

Date: 11.21.23

Amendment Number 1

Project: **General Contractors Request for Bids
Issued by Salt Lake County
Project: Clark Planetarium Annex Renovation
Project #: CLP104381
Closing date: December 11, 2023**

This amendment represents clarifications and additions to the Request for Bids (RFB) and any of its respective parts. These changes are to be considered part of said documents as though they were included in the original documents. Any terms or conditions of said documents not modified by Amendment No. 1 shall remain unchanged.

—

- 1) The Architect's Addendum No. 1 dated November 20, 2023 is incorporated into the bid documents.

End of Amendment No. 1



ARCHITECTURAL NEXUS, Inc
archnexus.com

ADD #01

SALT LAKE CITY
2505 East Parleys Way
Salt Lake City, Utah 84109
T 801.924.5000

SACRAMENTO
930 R Street
Sacramento, California 95811
T 916.443.5911

ISSUE DATE: November 20, 2023

RESPONSE TO: City Review Comments

PROJECT: **Clark Planetarium New Space Tenant Improvement**
110 S 400 W
Salt Lake City, UT 84101

OWNER: **Salt Lake County**
2001 S State St Suite S3-120
Salt Lake City, UT 84114

ARCHITECT'S PROJECT #: 22070

PAGES: 2 + Attachments (42) = 44
Replaced attached drawings: **G001, G002, G050, G101, G501, G701, A101, A251, M001, M101, M102, M501, M601, PD100, P101, P501, P601, E-001, E-002, EDL-101, EP-102**
Replace attached specifications: **08 7100**

This Addendum forms a part of the Contract Documents and modifies the original Bid Documents as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. This Addendum includes all attachments noted, included herein by reference.

DRAWING AMENDMENTS:

D1. Architectural:

<u>Item #</u>	<u>Sheet(s)</u>	<u>Drawing(s)</u>	<u>Amendment</u>
D1.01	G001	Code Required Inspections, Deferred Submittals, General Notes	1. Code Required Inspections, REVISE: Removed "structural drawings" from note. 2. Deferred Submittals, REVISE: Modified note to include instructions regarding a pre-construction meeting with the inspector. 3. General Notes, ADD: Note stating a full set of approved plans and documents is required to be on site. REPLACE sheet in its entirety
D1.02	G002	Sheet Index	1. Sheet Index, ADD: M102 – Mechanical Roof Plan REPLACE sheet in its entirety
D1.03	G050	Nonstructural Component Checklist	1. REVISE: Added MEP Seismic Support as a deferred submittal and removed general notes. REPLACE sheet in its entirety
D1.04	G101	Entirety of Sheet	1. REVISE: Modified egress (including existing door hardware) and occupancy to reflect changes in exiting and furniture layout. Modified General Code Requirements to reflect changes to the number of sinks in new space. 2. REPLACE sheet in its entirety
D1.05	G501	S31 Wall Type	1. REVISE: Wall rating and height should be field verified to match existing REPLACE sheet in its entirety
D1.06	G701	B5	1. REVISE: Toilet room signage REPLACE sheet in its entirety
D1.07	A101	A5	1. ADD: Keynote 02:EH1 2. REVISE: Dimension for west toilet room wall 3. ADD: Existing doors and (E) Hallway room tag 4. ADD: Sinks within individual toilet rooms 5. REVISE: Wall type S6 6. Keynote Legend, ADD: Keynote 10:ES1, REVISE: Bid Alt #1 tag name REPLACE sheet in its entirety

<u>Item #</u>	<u>Sheet(s)</u>	<u>Drawing(s)</u>	<u>Amendment</u>
D1.08	A251	Door Schedule, A3, B5, C5	1. Door Schedule, ADD: Hardware Group numbers, Door 100A 2. A3, REVISE: Include new sink 3. ADD: B5 4. C5, REVISE: Dimensions for door widths REPLACE sheet in its entirety

D2. Mechanical:

See the attached narrative and drawings from Engineer (2 sheets).

D3. Electrical:

See the attached narrative and drawings from Engineer (1 sheet).

SPECIFICATION AMENDMENTS:

Description: ADD = red text

S1. SECTION 08 7100 – DOOR HARDWARE, REVISED, REPLACE in its entirety

Rachel Sittler, Project Architect	801.856.8722	rsittler@archnexus.com	11.20.2023
Name	Phone	Email	Date

CODE REQUIRED INSPECTIONS

NOTE: THE FOLLOWING DOCUMENTS ARE REQUIRED BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED. ADDITIONAL DOCUMENTS MAY BE REQUIRED AS THE WORK PROGRESSES.

- 1. CODE INSPECTION REPORT RECOMMENDING THAT A CERTIFICATE OF OCCUPANCY BE ISSUED.
- 2. FINAL REPORT FROM THE SPECIAL INSPECTION AGENCY.
- 3. CERTIFICATE OF FIRE CLEARANCE FROM THE STATE FIRE MARSHALL.
- 4. REPORT OF THE DISINFECTION OF THE POTABLE WATER SYSTEM. IPC 610
- 5. A CERTIFICATE OF COMPLIANCE FROM THE APPROVED FABRICATOR, IBC 1704.2.2

REFER TO SHEET G050, AS WELL AS MECHANICAL AND ELECTRICAL COMCHECKS (SEE SPECIFICATIONS APPENDIX).

DEFERRED SUBMITTALS

NOTE: WORK RELATED TO THE DEFERRED SUBMITTALS IS NOT TO COMMENCE UNTIL THE BUILDING OFFICIAL HAS APPROVED THE SUBMITTAL. SUBMITTALS SHALL BE SUPPLIED TO THE BUILDING OFFICIAL FOR REVIEW WITH AN ACCOMPANIED APPROVED SUBMITTAL FROM THE ARCHITECT. THE GENERAL CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE INSPECTOR TO DISCUSS THE DEFERRED SUBMITTAL REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.

SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWING AND SPECIFICATIONS FOR ADDITIONAL DEFERRED SUBMITTAL REQUIREMENTS.

DEFERRED SUBMITTALS LIST

- 1. FIRE ALARMS SYSTEMS
- 2. FIRE SPRINKLER SYSTEMS
- 3. VIBRATION AND SEISMIC CONTROL FOR PLUMBING PIPING AND EQUIPMENT
- 4. VIBRATION AND SEISMIC CONTROL FOR HVAC EQUIPMENT

APPLICABLE CODES

INTERNATIONAL BUILDING CODE	2021	NATIONAL ELECTRICAL CODE	2020
INTERNATIONAL MECHANICAL CODE	2021	UNIFORM CODE FOR BUILDING CONSERVATION	N/A
INTERNATIONAL FUEL GAS CODE	2021	ADA ACCESSIBILITY GUIDELINES	ICC/ANSI A117.1-2017
INTERNATIONAL PLUMBING CODE	2021	* 2018 INTERNATIONAL EXISTING BUILDING CODE	
INTERNATIONAL FIRE CODE	2021	* TITLE 18 SALT LAKE CITY ORDINANCES - BUILDING AND CONSTRUCTION	
INTERNATIONAL ENERGY CONSERVATION CODE	2021	* AUGUST 2017 SALT LAKE COUNTY DESIGN & CONSTRUCTION STANDARDS & PROCEDURES	
ZONING ORDINANCES	SALT LAKE CITY, UT	* CURRENT SALT LAKE COUNTY GENERAL CONDITIONS	
LIFE SAFETY 101			

BID PACKAGE GENERAL NOTES

- A. THIS BID PACKAGE SHALL BE BID IN ITS ENTIRETY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THE ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY.
- B. AS PART OF THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS, THE CONTRACTOR SHALL ENDEAVOR TO IDENTIFY AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OF CONFLICTS BETWEEN THE WORK OF DIFFERENT PARTIES AT THE EARLIEST POSSIBLE DATE SO AS TO ALLOW REASONABLE AND ADEQUATE TIME FOR THE CONFLICT TO BE RESOLVED WITHOUT DELAYING THE WORK. ALL DEVIATIONS FROM THAT WHICH IS REQUIRED BY THE CONTRACT DOCUMENTS MUST BE APPROVED IN ADVANCE BY THE ARCHITECT.
- C. IN CASE OF ANY DISCREPANCY WITHIN THE CONTRACT DOCUMENTS, THE MOST STRINGENT REQUIREMENT OR MOST COSTLY OPTION SHALL APPLY, UNLESS CLARIFICATION IS SOUGHT IN WRITING AND RECEIVED FROM THE ARCHITECT PRIOR TO BIDDING. THE CONTRACTOR SHALL BRING ANY KNOWN DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT AS SOON AS POSSIBLE, AND IN ANY EVENT, PRIOR TO COMMENCING AFFECTED WORK.
- D. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY CONFLICTS BETWEEN VENDOR DRAWINGS AND THE CONTRACT DOCUMENTS. THE LATEST VENDOR DRAWINGS SHALL GOVERN AND BE VERIFIED WITH THE OWNER AND THE ARCHITECT.
- E. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. NOT ALL ELEMENTS OF THE DRAWINGS MAY BE DRAWN TO EXACT SCALE. ALL REQUIRED DIMENSIONS ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE DRAWINGS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED. DIMENSIONS ARE TO BE COORDINATED WITH ALL DISCIPLINES, VENDORS AND OWNER-FURNISHED EQUIPMENT, FURNITURE AND DEVICES TO ASSURE PROPER PLACEMENT AND WARRANTY REQUIREMENTS.
- F. ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS. SEE THE G-SERIES SHEETS FOR PARTIAL REGULATORY INFORMATION, INCLUDING CODE COMPLIANCE TABLES, RATED ASSEMBLY TYPES AND TYPICAL ACCESSIBILITY CLEARANCE AND COMPLIANCE REQUIREMENTS.
- G. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND THEIR COMPATIBILITY WITH NEW CONSTRUCTION, AND COORDINATE ANY DISCREPANCIES WITH THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.
- H. THE CONTRACTOR SHALL PROTECT ALL EXISTING FIRE-RESISTANCE-RATED ASSEMBLIES AND SPRAY-APPLIED STRUCTURAL FIREPROOFING FROM DAMAGE. PATCH AND FULLY REPAIR ANY DAMAGE TO SUCH ITEMS, WHETHER EXISTING OR CAUSED BY NEW CONSTRUCTION OR DEMOLITION ACTIVITIES, TO LIKE-NEW CONDITION IN ACCORDANCE WITH THE ORIGINAL LISTED SYSTEMS. SEAL ALL EXISTING AND NEW ASSEMBLY PENETRATIONS WITH LISTED FIRE-RESISTANCE-RATED ASSEMBLIES, WHERE OCCUR, TO MAINTAIN THE INTEGRITY OF THE ASSEMBLIES.
- I. ALL UNUSED FLOOR SLAB PENETRATIONS 36 SQUARE INCHES OR LESS IN AREA ARE TO BE INFILLED USING 4,000 PSI CONCRETE FOR THE FULL DEPTH OF THE EXISTING SLAB.
- J. IF THERE ARE ANY DISCREPANCIES BETWEEN OR WITHIN THE CONTRACT DOCUMENTS, THEN THE MORE STRINGENT REQUIREMENT AND GREATER EXPENSE WILL BE ENFORCED.

Salt Lake County

CLARK PLANETARIUM
NEW SPACE TENANT
IMPROVEMENT

110 S 400 W, Salt Lake City UT,
84101

Nexus Project #: 22070

Owner Project #:

31 AUGUST 2023

CONSTRUCTION DOCUMENTS
(BP-2, P.I)

THIS PROJECT CONSISTS OF THE FIRST NEW CONSTRUCTION PHASE OF A (2) PHASE RENOVATION OF AN EXISTING TENANT SPACE. THE SCOPE OF WORK OF PHASE I INCLUDES THE INSTALLATION OF NEW WALLS, CEILINGS, DOORS, MILLWORK, PLUMBING, AND FINISHES.

A LEGIBLE FULL SET OF APPROVED PLANS AND DOCUMENTS IS REQUIRED TO BE ON-SITE FOR INSPECTIONS.



OWNER
Clark Planetarium

110 South 400 West
Salt Lake City, UT 84101

CONTACT: Duke Johnson E-MAIL: DJJohnson@slco.org
PHONE: 801.580.3398 INTERNET: https://slco.org/clark-planetarium/

ARCHITECT
Architectural NEXUS, Inc.

2505 East Parleys Way
Salt Lake City, UT 84109

CONTACT: Holli Adams E-MAIL: hadams@archnexus.com
PHONE: 801.924.5000 INTERNET: http://www.archnexus.com

MECHANICAL

Van Boerum & Frank Associates, Inc.

181 East 5600 South, Suite 200
Murray, UT 84123

CONTACT: Spencer Howell E-MAIL: showell@vbfa.com
PHONE: 801.530.3148 INTERNET: http://www.vbfa.com

ELECTRICAL

Electrical Engineering & Lighting Design

1220 South 300 West
Salt Lake City, UT 84101

CONTACT: Mansour Aghdasi E-MAIL: mansour@ee-id.com
PHONE: 801.486.2222 INTERNET: http://www.ee-id.com



ARCH | NEXUS

A		
A/C	AIR CONDITIONING	
AD	AREA DRAIN	
AFC	ABOVE FINISHED CEILING	
AFF	ABOVE FINISHED FLOOR	
AHU	AIR HANDLING UNIT	
ALUM	ALUMINUM	
ANOD	ANODIZED	
ARCH	ARCHITECT	
@	AT	
B		
BD	BOARD	
BLDG	BUILDING	
BO	BOTTOM OF	
C		
C	CELSIUS	
CCSF	CLOSED-CELL SPRAY-APPLIED FOAM	
CH	COAT HOOK	
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	
CG	CORNER GUARD	
CJ	CONTINUOUS INSULATION	
CL	CONTROL JOINT	
CLG	CENTERLINE	
CLO	CEILING	
CLR	CLOSET	
CMU	CLEAR	
COL	CONCRETE MASONRY UNIT	
CONC	COLUMN	
CONT	CONCRETE	
CORR	CONTINUOUS	
CT	CORRIDOR	
CTJ	CERAMIC TILE	
CUH	CONSTRUCTION JOINT	
	CABINET UNIT HEATER	
D		
D	DEEP	
DEG	DEGREE	
DEMO	DEMOLITION	
DF	DRINKING FOUNTAIN	
DIA	DIAMETER	
DIM	DIMENSION	
DN	DOWN	
DS	DOWNSPOUT	
DWGS	DRAWINGS	
E		
(E)	EXISTING	
EA	EACH	
EJ	EXPANSION JOINT	
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	
EL	ELEVATION	
ELEC	ELECTRICAL	
ELEV	ELEVATOR	
EOS	EDGE OF SLAB	
ERD	EXISTING ROOF DRAIN	
EQ	EQUAL	
EQUIP	EQUIPMENT	
EW	ELECTRIC WATER COOLER	
EXIST	EXISTING	
EXP	EXPOSED	
EXT	EXTERIOR	
F		
F	FAHRENHEIT	
FA	FIRE ALARM	
FACP	FIRE ALARM CONTROL PANEL	
FDC	FIRE DEPARTMENT CONNECTION	
FD	FLOOR DRAIN	
FEC	FIRE EXTINGUISHER CABINET	
FE	FIRE EXTINGUISHER	
FFE	FINISH FLOOR ELEVATION	
FF&E	FINISHES, FURNITURE & EQUIPMENT	
FG	FINISH GRADE	
FHC	FIRE HOSE CABINET	
FIN	FINISH	
FLR	FLOOR	
FND	FOUNDATION	
FO	FINISHED OPENING	
FOC	FACE OF CONCRETE	
FOM	FACE OF MASONRY	
FOS	FACE OF STUD	
FOW	FACE OF WALL	
FRG	FIBER REINFORCED GYPSUM	
FSP	FIRE STANDPIPE	
FT	FEET	

LIST OF ABBREVIATIONS

G		
GA	GAUGE	
GALV	GALVANIZED	
GFRC	GLASS-FIBER-REINFORCED CONCRETE	
GFRG	GLASS-FIBER-REINFORCED GYPSUM	
GL	GLASS	
GWB	GYPSUM WALL BOARD	
GYP	GYPSUM	
H		
H	HIGH	
HB	HOSE BIBB	
HDR	HEADER	
HM	HOLLOW METAL	
HPT	HIGH POINT	
HR	HOUR	
HT	HEIGHT	
I		
ID	INSIDE DIAMETER; INSIDE DIMENSION	
IN	INCH	
INFO	INFORMATION	
INT	INTERIOR	
J		
JAN	JANITOR	
K		
(K)	(NOT USED)	
L		
LAB	LABORATORY	
LAV	LAVATORY	
LBS	POUNDS	
LLH	LONG LEG HORIZONTAL	
LLV	LONG LEG VERTICAL	
LPT	LOW POINT	
M		
MACH RM	MACHINE ROOM	
MAX	MAXIMUM	
MFR	MANUFACTURER	
MECH	MECHANICAL	
MEZZ	MEZZANINE	
MIN	MINIMUM	
MO	MASONRY OPENING	
N		
(N)	NEW	
N/A	NOT APPLICABLE	
NIC	NOT IN CONTRACT	
NOM	NOMINAL	
NTS	NOT TO SCALE	
O		
OC	ON CENTER	
OD	OUTSIDE DIAMETER; OUTSIDE DIMENSION	
OFD	OVERFLOW DRAIN	
OH DR	OVERHEAD DOOR	
OPH	OPPOSITE HAND	
OPP	OPPOSITE	
ORIG	ORIGINAL	
P		
P LAM	PLASTIC LAMINATE	
PLAS	PLASTER	
PLUMB	PLUMBING	
PR	PAIR	
PSI	POUNDS PER SQUARE INCH	
PSF	POUNDS PER SQUARE FOOT	
PVC	POLYVINYL CHLORIDE	
Q		
QT	QUARRY TILE	

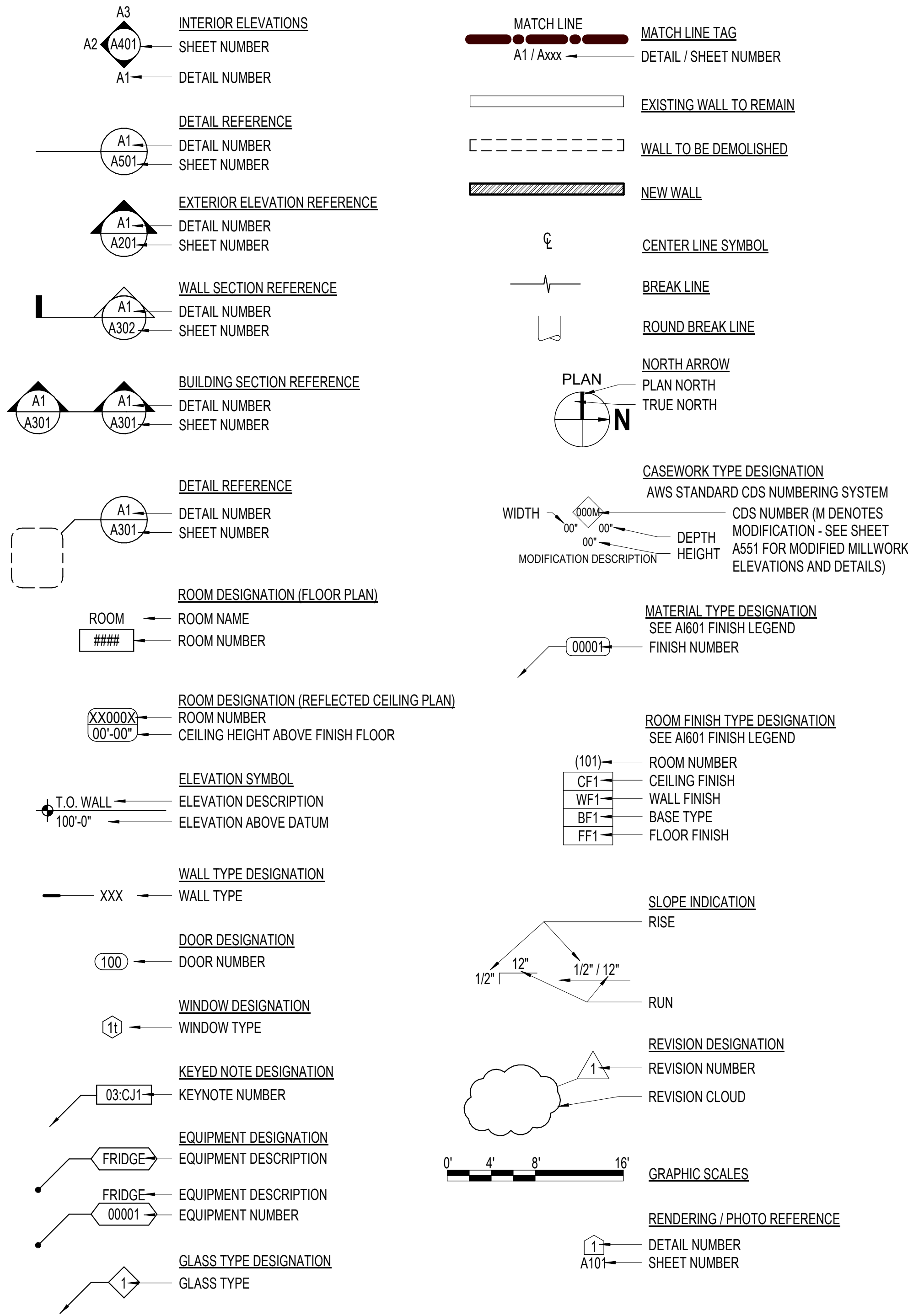
R		
R	RISER OR RADIUS	
RAD	RADIUS	
RCP	REFLECTED CEILING PLAN	
RD	ROOF DRAIN	
REF	REFRIGERATOR	
REQD	REQUIRED	
REV	REVISION	
RH	RELATIVE HUMIDITY	
RM	ROOM	
RO	ROUGH OPENING	
RTU	ROOF TOP UNIT	
RWL	RAIN WATER LEADER	
S		
S	SMOKE DETECTOR	
SAM	SELF ADHESIVE MEMBRANE	
SCHED	SCHEDULE	
SECT	SECTION	
SIM	SIMILAR	
SPEC	SPECIFICATION	
SS	STAINLESS STEEL	
STD	STANDARD	
STRUCT	STRUCTURAL	
T		
T	TREAD	
TEL	TELEPHONE	
TEMP	TEMPORARY	
THK	THICK	
TOC	TOP OF CONCRETE	
TOM	TOP OF MASONRY	
TOP	TOP OF PARAPET	
TOS	TOP OF SLAB; TOP OF STEEL	
TOW	TOP OF WALL	
TYP	TYPICAL	
TO	TOP OF	
U		
UL	UNDERWRITER'S LABORATORIES	
UNO	UNLESS NOTED OTHERWISE	
V		
VCT	VINYL COMPOSITE TILE	
VERT	VERTICAL	
VEST	VESTIBULE	
VIF	VERIFY IN FIELD	
W		
W	WITH	
W/O	WITHOUT	
WD	WOOD	
WH	WALL HYDRANT	
WP	WORKING POINT	
WRB	WEATHER RESISTIVE BARRIER	
X,Y,Z	(NOT USED)	
THE PRECEDING LIST OF ABBREVIATIONS IS PRESENTED AS A GENERAL GUIDE AND DOES NOT NECESSARILY SHOW ALL ABBREVIATIONS USED. OTHER GENERALLY ACCEPTED ABBREVIATIONS MAY BE FOUND AMONG THE DRAWINGS - SOME ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED WITHIN THIS DRAWING SET.		

HATCH LEGEND

NOTE: HATCHING ANGLES MAY VARY DUE TO ANGLE OF WALL DRAWN, WHILE HATCHING PATTERN REMAINS SIMILAR.

	CAST-IN-PLACE CONCRETE		CONTINUOUS MATERIAL
	CONCRETE MASONRY UNIT		NON CONTINUOUS MATERIAL (BLOCKING)
	PRECAST CONCRETE / GLASS FIBER REINFORCED CONCRETE (GFRC)		GYPSUM BOARD
	STEEL STUDS		PLYWOOD
	WOOD STUDS		EXTERIOR SHEATHING
	BRICK VENEER		GRAVEL
	RIGID INSULATION		UNDISTURBED EARTH
	BATT INSULATION		BACKFILL OR FILL

DRAWING SYMBOL LEGEND

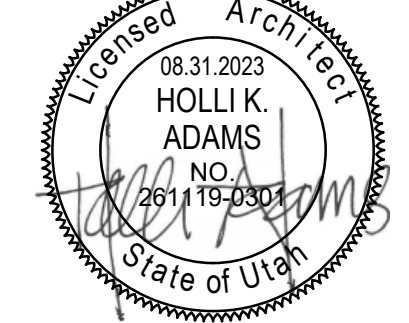


SHEET INDEX	
GENERAL:	
G001	COVER SHEET
G002	GENERAL INFORMATION
G050	GENERAL CODE REQUIREMENTS
G101	LEVEL 01 EXITING & OCCUPANCY PLANS
G501	ASSEMBLY TYPES
G701	ACCESSIBILITY COMPLIANCE
ARCHITECTURAL:	
A101	FLOOR PLAN (PHASE I)
A151	REFLECTED CEILING PLAN (PHASE I)
A251	INTERIOR ELEVATIONS AND DOOR SCHEDULES & TYPES
A101	FINISH FLOOR PLAN, FINISH SCHEDULE, AND FINISH LEGEND
A701	TYPICAL DETAILS
A702	TYPICAL DETAILS
MECHANICAL:	
M001	LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS
M002	MECHANICAL GENERAL NOTES
MD100	MECHANICAL DEMOLITION FLOOR PLAN
M101	MECHANICAL FLOOR PLAN
M102	MECHANICAL ROOF PLAN
M501	MECHANICAL DETAILS
M601	MECHANICAL SCHEDULES
M801	MECHANICAL ZONE PLAN
MPD100	MECHANICAL PIPING DEMOLITION FLOOR PLAN
MP101	MECHANICAL PIPING FLOOR PLAN
PLUMBING:	
PD100	PLUMBING DEMOLITION FLOOR PLAN
P101	PLUMBING FLOOR PLAN
P501	PLUMBING DETAILS
P601	PLUMBING SCHEDULES
ELECTRICAL:	
E-001	GENERAL NOTES & DETAILS
E-002	SCHEDULES
EDL-101	LEVEL 1 FLOOR PLAN - DEMOLITION AND LIGHTING
EP-102	LEVEL 1 FLOOR PLAN - POWER



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City UT, 84101

#	Date	Revision
1	10.16.23	Plan Review 01

CONSTRUCTION DOCUMENTS (BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

GENERAL INFORMATION

G002

NONSTRUCTURAL COMPONENT CHECKLIST				
ITEM DESCRIPTION	NOT REQUIRED	ON CONSTR. DOCUMENTS	DEFERRED SUBMITTAL	COMMENTS
ARCHITECTURAL COMPONENTS:				
INTERIOR NONSTRUCTURAL WALLS & PARTITIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CANTILEVER ELEMENTS (I.E. PARAPETS, ETC.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EXTERIOR NONSTRUCTURAL WALL ELEMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VENEER	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PENTHOUSES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CEILINGS (I.E. SUSPENDED GRID OR HARD-LID)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CABINETS (I.E. STORAGE CABINETS, EQUIP, ETC.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ACCESS FLOORS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
STORAGE RACKS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
APPENDAGES & ORNAMENTATIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SIGNS & BILLBOARDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MEP COMPONENTS:				
FIRE SPRINKLERS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Modify Existing
MECHANICAL EQUIPMENT (I.E. HVAC, FANS, AIR HANDLERS, BOILERS, FURNACES, TANKS, CHILLERS, WATER HEATERS, HEAT EXCHANGERS, EVAPORATORS, ENGINES, TURBINES, PUMPS, COMPRESSORS, MFR EQUIPMENT, ETC.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELECTRICAL EQUIPMENT (I.E. GENERATORS, BATTERIES, INVERTERS, TRANSFORMERS, MCC, PANEL BOARDS, SWITCH GEAR, CABINETS, ETC.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEVATOR & ESCALATOR COMPONENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COMMUNICATION EQUIPMENT, COMPUTERS, INSTRUMENTATION, AND CONTROLS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ROOF-MOUNTED CHIMNEYS, STACKS, COOLING & ELECTRICAL TOWERS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LIGHTING FIXTURES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VIBRATION ISOLATED COMPONENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PIPING & CONDUIT SYSTEMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DUCTWORK (INCLUDING IN-LINE COMPONENTS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CONVEYORS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CABLE TRAYS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MEP SEISMIC SUPPORT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
OTHER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



CODE ANALYSIS TABLE				
SPECIAL INSPECTIONS LIST:				
Special Inspections for the project must be listed below in accordance with the provisions of IBC 1704 and for miscellaneous areas. Indicate required Special Inspections for the project by checking the appropriate boxes and provide specific instructions as to the inspection requirements and the expectations of the Architect, Engineer, and Owner:				
FABRICATORS (IBC 1704.2.5)				
<input checked="" type="checkbox"/> APPROVED FABRICATOR	FABRICATORS NAME: NA			
<input type="checkbox"/> UNAPPROVED FABRICATOR	FABRICATORS NAME: NA			
IN-PLANT INSPECTIONS: <input type="checkbox"/> STEEL CONSTRUCTION <input type="checkbox"/> WELDING <input type="checkbox"/> DETAILS				
STEEL (IBC 1705.2)				
NOT USED				
CONCRETE CONSTRUCTION (IBC 1705.3 & T1705.3)				
NOT USED				
MASONRY CONSTRUCTION (IBC 1705.4)				
NOT USED				
WOOD CONSTRUCTION (IBC 1705.5)				
NOT USED				
SOILS CONSTRUCTION (IBC 1705.6)				
NOT USED				
DRIVEN DEEP FOUNDATIONS (IBC 1705.7)				
NOT USED				
CAST-IN-PLACE DEEP FOUNDATIONS (IBC 1705.8)				
NOT USED				
HELICAL PILE FOUNDATIONS (IBC 1705.9)				
NOT USED				
SPECIAL INSPECTIONS FOR WIND REQUIREMENTS (IBC 1705.12)				
NOT USED				
SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE (IBC 1705.13)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
STRUCTURAL STEEL (1705.13.1)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
STRUCTURAL WOOD (1705.13.2)	<input type="checkbox"/>		NA	NA
A. CONTINUOUS SPECIAL INSPECTION SHALL BE REQUIRED DURING FIELD GLUING OPERATIONS OF THE ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM.				
B. PERIODIC SPECIAL INSPECTION SHALL BE REQUIRED FOR NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, SHEAR PANELS AND HOLD-DOWNS.		<input type="checkbox"/>	NA	NA
COLD-FORMED STEEL FRAMING (1705.13.3)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
DESIGNATED SEISMIC SYSTEMS (1705.13.4)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
ARCHITECTURAL COMPONENTS (1705.13.5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	INTERIOR NONBEARING WALLS
ACCESS FLOORS (1705.13.5.1)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MECHANICAL & ELECTRICAL ITEMS (1705.13.6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	
STORAGE RACKS (1705.13.7)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
SEISMIC ISOLATION SYSTEMS (1705.13.8)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
COLD-FORMED STEEL SPECIAL BOLTED MOMENT FRAMES (1705.13.9)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA

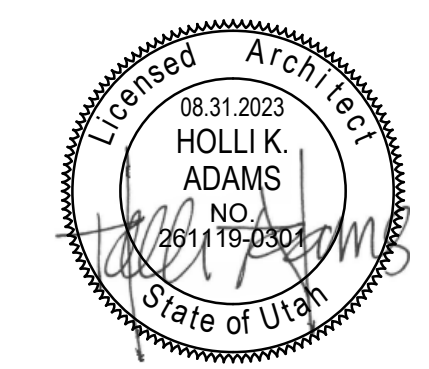
- SPECIAL INSPECTORS SHALL:
- Be approved by the Building Official (AHJ) prior to performing any duties;
 - Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
 - Inspection reports are to meet the requirements of IBC 1704.2.4 and SLCo General Conditions and Standards standards;
 - Inspection reports are to be submitted to the Code Consultant, Architect, Project Manager, and the SLCo Project Manager within 48 hrs. of inspections;
 - A final inspection report shall be submitted following completion of the project documenting the types of special inspections performed and a statement indicating that the structure is in compliance with the drawings, specifications, and applicable codes. (IBC 1704.2.4)

CODE ANALYSIS TABLE				
TESTING & QUALIFICATION FOR SEISMIC RESISTANCE (1705.14)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
STRUCTURAL STEEL (1705.14.1)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
SEISMIC CERTIFICATION OF NONSTRUCTURAL COMPONENTS (1705.14.2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	ARCHITECTURAL, MPE ITEMS
SEISMIC ISOLATION SYSTEMS (1705.14.4)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
SPRAYED FIRE-RESISTANT MATERIALS (IBC 1705.15)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
PHYSICAL & VISUAL TESTS (1705.15.1)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
STRUCTURAL MEMBER SURFACE CONDITIONS (1705.15.2)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MATERIAL APPLICATION (1705.15.3)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MATERIAL THICKNESS (1705.15.4)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MATERIAL DENSITY (1705.15.5)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
BONDING STRENGTH (1705.15.6)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1705.16)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
MATERIAL AND INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>		NA
EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1705.17)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
MATERIAL AND INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>		NA
FIRE-RESISTANT PENETRATIONS AND JOINTS (IBC 1705.18)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
PENETRATION FIRESTOPS (1705.17.1)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
FIRE-RESISTANT JOINT SYSTEMS (1705.17.2)	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
SMOKE CONTROL (IBC 1705.19)				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
MATERIAL AND INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>	-	NA
MISCELLANEOUS AREAS				
THESE INSPECTIONS ARE RECOMMENDED BY THE ARCHITECT/ENGINEER AND APPROVED BY THE UNIVERSITY OF UTAH BUILDING OFFICIAL				
ITEM (IBC REFERENCE)	CONTINUOUS	PERIODIC	REFERENCED STANDARD	DETAILED INSTRUCTIONS and FREQUENCIES
SUSPENDED CEILING GRID CLIPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT
SUSPENDED CEILING WIRE SPACING (SEISMIC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT
SOILS BACKFILL (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
SOILS FOR CURB AND GUTTER (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
SOILS FOR PARKING LOTS (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
SOILS FOR UTILITY TRENCH BACKFILL	<input type="checkbox"/>	<input type="checkbox"/>		NA
REINFORCEMENT FOR SLAB ON GRADE SIDEWALKS AND DRIVE APPROACHES (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
REINFORCEMENT FOR INTERIOR SLAB ON GRADE (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
CONCRETE TESTING FOR SLAB ON GRADE SIDEWALKS AND DRIVE APPROACHES (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
CONCRETE TESTING FOR INTERIOR SLAB ON GRADE (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
MASONRY VENEER (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
ASPHALT INSPECTION (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
ASPHALT TESTING (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
INSPECTION OF SEISMIC RESISTANCE (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
STEAM AND WATER LINE WELDING (SPECIFY LOCATIONS AND FREQUENCY)	<input type="checkbox"/>	<input type="checkbox"/>		NA
SEISMIC SUPPORTS FOR DUCTWORK AND SEALING OF JOINTS FOR DUCTWORK	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT
SEISMIC SUPPORTS FOR ELECTRICAL RACEWAYS, CABLE TRAYS AND LIGHTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT
SEISMIC SUPPORTS FOR PLUMBING LINES INCLUDING GAS, WATER AND STEAM AND CONDENSATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT
SEISMIC BRACING FOR MECHANICAL UNITS BOTH ON SLAB AND SUSPENDED	<input type="checkbox"/>	<input checked="" type="checkbox"/>		THROUGHOUT



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City UT, 84101

Date Revision
1 10.16.23 Plan Review 01

CONSTRUCTION DOCUMENTS (BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

GENERAL CODE REQUIREMENTS

G050

IEBC 2021 - GENERAL CODE REQUIREMENTS ALTERATIONS - LEVEL 2	
THIS PROJECT CONSISTS OF THE FIRST NEW CONSTRUCTION PHASE OF A (2) PHASE RENOVATION OF AN EXISTING TENANT SPACE WITHIN THE GATEWAY MALL. THE AFFECTED AREA IS APPROXIMATELY 2,443 SF. THERE IS EXISTING PARKING THAT IS ACCESSIBLE IN AN UNDERGROUND PARKING GARAGE.	
OCCUPANCY CLASSIFICATION	MIXED: A-3, B, E, AND S-1
CONSTRUCTION CLASSIFICATION	EXISTING TYPE I
ACCESSIBILITY FOR EXISTING BUILDINGS (SECTION 305.7)	
WHERE AN ALTERATION AFFECTS THE ACCESSIBILITY TO, OR CONTAINS AN AREA OF PRIMARY FUNCTION, THE ROUTE TO THE PRIMARY FUNCTION AREA SHALL BE ACCESSIBLE.	YES
THE ACCESSIBLE ROUTE TO THE PRIMARY FUNCTION AREA SHALL INCLUDE TOILET FACILITIES AND DRINKING FOUNTAINS SERVING THE AREA OF PRIMARY FUNCTION.	YES
ALTERATIONS - LEVEL 2 COMPLIANCE (CHAPTER 8)	
NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS, AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.	YES
FIRE PROTECTION	EXISTING FIRE SPRINKLERS TO REMAIN WITH A MODIFIED LAYOUT
MEANS OF EGRESS	EXISTING MEANS OF EGRESS IS MAINTAINED
STRUCTURAL	THERE ARE NO CHANGES TO THE EXISTING STRUCTURE
ELECTRICAL	NEWLY INSTALLED ELECTRICAL EQUIPMENT AND WIRING RELATING TO WORK DONE IN ANY WORK AREA SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF NFPA 70
MECHANICAL	RECONFIGURED SPACES INTENDED FOR OCCUPANCY AND SPACES CONVERTED TO HABITABLE OR OCCUPIABLE SPACE IN ANY WORK AREA SHALL BE PROVIDED WITH NATURAL OR MECHANICAL VENTILATION IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.
ENERGY CONSERVATION	ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE AS THEY RELATE TO NEW CONSTRUCTION ONLY.

TOTAL NUMBER OF REQUIRED FIXTURES:										
OCCUPANCY	OCC. LOAD	WATER CLOSETS				LAVATORIES			DRINKING FOUNTAINS	
		RATIO	MEN	RATIO	WOMEN	RATIO	MEN	WOMEN	RATIO	TOTAL
A-3	88	1 PER 125	0.4	1 PER 65	0.7	1 PER 200	0.3	0.3	1 PER 500	0.2
B	16	1 PER 25 <50	0.4	1 PER 25 <50	0.4	1 PER 40 <80	0.2	0.2	1 PER 100	0.2
		1 PER 50 >50	0.0	1 PER 50 >50	0.0	1 PER 80 >80	0.0	0.0		
E	33	1 PER 50	0.4	1 PER 100	0.4	1 PER 100	0.2	0.2	1 PER 100	0.4
S-1	3	1 PER 100	0.1	1 PER 100	0.1	1 PER 100	0.1	0.1	1 PER 1000	0.1
TOTAL REQUIRED			2		2		1	1		1
TOTAL PROVIDED			2.5		2.5		4.5	4.5		4

LIFE SAFETY LEGEND

- FIRE BARRIER WALLS (1 HOUR):**
- SEPARATE STORAGE AREAS FROM ALL OTHER AREAS AND SPACES.
- WALL CONSTRUCTION:**
1 HOUR FIRE-RESISTANCE RATING.
- DOORS:**
45 MIN. RATED (ISC, IBC).

EGRESS SYMBOL LEGEND

- XX'-X" TRAVEL DISTANCE TO EXIT
- 0 OCCUPANT LOAD, EGRESS DIRECTION
- LOCATION OF EXIT
- EXIT SIGN
- FEC SEMI RECESSED FIRE EXTINGUISHER, VERIFY LOCATION WITH OWNER, COORD W/ DETAIL ON SHEET A701, COORD TYPE AND LOCATION W/ LOCAL FIRE MARSHALL

DOOR		
OCCUPANT LOAD	REQ'D	PROVIDED
47'0.2	9.4"	33"

GENERAL NOTES - REGULATORY PLANS

- A. SEE WALL TYPES ON FLOOR PLANS AND RATED WALL ASSEMBLIES IN G500 SHEET SERIES FOR SPECIFIC WALL CONSTRUCTION TO ACHIEVE THE RATINGS SHOWN ON THIS PLAN.

OCCUPANCY TAG

Name	ROOM NAME
150 SF	ROOM AREA
A-3	OCCUPANCY TYPE
000	OCCUPANCY LOAD FACTOR
	OCCUPANT LOAD

EGRESS

- NUMBER OF OCCUPANTS PER EXIT/EGRESS PATH

TRAVEL DISTANCE

EXIT ACCESS TRAVEL DISTANCE PER TABLE 1017.2, WITH SPRINKLERS:

OCCUPANCY	MAX. TRAVEL DISTANCE
BUSINESS AREAS (B)	300'
ASSEMBLY: NO FIXED STG (A)	250'
STORAGE (S-1)	400'
STORAGE (S-2)	400'
UTILITY / MISC. SERVICES (U-1)	400'

COMMON PATH OF TRAVEL

COMMON PATH OF TRAVEL DISTANCE PER TABLE 1006.2.1, WITH SPRINKLERS (OL > 30):

OCCUPANCY	MAX. TRAVEL DISTANCE
BUSINESS AREAS (B)	100'
ASSEMBLY: NO FIXED STG (A-2/A-3)	75'
STORAGE (S-1)	100'
STORAGE (S-2)	100'
UTILITY / MISC. SERVICES (U-1)	75'

LEVEL 01		
PATH #	COMMON PATH OF TRAVEL	LONGEST PATH OF TRAVEL
1	35' - 11"	35' - 11"
2	30' - 0"	67' - 6"
3	25' - 7"	71' - 5"
4	28' - 0"	125' - 9"

KEYNOTE LEGEND

TAG	KEYNOTE TEXT
02-EH1	EXISTING PANIC DOOR HARDWARE TO REMAIN ON EXISTING DOORS TO REMAIN
02-ET1	EXISTING TOILET ROOM TO REMAIN, NOT IN SCOPE OF WORK

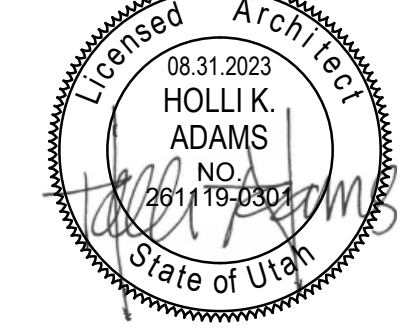
Occupancy Legend

- A-2: Assembly w/o fixed seating: Unconcentrated
- B: Business Areas
- E: Educational: Classroom Area
- U: Accessory Storage areas, mechanical equipment room



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



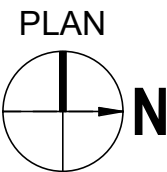
Salt Lake County
CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City UT, 84101

#	Date	Revision
1	10.16.23	Plan Review 01
2	11.14.23	Plan Review 02

CONSTRUCTION DOCUMENTS (BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

LEVEL 01 EXITING & OCCUPANCY PLANS



G101

THIS SHEET TO BE VIEWED IN COLOR

11/20/2023 10:01:45 AM

A5 LEVEL 01 - EXITING AND OCCUPANCY

G101 1/4" = 1'-0"

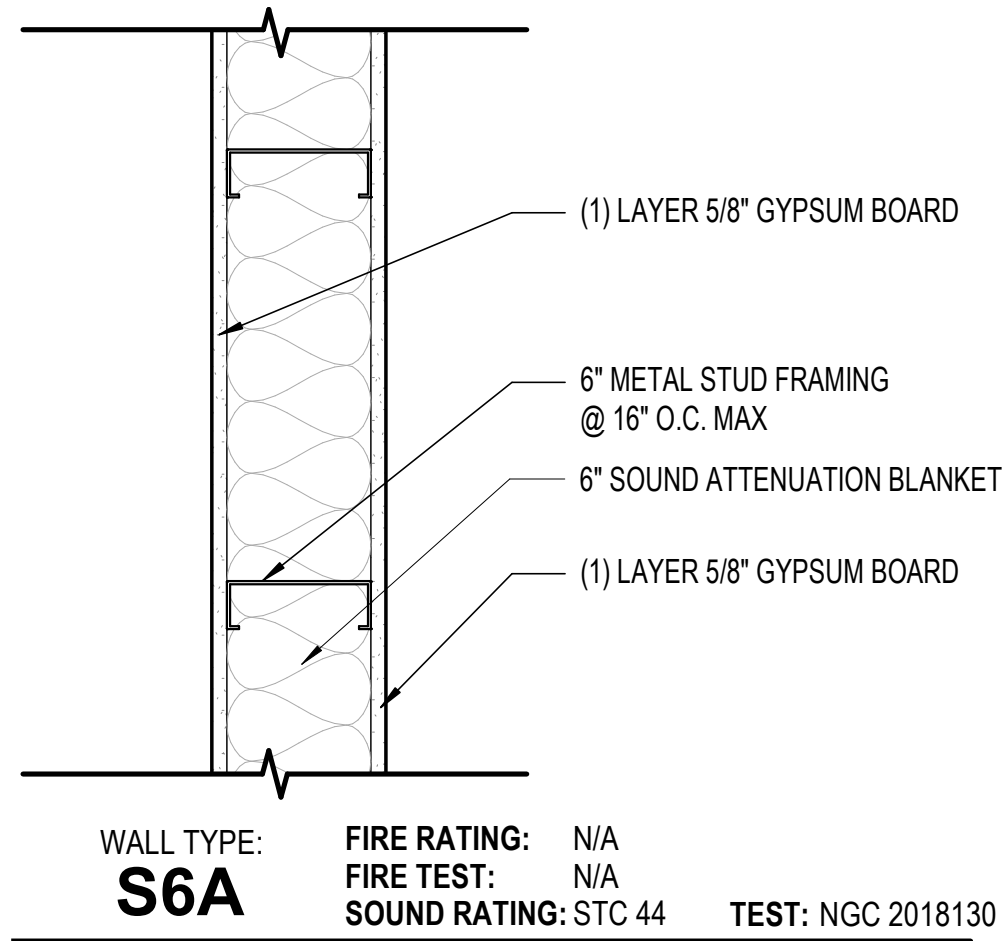
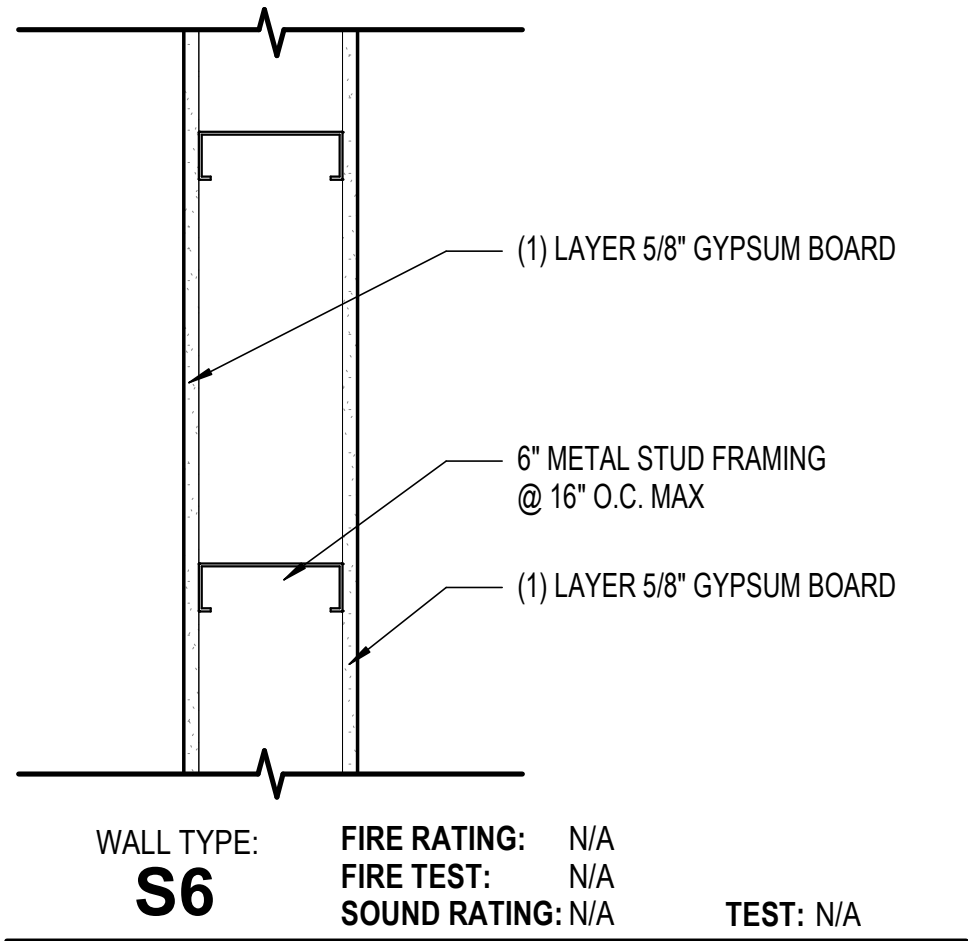
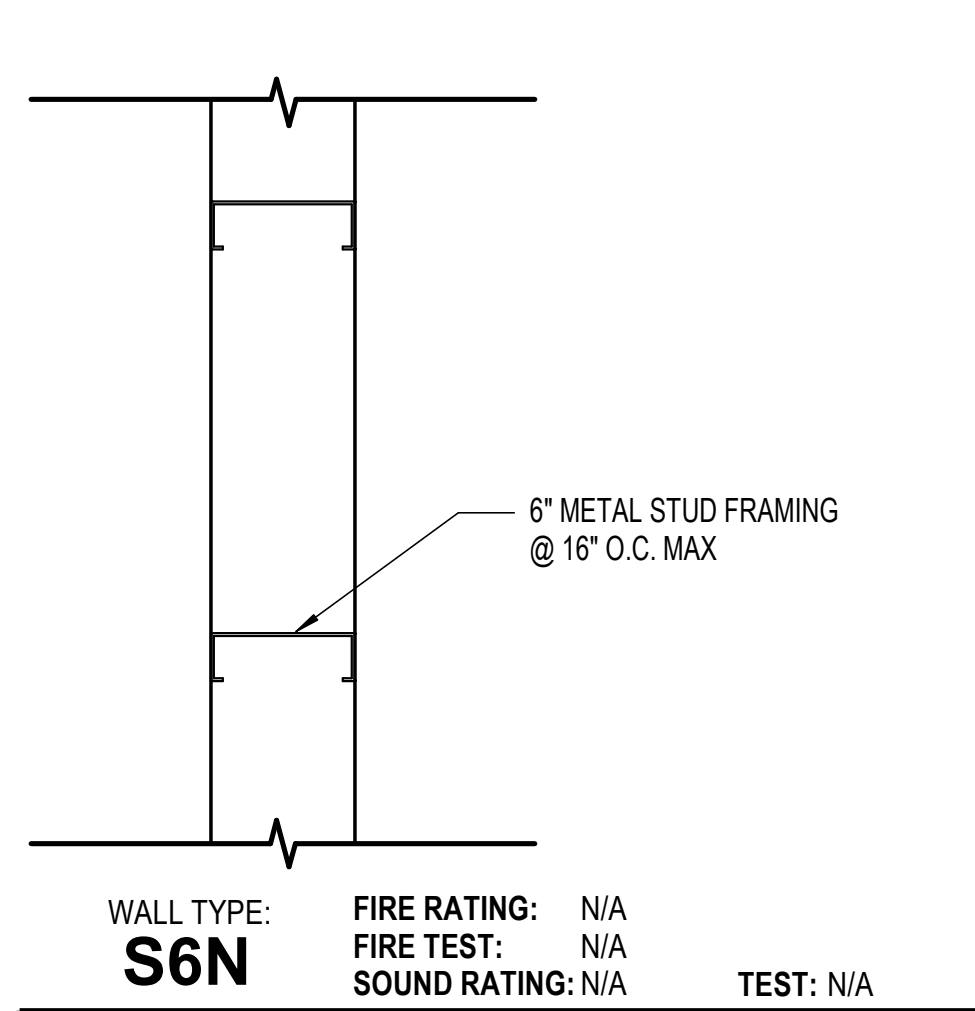
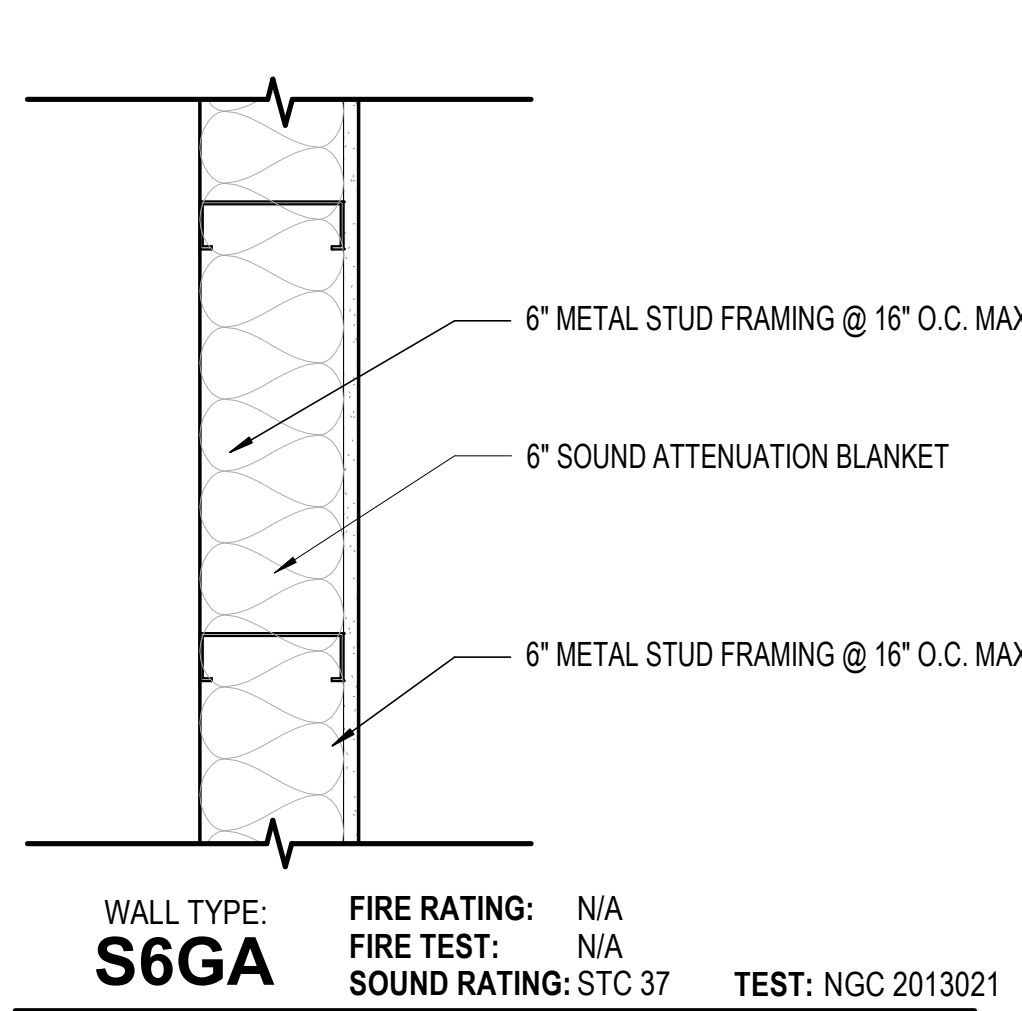
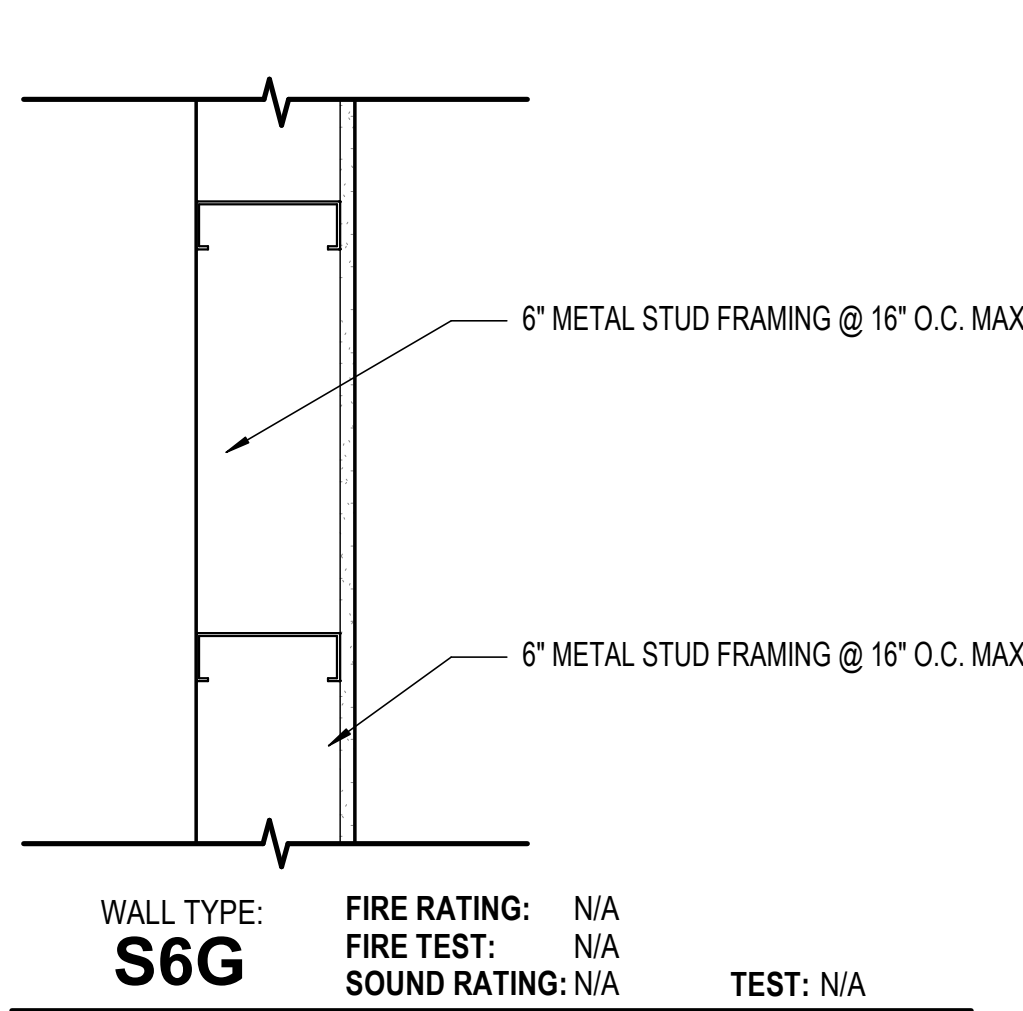
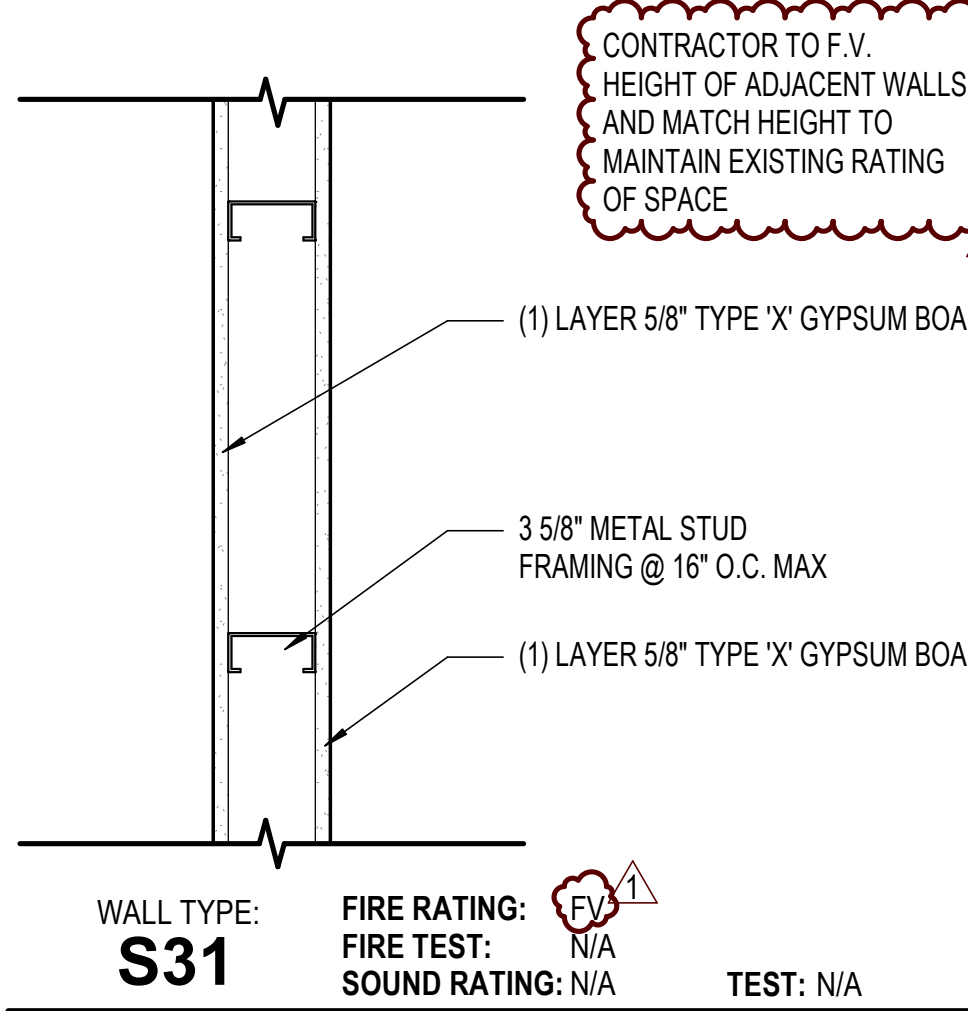
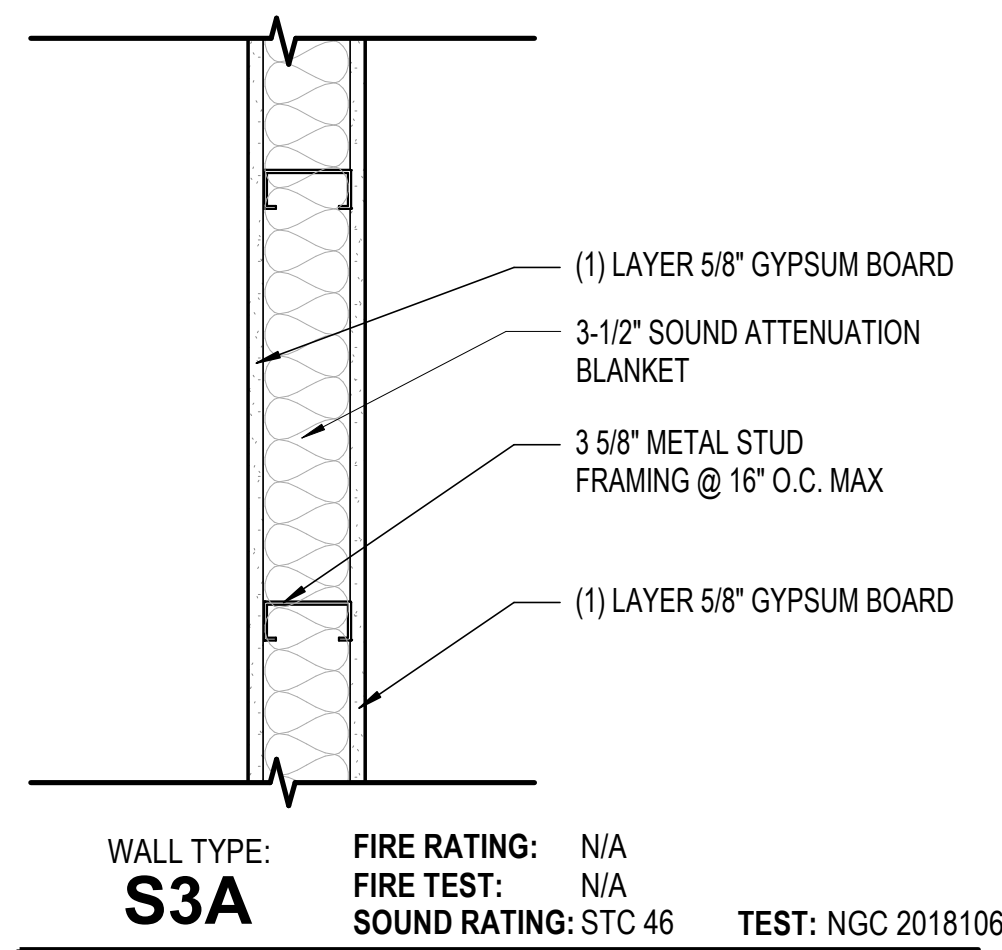
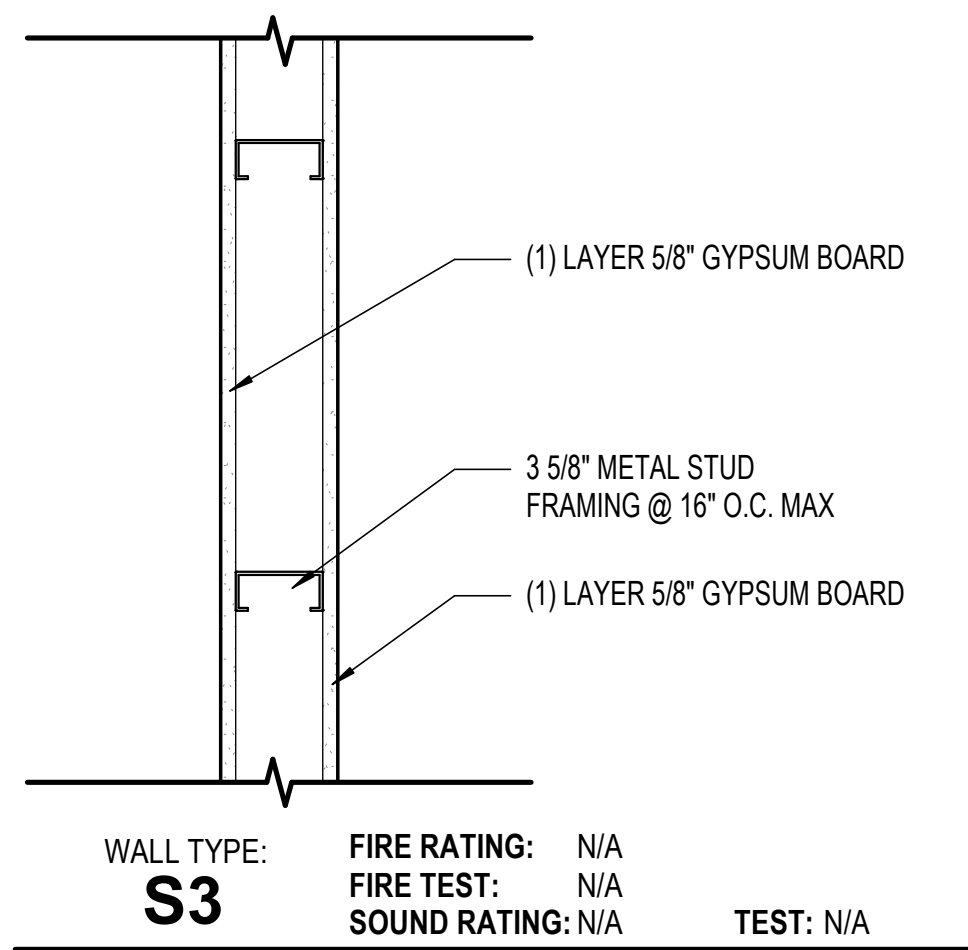
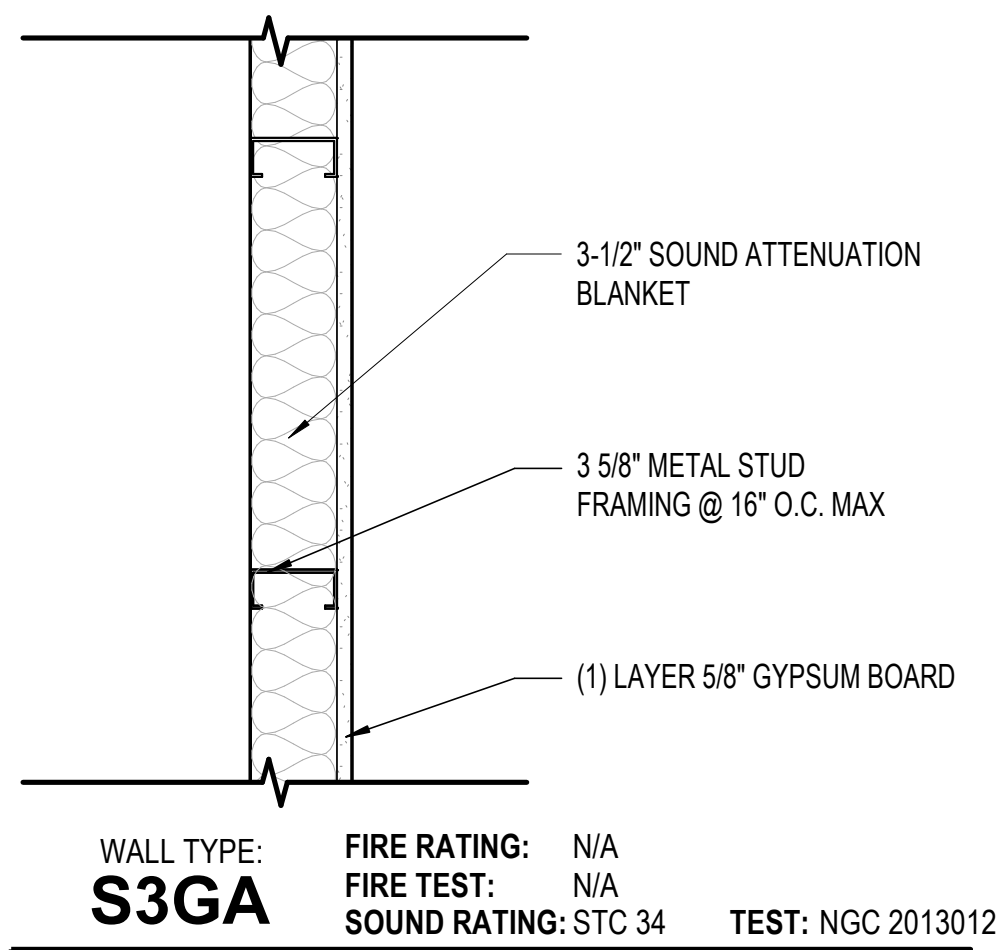
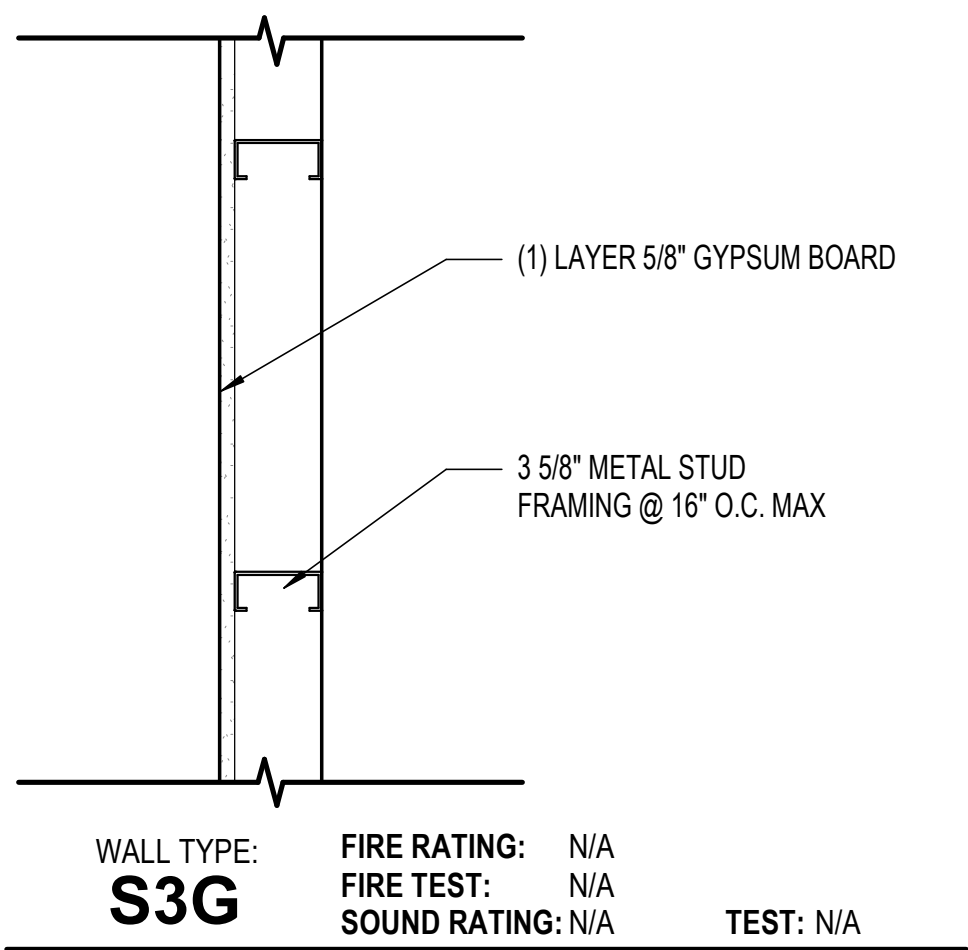
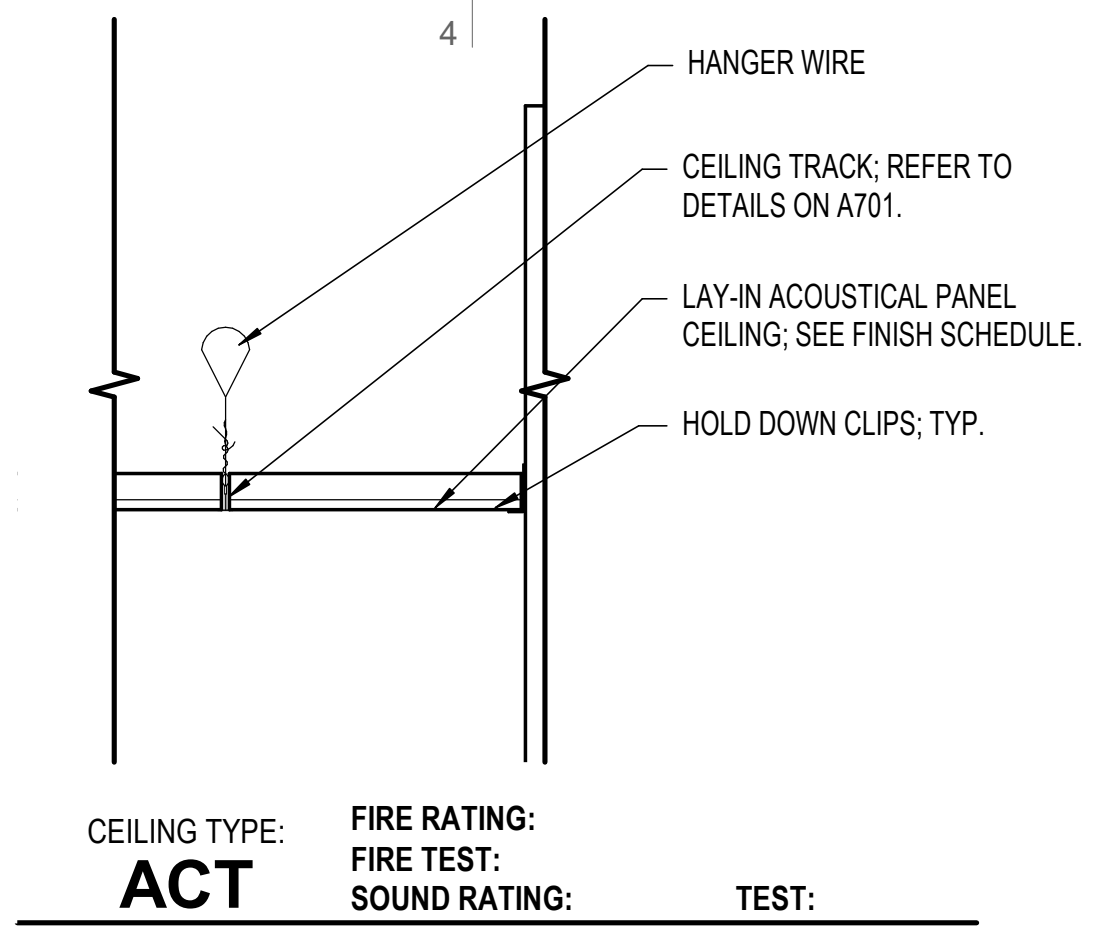
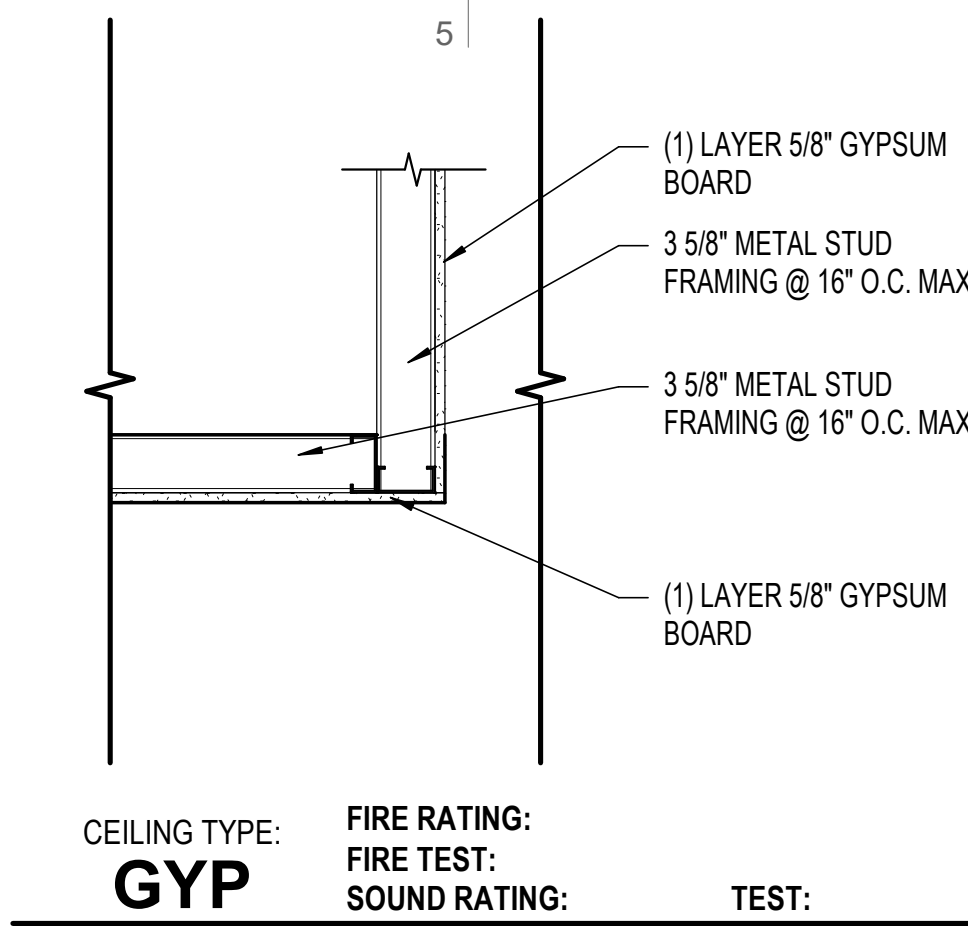
11/20/2023 10:01:46 AM

B

C

D

CEILING TYPES



INTERIOR WALL TYPES

GENERAL NOTES -
WALL TYPE ASSEMBLIES

- A. **WALL HEIGHT:** ALL NEW INTERIOR WALL ASSEMBLIES ARE CONTINUOUS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE. REFER TO THE LEGENDS ON THIS SHEET AND COORDINATE WITH PLANS.
- B. **TILE BACKER / CEMENT BOARD:** WALL TYPES DESCRIBED ON THIS SHEET DO NOT SHOW OR ACCOUNT FOR REQUIREMENTS WHERE A TILE FINISH OCCURS. WHERE THE FINISH SCHEDULE OR INTERIOR ELEVATIONS CALL FOR TILE, REPLACE GYPSUM BOARD SHOWN IN THAT WALL'S ASSEMBLY WITH TILE BACKER / CEMENT BOARD WHERE THE TILE OCCURS. REPLACE OTHER GYPSUM BOARD SHOWN IN THAT WALL'S ASSEMBLY WITH MOISTURE RESISTANT GYPSUM BOARD WHERE NO TILE OCCURS.
- C. **BACKING / SUPPORT:** WALL TYPES DESCRIBED ON THIS SHEET DO NOT ACCOUNT FOR REQUIRED BACKING. CONTRACTOR TO PROVIDE BACKING / SUPPORT FOR ALL MOUNTED FIXTURES, EQUIPMENT, CASEWORK, AND/OR SYSTEMS FURNITURE. COORDINATE WITH FLOOR PLANS, AND INTERIOR ELEVATIONS PRIOR TO THE COVERING OF STUD FRAMING. REFER TO MANUFACTURER'S RECOMMENDATIONS WHERE APPLICABLE, OTHERWISE REFER TO DETAILS ON A700 SHEET SERIES.
- D. **STRUCTURAL SHEATHING:** REFER TO STRUCTURAL DRAWINGS FOR STRUCTURAL SHEATHING REQUIREMENTS AND ATTACHMENTS.
- E. **SEISMIC BRACING:** PROVIDE SEISMIC BRACING AT ALL WALL TYPES THAT DO NOT EXTEND TO DECK, REFER TO DETAILS ON A700 SHEET SERIES.
- F. **PENETRATIONS:** PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE PROVIDED PER G550 SHEET SERIES.
- G. **LISTED ASSEMBLIES:** RATED ASSEMBLIES PROVIDED PER G550 SHEET SERIES.
- H. **ACOUSTIC WALLS:** AT ALL WALLS WITH SOUND ATTENUATION, SEAL ENTIRE TOP AND BOTTOM OF WALL WITH SOUND SEALANT.
- I. **DEFLECTION TRACK:** AT ALL WALLS THAT EXTEND TO STRUCTURE PROVIDE DEFLECTION TRACK. REFER TO DETAILS ON A700 SHEET SERIES.
- J. **RATED WALL PRIORITY:** FOR PARTITION PRIORITY FOR SEQUENCING OF RATED WALL CONSTRUCTION REFER TO DETAILS ON A700 SHEET SERIES.
- K. INFORMATION IN THE LEGENDS BELOW IS FOR REFERENCE ONLY AND DOES NOT OVERRIDE THE CONTENTS OF THE DETAILS ON THIS SHEET.
- L. DO NOT SCALE DRAWINGS.

INTERIOR WALL TAG LEGEND

S61M(C)

CONSTRUCTION TYPE (SEE BELOW) →
STRUCTURE THICKNESS (TO NEAREST SIZE) →
FIRE RATING (AS NEEDED, SEE BELOW) →
MODIFIERS (AS NEEDED, SEE BELOW) →
TOP OF WALL CONDITION MODIFIER (SEE BELOW) →

CONSTRUCTION TYPES		FIRE RATING	
CONCRETE	C	0 HOUR (SMOKE)	0
MASONRY	M	1 HOUR	1
STEEL STUDS	S	2 HOUR	2
C-H (SHAFTWALL) STUD	H	3 HOUR	3
WOOD STUDS	W	4 HOUR	4
DOUBLE STUD	#D	NO RATING	NOT SHOWN

MODIFIER EXAMPLES		TOP OF WALL CONDITIONS	
ACOUSTIC RATING	A	SEE TABLE BELOW	
FURRING	F		
GYP. ONE SIDE	G		
GYP. NO SIDES	N		

TOP OF WALL MODIFIERS **EXAMPLE**
DETAILS PROVIDED PER A700 SHEET SERIES.

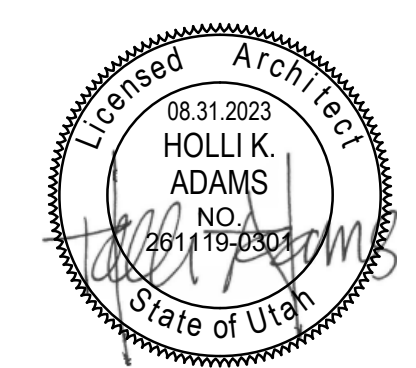
ALL WALLS TO TERMINATE 6" ABOVE CEILING
WALLS WILL TERMINATE AT 6" ABOVE THE HIGHEST ADJOINING CEILING (UNLESS OTHERWISE NOTED)



ARCH | NEXUS

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City UT, 84101

Date Revision
1 10.16.23 Plan Review 01

CONSTRUCTION
DOCUMENTS
(BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

ASSEMBLY
TYPES

G501

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT

1110 S 400 W, Salt Lake City UT, 84101

#	Date	Revision
1	10.16.23	Plan Review 01

**CONSTRUCTION
DOCUMENTS
(BP-2, P.I)**

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

ACCESSIBILITY COMPLIANCE

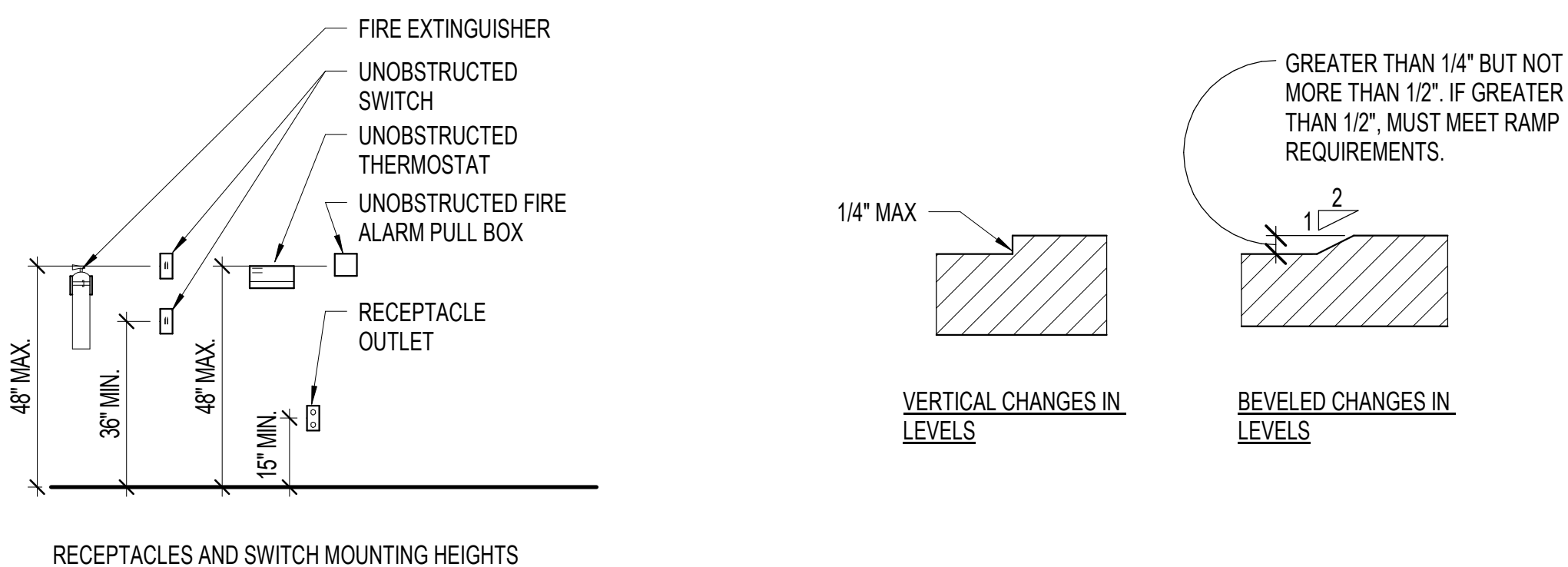
GENERAL NOTES - ACCESSIBILITY

A. THESE DETAILS ARE SHOWN FOR MINIMUM ACCESSIBILITY REQUIREMENTS. SEE PROJECT SPECIFIC DETAILS FOR ADDITIONAL INFORMATION. VERIFY WITH ARCHITECT ANY DIFFERENCES BEFORE PROCEEDING WITH CONSTRUCTION.

B. PROVIDE BACKING / SUPPORT FOR ALL MOUNTED FIXTURES, EQUIPMENT, CASEWORK, AND/OR SYSTEMS FURNITURE. COORDINATE WITH FLOOR PLANS, AND INTERIOR ELEVATIONS PRIOR TO THE COVERING OF STUD FRAMING. REFER TO MANUFACTURER'S RECOMMENDATIONS WHERE APPLICABLE, OTHERWISE REFER TO DETAILS ON **A700** SHEET SERIES.

C. DO NOT SCALE DRAWINGS.

G701

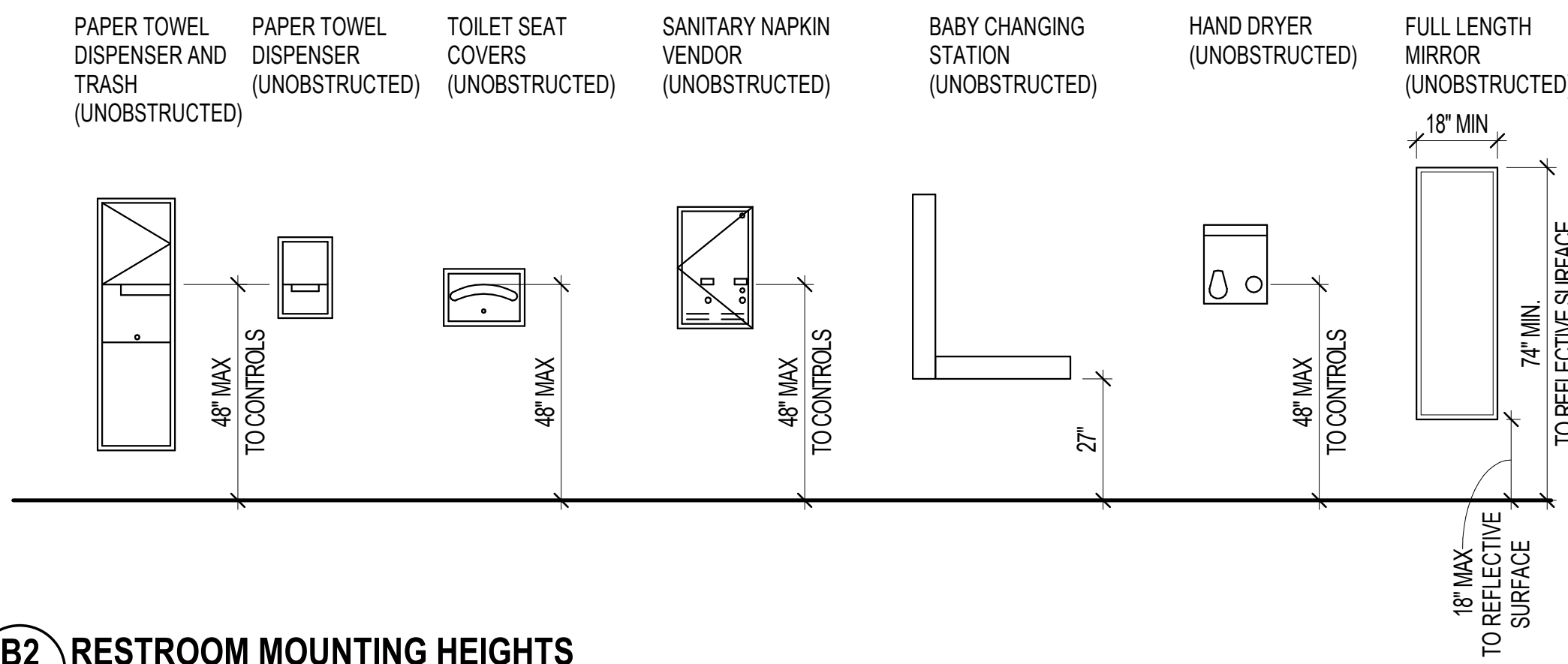


C2 MISC. MOUNTING HEIGHTS

G701	3/8" = 1'-0"
------	--------------

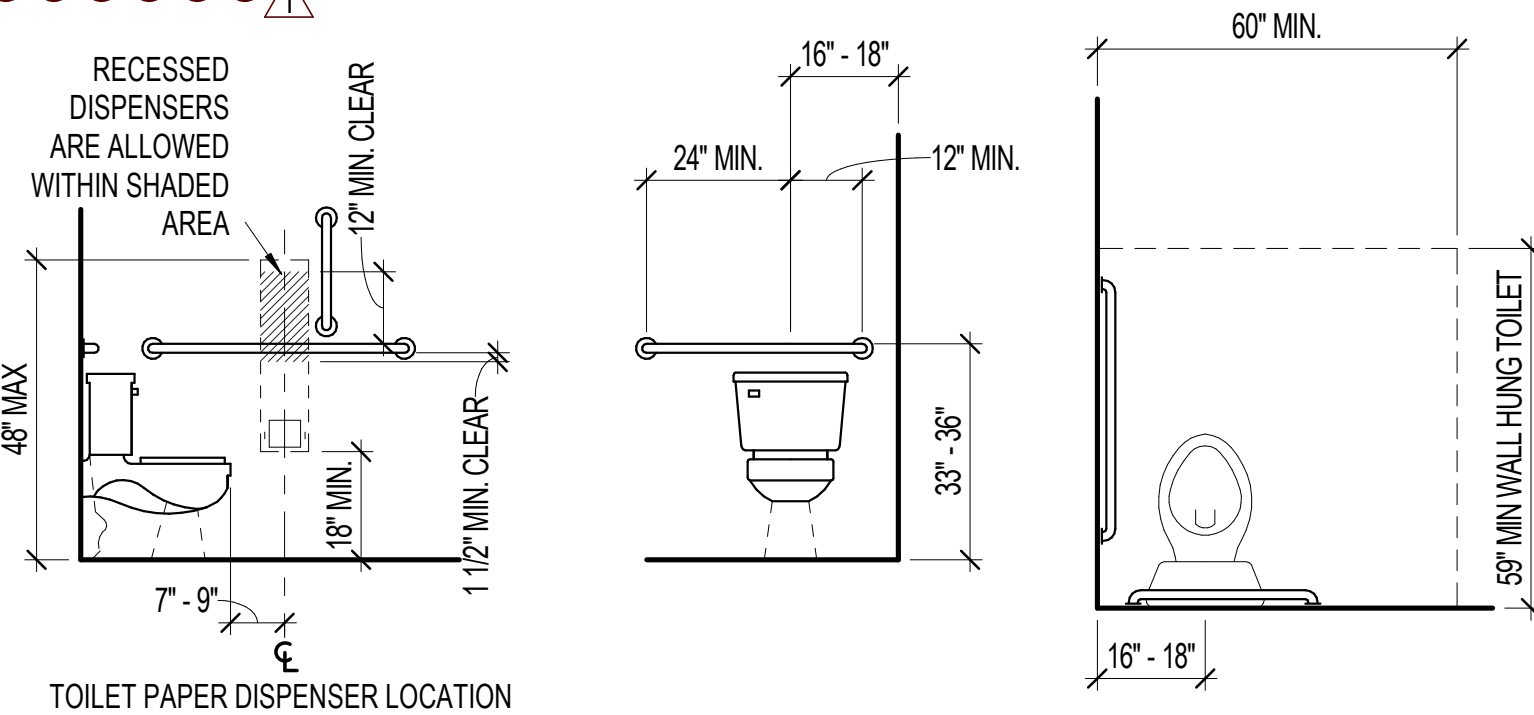
C1 CHANGE IN LEVELS

G701 $6'' = 1'-0''$



B2 RESTROOM MOUNTING HEIGHTS

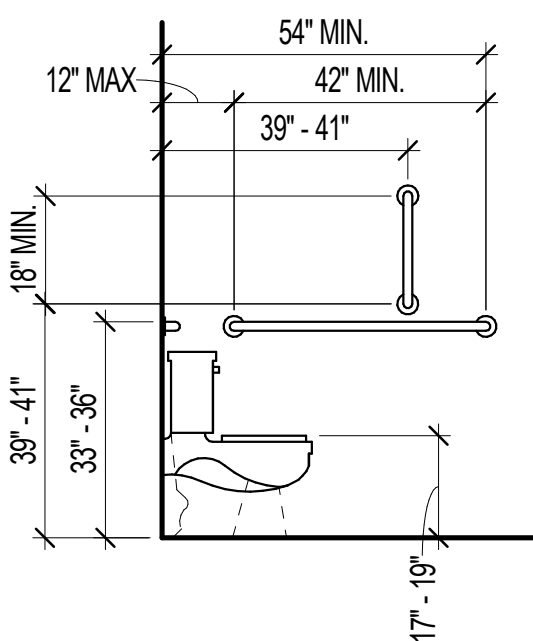
G701	3/8" = 1'-0"
------	--------------



NOTE: DIMENSIONS ARE TO TOP/BOTTOM OF GRAB BARS UNLESS NOTED OTHERWISE

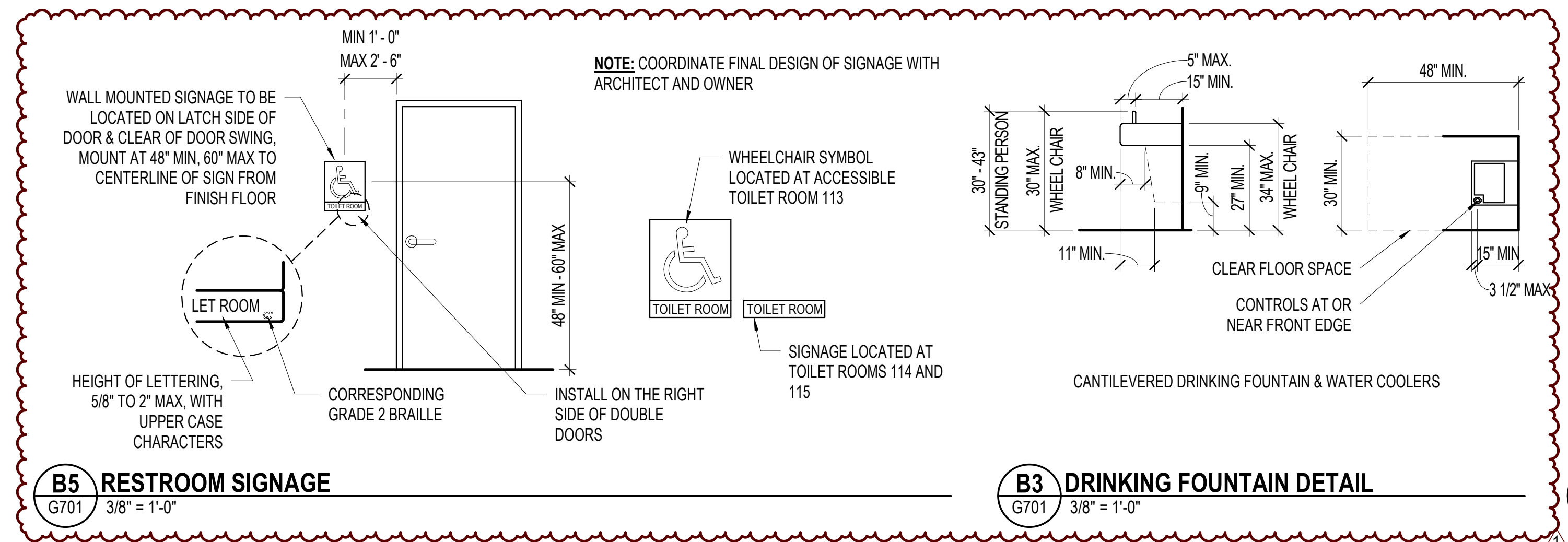
A3 ACCESSIBLE WALL / FLOOR MOUNTED TOILET DETAIL

G701 $3/8" = 1'-0"$



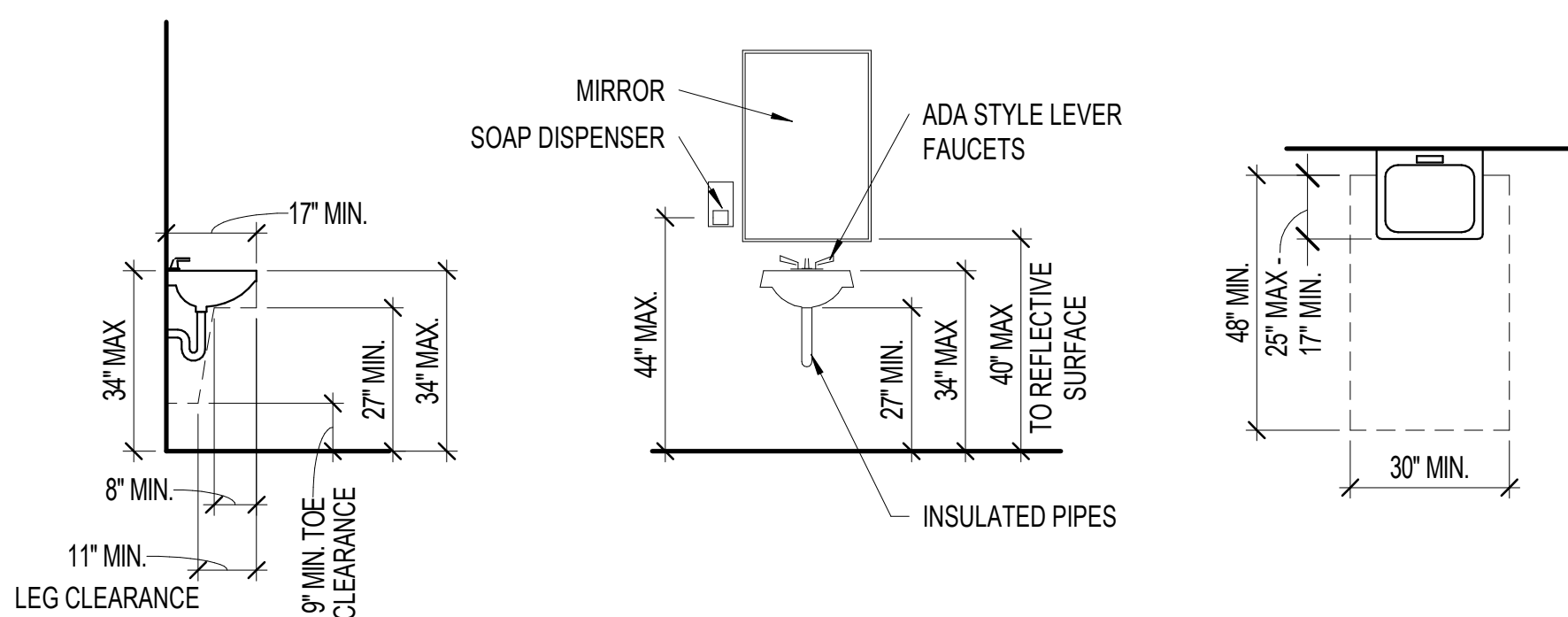
A3

G701	3/8" = 1'-0"
------	--------------



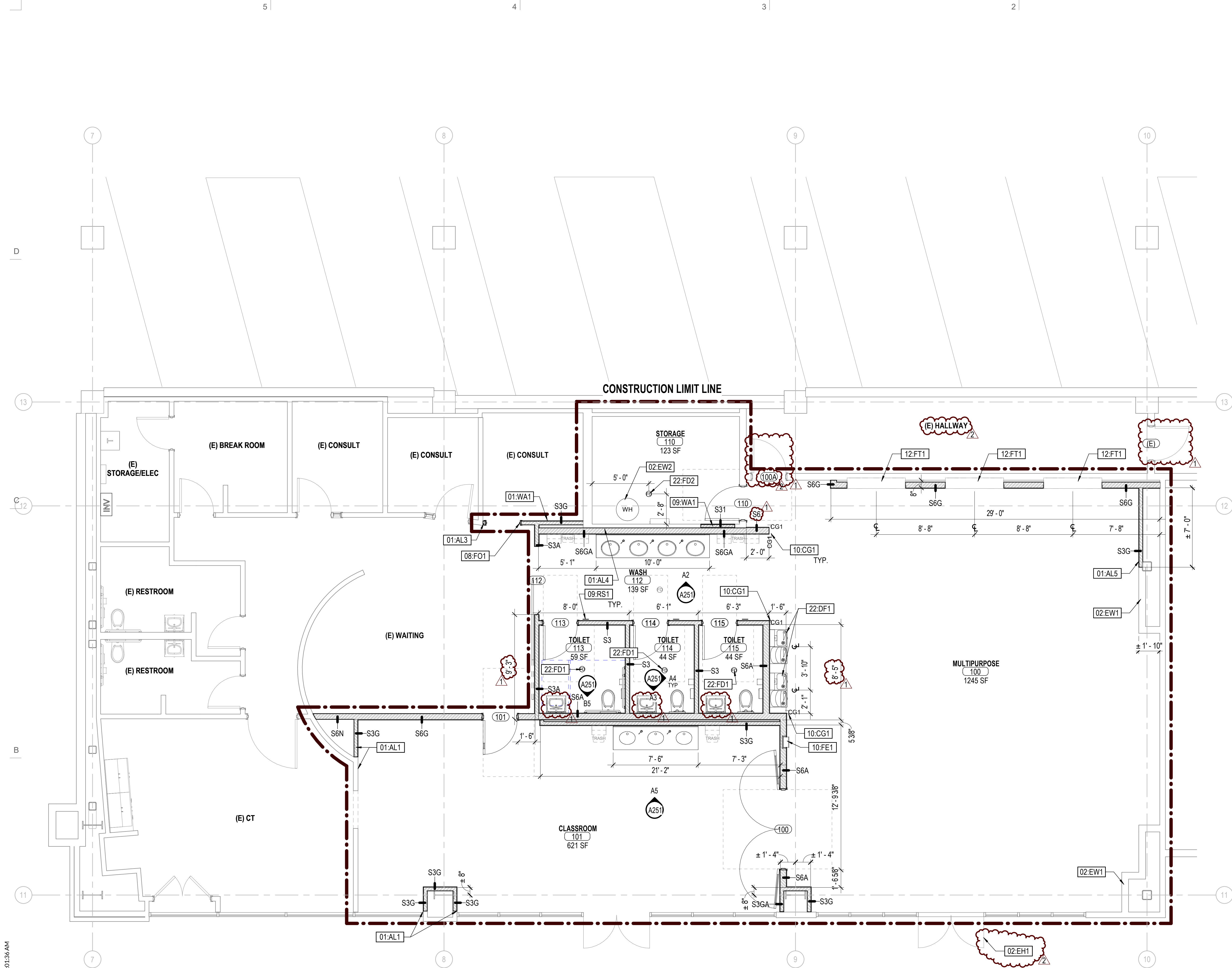
B5 RESTROOM SIGNAGE

G701	3/8" = 1'-0'
------	--------------



A5 ACCESSIBLE SINK DETAIL

G701 $3/8" = 1'-0"$



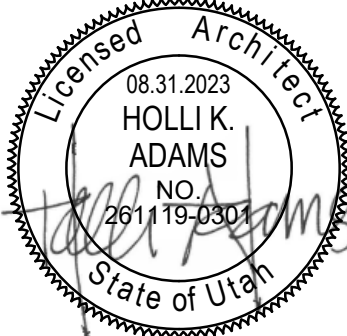
GENERAL NOTES -
FLOOR PLANS

- A. FIELD VERIFY ALL EXISTING CONDITIONS AND THEIR COMPATIBILITY WITH NEW CONSTRUCTION. COORDINATE DISCREPANCIES WITH ARCHITECT PRIOR TO THE COMMENCEMENT OF WORK.
- B. ALL NEW WALL ASSEMBLIES ARE CONTINUOUS TO BOTTOM OF DECK UNLESS NOTED OTHERWISE.
- C. PLAN WALL DIMENSIONS ARE TO GRID LINE OR FACE OF WALL STRUCTURE, UNLESS NOTED OTHERWISE. "CLEAR" DIMENSIONS ARE TO FACE OF WALL FINISH.
- D. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- E. SEE G SERIES SHEETS FOR WALL TYPES AND TYPICAL ACCESSIBILITY CLEARANCE AND COMPLIANCE REQUIREMENTS. REGULATORY PLAN INFORMATION, INCLUDING RATED ASSEMBLY EXTENTS, OCCUPANCY AND EGRESS SYSTEMS.
- F. WHERE NEW CONSTRUCTION INTERFACES WITH EXISTING, PATCH AND REPAIR AS NECESSARY TO MATCH ORIGINAL CONDITION.
- G. WHERE PROVIDED, DOOR AND WINDOW DIMENSIONS ARE TO EDGE OF OPENING. OPENING DIMENSIONS ARE NOMINAL. CONTRACTOR SHALL COORDINATE DIMENSIONS OF ALL ROUGH OPENINGS AND ACTUAL FRAME SIZES.
- H. WHERE DOOR LOCATIONS ARE NOT DIMENSIONED, SEE DETAILS REFERENCED IN DOOR SCHEDULE BY SPECIFIC CONDITION. OTHERWISE, THE HINGE SIDE OF DOOR ROUGH OPENINGS SHALL BE LOCATED 4" FROM THE ADJACENT PERPENDICULAR WALL, SUBJECT TO MAINTENANCE OF REQUIRED ADA CLEARANCES REFERRED IN THE G SERIES.
- I. DO NOT SCALE DRAWINGS.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



KEYNOTE LEGEND	
TAG	KEYNOTE TEXT
01:AL1	ALIGN
01:AL3	ALIGN NEW WALL AT CORNER OF EXISTING CONSTRUCTION
01:AL4	ALIGN NEW WALL AGAINST FACE OF EXISTING CONSTRUCTION
01:AL5	ALIGN NEW WALL WITH EXISTING WALL TO REMAIN
01:WA1	NEW WALL, PROTECT EXISTING FLOORING TO REMAIN
02:EH1	EXISTING PANIC DOOR HARDWARE TO REMAIN ON EXISTING DOORS TO REMAIN
02:EW1	EXISTING WALL TO REMAIN, PROTECT IN PLACE
02:EW2	EXISTING WATER HEATER TO BE RELOCATED, COORDINATE WITH PLUMBING DRAWINGS
08:FO1	PROVIDE 3' - 2" X 7' - 2" FRAMED OPENING IN PREPARATION FOR TYPICAL 3' X 7' DOOR IN FUTURE PHASE
09:RS1	UNISEX RESTROOM SIGNAGE AT EACH TOILET STALL. TYP. SEE B5/G701 FOR MORE INFORMATION; COORDINATE FINAL DESIGN OF SIGNAGE WITH ARCHITECT AND OWNER FOR APPROVAL
09:WA1	INFILL OPENING WITH NEW METAL STUD WALL, ALIGN WITH THE ADJACENT FACES OF EXISTING CONSTRUCTION, INSTALL BASE TO MATCH EXISTING
10:CG1	CORNER GUARD, COORDINATE WITH FINISH LEGEND
10:FE1	SEMI-RECESSED FIRE EXTINGUISHER, VERIFY LOCATION WITH OWNER, SEE TYPICAL DETAIL ON SHEET A701
12:FT1	FOLDING TABLE WITH BENCH SEATS WITH INTEGRAL WALL POCKET, COORDINATE DEPTH OF WALL WITH MANUFACTURER REQUIREMENTS, OPCI
22:DF1	DRINKING FOUNTAIN, COORDINATE WITH PLUMBING DRAWINGS
22:FD1	FLOOR DRAIN, CENTER IN ROOM, COORDINATE WITH PLUMBING DRAWINGS
22:FD2	FLOOR DRAIN, COORDINATE WITH PLUMBING DRAWINGS

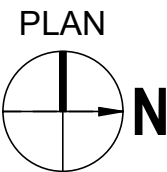
Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City UT, 84101

#	Date	Revision
1	10.16.23	Plan Review 01
2	11.14.23	Plan Review 02

**CONSTRUCTION
DOCUMENTS
(BP-2, P.I)**

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

**FLOOR PLAN
(PHASE I)**



A101

11/20/2023 10:01:36 AM

A5 FLOOR PLAN (PHASE I)
A101 1/4" = 1'-0"

DOOR SCHEDULE										
NUMBER	DOOR			FRAME			FIRE RATING	HARDWARE GROUP	NUMBER	NOTES
	SIZE		TYPE	DETAIL		TYPE				
	WIDTH	HEIGHT		HEAD	JAMB					
100	7'-0"	7'-0"	HD01					04	100	
100A	3'-0"	7'-0"	(E)					06	100A	EXISTING DOOR TO REMAIN WITH NEW HARDWARE INSTALLED
101	3'-0"	7'-0"	HS02				SH	01	101	SOUND INSULATION
110	3'-0"	7'-0"	WS01			B1/A251	SH	45 MIN	02	110
112	6'-0"	9'-6"	FS01				SH		05	112
113	3'-0"	7'-0"	HS01				SH		03	113
114	3'-0"	7'-0"	HS01				SH		03	114
115	3'-0"	7'-0"	HS01				SH		03	115

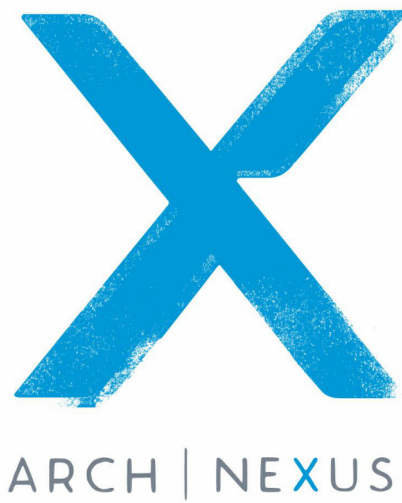
GLAZING SCHEDULE	
TAG	DESCRIPTION
01	1/4" CLEAR, TEMPERED

GENERAL NOTES -
DOOR & WINDOW TYPES

- A. FIELD VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING SUBMITTAL & SUBSEQUENT FABRICATION OF ALL DOOR AND WINDOW FRAMES.
- B. DOOR AND FRAME ASSEMBLIES SHALL COMPLY WITH ALL GENERAL NOTES & LEGENDS, DOOR AND FRAME DETAILS, HARDWARE AND OTHER COMPONENTS INDICATED BY THE "DOOR SCHEDULE(S)", AS WELL AS ALL PROJECT REQUIREMENTS AS SPECIFIED.
- C. ALL HARDWARE TO HAVE B.H.M.A. 626, U260 SATIN CHROME FINISH OR EQ, UNLESS NOTED OTHERWISE.
- D. PROVIDE CLEARANCE REQUIRED BY ACCESSIBILITY CODES ANSI A117.1 AND ADAAG AT ALL DOORS, AS DEPICTED IN DETAILS ON G700 SHEET SERIES.
- E. DO NOT SCALE DRAWINGS.

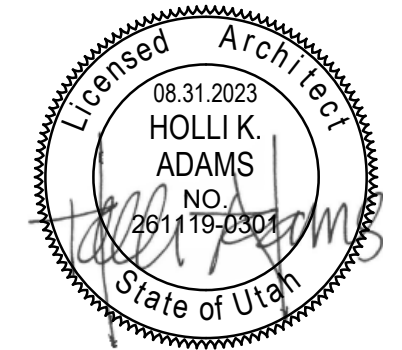
GENERAL NOTES -
INTERIOR ELEVATIONS

- A. SEE REFLECTED CEILING PLANS FOR CEILING FEATURES AND CEILING FINISH LOCATIONS.
- B. SEE PLANS, SECTIONS, SCHEDULES AND ADDITIONAL DETAILS FOR MORE MATERIAL AND FINISH INFORMATION.
- C. ENSURE THAT ALL REQUIRED FIXTURE AND CABINET CLEARANCES AND OTHER REQUIREMENTS ARE MAINTAINED PURSUANT TO ADAAG AND ANSI A117.1. SEE G700 SERIES SHEETS FOR GENERAL GUIDANCE ON COMMON MOUNTING HEIGHTS.
- D. WHERE THE FINISH SCHEDULE OR INTERIOR ELEVATIONS CALL FOR TILE, REPLACE GYPSUM BOARD SHOWN IN THE WALL'S ASSEMBLY WITH TILE BACKER BOARD WHERE TILE OCCURS. REPLACE OTHER GYPSUM BOARD SHOWN IN THAT WALL'S ASSEMBLY WITH MOISTURE RESISTANT GYPSUM BOARD WHERE NO TILE OCCURS.
- E. PROVIDE BACKING / SUPPORT FOR ALL MOUNTED FIXTURES, EQUIPMENT, CASEWORK, AND/OR SYSTEMS FURNITURE. COORDINATE WITH FLOOR PLANS, AND INTERIOR ELEVATIONS PRIOR TO THE COVERING OF STUD FRAMING. REFER TO MANUFACTURER'S RECOMMENDATIONS WHERE APPLICABLE, OTHERWISE REFER TO DETAILS ON A700 SHEET SERIES.
- F. ON ALL EXPOSED CABINET SIDES, INCLUDING KNEE OPENINGS, PROVIDE FINISHED FACE TO MATCH CABINET FRONTS.
- G. WHERE BACKSPASHES ARE NOTED, PROVIDE SIDESPLASHES WHENEVER COUNTERTOPS ARE ADJACENT TO WALLS.
- H. ALL MILLWORK LOCKKEYING TO BE COORDINATED WITH OWNER & ARCHITECT.
- I. THE CONTRACTOR IS TO COORDINATE WALK THROUGH(S) WITH THE OWNER AND THE ARCHITECT TO REVIEW PLACEMENT OF ELECTRICAL, MECHANICAL AND OTHER EQUIPMENT ITEMS FOR KEY ROOMS. SCHEDULING OF ROOM REVIEWS SHOULD BE COORDINATED DURING THE OAC MEETINGS.
- J. DO NOT SCALE DRAWINGS.

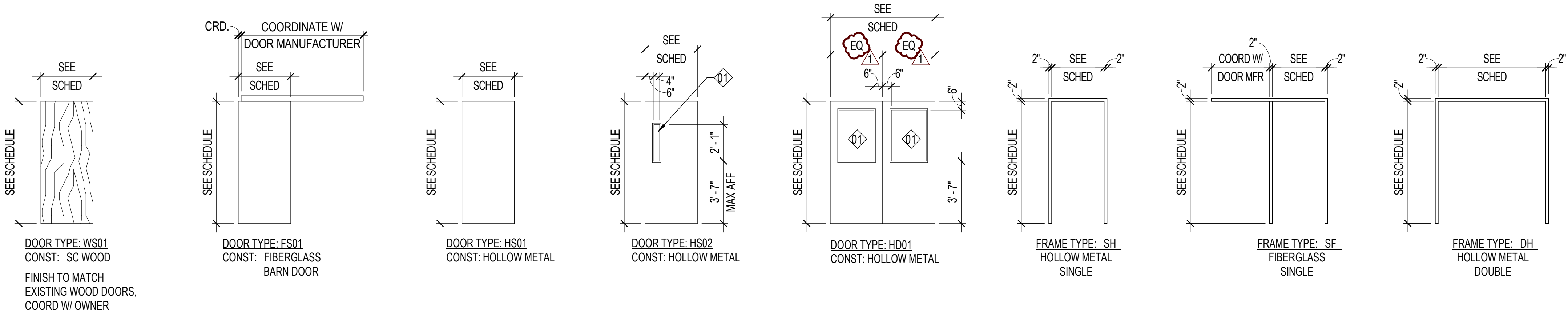


Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019

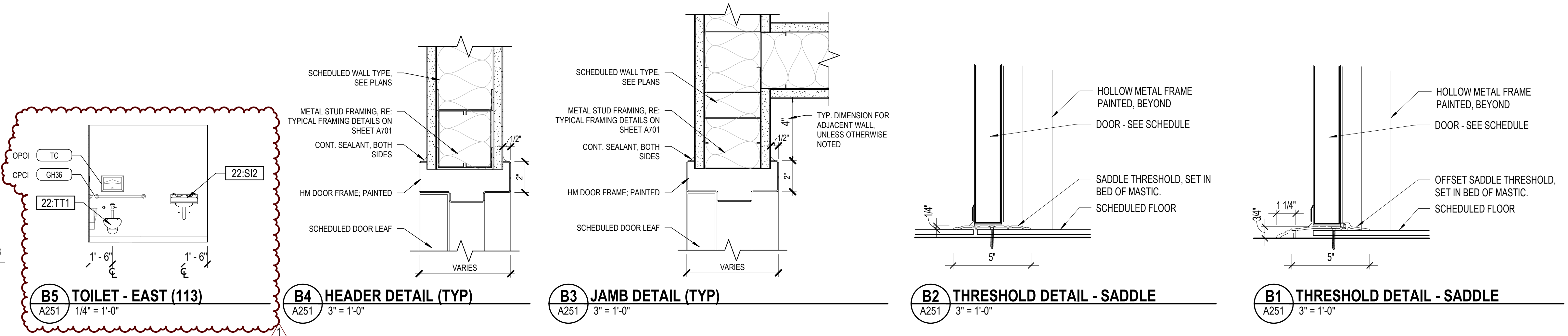


Salt Lake County
CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City UT, 84101



C5 DOOR TYPES
A251 1/4" = 1'-0"

C1 FRAME TYPES
A251 1/4" = 1'-0"



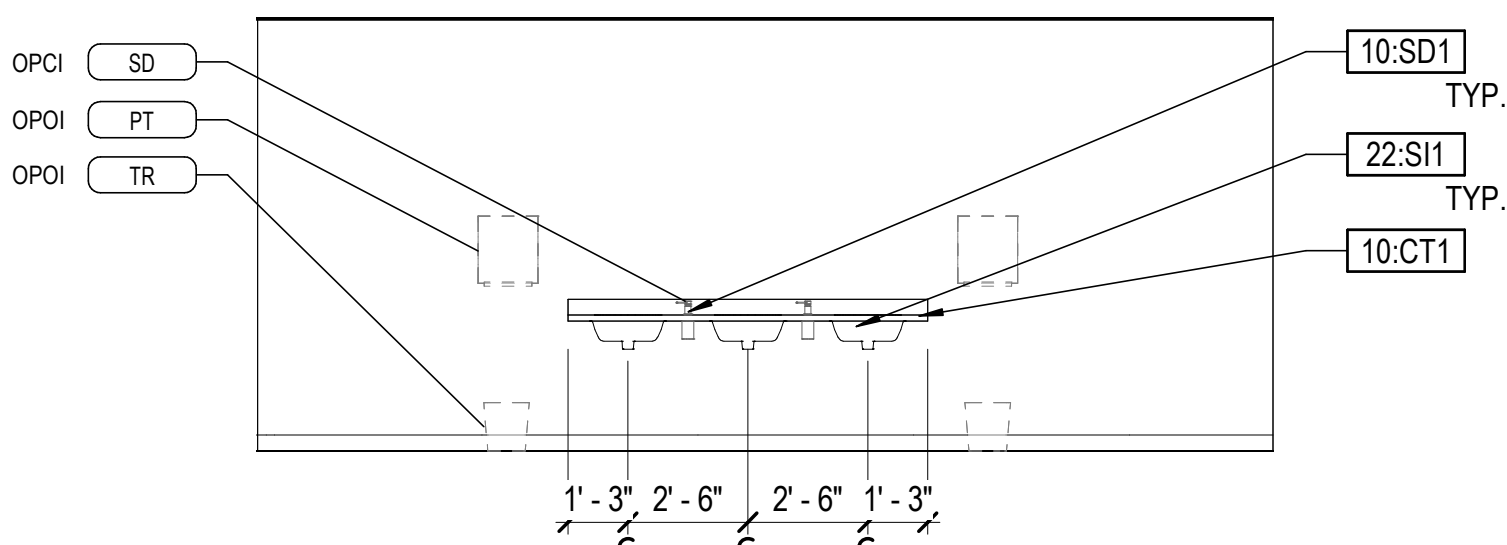
B5 TOILET - EAST (113)
A251 1/4" = 1'-0"

B4 HEADER DETAIL (TYP)
A251 3" = 1'-0"

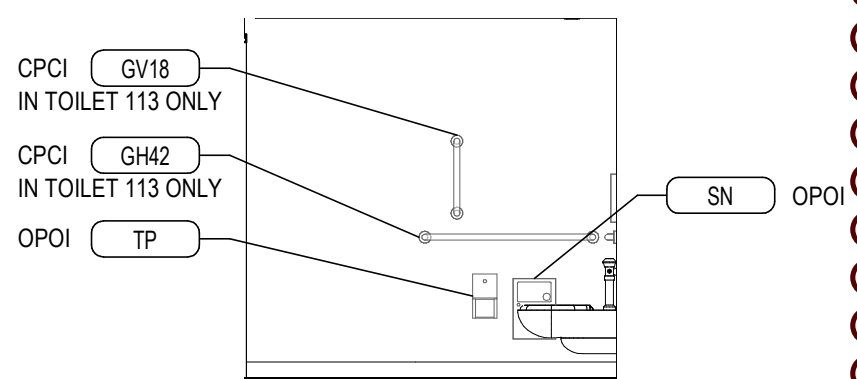
B3 JAMB DETAIL (TYP)
A251 3" = 1'-0"

B2 THRESHOLD DETAIL - SADDLE
A251 3" = 1'-0"

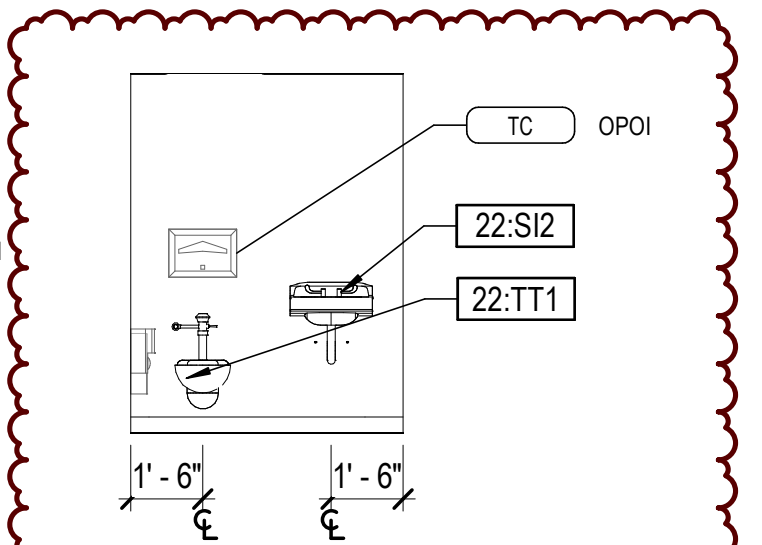
B1 THRESHOLD DETAIL - SADDLE
A251 3" = 1'-0"



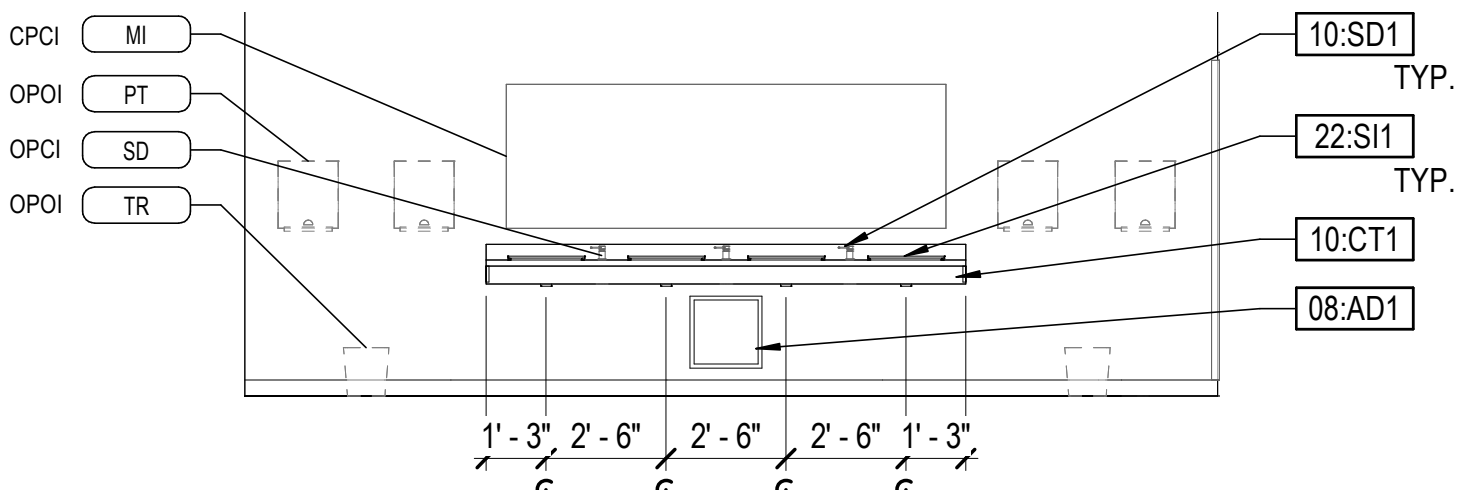
A5 CLASSROOM - WEST
A251 1/4" = 1'-0"



A4 TOILET - NORTH (TYP)
A251 1/4" = 1'-0"



A3 TOILET - EAST (114 & 115)
A251 1/4" = 1'-0"



A2 WASH - WEST
A251 1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	KEYNOTE TEXT
08:AD1	ACCESS DOOR FOR CONDENSATE ACCESS, COORDINATE WITH PLUMBING DRAWINGS, CONTRACTOR TO VERIFY BEST LOCATION IN FIELD
10:CT1	QUARTZ COUNTERTOP AND BACKSPASH; COORDINATE WITH FINISH SCHEDULE
10:SD1	SOAP DISPENSER, OPCI; COORDINATE LOCATION AND OPENING SIZE IN COUNTERTOP WITH OWNER
22:SI1	UNDERMOUNT SINK; COORDINATE WITH MECHANICAL DRAWINGS
22:SI2	WALL HUNG SINK; COORDINATE WITH MECHANICAL DRAWINGS
22:TT1	WALL MOUNT TOILET

#	Date	Revision
1	10.16.23	Plan Review 01
2	11.14.23	Plan Review 02

CONSTRUCTION
DOCUMENTS
(BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 31 AUGUST 2023

INTERIOR
ELEVATIONS
AND DOOR
SCHEDULES &
TYPES

A251



Corporate Office
Salt Lake City
181 East 5600 South
Murray, UT 84107
T 801 530 3148

St. George
230 N. 1680 E.
Building V
St. George, UT 84770
T 435 674 4800

Logan
40 W. Cache Valley Blvd.
Building 1, Suite B
Logan, UT 84341
T 435 752 5081

Arizona
1602 S. Priest Drive
Suite #103
Tempe, AZ 85281
T 480 889 5075

Date: 10-16-23

Project No: 22070

Project: CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT

Revision: PLAN REVIEW 01

Plan Review Response - The following revisions/clarifications were made in response to plan review comments by city or other authorities and shall be included as an integral part of the Contract Documents for the above-listed project and shall be fully binding.

DIVISION - 22, 23

DRAWINGS

Sheet: M001 - LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

- UPDATED SHEET INDEX, ADDED M102 - MECHANICAL ROOF PLAN

Sheet: M101 - MECHANICAL FLOOR PLAN

- ADDED KEYED NOTES 3 AND 4 REGARDING DAMPER INFORMATION.
- ADDED KEYED NOTE 4 TO CLARIFY DAMPER OPERATION.
- ADDED KEYED NOTE 3 AND CFM TO DAMPERS.
- CLARIFIED KEYED NOTE 1 ABOUT DUCT ROUTING TO ROOF HOOD.
- ADDED DCP-1. REFERENCE PLUMBING PLANS AND DETAILS.

Sheet: M102 - MECHANICAL ROOF PLAN

- ADDED SHEET M102 - MECHANICAL ROOF PLAN. ROOF EQUIPMENT SHOWN ON THIS PLAN.

Sheet: M501 - MECHANICAL DETAILS

- ADDED 2-WAY CONTROL VALVE TO COIL PIPING DETAIL.
- CLARIFIED STRAINER NOTE.
- CLARIFIED NOTE ON ROOF HOOD DETAIL.
- ADDED ROOF MOUNTED SPLIT SYSTEM CONDENSING UNIT DETAIL.

Sheet: M601 - MECHANICAL SCHEDULES

- UPDATED FLUID MEDIA FOR COOLING AND HEATING IN FAN COIL SCHEDULE.
- CLARIFIED NOTE 2 ON HOOD SCHEDULE.
- SWR-1 OMITTED ON GRILLES, REGISTERS AND DIFFUSERS SCHEDULE.

Sheet: MP101 - MECH. PIPING FLOOR PLAN

- UPDATED LOCATION OF UNIT TO SHOW ON ROOF PLAN. ADDED KEYED NOTE 3.
- CLARIFIED KEYED NOTE 2 AND ADDED KEYED NOTE 3.

Sheet: PD100 - PLUMBING DEMOLITION FLOOR PLAN

- ADDED KEYED NOTE 6 TO DEMOLISH CONDENSATE DRAIN PIPE.
- CLARIFIED KEYED NOTE 1.
- ADDED KEYED NOTE 6.

Sheet: P101 - PLUMBING FLOOR PLAN

- ADDED CONDENSATE DRAIN TO FC-2. ADDED DOMESTIC COLD AND HOT WATER, WASTE AND VENT PIPING TO L-2(S). UPDATED PIPE SIZE CALLOUTS AS REQUIRED.
- ADDED CONDENSATE DRAIN PIPE TO FC-1 AND CLARIFIED PIPE SIZE.
- ADDED KEYED NOTE 7 TO REFERENCE PLUMBING DETAILS FOR PIPING CONFIGURATION OF WATER HEATER(E), DCP-1 AND DOMESTIC EXPANSION TANK(E).
- ADDED KEYED NOTE 7 AND DCP-1.

Sheet: P501 - PLUMBING DETAILS

- UPDATED AQUASTAT CALLOUT.

Sheet: P601 - PLUMBING SCHEDULES

- UPDATED/ADDED ACCESSORIES TO PROVIDE MIXING VALVE TO L-1.
- ADDED L-2 TO PLUMBING FIXTURE SCHEDULE.

End of Plan Review Response.

LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

DUCTWORK/GRILLES

	POSITIVE PRESSURE DUCT - RISE
	POSITIVE PRESSURE DUCT - DROP
	NEGATIVE PRESSURE DUCT - RISE
	NEGATIVE PRESSURE DUCT - DROP
	ROUND DUCT - RISE
	ROUND DUCT - DROP
	UNDER FLOOR DUCT
	TURNING VANES
	FRESH AIR LOUVER
	RELIEF AIR OR EXHAUST AIR LOUVER
	CEILING SUPPLY DIFFUSER
	CEILING RETURN REGISTER
	CEILING EXHAUST REGISTER (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN)
	SIDEWALL SUPPLY REGISTER
	SIDEWALL EXHAUST OR RETURN REGISTER
	CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT
	CEILING AIR GRILLE WITH FLEXIBLE DUCT
	CEILING RETURN AIR GRILLE W/ SOUND BOOT
	LINEAR DIFFUSER TOP FIGURE: CONNECTION SIZE, ACTIVE LENGTH, SLOT QUANTITY - WIDTH BOTTOM FIGURE: AIR FLOW & QUANTITY (IF MORE THAN ONE OF SIMILAR CFM)
	FLEXIBLE DUCT CONNECTION
	FLEXIBLE DUCT
	FLAT OVAL DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
	RECTANGULAR DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
	ROUND DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
	INCLINED RISE
	INCLINED DROP
	R/W=1. ROUND DUCT SIMILAR TO RECTANGULAR
	RECTANGULAR TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
	RECTANGULAR TO ROUND DUCT TRANSFORMATION
	BRANCH DUCT SPLIT WITH 6" WIDTH AND MIN. R=WIDTH OF BRANCH DUCT DOWNSTREAM. ELBOW TURNING VANE OPTIONAL.
	TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
	HIGH EFFICIENCY FITTING
	MANUAL VOLUME DAMPER
	FIRE DAMPER IN DUCT, W/ ACCESS PANEL REQD.
	COMBINATION FIRE/SMOKE DAMPER W/ ACCESS PANEL
	SMOKE DAMPER W/ ACCESS PANEL
	BACK DRAFT DAMPER
	ATC DAMPER

DUCTWORK/GRILLES CONT.

	ACCESS PANEL IN DUCT OR PLENUM
	HEATING OR COOLING COIL IN DUCT
	SINGLE DUCT AIR TERMINAL BOX VARIABLE OR CONSTANT VOLUME. MINIMUM 1 1/2" TERMINAL INLET SIZE STRAIGHT DUCT AT TERMINAL INLET.
	4-WAY BLOW PATTERN
	3-WAY BLOW PATTERN
	2-WAY BLOW PATTERN
	1-WAY BLOW PATTERN
	DUCT SMOKE DETECTOR
	DEMOLITION

PIPING

	SHUT OFF VALVE
	BALL VALVE
	BUTTERFLY VALVE
	MOTOR OPERATED BUTTERFLY VALVE
	GATE VALVE
	GATE VALVE - NON RISING STEM
	ANGLE VALVE
	GLOBE VALVE
	PLUG VALVE
	SHUT OFF PLUG VALVE FOR USE WITH PRESSURE GAUGE
	CHECK VALVE
	LATERAL STRAINER WITH BLOW-OFF VALVE. PROVIDE HOSE END WITH CAP WHERE DISCHARGE IS NOT PIPED TO DRAIN
	REDUCED PRESSURE BACKFLOW PREVENTOR W/ DRAIN PAN
	PRESSURE REDUCING VALVE EXTERNAL PRESSURE
	PRESSURE REDUCING VALVE SELF CONTAINED
	ATC - 2 WAY VALVE
	ATC - 3 WAY VALVE
	SOLENOID VALVE
	CALIBRATED BALANCING VALVE WITH GPM INDICATED
	VENTURI FLOW METER
	FLOW METER ORIFICE
	RELIEF VALVE
	AIR VENT-MANUAL
	AIR VENT-AUTO
	FLOW SWITCH
	PRESSURE SWITCH
	TEMPERATURE AND PRESSURE TEST PORT
	THERMOMETER WELL
	THERMOMETER - TEMPERATURE RANGE AS INDICATED
	PRESSURE GAUGE WITH SHUT OFF PLUG VALVE
	PRESSURE GAUGE WITH PIGTAIL
	UNION
	FLANGE
	FLEXIBLE EXPANSION JOINT
	REDUCER
	ECCENTRIC REDUCER
	BRANCH - BOTTOM CONNECTION
	BRANCH - TOP CONNECTION
	BRANCH - SIDE CONNECTION

PIPING CONT.

	RISE OR DROP
	RISER - DOWN (ELBOW)
	RISER - UP (ELBOW)
	PIPE CAP
	ARROW INDICATES DIRECTION OF FLOW IN PIPE
	LEADER INDICATES DOWNWARD SLOPE
	VALVE IN RISE
	90° ELBOW
	45° ELBOW
	ALIGNMENT GUIDE
	ANCHOR

PLUMBING

	THERMOSTATIC MIXING VALVE
	HOSE BIBB
	FLOOR SINK
	FLOOR DRAIN
	FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
	ROOF DRAIN
	DOWNSPOUT NOZZLE
	VENT THRU ROOF
	WATER HAMMER ARRESTOR
	CLEAN-OUT
	FILL PORT
	DRAIN PAN AND P-TRAP
	FIXTURE FROM LEVEL ABOVE
	DEMOLITION

EQUIPMENT

	UNIT HEATER
	INLINE PUMP
	INLINE PUMP
	FAN

FIRE

	FIRE RISER
	SPRINKLER HEAD
	FIRE SPRINKLER WATER

ANNOTATIONS

	PLUMBING FIXTURES
	POINT OF CONNECTION
	SECTION TAG TOP FIGURE: SECTION NUMBER BOTTOM FIGURE: SHEET NUMBER
	DETAIL TAG TOP FIGURE: DETAIL NUMBER BOTTOM FIGURE: SHEET NUMBER
	DETAIL TAG TOP FIGURE: EQUIPMENT TYPE BOTTOM FIGURE: UNIT NUMBER
	EQUIPMENT IDENTIFICATION TOP FIGURE: EQUIPMENT TYPE AND NUMBER BOTTOM FIGURE: UNIT SIZE
	KEYED NOTE IDENTIFICATION
	SWITCH
	SENSOR
	THERMOSTAT
	NIGHT THERMOSTAT

LINETYPES

	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RETURN (DHW)
	EXISTING PIPING
	EXISTING PIPING TO BE REMOVED
	NATURAL GAS
	HEATING HOT WATER RETURN
	HEATING HOT WATER SUPPLY
	WASTE (BELOW GRADE)
	WASTE (ABOVE GRADE)
	VENT (WASTE)

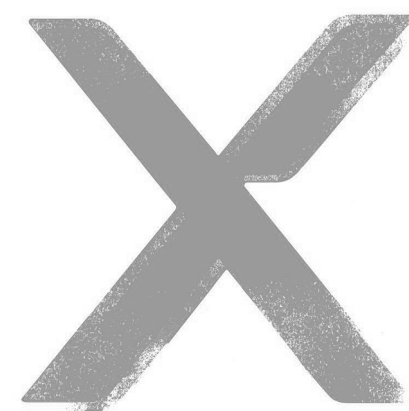
SHEET INDEX	
SHEET NUMBER	SHEET TITLE
M001	LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS
M002	MECHANICAL GENERAL NOTES
MD100	MECHANICAL DEMOLITION FLOOR PLAN
MM1	MECHANICAL FLOOR PLAN
M102	MECHANICAL ROOF PLAN
MS01	MECHANICAL DETAILS
MS01	MECHANICAL SCHEDULES
MS01	MECHANICAL ZONE PLAN
MPD100	MECH. PIPING DEMOLITION FLOOR PLAN
MP101	MECH. PIPING FLOOR PLAN
PD100	PLUMBING DEMOLITION FLOOR PLAN
P101	PLUMBING FLOOR PLAN
P501	PLUMBING DETAILS
P601	PLUMBING SCHEDULES

ABBREVIATIONS

Ø	ROUND	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	MA	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BTU	BRITISH THERMAL UNITS	MUA	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
CAP	CATCH BASIN	NF	NON FREEZE HYDRANT
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CO	CLEAN OUT	NO	NORMALLY OPEN
DCW	DOMESTIC COLD WATER	NTS	NOT TO SCALE
DB	DRY BULB	O	OXYGEN
DIA	DIAMETER	OA	OUTSIDE AIR
DN	DOWN	PD	PRESSURE DROP
DW	DISTILLED WATER	PLBG	PLUMBING
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	RA	RETURN AIR
EWT	ENTERING WATER TEMPERATURE	RCP	RADIANT CEILING PANEL
EA	EXHAUST AIR	RD	ROOF DRAIN
F	DEGREES FAHRENHEIT	RDO	ROOF DRAIN OVERFLOW
F	FLOOR CLEAN OUT	RH	RELATIVE HUMIDITY
FD	FLOOR DRAIN	RLA	RELIEF AIR
FDV	FIRE DEPARTMENT VALVE	RM	ROOM
FO	FUEL OIL	RPM	REVOLUTIONS PER MINUTE
FOV	FUEL OIL VENT	RW	RAIN WATER
FOR	FUEL OIL RETURN	SF	SQUARE FOOT
FOS	FUEL OIL SUPPLY	S/A	SUPPLY AIR
FPM	FEET PER MINUTE	SAN	SANITARY
FS	FLOOR SINK	SF	SQUARE FOOT
FT	FOOT/FEET	SD	SMOKE DAMPER
FTR	FIN TUBE RADIATION	SM	SURFACE MOUNT
GAL	GALLON	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	THERMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TD	TRENCH DRAIN
DHW	DOMESTIC HOT WATER	TEMP	TEMPERATURE
HYD	HYDRANT	TYP	TYPICAL
ID	INDIRECT	VAC	VACUUM
IN	INCH	V	VENT
INVE	INVERT	VAV	VARIABLE AIR VOLUME
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LPG	LIQUEFIED PETROLEUM GAS	WCO	WALL CLEAN OUT

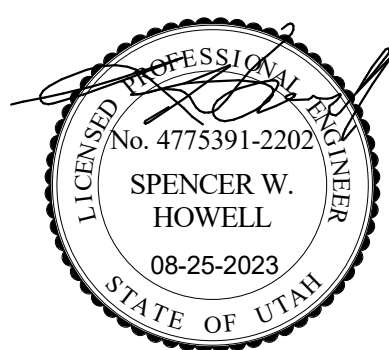
EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
CU	AIR COOLING CONDENSING UNIT	EW	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FC	FAN COIL
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HR	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
ED	EXHAUST FAN	UH	UNIT HEATER
	ELECTRIC DUCT HEATER	WH	WATER HEATER



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

CONSTRUCTION DOCUMENTS (BP-2, P.1)

NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

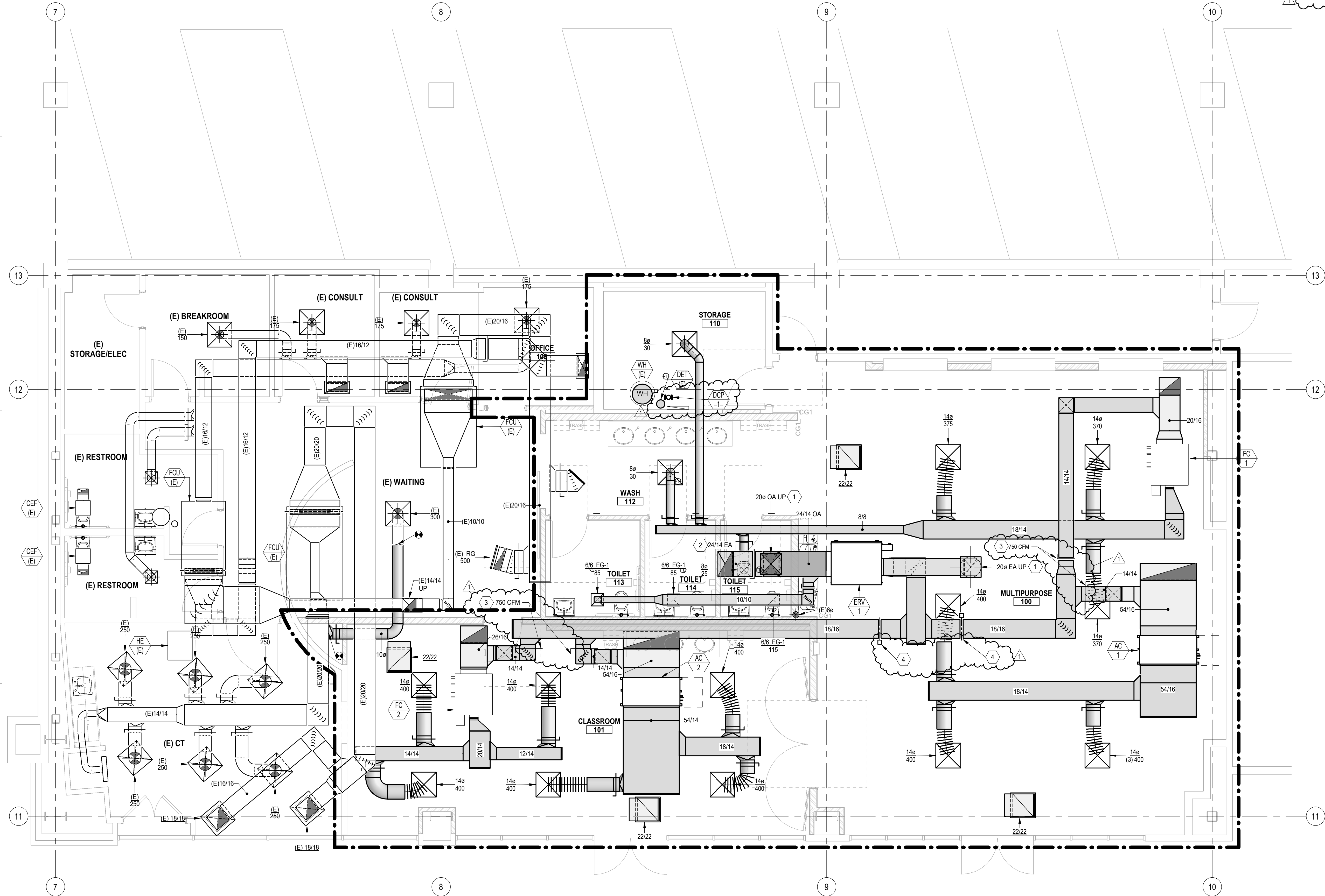
LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS



181 East 5600 South
Murray, Utah 84107
O: (801)530-3148
www.vbfa.com
VBFA Project #: 23206

M001

10/16/2023 4:19:51 PM



- # KEYED NOTES
- 1

ROUTE DUCTING UP THRU ROOF, PROVIDE WITH ROUND-TO-SQUARE TRANSITION TO CONNECT TO ROOF HOOD(S). COORDINATE WITH SITE CONDITIONS.
- 2

EXHAUST AIR INTAKE BOOT, TERMINATE ABOVE CEILING WITH OPENING DIRECTED AT ROOF DECK.
- 3

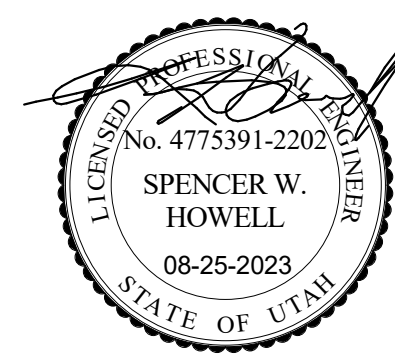
BALANCE DAMPERS TO LISTED CFM(S).
- 4

DAMPER TO OPEN WHEN STUDENTS ARE IN MULTIPURPOSE ROOM OR CLASS ROOM. DO NOT PROVIDE AIR TO BOTH ROOM SIMULTANEOUSLY.

ARCH | NEXUS

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County

CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT

110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

CONSTRUCTION
DOCUMENTS
(BP-2, P.1)

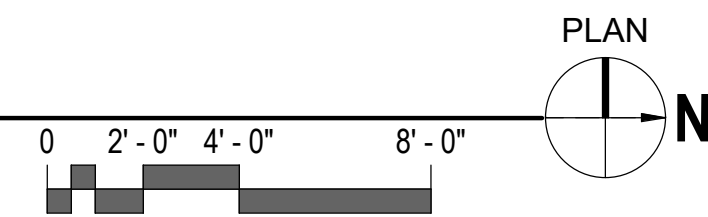
NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

MECHANICAL
FLOOR PLAN

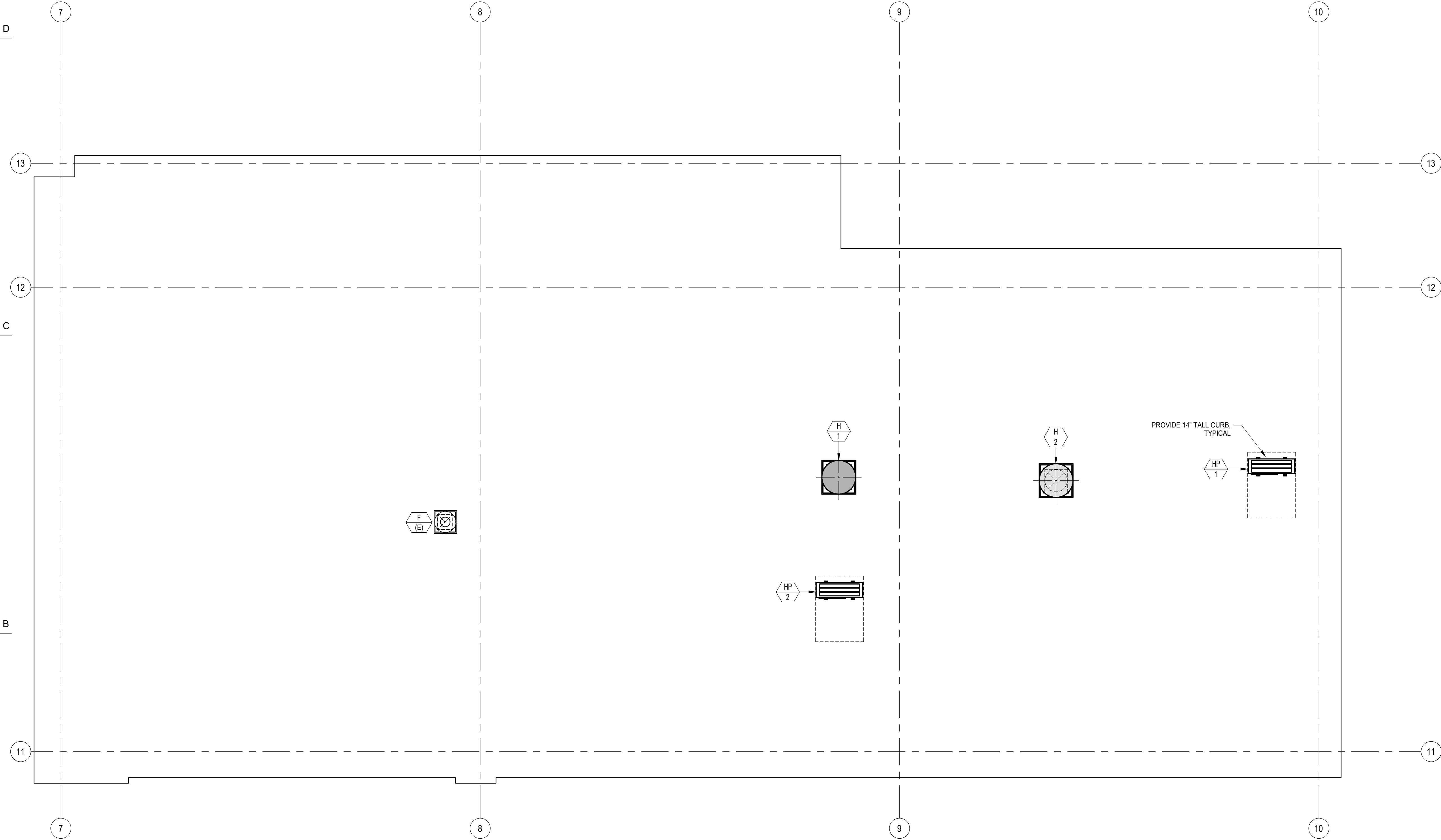


M101

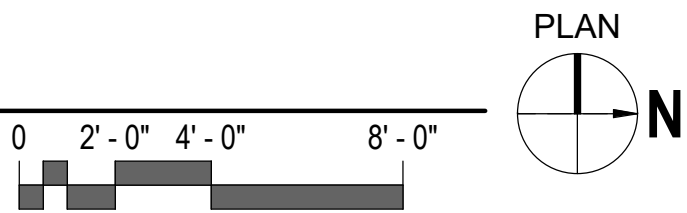
1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



10/16/2023 4:23:07 PM



1 MECHANICAL ROOF PLAN
SCALE: 1/4" = 1'-0"



KEYED NOTES

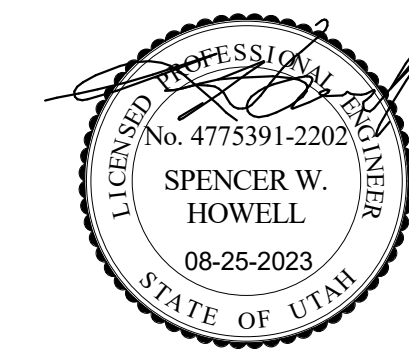
1. -



ARCH | NEXUS

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

**CONSTRUCTION
DOCUMENTS
(BP-2, P.1)**

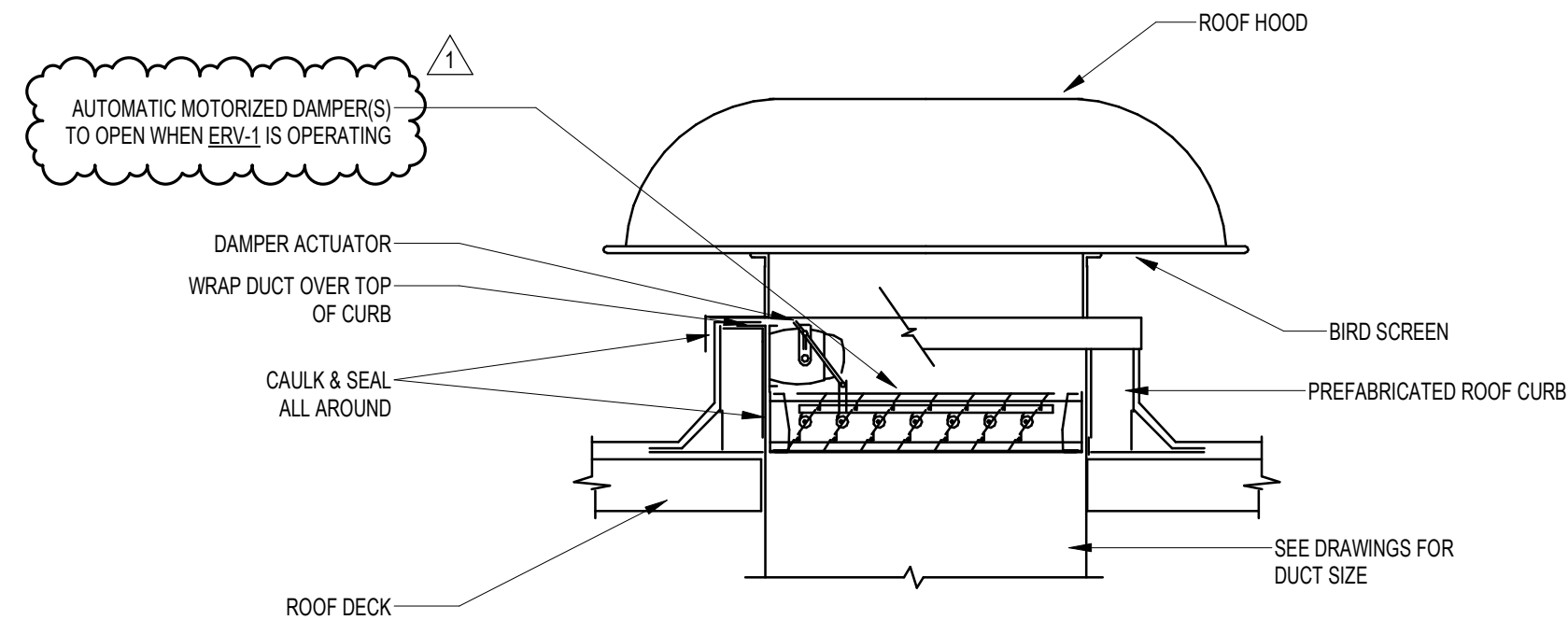
NEXUS PROJECT #: 22070
CHECKED BY: Checker
DRAWN BY: Author
DATE: 25 AUGUST 2023

**MECHANICAL
ROOF PLAN**

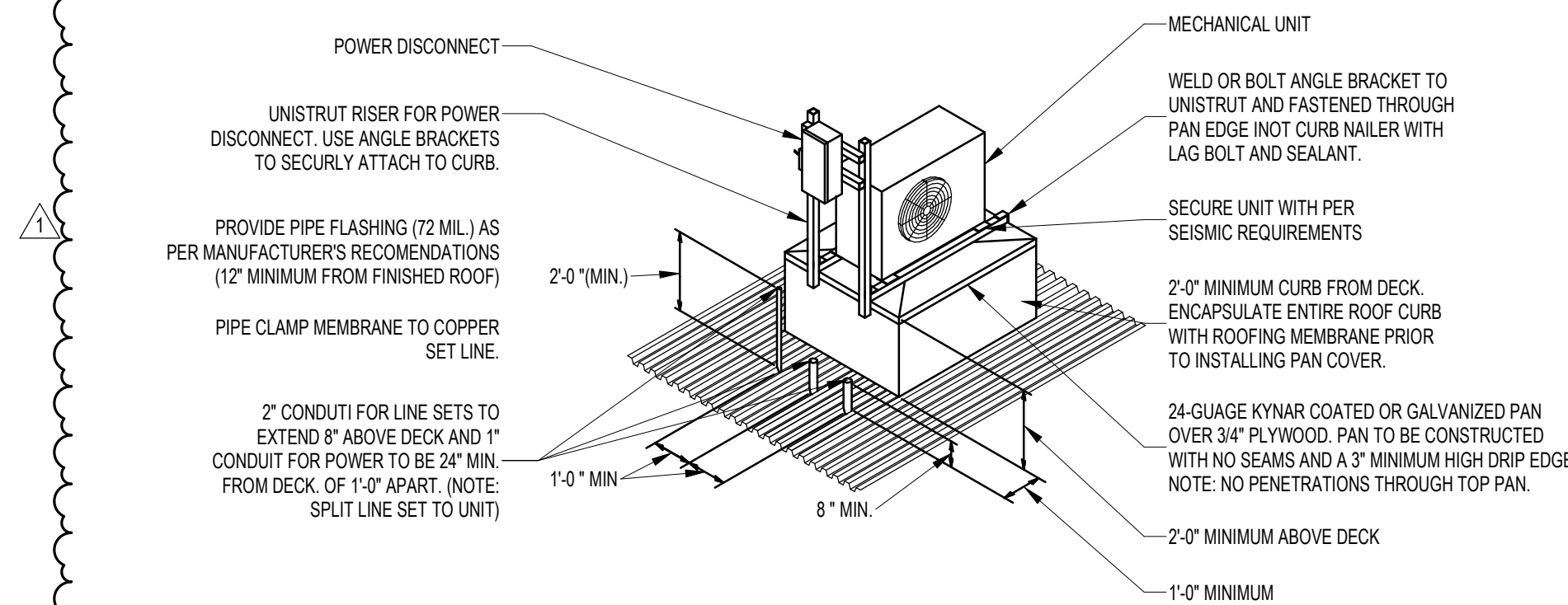
181 East 5600 South
Murray, Utah 84107
O: (801) 530-3148
www.vbfa.com
VBFA Project #: 23206

VBFA

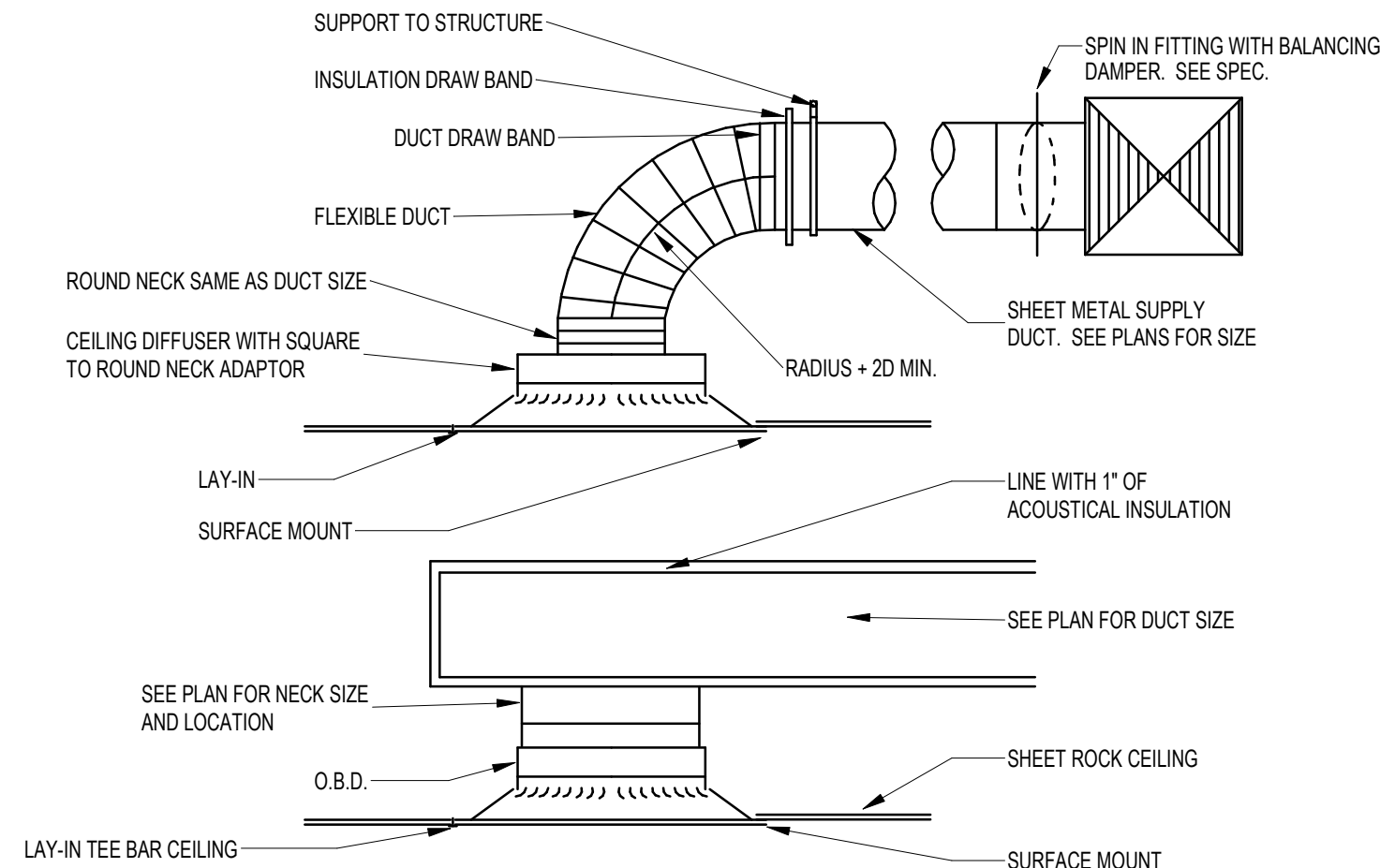
M102



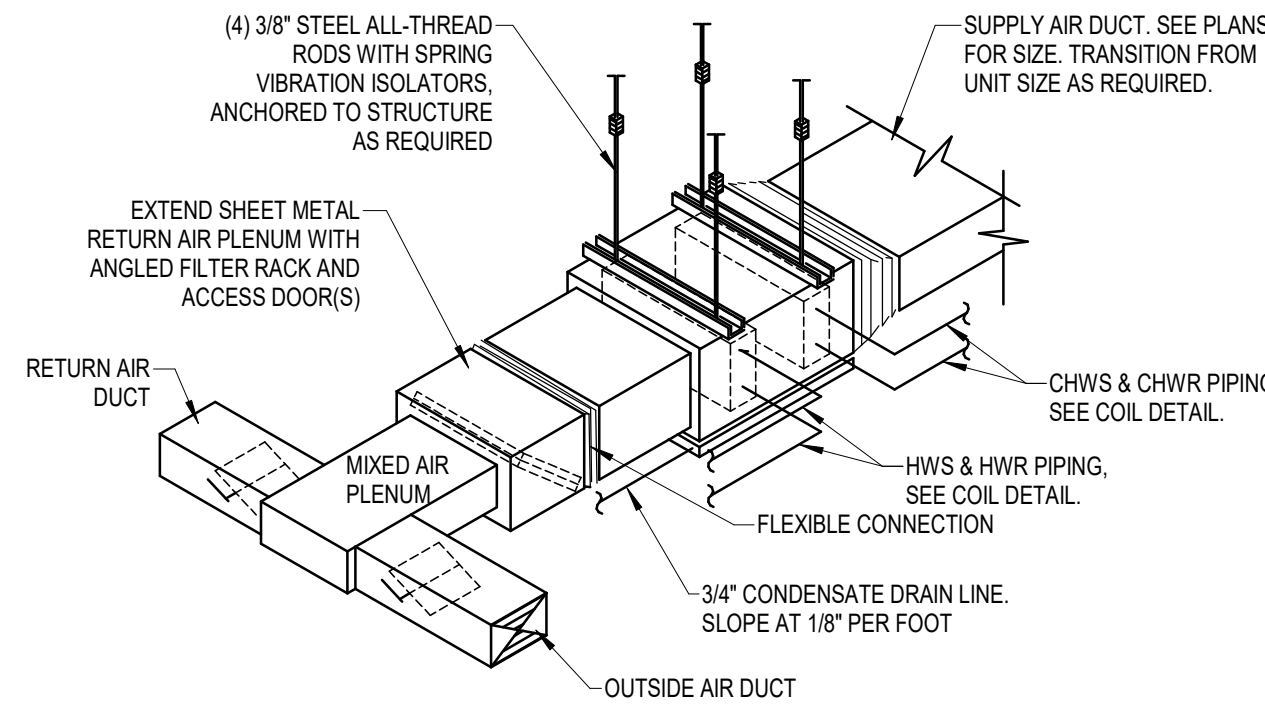
9 ROOF HOOD WITH MOTORIZED DAMPER DETAIL
NOT TO SCALE



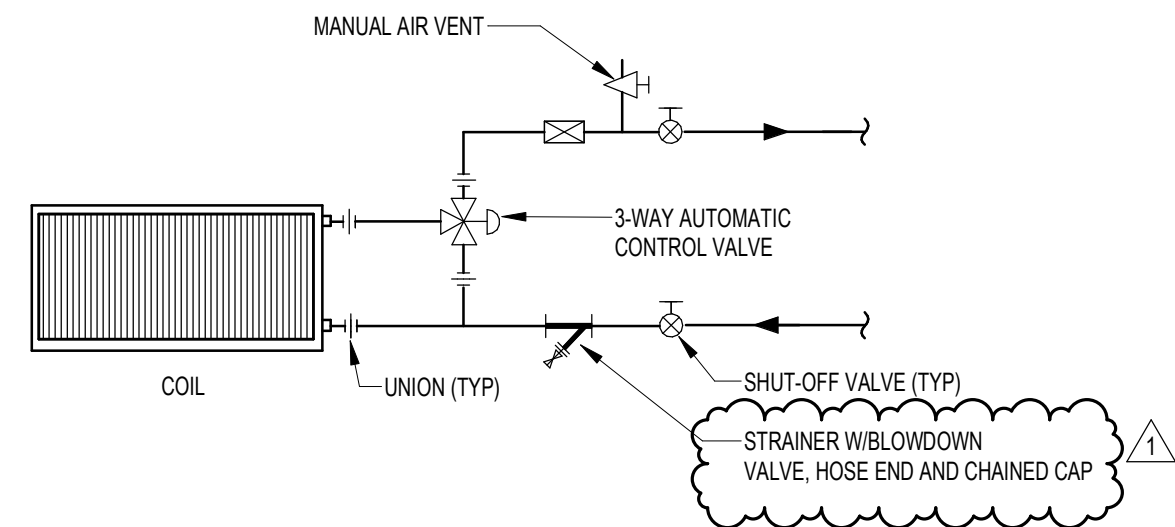
10 ROOF MOUNTED SPLIT SYSTEM CONDENSING UNIT DETAIL
NOT TO SCALE



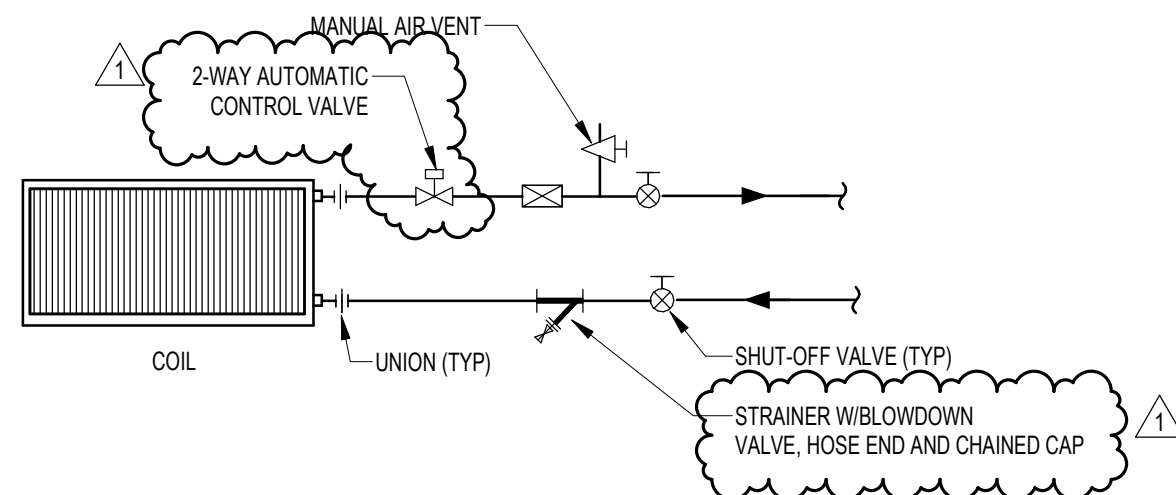
5 DIFFUSER CONNECTION DETAIL
NOT TO SCALE



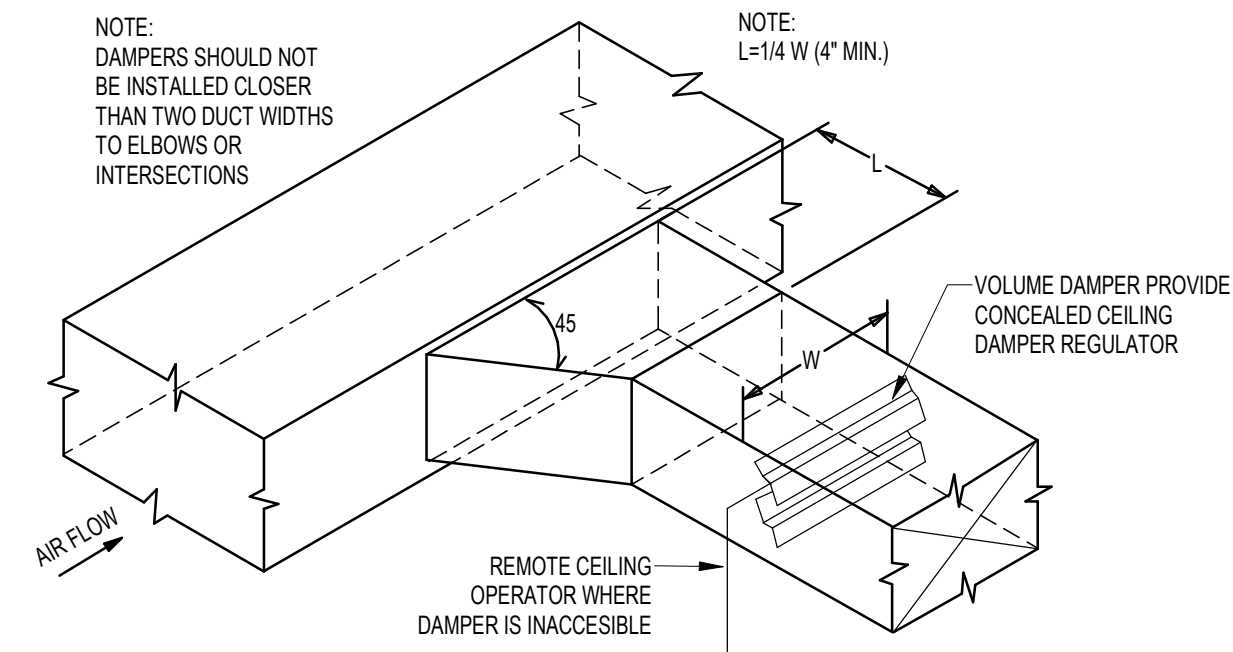
6 FAN COIL UNIT DETAIL
NOT TO SCALE



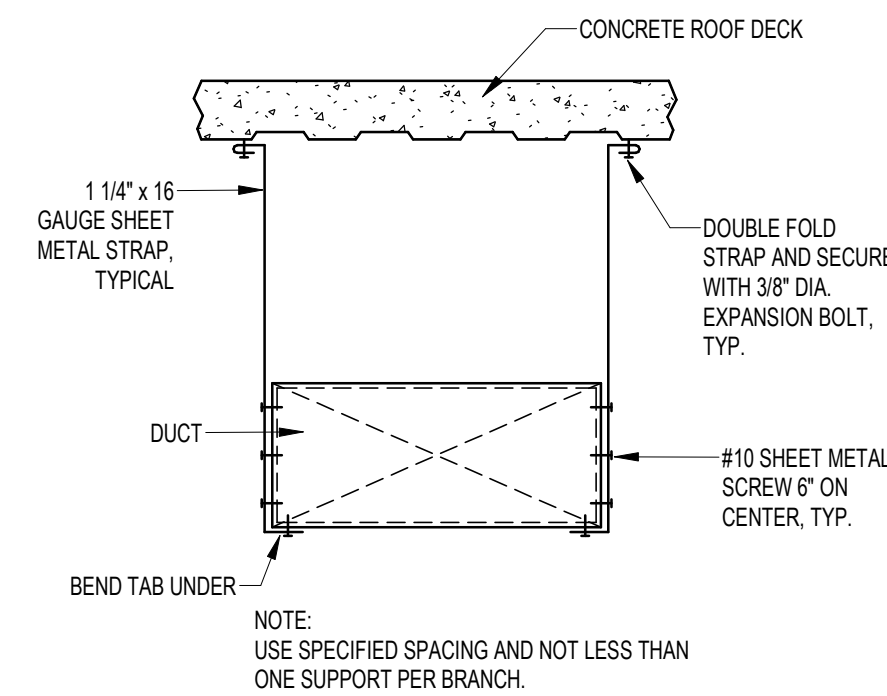
7 COIL PIPING DETAIL WITH 3-WAY VALVE
NOT TO SCALE



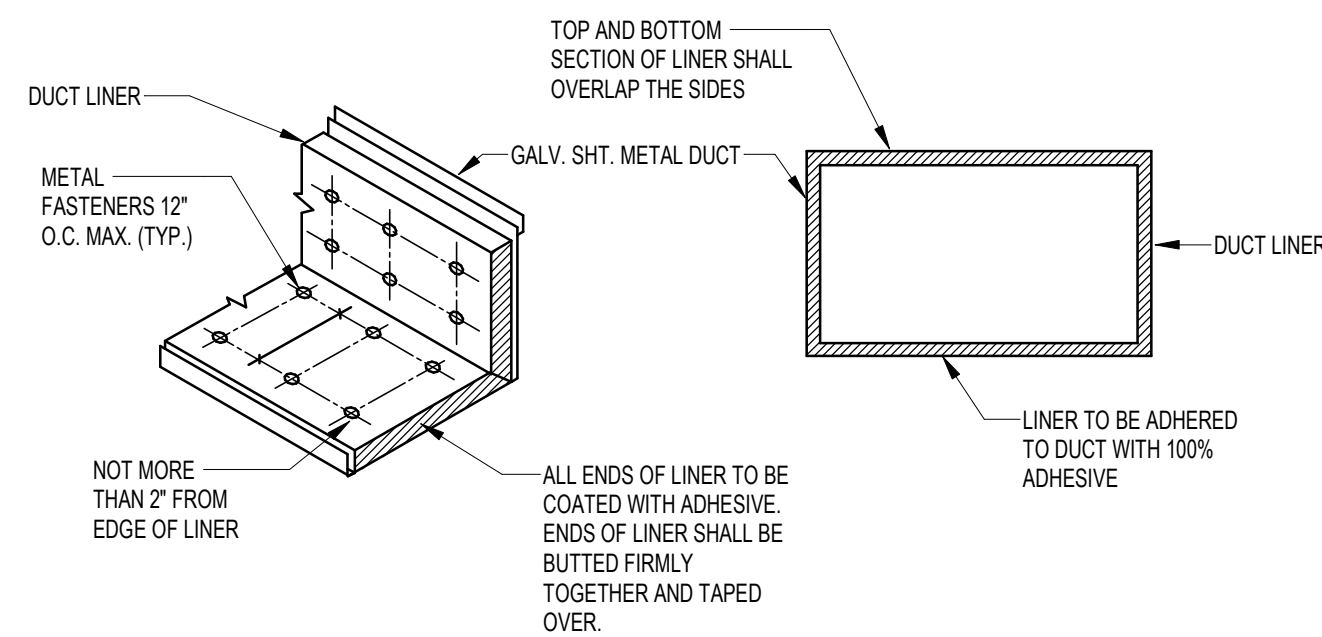
8 COIL PIPING DETAIL
NOT TO SCALE



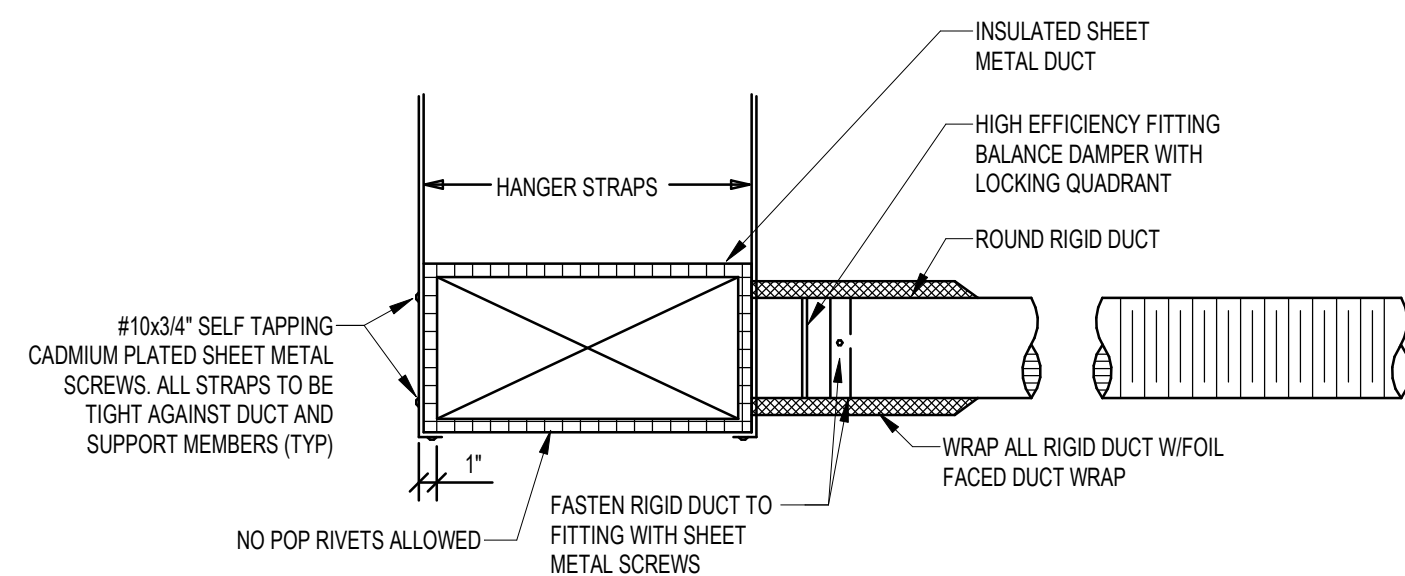
1 BRANCH DUCT TAKE-OFF WITH DAMPER DETAIL
NOT TO SCALE



2 RECTANGULAR DUCT DETAIL
NOT TO SCALE



3 RECTANGULAR DUCT LINER DETAIL
NOT TO SCALE



4 FLEX DUCT WITH HIGH EFFICIENCY FITTING DETAIL
NOT TO SCALE

FAN COIL SCHEDULE																													
ID	MANUFACTURER AND MODEL NUMBER	TYPE	AIR		COOLING										HEATING										ELECTRICAL				
			MAXIMUM AIRFLOW RATE (CFM)	EXTERNAL STATIC PRESSURE (IN. WATER)	TOTAL LOAD (MBH)	SENSIBLE LOAD (MBH)	EAT (DBWB)	LAT (DBWB)	EWTLWT (°F)	FLOW (GPM)	FLUID P.D. (FT. WG)	PIPE SIZE (IN)	LOAD (MBH)	EAT (°F)	LAT (°F)	EWTLWT (°F)	FLOW (GPM)	FLUID P.D. (FT. WG)	PIPE SIZE (IN)	FILTER EFFICIENCY	FILTER SIZE (IN)	MOTOR SIZE (HP)	FLA	MCA	MOCP	VOLT/PH/Hz	WEIGHT (LBS)	NOTES	
FC-1	ENVIRO-TEC HDD16	4 PIPE, HORIZONTAL	1200	0.5	30.5	29.6	80 / 62	53.1 / 52.4	45 / 55	6.2	0.96	1	45.3	54	93.5	180 / 160	4.6	0.65	1	10% PG	MERV 8	(212)	1/2	5	6.25	15	208/160	380	1,2,3
FC-2	ENVIRO-TEC HDD16	4 PIPE, HORIZONTAL	1200	0.5	30.5	29.6	80 / 62	53.1 / 52.4	45 / 55	6.2	0.96	1	45.3	54	93.5	180 / 160	4.6	0.65	1	10% PG	MERV 8	(212)	1/2	5	6.25	15	208/160	380	1,2,3

1. PERFORMANCE LISTED AT 4200 FT ELEVATION.
2. PROVIDE WITH COIL FACE INSULATION, IAQ GALVANIZED DRAIN PAN, EC MOTOR, COORDINATE LEFT OR RIGHT HAND CONNECTIONS.
3. DISCONNECT PROVIDED AND INSTALL BY DIV. 26.
4. PROVIDE WITH EC MOTOR, TRANSFORMERS AND RELAYS AS REQUIRED, VALVE PACKAGE, ELASTORMERIC CLOSED CELL FOAM INSULATION, GALVANIZED DRAIN PAN.

AIR-TO-AIR ENERGY RECOVERY SCHEDULE																											
ID	MANUFACTURER AND MODEL NUMBER	TYPE	USAGE	OUTSIDE/SUPPLY					RETURN/EXHAUST					EFFECTIVE					SUPPLY FILTER	SUPPLY MOTOR SIZE (HP)	EXHAUST MOTOR SIZE (HP)	MCA	MOCP	V/PH/Hz	PHYSICAL		NOTES
				TOTAL/ SENSIBLE LOAD (BTUH)	AIRFLOW RATE (CFM)	ENTERING TEMP. DBWB (°F)	LEAVING TEMP. DBWB (°F)	STATIC PRESSURE (IN. WATER)	AIRFLOW RATE (CFM)	ENTERING TEMP. DBWB (°F)	LEAVING TEMP. DBWB (°F)	STATIC PRESSURE (IN. WATER)	SENSIBLE/ LATENT (%)	EXHAUST FILTER	LENGTH/ WIDTH/ HEIGHT (IN)	WEIGHT (LBS)											
ERV-1	RENEWAIRE HE-2XJINH-S19UU—ANT—L	PLATE	COOL	69,658 / 36,774	1,500	97.7 / 62.8	82.5 / 59.3	0.5	1,350	75 / 61.9	N/A	0.5	74.5 / N/A	2" MERV 8	2" MERV 8	2	2	18.5	25	208/160	64.25 / 35.5 / 42.875	700	1-4				
			HEAT	46,387 / 37,394	1,500	0 / 0	46.9 / 37.4	0.5	1,350	70 / 50	N/A	0.5															

1. PERFORMANCE LISTED AT 4,200 FEET ELEVATION.
2. PROVIDE WITH MOTOR STARTERS & CONTACTORS, TRANSFORMER WITH ISOLATION RELEY.
3. PROVIDE WITH PRE-WIRED FACTORY DISCONNECT.
4. PROVIDE WITH SUPPLY AIRFLOW CONTROL OPTION.

SPLIT SYSTEM																				
ID	MANUFACTURER	MODEL NUMBER	MODEL NUMBER	TOTAL COOLING CAPACITY (BTU/H)	SENSIBLE COOLING (BTU/H)	TOTAL HEATING CAPACITY (BTU/H)	HEATING CAPACITY @ 47°F (BTU/H)	INDOOR UNIT				OUTDOOR UNIT				REFRIGERANT LINES			NOTES	
								CFM RANGE	DIMENSIONS W" D" x H"	WEIGHT (LBS.)	AMPS (MCA)	DIMENSIONS W" x D" x H"	WEIGHT (LBS.)	AMPS (MCA)	MOCP	VOLTS/PH/Hz	LIQUID	GAS		
AC-1 / HP-1	MITSUBISHI	PEAD-A42AA7	PUZ-HA42NKA1	42,000	26,524	35,000	48,000	1040-1480	55-1/8" x 28-7/8" x 9-7/8"	110	3.5	41-5/16" x 14-3/16" x 52-11/16"	340	36	44	208-230/1/60	3/8	5/8	1-8	
AC-2 / HP-2	MITSUBISHI	PEAD-A42AA7	PUZ-HA42NKA1	42,000	26,524	35,000	48,000	1040-1480	55-1/8" x 28-7/8" x 9-7/8"	110	3.5	41-5/16" x 14-3/16" x 52-11/16"	340	36	44	208-230/1/60	3/8	5/8	1-8	

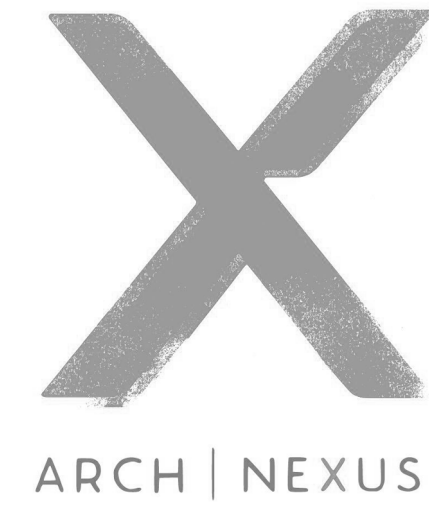
1. CAPACITIES LISTED ARE AT 4,200 FEET ELEVATION.
2. CAPACITIES RATED AT THE FOLLOWING OUTDOOR CONDITIONS: COOLING - 95 DEG. F. D.B., 75 DEG. F. W.B. HEATING - 40 DEG F DB
3. CAPACITIES RATED AT THE FOLLOWING INDOOR CONDITIONS: COOLING - 80 DEG. F. D.B., 67 DEG. F. W.B., HEATING - 70 DEG F DB
4. PROVIDE LOW AMBIENT HEAD CONTROLLER TO ALLOW COOLING OPERATION DOWN TO 0 DEG. F. D.B.
5. R410A REFRIGERANT.
6. WIRELESS REMOTE CONTROLLER, PROVIDE WALL MOUNTED HOLDER.
7. PROVIDE ACCESSORY BLUE DIAMOND MAXIBLUE CONDENSATE PUMP 110V/ 1PH, WITH RESERVOIR AND SENSOR FOR INDOOR UNIT.
8. DISCONNECT PROVIDED AND INSTALLED BY DIV. 26.

HOOD SCHEDULE														
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	AIR			PHYSICAL						
					MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN. WATER)	THROAT VELOCITY (FPM)	INLET HEIGHT ABOVE ROOF (IN)	TOTAL HEIGHT (IN)	THROAT DIA (IN)	OVERALL DIA (IN)	WEIGHT (LBS)	NOTES	
H-1	GREENHECK GRSI-20	ROOF	SPUN ALUMINUM	INTAKE	1,500	0.075	667	14	27	30	30	30	1,2,3	
H-2	GREENHECK GRSR-20	ROOF	SPUN ALUMINUM	RELIEF	1,500	0.075	667	14	27	30	30	30	1,2,3	

1. PERFORMANCE LISTED AT 4,200 FEET ELEVATION.
2. PROVIDE WITH 14" TALL ROOF CURB AND 120V MOTORIZED DAMPER. (DAMPERS TO OPEN WHEN ERV-1 IS OPERATIONAL).
3. VERIFY COLOR WITH ARCHITECT.

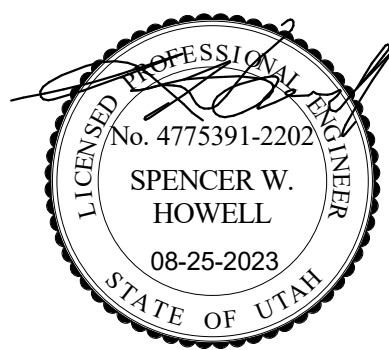
GRILLES, REGISTERS AND DIFFUSERS				
ID	MANUFACTURER	MODEL	MAX NC	DESCRIPTION
CD-1	PRICE	SPD	FACE STYLE: SQUARE PLAQUE DIFFUSER FACE SIZE: 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE APPLICATION: ENGINEERED VAV SYSTEMS MATERIAL: STEEL FINISH: COORDINATE COLOR WITH ARCHITECT	MOUNTING-FRAME: SURFACE OR LAY-IN, (CW CEILING TYPE.) PATTERN: 360° RADIAL HORIZONTAL AIR PATTERN DAMPER: OPPOSED BLADE MAX NC - 30 DAMPER: NONE REMOVABLE FACE
RG-1 / EG-1	PRICE	PDDR	FACE STYLE: PERFORATED RETURN AIR UNIT FACE SIZE: 24" x 24", 16" x 16" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. APPLICATION: AIR RETURN MATERIAL: STEEL FINISH: COORDINATE COLOR WITH ARCHITECT	MOUNTING-FRAME: SURFACE OR LAY-IN, (CW CEILING TYPE.) DAMPER: NONE MAX NC - 30 REMOVABLE FACE & CORE MAX VELCOTY: 500 FPM
SWS-1	PRICE	520S	FACE STYLE: DOUBLE DEFLECTION HIGH SIDEWALL SUPPLY REGISTER APPLICATION: CONSTANT VOLUME BLADE ORIENTATION: VERTICAL FRONT WITH REAR HORIZONTAL ADJUSTABLE VANES FRONT BLADES PARALLEL TO SHORT DIMENSION. MATERIAL: STEEL	FINISH: COORDINATE COLOR WITH ARCHITECT FRAME: 1.25" BORDER MOUNTING: SURFACE PATTERN: ADJUSTIBLE DAMPER: OPPOSED BLADE MAX NC 30 CORE: REMOVABLE
SWR-1	OMITTED			

1. ALL SUPPLY GRILES ARE TO BE CD-1, ALL RETURN GRILLES ARE TO BE RG-1, ALL EXHAUST GRILLES ARE TO BE EG-1, UNLESS OTHERWISE NOTED.
2. ALL DUCT RUNOUT TO DIFFUSERS, GRILLES, REGISTERS ARE TO BE NECK SIZE, UNLESS OTHERWISE NOTED.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City, UT 84101

Date Revision
1 10-16-23 PLAN REVIEW 01

CONSTRUCTION
DOCUMENTS
(BP-2, P.1)

NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

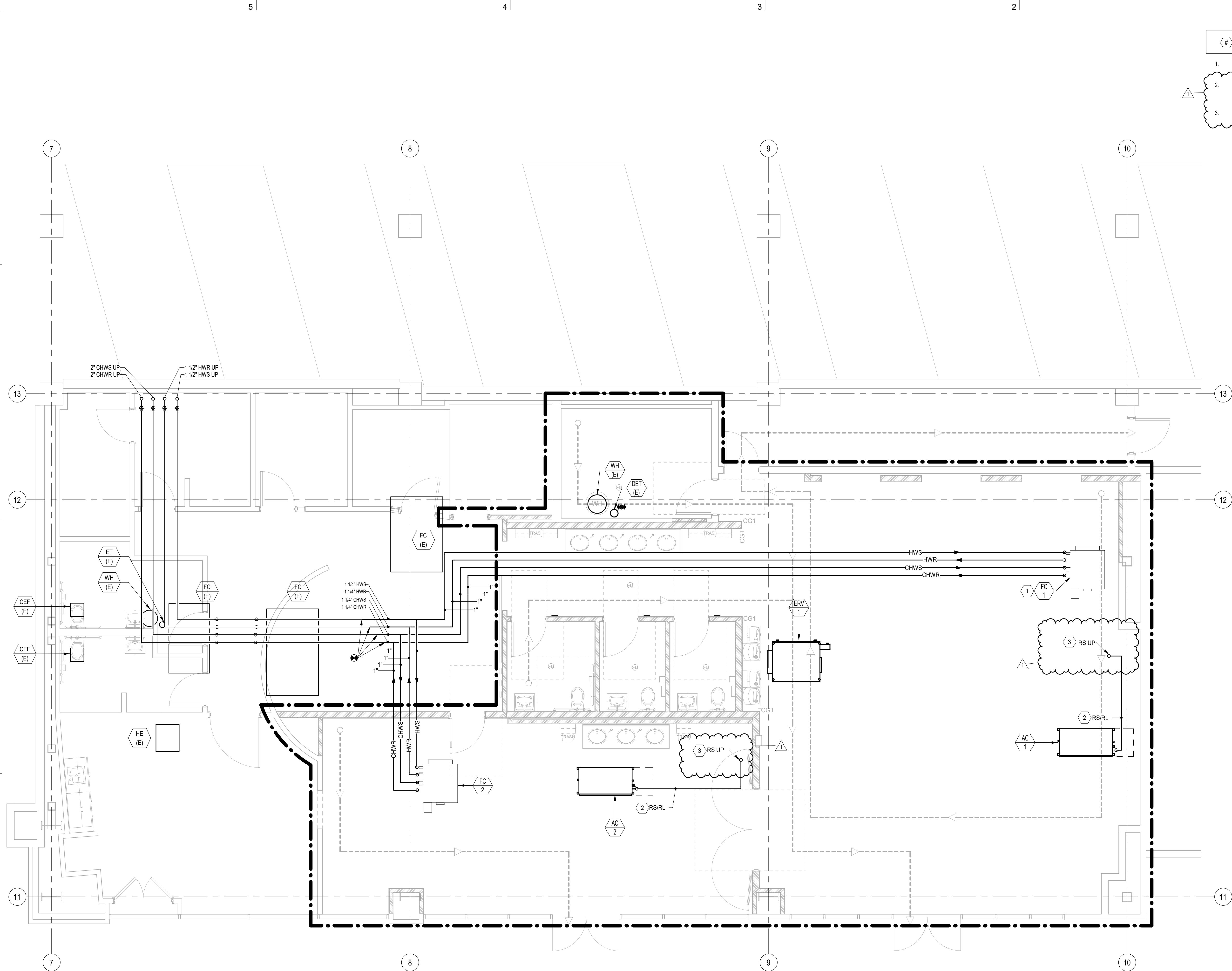
MECHANICAL
SCHEDULES



181 East 5600 South
Murray, Utah 84107
O: (801)530-3148
www.vbfa.com
VBFA Project #: 23206

M601

10/16/2023 4:19:54 PM



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

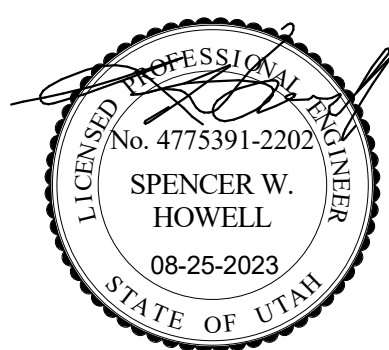
KEYED NOTES

1. PROVIDE A 3-WAY VALVE IN HEATING WATER SUPPLY AND RETURN PIPING SERVING FAN COIL UNIT.
2. SINGLE LINE SHOWN FOR CLARITY. PROVIDE RS/RL PIPING AS REQUIRED. SIZE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE REFRIGERANT PIPING UP TO OUTDOOR UNIT AT THIS LOCATION.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT

110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

CONSTRUCTION DOCUMENTS (BP-2, P.1)

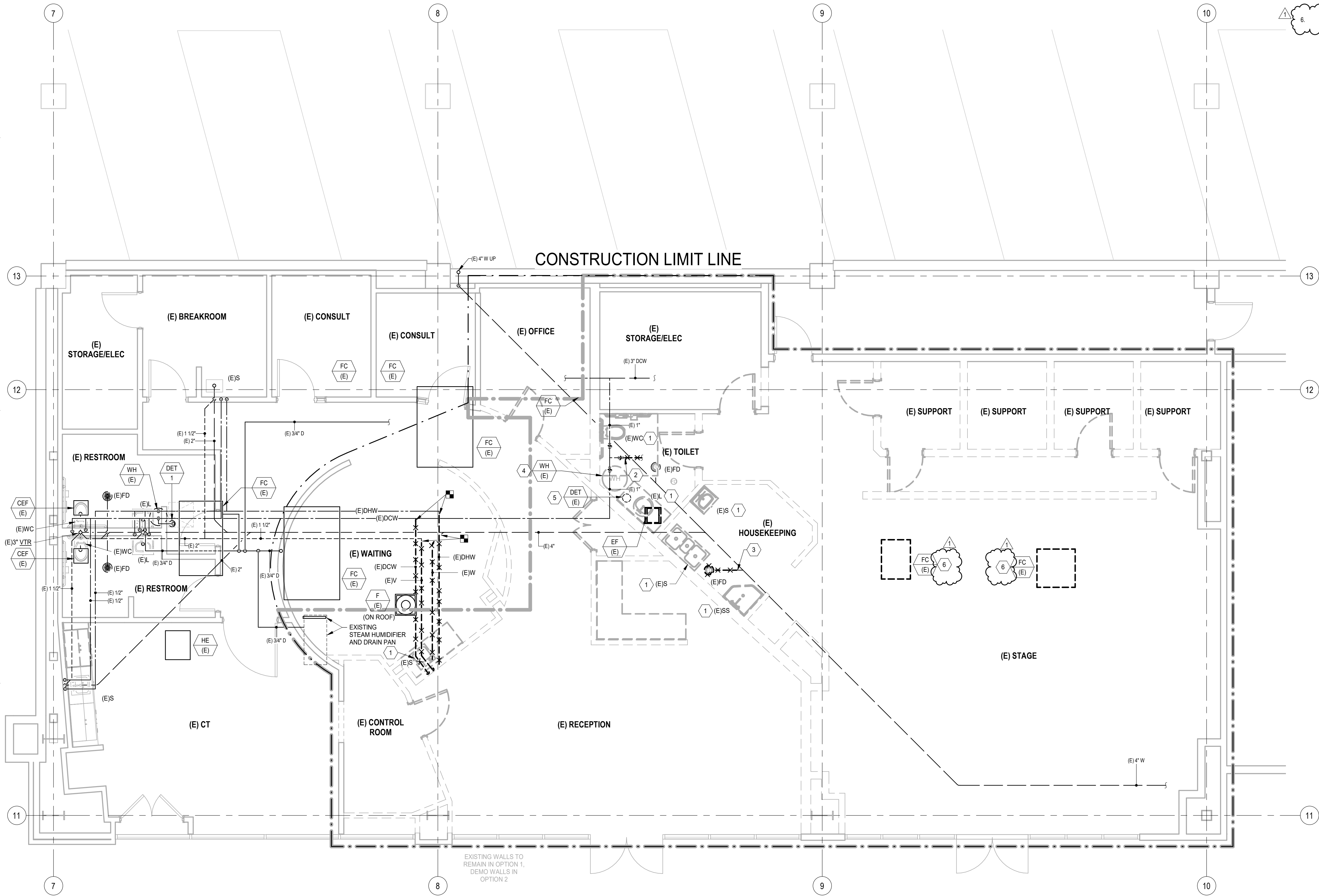
NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

MECH. PIPING FLOOR PLAN



MP101

10/16/2023 4:19:59 PM
A



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

KEYED NOTES

1.

REMOVE PLUMBING FIXTURE AND ASSOCIATED PIPING BACK TO MAINS AND CAP. PATCH FLOOR. TO MATCH EXISTING.

2.

DEMOLISH DOMESTIC COLD WATER BACK TO VALVE.

3.

DEMOLISH EXISTING FLOOR DRAIN AND PIPING BACK TO MAIN AND CAP. PATCH FLOOR TO MATCH EXISTING FLOOR.

4.

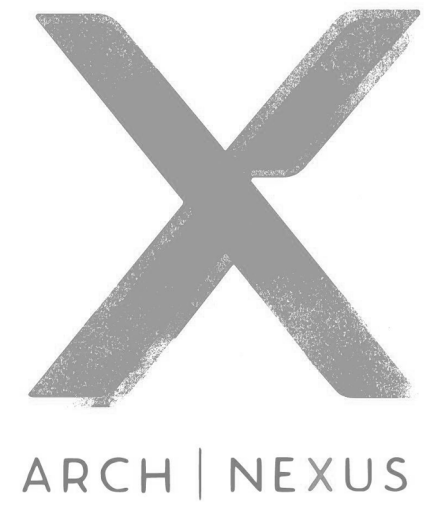
REMOVE AND SALVAGE EXISTING WATER HEATER FOR REUSE.

5.

REMOVE AND SALVAGE EXISTING DOMESTIC EXPANSION TANK FOR REUSE.

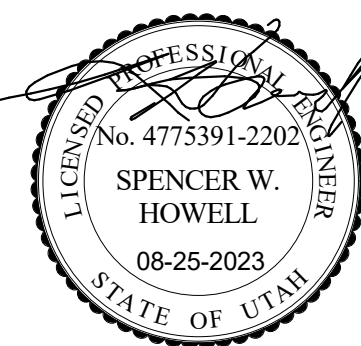
6.

DEMOLISH ALL ASSOCIATED CONDENSATE DRAIN PIPING.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

**CONSTRUCTION
DOCUMENTS
(BP-2, P.1)**

NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

**PLUMBING
DEMOLITION
FLOOR PLAN**



PD100

10/16/2023 4:19:56 PM

5

4

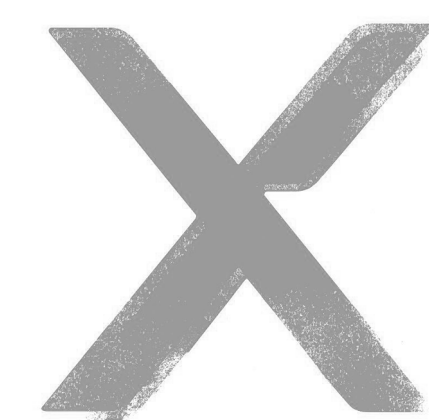
3

2

1

KEYED NOTES

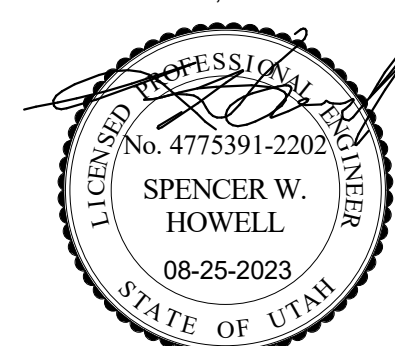
1. DROP WASTE TO CONNECT TO EXISTING WASTE AT THIS LOCATION.
2. ROUTE CONDENSATE DRAIN TO TAILPIPE OF LAV/SINK. REFERENCE PLUMBING DETAILS.
3. CONNECT NEW 2" DOMESTIC COLD WATER TO EXISTING 3" MAIN.
4. ROUTE VENT FROM CONNECTION IN PARKING GARAGE UP IN WALL CAVITY TO ABOVE CEILING.
5. ROUTE DOMESTIC HOT WATER DOWN IN WALL FOR SERVICE TO PUBLIC LAVATORY(IES). AFTER LAST FIXTURE RETURN PIPING BACK TO SET HEIGHT AND CONTINUE LOOP.
6. BRONZE VALVE AND GASKET FOR FUTURE ADDITION.
7. REFERENCE PLUMBING DETAILS. TYPICAL.



ARCH | NEXUS

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County CLARK PLANETARIUM NEW SPACE TENANT IMPROVEMENT

110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

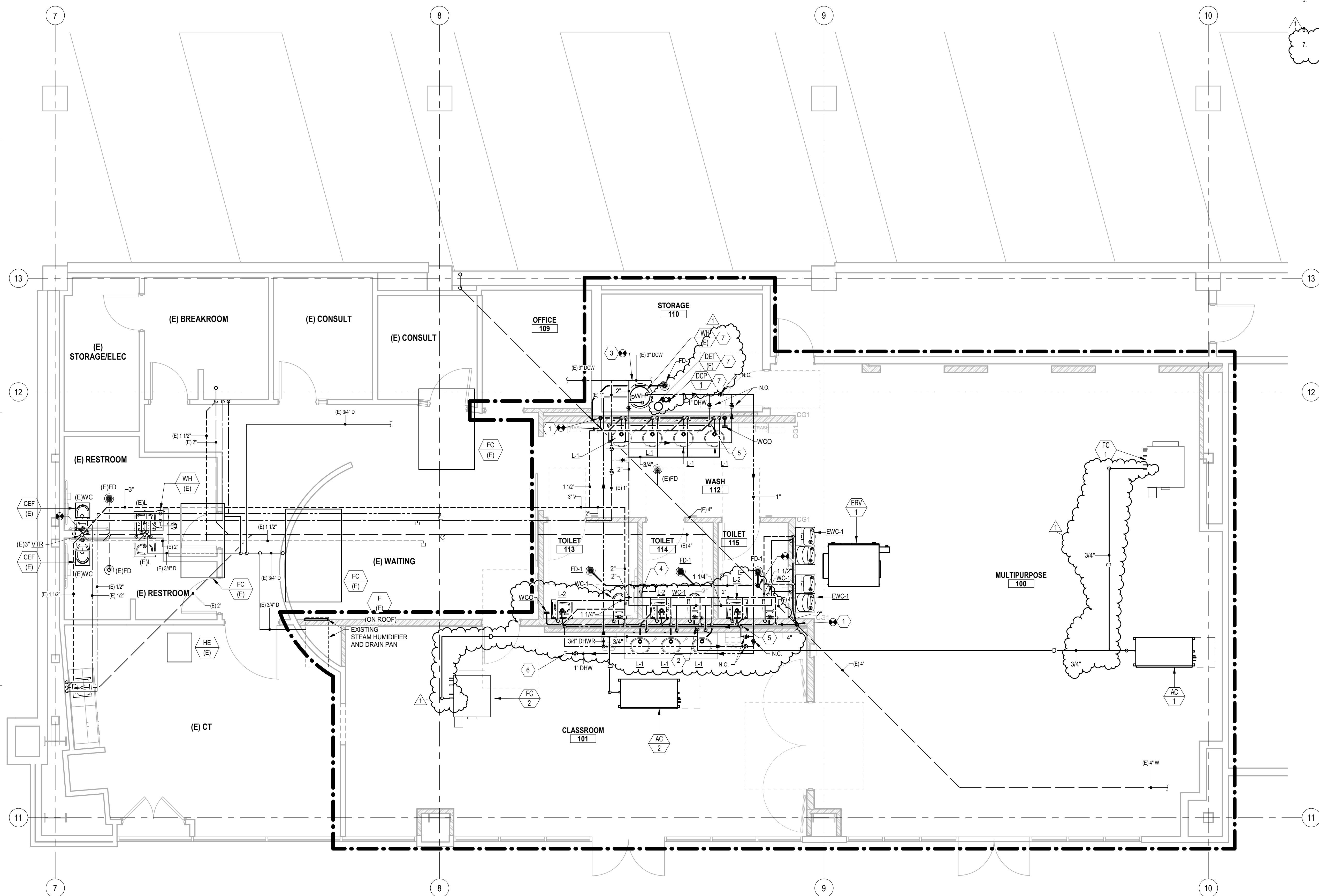
CONSTRUCTION DOCUMENTS (BP-2, P.1)

NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

PLUMBING FLOOR PLAN

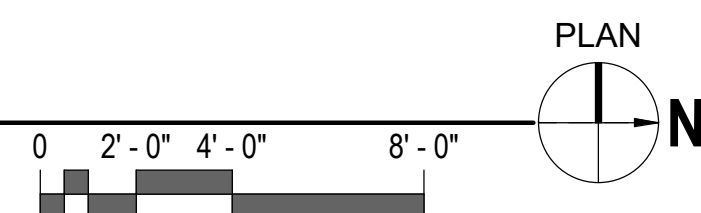


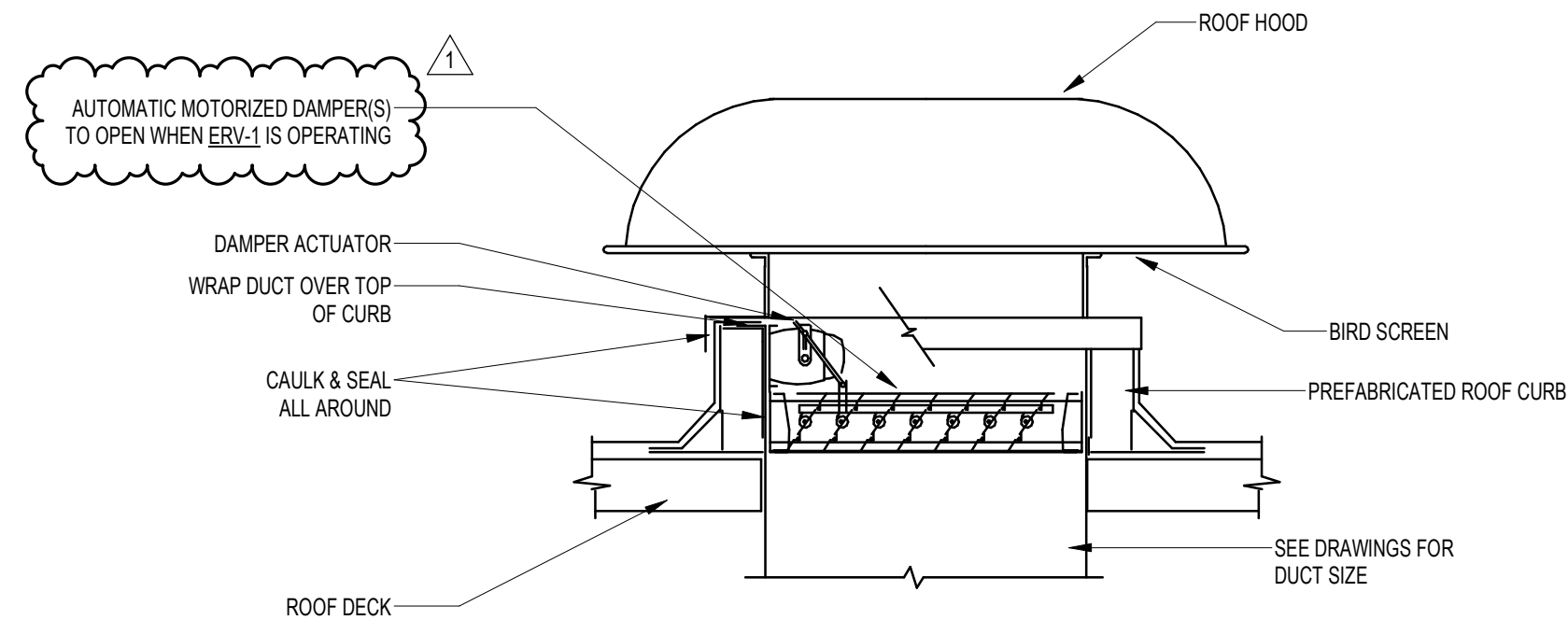
P101



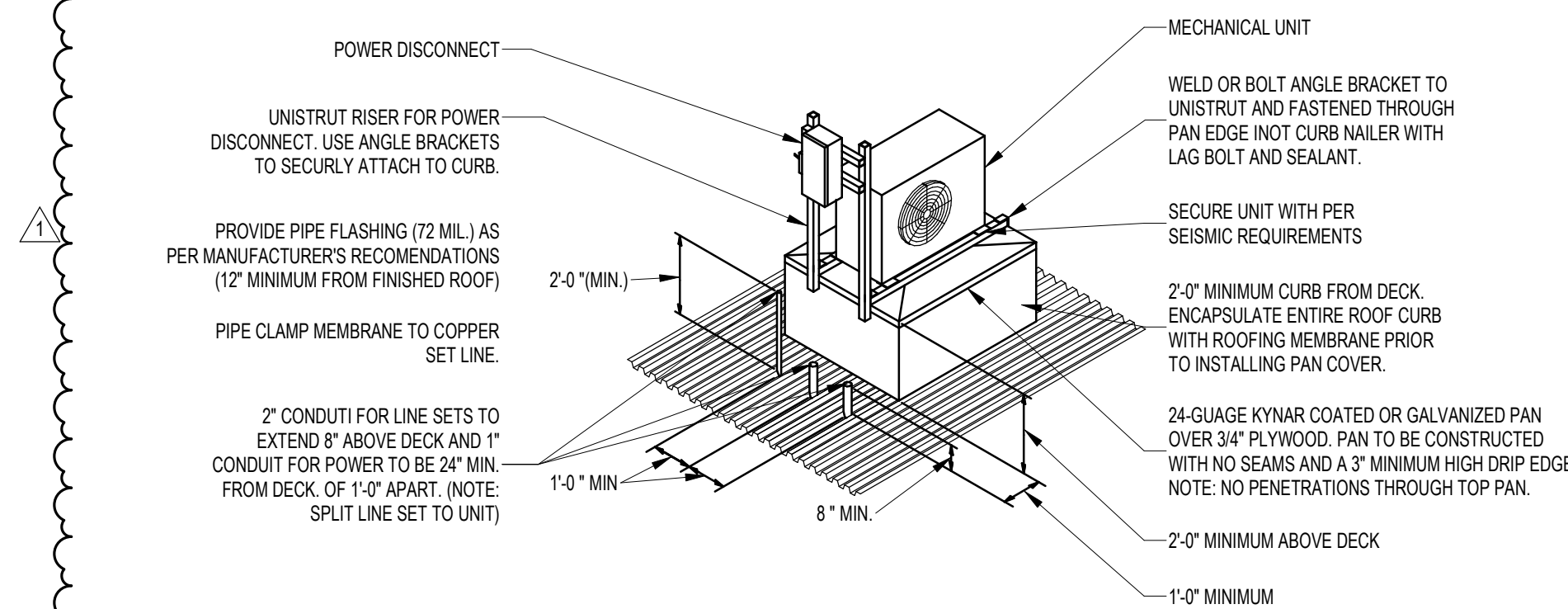
1 PLUMBING FLOOR PLAN

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

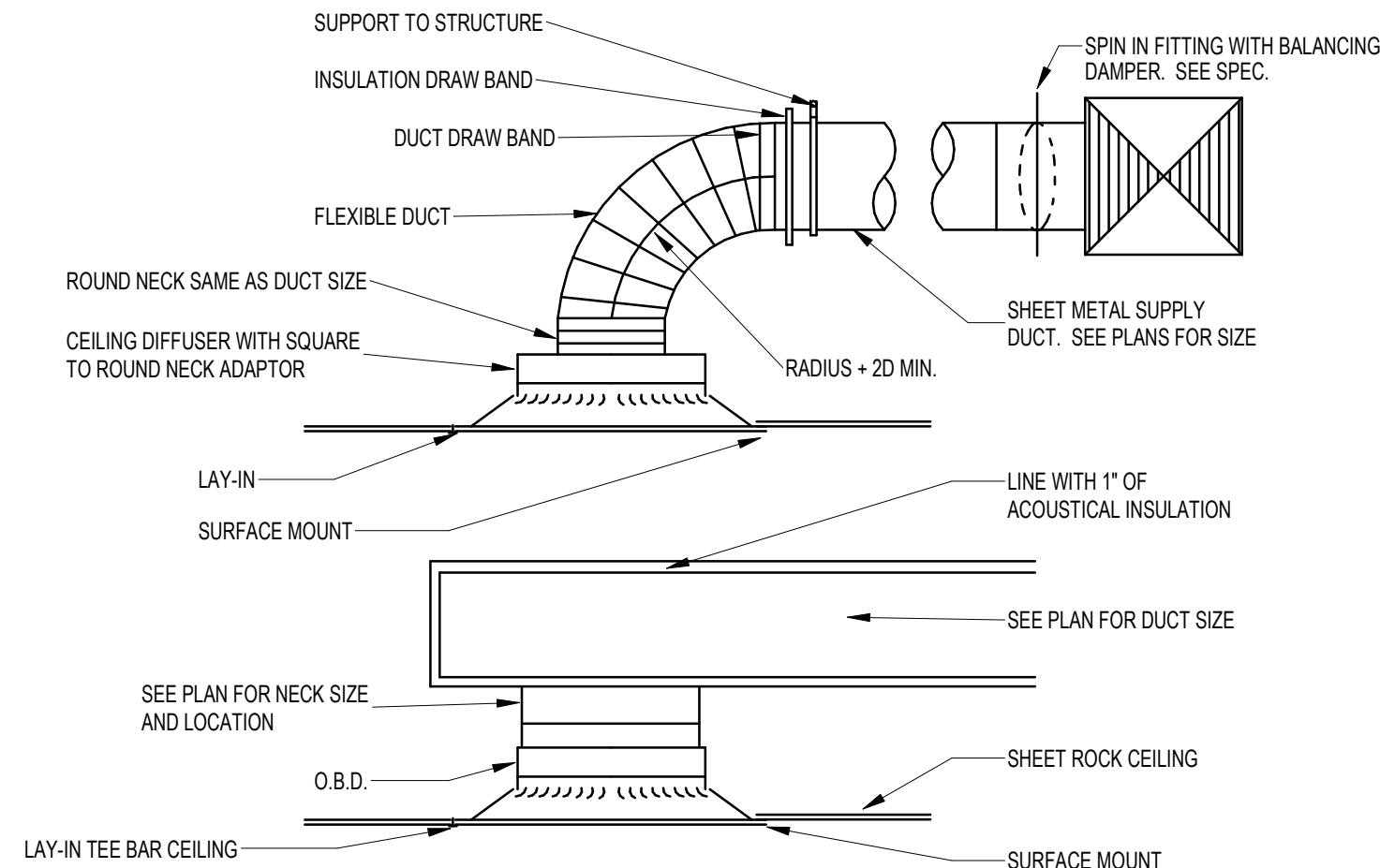




9 ROOF HOOD WITH MOTORIZED DAMPER DETAIL
NOT TO SCALE

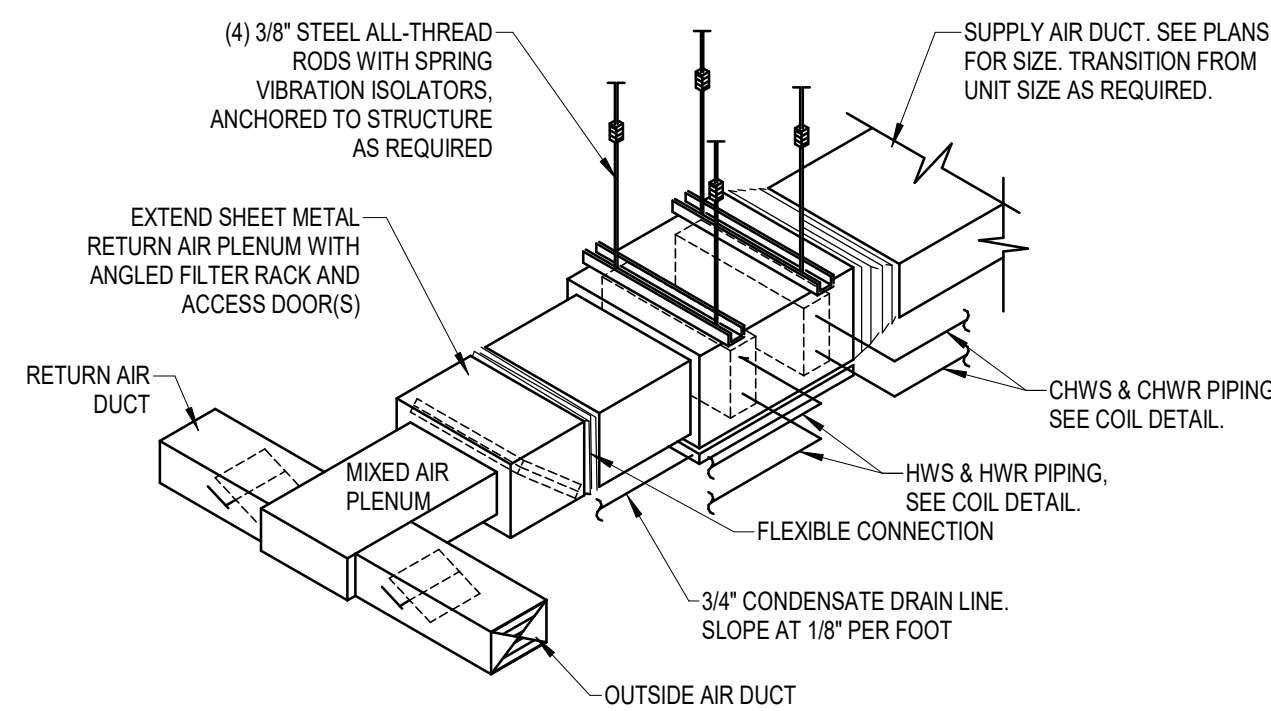


10 ROOF MOUNTED SPLIT SYSTEM CONDENSING UNIT DETAIL
NOT TO SCALE

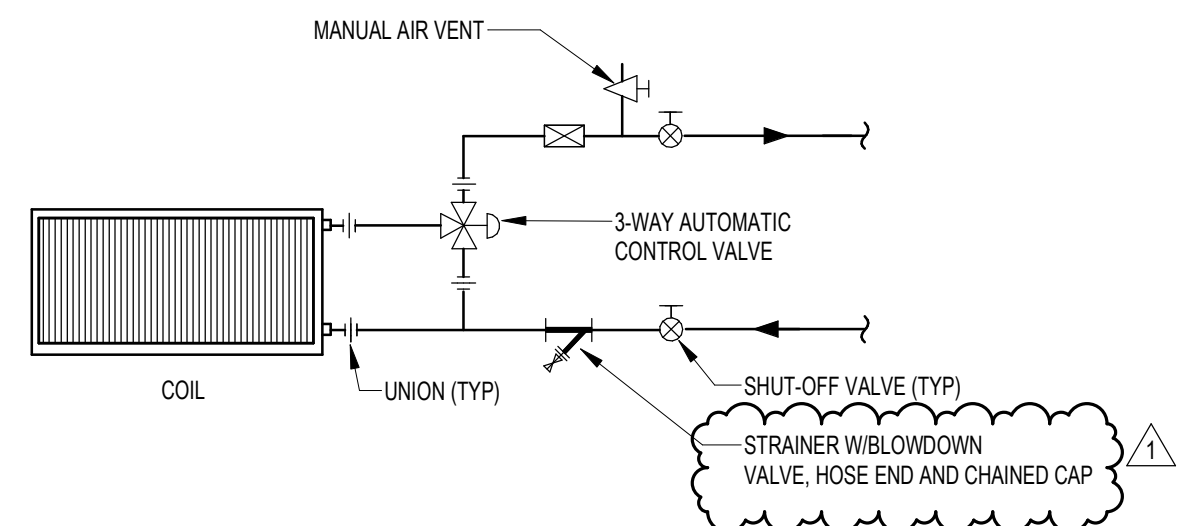


NOTES:
1. EXHAUST AND RETURN GRILLES ARE SIMILAR.
2. EITHER METHOD IS ACCEPTABLE

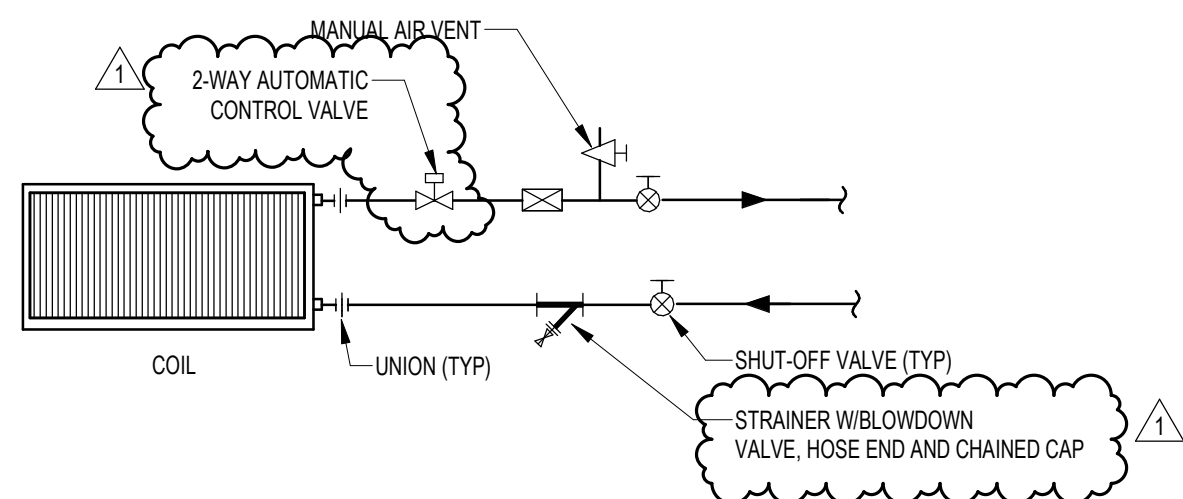
5 DIFFUSER CONNECTION DETAIL
NOT TO SCALE



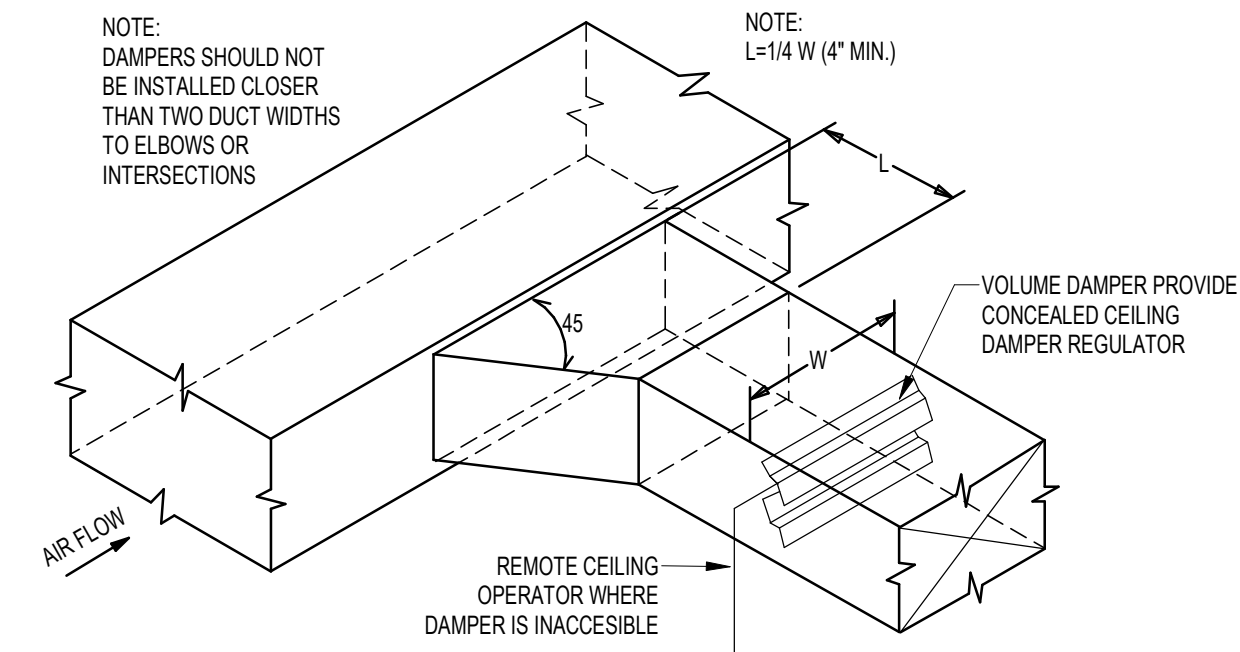
6 FAN COIL UNIT DETAIL
NOT TO SCALE



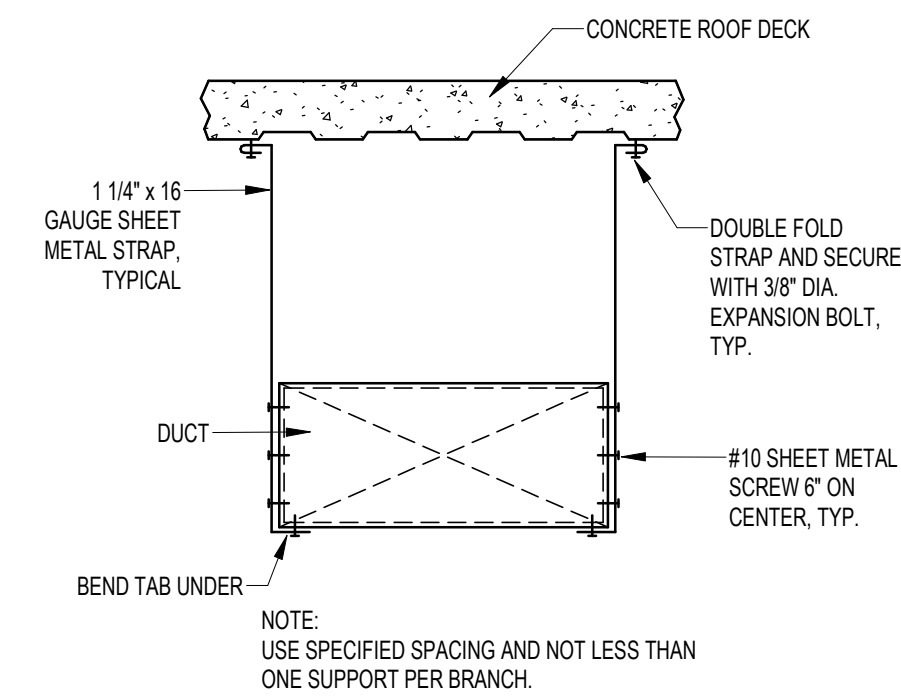
7 COIL PIPING DETAIL WITH 3-WAY VALVE
NOT TO SCALE



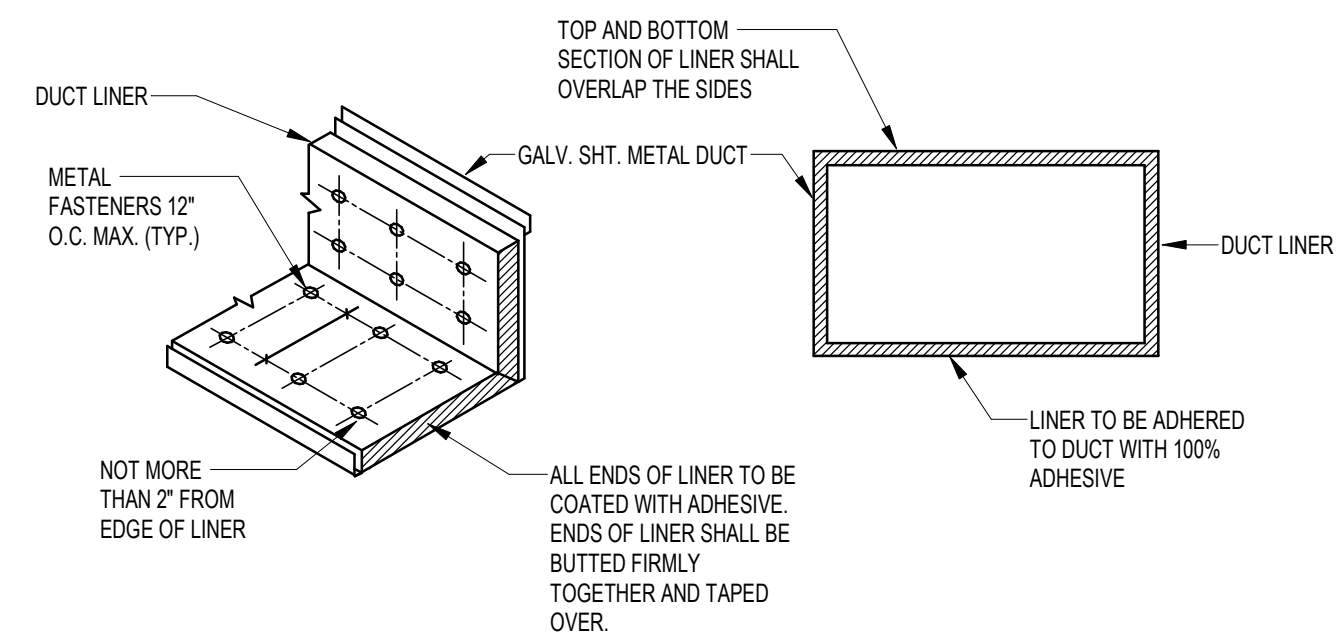
8 COIL PIPING DETAIL
NOT TO SCALE



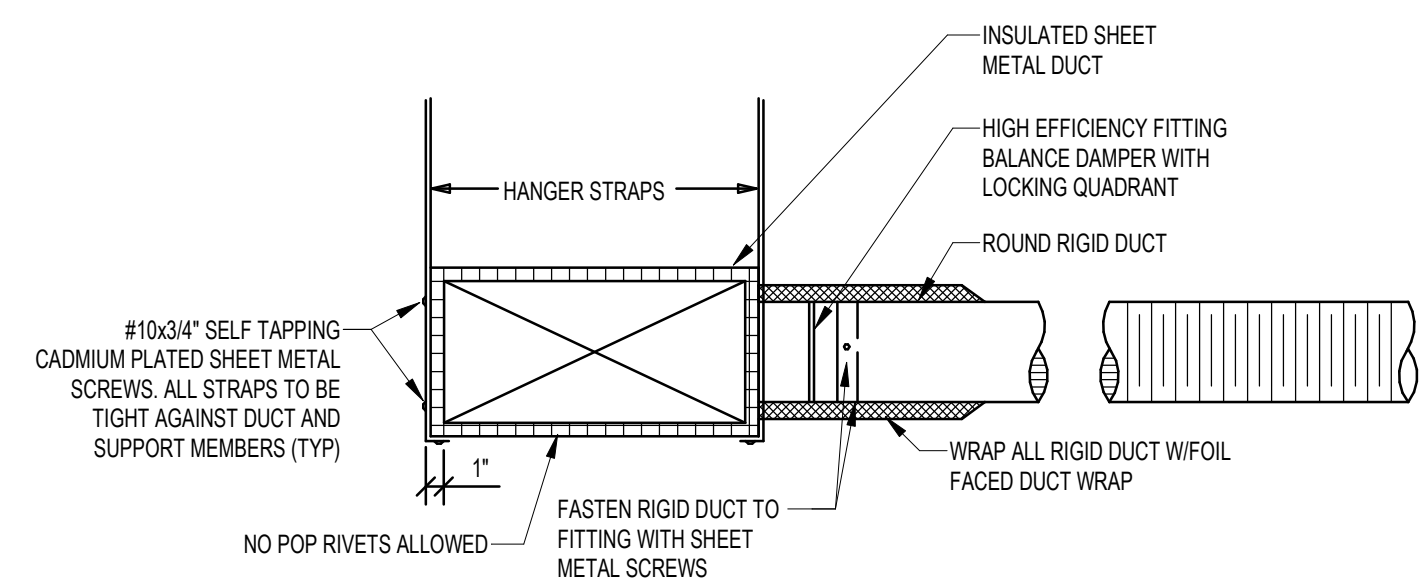
1 BRANCH DUCT TAKE-OFF WITH DAMPER DETAIL
NOT TO SCALE



2 RECTANGULAR DUCT DETAIL
NOT TO SCALE



3 RECTANGULAR DUCT LINER DETAIL
NOT TO SCALE



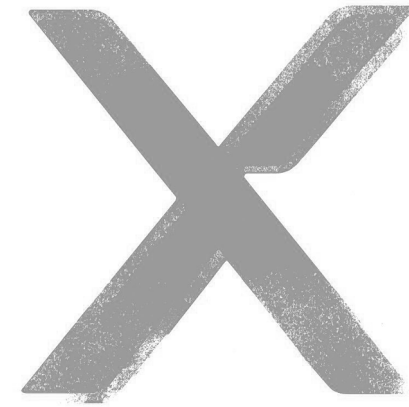
4 FLEX DUCT WITH HIGH EFFICIENCY FITTING DETAIL
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE										
ID	FIXTURE	CW (IN)	HW (IN)	W (IN)	V (IN)	SPECIFICATION				
WC-1	WATER CLOSET, WALL MOUNT FLUSH VALVE	1	--	4	2	FIXTURE:	AMERICAN STANDARD AFWALL 2257.101, VITREOUS CHINA, ELONGATED BOWL, TOP SPUD, 1.6GPF.			
						VALVE:	SLOAN REGAL OPTIMA SMO MODEL 111-SMO LOW CONSUMPTION EXPOSED, BATTERY POWERED, SIDE MOUNT SENSOR OPERATED, 1.6 GPF FLUSH VALVE			
						SEAT:	AMERICAN STANDARD 5901.100 ELONGATED BOWL, OPEN FRONT SEAT LESS COVER, ANTIMICROBIAL SEAT.			
						ACCESSORIES:	SMITH 0210 HORIZONTAL (LEFT OR RIGHT HAND AS REQUIRED) OR SMITH 0230 VERTICAL ADJUSTABLE CARRIER WITH FOOT SUPPORT; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE; SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.			
L-1	LAVATORY, COUNTER MOUNT, MANUAL FAUCET	1/2	1/2	1 1/2	1 1/2	FIXTURE:	ZURN Z5110 20" X 17" COUNTERTOP LAVATORY, VITREOUS CHINA, 4" CENTER, FRONT OVERFLOW			
						FAUCET:	CHICAGO 802-VE2805-317ABCP DECK-MOUNTED MANUAL FAUCET WITH 4" CENTERS, VANDAL PROOF WRISTBLADE HANDLE, LAMINAR SPRAY 0.5 GPM			
						ACCESSORIES:	PROVIDE WATTS NO. 7C DUAL CHECKS IN HOT AND COLD SUPPLIES. PROVIDE 0.5 GPM VANDAL RESISTANT AERATOR. PROVIDE LOOSE KEY ANGLE STOPS AND CHROME PLATED			
							COPPER SUPPLIES AND 1/2 GA. CAST BRASS, CHROME PLATED P-TRAP. COVER ALL EXPOSED PIPING WITH WHITE "HAND-LAV GUARD" PROTECTOR TO MEET ADA REQUIREMENTS.			
							PROVIDE ASSE 1070 THERMOSTATIC MIXING VALVE			
						FIXTURE:	AMERICAN STANDARD 2845-2010 WALL HUNG LAVATORY, ENAMELED CAST IRON, GLOSSY PORCELAIN FINISH, FRONT OVERFLOW.			
L-2	LAVATORY, WALL HUNG, MANUAL FAUCET	1/2	1/2	1 1/2	1 1/2	FAUCET:	CHICAGO 802-VE2805-317ABCP DECK-MOUNTED MANUAL FAUCET WITH 4" CENTERS, VANDAL PROOF WRISTBLADE HANDLE, LAMINAR SPRAY 0.5 GPM			
						ACCESSORIES:	PROVIDE WATTS NO. 7C DUAL CHECKS IN HOT AND COLD SUPPLIES. PROVIDE 0.5 GPM VANDAL RESISTANT AERATOR. PROVIDE LOOSE KEY ANGLE STOPS AND CHROME PLATED			
							COPPER SUPPLIES AND 1/2 GA. CAST BRASS, CHROME PLATED P-TRAP. COVER ALL EXPOSED PIPING WITH WHITE "HAND-LAV GUARD" PROTECTOR TO MEET ADA REQUIREMENTS.			
							PROVIDE ASSE 1070 THERMOSTATIC MIXING VALVE			
EW-1	ELECTRIC WATER COOLER, BI-LEVEL & BOTTLE FILLER	1/2	--	1 1/2	1 1/2	FIXTURE:	ELKAY LZSTL8WSLK, WALL MOUNTED, BARRIER FREE, ADA ELECTRIC WATER COOLER WITH FLEXIBLE BUBBLER GUARD, STAINLESS STEEL BOWLS AND CONTROL BUTTONS ON FRONT AND SIDES. COMPRESSOR TO BE 115V, 60 HZ WITH CAPACITY TO DELIVER AT LEAST 8.0 GPH OF 50°F WATER. 1-1/2" CAST BRASS CHROME-PLATED P-TRAPS.			
							COORDINATE THE ADA SIDE WITH THE ARCHITECT. PROVIDE THREE EXTRA FILTERS.			
FD-1	FLOOR DRAIN	--	--	2	2	FIXTURE:	SMITH FIGURE 2005Y-P050 FLOOR DRAIN WITH CAST IRON BODY AND FLASHING COLLAR WITH 6" ROUND NICKEL BRONZE ADJUSTABLE STRAINER HEAD WITH SECURED GRATE AND TRAP GUARD.			

1. ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.

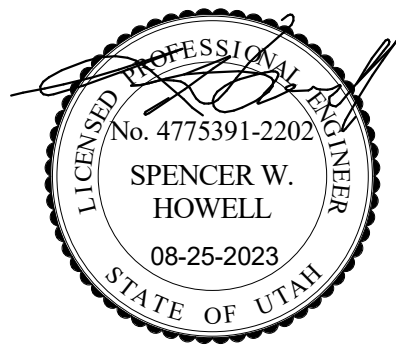
DOMESTIC RECIRC PUMP SCHEDULE												
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID			CONSTRUCTION	ELECTRICAL				NOTES
				FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)		MOTOR SIZE (HP)	MOTOR SPEED (RPM)	FULL LOAD AMPS	VOLT/PH/Hz	
DCP-1	BELL AND GOSSETT PL-36	REFERENCE PLAN	INLINE	2	WATER	25	BRONZE	1/6	3300	2.1	120/1/60	1,2,3

1. DISCONNECT PROVIDED AND INSTALLED BY DIV. 26.
2. PUMP MUST BE SUITABLE FOR DOMESTIC HOT WATER RECIRC. APPLICATION.
3. PROVIDE WITH AQUASTAT (ADJUSTABLE), SET TO 120° F.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
http://www.archnexus.com

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019



Salt Lake County
CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT
110 S 400 W, Salt Lake City, UT 84101

#	Date	Revision
1	10-16-23	PLAN REVIEW 01

CONSTRUCTION
DOCUMENTS
(BP-2, P.1)

NEXUS PROJECT #: 22070
CHECKED BY: GR
DRAWN BY: JN
DATE: 25 AUGUST 2023

PLUMBING
SCHEDULES



181 East 5600 South
Murray, Utah 84107
O: (801)530-3148
www.vbfa.com
VBFA Project #: 23206

P601

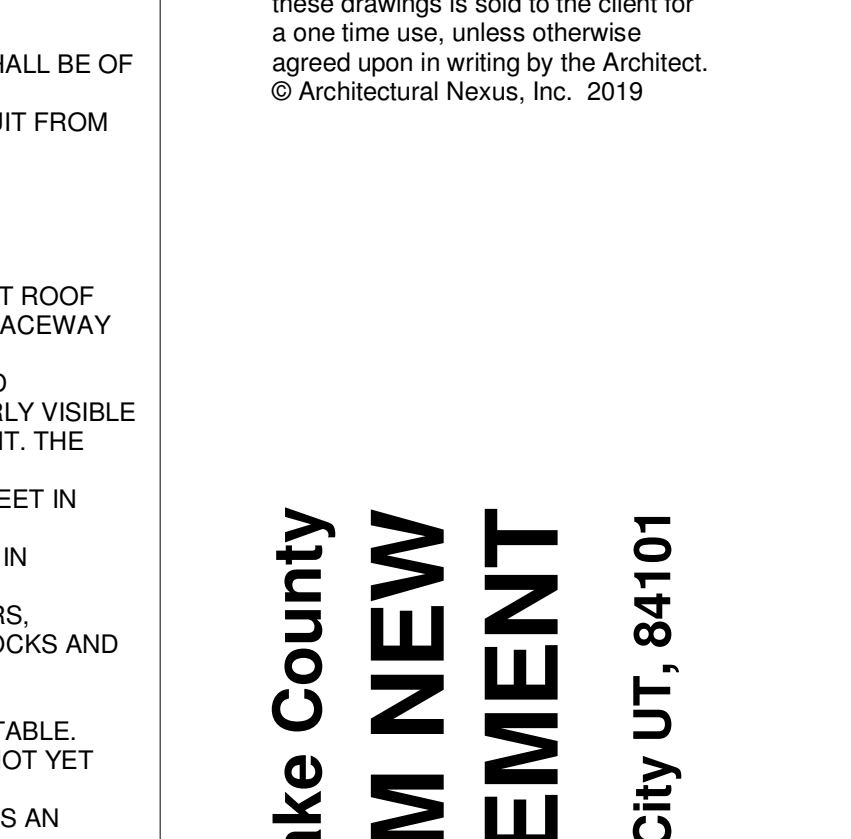
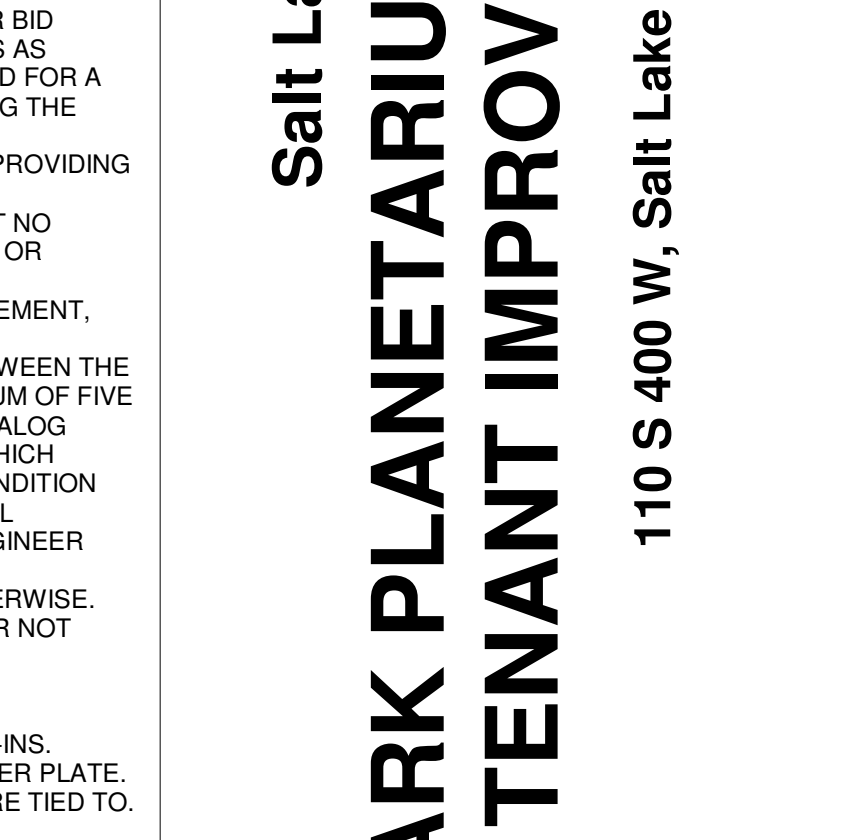
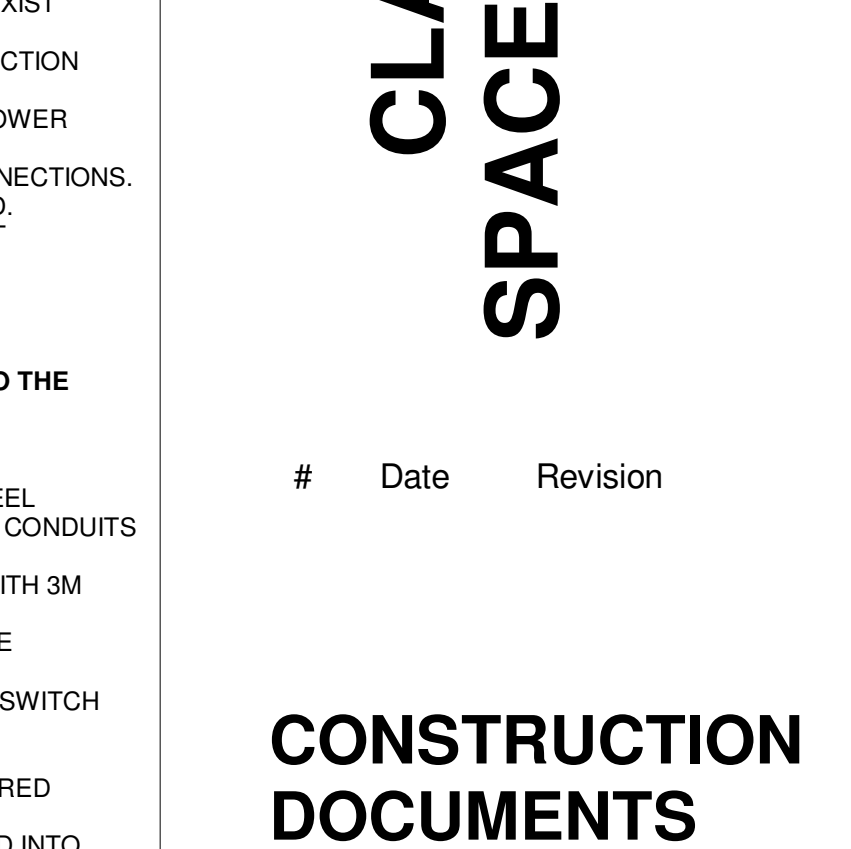
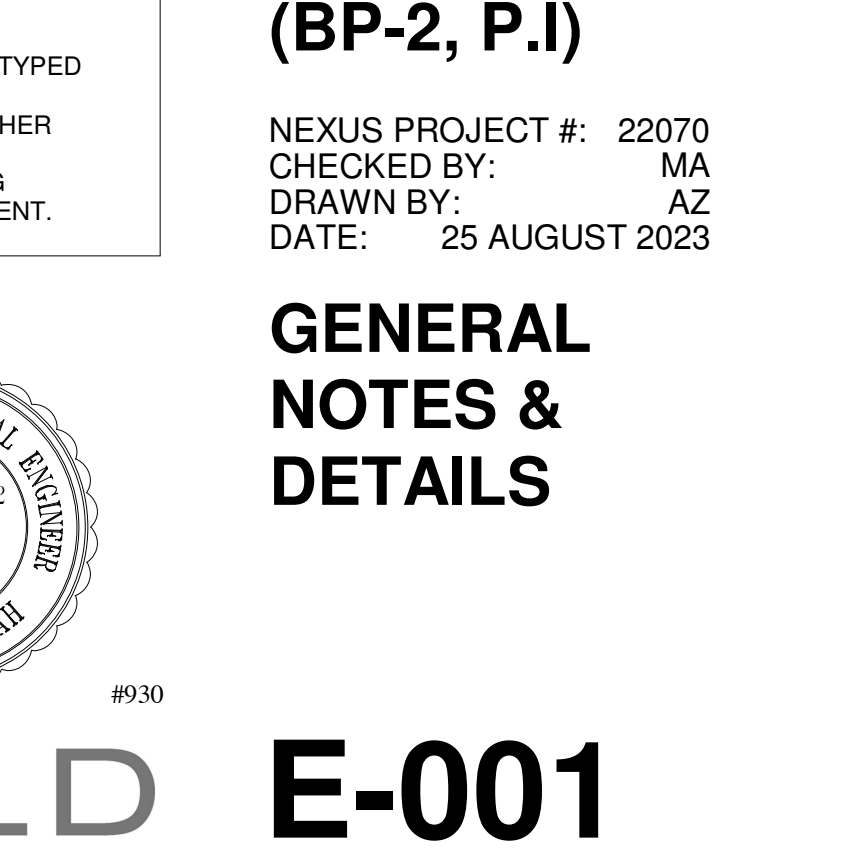
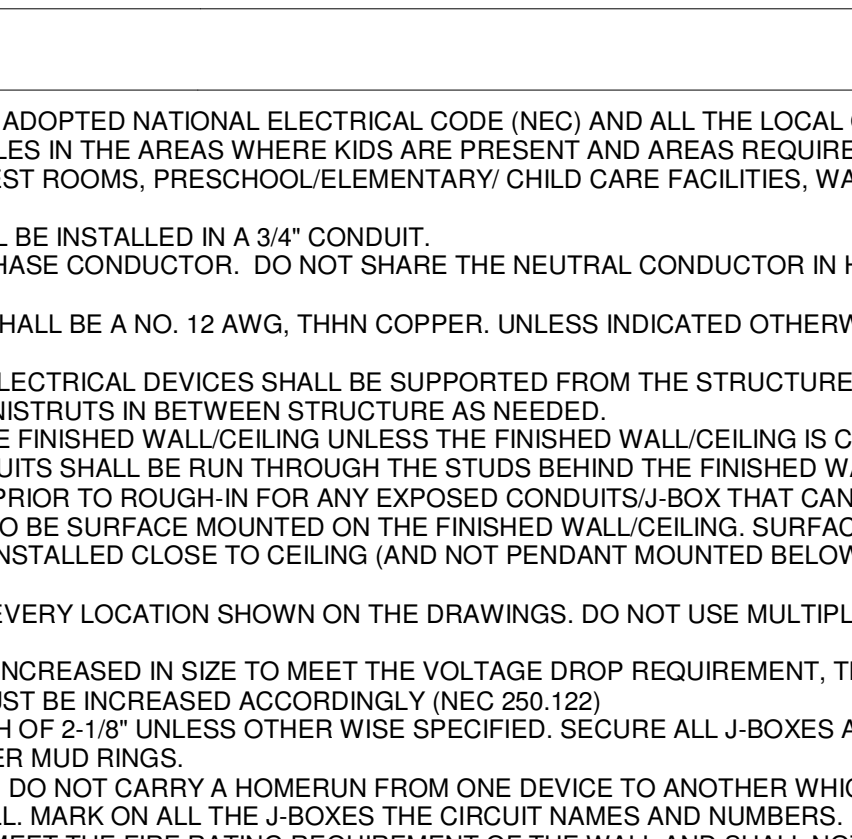
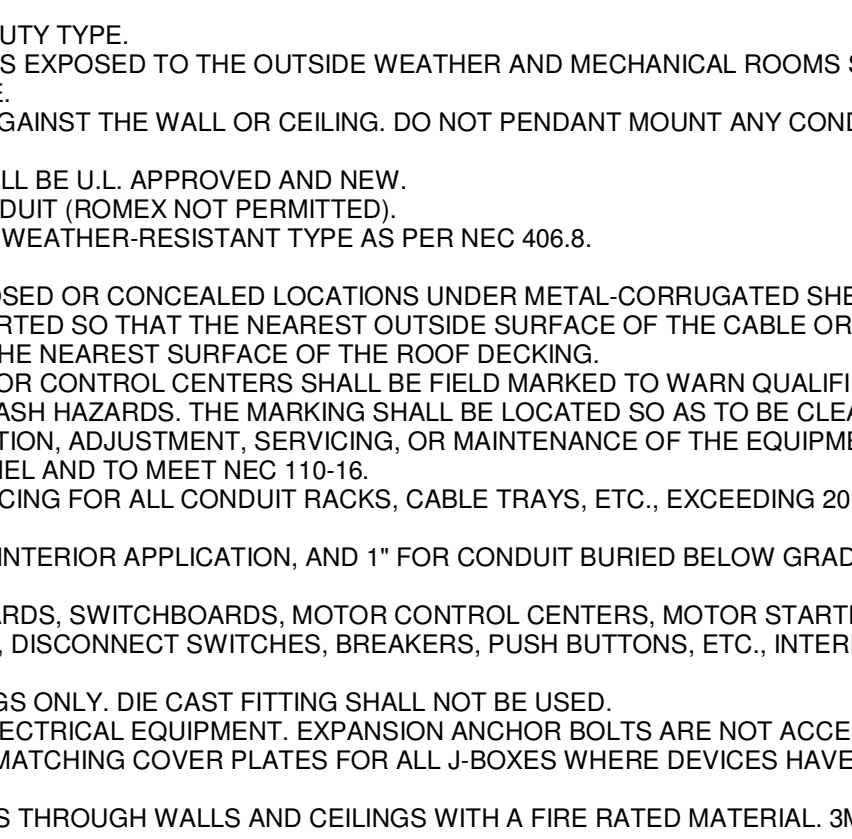
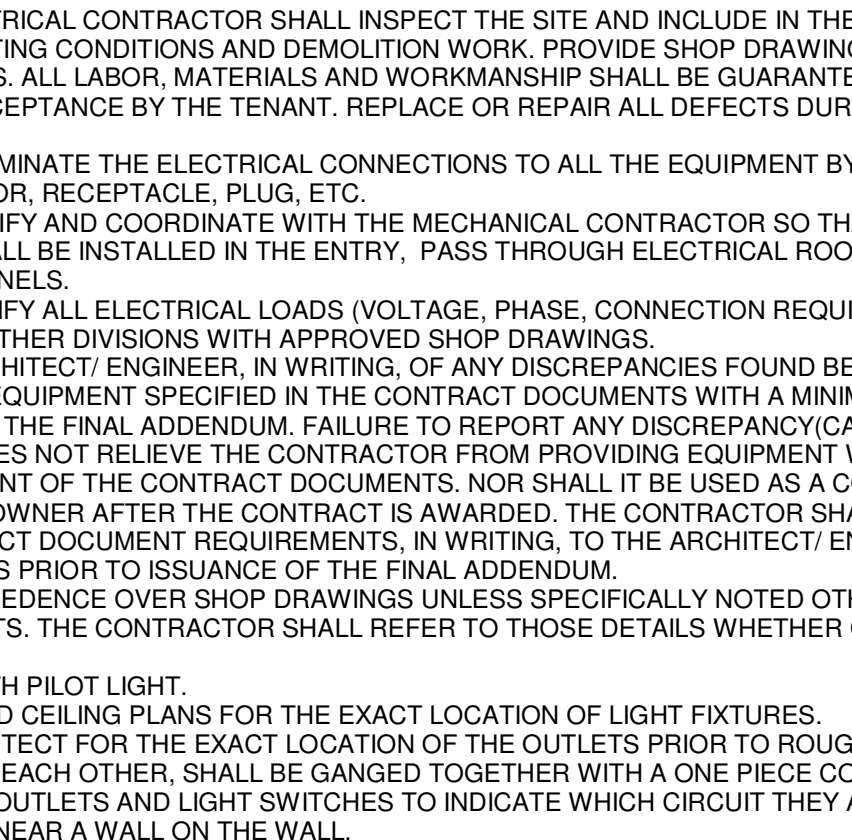
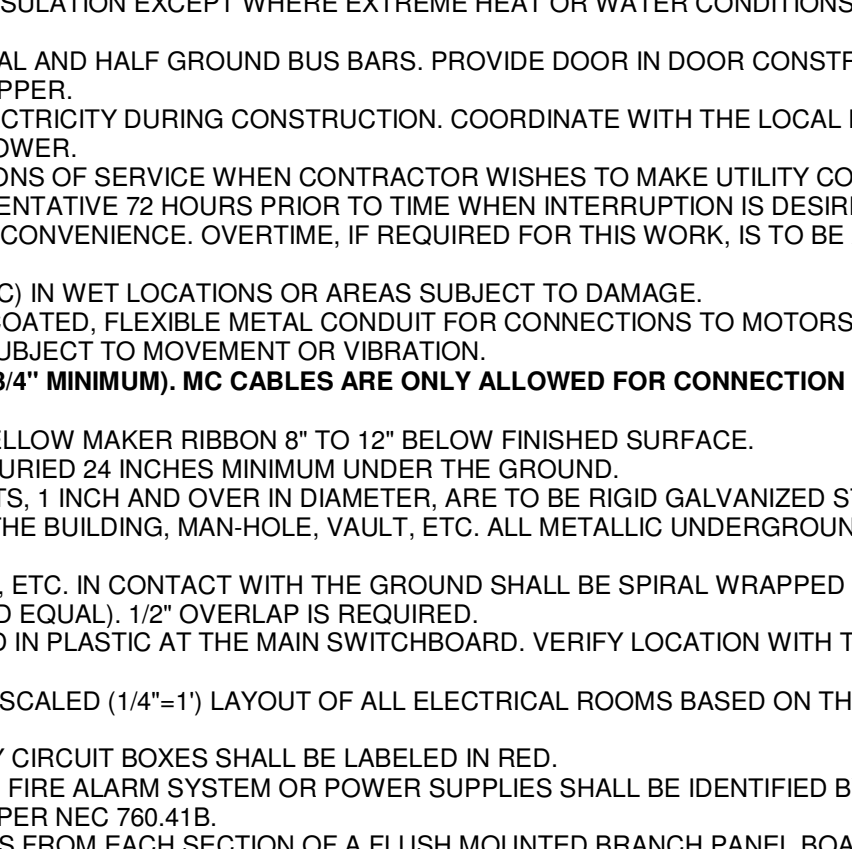
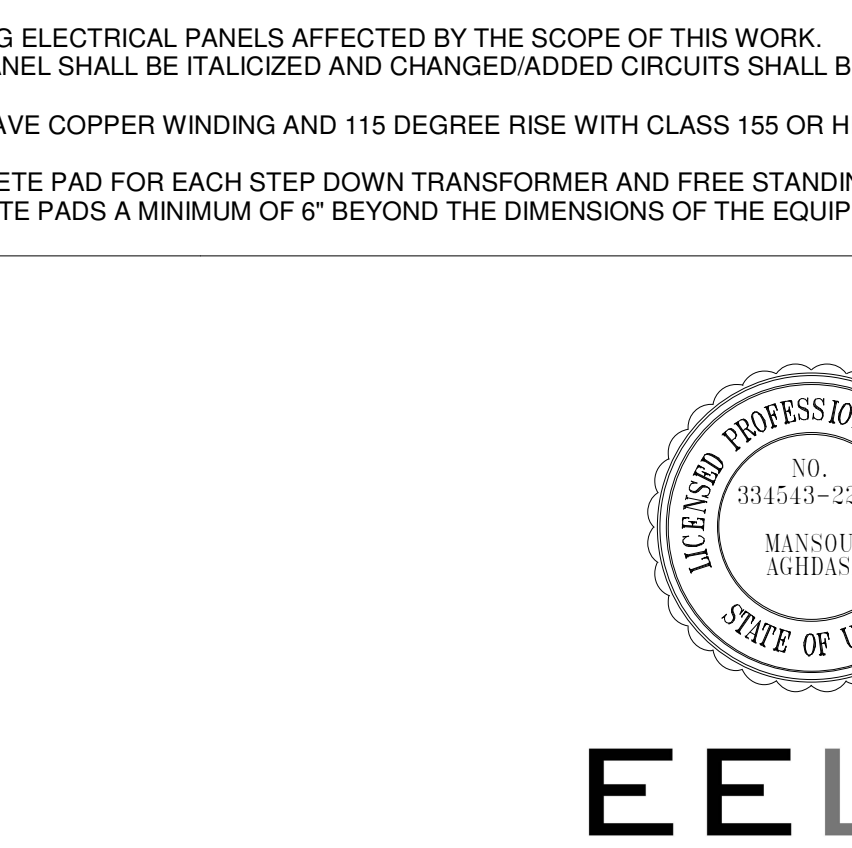
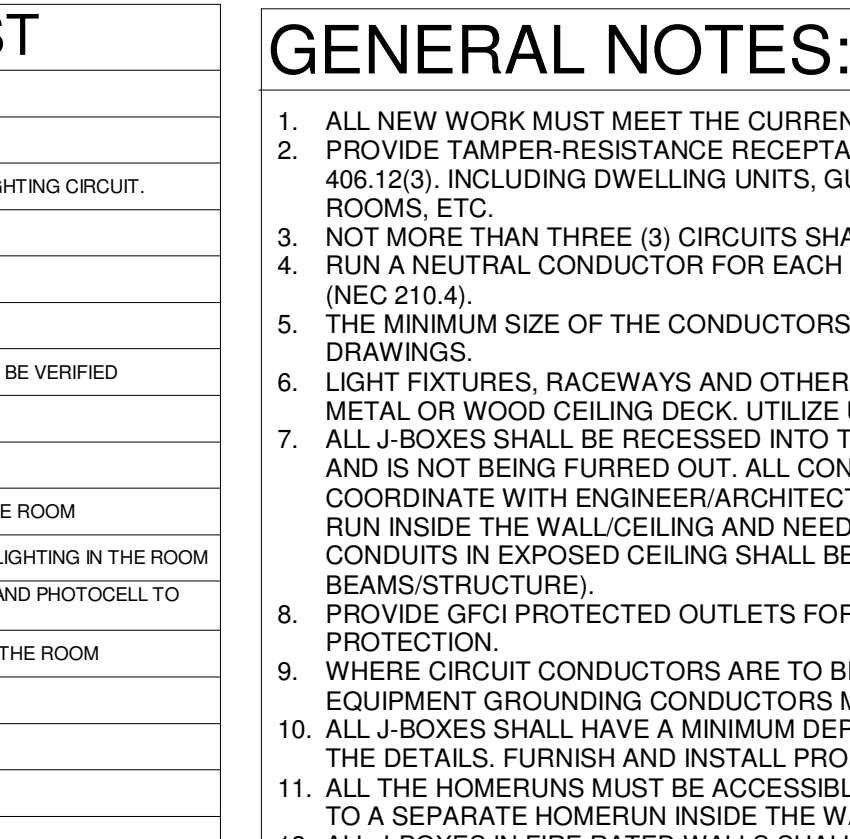
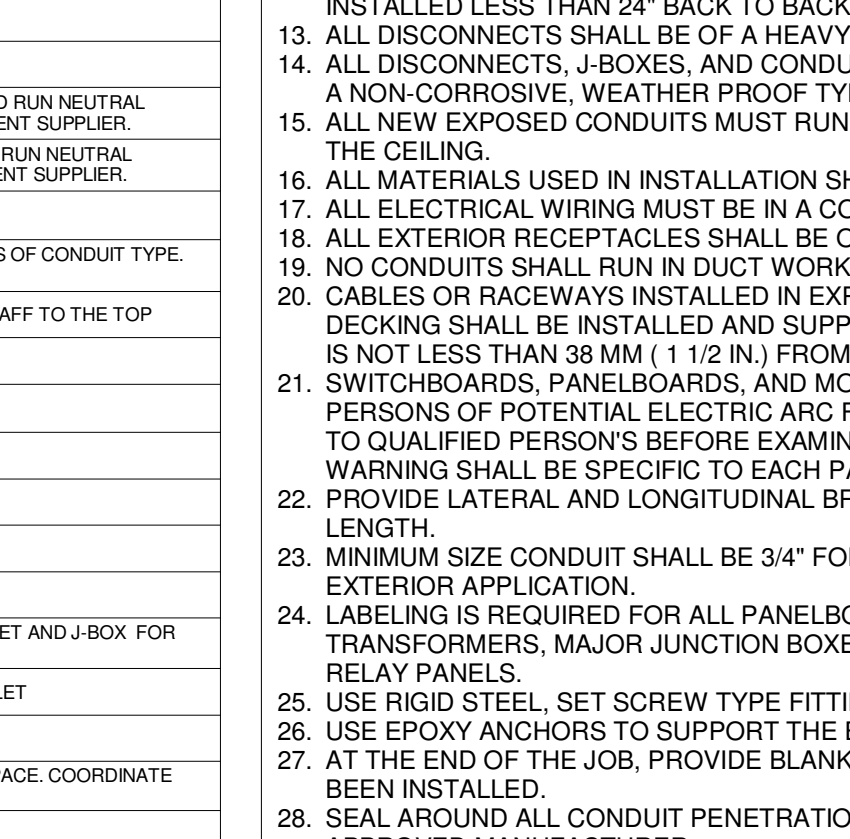
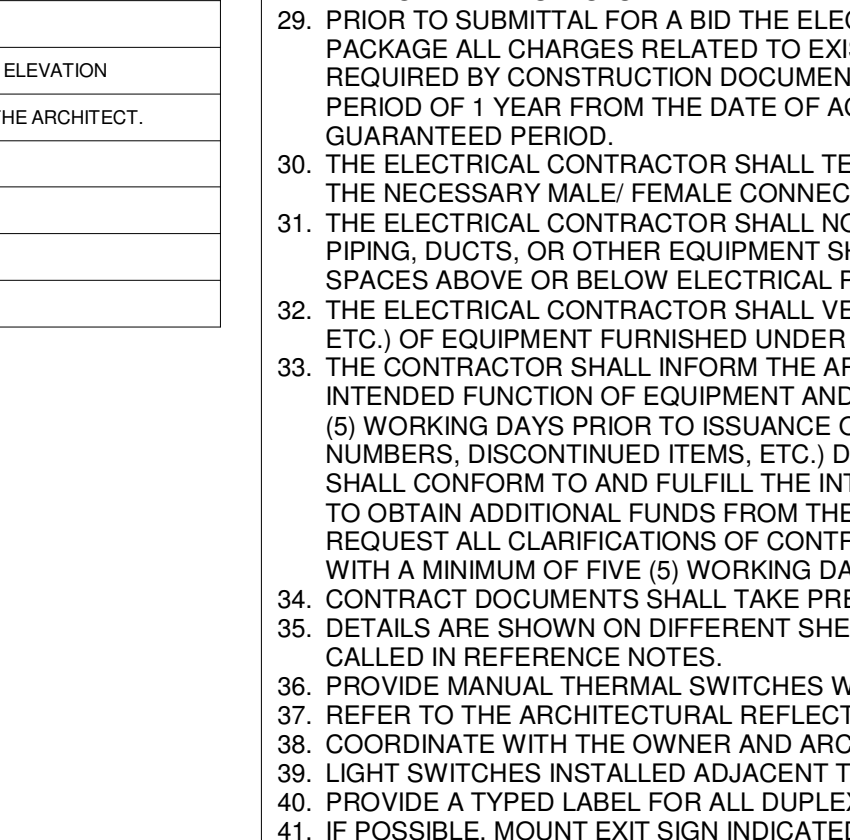
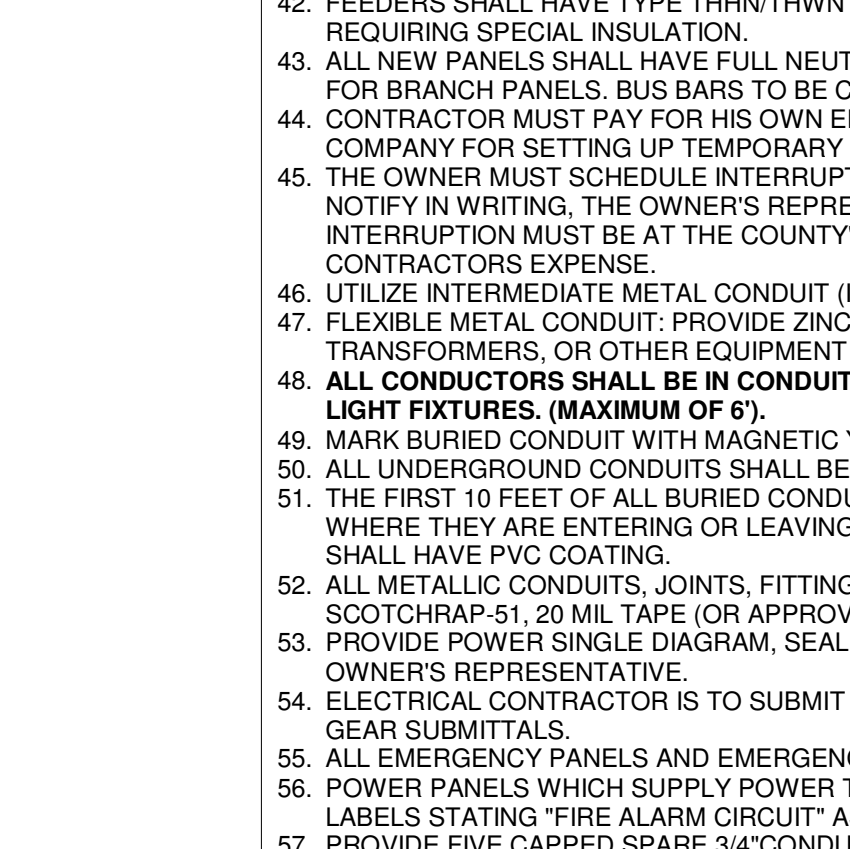
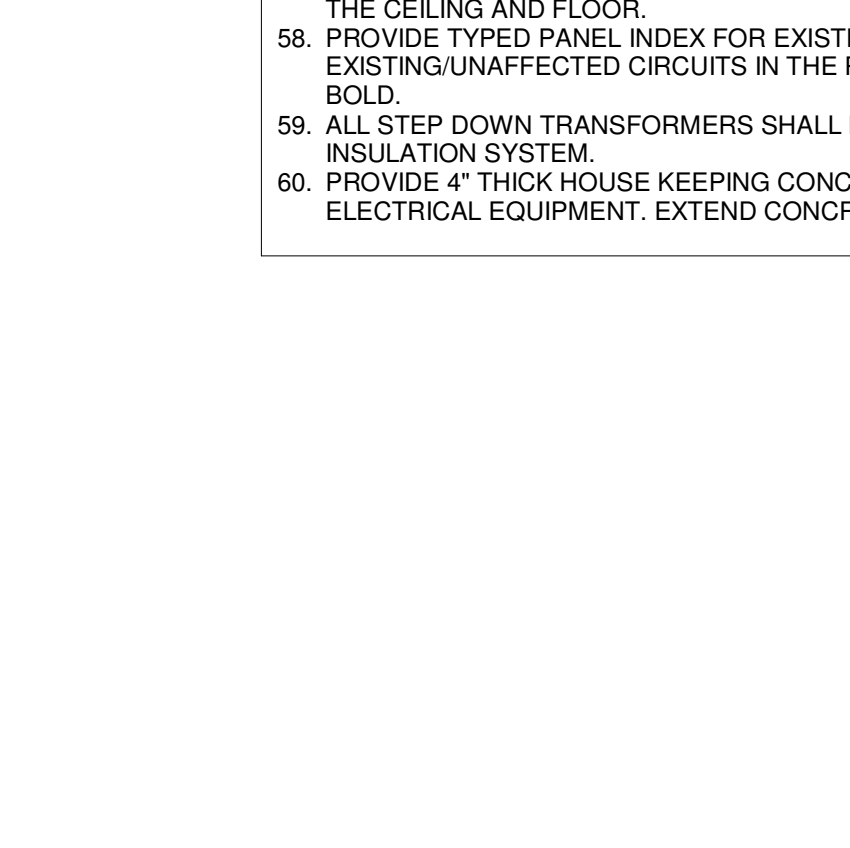
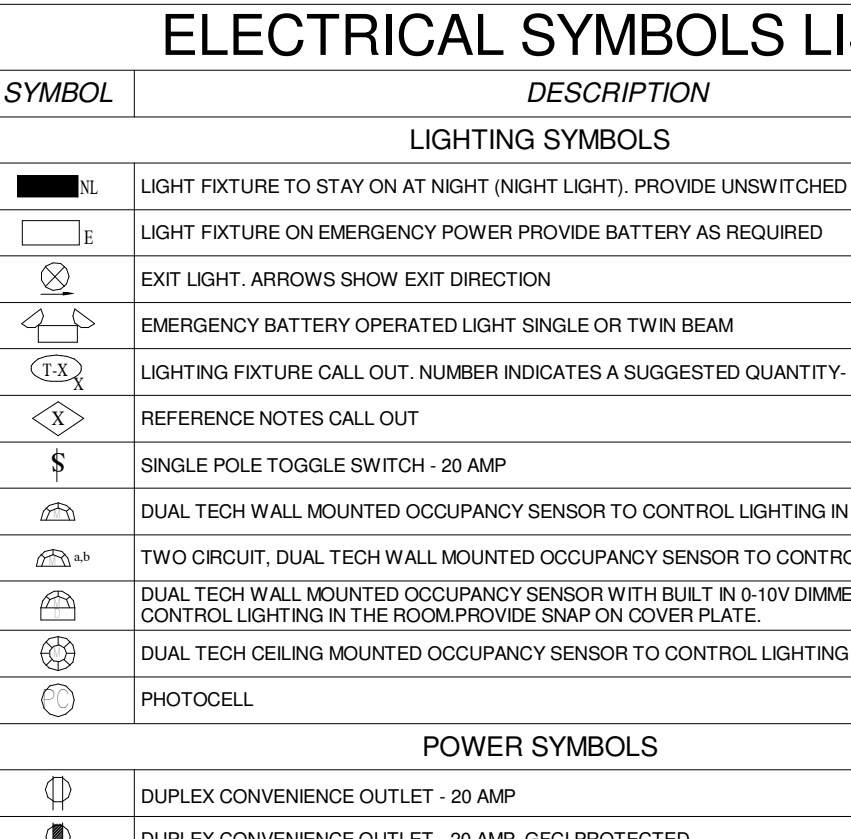
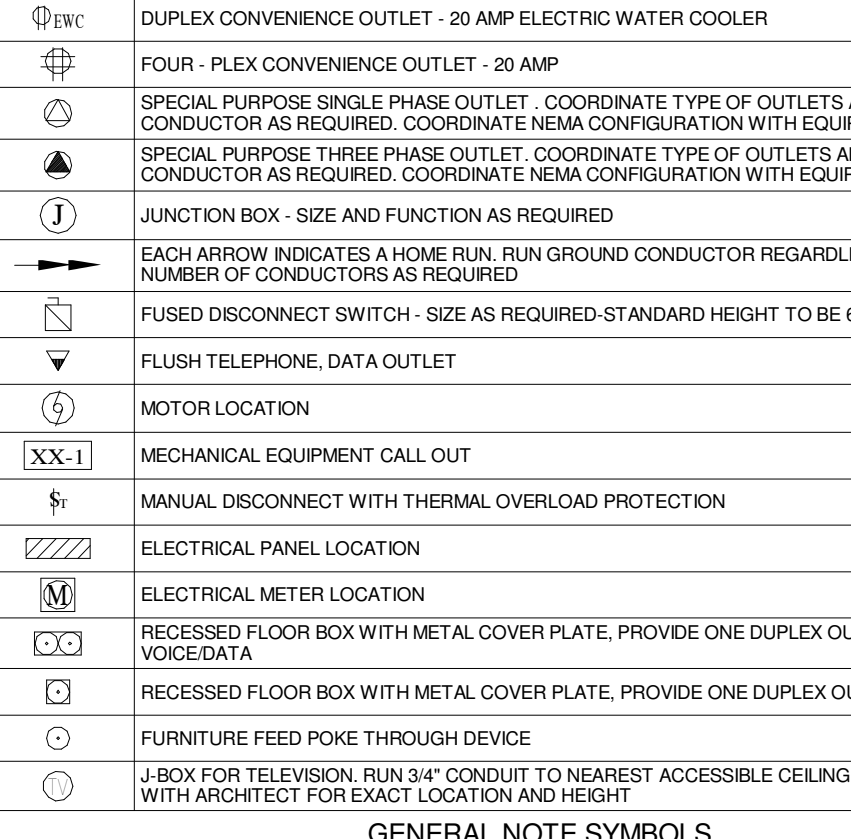
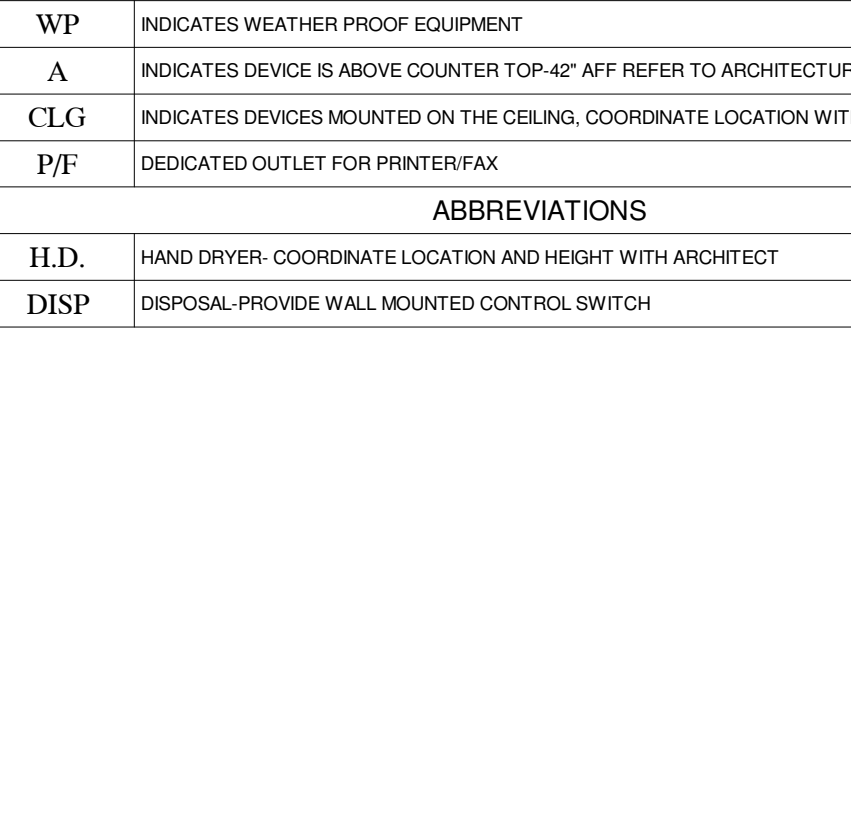
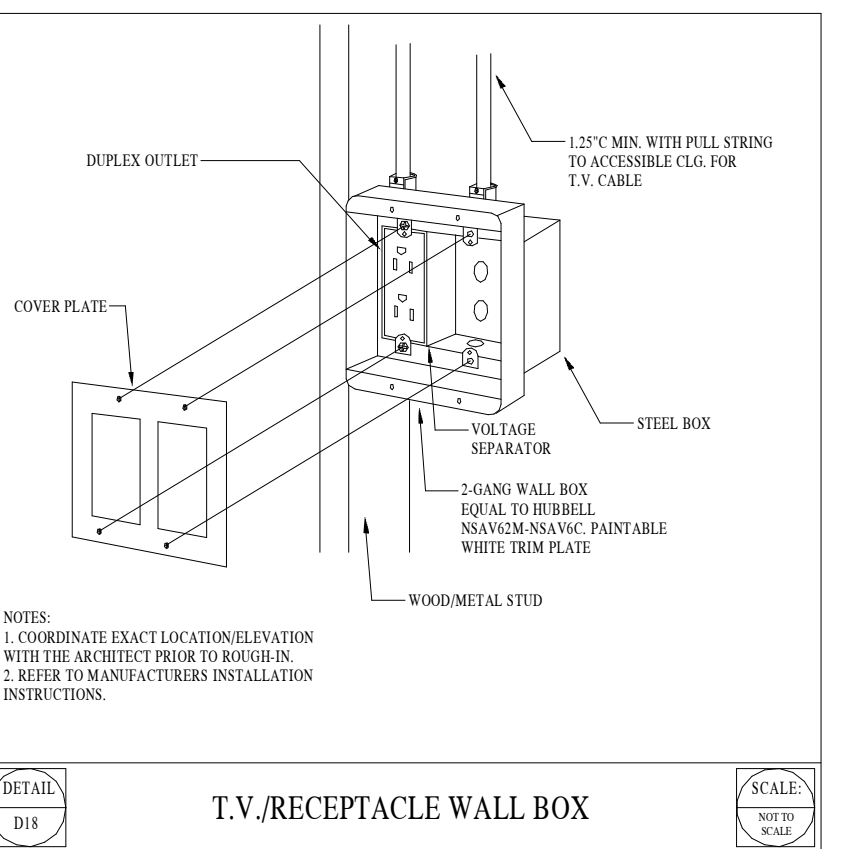
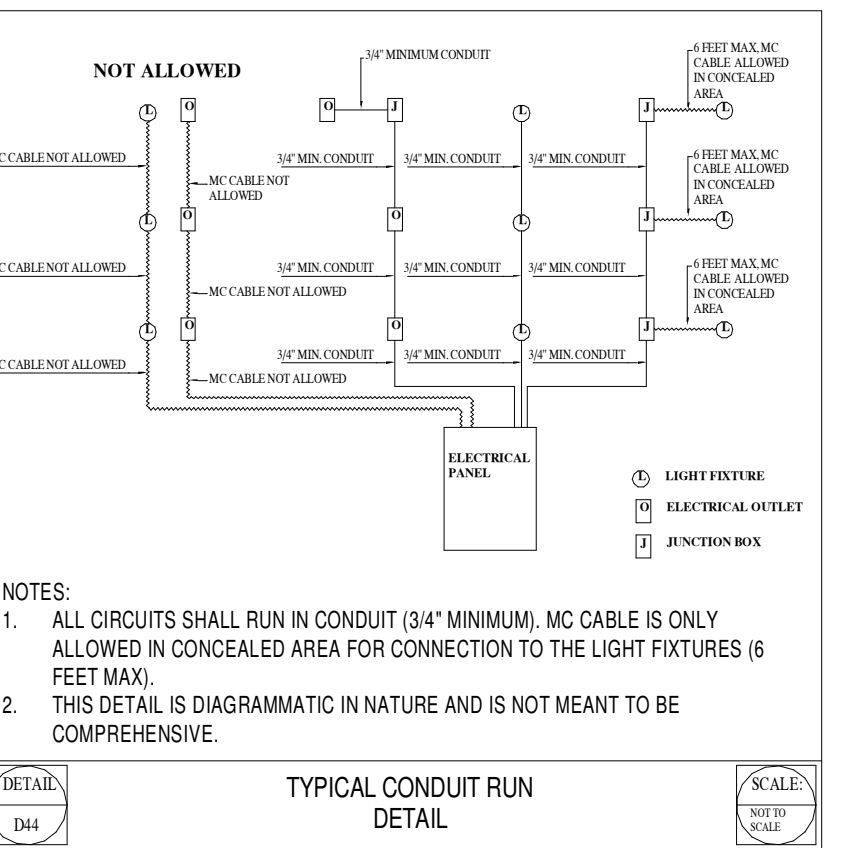
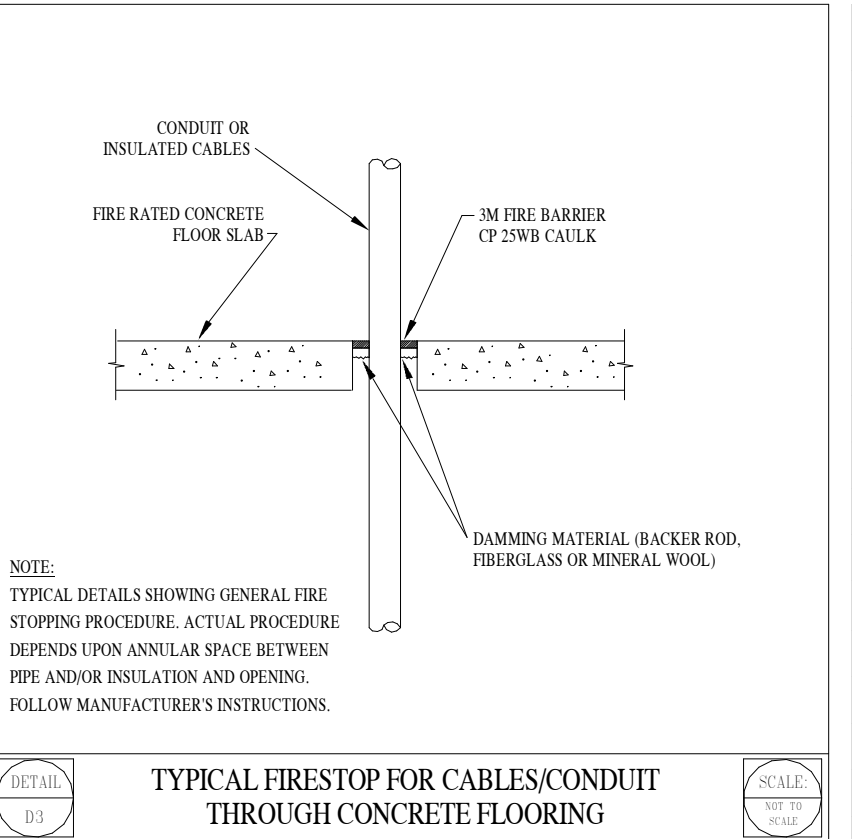
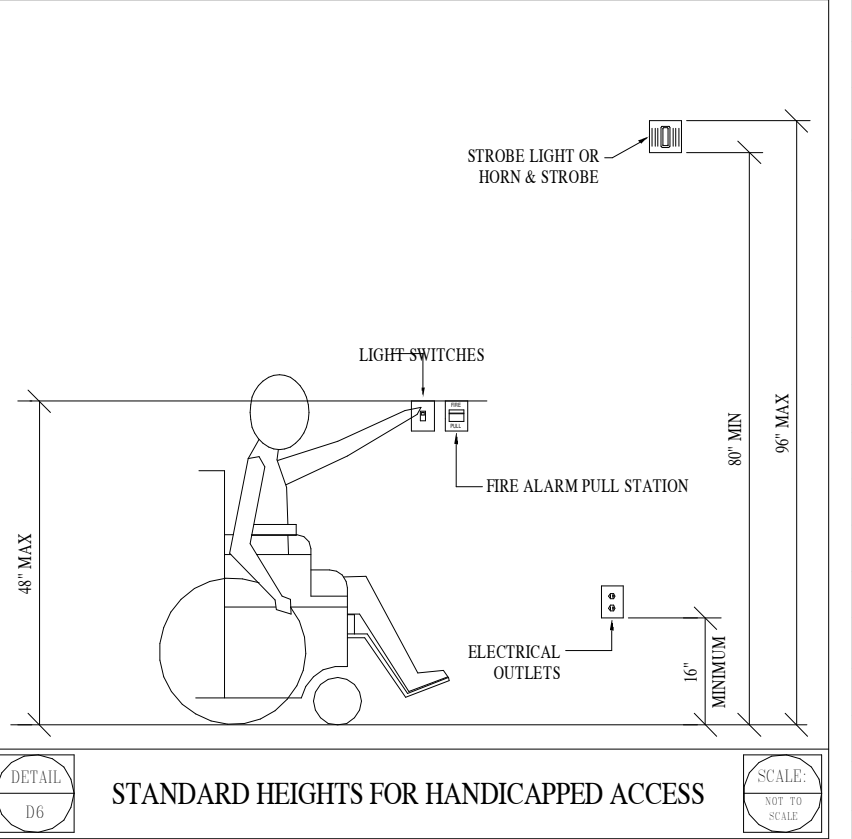
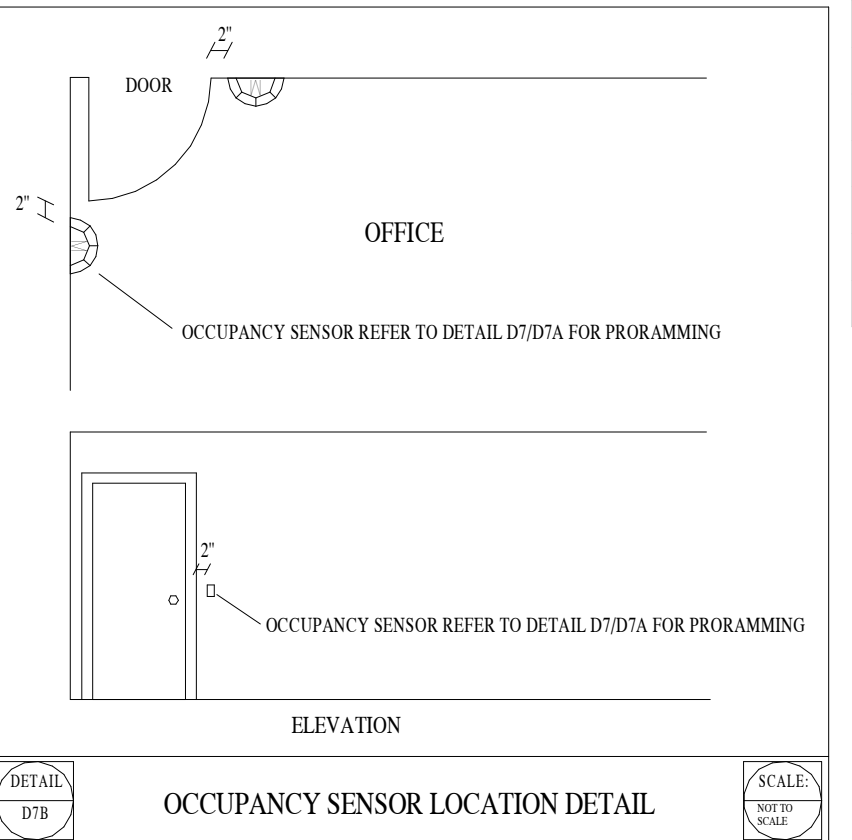
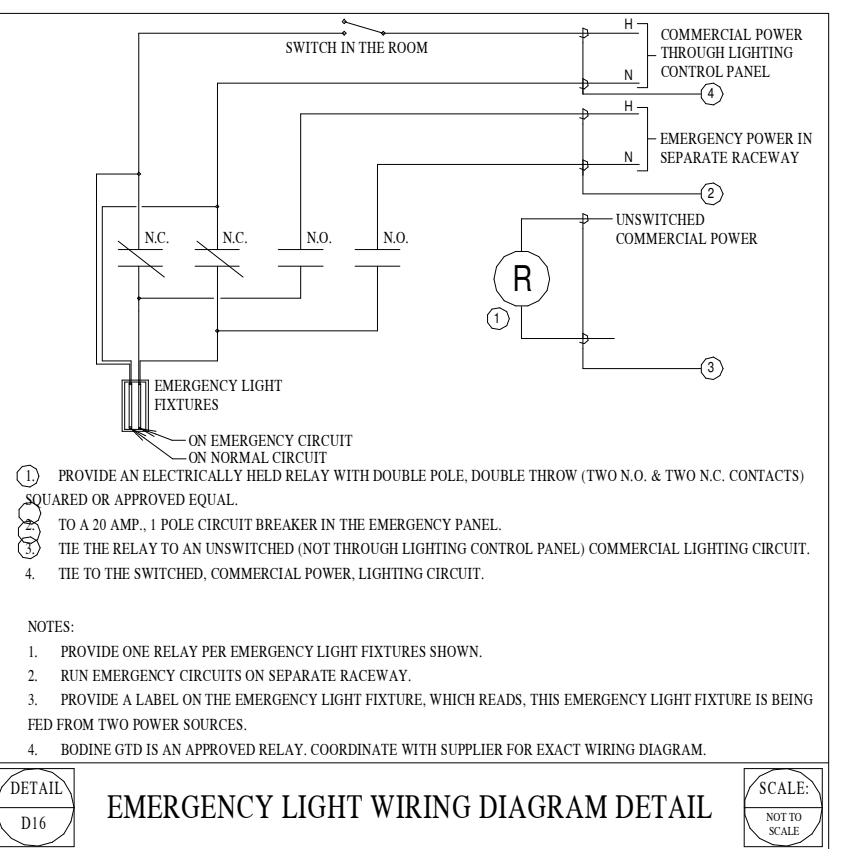
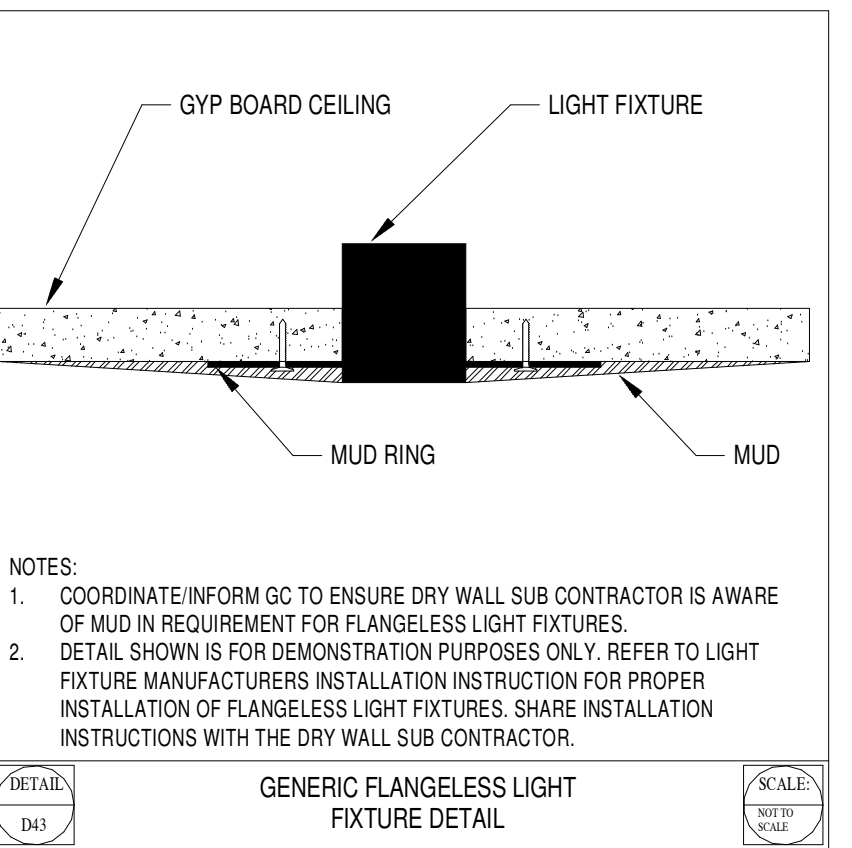
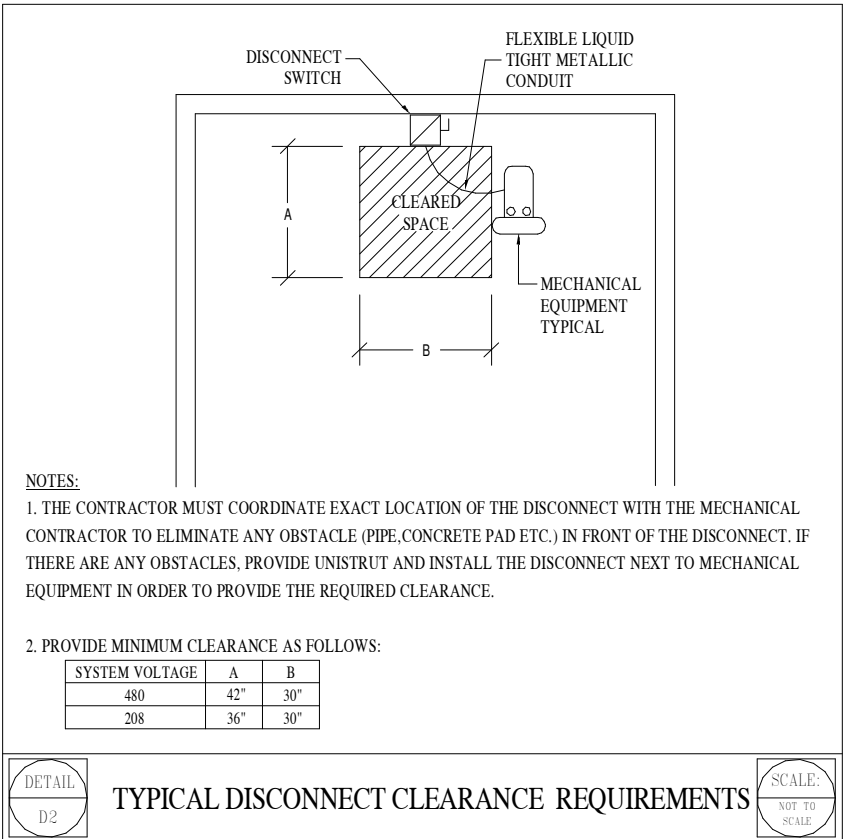
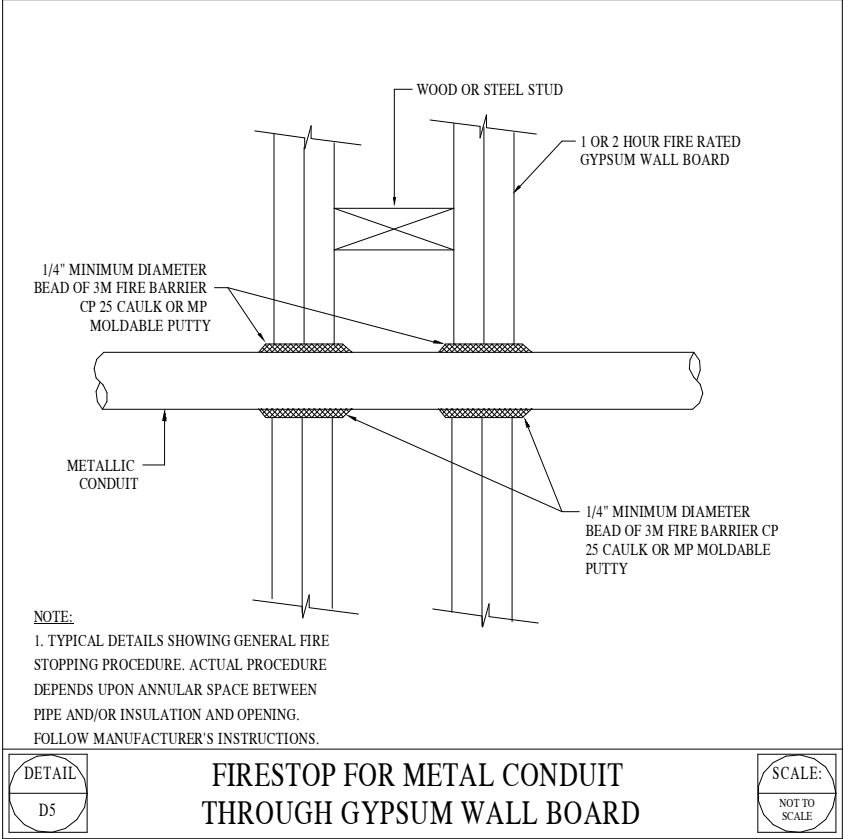
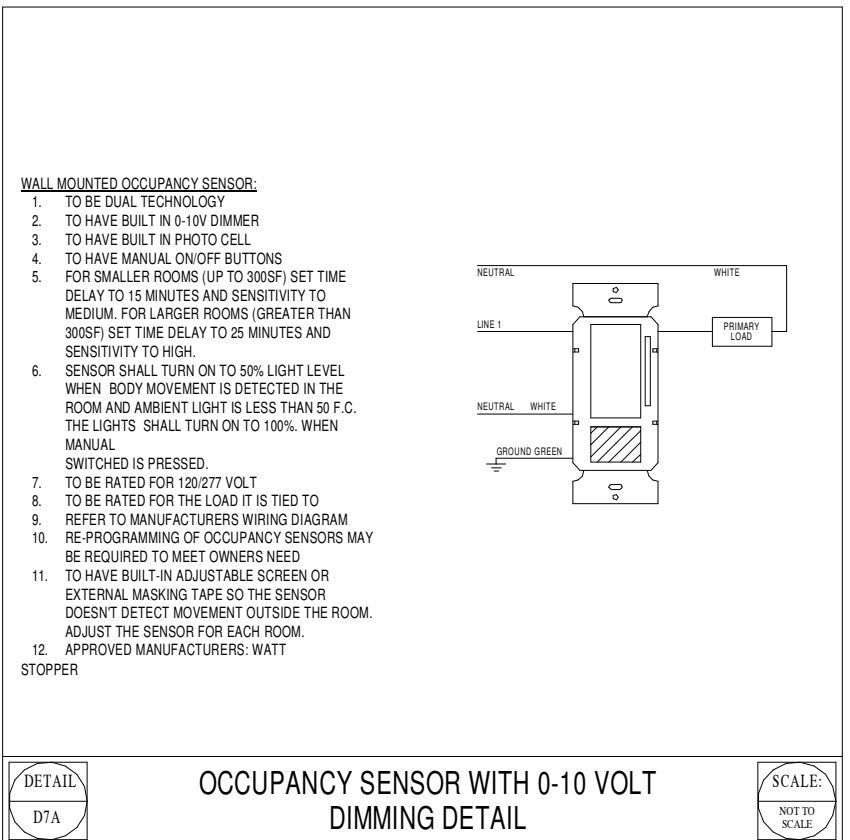
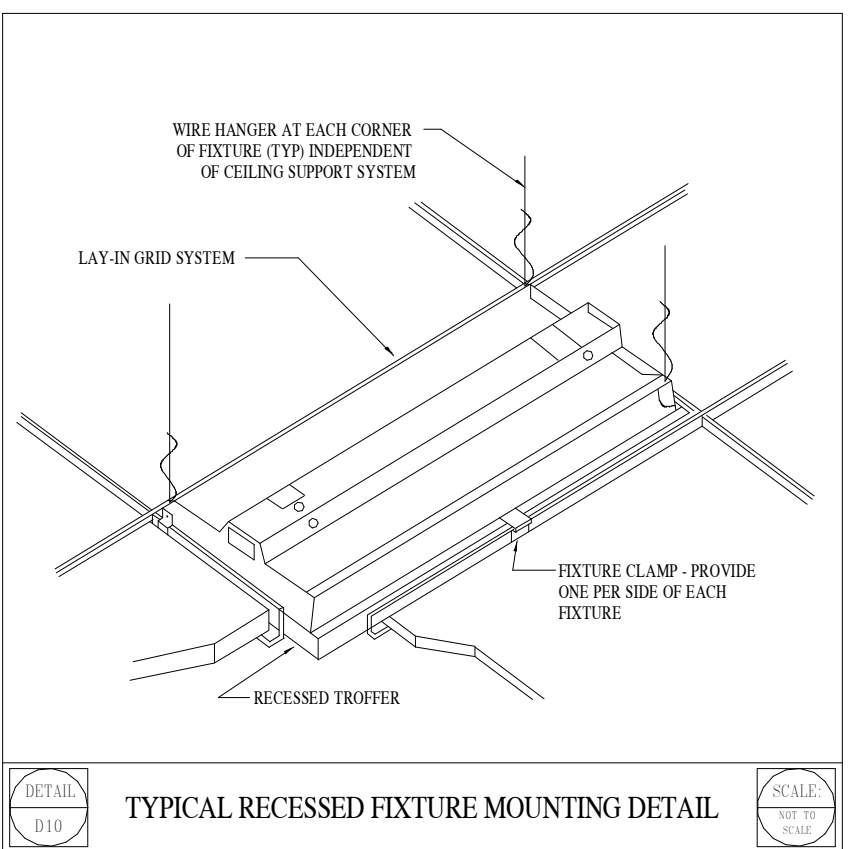
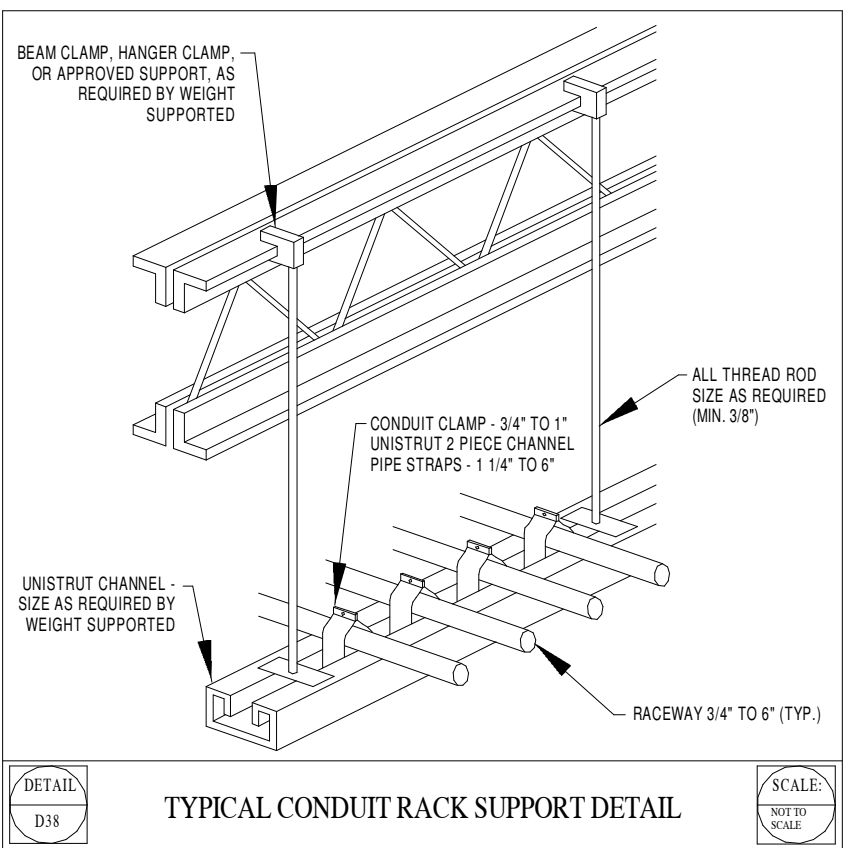
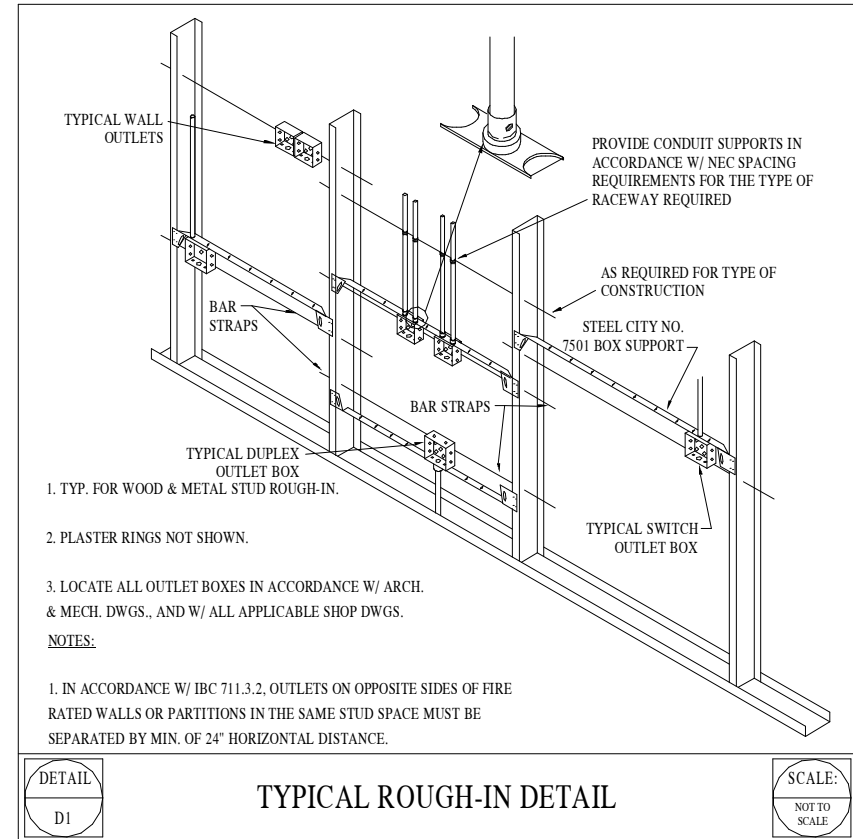
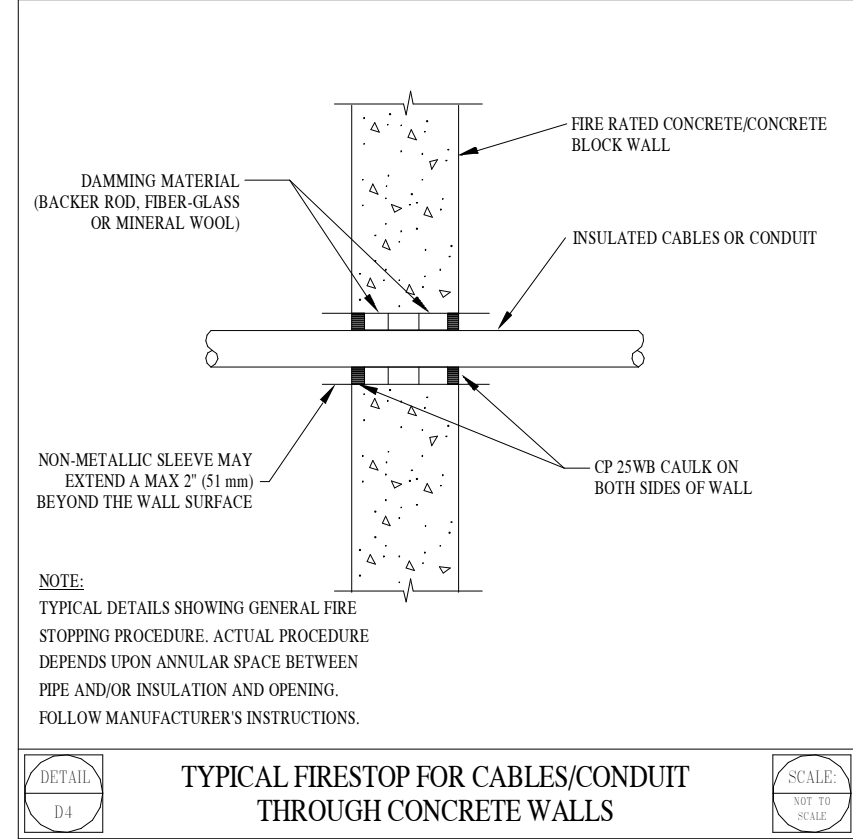
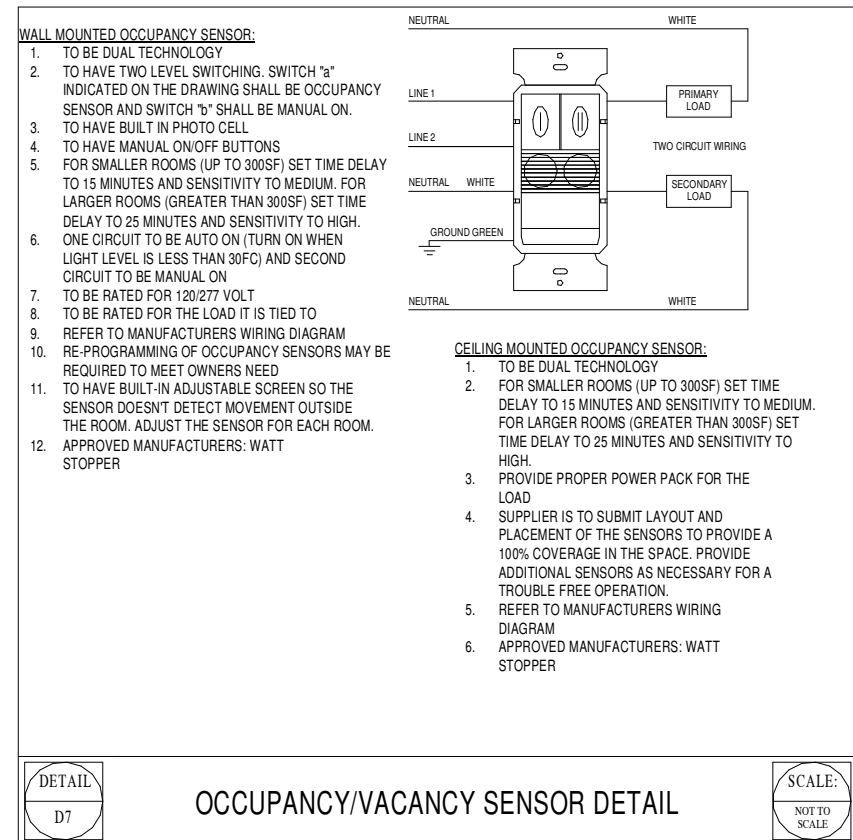
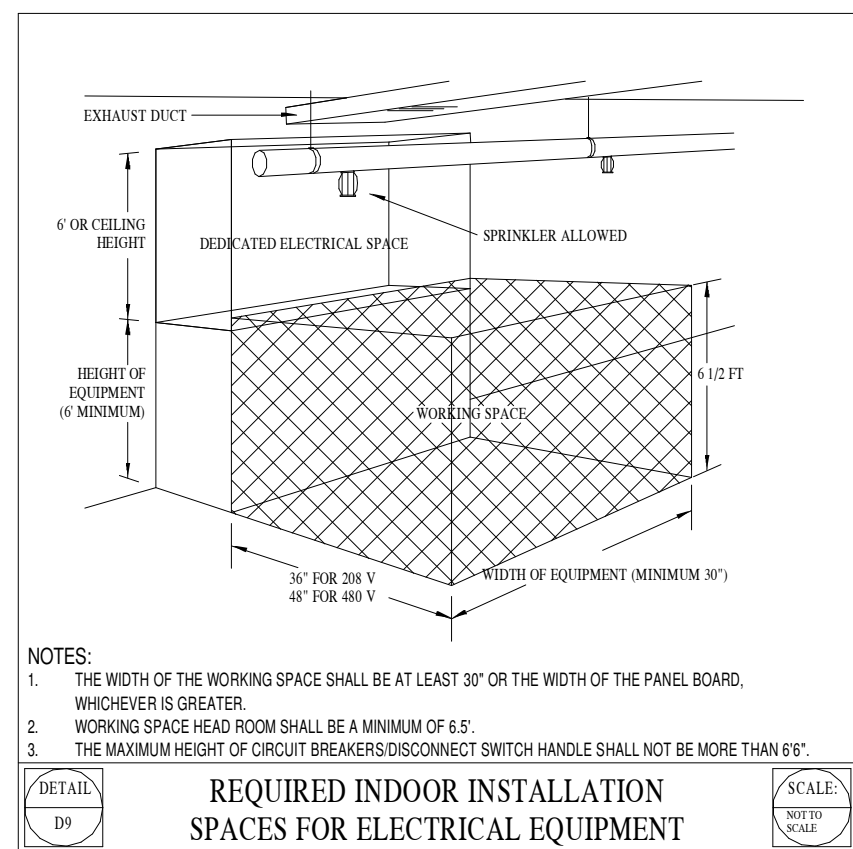
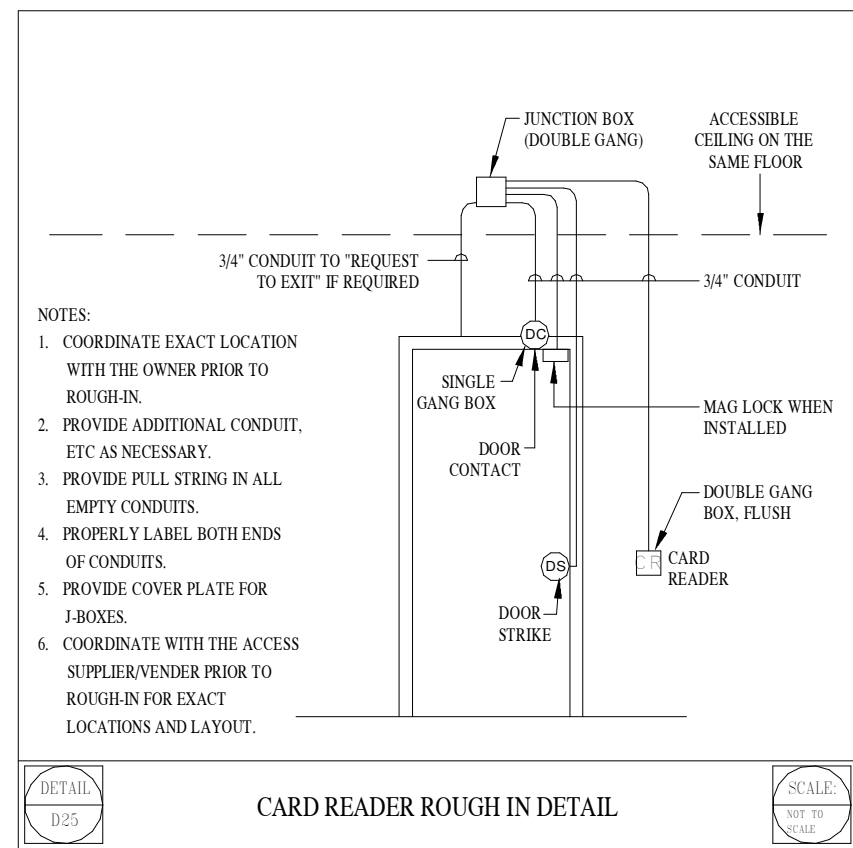
EELD's response to the city's review comments:

City Review 01

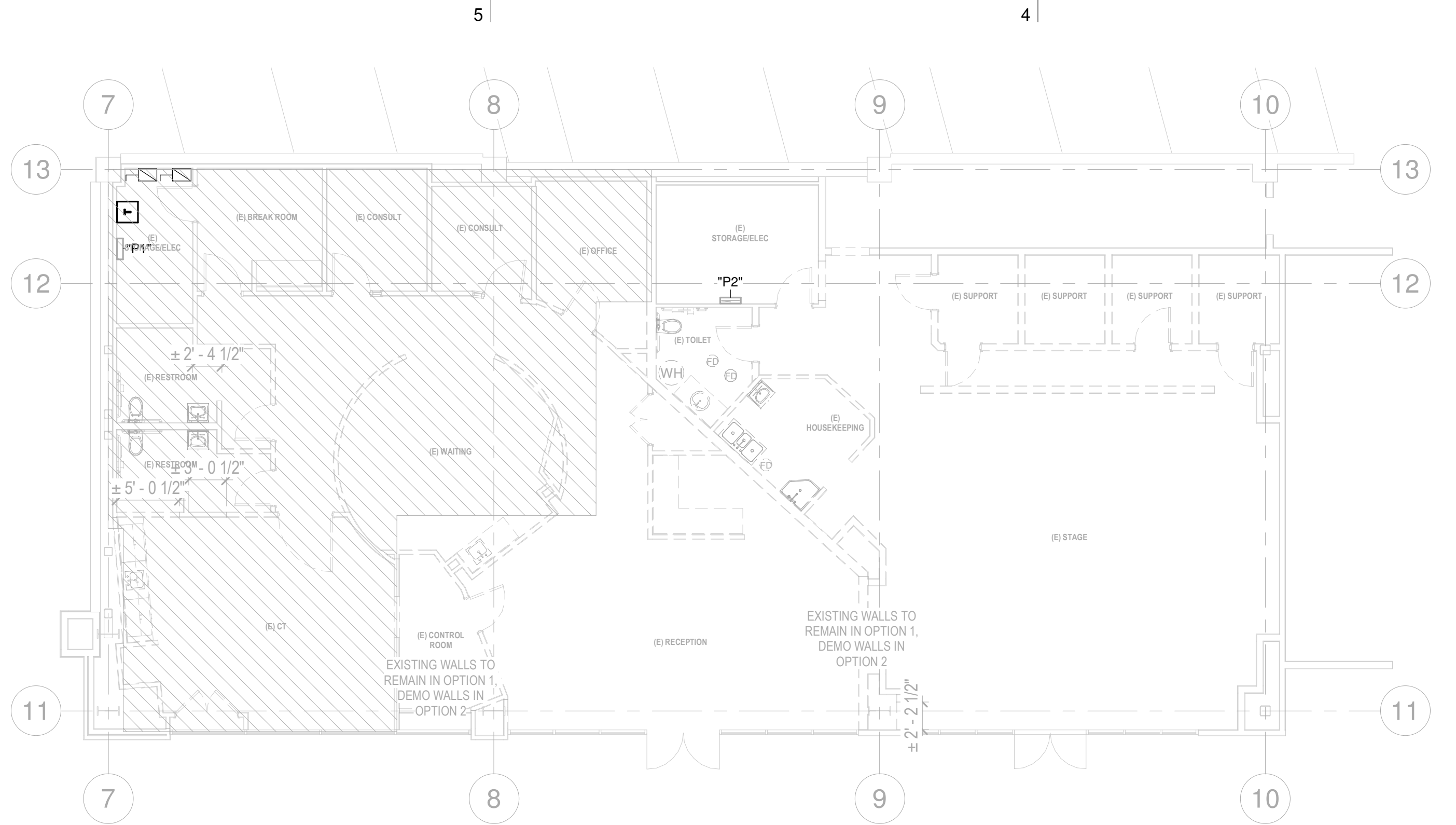
1. An exit sign has been added over the 2nd exit door.
2. Emergency light fixtures are identified with letter E on the lighting sheet. An emergency inverter will be installed to feed the emergency lights. See reference note# L7 on sheet EDL-101
3. Occupancy sensors are provided to control lighting in each area. Lighting zones are identified by lower case letter by each fixture.
4. Photocells are provided in the daylight area to control the lights. See reference note # L9.

City Review 02

1. The Egress corridor is existing and should have proper Egress Lighting and exit sign. We have added a note to the construction document for the contractor to verify functionality of the egress lighting.

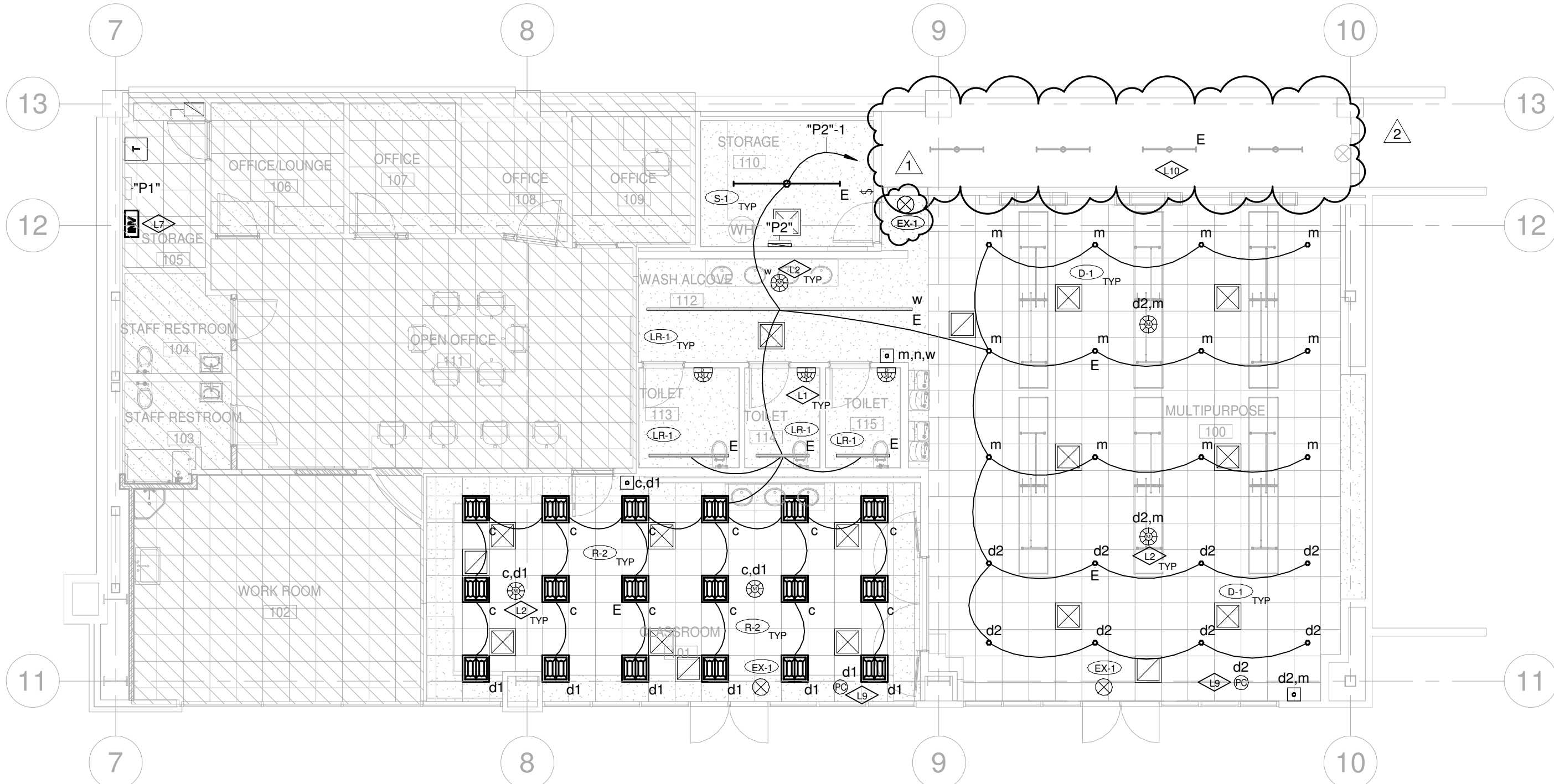


10/27/2023 1:57:52 PM



LEVEL 1 FLOOR PLAN - DEMOLITION

1/8" = 1'-0"



LEVEL 1 FLOOR PLAN - LIGHTING

1/8" = 1'-0"

SHEET NOTES - DEMOLITION

- 1 IN THE EXISTING SPACE TO BE RENOVATED, THE CONTRACTOR SHALL REMOVE ALL LIGHT FIXTURES, SWITCHES, WIRING, WIRING DEVICES, CONDUITS, FIRE ALARM DEVICES, SPEAKERS VOLUME CONTROLS, ETC. AS REQUIRED WHETHER OR NOT SHOWN ON THE DRAWINGS COORDINATE WITH THE GENERAL CONTRACTOR PRIOR TO ANY DEMOLITION WORK AND REINSTALL DEVICES ON THE NEW CEILING IF NECESSARY.
- 2 ALL MATERIALS THAT ARE TO BE REMOVED FROM THE PREMISES SHALL BE RETURNED TO THE OWNER. MATERIALS WHICH THE OWNER DECIDES NOT TO KEEP SHALL BE SALVAGED AND REMOVED FROM THE SITE BY THE CONTRACTOR.
- 3 ALL CONCEALD CONDUITS THAT CANNOT BE REMOVED SHALL BE CUT FLUSH WITH THE FINISHED SURFACES AND CAPPED OFF AFTER THE WIRING HAS BEEN DISCONNECTED AT THE PANEL AND REMOVED FROM THE CONDUIT.
- 4 IN AREAS WHERE CIRCUIT CONTINUITY IS INTERRUPTED, BUT MUST BE MAINTAINED BECAUSE OF THE NATURE OF THE FACILITY, MAKE ALL THE NECESSARY MODIFICATIONS TO THE CIRCUITS IN ORDER TO MAINTAIN THE CIRCUITS INTEGRITY.

- 5 EXISTING PANELS AND THE TRANSFORMER TO REMAIN AS IS AND STAY FUNCTIONAL.

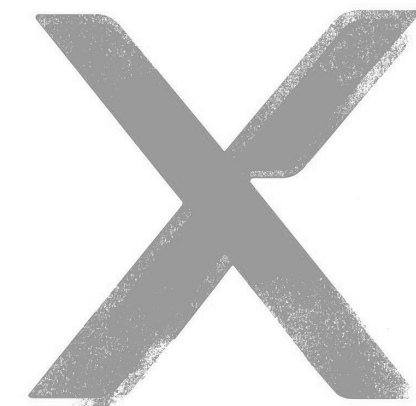
SHEET NOTES - LIGHTING

- 1 TIE ALL FIXTURES INDICATED WITH A LOWER CASE LETTER TO ITS CORRESPONDING SWITCH(ES). PROVIDE CONDUITS, CONDUCTORS, LIGHTING CONTACTORS, ETC. FOR A COMPLETE INSTALLATION.
- 2 EMERGENCY LIGHT FIXTURES INDICATED WITH THE LETTER "E" (4' SECTION OF LINEAR LIGH) SHALL BE TIED TO THE EMERGENCY POWER AND TURN ON (TO FULL LUMEN OUTPUT OF THE FIXTURE) WHEN THE COMMERCIAL POWER FAILS REGARDLESS OF THE POSITION OF THE CONTROL SWITCH. THE FIXTURE SHALL BE CONTROLLED BY THE INDICATED SWITCH. PROVIDE CONDUITS, CONDUCTORS, ETC. FOR A COMPLETE INSTALLATION. RU THE EMERGENCY CIRCUIT IN A SEPARATE RACEWAY. PROVIDE RELAY EQUAL TO BODINE GTD.
- 3 TIE EXIT SIGNS TO AN UNSWITCHED EMERGENCY LIGHTING CIRCUIT. PROVIDE CONDUITS, CONDUCTORS, RELAY BALLAST'S, ETC. FOR A COMPLETE INSTALLATION.
- 4 LIGHT FIXTURES INDICATED WITH THE LETTERS "NL" (NIGHT LIGHT) SHALL STAY ON AT ALL TIMES. PROVIDE CONDUITS, CONDUCTORS, ETC. FOR A COMPLETE INSTALLATION. NIGHT LIGHTS SHALL BE DIMMED WITH THE INDICATED DIMMER SWITCH.
- 5 ELECTRICAL CONTRACTOR IS TO COORDINATE WITH THE GC AND DRY WALL CONTRACTOR TO ENSURE ALL THE FLANGELESS LIGHT FIXTURES ARE INSTALLED PROPERLY IN A PROFESSIONAL MANNER. COORDINATE WITH THE GC AND SHEET ROCK CONTRACTOR PRIOR TO ROUGH-IN. REFER TO DETAIL D43 ON SHEET E-001 FOR MORE INFORMATION.

REFERENCE NOTES

- 1 FURNISH AND INSTALL A LOW PROFILE WALL MOUNTED OCCUPANCY SENSOR WITH BUILT IN 0-10V DIMMER SWITCH TO BE SUITABLE FOR THE TYPE OF LIGHT IT IS CONTROLLING. COORDINATE WITH THE LIGHT FIXTURE MANUFACTURER FOR PROPER DIMMER TYPE TO ENSURE COMPATIBILITY. DIMMER TO BE DIMMABLE TO 10% OF THE LIGHT OUTPUT. REFER TO DETAIL D7A ON E-001. WATT STOPPER IS THE ONLY APPROVED MANUFACTURER.
- 2 FURNISH AND INSTALL A CEILING MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSOR WITH VANDAL-RESISTANT LENS TO CONTROL THE LIGHT FIXTURES IN THE HALLWAYS/ROOM. OCCUPANCY SENSORS THAT CONTROL THE SAME LIGHT FIXTURES SHALL BE INTERCONNECTED, SO THAT WHEN ONE ACTIVATES ALL LIGHTS WITH THE SAME SWITCH LEG AS THAT OCCUPANCY SENSOR SHALL TURN ON. OCCUPANCY SENSORS THAT CONTROL DIFFERENT ZONES IN OPEN OFFICE SHALL BE INTERCONNECTED (CAT 5 OR WHAT IS REQUIRED BY MANUFACTURER) AND PROGRAMMED SO THAT THE LIGHTING IN THE AREA WITHOUT MOTION DROPS DOWN TO 20% LIGHT OUTPUT DURING BUSINESS HOURS. PROVIDE ROOM CONTROLLER WITH NUMBER OF ZONES AS REQUIRED TO ACCOMMODATE CONTROL SHOWN ON THE DRAWINGS (RESTROOM DOES NOT REQUIRE A ROOM CONTROLLER). PROVIDE PUSH BUTTONS AS SHOWN (ONE BUTTON PER ZONE). REFER TO DRAWINGS/PUSH BUTTON SCHEDULE FOR MORE INFORMATION. THE OCCUPANCY SENSOR SUPPLIER SHALL PROVIDE A LAYOUT TO ENSURE A 100% COVERAGE IN EACH AREA. PROVIDE ADDITIONAL POWER PACKS (TO CONTROL 120V AND 277V CIRCUITS), RELAYS, ETC. FOR A COMPLETE INSTALLATION. REFER TO DETAIL D7 ON SHEET E-001 FOR PROGRAMMING. WATT STOPPER IS THE ONLY APPROVED MANUFACTURER.
- 3 FURNISH AND INSTALL A 250 WATT EMERGENCY INVERTER IN THE APPROXIMATE LOCATION TO FEED THE EMERGENCY LIGHTS. TIE THE EMERGENCY LIGHTS FIXTURE TO THE INVERTER UTILIZING SEPARATE RACE WAY THAN THE NORMAL LIGHTING CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, RELAY, ETC. FOR A COMPLETE INSTALLATION. ACUITY BRAND, COOPER, PHILIPS, AND HUBBELL ARE THE APPROVED MANUFACTURER. THE INVERTER IS TO HAVE 120 VOLTS, INPUT, AND 120 VOLT, 20 AMP CIRCUIT BREAKERS ON THE OUTPUT. TIE THE INVERTER TO THE SAME CIRCUIT AS THE LIGHTING CIRCUIT.
- 4 FURNISH AND INSTALL A CLOSED LOOP PHOTO CELL WITH 0-10V CONTINUOUS DIMMING IN THE APPROXIMATE LOCATION SHOWN. THE PHOTO CELL SHALL BE FULLY COMPATIBLE WITH THE LIGHT FIXTURES IT IS CONTROLLING. PROVIDE ROOM CONTROLLER AS NEEDED. PROGRAM THE SYSTEM SO THAT 30FC AVERAGE IS MAINTAINED AT THE DESK LEVEL. RUN ADDITIONAL CONTROL WIRES TO EACH FIXTURE AS NECESSARY. RE-PROGRAM AFTER THE TENANT HAS MOVED IN. COORDINATE THIS WORK WITH THE OWNER/ARCHITECT.

- 5 THE CONTRACTOR IS TO VERIFY THE CONDITION OF THE EXISTING EMERGENCY LIGHTS AND THE EXIT SIGN IN THE EXISTING EXIT CORRIDOR. FIX THE FIXTURES, AS NECESSARY. FIELD VERIFY.



Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019

Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City UT, 84101

Date Revision
2 11.14.23 Plan Review 02

CONSTRUCTION DOCUMENTS (BP-2, P.I)

NEXUS PROJECT #: 22070
CHECKED BY: MA
DRAWN BY: AZ
DATE: 25 AUGUST 2023

LEVEL 1 FLOOR PLAN - DEMOLITION & LIGHTING

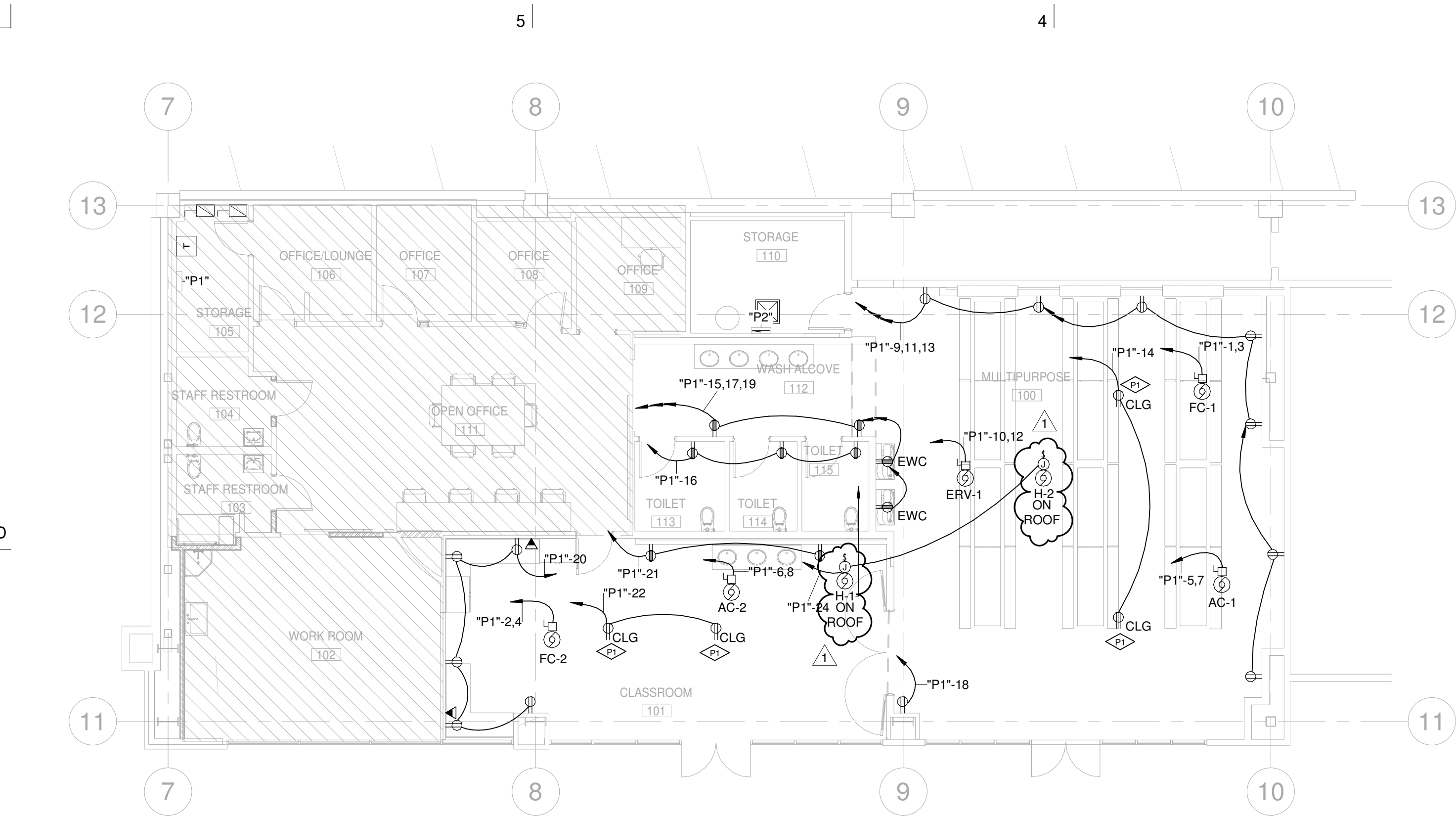


#930

EELD

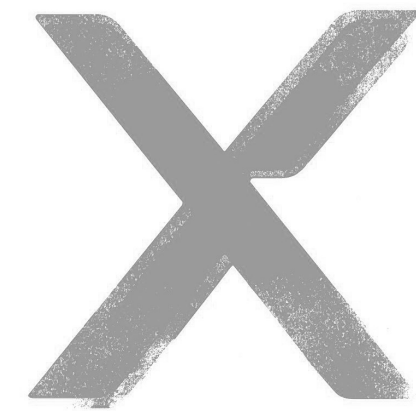
ELECTRICAL ENGINEERING & LIGHTING DESIGN
1220 SOUTH 300 WEST SLC, UT 84101 | 801-486-2222

EDL-101



 LEVEL 1 FLOOR PLAN- POWER
1/8" = 1'-0"

SHEET NOTES - POWER	
1	FURNISH AND INSTALL A 4"X4"X2-1/8" J-BOX WHERE VOICE/DATA OUTLETS ARE SHOWN. RUN A 1" CONDUIT WITH A PULL-STRING FROM THE J-BOX TO THE NEAREST ACCESSIBLE CEILING SPACE ON THIS FLOOR. PROVIDE A 90° LONG SWEEP ELBOW WITH PLASTIC BUSHING AT THE END OF THE CONDUIT.COORDINATE WITH THE OWNER/ARCHITECT FOR EXACT LOCATION PRIOR TO ROUGH-IN.
2	INSTALL DUPLEX OUTLET NEXT TO DATA OUTLET IN OFFICES, CONFERENCE ROOMS, COPY AREAS, ETC. COORDINATE EXACT LOCATIONS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
3	PROVIDE J-BOX AND RUN 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING WITH PULL STRING FOR TV. INSTALL CLOCK TYPE OUTLET NEXT TO J-BOX. COORDINATE WITH ARCHITECT/ OWNER FOR EXACT LOCATION AND HEIGHT. REFER TO DETAIL D18 ON SHEET E-001.



ARCH | NEXUS

Architectural NEXUS, Inc.
2505 East Parleys Way
Salt Lake City, UT 84109
T 801.924.5000
<http://www.archnexus.com>

Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.
© Architectural Nexus, Inc. 2019

Salt Lake County
**CLARK PLANETARIUM NEW
SPACE TENANT IMPROVEMENT**
110 S 400 W, Salt Lake City UT, 84101

#	Date	Revision
1	10-11-23	Plan Review 01

**CONSTRUCTION
DOCUMENTS
(BP-2, P.I)**

NEXUS PROJECT #: 22070
CHECKED BY: MA
DRAWN BY: AZ
DATE: 25 AUGUST 2023

**LEVEL 1 FLOOR
PLAN - POWER**



#930

EELD

ELECTRICAL ENGINEERING & LIGHTING DESIGN
1220 SOUTH 300 WEST SLC, UT 84101 | 801-486-2222

EP-102

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
 - a. "Metal Doors and Frames"
 - b. "Flush Wood Doors"
 - c. "Entrances"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.

- b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
5. Key Schedule:
- a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
- 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
 - 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
- 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
 - a. Fire door assemblies, in compliance with NFPA 80.
 - b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
 - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
 - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
2. Smoke and Draft Control Door Assemblies:
 - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
 - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
3. Electrified Door Hardware

- a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- 4. Accessibility Requirements:
 - a. Comply with governing accessibility regulations cited in "REFERENCES" article 08 7100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.

C. Pre-Installation Meetings

- 1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
- 2. Pre-installation Conference
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
- 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Final Acceptance, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Falcon: 10 years
 - 2) Exit Devices
 - a) Falcon: 10 years
 - 3) Closers
 - a) Falcon SC Series: 10 years
 - b. Electrical Warranty
 - 1) Exit Devices
 - a) Falcon: 1 year

1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 2500.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- C. Cable and Connectors:
 - 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
 - 2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
 - 3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Ives 5BB series
 - b. Sargent 8200 Series
 - c. ASSA – all cylinders
2. Acceptable Manufacturers and Products:
 - a. Hager BB1191/1279 series
 - b. McKinney TB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
 - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
 - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
 - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
5. 2 inches or thicker doors:
 - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
8. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins
9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Sargent 8200 series
2. Acceptable Manufacturers - Cylinders:
 - a. ASSA – No Substitute (Owner Licensed)

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.
4. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
5. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
7. Provide electrified options as scheduled in the hardware sets.
8. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
 - a. Lever Design: Quantum.

2.05 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Sargent 8200 series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
2. Cylinders: Refer to "KEYING" article, ASSA Owners licensed required.
3. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
4. Provide flush end caps for exit devices.
5. Provide exit devices with manufacturer's approved strikes.
6. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
7. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
8. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
9. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
10. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
11. Provide electrified options as scheduled.
12. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.06 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. Match existing type and keyway

2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

2.07 KEYING

A. Scheduled System:

1. Existing factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing factory registered keying system (ASSA) Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Construction Keying:
 - a. Temporary Construction Cylinder Keying.
 - 1) Provide construction cylinders/cores per owner's request
 - 2) Owner or Owner's Representative will void operation of temporary construction keys.
2. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
 - e. Quantity: Furnish in the following quantities.
 - 1) Change (Day) Keys: 3 per cylinder/core.
 - 2) Master Keys: 6.

2.08 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Sargent

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
 - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
 - b. Provide hinged-panel type cabinet for wall mounting.

2.09 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Sargent 8200 series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with aluminum cylinder.
3. Closer Body: 1-1/2-inch (38 mm) diameter with 5/8-inch (16 mm) diameter heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Pressure Relief Valve (PRV) Technology: Not permitted.
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.10 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Trimco

b. Rockwood

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Size plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.11 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Trimco
 - b. Rockwood

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button or thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.12 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Zero International
2. Acceptable Manufacturers:
 - a. National Guard
 - b. Pemko

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.13 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Rockwood
 - b. Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.14 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Sargent
2. Acceptable Manufacturers:
 - a. GE-Interlogix

B. Requirements:

1. Provide recessed or surface mounted type door position switches as specified.
2. Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch and magnetic locking device.

2.15 FINISHES

- A. FINISH: BHMA 626/652 (US26D) FOR ESTIMATING PURPOSE ONLY. PROVIDE HARDWARE WITH FINISH MATCHES EXISTING

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.
- J. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- K. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

- L. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- M. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- N. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- O. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- P. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- Q. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- R. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Final Acceptance, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Final Acceptance.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

Hardware Group No. 01

For use on Door #(s):

101

Provide each door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	8804-F-ETL Rim Exist	689	SAR
1	EA	MORTISE CYLINDER		626	
1	EA	SURFACE CLOSER	1431-UO-TB	689	SAR
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	429 @ HEAD & JAMBS	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A - OR PER SILL DETAILS	A	ZER

HARDWARE IS FOR HOLLOW METAL DOOR/FRAME

Hardware Group No. 02

For use on Door #(s):

110

Provide each door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5	630	IVE
1	EA	STOREROOM LOCK	8204-LNL-26D	626	SAR
1	EA	WALL STOP	WS401/402CCV	626	IVE

Hardware Group No. 03

For use on Door #(s):

113 114 115

Provide each door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5	630	IVE
1	EA	KEYED PRIVACY W/ INDICATOR	8205-LNMD-26D LH	626	SAR
1	EA	SURFACE CLOSER	1431-UO-TB	689	SAR
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	SEAL	429A	719	ZER
1	EA	DOOR SWEEP	39A	719	ZER

Hardware Group No. 04

For use on Door #(s):

100

Provide each door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5	630	IVE
1	EA	PASSAGE LEVER SET	8215-LNMI-26D	626	SAR
1	EA	WALL STOP	WS401/402CCV	626	IVE

Hardware Group No. 05

For use on Door #(s):

112

Provide each door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	NOTE	ALL HARDWARE BY AD SYSTEM CONTRACTOR/MANUFACTURER		

Hardware Group No. 06

For use on Door #(s):

100A

Provide each door(s) with the following:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>	<u>FINISH</u>	<u>MFR</u>
<u>1</u>	<u>EA</u>	<u>ELEC PANIC HARDWARE</u>	<u>RX-EA-25-R-NL-CON 9 VOLT BATTERY WITH HARDWIRED OPTION</u>	<u>626</u>	<u>FAL</u>

END OF SECTION 08 7100