

WSU SOCIAL SCIENCE RENOVATION SCHEMATIC DESIGN

07.08.2016

CIVIL ENGINEERING:

NVS
5217 South State Street Suite 300
Murray UT 84107
P. 801.743.1300

STRUCTURAL ENGINEERING:

ARW ENGINEERS
1594 West Park Circle
Ogden UT 84404
P. 801.782.6008

MECHANICAL ENGINEERING:

COLVIN ENGINEERING ASSOCIATES
244 West 300 North Suite 200
Salt Lake City UT 84103
P. 801.322.2400

ELECTRICAL ENGINEERING:

ELECTRICAL CONSULTING ENGINEERS
939 South West Temple
Salt Lake City UT 84101
P. 801.521.8007

FIRE PROTECTION ENGINEERING:

SPECTRUM ENGINEERS
324 South State Street Suite 400
Salt Lake City UT 84111
P. 801.328.5151



WSU SOCIAL
SCIENCE
RENOVATION

1299 Edvalson St. Ogden, UT 84408



1410 Edvalson St. Ogden, UT 84408

GSBS PROJECT NO.: 2016.036.00

ISSUED DATE: 07.08.2016

VICINITY MAP



DRAWING INDEX

Sheet #	Sheet Name	Sheet #	Sheet Name
GENERAL		MECHANICAL	
G000	COVER SHEET	M001	MECHANICAL LEGEND, SYMBOLS & ABBREVIATIONS
G001	DRAWING INDEX, VICINITY MAP, ABBREVIATIONS, SYMBOLS, GENERAL NOTES, CODE ANALYSIS	FP101	LEVEL 1 FIRE PROTECTION PLAN
G003	MISC. REQ. DOCS. CONT.	FP102	LEVEL 2 FIRE PROTECTION PLAN
G100	CODE/EXISTING PLANS - LEVEL B	FP103	LEVEL 3 FIRE PROTECTION PLAN
G101	CODE/EXISTING PLANS - LEVEL 1	FP104	LEVEL 4 FIRE PROTECTION PLAN
G102	CODE/EXISTING PLANS - LEVEL 2	MD100	MECHANICAL DEMOLITION PLAN - LOWER LEVEL
G103	CODE/EXISTING PLANS - LEVEL 3	MD101	MECHANICAL DEMOLITION PLAN - LEVEL 1
G105	FIRE RATING PLANS - LEVEL 1 & LEVEL B	MD102	MECHANICAL DEMOLITION PLAN - LEVEL 2
G106	FIRE RATING PLANS - LEVEL 2 & 3	MD103	MECHANICAL DEMOLITION PLAN - LEVEL 3
G200	UL DETAILS	MD104	MECHANICAL PLUMBING DEMOLITION PLAN - ROOF
G201	UL DETAILS	MH100	MECHANICAL FLOOR PLAN - LOWER LEVEL
G202	UL DETAILS	MH101	MECHANICAL FLOOR PLAN - LEVEL 1
G203	UL DETAILS	MH102	MECHANICAL FLOOR PLAN - LEVEL 2
CIVIL		MH103	MECHANICAL FLOOR PLAN - LEVEL 3
C101	DEMOLITION PLAN	MH104	MECHANICAL PLUMBING ROOF PLAN
C201	SITE PLAN	MH401	ENLARGED MECHANICAL PLANS
LANDSCAPE		MH402	ENLARGED MECHANICAL DETAILS
AS101	SITE PLAN	MH501	MECHANICAL DETAILS
ARCHITECTURAL		MH502	MECHANICAL SCHEDULES
AD100	DEMOLITION PLAN - LEVEL B	MH701	MECHANICAL SCHEMATICS
AD101	DEMOLITION PLAN - LEVEL 1	MH702	MECHANICAL SCHEMATICS
AD102	DEMOLITION PLAN - LEVEL 2	MZ100	MECHANICAL ZONE PLAN - LOWER LEVEL
AD103	DEMOLITION PLAN - LEVEL 3	MZ101	MECHANICAL ZONE PLAN - LEVEL 1
AD104	DEMOLITION PLAN - ROOF	MZ102	MECHANICAL ZONE PLAN - LEVEL 2
AD201	EXTERIOR DEMOLITION PLAN	MZ103	MECHANICAL ZONE PLAN - LEVEL 3
AD301	EXTERIOR DEMOLITION WALL SECTIONS	PLUMBING	
AD302	EXTERIOR DEMOLITION WALL SECTIONS	PD100	PLUMBING DEMOLITION PLAN - LOWER LEVEL
AE100	OVERALL PLAN - LEVEL B	PD101	PLUMBING DEMOLITION PLAN - LEVEL 1
AE101	OVERALL PLAN - LEVEL 1	PD102	PLUMBING DEMOLITION PLAN - LEVEL 2
AE102	OVERALL PLAN - LEVEL 2	PD103	PLUMBING DEMOLITION PLAN - LEVEL 3
AE103	OVERALL PLAN - LEVEL 3	PL100	PLUMBING FLOOR PLAN - LOWER LEVEL
AE121	ROOF PLAN	PL101	PLUMBING FLOOR PLAN - LEVEL 1
AE201	EXTERIOR ELEVATIONS	PL102	PLUMBING FLOOR PLAN - LEVEL 2
AE202	EXTERIOR ELEVATIONS	PL103	PLUMBING FLOOR PLAN - LEVEL 3
AE203	AXONOMETRIC VIEWS - EXTERIOR	PL401	ENLARGED MECHANICAL ROOM PLUMBING PLAN
AE301	BUILDING SECTIONS	PL402	ENLARGED PLUMBING PLANS
AE302	BUILDING SECTIONS	PL501	PLUMBING DETAILS
STRUCTURAL		PL601	PLUMBING SCHEDULES
SD01	STRUCTURAL NOTES	ELECTRICAL	
SD101	FOOTING AND FOUNDATION DEMO PLAN	EE001	GENERAL NOTES AND SYMBOLS LEGEND
SD102	FIRST FLOOR STRUCTURAL DEMO PLAN	EE002	DETAILS
SD103	SECOND FLOOR STRUCTURAL DEMO PLAN	EE003	DETAILS
SD104	THIRD FLOOR STRUCTURAL DEMO PLAN	EE004	SCHEMATIC POWER SINGLE LINE DIAGRAM
SD105	ROOF STRUCTURAL DEMO PLAN	EDL100	LOWER LEVEL DEMOLITION FLOOR PLAN - LIGHTING
		EDL101	FIRST LEVEL DEMOLITION FLOOR PLAN - LIGHTING
		EDL102	SECOND LEVEL DEMOLITION FLOOR PLAN - LIGHTING
		EDL103	THIRD LEVEL DEMOLITION FLOOR PLAN - LIGHTING
		EDP100	LOWER LEVEL DEMOLITION FLOOR PLAN - POWER
		EDP100-1	LOWER LEVEL ENLARGED DEMOLITION FLOOR PLAN - POWER
		EDP101	FIRST LEVEL DEMOLITION FLOOR PLAN - POWER
		EDP102	SECOND LEVEL DEMOLITION FLOOR PLAN - POWER
		EDP103	THIRD LEVEL DEMOLITION FLOOR PLAN - POWER
		EP100	FLOOR PLAN - POWER - LOWER LEVEL

CODE ANALYSIS

APPLICABLE CODES			
	Year		Year
International Building Code	2015	National Electrical Code	2014
International Mechanical Code	2015	Uniform Code for Building Conservation	2015
International Plumbing Code	2015	ADA Accessibility Guidelines	2009
International Fire Code	2015		
International Energy Conservation Code	2015		

- A. Occupancy and Group (IBC 306 & 508.3.1): B & A-3
- Change in Use (IBC 3406): Yes No Mixed Occupancy (IBC 508): Yes No
 Special Use and Occupancy (e.g. High Rise, Covered Mall; IBC CH. 4): NA
- B. Seismic Design Category (IBC 1613): _____ Design Wind Speed (IBC 1609): _____ mph
- C. Type of Construction (IBC 602.2):
 I A I B II A II B III A III B IV A IV B
- D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours) (IBC Table 602):
 North: NA South: NA East: NA West: NA
- E. Mixed Occupancies (IBC 508): YES Nonseparated Uses (IBC 508.3): YES
- F. Sprinklers (IBC 903):
 Required: X Provided: X Type of Sprinkler System: _____
- G. Number of Stories (IBC 503 & 504.2): 4 Building Height: 60'-6"
- H. Actual Area per Floor (square feet): 30,800 SF
- I. Tabular Area (A_t) (IBC Table 503): 15,500 sf
- J. Area Modifications (IBC 506):
 a) $A_a = A_t + [A_t I_r] + [A_t I_s]$ $I_r = \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$
 $58,125 = 15,500 + [15,500 \times 0.75] + [15,500 \times 2]$ $0.75 = \left[\frac{1}{1} - 0.25 \right] \frac{30}{30}$
 b) Sum of the Ratio Calculations for Mixed Occupancies:
 $\frac{\text{Actual Area}}{\text{Allowable Area}} \leq$
 c) Total Allowable Area for:
 1) One Story: A_a 58,125 sf
 2) Two Story: A_a(2) 116,250 sf
 3) Three Story: A_a(3) 174,375 sf
 3) Four Story: A_a(4) 232,500 sf
 d) Unlimited Area Building: Yes No Code Section: NA
- K. Fire Resistance Rating Requirements for Building Elements (hours) (IBC Table 601)
 Fire Resistance Rated Construction Requirements (hours) (IBC Tables 705.4, 706.3.9, Sections 707, 708, 709, 710)
- | Element | Hours | Assembly Listing | Element | Hours | Assembly Listing |
|----------------------------|-------|------------------|----------------------------|-------|------------------|
| Exterior Bearing Walls | 1 | | Floors - Ceiling Floors | 1 | |
| Interior Bearing Walls | 1 | | Roofs - Ceiling Roofs | 1 | |
| Exterior Non-Bearing Walls | 0 | | Exterior Doors and Windows | 1 | |
| Structural Frame | 1 | | Shaft Enclosures | 2 | |
| Partitions - Permanent | 0 | | Fire Walls | NA | |
| Fire Barriers | 2 | | Fire Partitions | NA | |
| | | | Smoke Partitions | NA | |
- L. Design Occupant Load (IBC Table 1004.1.1): 2751
 Exit Width Required (IBC Table 1005.1): 184" Exit Width Provided: 288"
- M. Minimum Number of Required Plumbing Facilities (IBC Table 2902.1):
 a) Water Closets - Required (m) 28 (f) 28 Provided (m) 32 (f) 32
 b) Lavatories - Required (m) 18 (f) 18 Provided (m) 20 (f) 20
 c) Bath Tubs or Showers: 0
 d) Drinking Fountains: 28 Service Sinks: 1

ABBREVIATIONS

ABV	ABOVE	DEPT	DEPARTMENT	GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED	MTL	METAL	SHR	SHOWER
A.F.F.	ABOVE FINISH FLOOR	DTL	DETAIL	GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED	MIN.	MINIMUM	SIM.	SIMILAR
ADJ.	ADJUSTABLE	Ø	DIAMETER			MISC.	MISCELLANEOUS	STC	SOUND TRANSMISSION COEFFICIENT
ALUM.	ALUMINUM	DIA.	DIAMETER	GND.	GROUND	N.I.C.	NOT IN CONTRACT	SPEC.	SPECIFICATION
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	DBL	DOUBLE	GYP. BD.	GYPSUM BOARD	N.T.S.	NOT TO SCALE	STD.	STANDARD
AB	ANCHOR BOLT	DWGS.	DRAWINGS	GWB.	GYPSUM WALL BOARD	#	NUMBER	STRUCT.	STRUCTURAL
<	ANGLE	EA.	EACH	HC.	HANDICAPPED	NO.	NUMBER	SUPER.	SUPERVISOR
APPROX.	APPROXIMATE	E.F.	EACH FACE	HDWR.	HARDWARE	O.C.	ON CENTER	SUSP.	SUSPENDED
ARCH.	ARCHITECTURAL OR ARCHITECT	E.S.	EACH SIDE	HSA	HEADED STUD ANCHOR	O.W.SJ	OPEN WEB STEEL JOIST	THRU	THROUGH
@	AT	E.W.	EACH WAY	HVAC	HEATING/VENTILATION/AIR CONDITIONING	OPP.	OPPOSITE	T.O.	TOP OF
BP	BASE PLATE	EW.	ELECTRIC WATER COOLER	HT.	HEIGHT	O.D.	OUTSIDE DIAMETER	T.O.A.	TOP OF ASPHALT
BRG.	BEARING	ELEV.	ELEVATION	H.M.	HOLLOW METAL	O.F.	OUTSIDE FACE	T.O.C.	TOP OF CURB
B.M.	BENCHMARK	EQ.	EQUAL	HORIZ.	HORIZONTAL	O.H.	OVERHEAD	T.O.F.	TOP OF FOOTING
BTWN	BETWEEN	EQ.	EQUAL	HR.	HOUR	OHD	OVERHEAD DOOR	T.O.S.	TOP OF SLAB OR SIDEWALK
BITUM.	BITUMINOUS	EXST.	EXISTING	HYD	HYDRANT	PNT	PAINTED OR PAINT	T.O.W.	TOP OF WALL
BD.	BOARD	EXP.	EXPANSION	IN.	INCHES OR INCH	PTN	PARTITION	TYP.	TYPICAL
B.O.	BOTTOM OF BUILDING	EJ.	EXPANSION JOINT	INFO.	INFORMATION	PERP.	PERPENDICULAR	U.N.O.	UNLESS NOTED OTHERWISE
B.LDG	BOTTOM OF BUILDING	EXT.	EXTERIOR	I.D.	INSIDE DIAMETER	PLAM	PLASTIC LAMINATE PLATE	VEN.	VENER
CLG.	CEILING	FT.	FEET OR FOOT	I.F.	INSIDE FACE	PCF	POUNDS PER CUBIC FOOT	V.I.F.	VERIFY IN FIELD
CL.	CENTER LINE	F.V.	FIELD VERIFY	INSUL.	INSULATION	PLF	POUNDS PER LINEAL FOOT	VERT.	VERTICAL
CT	CERAMIC TILE	FF	FINISH FLOOR	INT.	INTERIOR	PSF	POUNDS PER SQUARE FOOT	VEST.	VESTIBULE
CLR.	CLEAR	FE	FIRE EXTINGUISHER	INT.	INTERIOR	PSI	POUNDS PER SQUARE INCH	VCT	VINYL COMPOSITION TILE
COL	COLUMN	FEC	FIRE EXTINGUISHER CABINET	LAV.	LAVATORY	PROT.	PROTECTION	WWF	WELDED WIRE FABRIC
CONC	CONCRETE	FLR.	FLOOR	LT.	LIGHT	QTY.	QUANTITY	W/	WITH
CMU	CONCRETE MASONRY UNIT	FD	FLOOR DRAIN	LT.WT.	LIGHT WEIGHT	RAD.	RADIUS	W/D	WOOD
CONST.	CONSTRUCTION	FTG.	FOOTING	MAINT.	MAINTENANCE	REINF.	REINFORCED		
CONT.	CONTINUOUS	FDN.	FOUNDATION	MANUF.	MANUFACTURER	REQ.	REQUIRED		
C.J.	CONTROL JOINT	G.A.	GAGE/GAUGE	MFR.	MANUFACTURER	R.D.	ROOF DRAIN		
COORD.	COORDINATE	GAL.	GALLON	M.O.	MASONRY OPENING	RM.	ROOM		
DBA	DEFORMED BAR ANCHOR	GPM	GALLONS PER MINUTE	MAT.	MATERIAL	R.O.	ROUGH OPENING		
		GALV.	GALVANIZED	MAX.	MAXIMUM	SCHED.	SCHEDULE		
		GOVT.	GOVERNMENT	MECH.	MECHANICAL	SHT.	SHEET		

GRAPHIC SYMBOLS

	GRID	GRID LINES
	DETAIL SYMBOL	DETAIL NUMBER/ SHEET WHERE DETAIL IS DRAWN
	BUILDING SECTION SYMBOL	SECTION REFERENCE/ SHEET WHERE SECTION IS DRAWN
	WALL SECTION SYMBOL	SECTION REFERENCE/ SHEET WHERE SECTION IS DRAWN
	EXTERIOR ELEVATION SYMBOL	ELEVATION IDENTIFICATION SHEET WHERE ELEVATION IS DRAWN
	INTERIOR ELEVATION SYMBOL	ELEVATION IDENTIFICATION SHEET WHERE ELEVATION IS DRAWN
	ELEVATION CONTROL POINT	OR DATUM POINT
	DOOR TAG	DOOR NUMBER
	WINDOW TAG	WINDOW OR STOREFRONT NUMBER
	ROOM TAG	ROOM NAME ROOM NUMBER
	REVISION TAG	
	VIEW NAME	VIEW NUMBER/ SHEET WHERE VIEW IS LOCATED VIEW NAME/ VIEW SCALE

MATERIALS/LEGEND

	CONCRETE MASONRY UNIT
	FACE BRICK
	CONCRETE (POURED IN PLACE)
	GYPSUM BOARD OR SETTING BEDS
	INSULATION (BATT & BLANKET)
	INSULATION (RIGID/SEMI-RIGID)
	PLYWOOD
	CONTINUOUS ROUGH WOOD
	BLOCKING, ROUGH WOOD
	METAL (LARGE SCALE)
	GRAVEL
	EARTH
	COMPACTED FILL
	QUARRY/CERAMIC TILE
	FIREPROOFING
	WOOD

FOOTNOTES:

- In case of conflict with the U.S. Department of Justice Federal Registers Parts through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.
- Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
 - High Rise Requirements.
 - Atriums.
 - Performance Based Criteria.
 - Means or Egress Analysis.
 - Fire Assembly Locator Sheet.
 - Exterior and Interior Accessibility Route.
 - Fire Stopping, Including Tested Design Number.

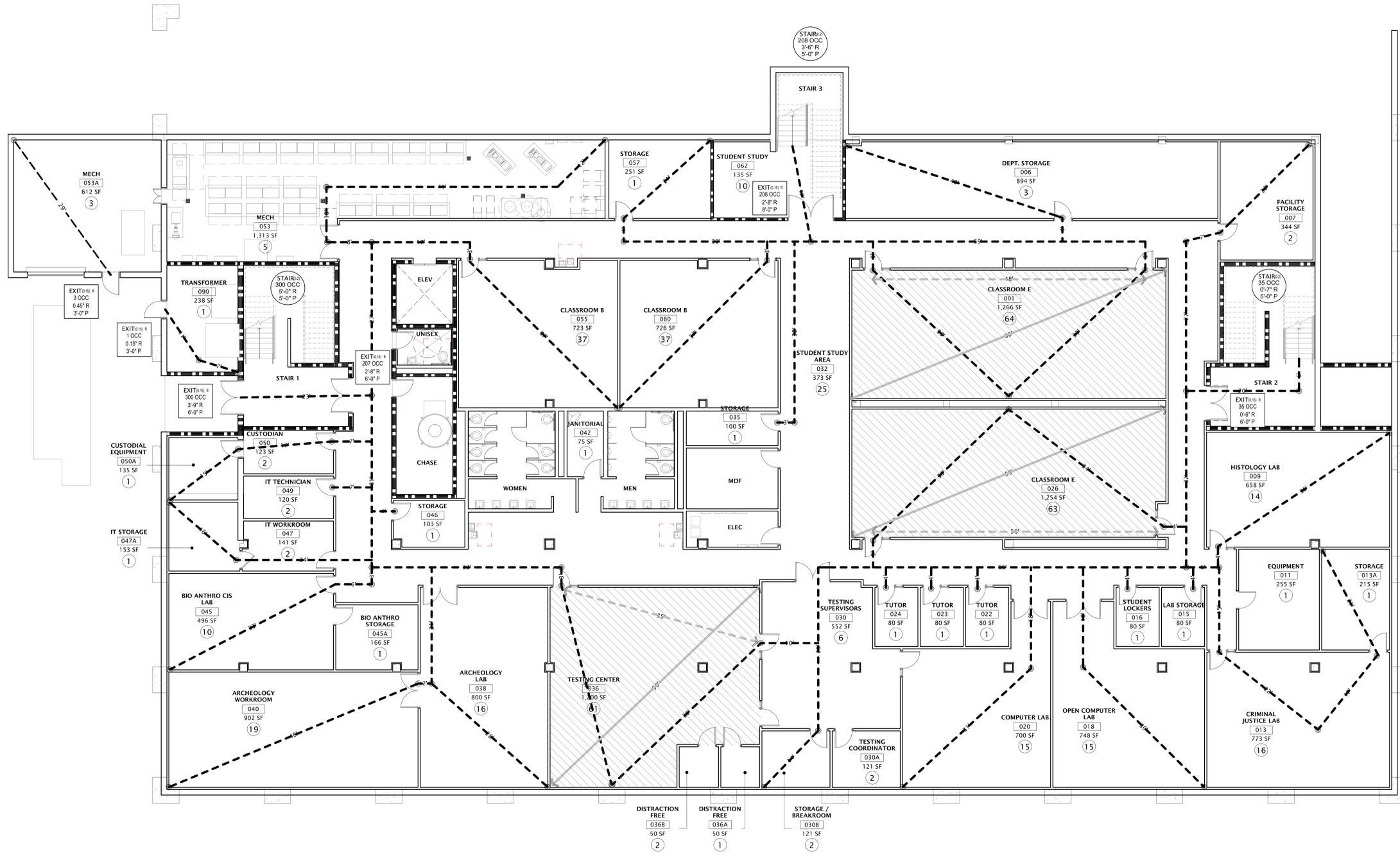
REVISIONS:

NO.	DATE	DESCRIPTION



OCCUPANCY / EGRESS LEGEND	
	NO. OF OCCUPANTS
	CORRIDOR TRIBUTARY LOAD
	TOTAL NO. OF OCCUPANTS AT EXIT
	LOCATION, EXIT WIDTH FACTOR, OCCUPANT NUMBER, REQUIRED STAIR WIDTH, PROVIDED STAIR WIDTH
	LOCATION, EXIT WIDTH FACTOR, GOVERNING FLOOR, OCCUPANT NUMBER, REQUIRED EXIT WIDTH, PROVIDED EXIT WIDTH
	FIRE EXTINGUISHER CABINET
	2 HR. RATED WALL
	1 HR. RATED WALL
	2 HR. FIREPROOF STRUCTURE: STRUCTURAL COLUMNS AND BEAMS
	OCCUPANCY TYPE A3
	OCCUPANCY IS TYPE B UNLESS NOTED OTHERWISE
	TRAVEL DISTANCE
	MAXIMUM DISTANCE
	DOOR TO DOOR DISTANCE

REVISIONS:



1 CODE PLAN - LEVEL B
G1100 1/8" = 1'-0"

SCHEMATIC DESIGN
WSU SOCIAL SCIENCE RENOVATION

1299 Edvalson St. Ogden, UT 84408
WEBER STATE UNIVERSITY

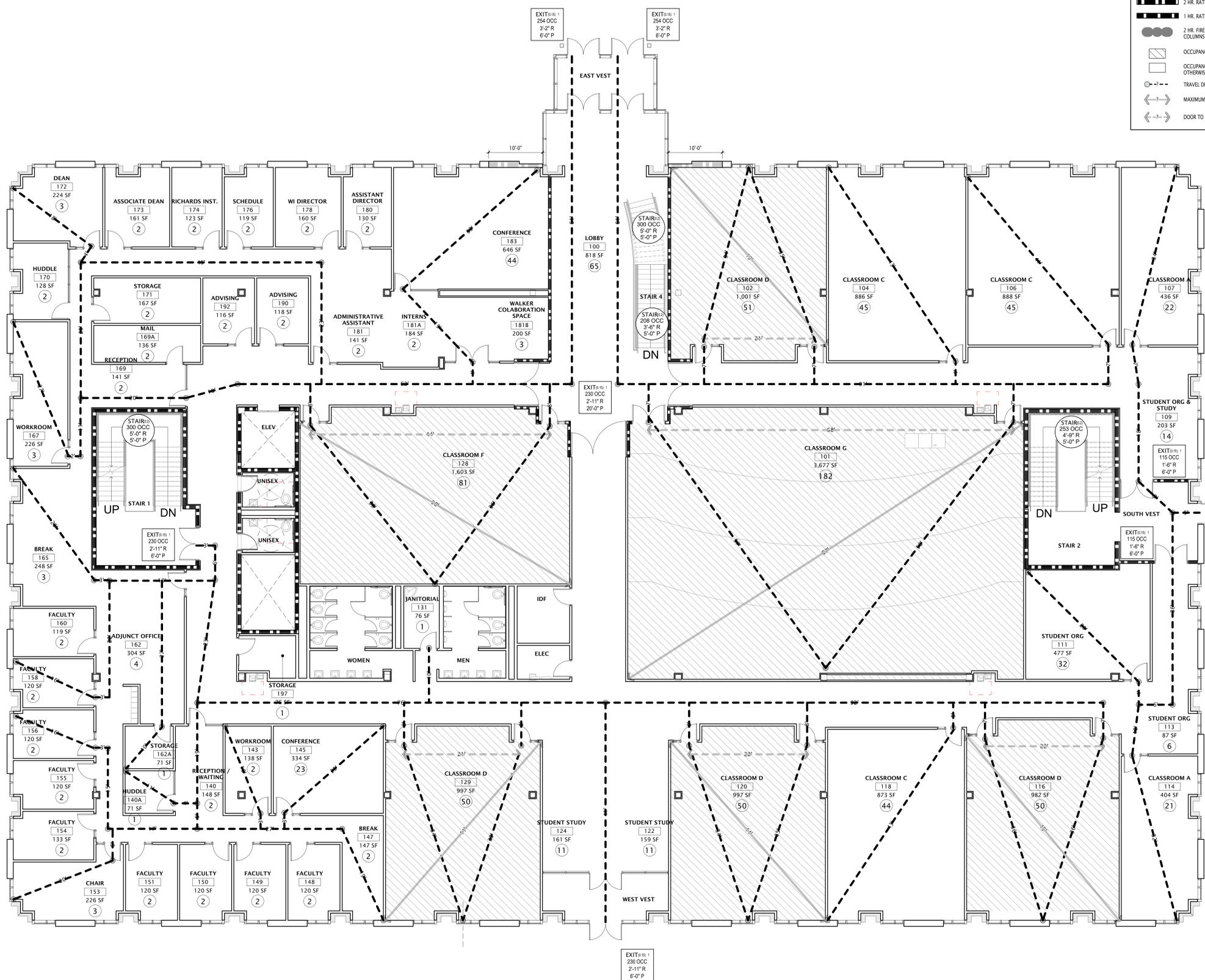
1410 Edvalson St. Ogden, UT 84408
OWNER PROJECT NO.: 16050810
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016

CODE/EXITING PLANS - LEVEL B

REVISIONS:

OCCUPANCY / EGRESS LEGEND

- NO. OF OCCUPANTS
- CORRIDOR TRIBUTARY LOAD
- TOTAL NO. OF OCCUPANTS AT EXIT
- STAIR: XX OCC, X'-X" R, X'-X" P
- EXIT: XX OCC, X'-X" R, X'-X" P
- REC: FIRE EXTINGUISHER CABINET
- 2 HR. RATED WALL
- 1 HR. RATED WALL
- 2 HR. FIREPROOF STRUCTURE- STRUCTURAL COLUMNS AND BEAMS
- OCCUPANCY TYPE A3
- OCCUPANCY IS TYPE B UNLESS NOTED OTHERWISE
- TRAVEL DISTANCE
- ←-→ MAXIMUM DISTANCE
- ←-→ DOOR TO DOOR DISTANCE



1 CODE PLAN - LEVEL 1
G1101 1/8" = 1'-0"

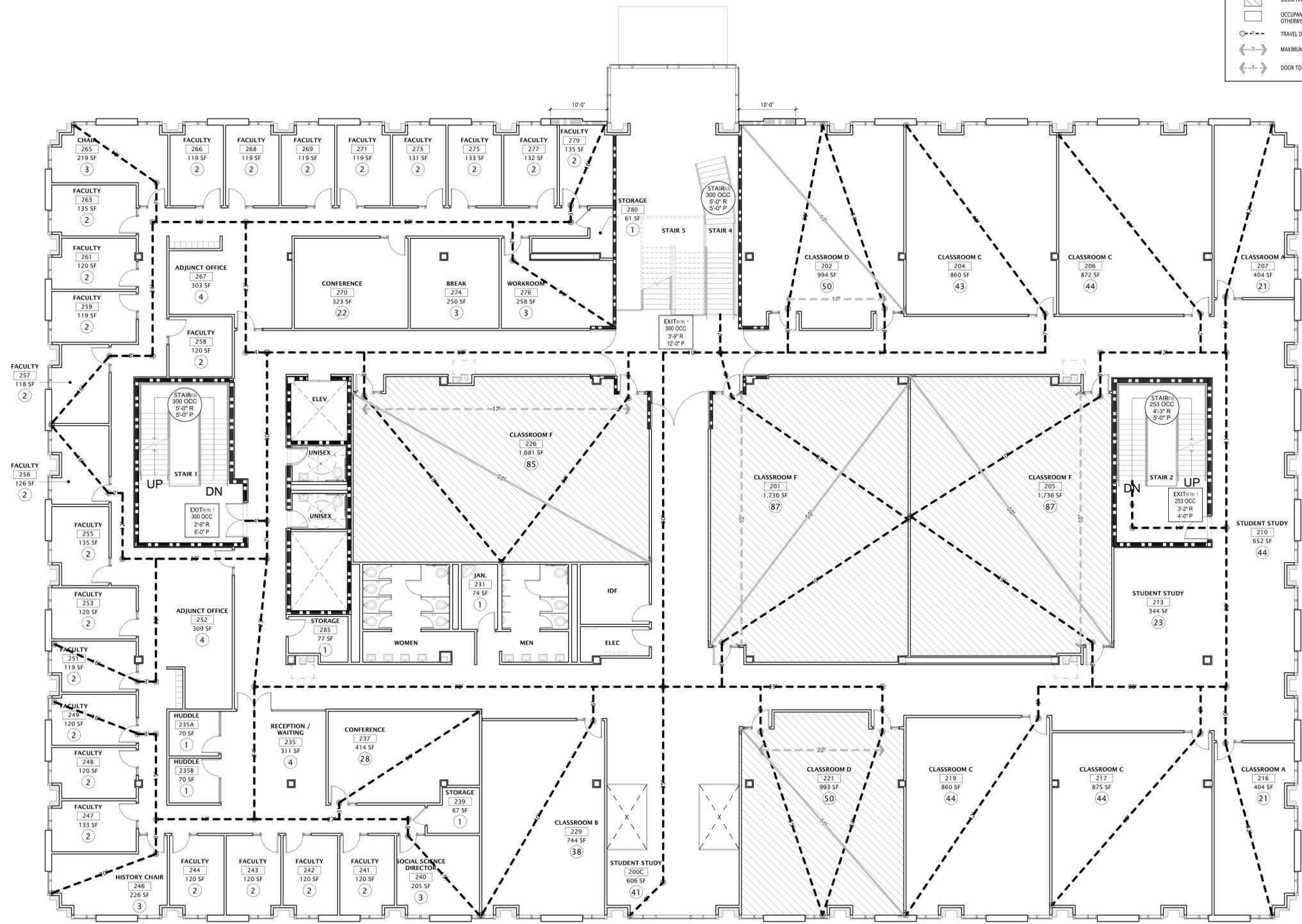
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1299 Edvalson St. Ogden, UT 84408
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1410 Edvalson St. Ogden, UT 84408
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GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016
CODE/ EXITING PLANS - LEVEL 1

REVISIONS:

OCCUPANCY / EGRESS LEGEND

- NO. OF OCCUPANTS
- CORRIDOR TRIBUTARY LOAD
- TOTAL NO. OF OCCUPANTS AT EXIT
- STAIR: XX OCC, X'-X" R, X'-X" P
- EXIT: H: H, X: XXXX OCC, X'-X" R, X'-X" P
- FEC
- ▬ 2 HR. RATED WALL
- ▬ 1 HR. RATED WALL
- 2 HR. FIREPROOF STRUCTURE- STRUCTURAL COLUMNS AND BEAMS
- ▨ OCCUPANCY TYPE A3
- OCCUPANCY IS TYPE B UNLESS NOTED OTHERWISE
- → TRAVEL DISTANCE
- ← → MAXIMUM DISTANCE
- ← → DOOR TO DOOR DISTANCE



1 CODE PLAN - LEVEL 2
G1102 1/8" = 1'-0"

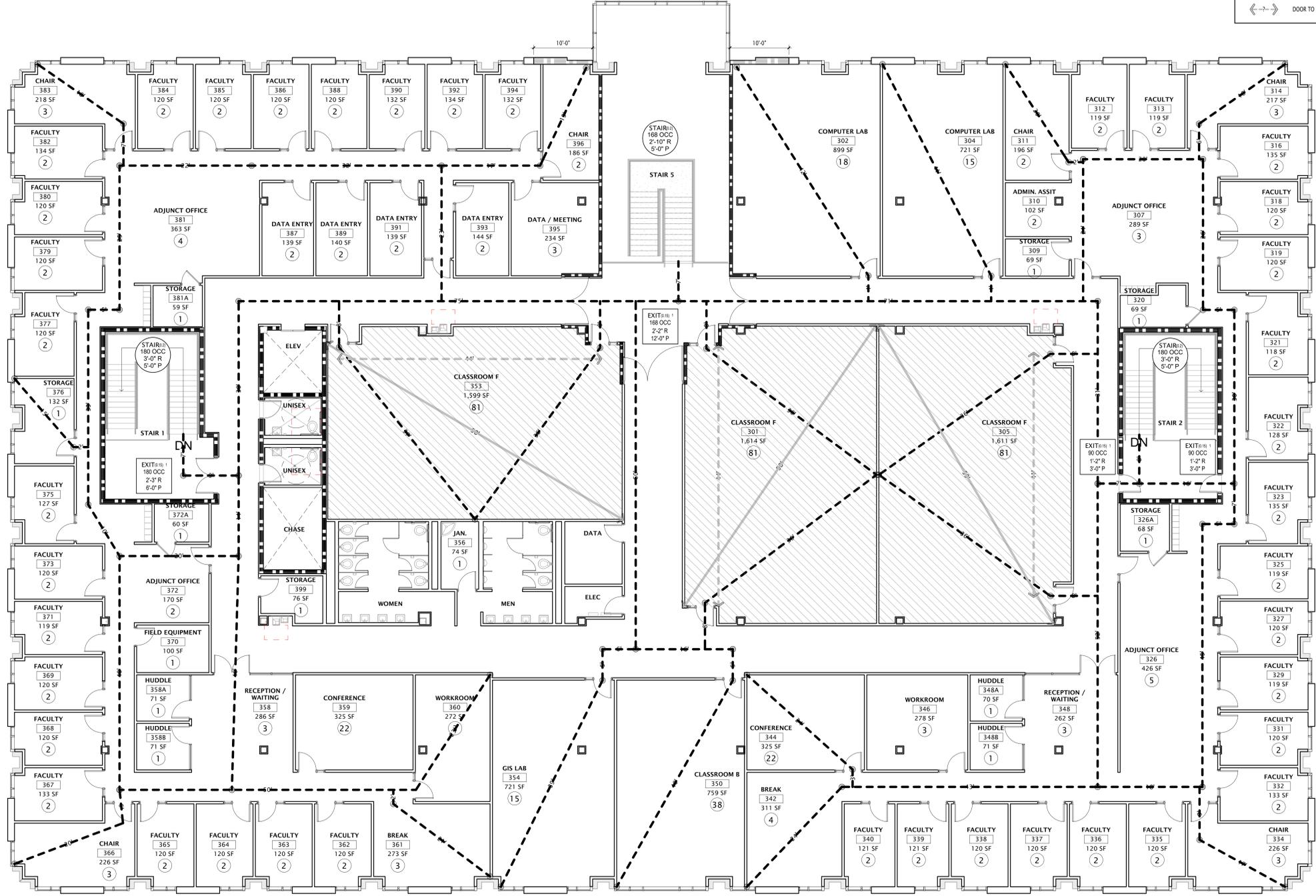
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OWNER PROJECT NO.: 16050810
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016
CODE/EXITING PLANS - LEVEL 2

REVISIONS:

OCCUPANCY / EGRESS LEGEND

- NO. OF OCCUPANTS
- CORRIDOR TRIBUTARY LOAD
- TOTAL NO. OF OCCUPANTS AT EXIT
- STAIR: XX OCC, X'-X" R, X'-X" P
- EXIT: 18" OCC, X'-X" R, X'-X" P
- REC: FIRE EXTINGUISHER CABINET
- 2 HR. RATED WALL
- 1 HR. RATED WALL
- 2 HR. FIREPROOF STRUCTURE - STRUCTURAL COLUMNS AND BEAMS
- OCCUPANCY TYPE A3
- OCCUPANCY IS TYPE B UNLESS NOTED OTHERWISE
- TRAVEL DISTANCE
- ←-→ MAXIMUM DISTANCE
- ←-→ DOOR TO DOOR DISTANCE



1 CODE PLAN - LEVEL 3
G1103 1/8" = 1'-0"

SCHEMATIC DESIGN
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1410 Edvalson St. Ogden, UT 84408
OWNER PROJECT NO.: 16050810
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016
CODE/EXISTING PLANS - LEVEL 3



Lindquist Hall



WEBER STATE UNIVERSITY

REVISIONS:

NOT FOR CONSTRUCTION



WSU SOCIAL SCIENCE RENOVATION

1290 Edvokan St. Ogden, UT 84408

1410 Edvokan St. Ogden, UT 84408
OWNER PROJECT NO.:
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE:
DEMOLITION PLAN

GENERAL NOTES:
EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM RECORD DRAWINGS AND MAY NOT BE LOCATED CORRECTLY AND IS NOT ALL INCLUSIVE. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES BEFORE BEGINNING DEMOLITION/CONSTRUCTION AND NOTIFY ENGINEER WHEN UNEXPECTED UTILITIES ARE DISCOVERED.
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. THE FACILITIES AND IMPROVEMENTS ARE BELIEVED TO BE CORRECTLY SHOWN BUT THE CONTRACTOR IS REQUIRED TO SATISFY HIMSELF AS TO THE COMPLETENESS AND ACCURACY OF THE LOCATIONS. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE THEMSELVES WITH THE SITE AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY, OR INDIRECTLY, FROM THEIR OPERATIONS, WHETHER OR NOT SAID FACILITIES ARE SHOWN ON THESE PLANS.

SCOPE OF WORK:

- 1) SAWCUT EXISTING CONCRETE.
- 2) REMOVE AND PROPERLY DISPOSE OF EXISTING ASPHALT.
- 3) REMOVE AND PROPERLY DISPOSE OF EXISTING CONCRETE.
- 4) EXISTING LIGHT POLE TO BE PROTECTED IN PLACE.
- 5) EXISTING TREES AND PLANTS TO BE PROTECTED IN PLACE.
- 6)
- 7) TYPE I SLURRY SEAL, APPROXIMATELY 61,500 SQUARE FEET.
- 8) EXISTING ASPHALT TO BE PROTECTED IN PLACE.
- 9) EXISTING CONCRETE TO BE PROTECTED IN PLACE.
- 10) REMOVE AND PROPERLY DISPOSE OF MECHANICAL EQUIPMENT AND ENCLOSURE. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS.
- 11) REMOVE AND PROPERLY DISPOSE OF EXISTING TREES.
- 12) EXISTING UTILITY TUNNEL TO BE PROTECTED IN PLACE.
- 13) REMOVE EXISTING WATER VAULT
- 14) REMOVE EXISTING WATER VALVE
- 15) REMOVE EXISTING IRRIGATION BOX
- 16) REMOVE EXISTING PVW LINE
- 17) REMOVE EXISTING STORM DRAIN LINE
- 18) REMOVE EXISTING ELECTRICAL BOX

MOST MAJOR STRUCTURES ARE IDENTIFIED ON THIS DEMO PLAN, HOWEVER A COMPLETE SITE WALK THROUGH IS ABSOLUTELY NECESSARY PRIOR TO BID TO IDENTIFY ITEMS TO BE REMOVED/DEMOLISHED THAT ARE NOT IDENTIFIED ON THIS PLAN (FENCING, STAIRS, HVAC EQUIPMENT, ETC.)

EXISTING IRRIGATION SYSTEM:

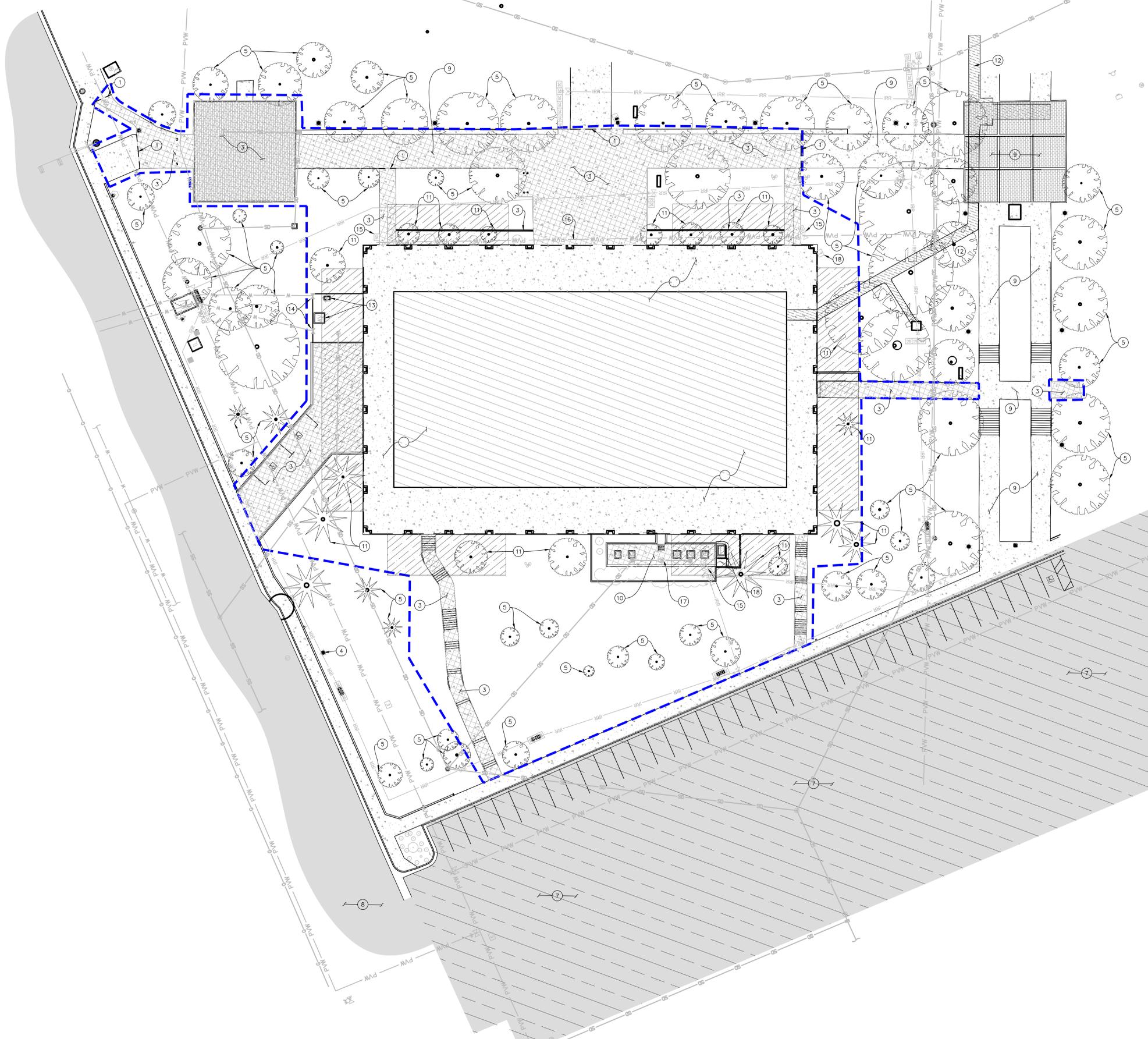
1) CONTACT BRIAN HADLEY AT 801.839.6614 OR BRIANHADLEY@WEBER.EDU WITH WEBER STATE UNIVERSITY TO GO OVER IRRIGATION LINES TO KEEP OPERATING DURING CONSTRUCTION AND RE-ROUTING VALVES AND/OR ZONES ADJACENT TO PROJECT. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN WATER SUPPLY TO ALL EXISTING PLANT MATERIAL DESIGNATED TO REMAIN. THIS MAY REQUIRE THAT THE CONTRACTOR RE-ROUTE EXISTING IRRIGATION LINES AND RELOCATE EXISTING AUTOMATIC CONTROL VALVES, IRRIG. & IRRIGATION HEADS. THE CONTRACTOR MAY ALSO BE REQUIRED TO HAND-WATER EXISTING PLANT MATERIAL DURING CONSTRUCTION WHERE RELOCATING THE EXISTING IRRIGATION SYSTEM COMPONENTS IS NOT FEASIBLE.

DEMOLITION NOTES:

- 1) ALL SITE FURNISHINGS, I.E. BENCHES, BIKE RACKS, TRASH RECEPTACLES, ETC. SHALL BE CONVEYED TO OWNER.
- 2) CONTACT WESTON WOODWARD AT 801.839.6614 OR WESTONWOODWARD@WEBER.EDU WITH WEBER STATE UNIVERSITY PRIOR TO ANY REMOVAL OF PLANT MATERIAL AND COORDINATE WITH BRIAN TO HARVEST PLANT MATERIAL PRIOR TO ANY DEMOLITION.

LEGEND:

	EXISTING STORM DRAIN PIPE
	EXISTING CATCH BASIN
	EXISTING WATER VALVE
	EXISTING TREE
	EXISTING CONCRETE TO REMAIN
	EXISTING ASPHALT TO BE REMOVED
	EXISTING ASPHALT TO REMAIN
	EXISTING ASPHALT TO BE OVERLAYED
	LIMITS OF EXCAVATION TO ACCESS BUILDING FOUNDATION



REVISIONS:

NO.	DESCRIPTION

GENERAL NOTES:
ALL WORK TO COMPLY WITH APWA AND DFCM STANDARDS AND SPECIFICATIONS.
ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS.
SEE GRADING PLANS FOR ADDITIONAL DESIGN INFORMATION.

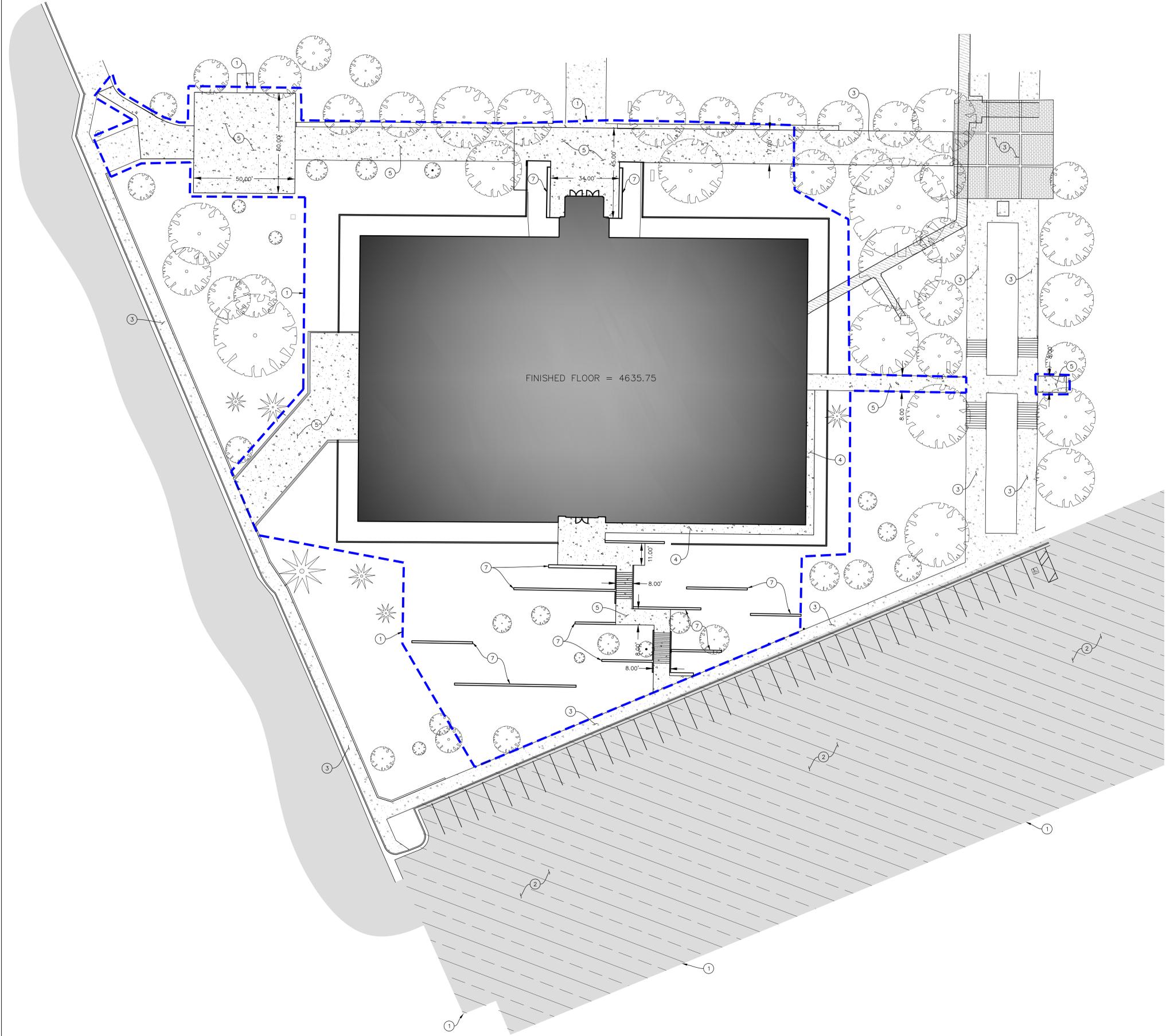
SCOPE OF WORK:
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.

GENERAL SIGNAGE AND STRIPING NOTES:
ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.
ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).

- ① APPROXIMATE LIMITS OF DISTURBANCE.
- ② TYPE I SLURRY SEAL. SEE OVERLAY NOTES ON THIS SHEET.
- ③ CONTRACTOR TO & PRESERVE EXISTING IMPROVEMENTS (TYPICAL UNLESS OTHERWISE NOTED).
- ④ INSTALL CONCRETE SIDEWALK.
- ⑤ CONCRETE SIDEWALK WIDTH AS SHOWN ON PLAN.
- ⑥ INSTALL CONCRETE DRIVEWAY.
- ⑦ C-CHANNEL CONCRETE SEAT WALL. SEE LANDSCAPE PLANS FOR DETAILS.

SLURRY NOTES:
1. CONTRACTOR AND OWNER TO IDENTIFY AREAS OF DISTRESSED ASPHALT TO BE REMOVED AND REPLACED PRIOR TO SLURRY SEAL.
2. CONTRACTOR TO INVENTORY PARKING LOT STRIPING PRIOR TO SLURRY SEAL AND REPLACE IN KIND UPON COMPLETION OF SLURRY SEAL.

 SLURRY OVERLAY



LEGEND:

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT
	PROPOSED ASPHALT OVERLAY

NOT FOR CONSTRUCTION

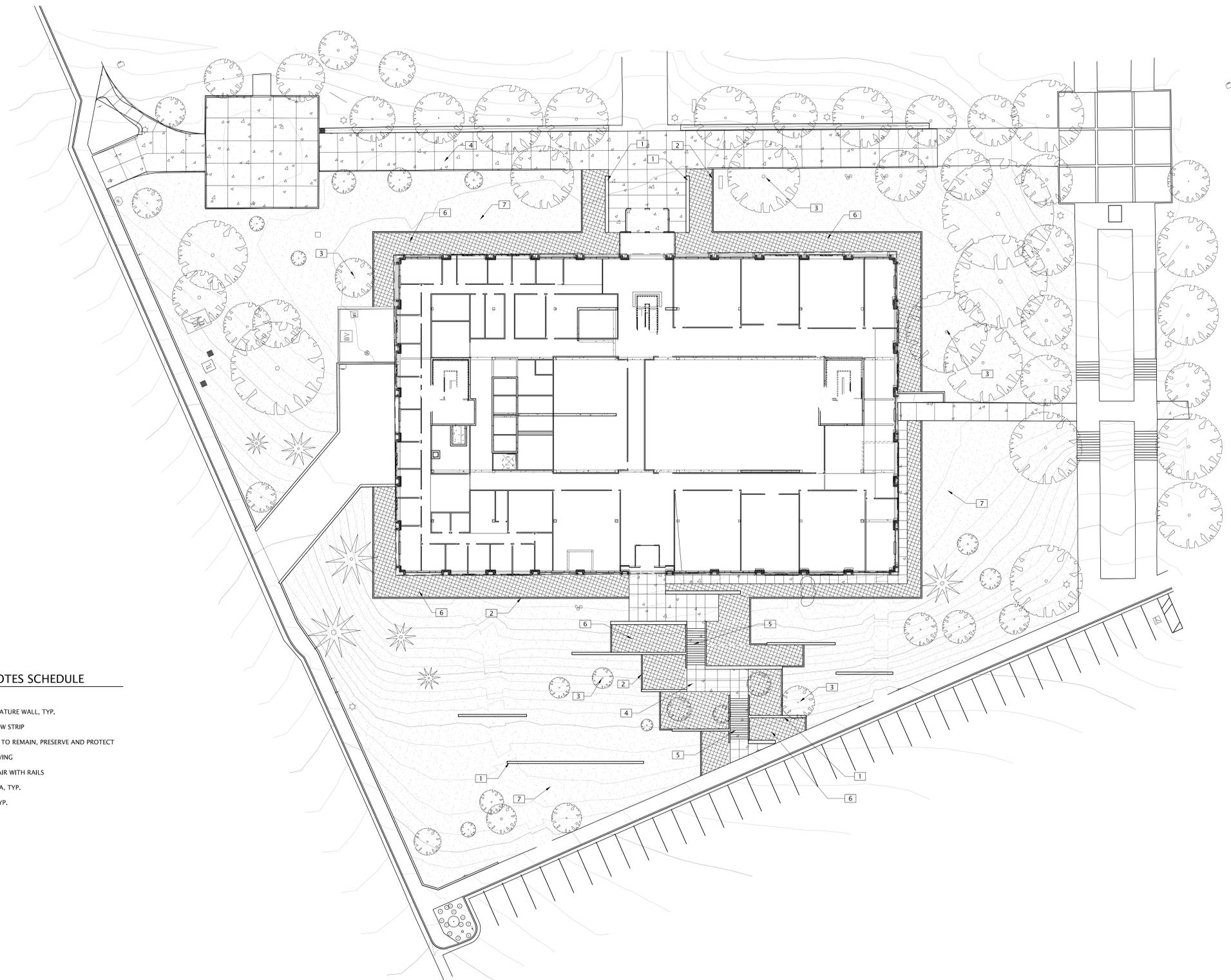


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1410 Edelson St. Ogden, UT 84408
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GSBS PROJECT NO.: 2016.036.00
ISSUED DATE:
SITE PLAN

SCALE
HORIZONTAL: 1" = 20'
0 5 10 20 30

REVISIONS:



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	LANDSCAPE FEATURE WALL, TYP.
2	CONCRETE MOW STRIP
3	EXISTING TREE TO REMAIN, PRESERVE AND PROTECT
4	CONCRETE PAVING
5	CONCRETE STAIR WITH RAILS
6	PLANTING AREA, TYP.
7	LAWN AREA, TYP.

NOT FOR CONSTRUCTION

Schematic Design

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GSBS PROJECT NO.: 7.8.16
ISSUED DATE:

SITE PLAN

SITE PLAN 1
SCALE: 1"=20' AS100

AS100



DEMOLITION LEGEND	
	EXISTING TO REMAIN
	TO BE DEMO

REVISIONS:



1 DEMO PLAN - LEVEL B
AD100 1/8" = 1'-0"

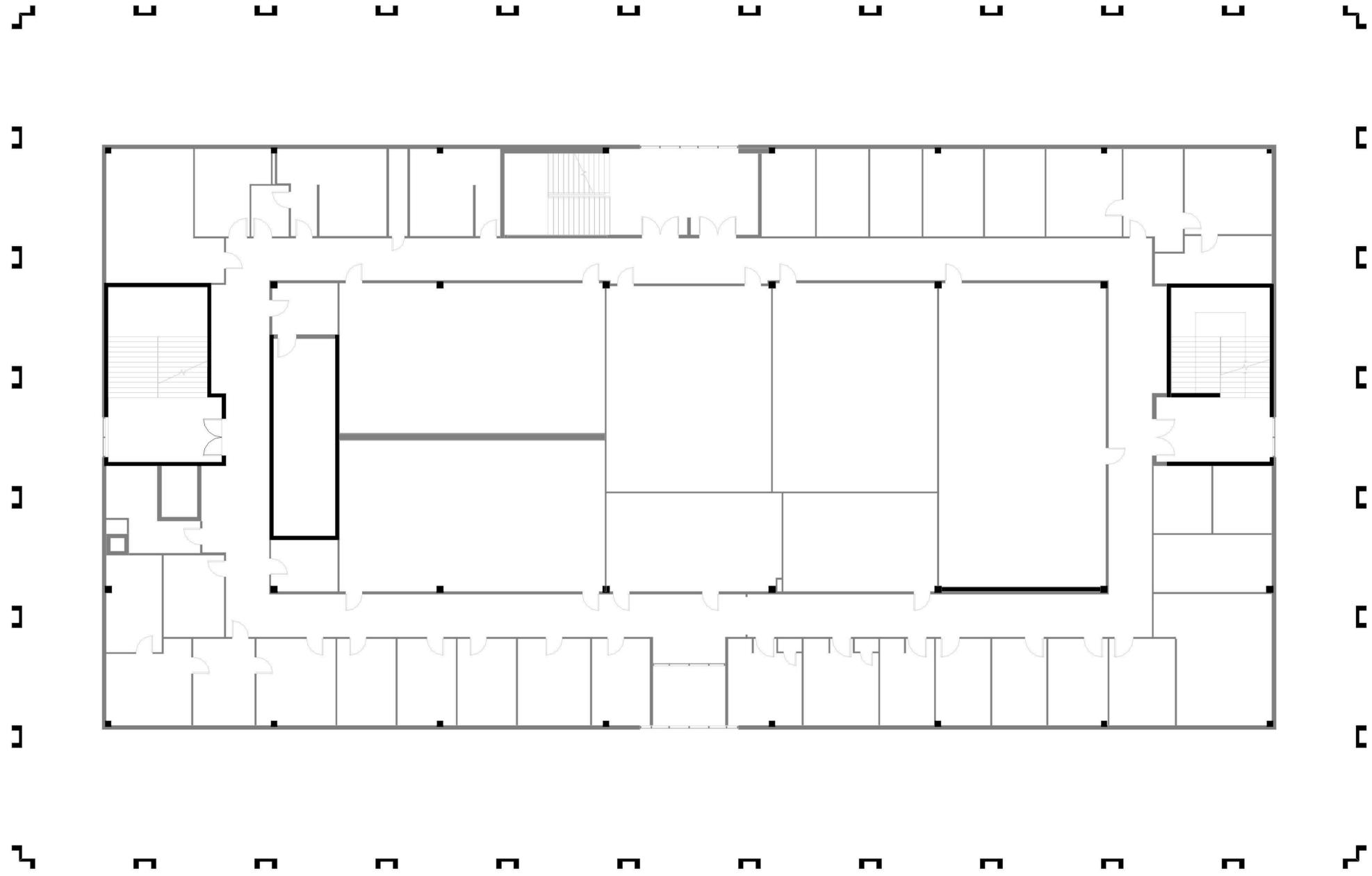
SCHEMATIC DESIGN
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DEMOLITION PLAN - LEVEL
B

DEMOLITION LEGEND	
	EXISTING TO REMAIN
	TO BE DEMO

REVISIONS:



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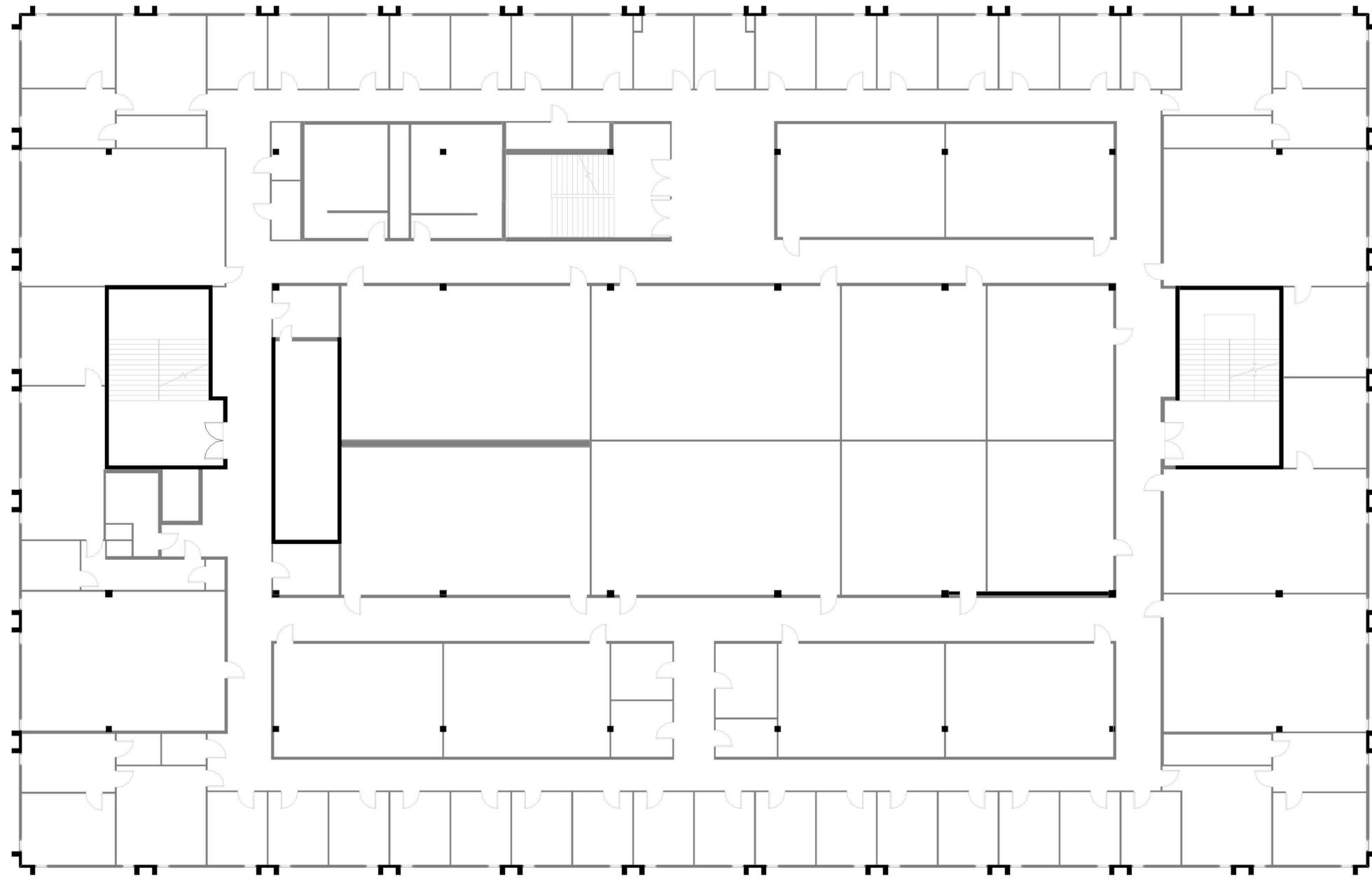


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DEMOLITION PLAN - LEVEL
1

DEMOLITION LEGEND	
	EXISTING TO REMAIN
	TO BE DEMO

REVISIONS:



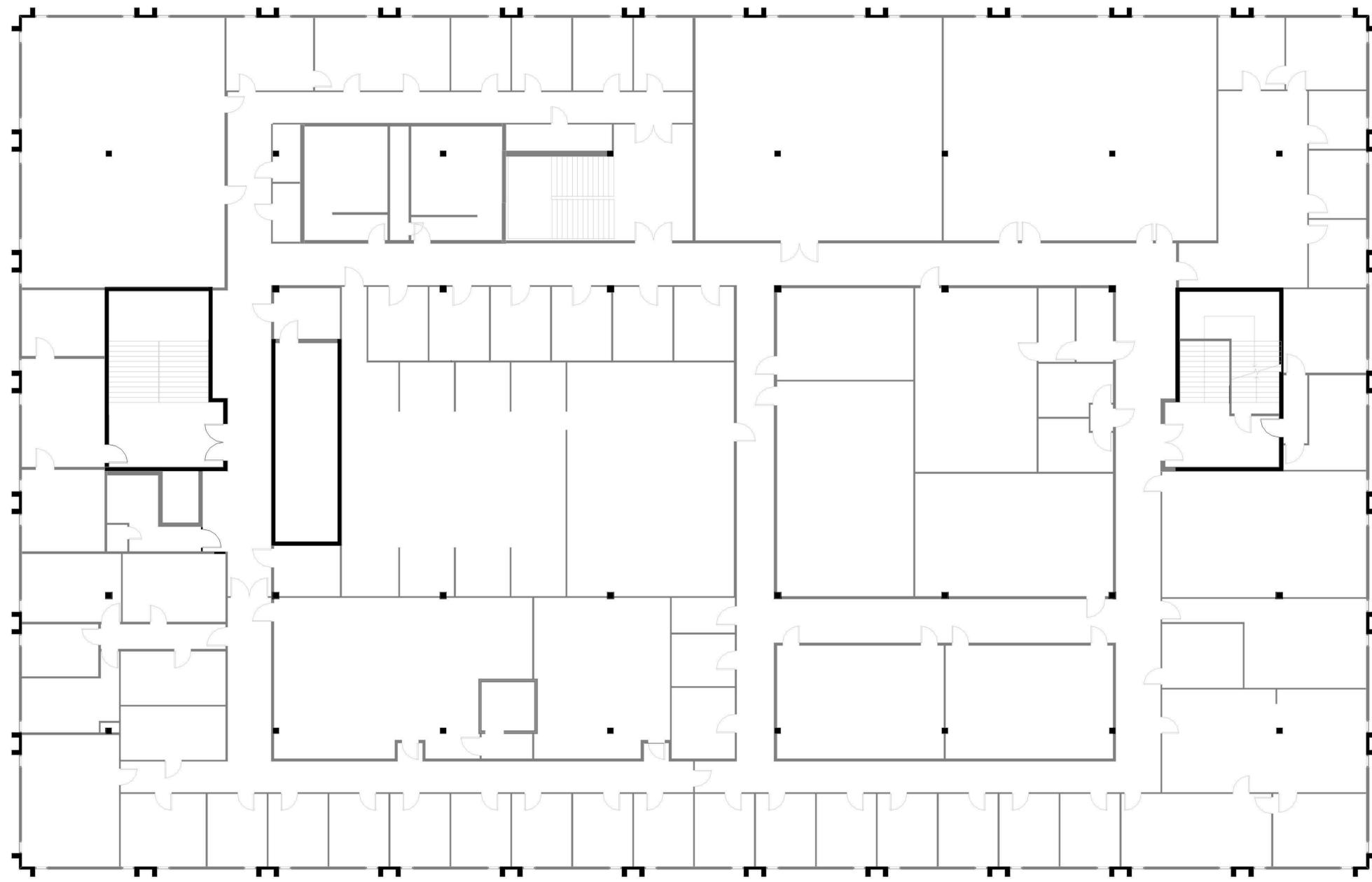
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DEMOLITION PLAN - LEVEL
2

DEMOLITION LEGEND	
	EXISTING TO REMAIN
	TO BE DEMO

REVISIONS:



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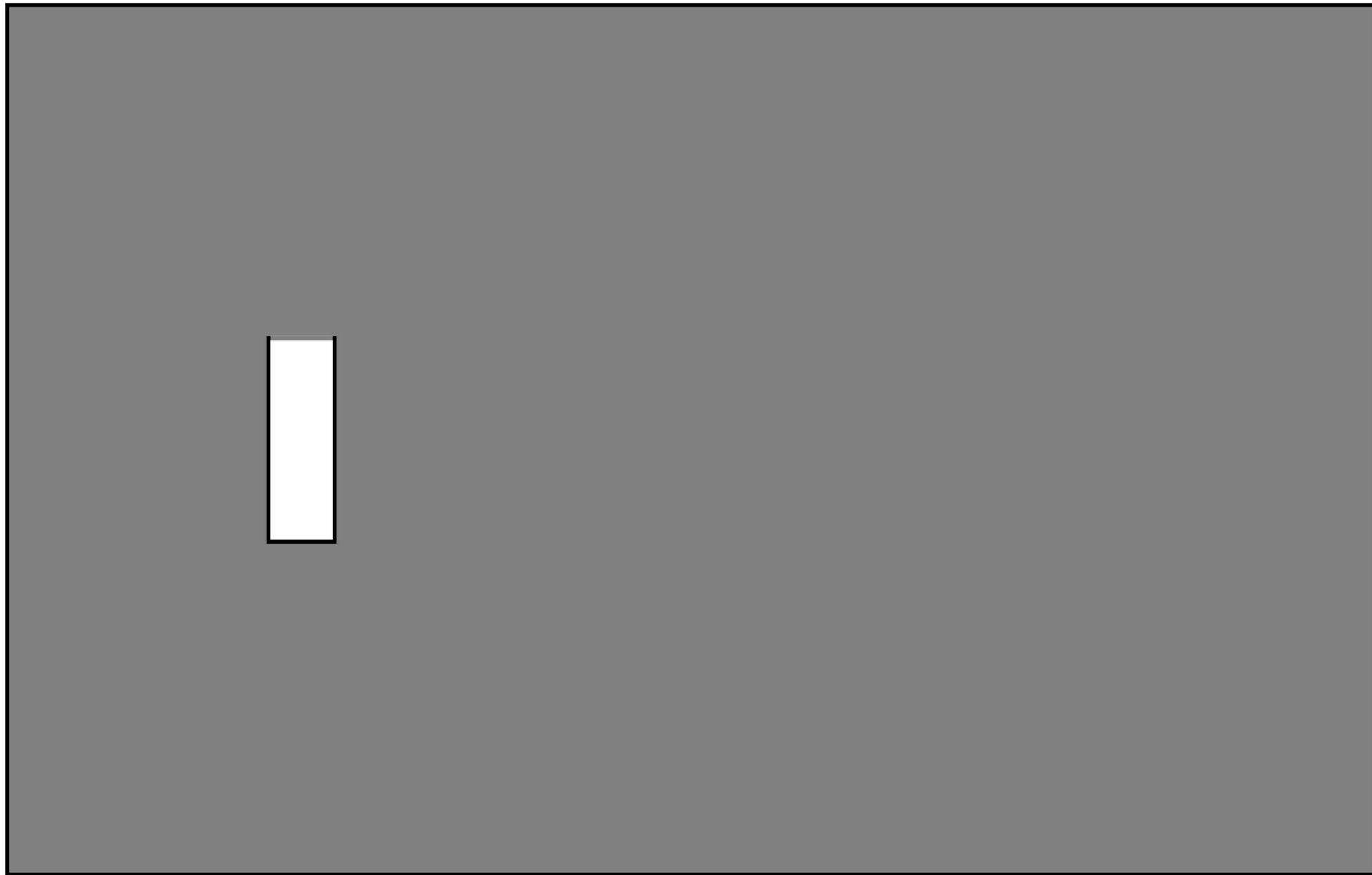
DEMOLITION PLAN - LEVEL
3

DEMOLITION LEGEND	
	EXISTING TO REMAIN
	TO BE DEMO



375 WEST 200 SOUTH
SALT LAKE CITY, UT 84101
P 801.521.8600
F 801.521.7915
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REVISIONS:



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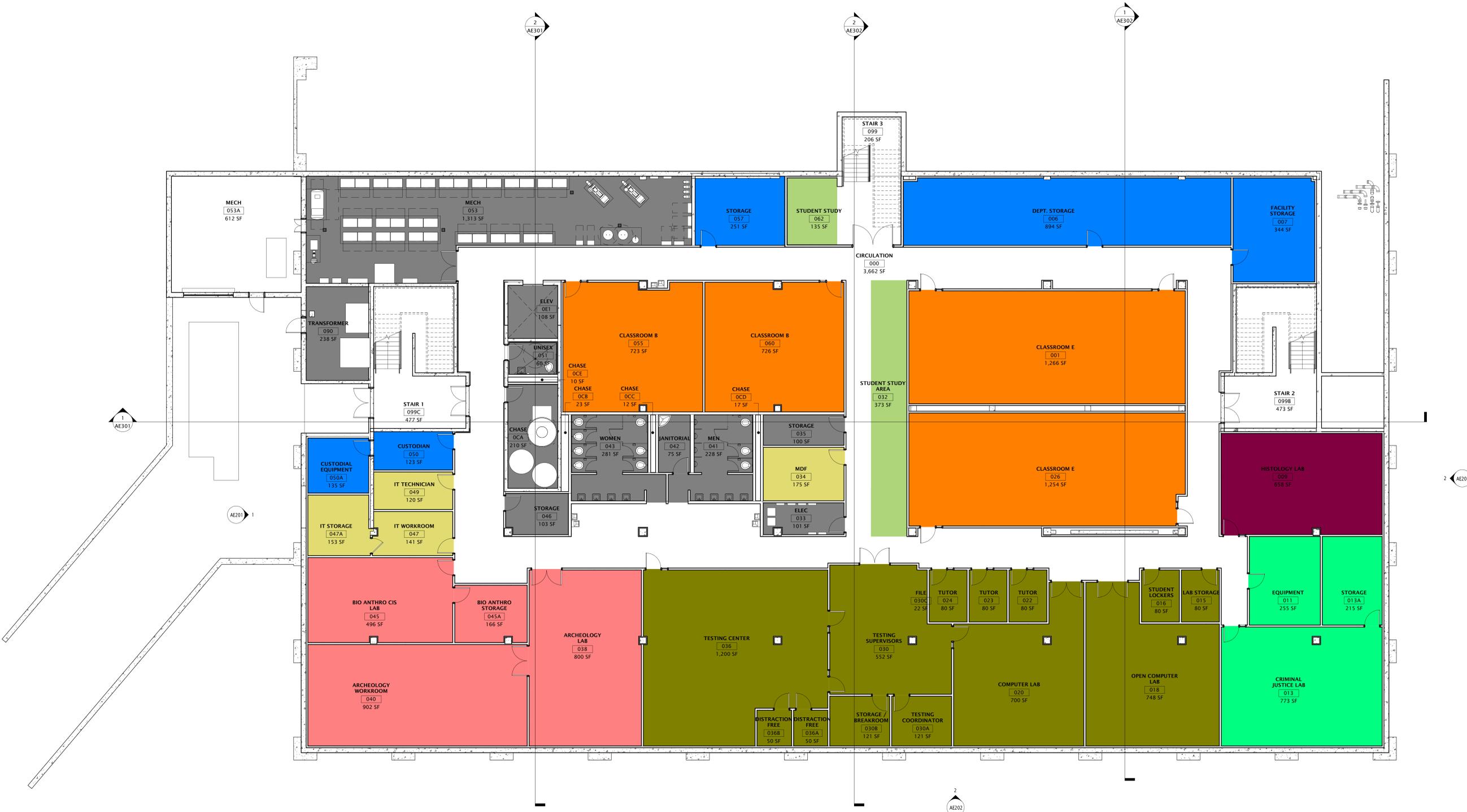
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DEMOLITION PLAN - ROOF



REVISIONS:

- BUILDING SUPPORT
- CIRCULATION
- CLASSROOM
- CRIMINAL JUSTICE
- DEAN
- GEOGRAPHY
- HISTORY
- IT
- NEUROSCIENCE
- PHYSICAL PLANT
- POLITICAL SCIENCE & PHILOSOPHY
- PSYCHOLOGY
- SHARED
- SOCIAL SCIENCE
- SOCIAL WORK / GERONTOLOGY
- SOCIOLOGY & ANTHROPOLOGY
- STUDENT
- TESTING
- WALKER CENTER
- WOMEN / GENDER



FLOOR PLAN - LEVEL B
1/AE100 1/8" = 1'-0"

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OVERALL PLAN - LEVEL B

REVISIONS:

- BUILDING SUPPORT
- CIRCULATION
- CLASSROOM
- CRIMINAL JUSTICE
- DEAN
- GEOGRAPHY
- HISTORY
- IT
- NEUROSCIENCE
- PHYSICAL PLANT
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- SOCIAL SCIENCE
- SOCIAL WORK / GERONTOLOGY
- SOCIOLOGY & ANTHROPOLOGY
- STUDENT
- TESTING
- WALKER CENTER
- WOMEN / GENDER



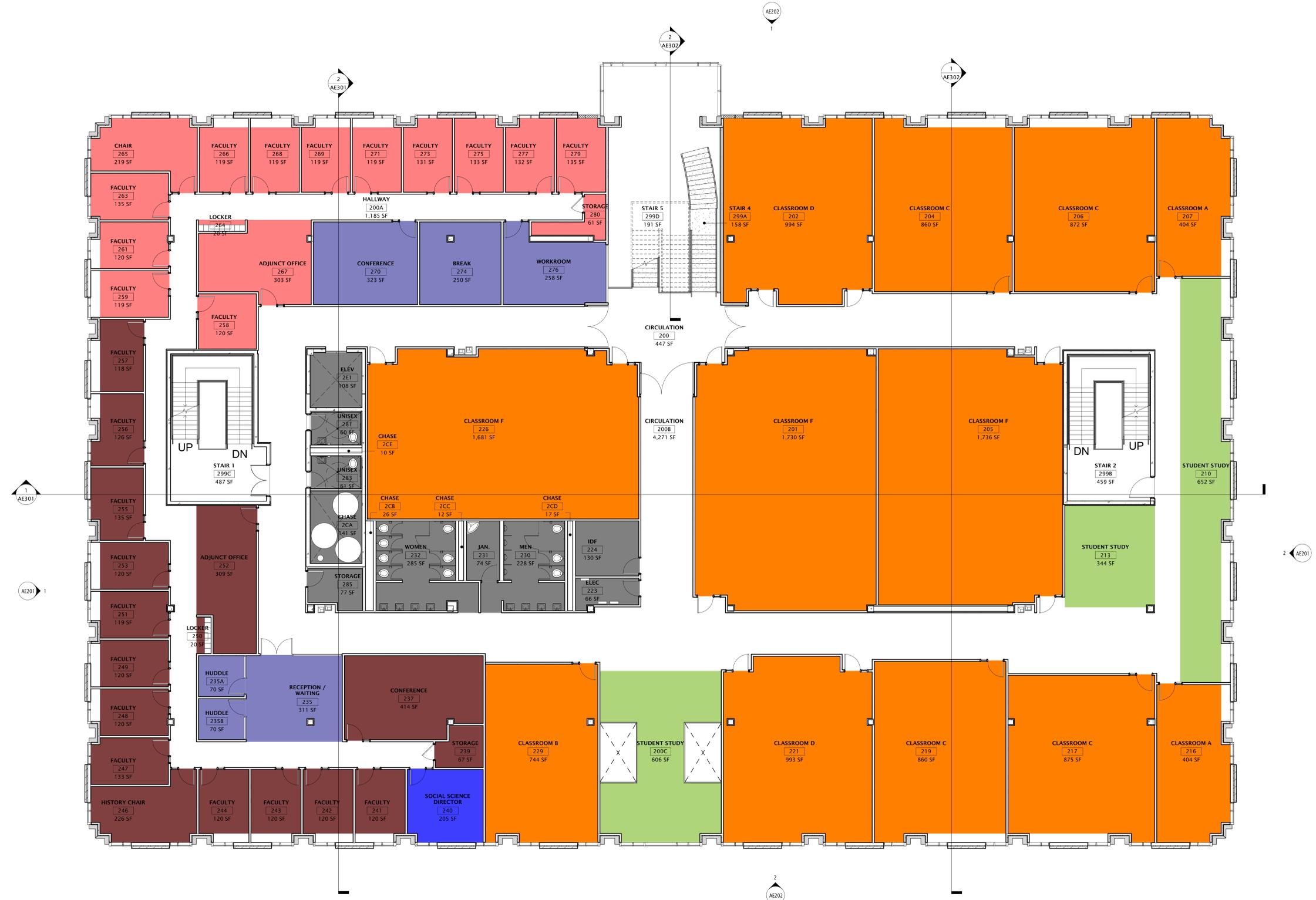
1 FLOOR PLAN - LEVEL 1
AE101 1/8" = 1'-0"

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OVERALL PLAN - LEVEL 1

REVISIONS:

- BUILDING SUPPORT
- CIRCULATION
- CLASSROOM
- CRIMINAL JUSTICE
- DEAN
- GEOGRAPHY
- HISTORY
- IT
- NEUROSCIENCE
- PHYSICAL PLANT
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- SOCIAL SCIENCE
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- SOCIOLOGY & ANTHROPOLOGY
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- TESTING
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FLOOR PLAN - LEVEL 2
1/8" = 1'-0"

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OVERALL PLAN - LEVEL 2

REVISIONS:

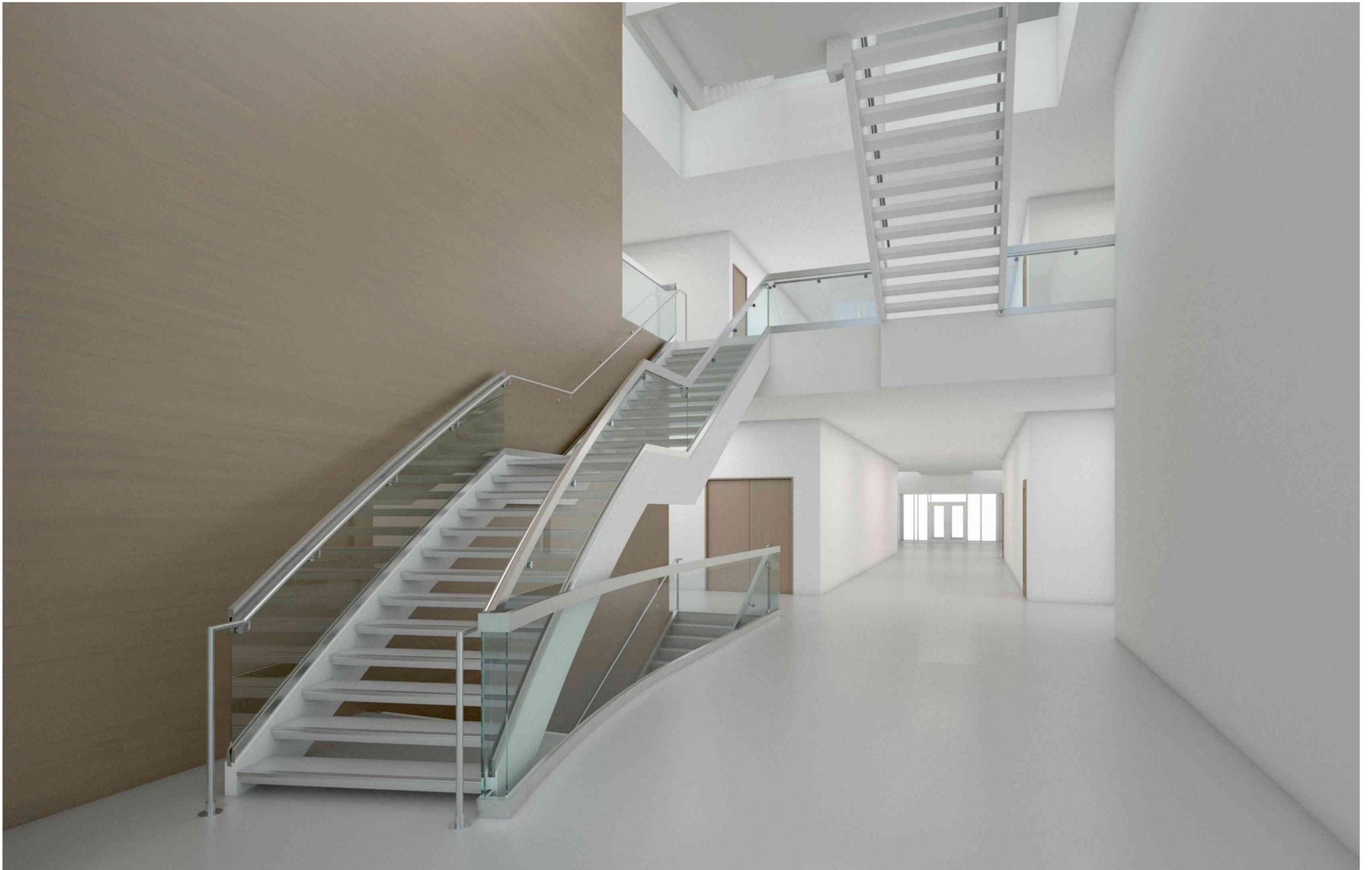
- BUILDING SUPPORT
- CIRCULATION
- CLASSROOM
- CRIMINAL JUSTICE
- DEAN
- GEOGRAPHY
- HISTORY
- IT
- NEUROSCIENCE
- PHYSICAL PLANT
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- SOCIOLOGY & ANTHROPOLOGY
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FLOOR PLAN - LEVEL 3
1/AE103 1/8" = 1'-0"

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OVERALL PLAN - LEVEL 3



REVISIONS:



2 SOUTH ELEVATION
AE201 1/8" = 1'-0"



1 NORTH ELEVATION
AE201 1/8" = 1'-0"

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EXTERIOR ELEVATIONS

REVISIONS:



2 WEST ELEVATION
AE202 1/8" = 1'-0"



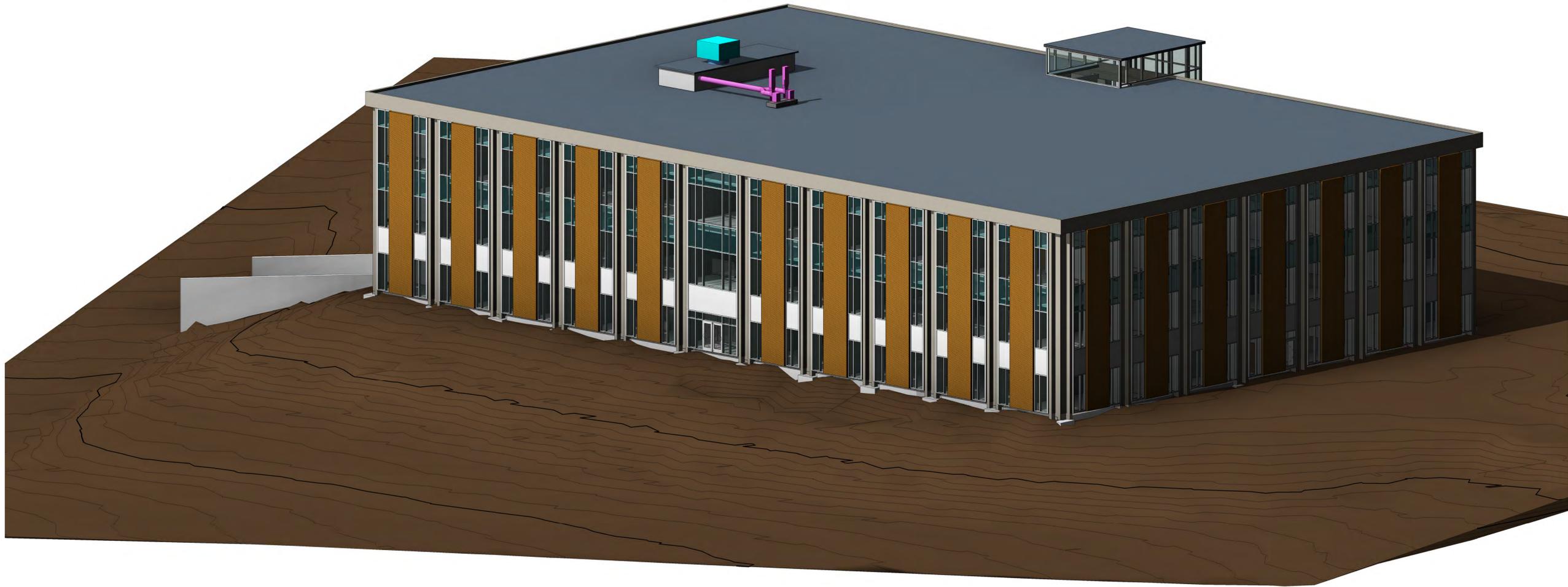
1 EAST ELEVATION
AE202 1/8" = 1'-0"

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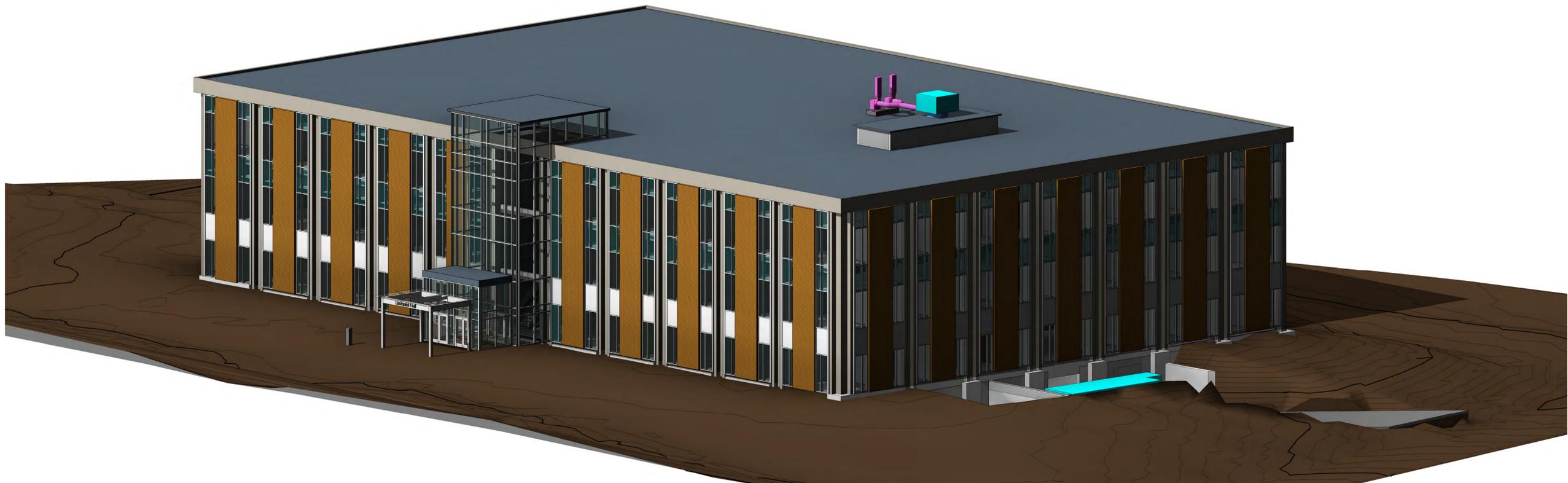
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EXTERIOR ELEVATIONS

REVISIONS:



2 AXONOMETRIC VIEW - EXTERIOR S/W
AE203



1 AXONOMETRIC VIEW - EXTERIOR N/E
AE203

SCHEMATIC DESIGN

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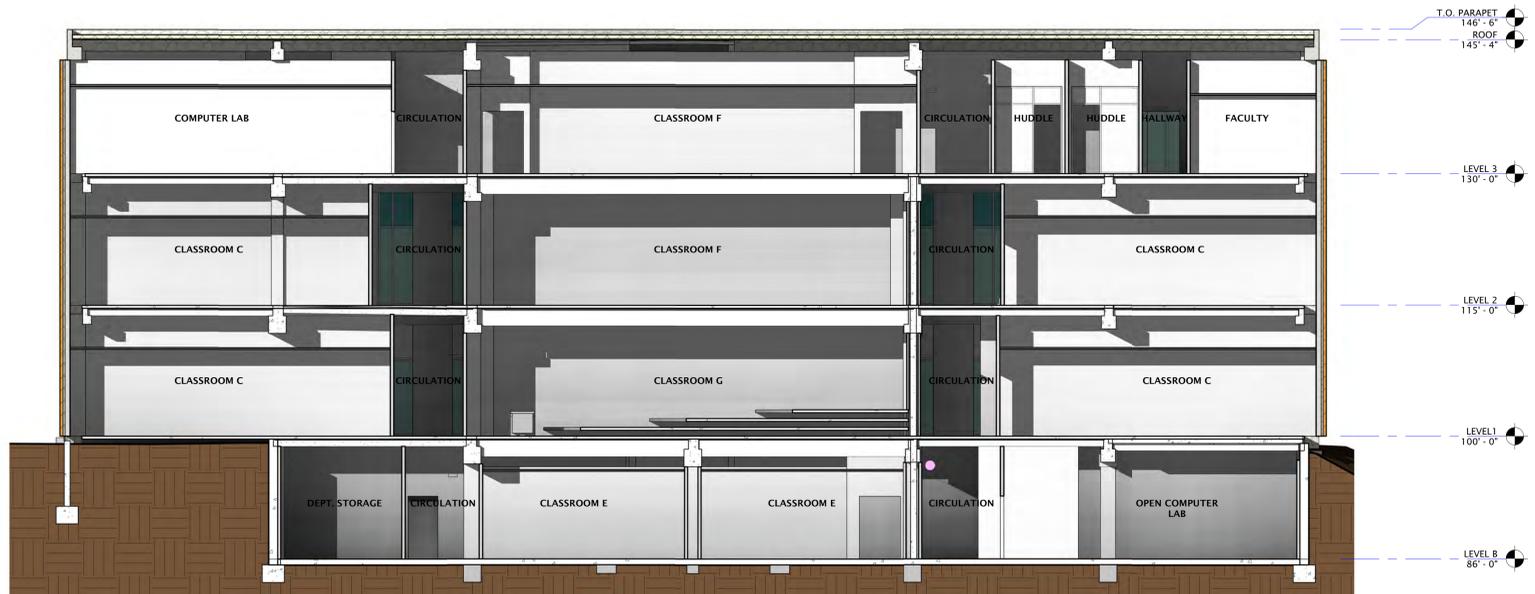
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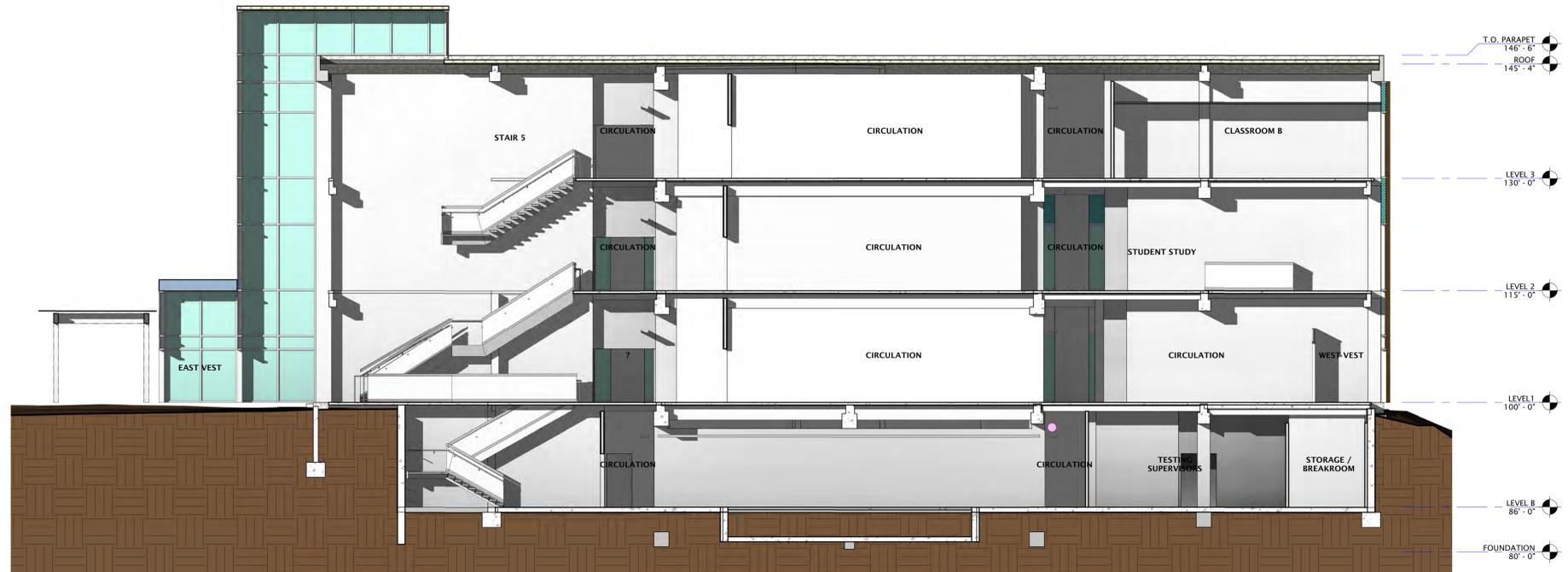
ISSUED DATE: 07.08.2016

**AXONOMETRIC VIEWS -
EXTERIOR**

REVISIONS:



1 EAST / WEST SECTION 2
AE302 1/8" = 1'-0"



2 EAST / WEST SECTION 1
AE302 1/8" = 1'-0"

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BUILDING SECTIONS

REVISIONS:



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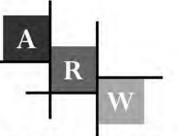
OWNER PROJECT NO.: 2016.036.00
GSBS PROJECT NO.: 06.07.2016
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STRUCTURAL NOTES

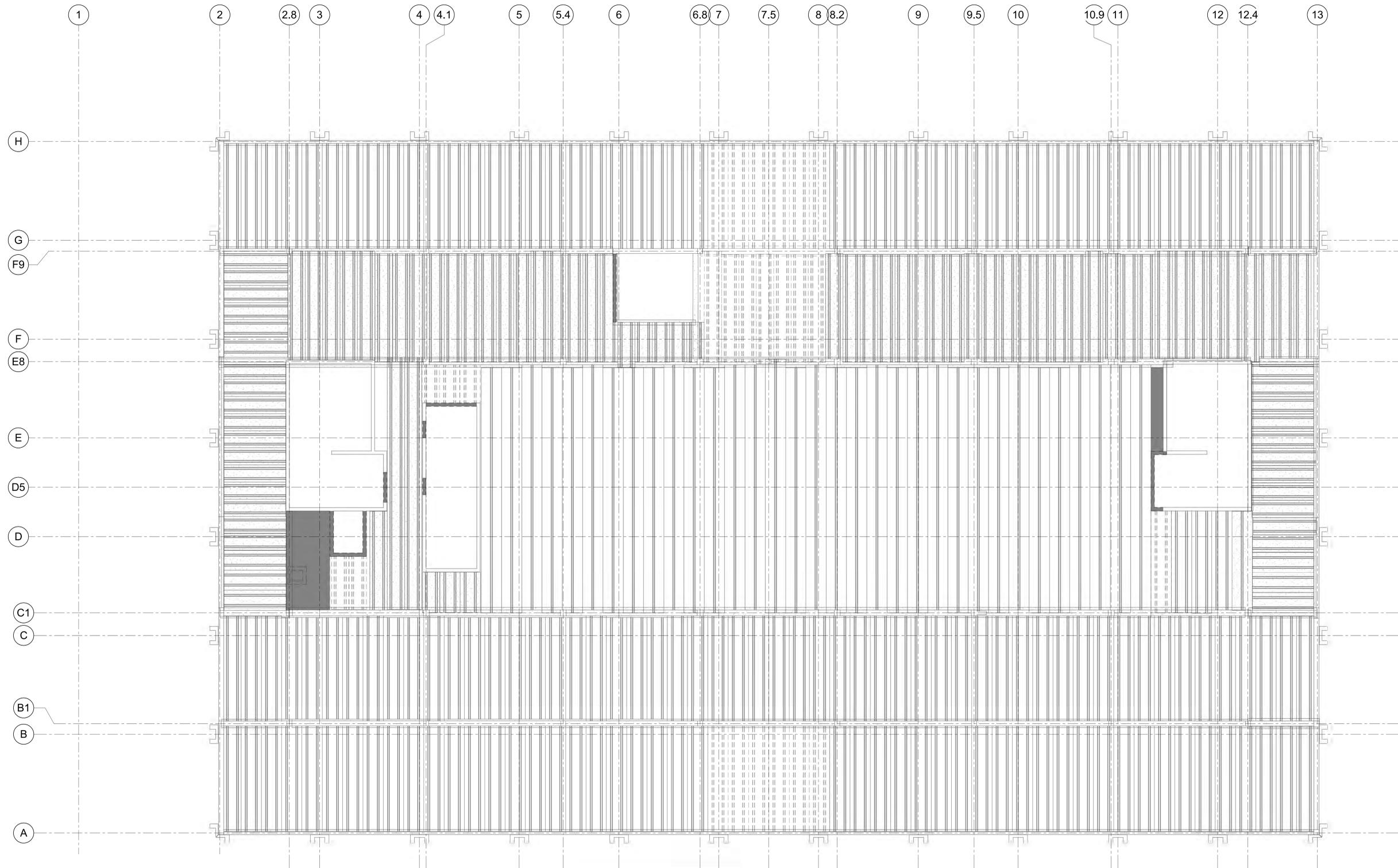
SCHEMATIC DESIGN

Structural Sheet Index	
SHEET NUMBER	SHEET NAME
S001	STRUCTURAL NOTES
S101	FOOTING AND FOUNDATION PLAN
S102	FIRST FLOOR FRAMING PLAN
S103	SECOND FLOOR FRAMING
S104	THIRD FLOOR FRAMING
S105	ROOF FRAMING PLAN
SD101	FOOTING AND FOUNDATION DEMO PLAN
SD102	FIRST FLOOR STRUCTURAL DEMO PLAN
SD103	SECOND FLOOR STRUCTURAL DEMO PLAN
SD104	THIRD FLOOR STRUCTURAL DEMO PLAN
SD105	ROOF STRUCTURAL DEMO PLAN

REVISIONS:



ENGINEERS
structural consultants
1584 W. Park Dr. Ogden, Utah 84404
ph: 801.752.6339 fx: 801.752.4656



= EXISTING SLABS & WALLS TO BE DEMOLISHED
 = EXISTING JOISTS TO BE DEMOLISHED

SECOND FLOOR STRUCTURAL DEMO PLAN
SCALE: 1/8" = 1'-0"

A
SD103

WSU Social
Science
Renovation

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**SECOND FLOOR
STRUCTURAL DEMO PLAN**

SCHEMATIC DESIGN

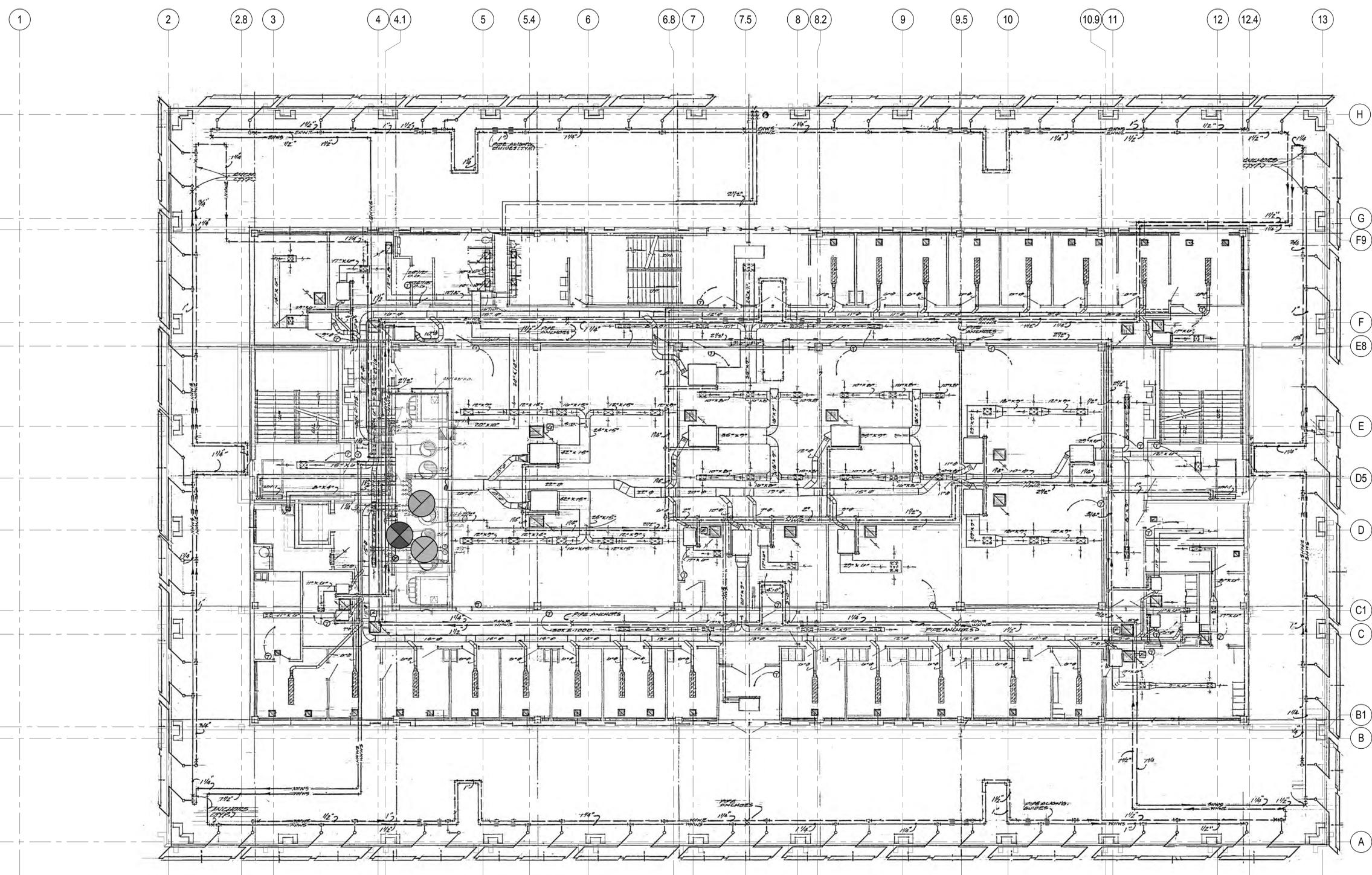
SD103

REVISIONS:

GENERAL NOTES

A. DEMOLISH ALL MECHANICAL AND PIPE. CAP CHILLED HEATING AND STEAM/CONDENSATE IN TUNNEL.

COLVIN ENGINEERING ASSOCIATES
244 West 300 North, Suite 200
Salt Lake City, Utah 84103
Phone 801.332.2400
colvinengineering.com



THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.

1 MECHANICAL DEMOLITION PLAN - LEVEL 1
SCALE: 1/8"=1'-0"

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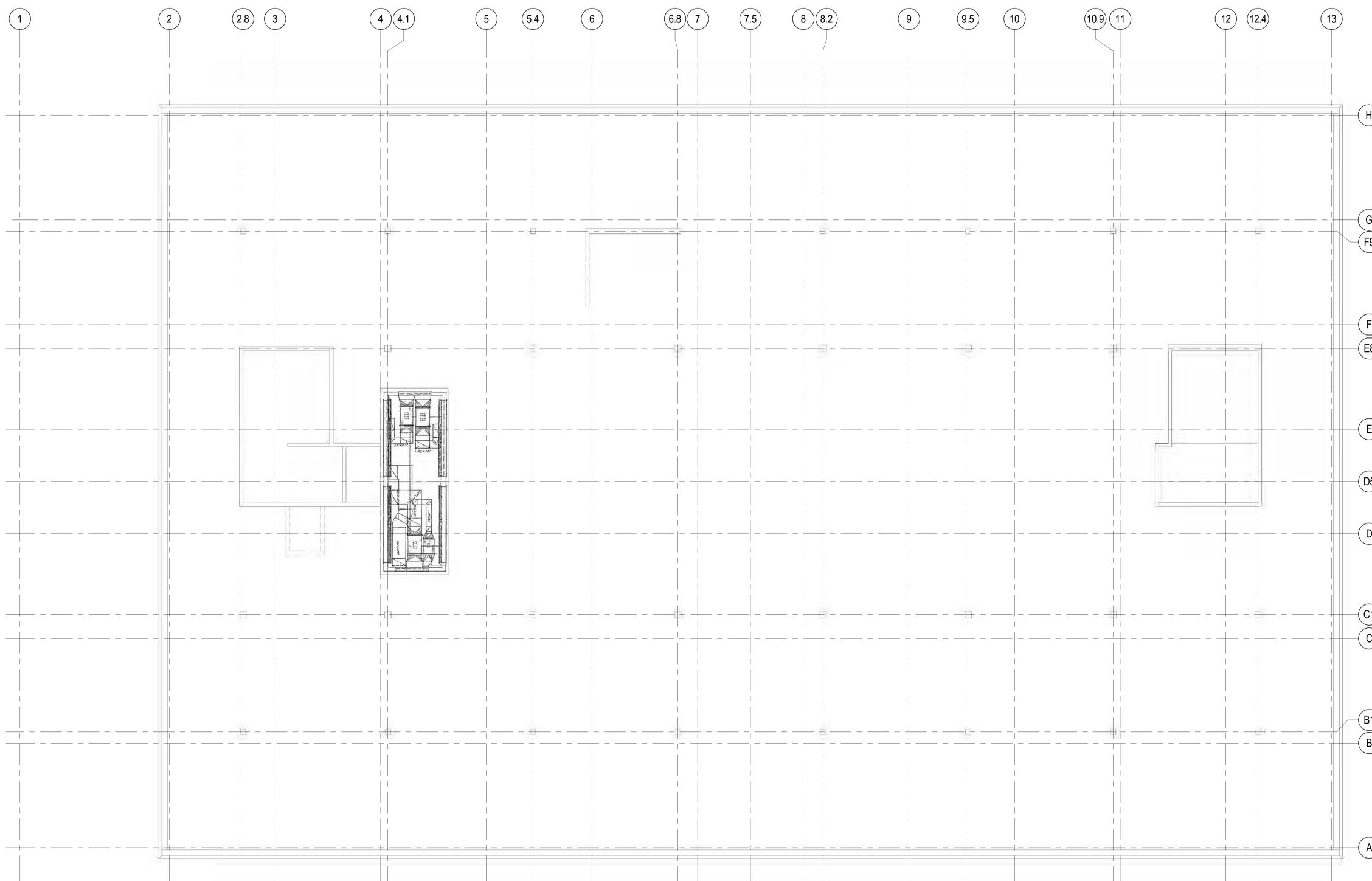


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ISSUED DATE: 06.27.2016

MECHANICAL DEMOLITION PLAN - LEVEL 1

SCHEMATIC DESIGN

REVISIONS:



GENERAL NOTES

- A. DEMOLISH ALL MECHANICAL AND PIPE. CAP CHILLED HEATING AND STEAM/CONDENSATE IN TUNNEL.

THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.

1 MECHANICAL PLUMBING DEMOLITION PLAN - ROOF
SCALE: 1/8" = 1'-0"



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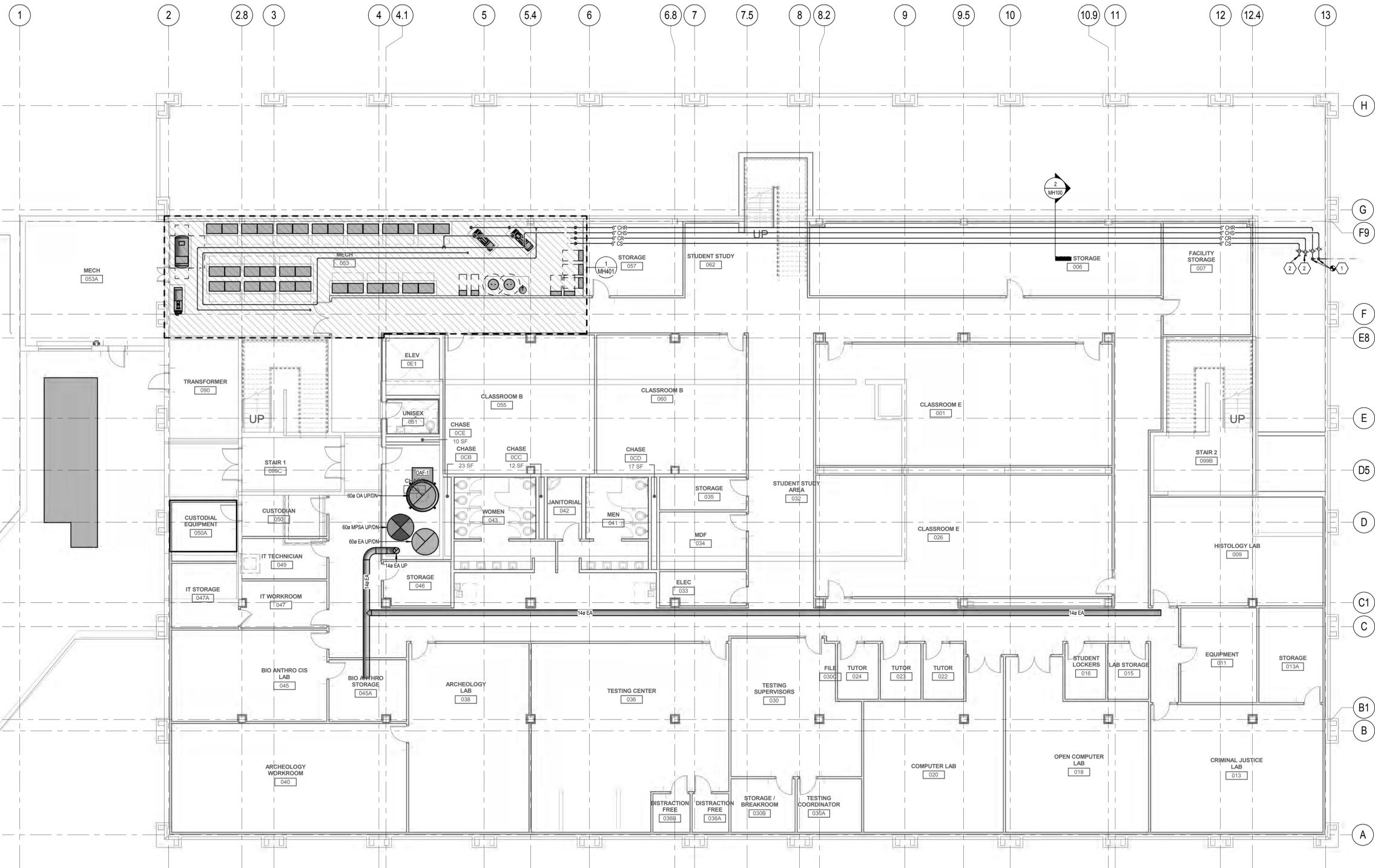


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MECHANICAL PLUMBING DEMOLITION PLAN - ROOF

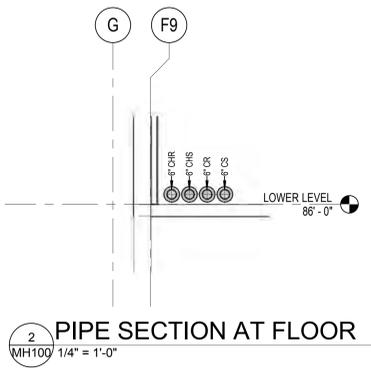
SCHEMATIC DESIGN
MD104

REVISIONS:

GENERAL NOTES
 A. COORDINATE ALL WORK WITH OTHER TRADES.
 B. ALL THERMOSTATS IN CLOSED OFFICES TO BE MOUNTED ON WALL 6" AWAY FROM OPEN DOOR.
 C.



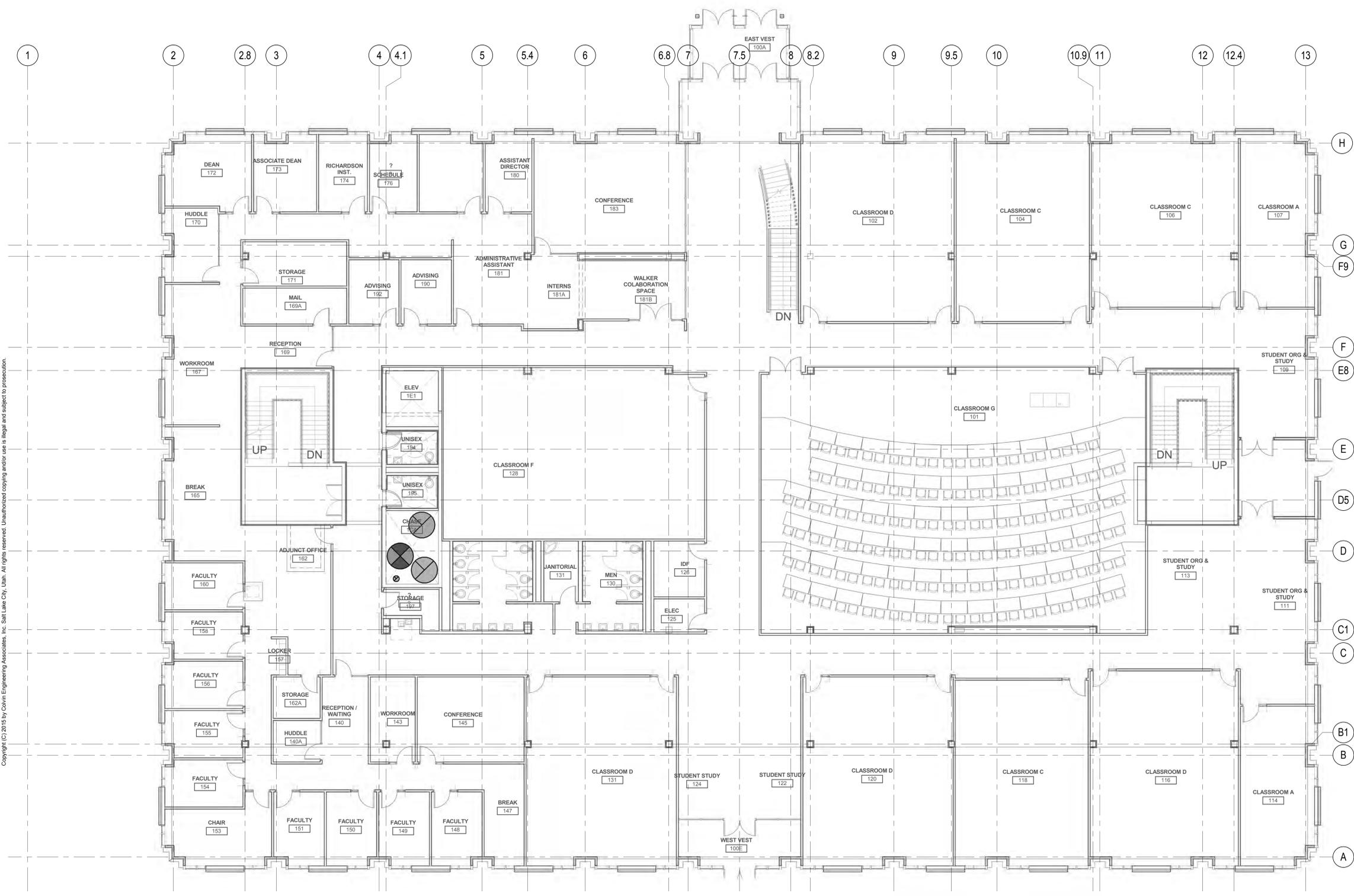
1 MECHANICAL FLOOR PLAN - LOWER LEVEL
 SCALE: 1/8" = 1'-0"



2 PIPE SECTION AT FLOOR
 MH100 1/4" = 1'-0"

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REVISIONS:



GENERAL NOTES

- A. COORDINATE ALL WORK WITH OTHER TRADES.
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- C.

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1 MECHANICAL FLOOR PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

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MECHANICAL FLOOR PLAN - LEVEL 1

SCHEMATIC DESIGN

MH101

REVISIONS:



GENERAL NOTES

- A. COORDINATE ALL WORK WITH OTHER TRADES.
- B. ALL THERMOSTATS IN CLOSED OFFICES TO BE MOUNTED ON WALL 6" AWAY FROM OPEN DOOR.
- C.

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1 MECHANICAL FLOOR PLAN - LEVEL 2
SCALE: 1/8" = 1'-0"

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REVISIONS:



GENERAL NOTES

- A. COORDINATE ALL WORK WITH OTHER TRADES.
- B. ALL THERMOSTATS IN CLOSED OFFICES TO BE MOUNTED ON WALL 6" AWAY FROM OPEN DOOR.
- C.

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1 MECHANICAL FLOOR PLAN - LEVEL 3
SCALE: 1/8" = 1'-0"

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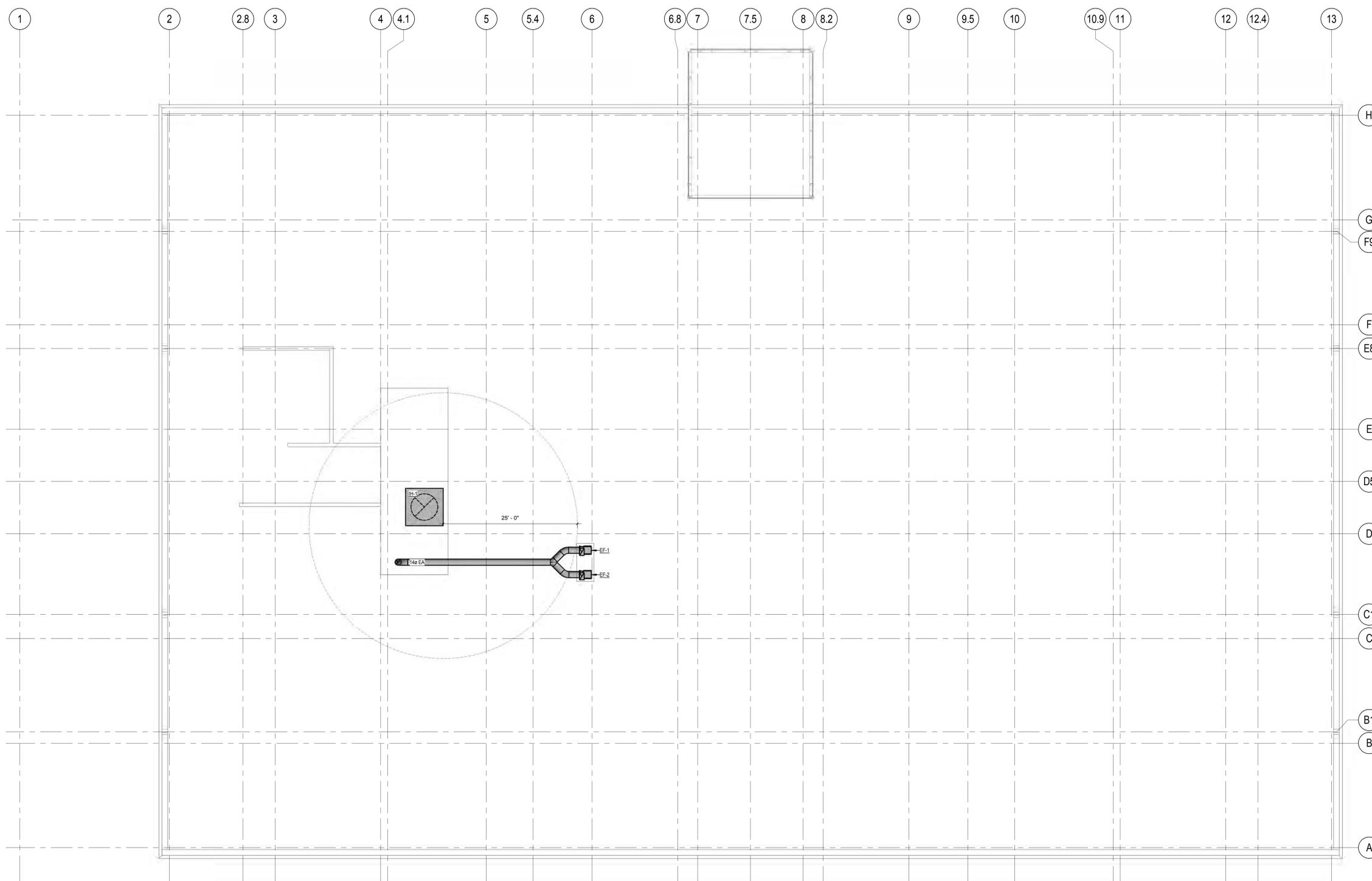


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**MECHANICAL FLOOR PLAN -
LEVEL 3**

SCHEMATIC DESIGN

MH103

REVISIONS:



GENERAL NOTES

- A. COORDINATE ALL WORK WITH OTHER TRADES.
- B. ALL THERMOSTATS IN CLOSED OFFICES TO BE MOUNTED ON WALL 6" AWAY FROM OPEN DOOR.
- C.

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1 ROOF MECHANICAL HVAC OVERALL PLAN
SCALE: 1/8" = 1'-0"
0 4'-0" 8'-0" 16'-0"

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MECHANICAL PLUMBING ROOF PLAN

SCHEMATIC DESIGN

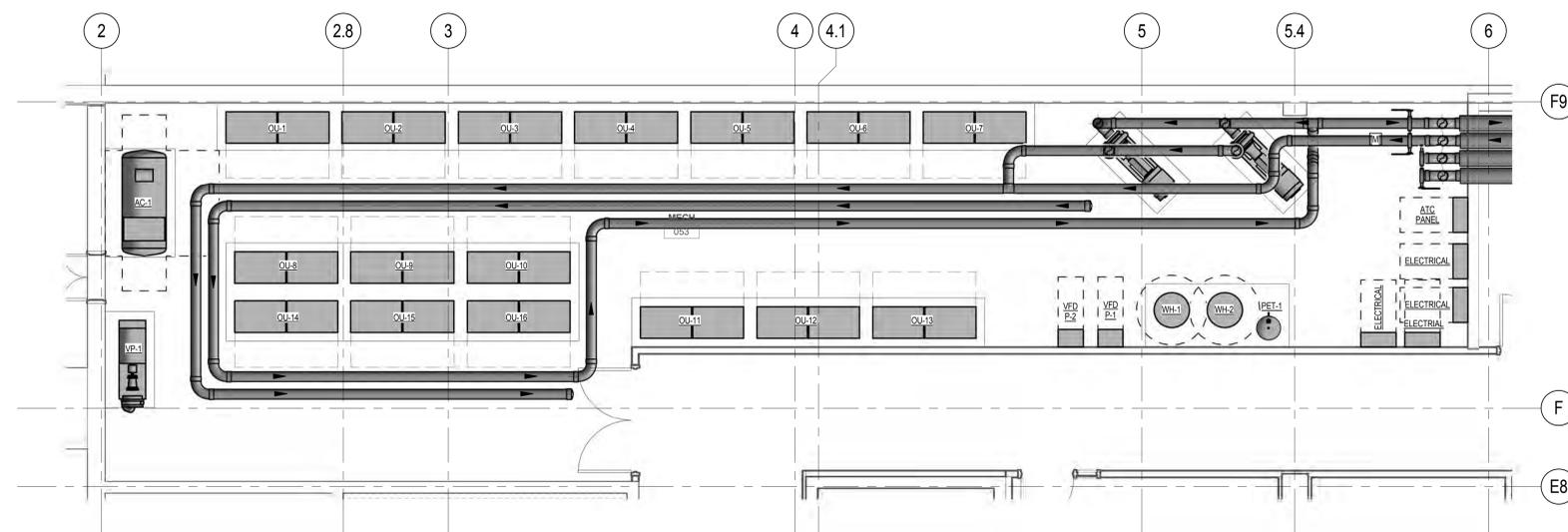
MH104

REVISIONS:

GENERAL NOTES

- A. COORDINATE ALL WORK WITH OTHER TRADES.
- B. ALL THERMOSTATS IN CLOSED OFFICES TO BE MOUNTED ON WALL 6" AWAY FROM OPEN DOOR.
- C.

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1 ENLARGED MECHANICAL ROOM PLAN - LOWER LEVEL
SCALE: 1/4"=1'-0"
3'-0" 0" 2'-0" 4'-0" 8'-0"

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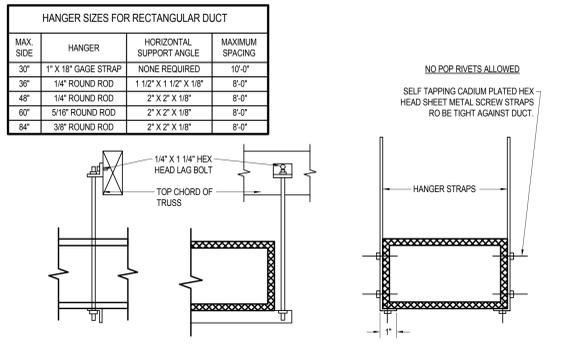
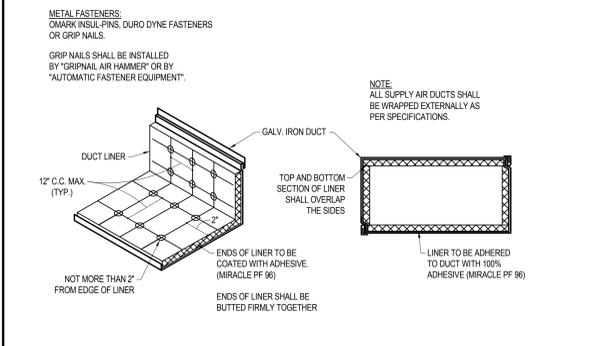
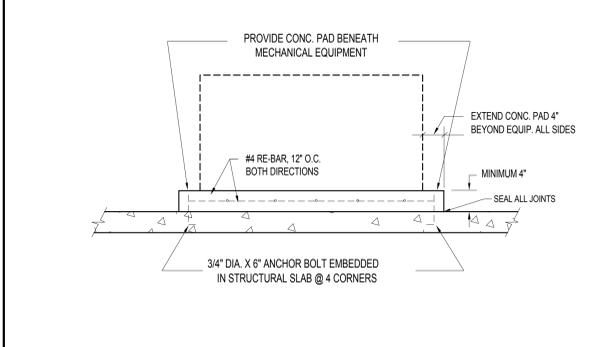
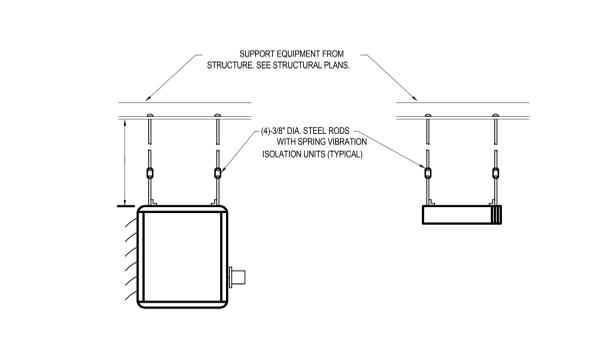
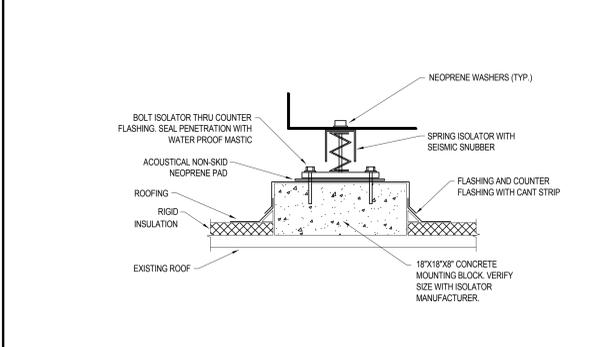
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ENLARGED MECHANICAL PLANS

SCHEMATIC DESIGN

MH401

REVISIONS:

NOT USED	<p style="text-align: center;">HANGER SIZES FOR RECTANGULAR DUCT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>MAX. SIDE</th> <th>HANGER</th> <th>HORIZONTAL SUPPORT ANGLE</th> <th>MAXIMUM SPACING</th> </tr> </thead> <tbody> <tr> <td>30"</td> <td>1" X 1/8" GAGE STRAP</td> <td>NONE REQUIRED</td> <td>10'-0"</td> </tr> <tr> <td>36"</td> <td>1/4" ROUND ROD</td> <td>1 1/2" X 1 1/2" X 1/8"</td> <td>8'-0"</td> </tr> <tr> <td>48"</td> <td>1/4" ROUND ROD</td> <td>2" X 2" X 1/8"</td> <td>8'-0"</td> </tr> <tr> <td>60"</td> <td>5/16" ROUND ROD</td> <td>2" X 2" X 1/8"</td> <td>8'-0"</td> </tr> <tr> <td>84"</td> <td>3/8" ROUND ROD</td> <td>2" X 2" X 1/8"</td> <td>8'-0"</td> </tr> </tbody> </table>  <p style="text-align: center;">DUCT STRAP HANGER DETAIL</p>	MAX. SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING	30"	1" X 1/8" GAGE STRAP	NONE REQUIRED	10'-0"	36"	1/4" ROUND ROD	1 1/2" X 1 1/2" X 1/8"	8'-0"	48"	1/4" ROUND ROD	2" X 2" X 1/8"	8'-0"	60"	5/16" ROUND ROD	2" X 2" X 1/8"	8'-0"	84"	3/8" ROUND ROD	2" X 2" X 1/8"	8'-0"	<p>METAL FASTENERS: ON MARK INSUL. PINS, DURO DYNE FASTENERS OR GRIP NAILS.</p> <p>GRIP NAILS SHALL BE INSTALLED BY "GRIPNAIL AIR HAMMER" OR BY "AUTOMATIC FASTENER EQUIPMENT".</p>  <p style="text-align: center;">DUCT LINER DETAIL</p>	<p style="text-align: center;">TRANSVERSE REINFORCING</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">DIMENSION OF LONGEST SIDE, INCHES</th> <th rowspan="2">SHEET METAL GAGE, ALL FOUR SIDES</th> <th rowspan="2">MINIMUM REINFORCING ANGLE SIZE & MAXIMUM LONGITUDINAL SPACING BETWEEN JOINTS & OR INTERMEDIATE REINFORCING</th> <th colspan="6">MIN. U. IN.</th> <th rowspan="2">REINFORCED ANGLE SIZE</th> <th rowspan="2">REINFORCED ANGLE SIZE</th> <th rowspan="2">REINFORCED ANGLE SIZE</th> <th rowspan="2">REINFORCED ANGLE SIZE</th> </tr> <tr> <th>DRIVE SLIP</th> <th>PLAIN S SLIP</th> <th>HEMME S SLIP</th> <th>ALT. BAR SLIP</th> <th>REINFOR BAR SLIP</th> <th>ANGLE SLIP</th> </tr> </thead> <tbody> <tr> <td>UP THRU 12</td> <td>28</td> <td>NONE REQ.</td> <td>1</td> <td>26</td> <td>26</td> <td>24</td> <td>24</td> <td>24</td> <td>NONE REQ.</td> <td>NONE REQ.</td> <td>24</td> <td>NONE REQ.</td> </tr> <tr> <td>13-18</td> <td>24</td> <td>NONE REQ.</td> <td>1</td> <td>24</td> <td>24</td> <td>24</td> <td>24</td> <td>24</td> <td>NONE REQ.</td> <td>NONE REQ.</td> <td>24</td> <td>NONE REQ.</td> </tr> <tr> <td>19-30</td> <td>24</td> <td>1X1X1/8 @90°</td> <td>1</td> <td>-</td> <td>24</td> <td>24</td> <td>24</td> <td>24</td> <td>NONE REQ.</td> <td>NONE REQ.</td> <td>24</td> <td>NONE REQ.</td> </tr> <tr> <td>31-42</td> <td>22</td> <td>1X1X1/8 @90°</td> <td>1</td> <td>-</td> <td>-</td> <td>22</td> <td>22</td> <td>22</td> <td>NONE REQ.</td> <td>NONE REQ.</td> <td>22</td> <td>NONE REQ.</td> </tr> <tr> <td>43-54</td> <td>22</td> <td>1.5X1.5X1/8 @90°</td> <td>1/2</td> <td>-</td> <td>-</td> <td>22</td> <td>22</td> <td>22</td> <td>1.5X1.5X1/8</td> <td>NONE REQ.</td> <td>22</td> <td>NONE REQ.</td> </tr> <tr> <td>55-60</td> <td>20</td> <td>1.5X1.5X1/8 @90°</td> <td>1/2</td> <td>-</td> <td>-</td> <td>22</td> <td>22</td> <td>22</td> <td>1.5X1.5X1/8</td> <td>NONE REQ.</td> <td>22</td> <td>NONE REQ.</td> </tr> <tr> <td>61-84</td> <td>20</td> <td>1.5X1.5X1/8 @90°</td> <td>1/2</td> <td>-</td> <td>-</td> <td>22</td> <td>22</td> <td>22</td> <td>1.5X1.5X1/8</td> <td>1.5X1.5X1/8</td> <td>22</td> <td>1.5X1.5X1/8</td> </tr> </tbody> </table> <p style="text-align: center;">DUCT CONSTRUCTION DETAIL</p>	DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE, ALL FOUR SIDES	MINIMUM REINFORCING ANGLE SIZE & MAXIMUM LONGITUDINAL SPACING BETWEEN JOINTS & OR INTERMEDIATE REINFORCING	MIN. U. IN.						REINFORCED ANGLE SIZE	REINFORCED ANGLE SIZE	REINFORCED ANGLE SIZE	REINFORCED ANGLE SIZE	DRIVE SLIP	PLAIN S SLIP	HEMME S SLIP	ALT. BAR SLIP	REINFOR BAR SLIP	ANGLE SLIP	UP THRU 12	28	NONE REQ.	1	26	26	24	24	24	NONE REQ.	NONE REQ.	24	NONE REQ.	13-18	24	NONE REQ.	1	24	24	24	24	24	NONE REQ.	NONE REQ.	24	NONE REQ.	19-30	24	1X1X1/8 @90°	1	-	24	24	24	24	NONE REQ.	NONE REQ.	24	NONE REQ.	31-42	22	1X1X1/8 @90°	1	-	-	22	22	22	NONE REQ.	NONE REQ.	22	NONE REQ.	43-54	22	1.5X1.5X1/8 @90°	1/2	-	-	22	22	22	1.5X1.5X1/8	NONE REQ.	22	NONE REQ.	55-60	20	1.5X1.5X1/8 @90°	1/2	-	-	22	22	22	1.5X1.5X1/8	NONE REQ.	22	NONE REQ.	61-84	20	1.5X1.5X1/8 @90°	1/2	-	-	22	22	22	1.5X1.5X1/8	1.5X1.5X1/8	22	1.5X1.5X1/8
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REVISIONS:

AIR TERMINAL SCHEDULE														
* VERIFY FRAME TYPE OF ALL DEVICES WITH ARCHITECTURAL REFLECTED CEILING PLANS BEFORE ORDERING.														
PLAN CODE	TYPE & DUTY	DIMENSIONS			CEILING TYPE *	MAX CFM	MAX T.P. (IN WC)	NO LEVEL MAX	MIN THROW (FT) (T80)	4-WAY MIN THROW (T80)	2-WAY MIN THROW (T80)	MANUFACTURER	MODEL	COMMENTS
		FACE WIDTH	FACE LENGTH	FACE DIAMETER										

AIR CONDITIONING UNIT (AC)															
PLAN CODE	AREA SERVED	OUTDOOR UNIT	SENSIBLE COOLING CAPACITY (BTUH)	VOLTAGE & PHASE	FLA	MCA	CFM	CONTROL	SOUND PRESSURE (dBA)	MAX DIMENSIONS (IN)				MANUFACTURER & MODEL NO.	REMARKS
										W	H	D	WT. (LBS.)		

① PROVIDE CONDENSATE PUMP ② POWERED BY OUTDOOR UNIT

AIR COOLED CONDENSING UNIT SCHEDULE (ACCU)													
PLAN CODE	SYSTEM SERVED	COOLING CAPACITY (BTUH)	SEER	AMBIENT TEMP. °F	ELECTRICAL ②			MAX DIMENSIONS				MANUFACTURER & MODEL NO.	REMARKS
					VOLTAGE & PHASE	MCA	MOCP	W (IN)	D (IN)	H (IN)	OPERATING WT. (LBS)		

① PROVIDE WITH LOW AMBIENT CONTROLS AND WIND BAFFLES ② ON EMERGENCY POWER

ELECTRIC DUCT HEATER SCHEDULE (DH)												
PLAN CODE	AREA SERVED	NO. STAGES	CFM (ALT)	DUCT AIR TEMP (°F)	DUCT SIZE	ELECTRICAL			MAX DIMENSIONS			MANUFACTURER & MODEL NO.
						INPUT (KW)	AMPS	VOLTS/PH	DEPTH (IN)	WIDTH (IN)	HEIGHT (IN)	

RADIANT CEILING PANEL SCHEDULE (RCP)							
PLAN CODE	BTUH	WATTS	VOLTS/PH	AMPS	PANEL SIZE (IN)	MANUFACTURER & MODEL NO.	REMARKS

ELECTRIC UNIT HEATER SCHEDULE (EUH)									
PLAN CODE	TYPE	ELECTRICAL			CFM (ALT)	RECOMMENDED MOUNTING HEIGHT	EAT (°F)	MANUFACTURER & MODEL NO.	REMARKS
		TOTAL KW	NO OF STEPS	VOLTS/PH					

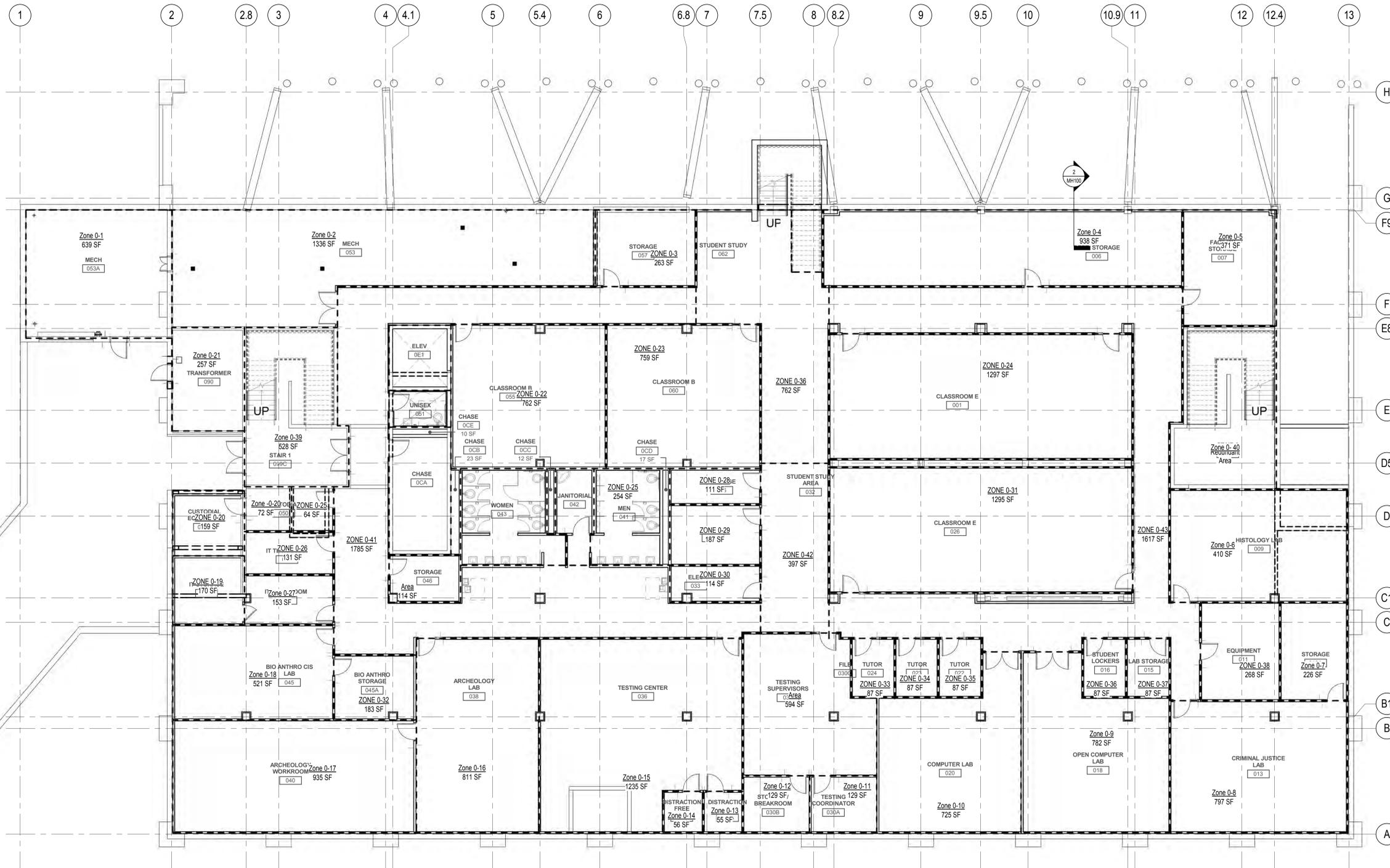
CABINET UNIT HEATER SCHEDULE (CUH)													
PLAN CODE	CFM @ ELEV.	MIN HEATING CAPACITY (MBH)	GPM	MAX WPD (FT)	EWT/LWT (°F)	EAT (°F)	MOTOR		MOUNTING	CONFIG	MAX DIMENSIONS W x H x D (IN)	MANUFACTURER & MODEL NO.	REMARKS
							HP	VOLTS/PH					

EXHAUST FAN SCHEDULE (EF)																		
PLAN CODE	AREA SERVED	TYPE	CFM @ ELEV.	ESP @ ELEV.	FAN RPM	MOTOR				DAMPER (GRAVITY OR MOTOR)	METHOD OF CONTROL	OPENING SIZE			MAX OPERATING WT. (LBS)	MANUFACTURER	MODEL	REMARKS
						BHP	HP	EFFICIENCY %	VOLTAGE			PHASE	WIDTH	HEIGHT				

PUMP SCHEDULE (P)																	
REMARKS: REMARKS: 1. MAXIMUM IMPELLER SIZE FOR VOLUTE. 4. POST-BALANCE IMPELLER TRIM REQUIRED. 7. BRONZE WEAR RINGS. 2. FURNISH BASE RAIL, INCLUDING SUCTION PIPE. 5. FLUSH LINE. 8. POST-SEISMIC EVENT OPERATION REQUIRED. 3. INTERIA BASE. 6. SHAFT GROUNDING. 9. EMERGENCY POWER.																	
PLAN CODE	TYPE	DUTY	FLOW (GPM)	PRESSUR E (FT)	MAX. ALLOWAB LESHP	IMPELLER (IN)	FLUID	NPSHR (FT)	MOTOR					PUMP & MOTOR WEIGHT (LBS)	MANUFACTURER	MODEL	REMARKS
									SIZE (HP)	SPEED (RPM)	VOLTAGE	PHASE	VFD				

TRANSFER FAN SCHEDULE (TF)																		
PLAN CODE	AREA SERVED	TYPE	CFM @ ELEV.	ESP @ ELEV.	FAN RPM	MOTOR				DAMPER (GRAVITY OR MOTOR)	METHOD OF CONTROL	OPENING SIZE			MAX OPERATING WT. (LBS)	MANUFACTURER	MODEL	REMARKS
						BHP	HP	EFFICIENCY %	VOLTAGE			PHASE	WIDTH	HEIGHT				

REVISIONS:

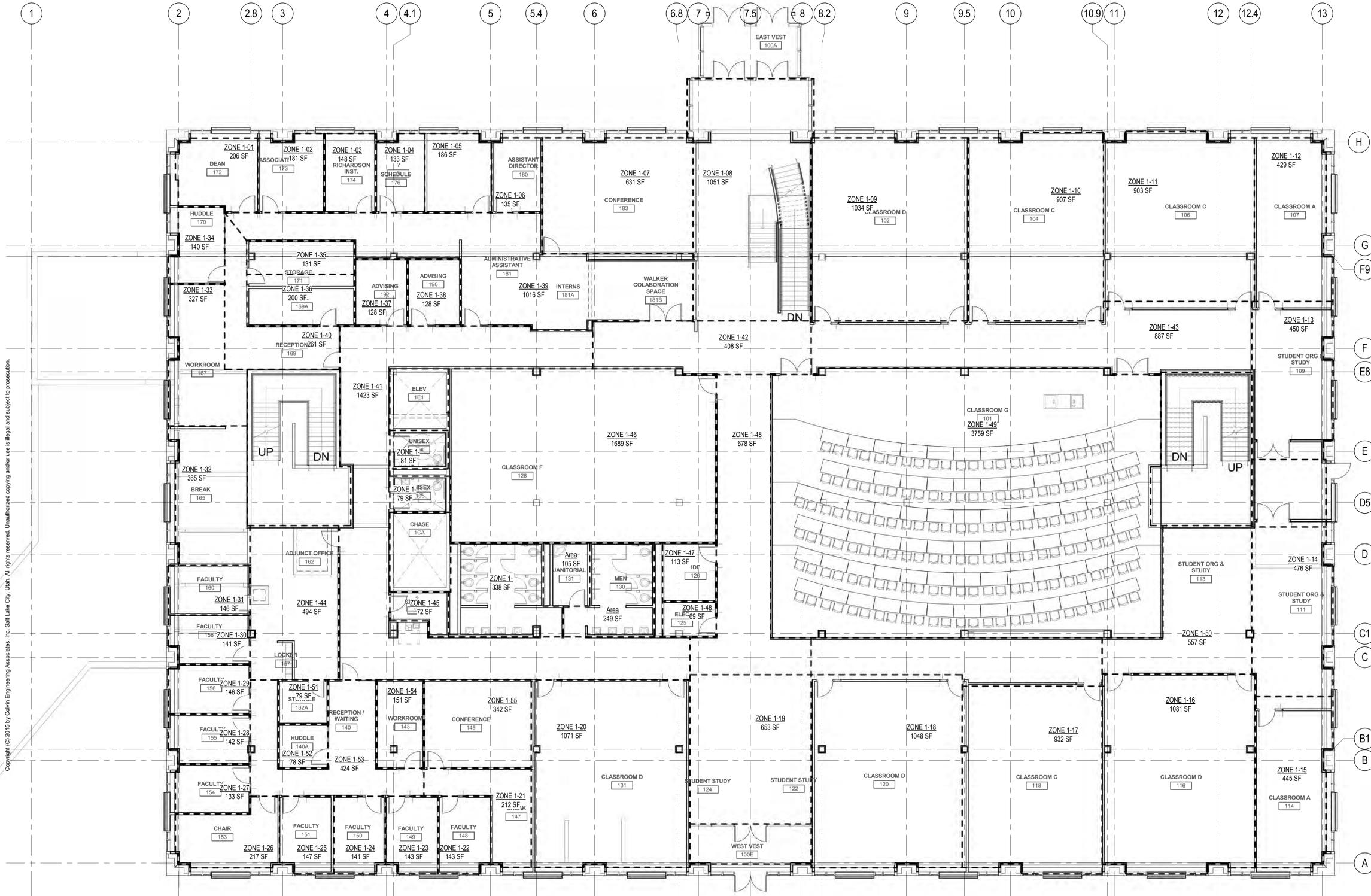


1 MECHANICAL ZONE PLAN - LOWER LEVEL
SCALE: 1/8" = 1'-0"

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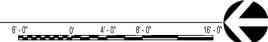
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1 MECHANICAL ZONE PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"



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GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 06.27.2016
MECHANICAL ZONE PLAN - LEVEL 1

SCHEMATIC DESIGN

REVISIONS:



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1 Level 2
SCALE: 1/8"=1'-0"
0 4'-0" 8'-0" 16'-0"

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



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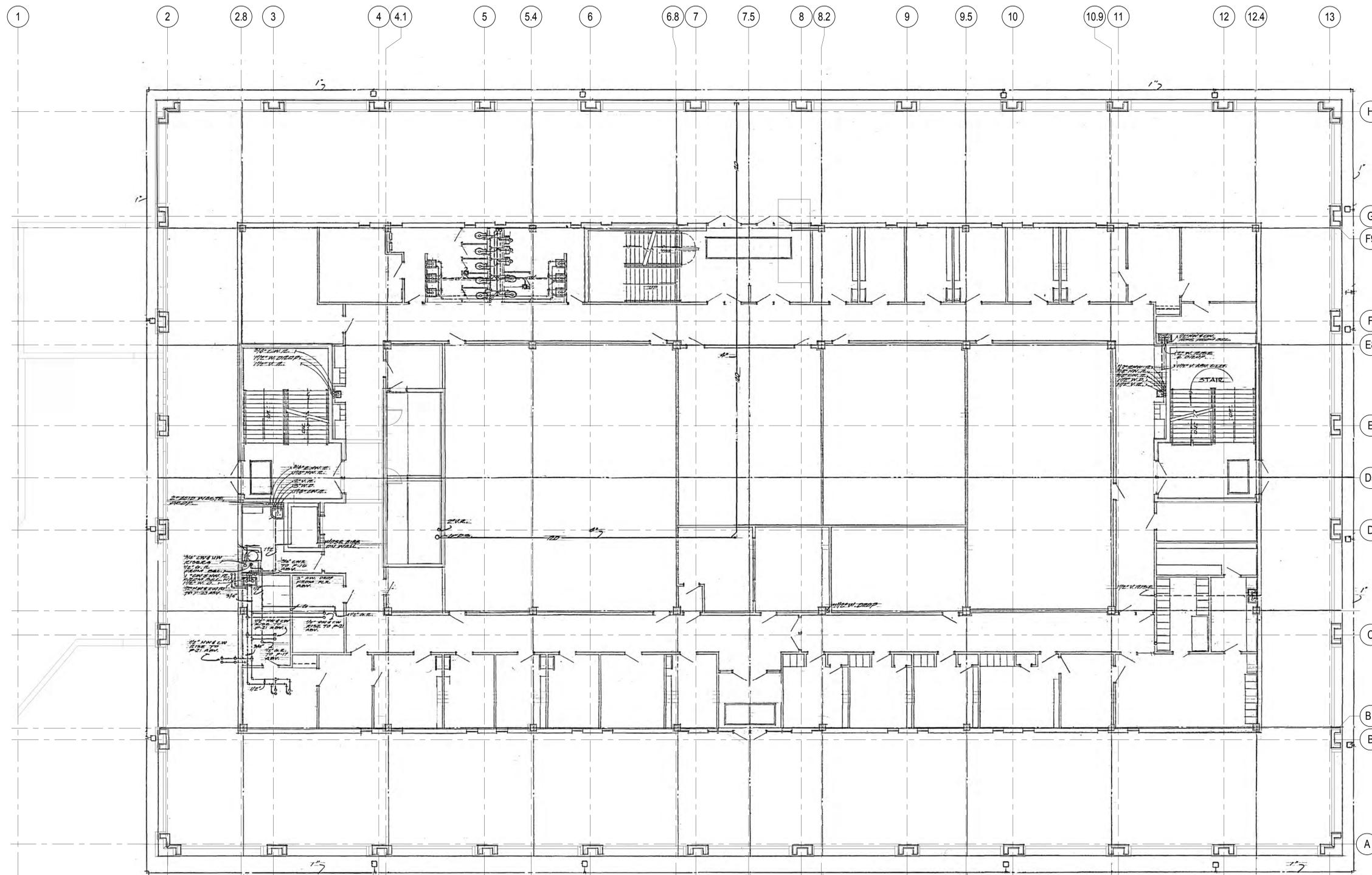
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OWNER PROJECT NO.:
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 06.27.2016
MECHANICAL ZONE PLAN - LEVEL 3

SCHEMATIC DESIGN

REVISIONS:



GENERAL NOTES

- A. EXISTING TO REMAIN PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN LIGHT AND WITH A THIN LINE. DEMOLITION PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN DARK WITH BOLD DASHED LINE. NEW PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN DARK AND WITH THICK LINE.
- B. DEMOLISH ALL PLUMBING AND FIXTURES UNLESS NOTE OTHERWISE.

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THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.

1 PLUMBING DEMOLITION PLAN - LEVEL 1

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



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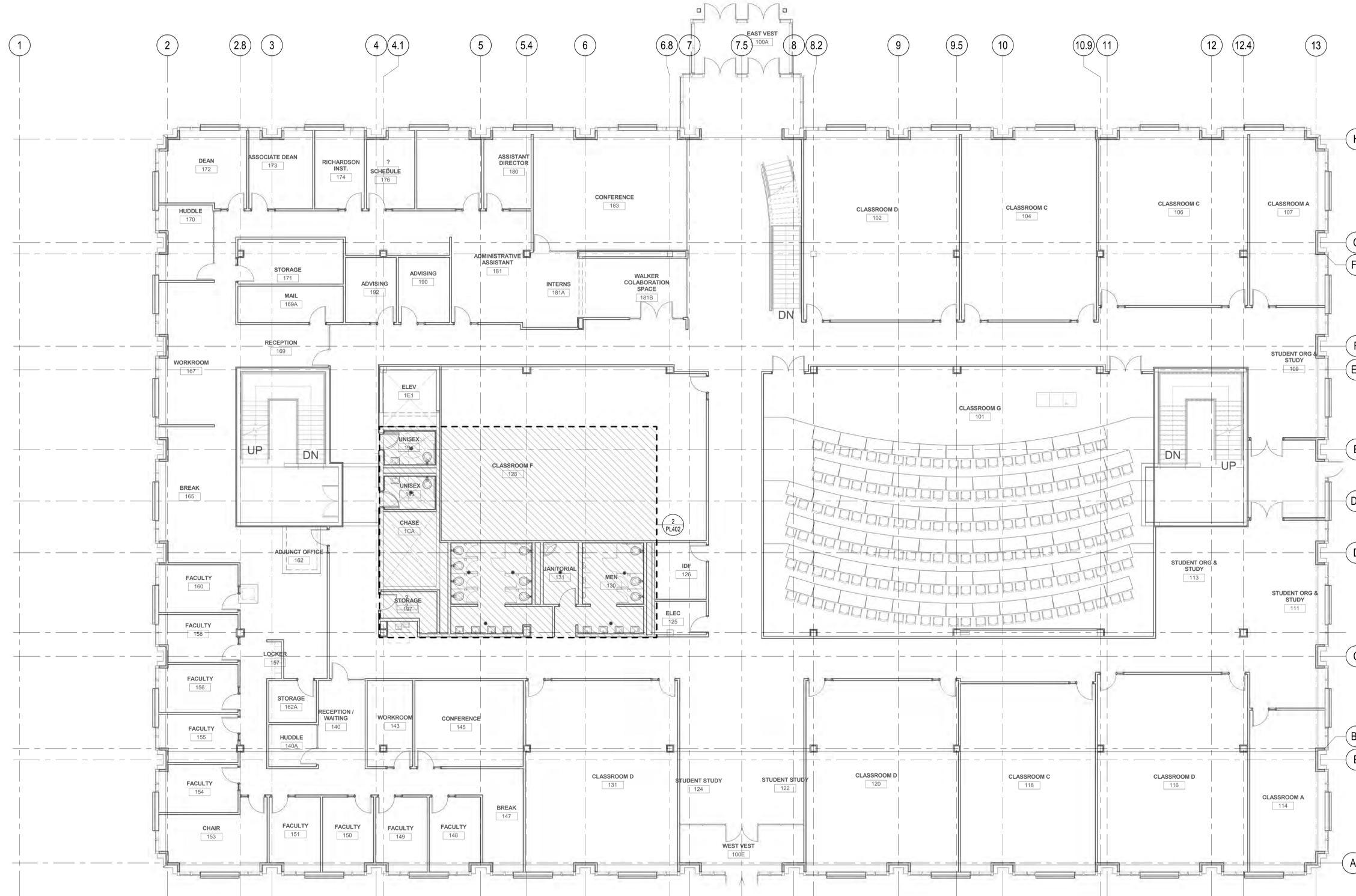
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PLUMBING DEMOLITION PLAN - LEVEL 1

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- B. COORDINATE PLUMBING PIPE ROUTING AND LOCATION WITH ALL TRADES.
- C. PROVIDE ACCESS DOORS TO ALL MIXING VALVES, TRAP PRIMERS, SHUTOFF VALVES, ETC.
- D. NO PIPING TO RUN OVER ANY ELECTRICAL, IDF, MDF, AND COMMUNICATION ROOMS.
- E. ALL CONDENSATE DRAIN PIPING TO BE COPPER. ALL DRAINS TO E 3/4" UNLESS NOTED OTHERWISE. CONDENSATE RISER FROM UNIT TO RISE AS HIGH AS POSSIBLE TO ALLOW FOR SLOPE.

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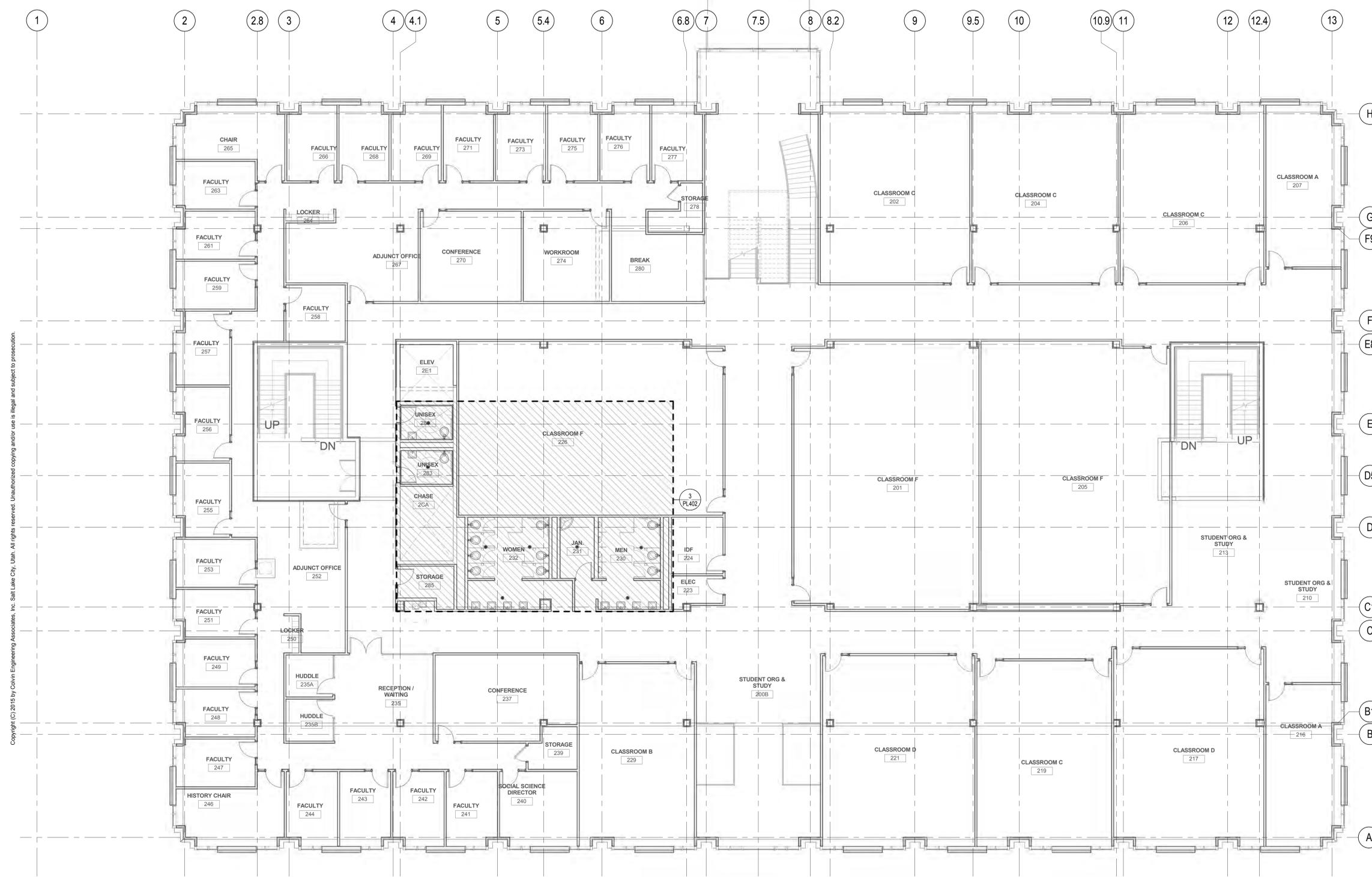
1 PLUMBING FLOOR PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

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1 PLUMBING FLOOR PLAN - LEVEL 2
SCALE: 1/8"=1'-0"

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GENERAL NOTES

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1 PLUMBING FLOOR PLAN - LEVEL 3
SCALE: 1/8" = 1'-0"



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PLUMBING FLOOR PLAN - LEVEL 3

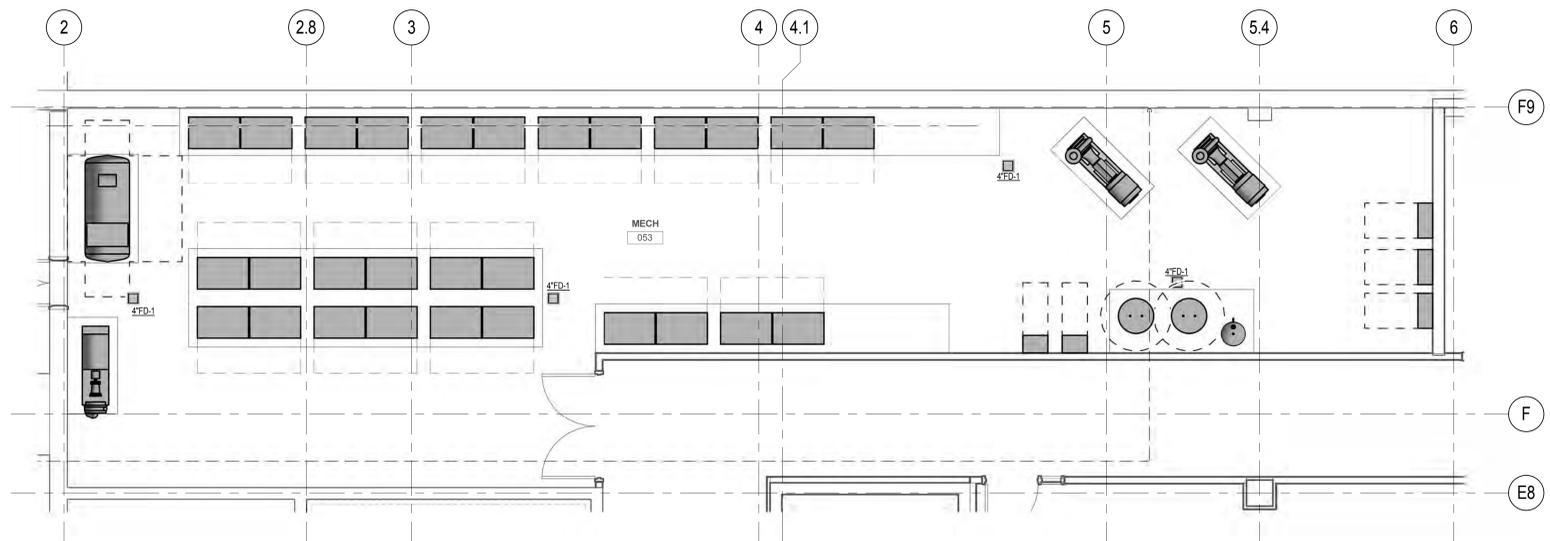
SCHEMATIC DESIGN

REVISIONS:

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1 PLUMBING MECHANICAL ROOM - LOWER LEVEL
SCALE: 1/4" = 1'-0"
8'-0" 7'-0" 6'-0" 5'-0" 4'-0" 3'-0" 2'-0" 1'-0" 0"

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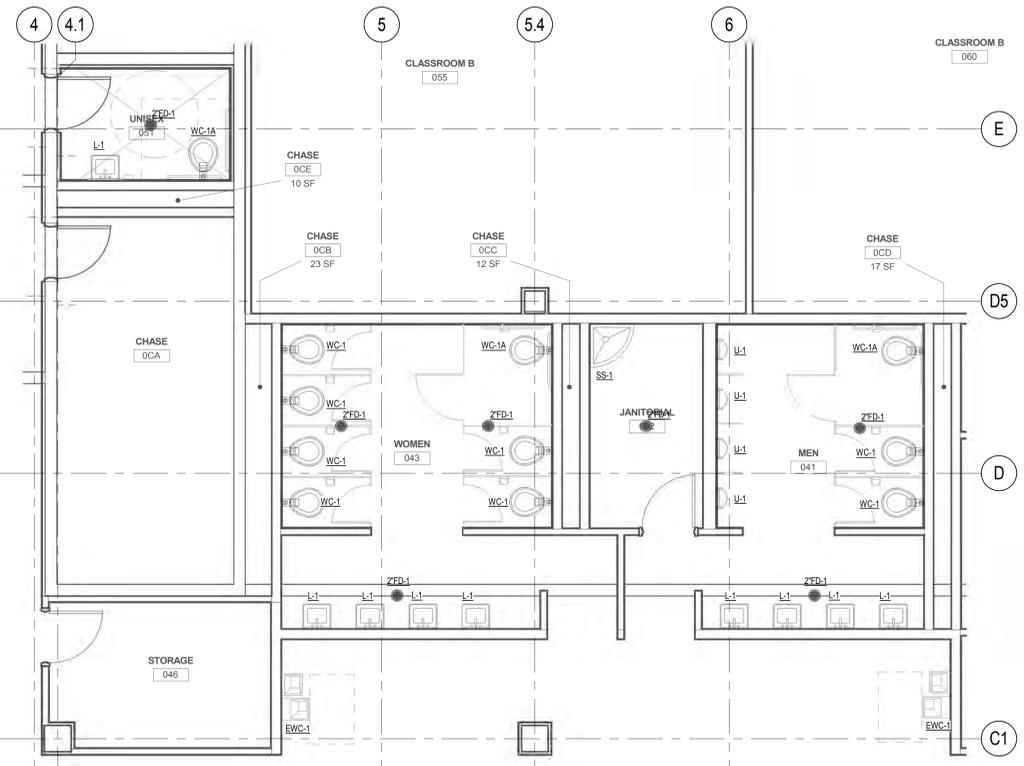
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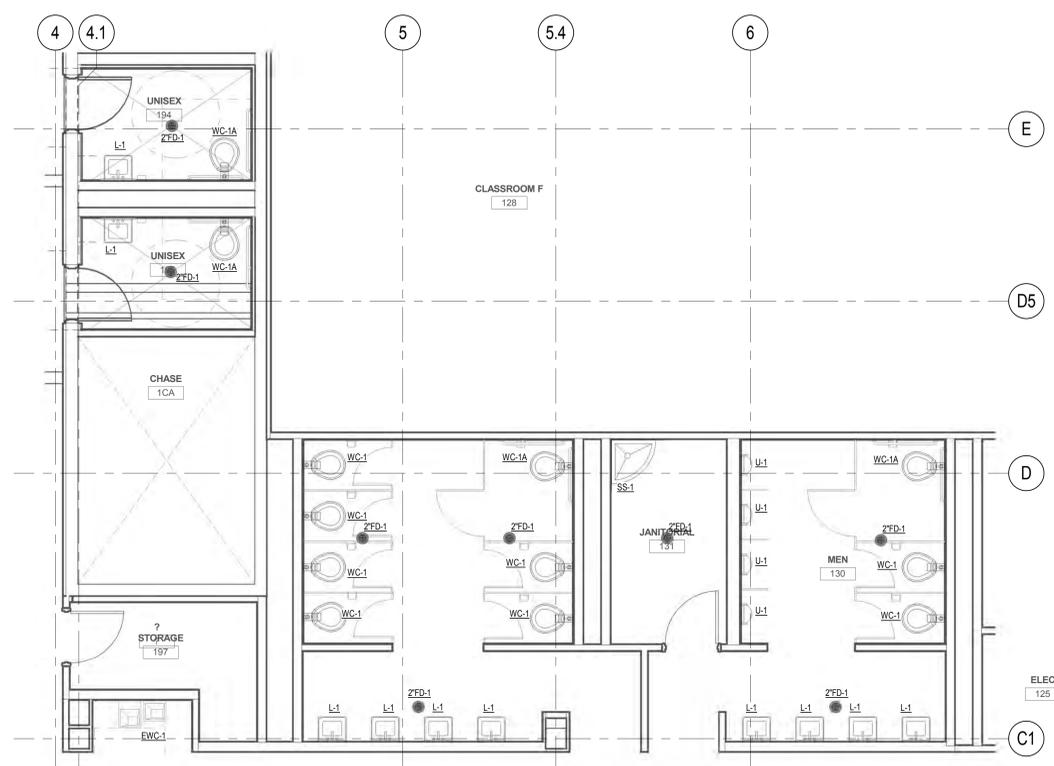
**ENLARGED MECHANICAL
ROOM PLUMBING PLAN**

SCHEMATIC DESIGN

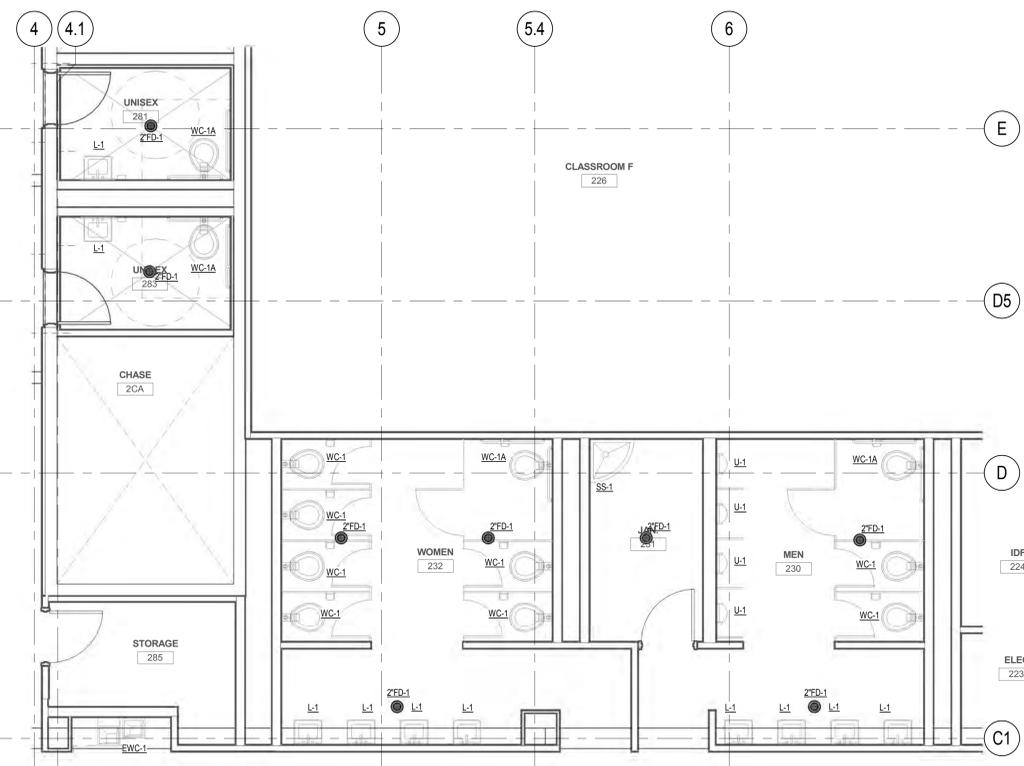
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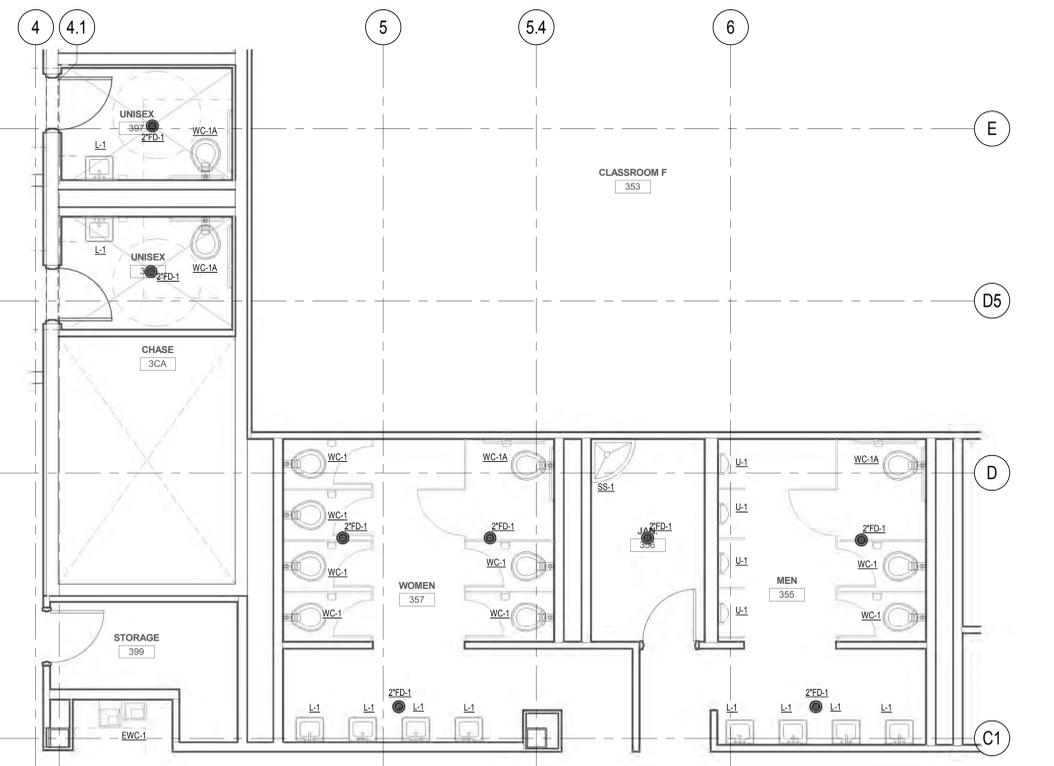
1 ENLARGED RESTROOM - LOWER LEVEL
SCALE: 1/4" = 1'-0"



2 ENLARGED RESTROOM - LEVEL 1
SCALE: 1/4" = 1'-0"



3 ENLARGED RESTROOM - LEVEL 2
SCALE: 1/4" = 1'-0"



4 ENLARGED RESTROOM - LEVEL 3
SCALE: 1/4" = 1'-0"

KEYED NOTES

GENERAL NOTES

- A. EXISTING TO REMAIN PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN LIGHT AND WITH A THIN LINE. DEMOLITION PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN DARK WITH BOLD DASHED LINE. NEW PIPE, PIPE ACCESSORIES AND PLUMBING IS SHOWN DARK AND WITH THICK LINE.
- B. COORDINATE PLUMBING PIPE ROUTING AND LOCATION WITH ALL TRADES.
- C. PROVIDE ACCESS DOORS TO ALL MIXING VALVES, TRAP PRIMERS, SHUTOFF VALVES, ETC.
- D. NO PIPING TO RUN OVER ANY ELECTRICAL, IDF, MDF, AND COMMUNICATION ROOMS.
- E. ALL CONDENSATE DRAIN PIPING TO BE COPPER. ALL DRAINS TO E 3/4" UNLESS NOTED OTHERWISE. CONDENSATE RISER FROM UNIT TO RISE AS HIGH AS POSSIBLE TO ALLOW FOR SLOPE.

REVISIONS:

NO.	DESCRIPTION

REVISIONS:

NO.	DATE	DESCRIPTION

HYBRID ELECTRIC HEAT PUMP WATER HEATER SCHEDULE (HPWH) ①															
PLAN CODE	HP TOTAL HEATING CAP (MBH)	ENERGY EFFICIENCY	CAP (GAL)	FIRST HOUR RATING (GPH)	RECOVERY @ 90° F (GPH)	ELECTRIC ELEMENT INPUT (KW)	TEMP RISE (°F)	MAX DIMENSIONS				MAX OPERATING WT (LBS)	MANUFACTURER & MODEL NO	REMARKS	
								DIA (IN)	HEIGHT (IN)	VOLT/PH	AMPS				
HPWH-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HPWH-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

① AMBIENT TEMPERATURE OPERATING RANGE (37°-120°)

MIXING VALVE SCHEDULE (MV)						
PLAN CODE	MIN GPM	MAX GPM	INLET SIZE	OUTLET SIZE	MANUFACTURER & MODEL NO	REMARKS
MV-1	0.25	5	3/8"	3/8"	LEONARD 170	1,2

① PROVIDE STAINLESS STEEL STRAINER, PORTS AND INTERVALS. ② ASSE 1070

DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE ①								
PLAN CODE	DUTY	GPM	FEET OF HEAD	PUMP RPM	MOTOR		MANUFACTURER & MODEL NO	REMARKS
					H.P.	VOLTAGE & PHASE		
DCP-1	DOMESTIC HOT WATER RECIRC.	5	20	3250	1/8	115/1	TACO 009-F5	INLINE BRONZE

① PROVIDE PLUG END POWER CORD.

PLUMBING EXPANSION TANK SCHEDULE (PET)										
PLAN CODE	SYSTEM SERVED	WATER TEMP (°F)	TANK VOL (GAL)	ACCEPTANCE FACTOR	PRE-CHARGE (PSI)	MAX DIMENSIONS			MANUFACTURER & MODEL NO	REMARKS
						DIA (IN)	H (IN)	OPERATING WT (LBS)		
PET-1	DOMESTIC HOT WATER	140	8.0	3.2	40	12	19.5	68	AMTROL THERMA-TROL ST-20V-C	PROVIDE WITH POTABLE WATER BLADDER.

SUMP PUMP (SP)									
PLAN CODE	SYSTEM SERVED	PUMP				MOTOR ①		BASIN	REMARKS
		FLOW (GPM)	HEAD (FT)	CONFIGURATION	MANUFACTURER & MODEL NO	VOLTAGE PHASE	SIZE (HP)		
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

① EMERGENCY POWER

CONDENSATE PUMP SCHEDULE (CP)									
PLAN CODE	DUTY	FLOW (GPM)	PRESSURE (FT)	MOTOR		DIMENSIONS (LxWxH) (LBS)	OPERATING WEIGHT (LBS)	MANUFACTURER & MODEL NO	REMARKS
				SIZE (HP)	VOLT/PH				
CP-1	CONDENSATE	25	12	1/30	115/1	12.2 x 5.4 x 7.5	13	LITTLE GIANT VDMA-200L	Ø POWER CORD, CHECK VALVE

PLUMBING FIXTURE SCHEDULE

PLAN CODE	DESCRIPTION	ROUGH-IN SIZE						REMARKS
		C.W.	H.W.	TEMPERATURE	WASTE	VENT	TRAP	
DD-1	DECK DRAIN	-	-	-	SEE PLANS	-	-	JAY R SMITH LARGE-14" (355) DECK DRAINS SEE PLANS FOR OUTLET SIZE. STRAINER GRATE MUST BE HEEL PROOF.
DOD-1	DECK OVERFLOW DRAIN	-	-	-	SEE PLANS	-	-	JAY R SMITH FIG. 1610T DECK DRAINS SEE PLANS FOR OUTLET SIZE.
DSN-1	DOWN SPOUT NOZZLE	-	-	-	-	-	-	J.R. SMITH MANUFACTURING COMPANY SERIES 1770, CAST BRONZE BODY AND FLANGE. PROVIDE SIZE INDICATED ON DRAWINGS.
EEW-1	EMERGENCY WALL MOUNTED SWING DOWN EYE WASH STATION WITH EMERGENCY THERMOSTATIC MIXING VALVE	-	-	3/4"	-	-	-	BRADLEY S19-270/W BRADLEY S19-2000 EFX8 SET TEPID WATER TEMP @ 80°F
EWC-1	ADA COMPLIANT, BARRIER FREE, STAINLESS STEEL, SURFACE MOUNT ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION	3/8"	-	-	1 1/2"	1 1/4"	-	ELELKY #LZSTLWBLK (ADA), BI-LEVEL FILTERED COOLER WITH BOTTLE FILLING STATION, 15 AMP, 115 VOLT, 60 HZ. SINGLE PHASE KAY #ESFATLBC (ADA), STAINLESS STEEL, 8.0 GPH, F.L.A. = 3.7, 115 V/1 PH 60 HZ.
FD-1	FLOOR DRAIN	-	-	-	SEE PLANS	1 1/2"	-	J.R. SMITH MANUFACTURING COMPANY FIG. 2005Y-NB-U. DUCCO CAST IRON FLOOR DRAIN. SEE PLANS FOR OUTLET SIZE. STRAINER GRATE MUST BE HEEL PROOF. PROVIDE WITH TRAP GUARD, OR EQUAL.
FD-2	FLOOR DRAIN	-	-	-	SEE PLANS	1 1/2"	-	J.R. SMITH MANUFACTURING COMPANY FIG. 2005Y-NB-U. DUCCO CAST IRON FLOOR DRAIN. SEE PLANS FOR OUTLET SIZE. STRAINER GRATE MUST BE HEEL PROOF. PROVIDE WITH TRAP GUARD AND SEDIMENT BUCKET, OR EQUAL.
FD-3	FLOOR DRAIN (ACID RESISTANT)	-	-	-	SEE PLANS	1 1/2"	-	J.R. SMITH MANUFACTURING COMPANY FIG. DX-3027T-U. CAST IRON BODY WITH ACID RESISTANT COATED INTERIOR. SEE PLANS FOR OUTLET SIZE. STRAINER GRATE MUST BE HEEL PROOF. PROVIDE WITH TRAP GUARD, OR EQUAL.
FS-1	FLOOR SINK	-	-	-	SEE PLANS	1 1/2"	X	JAY R. SMITH SERIES 3100, ACID RESISTANT WITH TRAP GUARD AND DEEP SEAL TRAP.
FS-2	FLOOR SINK	-	-	-	SEE PLANS	1 1/2"	X	JAY R. SMITH SERIES 3101-Y, WITH SEDIMENT BUCKET, TRAP GUARD AND DEEP SEAL TRAP.
HB-1	HOSE BIBB	3/4"	3/4"	-	-	-	-	WOODFORD MODEL 22, HORIZONTAL FREEZELESS HOT AND COLD WATER HOSE BIBB. ANTI-SIPHON AND PRESSURE RELIEF VALVES.
HB-2	HOSE BIBB (INDOOR FINISH AREA)	3/4"	-	-	-	-	-	WOODFORD MODEL 2, 6 WALL MOUNTED HOSE BIBB. FLUSH VALVE: ZURN Z-6039AV-W/S1 COLOR: WHITE SEE ARCH DRAWINGS FOR MOUNTING HEIGHT.
HB-3	HOSE BIBB (INDOOR AREA)	3/4"	-	-	-	-	-	WOODFORD MODEL 623 WALL MOUNTED HOSE BIBB WITH ROUGH BRASS FINISHED WALL BOX.
IMB-1	ICE MAKER BOX	1/2"	-	-	-	-	-	OATEY - MODEL 38575 - 6" S.S. HOSE AND VALVE
L-1	COUNTERMOUNT OVAL LAVATORY, VITREOUS CHINA, 4" CENTERSET, CHROME WING HANDLE, FAUCET WITH GRID DRAIN, 0.5 GPM FLOW	1/2"	-	1/2"	1 1/2"	1 1/2"	X	AMERICAN STANDARD "RONDALYN" 0491.019 FAUCET: MOEN 8211 AMERICAN STANDARD "RONDALYN" 0491.019 FAUCET: MOEN 8211
L-2	WALL MOUNT, RECTANGULAR LAVATORY, VITREOUS CHINA, 4" CENTERSET, CHROME WING HANDLE FAUCET WITH GRID DRAIN, 0.5 GPM FLOW	1/2"	-	1/2"	1 1/2"	1 1/2"	X	AMERICAN STANDARD "LUCERNE" 0355.012 FAUCET: MOEN 8211
LSP-1	ISIMET - LABORATORY SERVICE PANEL WITH SOLENOID ASSEMBLY, 120V/1 VOLT, 1.5 AMP	-	-	-	-	-	-	ISIMET MODEL #LSP-4211-3-U GRAY PC ENCLOSURE WITH STAINLESS STEEL DOOR. FLUSH MOUNT 18"x18"x6" STANDARD ASSEMBLY WITH GROMMETS. 120V/1 VOLT.
MH-1	MANHOLE	-	-	-	-	-	-	Ø" DURA-CRETE. PROVIDE HEAVY DUTY MANHOLE COVER AND EXTENSION RINGS TO GRADE.
OD-1	OVERFLOW DRAIN	-	-	-	-	-	-	J.R. SMITH SERIES 10 80 GENERAL PURPOSE OVERFLOW DRAIN PROVIDED WITH DUCCO CAST IRON BODY
RD-1	ROOF DRAIN	-	-	-	-	-	-	J.R. SMITH SERIES 10 10 GENERAL PURPOSE ROOF DRAIN PROVIDED WITH DUCCO CAST IRON BODY
S-1	SINGLE COMPARTMENT, RECTANGULAR STAINLESS STEEL, COUNTER MOUNT SINK, GOOSENECK SWING SPOUT WITH WING HANDLES, 0.5 GPM 18 GA	1/2"	1/2"	-	1 1/2"	1 1/4"	X	BOWL: ELKAY LR2219 FAUCET: MOEN CA8940 STRAINER: ELKAY LK2437BH
S-2	DOUBLE COMPARTMENT, RECTANGULAR STAINLESS ACID RESISTANT TAIL-PIECE STEEL, COUNTER MOUNT SINK, GOOSENECK SWING SPOUT WITH WING HANDLES, 0.5 GPM 18 GA, SHOOK ARRESTOR	1/2"	1/2"	-	1 1/2"	1 1/4"	X	BOWL: ELKAY LR 3321 FAUCET: MOEN CA8940 STRAINER: ELKAY LK-35, OR EQUAL BOWL DEPTH: 12"
SA-1	SILL COCK	3/4"	3/4"	-	-	-	-	PRECISION PLUMBING PRODUCTS SC-750. VANDAL PROOF OR EQUAL
SC-1	SILL COCK	3/4"	3/4"	-	-	-	-	WOODFORD MODEL 865, FREEZELESS, ANTI-SIPHON SILL COCK WITH AUTOMATIC DRAINING, CHROME FINISHED BOX AND DOOR.
SD-1	SCUPPER DRAIN	-	-	-	-	-	-	J.R. SMITH SERIES 1 530T-NB SCUPPER DRAIN PROVIDED WITH DUCCO CAST IRON BODY AND ANGLE GRATE.
SGM-1	SPECIAL GAS MANIFOLD	-	-	-	-	-	-	WESTERN INNOVATOR HBAC2
SH-1	SINGLE LEVER, ADA COMPLIANT, PRESSURE BALANCING MIXING VALVE, SHOWER HEAD, HAND SPRAYER, 1.5 GPM	1/2"	1/2"	-	1 1/2"	1 1/2"	-	SYMMONS #96-500-B30-L-V-X-1.5 WITH HAND SPRAY, WALL SHOWER HEAD, AND BAR SLIDE. PROVIDE WITH LOW FLOW SHOWER HEAD AND LOW FLOW HAND SPRAY. PROVIDE WITH J.R. SMITH MANUFACTURING COMPANY FIG. 2005Y-NB-POS-NB DUCCO CAST IRON FLOOR DRAIN. DRAIN TO BE PROVIDED WITH 2" OUTLET, ROUND NICKEL BRONZE STRAINER HEAD, SEDIMENT BUCKET, AND VANDAL PROOF SCREWS. STRAINER HEAD MUST BE HEEL PROOF.
SI-1	SEDIMENT INTERCEPTOR	-	-	-	SEE PLANS	-	-	WATTS MODEL SI-742, UNDERSINK SEDIMENT INTERCEPTOR WITH TOP ACCESS DRAIN, ACID RESISTANT EPOXY COATED STEEL.
SS-1	SERVICE SINK ENAMELED CAST IRON, WITH RIM GAUGED, 3" GRID DRAIN AND FAUCET WITH VACUUM BREAKER, STOPS, TOP BRACE, CHROME FINISH.	3/4"	3/4"	-	3"	2"	X	SINK: KOHLER K-6710 FAUCET: KOHLER K-8907
TD-1	TRENCH DRAIN	-	-	-	2"	2"	-	JAY R SMITH 8818 6" WIDE CHANNEL SLOPE, PRE-CAST POLYMER CONCRETE SYSTEM WITH INTEGRAL METAL RAILS, CLASS C GRATE.
U-1	URINAL, ADA COMPLIANT, VITREOUS CHINA, SIPHON JET, MANUAL FLUSH VALVE, 0.125 GPF	3/4"	-	-	2"	1 1/2"	-	KOHLER "BARDON" K-4904-ET FLUSH VALVE: ZURN Z6000PL-UJF COLOR: WHITE SEE ARCH DRAWINGS FOR MOUNTING HEIGHT
VB-1	RECESSED WALL MOUNTED VALVE BOX	-	-	-	-	-	-	ACCUOR ARVB 8 x 8 x 4 SCSX RECESSED WALL VALVE BOX WITH STAINLESS STEEL FINISH AND SCREW DRIVER OR KEY LOCKING LATCH OR EQUAL. PROVIDE WITH HOLES FOR HOLES FOR PIPING.
WC-1	WATER CLOSET, STANDARD WALL MOUNT, MANUAL FLUSH VALVE, SIPHON JET, VITREOUS CHINA 1.28 GPF	1"	-	-	3"	2"	-	KOHLER "KINGSTON" K-4325 SEAT: OLSONITE #10CCSS FLUSH VALVE: ZURN Z6000PL-HET COLOR: WHITE SEE ARCH DRAWINGS FOR MOUNTING HEIGHT
WC-1A	WATER CLOSET, ADA COMPLIANT, WALL MOUNT, MANUAL FLUSH VALVE, SIPHON JET, VITREOUS CHINA 1.28 GPF	1"	-	-	3"	2"	-	KOHLER "KINGSTON" K-4325 SEAT: OLSONITE #10CCSS FLUSH VALVE: ZURN Z6000PL-HET COLOR: WHITE SEE ARCH DRAWINGS FOR MOUNTING HEIGHT
WWB-1	WASHER WALL BOX	3/4"	3/4"	-	2"	2"	-	IPS MODEL W4709HA, 3/4" HOSE BIBB HOT AND COLD WATER HAMMER ARRESTOR HOT AND COLD

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FIRE ALARM SYSTEM SYMBOL LIST	
SYMBOL	DESCRIPTION
	WATERFLOOD (XXX - ADDRESS)
	SMOKE DETECTOR
	FIRE SMOKE DAMPER
	SPEAKER/STROBE
	STROBE ONLY
	HAND PULL
	DOOR HOLDER
	TAMPER SWITCH
	FLOW SWITCH

LIGHTING SYSTEMS SYMBOL LIST	
SYMBOL	DESCRIPTION
	ELECTRICAL PANEL LOCATION
	LAY-IN MOUNTED FLUORESCENT FIXTURE
	EMERGENCY LIGHTING
	STRIP LIGHT FIXTURE
	RECESSED FIXTURE
	WALL MOUNTED FIXTURE
	PENDANT MOUNTED LIGHT FIXTURE - LENGTH AS SHOWN
	EXIT LIGHT. ARROWS SHOW EXIT DIRECTION
	PENDANT MOUNTED FIXTURE
	RECESSED WALL WASHER FIXTURE
	METAL HALIDE PROJECTOR LIGHT FIXTURE
	CEILING MOUNTED MIRRORS
	WALL MOUNTED LIGHT FIXTURE
	TRACK LIGHTING FIXTURE
	POST MOUNTED PARKING OR WALKWAY LIGHTING

COMMUNICATION SYSTEMS SYMBOL LIST	
SYMBOL	DESCRIPTION
	TELEPHONE TERMINAL BOARD
	GROUND BUS BAR
	FLUSH FLOOR OUTLET WITH TELE/DATA. TO BE HUBBELL OR WIREMOLD RFB4-SS/S38PTXXX WITH 2 DUPLEX OUTLETS AND 2 DATA OUTLETS AND COVERPLATES
	FLUSH TELE/DATA OUTLET BY TELECOMMUNICATIONS CONTRACTOR
	WIRELESS DEVICE IN THE CEILING
	SPEAKER
	FLUSH TELEVISION OUTLET BY TELECOMMUNICATIONS CONTRACTOR
	MICROPHONE JACK
	BELL
	O.H.P. - OVER HEAD PROJECTOR

SWITCHES SYMBOL LIST	
SYMBOL	DESCRIPTION
	SINGLE POLE TOGGLE SWITCH - 20 AMP
	SINGLE POLE TOGGLE SWITCH - 20 AMP, LETTERS INDICATE SWITCH ASSIGNMENT
	THREE WAY TOGGLE SWITCH - 20 AMP
	FOUR WAY TOGGLE SWITCH - 20 AMP
	PILOT LIGHT TOGGLE SWITCH
	KEYED LIGHT SWITCH
	PHOTO CELL SENSOR - LIGHTING CONTROL SYSTEM
	MANUAL DISCONNECT WITH THERMAL OVERLOAD PROTECTION
	PUSH BUTTON SWITCH

CALLOUT SYMBOL LIST	
SYMBOL	DESCRIPTION
	LIGHTING FIXTURE CALLOUT
	MECHANICAL EQUIPMENT CALLOUT
	DEVICE REFERENCE CALLOUT
	REFERENCE NOTE CALLOUT

SECURITY SYMBOLS LIST	
SYMBOL	DESCRIPTION
	CARD READER (PERSONA)
	DOOR CONTACT
	CAMERA

ABBREVIATIONS SYMBOL LIST	
SYMBOL	DESCRIPTION
W.P.	INDICATES WEATHER PROOF EQUIPMENT
A	INDICATES DEVICE IS ABOVE COUNTER TOP
CL.G.	INDICATES CEILING MOUNTED DEVICE
C.O.	CONVENIENCE OUTLET
CU	COPPER
E	INDICATES DEVICE IS ON EMERGENCY CIRCUIT
F.A.C.P.	FIRE ALARM CONTROL PANEL
F.A.R.A.P.	FIRE ALARM REMOTE ANNUNCIATOR PANEL
F.A.N.E.P.	FIRE ALARM NETWORK EXPANDER PANEL
F.L.A.	FULL LOAD AMPERAGE
M.C.A.	MINIMUM CIRCUIT AMPERAGE
M.C.B.	MAIN CIRCUIT BREAKER
M.M.C.	MULTIMEDIA CABINET
M.L.O.	MAIN LUG ONLY
O.H.P.	OVERHEAD PROJECTOR
O.I.T.	OFFICE OF INFORMATION TECHNOLOGY
S	INDICATES DEVICE IS SURFACE MOUNTED
T.V.S.S.	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
U.P.S.	UNINTERRUPTIBLE POWER SUPPLY
VFD	VARIABLE FREQUENCY DRIVE
XFMR	TRANSFORMER

DISCONNECTS/CIRCUIT BREAKER SYMBOL LIST	
SYMBOL	DESCRIPTION
	NON FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	COMBINATION STARTER/FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	CIRCUIT BREAKER DISCONNECT - SIZE AS REQUIRED
	FUSE - SIZE AS REQUIRED
	MOTOR LOCATION
	ELECTRICAL PANEL LOCATION
	ELECTRICAL METER LOCATION

CONDUITS SYMBOL LIST	
SYMBOL	DESCRIPTION
	CONDUITS CONCEALED IN FLOOR OR BELOW GRADE
	CONDUITS CONCEALED IN CEILING AND WALLS
	ARROWS INDICATE HOME RUNS

RECEPTACLES SYMBOL LIST	
SYMBOL	DESCRIPTION
	SINGLE OUTLET
	DUPLEX CONVENIENCE OUTLET - 20 AMP
	DUPLEX CONVENIENCE OUTLET - 20 AMP GROUND FAULT INTERRUPTER
	4-PLEX CONVENIENCE OUTLET - 20 AMP
	DUPLEX CONVENIENCE OUTLET - 20 AMP ELECTRIC WATER COOLER
	SPECIAL PURPOSE SINGLE PHASE OUTLET. PROVIDE CONDUCTORS TO MEET OR EXCEED THE AMPACITY OF THE OUTLET PER NEC 310-16, USE 75 DEGREE C COLUMN.
	SPECIAL PURPOSE THREE PHASE OUTLET. PROVIDE CONDUCTORS TO MEET OR EXCEED THE AMPACITY OF THE OUTLET PER NEC 310-16, USE 75 DEGREE C COLUMN.
	FLUSH FLOOR OUTLET BOX
	JUNCTION BOX - SIZE AND FUNCTION AS REQUIRED
	DUAL CHANNEL SURFACE MOUNTED RACEWAY - POWER AND DATA
	SURFACE MOUNTED RACEWAY WITH 20 AMP MONO OUTLET AT SPACING SHOWN
	SURFACE MOUNTED RACEWAY WITH 20 AMP DUPLEX OUTLET AT SPACING SHOWN

GENERAL NOTES:	
42.	WHERE THE GROUNDING CIRCUIT CONDUCTOR CONNECTED TO THE EMERGENCY SOURCE IS CONNECTED TO A GROUNDING ELECTRODE CONDUCTOR AT A LOCATION REMOTE FROM THE EMERGENCY SOURCE, THERE SHALL BE A SIGN AT THE GROUNDING LOCATION THAT SHALL IDENTIFY ALL EMERGENCY AND NORMAL SOURCES CONNECTED AT THAT LOCATION.
43.	PROVIDE UPDATED, TYPED WRITTEN, PANEL SCHEDULES FOR NEW AND EXISTING PANELBOARDS SHOWING CIRCUIT CHANGES MADE DURING THIS PROJECT.
44.	ALL DISCONNECTS, J-BOXES AND CONDUITS EXPOSED TO THE OUTSIDE WEATHER SHALL BE NON-CORROSIVE, WEATHER PROOF TYPE.
45.	ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE.
46.	ALL MAGNETIC DOOR HOLDERS SHALL BE TIED TO THE FIRE ALARM CONTROL PANEL. REFER TO TYPICAL FIRE ALARM RISER DIAGRAM ON FIRE ALARM RISER DIAGRAM FOR MORE INFORMATION. IN THE EVENT OF A FIRE ALARM THE MAGNETIC DOOR HOLDERS SHALL BE DE-ENERGIZED AND RELEASE THE DOORS. PROVIDE ALL CONDUIT, WIRE, JUNCTION BOXES, ETC. FOR A COMPLETE INSTALLATION. REFER TO THE ELECTRICAL AND ARCHITECTURAL FLOOR PLANS FOR THE EXACT LOCATIONS OF THE DOOR HOLDERS.
47.	PAINT ALL THE J-BOXES FOR FIRE ALARM SYSTEM WITH RED PAINT. PAINT THE CONDUIT COUPLINGS FOR FIRE ALARM SYSTEM RACEWAY WITH RED PAINT. REFER TO THE SECTION 260553 FOR MORE INFORMATION.
48.	ANY CIRCUIT BREAKER FEEDING FIRE ALARM SYSTEMS SHALL CONTAIN RED MARKING AND SHALL BE LABELED "FOR FIRE ALARM SYSTEM".
49.	ALL NEW WORK MUST MEET THE CURRENT ADOPTED NATIONAL ELECTRICAL CODE.
50.	ALL MATERIALS USED IN THIS INSTALLATION SHALL BE U.L. APPROVED AND NEW.
51.	TEMPORARY ELECTRICAL SERVICE IS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND REMOVED BY THE ELECTRICAL CONTRACTOR.
52.	DETAILS ARE SHOWN ON DIFFERENT SHEETS. THE CONTRACTOR SHALL REFER TO THOSE DETAILS WHETHER OR NOT CALLED IN REFERENCE NOTES.
53.	CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
54.	ELECTRICAL CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH ELECTRICAL SHOP SUPERVISOR.
55.	ALL J-BOX FEEDING RECESSED LIGHT FIXTURES IN THE GYP. BOARD CEILING SHALL BE LOCATED WITHIN 8" FROM LIGHT FIXTURE OPENING.
56.	LIMIT COMMUNICATION CONDUIT TO TWO (2) 90 DEGREE BENDS.

GENERAL NOTES:	
1.	ALL MATERIALS TO BE REMOVED AND RETURNED TO THE OWNER. MATERIALS WHICH THE OWNER DECIDES NOT TO KEEP SHALL BE SALVAGED AND REMOVED FROM THE SITE BY THE CONTRACTOR.
2.	ALL CONCEALED CONDUIT THAT CANNOT BE REMOVED SHALL BE CUT FLUSH WITH THE FINISH SURFACES AND CAPPED OFF AFTER THE WIRING HAS BEEN DISCONNECTED AT THE PANEL AND REMOVED FROM THE CONDUIT.
3.	IN AREAS WHERE CIRCUIT CONTINUITY IS INTERRUPTED, BUT MUST BE MAINTAINED TO THE DEVICES WHICH ARE TO REMAIN, MAKE ALL THE NECESSARY MODIFICATIONS TO THE CIRCUITS IN ORDER TO MAINTAIN THE CIRCUIT INTEGRITY.
4.	REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL LIGHTING FIXTURES.
5.	THE COLOR OF THE LIGHT FIXTURES SHALL BE SELECTED BY THE ARCHITECT.
6.	COORDINATE WITH THE OWNER AND ARCHITECT FOR THE EXACT LOCATION OF THE OUTLETS.
7.	PRIOR TO SUBMITTING A BID THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE AND INCLUDE IN HIS BID PACKAGE ALL CHARGES DUE TO EXISTING CONDITIONS. SHOP DRAWINGS ARE REQUIRED. ALL LABOR, MATERIAL AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR FROM THE DATE OF ACCEPTANCE BY THE TENANT. REPLACE OR REPAIR ALL DEFECTS DURING THE GUARANTEED PERIOD.
8.	THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES FOUND BETWEEN THE INTENDED FUNCTION OF EQUIPMENT AND EQUIPMENT SPECIFIED IN THE CONTRACT DOCUMENTS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL BID. FAILURE TO REPORT ANY DISCREPANCY (CATALOG NUMBERS, DISCONTINUED ITEMS, ETC.) DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING EQUIPMENT WHICH SHALL CONFORM TO AND FULFILL THE INTENT OF THE CONTRACT DOCUMENTS. NOR SHALL IT BE USED AS A CONDITION TO OBTAIN ADDITIONAL FUNDS FROM THE OWNER AFTER THE CONTRACT IS AWARDED. THE CONTRACTOR SHALL REQUEST ALL CLARIFICATIONS OF CONTRACT DOCUMENT REQUIREMENTS IN WRITING TO THE ARCHITECT/ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL BID.
9.	REFER TO THE MECHANICAL SHEETS FOR THE EXACT LOCATION OF THE MECHANICAL EQUIPMENT.
10.	THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE MECHANICAL CONTRACTOR SO THAT NO PIPING, DUCTS, OR OTHER EQUIPMENT SHALL BE INSTALLED IN ENTRY OR PASS THROUGH ELECTRICAL ROOM OR SPACES ABOVE OR BELOW ELECTRICAL PANELS.
11.	ELECTRICAL CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENT, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS PRIOR TO BEGINNING ROUGH-IN.
13.	MINIMUM SIZE OF CONDUIT TO BE 3/4". ALUMINUM CONDUITS SHALL NOT BE USED.
14.	USE RIGID STEEL SET SCREW TYPE FITTINGS ONLY. DIE CAST FITTINGS SHALL NOT BE USED.
15.	RUN A NEUTRAL CONDUCTOR FOR EACH PHASE CONDUCTOR (EACH CIRCUIT) IN A CONDUIT. NOT MORE THAN THREE (3) CIRCUITS IN A CONDUIT. THREE (3) PHASE CONDUCTORS, THREE (3) NEUTRAL CONDUCTORS (ONE FOR EACH PHASE) AND ONE (1) GROUND CONDUCTOR FOR A TOTAL OF SEVEN (7) CONDUCTORS COMPLY WITH NEC ARTICLE 210.4.
16.	PROVIDE PULL WIRES IN EMPTY CONDUITS. REFER TO SPECIFICATION SECTION 260533 FOR MORE INFORMATION.
17.	THE MINIMUM SIZE OF THE CONDUCTORS SHALL BE #12 AWG THIN STRANDED COPPER, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
18.	ALL J-BOXES SHALL HAVE MINIMUM DEPTH OF 3" UNLESS OTHERWISE SPECIFIED. SECURE ALL J-BOXES AS SHOWN IN THE DETAILS. FURNISH AND INSTALL PROPER MUD RINGS.
19.	ALL NEW EXPOSED CONDUIT SHALL RUN AGAINST THE WALLS OR CEILINGS. DO NOT PENDANT MOUNT ANY CONDUIT FROM THE CEILINGS. KEEP CONDUITS AT ROOF DECK 1-1/2" BELOW THE ROOF DECK PER NEC.
20.	AT THE END OF THE JOB, PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL J-BOXES WHERE DEVICES HAVE NOT YET BEEN INSTALLED.
21.	SEAL AROUND ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS WITH FIRE RATED MATERIAL. 3M IS AN APPROVED MANUFACTURER.
22.	ALL ELECTRICAL WIRING MUST BE IN CONDUIT (ROMEX AND MC CABLE ARE NOT PERMITTED).
23.	FLEXIBLE CONDUITS CAN ONLY BE USED FOR SHORT RUNS (6' MAXIMUM). REFER TO SPECIFICATION SECTION #260533 FOR MORE INFORMATION.
24.	NO CONDUITS SHALL RUN IN DUCT WORK.
25.	THE ELECTRICAL CONTRACTOR SHALL TERMINATE THE ELECTRICAL CONNECTIONS TO ALL THE EQUIPMENT BY PROVIDING THE NECESSARY MALE/FEMALE CONNECTOR, RECEPTACLE, PLUG, ETC.
26.	USE NO. 10 THIN CONDUCTORS FOR CONDUCTOR LENGTH OVER 100 FEET, NO. 8 THIN OVER 200 FEET, NO. 6 THIN OVER 300 FEET AND NO. 4 THIN OVER 400 FEET LENGTH.
27.	ALL CONDUITS EXPOSED TO THE WEATHER AND IN THE BOILER ROOM SHALL BE GALVANIZED RIGID STEEL, UNLESS OTHERWISE NOTED.
28.	THE FIRST 10' LENGTH OF ALL BURIED CONDUIT SHALL BE RIGID GALVANIZED STEEL WHERE THEY ARE LEAVING OR ENTERING THE BUILDING, MANHOLE, VAULT, ETC.
29.	ALL METALLIC CONDUITS, JOINTS, FITTINGS, ETC., IN CONTACT WITH THE GROUND SHALL BE SPIRALLY WRAPPED WITH 3M SCOTCHRAP-51, 20 MIL TAPE (OR APPROVED EQUAL). 50% OVERLAP IS REQUIRED.
30.	ALL UNDERGROUND CONDUIT SHALL BE BURIED 24" MINIMUM BELOW FINAL FINISHED SURFACES OR AS SPECIFIED.
31.	PROVIDE TYPED LABEL FOR ALL DUPLEX OUTLETS AND LIGHT SWITCHES TO INDICATE WHICH CIRCUIT THEY ARE TIED TO. REFER TO SPECIFICATION #260533 FOR MORE INFORMATION.
32.	ALL DUPLEX OUTLETS AND SWITCHES SHALL BE 20 AMP, 120 VOLT SPEC GRADE. HUBBELL AND PASS & SEYMOUR AND LEVITON ARE APPROVED MANUFACTURERS. REFER TO SPECIFICATION #262726 FOR MORE INFORMATION.
33.	LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER, SHALL BE GANGED TOGETHER WITH ONE PIECE COVERPLATE.
34.	INSTALL LIGHT SWITCHES 10" TO THE DOOR. COORDINATE EXACT LOCATION OF LIGHT SWITCHES WITH ARCHITECT.
35.	SUPPORT THE LAY-IN TYPE FIXTURES INCLUDING DOWN LIGHT FIXTURE FROM THE CEILING DECK INDEPENDENT OF THE CEILING GRID, AS SHOWN ON THE TYPICAL RECESSED FIXTURE MOUNTING DETAIL.
36.	INSTALL EXIT SIGNS ON THE WALL IF POSSIBLE.
37.	ALL PANELBOARDS SHALL HAVE FULL SIZE NEUTRAL AND GROUND COPPER BUS BARS.
38.	SUCCESSFUL BIDDER FOR THE PANELBOARDS, MAIN DISTRIBUTION PANEL, MOTOR CONTROL CENTERS, TRANSFORMERS, ETC., SHALL INCLUDE IN THEIR SUBMITTALS, LAYOUTS OF ALL THE ELECTRICAL ROOMS TO SHOW THE ELECTRICAL SWITCH GEAR LAYOUT OF EACH ROOM. (SCALE: 1/4" = 1'-0").
39.	USE EPOXY ANCHORS TO SUPPORT THE ELECTRICAL EQUIPMENT. EXPANSION ANCHOR BOLTS ARE NOT ACCEPTED.
40.	ALL PANELS SHALL HAVE COPPER BUSSES AND SHALL BE BRACED FOR A MINIMUM OF 10,000 AIC OR AS SPECIFIED.
41.	A SIGN SHALL BE PLACED AT THE SERVICE ENTRANCE EQUIPMENT, INDICATING TYPE AND LOCATION OF ONSITE EMERGENCY POWER SOURCES.

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OWNER PROJECT NO.:
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GENERAL NOTES AND SYMBOLS LEGEND

SCHEMATIC DESIGN

REVISIONS:



E.C.E. LLC
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ECE Project # 5018

UL SYSTEM #W-L-1001
JUNE 15, 2005
F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3 AND 4 HR (SEE ITEM 3)
L RATINGS AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

1. WALL ASSEMBLY - 1, 2, 3 OR 4 HR FIRE RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS, WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102MM) LUMBER SPACED 16 IN. (408 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102MM) END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.

B. GYPSUM BOARD* - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).

2. THROUGH PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (0 MM) (POINT CONTACT) TO MAX 2 IN. (51 MM). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDERS OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. STEEL PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

B. IRON PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN. (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.

C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN. (102 MM) (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.

D. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.

E. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

F. THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING - THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDERS OF WALL ASSEMBLY.

OMEGA FLEX INC

2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDERS OF WALL ASSEMBLY.

TITIFLEX CORP
A BUNDY CO

3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDERS OF WALL ASSEMBLY.

WARD MFG INC

3. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - MIN 5/8, 1-1/4, 1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY. APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDERS OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAX PIPE OR CONDUIT DIAM (MM)	F RATING HR	T RATING HR
1 (25)	1 OR 2	0*, 1 OR 2
1 (25)	3 OR 4	3 OR 4
4 (102)	1 OR 2	0
6 (152)	3 OR 4	0
12 (305)	1 OR 2	0

* WHEN COPPER PIPE IS USED, T RATING IS 0 HR.
3M COMPANY - CP 25WB* CAULK OR FB-3000 WT SEALANT,
* BEARING THE UL CLASSIFICATION MARKING

SCALE: FIRESTOP FOR METAL CONDUIT THROUGH GYPSUM WALL BOARD
N.T.S.

UL SYSTEM #C-AJ-1009
DECEMBER 07, 1999
(FORMERLY SYSTEM NO. 122)
F RATING - 2 HR
T RATING - 0 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT (SEE ITEM 5)
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT (SEE ITEM 5)

SECTION A-A
WALL ASSEMBLY

1. FLOOR OR WALL ASSEMBLY - MIN 5 IN. THICK REINFORCED NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 6 IN.

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. METALLIC SLEEVE (OPTIONAL) - NOM 6 IN. DIAM (OR SMALLER) ELECTRICAL METALLIC TUBING, STEEL CONDUIT OR CAST IRON PIPE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY, FLUSH WITH FLOOR OR WALL SURFACES.

3. THROUGH PENETRANTS - ONE METALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM ANNULAR SPACE OF 3/4 IN. IS REQUIRED WITHIN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDERS OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:

A. STEEL PIPE - NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.

B. CONDUIT - NOM 4 IN. (OR SMALLER) DIAM STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

4. PACKING MATERIAL - MIN 3 IN. THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. PACKING MATERIAL TO BE CENTERED IN WALLS MID DEPTH AND RECESSED TO ALLOW FOR INSTALLATION OF FILL MATERIAL.

5. FILL, VOID OR CAVITY MATERIAL* - SEALANT - MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. IN WALLS, FILL MATERIAL TO BE APPLIED ON EACH SIDE OF PACKING MATERIAL.

3M COMPANY - FB-2000 OR FB-2000+ (FLOORS ONLY).
(NOTE: L RATINGS APPLY ONLY WHEN FB-2000+ IS USED.)
* BEARING THE UL CLASSIFICATION MARKING

SCALE: TYPICAL FIRESTOP FOR CABLES/CONDUIT THROUGH CONCRETE FLOORING
N.T.S.

UL SYSTEM #C-AJ-1009
DECEMBER 07, 1999
(FORMERLY SYSTEM NO. 122)
F RATING - 2 HR
T RATING - 0 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT (SEE ITEM 5)
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT (SEE ITEM 5)

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A. STEEL PIPE - NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.

B. CONDUIT - NOM 4 IN. (OR SMALLER) DIAM STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

4. PACKING MATERIAL - MIN 3 IN. THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. PACKING MATERIAL TO BE CENTERED IN WALLS MID DEPTH AND RECESSED TO ALLOW FOR INSTALLATION OF FILL MATERIAL.

5. FILL, VOID OR CAVITY MATERIAL* - SEALANT - MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. IN WALLS, FILL MATERIAL TO BE APPLIED ON EACH SIDE OF PACKING MATERIAL.

3M COMPANY - FB-2000 OR FB-2000+ (FLOORS ONLY).
(NOTE: L RATINGS APPLY ONLY WHEN FB-2000+ IS USED.)
* BEARING THE UL CLASSIFICATION MARKING

SCALE: TYPICAL FIRESTOP FOR CABLES/CONDUIT THROUGH CONCRETE WALLS
N.T.S.

VERIFY DISTANCE WITH ROOFING CONTRACTOR AND MECHANICAL SHOP DRAWINGS MAXIMUM DISTANCE WITHOUT ADDITIONAL SUPPORT 3'-0"

RAIN TIGHT FITTINGS

RAIN TIGHT CONDUIT BODY "LB" SEAL A/A

ROOF JACK/CONE

CORE DRILL ROOF SLAB PACK ALL AROUND WITH BACKING AND SEALANT (SIL-A-FLEX OR EQUAL)

BALLAST (IF USED)

INSULATION

CONCRETE ROOF DECK

SEAL-TIGHT FLEXIBLE STEEL CONDUIT AFTER RGS HAS BEEN ANCHORED TO THE MECHANICAL UNIT

J-BOX (SIZE AS REQUIRED) ANCHORED TO CEILING DECK

UL APPROVED CONDUIT SUPPORT

SCALE: CONDUIT ROOF PENETRATION
NTS

STRUCTURAL UNIT

PROVIDE MOISTURE PROOFING AS REQUIRED

FLOOR

CONDUIT

SEISMIC OR EXPANSION JOINT

FLEXIBLE CONDUIT (VINYL CLAD)

STRUCTURAL MEMBER (BEAM, JOIST, ETC.)

FLOOR OR ROOF STRUCTURE

CONDUIT CLAMP

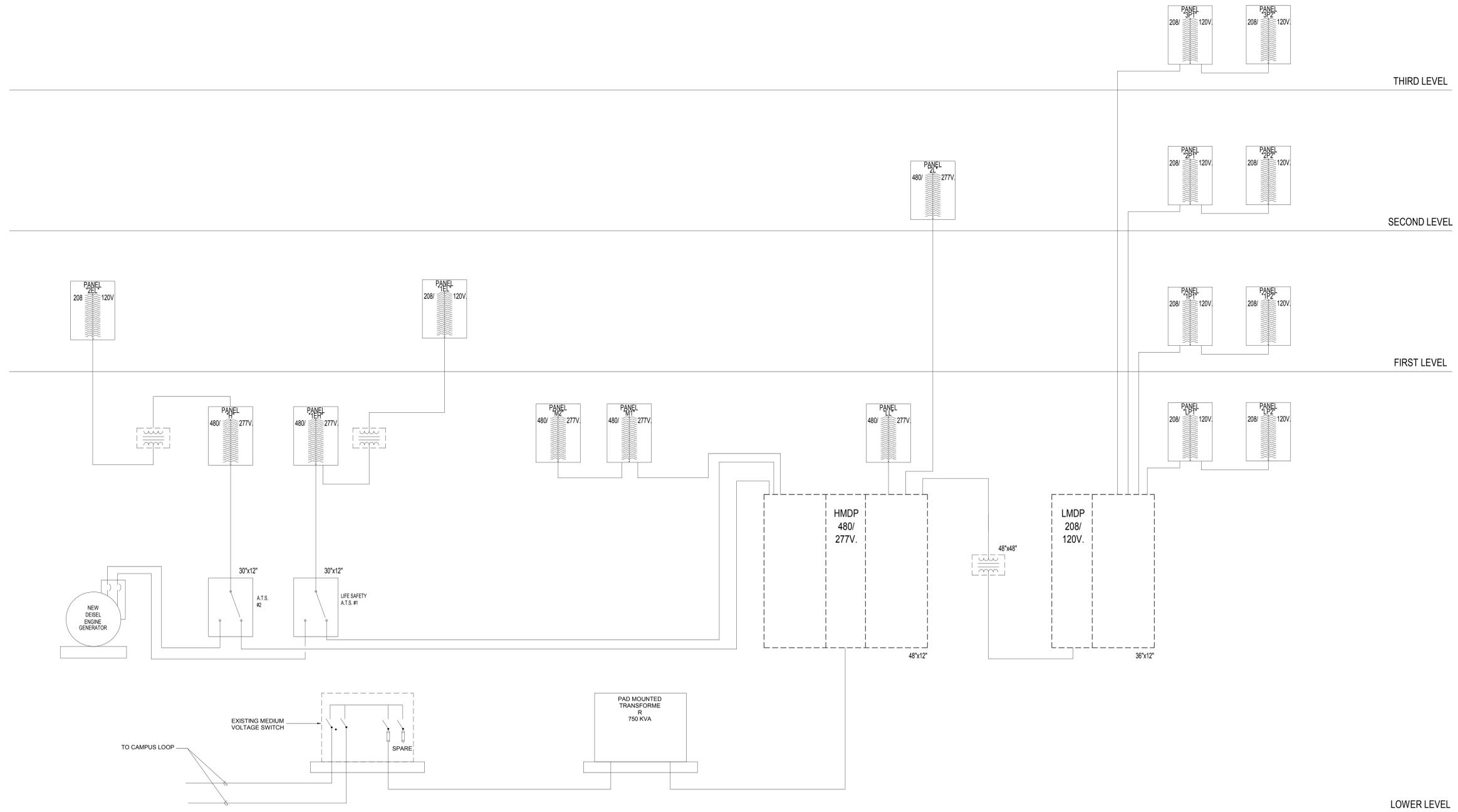
FLEXIBLE CONDUIT (VINYL CLAD)

SCALE: CONDUIT CROSSING SEISMIC OR EXPANSION JOINT DETAIL
N.T.S.

REVISIONS:



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ECE Project # 5018



SCHEMATIC POWER SINGLE LINE DIAGRAM
SCALE: N.T.S.

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GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016

SCHEMATIC POWER SINGLE
LINE DIAGRAM

SCHEMATIC DESIGN

EE004

GENERAL DEMOLITION NOTES:

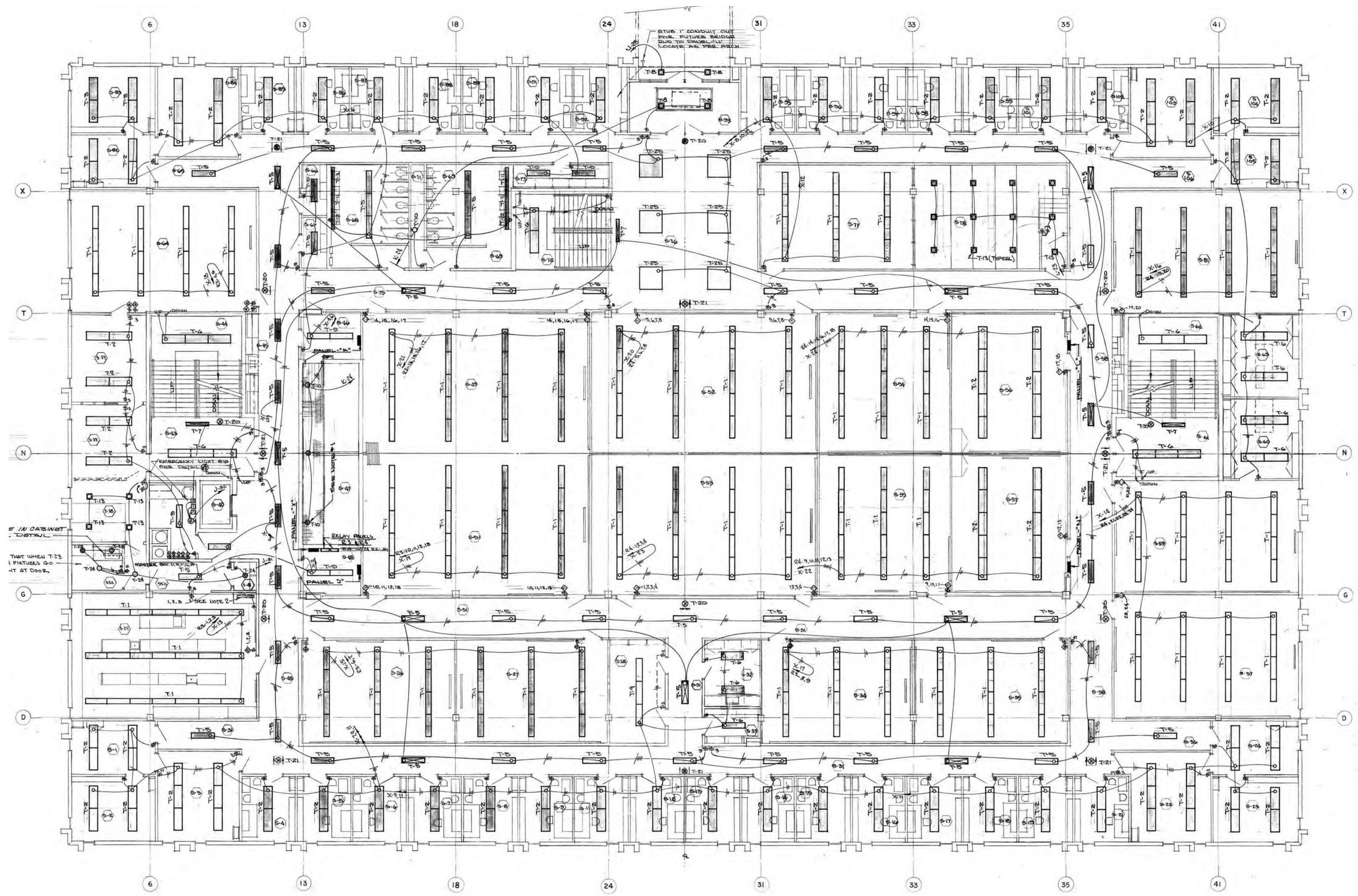
1. ALL 2787/480 VOLT AND 120/208 VOLT SWITCHBOARDS WILL BE REMOVED ENTIRELY INCLUDING ALL FEEDER CONDUIT AND CONDUCTORS. ALL BRANCH PANELBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS ARE TO BE REMOVED IN THE ENTIRE BUILDING.
2. ALL THE DEVICES, ASSOCIATED CONDUIT AND CONDUCTORS, UNLESS NOTED OTHERWISE, ARE TO BE REMOVED IN THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.
3. ALL LIGHT FIXTURES, LIGHT SWITCHES, ASSOCIATED CONDUIT, CONDUCTORS, J-BOXES, ETC. ARE TO BE REMOVED FROM THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.

REVISIONS:

THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.



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1 DEMOLITION LIGHTING PLAN - LEVEL 2
1/2" = 1'-0"

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SECOND LEVEL DEMOLITION FLOOR PLAN - LIGHTING

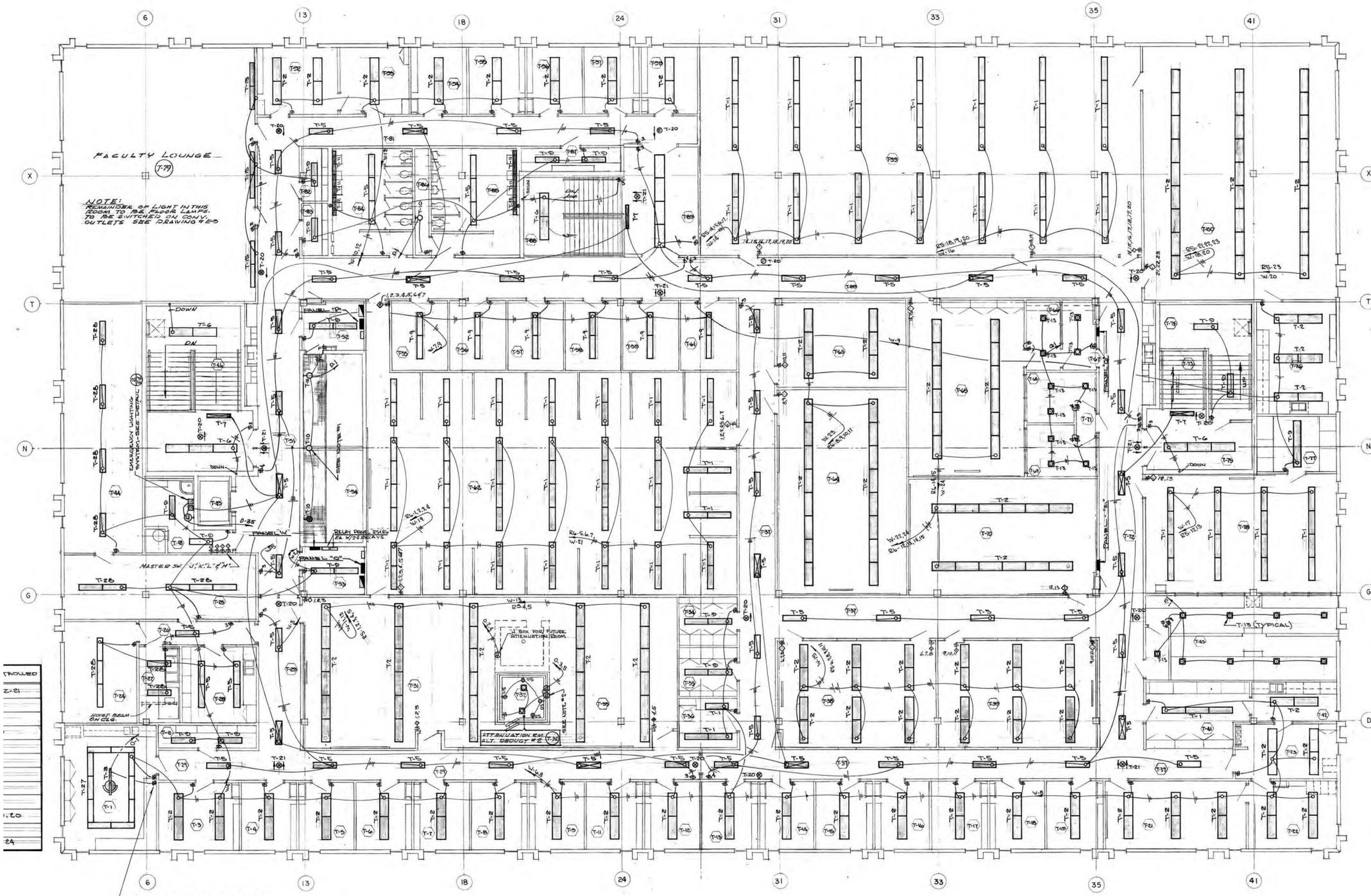
SCHEMATIC DESIGN

- GENERAL DEMOLITION NOTES:**
1. ALL 2787/480 VOLT AND 120/208 VOLT SWITCHBOARDS WILL BE REMOVED ENTIRELY INCLUDING ALL FEEDER CONDUIT AND CONDUCTORS. ALL BRANCH PANELBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS ARE TO BE REMOVED IN THE ENTIRE BUILDING.
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REVISIONS:

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1 DEMOLITION LIGHTING PLAN - LEVEL 3
1/2" = 1'-0"

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ISSUED DATE: 07.08.2016

THIRD LEVEL DEMOLITION FLOOR PLAN - LIGHTING

SCHEMATIC DESIGN

GENERAL DEMOLITION NOTES:

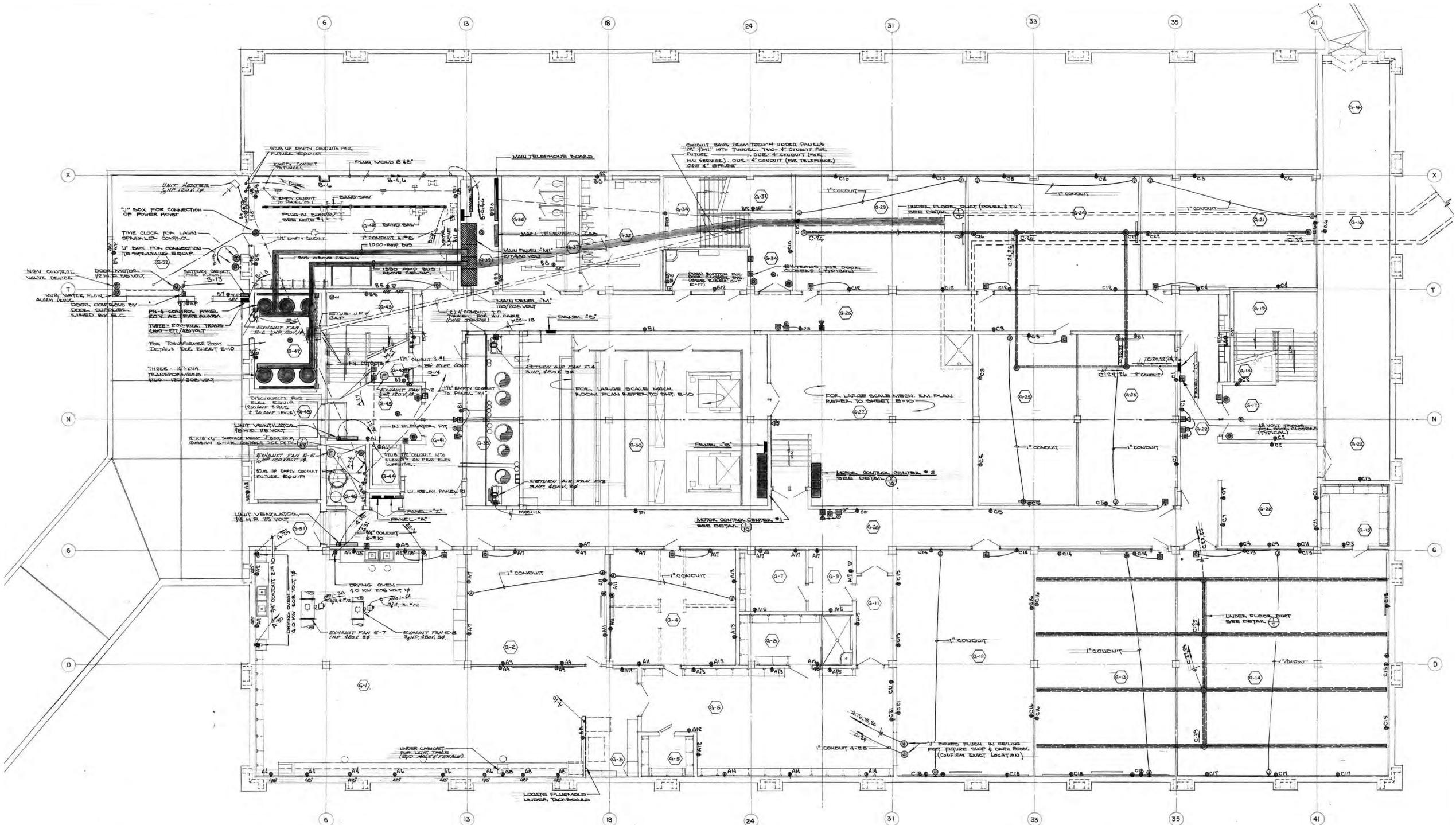
1. ALL 277/480 VOLT AND 120/208 VOLT SWITCHBOARDS WILL BE REMOVED ENTIRELY INCLUDING ALL FEEDER CONDUIT AND CONDUCTORS. ALL BRANCH PANELBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS ARE TO BE REMOVED IN THE ENTIRE BUILDING.
2. ALL THE DEVICES, ASSOCIATED CONDUIT AND CONDUCTORS, UNLESS NOTED OTHERWISE, ARE TO BE REMOVED IN THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.
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REVISIONS:

THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.



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LOWER LEVEL DEMOLITION FLOOR PLAN - POWER

SCHEMATIC DESIGN

DEMOLITION POWER PLAN - LOWER LEVEL
1 12" = 1'-0"

REVISIONS:



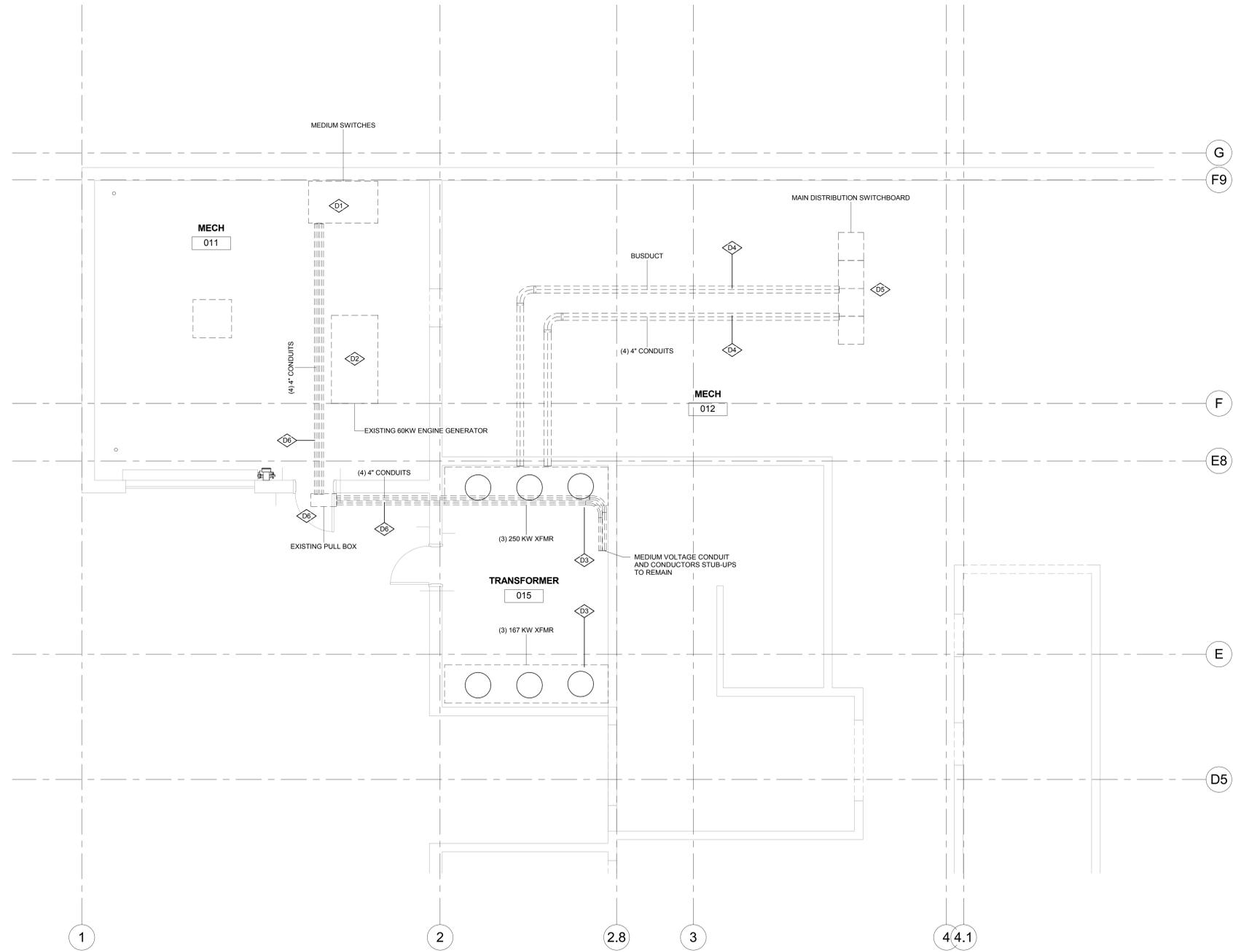
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REFERENCE NOTES:

- D1 RELOCATE EXISTING MEDIUM VOLTAGE SWITCH TO NEW LOCATION IN TRANSFORMER ROOM 015. TIE THE EXISTING LOOP TO THE SWITCH. COORDINATE THIS WORK WITH WSU ELECTRICAL SHOP. REMOVE EXISTING 15 KVA FEEDER CONDUIT AND CONDUCTORS TO EXISTING TRANSFORMER.
- D2 EXISTING 60 KW ENGINE GENERATOR IS TO BE REPLACED WITH A NEW ONE. REMOVE ALL ASSOCIATED FEEDER CONDUIT AND CONDUCTORS.
- D3 EXISTING MEDIUM VOLTAGE TRANSFORMERS ARE TO BE REMOVED. REMOVE ASSOCIATED MEDIUM VOLTAGE AND SECONDARY CONDUCTORS, CONDUIT, AND BUSDUCTS.
- D4 REMOVE EXISTING BUSDUCTS.
- D5 REMOVE EXISTING MAIN DISTRIBUTION SWITCHBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS.
- D6 REMOVE EXISTING MEDIUM VOLTAGE CONDUIT AND CONDUCTORS ALL THE WAY TO THE TRANSFORMER ROOM 015. TIE THE CAMPUS LOOP TO SWITCH IN ITS NEW LOCATION.

GENERAL DEMOLITION NOTES:

1. ALL 2787/480 VOLT AND 120/208 VOLT SWITCHBOARDS WILL BE REMOVED ENTIRELY INCLUDING ALL FEEDER CONDUIT AND CONDUCTORS. ALL BRANCH PANELBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS ARE TO BE REMOVED IN THE ENTIRE BUILDING.
2. ALL THE DEVICES, ASSOCIATED CONDUIT AND CONDUCTORS, UNLESS NOTED OTHERWISE, ARE TO BE REMOVED IN THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.
3. ALL LIGHT FIXTURES, LIGHT SWITCHES, ASSOCIATED CONDUIT, CONDUCTORS, J-BOXES, ETC. ARE TO BE REMOVED FROM THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.



ENLARGED DEMOLITION POWER PLAN -
LOWER LEVEL
1/4\"/>

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ISSUED DATE:

**LOWER LEVEL ENLARGED
DEMOLITION FLOOR PLAN -
POWER**

SCHEMATIC DESIGN

GENERAL DEMOLITION NOTES:

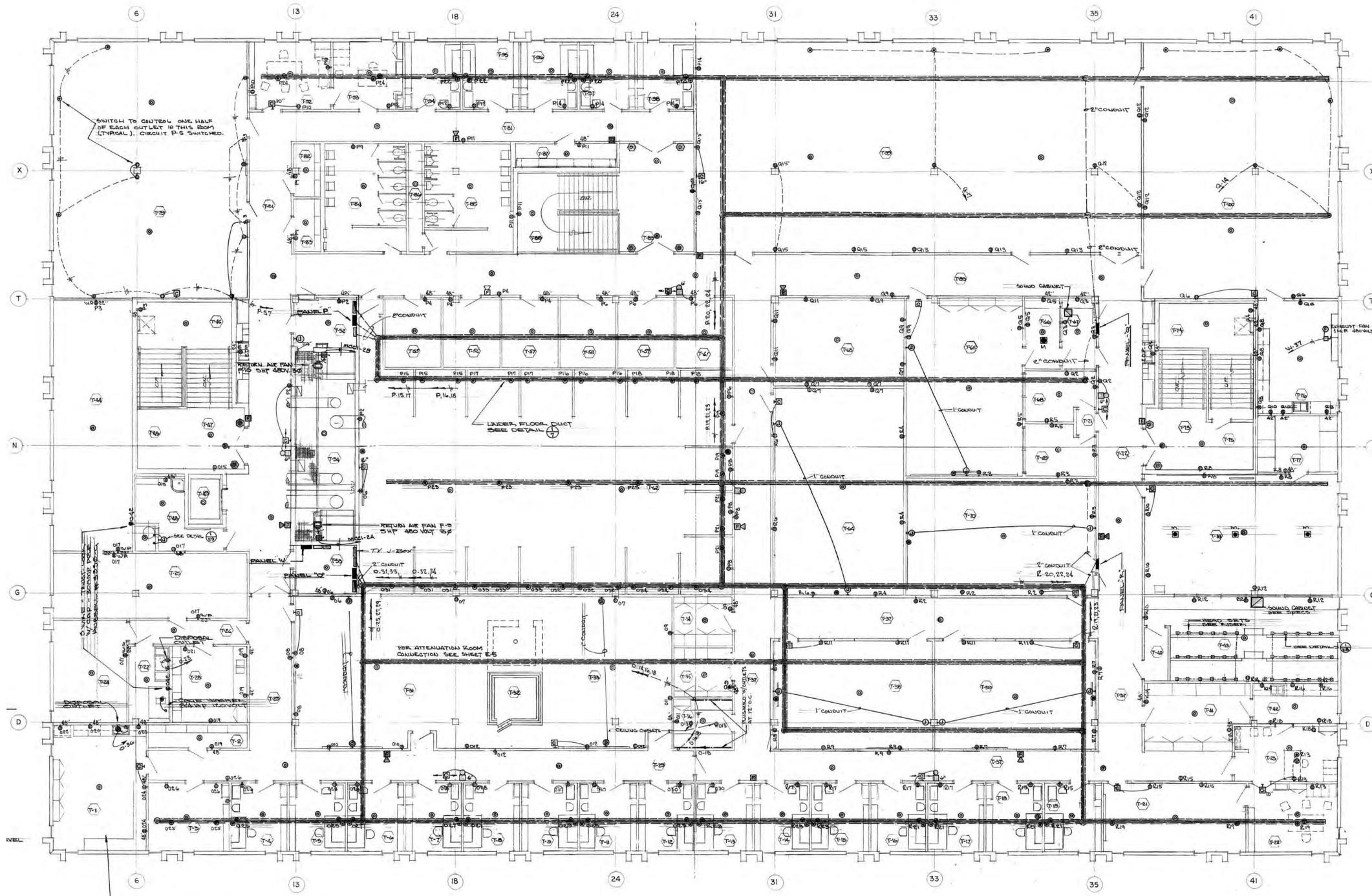
1. ALL 2787480 VOLT AND 120/208 VOLT SWITCHBOARDS WILL BE REMOVED ENTIRELY INCLUDING ALL FEEDER CONDUIT AND CONDUCTORS. ALL BRANCH PANELBOARDS, ASSOCIATED CONDUIT AND CONDUCTORS ARE TO BE REMOVED IN THE ENTIRE BUILDING.
2. ALL THE DEVICES, ASSOCIATED CONDUIT AND CONDUCTORS, UNLESS NOTED OTHERWISE, ARE TO BE REMOVED IN THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.
3. ALL LIGHT FIXTURES, LIGHT SWITCHES, ASSOCIATED CONDUIT, CONDUCTORS, J-BOXES, ETC. ARE TO BE REMOVED FROM THE ENTIRE BUILDING REGARDLESS IF SHOWN ON THE DEMO PLANS OR NOT.

THESE ORIGINAL AS-BUILT PLANS ARE SHOWN TO ILLUSTRATE THE GENERAL SCOPE OF DEMOLITION REQUIRED. NOT ALL ELEMENTS ARE ACCURATE IN QUANTITY OR CONFIGURATION.

REVISIONS:



E.C.E. LLC
Electrical Consulting Engineers
939 So. West Temple
Salt Lake City, Utah 84101
Telephone (801) 521-8007
Email Admin@eceline.com
ECE Project # 5018



1 DEMOLITION POWER PLAN - LEVEL 3
12" = 1'-0"

WSU SOCIAL SCIENCE RENOVATION

1299 Edvolson St. Ogden, UT 84408



1410 Edvolson St. Ogden, UT 84408
OWNER PROJECT NO.:
GSBS PROJECT NO.: 2016.036.00
ISSUED DATE: 07.08.2016

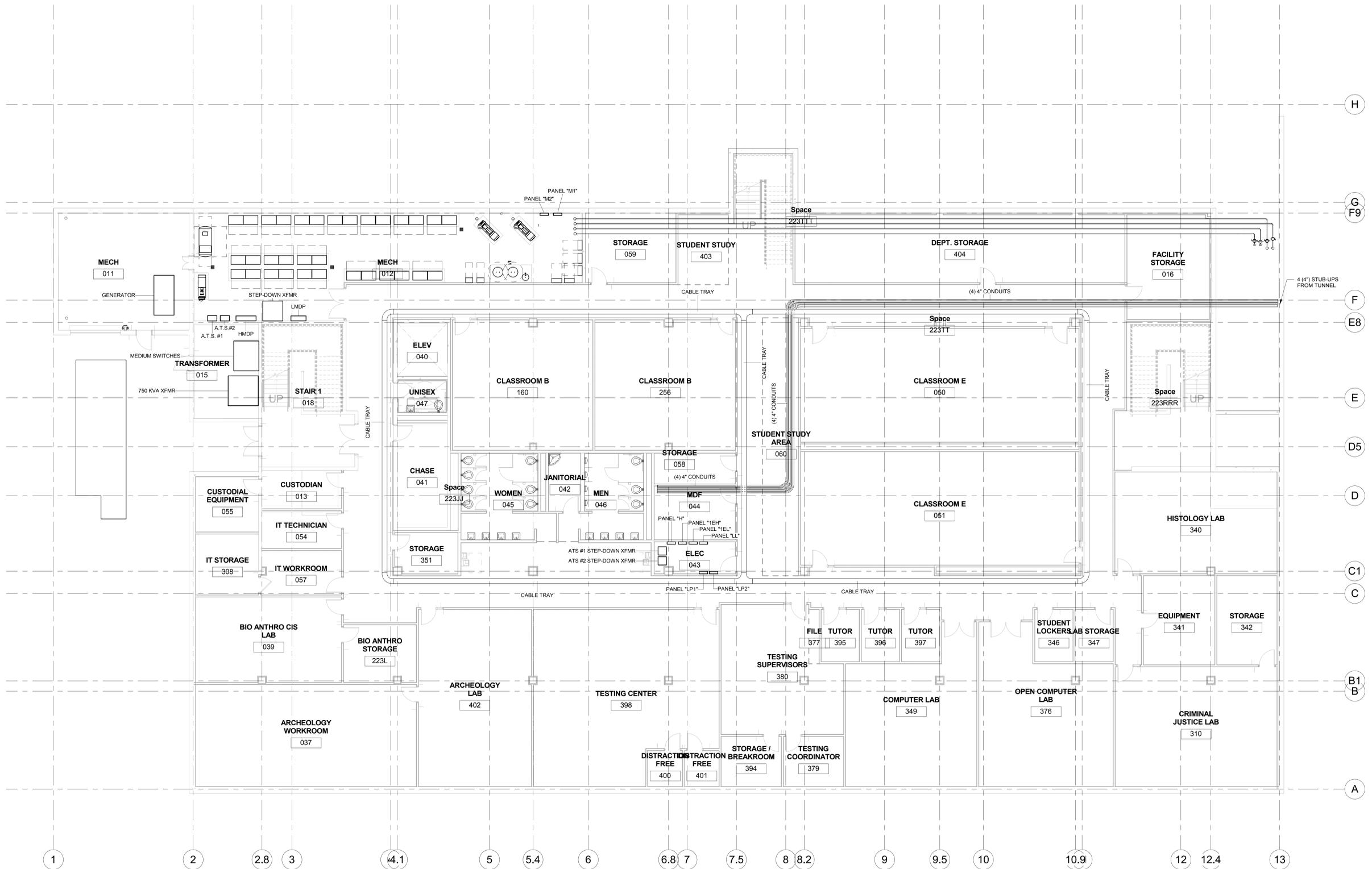
THIRD LEVEL DEMOLITION FLOOR PLAN - POWER

SCHEMATIC DESIGN

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

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1410 Edvalson St. Ogden, UT 84408
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FLOOR PLAN - POWER - LOWER LEVEL

SCHEMATIC DESIGN