1.2. Floor Live Loading A. Exam and Procedure Rooms. ..80 psf Live Load+ 20 psf Partition Load B. Offices... ..80 psf Live Load + 20 psf Partition Load C. Exit facilities and corridors... .100 psf Live Load D. Lobbies... .100 psf Live Load

1.3. Earthquake A. Seismic Design Category...

B. Spectral Response Accelerations  $S_S = 1.324 g$   $S_{DS} = 1.059 g$  $S_1 = 0.475 g$   $S_{D1} = 0.578 g$ C. Soil Site Class...  $F_a = 1.2$  $F_v = 1.83$ 

1.4. Wind A. Interior Partition Wall Pressure.

#### 2. Structural Steel

2.1. Material:

A. W-Shapes: ASTM A992,  $(F_y = 50 \text{ ksi})$ , except as noted otherwise B. All Other Shapes and Plates: ASTM A36 (Fy = 36 ksi), except as noted otherwise

C. Rectangular and Square Hollow Structural Sections (HSS): ASTM A500, Grade C (Fy = 50 ksi) D. High-Strength Bolts:

1. Group A: ASTM F3125 Grades A325 & F1852 E. Anchor Rods: ASTM F1554, Grade 36, unless noted otherwise, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers

2.2. Fabrication and construction shall comply with the following Codes and Standards: A. American Institute of Steel Construction (AISC)

1. AISC 360-16, "Specification for Structural Steel Buildings"

apply when they conflict with the AISC requirements)

2. AISC 341-16, "Seismic Provisions for Structural Steel Buildings" 3. AISC 303-16, "Code of Standard Practice for Steel Buildings and Bridges"

a. The structural drawings shall be used in conjunction with the architectural drawings. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in architectural, structural, and/or other consultants' drawings. Refer to the Special Instructions section of the general notes, below.

B. Research Council on Structural Connections (RCSC), "Specification for Structural Joints Using High-Strength Bolts," August 1, 2014.

C. American Welding Society (AWS)

1. AWS D1.1—2015: "Structural Welding Code – Steel" (specific items do not apply when they conflict with the AISC requirements) 2. AWS D1.8—2016: "Structural Welding Code – Seismic Supplement" (specific items do not

2.3. Structural shapes and plates shall be fabricated from newly rolled (milled) one-piece sections without splices, unless specifically noted otherwise on the structural drawings. Connections for structural steel shall comply with the structural drawings, unless written approval is given by the Structural Engineer.

2.4. Bolted Connections:

A. Provide snug tightened joints with Group A (threads not excluded) bolts for steel to steel connections, unless noted otherwise. Snug tightened joints shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Snug tight is the condition that exists when all of the plies in a connection have been pulled into firm contact by the bolts in the joint and all of the bolts in the joint have been tightened sufficiently to prevent the removal of the nuts without the use of a wrench. The snug tightened condition is typically achieved with a few impacts of an impact wrench, application of an electric torque wrench until the wrench begins to slow, or the full effort of a worker on an ordinary spud wrench.

#### 3. Miscellaneous

3.1. Post-Installed Anchors in Concrete

A. Anchorage to hardened concrete shall include all mechanical and adhesive anchors and epoxy doweled reinforcing bars of size, quantity, spacing, and embedment as shown on the drawings Additional anchors shall not be used without approval from the Engineer prior to installation.

B. Special inspection is required during the installation of all post-installed anchors. Refer to applicable code evaluation reports and the Quality Assurance and Statement of Special Inspections sections of the General Structural Notes. C. Anchorage to Concrete:

1. All post-installed anchors into hardened concrete shall be selected from the following preapproved products, unless noted otherwise: Steel Screw Anchor **Evaluation Report** Hilti Kwik HUS-EZ **ICC ESR-3027** DeWalt Screw-Bolt+ ICC ESR-3889 Simpson Titen HD ICC ESR-2713 Steel Expansion/Wedge Anchor ICC ESR-4266 Hilti Kwik Bolt TZ2 DeWalt Power-Stud+ SD2 ICC ESR-2502 Simpson Strong-Bolt 2 ICC ESR-3037 Adhesive Anchor System **Evaluation Report** Hilti HIT-HY 200 ICC ESR-3187 Hilti HIT-RE 500 V3 ICC ESR-3814 ICC ESR-4027 DeWalt AC200+ DeWalt Pure 110+ ICC ESR-3298 ICC ESR-4057 Simpson SET-3G

2. Adhesive anchors shall be installed into concrete having a minimum age of 21 days. For installations sooner than 21 days, consult the adhesive manufacturer.

D. Alternate anchors or adhesives are permitted with approval of the Engineer. The Contractor shall submit the proposed anchor product data and code evaluation report demonstrating the anchor is equivalent to or exceeds the capacity of the specified anchor.

E. Installation of adhesive anchors horizontally or upwardly inclined to support sustained tension loads shall be performed by personnel certified by an applicable certification program. Certification shall include written and performance tests in accordance with the ACI/CRSI Adhesive Anchor Installer Certification program, or equivalent. Proof of current certification shall be submitted to the Engineer for approval prior to commencement of installation.

F. Anchors shall be installed according to the Manufacturer's Printed Installation Instructions and applicable code evaluation reports including: 1. Hole diameter, depth, and cleaning procedure 2. Adhesive mixing, preparation, and placement

Installation torque G. Locate all existing reinforcement and embedded items prior to drilling into concrete or masonry

elements. Do not damage rebar or embeds while drilling or installing anchors. H. Grout all defective or abandoned holes with non-shrink grout or an injectable epoxy adhesive matching the surrounding concrete compressive strength. Consult the Architect for additional requirements at architecturally exposed concrete.

I. Drilled anchors are not allowed in post-tensioned concrete without approval of the Architect and Carbon steel anchors are limited to use in dry, interior locations. K. Holes for post-installed anchors may not be core drilled unless specifically allowed by the

# 4. Special Instructions

4.1. The project specifications are not superseded by the General Structural Notes but are intended to be complementary to them. Consult the specifications for additional requirements in each section. Notes and specific details on the drawings shall take precedence over General Structural Notes and typical

manufacturer's installation instructions and the code evaluation report.

4.2. The architectural drawings are the prime contract drawings. Consultant drawings by other disciplines are supplementary to the architectural drawings. All omissions or conflicts, including dimensions, between the various elements of the consultants' drawings and/or specifications shall be brought to the attention of the Architect before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the Architect without additional cost to the Owner. Any work done by the Contractor after discovery of such discrepancy shall be done at the Contractor's risk.

4.3. The structural drawings shall be used in conjunction with the architectural drawings. Primary structural elements and overall structural layout are indicated within the structural plans and details. Some secondary elements, architectural layouts, alcoves, elevations, slopes, depressions, curbs, mechanical equipment and electrical equipment, are not indicated within the structural drawings. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings.

4.4. All expansion joints (E.J.) shown in the structural drawings shall be considered seismic separation joints, unless noted otherwise. The width dimensioned shall be provided with a tolerance of (+1"/-0") regardless of the tolerances stated in material reference standards.

4.5. Submittals: A copy of all shop drawings that have been submitted for review must be kept at the construction site for reference. These drawings must bear the appropriate review stamps. The shop drawing review shall not relieve the Contractor of the responsibility of completing the project according to the contract documents. The General Contractor shall review and mark all shop drawings prior to submitting them to the Architect ft

4.6. Project Coordination: It shall be the responsibility of the General Contractor to coordinate with all trades any and all items that are to be integrated into the structural system. Openings or penetrations through, or attachments to the structural system that are not indicated on these drawings shall be the responsibility of the General Contractor and shall be coordinated with the Architect/Engineers. The order of construction is the responsibility of the General Contractor. It is the Contractor's obligation to provide all items necessary for the chosen procedure.

4.7. Contractor shall field verify all dimensions, and conditions. If the contract drawings do not represent actual conditions, Contractor shall notify Architect/Engineer prior to fabrication or construction within

4.8. Notice of Copyright: The structural drawings, plans, schedules, notes and details are hereby copyrighted by Reaveley Engineers. Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the project is not to be construed as publication in derogation of Reaveley Engineers' reserved rights. The documents defining the structure are instruments of service prepared by Reaveley Engineers for one use only. Furthermore, these documents shall not be reproduced, or copied, in whole or in part by the Contractor or subcontractors for preparation of shop drawings or other submittals.

#### 5. Quality Assurance

5.1. Quality Assurance Agency Requirements:

A. The Owner shall engage a qualified Quality Assurance Agency (QAA) to provide all special inspection and quality assurance testing for the project. The QAA shall provide all information necessary for the building official to determine that the agency meets the applicable requirements. 1. The QAA shall be objective, competent and independent from the Contractor responsible for the work being inspected. The agency shall disclose to the building official and the registered design professional in responsible charge possible conflicts of interest so that objectivity can be confirmed.

2. The QAA shall have adequate equipment to perform required tests. The equipment shall be periodically calibrated. 3. The QAA shall employ experienced personnel educated in conducting, supervising and

evaluating tests and special inspections. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of special inspection or testing activities for projects of similar complexity and material qualities. 4. The QAA shall send copies of all inspection and testing reports to the building official, Owner, Architect, Engineer and Contractor. Reports shall indicate that the work inspected was or was not completed in conformance to the approved construction documents. Discrepancies shall be brought to the immediate attention of the Contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the, Architect and Engineer.

5. The QAA shall submit a final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests. The final report shall be distributed to the building official, Owner, Architect and Engineer in a timely manner prior to the completion of the project.

5.2. Contractor Responsibilities:

A. The Contractor shall submit a written statement of responsibility to the building official and the Owner or the owner's authorized agent prior to the commencement of work on the systems or components listed in the statement of special inspections. The Contractor's statement of responsibility shall contain acknowledgement or awareness of the special requirements contained in the statement of special inspections.

B. Notification of QAA: The Contractor shall notify the QAA in a timely manner so that inspection and testing may be performed as outlined in the statement of special inspections.

5.3. Structural Observations by the Engineer of Record.

A. The Engineer of Record will perform structural observations at critical phases of the project as listed below. Observations will be made on a periodic basis throughout the construction of the structural system. During this timeframe, one site visit will be provided. Copies of the Engineer's report will be distributed to the Architect, Contractor, Owner, and QAA. B. Observation visits to the site by the Engineer's field representatives shall not be construed as

### inspection or approval of construction.

6. Statement of Special Inspections

6.1. The following materials, systems and components require special inspection or testing per Chapter 17 of the International Building Code (IBC).

6.2. For items requiring continuous inspection, a special inspector must be present onsite during the performance of that task. In most cases, periodic inspections/tests shall be performed prior to commencing the task, intermittently during the task, and at the completion of the task. Frequency marked with (E) designates periodic inspections that must be performed prior to or upon completion

Structural Steel per IBC Section 1705.2.1, 1705.13.1 & 1705.14.1 Detailed Instructions

	1.1040.103	Dotaliou motivationo
Prior to Bolting (Table N5.6-1, AISC	360-16):	
Certifications of fasteners	Continuous	Verify that manufacturer's certificates are available for fastener materials.
Fasteners marked	Periodic	Verify that fasteners have been marked in accordance with ASTM requirements.
Proper fasteners for joint	Periodic	Verify grade, type, and bolt length if threads are excluded from the shear plane.
Proper bolting procedure	Periodic	Verify proper procedure is used for the joint detail.
Connecting elements	Periodic	Verify appropriate faying surface condition and hole preparation, if specified, meet requirements.
Pre-installation verification testing	Periodic	Observe and document verification testing by installation personnel for fastener assemblies and methods used.
Proper storage	Periodic	Verify proper storage of bolts, nuts, washers, and other fastener components.
During Bolting (Table N5.6-2, AISC	360-16):	
Fastener assemblies	Periodic	Verify that fastener assemblies are of suitable condition, paced in all holes, and washers and nuts are positioned as required.
Snug-tight prior to pretensioning	Periodic	Verify that joints are brought to snug-tight condition prior to pretensioning operation.
Fastener component	Periodic	Verify that fastener component not turned by wrench is prevented from rotating.
Pretensioned fasteners	Periodic	Verify that fasteners are Pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward the free edges.
After Bolting (Table N5.6-3, AISC 36	60-16) <i>:</i>	
Documentation	Periodic (E)	Document the acceptance or rejection of bolte connections.
Other Steel Inspections (Section N5	5.8, AISC 360-16: Ta	able J8.1, J10.1, AISC 341-16):
Structural steel details	Periodic	All fabricated steel or steel frames shall be inspected to verify compliance with the details shown in the approved construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.
Anchor rods and other embedments supporting structural steel	Periodic	Shall be on the premises during the placemen of anchor rods and other embedments supporting structural steel for compliance with construction documents. Verify the diameter,

Concrete	Construction	per IBC	Sections	1705.3 &	1705.12

ioroto conotraction per ibe coctione ir colo a 17 coliz			
em	Frequency	Detailed Instructions	
rost-installed adhesive anchors nstalled in horizontally or upwardly nclined orientations to resist ustained tension loads	Continuous	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report. Horizontally or upwardly inclined anchors that resist sustained	
rost-installed mechanical anchors nd adhesive anchors not defined	Periodic	tension loads require continuous inspection and approved installers.	

grade, type, and length of the anchor rod or

embedded item, and the extent or depth of embedment prior to placement of concrete.

PLAN LEGEND STEEL BEAM OR GIRDER STEEL JOIST OR PURLIN <--- STEEL ANGLE BRACE / KICKER, SEE A1/SF501. EXISTING STEEL COLUMN - TUBE (HSS) **EXISTING STEEL COLUMN - WIDE FLANGE** EXISTING STEEL BEAM OR GIRDER EXISTING STEEL JOIST OR PURLIN — — EXISTING HORIZONTAL BRIDGING EXISTING TO BE REMOVED **EXISTING OPENING** 

	ABBREVIATIONS		
@	AT		REINF
AB	ANCHOR BOLT (S)		REQD
ABV	ABOVE		SDS
ALT	ALTERNATE		SFRS
APPROX	APPROXIMATE		SHT
ARCH	ARCHITECT(URAL)		SI
BLDG	BUILDING		SIM
BLW	BELOW		SOG
BM	BEAM		SQ
BOT	BOTTOM		STAG
BRG	BEARING		STD
BTWN	BETWEEN		STIFF
CJ	CONSTRUCTION JOINT OR CONTROL		STL
	JOINT		STRUCT
CJP	COMPLETE JOINT PENETRATION		T&B
CMU	CONCRETE MASONRY UNIT		T.O.
COL	COLUMN		TEMP
CONC	CONCRETE		THDS
CONST	CONSTRUCTION		TOC
CONT	CONTINUOUS		TOCP
CONTR	CONTRACTOR		TOF
CTR	CENTER		TOS
D.B.	DECK BEARING		TOST
db	DIAMETER OF REINFORCING BAR		TOW
DBA	DEFORMED BAR ANCHORS		TYP
DBL	DOUBLE		UNO
DET	DETAIL		VERT
DIA (OR Ø)	DIAMETER		W.P.
DIAG	DIAGONAL		W/
DIM	DIMENSION		WF
DK	DECK		WFRS
DN	DOWN		WT
DWG	DRAWING		WWF
DWL	DOWEL		YD
E.F.	EACH FACE	L	

DIM	DIMENSION
DK	DECK
DN	DOWN
DWG	DRAWING
DWL E.F.	DOWEL
E.J.	EACH FACE EXPANSION JOINT (SEISMIC
L.J.	SEPARATION JOINT)
E.W.	EACH WAY
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
ELEV ENG	ELEVATOR ENGINEER
EQ	EQUAL
-	EQUIPMENT
EXIST (E)	EXISTING
EXP	EXPANSION / EXPOSED
EXT	EXTERIOR
F.D. F.F.	FLOOR DRAIN FINISH FLOOR
F.V.	FIELD VERIFY
FDTN	FOUNDATION
FIN	FINISH
FL	FLOOR
FT	FOOT
FTG GA	FOOTING GAUGE
GALV	GALVANIZED
GLB	GLU-LAMINATED BEAM
GR	GRADE
GSN	GENERAL STRUCTURAL NOTES
HB	HORIZONTAL BRIDGING
HORIZ HSA	HORIZONTAL HEADED STUD ANCHORS
HSS	HOLLOW STRUCTURAL STEEL
HT	HEIGHT
I.F.	INSIDE FACE
IBC	INTERNATIONAL BUILDING CODE
ICC IN	INTERNATIONAL CODE COUNCIL INCH
INSUL	INSULATION
INT	INTERIOR
JST	JOIST
JT K	JOINT KIPS - 1,000 POUNDS
KLF	KIPS PER LINEAL FOOT
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
Ld, Lt, Lsb,	SEE CONCRETE REINFORCING BAR DEVELOPMENT AND LAP LENGTH
Loot, Luc, Loc	SCHEDULE
LF	LINEAL FOOT
LFRS	LATERAL FORCE RESISTING SYSTEM (SFRS & WFRS)
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
MAS MAX	MASONRY MAXIMUM
MCJ	MASONRY CONTROL JOINT
MECH	MECHANICAL
MFGR	MANUFACTURER
MIN	MINIMUM
MISC NIC	MISCELLANEOUS NOT IN CONTRACT
NORM	NORMAL
NTS	NOT TO SCALE
O.C.	ON CENTER
O.F.	OUTSIDE FACE
OPNG OPP	OPENING OPPOSITE
OWSJ	OPPOSITE OPEN WEB STEEL JOIST
P.T.	POST-TENSIONED
PAF	POWDER ACTUATED FASTENER
PCF	POUNDS/CUBIC FOOT
PJP PL	PARTIAL JOINT PENETRATION PLATE
PL PI F	POLINDS/LINEAL FOOT

POUNDS/LINEAL FOOT

POUNDS/SQ FOOT POUNDS/SQ INCH

**ROOF DRAIN** 

	ABBREVIATIONS
REINF	REINFORCING
REQD	REQUIRED
SDS	SELF-DRILLING SCREW
SFRS	SEISMIC FORCE RESISTING SYST
SHT	SHEET
SI	SPECIAL INSPECTION (SP. INSP.)
SIM	SIMILAR
SOG	SLAB ON GRADE
SQ	SQUARE
STAG	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
T & B	TOP AND BOTTOM
T.O.	TOP OF
TEMP	TEMPERATURE
THDS	THREADS
TOC	TOP OF CONCRETE
TOCP	TOP OF CONCRETE PIER
TOF	TOP OF FOOTING
TOS	TOP OF SLAB
TOST	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W.P.	WORK POINT
W/	WITH
WF	WIDE FLANGE
WFRS	WIND FORCE RESISTING SYSTEM
WT	WEIGHT
WWF	WELDED WIRE FABRIC
YD	YARD

	PLAN MARKS
=-#	BRACED FRAME
3-#	CONCRETE BEAM
C-#	CONCRETE COLUMN
CSS-#	CANTILEVERED CONCRETE SUSPENDE
	SLAB
OP-#	CONCRETE DRILLED PIER
-W-#	CONCRETE FOUNDATION WALL
GB-#	CONCRETE GRADE BEAM
J-#	CONCRETE JOIST
JC-#	CONCRETE JAMB COLUMN
#	CONCRETE LINTEL
P <b>-</b> #	CONCRETE PIER
₹W-#	CONCRETE RETAINING WALL
SG-#	CONCRETE SLAB ON GRADE
SH-#	CONCRETE SHEAR HEAD
SS-#	CONCRETE SUSPENDED SLAB
SW-#	CONCRETE SHEAR WALL
N-#	CONCRETE WALL
C#	CONTINUOUS FOOTING
Л#	MAT FOOTING
R#	RECTANGULAR FOOTING
S#	SQUARE FOOTING
ΓS#	THICKENED SLAB FOOTING
D-#	HOLD DOWN ANCHOR
C-#	MASONRY COLUMN
F-#	MOMENT FRAME
L-#	MASONRY LINTEL
P-#	MASONRY PIER
W-#	MASONRY WALL
ГВ-#	POST-TENSIONED CONCRETE BEAM
3P <b>-</b> #	STEEL BASE PLATE
C-#	STEEL COLUMN
CP-#	STEEL CAP PLATE
D-#	STEEL DECK
DA-#	STEEL DECK ATTACHMENT
G-#	STEEL GIRDER
J-#	STEEL JOIST
ND-#	SNOW DRIFT
B-#	WOOD BEAM
BW-#	WOOD BEARING WALL
C-#	WOOD COLUMN
D-#	WOOD DIAPHRAGM
J-#	WOOD JOIST
SW-#	WOOD SHEAR WALL

STRUCTURAL DRAWING LIST			
SHT NAME			
GENERAL STUCTURAL NOTES			
PARTIAL MEDICAL EQUIPMENT SUPPORT FRAMING PLANS			
MEDICAL EQUIPMENT SUPPORT DETAILS			
MEDICAL EQUIPMENT SUPPORT DETAILS			

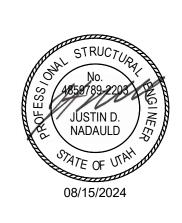
**ARCHITECT** HKS ARCHITECTS, INC. 222 SOUTH MAIN, SUITE 230 SALT LAKE CITY, UT 84101

STRUCTURAL ENGINEER REAVELEY ENGINEERS & ASSOCIATES 675 EAST 500 SOUTH, SUITE 400 SALT LAKE CITY, UTAH 84102

MECHANICAL ENGINEER VAN BOERUM & FRANK ASSOCIATES, INC 181 EAST 5600 SOUTH, SUITE 130

MURRAY, UTAH 84107 **ELECTRICAL ENGINEER** 

SPECTRUM ENGINEERS, INC 324 SOUTH STATE STREET, SUITE 400 SALT LAKE CITY, UTAH 84111



**KEY PLAN** 

NO. DESCRIPTION

HKS PROJECT NUMBER 26404.000 08/15/2024

CONSTRUCTION **DOCUMENTS GENERAL STUCTURAL** 

SHEET NO.

NOTES

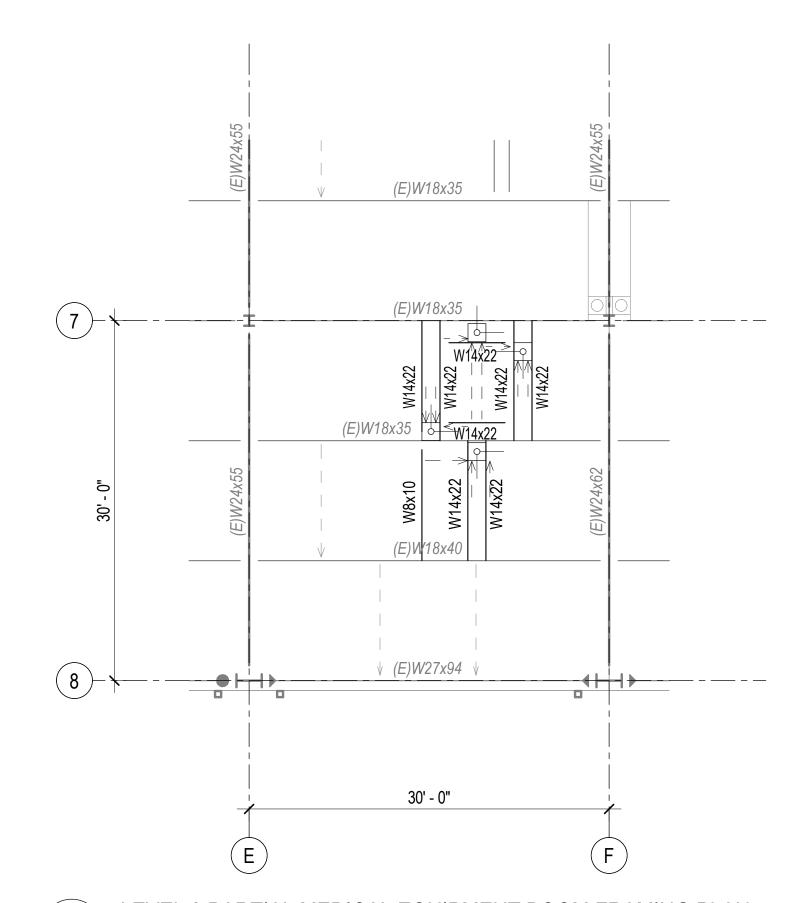
SINGLE EXAM ROOM LIGHT, SEE B4/SF502. SEE ARCH FOR DIMENSIONAL LAYOUT.

EQUIPMENT SUPPORT FOR STERIS EQUIPMENT SEE B5/SF501 . SEE ARCH FOR DIMENSIONAL LAYOUT.

## EXISTING BUILDING NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO DETAILING, FABRICATING, ERECTING OR INSTALLING ANY STRUCTURAL ELEMENT. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM IN A TIMELY MANNER SUCH THAT WORK WILL NOT BE DELAYED.

2. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING OF EXISTING STRUCTURE DURING CONSTRUCTION.



LEVEL 3 PARTIAL MEDICAL EQUIPMENT BOOM FRAMING PLAN

SF101 SCALE: 1/8" = 1'-0"

**ARCHITECT** HKS ARCHITECTS, INC. 222 SOUTH MAIN, SUITE 230 SALT LAKE CITY, UT 84101

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SALT LAKE CITY, UTAH 84102 **MECHANICAL ENGINEER** VAN BOERUM & FRANK ASSOCIATES, INC

181 EAST 5600 SOUTH, SUITE 130 MURRAY, UTAH 84107 **ELECTRICAL ENGINEER** 

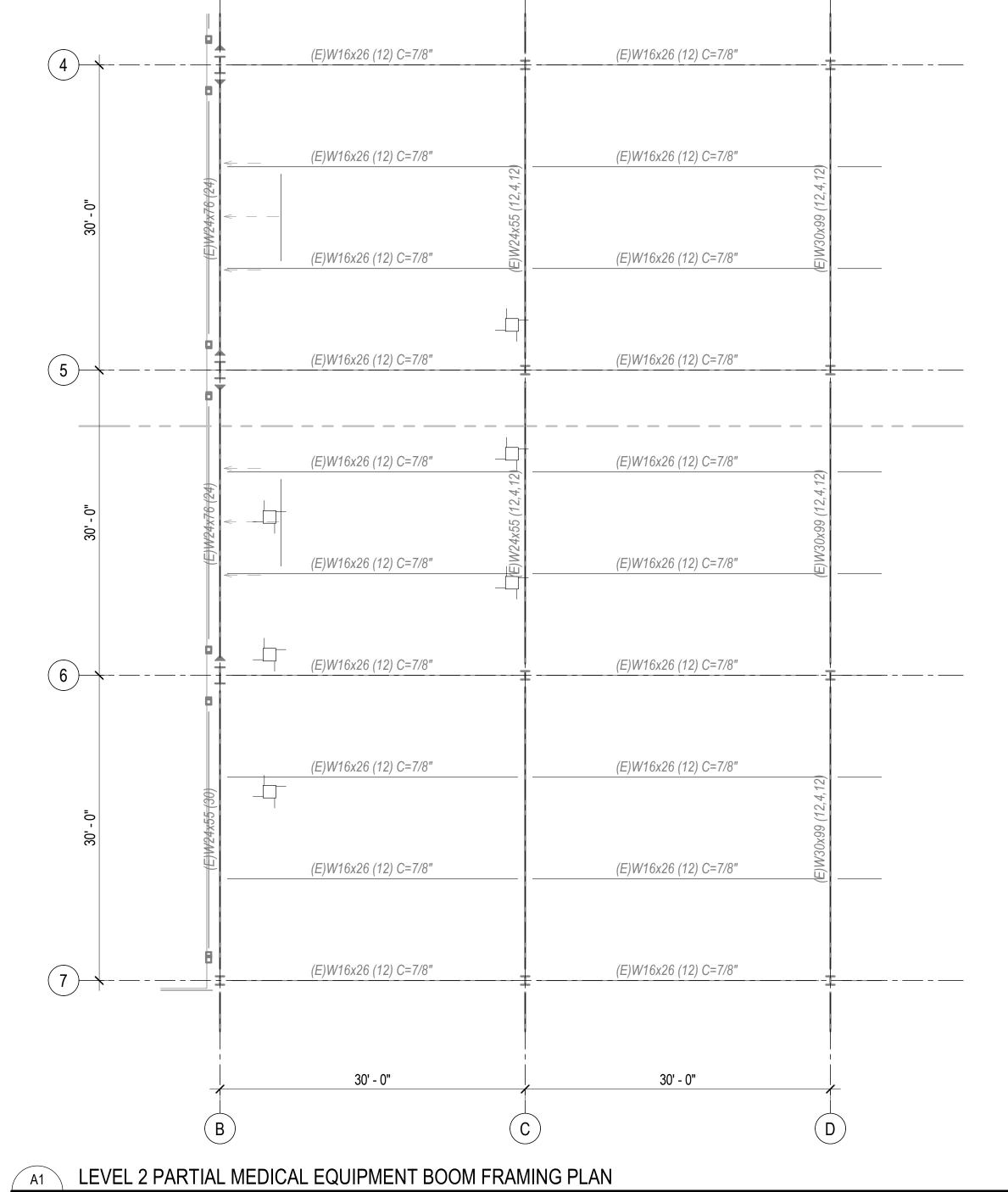
SPECTRUM ENGINEERS, INC 324 SOUTH STATE STREET, SUITE 400 SALT LAKE CITY, UTAH 84111



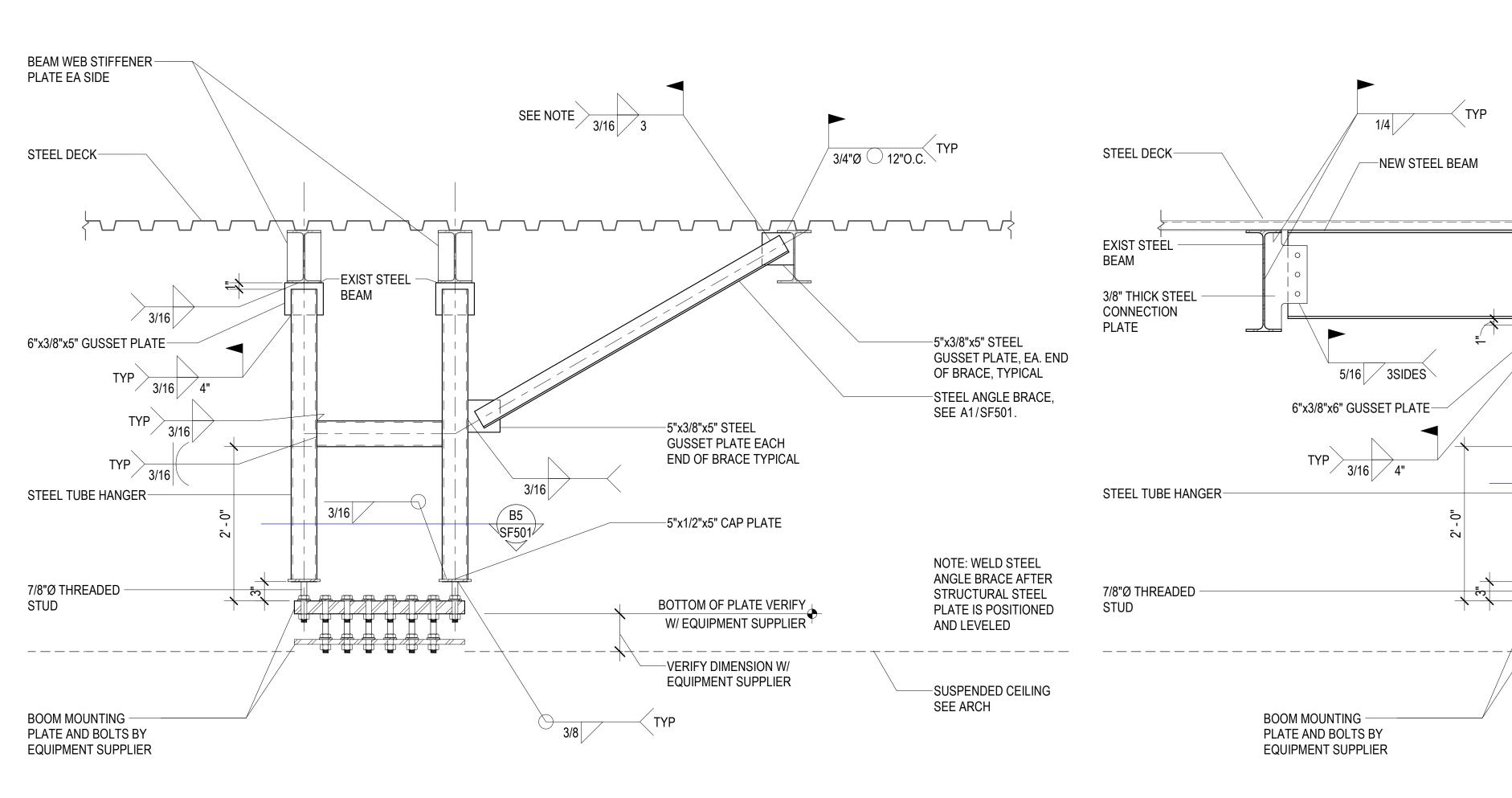
KEY PLAN

HKS PROJECT NUMBER 26404.000 08/15/2024 CONSTRUCTION **DOCUMENTS PARTIAL MEDICAL EQUIPMENT SUPPORT** 

FRAMING PLANS



SF101 SCALE: 1/8" = 1'-0"



3/4"Ø 12"O.C. TYP 3/16 1 1/2" \_ \_ 1 1/2" STEEL DECK->2" TO 6" OFFSE -NEW STEEL BEAM STEEL DECK-EXIST STEEL -EXIST STEEL BEAM 3/16 3/8" THICK STEEL CONNECTION 1/4 PLATE -NEW 3/8" THICK BEAM WEB STIFFENER 5/16 3SIDES PLATE - TYP 0 TO 2"— 3/16 3 6"x3/8"x6" GUSSET PLATE -STEEL ANGLE BRACE W/ 5"x3/8"x5" STEEL \_ \_\_ \_ \_ \_ **GUSSET PLATE EACH** 3/16 4" END, SEE A1/SF501. B5 SF501 -5"x1/2"x5" CAP PLATE STEEL TUBE HANGER-3/16 7/8"Ø THREADED BOTTOM OF PLATE VERIFY STUD W/ EQUIPMENT SUPPLIER VERIFY DIMENSION -\_\_\_\_\_ W/ EQUIPMENT SUPPLIER -SUSPENDED **BOOM MOUNTING -CEILING SEE ARCH** PLATE AND BOLTS BY EQUIPMENT SUPPLIER **BOOM MOUNTING -**PLATE AND BOLTS BY 0 TO 2" OFFSET **EQUIPMENT SUPPLIER** 

D3 SECTION AT STERIS TANDEN SUPPORT

SF501 NO SCALE

D1 SECTION AT STERIS TANDEN SUPPORT

SF501 NO SCALE

EXIST CONCRETE OVER STEEL DECK STEEL BEAM-—STEEL BEAM —ANGLE BRACE -WELD PLATE EACH END OF BRACE

ANGLE BRACE SCHEDULE			
BRACE LENGTH "L"	ANGLE BRACE SIZE	WELD PLATE SIZE	
UP TO 4'-0"	L2x2x1/4	4"x1/4"x4"	
4'-0" TO 8'-0"	L3x3x1/4	4"x1/4"x4"	
8'-0" TO 12'-0"	2-L2.1/2x2.1/2x1/4	4"x3/8"x4"	
12'-0" TO 16'-0"	2-L3x3x1/4	5"x3/8"x5"	
NOTE: 1. WHERE DOUBLE ANGLES ARE USED PROVIDE 3"x3/8" SPACER PLATES AT THIRD POINTS.			

A1 TYPICAL STEEL BEAM BOTTOM FLANGE BRACE DETAIL SF501 NO SCALE

SECTION AT STERIS TANDEN SUPPORT - CONDITION AT D5 HANGER BELOW GIRDER OR PURLIN SF501 NO SCALE

—STEEL BEAM

\SF501

BOTTOM OF PLATE VERIFY

-SUSPENDED

W/ EQUIPMENT SUPPLIER

**CEILING SEE ARCH** 

VERIFY DIMENSION

NOTE: COORDINATE ALL

W/ EQUIPMENT

SUPPLIER

-1/2" GUSSET PLATE

SF501)

DIMENSIONS WITH EQUIP NOTE: WELD STEEL ANGLE SUPPLIER BEFORE BRACE AFTER STRUCTURAL **FABRICATION** STEEL PLATE IS POSITIONED AND LEVELED -MOUNTING PLATE BY EQUIPMENT SUPPLIER. COORDINATE W/ COORDINATE BOLT HOLE EQUIPMENT SUPPLIER SIZE AND LOCATION FOR ATTACHMENT OF STEEL TUBE HANGERS WITH STEEL TUBE -**EQUIPMENT SUPPLIER** HANGER HSS4x4x1/4 (4 PLACES) -HSS4x4x1/4 (4 SIDES) —CENTER OF BOOM STRUCTURAL STEEL PLATE -STEEL ANGLE BRACE, 3 PER MOUNT. SEE PLAN FOR LOCATION. FOR BRACE LENGTH ≤ 8'-0" USE L2.1/2x2.1/2x1/4 FOR 8'-0" > BRACE LENGTH ≥ 10'-0" USE L3x3x1/4

STERIS TANDEM SUPPORT PLATE DETAIL - PLAN VIEW

ARCHITECT HKS ARCHITECTS, INC. 222 SOUTH MAIN, SUITE 230 SALT LAKE CITY, UT 84101

> STRUCTURAL ENGINEER REAVELEY ENGINEERS & ASSOCIATES 675 EAST 500 SOUTH, SUITE 400 SALT LAKE CITY, UTAH 84102

MECHANICAL ENGINEER VAN BOERUM & FRANK ASSOCIATES, INC 181 EAST 5600 SOUTH, SUITE 130 MURRAY, UTAH 84107

SALT LAKE CITY, UTAH 84111

**ELECTRICAL ENGINEER** SPECTRUM ENGINEERS, INC 324 SOUTH STATE STREET, SUITE 400

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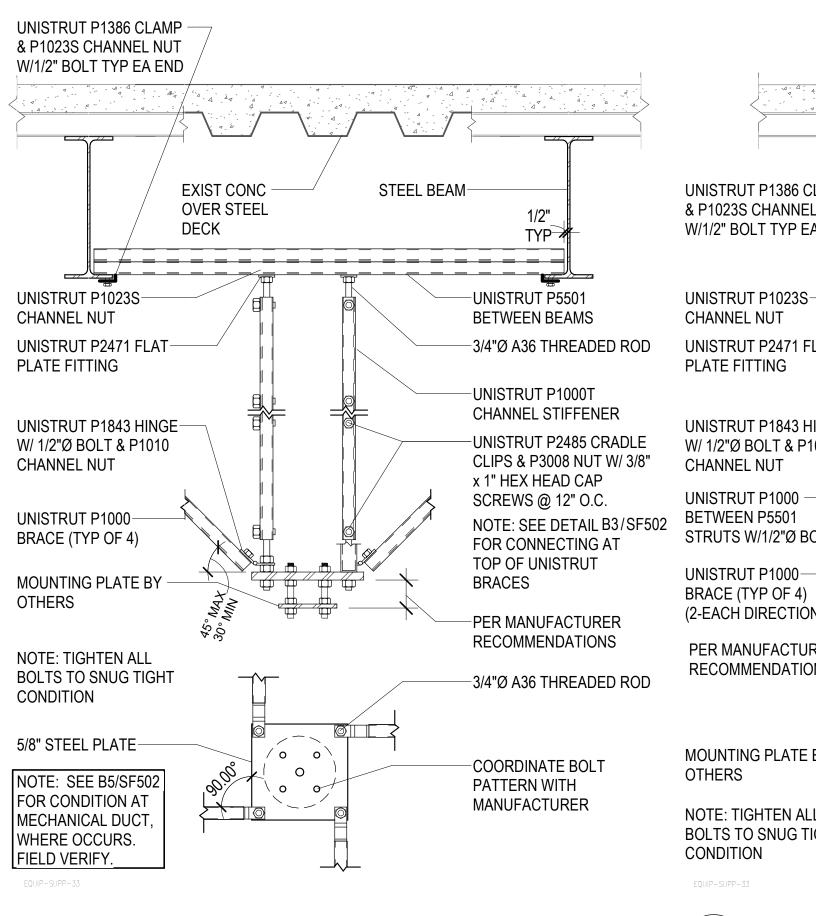
KEY PLAN

NO. DESCRIPTION

HKS PROJECT NUMBER 26404.000 08/15/2024

CONSTRUCTION **DOCUMENTS MEDICAL EQUIPMENT** 

**SUPPORT DETAILS** 



B4 TYPICAL SINGLE LIGHT SUPPORT FROM STRUCTURE
SF502 NO SCALE

EXIST CONC STEEL BEAM-UNISTRUT P1386 CLAMP -& P1023S CHANNEL NUT **OVER STEEL** W/1/2" BOLT TYP EA END -UNISTRUT P5501 BETWEEN BEAMS **CENTER OVER P5501** UNISTRUT P1023S-CHANNEL NUT UNISTRUT BELOW UNISTRUT P2471 FLAT--3/4"Ø A36 THREADED ROD PLATE FITTING -UNISTRUT P1000T CHANNEL STIFFENER UNISTRUT P1843 HINGE--UNISTRUT P2485 CRADLE W/ 1/2"Ø BOLT & P1010 CLIPS & P3008 NUT W/ 3/8" x 1" HEX HEAD CAP HVAC DUCT SCREWS @ 12" O.C. UNISTRUT P1000 -NOTE: SEE DETAIL B3/SF502 STRUTS W/1/2"Ø BOLT FOR CONNECTING AT TOP OF UNISTRUT UNISTRUT P1000-BRACE (TYP OF 4) (2-EACH DIRECTION) PER MANUFACTURER -MAX. RECOMMENDATIONS -UNISTRUT P5501 EACH SIDE OF 5/8" STEEL PLATE BELOW −3/4"Ø A36 THREADED MOUNTING PLATE BY OTHERS —5/8" THICK STEEL NOTE: TIGHTEN ALL PLATE, COORDINATE BOLTS TO SNUG TIGHT BOLT PATTERN WITH CONDITION MANUFACTURER

TYPICAL SINGLE LIGHT SUPPORT FROM STRUCTURE AT MECHANICAL DUCT

NO SCALE

**HKS** 

ARCHITECT
HKS ARCHITECTS, INC.
222 SOUTH MAIN, SUITE 230
SALT LAKE CITY, UT 84101

STRUCTURAL ENGINEER
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MECHANICAL ENGINEER

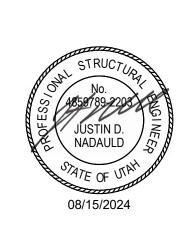
VAN BOERUM & FRANK ASSOCIATES, INC

181 EAST 5600 SOUTH, SUITE 130

MURRAY, UTAH 84107

ELECTRICAL ENGINEER
SPECTRUM ENGINEERS, INC
324 SOUTH STATE STREET, SUITE 400
SALT LAKE CITY, UTAH 84111

LAYTON HOSPITAL MISC PROJECTS



KEY PLAN

REVISION
NO. DESCRIPTION

AKS PROJECT NUMBER

26404.000
DATE

08/15/2024
ISSUE

CONSTRUCTION

DOCUMENTS
SHEET TITLE

MEDICAL
EQUIPMENT
SUPPORT DETAILS

SF502