

INNOVATION LAB RENOVATION
ANCHORAGE INDEPENDENT SCHOOL
ANCHORAGE INDEPENDENT BOARD OF EDUCATION
ANCHORAGE, KENTUCKY



SHROUT, TATE, WILSON
CONSULTING ENGINEERS
LOUISVILLE, KENTUCKY

G. SCOTT & ASSOCIATES, ARCHITECTS, P.L.C.

314 WILKINSON ST.
FRANKFORT, KY 40601

PHONE 502-875-2290
FAX 502-875-1107
mail@gsotarch.com

STATE PLAN
REVIEW STAMP

SYMBOLS AND ABBREVIATIONS

•	AT	-DO-	DITTO	INSUL	INSULATION	REQD.	REQUIRED
A.B.	ANCHOR BOLT	DP	DEEP	INV.	INVERT	REV	REVERSE
AFF.	ABOVE FINISH FLOOR	DWG(S)	DRAWING(S)	JAN.	JANITOR'S CLOSET	RM.	ROOM
ACOUS.TILE	ACOUSTICAL TILE	DWL	DOUEL	JNT(S)	JOINT(S)	RTU	ROOF TOP UNIT
ADDIT.	ADDITION	EF	EACH FACE	JST.	JOIST	S.F.O.	SECOND FLOOR ONLY
ADDL.	ADDITIONAL	EJ/EXP.JT.	EXPANSION JOINT	LL.V.	LONG LEG VERTICAL	S.J.I.	STEEL JOIST INSTITUTE
ADJ.	ADJUSTABLE	EJL	EACH WAY	LAM.	LAMINATE	S.S.	STAINLESS STEEL
ADMIN.	ADMINISTRATION	EA	EACH	LAND	LANDING	SAN.	SANITARY
ALT.	ALTERNATE/ALTERNATIVE	EL. ELEV.	ELEVATION	L.G.	LONG/LENGTH	SGFT	STRUCTURAL GLAZED FACE TILE
ALUM.	ALUMINUM	ELEC.	ELECTRIC/ELECTRICAL	L.P.	LOW POINT	SCHED.	SCHEDULE
APPD.	APPROVED	EMB.	EMBED/EMBEDMENT	LYR.	LAYER/LAYERS	SEC.	SECTION
APPROX.	APPROXIMATE	EPDM	ETHYLENE PROPYLENE DIENE	M.C.	MACHINE/MACHINERY	SHT.	SHEET
ARCH.	ARCHITECTURAL	EQ.	EQUAL	M.H.	MANHOLE	SL	SLOPE
BOTT/BTH.	BOTTOM	EQUIV.	EQUIVALENT	M.O.	MANHOLE OPENING	SP	SPACES
B.O.	BOTTOM OF	EXIST/EXTG.	EXISTING	MANF.	MANUFACTURER	SPCG.	SPACING
B.O.S.	BOTTOM OF STEEL	EIFS	EXTERIOR INSULATION	MATL.	MATERIAL	SPEC	SPECIFICATION
BLDG.	BUILDING	EXP.	EXPANSION	MAX.	MAXIMUM	SQ.	SQUARE
BLKG.	BLOCKING	F.D.	FLOOR DRAIN	MCJ	MASONRY CONTROL JOINT	STAG.	STAGGER/STAGGERED
BH.	BEAM	FEC.	FIRE EXTINGUISHER CABINET	MECH.	MECHANICAL	STD.	STANDARD
BRG/BRG.	BEARING	FF.	FAR FACE	MEGR/MGR.	MECHANICAL MANUFACTURER	STRR.	STIRRUP
BTUN.	BETWEEN	FFE.	FINISH FLOOR ELEVATION	STL	STEEL	STL	STEEL
C/C	CENTER TO CENTER	FFL	FINISH FLOOR LINE	STOR.	STORAGE	STRCT.	STRUCTURAL
C.J.	CONTROL JOINT	FT.	FOOT/FEET	T.F.	TOP/FROM	T.F.	TOP/FROM
CL. &	CENTERLINE	FLG.	FLANGE	T.	TOP	T.O.	TOP OF
CMUL.	CONCRETE MASONRY UNIT	IND.	FOUNDATION	N.F.	NEAR FACE	T.O.B.	TOP OF BEAM
CAB.	CABINET	N.C.	NOT IN CONTRACT	N.T.S.	NOT TO SCALE	T.O.S.	TOP OF STEEL
CERTILE	CERAMIC TILE	NTS.	NOT TO SCALE	NOM.	NOMINAL	THK/THICK.	THICKNESS </td
CLG.	CEILING	OPG.	OPENING	O.C.	ON CENTERS	THRU.	THROUGH
CLR.	CLEAR	OD.	OUTSIDE DIAMETER	OF.	OUTSIDE FACE	TRANSV.	TRANSVERSE </td
CLRM	CLASSROOM	OF.	OPENING	OPP.	OPPOSITE	UNO.	UNLESS NOTED OTHERWISE
COL.	COLUMN	OR EQ.	OR EQUAL/EQUIVALENT	V.	VERTICAL	V.	VERIFY IN FIELD
CONC.	CONCRETE	OR EQ.	OR EQUAL/EQUIVALENT	V.F.	VERIFY IN FIELD	VCT	VINYL COMPOSITION TILE
CONF.	CONFERENCE	PLATE	PLATE	W/	WITH	W/	WITHOUT
CONSTR.	CONSTRUCTION	PRO.	PROPOSED	W/O	WITHOUT	W/	WITH
CONT.	CONTINUOUS	P.T.	PRESSURE TREATED	W.P.	WORK POINT	WUF.	WOVEN WIRE FABRIC
CONTR.	CONTRACTOR	R/T	RISER/TREAD	W.U.	WAITING ROOM	WUB.	WRITING BOARD
CORR.	CORRIDOR	R.	RADIUS	W.U.	WAITING ROOM	W.U.	WRITING BOARD
CORRUS.	CORRUGATED	R.C.	ROUGH OPENING	W.U.	WAITING ROOM	W.U.	WRITING BOARD
CR	COURSE(S)	R.D.	ROUGH OPENING	W.U.	WAITING ROOM	W.U.	WRITING BOARD
CTR	CENTER	RD.	ROUGH OPENING	W.U.	WAITING ROOM	W.U.	WRITING BOARD
CTSK	COUNTERSINK	REF.	REFRIGERATOR	W.U.	WAITING ROOM	W.U.	WRITING BOARD
D.	DEPTH	RENF	REINFORCED	W.U.	WAITING ROOM	W.U.	WRITING BOARD
D.F.	DRINKING FOUNTAIN	REQ.T.	REQUIREMENT	W.U.	WAITING ROOM	W.U.	WRITING BOARD
D.S.	DOWNSPOUT			W.U.	WAITING ROOM	W.U.	WRITING BOARD
DET.	DETAIL			W.U.	WAITING ROOM	W.U.	WRITING BOARD
DIA. &	DIAMETER			W.U.	WAITING ROOM	W.U.	WRITING BOARD
DIM.	DIMENSION			W.U.	WAITING ROOM	W.U.	WRITING BOARD
DN	DOWN			W.U.	WAITING ROOM	W.U.	WRITING BOARD

VICINITY MAP

INDEX OF DRAWINGS

GENERAL CONTRACT & SEATING	
A-101	TITLE SHEET
A-102	DISPOSITION PLAN, FLOOR PLANS, CEILING PLAN, ELEVATIONS
A-103	SECTIONS, CASEWORK, ELEVATIONS
	INTERIOR ELEVATIONS
	WALL SECTIONS AND DETAILS
P-001	PLUMBING LEGEND & GENERAL NOTES
P-101	PLUMBING FLOOR PLAN
M-001	MECHANICAL LEGEND & GENERAL NOTES
M-101	MECHANICAL FLOOR PLAN
E-101	ELECTRICAL LEGEND & GENERAL NOTES
E-101	MECHANICAL FLOOR PLAN

PROJECT SITE

MOUNTING HEIGHTS

BUILDING INFO:

INNOVATION LAB - ANCHORAGE INDEPENDENT SCHOOL
10400 RIDGE ROAD
ANCHORAGE, KY 40223

NO CHANGE TO OCCUPANCY IN THIS SCOPE

INTERIOR RENOVATION ONLY
RENOVATE CLASSROOMS INTO COMPUTER LAB AND INNOVATION LAB AND

DATE

JULY 25

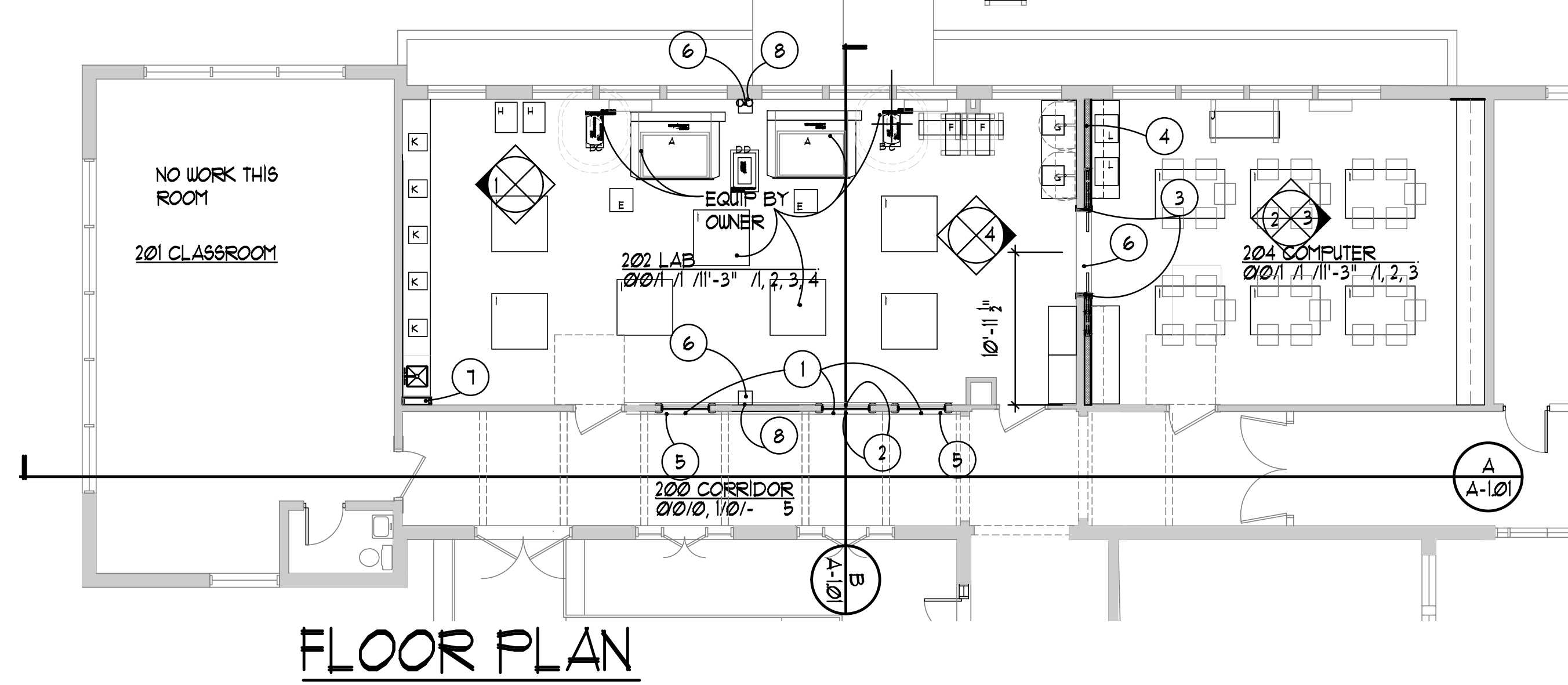
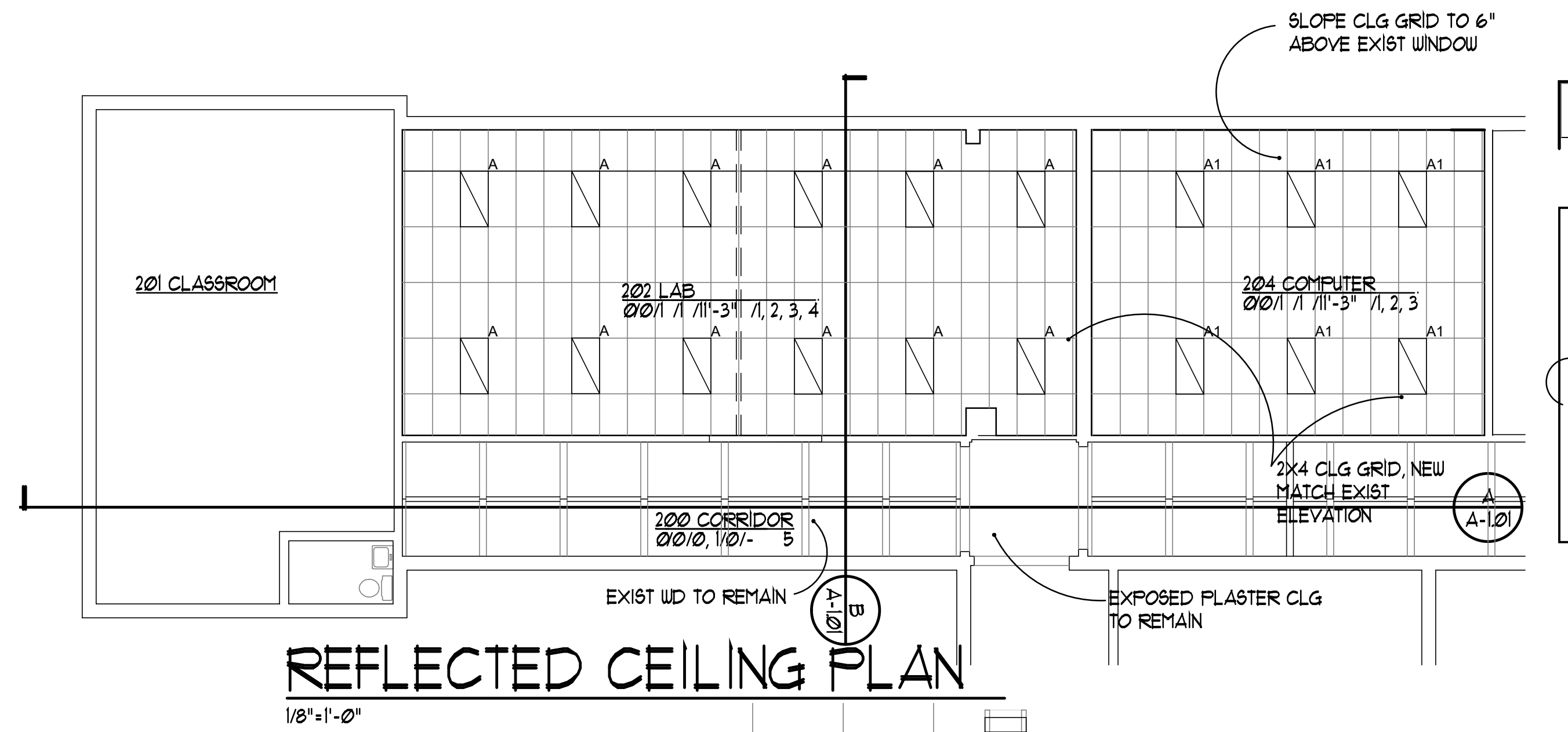
JOB NO.

2513

DATE

BEG-2-19

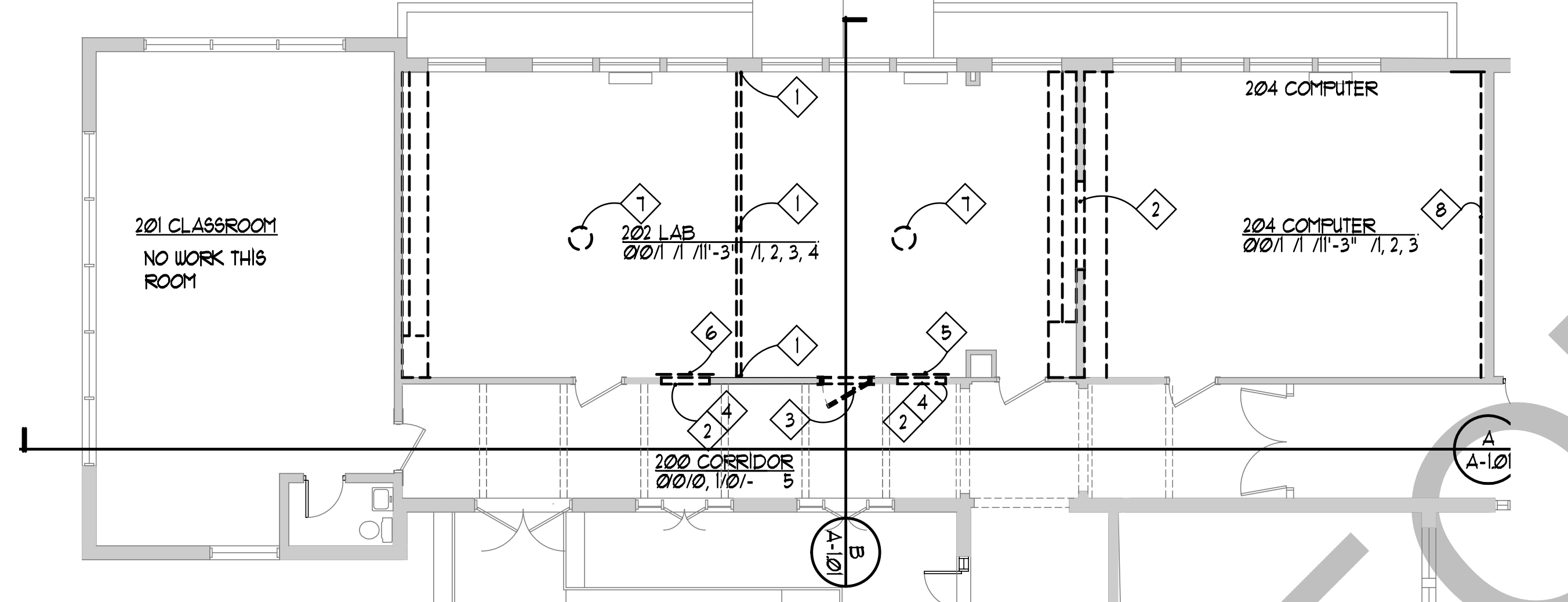
SET NUMBER



- OWNER-FURNISHED EQUIP**
- A. BOSS LASER ENGRAVER
 - B. BOSS FILTER
 - C. BOSS AIR COMPRESSOR
 - D. BOSS CHILLER STACK
 - E. COMPUTER STAND - MOBILE
 - F. VINYL CUTTER
 - G. VEOR HEAT PRESS
 - H. SMARTSTICH EMBROIDERY MACHINE
 - I. WORK TABLE
 - J. GRAPHTEC PLOTTER
 - K. CREALITY 3-D PRINTER
 - L. SAUGRASS PRINTER 11x17

- GENERAL NOTES:**
- ALIGN NEW WINDOW OPENINGS BELOW EXIST CLERESTORY WINDOWS
 - ALL EXIST FINISHES AT FLOOR & WALL TO REMAIN. REPAIRS AND INFILL TO MATCH EXISTING.
 - EXIST LASER PRINTERS TO REMAIN IN WORK SPACE DURING CONSTRUCTION. PROVIDE PLASTIC WRAP DUST AND PROTECT FROM DAMAGE. VERIFY CONDITION PRIOR TO BEGINNING WORK.
 - REPAIR HOLES & DAMAGE FROM DEMO WORK, AS WELL AS DETERIORATED FINISHES IN PREP FOR NEW PAINT FINISH

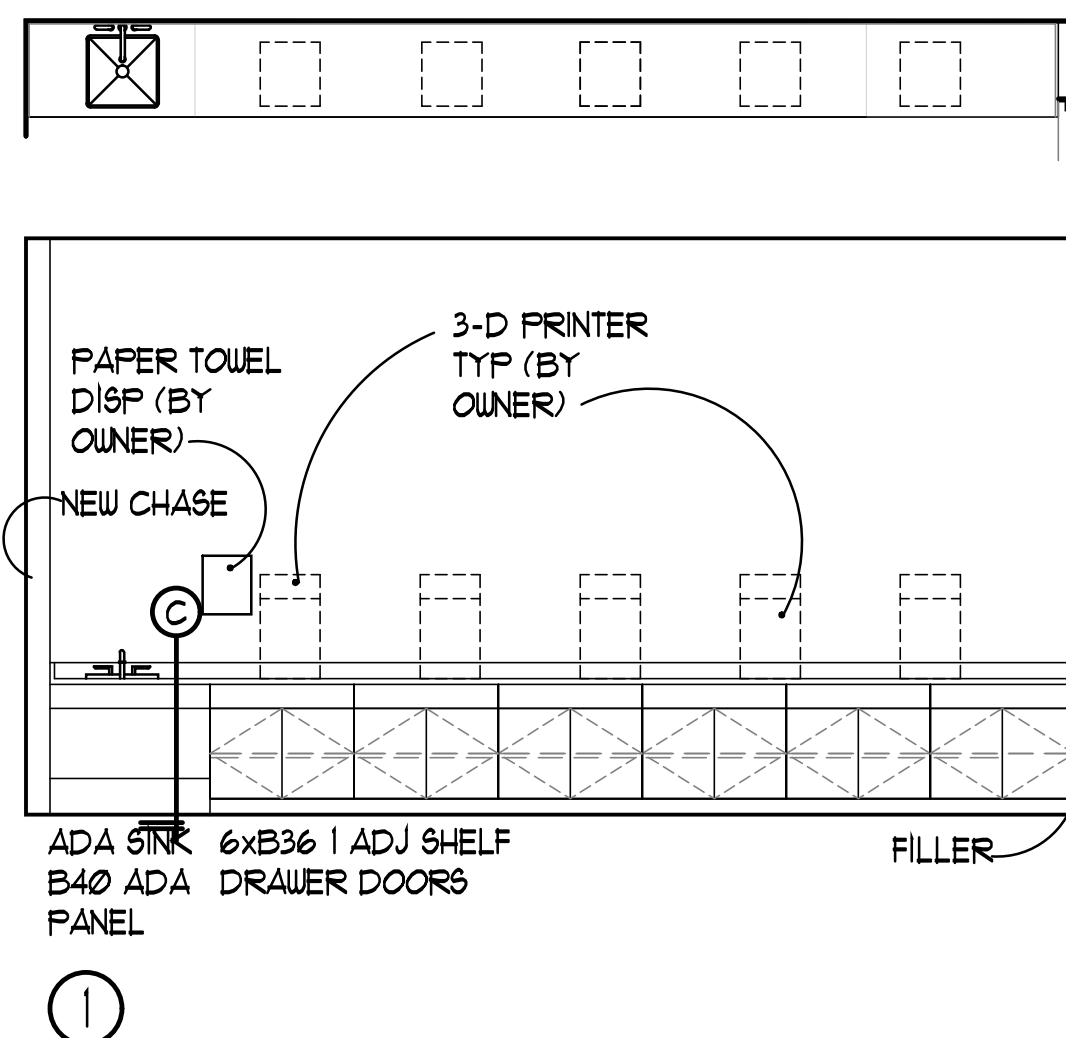
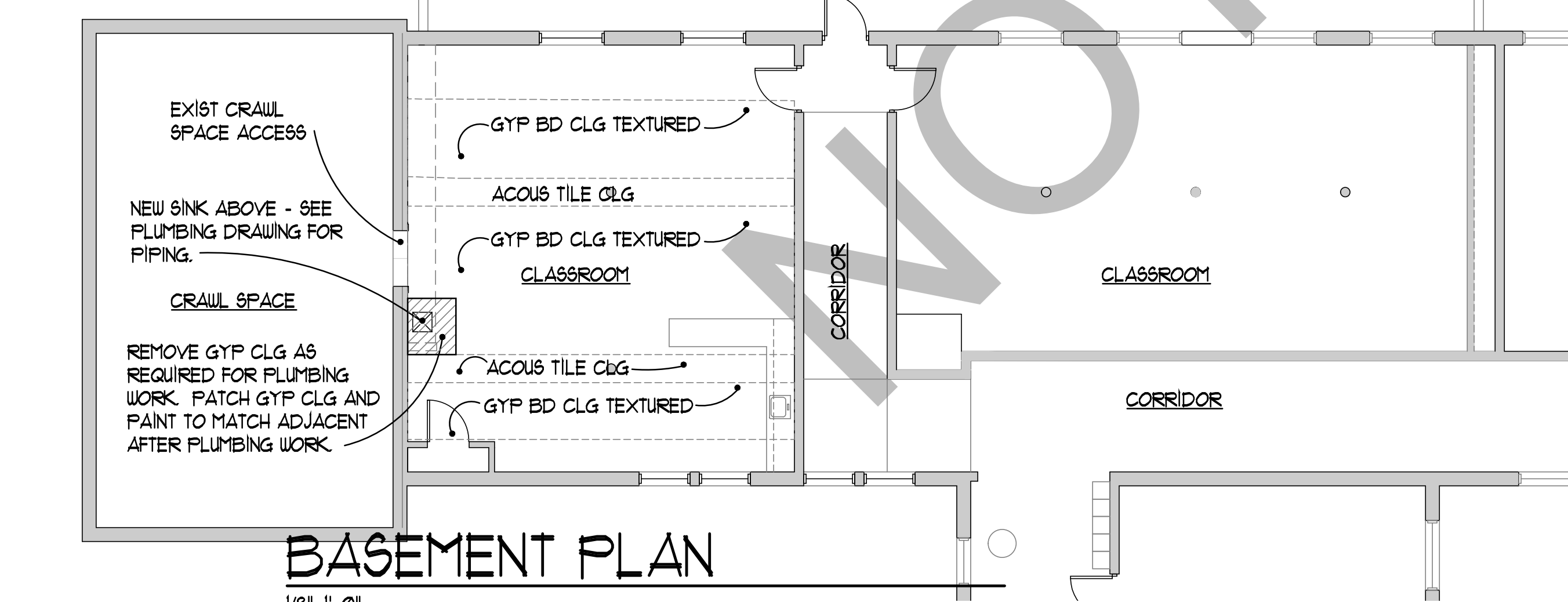
- KEYED CONSTRUCTION NOTES:**
- NEW 3'-4 1/4" TEMPERED GLASS WINDOW IN WOOD TRIM FRAME. HEAD AT 1'-0". ALIGN WITH CENTER OF CLERESTORY WINDOW OPENG ABOVE
 - INFILL BELOW WINDOW W/ 3/8" GYP BD CORRIDOR SIDE & FLYWD AT CLASSROOM SIDE ON WD FRAMING TO MATCH EXIST WALL THICKNESS. PROVIDE WOOD BASE ON BOTH SIDES OF INFILL TO MATCH EXIST.
 - NEW PAIR 3'-0" x 1'-0" SCUD IN POCKET DOOR FRAME.
 - NEW WD STUD WALL ADJACENT TO EXIST WALL. EXTEND STUDS AND GYP TO EXIST CLG.
 - INSTALL STORED COAT HANGERS & BACK TRIM UNDER WINDOW SILL. INFILL W/ MATCHING BACK TRIM UNDER NEW WINDOW (COATHOOKS BY OWNER)
 - PROVIDE VCT INFILL
 - NEW CHASE W/ GYP BD ON 2x6 WD FRAMING TO MIN 11'-6" AFF
 - INFILL BLOCK AT TRIM PER WINDOW HEAD DETAIL, DUG A-103



GENERAL DEMOLITION NOTES:

- REMOVE CEILINGS AND LIGHTS AS NEEDED FOR NEW WORK
- REMOVE EXISTING CASEWORK AS REQ'D FOR NEW WORK

- KEY DEMOLITION NOTES:**
- (ALT BID ITEM) REMOVE FRAMING, FINISH, AND TRIM FROM FOLDING PARTITION OVERHEAD SUPPORT TO UNDERSIDE OF WD TOP WALL PLATES (DOUBLE 2x), DO NOT IMPACT CEILING.
 - REMOVE EXISTING WALLS AS REQ'D FOR NEW WINDOW/DOOR OPENG.
 - REMOVE EXIST DOOR AND FRAME AS REQ'D FOR NEW WORK.
 - REMOVE COAT HOOKS AND BACK TRIM. STORE FOR RE-INSTALL.
 - OWNER TO REMOVE DIGITAL DISPLAY
 - REMOVE DISPLAY BD. AND TURN OVER TO OWNER
 - REMOVE CLG FANS, CAP & RETAIN FOWER AND J-BOX FOR FUTURE FAN INSTALL BY OWNER
 - REMOVE DISPLAY BDS, WOOD CHAIR RAIL, BASE & PANELING. PREP FOR NEW CASEWORK (INCLUDING OPTIONAL REMOVAL OF WRITING BOARD MATERIAL).



CASEWORK ELEVATIONS

1/4"=1'-0"

CASEWORK DESIGNATION SYMBOLS

BASE UNITS

B36 = BASE 36" WIDE DOORS, SHELVES, ETC. ADDED.

WALL UNITS

W3024 = WALL CAB. 30" WIDE x 24" TALL DOORS, ETC. ADDED.

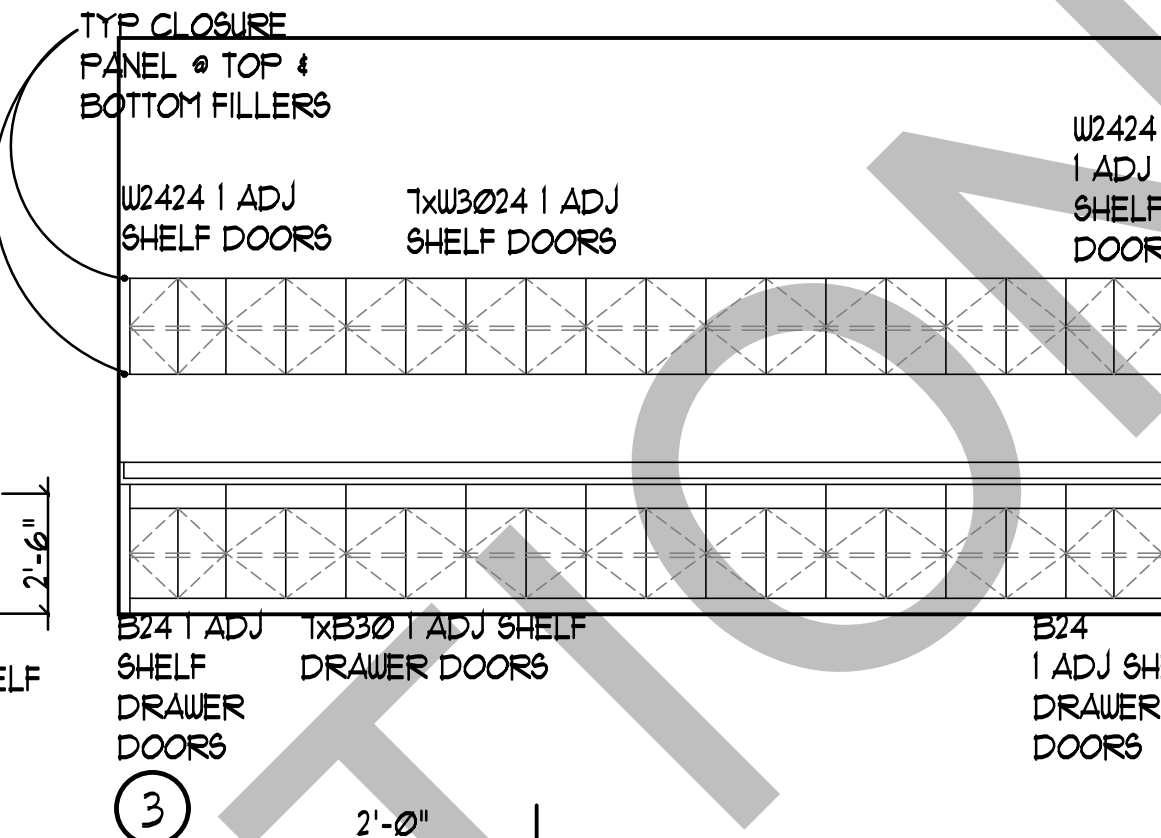
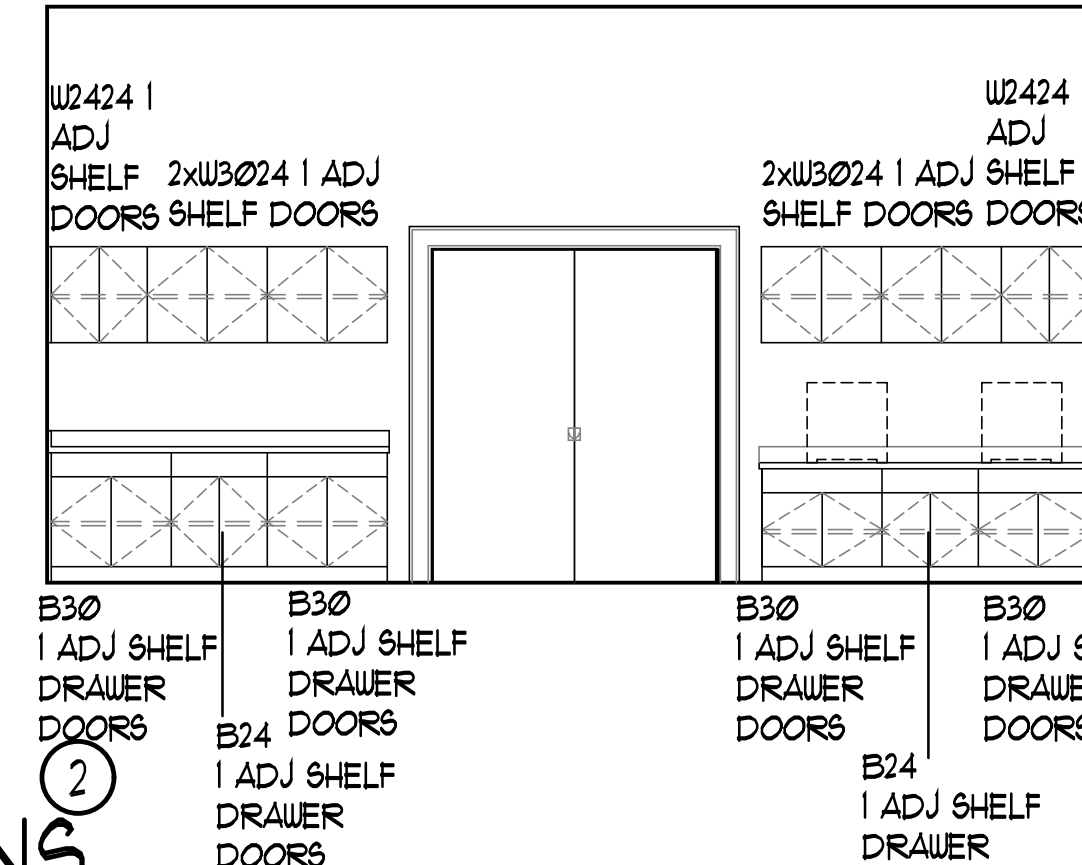
TALL UNITS

T4884 = BASE 48" WIDE x 84" HIGH DOORS, SHELVES, ETC. ADDED.

2 x = MULTIPLE SAME UNITS

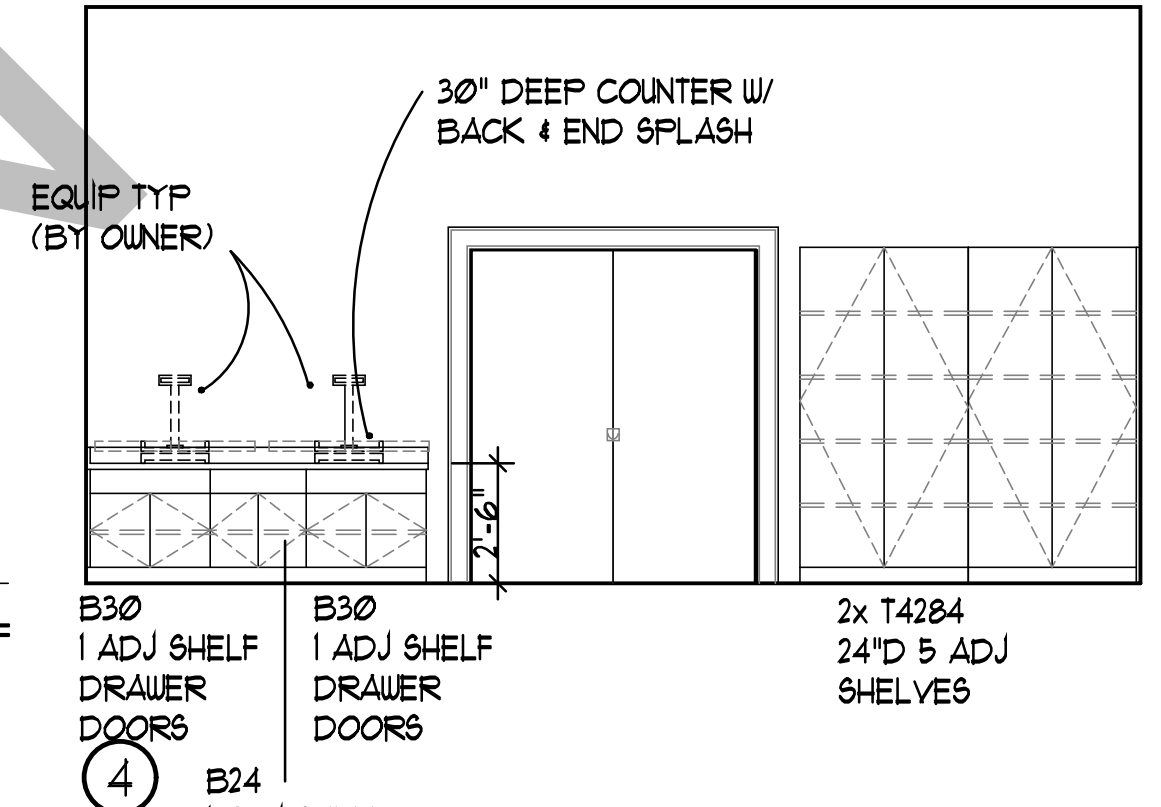
NOTES:

- ALL BASE UNITS 34" TALL TO COUNTER EXCEPT AS NOTED.
- SHELVING DEPTH SHOWN AS 24" & TALL UNITS, 18" & BASE UNITS, 12" & WALL UNITS.
- TALL SHELVING SHOWN @ 84".
- WALL UNITS SHOWN @ 14" d & 24" h EXCEPT AS NOTED.
- PROVIDE MIN 4" STRAIGHT RESILIENT BASE @ EXPOSED PERIMETER OF ALL CASEWORK. BASE SHALL COVER VERTICAL SURFACE TO UNDERSIDE OF CABINET BOX.
- CONTRACTOR OPTION TO USE SINGLE OR DOUBLE WALL PANEL AT MULTIPLE ADJACENT UNITS.
- BASE NOT MORE THAN 4" WITH SHIMS IN PLACE.
- EXTEND END PANEL LAMINATE 1" BELOW TOP OF TOE KICK.
- PROVIDE WOOD BLOCKING AT ALL METAL STUD WALLS TO SUPPORT CASEWORK PER SEISMIC & LOADING REQUIREMENTS.



ADA SINK

3/4"=1'-0"

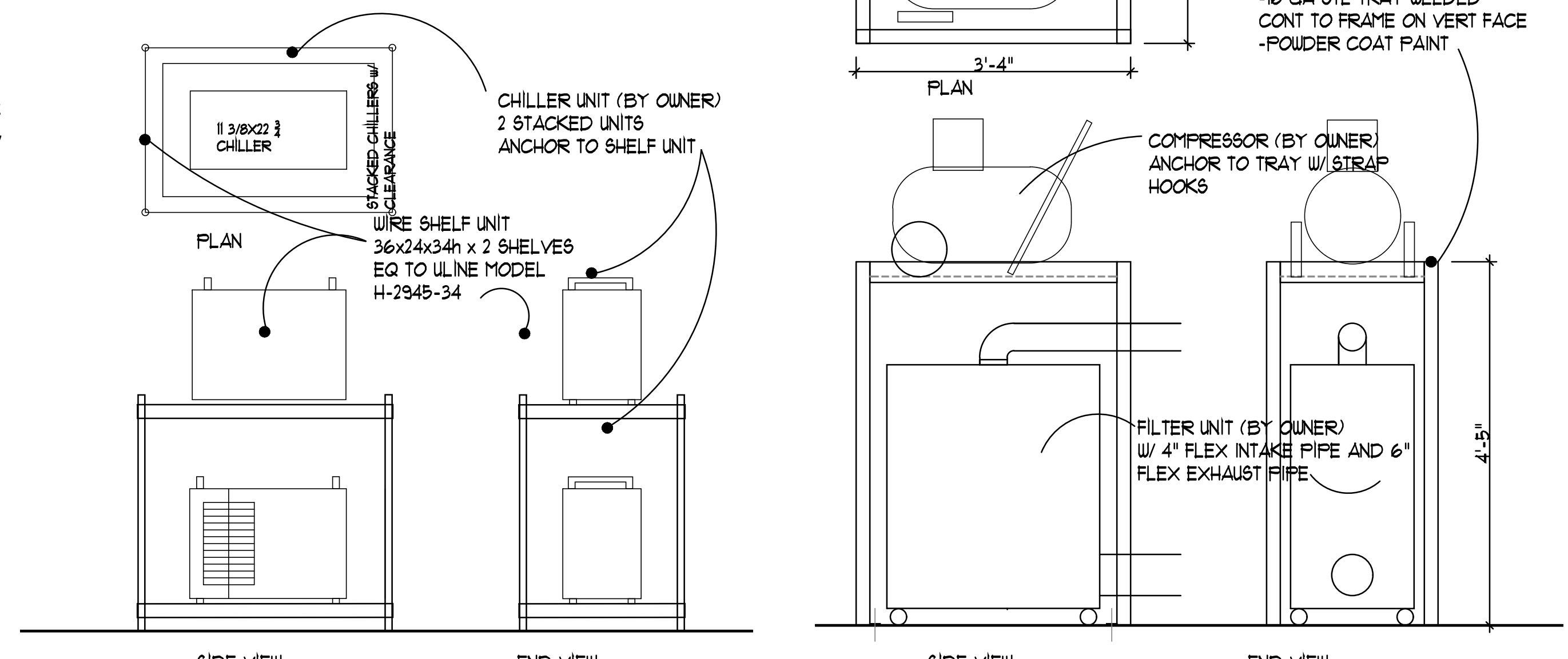
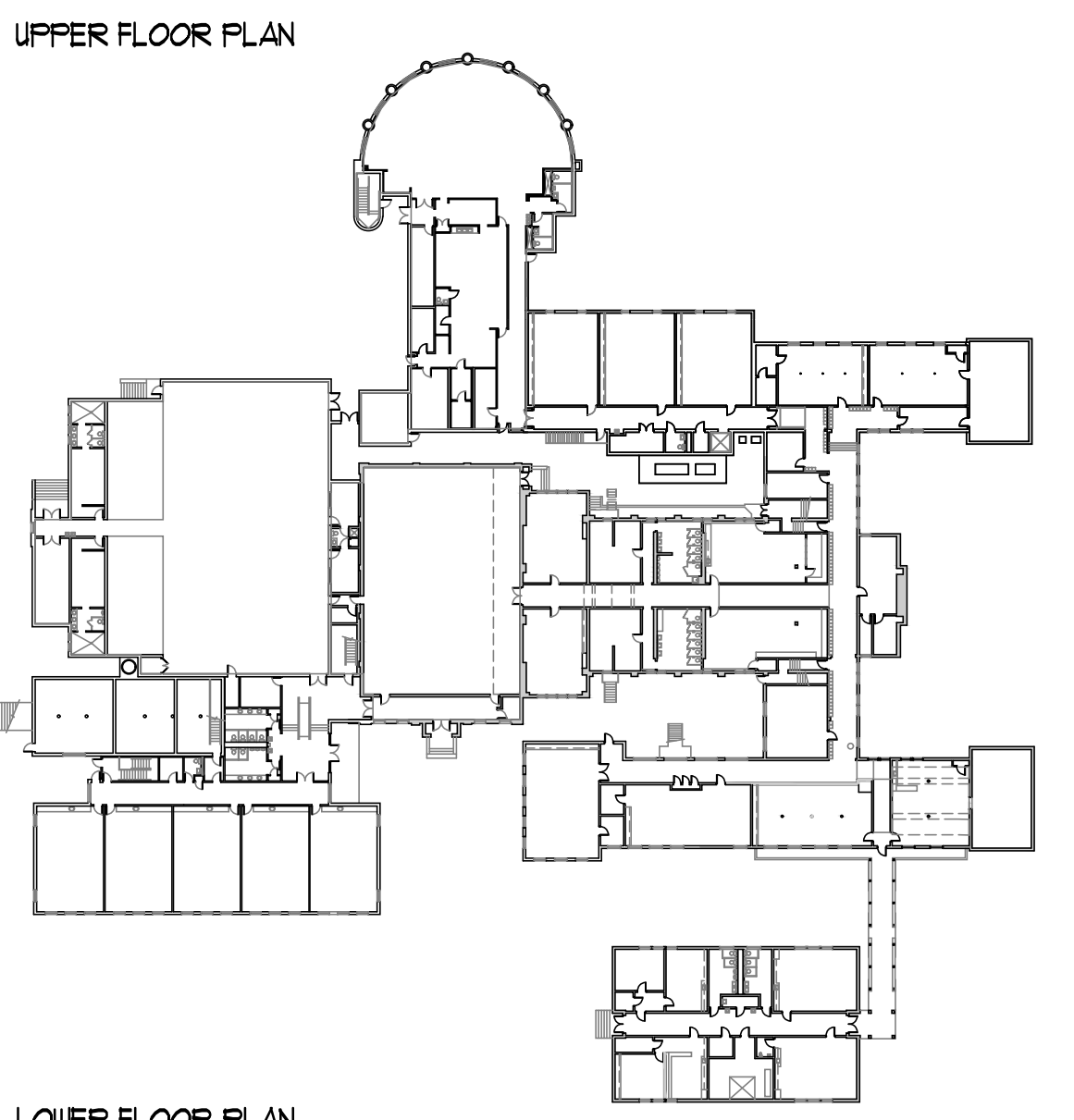
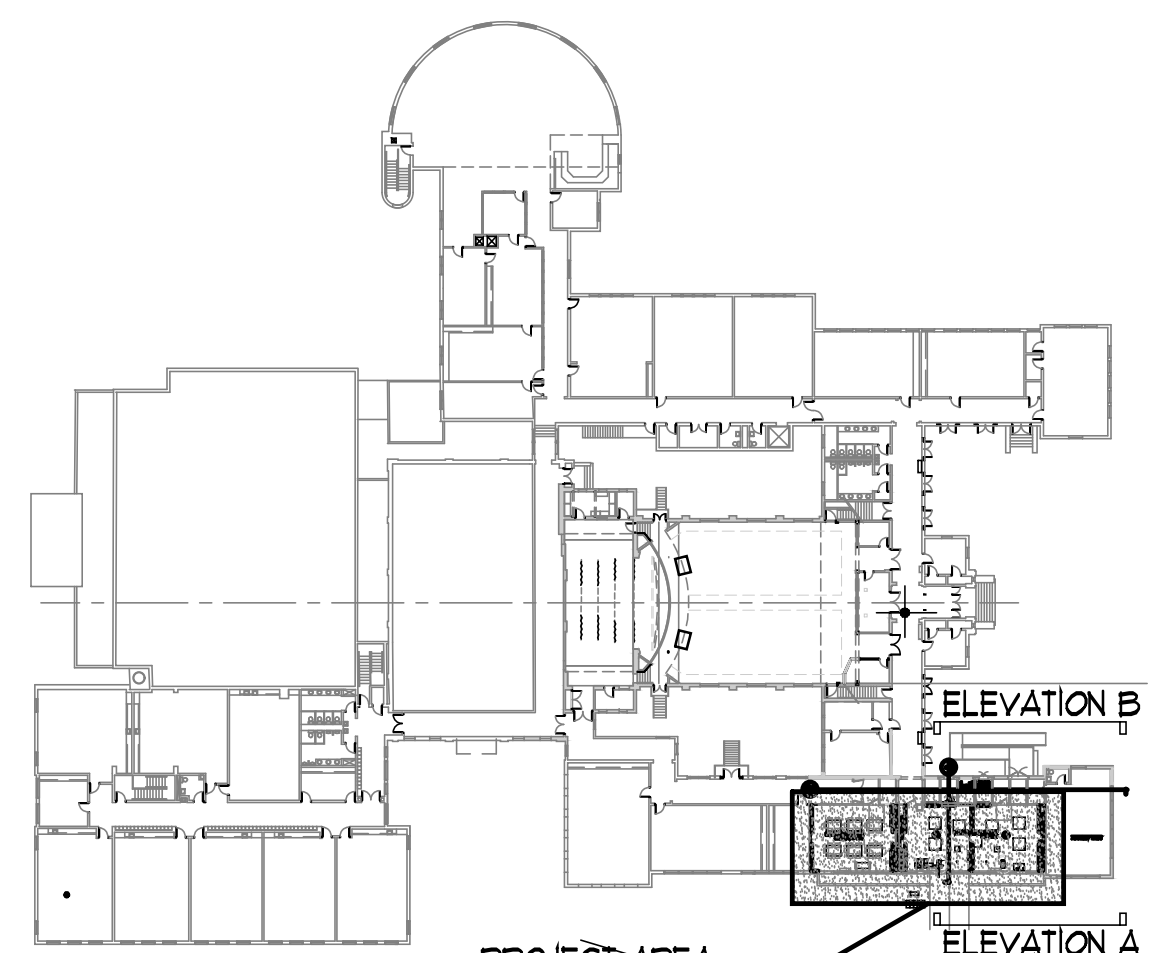


HEIGHT TO TOP OF COUNTER 30" FROM 30" D COUNTER & END PANEL EXTENSION FOR CLOSURE

ROOM FINISH SCHEDULE							
EXAMPLE		ROOM NAME					
ROOM NUMBER	ENTRY	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	CEILING HEIGHT	NOTES
100	ENTRY	1/2" 3/16" 10" 1/4"					
#	FIRST NO.	#	SECOND NO.	#	THIRD NO.	#	FOURTH NO.
FLOOR	BASE	WALLS	CEILING				
0	EXIST TO REMAIN	0	EXIST TO REMAIN	0	EXIST TO REMAIN	0	EXIST TO REMAIN
1	VCT	1	WOOD	1	PAINT LOW GLOSS	1	ACOUSTICAL TILE
2	NOT USED	2	RESILIENT	2	PAINT MED GLOSS	2	PAINT LOW GLOSS GYP BD
3	NOT USED	3	NOT USED	3	PAINT HIGH GLOSS	3	NOT USED
4	NONE	4	NONE	4	NONE	4	NONE

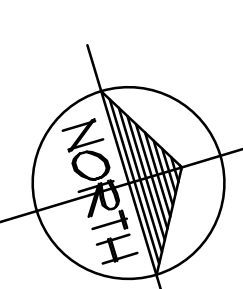
- ROOM FINISH SCHEDULE NOTES:**
- EXTEND NEW INTERIOR WALL TIGHT TO DECK. GYP BD ON ONE SIDE WOOD FRAMING
 - SLOPE SECTION OF CLG TILE AT WINDOW TO REACH ABOVE WINDOW TRIM.
 - INFILL VCT AT NEW DOOR OPENG AND AT EA END OF PREVIOUSLY DEMOLISHED PARTITION.
 - SEAL AND REPAIR HOLES IN WALLS & FLOORS AT NEW PLUMBING PENETRATIONS
 - PAINT WALL (INCL TRIM) RECEIVING NEW WINDOW FROM INSIDE CORNER TO INSIDE CORNER OF PERPENDICULAR WALLS.

- GENERAL FINISH SCHEDULE NOTES:**
- VNTL BASE TO BE INSTALLED AT ALL CABINET BASES, FULL HEIGHT OF TOE KICK
 - PAINT: LOW GLOSS = SATIN MED GLOSS = SEMI-GLOSS HIGH GLOSS = GLOSS
 - REPAIR EXIST FINISHES TO MATCH EXIST AT AREAS WHERE PRIMARY WORK IS CASEWORK REPLACEMENT AND NO OTHER WORK INDICATED.



KEY PLAN

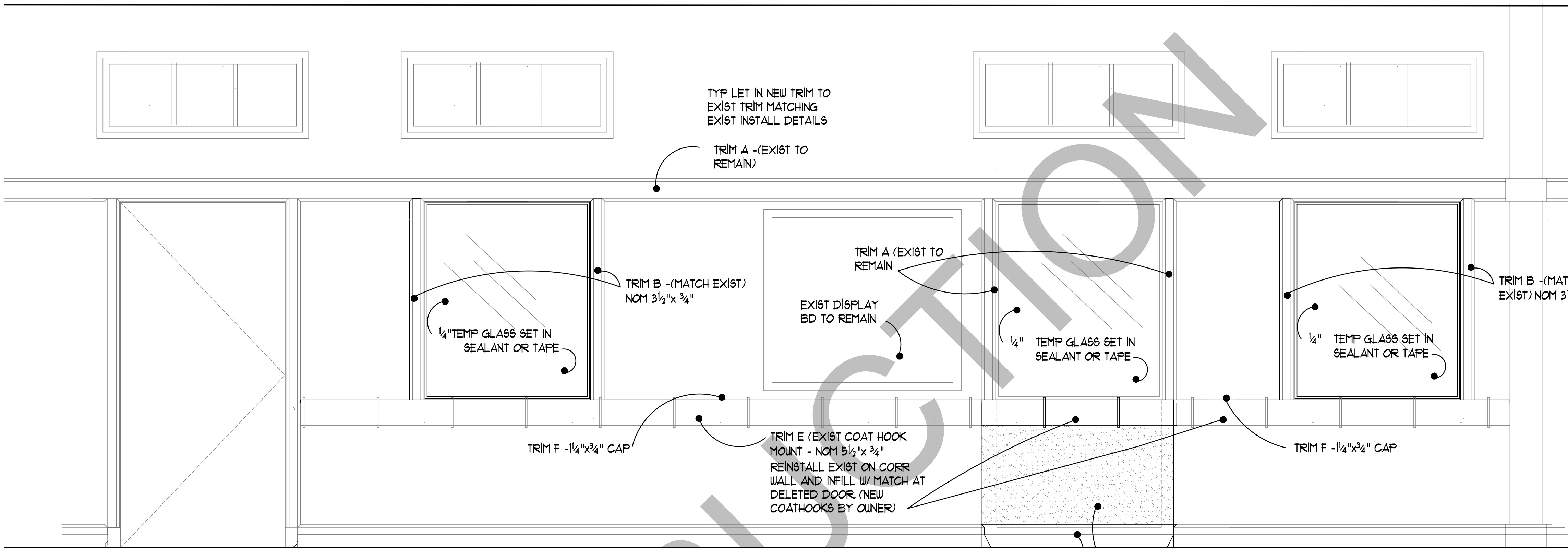
NTS





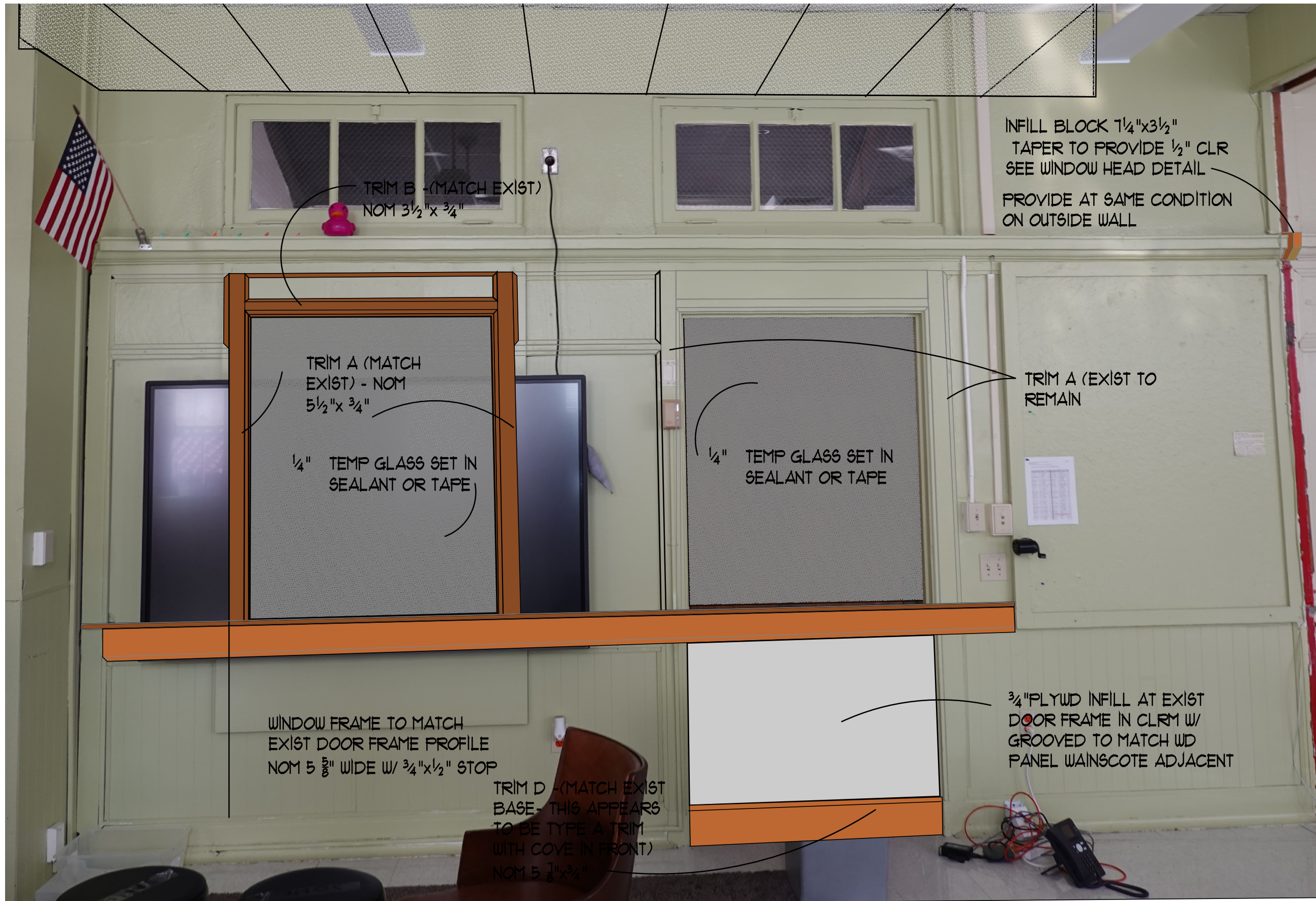
CORRIDOR PHOTO

NOTES ON PHOTOS ARE FOR ORIENTATION AND REFERENCE INFO ONLY- SEE ELEVATIONS AND PLAN FOR ALL NOTES



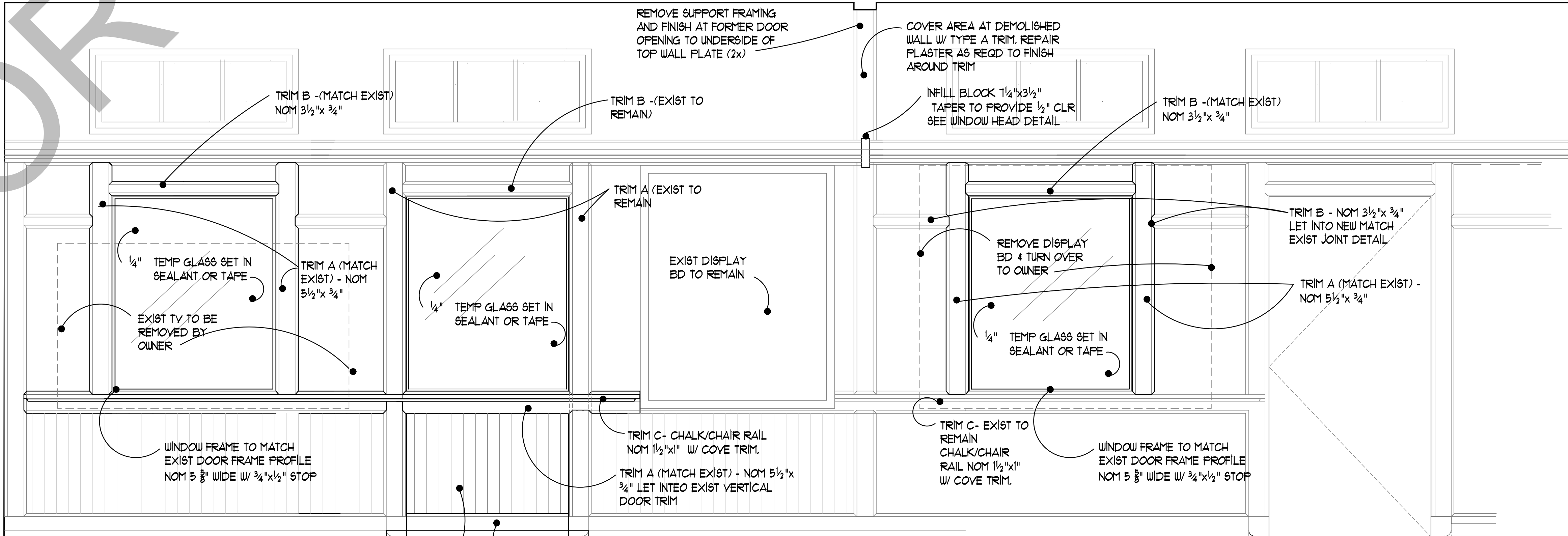
CORRIDOR ELEVATION

3/4\"=1'-0"



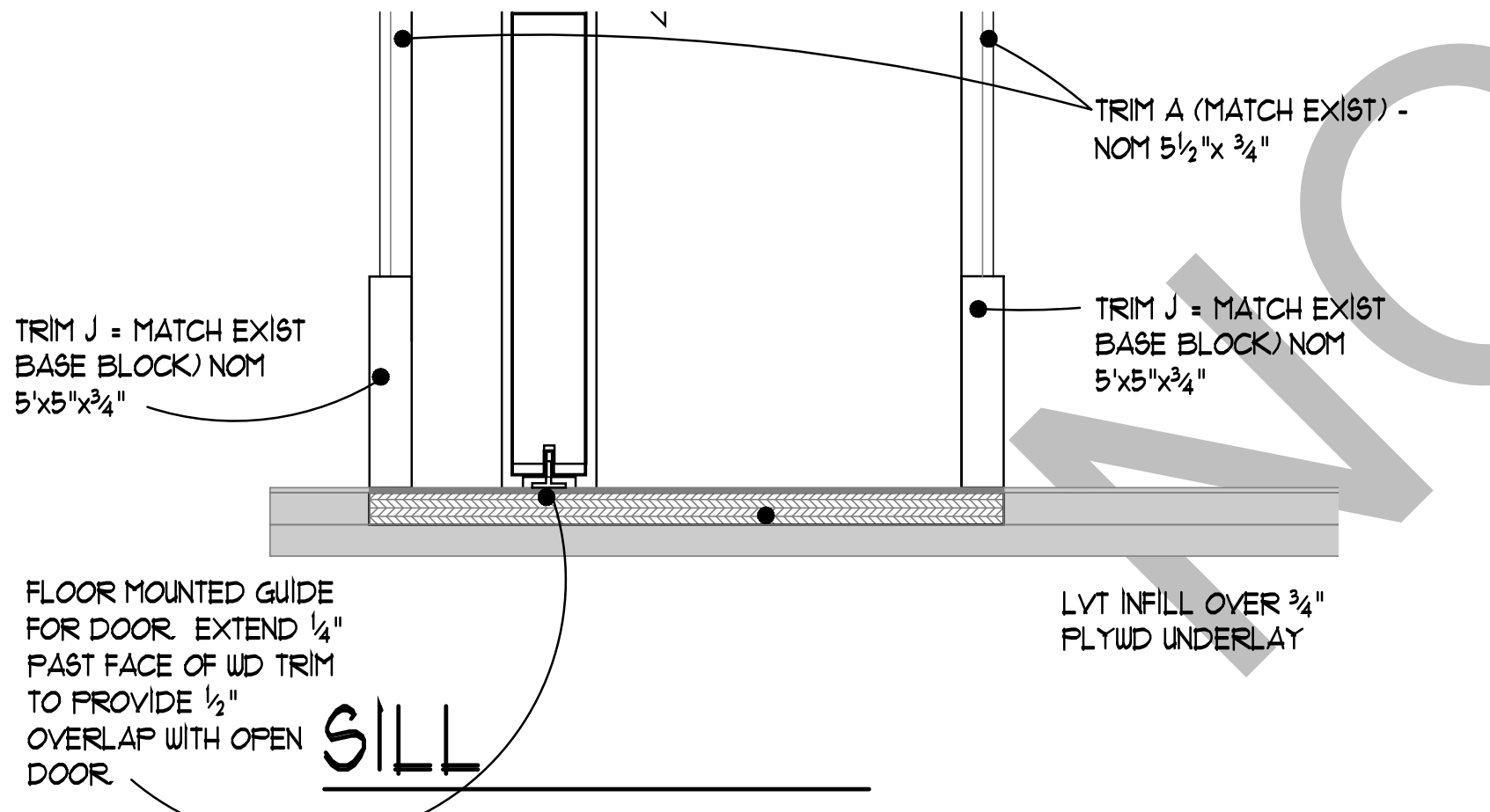
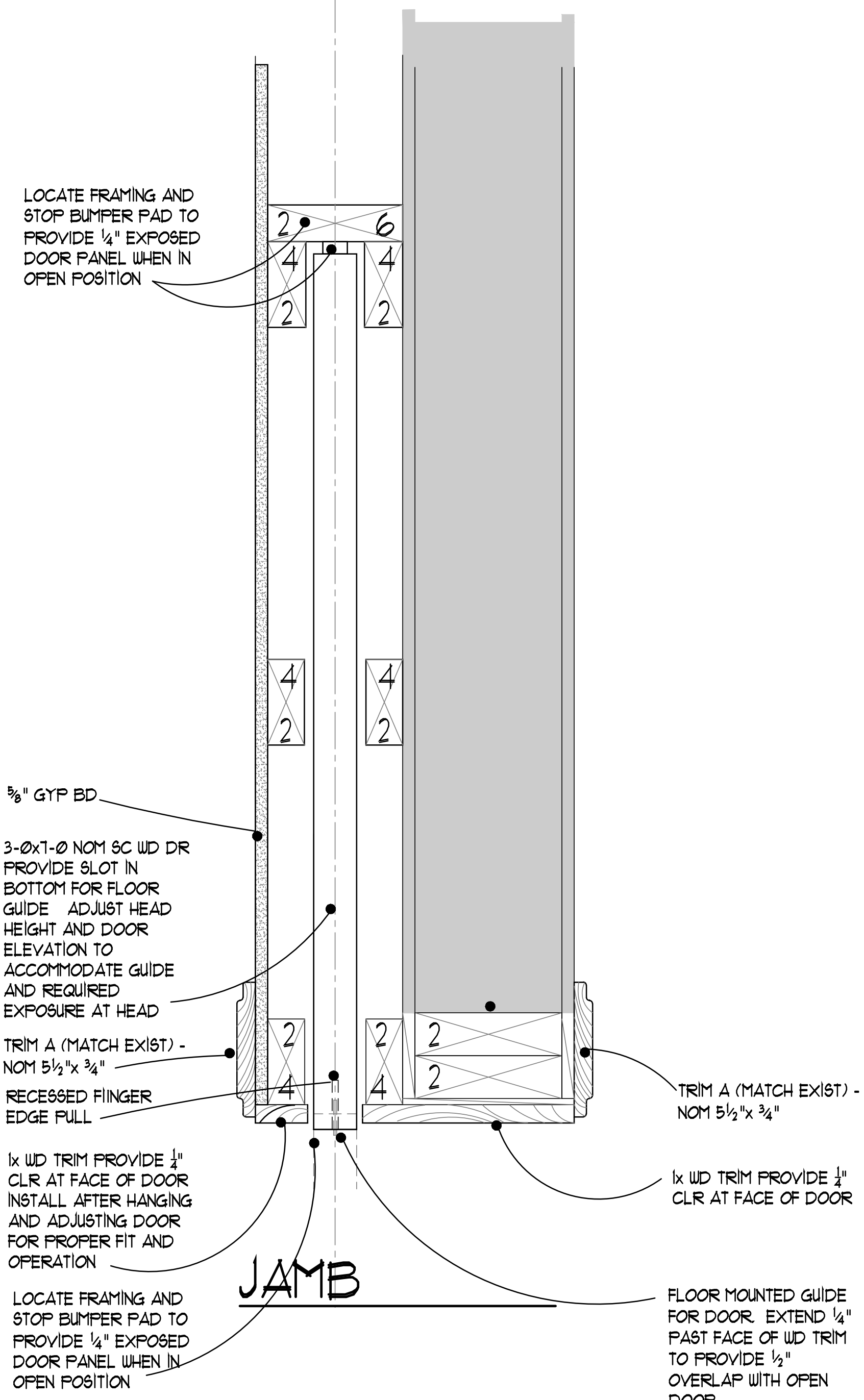
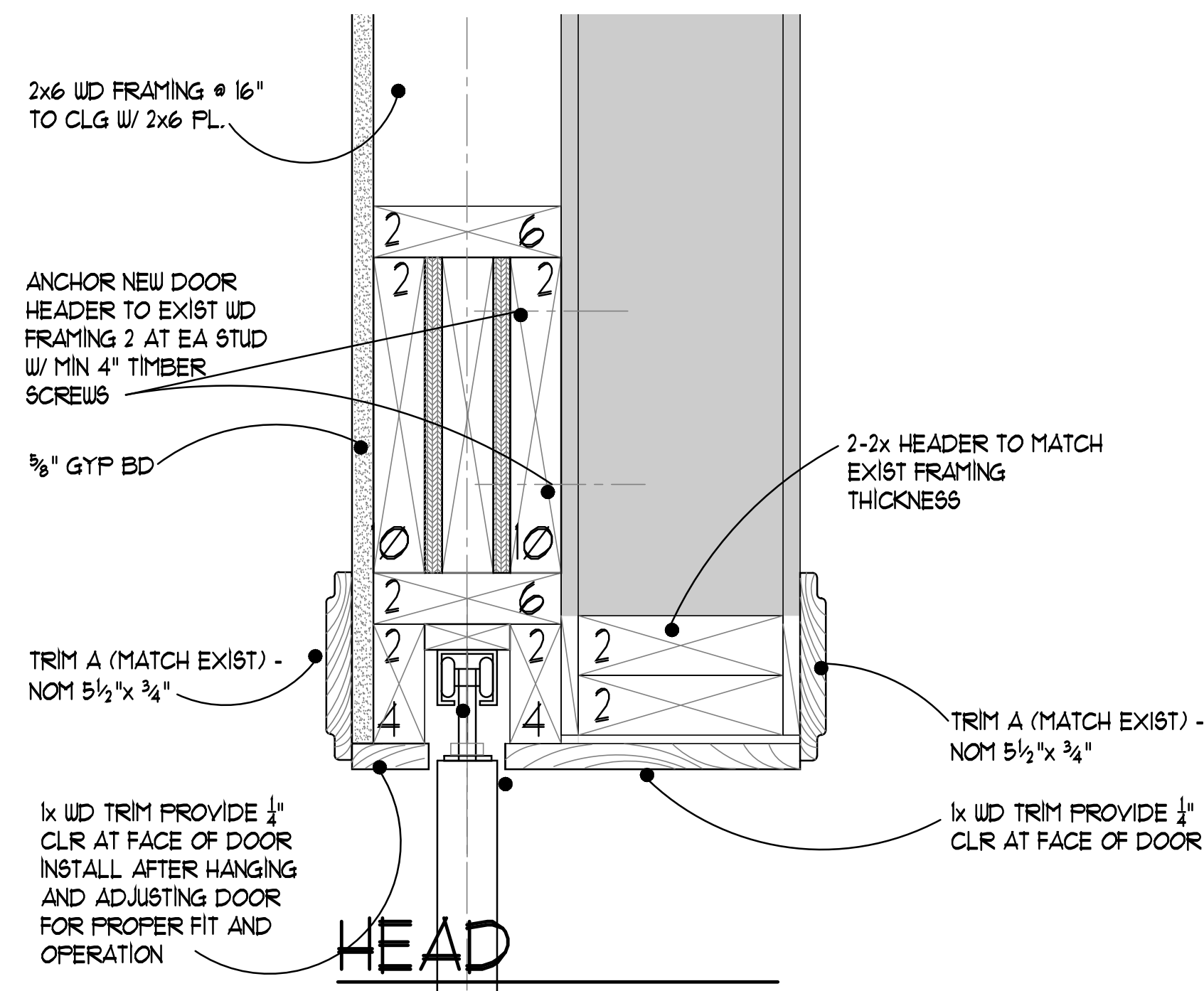
CLASSROOM PHOTO

NOTES ON PHOTOS ARE FOR ORIENTATION AND REFERENCE INFO ONLY- SEE ELEVATIONS AND PLAN FOR ALL NOTES

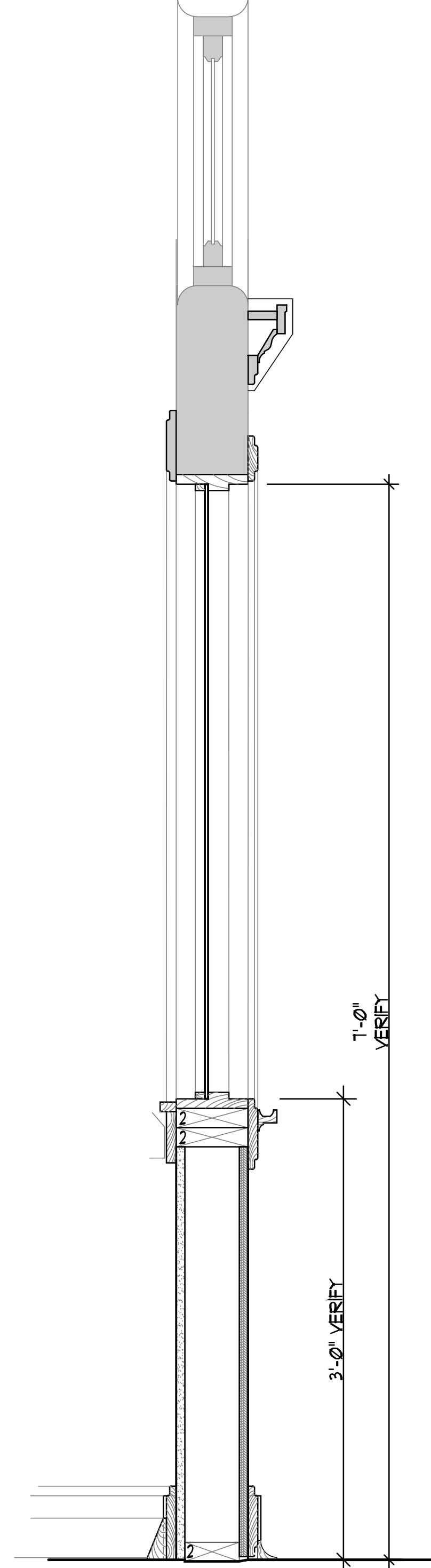


CLASSROOM ELEVATION

3/4\"=1'-0"



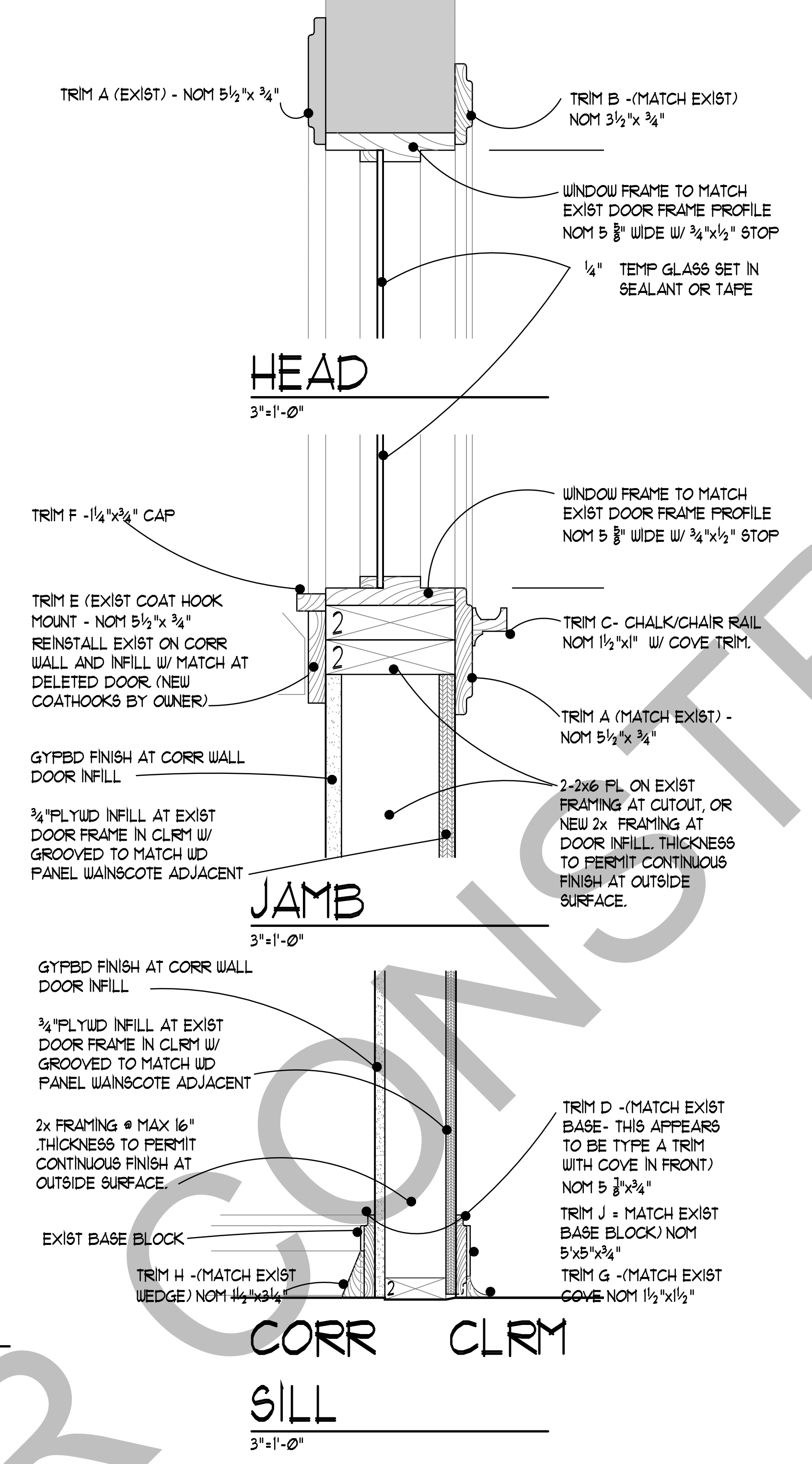
POCKET DOOR DETAILS



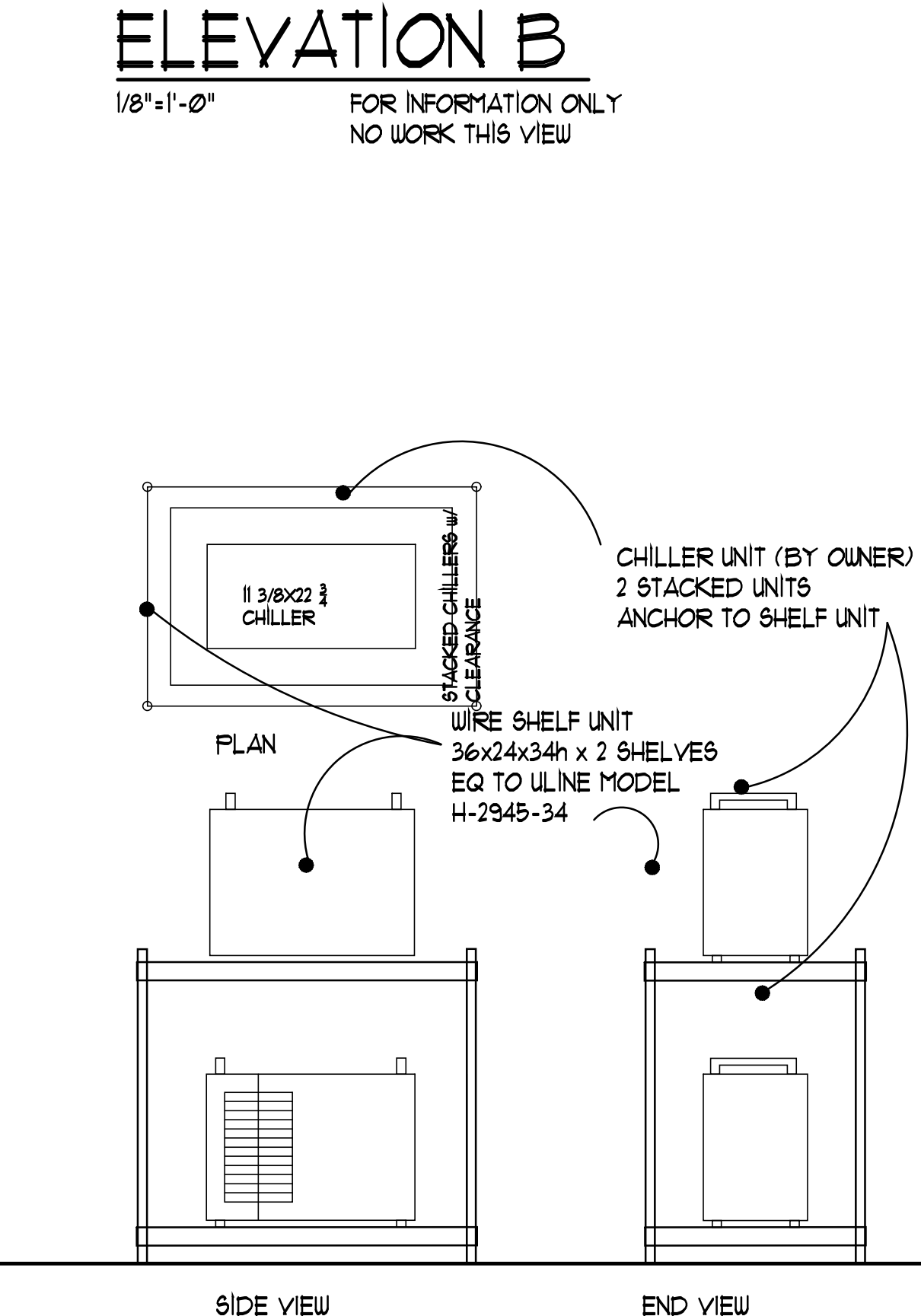
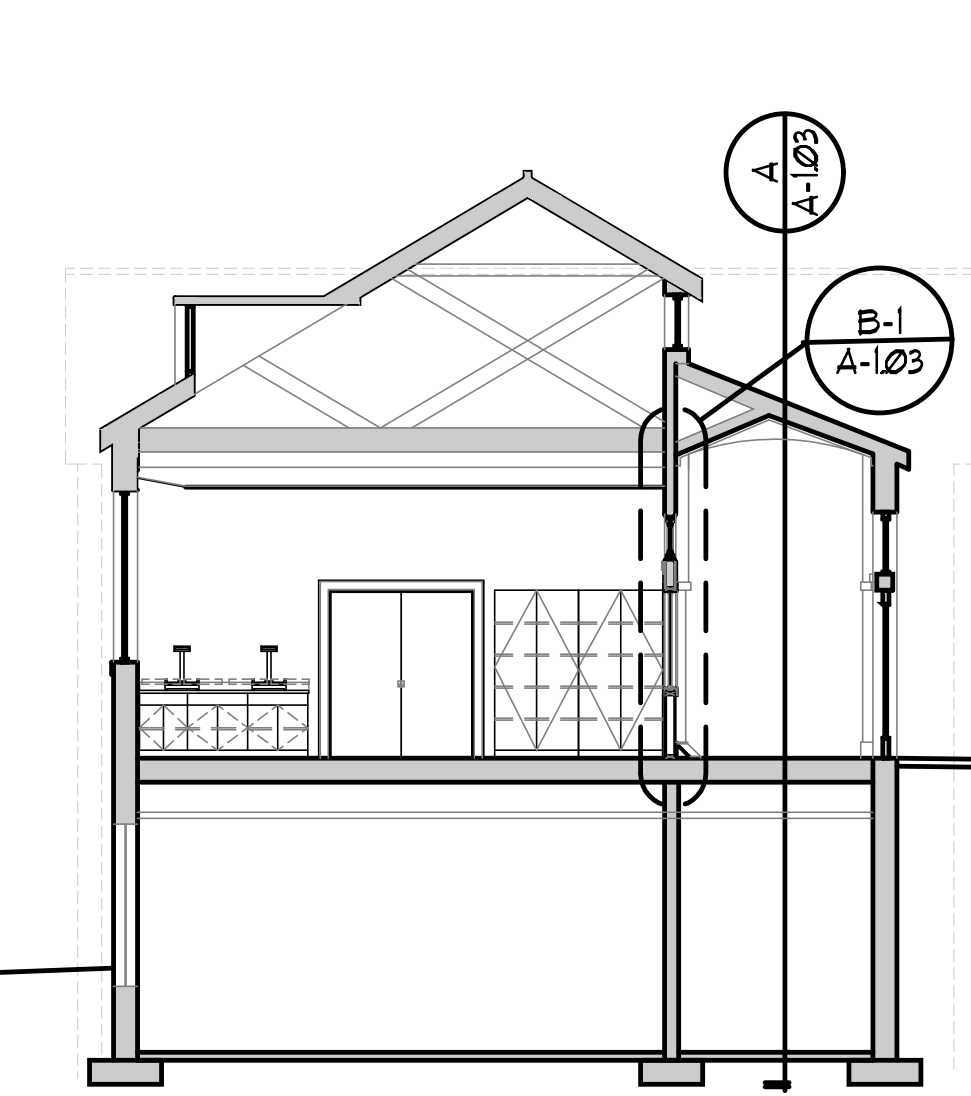
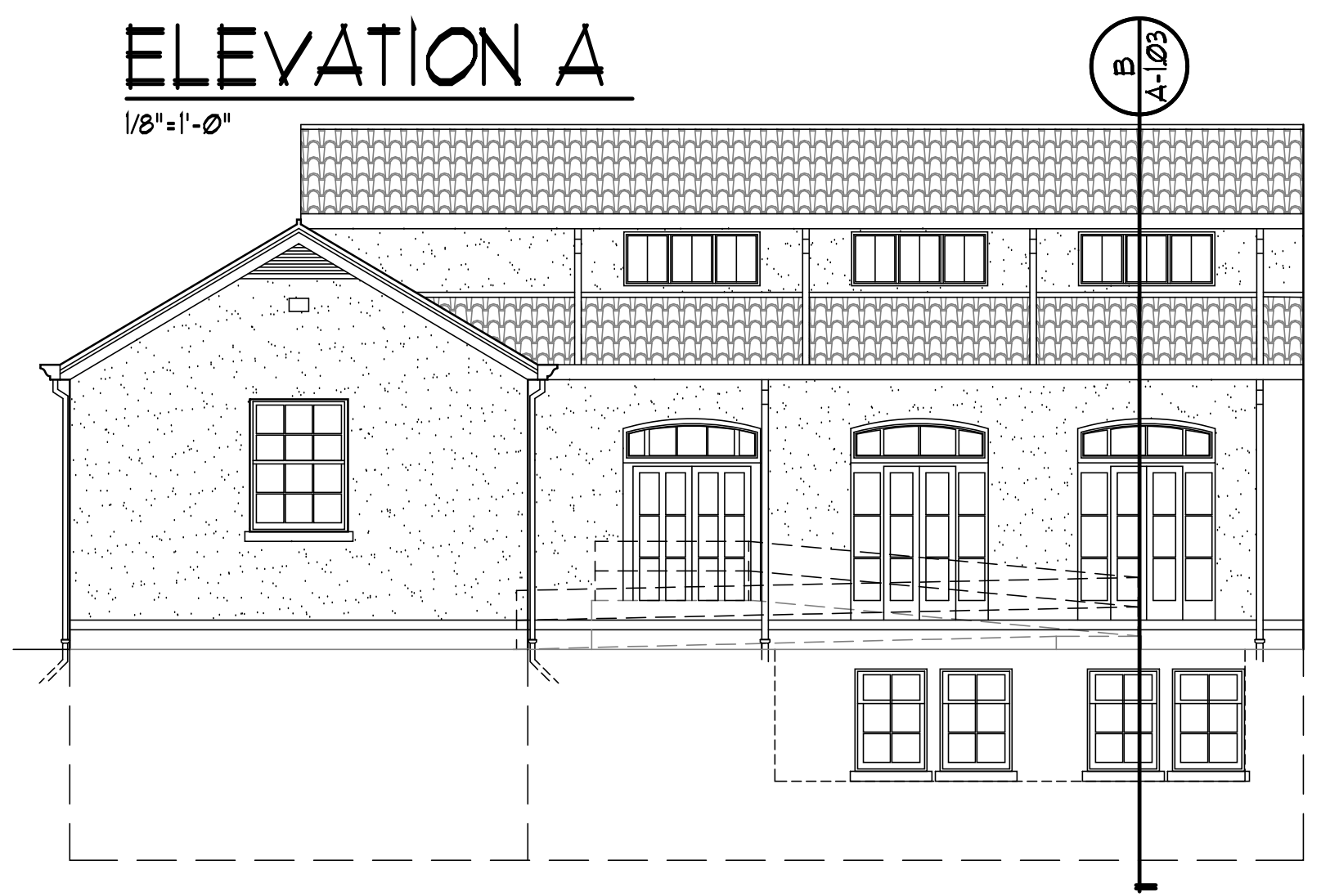
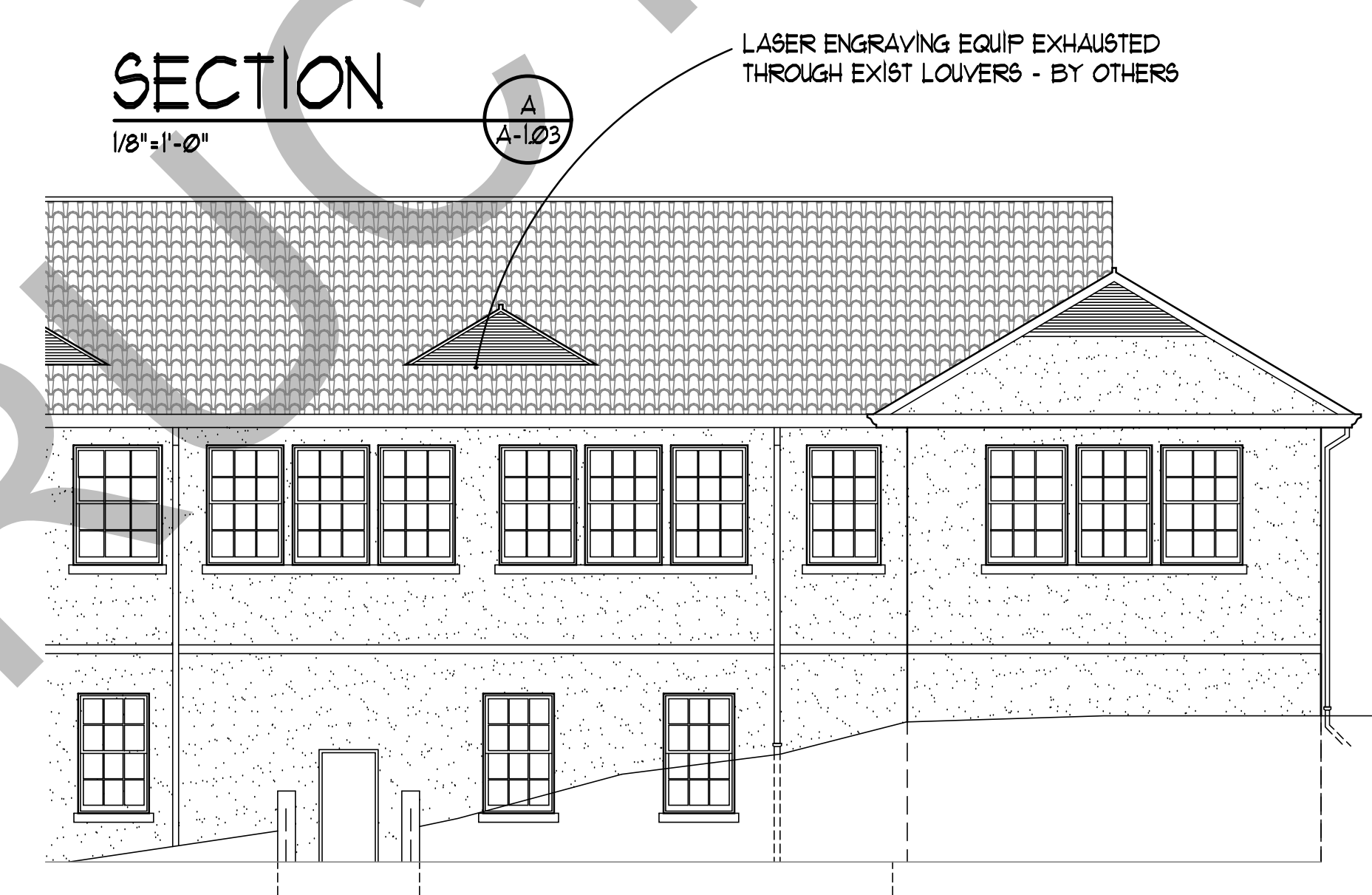
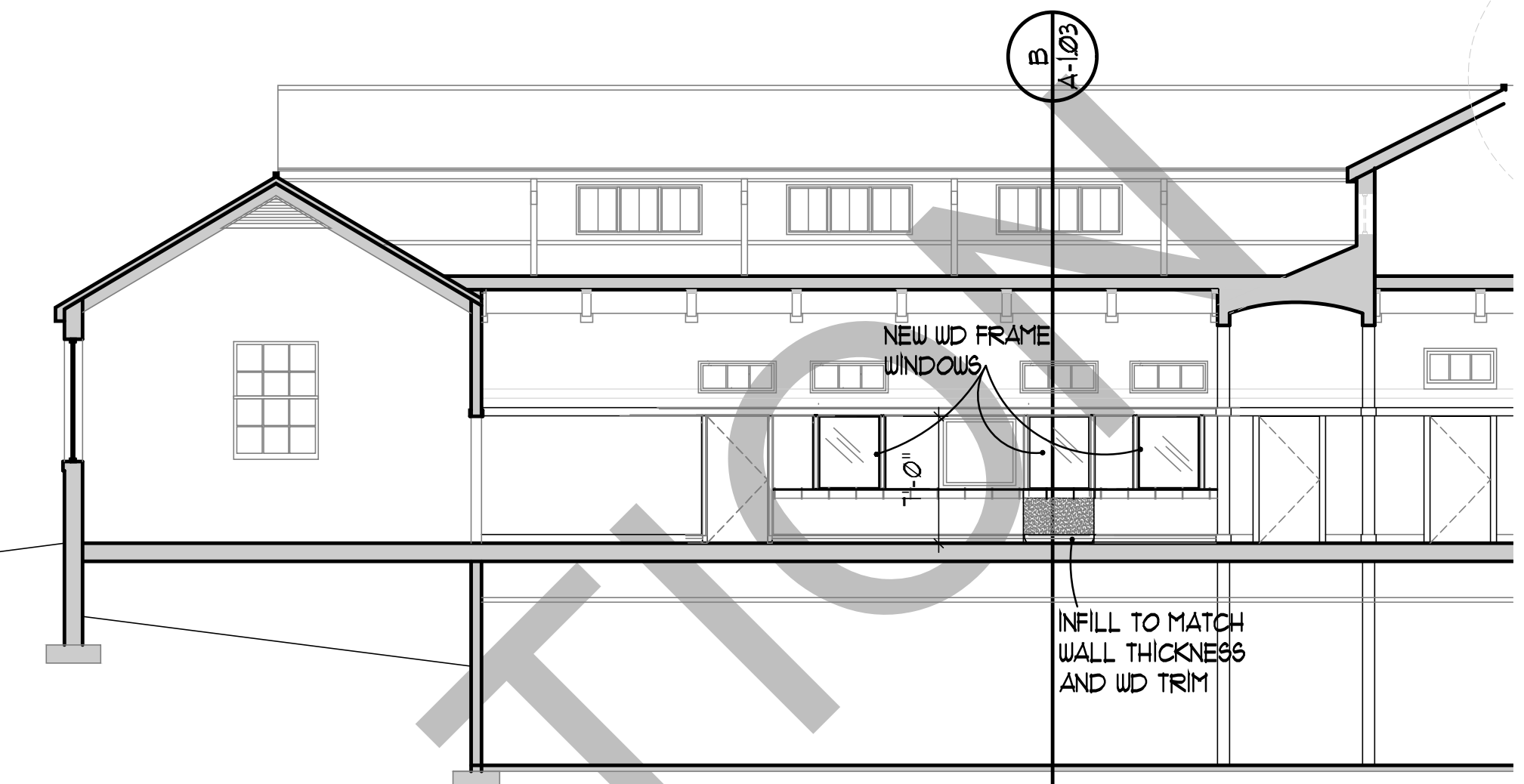
WINDOW SECTION

NOTE: NEW WINDOW SIZE AS INDICATED MAY BE ADJUSTED TO MATCH EXIST OPNG HEIGHT AND CHAIR RAIL LOCATION. VERIFY THIS DIMENSION PRIOR TO PRODUCTION AND ADJUST NEW WINDOW HEIGHT TO FIT.

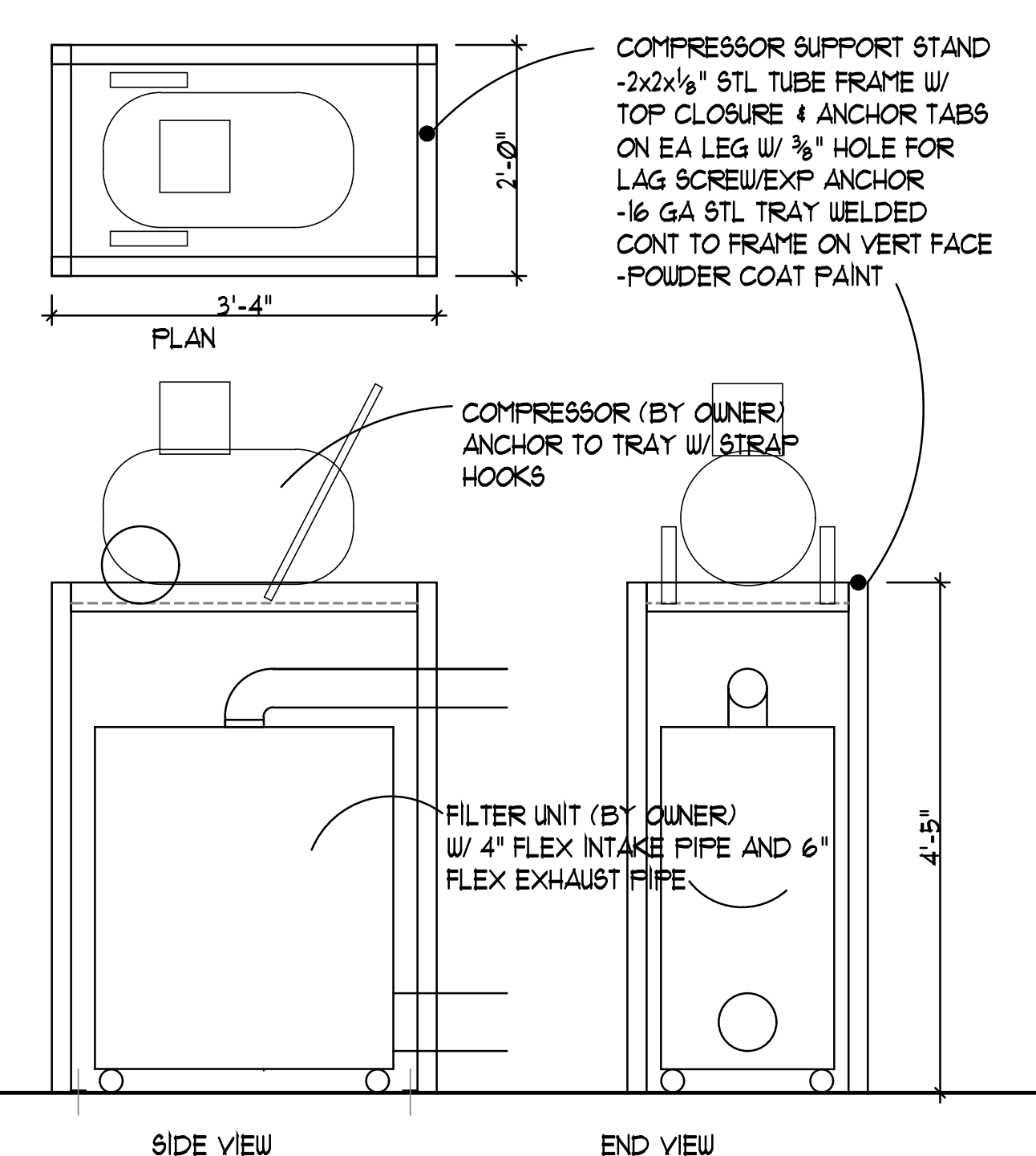
EXISTING TRIM PROFILES DRAWN AS NOMINAL SIZES PER ONSITE REVIEW. REPLACEMENT AND NEW PIECES SHALL MATCH EXISTING PROFILES
















































WINDOW DETAILS



EQUIPMENT SUPPORT (BY OWNER)

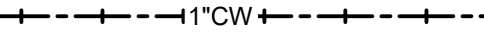

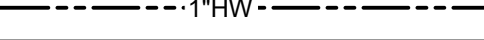

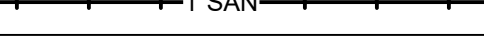
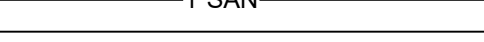
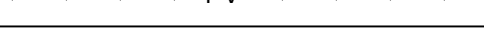
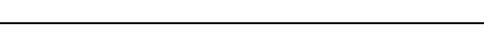
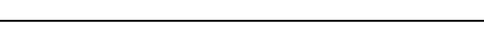
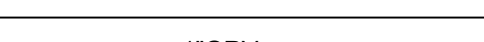
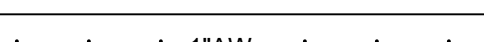
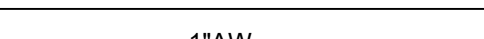
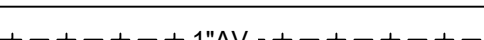
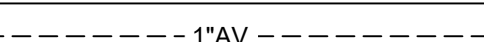


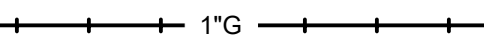
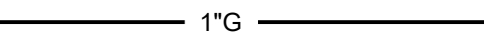

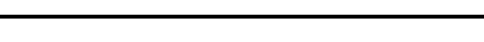




PLUMBING/FIRE PROTECTION LEGEND

PLUMBING SYMBOLS	
SYMBOL	DESCRIPTION
	PIPE DOWN
	PIPE UP
	TEE DOWN
	TEE UP
	CONTINUATION
	CAP
	HAMMER ARRESTOR
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY VALVE
	ELECTRIC CONTROL VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	GATE VALVE
	PLUG VALVE
	REDUCER
	UNION
	VALVE IN VERTICAL
	PRESSURE GAUGE
	STRAINER
	FLOW INDICATOR
	CLEANOUT
	FLOOR CLEANOUT
	THERMOMETER
	RECIRC. BALANCING STATION
	FLOW SWITCH
	TAMPER SWITCH ON VALVE
	PUMP, INLINE
	SUMP PUMP
	GAS METER
	WATER METER
	THRUST BLOCK
	GAS REGULATOR
	FLOOR DRAIN
	P-TRAP
	FLOOR DRAIN GRATE
	FIRE PROTECTION RISER
	FIRE PROTECTION CONNECTION (DOUBLE)
	FIRE PROTECTION CONNECTION (SINGLE)
	SHEET NOTE
	DEMOLITION NOTE
	CONNECT NEW TO EXISTING
	EXTENT OF DEMOLITION
	EQUIPMENT TAG
	RISER IDENTIFICATION TAG

ABBREVIATIONS	
ADP	ACID DILUTION PIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AG	AIR GAP
AV	ACID VENT
AW	ACID WASTE
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BTU	BRITISH THERMAL UNIT
CA	COMPRESSED AIR
CFH	CUBIC FEET/HOUR
CI	CAST IRON
CRD	COMBINATION ROOF DRAIN
CO	CLEANOUT
CON	CONDENSATE
CW	COLD WATER
D	DISPOSAL
DD	DECK DRAIN
DI	DUCTILE IRON
DF	DRINKING FOUNTAIN
DSN	DOWNSPOUT NOZZLE
ECO	EXTERIOR CLEANOUT
EEW	EMERGENCY EYE WASH
ESEW	EMERGENCY SHOWER / EYE WASH
ET	EXPANSION TANK
ETP	ELECTRONIC TRAP PRIMER
EW	ELECTRIC WATER COOLER
EW	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
FS	FLOW SWITCH
G	NATURAL GAS
GPM	GALLONS PER MINUTE
GR	GREASE
GRV	GREASE VENT
GT	GREASE TRAP
GWH	GAS WATER HEATER
HA	HAMMER ARRESTOR
HB	HOSE BIBB
HW	HOT WATER
HW	HOT WATER RETURN
IE	INVERT ELEVATION
IMB	ICE MAKER BOX
L/LAV	LAVATORY
LPG	LIQUID PETROLEUM GAS
LT	LAUNDRY TUB
MA	MEDICAL AIR
MB	MOP BASIN
MBH	1,000 BTU
MG	MEDICAL GAS
MH	MANHOLE
MIN	MINIMUM
MS	MOP SINK
N2	NITROGEN
O2	OXYGEN
OR	OPEN RECEPTACLE
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW ROOF LEADER
OWS	OIL WATER SEPARATOR
PD	PUMP DISCHARGE
PDI	PLUMBING DRAINAGE INSTITUTE

ABBREVIATIONS CONT.	
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	PLASTER TRAP
RBS	RECIRC. BALANCE STATION
RD	ROOF DRAIN
RL	ROOF LEADER
RP	RECIRCULATION PUMP
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
S	SINK
SAN	SANITARY
SCO	STACK CLEANOUT
SP	SUMP PUMP
SS	SERVICE SINK
ST	STORAGE TANK
STM	STORM
TB	THRUST BLOCK
TD	TRENCH DRAIN
TP	TRAP PRIMER
TMV	THERMOSTATIC MIXING VALVE
T&P	TEMPERATURE & PRESSURE
TS	TAMPER SWITCH
U	URINAL
UT	UTILITY TUB
V	VENT
VB	VACUUM BREAKER
VTR	VENT THROUGH ROOF
WB	WASHER BOX
WC	WATER CLOSET
WC	WATER COLUMN
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WS	WASH STATION
WS	WATER SOFTENER
X	EXISTING

PLUMBING LINETYPES	
SYMBOL	DESCRIPTION
	UNDER SLAB COLD WATER PIPING WITH SIZE
	COLD WATER PIPING WITH SIZE
	HOT WATER PIPING WITH SIZE
	HOT WATER RETURN PIPING WITH SIZE
	UNDER SLAB SANITARY PIPING WITH SIZE
	SANITARY PIPING WITH SIZE
	UNDER SLAB VENT PIPING WITH SIZE
	VENT PIPING WITH SIZE
	UNDER SLAB GREASE PIPING WITH SIZE
	GREASE VENT PIPING WITH SIZE
	UNDER SLAB ACID WASTE PIPING WITH SIZE
	ACID WASTE PIPING WITH SIZE
	UNDER SLAB ACID VENT PIPING WITH SIZE
	ACID VENT PIPING WITH SIZE
	ROOF LEADER PIPING WITH SIZE
	UNDER SLAB STORM WITH SIZE
	UNDER SLAB GAS PIPING WITH SIZE (SLEEVED)
	GAS PIPING WITH SIZE
	TEMPERED WATER PIPING WITH SIZE
	FIRE PROTECTION PIPE
	COMPRESSED AIR PIPING WITH SIZE
	VACUUM PIPING WITH SIZE

GENERAL NOTES - PLUMBING:

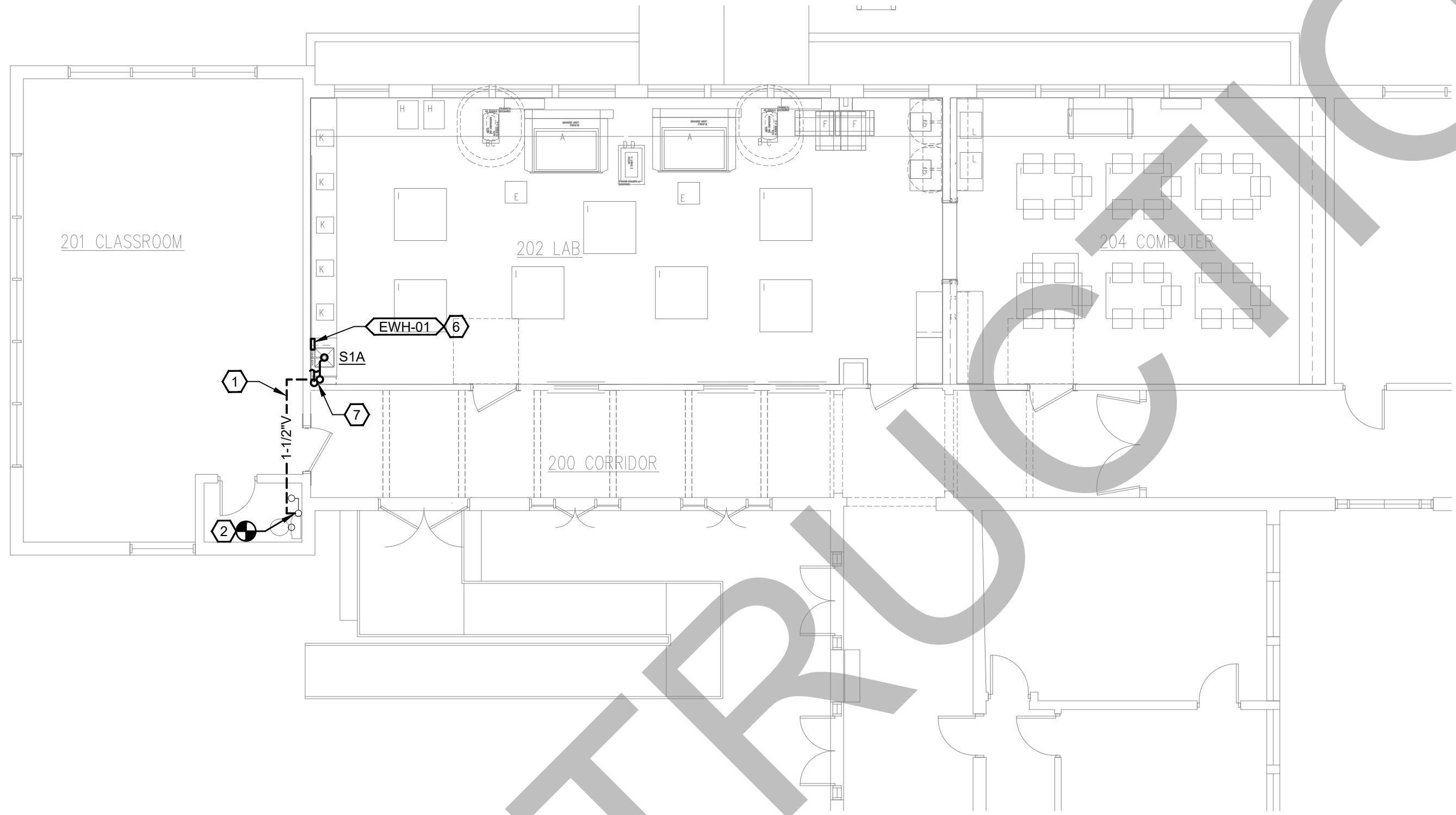
- A. **CONSTRUCTION PHASING:** ALL WORK SHALL BE COORDINATED AND SCHEDULED WITH THE GENERAL CONTRACTOR, OTHER TRADES, THE OWNER, RELATED UTILITY COMPANIES SHALL COINCIDE WITH CONSTRUCTION PHASING PER THE ARCHITECTURAL DOCUMENTS. CONTACT THE ARCHITECT/ENGINEER IN THE EVENT OF A CONFLICT.
- B. **NEW UTILITIES:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW UTILITY SERVICES AND COSTS UNDER THIS CONTRACT. COORDINATE AND SCHEDULE ALL RELATED WORK WITH THE UTILITY COMPANIES.
- C. **MAINTAIN SITE UTILITIES:** THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SITE UTILITIES AT ALL TIMES. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE ANY OUTAGE. SCHEDULED SHUT-DOWNS SHALL REQUIRE 48 HOUR PRIOR NOTIFICATION WITH OWNER. COORDINATE ALL RELATED WORK WITH THE OWNER AND THE UTILITY COMPANIES AS REQUIRED.
- D. **VERIFY UTILITIES:** FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WHERE REQUIRED FOR CONNECTIONS OF NEW WORK PRIOR TO CONSTRUCTION AND FABRICATION. DOCUMENT ON THE AS-BUILT DRAWINGS; THE TYPE, SIZE, MATERIAL, LOCATION AND INVERT ELEVATIONS OF ALL UTILITIES ENCOUNTERED. COORDINATE ALL RELATED WORK WITH ALL PARTIES INVOLVED. CONTACT THE ENGINEER IN THE EVENT OF A CONFLICT.
- E. **CONTACT B.U.D.:** THE EXISTING UTILITIES, EQUIPMENT, AND PIPING SHOWN ON THESE DRAWINGS ARE FROM RECORD DRAWINGS AND VISUAL INSPECTION OF THE SITE. THE NUMBER, LOCATION, SIZE, AND TYPE OF UTILITIES SHOWN ARE APPROXIMATE, AND THERE MAY BE OTHER UTILITIES NOT SHOWN. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITY COMPANIES AND KENTUCKY B.U.D. PRIOR TO BEGINNING EXCAVATION.
- F. **PERMITS, TESTING, AND INSPECTIONS:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, TESTING AND SCHEDULES INSPECTIONS.
- G. **REMOVAL OF EXISTING UTILITIES:** REMOVE UNUSED/ABANDONED EQUIPMENT, PIPING, ETC. AS NECESSARY TO INSTALL THE NEW WORK. CAP THE ENDS OF ALL LINES AND ABANDONED IN PLACE.
- H. **TEMPORARY CONSTRUCTION HEAT:** PROVIDE TEMPORARY HEAT IN CONSTRUCTION AREAS AS REQUIRED TO PREVENT FREEZING OF WATER PIPING DURING CONSTRUCTION.
- I. **PATCHING AND REPAIRING:** PATCH AND REPAIR ALL AREAS WHERE WALLS, SLABS, PAVEMENT, CURBS, VEGETATION AND MATERIALS HAVE BEEN CUT, REMOVED, DISTURBED AND OR MODIFIED. MATCH EXISTING MATERIALS, RATINGS, AND FINISHES.
- J. **CUTTING EXISTING MATERIALS:** CUTTING OF EXISTING PAVEMENT, SLABS, CONCRETE MASONRY, WALLS, ETC. SHALL BE SAW-CUT OR CORE DRILLED. NO "HAMMER DRILLING" WILL BE ALLOWED.
- K. **ROOFING PENETRATIONS:** ALL ROOF PENETRATIONS SHALL BE IN COMPLIANCE WITH THE ROOFING MANUFACTURER'S GUIDELINES, THE AMERICAN ROOFING COUNCIL, AND MAINTAIN ALL WARRANTIES.
- L. **WALL PENETRATIONS:** SEAL ALL PIPING PENETRATIONS THROUGH EXTERIOR WALLS WITH SILICONE SEALANT AS REQUIRED TO MAKE WATER/WEATHER TIGHT.
- M. **EXISTING WALL OPENINGS:** EXISTING OPENINGS IN WALLS THAT ARE NOT BEING RE-USED SHALL BE PATCHED/CLOSED BY THE GENERAL CONTRACTOR.
- N. **NEW OPENINGS:** NEW OPENINGS FOR PLUMBING PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS, ASSEMBLIES AND SLABS SHALL BE BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
- O. **STRUCTURAL COORDINATION:** THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL BELOW SLAB / UNDERGROUND PIPING WITH STRUCTURAL COMPONENTS AND COORDINATING ALL STEPPED FOOTINGS OR SLEEVES WHERE REQUIRED.
- P. **FIRE AND SMOKE STOPPING:** ALL PLUMBING PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS, ASSEMBLIES AND SLABS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
- Q. **INSULATION:** INSULATE ALL DOMESTIC HOT/COLD WATER, RECIRCULATION PIPING, AND ROOF LEADERS.
- R. **HAMMER ARRESTOR:** ALL HAMMER ARRESTORS SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA SHALL BE PROVIDED AND INSTALLED AS SHOWN ON BOTH.
- S. **VALVES:** ALL VALVES SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA, SHALL BE PROVIDED AND INSTALLED AS IF SHOWN ON BOTH.
- T. **ELECTRICAL PANELS AND EQUIPMENT:** PLUMBING PIPING, SYSTEMS, AND EQUIPMENT SHALL BE INSTALLED TO MAINTAIN THE DEDICATED WORKING/ELECTRICAL SPACE ABOVE, BELOW, AND IN FRONT OF ELECTRICAL PANELS AND EQUIPMENT PER THE REQUIREMENTS OF THE N.E.C. (NATIONAL ELECTRIC CODE).

GENERAL NOTES:

A. REFER TO SHEET P0.1 FOR GENERAL NOTES.

SHEET KEYNOTES:

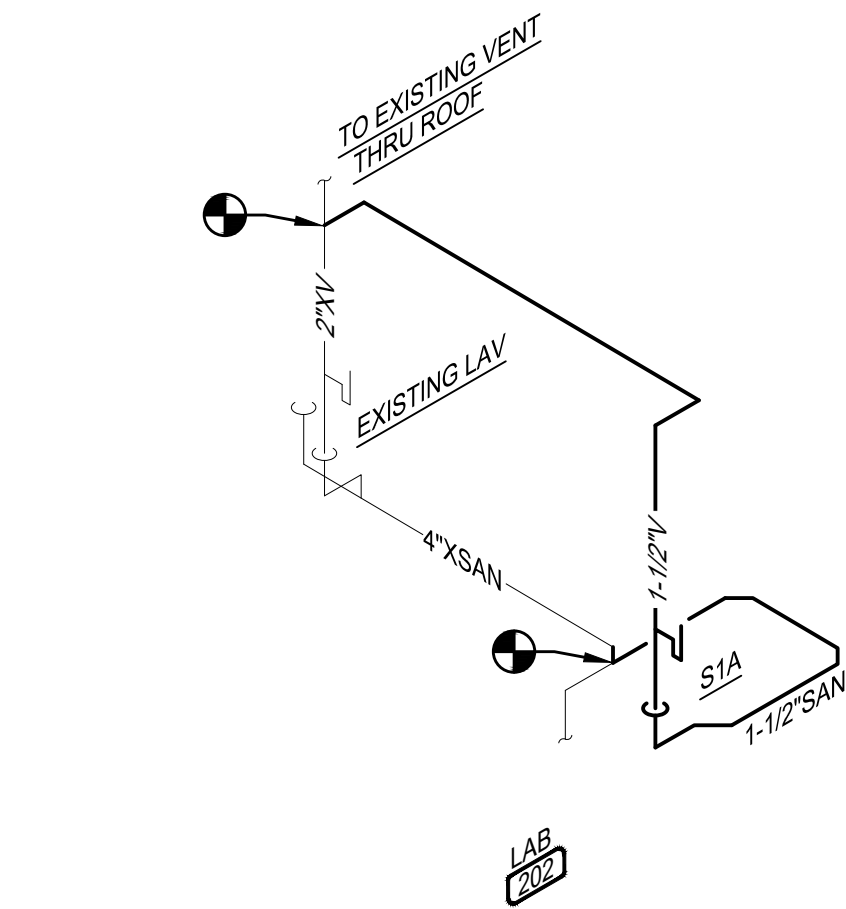
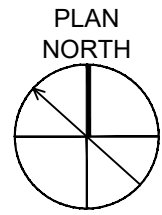
- VENT PIPING ABOVE CEILING WITHIN ATTIC SPACE.
- CONNECT TO EXISTING VENT PIPING ABOVE CEILING WITHIN ATTIC SPACE.
- WASTE AND WATER PIPING FROM SINK ABOVE. ROUTE WITHIN JOIST SPACE JUST BELOW SINK AND CONTINUE INTO CRAWL SPACE. COORDINATE INSTALLATION WITH EXISTING BUILDING CONSTRUCTION AND MEP COMPONENTS.
- REPLACE EXISTING 4" SANITARY ELBOW FITTING WITH WYE FITTING FOR CONNECTION OF NEW SANITARY PIPING.
- CONNECT COLD WATER PIPING TO EXISTING COLD WATER PIPING SERVING EXISTING BATHROOM ON 1ST FLOOR ABOVE. FIELD VERIFY EXACT TIE-IN POINT. COORDINATE INSTALLATION WITH EXISTING BUILDING CONSTRUCTION AND MEP COMPONENTS.
- INSTANTANEOUS ELECTRIC WATER HEATER BELOW SINK. COORDINATE INSTALLATION WITH CABINETRY.
- WASTE AND WATER PIPING DOWN INTO JOIST SPACE BELOW.



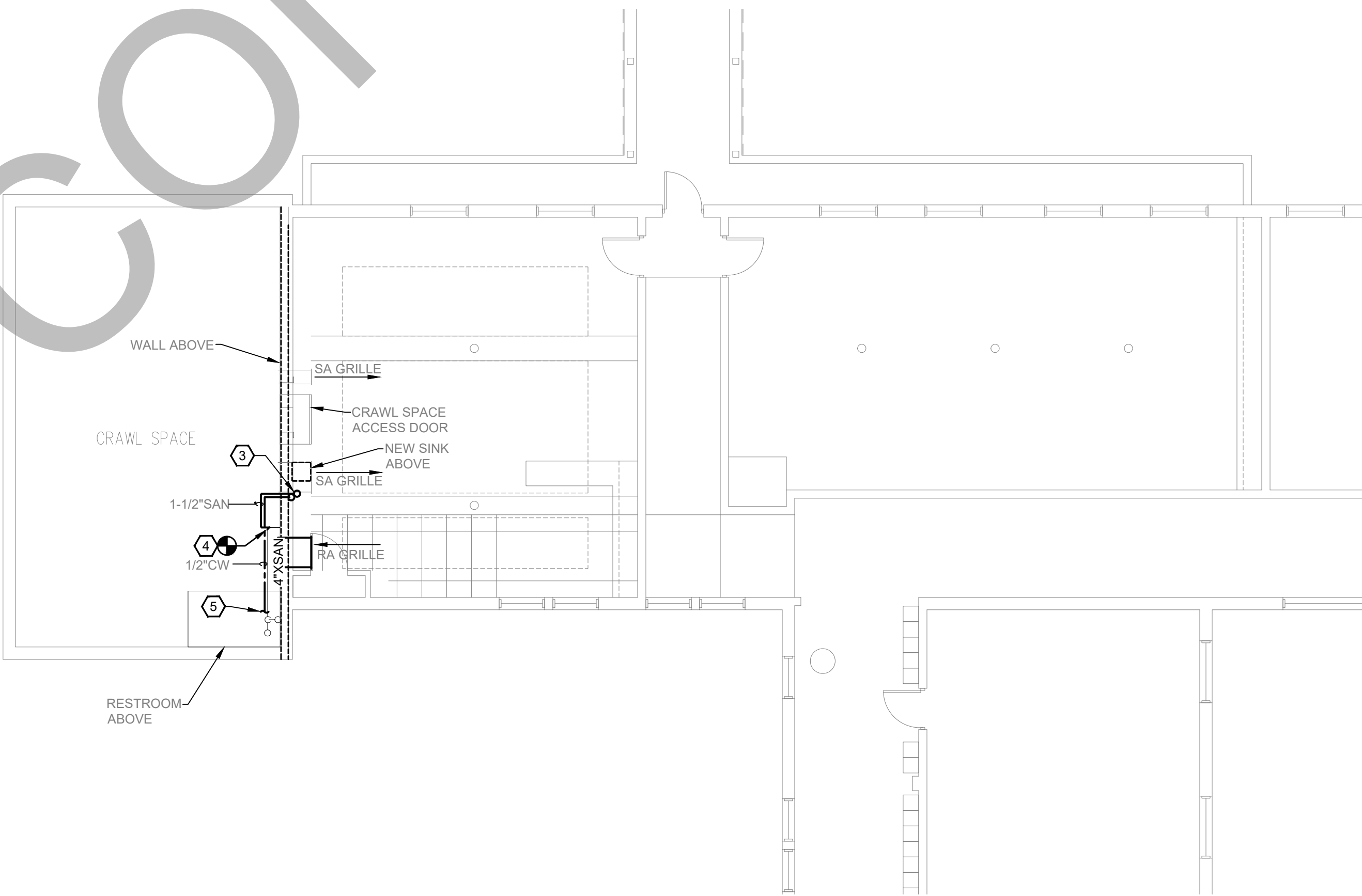
NEW UPPER FLOOR PLAN - PLUMBING

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

0 4' 8' 16'



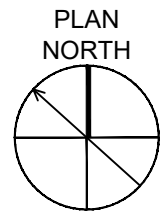
1 SANITARY WASTE RISER
NOT TO SCALE



NEW LOWER FLOOR PLAN - PLUMBING

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

0 4' 8' 16'



ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	AERATOR GPM	TEMP RISE	ELECTRICAL				REMARKS
						KW	V / Ø / Hz	MCA	MOCP	
EWH-1	STIEBEL ELTRON	MINI-E 2.5-1	SEE PLANS	0.5	40 F	2.4	120/1/60	20	20	ALL
REMARKS: 1. POINT OF USE WATER HEATER. 2. INSTALL IN BELOW COUNTER CABINET SPACE BESIDE SINK. 3. COORDINATE INSTALLATION WITH SINK WASTE AND WATER SUPPLIES. 4. T&P VALVE NOT REQUIRED. 5. PROVIDE WITH SINK FAUCET AERATOR 6. 10 YEAR LEAKAGE/3 YEAR PARTS WARRANTY. OTHER ACCEPTABLE MANUFACTURERS INCLUDE: STATE, LOCHINVAR, STIEBEL ELTRON, BOSCH. REFER TO SPECIFICATIONS FOR ADDITIONAL										

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL / TYPE	TRIM	CW	HW	TRAP	WASTE	VENT	MOUNTING	REMARKS	OTHER ACCEPTABLE MANUFACTURERS
S1A	ELKAY	LRAD1918-5 ADA SINGLE COMPARTMENT SINK	FAUCET: ELKAY LKD2423BHC TRIM: CHROME PLATED ELKAY LK18 GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	1-1/2"	1-1/2"	COUNTER SET	16" X 11-1/2" X 5-1/2" INSIDE BOWL, #18 GAUGE 304 STAINLESS STEEL, REAR CENTER DRAIN, 3 HOLE PUNCH, GOOSENECK FAUCET W/4" LEVER HANDLES	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA, T&S

MECHANICAL LEGEND

HVAC	
SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER (4-WAY, 3-WAY, 2-WAY, 1-WAY)
	SUPPLY AIR DIFFUSER (ROUND)
	RETURN GRILLES
	EXHAUST GRILLES
	FLEXIBLE CONNECTION
	SUPPLY AIR DUCT (UP -, DOWN)
	RETURN AIR DUCT (UP -, DOWN)
	EXHAUST AIR DUCT (UP -, DOWN)
	ACCESS DOOR
	RECTANGULAR TO ROUND DUCTWORK TRANSITION
	RECTANGULAR TO RECTANGULAR TRANSITION
	DUCT CHANGE IN ELEVATION, R= RISE, D= DROP
	DUCT SIZE BACKDRAFT DAMPER (ARROW INDICATES FLOW DIRECTION)
	FIRE DAMPER
	MANUAL VOLUME CONTROL BALANCE DAMPER
	SMOKE DAMPER
	MOTORIZED DAMPER
	COMBINATION - FIRE / SMOKE DAMPER
	ELBOW WITH TURNING VANES
	ELBOW ROUND
	CONNECT NEW TO EXISTING
	INDICATES AIR FLOW DIRECTION
	GATE VALVE (HORIZ. - VERT.)
	GLOBE VALVE (HORIZ. - VERT.)
	BUTTERFLY VALVE (HORIZ. - VERT.)
	BALL VALVE (HORIZ. - VERT.)
	CONTROL VALVE (2-WAY, 3-WAY)
	TRIPLE-DUTY VALVE
	PRESSURE GAUGE
	TEMPERATURE GAUGE / THERMOMETER
	PRESSURE REDUCING VALVE
	STRAINER
	CHECK VALVE
	FLOW INDICATOR
	BALANCE VALVE
	EXISTING PIPING/DUCT/EQUIPMENT TO REMAIN
	EXISTING PIPING/DUCT/EQUIPMENT TO BE REMOVED
	CAP OR PLUG
	PIPE DOWN, PIPE UP
	INCREASE / REDUCER
	FLOW SWITCH (FS)
	FLOW METER (FM)(DDC)
	TEMPERATURE SENSOR (TS)(DDC)
	PRESSURE SENSOR (PS)(DDC)
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	ROOM THERMOSTAT OR DUCT STAT
	SENSOR (CO, CO2, ETC.)
	HUMIDISTAT
	SUPPLY AIR DEVICE (S-1) / AIRFLOW (CFM)
	EQUIPMENT IDENTIFICATION
	DETAIL NO. / SHEET NO.
	SECTION NO. / SHEET NO.
	INDICATED TAG OR SHEET NOTE
	DEMOLITION NOTE
	REVISION TAG
	EXTENT OF DEMOLITION
	EXPANSION JOINT

HVAC	
SYMBOL	DESCRIPTION
	PIPE ANCHOR
	COMBINATION FLOW INDICATOR / BALANCING (4"-SMALLER)
	COMBINATION FLOW INDICATOR / BALANCING (8"-LARGER)
	TEMP. / PRESS. RELIEF VALVE
	FLANGED CONNECTION
	UNION
	FLEXIBLE CONNECTION
	PUMP

HVAC	
SYMBOL	DESCRIPTION
	CONDENSATE DRAIN LINE
	CHILLED WATER RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	EXHAUST AIR DUCTWORK
	HYDRONIC RETURN PIPING
	HYDRONIC SUPPLY PIPING
	HIGH PRESSURE RETURN
	HIGH PRESSURE STEAM
	HOT WATER RETURN PIPING
	HOT WATER SUPPLY PIPING
	LOW PRESSURE RETURN
	LOW PRESSURE STEAM
	MEDIUM PRESSURE RETURN
	MEDIUM PRESSURE STEAM
	OUTSIDE AIR DUCTWORK
	REFRIGERANT LINE SET PIPING
	RETURN AIR DUCTWORK
	SUPPLY AIR DUCTWORK

ABBREVIATIONS	
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU-X	AIR HANDLING UNIT
AS-X	AIR SEPARATOR
ATV	AUTO. TEMPERING VALVE
B-X	BOILER
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
C	COMMON
CAS-X	VARIABLE REFRIGERANT CASSETTE UNIT
CFM	CUBIC FEET PER MINUTE
CH-X	CHILLER
CT-X	COOLING TOWER
CU-X	CONDENSING UNIT
E-X	EXHAUST AIR DEVICE
EF-X	EXHAUST FAN DESIGNATION
EH-X	ELECTRIC HEATER
ERU-X	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
EXT-X	EXTERNAL LIGHTING AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL EQUIPMENT. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
FCU-X	FAN COIL UNIT
FZT	FREEZESTAT
GBD	GRAVITY BACKDRAFT DAMPER
GH-X	GRAVITY HOOD
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HP-X	HEAT PUMP UNIT
HT-X	HEAT TRACE
HX-X	HEAT EXCHANGER
KH-X	KITCHEN HOOD
KW	KILOWATT
L-X	LOUVER DESIGNATION
MAU-X	MAKE-UP AIR UNIT
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MOU-X	MINISPLIT OUTDOOR UNIT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
P-X	PUMP
PRV	PRESSURE REDUCING VALVE
R-X	RETURN AIR DEVICE
RH-X	RADIANT HEATER
RTU-X	ROOFTOP UNIT
S-X	SUPPLY AIR DEVICE
SF-X	SUPPLY FAN DESIGNATION
SP	TOTAL STATIC PRESSURE
T-X	TRANSFER AIR DEVICE
VAV-X	VARIABLE AIR VOLUME BOX
VEF-X	VEHICLE EXHAUST FAN
X	EXISTING

GENERAL NOTES:

- REFER TO SPECIFICATIONS AND THE CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
 - ALL MECHANICAL WORK SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR.
 - ALL WORK SHALL BE COORDINATED AND SCHEDULED WITH THE CONSTRUCTION MANAGER (CM) OR GENERAL CONTRACTOR (GC), OTHER TRADES, THE OWNER, AND RELATED UTILITY COMPANIES. ALL WORK SHALL COINCIDE WITH THE CONSTRUCTION PHASING PER THE CONTRACT DOCUMENTS OR CONSTRUCTION DOCUMENTS AND/OR AS MODIFIED BY THE CM/GC AND APPROVED BY THE OWNER AND DESIGN TEAM. THE MECHANICAL CONTRACTOR SHALL COORDINATE AND DEVELOP A PHASING PLAN WHERE ONE IS NOT EXPLICITLY SHOWN AND SHALL ENSURE THAT SAID PHASING PLAN IS APPROVED PRIOR TO PROCEEDING WITH WORK. ANY AND ALL DEMOLITION SHALL NOT PERMIT INTERRUPTION OF SERVICE IN AN OCCUPIED BUILDING UNLESS COORDINATED AND APPROVED.
 - ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF DUCTWORK, PIPING, EQUIPMENT, AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, VALVE, OR COMPONENT. CONTRACTOR TO PROVIDE ANY ADDITIONAL DUCT OR PIPING OFFSETS AND/OR FITTINGS, INCLUDING DIVIDED DUCTS AND FLATTENED DUCTS, REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
 - THE MECHANICAL CONTRACTOR SHALL OBTAIN A COPY OF THE ENTIRE SET OF CONTRACT DOCUMENTS PRIOR TO BID AND SHALL COORDINATE ROUTING AND INSTALLATION OF MECHANICAL DUCTWORK, PIPING, AND EQUIPMENT WITH ALL OTHER DISCIPLINES AND TRADES INCLUDING BUT NOT LIMITED TO CIVIL, ARCHITECTURAL, STRUCTURAL, FIRE SUPPRESSION, PLUMBING, AND ELECTRICAL.
 - REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR DETAILS OF CONSTRUCTION AND INSTALLATION REQUIREMENTS. FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR COMPLETION AND OPERATION OF A FULLY FUNCTIONAL MECHANICAL SYSTEM AND IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO THE KENTUCKY BUILDING CODE, ASHRAE, IMC, IECC, SMACNA, AND NFPA.
 - THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTS, DIFFUSERS, ETC. SHALL BE COORDINATED WITH ALL OTHER TRADES. CEILING MOUNTED LIGHTING AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL EQUIPMENT. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL BELOW SLAB / UNDERGROUND PIPING WITH STRUCTURAL COMPONENTS AND COORDINATING ALL STEPPED FOOTINGS OR SLEEVES WHERE REQUIRED.
 - THE MECHANICAL DRAWINGS REFLECT A "BASIS OF DESIGN" HVAC SYSTEM THAT HAS BEEN DESIGNED AROUND SPECIFIC PRODUCTS/MANUFACTURER'S (SEE SCHEDULES). THE SELECTION OF A "BASIS OF DESIGN" HAS INFLUENCED THE DESIGNS OF OTHER TRADES (ELECTRICAL, STRUCTURAL, ETC.). THE CONTRACTOR MAY USE "NON-BASIS OF DESIGN" PRODUCTS/MANUFACTURER'S AS PERMITTED BY THE SPECIFICATIONS AND/OR CONTRACT DOCUMENTS. COORDINATION OF ALL MODIFICATIONS TO EACH DISCIPLINE WHICH RESULT FROM THE USE OF "NON-BASIS OF DESIGN" EQUIPMENT OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. IF "NON-BASIS OF DESIGN" MANUFACTURERS, SIZES, OR MODEL NUMBERS ARE BID, SUBMITTED, OR INSTALLED, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND ALL OF HIS OR HER SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES PRIOR TO BID. ALL COSTS OF ALL TRADES ASSOCIATED WITH THE USE OF "NON-BASIS OF DESIGN" EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND SHALL BE INCLUDED IN THE BID. SUBSEQUENTLY, ANY ADDITIONAL COST BORE BY THE ENGINEER (MECHANICAL, ELECTRICAL, ETC.) TO ACCOMMODATE "NON-BASIS OF DESIGN" EQUIPMENT SHALL BE BORE BY THE CONTRACTOR AND PAID TO THE ENGINEER OF RECORD DURING SUBMITTALS.
 - EQUIPMENT OR MATERIALS AS ALLOWED BY THE SPECIFICATIONS AND/OR CONTRACT DOCUMENTS, WHICH ARE INSTALLED AND SUBSEQUENTLY VIEWED UNSATISFACTORY BY THE OWNER AND/OR ENGINEER WITHIN THE WARRANTY PERIOD, SHALL BE REMOVED COMPLETELY BY THE CONTRACTOR AND REPLACED WITH THE ORIGINAL DESIGN OR CORRECTED AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL VISIT THE JOB SITE, FIELD VERIFY FIT, COORDINATE WITH OTHER TRADES, AND BECOME FAMILIAR WITH ALL PROJECT CONDITIONS PRIOR TO FABRICATING DUCTWORK, INSTALLING EQUIPMENT, ETC. NO ALLOWANCES WILL BE MADE FOR LACK THEREOF.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR ALL PERMITS, TESTING, AND INSPECTIONS.
 - CONTRACTOR TO REMOVE UNUSED/ABANDONED HVAC SYSTEMS AND EQUIPMENT UNLESS INDICATED OTHERWISE ON THE CONTRACT DOCUMENTS.
 - COORDINATE WITH THE CONTRACT DOCUMENTS AND PROVIDE TEMPORARY HEAT AS REQUIRED.
 - INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS BUT NOT SHOWN ON PLANS AND VICE VERSA, SHALL BE PROVIDED AS IF REQUIRED BY BOTH.
 - THE ENTIRE MECHANICAL INSTALLATION SHALL BE AS REQUIRED TO MAINTAIN FIRE/SMOKE RATINGS AND/OR "UL" ASSEMBLY RATINGS AS REQUIRED BY THE CONTRACT DOCUMENTS AND AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. SEAL AROUND ALL PENETRATIONS THROUGH ALL FIRE/SMOKE SEPARATIONS AND/OR "UL" RATED ASSEMBLIES. COORDINATE ALL PENETRATIONS WITH THE CONSTRUCTION MANAGER AND/OR GENERAL CONTRACTOR.
- PROVIDE ADDITIONAL FIRE DAMPERS, SMOKE DETECTORS, AND SMOKE DAMPERS (INCLUSIVE OF WIRING) AS REQUIRED FOR A FULLY FUNCTIONAL AND CODE COMPLIANT SYSTEM.
- ALL DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE. NO OTHER TRADES, I.E. ELECTRICAL, CEILING, PLUMBING, ETC., SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM MECHANICAL DUCTWORK OR MECHANICAL PIPING.
- ALL BUILDING PENETRATIONS MUST BE COORDINATED WITH THE ARCHITECT AND SHALL BE FLASHED AND SEALED WEATHER-TIGHT. ALL MATERIALS AND COLORS MUST BE PRE-APPROVED BY THE ARCHITECT. NEW OPENINGS AND/OR PENETRATIONS FOR MECHANICAL ITEMS SHALL BE CUT, SLEEVED, ETC. BY THE MECHANICAL CONTRACTOR. ALL OPENINGS SHALL BE CORE DRILLED OR SAW-CUT. NO "HAMMER DRILLING" WILL BE ALLOWED.
- ROUTE DUCTWORK AS HIGH AS POSSIBLE TO FACILITATE ACCESS TO ABOVE CEILING SPACE. COORDINATE ROUTING WITH OTHER SERVICES AND TRADES. PROVIDE ADDITIONAL DUCTWORK, OFFSETS, ETC. TO ACCOMMODATE FIELD CONDITIONS AS REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM AT NO ADDITIONAL COST. ADDITIONAL OFFSETS REQUIRE APPROVAL FROM THE ENGINEER. ROUTE DUCTWORK BETWEEN JOISTS WHERE POSSIBLE.
- ALL AIR DEVICES LOCATED ABOVE GYPBOARD OR HARD CEILINGS SHALL HAVE ACCESSIBLE BALANCING DAMPERS.
- ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- PROVIDE AND INSTALL DUCT ACCESS DOORS FOR INSPECTION OF ALL INSTALLED FIRE DAMPERS AS DIRECTED BY SMACNA HVAC CONSTRUCTION STANDARDS.
- MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0". ALL FLEXIBLE DUCT SHALL CONFORM TO THE REQUIREMENTS OF UL 181 FLEXIBLE AIR DUCTS. SUPPORT TO ELIMINATE SAGGING AND KINKING. INSULATED FLEXIBLE DUCTS SHALL MEET MINIMUM R-VALUES REQUIRED BY THE IECC.
- ALL HVAC EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. UTILIZE FACTORY FILTERS DURING CONSTRUCTION.
- THE MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNERS REPRESENTATIVES WITH COMPLETE NEBB/AAAC BALANCE REPORT. THE MECHANICAL CONTRACTOR SHALL PROVIDE AS MANY ADDITIONAL SITE VISITS BY THE LICENSED TAB CONTRACTOR AS REQUIRED BY THE ENGINEER FOR A COMPLETE AND FUNCTIONING AND APPROVED SYSTEM IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- ALL RECTANGULAR 90 DEG. AND 45 DEG. ELBOWS SHALL HAVE TURNING VANES.
- PROVIDE A MANUAL VOLUME DAMPER AT ALL BRANCH TAKE-OFFS ON SUPPLY, RETURN, AND OUTSIDE AIR RIGS AT NO ADDITIONAL COST. PROVIDE A MAIN RETURN DAMPER UPSTREAM OF OUTSIDE AIR CONNECTIONS IN RETURN AIR PLENUM DESIGNS. COORDINATE ADDITIONAL MANUAL VOLUME DAMPERS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM WITH THE ENGINEER PRIOR TO ORDER, FABRICATION, OR INSTALLATION.
- ALL DUCT DIMENSIONS SHOWN ARE INTERIOR "CLEAR" DUCT DIMENSIONS.
- MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN OUTDOOR AIR INTAKES AND EXHAUST, PLUMBING VENTS, ETC. AND/OR AS REQUIRED BY IMC, WHICHEVER IS MORE STRINGENT.
- MAINTAIN 10'-0" MINIMUM CLEARANCE FROM EDGE OF ROOFTOP EQUIPMENT TO ROOF EDGE UNLESS RAILING OR PARAPET OF SUFFICIENT HEIGHT IS TO BE PROVIDED IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO: IRC, IMC, LOCAL CODES, OSHA GUIDELINES (WHERE APPLICABLE). REFER TO ARCHITECTURAL.
- PROVIDE CONDUIT, BOXES AND CONTROL WIRING IN COMPLIANCE WITH THE NEC AND DIVISION 26.
- MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND DRAWINGS FOR CONNECTIONS AND LOCATION OF ALL EQUIPMENT.
- CONTRACTOR SHALL PROVIDE ADDITIONAL OFFSETS OR BENDS IN PIPING AS REQUIRED TO ALLOW FOR EXPANSION AND CONTRACTION DUE TO TEMPERATURE CHANGES AND DIFFERENCES IN THE AMBIENT TEMPERATURE WHEN PIPING AND EQUIPMENT IS INSTALLED.
- PROVIDE MANUAL AIR VENTS AT HIGH POINTS AND DRAIN VALVES AT LOW POINTS OF ALL HYDRONIC PIPING. AUTOMATIC AIR VENTS SHALL BE INSTALLED WHERE INDICATED IN THE CONTRACT DOCUMENTS AND/OR AS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM.
- MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL PLANS AND GC ON ALL AREAS WHERE MECHANICAL / ELECTRICAL EQUIPMENT AND DEVICES ARE INDICATED TO BE DEMOLISHED AND THE REQUIRED REPAIR AND RESTORATION OF ALL WALLS, ROOFS, CEILINGS, FLOORS, ETC. SHALL BE INCLUDED IN THEIR BID.
- ALL ROOF PENETRATIONS SHALL BE IN COMPLIANCE WITH THE ROOFING MANUFACTURER'S GUIDELINES AND THE AMERICAN ROOFING COUNCIL. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE AS NECESSARY TO MAINTAIN ALL WARRANTIES.
- STRUCTURAL MEMBERS SHALL NOT BE CUT OR COMPROMISED IN ANY WAY.
- DO NOT BLOCK ACCESS TO HVAC OR ELECTRICAL EQUIPMENT. DO NOT INSTALL PIPING, DUCTWORK, OR EQUIPMENT OVER ELECTRICAL PANELS/SWITCHGEAR OR THE 30" x 42" (W x D) CLEARANCE IN FRONT OF THESE ELECTRICAL ITEMS. COORDINATE ADDITIONAL REQUIREMENTS WITH NEC.

GENERAL DEMOLITION NOTES:

- GENERAL MECHANICAL DEMOLITION NOTES APPLY TO ALL MECHANICAL SHEETS.
- SEE ARCHITECTURAL DRAWINGS FOR BUILDING FLOOR PLAN LAYOUT.
- THE EXISTING CONDITIONS REPRESENTED ON PLANS DEPICT APPROXIMATE LOCATIONS AND SIZES OF EQUIPMENT AND COMPONENTS. FIELD-VERIFY ACTUAL CONDITIONS AND DETERMINE ACTUAL LOCATIONS AND SIZES OF EQUIPMENT PRIOR TO COMMENCING WORK.
- SUBSTANTIAL DEVIATIONS BETWEEN THE CONTRACT DOCUMENTS DEMOLITION SCOPE AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER IN THE FORM OF A REQUEST FOR INFORMATION WITH THE DESCRIPTIONS AND SKETCHES.
- SCHEDULING OF ALL DEMOLITION OPERATIONS SHALL BE COORDINATED WITH OWNER NO LATER THAN THE DATE OF THE PROJECT PRECONSTRUCTION MEETING.
- PROVIDE DEMOLITION WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL DEMOLITION WORK REQUIRED TO COMPLETE NEW CONSTRUCTION WORK.
- PROTECT EXISTING EQUIPMENT, PIPING, DUCTWORK, AIR OPENINGS, ETC. FROM DIRT AND DAMAGE DURING DEMOLITION AND CONSTRUCTION.
- COMPLETELY REMOVE ALL COMPONENTS INDICATED ON PLANS FOR DEMOLITION INCLUDING REMOVAL OF ALL SUPPORTS, HANGERS, PIPING, WIRING, ECT. THAT ARE ASSOCIATED WITH THE COMPONENT BEING REMOVED, UNLESS OTHERWISE STATED.
- CONTRACTOR SHALL PATCH AND REPAIR ALL DAMAGE ASSOCIATED WITH DEMOLITION. ALL FINISHED SURFACES (FLOORS, WALLS, CEILINGS, ROOF, ETC.) SHALL MATCH EXISTING CONDITIONS.
- PROVIDE 1-HOUR FIRE RATED DUST PROOF BARRIERS (UL DESIGN U309) TO SEPARATE DEMOLITION AREA FROM THE REST OF THE FACILITY.
- WHERE DUST CREATED DURING DEMOLITION MAY ENTER AN HVAC SYSTEM RETURN AIR DUCT, PROVIDE TEMPORARY FILTERS AS REQUIRED TO PREVENT DUST INTRUSION.
- MAINTAIN OPERATION OF ALL EXISTING SERVICES AND UTILITIES SERVING AREAS THAT ARE OCCUPIED OR IN OPERATION DURING DEMOLITION WORK. COORDINATE AND SCHEDULE ALL DISRUPTIONS TO SERVICES OR UTILITIES WITH OWNER TWO WEEKS IN ADVANCE OF INTERRUPTION.
- REMOVE, RELOCATE AND REINSTALL ANY COMPONENTS WHEN REQUIRED TO ACCOMMODATE DEMOLITION OR NEW WORK SCOPE. COMMUNICATE TO ARCHITECT/ENGINEER THE EXTENT OF ITEMS TO BE REMOVED PRIOR TO BEGINNING THE WORK.
- STORE AND PROTECT ALL EXISTING ITEMS WHICH ARE TO BE RELOCATED OR REUSED.
- WHERE DEMOLITION/RE-WORK OF EXISTING MEP ITEMS CONTAINING HAZARDOUS MATERIALS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER FOR ABATEMENT AND REMEDIATION AS REQUIRED.

A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

1. PROVIDE 12" RIGID ROUND DUCTWORK PENETRATION THROUGH WALL ABOVE CEILING AND TRANSITION TO INSULATED FLEXIBLE DUCTWORK TO CEILING MOUNTED TRANSFER GRILLE.



AIR DEVICE SCHEDULE											
MARK	MANUFACTURER	MODEL	MODULE	NECK	MAX CFM	S. P.	OBD	MAX NC	MOUNTING	COLOR	REMARKS
R-1	PRICE	85	24X24	22X22	600	.034"	NO	<18	LAY-IN	WHITE	1, 2, 3
REMARKS:											
1. COORDINATE AIR DEVICE LOCATIONS WITH REFLECTED CEILING PLANS PRIOR TO INSTALLATION. LIGHTING HAS PRIORITY OVER HVAC											
2. EGG CRATE GRILLE WITH 45 DEGREE DEFLECTION CORE.											
3. PROVIDE WITH PRICE MODEL 9X TALL (2'-0") SQUARE TO ROUND TRANSITION - SEE PLANS FOR REQUIRED ROUND SIZE.											
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: KRUEGER, TITUS.											

INNOVATION LAB RENOVATION
MECHANICAL FLOOR PLAN

DATE	JOB NO.
AUG 25	2513

DRAWING
M1.01

ELECTRICAL LEGEND

LIGHTING	
SYMBOL	DESCRIPTION
	SURFACE MOUNTED LUMINAIRE (NORMAL & EMERGENCY)
	RECESSED LUMINAIRE (NORMAL & EMERGENCY)
	WALL MOUNTED LUMINAIRE (NORMAL AND EMERGENCY)
	RECESSED LUMINAIRE (NORMAL AND EMERGENCY)
	SURFACE MOUNTED LUMINAIRE (NORMAL AND EMERGENCY)
	LINEAR PENDANT LUMINAIRE (NORMAL AND EMERGENCY)
	CIRCULAR LUMINAIRE (NORMAL AND EMERGENCY)
	WALL BRACKET LUMINAIRE (NORMAL AND EMERGENCY)
	INDUSTRIAL STRIP LUMINAIRE (NORMAL AND EMERGENCY)
	CEILING FAN
	TWO-HEAD EMERGENCY LIGHTING UNIT
	EMERGENCY REMOTE HEAD (SINGLE OR DOUBLE)
	EMERGENCY EXIT SIGN WITH COMBINATION EMERGENCY LUMINAIRE WALL AND CEILING MOUNT
	EMERGENCY EXIT SIGN - SINGLE FACE WITH ARROWS AS INDICATED WALL AND CEILING MOUNTED
	EMERGENCY EXIT SIGN - DOUBLE FACE
	LIGHTING CONTROL RISER REFERENCE TAG
	PHOTOCELL
	EMERGENCY POWER PACK
	EMERGENCY BYPASS RELAY (UL924)
	EMERGENCY TRANSFER CONTROL (UL1008)
	BATTERY PACK
	LIGHTING CONTROL POWER PACK
	PORT INJECTOR
	LOW VOLTAGE LIGHTING RELAY PANEL
	ROOM CONTROLLER
	NETWORK BRIDGE
	SYSTEM CONTROLLER
	USER CONTROLLER
	POWER SUPPLY
	TIME CLOCK
	CONTACTOR, POLES AS REQUIRED
	RJ45 CONTROL WIRE SPLITTER
	DAYLIGHT SENSOR
	DUAL TECHNOLOGY LOW VOLTAGE CORNER MOUNTED OCCUPANCY SENSOR WITH POWER PACK AND CEILING MOUNT OR WALL MOUNT BRACKET AS SHOWN.
	DUAL TECHNOLOGY LOW VOLTAGE CEILING MOUNTED, 360° OCCUPANCY SENSOR.
	LIGHTING CONTROL PANEL
	LIGHT SWITCH - SUBSCRIPT INDICATES THE FOLLOWINGS: 3 - 3 WAY, 4 - 4 WAY, K - KEY OPERATED, D - DIMMER, OS - LINE VOLTAGE OCCUPANCY SENSOR, L - LOW VOLTAGE, M - MANUAL MOTOR STARTER W/ HANDLE GUARD KIT AND PADLOCK. SEE LIGHTING CONTROL DIAGRAM SHEET FOR OTHER SUBSCRIPTS.

ONE LINE DIAGRAM	
SYMBOL	DESCRIPTION
	CIRCUIT BREAKER
	GROUND FAULT PROTECTION
	VARIABLE FREQUENCY DRIVE
	DIGITAL MONITORING METER
	SURGE PROTECTION DEVICE
	DIGITAL METER DISPLAY
	POWER METERING DEVICE
	NON FUSED SWITCH
	FUSED SWITCH
	FUSE
	RELAY (NORMALLY OPEN)
	PANEL
	DOUBLE THROW SWITCH OR TRANSFER SWITCH

POWER	
SYMBOL	DESCRIPTION
	TAMPER RESISTANT DUPLEX RECEPTACLE - SUBSCRIPT INDICATES THE FOLLOWING: C - INSTALL 4 INCHES ABOVE COUNTER OR BACKSPLASH, CM - CEILING MOUNTED, E - EMERGENCY, G - GROUND FAULT CIRCUIT INTERRUPTER, GB - BLANK FACE GROUND FAULT INTERRUPT, IG - ISOLATED GROUND, P - SPLIT-WIRED PLUG LOAD CONTROL, WP - WEATHER PROOF, U - WITH USB PORT
	TAMPER RESISTANT QUADRUPLEX RECEPTACLE
	TAMPER RESISTANT SINGLE RECEPTACLE
	TAMPER RESISTANT SPECIAL PURPOSE RECEPTACLE
	JUNCTION BOX
	SAFETY SWITCH (SIZE/FUSING/POLES/NEMA - OPTIONAL)
	ENCLOSED CIRCUIT BREAKER DISCONNECT (SIZE/POLES/NEMA - OPTIONAL)
	CONDUIT TURNED DOWN
	CONDUIT TURNED UP
	CONDUIT WITH END CAP
	EQUIPMENT CONNECTION
	CONDUIT CONTINUATION
	TRANSFORMER; X - INDICATES IDENTIFICATION
	SURFACE MOUNTED PANELBOARD/DISTRIBUTION PANEL/AUTOMATIC TRANSFER SWITCH; X - INDICATES IDENTIFICATION
	FLUSH MOUNTED PANELBOARD; X - INDICATES IDENTIFICATION
	EXISTING SURFACE MOUNTED PANELBOARD/DISTRIBUTION PANEL; X - INDICATES IDENTIFICATION
	EXISTING FLUSH MOUNTED PANELBOARD; X - INDICATES IDENTIFICATION
	GROUND ROD
	LOW-VOLTAGE CIRCUIT WITH CONDUCTOR TYPES AS REQUIRED BY THE MANUFACTURER FOR THE PARTICULAR SYSTEM.
	UTP LIGHTING CONTROL CABLE
	CIRCUIT CONNECTED TO EMERGENCY POWER
	SURFACE MOUNTED RACEWAY
	BRANCH CIRCUIT HOMERUN TO PANELBOARD. THE NUMBER OF TICK MARKS INDICATES THE NUMBER OF CONDUCTORS. LONG TICK MARKS REPRESENT UNGROUNDED CONDUCTORS, SHORT TICK MARKS REPRESENT GROUNDED CONDUCTORS (NEUTRAL). A GROUNDING CONDUCTOR (GROUND) SHALL BE INSTALLED WITH ALL CIRCUITS. TICK MARKS AND CONDUCTOR SIZES ARE ONLY SHOWN ON THE HOMERUN. INSTALL THE REQUIRED QUANTITY AND SIZE CONDUCTORS TO EACH DEVICE ON THE SAME CIRCUIT AS INDICATED ON THE DRAWINGS. MINIMUM CONDUCTOR SIZE = #12 MINIMUM CONDUIT SIZE = 3/4 INCH SUBSCRIPT EXAMPLE: #8 = (3) UNGROUNDED AND (1) NEUTRAL CONDUCTORS SIZE IF OTHER THAN #12 #10 = GROUNDING CONDUCTOR SIZE IF OTHER THAN #12 1" = CONDUIT SIZE A-1 = PANEL NAME - POLE POSITION IN PANEL

DEMOLITION vs EXISTING LINE WEIGHTS	
DEMO	EXISTING

	3 POSITION SELECTOR SWITCH: LOCAL-OFF-REMOTE HAND-OFF-AUTOMATIC
	GROUND
	ELECTRIC HEATER

FIRE ALARM	
SYMBOL	DESCRIPTION
	FIRE ALARM NOTIFICATION DEVICE (WALL & CEILING) - SUBSCRIPT INDICATES THE FOLLOWING: S - STROBE, SS - SPEAKER STROBE, H - HORN, HS - HORN STROBE, SP - SPEAKER

SYSTEMS	
SYMBOL	DESCRIPTION
	EXISTING COMMUNICATIONS OUTLET
	DATA OUTLET FOR WIRELESS ACCESS POINT WITH TWO RJ45 DATA JACKS WITH TWO UTP CABLES IN SURFACE RACEWAY, 1 INCH CONDUIT OR CABLE TRAY TO THE NEAREST MDF OR IDF (WALL & CEILING)
	VOICE/DATA OUTLET WITH # VOICE AND # OF DATA JACKS AND # UTP CABLES IN SURFACE RACEWAY, 1 INCH CONDUIT, OR CABLE TRAY TO THE NEAREST MDF OR IDF (#V - INDICATES THE NUMBER OF VOICE JACKS AND CABLES, #D - INDICATES THE NUMBER OF DATA JACKS AND CABLES), C - INSTALL 4 INCHES ABOVE COUNTER OR BACKSPLASH, CG - CEILING MOUNTED
	FLOOR BOX WITH # RJ45 DATA JACKS. PROVIDE WITH COVERPLATE. INSTALL # UTP WET LOCATION CABLES IN A 1 INCH CONDUIT FROM THE DATA COMPARTMENT TO THE NEAREST MDF OR IDF (# - INDICATES THE NUMBER OF JACKS AND CABLES)
	MULTIMEDIA OUTLET. 4-11/16 INCHES OUTLET BOX WITH TWO 1-1/4 INCH CONDUITS TO ABOVE ACCESSIBLE CEILING. (WALL & CEILING)
	VGA/RCA OUTLET WITH ONE VGA CONNECTOR AND TWO RCA CONNECTORS. INSTALL CABLES IN SURFACE RACEWAY, 1-1/4 INCH CONDUIT, J-HOOKS OR CABLE TRAY. THE VGA CABLE MUST BE RAPID RUN TYPE WITH REMOVABLE LEADS OR APPROVED EQUAL.
	TELEVISION OUTLET WITH ONE F-TYPE CONNECTOR WITH COAXIAL CABLE IN SURFACE RACEWAY, 3/4 INCH CONDUIT, OR CABLE TRAY TO THE TELEVISION DISTRIBUTION SYSTEM
	DOOR RELEASE BUTTON
	J-HOOK PATHWAY
	SECURITY INTERCOM STATION
	SECURITY SYSTEM KEY PAD
	SECURITY SYSTEM CARD READER
	SECURITY SYSTEM AUDIO SENSOR
	SECURITY SYSTEM MOTION DETECTOR (CEILING & WALL); X - DEGREE OF MOTION
	CEILING MOUNTED SECURITY SYSTEM CAMERA
	WALL MOUNTED SECURITY SYSTEM CAMERA
	DOOR CONTACT/POSITION SWITCH
	PRESS PLATE FOR AUTOMATIC DOOR OPERATOR
	ACCESS POINTS WITH ELECTRIFIED DOOR HARDWARE
	SOUND SYSTEM ANTENNA

ABBREVIATIONS	
±10'	+10' INDICATES THE MOUNTING HEIGHT OF THE DEVICE TO BOTTOM.
1Ø	1-PHASE
3Ø	3-PHASE
BTM	BOTTOM
GF	GROUND FAULT PROTECTION
GND	GROUND
WG	PROVIDE DEVICE WITH MANUFACTURER'S WIREGUARD.
WP	PROVIDE DEVICE WITH WEATHERPROOF COVER. RECEPTACLES TO BE WEATHER-RESISTANT TYPE AND PROVIDED WITH A CAST ALUMINUM, EXTRA DUTY, WHILE-IN-USE COVER.

ELECTRICAL DEVICE MOUNTING HEIGHTS	
SWITCHES	48 INCHES TO TOP
INTERIOR RECEPTACLES	16 INCHES TO BOTTOM
EXTERIOR RECEPTACLES	24 INCHES TO BOTTOM
COMMUNICATIONS / DATA OUTLETS	16 INCHES TO BOTTOM
FIRE ALARM MANUAL PULL STATIONS	48 INCHES TO TOP
FIRE ALARM HORN/STROBE SIGNAL	80 INCHES TO BOTTOM
FIRE ALARM STROBE SIGNAL	80 INCHES TO BOTTOM
WALL TELEPHONES	48 INCHES TO TOP
TELEVISION OUTLETS	72 INCHES TO BOTTOM
CLOCKS	96 INCHES TO TOP
NOTE: MOUNTING HEIGHTS UNLESS OTHERWISE NOTED ON DRAWINGS.	

GENERAL NOTES:

DEMOLITION

- A. ALL ELECTRICAL ITEMS SHOWN AS LIGHTER WEIGHT ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- B. ALL ELECTRICAL ITEMS SHOWN IN HEAVIER WEIGHT SHALL BE REMOVED UNLESS OTHERWISE NOTED.
- C. THE CONDUIT, CONDUCTORS, HANGERS, SUPPORTS, CONCRETE BASES, HOUSEKEEPING PADS, AND ANY OTHER ITEMS ASSOCIATED WITH EQUIPMENT SHOWN TO BE REMOVED SHALL ALSO BE REMOVED UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE REMOVED BACK TO THE SOURCE. ALL ACCESSIBLE CONDUITS SHALL BE REMOVED. EXISTING UNDERGROUND CONDUITS MAY BE ABANDONED IN PLACE AFTER THEIR ENDS HAVE BEEN REMOVED TO A MINIMUM OF 30 INCHES BELOW GRADE AND CAPPED.
- D. WHERE ANY EXISTING ELECTRICAL ITEMS ARE SHOWN TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL RECONNECT WIRING AS REQUIRED TO ENSURE ALL DOWNSTREAM DEVICES REMAIN OPERATIONAL.
- E. REMOVE ALL EXISTING AND ACCESSIBLE ABANDONED LOW VOLTAGE CABLING. ACCESSIBLE AREAS INCLUDE, BUT NOT LIMITED TO, ABOVE LAY-IN CEILINGS, BELOW RAISED FLOORS AND EXPOSED LOCATIONS.
- F. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHERE WALLS, SLABS AND MATERIALS HAVE BEEN CUT, REMOVED OR MODIFIED AS A RESULT OF DEMOLITION. PATCHING AND REPAIRS SHALL MATCH THE ADJACENT EXISTING MATERIALS, RATINGS AND FINISHES.
- G. REFER TO THE MECHANICAL, PLUMBING, AND FIRE PROTECTION PLANS FOR LOCATION OF EQUIPMENT REQUIRING ELECTRICAL DEMOLITION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISCONNECTING EQUIPMENT AND DEMOLISHING THE ASSOCIATED CONDUIT, CONDUCTORS, DISCONNECTS, STARTERS, ETC.
- H. ALL EXISTING ITEMS SHOWN HAVE BEEN COMPILED FROM SITE SURVEYS, RECORD DRAWINGS AND VISUAL SITE INSPECTIONS. ALL ITEMS TO BE REMOVED MAY NOT BE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO BECOME FAMILIAR WITH THE EXTENT OF THE DEMOLITION WORK REQUIRED.
- I. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL EXISTING SYSTEMS ACTIVE UNTIL THEY ARE DEMOLISHED IN THEIR RESPECTIVE PHASES. PROVIDE ALL TEMPORARY CONNECTIONS AS REQUIRED. COORDINATE ALL DEMOLITION WORK WITH THE TIMING SEQUENCE OF NEW WORK.
- J. WHERE THE CONTRACT DOCUMENTS INCLUDE THE REMOVAL OF THE EXISTING CEILINGS, EXISTING CEILING MOUNTED DEVICES NOT SHOWN TO BE REMOVED SHALL BE PROTECTED, SUPPORTED IN-PLACE AND REINSTALLED IN THE NEW CEILING.

LIGHTING

- A. THE CONTRACTOR SHALL INSTALL THE REQUIRED NUMBER OF CONDUCTORS BETWEEN SWITCHES, LIGHT FIXTURES AND ASSOCIATED DEVICES FOR A COMPLETE AND WORKING SYSTEM. PROVIDE SINGLE-LEVEL OR DUAL-LEVEL SWITCHING, THREE-WAY SWITCHING OR OTHER SWITCHING METHOD AS INDICATED ON THE DRAWINGS.
- B. INSTALL AN UNSWITCHED CONDUCTOR TO ALL EXIT LIGHTS, EMERGENCY LIGHTS AND ALL OTHER FIXTURES USED FOR EMERGENCY ILLUMINATION AND SUPPLIED WITH INTEGRAL OR EXTERNAL BATTERIES. INSTALL A NORMAL UNSWITCHED CONDUCTOR TO ALL EMERGENCY RELAYS WHEN EMERGENCY POWER IS PROVIDED BY A GENERATOR OR MEANS OTHER THAN BATTERY POWER. THE UNSWITCHED CONDUCTOR SHALL BE FED FROM THE SAME CIRCUIT AS THE SWITCHED CONDUCTOR(S).
- C. CABLING ASSOCIATED WITH THE LOW VOLTAGE LIGHTING CONTROLS, INCLUDING DIMMING, NETWORK AND CONTROL CABLES, SHALL BE INSTALLED AND SUPPORTED IN A SIMILAR MANNER AS OTHER LOW-VOLTAGE CABLING. THE CABLING SHALL BE INSTALLED SEPARATE FROM LINE VOLTAGE CONDUCTORS.

INTERRUPTIONS OF SERVICE

- A. THE BUILDING SERVICES AND SYSTEMS SHALL REMAIN OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. IF INTERRUPTIONS TO ANY SERVICE OR SYSTEM ARE NECESSARY TO FACILITATE COMPLETING THE PROJECT, THE CONTRACTOR SHALL:
- A.A. APPRISE THE OWNER OF ANTICIPATED INTERRUPTIONS IN ADVANCE AND SCHEDULE FOR TIMES THAT ARE CONVENIENT TO THE OWNER AND ALL OTHER AFFECTED PARTIES.
- A.B. COORDINATE AN ACCEPTABLE DURATION AND WORK AS NECESSARY TO MEET THE AGREED UPON SCHEDULE.
- A.C. NO INTERRUPTIONS SHALL OCCUR PRIOR TO RECEIVING WRITTEN APPROVAL FROM THE OWNER AND ALL OTHER AFFECTED PARTIES.
- A.D. FOR UNPLANNED INTERRUPTIONS, THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE THE AFFECTED SERVICE(S) AND SYSTEM(S).

POWER

- A. THE NOMINAL VOLTAGE FOR THE POWER DISTRIBUTION SYSTEM SHALL BE 120/240V, 120/208V OR 277/480V AS NOTED ON THE DRAWINGS.
- A.A. THE CONTRACTOR SHALL CONFIRM THE SUPPLY VOLTAGE AT THE SERVICE IS NOMINAL PRIOR TO ENERGIZING PERMANENT POWER. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY AND ADJUST THE TAPS ON THE UTILITY TRANSFORMER AS NECESSARY TO PROVIDE THE SPECIFIED NOMINAL VOLTAGE AT THE SERVICE.
- A.B. THE CONTRACTOR SHALL CONFIRM THE SUPPLY VOLTAGE ON EQUIPMENT CONNECTED TO THE SECONDARY OF DISTRIBUTION TRANSFORMERS IS NOMINAL PRIOR TO ENERGIZING. THE CONTRACTOR SHALL ADJUST THE TAPS ON DISTRIBUTION TRANSFORMERS AS NECESSARY TO PROVIDE THE SPECIFIED NOMINAL VOLTAGE AT THE EQUIPMENT.
- A.C. THE CONTRACTOR SHALL INFORM THE ENGINEER IF THE VOLTAGE AT THE SERVICE OR AT THE EQUIPMENT CONNECTED TO THE SECONDARY OF DISTRIBUTION TRANSFORMERS IS MORE THAN +/- 2% OF NOMINAL.
- A.D. THE CONTRACTOR SHALL PROVIDE A WRITTEN RECORD OF THE MEASURED VOLTAGES TO THE ENGINEER AND INCLUDE A COPY IN THE O&M MANUALS.
- B. PROVIDE CLEAR AND UNOBSTRUCTED WORKING SPACE FOR SAFETY SWITCHES IN ACCORDANCE WITH NEC ARTICLE 110.28. LOCATION OF SWITCHES ON THE PLANS ARE SHOWN FOR DRAWING CLARITY ONLY. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH ALL OTHER TRADES TO ENSURE THE REQUIRED WORKING SPACE CLEARANCES ARE MAINTAINED.
- C. WHERE NOTED ON THE DRAWINGS TO REUSE OR CONNECT TO EXISTING LINE VOLTAGE CIRCUITS, THE CONTRACTOR SHALL INSTALL NEW CONDUIT AND CONDUCTORS AS NECESSARY TO EXTEND THE EXISTING CIRCUIT TO THE NEW CONNECTION/DEVICE LOCATION.

FIRE ALARM

- A. ALL FIRE ALARM CABLING SHALL BE INSTALLED WITHIN A MINIMUM OF 3/4 INCH CONDUIT.
- B. PROVIDE DATA CONNECTION FROM THE NEAREST MDF/IDF TO THE FIRE ALARM IP DIALER. REFER TO THE DIVISION 27 SPECIFICATIONS FOR DATA CABLE REQUIREMENTS.

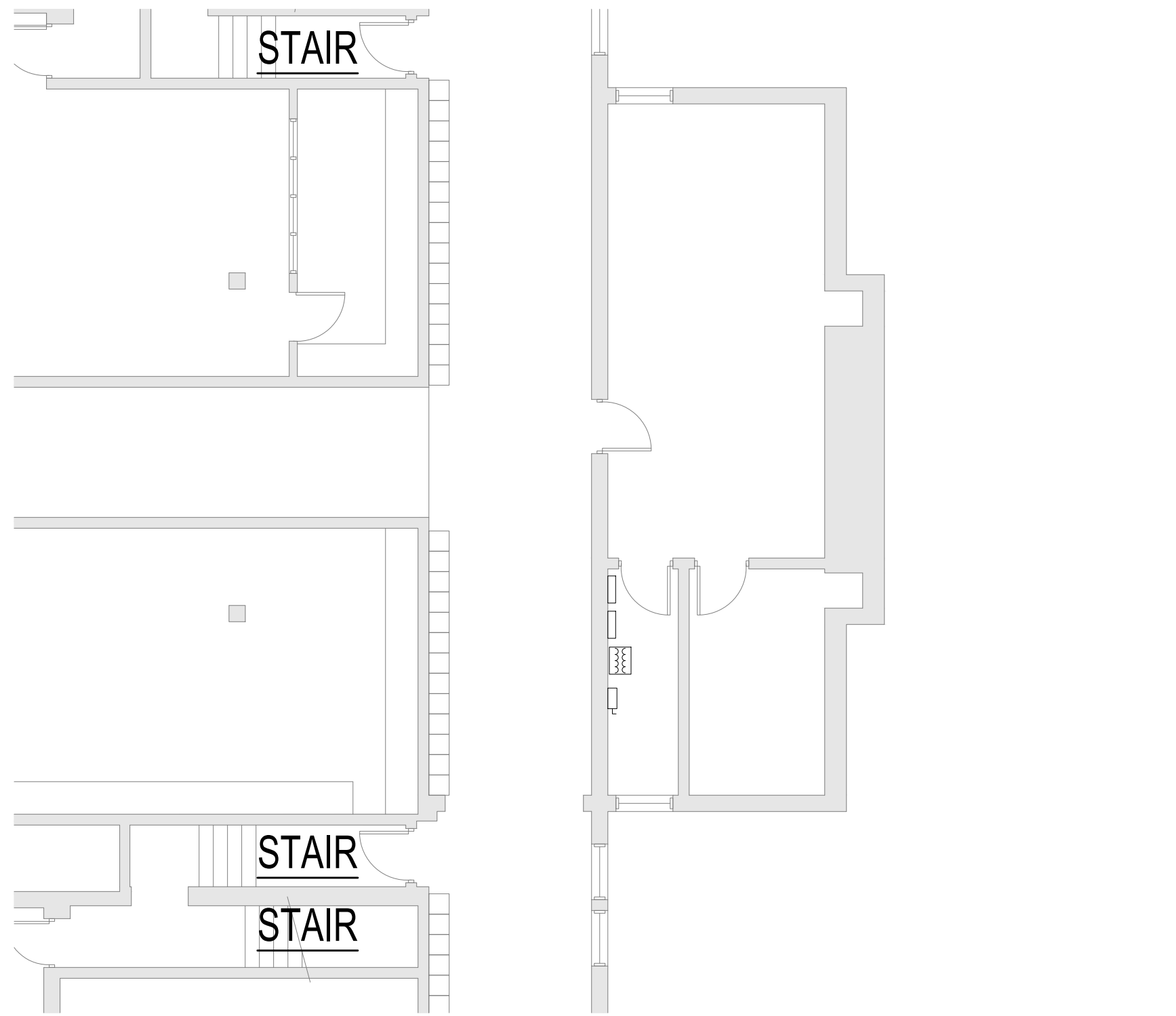
LOW-VOLTAGE CABLING

- A. ALL LOW-VOLTAGE CABLING INSTALLED IN OPEN-AIR WITHIN AIR HANDLING SPACES SHALL BE PLENUM RATED.
- B. ALL ELECTRICALLY CONDUCTIVE CABLES INSTALLED OUTDOORS SHALL BE PROVIDED WITH SURGE PROTECTION DEVICE(S). THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: FIRE ALARM CABLING FOR TAMPER SWITCHES, EXTERIOR MOUNTED SECURITY CAMERA CABLING, EXTERIOR MOUNTED SPEAKER CABLING AND CABLING BETWEEN SEPARATE BUILDINGS.
- C. ALL LOW-VOLTAGE CABLING INSTALL UNDERGROUND OR IN OUTDOOR LOCATIONS SHALL BE WET LOCATION RATED.
- D. CABLE INSTALLATION:
- D.A. EXPOSED CEILINGS OR STRUCTURES: INSTALL IN CONDUIT; IF CABLE TRAY IS SHOWN ON THE DRAWINGS IN THESE AREAS, PROVIDE TRAY WITH SOLID BOTTOM.
- D.B. ABOVE INACCESSIBLE CEILINGS AND WITHIN WALLS: INSTALL IN CONDUIT.
- D.C. CONCEALED ABOVE ACCESSIBLE CEILINGS: INSTALL IN J-HOOKS, CABLE TRAY, AND CONDUIT.

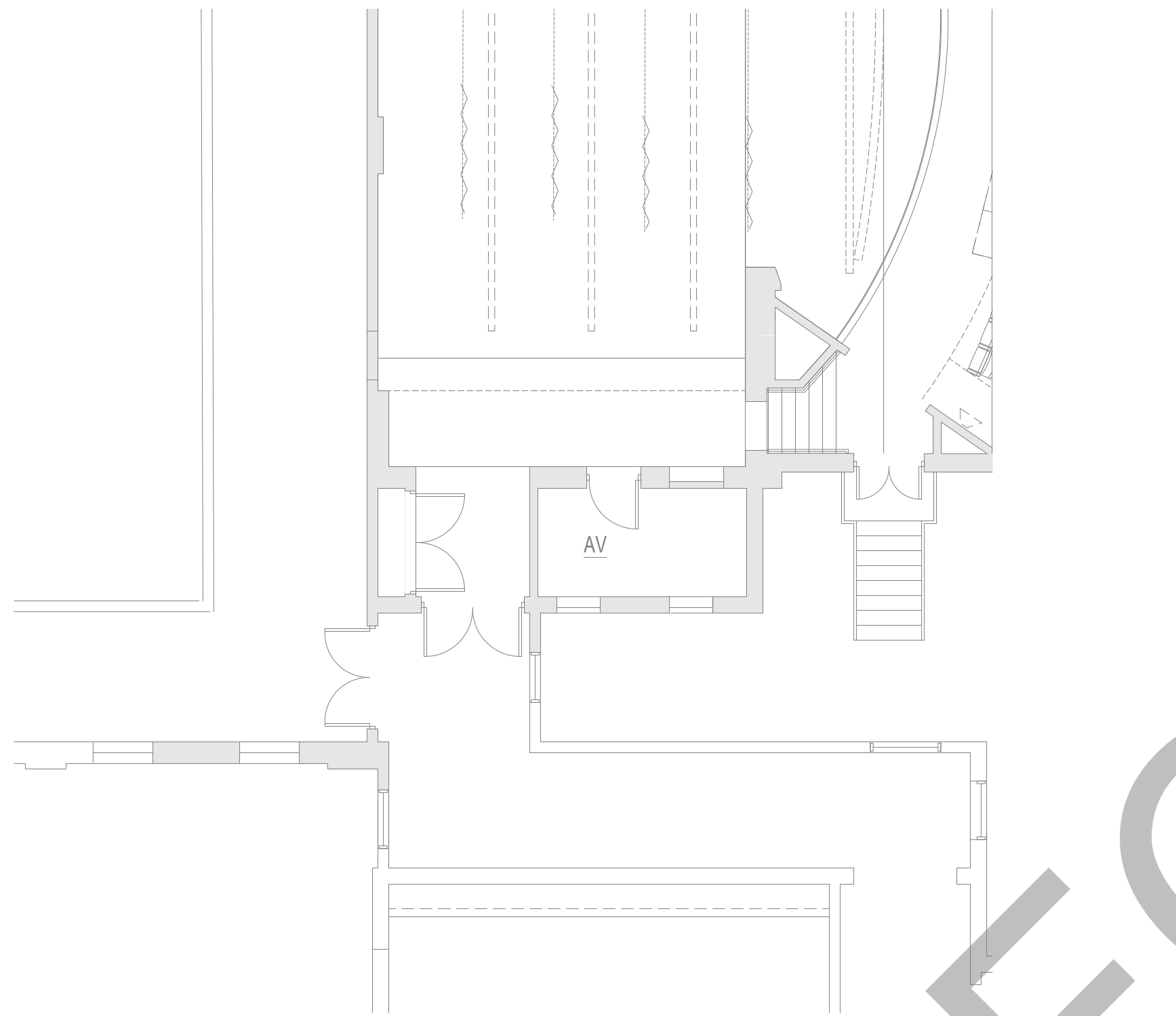
SURFACE RACEWAY (WIREMOLD)

- A. ALL SURFACE RACEWAYS SHALL BE WIREMOLD 700, AND 2400 SERIES OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
- B. 700 SERIES SHALL BE USED FOR RECEPTACLES, SWITCHES AND FIRE ALARM DEVICES. 2400 SERIES SHALL BE INSTALLED FOR VOICE AND DATA CABLING.
- C. ALL SURFACE RACEWAY IS TO BE MOUNTED ON EXISTING WALLS ONLY, UNLESS OTHER NOTED OTHERWISE. USE SUPPORTING CLIPS AND NOT MOUNTING STRAPS. THE CONTRACTOR HAS THE OPTION TO FISH FLEXIBLE CONDUIT DOWN EXISTING WALLS IN LIEU OF USING SURFACE RACEWAY.
- D. COORDINATE THE ROUTING OF ALL RACEWAY WITH WALL MOUNTED FURNISHINGS (I.E. TACKBOARDS, MARKERBOARDS, INTERACTIVE WHITEBOARDS, ETC.).

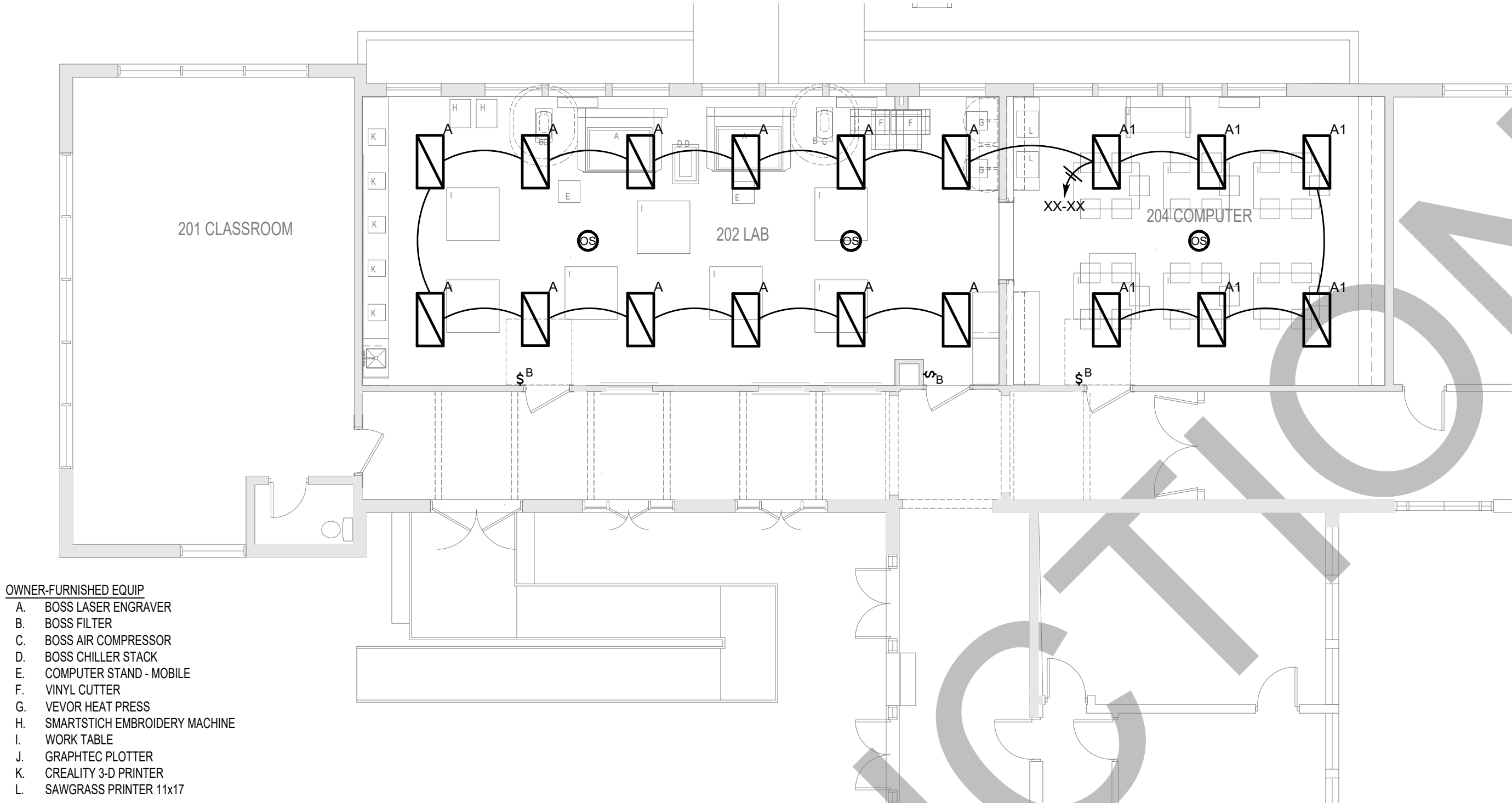
LIGHT FIXTURE SCHEDULE											
FIXTURE TYPE	DESCRIPTION	LAMPS							MOUNTING TYPE	MANUFACTURER - MODEL NUMBER	NOTES
		TYPE	CRI	DIMMING	COLOR TEMP	LUMENS	WATTS	VOLTS			
A	2'x4' GRID TROFFER	LED	80	0-10V	4000K	6000	50	277	GRID MOUNTED	LITHONIA #STAK 2'x4' 6000LM 80CRI 40K COL MINI 2T MVOLT SERIES WILLIAMS EQUAL DAYBRITE EQUAL	
A1	2'x4' GRID TROFFER	LED	80	0-10V	4000K	7200	55	277	GRID MOUNTED	LITHONIA #STAK 2'x4' 7200LM 80CRI 40K COL MINI 2T MVOLT SERIES WILLIAMS EQUAL DAYBRITE EQUAL	
NOTES: 1 2 3											



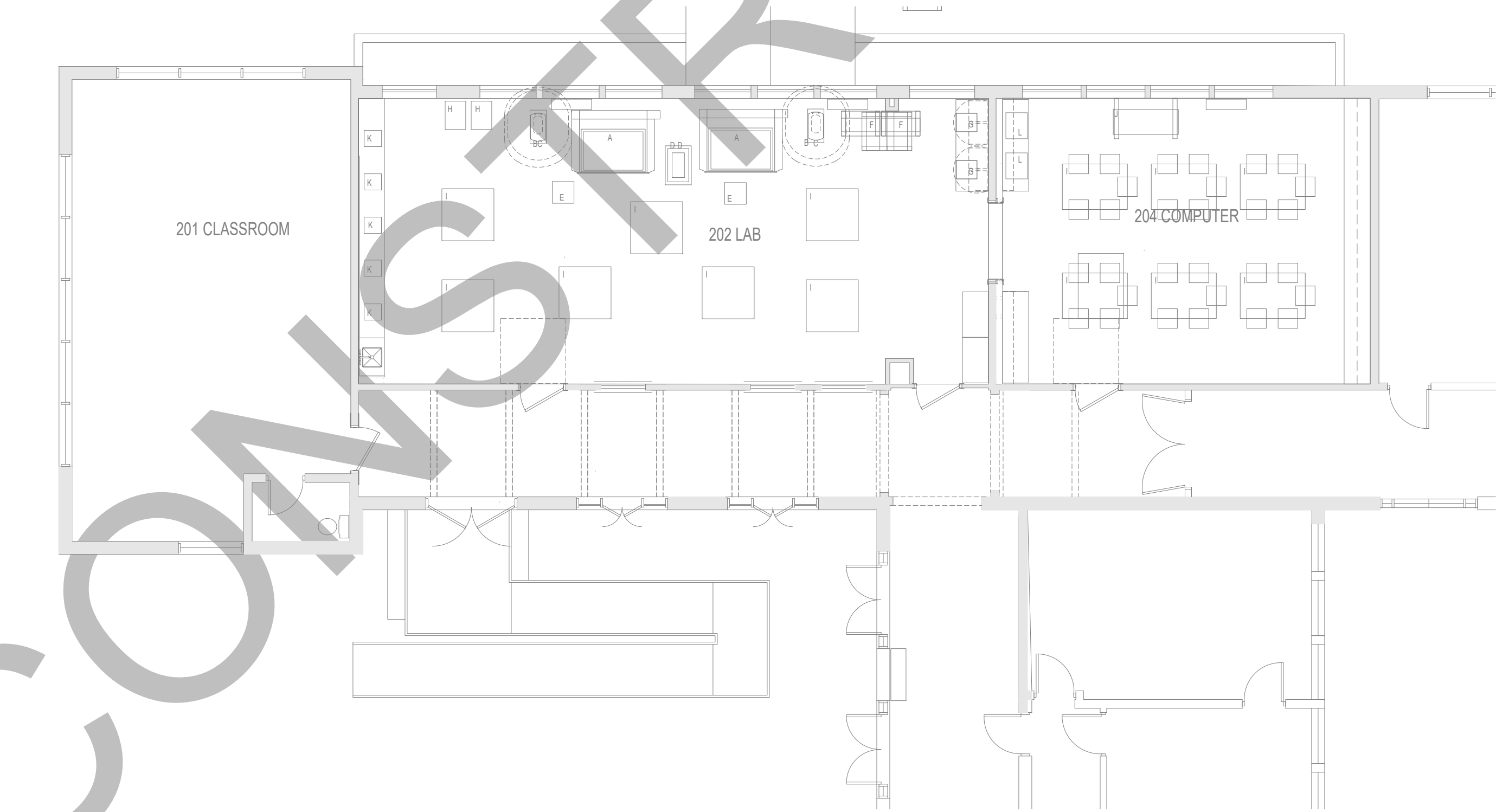
EXISTING LOWER FLOOR PLAN - POWER
SCALE: 1/8"=1'-0"



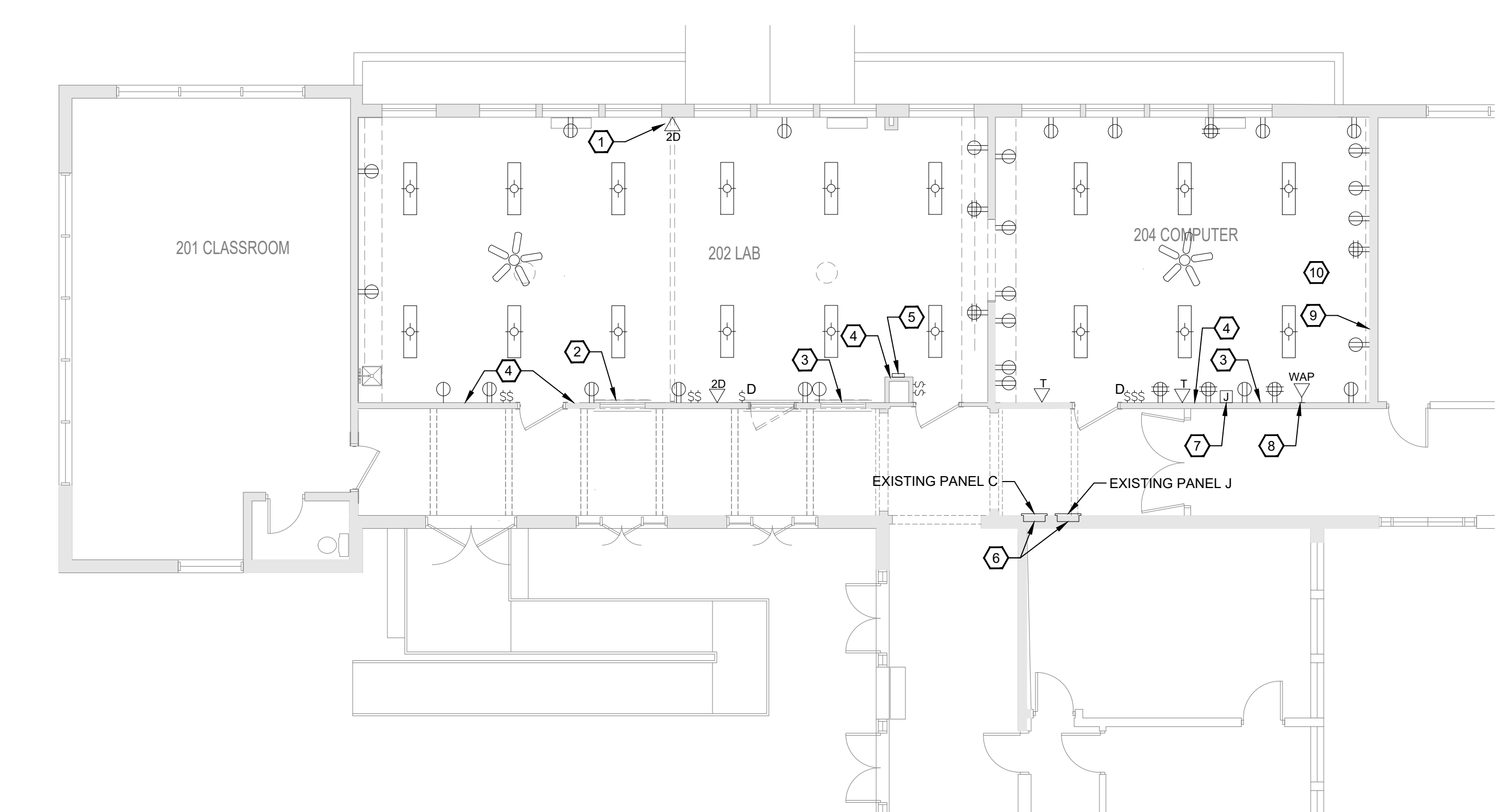
EXISTING MAIN FLOOR PLAN - SYSTEMS
SCALE: 1/8"=1'-0"



NEW WORK MAIN FLOOR PLAN - LIGHTING
SCALE: 1/8"=1'-0"



NEW WORK MAIN FLOOR PLAN - POWER AND SYSTEMS
SCALE: 1/8"=1'-0"



DEMOLITION MAIN FLOOR PLAN - ELECTRICAL
SCALE: 1/8"=1'-0"

SHROUT
TATE
MECHANICAL AND
ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

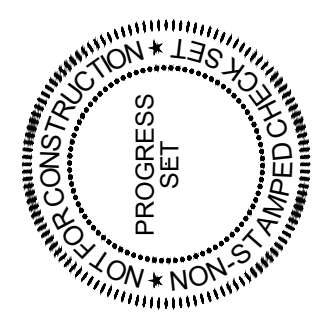
GENERAL NOTES:

- A. REFER TO SHEET E0.1 FOR GENERAL NOTES.

SHEET KEYNOTES:

- EXISTING DATA OUTLET TO REMAIN.
- DEMOLISH BROKEN SURFACE RACEWAY AND LOOSE CABLING ALONG BASEBOARD.
- EXISTING INTERACTIVE BOARD TO BE REMOVED BY OWNER PRIOR TO RENOVATION OF ROOM, AND REINSTALLED BY OWNER AT NEW LOCATION AFTER RENOVATION IS COMPLETE.
- EXISTING CLOCK AND/OR INTERCOM SPEAKER AT THIS LOCATION TO REMAIN.
- EXISTING 4-CIRCUIT LOAD CENTER TO BE REMOVED AND TURNED OVER TO THE OWNER. DEMOLISH CIRCUITS FED FROM THIS LOAD CENTER.
- EXISTING FLUSH-MOUNT PANELS TO REMAIN.
- INSTALL COVER ON OPEN JUNCTION BOX.
- EXISTING WIRELESS ACCESS POINT TO REMAIN.
- DEMOLISH EXISTING, EMPTY SURFACE RACEWAY ON WALL.
- DEMOLISH EXISTING DATA CABLES THAT ARE POKING UP THROUGH A HOLE IN THE FLOOR AT THIS APPROXIMATE LOCATION.

G. SCOTT & ASSOCIATES, ARCHITECTS P.C.
314 WILKINSON ST.
FRANKFORT, KY 40601
PHONE 502.975.2799
FAX 502.975.1107
mail@gsarchitect.com



INNOVATION LAB RENOVATION
ANCHORAGE INDEPENDENT SCHOOL
ANCHORAGE INDEPENDENT BOARD OF EDUCATION
ANCHORAGE, KENTUCKY

INNOVATION LAB RENOVATION
ELECTRICAL FLOOR PLAN

DATE
AUG 25
JOB NO.
2513

DRAWING
E1.01