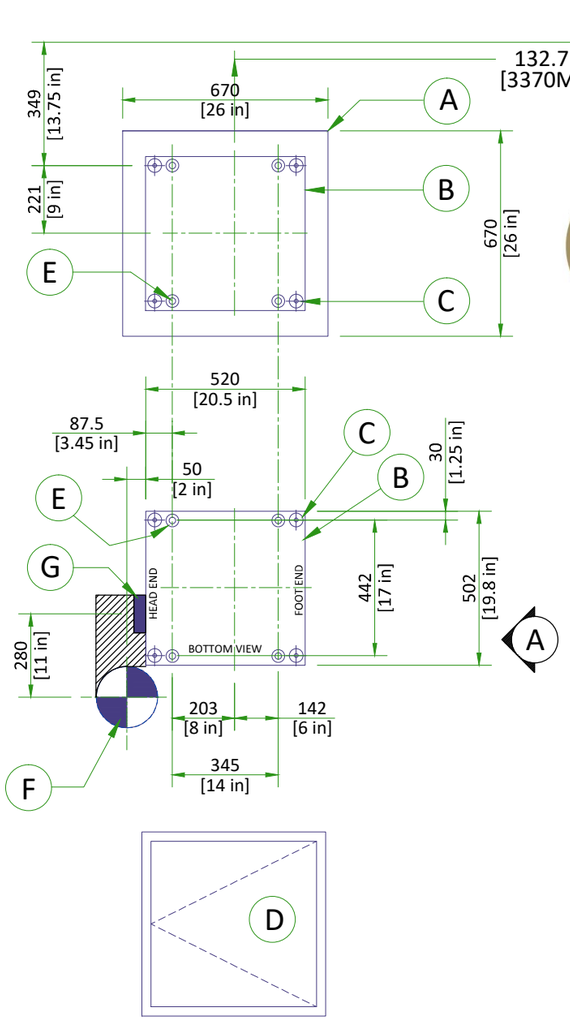


CMS MOUNTING



CMS STRUCTURAL SUPPORT PLATE INFORMATION

IMPORTANT NOTE: CUSTOMER/CONTRACTOR INSTALLED AND DESIGNED BY STRUCTURAL ENGINEER
- ●FIRE DETECTION, LIGHTING, VENTILATION, ETC. NOT TO EXCEED FINISHED CEILING
- ●EACH MOUNTING BOLT MUST NOT "PULL OUT" OR OTHERWISE FAIL UNDER A VERTICALLY DOWNWARD DEAD LOAD OF 635daN



City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

SEE STRUCTURAL CALCS

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

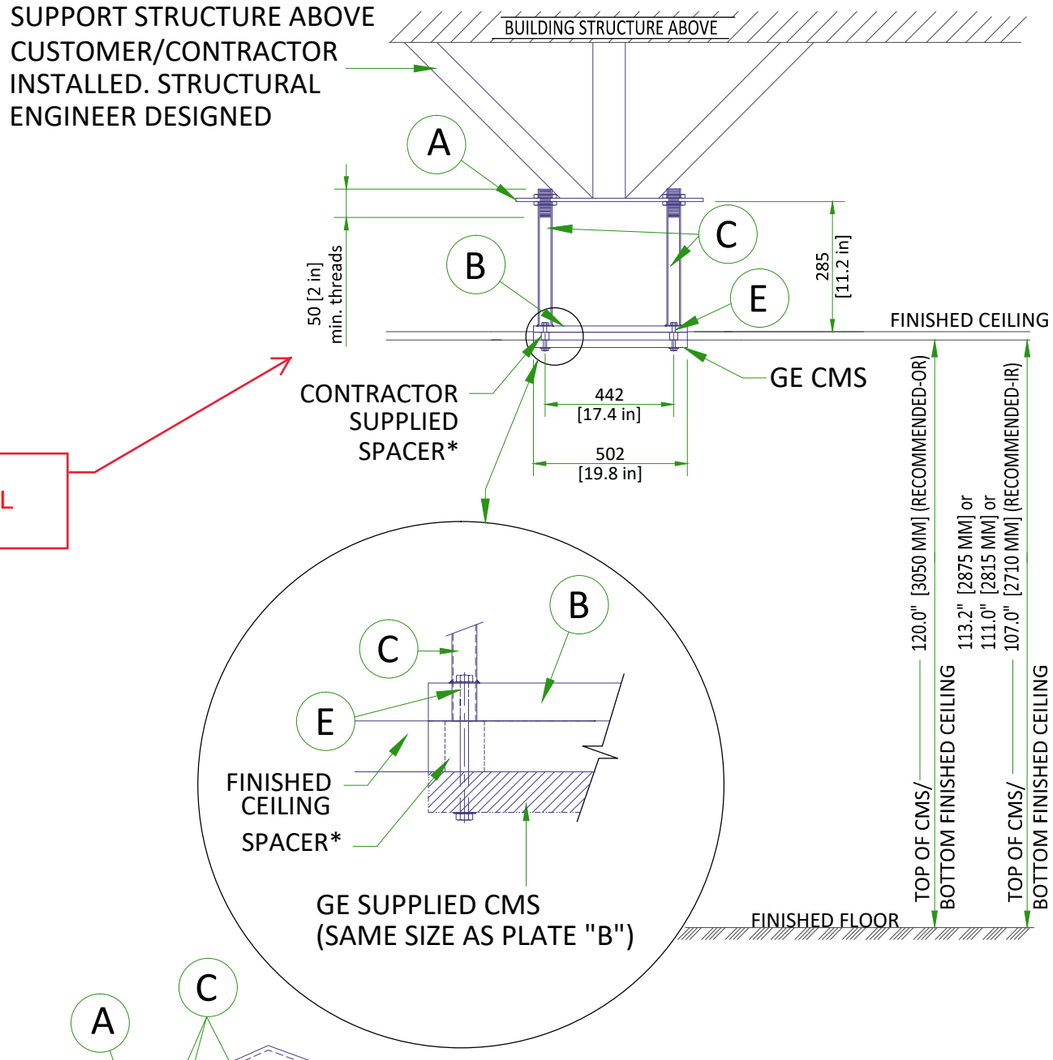
Material legend
(customer supplied and installed)

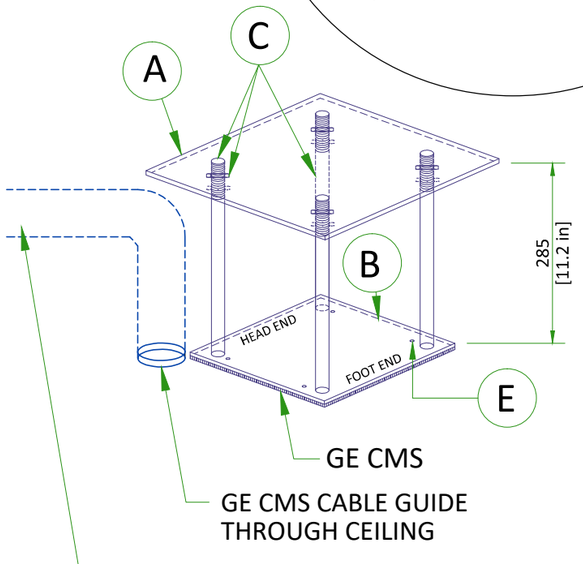
A	PLATE 2 [12MM]-SIZED BY CUSTOMER (ATTACH TO STRUCTURE ABOVE CEILING)
B	PLATE 1 [12MM] 20.5" (520MM) x 19.8" [502MM]
C	HARDENED THREADED RODS [50x50MM] (WELD & GRIND FLUSH TO BOTTOM PLATE 1) (DOUBLE NUT ADJUSTABLE TO PLATE 2)
D	ACCESS PANEL - 24" x 24" [600x600MM]
E	ANCHORED BY (4) M12 GRADE 8.8 BOLTS or ANCHORED BY (4) 1/2" GRADE 5 BOLTS (8) NORD WASHERS (8) NYLOC NUTS ●MAX. AXIAL EFFORT 153daN ●MAX. SHEAR FORCE 125daN
F	8.5" [210MM] DIA. OPENING IN FALSE CEILING (CABLE ACCESS, KEEP CLEAR NO OBSTRUCTIONS)
G	4" [100MM] x 1" [25MM] OPENING (FOR CABLE GUIDE BRACKET IN FALSE CEILING)

DETAIL NOT TO SCALE

CMS ELEVATION SUPPORT STRUCTURE

ELEVATION "A" VIEW





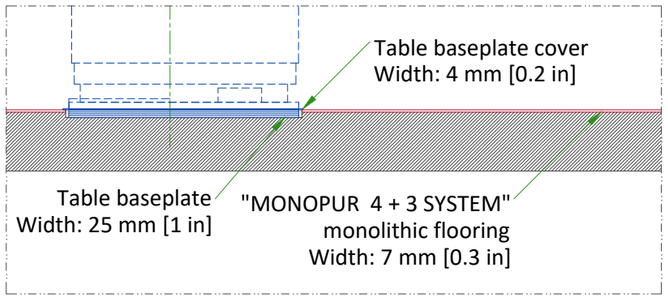
SCHEMATIC VIEW

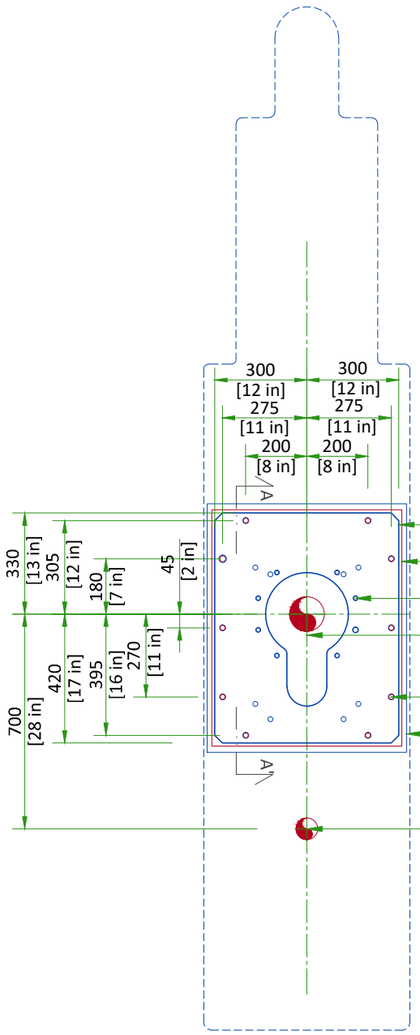
* SPACER REQUIRED IF CONTRACTOR PLATE B NOT FLUSH WITH FINISHED CEILING.

DETAIL NOT TO SCALE

TABLE MOUNTING WITH TABLE BASEPLATE

BASEPLATE COVER - SECTION A-A'





750x600x25 mm [30x24x1 in] baseplate - supplied by GE

770x620 mm [30x24 in] depth of 18 mm [1 in] recess in the floor

8 bolts for table mounting (1)

Cable inlet Ø100 mm [Ø4 in] opening in the floor

10 bolts for baseplate mounting (2)

810x650x4 mm [32x26x0.2 in] baseplate cover - supplied by GE

Ø70 mm [Ø3 in] opening for options

(1) Tilting table mounting location: 8 piece of M16x40 mm bolts - supplied by GE

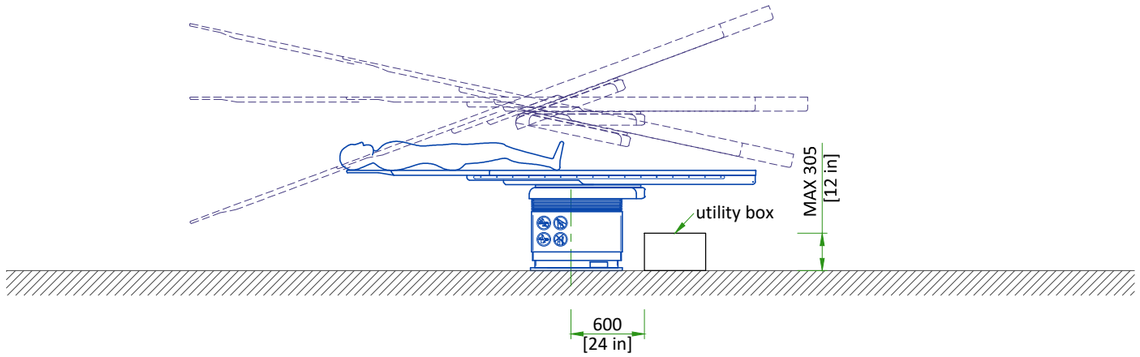
(2) Tilting table baseplate mounting location: 10 piece of M20 bolts - plate and bolts are supplied by GE.
Pull out strength on each bolt: 1120 daN

BASEPLATE MOUNTING REQUIREMENTS

- The maximum pullout force per provided anchor was calculated assuming:
  - A concrete compression strength of **17.24 MPa** at 28 days (which is the minimum required compression strength).
  - Anchors installed to the required hole depth of **165.1 mm [6.5 in]** minimum.
  - The distance between the center of anchor hole and the edge of the concrete is **79.4 [3.1 in] mm**.
- Make sure to obtain data on compression strength of the concrete before using floor anchors.
- Chemical anchors can be used as well: HILTIHVU adhesive capsule + HAS Anchor rod
- The fixation screws shall not jut out of the table baseplate, plate has to be level.

UTILITY BOX

RECOMMENDED DIMENSION		
The minimum distance from table pivot to the medical utility box		600 mm [24 in]
Maximum dimensions of the medical utility box	height	305 mm [12 in]
	width	250 mm [10 in]
	length	500 mm [20 in]
The Utility box under the table is not recommended for the surgical configuration.		
It is forbidden to place or install objects under the table towards head end that could interfere with the AGV motion.		



This sheet of drawings has not been reviewed for code compliance.

TEMPERATURE AND HUMIDITY SPECIFICATIONS

IN-USE CONDITIONS

	EXAM ROOM			CONTROL ROOM			TECHNICAL ROOM		
Temperature	Min	Recommended	Max	Min	Recommended	Max	Min	Recommended	Max
	15 °C [59 °F]	22 °C [72 °F]	32 °C [90 °F]	15 °C [59 °F]	22 °C [72 °F]	35 °C [95 °F]	15 °C [59 °F]	20 °C [68 °F]	25 °C [77 °F]
Temperature gradient	**≤ 10 °C/h**			**≤ 10 °C/h**			**≤ 10 °C/h**		
RH (1) non condensing	30% to 70%			30% to 75%			30% to 75%		
Humidity gradient	**≤ 10%/h**			**≤ 10%/h**			**≤ 10%/h**		

STORAGE CONDITIONS

Temperature	+10 °C [50 °F] to +40 °C [104 °F]
RH (1) non condensing	10% to 80%
Pressure	700 hPa to 1030 hPa
Overall storage time shall be less than 6 months.	

(1) Relative humidity

20 kVA FLUORO UPS

Air renewal	According to Standard IEC 62040-1-2

Systems with 20 kVA UPS shall be stored for less than 6 weeks if the storage temperature is above +30 °C, and less than 12 weeks if storage temperature is above +25 °C .

AIR RENEWAL

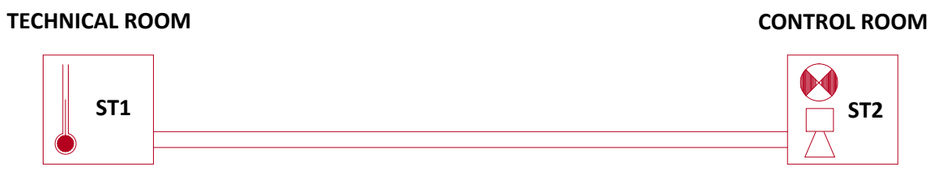
According to local standards.

This sheet of drawings has not been reviewed for code compliance.

NOTE
In case of using air conditioning systems that have a risk of water leakage it is recommended not to install it above electric equipment or to take measures to protect the equipment from dropping water.

ST1-ST2 OVERHEAT ALARM FOR THE TECHNICAL ROOM

28 °C [82.4 °F] to 30 °C [86 °F]: Warning lamps (lit or flashing) in the control room
above 30 °C [86 °F]: Warning lamps (lit or flashing) and audible warning buzzers in the control room with transfer at the security post.



ST1 thermal contact at 1.80 m [71 in] from floor level in the technical room
ST2 warning lamps (lit or flashing) and audible warning buzzers at 1.50 m [59 in] from floor level in the control room

NOTE:
Installation of the above mentioned overheat alarm system belongs to customer responsiblity

HEAT DISSIPATION

ROOM	DESCRIPTION	HEAT OUTPUT (kW)				HEAT OUTPUT (BTU/hr)			
		STAND BY	MODERATE[1]	TYPICAL[2]	MAX[3]	STAND BY	MODERATE[1]	TYPICAL[2]	MAX[3]
Exam room	LC gantry and table	0.41	0.55	0.89	1.62	1399	1877	3037	5528
	Large Display Monitor (LDM)	0.50	0.50	0.50	0.50	1706	1706	1706	1706
	TOTAL	**0.91**	**1.05**	**1.39**	**2.12**	**3105**	**7234**	**4743**	**7234**
Control room	DL console and live monitor	0.10	0.10	0.10	0.10	341	341	341	341
	AW Workstation	0.59	-	0.59	0.59	2019	-	2019	2019
	TOTAL	**0.69**	**0.10**	**0.69**	**0.69**	**2360**	**2360**	**2360**	**2360**
Technical room	C-FRT cabinet	0.70	0.70	0.70	0.70	2388	2388	2388	2388
	PDU	0.40	0.40	0.40	0.40	1365	1365	1365	1365
	Coolix tube chiller	2.53	4.49	5.49	6.93	8633	15321	18733	23646
	Detector Conditioner	0.21	0.21	0.21	0.21	717	717	717	717
	MDP (Mains Disconnect Panel)	0.06	0.06	0.06	0.06	205	205	205	205
	Fluoro UPS UL	1.98	1.98	1.98	1.98	6756	6756	6756	6756
	TOTAL	**5.88**	**7.84**	**8.84**	**10.28**	**20064**	**35077**	**30164**	**35077**

WARNING
The list contains only the principal components of the system and doesn't contain any non-GE supplied equipment.

[1] Moderate Use corresponds to 8 cases in 10 hours.

[2] Typical Use corresponds to 11 cases in 10 hours.

[3] Maximum Use is during the case.

CONNECTIVITY REQUIREMENTS

Broadband Connections are necessary during the installation process and going forward to ensure full support from GE for the customers system. Maximum performance and availability for the customers system is maintained and closely monitored during the lifetime of the system. Proactive and reactive maintenance is available utilizing the wide range of digital tools using the connectivity solutions listed below:

- Site-to-Site VPN/GE Solution
- Site-to-Site VPN/Customer Solution
- Connection through Dedicated Service Network
- Internet Access - connectivity for InSite 2.0

The requirements for these connectivity solutions are explained in the broadband solutions catalogue (separate document).

This sheet of drawings has not been reviewed for code compliance.

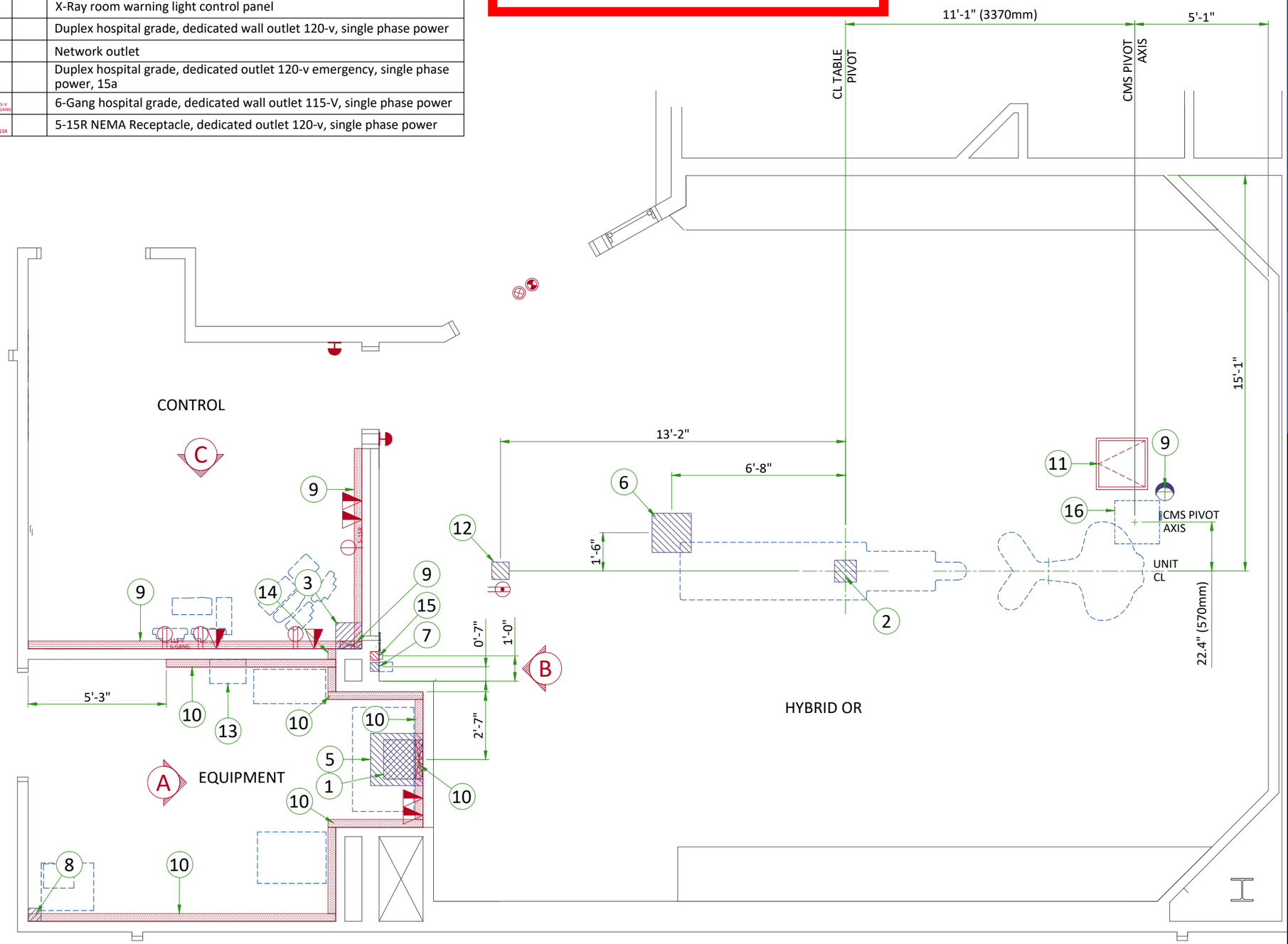
ELECTRICAL NOTES

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.
   1.1. Aluminum or solid wires are not allowed.
2. Wire sizes given are for use of equipment. Larger sizes may be required by local codes.
3. It is recommended that all wires be color coded, as required in accordance with national and local electrical codes.
4. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local or national codes.
5. Convenience outlets are not illustrated. Their number and location are to be specified by others. Locate at least one convenience outlet close to the system control, the power distritbution unit and one on each wall of the procedure room. Use hospital approved outlet or equivalent.
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.
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).
8. Conduit turns to have large, sweeping bends with minimum radius in accordance with national and local electrical codes.
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.
10. The maximum point to point distances illustrated on this drawing must not be exceeded.
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.
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.

- All junction boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be supplied and installed by customers electrical contractor.
- Conduit and duct runs shall have sweep radius bends
- Conduits and duct above ceiling or below finished floor must be installed as near to ceiling or floor as possible to reduce run length.
- Ceiling mounted junction boxes illustrated on this plan must be installed flush with finished ceiling.
- All ductwork must meet the following requirements:
  1.Ductwork shall be metal with dividers and have removable, accessible covers.
  2.Ductwork shall be certified/rated for electrical power purposes.
  3.Ductwork shall be electrically and mechanically bonded together in an approved manner.
  4.PVC as a substitute must be used in accordance with all local and national codes.
- All openings in access flooring are to be cut out and finished off with grommet material by the customers contractor.
- General contractor to insert pull cords for all cable run conduits between the equipment room and the operators control room.
- 10 foot pigtails at all junction points.
- Grounding is critical to equipment function and patient safety. Site must conform to wiring specifications shown on this plan.

ITEM	QTY	Outlet Legend for GE Equipment (contractor suplied & installed)
		System emergency off (SEO), (recommended height 1.2m [48"] above floor)
		X-Ray ON lamp (L1) - 24 V
		X-Ray room warning light control panel
		Duplex hospital grade, dedicated wall outlet 120-v, single phase power
		Network outlet
		Duplex hospital grade, dedicated outlet 120-v emergency, single phase power, 15a
15-V 6-GANG		6-Gang hospital grade, dedicated wall outlet 115-V, single phase power
5-15R		5-15R NEMA Receptacle, dedicated outlet 120-v, single phase power

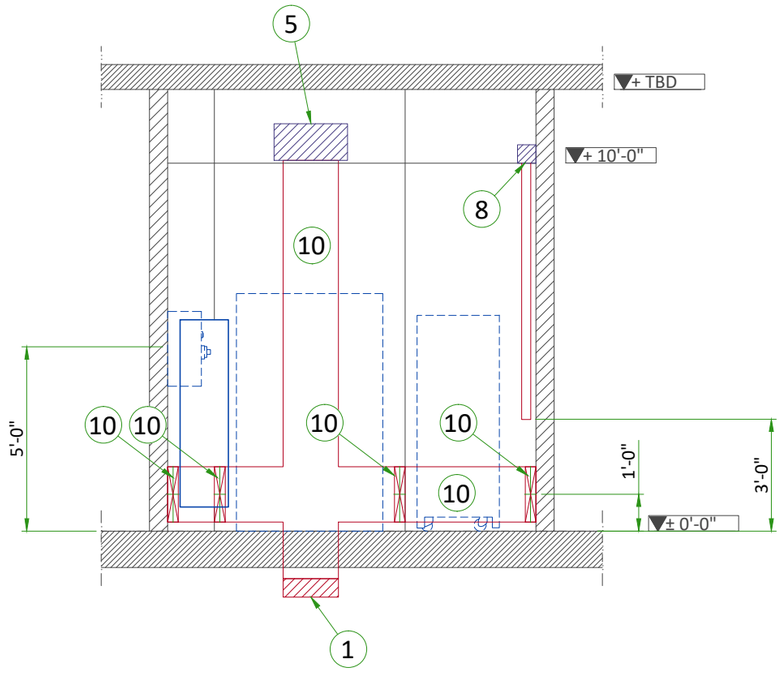
This sheet of drawings has not been reviewed for code compliance.



	ELECTRCAL LAYOUT ITEM LIST (contractor supplied & installed)
1	18" x 18" x 6" box below floor in equipment room
2	10" x 10" x 6" box below floor at table
3	12" x 12" x 6" box above ceiling in control
4	Cable management system (cms)
5	24" x 24" x 12" box above ceiling in equipment room
6	18" x 18" x 6" box above ceiling for monitors
7	4" x 4" x 4" flush junction box 12" below finished ceiling (xr-buzzer)
8	6" x 6" x 6" flush junction box in ceiling for 75 [3"]dia flexible pipe for water lines
9	10" x 3 1/2" surface wall duct with minimum 2 dividers
10	18" x 3 1/2" surface wall duct with minimum 2 dividers
11	24"x24" service access in ceiling
12	Box-size as required in ceiling for patient monitoring (TRAM/PDM
13	Main disconnect panel
14	Wall pass thru for duct
15	4" x 4" x 4" wall box with chase nipple for USB port for AW wireless mouse
16	Customer supplied plate (520 [20.5] x 502 [19.8])

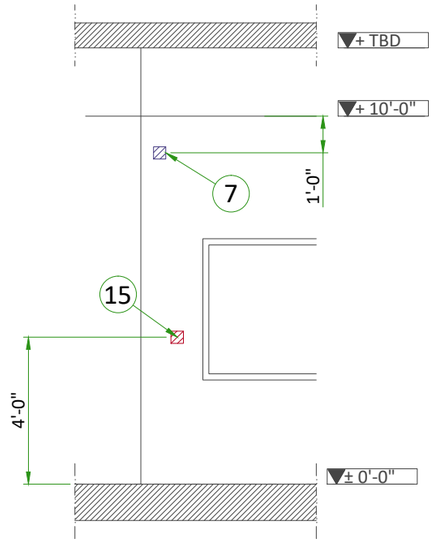
Additional Conduit Runs (Contractor Supplied and Installed)

From	To	Qty	Size In.	Size mm
Cable Management system	CFRT Cabinet	4	4	100
Table	CFRT Cabinet	2	4	100
Bolus Chase	Table	1	2 1/2	64
Water line	Cable Management system	1	3	75
Warning light controller	Warning light	1	1/2	50
Warning light controller	Power distribution unit	1	1/2	50
Warning light controller	120-V 1 phase power	1	As Required	As Required
XR-Buzzer	CFRT Cabinet	1	3/4	19
XR-Buzzer	Control Room	1	3/4	19
Monitor	Control Room	1	2 1/2	64
Large Display Monitor	CFRT Cabinet	1	3 and 3/4	75 and 19
CFRT Cabinet	Tram/PDM	2	3	75
Main Disconnet Panel	20 KVA UPS	2	As Required	As Required
Power distribution unit	Emergency off	1	1/2	50
Power distribution unit	Emergency off	1	1/2	50
Main Disconnect Panel	Power distribution unit	1	1	25
Main Disconnet Panel	480-V 3 phase power	1	As Required	As Required
AW wireless mouse	AW workstation	1	3/4	19
Patient Monitoring	Monitor boom	1	3	75
Patient Monitoring	TRAM/PDM (Boom D)	2	3	75

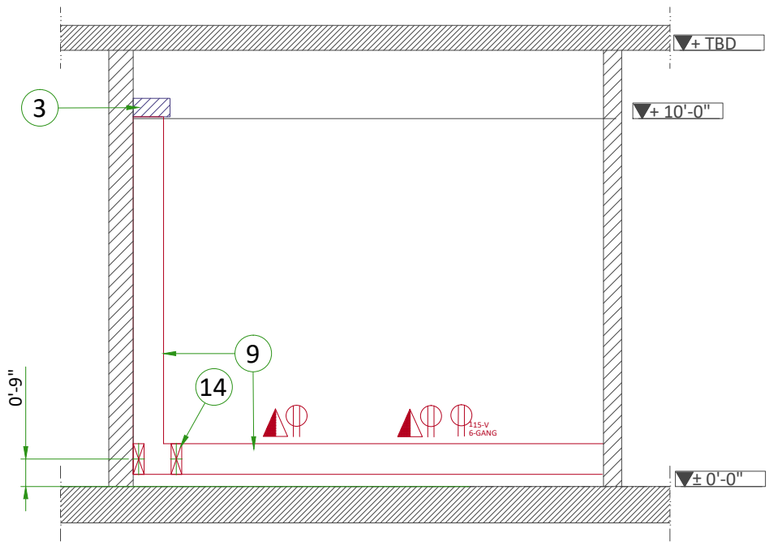


A

This sheet of drawings has not been reviewed for code compliance.



B



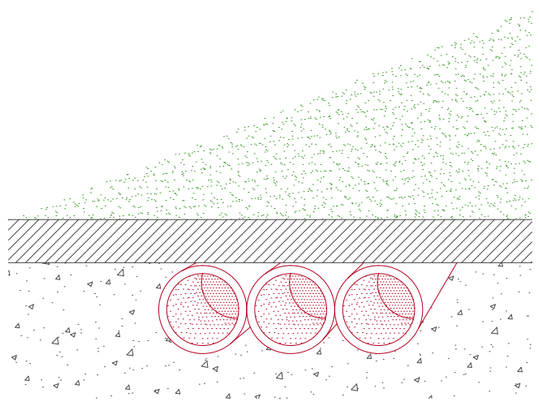
C

This sheet of drawings has not been reviewed for code compliance.

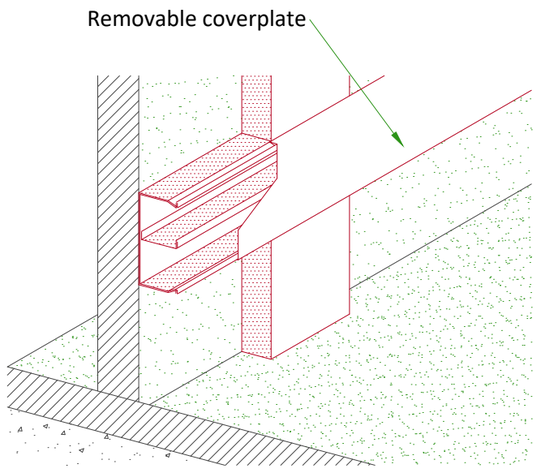
FEEDER TABLE								
MIN. FEEDER WIRE SIZE, AWG OR MCM (sq. mm)/VAC	MINIMUM FEEDER WIRE LENGTH - ft (m)							
	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (107)	400 (122)
480 VAC	*1/0 (55)	*1/0 (55)	*1/0 (55)	1/0 (55)	3/0 (85)	4/0 (107)	4/0 (107)	300M (150)
GENERAL NOTES								
In all cases qualified personnel must verify that the feeder (at the point of take-off) and the run to the GE system meet all the requirements stated in the PIM								
For a single unit installation, the minimum transformer size is 225kva, with 2.4% rated regulation at unity power factor. Resultant maximum allowable feeder regulation is 3.6%								
The ground wire to earth shall be a minimum of AWG 2 (UL) OR 35 mm² (CE) or the same size (100%) as feeder wires, which ever is larger.								
When a fluoro ups is or will be installed, a neutral line is mandatory. If it scheme as earthing system is used, an isolation transformer is required with delta-wye or delta-star connection.								
* Minimum wire size for circuit breaker, based on recommended overcurrent protection.								

CABLE MANAGEMENT

CONDUIT IN THE FLOOR



WALL DUCT



NOT TO SCALE

This sheet of drawings has not been reviewed for code compliance.

POWER REQUIREMENTS

POWER SUPPLY	**3 PHASES+N+G 380/400/415/480 V ±10%**
FREQUENCIES for 380/400/415V	**50/60 Hz ± 3 Hz**
FREQUENCIE for 480V	**60 Hz ± 3Hz**
PEAK POWER CONSUMPTION	**150 kVA (0.1 sec max)**
MOMENTARY POWER CONSUMPTION	**100 kVA**
LONG TIME POWER CONSUMPTION	**18 kVA**
MAXIMUM LINE RESISTANCE PER 2 PHASE WIRES	**380 V : 0.09 Ω / 400 V : 0.096 Ω / 415 V : 0.102 Ω / 480 V : 0.12 Ω**

- Neutral is mandatory for UPS control.
- TNC neutral point connection must not be used.
- In case of IT or delta configuration without neutral, an isolation transformer is needed (supplied by customer)
- Three-phase, 5 conductors (3 phase conductors, 1 neutral and 1 protective earth conductor)
- Power supply should come into a Mains Disconnect Panel (MDP) containing the protective units and controls.
- The section of the supply cable should be calculated in accordance with its length and the maximum line resistance per 2 phases.

SUPPLY CHARACTERISTICS

- Power input must be separated from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers ...)
- All equipment installed with IGS system components must be powered separately (e.g. lighting, power outlets)
- Transients must be less than 2,000 V peak in common mode and 1,000 V in differential mode, with a duration limited to a few microseconds.

GROUND SYSTEM

- At least 35mm² copper from main ground point to the MDP.
- The equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non IGS cableways and to additional equipotential connections linking up all the conducting units in the rooms where IGS units are located.

CABLES

- Power and cable installation must comply with the distribution diagram.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- The cables from signalling and remote control (Y, SEO, L...) will go to MDP with a pigtail lenght of 1.5 m, and will be connected during installation.
- Each conductor will be identified and isolated (screw connector).

CABLEWAYS

The general rules for laying cableways should meet the conditions laid down in current standards and regulations, with regard to :

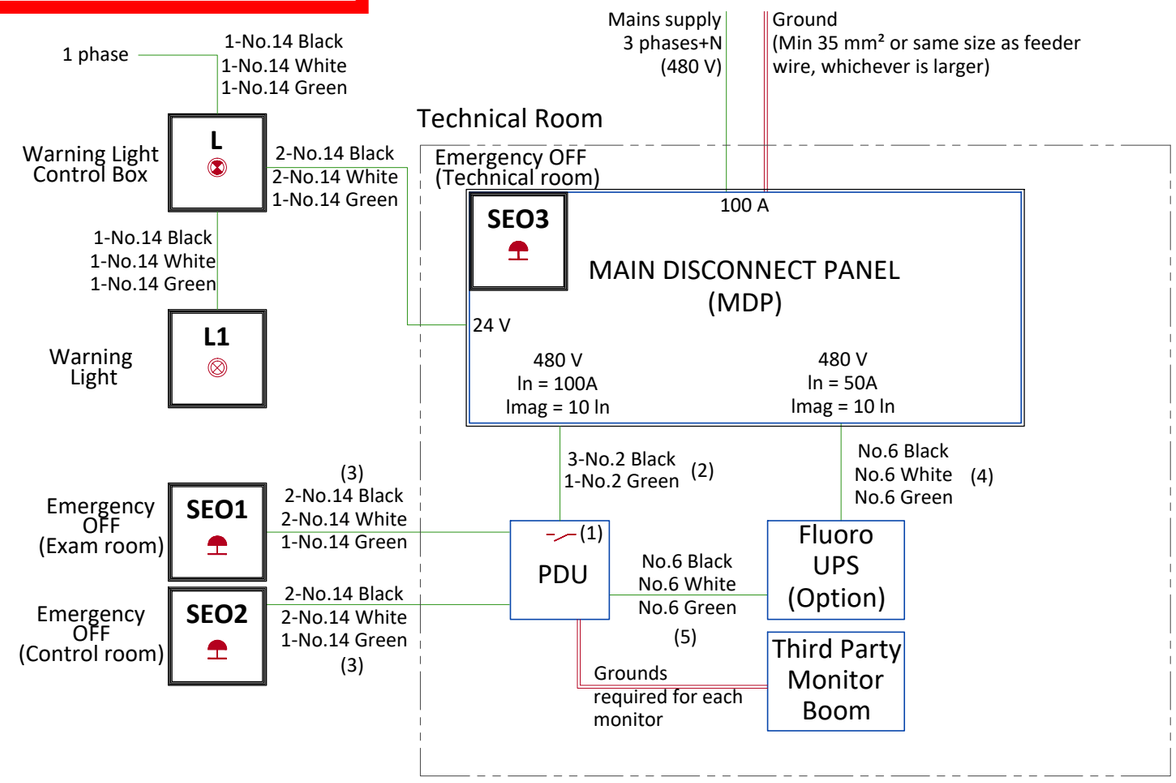
- Protecting cables against water (Cableways should be waterproof),
- Protecting cables against abnormal temperatures (Proximity to heating pipes or ducts),
- Protecting cables against temperature shocks,
- Replacing cables (Cableways should be large enough for cables to be replaced) ,
- Only GE cables are running inside cableways,
- Metal cableways should be grounded.

LOTO DEVICES

- The MDP shall provide means of disconnecting the mains power from the system, with LOTO capability to ensure safe service operation. It can be done by the input breaker if it has disconnecting capability, or by a separate disconnection device.
- LOTO device is installed on the MDP input breaker or on the disconnecting device, there shall be no voltage at the output of the MDP.

POWER DISTRIBUTION

POWER SUPPLY FOR MAIN SYSTEM



L	Warning Light Control Box - 24 V, Located near access doors*
L1	Warning light - 24 V, Located near access doors and inside the exam room*
SEO1-2	Emergency OFF button, located 1.50m [5 ft.] above floor
SEO 3	Emergency OFF button with extra protection, located in the door of the MDP
PDU	Power distribution unit

Cable SUPPLIED BY CUSTOMER
Equipment SUPPLIED BY CUSTOMER
Equipment SUPPLIED BY GE
Equipment can be SUPPLIED BY GE

*Refer to local codes, see layout for quantity and location

(1) Two dry contacts: "System ON" and "X-Ray ON", both released by PDU. Max. voltage = 24 V and the UPS emergency shutdown. able with 2m [6.5 ft] extra length on the floor behind the back of PDU

(2) If length < 6m [19.7ft] - Cable with 2m [6.5 ft] extra length on the floor behind the back of PDU

(3) Cable with 2m [6.5 ft] extra length on the floor behind the back of PDU

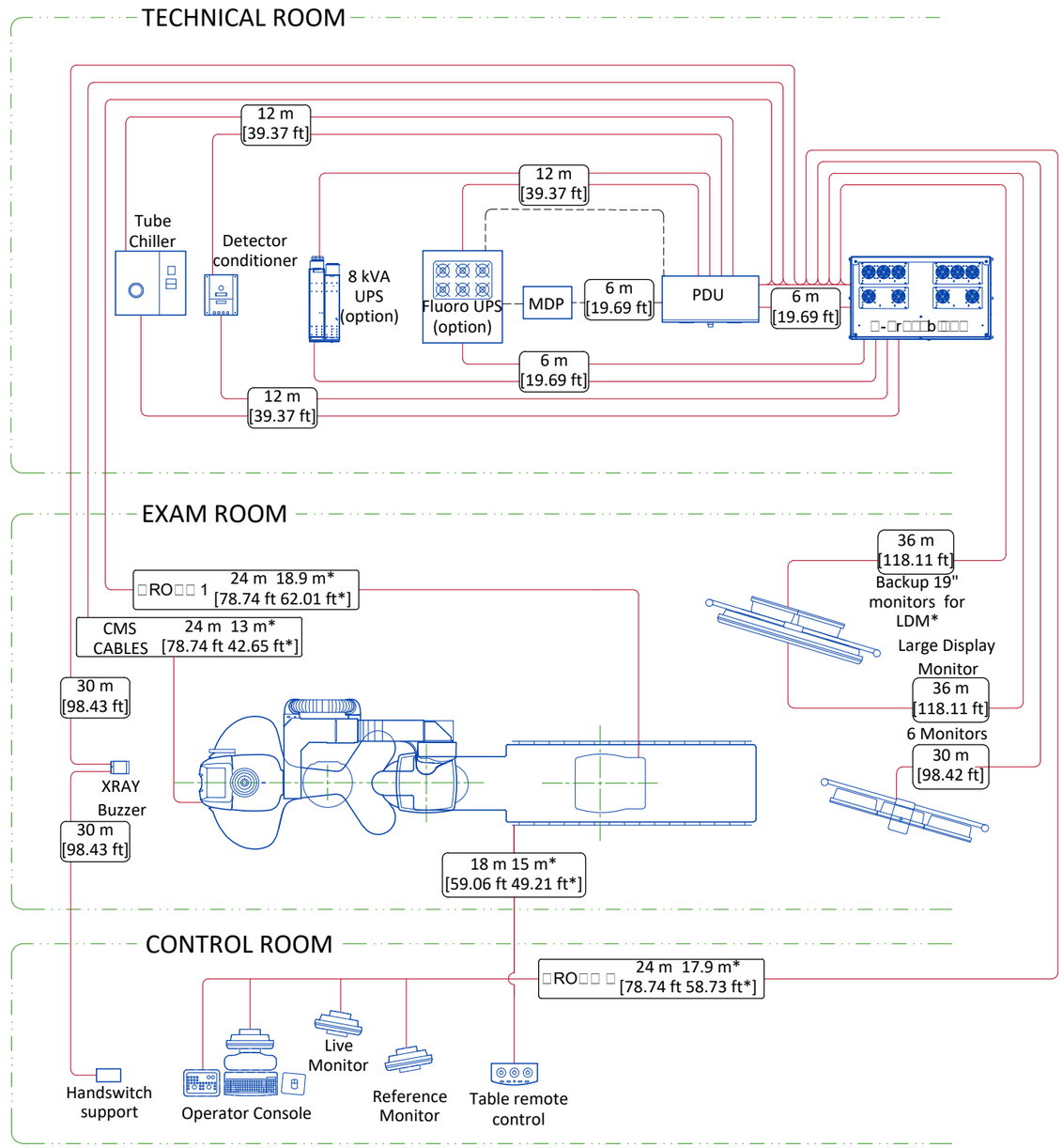
(4) If length < 10m [32.8 ft] - Cable with 2m [6.5 ft] extra length on the floor behind the back of the Fluoro UPS

(5) If length < 10m [32.8 ft] - Cable with 2m [6.5 ft] extra length on each side on the floor behind the back of the Fluoro UPS and PDU

NOTES :
The Fluoro UPS requires a Neutral line connected to the Protective Earth. For hospitals with an IT Electrical Network, a transformer is required with Delta-Wye or Delta-Star connection. This transformer shall be provided by the customer; its characteristics shall be: 30 kVA minimum; Secondary star 3 Ph+N; The power distribution shall be of TNS type with the Neutral grounded; The transformer impedance shall be 4.5% or less (this parameter is also called %Z or short circuit voltage

This sheet of drawings has not been reviewed for code compliance.

INTERCONNECTIONS



- - - - - - - -	Cable supplied by the client
———	Cable supplied by GE
- · - · - · -	Room wall
.....m	Total length
.....m*	Usable length
*	Can be positioned on the back of LDM or on separate suspension boom

THE MEDICAL CENTER OF AURORA

-

HYBRID OR 9

-

AURORA, CO

DATE: 28 OCT 19

This sheet of drawings has not been reviewed for code compliance.

DIRECTORY

SALES REP: MARK BRAYTON 515.778.7599

MARK.BRAYTON@STRYKER.COM

PROJECT MANAGER: MATTHEW ALLEN 720.795.6573

MATTHEW.ALLEN@STRYKER.COM

ENGINEER: TIM THOMPSON 317.603.4120

TIM.THOMPSON@STRYKER.COM

TABLE OF CONTENTS

REVISION SUMMARY.....(C) SHEET SECTION

EQUIPMENT LAYOUTS .....(R) SHEET SECTION

PRE-INSTALL NOTES .....(P) SHEET SECTION

ENGINEERING APPROVAL

AUTHORIZED SIGNATURE:

DRAWING#: CO-636800_7

APPROVED REVISION: 7

DISCLAIMER: THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF STRYKER. NEITHER THIS DOCUMENT NOR THE INFORMATION HEREIN MAY BE REPRODUCED, USED, OR DISCLOSED TO OR FOR THE BENEFIT OF ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF STRYKER.

571 SILVERON BLVD.
FLOWER MOUND, TX 75028
PHONE: (877) 789-8106
WWW.STRYKER.COM

stryker

REP: MARK BRAYTON
PM: MATTHEW ALLEN

SHEET:
TITLE

SUMMARY LIST OF CHANGES		
KEY #	**DESCRIPTION OF CHANGE**	**ROOM #**
1	ADDED ONE 55" LCD MONITOR (P)	HYBRID OR 9

This sheet of drawings has not been reviewed for code compliance.

stryker

571 SILVERON BLVD.
FLOWER MOUND, TX 75028
PHONE: (877) 789-8106
WWW.STRYKER.COM

REV:	DATE:	DRAFTER	IR
7	28OCT19	STUART.COURTNEY	-

DRAWING #: CO-636800_7	REFERENCE #: DRC # 388993

DISCLAIMER

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF STRYKER. NEITHER THIS DOCUMENT NOR THE INFORMATION HEREIN MAY BE REPRODUCED, USED, OR DISCLOSED TO OR FOR THE BENEFIT OF ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF STRYKER.

REVISION SUMMARY

THE MEDICAL CENTER OF AURORA
-
AURORA, CO

REP: MARK BRAYTON
PM: MATTHEW ALLEN

SHEET:
C-1

NOTES: (UNLESS OTHERWISE SPECIFIED)

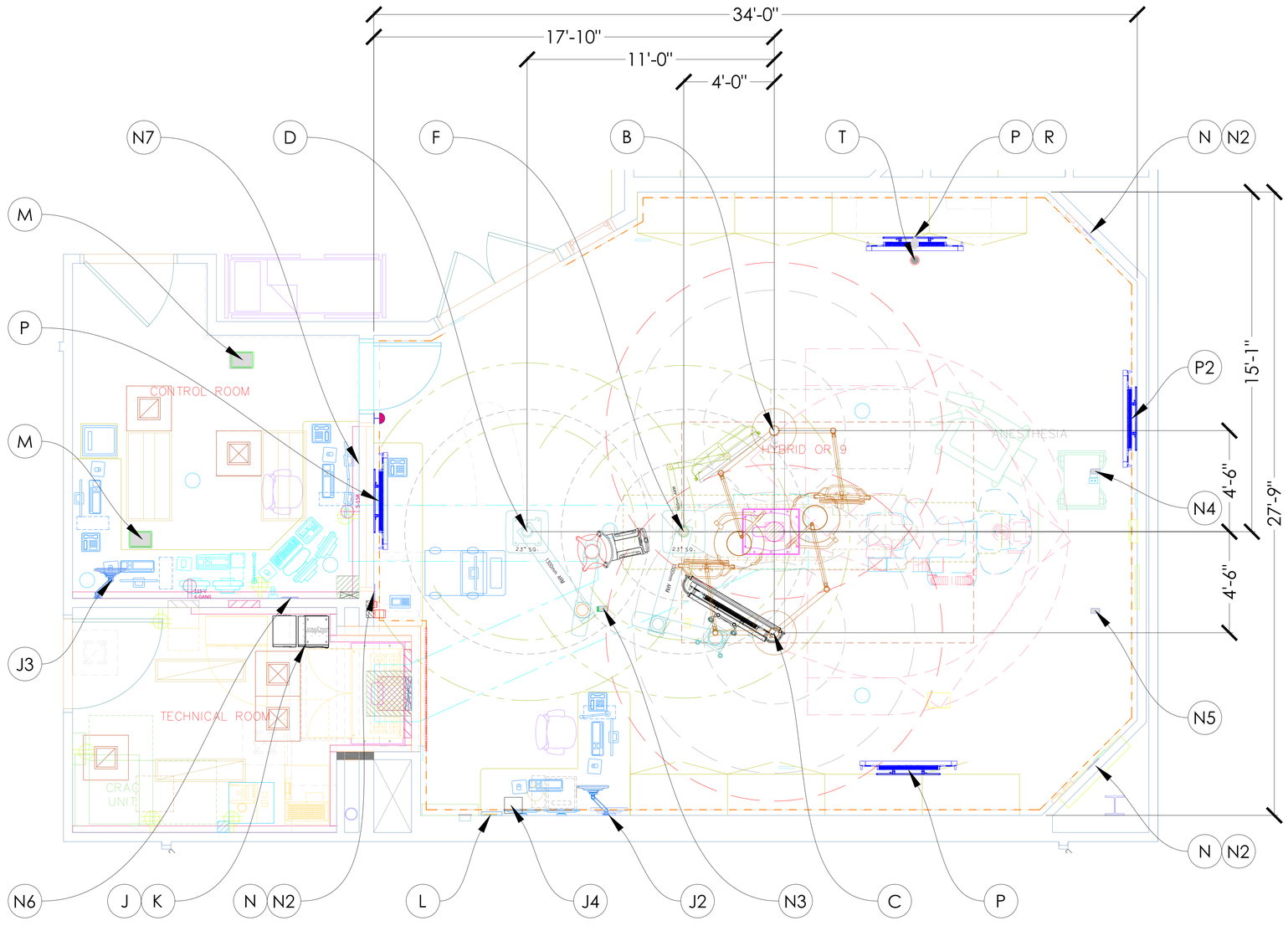
EQUIPMENT SCHEDULE

KEY ITEM	NAME	QTY
B	VISUM LED SURGICAL LIGHT & FLAT PANEL	1
C	VISUM LED SURGICAL LIGHT & FLAT PANEL	1
D	TELETOM TP-622 EQUIPMENT BOOM -1300 TOP ARM	1
F	TC MOUNT: S-SERIES SPS-2-LSM3T MONITOR BOOM -1300 TOP ARM DUAL FLAT PANEL -900 TOP ARM	1
J	SWITCHPOINT INFINITY 3 - UPS | SUITESTREAM | SDC3	1
J2	TOUCH PANEL (WALL MOUNTED)	1
J3	TOUCH PANEL (GCX WALL MOUNTED)	1
J4	PRINTER | MP3	1
K	VISUM LED POWER SUPPLY BOX	1
L	VISUM LED WALL CONTROL PANEL	1
M	FLUSH RECTANGULAR CEILING SPEAKER	2
N	DVI WALL PLATE (FUTURE)	3
N2	S-VID/BNC WALL PLATE	3
N3	DVI CEILING PLATE (EXISTING)	1
N4	DVI CEILING PLATE (ANES. VITALS)	1
N5	DVI CEILING PLATE (TEE)	1
N6	IVUS | PACS	1
N7	MACLAB	1
P	55" LCD MONITOR	3
P2	CUSTOMER PROVIDED 55" LCD MONITOR	1
R	HD PTZ CAMERA	1
T	SUITESTATUS CAMERA	1

CONDUIT SCHEDULE

CONDUIT RUN ITEM - ITEM	CONDUIT QTY	CONDUIT SIZE
B - J	2	1 1/4"
B - K	1	2"
C - J	2	1 1/4"
C - K	1	2"
D - J	2	2"
F - J	2	1 1/4"
F - J	2	2"
L - K	1	3/4"
M - J	1	3/4"
N - J	1	1 1/4"
N2 - J	1	1 1/4"
N3 - J	1	1 1/4"
N4 - J	1	1 1/4"
N5 - J	1	1 1/4"
N6 - J	1	2"
N7 - J	1	2"
P - J	1	1 1/4"
P2 - J	1	1 1/4"
R - J	1	1 1/4"

This sheet of drawings has not been reviewed for code compliance.



SCALE: 3/8" = 1'-0"

AUTOCAD DRAWING TEMPLATE | TEM100XX | REV. A

PLOT STAMP:COURTNEY, STUART | DATE: 10/28/2019 7:42 AM

stryker
571 SILVERON BLVD.
FLOWER MOUND, TX 75028
PHONE: (877) 789-8106
WWW.STRYKER.COM

REV:	DATE:	DRAWING #:	DRAFTER
7	28OCT19	REFERENCE #: DRC # 388993	STUART.COURTNEY
		DRAWING #: CO-636800_7	IR
			-

DISCLAIMER
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF STRYKER. NEITHER THIS DOCUMENT NOR THE INFORMATION HEREIN MAY BE REPRODUCED, USED, OR DISCLOSED TO OR FOR THE BENEFIT OF ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF STRYKER.

EQUIPMENT LAYOUT

THE MEDICAL CENTER OF AURORA
- AURORA, CO

REP: MARK BRAYTON
PM: MATTHEW ALLEN

SHEET:
R-HY9

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. **ALL CONDUIT RUNS INCLUDE INSULATED BUSHINGS AND PULL STRINGS.**
2. **CONDUIT RUNS CANNOT EXCEED 45' FROM END-TO-END. DO NOT EXCEED FOUR (4) 90 DEGREE BENDS.**
3. **CABLES BETWEEN ITEMS OVER 45 FEET IN LENGTH ARE PROVIDED BY THE CUSTOMER / CONTRACTOR. PLEASE REFER TO EQUIPMENT LIST FOR CABLE SPECIFICATIONS.**
4. **THE PRE-INSTALL MANUAL REQUIREMENTS SUPERSEDE ALL PRE-INSTALL NOTES IN THIS DRAWING PACKAGE.**
5. **EQUIPMENT LIST:**

This sheet of drawings has not been reviewed for code compliance.

PRE-INSTALL NOTES SCHEDULE

KEY ITEM	NAME
B C	**VISUM LED SURGICAL LIGHT & FLAT PANEL ARM** **VISUM LED SURGICAL LIGHT & FLAT PANEL ARM** "STRUCTURAL: STRYKER PRE-INSTALL PLATE SHALL BE INSTALLED BY CUSTOMER/CONTRACTOR AT 3"" , ± .25"" ABOVE FINISHED CEILING PER CUSTOMER PROVIDED STRUCTURAL ENGINEER SPECS. - A 21"" CIRCULAR HOLE CENTERED ON STRYKER PRE-INSTALL PLATE IN THE FINISHED CEILING IS REQUIRED FOR INSTALLATION. A 24"" DIAMETER CEILING COVER CONCEALS HOLE AFTER SUSPENSION IS INSTALLED MONITOR POWER: ONE (1) - 20 AMP CIRCUIT LOCATED AT JUNCTION BOX WITHIN 18"" OF CENTER OF STRYKER PRE-INSTALL PLATE. - THE CONTRACTOR / ELECTRICIAN TO HARDWIRE STRYKER ELECTRICAL WHIPS DURING STRYKER INSTALLATION. - IF REQUIRED BY LOCAL ELECTRICAL CODE INSTALL ONE (1) - 5 AMP FUSE FOR 100V- 120V APPLICATIONS, OR A 2.5 AMP FUSE FOR 200V-240V APPLICATIONS. THESE FUSES MUST BE PROVIDED BY THE CONTRACTOR. CONDUIT: REFER TO ROOM LAYOUT FOR CONDUIT SIZE. TERMINATE ALL CONDUITS WITHIN 18"" OF THE CENTER OF THE CEILING MOUNT. ACCESS PANEL: ONE (1) 24"" X 24"" ACCESS PANEL ADJACENT TO SUSPENSION."
D	**TELETOM TP-622 EQUIPMENT BOOM** "STRUCTURAL: STRYKER COMMON PRE-INSTALL PLATE SHALL BE INSTALLED BY CUSTOMER/CONTRACTOR AT 3-INCH, ± .25-INCH ABOVE FINISHED CEILING PER CUSTOMER PROVIDED STRUCTURAL ENGINEER SPECS. - TO ENSURE ADEQUATE ROOM FOR INSTALLATION OF THE TELETOM THE OWNER AND/OR CONTRACTOR MUST ENSURE THAT STRUCTURAL/UTILITY COMPONENTS DO NOT INTERFERE WITH ANY PART OF THE TELETOM. THIS "NO-FLY" ZONE EXTENDS 12-INCHES FROM THE MOUNTING PLATE ON ALL SIDES, AND 16-INCHES UP FROM THE FINISHED CEILING. - REQUIRED: A 21-INCH SQUARE HOLE CENTERED ON STRYKER PRE-INSTALL PLATE IN THE FINISHED CEILING IS REQUIRED FOR INSTALLATION. A 23-INCH SQUARE CEILING COVER CONCEALS HOLE AFTER BOOM IS INSTALLED POWER: REFER TO TELETOM MANUFACTURING SERVICE MODULE DRAWING FOR ELECTRICAL CIRCUIT COUNT. - THE CONTRACTOR / ELECTRICIAN TO HARDWIRE STRYKER ELECTRICAL WHIP DURING STRYKER INSTALLATION. - ALL ELECTRICAL CIRCUITS SHALL BE CONNECTED TO TELETOM OUTLET BOX OR BOXES. - THE TELETOM OUTLET BOX (8-INCH HEIGHT X 8-INCH WIDTH X 4-INCH DEPTH) ARRIVES ATTACHED TO TELETOM BOOM AND MOUNTS TO THE STRYKER PROVIDED MOUNTING PLATE VIA A MOUNTING BRACKET. IT IS STRYKERS RESPONSIBILITY TO MOUNT THE TELETOM OUTLET BOX. THE OUTLET BOX WILL BE MOUNTED ADJECENT TO THE MED GAS LINES. REQUIRED ACCESS PANEL: ONE (1) 24-INCH X 24-INCH ACCESS PANEL ADJACENT TO BOOM, SO OUTLET BOXES, AND MED GAS LINES CAN BE EASILY ACCESSED. CONDUIT: REFER TO ROOM LAYOUT FOR CONDUIT SIZE. TERMINATE ALL CONDUITS WITHIN 18-INCHES OF THE CENTER OF THE CEILING MOUNT. PLUMBING: INSTALL VALVE BRIDGE TO TOP OF PRE-INSTALL PLATE. ALL GAS LINES MUST BE TERMINATED WITH STRYKER SUPPLIED GAS RISERS BY CUSTOMER/MEDGAS INSTALLER. - ALL FINAL DISS CONNECTIONS TO BE MADE BY CUSTOMER/MEDGAS INSTALLER AFTER STRYKER INSTALLATION."

PRE-INSTALL NOTES SCHEDULE

KEY ITEM	NAME
F	**TC MOUNT:** **- S-SERIES SPS-2-LSM3T MONITOR BOOM** **- DUAL FLAT PANEL** "STRUCTURAL: STRYKER COMMON PRE-INSTALL PLATE SHALL BE INSTALLED BY CUSTOMER/CONTRACTOR AT 3-INCH, ± .25-INCH ABOVE FINISHED CEILING PER CUSTOMER PROVIDED STRUCTURAL ENGINEER SPECS. - TO ENSURE ADEQUATE ROOM FOR INSTALLATION OF THE S-SERIES BOOM THE OWNER AND/OR CONTRACTOR MUST ENSURE THAT STRUCTURAL/UTILITY COMPONENTS DO NOT INTERFERE WITH ANY PART OF THE S-SERIES BOOM. THIS "NO-FLY" ZONE EXTENDS 12-INCHES FROM THE MOUNTING PLATE ON ALL SIDES, AND 16-INCHES UP FROM THE FINISHED CEILING. - REQUIRED: A 21-INCH SQUARE HOLE CENTERED ON STRYKER PRE-INSTALL PLATE IN THE FINISHED CEILING IS REQUIRED FOR INSTALLATION. A 23-INCH SQUARE CEILING COVER CONCEALS HOLE AFTER BOOM IS INSTALLED POWER: REFER TO S-SERIES MANUFACTURING SERVICE MODULE DRAWING FOR ELECTRICAL CIRCUIT COUNT. - THE CONTRACTOR / ELECTRICIAN TO HARDWIRE STRYKER ELECTRICAL WHIP DURING STRYKER INSTALLATION. - ALL ELECTRICAL CIRCUITS SHALL BE CONNECTED TO S-SERIES JUNCTION BOX OR BOXES. - THE S-SERIES JUNCTION BOX (7.4" X 3.5" X 3.74") ARRIVES ATTACHED TO THE S-SERIES BOOM FLANGE BY A GROUND WIRE. THE JUNCTION BOX MUST BE MOUNTED ADJACENT TO THE MED GAS LINES BY THE CUSTOMER/CONTRACTOR ACCORDING TO NATIONAL AND LOCAL BUILDING CODES. REQUIRED ACCESS PANEL: ONE (1) 24-INCH X 24-INCH ACCESS PANEL ADJACENT TO BOOM, SO JUNCTION BOX(ES), AND MED GAS LINES CAN BE EASILY ACCESSED. CONDUIT: REFER TO ROOM LAYOUT FOR CONDUIT SIZE. TERMINATE ALL CONDUITS WITHIN 18-INCHES OF THE CENTER OF THE CEILING MOUNT. PLUMBING: INSTALL VALVE BRIDGE TO TOP OF PRE-INSTALL PLATE. ALL GAS LINES MUST BE TERMINATED WITH STRYKER SUPPLIED GAS RISERS BY CUSTOMER/MEDGAS INSTALLER. - ALL FINAL DISS CONNECTIONS TO BE MADE BY CUSTOMER/MEDGAS INSTALLER AFTER STRYKER INSTALLATION."

stryker
571 SILVERON BLVD.
FLOWER MOUND, TX 75028
PHONE: (877) 789-8106
WWW.STRYKER.COM

REV:	DATE:	DRAWING #: CO-636800_7	DRAFTER	IR
7	28OCT19	REFERENCE #: DRC # 388993	STUART.COURTNEY	-

DISCLAIMER
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF STRYKER. NEITHER THIS DOCUMENT NOR THE INFORMATION HEREIN MAY BE REPRODUCED, USED, OR DISCLOSED TO OR FOR THE BENEFIT OF ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF STRYKER.

PRE-INSTALL NOTES

THE MEDICAL CENTER OF AURORA
- AURORA, CO

REP: MARK BRAYTON
PM: MATTHEW ALLEN

SHEET:
P-1

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. **ALL CONDUIT RUNS INCLUDE INSULATED BUSHINGS AND PULL STRINGS.**
2. **CONDUIT RUNS CANNOT EXCEED 45' FROM END-TO-END. DO NOT EXCEED FOUR (4) 90 DEGREE BENDS.**
3. **CABLES BETWEEN ITEMS OVER 45 FEET IN LENGTH ARE PROVIDED BY THE CUSTOMER / CONTRACTOR. PLEASE REFER TO EQUIPMENT LIST FOR CABLE SPECIFICATIONS.**
4. **THE PRE-INSTALL MANUAL REQUIREMENTS SUPERSEDE ALL PRE-INSTALL NOTES IN THIS DRAWING PACKAGE.**
5. **EQUIPMENT LIST:**

This sheet of drawings has not been reviewed for code compliance.

PRE-INSTALL NOTES SCHEDULE

KEY ITEM	NAME
J	**SWITCHPOINT INFINITY 3** "DIMENSIONS: - MEDIA ROUTER: 20.6""W X 24""H X 17"D - CONTROL SECTION: 12.5"W X 2.6"H X 17"D - TOTAL SPACE REQUIRED: 27.5"W X 31"H X 29"D POWER: SIXTEEN (16) ELECTRICAL RECEPTACLES AT THE MEDIA ROUTER LOCATION ALL RECEPTACLES REQUIRE CRITICAL POWER ALL ELECTRICAL CIRCUITS SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL BUILDING CODE OR WHAT IS SPECIFIED IN THE IBC. DATA: ONE (1) ETHERNET CONNECTION BACKBOX: ONE (1) 18"W X 18"H X 4"D (OR LARGER) JUNCTION BOX FLUSH MOUNTED. - SET BOTTOM OF BOX 9" ABOVE FINISHED FLOOR. NOTE: TERMINATE ALL INTEGRATION CONDUITS TO THIS JUNCTION BOX. " **SDC3** DIMENSIONS: 12.5"W X 7.25"H X 16.5"D DATA: ONE (1) ETHERNET CONNECTION BACKBOX: NONE **SUITESTREAM** "DIMENSIONS: 12.7"" W x 17.3"" D x 2.6"" H DATA: TWO (2) ETHERNET CONNECTION POWER: ONE (1) STANDARD OUTLET WITHIN 18"" OF SUITESTREAM LOCATION"
J2	**SPI3 TOUCH PANEL (WALL MOUNTED)** CONDUIT: - REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE BACK BOX: ONE (1) 4"W X 4"H JUNCTION BOX WITH SINGLE-GANG MUD RING - MOUNT J-BOX WITHIN 18" OF TOUCH PANEL LOCATION GCX TRACK: CONTRACTOR TO MOUNT 4" X 7" (W X H) TRACK VERTICALLY ON THE WALL AT A CUSTOMER SPECIFIED HEIGHT ABOVE FINISHED FLOOR POWER: ONE (1) STANDARD OUTLET WITHIN 18" OF TOUCH PANEL LOCATION.
J3	**SPI3 TOUCH PANEL (GCX WALL MOUNT)** "CONDUIT: - REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE BACK BOX: ONE (1) 4"W X 4"H JUNCTION BOX WITH SINGLE-GANG MUD RING - MOUNT J-BOX WITHIN 18" OF TOUCH PANEL LOCATION GCX TRACK: CONTRACTOR TO MOUNT 4"" X 7"" (W X H) TRACK VERTICALLY ON THE WALL AT A CUSTOMER SPECIFIED HEIGHT ABOVE FINISHED FLOOR POWER: ONE (1) STANDARD OUTLET WITHIN 18" OF TOUCH PANEL LOCATION. "
K	**VISUM LED POWER SUPPLY BOX** DIMENSIONS: 12.5""W X 7""H X 15.5"D - TOTAL SPACE REQUIRED: 20"W X 9"H X 21"D DATA: ONE (1) ETHERNET CONNECTION WHEN THERE IS NOT A SPI-3 IS PRESENT BACKBOX: ONE (1) 6"W X 6"H X 4"D (OR LARGER) JUNCTION BOX FLUSH MOUNTED. - SET BOTTOM OF BOX 14" ABOVE FINISHED FLOOR. NOTE: TERMINATE ALL SURGICAL LIGHT CONDUITS TO THIS JUNCTION BOX"
L	**VISUM LED WALL CONTROL PANEL** CONDUIT: ONE (1) ¾" CONDUIT TO LIGHT POWER SUPPLY BOX. CONDUIT: - REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE - MOUNT IN VERTICAL ORIENTATION AT CONVENTIONAL LIGHT SWITCH HEIGHT. - IF MULTIPLE WALL CONTROL PANELS ARE INSTALLED, A MINIMUM OF 1.5" IS REQUIRED BETWEEN EACH RACO 942 JUNCTION BOX. POWER: NONE"

PRE-INSTALL NOTES SCHEDULE

KEY ITEM	NAME
M	**FLUSH MOUNTED RECTANGULAR CEILING SPEAKER** CONDUIT: - REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE STRUCTURAL: CUSTOMER/CONTRACTOR TO CUT ONE 7 ¼"W X 10 ¾"L HOLE (TEMPLATE SUPPLIED W/ SPEAKER) IN THE CEILING AT EACH SPEAKER MOUNTING LOCATION. MINIMUM 4"" CEILING CLEARANCE."
N N2 N3 N4 N5	**DVI WALL PLATE** **S-VIDEO/BNC WALL PLATE** **DVI CEILING PLATE (EXISTING)** **DVI CEILING PLATE (ANES. VITALS)** **DVI CEILING PLATE (TEE)** "CONDUIT: - REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE BACK BOX: ONE (1) 4"W X 4"H JUNCTION BOX WITH SINGLE-GANG MUD RING - MOUNT THE J-BOX 18" ABOVE FINISHED FLOOR. POWER: NONE REQUIRED, BUT SHOULD BE LOCATED NEXT TO OUTLET"
P	**55" LCD MONITOR** "CONDUIT: REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE BACK BOX: ONE (1) 4"W X 4"H JUNCTION BOX WITH SINGLE-GANG MUD RING - MOUNTED DIRECTLY ABOVE THE TOP OF THE MOUNTING BRACKET. POWER: ONE (1) STANDARD DUPLEX OUTLET MOUNTED ADJACENT TO JUNCTION BOX. STRUCTURAL: CUSTOMER/CONTRACTOR TO MOUNT STRYKER PROVIDED BRACKET TO THE WALL IN THE DESIRED LOCATION WITH PROPER REINFORCEMENT TO SUPPORT THE MONITOR PRIOR TO STRYKER INSTALLATION. DIMENSIONS: 51.9"" X 30.5"" X 4.7"" NOTE: STRYKER PROJECT MANAGER WILL PROVIDE MOUNTING SPECIFICATIONS."
R	**HD PAN/TILT/ZOOM CAMERA** "CONDUIT: REFER TO ROOM LAYOUT FOR CONDUIT QUANTITY AND SIZE BACK BOX: ONE (1) 4"W X 4"H JUNCTION BOX WITH SINGLE-GANG MUD RING - FLUSH MOUNT J-BOX IN WALL 12" BELOW FINISHED CEILING POWER: NONE STRUCTURAL: CUSTOMER/CONTRACTOR TO MOUNT STRYKER PROVIDED BRACKET TO THE WALL IN THE DESIRED LOCATION WITH PROPER REINFORCEMENT TO HD PAN/TILT/ZOOM CAMERA PRIOR TO STRYKER INSTALLATION."
T	**SUITESTATUS CAMERA** POWER: POWER OVER ETHERNET STRUCTURAL: CUSTOMER/CONTRACTOR TO CUT 184MM DIAMETER CIRCLE IN CEILING AT EACH CAMERA MOUNTING LOCATION. - PROVIDE 4.5" MINIMUM CEILING CLEARANCE STRUCTURAL: CUSTOMER/CONTRACTOR TO MOUNT STRYKER PROVIDED BRACKET TO THE CEILING IN THE DESIRED LOCATION WITH PROPER REINFORCEMENT TO SUITESTATUS CAMERA PRIOR TO STRYKER INSTALLATION. DIMENSIONS: 5.5"DIA X 4.4"H DATA: ONE (1) ETHERNET CONNECTION PULLED THROUGH 184MM CAMERA CUTOUT HOLE MENTIONED ABOVE WITH A (3) FOOT SERVICE LOOP AND THEN TIE THE CABLE IN A LOOSE KNOT TO ENSURE CABLE WILL NOT BE LOST. BACKBOX: NONE.

stryker
571 SILVERON BLVD.
FLOWER MOUND, TX 75028
PHONE: (877) 789-8106
WWW.STRYKER.COM

REV:	DATE:	DRAWING #: CO-636800_7	DRAFTER	IR
7	28OCT19	REFERENCE #: DRC # 388993	STUART.COURTNEY	-

DISCLAIMER
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF STRYKER. NEITHER THIS DOCUMENT NOR THE INFORMATION HEREIN MAY BE REPRODUCED, USED, OR DISCLOSED TO OR FOR THE BENEFIT OF ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF STRYKER.

PRE-INSTALL NOTES

THE MEDICAL CENTER OF AURORA
- AURORA, CO

REP: MARK BRAYTON
PM: MATTHEW ALLEN

SHEET:
P-2

7186 S. Forest Lane
Centennial, CO 80122

nextlevel STRUCTURAL ENGINEERS

303.260.9455
nlengineers.com

Structural plan review is limited to a general survey for code compliance. No review is implied nor was undertaken to verify structural adequacy.

STRUCTURAL CALCULATIONS

FOR

MEDICAL CENTER OF AURORA

HYBRID OR 9

1501 S. Potomac Street
Aurora, CO 80012

NLI #19-087

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: John Lichtner
Date: Jan 23, 2020
2015 INTERNATIONAL CODES & 2017 NEC

PREPARED FOR

MEDICAL CENTER OF AURORA

January 14, 2020

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
01-14-20
PROFESSIONAL ENGINEER

Job Title TMCA CR9 Job No. 19-087

Client TMCA By MWN Date 10.24.19 Sheet of

CEILING EQUIPMENT SUPPORT FRAMING

CONSIDER MAX. EQUIP. LOADS

- VERT. WT. = 1,100#, MOMENT = 5,650 FT-#

FOR HSS VERTS & ANGLE KICKERS, CONSIDER EACH SUPPORTING 100% OF LOAD (CONSERVATIVE) W/ 10" RESISTING MOMENT ARM.

$$\Rightarrow T_{s\,MAX} = \frac{1{,}100^{\#}}{4} + 5{,}650^{FT\text{-}\#} \times 12''/1 \times \frac{L}{10''}$$

$$= 275^{\#} + 6{,}780^{\#} = 7055^{\#}$$

$$T_U = 1.2\,T_s = 8.5^{K}$$

HSS 1 1/2 x 1 1/2 x 3/16 → $\phi T_N = (0.9)(46^{KSI})(0.894) = 37^{K}$ OK

L 1 1/2 x 1 1/2 x 3/16 → $\phi T_N = (0.9)(36^{KSI})(0.527) = 17.1^{K}$ OK

CONSIDER MAX COMPRESSION, $P_{cu} = 1.2 \times 6.78^{K} = 8.1^{K}$ & $L_u = 4'$

HSS 1 1/2 x 1 1/2 x 3/16 – COMPACT – L = 48", r = 0.521", A = 0.894 in²

$F_e = 33.7^{KSI}$

$F_{cr} = 26^{KSI}$; $\phi P_N = (0.9)(26^{KSI})(0.894^{in^2}) = 20.9^{K}$ OK

L 1 1/2 x 1 1/2 x 3/16 – r = 0.457 in ; A = 0.527 in² – COMPACT

$F_e = 25.9^{KSI}$; $F_{cr} = 20.1^{KSI}$; $\phi P_N = (0.9)(20.1^{KSI})(0.527^{in^2})$

$= 9.5^{K}$ OK

Job Title TMCA ORG Job No. 19-087

Client TMCA By MWN Date 10.24.19 Sheet of

HORIZ. EQUIP. BOOM SUPPORT

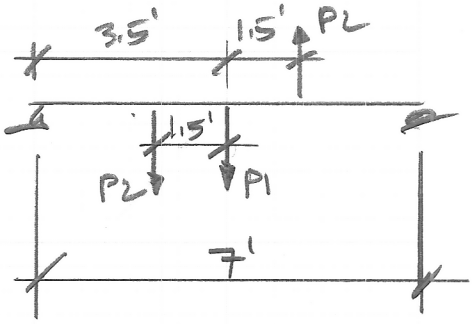
CONSIDER:

$P1 = \frac{1,100\#}{2} = 550\#$

$P2 = \frac{5,650\ FT\text{-}\#}{3'} = 1,884\#$

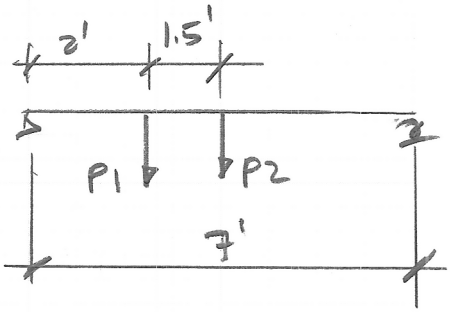
MOMENT RESISTING ARM

LC1



HSS 4x4x1/4 OK

LC2



PATIENT TABLE BASE & ANCHORAGE

SPEC'S PER G.E. REQUIREMENTS:

- CONC. f'_c = 17.24 MPa = 2,500 psi (ANCHORAGE) → 4,500 psi OK
  = ⟶ = 4,300 psi (FLOORING)
- MIN. CONC. EDGE DISTANCE TO ℄ ANCHOR
  = 79.4 mm = 3.2" → 6" MIN. PROVIDED OK
- ANCHOR INSTALLATION DEPTH = 6.5"
  → 10" CONC. THICKNESS PROVIDED OK

Next Level, Inc.
nlengineers.com

Project Title: TMCA OR 9
Engineer:
Project ID: 19-087
Project Descr:

Printed: 24 OCT 2019, 11:26AM

Steel Beam

File = C:\Users\mattn\DOCUME~1\NEXTLE~1\Jobs19\19-087~1\Calcs\19-087.ec6 .
Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.31 .

Lic. # : KW-06006926 NEXT LEVEL, INC.

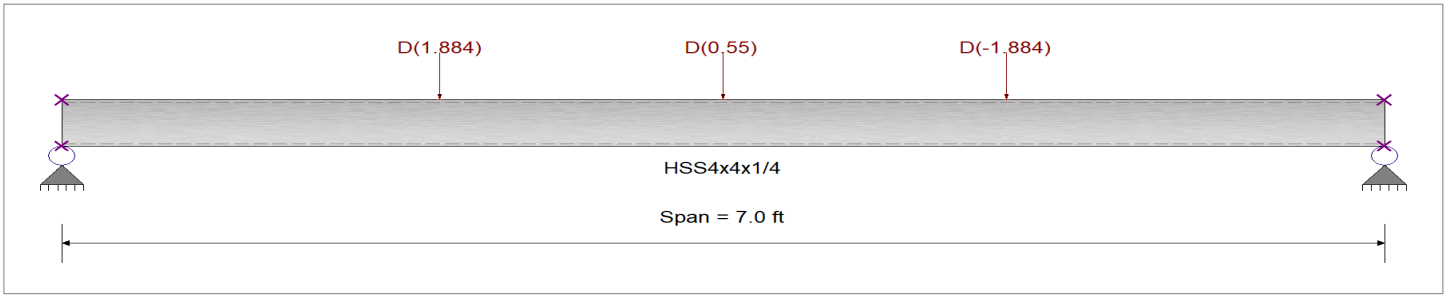
DESCRIPTION: Horiz Equip. Boom Support - Load Case 1

CODE REFERENCES

Calculations per AISC 360-10, IBC 2015, CBC 2016, ASCE 7-10
Load Combination Set : IBC 2015

Material Properties

Analysis Method :	Load Resistance Factor Design	Fy : Steel Yield :	46.0 ksi
Beam Bracing :	Completely Unbraced	E: Modulus :	29,000.0 ksi
Bending Axis :	Major Axis Bending		



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Load(s) for Span Number 1
Point Load : D = 1.884 k @ 2.0 ft, (Boom Moment Reaction)
Point Load : D = 0.550 k @ 3.50 ft, (Boom Vert Load)
Point Load : D = -1.884 k @ 5.0 ft, (Boom Moment Reaction)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.187 : 1	Maximum Shear Stress Ratio =	0.050 : 1
Section used for this span	HSS4x4x1/4	Section used for this span	HSS4x4x1/4
Mu : Applied	3.031 k-ft	Vu : Applied	1.892 k
Mn * Phi : Allowable	16.181 k-ft	Vn * Phi : Allowable	38.211 k
Load Combination	+1.40D	Load Combination	+1.40D
Location of maximum on span	2.000 ft	Location of maximum on span	3.520 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.000 in	Ratio =	0 <600
Max Upward Transient Deflection	0.000 in	Ratio =	0 <600
Max Downward Total Deflection	0.037 in	Ratio =	2277 >=600
Max Upward Total Deflection	0.000 in	Ratio =	0 <600

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.0369	2.440		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.082	-0.532
Overall MINimum	0.649	-0.319
D Only	1.082	-0.532
+0.60D	0.649	-0.319

Next Level, Inc.
nlengineers.com

Project Title: TMCA OR 9
Engineer:
Project ID: 19-087
Project Descr:

Printed: 24 OCT 2019, 11:28AM

Steel Beam

File = C:\Users\mattn\DOCUME~1\NEXTLE~1\Jobs19\19-087~1\Calcs\19-087.ec6 .
Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.31 .

Lic. # : KW-06006926 NEXT LEVEL, INC.

DESCRIPTION: Horiz Equip. Boom Support - Load Case 2

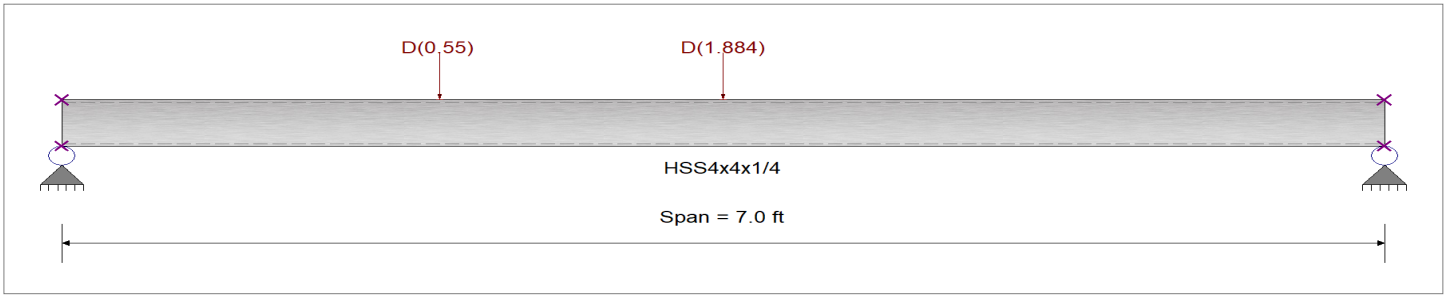
CODE REFERENCES

Calculations per AISC 360-10, IBC 2015, CBC 2016, ASCE 7-10
Load Combination Set : IBC 2015

Material Properties

Analysis Method : Load Resistance Factor Design
Beam Bracing : Completely Unbraced
Bending Axis : Major Axis Bending

Fy : Steel Yield : 46.0 ksi
E: Modulus : 29,000.0 ksi



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Load(s) for Span Number 1
Point Load : D = 1.884 k @ 3.50 ft, (Boom Moment Reaction)

Point Load : D = 0.550 k @ 2.0 ft, (Boom Vert Load)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.333 : 1	Maximum Shear Stress Ratio =	0.049 : 1
Section used for this span	HSS4x4x1/4	Section used for this span	HSS4x4x1/4
Mu : Applied	5.386 k-ft	Vu : Applied	1.869 k
Mn * Phi : Allowable	16.181 k-ft	Vn * Phi : Allowable	38.211 k
Load Combination	+1.40D	Load Combination	+1.40D
Location of maximum on span	3.500 ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.000 in	Ratio =	0 <600
Max Upward Transient Deflection	0.000 in	Ratio =	0 <600
Max Downward Total Deflection	0.126 in	Ratio =	665 >=600
Max Upward Total Deflection	0.000 in	Ratio =	0 <600

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.1264	3.460		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.335	1.099
Overall MINimum	0.801	0.659
D Only	1.335	1.099
+0.60D	0.801	0.659