# Serpent Mound Museum Improvements

# 3850 OH-73 Peebles, Adams County, OH 45660

# OHC Project CP2308



# Ohio History Connection

800 East 17th Ave, Columbus, OH

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Historic Sites and Museums Jennifer Aultman Chief Officer

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- E-4 ELECTRICAL SPECIFICATIONS

# SCOPE OF WORK

BASE BID:	<ol> <li>ATTIC STAIR DEMO AND STAIR SHAFT DEMO.</li> <li>INSTALL CEILING AND FLOOR ACCESS DOORS.</li> <li>RELOCATE HVAC DUCTS AND VENTS.</li> <li>REPAIR FLOOR STRUCTURE</li> <li>NEW ELECTRICAL OUTLETS</li> <li>DRAIN AND REMOVE FUEL OIL TANK</li> <li>FINISH CARPENTRY</li> </ol>
ALTERNATE NO. 1: ALTERNATE NO. 2: ALTERNATE NO. 3: ALTERNATE NO. 4:	NEW GIFTSHOP CASEWORK REPLACE LIGHTING AND CEILING FAN FIXTURES IN EXHIBIT AND STAFF AREA RELOCATE ELECTRICAL PANEL REFINISH EXHIBIT AREA CEILING

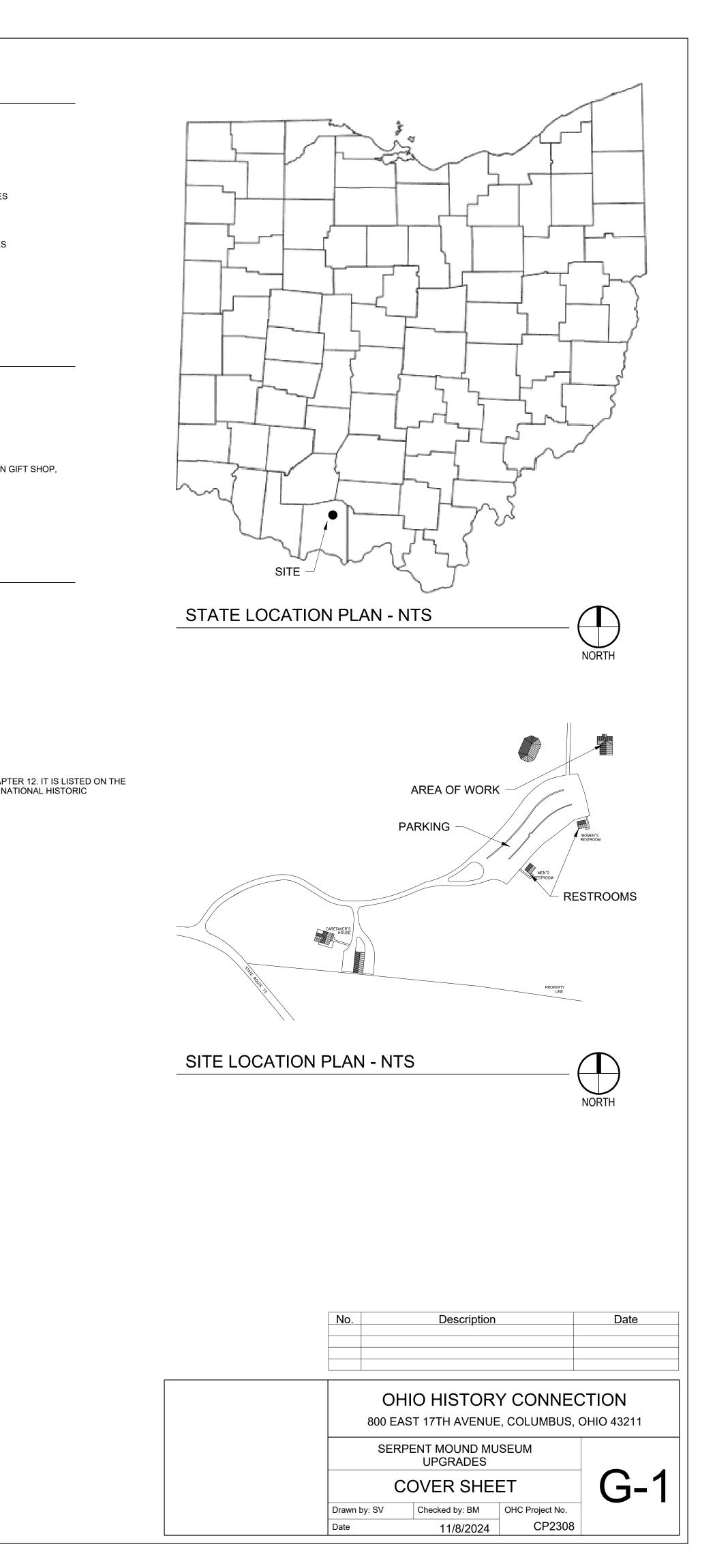
# PROJECT CODE DATA

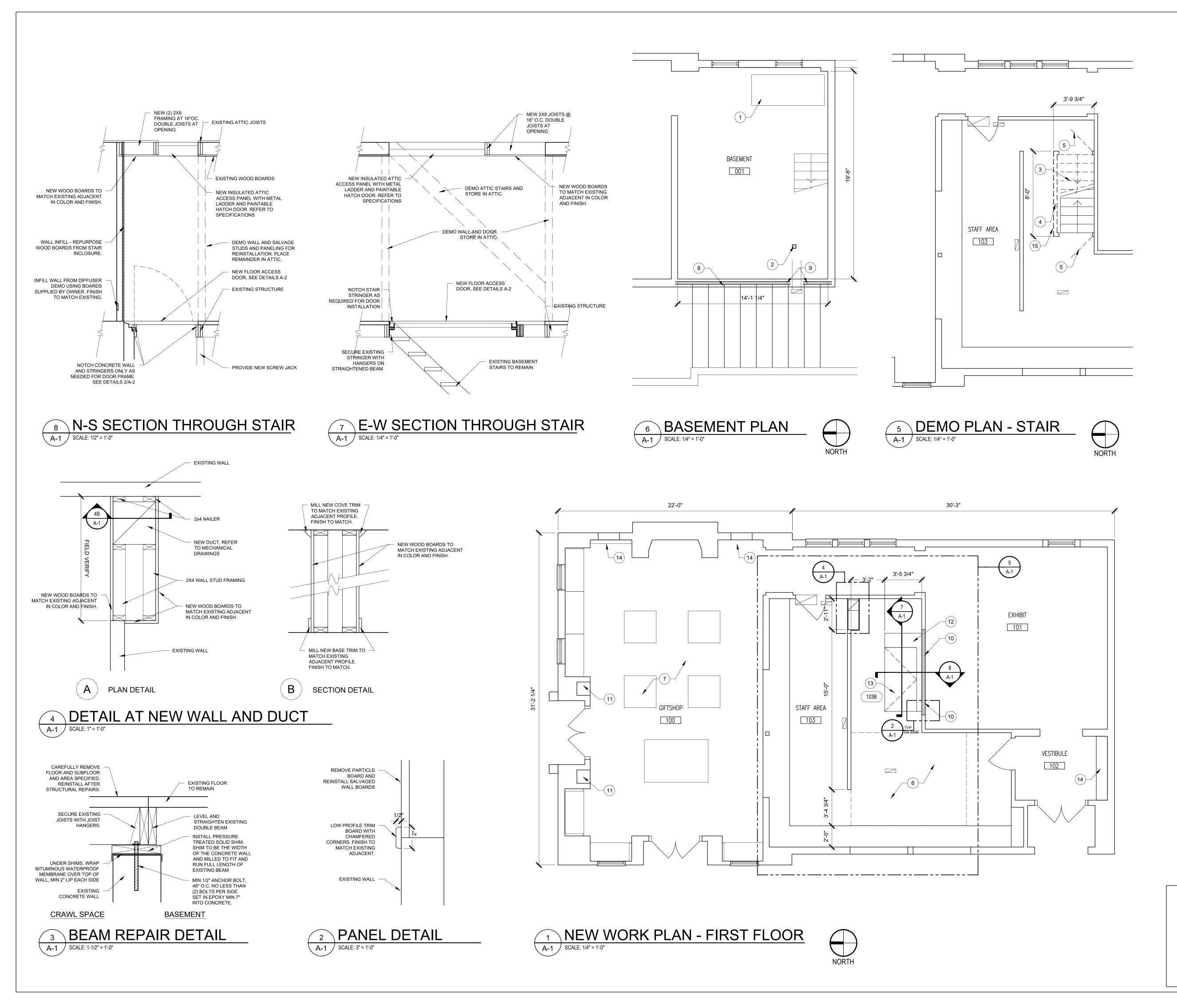
BUILDING CODE:	OHIO BUILDING CODE 2024
PRIMARY USE CLASS:	A-3 (UNCHANGED)
CONSTRUCTION TYPE:	VB (UNCHANGED)
NUMBER OF STORIES:	1 (NOT INCLUDING BASEMEN
BUILDING HEIGHT:	1 STORY, 17' (UNCHANGED)
BUILDING AREA:	EXISTING: 1400 SQ. F AREA OF WORK: 1400 SQ. F
NUMBER OF OCCUPANTS:	47

(UNCHANGED) (NOT INCLUDING BASEMENT) STORY, 17' (UNCHANGED) KISTING: 1400 SQ. FT. REA OF WORK: 1400 SQ. FT. NONE (UNCHANGED)

NUMBER OF EXITS: FIRE SUPPRESSION:

\*\*THIS BUILDING IS TO BE CONSIDERED AN HISTORIC BUILDING PER CHAPTER 12. IT IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES (#66000602) AND IS A US NATIONAL HISTORIC LANDMARK (1964).



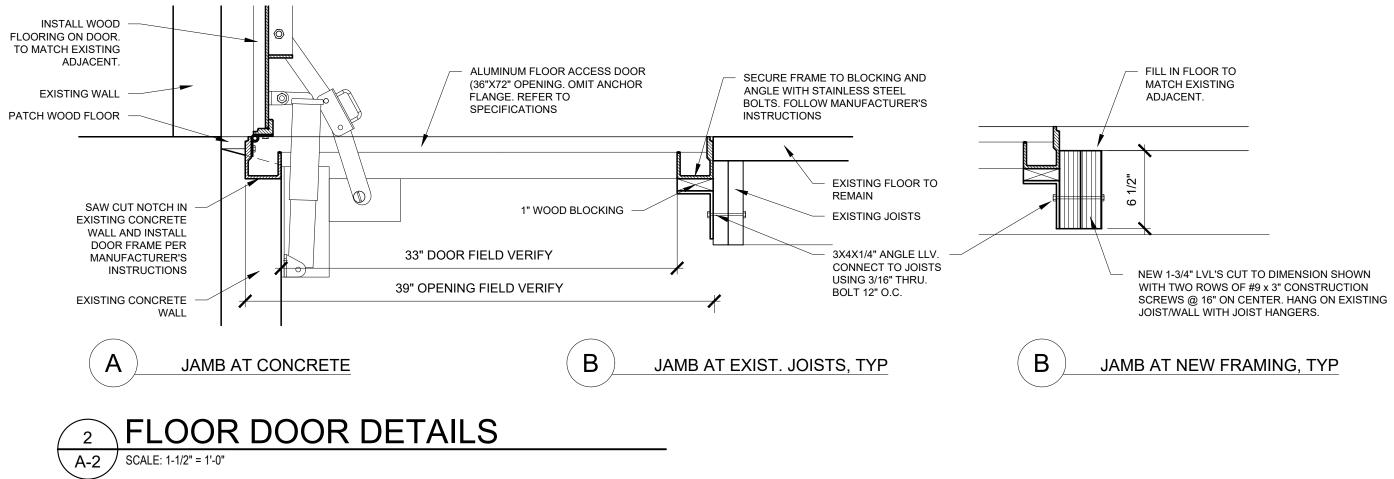


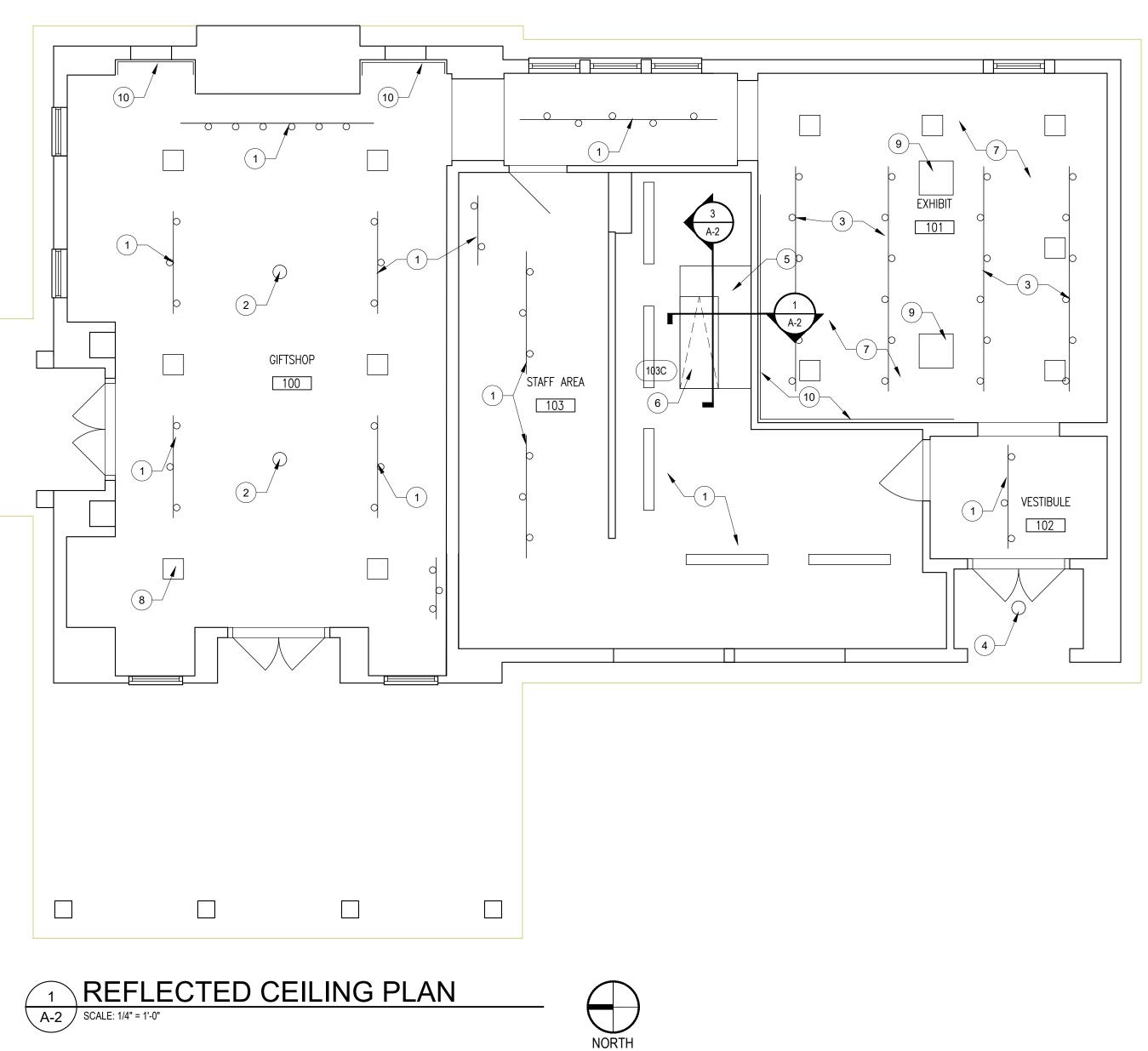
## **GENERAL NOTES**

- 1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LOCATIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT IN WRITING.
- THESE NOTES APPLY TO ALL ARCHITECTURAL DRAWINGS. FOR NOTES AND SYMBOLS APPLICABLE ONLY TO DRAWINGS OF DISCIPLINES OTHER THAN ARCHITECTURE, REFER TO SPECIFIC DRAWINGS OF THAT GENERAL DEMOLITION NOTES DISCIPLINE.
- 3. THE CONTRACTOR IS RESPONSIBLE TO REPAIR ALL DAMAGE DONE TO ALL EXISTING SURFACES. SURFACES WILL BE SURVEYED WITH ARCHITECT AT THE PRE-BID AND PRE-CONSTRUCTION MEETINGS. ALL EXISTING DAMAGE PRIOR TO START OF PROJECT WILL BE RECORDED BY THE ARCHITECT AND DAMAGE INCURRED WILL BE REPAIRED BY THE CONTRACTOR PRIOR TO THE CONCLUSION OF THE PROJECT.
- 4. THE CONTRACTOR IS RESPONSIBLE TO REPAIR ALL DAMAGE TO ALL EXISTING GRASS, PLANTINGS, DRAINAGE SYSTEM, ETC. EXISTING CONDITIONS / SYSTEMS WILL BE SURVEYED WITH THE ARCHITECT AT THE PRE-BID AND PRE-CONSTRUCTION MEETINGS. ALL EXISTING CONDITIONS PRIOR TO START OF PROJECT WILL BE RECORDED AND DAMAGE INCURRED IN THE CONSTRUCTION PROCESS WILL BE REPAIRED BY THE CONTRACTOR BEFORE THE CONCLUSION OF THE PROJECT (TYPICAL). ALL GRASS AREAS WILL BE REPAIRED WITH SEED, (PER SPECIFICATION.)
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE, MAINTAIN AND REMOVE ALL PROTECTION DEVICES, INCLUDING BUT NOT LIMITED TO: SIGNS, BARRICADES, OVERHEAD PROTECTION, ETC. PRIOR TO PROJECT COMPLETION.
- 6. CONTRACTOR SHALL REMOVE RUBBISH AND DEBRIS TO CONTAINER AREA DAILY. ACCUMULATION OF RUBBISH LONGER THAN 24 HOURS IN ANY AREA OTHER THAN THE DESIGNATED CONTAINER AREA IS NOT PERMITTED.
- 7. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- REMOVE ITEMS TO BE DEMOLISHED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. DESCRIPTION OF PRIMARY ITEMS TO BE REMOVED IS GENERAL IN NATURE, AND REMOVAL OF SECONDARY COMPONENTS SUCH AS BLOCKING, SUPPORTS, ANCHORS, TRIM, ADHESIVE, PIPING, WIRING, ETC., RELATED TO PRIMARY ITEMS SHALL BE INCLUDED.
- 9. CAREFULLY REMOVE AND STORE ANY AND ALL ITEMS TO BE REUSED OR RELOCATED. ITEMS SHALL BE STORED IN AN AGREED UPON LOCATION BY THE OWNER.
- 10. DEMOLISHED MATERIALS ARE THE PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE AND SHALL BE PROMPTLY DISPOSED OFF SITE IN A LEGAL MANNER.
- 11. SELECTIVE DEMOLITION FOR INSTALLATION OF NEW MECHANICAL, PLUMBING, OR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE REQUIRING THE DEMOLITION.
- 12. THE INTENT OF THE WORK IN THESE CONSTRUCTION DOCUMENTS IS TO PROVIDE AN END RESULT WHEREIN THE FINISHES, CARPENTRY, AND ALL ACCESSORIES, ETC. ARE INSTALLED WITH SUFFICIENT QUALITY AND CRAFTSMANSHIP TO PROVIDE AN INSTALLATION COMPLETE IN ALL RESPECTS.
- 13. OWNER SHALL REMOVE LOOSE ITEMS, I.E. EQUIPMENT, FURNITURE, ARTWORK, PLAQUES, ETC., PRIOR TO CONTRACTOR'S START OF WORK IN SPECIFIED AREAS.
- 14. THE ARCHITECT / OWNER IS NOT ENGAGED IN AND DOES NOT SUPERVISE CONSTRUCTION.
- 15. REFER TO SPECIFICATION FOR ALL MATERIAL TYPES AND METHODS OF REMOVAL AND INSTALLATION.
- 16. DIMENSIONAL INFORMATION FOR NEW OPENINGS INDICATED ON DEMOLITION DRAWINGS ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION AND COORDINATION WITH NEW CONSTRUCTION.
- 17. OHC ARCHAEOLOGIST MUST BE ON SITE FOR ANY GROUND DISTURBANCE. ANY GROUND WORK REQUIRING THE PRESENCE OF AN ARCHAEOLOGIST REQUIRES A 1-WEEK ADVANCED NOTICE.
- 18. PRIOR TO START OF DEMOLITION DUST AND SOUND BARRIERS SHALL BE CONSTRUCTED. PROPER EGRESS AND APPROVED (BY OWNER) BARRIERS MUST BE MAINTAINED THROUGHOUT THE DEMOLITION AREA AT ALL TIMES.
- # CODED NOTES ALL WORK IS BASE BID UNLESS OTHERWISE NOTED
- DRAIN AND REMOVE OIL TANK. CONTRACTOR RESPONSIBLE FOR FOLLOWING ALL STATE AND FEDERAL REGULATIONS.
- 2. REPLACE COLUMN AND COLUMN BASE IN BASEMENT WITH JACK POST.
- CAREFULLY REMOVE ATTIC STAIR, STORE IN ATTIC.
   CAREFULLY DEMO STAIR WALL, SET ASIDE WOOD PLANKS AND FRAMING, TO BE
- REINSTALLED IN BACK WALL, REFER TO SHOWN SECTIONS. ANY REMAINING STOCK TO BE STORED IN ATTIC.
  5. CAREFULLY REMOVE DOORS, FRAME, AND TRIM. SET ASIDE FOR REUSE. ANY PIECES
- NOT REUSED TO BE STORED IN ATTIC.
  6. CAREFULLY REMOVE FLOOR BOARDS AND SUBFLOOR WITHIN PATCH (EST 94 SF) AND
- SET ASIDE FOR REINSTALLATION. FOLLOWING FLOOR REPAIRS, REINSTALL SUBFLOOR AND FLOOR BOARDS. REFER TO SPECIFICATIONS FOR FINISH CARPENTRY. 7. ALTERNATE 1: PROVIDE NEW GIFTSHOP CASEWORK, SEE A-3.
- 8. SECURE EXISTING JOISTS WITH JOIST HANGERS AFTER BEAM LEVELING, TYP. SEE DETAIL 3/A-1.
   9. LEVEL AND STRAIGHTEN BEAM ON EACH SIDE OF DUCT, RESUPPORT BEAM ON
- EXISITING CONCRETE WALL, SEE DETAIL 3/A-1.
  10. FILL IN OLD REGISTER OPENINGS WITH SALVAGED WORMY CHESTNUT BOARDS SUPPLIED BY OWNER. STAIN AND FINISH TO MATCH EXISTING ADJACENT, CONTRACTOR
- TO PROVIDE SAMPLES FOR APPROVAL PRIOR TO INSTALL. REFER TO SECTION 8/A-1.
  11. ALTERNATE 2: REMOVE EXISTING LENS AND REPLACE LIGHTING IN NOOK. NEW LENS TO BE INSTALLED BY OWNER. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- 12. PATCH FLOORING IN THIS AREA. MATCH EXISTING ADJACENT IN SPECIES, COLOR AND FINISH. PROVIDE SAMPLES FOR APPROVAL BY OWNER.
- PROVIDE NEW FLOOR ACCESS DOOR. REFER TO DETAILS A-2 AND SPECIFICATIONS.
   ALTERNATE 2: DISCONNECT POWER IN EXHIBIT CASE. CASE TO BE REMOVED BY
- OWNER. 15. SUBPANEL TO BE REMOVED. REFER TO ELECTRICAL DRAWINGS.

No.		Description		Date		
		•				
	OHIO HISTORY CONNECTION					
	800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
	SERPENT MOUND MUSEUM UPGRADES					
DEMO AND NEW WORK PLANS						
Drawn I	by: SV	Checked by: BM	OHC Project No.			
Date		11/8/2024	CP2308			

### FLOORING ON DOOR. TO MATCH EXISTING



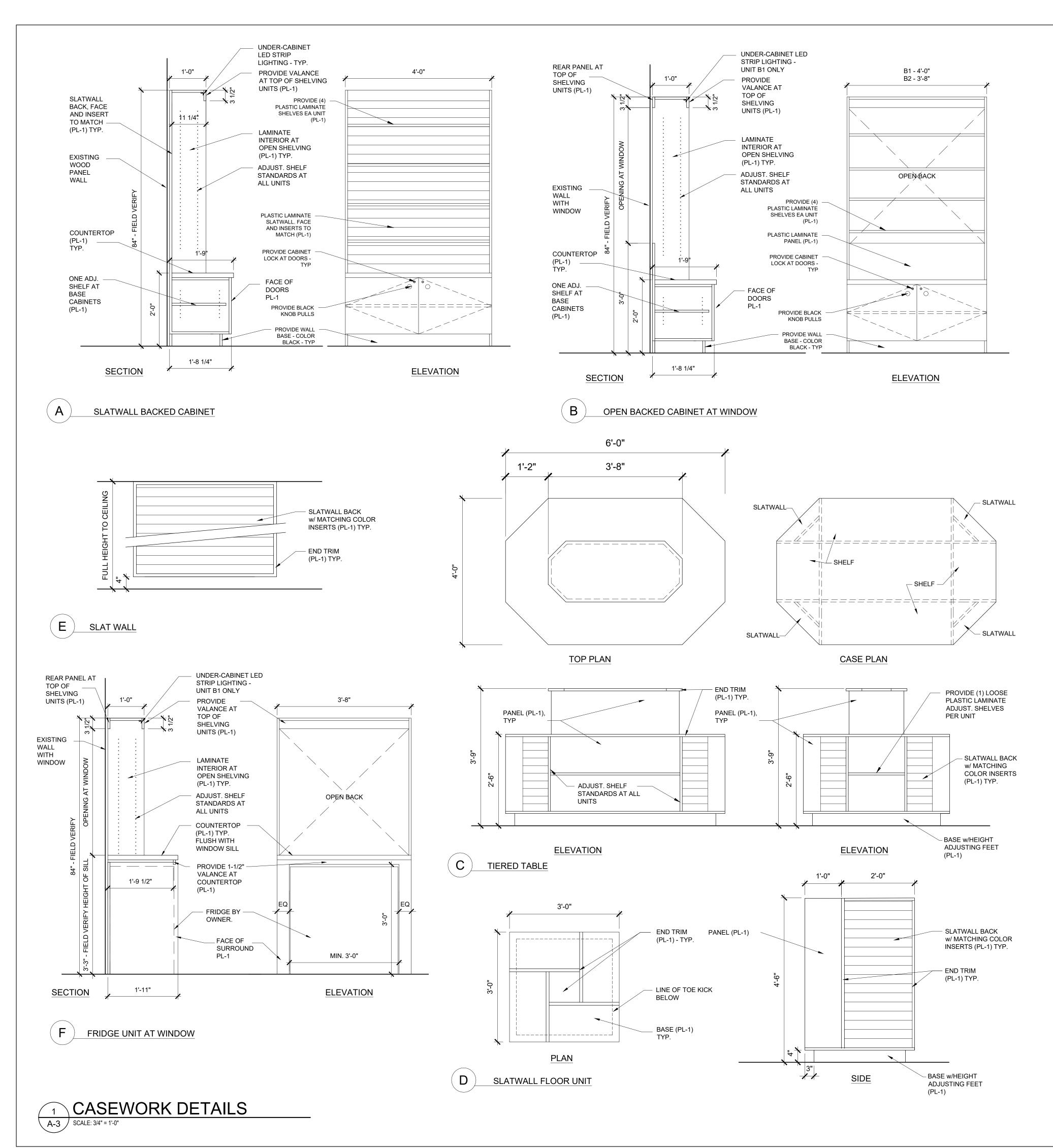


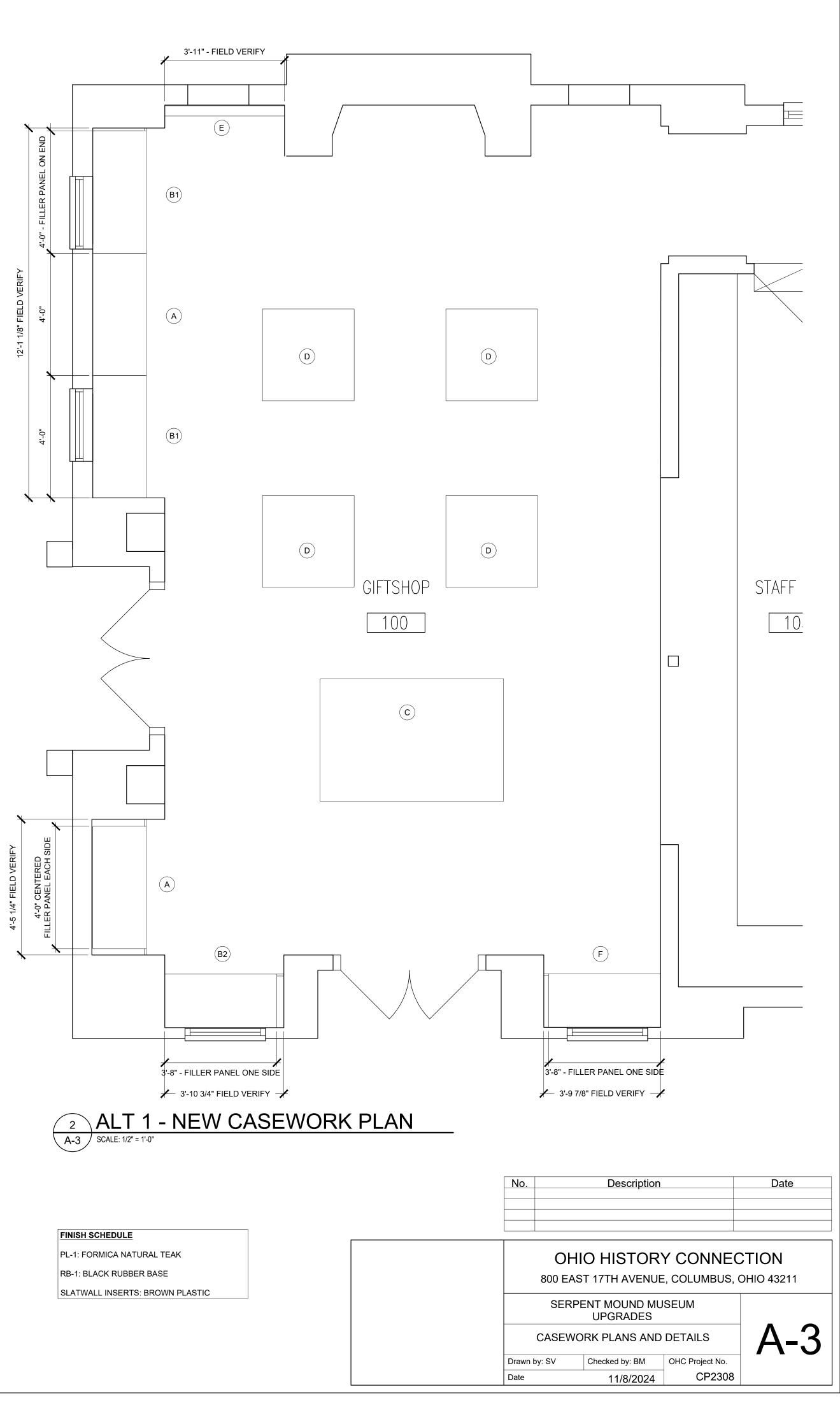
## REFLECTED CEILING PLAN CODED NOTES

ALL WORK IS BASE BID UNLESS OTHERWISE NOTED

- 1. ALTERNATE 2: REPLACE EXISTING FIXTURES WITH NEW TRACK LIGHTING. REFER TO ELECTRICAL DRAWINGS.
- 2. ALTERNATE 2: INSTALL NEW CEILING FANS PROVIDED BY OWNER. 3. ALTERNATE 2: NEW TRACK LIGHT. REFER TO ELECTRICAL DRAWINGS
- 4. ALTERNATE 2: INSTALL EXTERIOR LIGHT PROVIDED BY OWNER USING EXISTING J-BOX. 5. PATCH CEILING WITH NEW BOARDS. MATCH EXISTING ADJACENT IN FINISH. SAMPLES TO BE PROVIDED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION.
- 6. NEW ATTIC ACCESS PANEL, REFER TO DETAILS A/2. 7. ALTERNATE 4: CLEAN AND RESTORE FINISH THROUGHOUT. PREP, TONE, AND REFINISH
- AREAS WHERE CABINETS WERE REMOVED. PROVIDE TEST PATCHES FOR APPROVAL. TOP COAT VARNISH CEILING FOLLOWING FINISH RESTORATION. 8. EXISTING RECESSED LIGHT FIXTURE TO REMAIN. ALTERNATE 2: RELAMP PER ELECTRICAL DRAWINGS. TYP, UNO.
- 9. NEW HVAC CEILING DIFFUSERS. REFER TO MECHANICAL DRAWINGS. DIFFUSERS TO BE PAINTED IN FIELD. PREP AND PAINT PER SPECIFICATIONS. PROVIDE PHYSICAL COLOR SAMPLES TO ARCHITECT FOR SELECTION.
- 10. PROVIDE COVE TRIM IN AREAS MISSING. MATCH EXISTING ADJACENT IN PROFILE, SIZE, AND FINISH.

No.		Date				
OHIO HISTORY CONNECTION						
800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211						
SERPENT MOUND MUSEUM UPGRADES						
CEILING PLAN AND SECTIONS $A-2$						
Drawn b	by: SV	Checked by: BM	OHC Project No.			
Date		11/8/2024	CP2308			





#### GENERAL ABBREVIATIONS

A. A.D.	COMPRESSED AIRAB. ABOVE ACCESS DOOR
A.D. A.F.F.	AREA DRAIN ABOVE FINISHED FLOOR
	AIR HANDLER ALTERNATE
ALUM.	ALUMINUM ACCESS PANEL
APPROX.	APPROXIMATELY
ARR'T.	ARCHITECT ARRANGEMENT
AUTO. AV	AUTOMATIC ACID VENT
@ AW	AT ACID WASTE
& ∠	AND ANGLE
BAL.	BALANCING
BFP	BACKDRAFT DAMPER BACKFLOW PREVENTER
	BRAKE HORSEPOWER BUILDING
	BASEBOARD RADIATION BASEMENT
	BATH TUB BLACKTOP
BTM. BTU	BOTTOM BRITISH THERMAL UNIT
B.V.	BACKWATER VALVE
CAB. CAP.	CABINET CAPACITY
C.B. C/C	CATCH BASIN CENTER TO CENTER
CEIL./CLG. CFH	CEILING CUBIC FEET PER HOUR
CFM CHEM.	CUBIC FEET PER MINUTE CHEMICAL
C.I.	CAST IRON
C/L C.O.	CENTERLINE CLEANOUT
COL. COMB.	COLUMN COMBINATION
CONC. COND.	CONCRETE CONDENSATE/CONDENSER
CONN. CONST.	CONNECTION/CONNECT
CONTR.	CONTRACTOR
CONV. COORD.	CONVECTOR/CONVERTER COORDINATE
CUH CU. FT.	CABINET UNIT HEATER CUBIC FEET
D. DB	DEEP DRY BULB
DBL DCW	DOUBLE
DET.	DETAIL
D.F.	DEGREES FARENHEIGHT DRINKING FOUNTAIN
DHW DHWR	DOMESTIC HOT WATER DOM. HOT WATER RETURN
	DIAMETER DIFFUSER
	DIMENSION DISCHARGE
D.L.	DOOR LOUVER DAMPER MOTOR
D.M. DN.	DOWN
DPR. DR.	DAMPER DOOR
D.S. DW	DOWNSPOUT DISTILLED WATER
DWH DWV	DOMESTIC WATER HEAT-ER DRAIN, WASTE AND VENT
DWG. EA.	DRAWING
E.A.T.	ENTERING AIR TEMPERATURE
E.C. EFF.	ELECTRICAL CONTRACTOR EFFICIENCY
ELEC. ELEM.	ELECTRIC, ELECTRICAL ELEMENT
	ELEVATION EMERGENCY
ENGR.	ENGINEER ENTERING
EQUIP.	EQUIPMENT EXTERNAL STATIC PRESSURE EXPANSION TANK
E.S.P. E.T.	EXTERNAL STATIC PRESSURE EXPANSION TANK
EWC	EYE WASH ELECTRIC WATER COOLER
E.W.T. EXH	ENTERING WATER TEMP. EXHAUST
EXIST. FXT	EXISTING EXTERIOR
F.	FAN FIRE
FD	FLOOR DRAIN FIRE DAMPER
F.E.	FIRE EXTINGUISHER
FS.E.C.	FIRE EXTINGUISHER CABINET FOOD SERVICE EQUIPMENT CONTRACTOR
FS.H.	FIRE HYDRAN I
FS.H.E.C. FIG	FIRE HOSE CABINET FIRE HOSE/EXTINGUISHER CABINET FIGURE FINISH
FIN.	FINISH FINNED RADIATION
FLEX.	FLEXIBLE
	FEET PER MINUTE
⊢&ľ FT.	FLOAT & THERMOSTATIC FEET
FT. HD. FOR	FEET OF HEAD FUEL OIL RETURN
FOS FPC	FEET FEET OF HEAD FUEL OIL RETURN FUEL OIL SUPPLY FIRE PROTECTION CONTRACTOR
FURN.	FURNISH(ED) FLUSH VALVE

_	
G GALV.	GAS GALVANIZED
G.C.	GENERAL CONTRACTOR
GEN.	
G.I. GPM	GREASE INTERCEPTOR GALLONS PER MINUTE
GR	GRILLE
GRAV. G.T.C.	GRAVITY GENERAL TRADES CONTRACTOR
H./HT.	HEIGHT
HAC	HEATING AND AIR CONDITIONING
hb Horiz.	HOSE BIBB HORIZONTAL
HP	HIGH PRESSURE
HP HPS	HORSEPOWER HIGH PRESSURE STEAM
H.S.	HAIR STRAINER
HTG.	HEATING
HTR. HV	HEATER HEATING & VENTILA-TING
HV	HIGH VELOCITY
HVAC H'STAT	HEATING, VENTILATING AND AIR CONDITIONING HUMIDISTAT
I.D.	INSIDE DIAMETER
IN.	INSIDE
IND.	INDIRECT INDUCTION UNIT
INV.	INVERT
	INVERT ELEVA-TION
INSUL. INT.	INSULATION INTERIOR
J.R.	JANITOR'S RECEPTOR
K.EC. L.	KITCHEN EQUIPMENT CONTRACTOR
L. LAB	LABORATORY
L.A.T.	
LAV LH	LAVATORY LEFT HAND
LPS	LOW PRESSURE STEAM
LV'G. LWT	LEAVING LEAVING WATER TEMP.
M.A.	MIXED AIR
	MANUAL DAMPER MATERIAL
MAT. MAX.	
MBH	THOUSAND BTU PER HOUR
MECH. MET/MTL.	MECHANICAL METAI
MEZZ.	MEZZANINE
MFR. MH	MANUFACTURER MANHOLE
MIN.	MINIMUM
MISC. M.O.	
M.O. MPS	MOTOR OPERATED MEDIUM PRESSURE STEAM
MS	
MTD./MT. N2	MOUNTED/MOUNT NITROGEN
N.I.C.	NOT IN CONTRACT
NO./# NOM.	NUMBER NOMINAL
NOM. N.T.S.	NOMINAL NOT TO SCALE
N2O	NITROUS OXIDE
0. 0.A.	OXYGEN OUTSIDE AIR
O/C	ON CENTER
O.D. O.I.	OUTSIDE DIAMETER OIL INTERCEPTOR
OPG.	OPENING
OPP.	OPPOSITE
OU./OZ. O.V.	OUNCE OUTLET VELOCITY
P.	PROPANE
P.C. P.D.	
P.I.V.	
P/L	PROPERTY LINE
PLBG. PNEU.	PLUMBING PNEUMATIC
PRESS.	PRESSURE
PRV PROP.	PRESSURE REDUCING VALVE PROPELLER
PSI	POUNDS PER SQUARE INCH
PSIG PSF	POUNDS PER SQUARE INCH GAUGE POUNDS PER SQUARE FOOT
PSF PT	PLASTER TRAP
R R	
R.A. RAD.	RETURN AIR RADIUS/RADIATION/RADIATOR
R.D.	ROOF DRAIN
RECIRC. REG.	RECIRCULATING REGISTER
REINF.	-
REL.	RELIEF
REQ'D. RH	REQUIRED RIGHT HAND
RHC	REHEAT COIL
RM. RPM	ROOM REVOLUTIONS PER MIN-UTE
RWC	RAINWATER CONDUC-TOR
RW R/W	RAW WATER RIGHT OF WAY
S.	SINK
S.A. S.A.	SHOCK ABSORBER SUPPLY AIR
SAN.	SANITARY SEWER
SB	SHAMPOO BOWL
SD SD	SMOKE DETECTOR SHOWER DRAIN
S. DPR.	
SECT. S.F.	SECTION SQUARE FEET
SHR.	SHOWER
SHT. SHT. MT'L	SHEET SHEET METAL
S.M., S/M	SHEET METAL
S.P.	STATIC PRESSURE

SPEC. SQ. SQ.FT. S & R S.S. S.S. S.S., S/S STAI ST STAT STD. STL. STM. SUCT./S SW. SW TD TEMP. THERM. T'STAT T.W. TYP. UC UH UR UV VAC. VC VCP VERT. VIB. ISO. VSP V.T.R. W. W/ WAT. WB WC W.G. WH WH WO W/O W/W

XFMR

YD.

ΥH

SPECIFICATION				
	——— HS ———	HEATING WATER SUPPLY PIPING	, <del>k</del>	
SERVICE SINK	———— HR ————	HEATING WATER RETURN PIPING		PRESSURE REDUCING VALVE RIGHT
STORM SEWER	CHS	CHILLED WATER SUPPLY PIPING	4	
	— — CHR — —	CHILLED WATER RETURN PIPING		PRESSURE REDUCING VALVE LEFT
THERMOSTAT	CWS	CONDENSER WATER SUPPLY PIPING		
STANDARD	— — CWR — —	CONDENSER WATER RETURN PIPING	●	GAGE COCK
			$\mathcal{A}$	
SUCTION			$\square$	SAFETY RELIEF VALVE
SWITCH	MPS	MEDIUM PRESSURE STEAM PIPING		
	——— HPS ———	HIGH PRESSURE STEAM PIPING		ANGLE VALVE
TEMPERATURE	LP COND	LOW PRESSURE CONDENSATE PIPING		
THERMOMETER/ THERMOSTAT THERMOSTAT	MP COND	MEDIUM PRESSURE CONDENSATE PIPING		STRAINER (WITH BLOWDOWN)
TEMPERED WATER TYPICAL	HP COND	HIGH PRESSURE CONDENSATE PIPING		PIPE FLANGES
UNDERCUT	CPD	CONDENSATE PUMP DISCHARGE PIPING		PIPE UNION
UNIT HEATER URINAL	REF	REFRIGERANT LIQUID LINE PIPING		FLEXIBLE PIPE CONNECTOR
	COND	AIR CONDITIONER CONDENSATE PIPING	<u> </u>	AIR VENT, AUTO. OR MANUAL AS NOTED
VACUUM	DEMO	PIPING TO REMOVE		PIPE SLEEVE
VITRIFIED CLAY PIPE	EXIST	EXISTING PIPING	——————————————————————————————————————	PIPE ANCHOR
		BALL VALVE	<b>&gt;</b>	CONCENTRIC REDUCER
VITRIFIED SEWER PIPE		GATE VALVE		ECCENTRIC REDUCER
WIDTH OR WATER		COMBO BALANCING SHUTOFF VALVE	<b>—</b>	DIRECTION OF FLOW INDICATOR
		CHECK VALVE	Ţ	STEAM TRAP
WET BULB WATER CLOSET		DRAIN VALVE	►	PIPE DROP
WATER GAUGE		BUTTERFLY VALVE	<b>→</b> -c0	PIPE RISE
		LOCKSHIFLD VALVE	Y	PRESSURE/ TEMPERATURE TAP
WASTE OIL			Π	THERMOMETER
WITHOUT WALL TO WALL			T	PRESSURE GAUGE
TRANSFORMER				
YARD HYDRANT		3-WAT MOTOR OF ERAILD VALVE		THERMOSTAT
		2-WAY MOTOR OPERATED VALVE		THERMOSTAT WITH INSULATED BASE
		SOLENOID VALVE	H	HUMIDISTAT
		3-WAY CONTROL VALVE	S	MAIN CONTROL AIR SUPPLY CO2 SENSOR DIAMETER
		2-WAY CONTROL VALVE	<b></b>	FLAT OVAL DUCTWORK
		THERMOSTATIC EXPANSION VALVE		CONNECT TO EXISTING
		HILINIUSTATIO EAFANSIUN VALVE		
	SQUARE SQUARE FEET SUPPLY & RETURN SERVICE SINK STORM SEWER STAINLESS STEEL SOUND TRAP THERMOSTAT STANDARD STEEL STORM SUCTION SWITCH SOFTENED WATER TEMPERATURE DIFFERENCE TEMPERATURE THERMOMETER/ THERMOSTAT THERMOSTAT TEMPERED WATER TYPICAL UNDERCUT UNIT HEATER URINAL UNIT VENTILATOR VENT VACUUM VACUUM VACUUM VACUUM CLEANING VITRIFIED CLAY PIPE VERTICAL VIBRATION ISOLATOR VITRIFIED CLAY PIPE VERTICAL VIBRATION ISOLATOR VITRIFIED SEWER PIPE VENT THRU ROOF WIDTH OR WATER WITH WATER WET BULB WATER CLOSET WATER GAUGE WALL HYDRANT WATER HEATER WASTE OIL WITHOUT WALL TRANSFORMER YARD	SQUARE         SQUARE FEET         SUPPLY & RETURN         SERVICE SINK         STAINLESS STEEL         SOUND TRAP         THERMOSTAT         STEEL         STERL         STEEL         STAINDARD         STEEL         STANDARD         STEEL         SUCTION         SWITCH         SOFTENED WATER         TEMPERATURE DIFFERENCE         TEMPERATURE DIFFERENCE         THERMOSTAT         THERMOSTAT         THEMPERATURE DIFFERENCE         THEMPERATURE DIFFERENCE         THEMPERATURE DIFFERENCE         THERMOSTAT         THERMOSTAT         THERMOSTAT         THEMPERED WATER         TYPICAL         UNIT VENTILATOR         VENT         VACUUM CLEANING         VITRIFIED CLAY PIPE         VENT THRU ROOF         WITH         WATER         VENT THRU ROOF         WITH         WATER CLOSET         WATER COIL         WATER HEATER         WATER COLSET         WATER HEATER         WATER COL	SPECIFICATION SQUARE SQUARE FET SQUARE FET SQUARE FET SUMARE FET SERVICE SINK STANDARD STORM SEWER STANDARD STANDARD STANDARD STELL STANDARD STELL STANDARD STELL STORM SUNT THE MALE STELL STORM SUNT THE STANDARD S	SOUARE EVENT SUPPLY PIPING SUPPLY & RETURN SUPPLY A RETURN STORM AS WERK STORM AS WERK STOR

# HVAC SHEET INDEX

H0 H1 H4

HVAC GENERAL NOTES, SYMBOLS, ABBREVIATIONS, AND SCHEDULES HVAC FLOOR PLANS HVAC SPECIFICATIONS

GRILLE, REGISTER & DIFFUSER SCHEDULE BASED ON TITUS										
TAG	LOCATION	FUNCTION	MODEL NUMBER	FACE SIZE	FRAME TYPE	LOUVER TYPE	MATERIAL	FINISH	DAMPER	REMARKS
D-1	CEILING	SUPPLY	OMNI	20" x 20"	SURFACE	FIXED	STEEL	TAN/LIGHT BROWN	YES	1,2,3

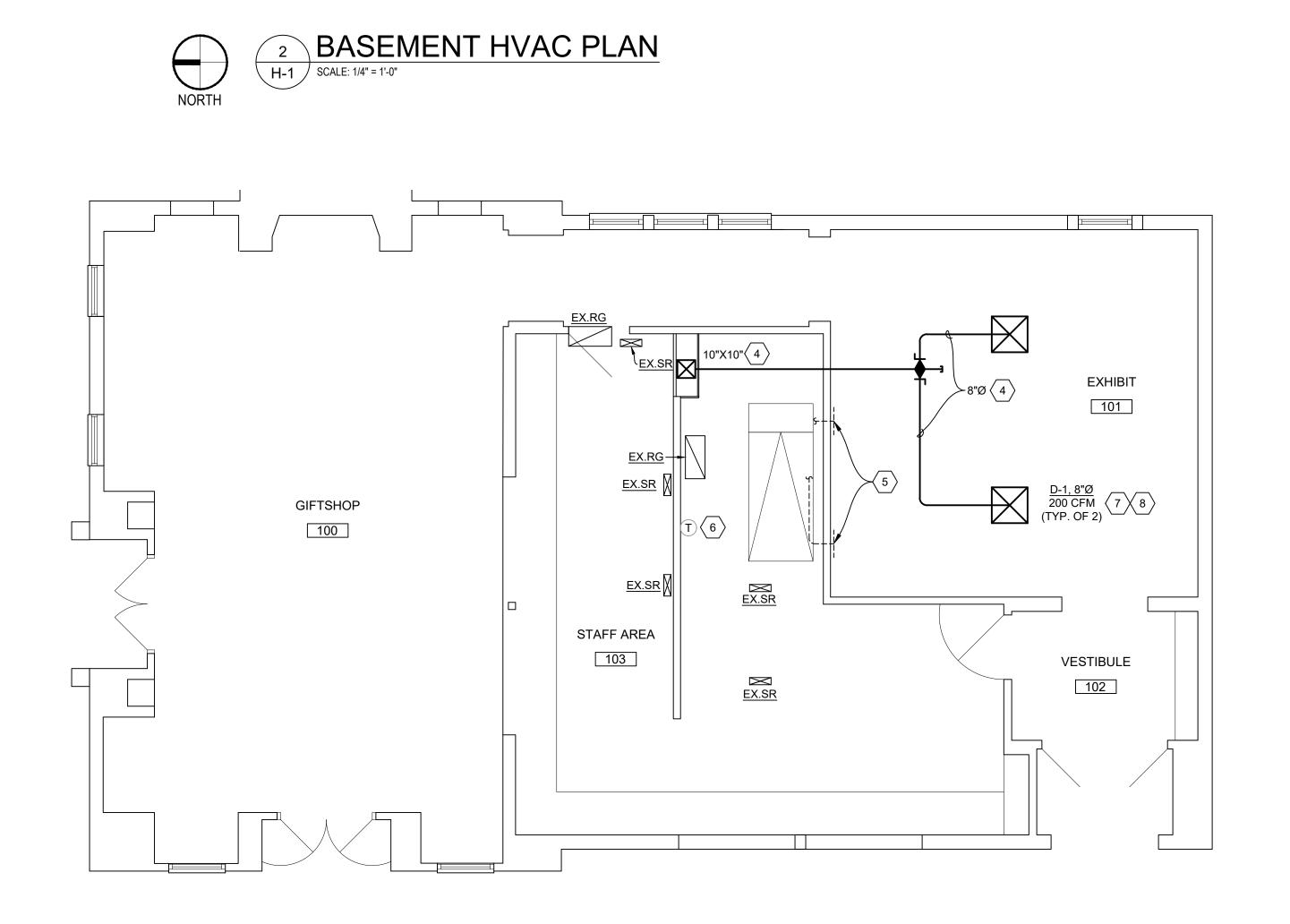
HVAC GENERAL NOTES

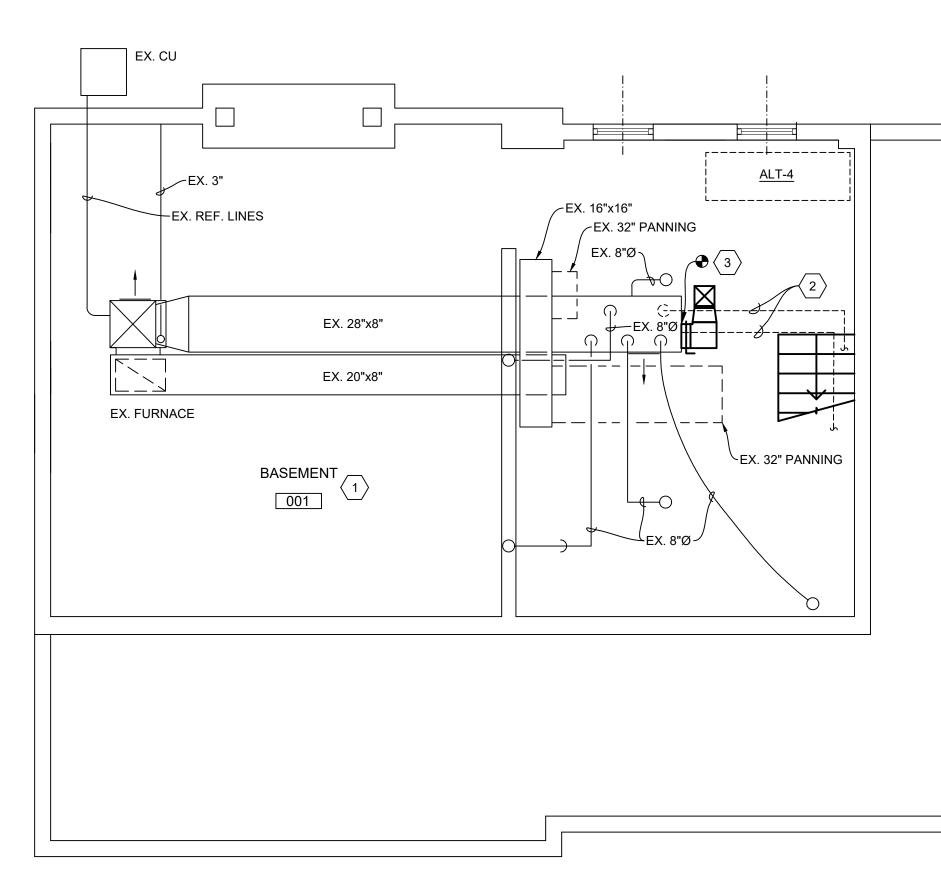
- A. ALL WORK SHALL BE PROVIDED IN ACCORDANCE WITH CURRENT VERSION OF ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS DETERMINED BY THE AUTHORITY HAVING JURISDICTION (AHJ).
- B. ALL EQUIPMENT AND APPLIANCES INSTALLED ON THIS PROJECT SHALL BEAR THE LABEL OF AN APPROVED TESTING AGENCY, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- C. PROTECT ALL EQUIPMENT AND MATERIALS DURING CONSTRUCTION FROM DAMAGE BY WEATHER, WATER, DIRT, AND OTHER CONSTRUCTION ACTIVITIES.
- D. UPON COMPLETION OF WORK, ALL MATERIAL AND EQUIPMENT SHALL BE THOROUGHLY CLEANED OF STICKERS, DIRT, GREASE, RUST, OIL, AND OTHER FOREIGN MATTER.
- E. THIS CONTRACTOR SHALL ARRANGE FOR AND CONDUCT ALL INSPECTIONS, TESTS, AND APPROVALS OF ITS WORK AND BEAR ALL COSTS FOR SAME.
- F. ALL DUCTWORK SHALL BE CONSTRUCTED PER SMACNA "HVAC DUCT CONSTRUCTION STANDARDS -METAL & FLEXIBLE", LATEST EDITION. G. DUCT LAYOUT IS SCHEMATIC; PROVIDE DUCT RISERS, DROPS, OFFSETS, TRANSITIONS, ETC. AND ALL FITTINGS
- NECESSARY TO INSTALL DUCT SYSTEM. INCLUDE TURNING VANES, EXTRACTORS, SPLITTER DAMPERS, VOLUME DAMPERS, ACCESS DOORS, FLEXIBLE DUCTS & CONNECTIONS, AS REQUIRED. H. ALL SUPPLY AIR DUCTS SHALL BE WRAPPED WITH 2" THICK, 1 LB. DENSITY FLEXIBLE FIBERGLASS BLANKET INSULATION
- WITH REINFORCED FOIL & KRAFT VAPOR BARRIER FACING. SEAL JOINTS WITH 2" WIDE VAPOR BARRIER TAPE. FOR UNHEATED AREAS ABOVE CEILING INSULATION, ADD AN ADDITIONAL 2" OF DUCT WRAP. I. CEILING DIFFUSERS SHALL HAVE AN INSULATION BLANKET ON THE ATTIC SIDE FOR CONTROL OF CONDENSATION.

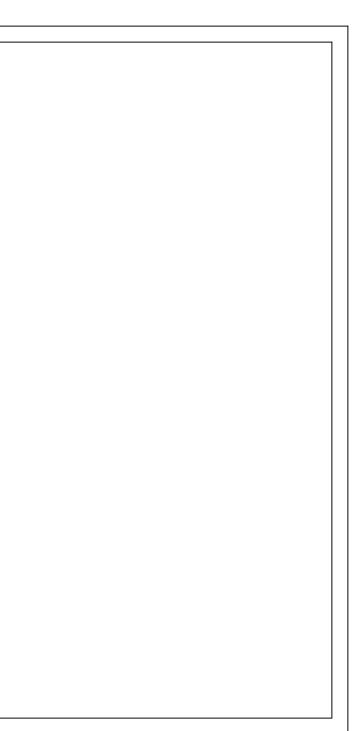
No.		Description		Date		
┣───						
	OHIO HISTORY CONNECTION					
	800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
	SERPENT MOUND MUSEUM UPGRADES					
HVAC GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND SCHEDULES						
Drawn I	oy: TW/EC	Checked by: TW	OHC Project No.			
Date		11/8/2024	CP2308			



T FIRST FLOOR HVAC PLAN H-1 SCALE: 1/4" = 1'-0"







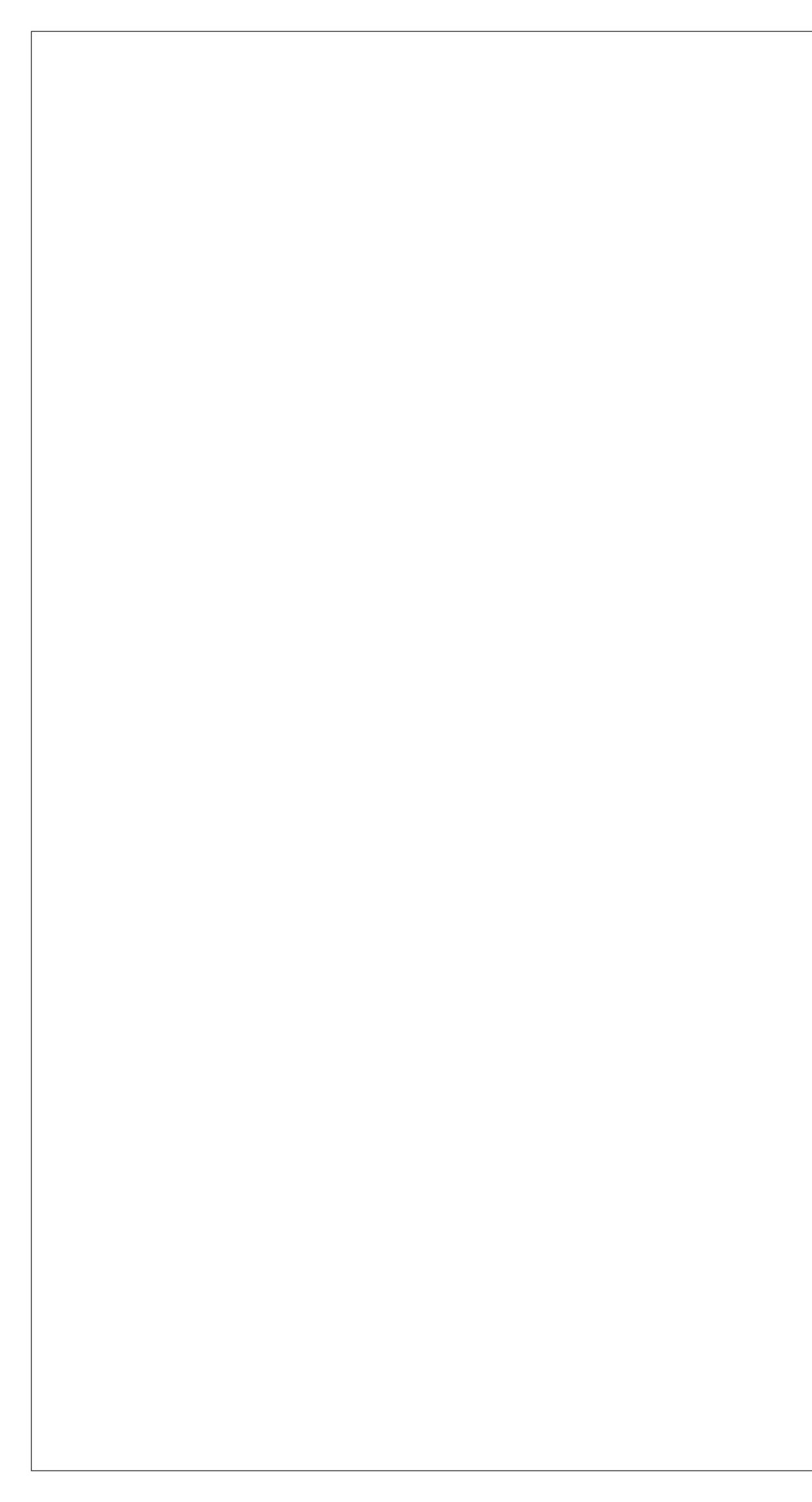
- <u>GENERAL HVAC NOTES:</u> A. ALL EXISTING CONDITIONS TO REMAIN EXCEPT AS NOTED.
- B. COORDINATE ALL CUTTING OF WOOD CEILING PANELS WITH GENERAL TRADES CONTRACTOR. COORDINATE WITH ROOF TRUSSES. C. AIR DEVICES SHALL HAVE CONCEALED MOUNTING HARDWARE, NO VISIBLE
- FASTENERS. D. BUILDING IS NATURALLY VENTILATED. OPERABLE WINDOW AND DOOR OPENINGS COMPRISE 15% OF OCCUPIED FLOOR AREA.

HVAC CODED NOTES: 1. NO WORK IN THIS ROOM /AREA.

- 2. REMOVE EXISTING DUCT AND PATCH TRUNK DUCT. 3. NEW 12"X8" TO 10"X10" UP THRU FIRST FLOOR TO ATTIC.
- 4. NEW DUCT IN ATTIC ABOVE .
- 5. REMOVE EXISTING LOW SIDEWALL 14"x4" REGISTERS. GENERAL
- TRADES CONTRACTOR TO PATCH UNUSED OPENINGS. 6. EXISTING THERMOSTAT TO REMAIN. NOT IN SCOPE.
- 7. COORDINATE FINAL LOCATION OF NEW CEILING DIFFUSERS WITH LIGHT FIXTURE LAY-OUT. NEW CEILING DIFFUSERS TO BE PAINTED IN THE FIELD. PROVIDE TAN/LIGHT BROWN PAINT SAMPLES TO ARCHITECT FOR APPROVAL. PREP ALL SURFACES TO BE PAINTED PRIOR PAINTING TO INSURE PROPER ADHESION. PAINT ONLY WITH SPRAY PAINT, MINIMUM TWO (2) COATS. PAINT SHALL BE THOROUGHLY DRY BETWEEN COATS AND PRIOR TO INSTALLATION.
- PROVIDE AN INSULATION BLANKET FOR TOPS OF DIFFUSERS IN THE ATTIC. SEE SPECIFICATIONS.

<u>ALTERNATE 4:</u> ADD PRICE TO REMOVE AND HAUL AWAY EXISTING ABANDONED FUEL OIL TANK.

No.		Description	Date			
	OHIO HISTORY CONNECTION					
	800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
	SERPENT MOUND MUSEUM UPGRADES					
	HV	H-1				
Drawn	by: TW/EC	Checked by: TW	OHC Project No.			
Date		11/8/2024	CP2308			



#### **HVAC GENERAL NOTES & SPECIFICATIONS**

23 00 00 HVAC SPECIFICATIONS

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES, TO INCLUDE OHIO BUILDING CODE AND OHIO MECHANICAL CODE LATEST EDITION AS ADOPTED BY ALL AUTHORITIES HAVING JURISDICTION.
- ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AS REQUIRED BY LOCAL AND STATE CODES.
   THIS CONTRACTOR SHALL ARRANGE FOR AND CONDUCT ALL INSPECTIONS, TESTS, AND APPROVALS OF ITS WORK. INSPECTIONS SHALL BE PERFORMED BY AUTHORITY HAVING JURISDICTION.
- 4. ARCHITECT SHALL SUBMIT DOCUMENTS FOR PLAN APPROVAL, AND PAY COST TO SECURE PLAN APPROVAL.
- CONTRACTOR SHALL PAY FOR ANY ADDITIONAL PERMITS OR FEES.5. PROTECT ALL MATERIALS DURING CONSTRUCTION FROM DAMAGE BY WEATHER, WATER, DIRT, AND OTHER CONSTRUCTION ACTIVITIES.
- 6. SUBMIT SHOP DRAWINGS FOR REVIEW BY ARCHITECT/ENGINEER PRIOR TO INSTALLATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS EARLY ENOUGH IN PROJECT TO ALLOW AMPLE TIME FOR REVIEW WITHOUT CAUSING TIME DELAYS OR CONFLICTS IN THE JOB PROGRESS. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND THE MANUFACTURERS LISTED ON THE DRAWINGS. SUBMITTALS SHALL BEAR THE STAMP OF THE CONTRACTOR SHOWING THAT IT IS REVIEWED AND APPROVED BY THEM AND THAT THEY ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. LACK OF SUCH CONTRACTOR APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE ARCHITECT. WHERE TRADE NAMES, BRANDS OF MANUFACTURERS OF EQUIPMENT OR MATERIALS ARE SHOWN ON THE DRAWINGS OR SPECIFICATIONS THE EXACT EQUIPMENT SHALL BE USED ON THE PROJECT. THE USE OF ANY UNAUTHORIZED EQUIPMENT OR MATERIAL SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE REQUEST OF THE OWNER, AT THE CONTRACTOR'S EXPENSE.
- 7. ROOFING IS TO BE DONE BY GENERAL CONTRACTOR.
- 8. CONTRACTOR MUST EXAMINE ALL AREAS AND CONDITIONS IN WHICH THE WORK IS TO BE DONE, AND NOTIFY THE ARCHITECT OF CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 9. MAINTAIN IN OPERATING CONDITION ALL ACTIVE UTILITIES DESIGNATED TO REMAIN. DOWNTIME MUST BE KEPT TO A MINIMUM. CONTRACTOR SHALL NOTIFY, AND OBTAIN APPROVAL FROM OWNER FOR ANY OUTAGES REQUIRED FOR THIS WORK.
- 10. CONTRACTOR SHALL LIMIT ITS ACTIVITIES TO AREAS OF THE BUILDING THAT ARE BEING RENOVATED. BUILDING ACCESS, STORAGE OF MATERIALS, DELIVERIES, PARKING, ETC. SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF SAFETY GUIDELINES TO REDUCE THE RISK OF INJURIES. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF EXCESS MATERIALS AND CLEANING OF DEBRIS ON A DAILY BASIS, AND SHALL BEAR THE COST OF SAME.
- 12. WORK SHALL BE CARRIED OUT IN A NEAT AND WORKMANLIKE MANNER SO THAT IT DOES NOT DAMAGE THE BUILDING
- 13. MISCELLANEOUS ACCESSORIES:
- A. PROVIDE ANY ADAPTERS, FITTINGS, TRIM, AND OTHER APPURTENANCES AS NECESSARY TO SECURELY INSTALL ALL ITEMS OF WORK SPECIFIED OR SHOWN ON THE DRAWINGS.B. THESE ACCESSORIES ARE REQUIRED EVEN THOUGH THEY MAY NOT BE SHOWN OR DETAILED ON THE
- DRAWINGS.C. INSTALLATION SHALL BE COMPATIBLE WITH THE BUILDING CONSTRUCTION ON WHICH THE ITEM IS TO BE
- LOCATED. D. VERIFY THE TYPE OF CONSTRUCTION PRIOR TO ORDERING THE EQUIPMENT ITEM, SO THAT ALL REQUIRED
- ACCESSORIES ARE INCLUDED. 16. CONTRACTOR TO CLEAN UP ALL CONSTRUCTION DEBRIS RESULTING FROM CONTRACTOR'S WORK AS WELL AS ALL
- WORK AREAS AFFECTED BY CONTRACTOR'S WORK. 17.UPON COMPLETION OF WORK, ALL MATERIAL AND EQUIPMENT SHALL BE THOROUGHLY CLEANED OF STICKERS,
- DIRT, GREASE, RUST, OIL, AND OTHER FOREIGN MATTER.
  18. PROVIDE ELECTRONIC COPIES OF REVIEWED SHOP DRAWINGS OF EACH EQUIPMENT ITEM TO OWNER. PROVIDE
- MARKED-UP RECORD DRAWINGS SHOWING ANY DEVIATIONS IN LOCATION OF EQUIPMENT. RECORD ADDENDUM AND CHANGE ORDER ITEMS. AT COMPLETION OF PROJECT DELIVER RECORD DRAWINGS TO ARCHITECT. PROVIDE (2) SETS OF BOUND 8-1/2" X 11" OPERATIONS AND MAINTENANCE MANUALS. 19.REQUIREMENTS FOR COMPLETION OF WORK: FOR SUBSTANTIAL COMPLETION, PROVIDE ALL REQUIRED
- OPERATING TESTS, OPERATING AND MAINTENANCE MANUALS, INSTRUCTION OF OWNER'S PERSONNEL IN OPERATION OF ALL SYSTEMS, SPARE PARTS, AND SPECIAL TOOLS.
- 20.PROVIDE (1) FULL YEAR OF GUARANTEE FROM DATE OF FINAL COMPLETION ON ALL EQUIPMENT AND WORK PERFORMED, INCLUDING ANY EXISTING SYSTEM THAT IS RE-USED. CONTRACTOR SHALL WARRANT THAT THE WORK HAS BEEN COMPLETED IN COMPLIANCE WITH ESTABLISHED CODES AND REGULATIONS. CERTIFICATE SHALL BE GIVEN TO OWNER AT PROJECT COMPLETION.

#### 23 05 00 COMMON WORK RESULTS FOR HVAC

- 1. VISIT THE SITE PRIOR TO BIDDING AND DETERMINE ALL EXISTING CONDITIONS. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND MODIFICATIONS REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- 2. BRIEF SUMMARY OF WORK: FURNISH MATERIAL, LABOR, TOOLS, ACCESSORIES, AND EQUIPMENT TO COMPLETE AND LEAVE READY FOR OPERATION ALL SYSTEMS OF THIS PROJECT AS DESCRIBED IN THESE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
- 3. EXISTING HVAC SYSTEM SHALL BE REWORKED AS REQUIRED BY THE BUILDING FLOOR PLAN.
- THE INSTALLATION SHALL BE COMPLETE IN EVERY RESPECT, PROVIDING ALL LABOR AND MATERIAL.
   THE REQUIREMENTS AS SET FORTH UNDER GENERAL CONDITIONS, INSTRUCTIONS TO BIDDERS AND GENERAL REQUIREMENTS ARE A PART OF THIS CONTRACT.
- 6. BIDS SHALL BE BASED ON A COMPLETE/FULL SET OF DRAWINGS.
- 7. CONTRACTOR MUST READ THE ENTIRE SPECIFICATIONS COVERING OTHER BRANCHES OF WORK AND IS RESPONSIBLE FOR COORDINATION OF THE WORK WITH WORK PERFORMED BY OTHER TRADES.
- MATERIALS, AND PRODUCTS, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND AS SUCH APPEAR ON THE UNDERWRITERS LABORATORIES LIST OF APPROVED ITEMS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL FIRE SUPPRESSION CODE AND OTHER APPLICABLE CODES, WHICHEVER ARE MORE STRINGENT.
- INCLUDE ANY LABOR AND MATERIALS NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO PROVIDE A COMPLETE AND FULLY OPERATIVE FIRE SUPPRESSION SYSTEMS
   CUTTING AND PATCHING: GENERAL TRADES CONSTRUCTOR SHALL PATCH FLOORS, CEILING AND WALLS IN
- AREAS OF REMOVED AIR DEVICES. CONTRACTOR SHALL CUT EXISTING CEILING AND PATCH FOR NEW AIR DEVICES. PATCH TO MATCH ADJACENT SURFACES. CONTRACTOR SHALL PROVIDE PAINTING. 11. ALL DUCTWORK SHALL BE CONSTRUCTED PER SMACNA "HVAC DUCT CONSTRUCTION STANDARDS -METAL &
- FLEXIBLE," LATEST EDITION. 12.DUCT LAYOUT IS SCHEMATIC; PROVIDE DUCT RISERS, DROPS, OFFSETS, TRANSITIONS, ETC. AND ALL FITTINGS NECESSARY TO INSTALL DUCT SYSTEM. INCLUDE TURNING VANES, EXTRACTORS, SPLITTER DAMPERS, VOLUME DAMPERS, ACCESS DOORS, FLEXIBLE DUCTS & CONNECTIONS, AS REQUIRED.
- 13. DUCT SIZES SHOWN ARE NET INSIDE DIMENSIONS.
- 14. MAKE FINAL CONNECTIONS TO SUPPLY AIR DIFFUSERS IN CEILINGS WITH INSULATED FLEXIBLE DUCT; MAXIMUM 5'-0" AND ONE 90° ELBOW.
- 15. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE WORK OF OTHER CONTRACTORS, OR THE BUILDING, OR ITS CONTENTS, PEOPLE, ETC., CAUSED BY LEAKS IN ANY PIPING OR EQUIPMENT, INSTALLED OR REUSED, THROUGH EQUIPMENT FAILURE AND SHALL MAKE, AT IT'S OWN EXPENSE, ALL REPAIRS TO MERCHANDISE, FIXTURES, AND EQUIPMENT SO DAMAGED.

#### 23 05 29 HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT

- 1. ATTACH ALL ITEMS OF EQUIPMENT SECURELY TO STRUCTURE, FLOOR, OR CONCRETE PAD.
- 2. PROVIDE SUPPORT STEEL, ATTACHED TO BUILDING STRUCTURE, AS NECESSARY, TO SUPPORT SMALLER HVAC EQUIPMENT ITEMS. PROVIDE SUPPORTS BETWEEN STRUCTURAL MEMBERS, SUCH AS STEEL ANGLES, CHANNELS, STRUT CHANNELS, ETC., AS REQUIRED.
- 3. FOR ANY VARIATION IN SUPPORTS NEEDED FOR EQUIPMENT ACTUALLY PURCHASED, CONTRACTOR SHALL BEAR
- ALL COSTS OF MODIFICATIONS, INCLUDING REDESIGN COSTS.
- 4. PROVIDE ANGLES, CLIPS, MECHANICAL FASTENERS, REINFORCEMENT STEEL, DRILLING OF STRUCTURE, ETC. AS NEEDED. MEANS OF ATTACHMENT SHALL BE APPROVED BY ARCHITECT AND SHALL NOT DEGRADE STRUCTURE.
- 5. PROVIDE HANGERS AND SUPPORTS REQUIRED FOR DUCTWORK, INSTALLED UNDER HVAC CONTRACT.
- 6. PROVIDE ALL NECESSARY INSERTS, EXPANSION SHIELDS, BEAM CLAMPS, DUCT FLOOR SUPPORTS, AND AUXILIARY STEEL.
- 7. COMPONENTS SHALL BE SELECTED AND MATCHED TO LOAD IMPOSED ON THEM.
- INSTALL ALL NECESSARY HANGERS, SUPPORTS, CLAMPS, WALL BRACKETS, AND ATTACHMENTS AS REQUIRED:
   A. TO PROPERLY SUPPORT DUCTWORK FROM BUILDING STRUCTURE.
- 13. INSTALL HANGERS AND SUPPORTS WITH ALL NECESSARY INSERTS, BOLTS, RODS, NUTS, WASHERS, AND OTHER ACCESSORIES, ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 14. USE A SEPARATE HANGER FOR EACH DUCT. DO NOT HANG ONE DUCT FROM ANOTHER.15. PROVIDE ADDITIONAL SUPPORTS AS NECESSARY TO MAINTAIN DUCT ALIGNMENT.
- 16. SPACING OF SUPPORTS: MAXIMUM SPACING OF SUPPORTS SHALL BE IN ACCORDANCE WITH INDUSTRY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

#### 23 07 00 HVAC INSULATION

 PROVIDE INSULATION FOR NEW WORK. INSULATE FOLLOWING ITEMS: INTERIOR RECTANGULAR OR ROUND DUCTWORK: INSULATE DUCTS AND TOP OF CEILING DIFFUSERS IN ATTIC WITH TWO LAYERS OF 2" FSK DUCT WRAP. 23 31 13 METAL DUCTS

1. CONSTRUCT GALVANIZED STEEL SHEET METAL SYSTEM TO MEET LATEST SMACNA AND ASHRAE STANDARDS. INSTALL FABRICATED ADJUSTABLE EXTRACTOR AT RECTANGULAR SUPPLY TAKE-OFFS. PROVIDE FLEXIBLE CONNECTIONS FOR SUPPLY AND RETURN DUCT CONNECTIONS TO UNITS. SEAL ALL JOINTS TO PROVIDE AIRTIGHT DUCT SYSTEMS. SECURELY HANG ALL DUCTS FROM STRUCTURE. ALL DUCTS 2" PRESSURE CLASS.

23 37 00 AIR OUTLETS AND INLETS

 GRILLES, REGISTERS, AND DIFFUSERS: BASED ON TITUS OMNI WITH SURFACE MOUNTING FRAME. EQUAL PRICE, ANEMOSTAT, AIR GUIDE, METALAIRE, KRUEGER, CANES OR TUTTLE & BAILEY. NECK SIZE AND CFM AS INDICATED ON THE DRAWINGS. CONTRACTOR TO PAINT IN THE FIELD. PROVIDE ARCHITECT WITH TAN/LIGHT BROWN COLOR SAMPLES FOR APPROVAL.

No.		Date				
	OHIO HISTORY CONNECTION 800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
SERPENT MOUND MUSEUM UPGRADES						
Drawn	HVA	H-4				
	by: TW/EC	Checked by: TW	OHC Project No.			
Date		11/8/2024	CP2308			

#### GENERAL ABBREVIATIONS

Α.	COMPRESSED AIRAB. ABOVE
A.D.	ACCESS DOOR
A.D. A.F.F.	AREA DRAIN ABOVE FINISHED FLOOR
AH ALT.	AIR HANDLER ALTERNATE
ALUM.	ALUMINUM
	ACCESS PANEL APPROXIMATELY
ARCH. ARR'T.	ARCHITECT ARRANGEMENT
AUTO.	AUTOMATIC
AV @	ACID VENT AT
AW &	ACID WASTE AND
2	ANGLE
BAL. B.D.D.	BALANCING BACKDRAFT DAMPER
BFP BHP	BACKFLOW PREVENTER BRAKE HORSEPOWER
BLDG.	BUILDING
BSMT.	BASEBOARD RADIATION BASEMENT
В.Т. В.Т.	BATH TUB BLACKTOP
BTM. BTU	BOTTOM BRITISH THERMAL UNIT
B.V.	BACKWATER VALVE
CAB. CAP.	CABINET CAPACITY
C.B. C/C	CATCH BASIN CENTER TO CENTER
CEIL./CLG.	CEILING
CFH CFM	CUBIC FEET PER HOUR CUBIC FEET PER MINUTE
CHEM. C.I.	CHEMICAL CAST IRON
C/L	CENTERLINE CLEANOUT
C.O. COL.	COLUMN
COMB. CONC.	COMBINATION CONCRETE
COND. CONN.	CONDENSATE/CONDENSER CONNECTION/CONNECT
CONST.	CONSTRUCTION
	CONTRACTOR CONVECTOR/CONVERTER
COORD. CUH	COORDINATE CABINET UNIT HEATER
CU. FT.	CUBIC FEET
D. DB	DEEP DRY BULB
DBL DCW	DOUBLE DOMESTIC COLD WATER
	DETAIL DEGREES FAHRENHEIT
D.F.	DRINKING FOUNTAIN
DHW DHWR	DOMESTIC HOT WATER DOM. HOT WATER RETURN
dia. Or ø Diff.	DIAMETER DIFFUSER
DIM.	DIMENSION
	DISCHARGE DOOR LOUVER
D.M. DN	DAMPER MOTOR DOWN
DPR. DR.	DAMPER
D.S.	DOOR DOWNSPOUT
DW DWH	DISTILLED WATER DOMESTIC WATER HEATER
DWV DWG.	DRAIN, WASTE AND VENT DRAWING
EA.	EACH
E.A.T. E.C.	
EFF ELEC	EFFICIENCY ELECTRIC, ELECTRICAL
	ELEMENT
EMERG.	ELEVATION EMERGENCY
ENGR. ENT.	ENGINEER ENTERING
EQUIP.	EQUIPMENT EXTERNAL STATIC PRESSURE
E.T.	EXPANSION TANK
EW EWC	EYE WASH ELECTRIC WATER COOLER
	ENTERING WATER TEMP. EXHAUST
EXIST. EXT.	EXISTING EXTERIOR
F.	FAN
F. FD	FIRE FLOOR DRAIN
F.D. F F	FIRE DAMPER FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FOOD SERVICE EQUIPMENT CONTRACTOR
F.H.	FIRE HYDRANT
	FIRE HOSE CABINET FIRE HOSE/EXTINGUISHER CABINET
FIG. FIN.	FIGURE FINISH
FIN. RAD.	FINNED RADIATION
FLEX. FLR./FL.	FLOOR
FPM F & T	FEET PER MINUTE FLOAT & THERMOSTATIC
ГІ.	FEET FEET OF HEAD
FOR	FUEL OIL RETURN
FOS FPC	FUEL OIL SUPPLY FIRE PROTECTION CONTRACTOR
FURN F.V	FURNISH(ED) FLUSH VALVE

ALV.	GAS GALVANIZED
.C.	GENERAL CONTRACTOR
EN. .I.	GENERAL GREASE INTERCEPTOR
PM	GALLONS PER MINUTE
R RAV.	GRILLE GRAVITY
.T.C. ./HT.	GENERAL TRADES CONTRACTOR HEIGHT
AC	HEATING AND AIR CONDITIONING
B ORIZ.	HOSE BIBB HORIZONTAL
Р	HIGH PRESSURE
P PS	HORSEPOWER HIGH PRESSURE STEAM
.S.	HAIR STRAINER
TG. TR.	HEATING HEATER
V	HEATING & VENTILATING
V VAC	HIGH VELOCITY HEATING, VENTILATING AND AIR CONDITIONING
'STAT	HUMIDISTAT
). I.	INSIDE DIAMETER INSIDE
ID.	INDIRECT
ID. U. IV.	INDUCTION UNIT INVERT
ISUL. IT.	INSULATION INTERIOR
R. .EC.	JANITOR'S RECEPTOR KITCHEN EQUIPMENT CONTRACTOR
	LENGTH
AB A.T.	LABORATORY LEAVING AIR TEMPERATURE
4V	LAVATORY
H PS	LEFT HAND LOW PRESSURE STEAM
√'G.	LEAVING
W.T. .A.	LEAVING WATER TEMP. MIXED AIR
AN. DPR.	MANUAL DAMPER
AT. AX.	MATERIAL MAXIMUM
BH	THOUSAND BTU PER HOUR
ECH. ET/MTL	MECHANICAL METAL
EZZ. FR.	MEZZANINE MANUFACTURER
IFR. IH	MANUFACTORER
IN. ISC.	MINIMUM MISCELLANEOUS
.0.	MOTOR OPERATED
IPS IS	MEDIUM PRESSURE STEAM MOTOR STARTER
TD./MT.	MOUNTED/MOUNT
2 .I.C.	NITROGEN NOT IN CONTRACT
O./#	NUMBER
OM. .T.S.	NOMINAL NOT TO SCALE
<sub>2</sub> O	NITROUS OXIDE
.A.	OXYGEN OUTSIDE AIR
/C .D.	ON CENTER OUTSIDE DIAMETER
.D. .l.	OIL INTERCEPTOR
PG. PP.	OPENING OPPOSITE
U./OZ.	OUNCE
V.	OUTLET VELOCITY PROPANE
.C.	PLUMBING CONTRACTOR
.D. .I.V.	PRESSURE DROP POST INDICATOR VALVE
/L	
LBG. NEU.	PLUMBING PNEUMATIC
RESS. RV	PRESSURE PRESSURE REDUCING VALVE
ROP.	PROPELLER
SI SIG	POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH GAUGE
SF	POUNDS PER SQUARE FOOT
Т	PLASTER TRAP REGISTER
.A.	RETURN AIR
AD. .D.	RADIUS/RADIATION/RADIATOR ROOF DRAIN
ECIRC.	RECIRCULATING
EG. EINF.	REGISTER REINFORCED
EL. EQ'D.	RELIEF REQUIRED
Н	RIGHT HAND
HC M.	REHEAT COIL ROOM
PM	REVOLUTIONS PER MINUTE
WC W	RAINWATER CONDUCTOR RAW WATER
/W	RIGHT OF WAY
.A.	SINK SHOCK ABSORBER
.A.	SUPPLY AIR
AN. B	SANITARY SEWER SHAMPOO BOWL
D D	SMOKE DETECTOR
DPR.	SHOWER DRAIN SMOKE DAMPER
ECT. .F.	SECTION SQUARE FEET
HR.	SHOWER
HT. HT. MT'L	SHEET SHEET METAL
.M., S/M	SHEET METAL
.P.	STATIC PRESSURE

	SPECIFICATION
Q	SQUARE
Q.FT.	
& R	SUPPLY & RETURN
S.	SERVICE SINK
S.	STORM SEWER
S., S/S	STAINLESS STEEL
Γ	SOUND TRAP
ΓΑΤ	THERMOSTAT
ΓD.	STANDARD
TL.	STEEL
г <u>с.</u> ГМ.	STORM
	SUCTION
N.	SWITCH
N	SOFTENED WATER
)	TEMPERATURE DIFFER
EMP.	TEMPERATURE
HERM.	THERMOMETER/ THER
STAT	THERMOSTAT
W.	TEMPERED WATER
ΥP.	TYPICAL
2	UNDERCUT
-	UNIT HEATER
, २	URINAL
, ,	
v	VENT
AC.	VACUUM
40. ∽	VACUUM CLEANING
CP	VITRIFIED CLAY PIPE
ERT.	VERTICAL
B. ISO.	VIBRATION ISOLATOR
SP	VITRIFIED SEWER PIPE
T.R.	VENT THRU ROOF
•	WIDTH OR WATER
7	WITH
AT.	WATER
Β	WET BULB
C	WATER CLOSET
.G.	WATER GAUGE
Ή	WALL HYDRANT
Ή	WATER HEATER
0	WASTE OIL
/0	WITHOUT
	WALL TO WALL
/W	
MR	TRANSFORMER
<u>.</u>	YARD
4	YARD HYDRANT

# ELECTRICAL SYMBOLS

1. ALL SYMBOLS NOT NECESSARILY USED.

2. MOUNTING HEIGHT (M.H.) IS TO CENTERLINE OF DEVICE. 3. MOUNTING HEIGHT ON PLAN SUPERSEDES THIS SCHEDULE.

4. RTD: REFER TO DRAWING.

5. ADJUST MOUNTING HEIGHTS OF DEVICES WHICH PROTRUDE MORE THAN 4" INTO CORRIDORS AND WALKWAYS AS NECESSARY TO MEET A.D.A. CLEARANCE REQUIREMENTS.

ENCE	

## ERMOSTAT

-	TO MEET A.D.A. CLEARANCE REQUIREMENTS		
SYMBOL	ITEM	M.H.	SYMB
	SURFACE MOUNTED LIGHTING FIXTURE		FACP
	RECESSED MOUNTED LIGHTING FIXTURE		FAAF
	LIGHTING ON EMERGENCY CIRCUIT		EGA
$\bigcirc$	CEILING MOUNTED FIXTURE		
	LIGHTING ON EMERGENCY CIRCUIT		
			V
ю	WALL MOUNTED FIXTURE	RTD	SM
$\otimes$	SINGLE FACE EXIT LIGHT W/DIRECTION AR	ROW	SM
$\otimes$	DOUBLE FACE EXIT LIGHT W/DIRECTION AF	ROWS	SM
\$ \$ <sub>3</sub> \$ <sub>4</sub> \$ <sub>K</sub> \$ <sub>P</sub>	SWITCH, 3-WAY, 4-WAY, KEY, PILOT	48"	Н
\$ <sub>LV</sub>	SWITCH, LOW VOLTAGE	48"	DH
\$ <sub>PB</sub>	PUSHBUTTON SWITCH	48"	WF
\$0	SWITCHED LOADS, WIRING & CONDUIT		SS
∎⊢	PUSHBUTTON SWITCH	48"	PS
D D <sub>3</sub>	WALL DIMMER, 3-WAY	48"	TS
DLV	LOW VOLTAGE WALL DIMMER	48"	-FA-
$\Phi \oplus$	DUPLEX RECEPT.; QUADRUPLEX	18"	TV
"Φ"	SINGLE RECEPT.	18"	
	LIGHT OR DEVICE ON EMERG. CIRCUIT		H
⊂e ¶e ⊙ ⊽	FLOOR RECEPT.; FLOOR TELEPHONE OUTL	ET	
$\nabla$	TELEPHONE OUTLET	18"	→ − c
V W	TELEPHONE/DATA OUTLET	18"	
		18"	
≻— T — ≺ س			
∰ 30A	30 AMP, 208V. OUTLET	18"	
۲	SPECIAL POWER OUTLET	18" RTD	
J	JUNCTION BOX	in b	s
$\sim$	SINGLE-PHASE MOTOR		SP
	THREE-PHASE MOTOR		⊢⊚
$\boxtimes$	MAGNETIC STARTER		VC
$\boxtimes_{L}$	COMBINATION STARTER/DISCONNECT SWI	ТСН	S
	NON-FUSED DISCONNECT SWITCH		M
F LPN	FUSED DISCONNECT SWITCH (30A FUSES)		В
s <sup>30</sup>	SPEED CONTROLLER	48"	LV
T	ELECTRIC THERMOSTAT	48"	s s
	PANELBOARD TOP @	0 72"	Р
	WIRING ABOVE CEILING OR IN JOIST SPACE	Ē	WF
	WIRING UNDER FLOOR OR IN WALL		cc <sup>-</sup>
	HOME RUN TO PANEL "A", 2-POLE BRKR.		GF
A-1/3	EMERGENCY CIRCUIT		
F	MANUAL FIRE ALARM PULL STATION	48"	
	AUDIO ALARM HORN	80"	
SM SB	CEILING SMOKE DET. W/ SOUNDER BASE	0.0"	
	AUDIO/VISUAL ALARM HORN/STROBE	80"	Ψex
	AUDIO/VISUAL ALARM SPEAKER/STROBE	80"	\$ <sub>R</sub>
вþ	AUDIO ALARM BELL	80"	 
C1	CONTACTOR "C1"		 
MD	SECURITY MOTION DETECTOR	84"	тс
0S	SECURITY DOOR SWITCH		B
(N) (N)	SECURITY WINDOW SWITCH		$ $ $\oplus$
EL	ELECTRIC LOCK		GB
DR	REMOTE DOOR RELEASE	48"	⊦s
CR	CARD READER	48"	KP
	CCTV CAMERA	RTD	os
	ALARM STROBE/BEACON	80"	OS
$\stackrel{\frown}{\leftarrow}$			vs
Ψıg	ISOLATED GROUND RECEPTACLE	18"	H

SYMBOL	ITEM	M.H.
FACP	FIRE ALARM CONTROL PANEL	TOP @ 60
FAAP	FIRE ALARM ANNUNCIATOR	TOP @ 60
EGA	EMERGENCY GENERATOR ANNUNCIATOR	TOP @ 48
	AUDIO/VISUAL ALARM BELL	80"
V	VISUAL ALARM STROBE	80"
SM <sub>D</sub>	DUCT SMOKE DETECTOR	
SM	CEILING SMOKE DETECTOR	
SM <sub>SB</sub>	CEILING SMOKE DETECTOR W/ SOUNDER I	BASE
Н	HEAT DETECTOR	
DH	MAGNETIC DOOR HOLD-OPEN DEVICE	RTD
WF	WATER FLOW SWITCH	
SS	SUPERVISORY SWITCH	
PS	PRESSURE SWITCH	
TS	TAMPER SWITCH	
⊱—FA—→	FIRE ALARM SYSTEM CONDUIT	
TV	TV OUTLET	18"
≻VT	TV SYSTEM CONDUIT	
Н©	CLOCK OUTLET	80"
Ь	CLOCK	80"
← C →	CLOCK SYSTEM CONDUIT	
IM	INTERCOM MASTER	RTD
	INTERCOM STAFF STATION	48"
ΗŪ	REMOTE INTERCOM	48"
<del>، ا س</del>	INTERCOM SYSTEM CONDUIT	
S	CEILING SPEAKER	
S	TRUMPET SPEAKER	80"
SP	CEILING SOUND REINFORCEMENT SPEAKE	ER
HSP	WALL SOUND REINFORCEMENT SPEAKER	80"
VC	VOLUME CONTROL	48"
S	HORN SPEAKER	80"
	MICROPHONE JACK	RTD
В	BUZZER	80"
LV	LOW VOLTAGE TRANSFORMER	RTD
⊱s	SOUND SYSTEM CONDUIT	
ΡO	PROGRAM BELL	80"
WP	WEATHERPROOF	
ССТ	CIRCUIT	
GFI	GROUND FAULT INTERRUPTER	
$\begin{pmatrix} 1 \\ \ddots \end{pmatrix}$	BEDSIDE STATION (SINGLE, DUAL)	60"
	EMERGENCY, STAFF STATIONS	48"
>NC∢		
Ψ <sub>EX</sub> \$ <sub>EX</sub>		
\$ <sub>R</sub> \$ <sub>R</sub>	RELOCATED EXISTING DEVICE EXISTING WIRING TO REMAIN	
 тс	TIME CLOCK	RTD
B	BLANK OUTLET BOX	IT D
Ð	CONNECT TO EXISTING	
GB	SECURITY GLASS BREAK	
⊢©	SECURITY SIREN	80"
KP	SECURITY KEYPAD	48"
os vs	OCCUPANCY/VACANCY SENSOR (WALL)	
<u> </u>	OCCUPANCY/VACANCY SENSOR (CEILING)	)
VSD	DIMMING VACANCY SENSOR	
HA	AUXILIARY WALL PANEL	80"

ELECTRICAL GENERAL NOTES (APPLIES TO ALL SHEETS)

- A. STRUCTURE IS CONSIDERED HISTORICAL. ALL MODIFICATIONS TO THE STRUCTURE INCLUDING BUT NOT LIMITED TO CUTTING AND DRILLING SHALL BE COORDINATED WITH OWNER AND ARCHITECT.
- B. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL
- LIGHTING FIXTURES. C. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL EQUIPMENT AND DEVICES WITH CEILINGS, SOFFITS, DIFFUSERS, GRILLES, REGISTERS, SPRINKLERS, STRUCTURAL MEMBERS, JOISTS, METAL DECKS, BRACING, PIPING, DUCTWORK,
- HANGERS, AND MECHANICAL EQUIPMENT, ETC. D. REFER TO HVAC DRAWINGS FOR ADDITIONAL DIVISION 23 REQUIREMENTS. COORDINATE LOCATIONS OF CO2 SENSORS AND THERMOSTAT BACK BOXES. PROVIDE ALL ROUGH-INS FOR CO2 SENSORS AND THERMOSTATS AS INDICATED ON HVAC SHEETS. COORDINATE SIZES AND LOCATIONS WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN.
- E. PROVIDE FIRE CAULK AT ALL PENETRATIONS THROUGH RATED WALLS. ALL PENETRATIONS THROUGH FIRE-RATED PARTITIONS SHALL BE COMPLETELY SEALED AS PER SPECIFICATIONS, ASSOCIATED DETAILS, OR AN APPROVED UL-LISTED SYSTEM. SEE
- ARCHITECTURAL DRAWINGS FOR IDENTIFICATION DETAILS. F. ALL NEW ELECTRICAL WORK SHALL BE CONCEALED FROM VIEW (IN FINISHED AREAS). ANY CONDUIT THAT MUST BE VISIBLE SHALL BE COORDINATED AND APPROVED BY ARCHITECT PRIOR TO ROUGH-IN.
- G. ALL BRANCH CIRCUIT WIRING SHALL BE RUN ABOVE CEILING, BELOW FLOOR, OR IN WALL. NO EXPOSED WIRE OR CONDUIT IS PERMITTED, UNLESS NOTED OTHERWISE.
- H. PROVIDE UNISTRUT STEEL ANGLES, CHANNELS, STEEL WIRE HANGER SUPPORTS, HURRICANE/EARTHQUAKE ("CADDY") CLIPS, ETC. AS REQUIRED TO SECURELY MOUNT LIGHTING FIXTURES TO ELEMENTS OF THE BUILDING STRUCTURE.
- I. ALL 20 AMP, 120 VOLT, SINGLE PHASE BRANCH CIRCUIT WIRING SHALL BE (2) #12 CU, (1) #12 CU GRD. MC CABLE UNLESS NOTED OTHERWISE. CONTRACTOR SHALL UPSIZE WIRE ACCORDINGLY FOR 3% VOLTAGE DROP MAXIMUM WHERE NECESSARY. J. DISCONNECT AND REMOVE ALL ITEMS SHOWN DASHED.
- K. DISCONNECT AND REMOVE ALL EXISTING WIRING AND CONDUIT NO LONGER BEING USED.
- L. ALL 20 AMP, 125 VOLT SINGLE AND DUPLEX RECEPTACLES SHALL BE
- TAMPER-RESISTANT. M. CONTRACTOR SHALL VERIFY VOLTAGE OF ALL SWITCHES AND DIMMERS SHOWN ON DRAWINGS.

ELECTRICAL SHEET INDEX

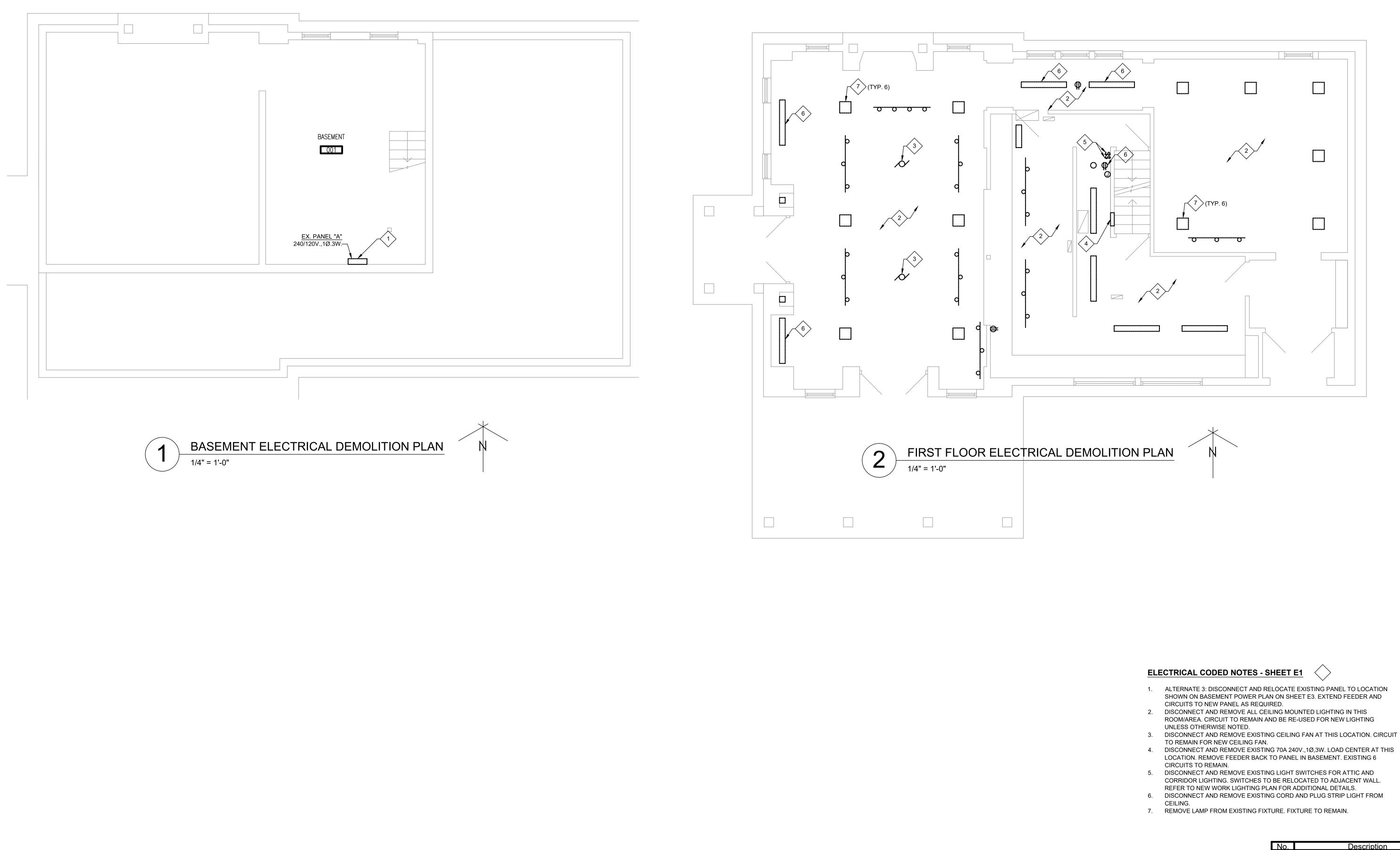
- E0 ELEC. GEN. NOTES, SYMBOLS, & ABBREVIATIONS
- E1 ELECTRICAL DEMOLITION PLANS E2 LIGHTING PLANS
- E3 POWER PLANS E4 ELECTRICAL SPECIFICATIONS

No.	Description	Date

OHIO HISTORY CONNECTION
800 EAST 17TH AVENUE, COLUMBUS, OHIO 4321

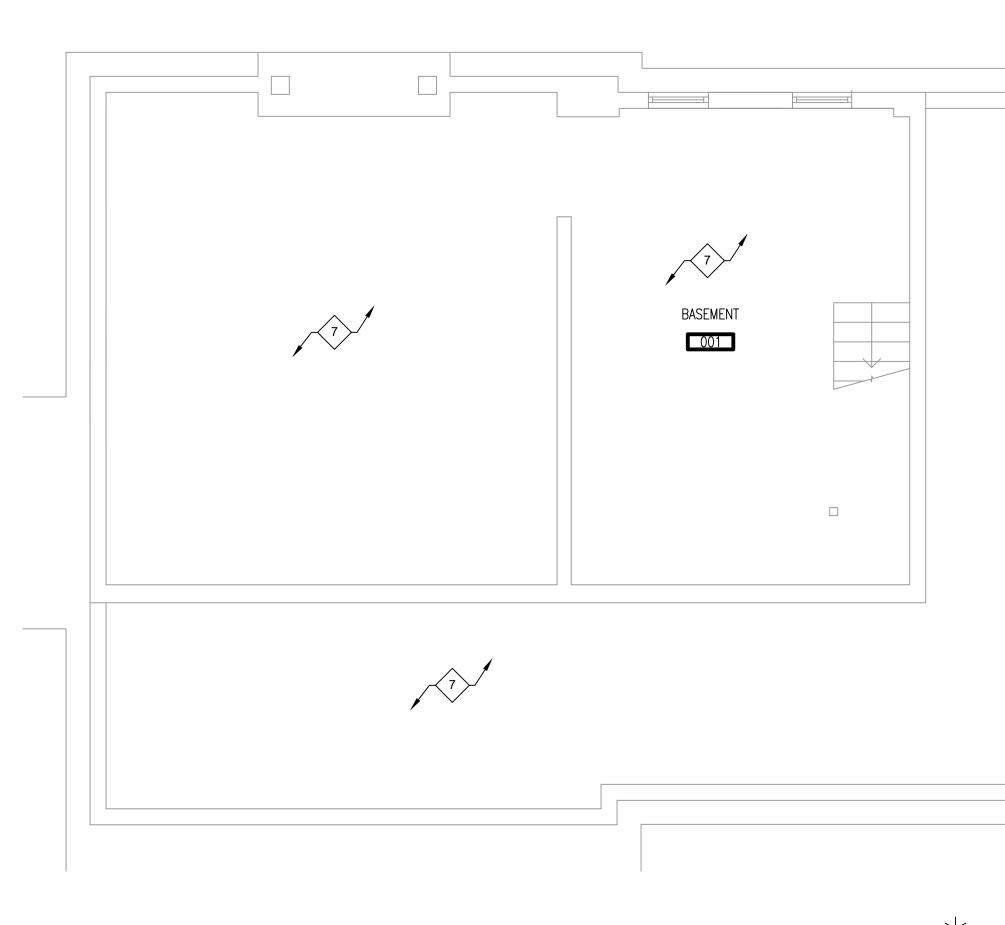
SERPENT MOUND MUSEUM UPGRADES ELEC GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND SCHEDULES Drawn by: JH/CF Checked by: JH OHC Project No. CP2308 Date 11/8/2024

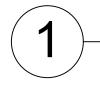
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	J





No.		Description		Date	
OHIO HISTORY CONNECTION 800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
	SERPE	SEUM			
ELE	CTRICAL	E1			
Drawn b	oy: JH/CF	Checked by: JH	OHC Project No.		
Date		11/8/2024	CP2308		



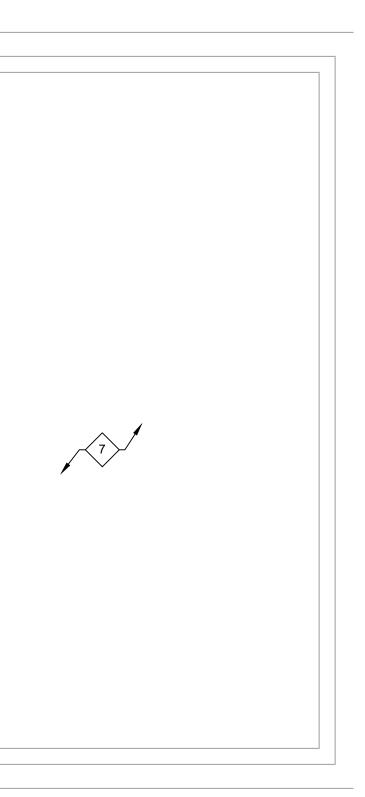


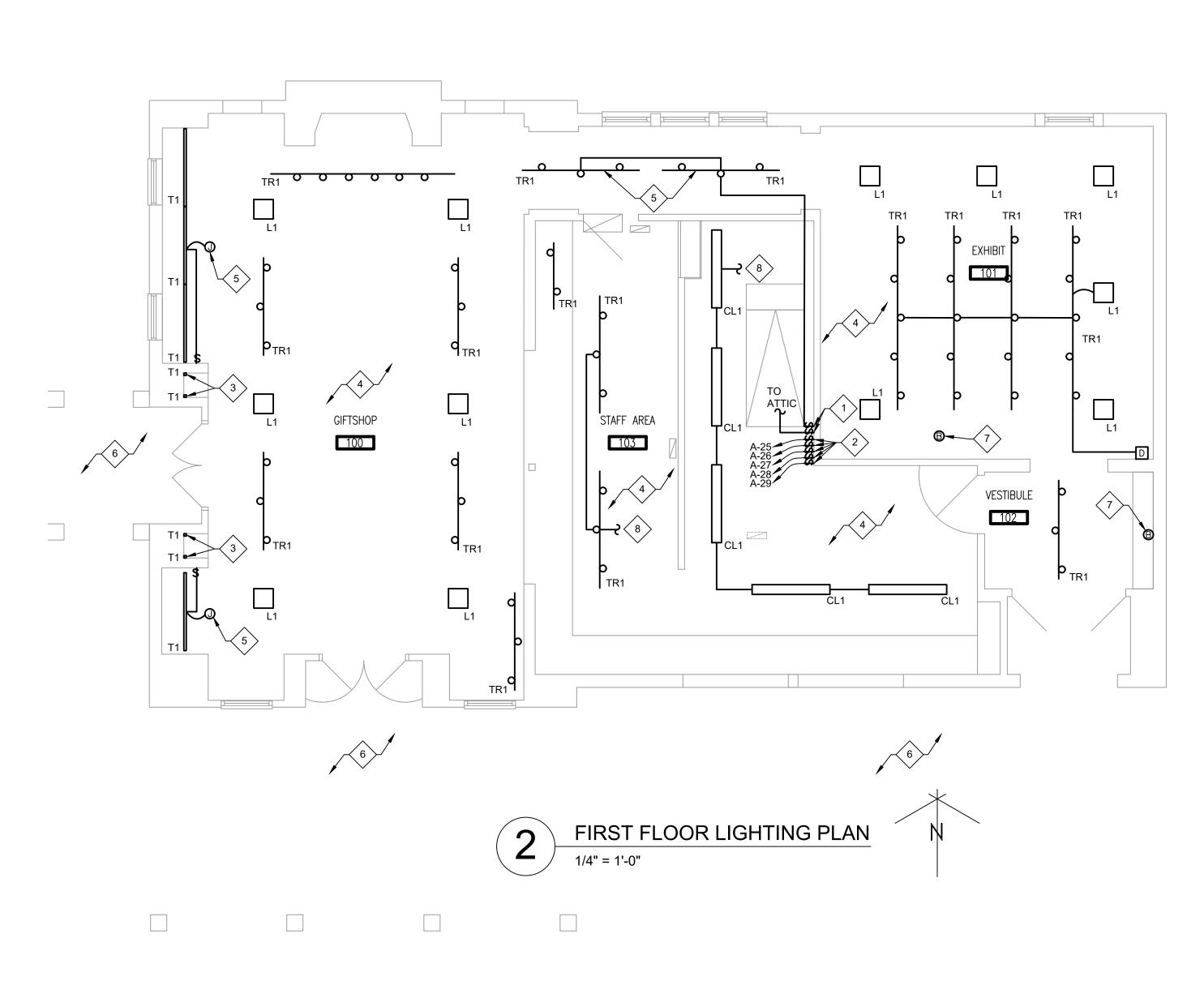
BASEMENT LIGHTING PLAN 1/4" = 1'-0"

/	× N	

	OTE: FIXTURE NUMBER, LETTER PREFIX INDICATES TYPE OF MOUNTING AS FOLLOWS: CH-CHAIN HUNG; CL-CEILING MOUNTED; S-STEM SUSPENDED; W-WALL MOUNTED; R-CEILING RECESSED; WR-WALL RECESSED; CV-COVE MOUNTED; UC- NDER CABINET; RF-ROOF MOUNTED; P-POST OR POLE; GR-							
FIXTURE TYPE	MANUFACTURER	CATALOG NO./MODEL NO.	QTY/WATTAGE/TYPE	COLOR TEMP/LUMENS	FINISH	DESCRIPTION		
CL1/CL1A	METALUX OR APPROVED EQUAL BY WILLIAMS OR CURRENT	4AWS-L3C39-UNV	1/37W/LED	4000K/4000L	WHITE	4'-0" LONG BY 5.5" WIDE SURFACE MOUNTED LED WRAP. INTEGRAL DRIVER WITH FIELD SELECTABLE LUMENS AND COLOR TEMPERATURE 90 CRI. CL1A: 2AWS-L3C3-UNV (2FT VERSION)		
_1	SOLAIS OR APPROVED EQUAL BY GREENCREATIVE, OR GE	TBD	TBD	4000K/?L	-	CONTRACTOR TO FIELD VERIFY EXISTING LAMP TYPE AND MATCH EXISTING WITH LED EQUAL. PROVIDE \$100 ALLOWANCE TO REPLACE EACH LAMP.		
Γ1	ALUZ LIGHTING OR APPROVED EQUAL BY WAC OR CON TECH	A8-ZIGY-CRN-CL-1.5W-40K-DRY	1/1.5W-FT/LED	4000K/157L-FT	WHITE	0.5" WDE TAPE LIGHT IN CORNER MOUNTED EXTRUDED CHANNEL WITH CLEAR LENS. CONTRACTOR TO VERIFY LENGTH IN FIELD. TAPE SHALL RUN THE ENTIRE HEIGHT OF THE ENCLOSURE.		
ſR1	HALO OR APPROVED EQUAL BY	L1735	1/12W/LED	4000K/1250L	BLACK	TRACK MOUNTED PAR LAMP HOLDER. PROVIDE COMPATIBLE TRACK OF EXISTING LENGTH AND SOLAIS LR30-25-40K-1250-BK LAMP.		

2. PROVIDE TENMAT HAT FOR ALL RECESSED LI

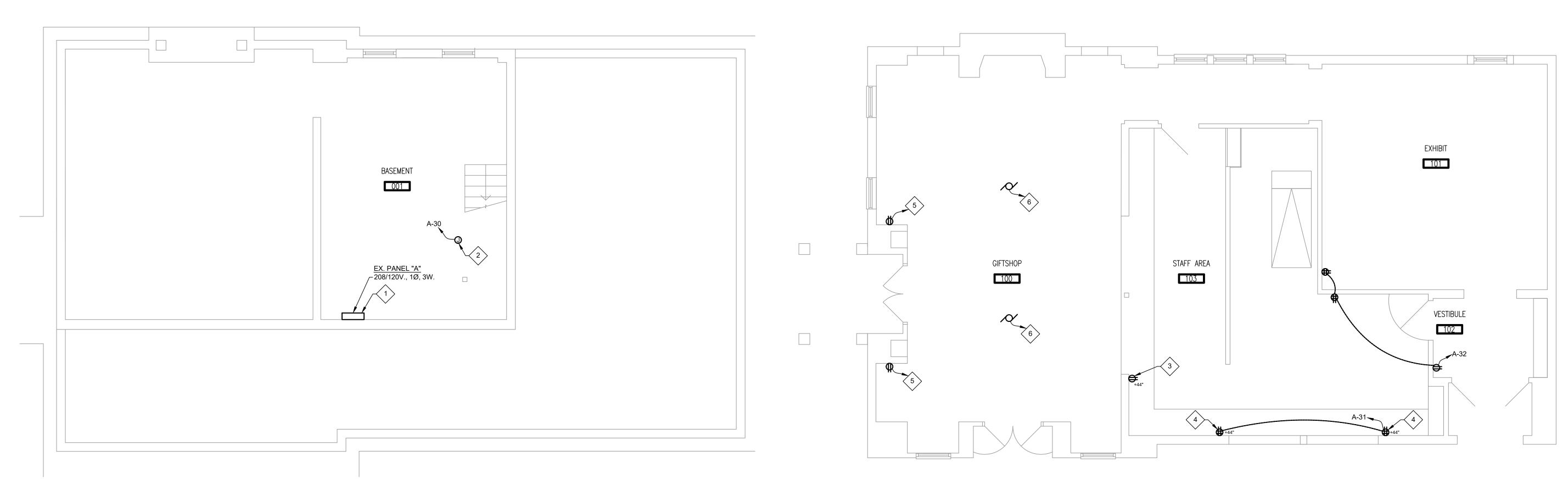


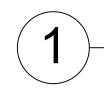


## ELECTRICAL CODED NOTES - SHEET E2

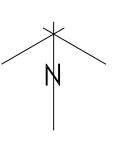
- 1. PROVIDE NEW SINGLE POLE TOGGLE SWITCHES FOR RELOCATED ATTIC AND CORRIDOR LIGHTING SWITCHES. EXTEND WIRING TO THIS LOCATION AS REQUIRED.
- 2. PROVIDE NEW LIGHT SWITCHES FOR EXISTING LIGHTING CIRCUITS REMOVED FROM DEMOLISHED LOAD CENTER. EXTEND WIRING AS REQUIRED TO NEW SWITCH LOCATIONS. EXISTING LIGHTING CIRCUITS TO EXISTING PANEL IN BASEMENT.
- 3. COORDINATE INSTALLATION OF LED TAPE LIGHTING WITH ARCHITECT. EACH RUN OF LED TAPE IS APPROXIMATELY 3'-0" LONG.
- 4. CONNECT NEW LIGHT FIXTURES IN THIS ROOM/AREA TO EXISTING LIGHTING CIRCUITS SERVING THIS ROOM/AREA.
- 5. HARDWIRE NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUIT. WIRING
- SHALL BE CONCEALED AS MUCH AS POSSIBLE. 6. NO LIGHTING WORK IN THIS ROOM/AREA.
- 7. PROVIDE BLANK COVERPLATE.
- 8. PROVIDE LINE VOLTAGE DIMMING AT EXISTING SWITCH LOCATION AND CONTROL AS SHOWN. RE-WORK EXISTING SWITCHING AS REQUIRED .

No.	Description		Date
ОН	IO HISTOR	Y CONNEC	CTION
800 EAS	ST 17TH AVENUE	E, COLUMBUS, (	OHIO 43211
SERP	ENT MOUND MU UPGRADES	ISEUM	
ELECTRICA	AL LIGHTING FLO	OOR PLANS	E2
Drawn by: JH/CF	Checked by: JH	OHC Project No.	
Date	11/8/2024	CP2308	





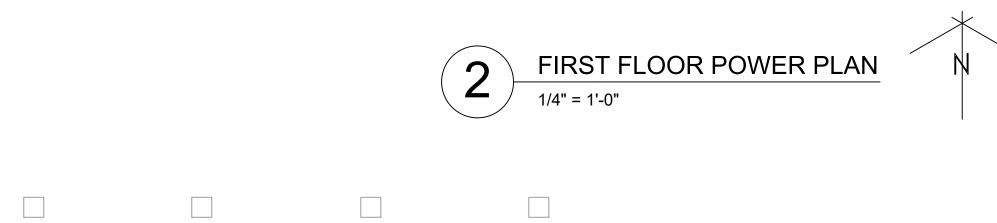
BASEMENT POWER PLAN 1/4" = 1'-0"



### Evist Danol: "A"

		Exist. Panel:	"A"									
Location: BASEMENT				ENT	Volts: 240/120				Surge Protection Device:			
Supply From: Mounting:			Phases: 1 SURFACE Wires: 3			Main Type: MCB						
							Mains Rating: 200A					
		Enclosure:			A.I.C	C. Rating: 10	Ж		MCB Ratin			
скт	Note	LOAD	CB/P	TYPE	Α	В	ТҮРЕ	CB/P	LOAD	Note	скт	
4			70/0	-							2	
1	1	SPARE	70/2	E				-	SPACE		2	
3			-	E				-			4	
5			20/1	L			R	20/1	EXISTING UNDERCOUNTER REC. COMP.		6	
7		EXISTING MUSEUM DOOR REC.	20/1	R			R	20/1	EXISTING ?	3	8	
9		EXISTING GIFT SHOP REC.	20/1	R			R	20/1	EXISTING ?	3	10	
11		EXISTING BASEMENT LIGHTS	20/1	L			R	20/1	EXISTING UNDERCOUNTER REC.		12	
13	3	EXISTING ?	20/1	R			E	20/1	EXISTING REFRIGERATOR		14	
15		EXISTING GIFT SHOP LIGHTS	20/1	L			н	20/1	EXISTING FURNACE	_	16	
17		EXISTING OFFICE LIGHTS	20/1	L			R	20/1	EXISTING OFFICE REC.		18	
19		EXISTING EXHAUST FAN & ATTIC & HALL LIGH	20/1	Ŀ			R	20/1	EXISTING PAREL REC.		20	
21		EXISTING PROJECTOR REC.	15/1	R			С	40/2	EXISTING AC		22	
23		EXISTING OFFICE AC	20/1	С			С	-	-		24	
25	2	OVERHEAD LIGHTING	20/1	L			L	20/1	CEILING FANS AND SPOT LIGHTS	2	26	
27	2	LIGHT-UP CASES	20/1	L			L	20/1	?	2,3	28	
29	2	HALLWAY LIGHT UP CASE	20/1	L			R	20/1	CREDIT CARD MACHINE	2	30	
31		CONCESSION REC.	20/1	R			R	20/1	EXHIBIT AND VEST. REC.	2	32	
33		SPACE	-					-	SPACE		34	
35		SPACE	-					-	SPACE		36	
37		SPACE	-					-	SPACE		38	
39		SPACE	-					-	SPACE		40	
41		SPACE	-					-	SPACE		42	
				Kilowatts:	0.00	0.00						
2. PRO	IDE NE	T EXISTING LOAD CENTER. UPDATE PANEL DIR W 20A/1P CIRCUIT BREAKER TO FEED EXISTING R TO VERIFY EXISTING LOAD AND UPDATE CIRC	G LOAD N CUIT DIRE	IOVED FRO	DM DEMOLISHED LO	AD CENTER O	N FIRST FLOOR.	1				
Load Classification			Connected Load (VA)		Demand Factor	Estimated Demand (VA)						
(L) Lighting				0	0.00%		0					
(R) Receptacles				0	0.00%		0	Total	Conn. Load (VA):	0		
(C) Cooling				0	0.00%		0	Total	Est. Demand (VA):	0		
(H) Heating				0	0.00%		0	Total	Conn. Current (A):	0		
(E) Equipment				0	0.00%		0	Total	Est. Demand Current (A):	0		
				•	0.0070		•			U		

(L) Lighting	0	0.00%	0	
(R) Receptacles	0	0.00%	0	Total Conn. Load
(C) Cooling	0	0.00%	0	Total Est. Deman
(H) Heating	0	0.00%	0	Total Conn. Curre
(E) Equipment	0	0.00%	0	Total Est. Deman

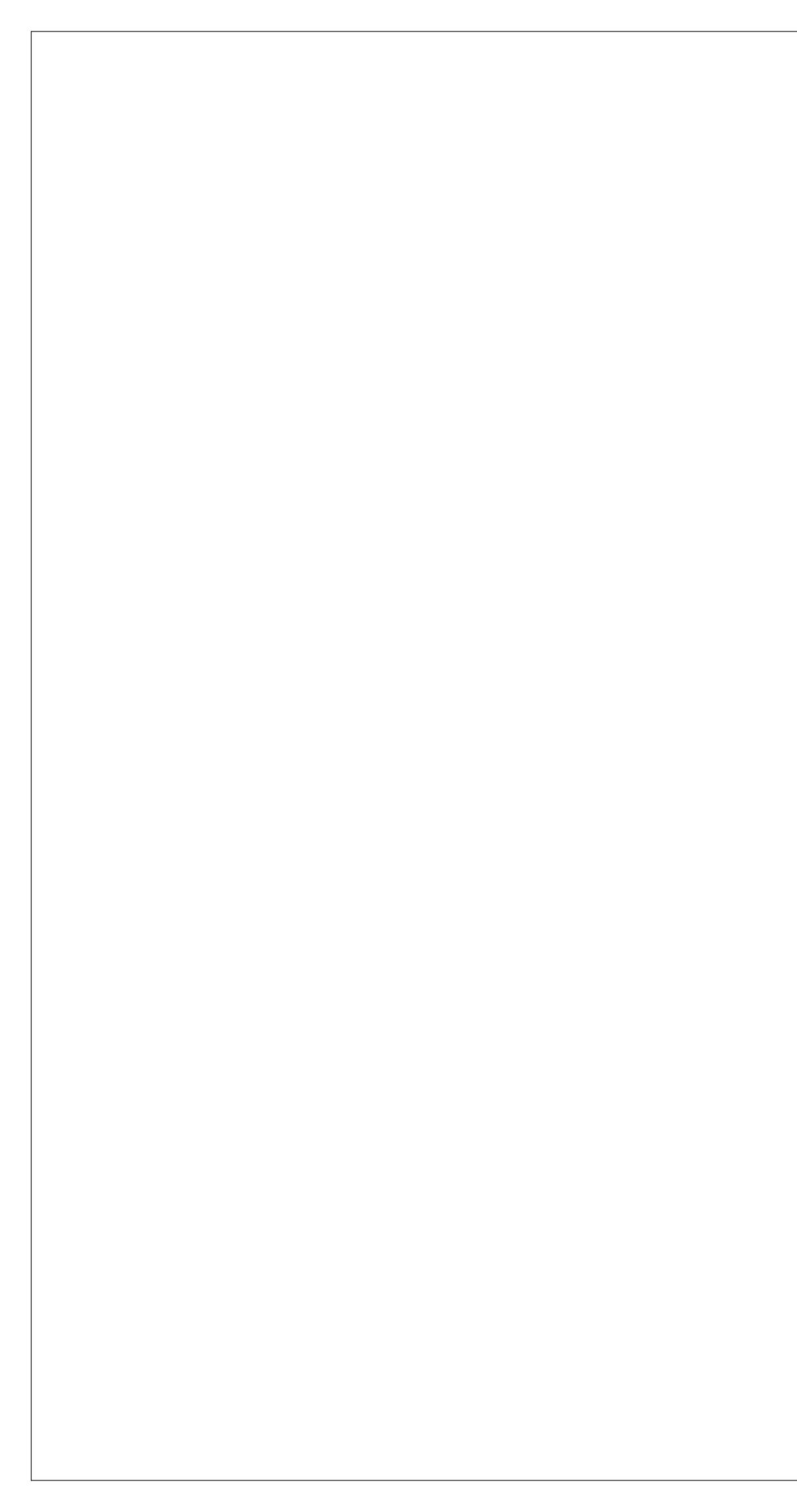


## ELECTRICAL CODED NOTES - SHEET E4



- 1. ALTERNATE 3: RELOCATE EXISTING PANEL "A" TO THIS LOCATION. EXTEND
- EXISTING FEEDER AND CIRCUITS AS REQUIRED.
- 2. FOR EXISTING CREDIT CARD MACHINE CIRCUIT REMOVED FROM DEMOLISHED LOAD CENTER. INSTALL BOX ON CEILING OF BASEMENT AND WIRE TO CIRCUIT INDICATED IN PANEL "A".
- 3. PROVIDE NEW DUPLEX RECEPTACLE ABOVE COUNTER. RE-USE EXISTING
- RECEPTACLE CIRCUIT. 4. PROVIDE NEW RECEPTACLE ABOVE COUNTER NEAR CONCESSION WINDOW AND WIRE TO NEW CIRCUIT INDICATED. COORDINATE INSTALLATION AND ROUTING OF WIRING WITH ARCHITECT.
- 5. PROVIDE NEW MERCHANDISE STAND RECEPTACLE TO NEAREST 120V. RECEPTACLE CIRCUIT SERVING THIS AREA. ALL WIRING SHALL BE CONCEALED IN WALL, IF POSSIBLE,
- 6. WIRE NEW CEILING FAN TO EXISTING CEILING FAN CIRCUIT.

No.	Description		Date		
OHI	O HISTOR	Y CONNEC	CTION		
800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211					
SERPE	SEUM				
ELECTRIC	E3				
Drawn by: JH/CF	Checked by: JH	OHC Project No.			
Date	11/8/2024	CP2308			



#### ELECTRICAL GENERAL NOTES AND SPECIFICATIONS

#### 26 00 00 ELECTRICAL SPECIFICATIONS

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, TO INCLUDE THE 2024 OHIO BUILDING CODE AND THE 2023 NATIONAL ELECTRICAL CODE.
- 2. ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS AS REQUIRED BY LOCAL AND STATE CODES. 3. ALL EQUIPMENT AND APPLIANCES INSTALLED ON THIS PROJECT SHALL BEAR THE LABEL OF AN APPROVED
- TESTING AGENCY, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- 4. THIS CONTRACTOR SHALL ARRANGE FOR AND CONDUCT ALL INSPECTIONS, TESTS, AND APPROVALS OF ITS WORK AND SHALL BEAR ALL COST FOR SAME. INSPECTIONS SHALL BE PERFORMED BY AUTHORITY HAVING JURISDICTION. 5. ARCHITECT SHALL SUBMIT DOCUMENTS FOR PLAN APPROVAL AND PAY COST TO SECURE PLAN APPROVAL
- CONTRACTOR SHALL PAY FOR ANY ADDITIONAL PERMITS AND FEES. 6. PROTECT ALL EQUIPMENT AND MATERIAL DURING CONSTRUCTION FROM DAMAGE BY WEATHER, WATER, DIRT, AND OTHER CONSTRUCTION ACTIVITIES.
- 7. SUBMIT SHOP DRAWINGS FOR REVIEW BY ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS EARLY ENOUGH IN PROJECT TO ALLOW AMPLE TIME FOR REVIEW WITHOUT CAUSING TIME DELAYS OR CONFLICTS IN THE JOB PROGRESS. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND THE MANUFACTURERS LISTED ON THE DRAWINGS. SUBMITTALS SHALL BEAR THE STAMP OF THE CONTRACTOR SHOWING THAT IT IS REVIEWED AND APPROVED BY THEM AND THAT THEY ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. LACK OF SUCH CONTRACTOR APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE ARCHITECT/ENGINEER. WHERE TRADE NAMES, BRANDS OF MANUFACTURERS OF EQUIPMENT OR MATERIALS ARE SHOWN ON THE DRAWINGS OR SPECIFICATIONS THE EXACT EQUIPMENT SHALL BE USED ON THE PROJECT. THE USE OF ANY UNAUTHORIZED EQUIPMENT OR MATERIAL SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE REQUEST OF THE OWNER. AT THE CONTRACTOR'S EXPENSE.
- 8. CHECK EACH NEW PIECE OF EQUIPMENT AND FIXTURES IN THE SYSTEM FOR DEFECTS, VERIFYING THAT ALL PARTS ARE PROPERLY FURNISHED AND INSTALLED, THAT ALL ITEMS FUNCTION PROPERLY, AND THAT ALL ADJUSTMENTS HAVE BEEN MADE.
- 9. CONTRACTOR MUST EXAMINE ALL AREAS AND CONDITIONS IN WHICH THE WORK IS TO BE DONE, AND NOTIFY THE ARCHITECT/ENGINEER OF CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. 10. MAINTAIN IN OPERATING CONDITION ALL ACTIVE BRANCH CIRCUITS AND UTILITIES DESIGNATED TO REMAIN.
- DOWNTIME MUST BE KEPT TO A MINIMUM. CONTRACTOR SHALL NOTIFY, AND OBTAIN APPROVAL FROM OWNER FOR ANY OUTAGES REQUIRED FOR THIS WORK.
- 11. CONTRACTOR SHALL LIMIT ITS ACTIVITIES TO AREAS OF THE BUILDING THAT ARE BEING RENOVATED. BUILDING ACCESS, STORAGE OF MATERIALS, DELIVERIES, PARKING, ETC. SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF SAFETY GUIDELINES TO REDUCE THE RISK OF INJURIES. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF EXCESS MATERIALS AND CLEANING OF DEBRIS ON A DAILY BASIS, AND SHALL BEAR THE COST OF SAME.
- 13. WORK SHALL BE CARRIED OUT IN A NEAT AND WORKMANLIKE MANNER SO THAT IT DOES NOT DAMAGE THE BUILDING.
- 14. MISCELLANEOUS ACCESSORIES: A. PROVIDE ANY ADAPTERS, FITTINGS, TRIM, AND OTHER APPURTENANCES AS NECESSARY TO SECURELY INSTALL ALL ITEMS OF EQUIPMENT SPECIFIED OR SHOWN ON THE DRAWINGS.
- B. THESE ACCESSORIES ARE REQUIRED EVEN THOUGH THEY MAY NOT BE SHOWN OR DETAILED ON THE DRAWINGS.
- C. INSTALLATION SHALL BE COMPATIBLE WITH THE BUILDING CONSTRUCTION ON WHICH THE ITEM IS TO BE I OCATED
- D. VERIFY THE TYPE OF CONSTRUCTION PRIOR TO ORDERING THE EQUIPMENT ITEM, SO THAT ALL REQUIRED ACCESSORIES ARE INCLUDED
- 16. CONTRACTOR SHALL CLEAN UP CONSTRUCTION DEBRIS RESULTING FROM CONTRACTOR'S WORK AS WELL AS ALL WORK AREAS AFFECTED BY CONTRACTOR'S WORK.
- 17. UPON COMPLETION OF WORK, ALL MATERIAL AND EQUIPMENT SHALL BE THOROUGHLY CLEANED OF STICKERS, DIRT, GREASE, RUST, OIL, AND OTHER FOREIGN MATTER.
- 18 PROVIDE ELECTRONIC COPIES OF REVIEWED SHOP DRAWINGS OF EACH EQUIPMENT ITEM TO OWNER. PROVIDE MARKED-UP RECORD DRAWINGS SHOWING ANY DEVIATIONS IN LOCATION OF EQUIPMENT. RECORD ADDENDUM AND CHANGE ORDER ITEMS. AT COMPLETION OF PROJECT DELIVER RECORD DRAWINGS AND ONE (1) BOUND 8-1/2"x11" OPERATING AND MAINTENANCE MANUAL TO ARCHITECT FOR REVIEW. PROVIDE OPERATING AND MAINTENANCE MANUAL IN PHYSICAL FORMAT AND A COPY ON A UNIVERSAL SERIAL BUS (USB) FLASH DRIVE. 19. REQUIREMENTS FOR COMPLETION OF WORK: FOR SUBSTANTIAL COMPLETION, PROVIDE ALL REQUIRED
- OPERATING TESTS, OPERATING AND MAINTENANCE MANUALS, INSTRUCTION OF OWNER'S PERSONNEL IN OPERATION OF ALL SYSTEMS, SPARE PARTS, AND SPECIAL TOOLS. 20.PROVIDE (1) FULL YEAR GUARANTEE FROM DATE OF FINAL COMPLETION ON ALL EQUIPMENT AND WORK PERFORMED. INCLUDING ANY EXISTING SYSTEM THAT IS RE-USED. CONTRACTOR SHALL WARRANT THAT THE
- WORK HAS BEEN COMPLETED IN COMPLIANCE WITH ESTABLISHED CODES AND REGULATIONS. CERTIFICATE SHALL BE GIVEN TO OWNER AT PROJECT COMPLETION. 21.ALTERNATES: PROVIDE ALL MATERIAL, LABOR, AND EQUIPMENT NECESSARY FOR THE ADDITIONAL ELECTRICAL
- WORK FOR THE COMPLETE INSTALLATION OF ALL WORK SHOWN ON THE DRAWINGS. A. ALTERNATE NO. 1: RELOCATE PANEL "A" 6' TO THE RIGHT. PANEL"A" IS IN THE BASEMENT.

#### 26 05 00 COMMON WORK RESULTS FOR ELECTRICAL

- CONTRACTOR SHALL VISIT SITE DRIOP TO RIDDING RIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. ALL REQUIREMENTS INCLUDING MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE TO BE OBTAINED BY ELECTRICAL CONTRACTOR PRIOR TO AND INCLUDED IN BID PRICE. FIELD VERIFY ALL EXISTING ELECTRICAL AND TELEPHONE EQUIPMENT, LOCATIONS, CONDITIONS, ETC. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE ELECTRICAL WORK.
- 2. BRIEF SUMMARY OF WORK: FURNISH MATERIAL, LABOR, TOOLS, ACCESSORIES, AND EQUIPMENT TO COMPLETE AND LEAVE READY FOR OPERATION ALL SYSTEMS OF THIS PROJECT AS DESCRIBED IN THESE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
- 3. THE INSTALLATION SHALL BE COMPLETE IN EVERY RESPECT PROVIDING ALL LABOR AND MATERIALS.
- 4. THE REQUIREMENTS AS SET FORTH UNDER GENERAL CONDITIONS, INSTRUCTIONS TO BIDDERS AND GENERAL REQUIREMENTS ARE A PART OF THIS CONTRACT.
- 5. BIDS SHALL BE BASED ON A COMPLETE/FULL SET OF DRAWINGS. 6. CONTRACTOR MUST READ THE ENTIRE SPECIFICATIONS COVERING OTHER BRANCHES OF WORK AND IS
- RESPONSIBLE FOR COORDINATION OF THE WORK WITH WORK PERFORMED BY OTHER TRADES.
- 7. FURNISH ALL LABOR, MATERIALS, TESTING, EQUIPMENT, INCIDENTALS AND TOOLS TO PERFORM ELECTRICAL WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION. 8. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND AS SUCH
- APPEAR ON THE UNDERWRITERS LABORATORIES LIST OF APPROVED ITEMS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE 2017 NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES, WHICHEVER ARE MORE STRINGENT
- 9. INCLUDE ANY LABOR AND MATERIALS NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO PROVIDE A COMPLETE AND FULLY OPERATIVE ELECTRICAL SYSTEMS. 10. PROVIDE ROUGH-IN BOXES, WIRING, CONDUIT, AND FINAL CONNECTION FOR ALL ITEMS OF EQUIPMENT REQUIRING
- ELECTRICAL POWER. COORDINATE WITH EQUIPMENT SUPPLIERS AND OTHER CONTRACTORS REGARDING ROUGH-IN AND FINAL CONNECTIONS REQUIREMENTS, SUCH AS MOUNTING HEIGHT, PLUG-RECEPTACLE CONFIGURATIONS, WIRE AND BREAKER SIZE, AND SPECIAL GROUNDING.
- 11. ALL ELECTRICAL ITEMS SHOWN DASHED ARE TO BE DISCONNECTED AND REMOVED, INCLUDING WIRING AND CONDUIT, ALL THE WAY BACK TO THE SOURCE, EXCEPT AS OTHERWISE INDICATED. 12.CUTTING AND PATCHING: GENERAL TRADES CONTRACTOR SHALL PATCH FLOORS AND WALLS IN AREAS OF
- REMOVED WIRING. COORDINATE LOCATION OF CORE-DRILLING OF WALLS AND FLOORS WITH OTHER CONTRACTORS AND EQUIPMENT. GENERAL TRADES CONTRACTOR SHALL SAW-CUT EXISTING FLOOR SLAB AND PATCH FLOOR FOR NEW UNDERFLOOR CONDUITS. PROVIDE ALL OTHER CUTTING AND PATCHING REQUIRED FOR WORK. PATCH TO MATCH ADJACENT SURFACES. GENERAL TRADES CONTRACTOR SHALL PROVIDE PAINTING. 13. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE WORK OF OTHER CONTRACTORS, OR THE
- BUILDING, OR ITS CONTENTS, PEOPLE, ETC; CAUSED BY ANY EQUIPMENT INSTALLED OR REUSED THROUGH EQUIPMENT FAILURE AND SHALL MAKE, AT ITS OWN EXPENSE, ALL REPAIRS TO MERCHANDISE, FIXTURES AND EQUIPMENT SO DAMAGED.
- 14. ALL ELECTRIC WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL INSTALLATION OF WORK AND SHALL BE FASTENED TO BUILDING STRUCTURE, STEEL, CONCRETE OR MASONRY, BUT NOT PIPING OR DUCTWORK. ALL CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE. EXPOSED CONDUITS SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS AND SEPARATED AT LEAST 3 INCHES FROM WATER LINES WHEREVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. OR OTHER CODE APPROVED RACEWAYS
- 15. THE LOCATION OF OUTLETS AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE AND THE ARCHITECT/OWNER/CONSTRUCTION MANAGER SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS, EQUIPMENT, OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ADDITIONAL COST. COORDINATE DEVICE LOCATIONS.
- 16.PROVIDE THE FOLLOWING SPARE PARTS FOR THE OWNER'S INVENTORY. ELECTRICAL CONTRACTOR SHALL INCLUDE THESE DEVICES AS FULLY INSTALLED IN HIS BID.
- A. SPARE LIGHTING SWITCHES (QUANTITY [2]).
- B. SPARE SCREW-IN LED LAMPS (QUANTITY 10%, [3] MINIMUM OF EACH TYPE).
- 17.FURNISH APPROVED CERTIFICATE OF FINAL INSPECTION, AND TURN OVER TO OWNER AT COMPLETION OF PROJECT.

### **26 05 05 SELECTIVE DEMOLITION FOR ELECTRICAL**

1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ANY/ALL NECESSARY ELECTRICAL DEMOLITION WORK THAT IS REQUIRED TO FACILITATE THE NEW INSTALLATION, FIELD COORDINATE PRIOR TO BIDS. REMOVE AND/OR MODIFY EXISTING EQUIPMENT, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. ANY EQUIPMENT OR DEVICE REMAINING IN USE AFTER PART OF THE EQUIPMENT OR DEVICES HAVE BEEN REMOVED ARE TO BE RECONNECTED

- TO EXISTING OR NEW CIRCUITS AND LEFT IN WORKING ORDER. FEEDERS TO PANELS AND WIRING TO OTHER EQUIPMENT TO BE ROUTED CONCEALED IN FINISHED AREAS. CONTRACTOR SHALL NOTIFY, AND OBTAIN APPROVAL FROM OWNER FOR ANY OUTAGES REQUIRED FOR THIS WORK.
- 2. DURING THE COURSE OF WORK, IF ANY ASBESTOS IS ENCOUNTERED, CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK ASSOCIATED THEREWITH AND IMMEDIATELY NOTICY THE A/F AND OWNER. CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY MATERIAL SUSPECTED OF, OR IDENTIFIED AS, CONTAINING ASBESTOS. OWNER SHALL REMOVE OR SEAL SUCH MATERIALS PRIOR TO ANY WORK UNDER THIS CONTRACT.
- 3. CONTRACTOR SHALL ASSUME THAT ALL EXISTING FLUORESCENT LIGHTING FIXTURES BEING REMOVED DO NOT HAVE PCB CONTAINING BALLASTS. IF DURING DEMOLITION ANY BALLAST IS ENCOUNTERED THAT IS NOT LABELED "NO PCBS" SHALL BE CONSIDERED PCB CONTAINING.
- 4. DISCONNECT AND REMOVE ALL EXISTING CONDUITS AND RACEWAYS NO LONGER BEING USED WHETHER SHOWN ON THE DRAWING OR NOT.
- 26 05 19 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES 1. WIRE SHALL BE SINGLE CONDUCTOR COPPER WITH 600 VOLT INSULATION. MINIMUM WIRE SIZE SHALL BE #12 AWG, ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES. ALL WIRING
- OF ANY TYPE SHALL BE IN CONDUIT. NO STRANDED WIRE ALLOWED FOR #10 AND #12 AWG SIZES. (INCREASE CONDUCTOR BY ONE SIZE FOR EVERY 150' INCREMENT OF DISTANCE FROM THE PANELBOARD FOR 120 VOLT CIRCUITS) 2. GENERAL WIRING SHALL BE RATED AT 600V AND BE XHHW, TWHN OR THHN. (ALUMINUM CONDUCTORS ARE NOT
- PERMITTED.) AS MANUFACTURED BY SERVICE WIRE, CERROWIRE, HOUSTON WIRE AND CABLE, ENCORE WIRE, SOUTHWIRE, OMNI CABLE, OR SUPERIOR ESSEX. 3. WIRE CONNECTORS SHALL BE EQUAL TO SCOTCHLOK FOR #8 AND SMALLER, AND EQUAL TO T & B "LOCK-TITE" FOR
- #6 AND LARGER. EQUAL BY POLARIS, ILSCO, ARLINGTON INDUSTRIES, OR BUCHANAN. 4. ALL WIRING TO BE COLOR CODED AS FOLLOWS:
- 120/208 VOLT SYSTEM
- NEUTRAL-WHITE
- PHASE A OR L1-BLACK PHASE B OR L2-RED
- GROUND-GREEN
- 5. CONTRACTOR SHALL MEGGER TEST ALL NEW OR RECONNECTED CABLES AT 1000 VOLTS AND CHECK FOR PROPER OPERATION OF ALL EQUIPMENT AND SYSTEMS
- 6. OPTION: MULTICONDUCTOR CABLE. UNLESS OTHERWISE EXCLUDED, THE FOLLOWING OPTION MAY BE USED IN
- LIEU OF WIRE AND CONDUIT ONLY WHERE CONCEALED AND WHERE PERMITTED BY AHJ A. TYPE MC COPPER CONDUCTORS, 90 EGREES C., INSULATED GREEN GROUNDING CONDUCTOR INSTALLED IN ACCORDANCE WITH NEC ARTICLE 330. INTERLOCKED ALUMINUM METAL SHEATH.

#### 26 05 26 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- 1. ALL ENCLOSURES AND NON-CURRENT CARRYING METALS TO BE GROUNDED. CONDUIT SYSTEM TO BE ELECTRICALLY CONTINUOUS. ALL LOCK NUTS MUST CUT THROUGH ENAMELED OR PAINTED SURFACES ON ENCLOSURES. WHERE ENCLOSURES AND NON-CURRENT CARRYING METALS ARE ISOLATED FROM THE CONDUIT SYSTEM, USE BONDING JUMPERS WITH APPROVED CLAMPS.
- 2. ALL GROUNDING CONDUCTORS SHALL BE GREEN, WHERE EXPOSED IN PANEL, SWITCHBOARD, OUTLET, BOXES,
- 3. RUN A SEPARATE GROUNDING CONDUCTOR IN EACH CONDUIT, #12 MINIMUM, OR AS SHOWN ON DRAWINGS. FOR BRANCH CIRCUITS AND PANEL FEEDERS BOND THE GROUNDING CONDUCTOR TO THE CONDUIT, WHERE ENTERING AND LEAVING THE CONDUIT. ALL GROUND CLAMPS SHALL BE PENN-UNION OR EQUAL, SIMILAR TO "GPL" TYPE. CONDUIT GROUND BUSHINGS SHALL BE THOMAS & BETTS OR EQUAL, SIMILAR TO #3800 SERIES WITH NYLON INSULATED THROAT.
- 4. ALL WIRING DEVICES SHALL BE BONDED TO THE CONDUIT SYSTEM. USE A BONDING JUMPER BETWEEN THE OUTLET BOX AND THE DEVICE GROUNDING TERMINAL. METAL-TO-METAL CONTACT BETWEEN THE DEVICE YOKE AND THE OUTLET BOX IS NOT ACCEPTABLE AS A BOND FOR EITHER SURFACE MOUNTED BOXES OR FLUSH TYPE BOXES. ALL JUNCTION BOXES, OUTLET BOXES AND PULL BOXES SHALL BE BONDED TO THE CONDUIT SYSTEM. ALL FLEXIBLE CONDUIT SHALL BE JUMPERED WITH A GROUND CONDUCTOR.

#### 26 05 33 RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

- 1. MINIMUM SIZES OF CONDUITS SHALL BE 3/4" FOR STANDARD CONDUIT, AND 1/2" FOR FLEX CONDUIT AND LOW VOLTAGE WIRING. ELECTRIC METALLIC TUBING (EMT) SHALL BE GALVANIZED OR ELECTRO-GALVANIZED. FITTINGS SHALL BE SET SCREW OR COMPRESSION TYPE, FITTING SHALL BE AS MANUFACTURED BY REGEL, STEEL CITY, RACO, T & B, EFCOR OR EQUAL.
- 2. OUTLET BOXES AND COVERS SHALL BE GALVANIZED, ONE-PIECE PRESSED STEEL KNOCKOUT.
- 3. JUNCTION, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE SIZE. 4. SHALLOW 1-1/2 IN. DEEP BOXES MAY BE USED ONLY IN WALLS TOO THIN FOR STANDARD DEPTH BOXES. BOXES
- FOR SURFACE CONDUIT WORK AND IN WET LOCATIONS SHALL BE FS SERIES. EXTERIOR EXPOSED BOXES SHALL BE WEATHERPROOF WITH GASKETS. PAINT ALL BOXES CONTAINING FIRE ALARM WIRING RED. APPLETON, RACO, STEEL CITY, THOMAS & BETTS, NATIONAL ELECTRIC, OR CROUSE HINDS.
- 5. CONDUIT SHALL BE STANDARD STEEL RIGID. IMC OR EMT (THIN WALL) ACCORDING TO LOCAL CODE, CONDUIT SHALL BE CONCEALED IN FINISHED AREAS, EXCEPT AS OTHERWISE APPROVED BY ARCHITECT. REPUBLIC, ALLIED, STEEL DUCT, SHAMROCK, OMEGA, WESTERN TUBES, WHEATLAND, OR LTV. EMT CONNECTIONS SHALL BE COMPRESSION OR SET SCREW TYPE.
- 6. PAINTING OF ELECTRICAL CONDUITS, ETC., IF REQUIRED, WILL BE BY GENERAL CONTRACTOR.
- 7. MAXIMUM CONDUIT HANGER SPACING SHALL BE 8'-0" FOR 3/4" THRU 1 1/4" AND 10'-0" FOR 1 1/2" THRU 4" CONDUITS. DO NOT SUPPORT CONDUIT FROM PIPING, DUCTWORK, OR CEILING SYSTEM
- 8. CONTRACTOR SHALL USE APPROVED, UL-LISTED, FIRE-RETARDANT SEALANTS, BACKING, AND NEW PACKING AS REQUIRED TO MAINTAIN FIRE RATING OF THE STRUCTURE PENETRATED BY NEW CONDUITS, SPRAY UL-LISTED FOAM SEALANT AROUND WIRES IN NEW CONDUITS
- 9. INSTALL BOXES RIGIDLY ON BUILDING STRUCTURE AND SUPPORT INDEPENDENTLY OF THE CONDUIT SYSTEM USING FASTENERS SUCH AS "CADDY CLIPS" OR EQUAL. ALSO PROVIDE SUITABLE/PROPER BOX EXTENSIONS TO EXTEND BOXES TO FINISHED FACES OF WALLS ETC. ALL OUTLET BOXES TO HAVE SUITABLE BLOCKING BEHIND THEM TO MINIMIZE THE DEFLECTION THAT OCCURS WHEN PLUGGING/UNPLUGGING INTO THESE DEVICES.

#### 26 27 00 LOW-VOLTAGE DISTRIBUTION EQUIPMENT

- 1. COLOR OF WIRING DEVICES AND COVERPLATES SHALL BE SELECTED BY ARCHITECT. (SEE PLAN NOTES FOR ADDITIONAL INFORMATION
- 2. HUBBELL, BRYANT, LEVITON, EATON, OR PASS & SEYMOUR. COVER PLATES SHALL BE PLASTIC. DO NOT MOUNT FLUSH RECEPTACLES BACK-TO-BACK ON SAME WALL. COVER PLATES FOR DEVICES IN SURFACE FITTINGS SHALL BE CADMIUM-PLATED STEEL COVERS WITHOUT OVERLAP AND ROUND CORNERS. WEATHERPROOF PLATES FOR GFI DUPLEX RECEPTACLES SHALL BE HUBBELL CAT. NO. WP26E SINGLE-GANG, CAST ALUMINUM, GASKETED WITH SINGLE LATCHED LIFT COVER SUITABLE FOR WET LOCATIONS WHILE IN USE AND UL-LISTED. ALL METAL PLATES SHALL BE GROUNDED. ALL DEVICES PLATES SHALL HAVE "PIN-TORX" TAMPER-RESISTANT TYPE SCREWS.
- I. SWITCHES: 20 AMP, 120/277 VOLT EXTRA-HEAVY-DUTY INDUSTRIAL GRADE, BACK-WIRED AND SIDE-WIRED OR HUBBELL "SNAPCONNECT" WIRED.

#### DEVICE HUBBELL CAT. NO. SINGLE-POLE HBL1221 / SNAP1221 NA

J. RECEPTACLES: 125 VOLT, EXTRA-HEAVY-DUTY INDUSTRIAL GRADE, 2-POLE, 3-WIRE GROUNDING, BACK-WIRED AND SIDE-WIRED OR HUBBELL "SNAPCONNECT" WIRED.

#### DEVICE HUBBELL CAT. NO. (NEMA TYPE) 20 AMP DUPLEX (TAMPER-RESISTANT) SNAP5362-\_TRA (NEMA 5-20R)

- 26 28 00 LOW-VOLTAGE CIRCUIT PROTECTIVE DEVICES
- 1. PROVIDE ENCLOSED MOLDED CASE CIRCUIT BREAKER AS CALLED FOR ON THE DRAWINGS AND AS REQUIRED BY CODE. CIRCUIT BREAKER SHALL COMPLY WITH UL 98, NEMA, AND ANSI. MINIMUM INTERRUPTING CAPACITY AS SHOWN ON THE DRAWINGS. THERMAL MAGNETIC AND TRIPPED CIRCUIT BREAKER IN NEMA 1 ENCLOSURE AS MANUFACTURED BY GE, SQUARE D, SIEMENS OR EATON.
- 2. NEW CIRCUIT BREAKERS AND FUSIBLE SWITCHES SHALL BE COMPATIBLE WITH EXISTING PANELBOARDS/DISTRIBUTION PANELS/SWITCHBOARDS.

#### 26 50 00 LIGHTING

- 1. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL FIXTURES AND LAMPS. ALL FIXTURES AND LAMPS SHALL BE UL LISTED. LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED AS SCHEDULED ON THE LIGHTING FIXTURE SCHEDULE.
- 2. SCREW-IN LED LAMPS SHALL BE TYPE AND COLOR AS SHOWN ON THE LIGHTING FIXTURE SCHEDULE AS MANUFACTURED BY USHIO AMERICA, GREEN CREATIVE, PHILIPS, SYLVANIA, GENERAL ELECTRIC, OR CREE LIGHTING.

No.	Description	Date
	OHIO HISTORY CONNE	CTION

800 EAST 17TH AVENUE, COLUMBUS, OHIO 43211

SERPENT MOUND MUSEUM

UPGRADES ELECTRICAL SPECIFICATIONS



Drawn by: JH/CF

Date

Checked by: JH 11/8/2024

OHC Project No CP2308