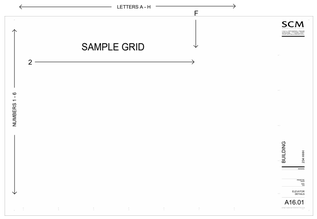
BURNS HALL HVAC REPLACEMENT

NORTHWEST ARKANSAS COMMUNITY COLLEGE

1 COLLEGE DRIVE
BENTONVILLE AR 72712

CSI CON DOC SYSTEM

PROJECT DRAWINGS ARE LAYED OUT USING THE CSI "CONDOC" SYSTEM.



TYPICAL DRAWING SHEET:

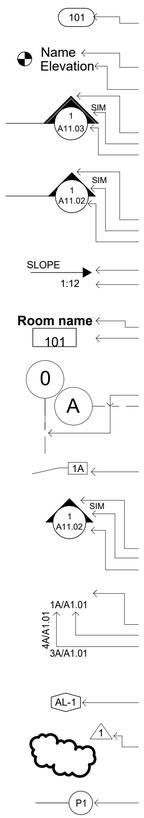
THE DRAWING/DETAIL SHEET IS BORDERED BY NUMBERS AND LETTERS CREATING A GRID. THIS GRID IS USED TO LOCATE AREAS OF THE DRAWING FOR REFERENCE AND PINPOINT DETAILS.

EXAMPLE:
NOTE THE DETAIL SYMBOL ON THE SHEET. ITS LOCATION IS "2F". IN DISCUSSION YOU WOULD SAY "LOOK AT THE DETAIL LOCATED AT "2F" ON SHEET A16.01. THIS NUMBER MAY BE KEYED INTO THE DETAIL SYMBOL AND WOULD READ "2F - A16.01."

ABBREVIATIONS

A.F.F. - ABOVE FINISH FLOOR
ALUM. - ALUMINUM
AS REQ. - AS REQUIRED
BD. - BOARD
BLDG. - BUILDING
BLK. - BLOCK
B.O.C. - BACK OF CURB
B.O.F. - BOTTOM OF FOOTING
CAB - CABINET
CER - CERAMIC
C.J. - CONTROL JOINT
C.L. - CENTER LINE
CLG - CEILING
CLR - CLEAR
CMU - CONCRETE MASONRY UNIT
COL - COLUMN
CONC - CONCRETE
CONT - CONTINUOUS
CORR - CORRIDOR
CPT - CARPET
DBL - DOUBLE
DEMO - DEMOLITION
DIA - DIAMETER
DIM - DIMENSION
DN - DOWN
DS - DOWNSPOUT
DTL - DETAIL
EA - EACH
EIFS - EXT. INSUL. FINISH SYSTEM
EJ - EXPANSION JOINT
ELEC - ELECTRICAL
ELEV - ELEVATION
E.O.S. - EDGE OF SLAB
EQ - EQUAL
EQUIP - EQUIPMENT
EXH - EXHAUST
EXIST - EXISTING
EXT - EXTERIOR
F.E.C. - FIRE EXTINGUISHER CABINET
F.F.E. - FINISH FLOOR ELEVATION
FIN. FL. - FINISH FLOOR
F.O.B. - FACE OF BRICK
F.O.C. - FACE OF CURB
F.O.S. - FACE OF STUD
FTG. - FOOTING
GYP BD - GYPSUM BOARD
GWB - GYPSUM BOARD
HM - HOLLOW METAL
INSUL - INSULATION
INT - INTERIOR
MECH - MECHANICAL
MFR - MANUFACTURER
MISC - MISCELLANEOUS
M.O. - MASONRY OPENING
MTL - METAL
N.I.C. - NOT IN CONTRACT
N.T.S. - NOT TO SCALE
O.C. - ON CENTER
O.H. - OPPOSITE HAND
OPP. - OPPOSITE
PLAM - PLASTIC LAMINATE
PLUMB - PLUMBING
PLYWD - PLYWOOD
PREFIN - PREFINISHED
RAD - RADIUS
RE: - REFERENCE
REINF - REINFORCED
REQ'D - REQUIRED
R.O. - ROUGH OPENING
SAN - SANITARY
SCHED - SCHEDULED
SIM - SIMILAR
S.S. - STAINLESS STEEL
STL - STEEL
STRUCT - STRUCTURAL
SUSP - SUSPENDED
THK - THICK
TYP - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
VER - VERIFY
V.I.F. - VERIFY IN FEILD
WD - WOOD

SYMBOLS LEGEND



DOOR TYPE
DOOR MARK (NUMBER)

CONTROL OF DATUM POINT
DESCRIPTION OF POINT
(FIN. FLR, TOP OF PLATE, TOP OF BEAM)
ELEVATION OR POINT

BUILDING SECTION
(See Plans and Building Elevations)
DIRECTION OF VIEW
SECTION LOCATOR/NUMBER
SHEET NUMBER

WALL SECTION
(See Plans and Building Elevations)
DIRECTION OF VIEW
SECTION LOCATOR/NUMBER
SHEET NUMBER

ROOF SLOPE
(See Roof Plans)
DIRECTION OF UPWARD SLOPE
RATIO OF SLOPE

ROOM TAG
(See Plans and Building Sections)
ROOM NAME
ROOM NUMBER

GRID LINES
EXISTING COLUMN
(Letters typ. run Vertical, Numbers typ. run Horizontal)

KEY NOTE
(See Building Elevations, Building Sections,
Wall Sections, Detail Views, and the Material Legend)
MATERIAL CALLOUT

BUILDING ELEVATION
(See Plans and Building Elevations)
DIRECTION OF VIEW
ELEVATION LOCATION/NUMBER
SHEET NUMBER

INTERIOR ELEVATION
(See Plans)
DIRECTION OF VIEW
ELEVATION LOCATION/NUMBER
SHEET NUMBER

WINDOW TYPE
WINDOW MARK (LETTER)

REVISION REFERENCE
NUMBER OF REVISION CORRESPONDING TO
SECTION IN TITLE BLOCK

PARTITION TYPE
PARTITION MARK (NUMBER)

GENERAL NOTES

****

GENERAL CONTRACT REQUIREMENTS AFFECTING ALL TRADES

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND EACH OF THE SUBCONTRACTORS TO REVIEW ALL DRAWINGS TO ENSURE COORDINATION OF ALL WORK AFFECTING EACH TRADE.

****

1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION TO COORDINATE THE SITING OF NEW UTILITIES AND NEW BUILDING INSTALLATION WITH EXISTING UTILITIES, EXISTING BUILDING LOCATIONS AND SITE ITEMS TO REMAIN.

2. CONTRACTOR TO COORDINATE STORAGE AND STAGING AREAS WITH OWNER'S REPRESENTATIVE TO AVOID INTERFERENCE WITH OWNER'S USE OF EXISTING BUILDINGS, PARKING AREAS, AND GROUNDS.

3. PROVIDE SECURITY, BARRIERS AND FACILITIES TO PROTECT WORK AND STORED MATERIAL FROM UNAUTHORIZED ENTRY, VANDALISM OR THEFT.

4. CONDITION AND USE OF THE JOB SITE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. JOB SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY FASHION. DEBRIS AND TRASH FOR ALL TRADES AND SUBCONTRACTORS UNDER GENERAL CONTRACTOR CONTROL AND FOR THOSE UNDER DIRECT CONTRACT WITH THE OWNER SHALL BE REMOVED DAILY.

5. GENERAL CONTRACTOR SHALL COORDINATE DELIVERIES, INSPECTIONS, AND SITE VISITS FOR ALL TRADES AND SUBCONTRACTORS AS REQUIRED.

6. THE CONTRACTOR IS REQUIRED TO PROTECT ALL SITE ITEMS IN THE AREAS ADJACENT TO THE PROJECT CONSTRUCTION WORK AS NECESSARY TO PREVENT DAMAGE. CONTRACTOR TO BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ITEMS DAMAGED DURING CONSTRUCTION.

7. FINAL CLEANING AT SUBSTANTIAL COMPLETION SHALL INCLUDE BUT NOT TO BE LIMITED TO CLEANING OF ALL SURFACES AFFECTED BY THE WORK OF THE CONTRACT AND REMOVAL OF ANY SPOTS, STAINS, SPILLS, ETC. ON ANY SURFACES CAUSED BY CONSTRUCTION ACTIVITIES AND INCURRED DURING THE CONSTRUCTION PERIOD.

8. ALL PRODUCTS USED ON THIS PROJECT THAT ARE USED IN CONJUNCTION WITH EACH OTHER OR ADJACENT TO EACH OTHER ARE REQUIRED TO BE COMPATIBLE.

9. OWNER RETAINS THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH THE PROJECT WORK. GENERAL CONTRACTOR SHALL PROPERLY COOPERATE, COORDINATE AND INTERFACE CONSTRUCTION SCHEDULE WITH ANY SUCH CONTRACTORS/VENDORS, ETC.

10. CONTRACTOR IS RESPONSIBLE FOR SEALING AND PROTECTING ALL PENETRATIONS THROUGH PARTITIONS, FLOORS, CEILINGS, AND ROOF ELEMENTS BOTH NEW AND EXISTING IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES TO THE SATISFACTION OF THE BUILDING OFFICIAL.

11. CONTRACTOR SHALL INSTALL GYPSUM CONTROL JOINTS IN CEILINGS OR WALLS WHERE INDICATED ON THE CONSTRUCTION DRAWINGS OR AS RECOMMENDED BY GYPSUM BOARD MANUFACTURER NOT TO EXCEED 30'-0" RUINS MAX. COORDINATE ALL JOINT LOCATIONS NOT INDICATED WITH ARCHITECT FOR EXACT LOCATIONS TO BE INSTALLED.

12. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS TO COORDINATE COMPLETE AND ACCURATE INSTALLATION WITH THE CONSTRAINTS OF THE NEW BUILDING CONSTRUCTION FOR ROUTING OF UTILITIES IN A NEAT AND ORDERLY MANNER. IF A DISCREPANCY OCCURS WITH THE NEW BUILDING STRUCTURE AND INSTALLATION REQUIREMENTS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT TO RESOLVE ANY ROUTING ISSUES.

13. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS AND TYPES OF CEILINGS. SEE SPECIFICATIONS FOR SPECIFIED ITEM TO BE INSTALLED ON WALLS, CEILINGS AND FLOOR.

PROJECT CONTACTS

CONTACT COORDINATOR: (OWNER)

CONTACT PERSONS:

NWACC
BENTONVILLE, ARKANSAS

JIM NELSON
DIRECTOR OF FACILITIES MANAGEMENT
479-619-3145
jnelson3@nwacc.edu

ARCHITECT:

SCM ARCHITECTS PLLC
1400 KIRK ROAD, SUITE 220
LITTLE ROCK, AR 72223

PRINCIPAL IN CHARGE:
BRAD PLACE, AIA
bplace@scmarchitects.com

SENIOR PROJECT ARCHITECT:
J. ASHLEY TUCKER, AIA
ashleyt@scmarchitects.com

(479) 966-4777

CONSULTANTS

MECHANICAL ENGINEER
ENFRA
3714 N BUSINESS DR
FAYETTEVILLE, AR 72703

Andrew Schneider
andrew.schneider@enfrasolutions.com

PLUMBING ENGINEER
ENFRA
3714 N BUSINESS DR
FAYETTEVILLE, AR 72703

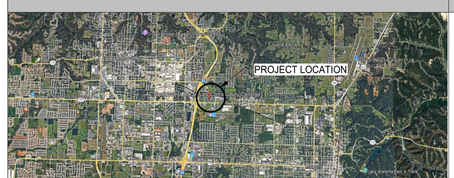
SHAWN LUTHER
shawnl@dcius.pro

ELECTRICAL ENGINEER
ENFRA
3714 N BUSINESS DR
FAYETTEVILLE, AR 72703

Grant Logan
GLogan@enfrasolutions.com

VICINITY MAP

LOCATION MAP



INDEX OF DRAWINGS

BUILDING CODE INFORMATION

OCCUPANCY CLASSIFICATION:	**B (BUSINESS) / A-3 (ASSEMBLY)**
TYPE OF CONSTRUCTION:	II - B - SPRINKLERED
ALLOWABLE BUILDING HEIGHT:	EXISTING UNCHANGED
PROPOSED BUILDING HEIGHT:	EXISTING UNCHANGED
ALLOWABLE BUILDING AREA:	EXISTING UNCHANGED
FLOOR AREA:	EXISTING UNCHANGED
CANOPY AND OVERHANGS:	EXISTING UNCHANGED

1/16/2026

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS

BRADLEY A. PLACE

1-16-2026
DATE:

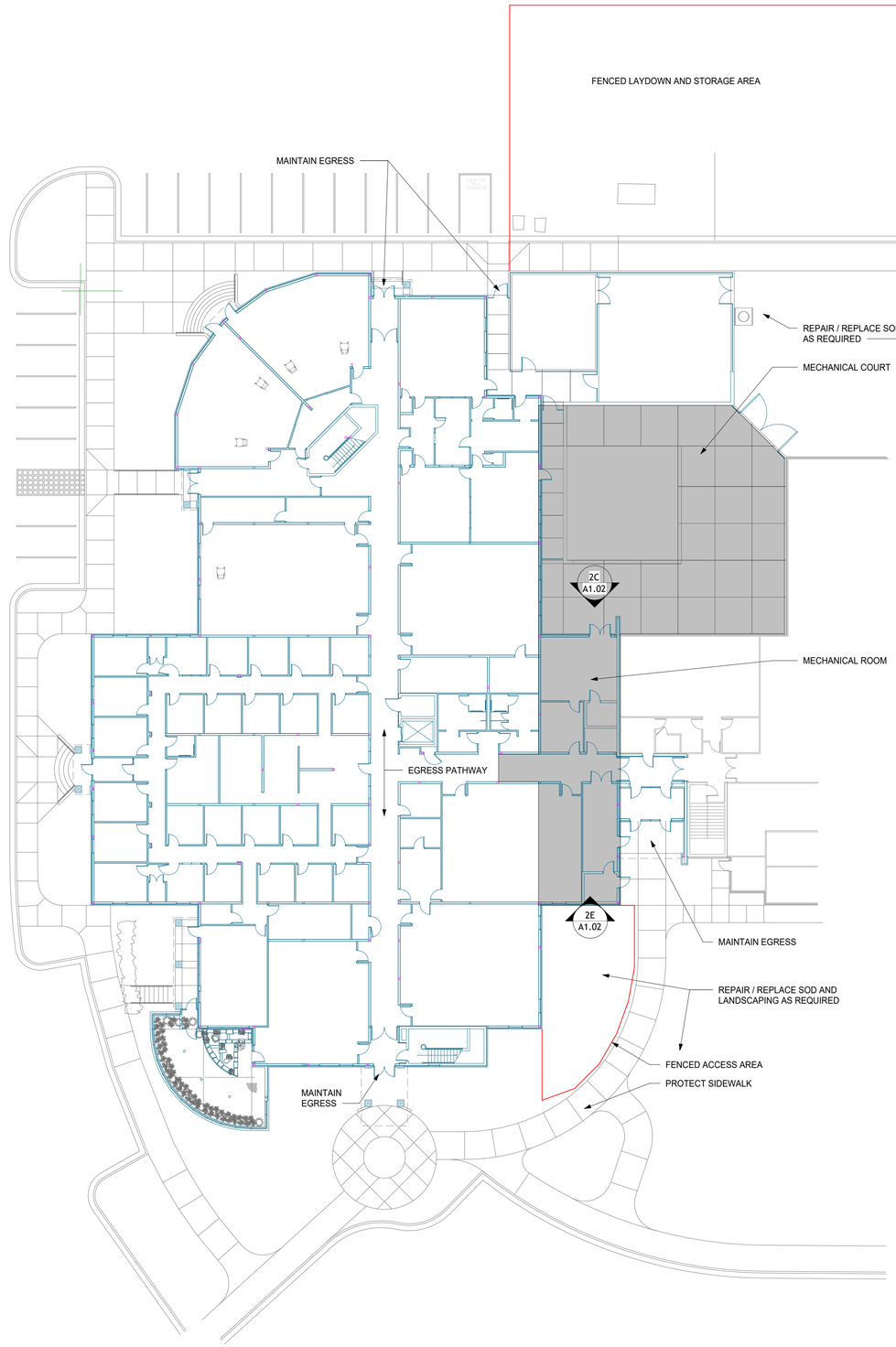
SCM
ARCHITECTS PLLC
28 E CENTER ST. SUITE 220
FAYETTEVILLE, AR 72701
FAY: (479) 966-4777 LR: (501) 224-3055
www.scmarchitects.com

T1.01B

SCM ARCHITECTS P.L.L.C.

GENERAL SITE NOTES

1. COORDINATE LAYDOWN AND STORAGE AREAS WITH OWNER, ARCHITECT, AND FIRE MARSHAL TO PROVIDE CONTINUOUS FIRE APARATUS ACCESS WHERE REQUIRED.
2. INSTALL TEMPORARY FENCING AT PERIMETER OF WORK AREA. MAINTAIN EMERGENCY EGRESS.
3. BUILDING WILL BE OCCUPIED ADJACENT TO WORK AREA.
4. REPAIR DAMAGE TO EXISTING LANDSCAPE, SIDEWALKDS AND PAVEMENT DAMAGED BY CONSTRUCTION ACTIVITIES. GRASS AREAS WITH NEW SOD. REMOVE AND REPLACE SIDEWALK TO NEAREST CONTROL JOINT. PROTECT ASPHALT WITH PLATES AND CRIB MATTS FOR CRANE AND HEAVY EQUIPMENT DELIVERIES.



NORTH

5E Site Plan
1" = 20'-0"

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

REGISTERED ARCHITECT
SCM ARCHITECTS PLLC
No.C-87
ARKANSAS
1.16.26

BURNS HALL HVAC REPLACEMENT
NORTHWEST ARKANSAS COMMUNITY COLLEGE
1 COLLEGE DRIVE
BENTONVILLE AR 72712

REVISIONS:

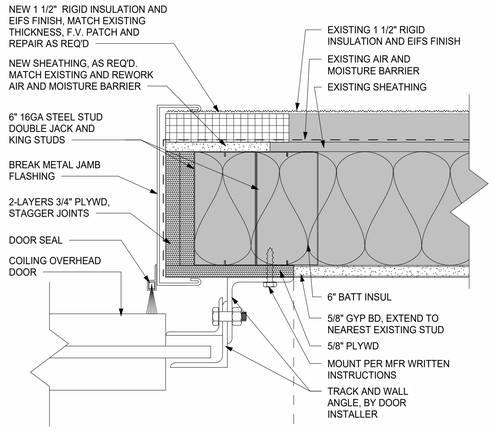
PROJECT NO.
22025
DATE:
1/16/2026

SITE PLAN

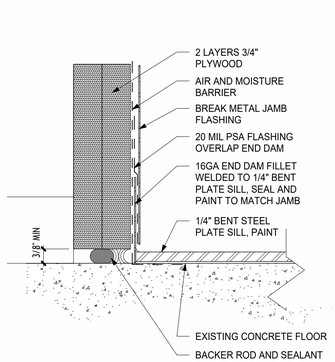
A1.01

SCM ARCHITECTS P.L.L.C.

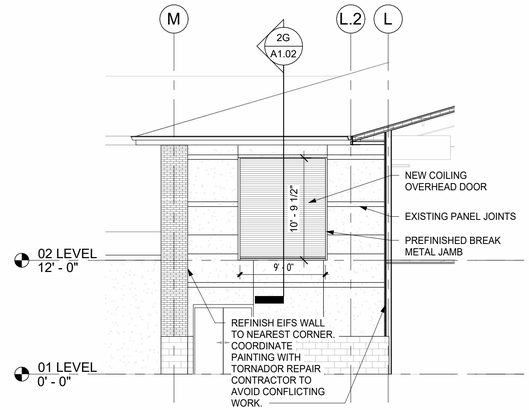
1/21/2026 8:40:52 AM



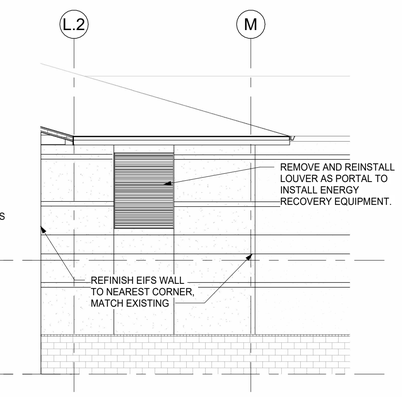
2A 02 DIMENSION PLAN - OVERHEAD DOOR JAMB
3" = 1'-0"



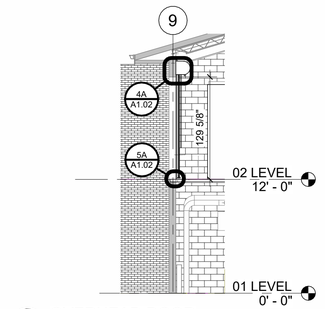
2B SILL DAM
6" = 1'-0"



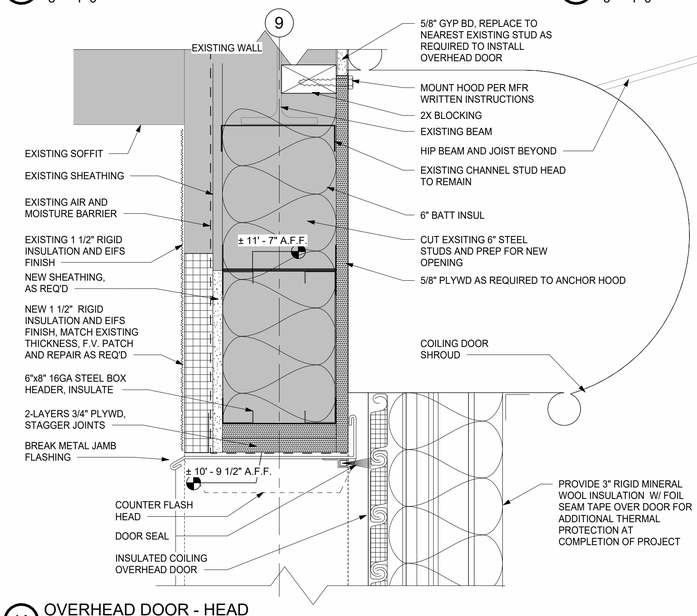
2C NORTH ELEVATION
1/8" = 1'-0"



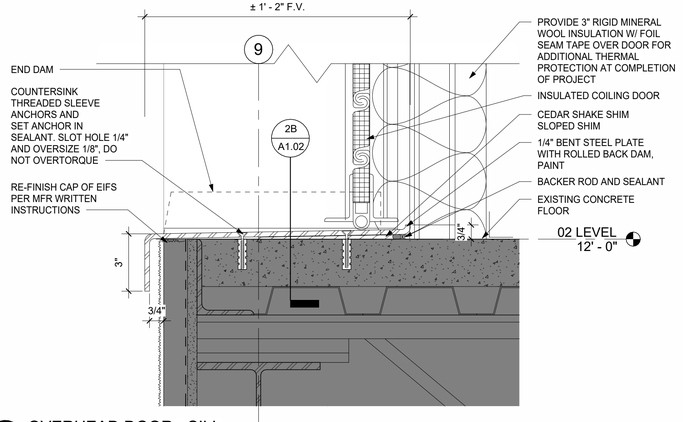
2E SOUTH ELEVATION
1/8" = 1'-0"



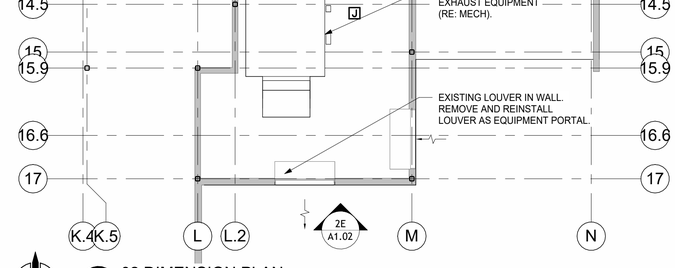
2G OVERHEAD DOOR
1/8" = 1'-0"



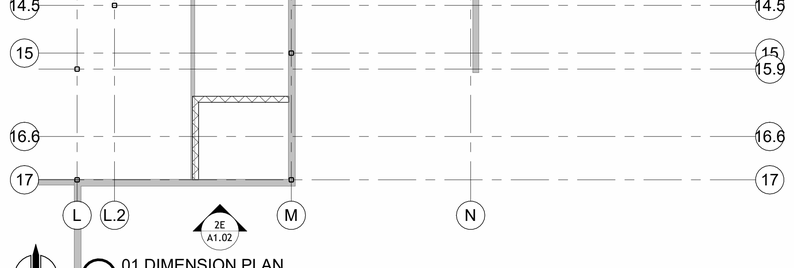
4A OVERHEAD DOOR - HEAD
3" = 1'-0"



5A OVERHEAD DOOR - SILL
3" = 1'-0"



NORTH
6C 02 DIMENSION PLAN
1/8" = 1'-0"



NORTH
6E 01 DIMENSION PLAN
1/8" = 1'-0"

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

REGISTERED ARCHITECT
SCM ARCHITECTS P.L.L.C.
No.C-87
ARKANSAS
1.16.26

BURNS HALL HVAC REPLACEMENT
NORTHWEST ARKANSAS COMMUNITY COLLEGE
1 COLLEGE DRIVE
BENTONVILLE AR 72712

REVISIONS:

PROJECT NO.
22025
DATE:
1/16/2026

PLANS AND DETAILS

A1.02

SCM ARCHITECTS P.L.L.C.

1/21/2026 8:40:54 AM

HVAC GENERAL NOTES

1. REFER TO GENERAL NOTES ON DRAWING FOR ADDITIONAL REQUIREMENTS.
2. ALL HVAC WORK TO BE PER SMACNA AND ALL APPLICABLE CODES.
3. ALL DUCTS SHALL BE MOUNTED AS HIGH AS POSSIBLE AGAINST THE BOTTOM OF JOISTS EXCEPT AS REQUIRED TO AVOID CONFLICTS WITH INTERSECTION DUCTS. DIAGONALLY OFFSET DUCTS IMMEDIATELY BEFORE AND AFTER PASSING UNDER INTERSECTING DUCTS OR LARGE STRUCTURAL MEMBERS TO MAINTAIN DUCT TIGHT TO STRUCTURE.
4. MAXIMUM 3'-0" FLEX DUCT ON ALL DIFFUSER RUNOUTS. CONNECTIONS TO FLEX DUCT SHALL BE SMOOTH ON AIRFLOW SIDE.
5. PROVIDE STREAMLINE TAP AND MANUAL BALANCING DAMPER AT EACH CONNECTION OF ROUND BRANCH DUCTS TO A RECTANGULAR DUCT. DAMPERS SHALL BE ACCESSIBLE TO ALLOW FOR REQUIRED BALANCING.
6. SUPPLY DUCTS SHALL BE EXTERNALLY INSULATED WITH FIBERGLASS INSULATION UNLESS OTHERWISE SHOWN. DUCT SIZES SHOWN ON PLANS INDICATE FREE AREA REQUIRED IN DUCTS. ADJUST DUCT SIZES FOR LINER WHERE APPLICABLE OR WHERE SHOWN. SEE SPECIFICATIONS FOR INSULATION TYPE AND STANDARDS.
7. INSTALL NEW FILTERS AT THE COMPLETION OF CONSTRUCTION. USE ONE SET OF FILTERS DURING CONSTRUCTION. INSTALL FINAL SET PRIOR TO TEST AND BALANCE.
8. BALANCE AIR SYSTEM TO PROVIDE INDICATED AIR FLOWS. SEE SPECIFICATIONS FOR OTHER TEST AND BALANCE REQUIREMENTS. SUBMIT FINAL BALANCE OF AIR AND WATER SYSTEMS (FLOW AND TEMPERATURE) FOR REVIEW.
9. MECHANICAL CONTRACTOR (MC) SHALL COORDINATE AND VERIFY THE FOLLOWING WITH THE ELECTRICAL CONTRACTOR (EC) PRIOR TO BID:
   A. DISCONNECTS: WHERE NOT FURNISHED WITH EQUIPMENT: FURNISHED BY EC, INSTALLED BY EC. WHERE FURNISHED WITH EQUIPMENT: FURNISHED BY MC, INSTALLED BY EC.
10. COORDINATE FINAL PLACEMENT OF ALL THERMOSTATS WITH OWNER AND ENGINEER. ANY THERMOSTAT THAT IS REQUIRED TO BE MOUNTED ON AN EXTERIOR WALL SHALL BE MOUNTED ON AN INSULATED PAD.

RENOVATION GENERAL NOTES

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. REFER TO ALL PROJECT DRAWINGS FOR DETAILS OF CONSTRUCTION AND INSTALLATION REQUIREMENTS.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FULL COORDINATION OF PROJECT INCLUDING THE EQUIPMENT AND INSTALLATION OF THE MECHANICAL WORK.
4. CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE REQUIREMENTS OF THESE NOTES AS WELL AS OTHER NOTES SHOWN ON THE CONTRACT DOCUMENTS.
5. THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS (SEE SCHEDULES), THE SELECTION OF WHICH HAS INFLUENCED THE DESIGNS OF OTHER TRADES (ELECTRICAL,STRUCTURAL, ETC.). IF SUBSTITUTE MANUFACTURERS, SIZES, OR MODEL NUMBERS SUBMITTED, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND ALL HIS SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES. ALL COSTS OF ALL TRADES ASSOCIATED WITH THE SUBSTITUTION SHALL BE INCLUDED.
6. COORDINATION OF ALL MODIFICATIONS TO EACH DISCIPLINE WHICH RESULT FROM SUBSTITUTION OF EQUIPMENT OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUBSTITUTIONS WHICH ARE INSTALLED AND SUBSEQUENTLY ARE PROVEN 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.
7. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, OR COMPONENT.
8. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.
9. CONTRACTOR SHALL NOT SCALE DRAWINGS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY THE CONTRACT DOCUMENTS.
10. UNLESS NOTED OTHERWISE, THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM.
11. EXACT LOCATIONS OF ALL EQUIPMENT, DUCTS, DIFFUSERS, ETC. SHALL BE COORDINATED WITH OTHER TRADES. SLOPED PIPING (PLUMBING), LIGHTING, AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION ALL WORK WITH THAT OF OTHER TRADES. REFER TO ARCHITECTURAL, ELECTRICAL, AND OTHER DRAWINGS FOR COMPLETE INFORMATION PRIOR TO BID.
13. NO OTHER TRADES, I.E., ELECTRICAL, CEILING, PLUMBING, ETC., SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM DUCTWORK OR PIPING.
14. REPLACE ALL ARCHITECTURAL FEATURES REMOVED OR DAMAGED DURING THE COURSE OF THE WORK.

ONE LINE PIPE SYMBOLS

—TWS—	SUPPLY FROM TOWER
—TWR—	RETURN TO TOWER
—HWS—	HEATING WATER SUPPLY
—HWR—	HEATING WATER RETURN
—DHWS—	DISTRICT HEATING WATER SUPPLY
—DHWR—	DISTRICT HEATING WATER RETURN
—CHS—	CHILLED WATER SUPPLY
—CHR—	CHILLED WATER RETURN
—DCHS—	DISTRICT CHILLED WATER SUPPLY
—DCHR—	DISTRICT CHILLED WATER RETURN
—SCHS—	SECONDARY CHILLED WATER SUPPLY
—SCHR—	SECONDARY CHILLED WATER RETURN
—D—	CONDENSATE DRAIN
—S12—	STEAM SUPPLY (PRESSURE NOTED)
—SR12—	STEAM RETURN (PRESSURE NOTED)
—PSR—	PUMPED STEAM RETURN
—BFW—	BOILER FEEDWATER
	BALL VALVE
	BUTTERFLY VALVE (LEVER HANDLE)
	BUTTERFLY VALVE (GEAR OPERATOR)
	GATE VALVE
	OS & Y GATE VALVE
	GLOBE VALVE
	CHECK VALVE (SWING CHECK)
	CHECK VALVE (BUTTERFLY CHECK)
	PRESSURE REDUCING VALVE
	FLOW LIMITING VALVE
	CALIBRATED BALANCING VALVE
	VALVE AT RISER
	STRAINER W/ DRAIN VALVE
	UNION
	AIR TERMINAL / FAN COIL UNIT/HOT WATER RETURN CONTROL VALVE (2-WAY) ELECTRIC OR ELECTRONIC
	AIR TERMINAL / FAN COIL UNIT CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC
	CONTROL VALVE (2-WAY) ELECTRIC OR ELECTRONIC
	CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC

ONE LINE PIPE SYMBOLS

	CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC
	CONTROL VALVE (2-WAY) PNEUMATIC
	CONTROL VALVE (3-WAY) PNEUMATIC
	EMERGENCY SHUT-OFF VALVE WITH FUSIBLE LINK
	FLEXIBLE PIPE CONNECTOR
	METAL BELLOWS PUMP CONNECTOR
H	AIR VENT (A - AUTO, H - HAND)
	PRESSURE AND TEMPERATURE TAP
	PRESSURE GAUGE
P	PRESSURE GAUGE W/ SIPHON
	THERMOMETER W/ INSERTION WELL
	ANCHOR
	PIPE GUIDE
	FLANGE
	ELBOW, TURNED UP
	ELBOW, TURNED DOWN
	RISE OR DROP IN PIPE
	ELBOW
	TEE, SIDE CONNECTION
	TEE, OUTLET UP
	TEE, OUTLET DOWN
	CAPPED OUTLET
	CAPPED PIPE
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	STEAM TRAP (DRIP LEG)
	STEAM TRAP
	DIRECTION OF PITCH
TFD	PIPE TO FLOOR DRAIN
EMS	ENERGY MANAGEMENT SYSTEM INSERTION WELL

DEMOLITION AND RENOVATION SYMBOLS

	EQUIPMENT TO BE REMOVED
	EXISTING EQUIPMENT TO REMAIN
	NEW EQUIPMENT
	POINT OF CONNECTION TO EXISTING
	TERMINATION OF DEMOLITION
- - - -	DUCT TO BE REMOVED
	EXISTING DUCT TO REMAIN
	NEW DUCT
- - - -	PIPING TO BE REMOVED
	EXISTING PIPING TO REMAIN
	NEW PIPING

TWO LINE PIPE SYMBOLS

	ELBOW - FLANGED LONG RADIUS 45°
	ELBOW - FLANGED LONG RADIUS 90°
	ELBOW - WELDED LONG RADIUS 45°
	ELBOW - WELDED LONG RADIUS 90°
	END CAP
	FLANGES - SLIP ON
	FLANGES - WELD NECK
	REDUCERS - FLANGED CONCENTRIC
	REDUCERS - FLANGED ECCENTRIC
	REDUCERS - WELDED CONCENTRIC
	REDUCERS - WELDED ECCENTRIC
	TEE - FLANGED
	TEE - WELDED
	BUTTERFLY VALVE - LEVER OPERATOR
	BUTTERFLY VALVE - WORM GEAR OPERATOR
	BUTTERFLY VALVE - ACTUATOR
	CHECK VALVE - SWING CHECK
	CHECK VALVE - SILENT OR WAFER
	GATE VALVE - NON RISING STEM
	GATE VALVE - OUTSIDE STEM AND YOKE
	GLOBE VALVE
	STRAINER - Y
	STRAINER - BASKET
	SUCTION DIFFUSER
	FLEXIBLE CONNECTORS

DUCTWORK SYMBOLS

T	THERMOSTAT
	THERMOSTAT WIRING
H	HUMIDISTAT
TS	TEMPERATURE SENSOR
FM	GPM FLUID FLOW METER
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
CFM	CUBIC FEET PER MINUTE
EMS	ENERGY MANAGEMENT SYSTEM
ATC	AUTOMATIC TEMP CONTROLS
CO2	CARBON DIOXIDE
PPM	PARTS PER MILLION
ø	ROUND DIAMETER
	FLAT OVAL (MAJOR/MINOR)
	SHORT (1x) RADIUS ELL (RECTANGULAR OR ROUND) CENTERLINE RADIUS = 1d
	LONG (1.5x) RADIUS ELL (ROUND OR OVAL) CENTERLINE RADIUS = 1.5d
	SQUARE ELL
	ELL WITH TURNING VANES
	STREAMLINE TAP (RECTANGULAR)
ø	STREAMLINE TAP (ROUND)
ø	CONICAL TAP
	STRAIGHT TAP
	LATERAL TAP
	MANUAL VOLUME DAMPER
M	MOTORIZED VOLUME DAMPER
FD	FIRE DAMPER (FD)
FD	VERTICAL FIRE DAMPER (FD)
S	SMOKE DAMPER
S FD/S	COMBINATION FIRE / SMOKE DAMPER (FD/S)
20/12	RECTANGULAR DUCT (WIDTH/DEPTH)
	ROUND DUCT OFFSET
RISE	CHANGE IN ELEVATION (RISE, FALL)
	FLEXIBLE DUCT
	SUPPLY DUCT UP
	RETURN DUCT UP
	EXHAUST DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT DOWN
	EXHAUST DUCT DOWN
	CEILING DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
AP	ACCESS PANEL
AP	ACCESS PANEL IN ROUND OR OVAL DUCT
X -X - 000	TYPE - THROW - AIRFLOW
X- 000	TYPE - AIRFLOW

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA
TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
NO. 22380
FORD R. LEWALLEN
01·21·26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SCHEDULES AND LEGEND - HVAC

M0.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:09 AM

DUCT CLASSIFICATION SCHEDULE

DESCRIPTION	DUCT PRESSURE CLASS	SMACNA MINIMUM SEAL CLASS	SMACNA LEAKAGE CLASS	SMACNA DUCT CLEANLINESS LEVEL	DUCT LEAKAGE TEST
SUPPLY AIR - RECTANGULAR					
BETWEEN AHU AND AIR TERMINAL UNIT	+4"	A	4	C	REQUIRED
BETWEEN AIR TERMINAL UNIT AND DIFFUSER	+1"	A	4	C	NOT-REQUIRED
SUPPLY AIR - ROUND/FLAT OVAL					
BETWEEN AHU AND AIR TERMINAL UNIT	+4"	A	2	C	REQUIRED
BETWEEN AIR TERMINAL UNIT AND DIFFUSER	+2"	A	2	C	NOT-REQUIRED
SUPPLY AIR - FLEXIBLE					
BETWEEN AHU AND AIR TERMINAL UNIT	+10"	NA	NA	C	REQUIRED
BETWEEN AIR TERMINAL UNIT AND DIFFUSER	+10"	NA	NA	C	REQUIRED
MEDIUM PRESSURE EXHAUST - RECTANGULAR	-4"	A	4	C	REQUIRED
MEDIUM PRESSURE EXHAUST - ROUND	-4"	A	2	C	REQUIRED
RETURN/EXHAUST/OUTSIDE - RECTANGULAR	-2"	B	4	C	NOT-REQUIRED
RETURN/EXHAUST/OUTSIDE - ROUND	-2"	B	2	C	NOT-REQUIRED
RETURN/EXHAUST/OUTSIDE - FLEXIBLE	-2"	NA	NA	C	NOT-REQUIRED

NOTE: 28 AND 30 GAUGE SHEET METAL PROHIBITED

AIR HANDLING UNIT

DESIGNATION		(N) AHU-1
MANUFACTURER/MODEL		TRANE CSAA100
UNIT CONFIGURATION		HORIZONTAL DRAW-THROUGH
CASING INSULATION		2" FOAM
# OF SECTIONS / MAX SECTION LENGTH		4 / 62"
MAXIMUM UNIT LENGTH		206"
MAXIMUM UNIT WIDTH		155"
MAXIMUM UNIT HEIGHT (INCLUDES BASE RAIL)		120"
MAXIMUM OPERATING WEIGHT (LBS.)		12,470 LBS
BASE RAIL HEIGHT (INCHES)		6" INTEGRAL BASE FRAME
FLAT FILTER SECTION	AIR FLOW (CFM)	58,000 CFM
	FACE VELOCITY	
	FILTER DEPTH (INCHES)	4
	FILTER TYPE	PLEATED (MERV 8)
	EFFICIENCY (%)	30%
	INITIAL AIR PRESSURE DROP (INCHES W.G.)	
	FINAL AIR PRESSURE DROP (INCHES W.G.)	1
	CASING LINER	
	ACCESS DOORS	YES
	AIRFLOW LENGTH (INCHES)	
CHILLED WATER COIL	AIR FLOW (CFM)	58,000
	COIL FACE VELOCITY (FPM)	581
	ROWS	6
	FIN SPACING (FINS PER FOOT)	126
	ENTERING AIR TEMPERATURE (DB/WB DEG. F.)	77/65
	LEAVING AIR TEMPERATURE (DB/WB DEG. F.)	52.4/52.3
	COIL AIR PRESSURE DROP (INCHES W.G.)	0.95
	ENTERING CHILLED WATER TEMPERATURE (DEG. F.)	42
	LEAVING CHILLED WATER TEMPERATURE (DEG. F.)	54
	CHILLED WATER FLOW (GPM)	362
	COIL WATER PRESSURE DROP (FEET W.G.)	9.7
	TOTAL HEAT TRANSFER (MBH)	2,178
	SENSIBLE HEAT TRANSFER (MBH)	1,570
	CASING LINER	
	ACCESS DOORS	
	DRAIN PAN	
	AIRFLOW LENGTH (INCHES)	
FAN SECTION	FAN TYPE	4 FAN ARRAY, CLASS II AIRFOIL
	TOTAL AIR FLOW (CFM)	58,000
	TOTAL STATIC PRESSURE (INCHES W.G.)	5.75
	EXTERNAL STATIC PRESSURE (INCHES W.G.)	3.5
	FAN RPM	2,560
	FAN BHP, TOTAL	93.77
	MOTOR HP, EACH	25
	MOTOR EFFICIENCY	93.6
	MOTOR VOLTAGE / PHASE	460/3
	FEI	1.11
	SECTION ACCESSORIES	INVERTER BALANCE, SHAFT GROUNDING
ELECTRICAL DATA	VOLTAGE / PHASE	460 / 3
	FULL LOAD AMPS (FLA)	130.65
	MINIMUM CIRCUIT AMPACITY (MCA)	163.15
	MAXIMUM OVERCURRENT PROTECTION (MOP)	250
REMARKS:	INCLUDE SUPPLY FAN VFD, EXTERNALLY MOUNTED	

ENERGY RECOVERY UNIT

DESIGNATION		(N) ERU-1
MANUFACTURER/MODEL		TRANE CSAA035
UNIT CONFIGURATION		HORIZONTAL AIRFLOW, ENERGY WHEEL
CASING INSULATION		2" FOAM
# OF SECTIONS / MAX SECTION LENGTH		5 / 70"
MAXIMUM UNIT LENGTH		188"
MAXIMUM UNIT WIDTH		100"
MAXIMUM UNIT HEIGHT (INCLUDES BASE RAIL)		135"
MAXIMUM OPERATING WEIGHT (LBS.)		10,402
BASE RAIL HEIGHT (INCHES)		2.5"
SERVES		AHU-1 OUTSIDE AIR
OUTSIDE AIR FLOW (SCFM), NORMAL OPERATION		18,000
EXHAUST AIR FLOW (SCFM), NORMAL OPERATION		16,000
OSA FLOW (SCFM), ECONOMIZER		30,000
EXHAUST AIR FLOW (SCFM), ECONOMIZER		28,000
ENERGY WHEEL NORMAL OPERATION	AIR PRESSURE DROP - SUPPLY (INCHES WG.)	.98
	AIR PRESSURE DROP - EXHAUST (INCHES WG.)	.86
	ARRANGEMENT	VERTICAL
	MODEL	WHEEL 15000 POLY S
	MEDIA / COATING	POLYMER
	EA/OSA BYPASS DAMPERS INCLUDED	
ENERGY WHEEL SUMMER CONDITIONS NORMAL OPERATION	OSA EDB/EWB (DEG. F)	99/78
	VENTILATION AIR LDB/LWB (DEG. F)	84.6/70.4
	SPACE EXHAUST AIR EDB/EWB (DEG. F)	75/64
	EXHAUST AIR LDB/LWB (DEG. F)	91.1/73.7
	TOTAL RECOVERED LOAD (MBH)	567.8
	SENSIBLE EFFICTIVENESS (%)	66.6
	LATENT EFFICTIVENESS (%)	62.5
	NET EFFICTIVENESS (%)	64.5
	ENTHALPY RECOVERY RATIO, LATENT	.58
ENERGY WHEEL WINTER CONDITIONS	OSA EDB/EWB (DEG. F)	0/-2
	VENTILATION AIR LDB/LWB (DEG. F)	39.5/33.3
	SPACE EXHAUST AIR EDB/EWB (DEG. F)	70/53
	EXHAUST AIR LDB/LWB (DEG. F)	22.3-20.6
	TOTAL RECOVERED LOAD (MBH)	789
	SENSIBLE EFFICTIVENESS (%)	67.5
	LATENT EFFICTIVENESS (%)	63.1
	NET EFFICTIVENESS (%)	66.5
	ENTHALPY RECOVERY RATIO, LATENT	.56
EXHAUST FAN, MAX.	TOTAL AIR FLOW (CFM)	28,000
	FAN TYPE	4 FAN ARRAY, CLASS II AIRFOIL
	TOTAL STATIC PRESSURE (INCHES W.G.)	5.46
	EXTERNAL STATIC PRESSURE (INCHES W.G.)	3.0
	FAN RPM	3,101
	FAN BHP, TOTAL	45.77
	MOTOR HP, PER FAN	20
	MOTOR EFFICIENCY	72.2%
	MOTOR VOLTAGE / PHASE	460/3
	FEI	1.19
VENTILATION/SUPPLY FAN, MAX.	TOTAL AIR FLOW (CFM)	30,000
	FAN TYPE	4 FAN ARRAY, CLASS II AIRFOIL
	TOTAL STATIC PRESSURE (INCHES W.G.)	3.26
	EXTERNAL STATIC PRESSURE (INCHES W.G.)	1.0
	FAN RPM	2,860
	FAN BHP, TOTAL	33.5
	MOTOR HP, PER FAN	10
	MOTOR EFFICIENCY	72.2%
	MOTOR VOLTAGE / PHASE	460/3
	FEI	1.11
VENTILATION AIR FILTERS	FILTER DEPTH (INCHES)	4
	FILTER TYPE	PLEATED (MERV 8)
	EFFICIENCY (%)	30%
EXHAUST AIR FILTERS	FILTER DEPTH (INCHES)	4
	FILTER TYPE	PLEATED (MERV 8)
	EFFICIENCY (%)	30%
ELECTRICAL DATA CIRCUIT 1 SUPPLY FANS AND CONTROLS	VOLTAGE / PHASE	460 / 3
	FULL LOAD AMPS (FLA) SECTION	105.65
	MINIMUM CIRCUIT AMPACITY (MCA)	131.90
	MAX. OVERCURRENT (MOP)	225
ELECTRICAL DATA CIRCUIT 2 EXHAUST FANS	VOLTAGE / PHASE	460 / 3
	FULL LOAD AMPS (FLA) SECTION	52
	MINIMUM CIRCUIT AMPACITY (MCA)	65
	MAX. OVERCURRENT (MOP)	110
ELECTRICAL DATA CIRCUIT 3 ENERGY WHEEL	VOLTAGE / PHASE	460 / 3
	FULL LOAD AMPS (FLA) SECTION	1.72
	MINIMUM CIRCUIT AMPACITY (MCA)	2.10
	MAX. OVERCURRENT (MOP)	15
REMARKS:	INCLUDE UNIT MOUNTED FAN CONTROL PANEL WITH VFDS FOR FANS, WHEEL BYPASS DAMPER, AND ELECTRICAL DISCONNECTS	

UNIT HEATERS - HOT WATER

DESIGNATION	REFERENCE PRODUCT	SERVES	HEATING CAPACITY (MBH)	AIR FLOW RATE (CFM)	AIR EDB / LDB (°F)	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FT. WATER)	EWT / LWT (°F)	ROTATION (RPM)	MOTOR SIZE (WATTS)	ELECTRICAL VOLTS / PHASE	REMARKS
(N) UH-1	TRANE UHS-A18	MECHANICAL W208	14.6	500	40 / 94	1.9	2.2	160/140	1550	16	120 / 1	FURNISH WITH THERMOSTAT, SET TO 40 DEG F FOR FREEZE PROTECTION.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA
TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SCHEDULES - HVAC

M0.02

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:10 AM

AIR-COOLED WATER CHILLER SCHEDULE

DESIGNATION	MANUFACTURER	MODEL	TYPE	100% LOAD AT 100 DEG. F AMBIENT TEMP (KW/TON)	RATED CAPACITY (AHRI)	REFRIGERANT TYPE	EVAPORATOR				NUMBER OF COMPRESSORS	OPERATING WEIGHT (LBS)	LENGTH (IN.)	WIDTH (IN.)	HEIGHT (IN.)	ELECTRICAL			REMARKS
							WATER FLOW RATE (GPM)	MIN. WATER FLOW RATE (GPM)	MAX. PRESSURE DROP @ DESIGN FLOW (FT. WATER)	EWT / LWT (°F)						INPUT POWER (KW)	VOLTS / PHASE / HERTZ	MINIMUM CIRCUIT AMPACITY (MCA)	
(N) ACC-1	TRANE	RTAF215EU	SCREW	1.23	206.2	R513A	380.4	228	8.54	54/42	2	11903	318	87	94	254.4	460/3/60	411	PROVIDE WITH LOW AMBIENT KIT, NON-FUSED DISCONNECT, DISPLAY HEATER, AND COVER PANELS.

PUMP SCHEDULE

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	WATER FLOW RATE (GPM)	TOTAL HEAD (FT. WATER)	ROTATION (RPM)	EFFICIENCY @ PEAK DEMAND (%)	BHP	HP	VOLTS / PHASE	REMARKS
(N) CHP-1	B&G E-1510-3BD	MECHANICAL W115	(N) CH-1	BASE MOUNTED END SUCTION	380	50	1770	79%	6.2	7.5	208/3	PROVIDE WITH NEW SUCTION DIFFUSER TO REPLACE EXISTING. FACTORY MOUNTED VFD.
(N) CHP-2	B&G E-1510-3BD	MECHANICAL W115	(N) CH-1	BASE MOUNTED END SUCTION	380	50	1770	79%	6.2	7.5	208/3	PROVIDE WITH NEW SUCTION DIFFUSER TO REPLACE EXISTING. FACTORY MOUNTED VFD.

GUIDE SPECIFICATION: AIR HANDLER UNIT (AHU-1)
1,1 ADVANCED APPLICATION CONTROLLERS
A. ADVANCE APPLICATION CONTROLLERS SHALL BE USED TO CONTROL ALL EQUIPMENT OR APPLICATIONS OF MEDIUM AND HIGH COMPLEXITY, INCLUDING BUT NOT LIMITED TO AIR HANDLERS, BOILER PLANTS AND CHILLER PLANTS.
B. THE ADVANCED APPLICATION CONTROLLER SHALL BE CAPABLE OF OPERATING AS A STAND-ALONE CONTROLLER OR AS A MEMBER OF A BUILDING AUTOMATION SYSTEM (BAS).
C. WHEN THE ADVANCED APPLICATION CONTROLLER IS OPERATING AS A MEMBER OF A BUILDING AUTOMATION SYSTEM (BAS), THE APPLICATION CONTROLLER SHALL OPERATE AS FOLLOWS:
1. APPLICATION CONTROLLER WILL RECEIVE OPERATION MODE COMMANDS FROM THE BAS NETWORK CONTROLLER. THE BAS COMMANDS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOW: OCCUPIED HEAT/COOL, UNOCCUPIED HEAT/COOL, MORNING WARM-UP, / PRE-COOL, OCCUPIED BYPASS).
2. APPLICATION CONTROLLER WILL PROVIDE EQUIPMENT STATUS PARAMETERS TO THE BAS THROUGH BACNET COMMUNICATION.
3. APPLICATION CONTROLLER WILL OPERATE AS A STAND-ALONE CONTROLLER IN THE EVENT OF COMMUNICATION FAILURE WITH THE BAS.
4. IN CASE OF COMMUNICATIONS FAILURE, STAND-ALONE OPERATION SHALL USE DEFAULT VALUES OR LAST KNOWN VALUES FOR REMOTE SENSORS READ OVER THE NETWORK SUCH AS OUTDOOR AIR TEMPERATURE.
D. FOR STAND-ALONE OPERATION OF ADVANCED APPLICATION CONTROLLERS:
1. SHALL OPERATE A SCHEDULE IN A STANDALONE APPLICATION USING A REAL TIME CLOCK WITH A 7 DAY POWER BACKUP.
A. THE CONTROLLER SHALL HAVE A BUILT IN SCHEDULE (ASSESSABLE WITH OR WITHOUT A DISPLAY)
B. SUPPORT WILL BE FOR AT LEAST 3 SCHEDULES WITH UP TO 10 EVENTS FOR EACH DAY OF THE WEEK.
C. EACH OF THE 3 SCHEDULES CAN BE ANALOG, BINARY OR MULTI-STATE
D. THE CONTROLLER SHALL SUPPORT A MINIMUM OF 25 EXCEPTIONS EACH WITH UP TO 10 EVENTS.
E. FOR EASE OF TROUBLESHOOTING, THE CONTROLLER SHALL SUPPORT DATA TREND LOGGING.
1. TRENDS SHALL BE CAPABLE OF BEING COLLECTED AT A MINIMUM SAMPLE RATE OF ONCE EVERY SECOND.
2. SHALL BE CAPABLE OF TRENDING ALL BACNET POINTS USED BY CONTROLLER
3. TRENDS SHALL BE CAPABLE OF BEING SCHEDULED OR TRIGGERED.
4. WITH A MINIMUM OF 20,000 TRENDING POINTS TOTAL ON A CONTROLLER
F. TO MEET THE SEQUENCE OF OPERATION FOR EACH APPLICATION, THE CONTROLLER SHALL USE LIBRARY PROGRAMS PROVIDED BY THE CONTROLLER MANUFACTURER THAT ARE EITHER FACTORY LOADED OR DOWNLOADED WITH SERVICE TOOL TO THE CONTROLLER.
G. ENVIRONMENT. CONTROLLER HARDWARE SHALL BE SUITABLE FOR THE ANTICIPATED AMBIENT CONDITIONS.
1. OPERATING CONDITIONS:
A. TEMPERATURE: -40°F TO 158°F (-40°C TO 70°C)
B. RELATIVE HUMIDITY: BETWEEN 5% TO 100% RH (NON-CONDENSING)
2. CONTROLLERS USED INDOORS SHALL BE MOUNTED IN A NEMA 1 ENCLOSURE AT A MINIMUM.
3. CONTROLLERS USED OUTDOORS AND/OR IN WET AMBIENT SHALL BE MOUNTED WITHIN NEMA 4 TYPE WATERPROOF ENCLOSURES, AND SHALL BE RATED FOR OPERATION AT -40° F TO 158° F [-40° C TO 70° C].
H. INPUT/OUTPUT: THE CONTROLLER SHALL HAVE ON BOARD OR THROUGH EXPANSION MODULE ALL I/O CAPABLE OF PERFORMING ALL FUNCTIONALITY NEEDED FOR THE APPLICATION. CONTROLS PROVIDED BY THE EQUIPMENT MANUFACTURE MUST SUPPLY THE REQUIRED I/O FOR THE EQUIPMENT. IN ADDITION OTHER CONTROLS MUST MEET THE FOLLOWING REQUIREMENTS:
1. SHALL SUPPORT FLEXIBILITY IN VALVE TYPE, THE CONTROLLERS SHALL BE CAPABLE OF SUPPORTING THE FOLLOWING VALVE CONTROL TYPES: 0-10VDC, 0-5VDC, 4-20MA, 24VAC - 2 POSITION.
2. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, THE CONTROLLER SHALL BE CAPABLE OF READING SENSOR INPUT RANGES OF 0 TO10V, 0 TO 20MA, 50MS OR LONGER PULSES, 200 TO 20KOHM AND RTD INPUT.
3. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, ALL ANALOG OUTPUTS SHALL HAVE THE ADDITIONAL CAPABILITY OF BEING PROGRAMMED TO OPERATE AS UNIVERSAL INPUTS OR PULSE WIDTH MODULATION OUTPUTS.
4. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, THE CONTROLLER AND/OR EXPANSION MODULES SHALL SUPPORT DRY AND WETTED (24VAC) BINARY INPUTS.
5. THE CONTROLLER SHALL SUPPORT PULSE ACCUMULATOR FOR CONNECTING DEVICES LIKE ENERGY METERS.
6. IN ORDER TO SUPPORT A WIDE RANGE OF DEVICES, THE CONTROLLER'S BINARY OUTPUT SHALL BE ABLE TO DRIVE AT LEAST 10VA EACH.
7. ANY UNUSED I/O THAT IS NOT NEEDED FOR THE FUNCTIONALITY OF THE EQUIPMENT SHALL BE AVAILABLE TO BE USED BY CUSTOM PROGRAMS ON THE CONTROLLER AND BY ANY OTHER CONTROLLER ON THE NETWORK.
8. THE CONTROLLER SHALL PROVIDE 24VAC AND 24VDC POWER TERMINALS SENSORS AND OTHER DEVICES REQUIRED.
9. THE CONTROLLER SHALL PROVIDE A DEDICATED STATIC PRESSURE INPUT.
I. INPUT/OUTPUT EXPANDABILITY – THE CONTROLLER SHALL PROVIDE THE FOLLOWING FUNCTIONALITY IN ORDER TO MEET CURRENT AND FUTURE APPLICATION NEEDS:
1. FOR THE APPLICATION FLEXIBILITY, THE CONTROLLER SHALL BE CAPABLE OF EXPANDING TO A TOTAL OF AT LEAST 100 HARDWARE I/O TERMINATIONS.
2. EXPANSION I/O CAN BE MOUNTED UP TO 650 FT. (200M) FROM CONTROL.
3. TO KEEP BACNET MS/TP NETWORK TRAFFIC TO A MINIMUM, EXPANSION I/O MUST COMMUNICATE VIA AN INTERNAL CONTROLLER COMMUNICATION BUS (POINT EXPANSION VIA THE BACNET MS/TP NETWORK IS NOT ALLOWED).
J. SERVICEABILITY – THE CONTROLLER SHALL PROVIDE THE FOLLOWING IN ORDER TO IMPROVE SERVICEABILITY OF THE CONTROLLER.
1. DIAGNOSTIC LEDS FOR POWER/NORMAL OPERATION/STATUS, BACNET COMMUNICATIONS, SENSOR BUS COMMUNICATIONS, AND BINARY OUTPUTS. ALL WIRING CONNECTIONS SHALL BE CLEARLY LABELED AND MADE TO BE FIELD REMOVABLE.
2. BINARY AND ANALOG INPUTS AND OUTPUTS SHALL USE REMOVABLE CONNECTORS OR BE CONNECTED TO TERMINAL STRIP EXTERNAL TO THE CONTROL BOX.
3. SOFTWARE SERVICE TOOL CONNECTION THROUGH THE FOLLOWING METHODS: DIRECT CABLE CONNECTION TO THE CONTROLLER, CONNECTION THROUGH ANOTHER CONTROLLER ON BACNET LINK.
4. FOR SAFETY PURPOSES, THE CONTROLLER SHALL BE CAPABLE OF BEING POWERED BY A PORTABLE COMPUTER'S USB PORT FOR THE PURPOSES OF CONFIGURATION, PROGRAMMING AND TESTING PROGRAMS SO THAT THIS WORK CAN BE ACCOMPLISHED WITH THE POWER OFF TO THE ASSOCIATED EQUIPMENT.
5. THE CONTROLLER SOFTWARE TOOL SERVICE PORT SHALL UTILIZE STANDARD OFF-THE-SHELF USB PRINTER CABLE.
6. CAPABILITIES TO TEMPORARILY OVERRIDE THE BACNET POINT VALUES WITH BUILT-IN TIME EXPIRATION IN THE CONTROLLER.
7. TO AID IN SERVICE REPLACEMENT, THE CONTROLLER SHALL EASILY ATTACHED TO STANDARD DIN RAIL MOUNTING.
8. FOR FUTURE EXPANSION, THE CONTROLLER SHALL BE CAPABLE OF ADDING SEQUENCE OF OPERATION PROGRAMMING UTILIZING SERVICE TOOLS SOFTWARE WITH A GRAPHICAL PROGRAMMING INTERFACE (EDITING OR PROGRAMMING IN LINE CODE IS NOT PERMISSIBLE).
9. TO AID IN SERVICE REPLACEMENT, THE CONTROLLER SHALL ALLOW FOR SETTING ITS BACNET ADDRESS VIA CONTROLLER MOUNTED ROTARY SWITCHES THAT CORRESPOND TO THE NUMERICAL VALUE OF THE ADDRESS. (DIP SWITCH METHODOLOGIES ARE NOT ALLOWED). SETTING OF THE ADDRESS SHALL BE ACCOMPLISHED WITHOUT THE NEED OF A SERVICE TOOL OR POWER APPLIED TO THE CONTROLLER.
10. CONTROLLER DATA SHALL BE MAINTAINED THROUGH A POWER FAILURE.
K. SOFTWARE RETENTION: ALL CONTROLLER OPERATING PARAMETERS, SETPOINTS, BIOS, AND SEQUENCE OF OPERATION CODE MUST BE STORED IN NON-VOLATILE MEMORY IN ORDER TO MAINTAIN SUCH INFORMATION FOR MONTHS WITHOUT POWER.
L. CONTROLLER MUST MEET THE FOLLOWING AGENCY COMPLIANCE:
1. UL916 PAZX, OPEN ENERGY MANAGEMENT EQUIPMENT
2. UL94-5V, FLAMMABILITY
3. FCC PART 15, SUBPART B, CLASS B LIMIT
4. BACNET TESTING LABORATORY (BTL) LISTED AS BACNET ADVANCED APPLICATION CONTROLLER (B-AAC)

GUIDE SPECIFICATION: ENERGY RECOVERY UNIT (ERU-1)
1.1 ADVANCED APPLICATION CONTROLLERS
A. ADVANCE APPLICATION CONTROLLERS SHALL BE USED TO CONTROL ALL EQUIPMENT OR APPLICATIONS OF MEDIUM AND HIGH COMPLEXITY, INCLUDING BUT NOT LIMITED TO AIR HANDLERS, BOILER PLANTS AND CHILLER PLANTS.
B. THE ADVANCED APPLICATION CONTROLLER SHALL BE CAPABLE OF OPERATING AS A STAND-ALONE CONTROLLER OR AS A MEMBER OF A BUILDING AUTOMATION SYSTEM (BAS).
C. WHEN THE ADVANCED APPLICATION CONTROLLER IS OPERATING AS A MEMBER OF A BUILDING AUTOMATION SYSTEM (BAS), THE APPLICATION CONTROLLER SHALL OPERAT AS FOLLOWS:
1. APPLICATION CONTROLLER WILL RECEIVE OPERATION MODE COMMANDS FROM THE BAS NETWORK CONTROLLER. THE BAS COMMANDS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOW: OCCUPIED HEAT/COOL, UNOCCUPIED HEAT/COOL, MORNING WARM-UP, / PRE-COOL, OCCUPIED BYPASS).
2. APPLICATION CONTROLLER WILL PROVIDE EQUIPMENT STATUS PARAMETERS TO THE BAS THROUGH BACNET COMMUNICATION.
3. APPLICATION CONTROLLER WILL OPERATE AS A STAND-ALONE CONTROLLER IN THE EVENT OF COMMUNICATION FAILURE WITH THE BAS.
4. IN CASE OF COMMUNICATIONS FAILURE, STAND-ALONE OPERATION SHALL USE DEFAULT VALUES OR LAST KNOWN VALUES FOR REMOTE SENSORS READ OVER THE NETWORK SUCH AS OUTDOOR AIR TEMPERATURE.
D. FOR STAND-ALONE OPERATION OF ADVANCED APPLICATION CONTROLLERS:
1. SHALL OPERATE A SCHEDULE IN A STANDALONE APPLICATION USING A REAL TIME CLOCK WITH A 7 DAY POWER BACKUP.
A. THE CONTROLLER SHALL HAVE A BUILT IN SCHEDULE (ASSESSABLE WITH OR WITHOUT A DISPLAY)
B. SUPPORT WILL BE FOR AT LEAST 3 SCHEDULES WITH UP TO 10 EVENTS FOR EACH DAY OF THE WEEK.
C. EACH OF THE 3 SCHEDULES CAN BE ANALOG, BINARY OR MULTI-STATE
D. THE CONTROLLER SHALL SUPPORT A MINIMUM OF 25 EXCEPTIONS EACH WITH UP TO 10 EVENTS.
E. FOR EASE OF TROUBLESHOOTING, THE CONTROLLER SHALL SUPPORT DATA TREND LOGGING.
1. TRENDS SHALL BE CAPABLE OF BEING COLLECTED AT A MINIMUM SAMPLE RATE OF ONCE EVERY SECOND
2. SHALL BE CAPABLE OF TRENDING ALL BACNET POINTS USED BY CONTROLLER
3. TRENDS SHALL BE CAPABLE OF BEING SCHEDULED OR TRIGGERED.
4. WITH A MINIMUM OF 20,000 TRENDING POINTS TOTAL ON A CONTROLLER
F. TO MEET THE SEQUENCE OF OPERATION FOR EACH APPLICATION, THE CONTROLLER SHALL USE LIBRARY PROGRAMS PROVIDED BY THE CONTROLLER MANUFACTURER THAT ARE EITHER FACTORY LOADED OR DOWNLOADED WITH SERVICE TOOL TO THE CONTROLLER.
G. ENVIRONMENT. CONTROLLER HARDWARE SHALL BE SUITABLE FOR THE ANTICIPATED AMBIENT CONDITIONS.
1. OPERATING CONDITIONS:
A. TEMPERATURE: -40°F TO 158°F (-40°C TO 70°C)
B. RELATIVE HUMIDITY: BETWEEN 5% TO 100% RH (NON-CONDENSING)
2. CONTROLLERS USED INDOORS SHALL BE MOUNTED IN A NEMA 1 ENCLOSURE AT A MINIMUM.
3. CONTROLLERS USED OUTDOORS AND/OR IN WET AMBIENT SHALL BE MOUNTED WITHIN NEMA 4 TYPE WATERPROOF ENCLOSURES, AND SHALL BE RATED FOR OPERATION AT -40° F TO 158° F [-40° C TO 70° C].
H. INPUT/OUTPUT: THE CONTROLLER SHALL HAVE ON BOARD OR THROUGH EXPANSION MODULE ALL I/O CAPABLE OF PERFORMING ALL FUNCTIONALITY NEEDED FOR THE APPLICATION. CONTROLS PROVIDED BY THE EQUIPMENT MANUFACTURE MUST SUPPLY THE REQUIRED I/O FOR THE EQUIPMENT. IN ADDITION OTHER CONTROLS MUST MEET THE FOLLOWING REQUIREMENTS:
1. SHALL SUPPORT FLEXIBILITY IN VALVE TYPE, THE CONTROLLERS SHALL BE CAPABLE OF SUPPORTING THE FOLLOWING VALVE CONTROL TYPES: 0-10VDC, 0-5VDC, 4-20MA, 24VAC - 2 POSITION.
2. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, THE CONTROLLER SHALL BE CAPABLE OF READING SENSOR INPUT RANGES OF 0 TO10V, 0 TO 20MA, 50MS OR LONGER PULSES, 200 TO 20KOHM AND RTD INPUT.
3. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, ALL ANALOG OUTPUTS SHALL HAVE THE ADDITIONAL CAPABILITY OF BEING PROGRAMMED TO OPERATE AS UNIVERSAL INPUTS OR PULSE WIDTH MODULATION OUTPUTS.
4. SHALL SUPPORT FLEXIBILITY IN SENSOR TYPE, THE CONTROLLER AND/OR EXPANSION MODULES SHALL SUPPORT DRY AND WETTED (24VAC) BINARY INPUTS.
5. THE CONTROLLER SHALL SUPPORT PULSE ACCUMULATOR FOR CONNECTING DEVICES LIKE ENERGY METERS.
6. IN ORDER TO SUPPORT A WIDE RANGE OF DEVICES, THE CONTROLLER'S BINARY OUTPUT SHALL BE ABLE TO DRIVE AT LEAST 10VA EACH.
7. ANY UNUSED I/O THAT IS NOT NEEDED FOR THE FUNCTIONALITY OF THE EQUIPMENT SHALL BE AVAILABLE TO BE USED BY CUSTOM PROGRAMS ON THE CONTROLLER AND BY ANY OTHER CONTROLLER ON THE NETWORK.
8. THE CONTROLLER SHALL PROVIDE 24VAC AND 24VDC POWER TERMINALS SENSORS AND OTHER DEVICES REQUIRED.
9. THE CONTROLLER SHALL PROVIDE A DEDICATED STATIC PRESSURE INPUT.
I. INPUT/OUTPUT EXPANDABILITY – THE CONTROLLER SHALL PROVIDE THE FOLLOWING FUNCTIONALITY IN ORDER TO MEET CURRENT AND FUTURE APPLICATION NEEDS:
1. FOR THE APPLICATION FLEXIBILITY, THE CONTROLLER SHALL BE CAPABLE OF EXPANDING TO A TOTAL OF AT LEAST 100 HARDWARE I/O TERMINATIONS.
2. EXPANSION I/O CAN BE MOUNTED UP TO 650 FT. (200M) FROM CONTROL.
3. TO KEEP BACNET MS/TP NETWORK TRAFFIC TO A MINIMUM, EXPANSION I/O MUST COMMUNICATE VIA AN INTERNAL CONTROLLER COMMUNICATION BUS (POINT EXPANSION VIA THE BACNET MS/TP NETWORK IS NOT ALLOWED).
J. SERVICEABILITY – THE CONTROLLER SHALL PROVIDE THE FOLLOWING IN ORDER TO IMPROVE SERVICEABILITY OF THE CONTROLLER.
1. DIAGNOSTIC LEDS FOR POWER/NORMAL OPERATION/STATUS, BACNET COMMUNICATIONS, SENSOR BUS COMMUNICATIONS, AND BINARY OUTPUTS. ALL WIRING CONNECTIONS SHALL BE CLEARLY LABELED AND MADE TO BE FIELD REMOVABLE.
2. BINARY AND ANALOG INPUTS AND OUTPUTS SHALL USE REMOVABLE CONNECTORS OR BE CONNECTED TO TERMINAL STRIP EXTERNAL TO THE CONTROL BOX.
3. SOFTWARE SERVICE TOOL CONNECTION THROUGH THE FOLLOWING METHODS: DIRECT CABLE CONNECTION TO THE CONTROLLER, CONNECTION THROUGH ANOTHER CONTROLLER ON BACNET LINK.
4. FOR SAFETY PURPOSES, THE CONTROLLER SHALL BE CAPABLE OF BEING POWERED BY A PORTABLE COMPUTER'S USB PORT FOR THE PURPOSES OF CONFIGURATION, PROGRAMMING AND TESTING PROGRAMS SO THAT THIS WORK CAN BE ACCOMPLISHED WITH THE POWER OFF TO THE ASSOCIATED EQUIPMENT.
5. THE CONTROLLER SOFTWARE TOOL SERVICE PORT SHALL UTILIZE STANDARD OFF-THE-SHELF USB PRINTER CABLE.
6. CAPABILITIES TO TEMPORARILY OVERRIDE THE BACNET POINT VALUES WITH BUILT-IN TIME EXPIRATION IN THE CONTROLLER.
7. TO AID IN SERVICE REPLACEMENT, THE CONTROLLER SHALL EASILY ATTACHED TO STANDARD DIN RAIL MOUNTING.
8. FOR FUTURE EXPANSION, THE CONTROLLER SHALL BE CAPABLE OF ADDING SEQUENCE OF OPERATION PROGRAMMING UTILIZING SERVICE TOOLS SOFTWARE WITH A GRAPHICAL PROGRAMMING INTERFACE (EDITING OR PROGRAMMING IN LINE CODE IS NOT PERMISSIBLE).
9. TO AID IN SERVICE REPLACEMENT, THE CONTROLLER SHALL ALLOW FOR SETTING ITS BACNET ADDRESS VIA CONTROLLER MOUNTED ROTARY SWITCHES THAT CORRESPOND TO THE NUMERICAL VALUE OF THE ADDRESS. (DIP SWITCH METHODOLOGIES ARE NOT ALLOWED). SETTING OF THE ADDRESS SHALL BE ACCOMPLISHED WITHOUT THE NEED OF A SERVICE TOOL OR POWER APPLIED TO THE CONTROLLER.
10. CONTROLLER DATA SHALL BE MAINTAINED THROUGH A POWER FAILURE.
K. SOFTWARE RETENTION: ALL CONTROLLER OPERATING PARAMETERS, SETPOINTS, BIOS, AND SEQUENCE OF OPERATION CODE MUST BE STORED IN NON-VOLATILE MEMORY IN ORDER TO MAINTAIN SUCH INFORMATION FOR MONTHS WITHOUT POWER.
L. CONTROLLER MUST MEET THE FOLLOWING AGENCY COMPLIANCE:
1. UL916 PAZX, OPEN ENERGY MANAGEMENT EQUIPMENT
2. UL94-5V, FLAMMABILITY
3. FCC PART 15, SUBPART B, CLASS B LIMIT
4. BACNET TESTING LABORATORY (BTL) LISTED AS BACNET ADVANCED APPLICATION CONTROLLER (B-AAC)

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01·21·26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SCHEDULES - HVAC

M0.03

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:10 AM

GENERAL NOTES:

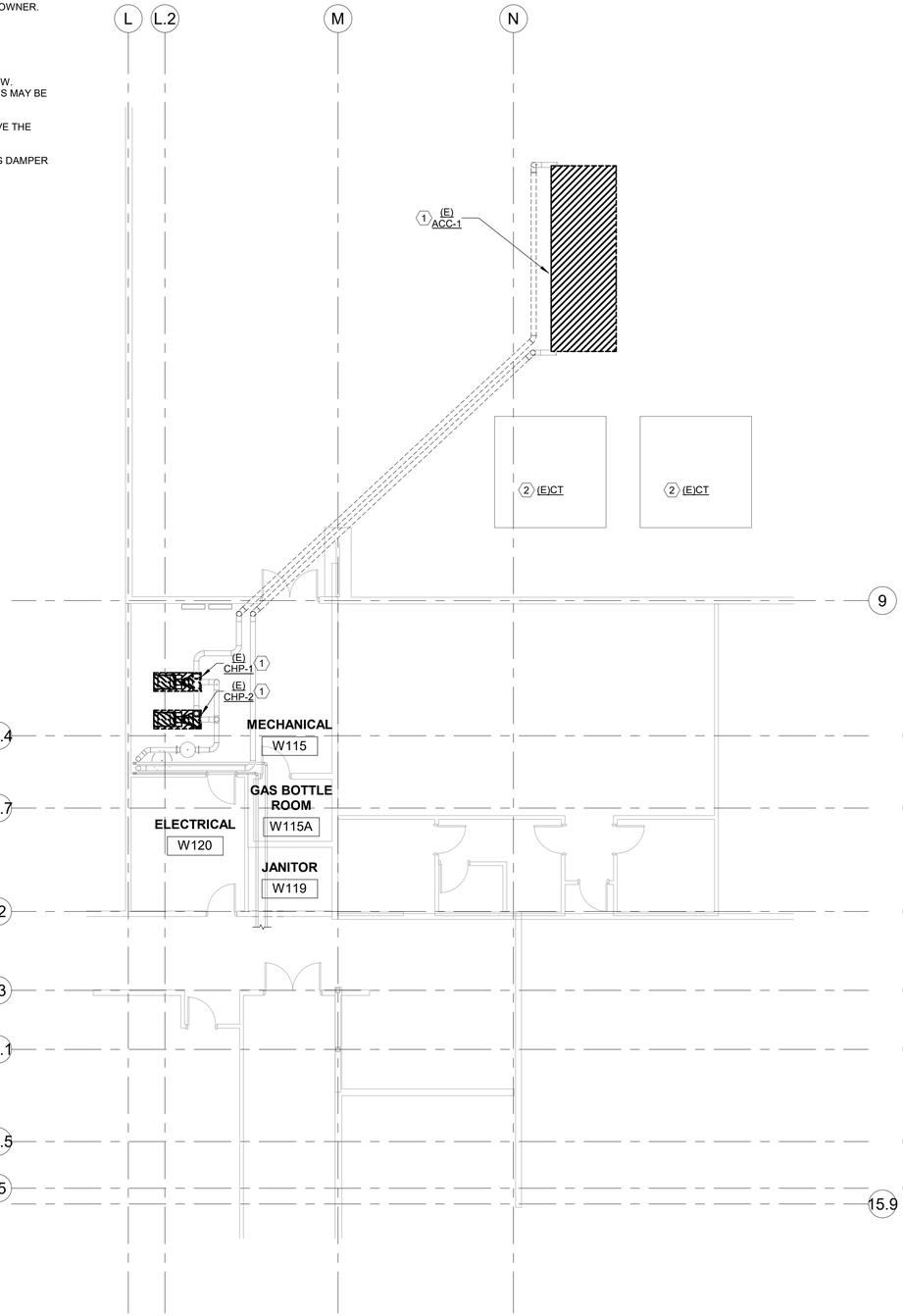
1. COORDINATE ALL MECHANICAL SYSTEM SHUTDOWNS AND INTERRUPTIONS WITH OWNER. DO NOT PERFORM SYSTEM SHUTDOWN WITHOUT PRIOR WRITTEN APPROVAL OF OWNER.

ⓧ KEYED NOTES:

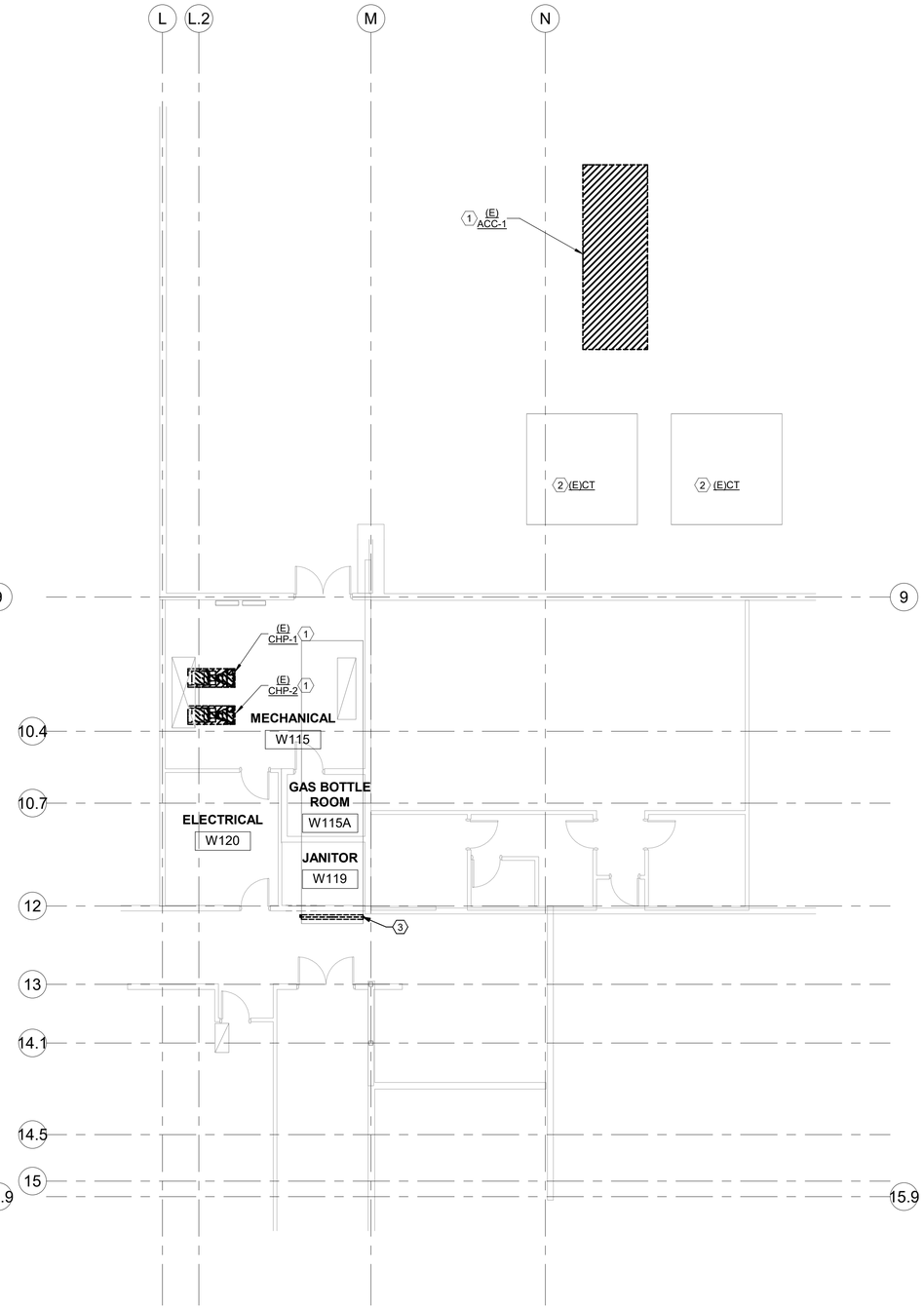
① REMOVE EXISTING EQUIPMENT TO BE REPLACED WITH NEW. MODICIACTIONS TO DUCTWORK AND PIPING CONNECTIONS MAY BE REQUIRED.

② NO CHANGE TO EXISTING COOLING TOWERS. THESE SERVE THE OTHER SIDE OF THE BUILDING.

③ REMOVE EXISTING RETURN AIR DUCT MANUAL BALANCING DAMPER AND REPLACE WITH MOTORIZED BALANCING DAMPER.



2 FIRST FLOOR PLAN - HVAC PIPING DEMOLITION
1/8" = 1'-0"



1 FIRST FLOOR PLAN - HVAC DUCTWORK DEMOLITION
1/8" = 1'-0"

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

FIRST FLOOR PLAN – MECHANICAL DEMOLITION

M2.01

SCM ARCHITECTS P.L.L.C.

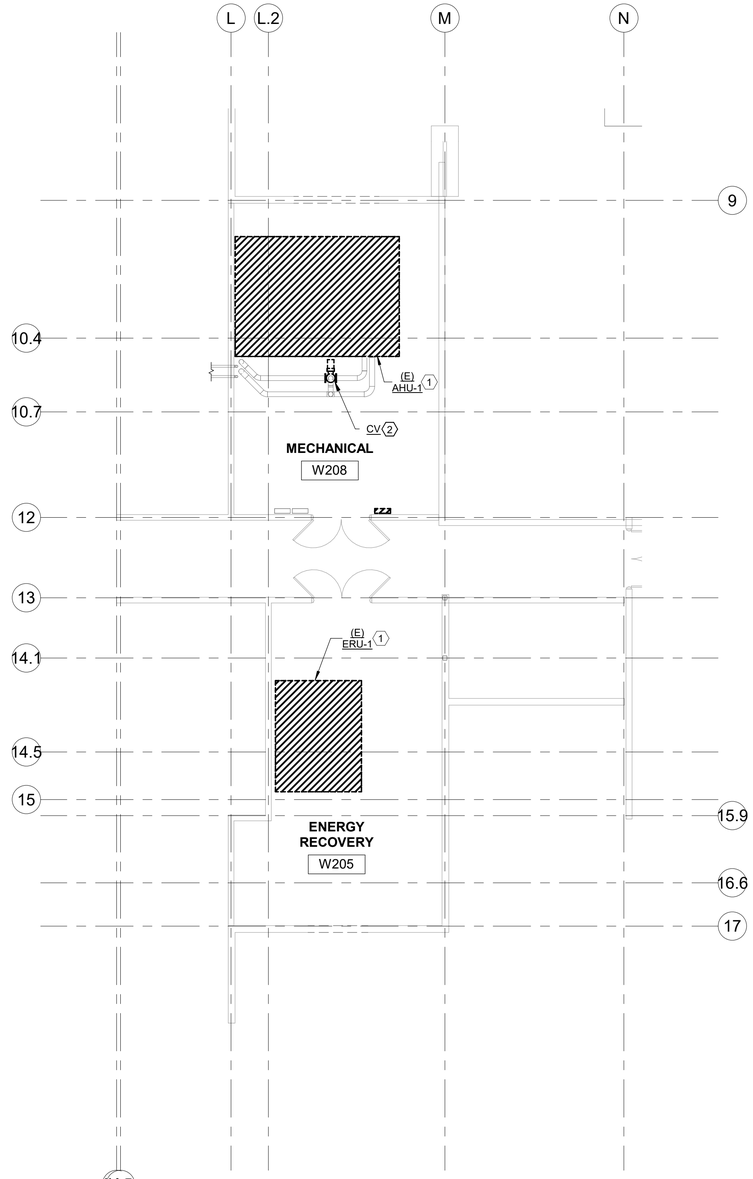
1/21/2026 7:56:11 AM

GENERAL NOTES:

1. COORDINATE ALL MECHANICAL SYSTEM SHUTDOWNS AND INTERRUPTIONS WITH OWNER. DO NOT PERFORM SYSTEM SHUTDOWN WITHOUT PRIOR WRITTEN APPROVAL OF OWNER.

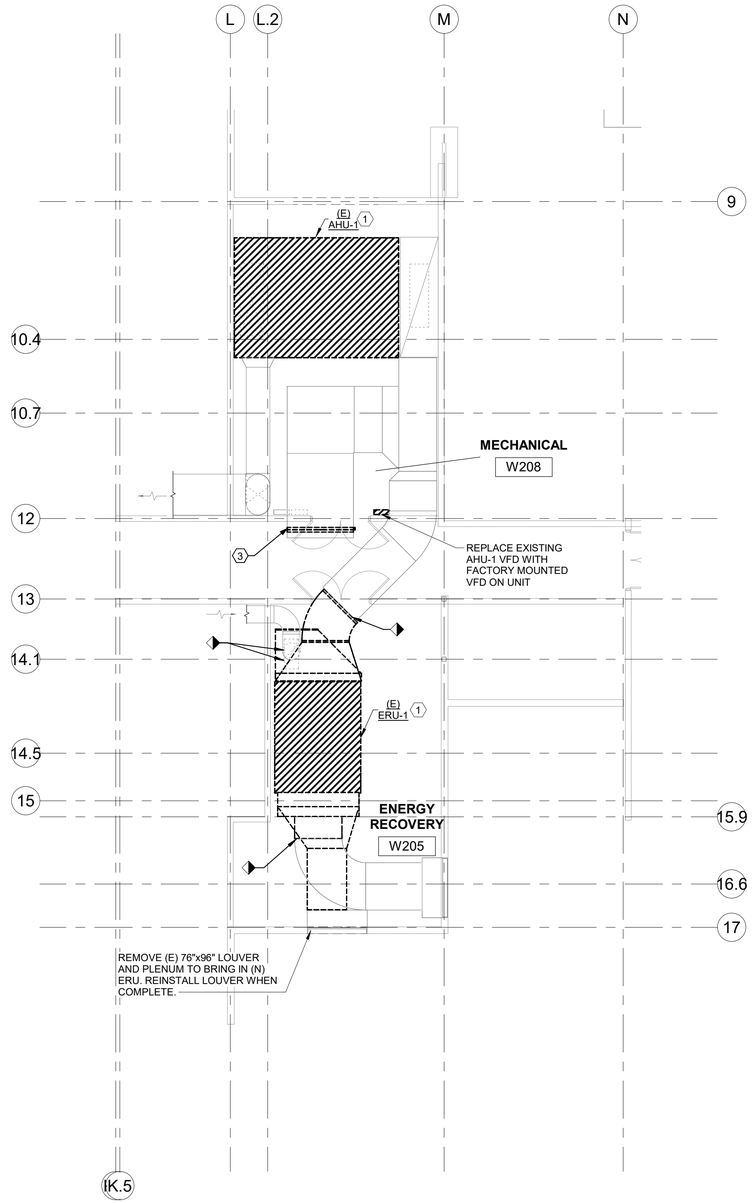
ⓧ KEYED NOTES:

1. REMOVE EXISTING EQUIPMENT TO BE REPLACED WITH NEW. MODICICATIONS TO DUCTWORK AND PIPING CONNECTIONS MAY BE REQUIRED.
2. REPLACE EXISTING CHILLED WATER CONTROL VALVE WITH NEW CONTROL VALVE.
3. REMOVE EXISTING RETURN AIR DUCT MANUAL BALANCING DAMPER AND REPLACE WITH MOTORIZED BALANCING DAMPER.



NORTH

2 SECOND FLOOR PLAN - HVAC PIPING DEMOLITION
1/8" = 1'-0"



NORTH

1 SECOND FLOOR PLAN - HVAC DUCTWORK DEMOLITION
1/8" = 1'-0"

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SECOND FLOOR PLAN - MECHANICAL DEMOLITION

M2.02

SCM ARCHITECTS P.L.L.C.

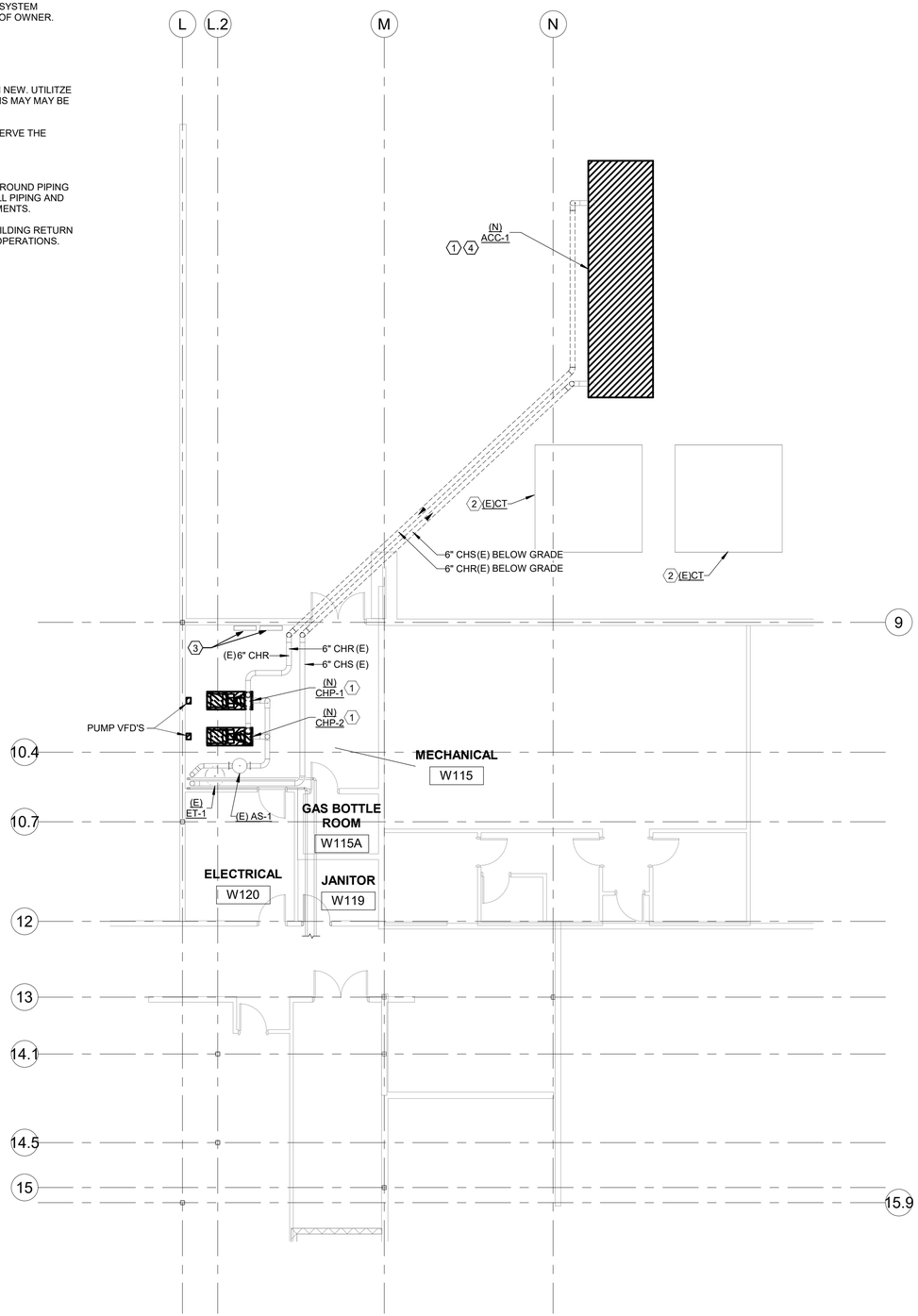
1/21/2026 7:56:12 AM

GENERAL NOTES:

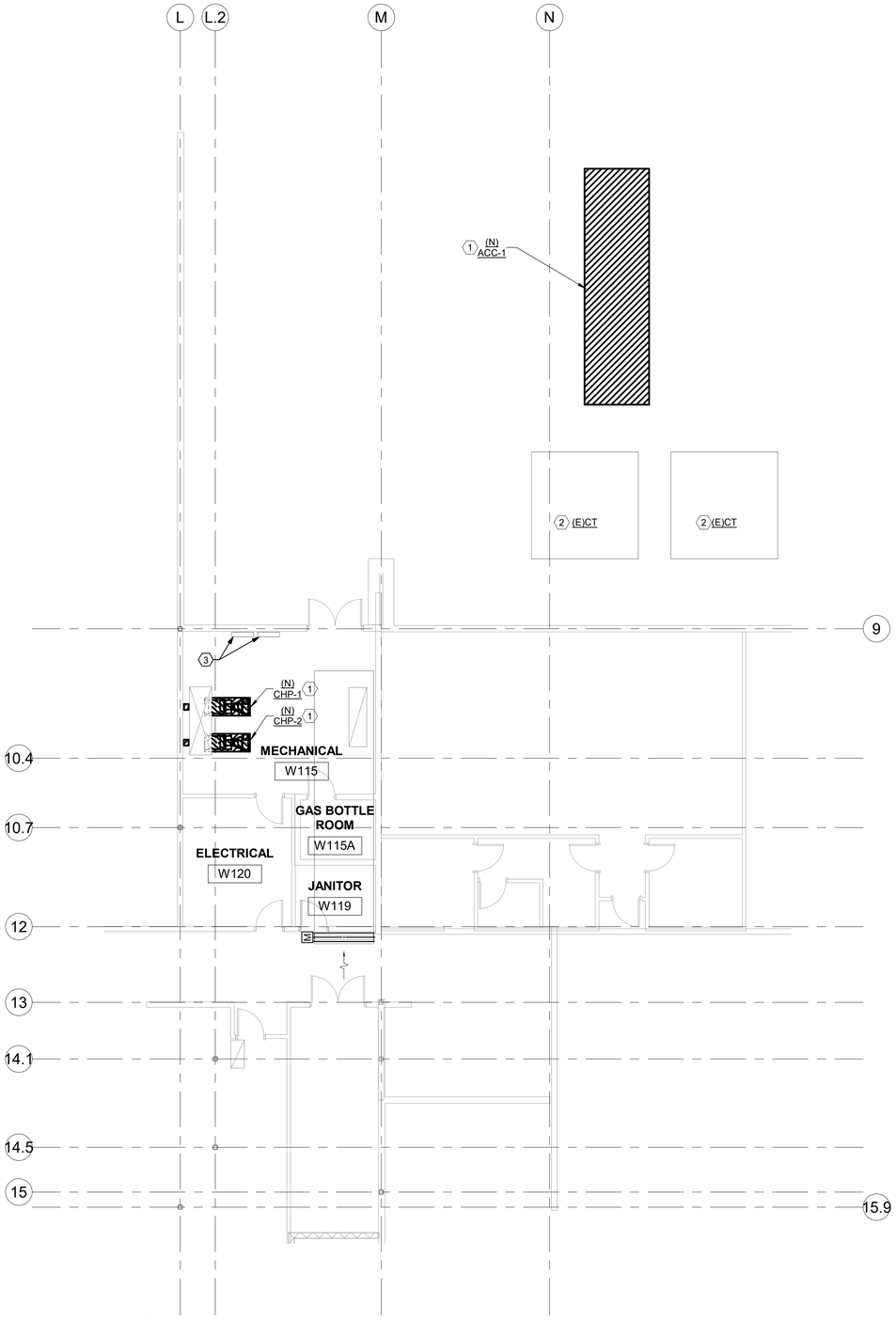
1. COORDINATE ALL MECHANICAL SYSTEM SHUTDOWNS AND INTERRUPTIONS WITH OWNER. DO NOT PERFORM SYSTEM SHUTDOWN WITHOUT PRIOR WRITTEN APPROVAL OF OWNER.

ⓧ KEYED NOTES:

1. REMOVE EXISTING EQUIPMENT TO BE REPLACED WITH NEW. UTILITZE EXISTING PIPING CONNECTIONS. PIPING MODIFICATIONS MAY MAY BE REQUIRED.
2. NO CHANGE TO EXISTING COOLING TOWERS. THESE SERVE THE OTHER SIDE OF THE BUILDING.
3. DDC CONTROL PANEL.
4. INSTALL HEAT TRACE (4W PER FOOT) ON ALL ABOVE GROUND PIPING AT CHILLER ON EXISTING HEAT TRACE CIRCUIT. INSTALL PIPING AND VALVES AT CHILLER PER MANUFACTURER'S REQUIREMENTS.
5. NEW MOTORIZED BALANCING DAMPER TO REDUCE BUILDING RETURN AIR DURING ECONOMIZER MODE. SEE SEQUENCE OF OPERATIONS.



2 FIRST FLOOR PLAN - HVAC PIPING
1/8" = 1'-0"



1 FIRST FLOOR PLAN - HVAC DUCTWORK
1/8" = 1'-0"

NORTH

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

FIRST FLOOR PLAN - MECHANICAL

M3.01

SCM ARCHITECTS P.L.L.C.

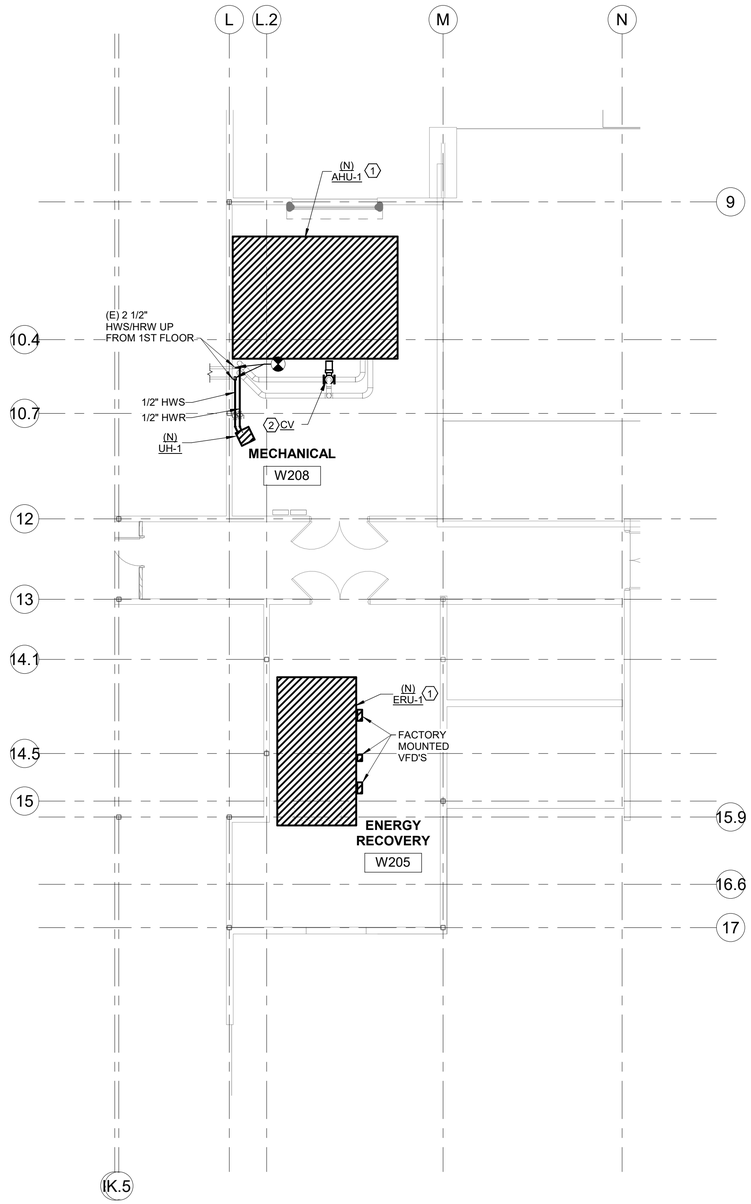
1/21/2026 7:56:12 AM

GENERAL NOTES:

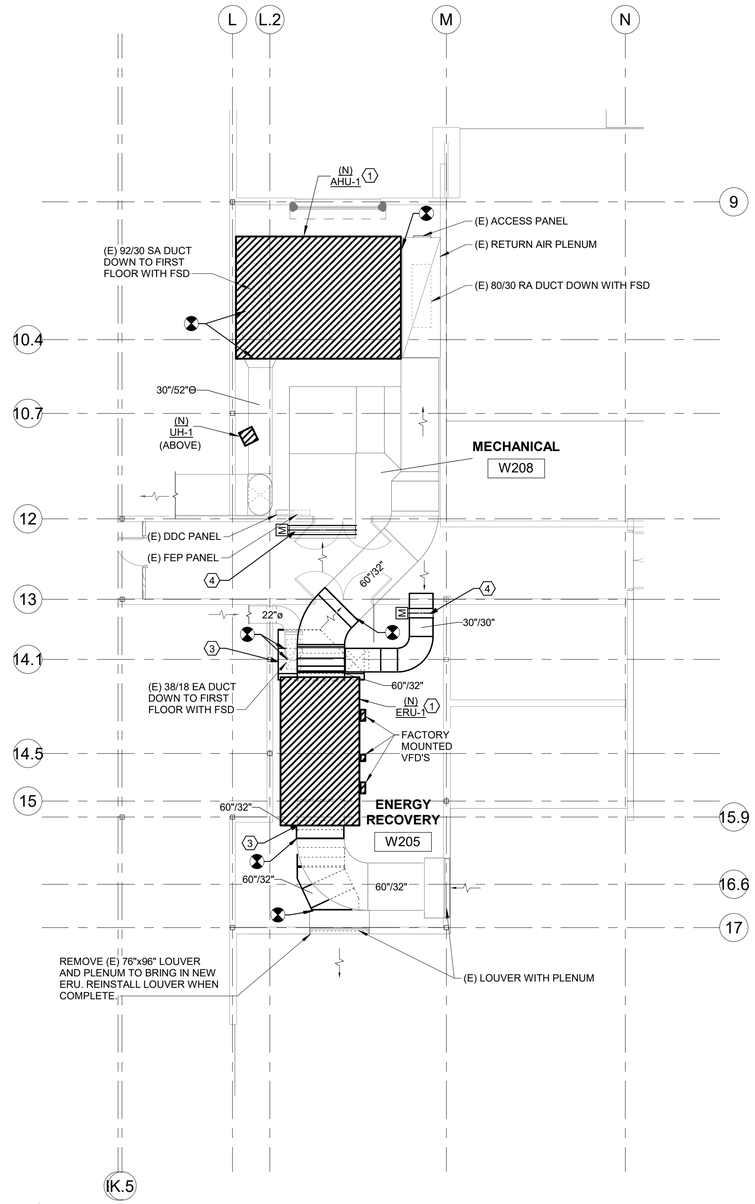
1. COORDINATE ALL MECHANICAL SYSTEM SHUTDOWNS AND INTERRUPTIONS WITH OWNER. DO NOT PERFORM SYSTEM SHUTDOWN WITHOUT PRIOR WRITTEN APPROVAL OF OWNER.

ⓧ KEYED NOTES:

1. REMOVE EXISTING EQUIPMENT TO BE REPLACED WITH NEW. MODICIATIONS TO DUCTWORK AND PIPING CONNECTIONS MAY BE REQUIRED.
2. REPLACE EXISTING CHILLED WATER CONTROL VALVE WITH NEW CONTROL VALVE.
3. REMOVE EXISTING PLENUMS AND INSTALL NEW PLENUMS WITH NEW ERU.
4. NEW MOTORIZED BALANCING DAMPER TO REDUCE BUILDING RETURN AIR DURING ECONOMIZER MODE. SEE SEQUENCE OF OPERATIONS.



2 SECOND FLOOR PLAN - HVAC PIPING
1/8" = 1'-0"



1 SECOND FLOOR PLAN - HVAC DUCTWORK
1/8" = 1'-0"

NORTH

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

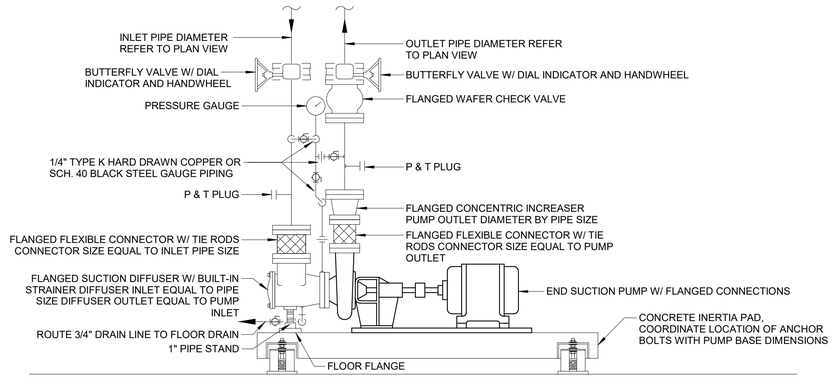
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SECOND FLOOR PLAN - MECHANICAL

M3.02

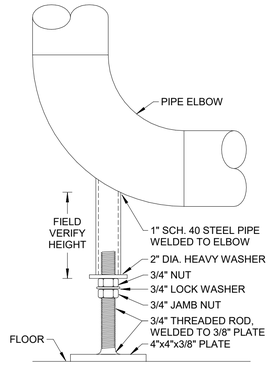
SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:13 AM



1 FLANGED END SUCTION PUMP WITH INERTIA BASE PIPING DETAIL

NOT TO SCALE



2 PIPE STAND SUPPORT

NOT TO SCALE

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

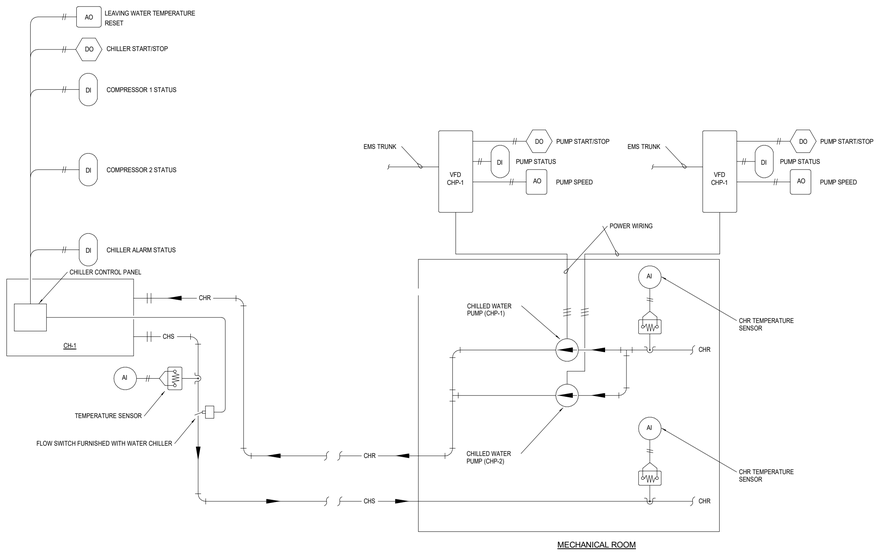
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

DETAILS - HVAC

M6.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:13 AM



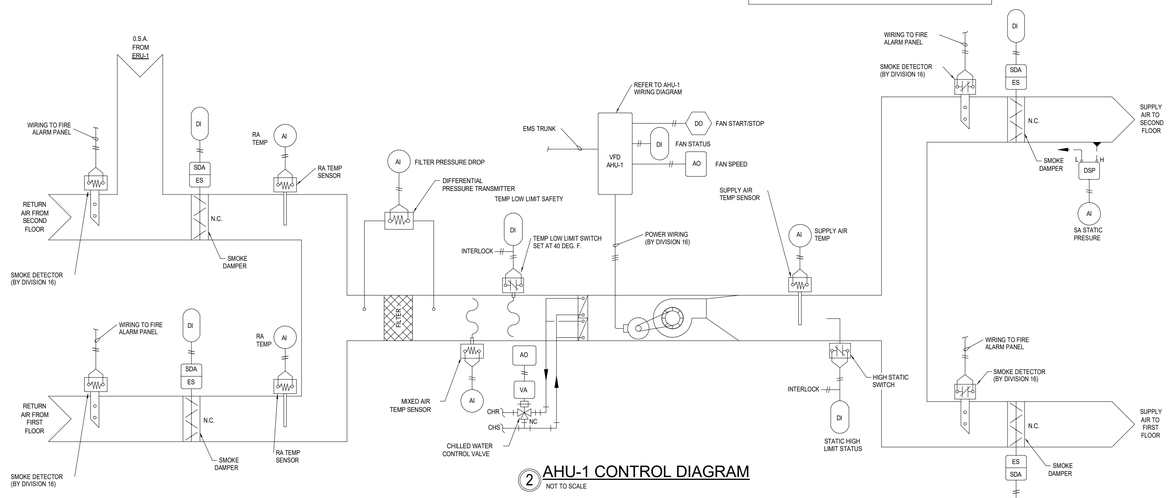
1 CHILLED WATER PIPING DIAGRAM
SCALE: NONE

CHILLED WATER SYSTEM SEQUENCE OF OPERATION:

WATER CHILLER OPERATION SHALL BE STARTED AND STOPPED BY EXISTING DDC PANEL BASED UPON OPERATOR COMMAND (AT EXISTING WORK STATION) OR A WEEKLY SCHEDULE. UPON COMMAND TO START WATER CHILLER OPERATION THE CHILLED WATER PUMP SHALL BE IMMEDIATELY STARTED BY DDC PANEL DIGITAL OUTPUT AND MOTOR STARTER. AFTER PUMP OPERATION IS PROVEN (STARTER AUX. CONTACTS) AND FLOW IS PROVEN (FLOW SWITCH), THE CHILLER SHALL BE STARTED. THE CHILLER COMPRESSORS SHALL BE STARTED AND SEQUENCED BY THE CHILLER CONTROL PANEL AS REQUIRED TO MAINTAIN THE LEAVING CHILLED WATER TEMPERATURE AT SETPOINT. LEAVING CHILLED WATER TEMPERATURE SETPOINT SHALL BE RESET BY DDC PANEL ANALOG OUTPUT BASED UPON OPERATOR COMMAND. THE OPERATION OF THE WATER CHILLER (COMPRESSOR 1 STATUS, COMPRESSOR 2 STATUS AND ALARM STATUS) BY THE DDC PANEL DIGITAL OUTPUTS. THE CHILLER LEAVING WATER TEMPERATURE SHALL BE MONITORED BY DDC PANEL ANALOG INPUT. UPON COMMAND TO STOP THE CHILLER, THE CHILLER SHALL BE IMMEDIATELY STOPPED. AFTER A TIME DELAY OF FIVE (5) MINUTES THE CHILLED WATER PUMP SHALL BE STOPPED.

CONTROLS LEGEND

- AI — DDC PANEL ANALOG INPUT
- AO — DDC PANEL ANALOG OUTPUT
- DI — DDC PANEL DIGITAL INPUT
- DO — DDC PANEL DIGITAL OUTPUT
- CONTROL WIRING (DIVISION 15)
- POWER WIRING (DIVISION 16)
- EMS TRUNK CABLING
- EMS LAN CABLING
- EMS FUME HOOD LAN CABLING
- ELECTRONIC ACTUATOR
- PNUEMATIC TUBING
- PRESSURE GAUGE



2 AHU-1 CONTROL DIAGRAM
NOT TO SCALE

SHEET GENERAL NOTES:

1. POWER WIRING (PWR) BY THE ELECTRICAL CONTRACTOR. ATC CONTRACTOR IS RESPONSIBLE FOR POWER WIRING FROM FIELD EQUIPMENT PANEL TO CONTROLS REQUIRING POWER.

2. SMOKE DETECTOR, INSTALLATION, AND FIRE ALARM WIRING BY THE FIRE ALARM CONTRACTOR.

3. VARIABLE FREQUENCY DRIVE FURNISHED BY ATC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

4. WIRING FROM FIRE ALARM RELAY TO ATC SYSTEM TO ACCOMPLISH SEQUENCE OF OPERATION BY ATC CONTRACTOR.

AIR HANDLING UNIT AHU-1 SEQUENCE OF OPERATION:

BUILDING AUTOMATION SYSTEM INTERFACE:
THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED BYPASS, PRE-COOL, OCCUPIED/UNOCCUPIED AND HEAT/COOL MODES. THE BAS SHALL ALSO SEND THE DISCHARGE AIR TEMPERATURE SETPOINT AND THE DUCT STATIC PRESSURE SETPOINT. IF A BAS IS NOT PRESENT, OR COMMUNICATION IS LOST WITH THE BAS THE CONTROLLER SHALL OPERATE USING DEFAULT MODES AND SETPOINTS.

MODE OF OPERATION:
THE AIR HANDLING UNIT MODE OF OPERATION SHALL BE EITHER OCCUPIED OR UNOCCUPIED BASED ON A SCHEDULE COMMUNICATED FROM THE EMS, AN OPERATOR OVERRIDE COMMAND FROM THE EMS, OR AN OCCUPANCY OVERRIDE SIGNAL FROM THE SPACE TEMPERATURE SENSOR.

OCCUPIED MODE OF OPERATION:
DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY. THE SUPPLY FAN VARIABLE FREQUENCY DRIVE(S) SHALL MODULATE THE SUPPLY FAN(S) SPEED TO MAINTAIN THE SUPPLY AIR STATIC PRESSURE. THE SUPPLY AIR STATIC PRESSURE SETPOINT IS DETERMINED BY THE BAS. THE BAS SHALL MONITOR THE DAMPER POSITION OF ALL SUPPLY AIR TERMINAL UNITS SERVED BY THE AIR HANDLING UNIT AND DETERMINE THE CRITICAL ZONE (CZ) SUPPLY AIR TERMINAL UNIT. THE CRITICAL ZONE (CZ) IS THE SUPPLY AIR TERMINAL UNIT WITH THE GREATEST PERCENTAGE OPEN DAMPER. THE INITIAL STATIC PRESSURE SETPOINT AT TRANSITION FROM UNOCCUPIED TO OCCUPIED OPERATION SHALL BE 1.5 INCHES WATER GAUGE. THE STATIC PRESSURE SETPOINT SHALL BE RESET BETWEEN 0.5 TO 2.0 INCHES WATER GAUGE TO OPTIMIZE FAN ENERGY AS FOLLOWS.

WHEN THE AHU CZ SUPPLY TERMINAL UNIT DAMPER IS LESS THAN 85% OPEN, THE SUPPLY FAN DISCHARGE STATIC PRESSURE SETPOINT SHALL BE RESET DOWNWARD BY 10% OF THE PREVIOUS SETPOINT AT A FREQUENCY OF 10 MINUTES UNTIL THE AHU CZ SUPPLY AIR TERMINAL UNIT DAMPER IS MORE THAN 90% OPEN OR THE STATIC PRESSURE SETPOINT HAS RESET DOWNWARD TO THE SYSTEM MINIMUM SETTING.

WHEN THE CZ DAMPER IS MORE THAN 95% OPEN, THE SUPPLY STATIC PRESSURE SETPOINT SHALL BE RESET UPWARD BY 10% OF THE PREVIOUS SETPOINT AT A FREQUENCY OF 5 MINUTES UNTIL THE CZ DAMPER IS MORE THAN 90% OPEN OR THE STATIC PRESSURE SETPOINT HAS RESET UPWARD TO THE SYSTEM MAXIMUM SETTING.

THE CHILLED WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN THE SUPPLY AIR TEMPERATURE AT SETPOINT OF 55°F.

IN THE EVENT OF FREEZESTAT ALARM, THE CHILLED WATER CONTROL VALVE SHALL BE FULLY OPENED.

IN THE EVENT OF A SUPPLY FAN FAILURE, THE REMAINING FANS IN THE ARRAY WILL REPLACE THE FAILED FAN AND AN ALARM SHALL BE GENERATED AT THE EMS.

UNOCCUPIED MODE:
THE SUPPLY FAN(S) SHALL BE OFF AND THE COOLING COIL CONTROL VALVES SHALL BE CLOSED.

WHEN ANY SPACE TEMPERATURE SENSOR ASSOCIATED WITH THE AIR HANDLING UNIT INDICATES A TEMPERATURE OF 2ºF BELOW THE UNOCCUPIED HEATING SETPOINT, THE AIR HANDLING UNIT SHALL BE STARTED, THE COOLING COIL CONTROL VALVE SHALL REMAIN CLOSED, AND THE TERMINAL UNITS SHALL OPERATE IN THE OCCUPIED MODE UNTIL ALL SPACE TEMPERATURES ARE 2ºF ABOVE UNOCCUPIED HEATING SETPOINT. WHEN SPACE TEMPERATURES ARE 2ºF ABOVE THE UNOCCUPIED HEATING SETPOINT THE AIR HANDLING UNIT SHALL STOP AND THE SYSTEM SHALL RETURN TO THE UNOCCUPIED MODE.

WHEN ANY SPACE TEMPERATURE SENSOR ASSOCIATED WITH THE AIR HANDLING UNIT INDICATES A TEMPERATURE OF 2ºF ABOVE THE UNOCCUPIED COOLING SETPOINT, THE AIR HANDLING UNIT SHALL BE STARTED AND THE COOLING COIL CONTROL VALVE SHALL FULLY OPEN. THE TERMINAL UNITS SHALL OPERATE IN THE OCCUPIED MODE WITH THE REHEAT LOCKED OUT. THE AIR HANDLING UNIT SHALL OPERATE UNTIL ALL SPACE TEMPERATURES ARE 2ºF BELOW THE UNOCCUPIED COOLING SETPOINT. WHEN SPACE TEMPERATURES ARE 2ºF BELOW THE UNOCCUPIED COOLING SETPOINT THE AIR HANDLING UNIT SHALL STOP AND THE SYSTEM SHALL RETURN TO THE UNOCCUPIED MODE.

MORNING WARM-UP MODE:
DURING OPTIMAL START, IF THE AVERAGE SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT, A MORNING WARM-UP MODE SHALL BE ACTIVATED.

PRE-COOL MODE:
DURING OPTIMAL START, IF THE AVERAGE SPACE TEMPERATURE IS ABOVE THE OCCUPIED COOLING SETPOINT, PRE-COOL MODE SHALL BE ACTIVATED. WHEN PRE-COOL IS INITIATED THE UNIT SHALL ENABLE THE FAN AND COOLING. WHEN THE SPACE TEMPERATURE REACHES OCCUPIED COOLING SETPOINT (ADJ.), THE UNIT SHALL TRANSITION TO THE OCCUPIED MODE.

SUPPLY FAN:
THE SUPPLY FAN SHALL BE OFF IN THE UNOCCUPIED MODE. THE SUPPLY FAN SHALL BE ON IF THE CONTROL IS HEATING OR COOLING IN THE UNOCCUPIED MODE. WHEN THE CONTROLLER IS IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY. THE SUPPLY FAN SPEED SHALL BE MODULATED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT. THE DUCT STATIC PRESSURE SETPOINT SHALL BE SENT BY THE BAS AND IS RESET BETWEEN THE MINIMUM AND MAXIMUM STATIC PRESSURE LIMITS TO MAINTAIN THE CRITICAL ZONE VAV AIR DAMPER IN A POSITION BETWEEN 65% AND 75% OPEN. IF THE SUPPLY FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, COOLING SHALL BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN. A HARDWIRED, HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE ELECTRICALLY INTERLOCKED WITH THE VARIABLE SPEED DRIVE. IF THE HIGH STATIC PRESSURE CUT-OFF SWITCH IS TRIPPED THE FAN SHALL BE COMMANDED OFF, COOLING SHOULD BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE REQUIRED TO RESTART THE FAN.

SMOKE DAMPERS:
SMOKE DAMPERS SHALL BE AUTOMATICALLY OPENED BY ELECTRIC PRESSURE SWITCH EP-1 WHENEVER THE SUPPLY FAN IS IN OPERATION. SMOKE DANPERS SHALL BE CLOSED WHEN THE SUPPLY FAN IS NOT IN OPERATION.

CHILLED WATER CONTROL VALVE:
CHILLED WATER CONTROL VALVE SHALL BE MODULATED BY DDC PANEL ANALOG OUTPUT AS REQUIRED TO MAINTAIN THE SUPPLY AIR TEMPERATURE AT SETPOINT OF 55 DEGREES F (ADJUSTABLE). CHILLED WATER VALVE SHALL BE AUTOMATICALLY CLOSED WHENEVER THE SUPPLY FAN IS NOT IN OPERATION.

SAFETIES IN ALL MODES OF OPERATION:
IN THE EVENT THE FIRE ALARM RELAY INDICATES AN UNSAFE CONDITION, THE SUPPLY FAN(S) SHALL STOP AND AN ALARM SHALL BE GENERATED AT THE EMS OPERATOR WORKSTATION. IN THE EVENT THE STATIC PRESSURE EXCEEDS THE HIGH STATIC LIMIT SWITCH (HSL) SETPOINT OF 5.0 INCHES WATER GAUGE, THE SUPPLY FAN(S) SHALL STOP AND AN ALARM SHALL BE GENERATED AT THE EMS OPERATOR WORKSTATION. THE SWITCH SHALL REQUIRE MANUAL RESET. THE SETPOINT IS ADJUSTABLE AT THE SWITCH. IN THE EVENT THE TEMPERATURE DROPS BELOW THE TEMPERATURE LOW LIMIT SAFETY (TLL) SETPOINT OF 40ºF, THE SUPPLY FAN SHALL STOP, AND THE CHILLED WATER CONTROL VALVE SHALL BE FULLY OPEN. AN ALARM SHALL BE GENERATED AT THE EMS OPERATOR WORKSTATION INDICATING THE LOW TEMPERATURE CONDITION. THE TEMPERATURE LOW LIMIT SWITCH SHALL REQUIRE MANUAL RESET. THE SETPOINT IS ADJUSTABLE AT THE SWITCH.

CONDENSATE OVERFLOW MONITORING:
IF THE CONDENSATE LEVEL REACHES THE TRIP POINT, A CONDENSATE OVERFLOW DIAGNOSTIC SHALL ANNUNCIATE AT THE BAS. TO PREVENT THE CONDENSATE DRAIN PAN FROM OVERFLOWING AND CAUSING WATER DAMAGE TO THE BUILDING THE FAN SHALL BE DISABLED AND THE CHILLED WATER VALVE SHALL CLOSE.

FILTERS:
THE DDC PANEL SHALL MONITOR FILTER DIFFERENTIAL PRESSURE AND DISPLAY THE PRESSURE DROP ON THE EMS. AN ALARM SHALL BE GENERATED AT THE EMS WHEN FILTER DIFFERENTIAL PRESSURE EXCEEDS THE DIRTY FILTER ALARM SETPOINT. THE FILTER DIFFERENTIAL PRESSURE ALARM SETPOINT SHALL BE ADJUSTABLE AT THE EMS.

SETPOINTS AND PARAMETERS:
ALL CONTROL BANDS, SETPOINTS, SETPOINT LIMITS, SETPOINT INCREMENT VALUES, SETPOINT DECREMENT VALUES, TIME DELAYS, EQUIPMENT ROTATION SEQUENCES, AND OTHER PARAMETERS SHALL BE ADJUSTABLE FROM THE EMS. ALL PARAMETERS SHALL BE COMMISSIONED BY THE ATC CONTRACTOR TO PROVIDE STABLE CONTROL OF ALL SYSTEMS.

SMOKE DETECTOR SHUTDOWN:
THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTOR SHALL BE REQUIRED TO RESTART THE UNIT.

ALARM MONITORING:
AN ALARM WILL BE GENERATED AT THE EMS PC WORKSTATION IF ANY OF THE FOLLOWING OCCUR:
1. FAN FAILURE
2. LOW SUPPLY AIR TEMPERATURE
3. HIGH SUPPLY AIR TEMPERATURE
4. SPACE HIGH TEMPERATURE
5. SPACE LOW TEMPERATURE
8. FILTER PRESSURE DROP HAS EXCEEDED ALLOWABLE LIMITS
9. HIGH STATIC PRESSURE SAFETY ALARM
10. TEMPERATURE LOW LIMIT SAFETY ALARM
11. FIRE ALARMS SAFETY ALARM

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
NO. 22380
FORD R. LEWALLEN
01·21·26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

CONTROLS - HVAC

M7.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:14 AM

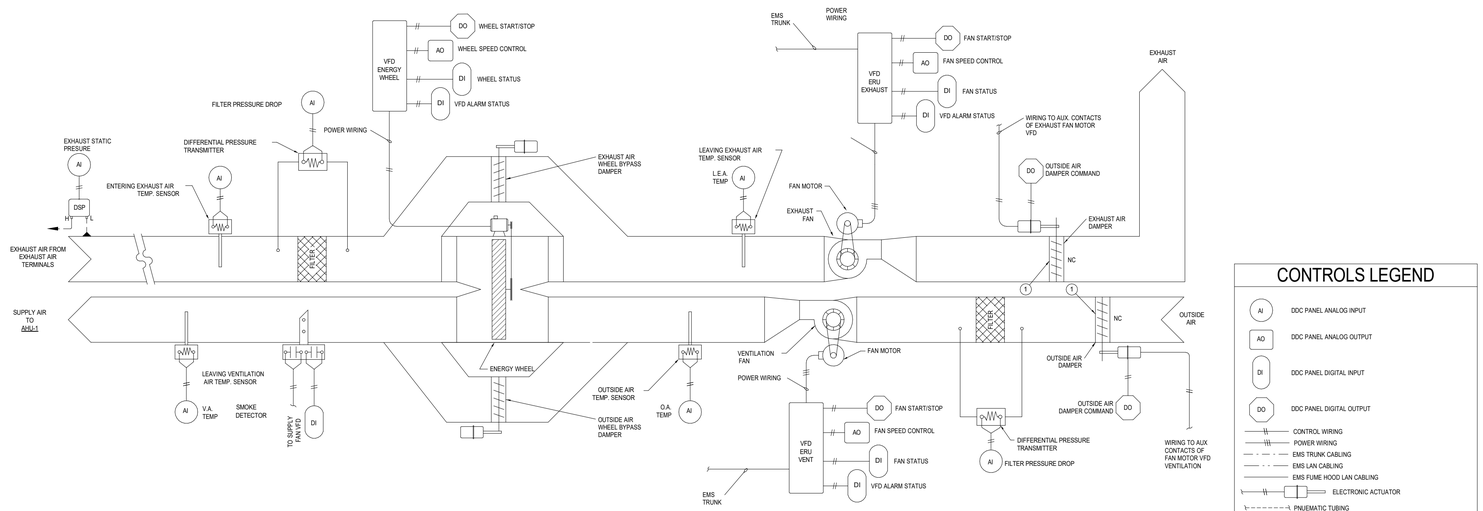
SHEET GENERAL NOTES:

1. POWER WIRING (PWR) BY THE ELECTRICAL CONTRACTOR. ATC CONTRACTOR IS RESPONSIBLE FOR POWER WIRING FROM FIELD EQUIPMENT PANEL TO CONTROLS REQUIRING POWER.

2. SMOKE DETECTOR, INSTALLATION, AND FIRE ALARM WIRING BY THE FIRE ALARM CONTRACTOR.

3. VARIABLE FREQUENCY DRIVE FURNISHED BY ATC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

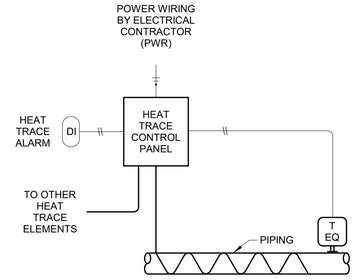
4. WIRING FROM FIRE ALARM RELAY TO ATC SYSTEM TO ACCOMPLISH SEQUENCE OF OPERATION BY ATC CONTRACTOR.



1 ENERGY RECOVERY UNIT (ERU-1) CONTROL DIAGRAM

CONTROLS LEGEND

- AI — DDC PANEL ANALOG INPUT
- AO — DDC PANEL ANALOG OUTPUT
- DI — DDC PANEL DIGITAL INPUT
- DO — DDC PANEL DIGITAL OUTPUT
- CONTROL WIRING
- POWER WIRING
- EMS TRUNK CABLING
- EMS LAN CABLING
- EMS FUME HOOD LAN CABLING
- ELECTRONIC ACTUATOR
- PNUEMATIC TUBING
- PRESSURE GAUGE



PIPING HEAT TRACE SEQUENCE OF OPERATION:

MODE OF OPERATION:
THE HEAT TRACE CONTROLLER MODULATES THE HEAT TRACE ELEMENT TO PREVENT PIPE FREEZING.

ALARM MONITORING:
AN ALARM WILL BE GENERATED AT THE EMS PC WORKSTATION IF ANY OF THE FOLLOWING OCCUR:
1. HEAT TRACE CONTROL FAILURE.

DIAGRAM GENERAL NOTES:

1. HEAT TRACE CONTROLLER; FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR; POWER WIRING BY ELECTRICAL CONTRACTOR; CONTROL AND INTERLOCK WIRING BY ATC CONTRACTOR.
2. HEAT TRACE ELEMENTS; FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR ON PIPING PER MANUFACTURERS RECOMMENDATIONS.
3. HEAT TRACE SENSOR; FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.

2 PIPING HEAT TRACE CONTROL DIAGRAM
NOT TO SCALE

ENERGY RECOVERY UNIT (ERU-1) SEQUENCE OF OPERATION:

BUILDING AUTOMATION SYSTEM INTERFACE:
THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER AN OCCUPIED OR UNOCCUPIED
COMMAND. THE BAS SHALL ALSO SEND THE DISCHARGE AIR TEMPERATURE SETPOINT, A DISCHARGE DEW
POINT SETPOINT, AND THE DUCT PRESSURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE CONTROLLER SHALL OPERATE IN THE OCCUPIED COOLING MODE USING ITS DEFAULT DISCHARGE AIR AND DUCT STATIC PRESSURE SETPOINTS.

OCCUPIED MODE OF OPERATION:
ON AN OCCUPANCY COMMAND, THE OUTSIDE AND EXHAUST DAMPERS SHALL OPEN. ON PROOF OF DAMPERS BEING OPEN FROM THE DAMPER END SWITCHES, THE SUPPLY AND EXHAUST FANS SHALL BE ENABLED. THE FANS SHALL OPERATE CONTINUOUSLY IN THE OCCUPIED MODE.

THE NORMAL SUPPLY AND EXHAUST FAN AIRFLOW SHALL BE 18,000 CFM AND 16,000 CFM, RESPECTIVELY, TO MAINTAIN THE SCHEDULED AIRFLOW. SUPPLY AND EXHAUST FAN AIRFLOWS IN ECONOMIZER MODE SHALL BE 30,000 CFM AND 28,000 CFM, RESPECTIVELY.

THE SUPPLY FAN SHOULD BE MODULATED TO MAINTAIN A CONSTANT AIR FLOW SETPOINT.

IF THE SUPPLY FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, THE OUTSIDE AIR DAMPER SHALL CLOSE, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN.

A HARDWIRED, HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE ELECTRICALLY INTERLOCKED WITH THE VARIABLE SPEED DRIVE. IF THE HIGH STATIC PRESSURE CUT-OFF SWITCH IS TRIPPED THE FAN SHALL BE COMMANDED OFF, THE OUTSIDE AIR DAMPER SHALL CLOSE, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE REQUIRED TO RESTART THE FAN.

THE ENERGY RECOVERY WHEEL SHALL BE INTERLOCKED TO OPERATE ONLY WHEN THE SUPPLY FAN AND THE EXHAUST FAN ARE IN OPERATION.

UNOCCUPIED MODE OF OPERATION:
THE SUPPLY FAN SHALL BE OFF, THE EXHAUST FAN SHALL BE OFF, THE OUTSIDE AIR DAMPER SHALL CLOSE, AND THE EXHAUST DAMPERS SHALL CLOSE.

EXHAUST FAN:
IF THE SUPPLY FAN STATUS IS CONFIRMED TO BE OFF, THE EXHAUST FAN SHALL BE DISABLED AND THE EXHAUST AIR DAMPER SHALL BE CLOSED.
IF THE EXHAUST FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, AND AN ALARM SHALL ANNUNCIATE AT THE BAS.

ENERGY RECOVERY OPERATION:
WHEN THE OUTDOOR AIR ENTHALPY IS GREATER THAN THE RELIEF AIR ENTHALPY, THE TOTAL ENERGY WHEEL SHALL BE ENABLED AND BOTH OUTDOOR AIR AND RELIEF AIR BYPASS DAMPERS SHALL BE CLOSED. WHEN THE OUTDOOR AIR ENTHALPY IS LESS THAN THE RELIEF AIR ENTHALPY AND THE AHU IS COOLING, THE TOTAL ENERGY WHEEL SHALL BE DISABLED AND BOTH OUTDOOR AIR AND RELIEF AIR BYPASS DAMPERS SHALL BE OPEN. WHEN COMMANDED OFF, THE TOTAL ENERGY WHEEL SHALL OPERATE FOR 2 MINUTES EVERY 4 HOURS TO AVOID FOULING. WHEN THE AHU IS HEATING, THE TOTAL ENERGY WHEEL SHALL BE ENABLED AS THE FIRST STAGE OF HEAT, THE OUTDOOR AIR BYPASS DAMPER SHALL BE CLOSED, AND THE RELIEF AIR BYPASS DAMPER SHALL MODULATE (AS NECESSARY) TO MAINTAIN DISCHARGE AIR TEMPERATURE HEATING SETPOINT OF 55.0 DEG. F (ADJ.). IF THE EXHAUST-SIDE LEAVING DRY-BULB TEMPERATURE DROPS BELOW THE FROST THRESHOLD SETPOINT 25 DEG. F (ADJ.), THE OUTDOOR AIR BYPASS DAMPER SHALL MODULATE TO MAINTAIN THE RELIEF-SIDE LEAVING DRY-BULB TEMPERATURE AT SETPOINT. IF THE OUTDOOR AIR BYPASS DAMPER REACHES 100% OPEN FOR 5 MINUTES (ADJ.), THE TOTAL ENERGY WHEEL SHALL BE DISABLED TO PREVENT FROSTING.

ECONOMIZER MODE:
WHEN THE OUTDOOR AIR TEMPERATURE IS 5 DEG LESS THAN THE RETURN AIR TEMPERATURE TO THE AHU, ERU FAN SPEED SHALL MODULATE UP TO 30,000 CFM. THE RETURN AIR MOTORIZED DAMPERS FOR THE AHU WILL MODULATE CLOSED TO DELIVER TOTAL SUPPLY AIR REQUIRED BY THE AHU. THE EXHAUST AIR MOTORIZED DAMPER IN THE HALLWAY SHALL MODULATE OPEN TO EXHAUST THE CORRECT AMOUNT AND MAINTAIN BUILDING PRESSURE.
AS OUTDOOR AIR TEMPS DECREASE BELOW 55 DEG (ADJ), MAINTAIN SUPPLY AIR TEMP AT 55 DEG (ADJ) BY MODULATING THE ERU FAN SPEED DOWN AND MODULATING THE AHU RETURN AIR MOTORIZED DAMPERS OPEN TO AVOID OVERCOOLING/FREEZING. THE AHU COOLING COIL SHALL BE OFF IF ECONOMIZER MODE PROVIDES THE REQUIRED COOLING.

SAFETIES IN ALL MODES OF OPERATION:
THE AIR HANDLING UNIT SHALL SHUTDOWN AND AN ALARM SHALL BE GENERATED AT THE EMS OPERATOR WORKSTATION IF THE FIRE ALARM RELAY INDICATES AN UNSAFE CONDITION.

ON AIR HANDLING UNIT SHUTDOWN, THE SUPPLY FAN SHALL STOP, THE EXHAUST FAN SHALL STOP, THE OUTSIDE AIR DAMPER SHALL CLOSE, AND THE EXHAUST DAMPER SHALL CLOSE.

CONDENSATE OVERFLOW MONITORING:
IF THE CONDENSATE LEVEL REACHES THE TRIP POINT, A CONDENSATE OVERFLOW DIAGNOSTIC SHALL ANNUNCIATE AT THE BAS. TO PREVENT THE CONDENSATE DRAIN PAN FROM OVERFLOWING AND CAUSING WATER DAMAGE TO THE BUILDING THE FAN SHALL BE DISABLED AND THE CHILLED WATER VALVE SHALL CLOSE.

FILTERS:
THE DDC PANEL SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER(S) AND GENERATE AN ALARM IF FILTER DIFFERENTIAL PRESSURE EXCEEDS THE ALARM LIMIT SETPOINT. FILTER DIFFERENTIAL PRESSURE ALARM LIMIT SETPOINT SHALL BE ADJUSTABLE FROM THE EMS.

SETPOINTS AND PARAMETERS:
ALL CONTROL BANDS, SETPOINTS, SETPOINT LIMITS, SETPOINT INCREMENT VALUES, SETPOINT DECREMENT VALUES, TIME DELAYS, EQUIPMENT ROTATION SEQUENCES, AND OTHER PARAMETERS SHALL BE ADJUSTABLE FROM THE EMS.

ALL PARAMETERS SHALL BE COMMISSIONED BY THE ATC CONTRACTOR TO PROVIDE STABLE CONTROL OF ALL SYSTEMS.

SMOKE DETECTOR SHUTDOWN:
THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTOR SHALL BE REQUIRED TO RESTART THE UNIT.

ALARM MONITORING:
AN ALARM WILL BE GENERATED AT THE EMS IF ANY OF THE FOLLOWING OCCUR:
1. SUPPLY FAN FAILURE
2. EXHAUST FAN FAILURE
3. HIGH SUPPLY AIR TEMPERATURE
4. HIGH RETURN/EXHAUST AIR HUMIDITY LEVEL
5. FILTER DIFFERENTIAL PRESSURE EXCEEDS ALARM LIMIT

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERT. IF CA OF AUTHORIZATION
ENFRA TME, LLC No. 2790
ARKANSAS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 22380 FORD R. LEWALLEN
01-21-26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

CONTROLS - HVAC

M7.02

SCM ARCHITECTS P.L.L.C.

1/21/2026 7:56:14 AM

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
S	SINGLE-POLE SWITCH		BRANCH CIRCUIT IN CONDUIT - HOT LEG, SWITCH LEG, NEUTRAL, AND EQUIPMENT GROUND		TRANSFORMER
S_M	MANUAL MOTOR STARTER WITH OVERLOADS, TOGGLE OPERATED, DEVICE SHALL BE UL508 LISTED AS MEANS OF DISCONNECT.		BRANCH CIRCUIT HOMERUN - PANEL & CIRCUIT NUMBER INDICATED		WYE CONNECTION
S_P	SINGLE-POLE SWITCH WITH PILOT LIGHT		CONDUIT CONCEALED IN OR BELOW FLOOR SLAB		EARTH GROUND
S_F	2.75" BOX WITH COOPER SSU BOX COVER, TYPE S ADAPTER AND TYPE S FUSE.		EMERGENCY CIRCUIT IN CONDUIT	PB	PULL BOX
S_K	BUSSMAN FUSED TOGGLE SWITCH - MODEL SSU WITH SA TYPE FUSE ADAPTOR		FLEXIBLE CONDUIT		NORMALLY CLOSED RELAY CONTACT
	MOTOR, SINGLE-PHASE		DUPLEX RECEPTACLE		NORMALLY OPEN RELAY CONTACT
	MOTOR, THREE-PHASE	GFI/WP	DUPLEX RECEPTACLE - GROUND FAULT INTERRUPTING AND WEATHER-PROOF TYPES AS INDICATED ON PLANS		FUSE WITH RATING
	PUSH BUTTON		DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP - VERIFY MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS	M	FIRE ALARM CONTROL MODULE
			QUADRAPLEX RECEPTACLE	F	FIRE ALARM AUDIO/VISUAL DEVICE
			SPECIAL PURPOSE OUTLET - NEMA CONFIGURATION (VOLTAGE, AMPACITY) INDICATED	F	FIRE ALARM VISUAL DEVICE
		J	CEILING MOUNTED JUNCTION BOX		FIRE ALARM PULL STATION
			NONFUSED DISCONNECT SWITCH - SIZE NOTED ON PLAN	R	FIRE ALARM RELAY
			COMBINATION MOTOR STARTER AND DISCONNECT SWITCH	HD	HEAT DETECTOR
			FUSED DISCONNECT	SD	SMOKE DETECTOR
			ELECTRICAL PANEL	DD	DUCT SMOKE DETECTOR
				TS	TAMPER SWITCH
				FS	FLOW SWITCH
				DH	DOOR HOLDER
					GROUND ROD
				TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR

GENERAL NOTES

1. EACH CIRCUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR, AND MULTI-WIRE CIRCUITS OF DIFFERENT PHASES MAY SHARE EQUIPMENT GROUND CONDUCTOR. EQUIPMENT GROUND CONDUCTOR SIZE SHALL NOT BE LESS THAN #12 AWG OR AS INDICATED ON THE DRAWINGS.
2. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID COPPER, AND ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER UNLESS BOLTED LUGS AT TERMINALS.
3. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED.
4. ALL WIRING DEVICES SHALL BE INSTALLED PLUMB, SQUARE, AND TRUE; AND ALL DEVICES INSTALLED AT A SINGLE LOCATION SHALL BE ALIGNED.
5. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE SPECIFIED.
6. ALL WORK SHALL COMPLY WITH THE 2023 EDITION OF THE NATIONAL ELECTRICAL CODE.
7. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL ELEVATIONS AND MILLWORK DETAILS FOR EXACT LOCATIONS OF ALL WIRING DEVICES.
8. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LAY-IN LIGHT FIXTURES.
9. ALL EXISTING BRANCH CIRCUITS NOT USED SHALL BE REMOVED BACK TO PANEL. THE CIRCUIT BREAKERS SHALL BE LABELED AS SPARE, AND EXISTING CONDUIT SHALL REMAIN FROM PANEL TO ABOVE ACCESSIBLE CEILING SPACE.
10. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION IN AREAS OF RENOVATION. ALL WIRING DEVICES, LIGHT FIXTURES, WIRE, AND CONDUIT THAT IS TO BE REMOVED SHALL BE STORED, AS DIRECTED BY THE OWNER, OR RELOCATED, AS SHOWN ON THE NEW FLOOR PLANS. APPROPRIATE MEASURES SHALL BE TAKEN TO ASSURE CONTINUITY OF EXISTING CIRCUITS WHERE REQUIRED. ALL OUTAGES WHICH MAY RESULT SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE WORK.
11. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING SCHEDULES IN ALL ELECTRICAL PANELS THAT ARE AFFECTED BY THIS WORK. UPDATED SCHEDULES ARE TO BE TYPEWRITTEN.
12. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING ALL SWITCHES, RECEPTACLES, AND FIXED EQUIPMENT WITH THE BRANCH CIRCUIT PANEL NAME AND NUMBER SERVING EACH DEVICE.
13. ALL CONDUIT SHALL BE INSTALLED AS HIGH AS POSSIBLE (MOUNT TO BOTTOM OF STRUCTURE) TO AVOID CONFLICTS WITH DUCTWORK AND PIPING. THE ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION WITH THE MECHANICAL CONTRACTOR.
14. ON THREE PHASE, FOUR WIRE SYSTEMS, DO NOT USE A COMMON NEUTRAL. MORE THAN THREE CIRCUIT IN ANY ONE CONDUIT IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

ABBREVIATIONS

A

A, AMPS	AMPERES
A/C	AIR CONDITIONING
AC	ALTERNATING CURRENT OR ARMORED CABLE
ADJ	ADJUSTABLE
AF	AMPERE FUSE
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
A/E	ARCHITECT/ENGINEER
AAP	ALARM ANNUNCIATOR PANEL
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO VISUAL

B

BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE (EARTH)
BFS	BELOW FLOOR SLAB
BKR	BREAKER
BLDG	BUILDING

C

C	CONDUIT
CATV	CABLE TELEVISION SYSTEM
CCTV	CLOSED CIRCUIT TELEVISION
C.I.	CUBIC INCHES
CKT	CIRCUIT
CL	CENTERLINE
CLG	CEILING
COORD	COORDINATE
CSA	COLOR SELECTED BY ARCHITECT
CU, C/U	COPPER, CONDENSING UNIT
CHW	CHILLED WATER
CHWP	CHILLED WATER PUMP
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION

D

DC	DIRECT CURRENT
DDC	HVAC DIGITAL CONTROL PANEL
DEMO	DEMOLITION
DIA	DIAMETER
DISC.	DISCONNECT SWITCH
DN	DOWN
DWG	DRAWING
DPDT	DOUBLE POLE, DOUBLE THROW
DPST	DOUBLE POLE, SINGLE THROW

E

EA	EACH
EC	ELECTRICAL CONTRACTOR
EF, EXH FAN	EXHAUST FAN
ELEC	ELECTRICAL
EM	EMERGENCY FIXTURE
ENCL	ENCLOSURE
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
ETR	EXISTING EQUIPMENT TO REMAIN
EWC	ELECTRICAL WATER COOLER
EMT	ELECTRICAL METALLIC TUBING
EWH	ELECTRICAL WATER HEATER

F

FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FD	FIRE DAMPER
FEP	HVAC FIELD EQUIP RELAY PANEL
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE METALLIC CONDUIT
FM	FACTORY MUTUAL
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FP	FIRE PROTECTION
FT	FEET OR FOOT
FU SW	FUSED SWITCH
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING

G

G, GND, GRD	GROUND
GA	GAUGE
GALV	GALVANIZED
GENSET	GENERATOR SET
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GEN	GENERATOR

H

HP	HORSEPOWER
HR, HRS	HOUR, HOURS
HSD	HOUSE SIDE OPTICS
HTR	HEATER
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HZ	HERTZ
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER

I

ID	INSIDE DIAMETER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS
IES	ILLUMINATING ENGINEERING SOCIETY
IG	ISOLATED GROUND
IESNA	ILLUMINATION ENGINEERING SOCIETY OF N. AMERICA
IMC	INTERMEDIATE METAL CONDUIT
IR	INFRARED

J

J-BOX	JUNCTION BOX

K

KAIC	1000 AMPS INTERUPTING CURRENT
KCML	1000 CIRCULAR MILS
KO	KNOCKOUT
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT-HOUR
KVAH	KILOVOLT AMPERE PER HOUR
KVAR	KILOVOLT AMPERE REACTIVE
KWHM	KILOWATT-HOUR METER

L

LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LV	LOW VOLTAGE

M

MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFGR, MANUF.	MANUFACTURER
MLO	MAIN LUGS ONLY
MIN	MINUTE, MINIMUM
MOCP, MOCPD	MAX. OVERCURRENT PROTECTIVE DEVICE
MTD	MOUNTED
MATV	MASTER ANTENNA TELEVISION SYSTEM
MC	METAL-CLAD
MH	MANHOLE
MTG	MOUNTING

N

N	NEUTRAL
N.C.	NORMALLY CLOSED
N.L.	NIGHT LIGHT (FIXTURE ON 24 HRS)
N.T.S	NOT TO SCALE
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
N/F	NON-FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NF	NON-FUSED
NO	NORMALLY OPEN

O

O.C.	ON CENTER
OD	OUTSIDE DIAMETER
NF	NONE FUSED

P

PF	POWER FACTOR
PH	PHASE
PLBG	PLUMBING
PNL	PANEL
PVC	POLYVINYL CHLORIDE (PLASTIC)
p.c.	PARTIAL CIRCUIT
PT	POTENTIAL TRANSFORMER

Q

QTY	QUANTITY

R

RCP	REFLECTED CEILING PLAN
RE, REF	REFERENCE, REFER
REQD	REQUIRED
REV	REVISED, REVISION, REVISE
RGS	RIGID GALVANIZED STEEL
RLA	RUNNING LOAD AMPS
RM	ROOM
RTU	ROOF TOP UNIT
RMS	ROOT MEAN SQUARE

S

SDBC	SOFT-DRAWN BARE COPPER
SE	SERVICE ENTRANCE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATIONS
SQ. FT., S.F.	SQUARE FEET
SS	STAINLESS STEEL
STD	STANDARD
SURF	SURFACE
SUSP	SUSPEND
SW	SWITCH
SCC	SHORT CIRCUIT CAPACITY
SD	SMOKE DETECTOR
SF	SQUARE FOOT (FEET)
SPST	SINGLE POLE, SINGLE THROW

T

TELECOM	TELECOMMUNICATIONS
TGB	TELECOM GROUNDING BUSBAR
TGMB	TELECOM GROUNDING MAIN BUSBAR
THD	TOTAL HARMONIC DISTORTION
THRU	THROUGH
TYP	TYPICAL
TC	TIME CLOCK
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION

U

U/F	UNDERFLOOR
U/G	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
UON, UNO	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY

V

V	VOLT
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VAR	VOLT AMPERE REACTIVE
VOLT	VOLTAGE

W

W	WATT, WIDTH
W/	WITH
W/O	WITHOUT
WH	WATER HEATER
WP	WEATHER-PROOF

X

XFMR	TRANSFORMER
XSTG	EXISTING

MISC.

1PH	SINGLE-PHASE
1P	SINGLE POLE
2C	TWO-CONDUCTOR
3C	THREE-CONDUCTOR
3PH	THREE-PHASE
4C	FOUR-CONDUCTOR
4W	FOUR-WIRE

NOTE:

REFER TO INDUSTRY STANDARDS, APPLICABLE CODES, AND PLAN DOCUMENTS OF ALL DISCIPLINES FOR MORE INFORMATION ON ABBREVIATIONS AND NOMENCLATURE.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA
TME, LLC
No. 2790
ARKANSAS

REGISTERED PROFESSIONAL ENGINEER
No. 14261
ARKANSAS
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

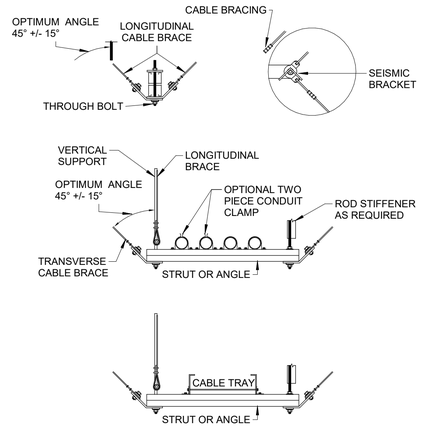
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SCHEDULES, LEGENDS AND GENERAL NOTES - ELECTRICAL

E0.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:54 AM

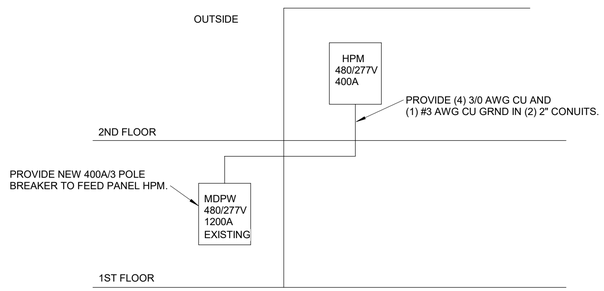


NOTES:

1. IF COLLATERAL DAMAGE TO SURROUNDING EQUIPMENT MAY OCCUR DUE TO SWAY, THEN USE "STRUT TRAPEZE SUPPORT DETAIL".

1 CABLE TRAPEZE SUPPORT DETAIL

NOT TO SCALE



2 PARTIAL RISER DIAGRAM PANEL HPM

NOT TO SCALE

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 14261
MATTHEW DAVID GREEN
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

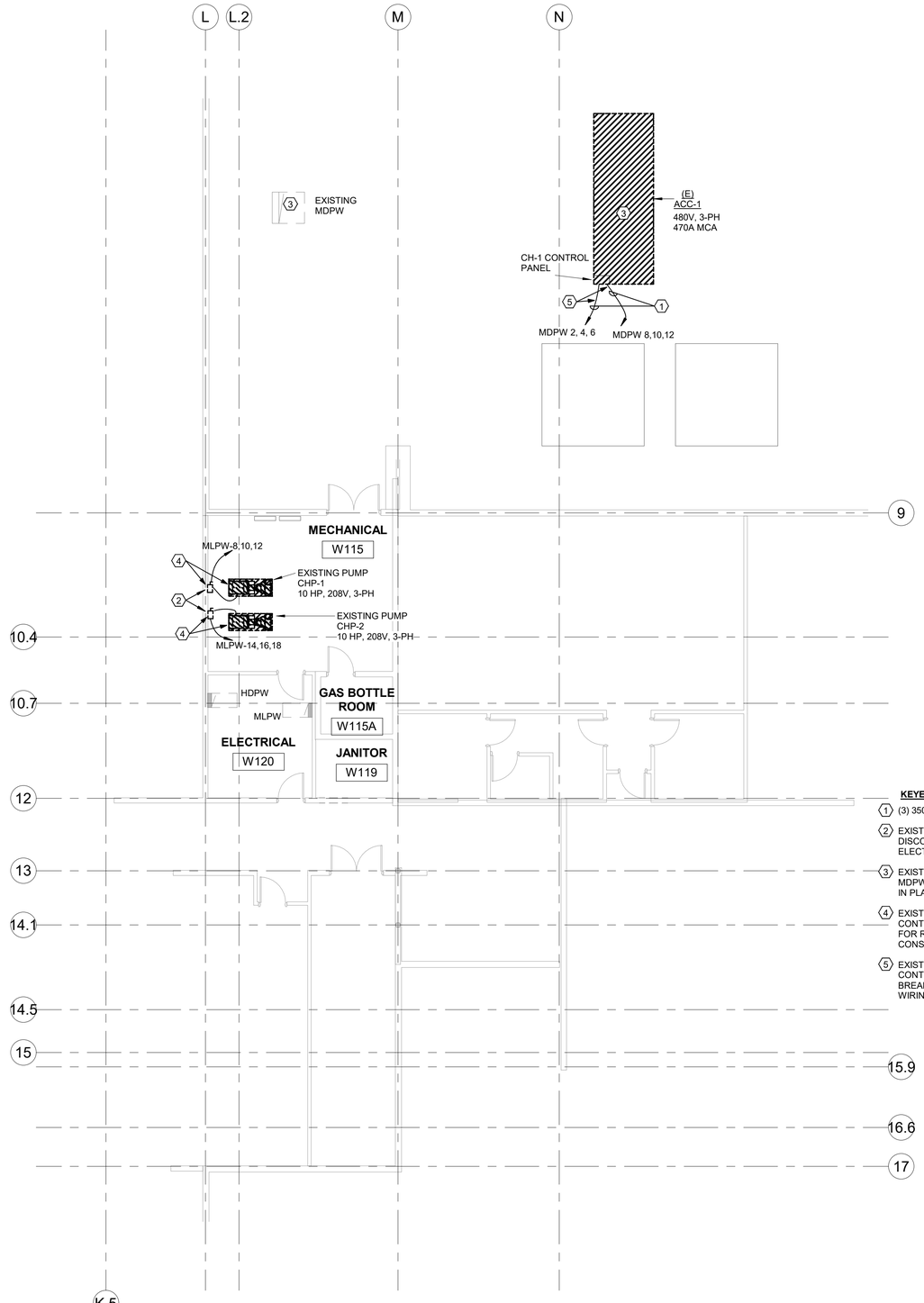
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

ELECTRICAL DETAILS

E1.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:54 AM



1 FIRST FLOOR PLAN - POWER DEMOLITION
1/8" = 1'-0"

KEYED NOTES

1. (3) 350 MCM & (1) #4 AWG CU GRND IN (1) 2 1/2" CONDUIT (EXISTING)
2. EXISTING COMBINATION SIZE 2 STARTER AND 60A/208V/3-PH NON-FUSED DISCONNECT SWITCH IN A NEMA-1 ENCLOSURE TO BE REMOVED BY ELECTRICAL CONTRACTOR.
3. EXISTING CHILLER FED WITH TWO 300A, 480V, 3-PH CIRCUITS FROM PANEL MDPW. CIRCUIT BREAKERS TO BE REMOVED, EXISTING WIRING TO REMAIN IN PLACE.
4. EXISTING WIRING TO REMAIN IN PLACE TO BE RE-USED. ELECTRICAL CONTRACTOR TO DISCONNECT EXISTING WIRING FROM PUMPS TO ALLOW FOR REMOVAL OF PUMPS. WIRING TO BE MADE SAFE DURING CONSTRUCTION.
5. EXISTING WIRING TO REMAIN IN PLACE TO BE RE-USED. ELECTRICAL CONTRACTOR TO DISCONNECT EXISTING WIRING FROM EXISTING BREAKERS AND FROM CHILLER TO ALLOW FOR REMOVAL OF CHILLER. WIRING TO BE MADE SAFE DURING CONSTRUCTION.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 14261
SCOTT DAVID GOSS
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

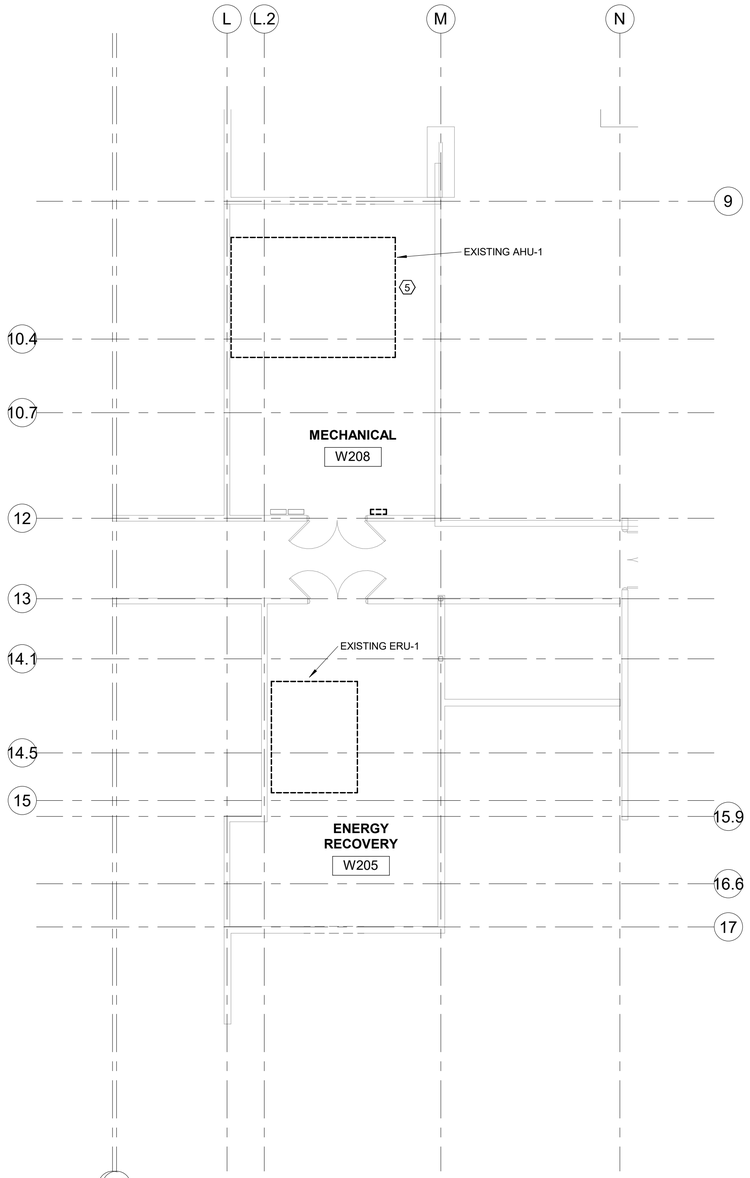
PROJECT NO. 25064
DATE: JANUARY 21, 2026

FIRST FLOOR PLAN - ELECTRICAL DEMOLITION

E2.01

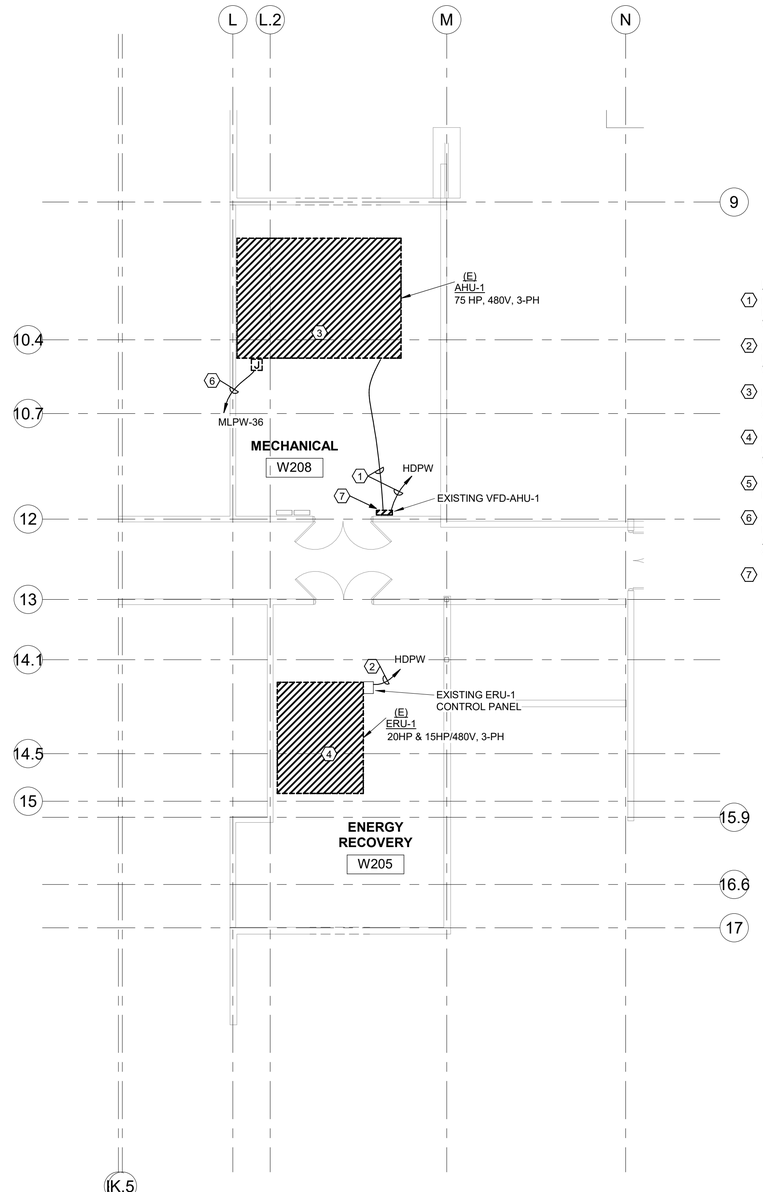
SCM ARCHITECTS PLLC

1/21/2026 10:43:55 AM



2 SECOND FLOOR PLAN - SYSTEMS DEMOLITION
1/8" = 1'-0"

NORTH



1 SECOND FLOOR PLAN - POWER DEMOLITION
1/8" = 1'-0"

NORTH

KEYED NOTES

1. EXISTING (3) #1 AWG CU, (1) #6 AWG CU GRND IN (1) 1-1/2" CONDUIT. ELECTRICAL CONTRACTOR TO REMOVE EXISTING CONDUIT AND WIRING BACK TO PANEL HDPW.
2. EXISTING (3) #4 AWG CU, (1) #8 AWG CU GRND IN (1) 1-1/4" CONDUIT. ELECTRICAL CONTRACTOR TO REMOVE EXISTING CONDUIT AND WIRING BACK TO PANEL HDPW.
3. EXISTING AHU-1 FED VIA VFD-AHU-1 FROM A 125A, 3-PH, 480V CIRCUIT FROM PANEL HDPW. ELECTRICAL CONTRACTOR TO REMOVE EXISTING CONDUIT, WIRING, AND BREAKER FEEDING EXISTING AHU-1.
4. EXISTING ERU-1 FED FROM A 80A, 3-PH, 480V CIRCUIT FROM PANEL HDPW. ELECTRICAL CONTRACTOR TO REMOVE EXISTING CONDUIT, WIRING AND BREAKER FEEDING EXISTING ERU-1.
5. EXISTING DUCT MOUNTED SMOKE DETECTORS TO BE REMOVED AND REPLACED WITH NEW DETECTORS WITH NEW AHU INSTALLATION.
6. EXISTING 120V CIRCUIT FOR AHU LIGHTS SHALL BE RE-USED TO FEED NEW (N) UH-1. ELECTRICAL CONTRACTOR SHALL DISCONNECT WIRING AND MAKE SAFE DURING CONSTRUCTION TO RE-USED WIRING AS PART OF NEW WORK.
7. EXISTING VFD TO BE REMOVED.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 14261
MATTHEW DAVID GROSS
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

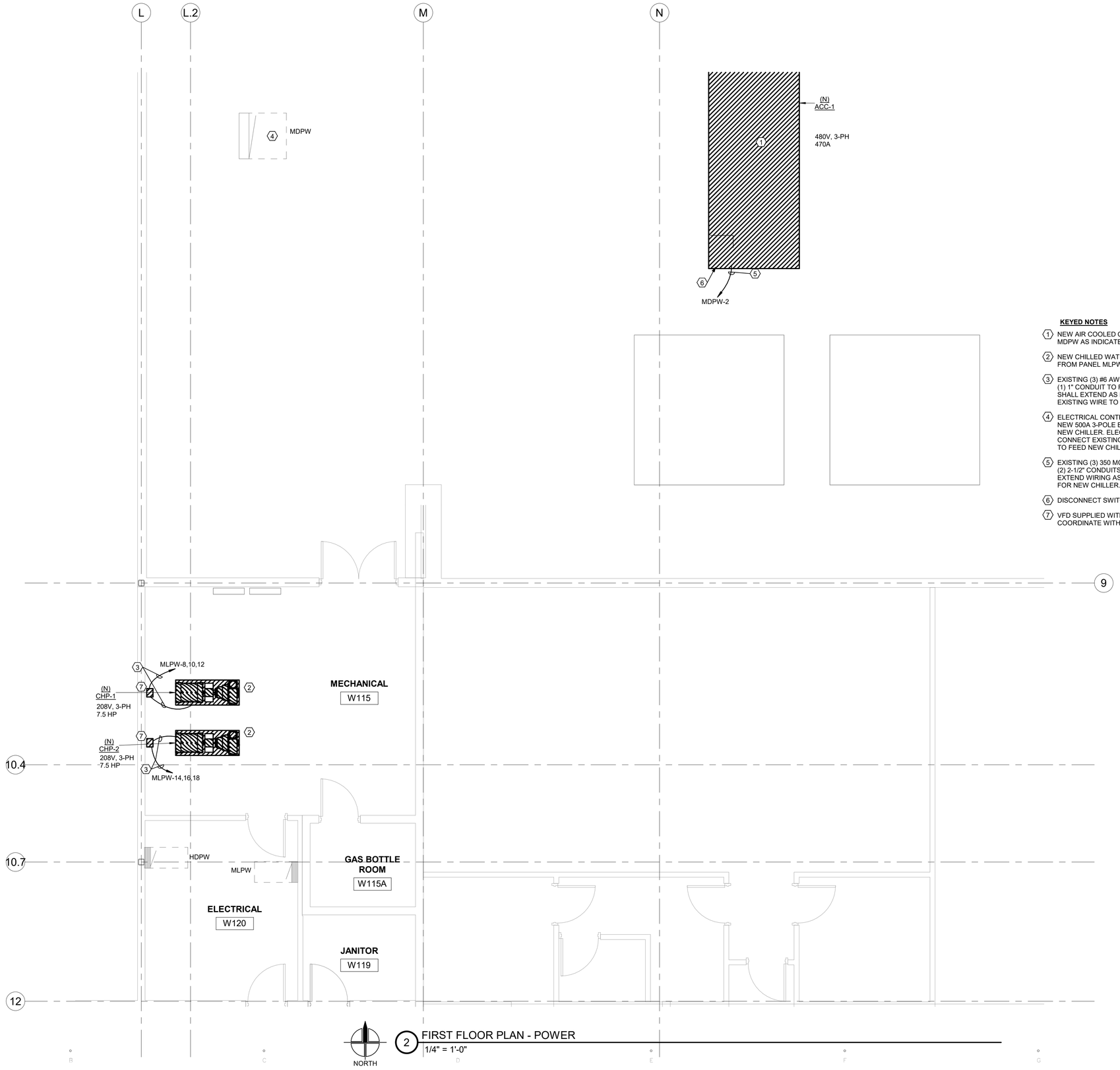
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SECOND FLOOR PLAN - ELECTRICAL DEMOLITION

E2.02

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:55 AM



2 FIRST FLOOR PLAN - POWER

1/4" = 1'-0"

KEYED NOTES

1. NEW AIR COOLED CHILLER TO BE FED FROM PANEL MDPW AS INDICATED.
2. NEW CHILLED WATER PUMP TO BE FED VIA VFD FROM PANEL MLPW AS INDICATED.
3. EXISTING (3) #6 AWG CU & (1) #10 AWG CU GRND IN (1) 1" CONDUIT TO REMAIN. ELECTRICAL CONTRACTOR SHALL EXTEND AS NECESSARY TO RECONNECT EXISTING WIRE TO NEW PUMPS.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL NEW 500A 3-POLE BREAKER IN PANEL MDPW TO FEED NEW CHILLER. ELECTRICAL CONTRACTOR SHALL CONNECT EXISTING WIRING TO NEW CIRCUIT BREAKER TO FEED NEW CHILLER.
5. EXISTING (3) 350 MCM & (1) #4 AWG CU GRND IN EACH OF (2) 2-1/2" CONDUITS. ELECTRICAL CONTRACTOR SHALL EXTEND WIRING AS REQUIRED TO TERMINATE WIRING FOR NEW CHILLER.
6. DISCONNECT SWITCH PROVIDED WITH CHILLER.
7. VFD SUPPLIED WITH INTEGRAL DISCONNECT SWITCH. COORDINATE WITH MECHANICAL CONTRACTOR.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 14261
MATTHEW DAVID GREEN
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

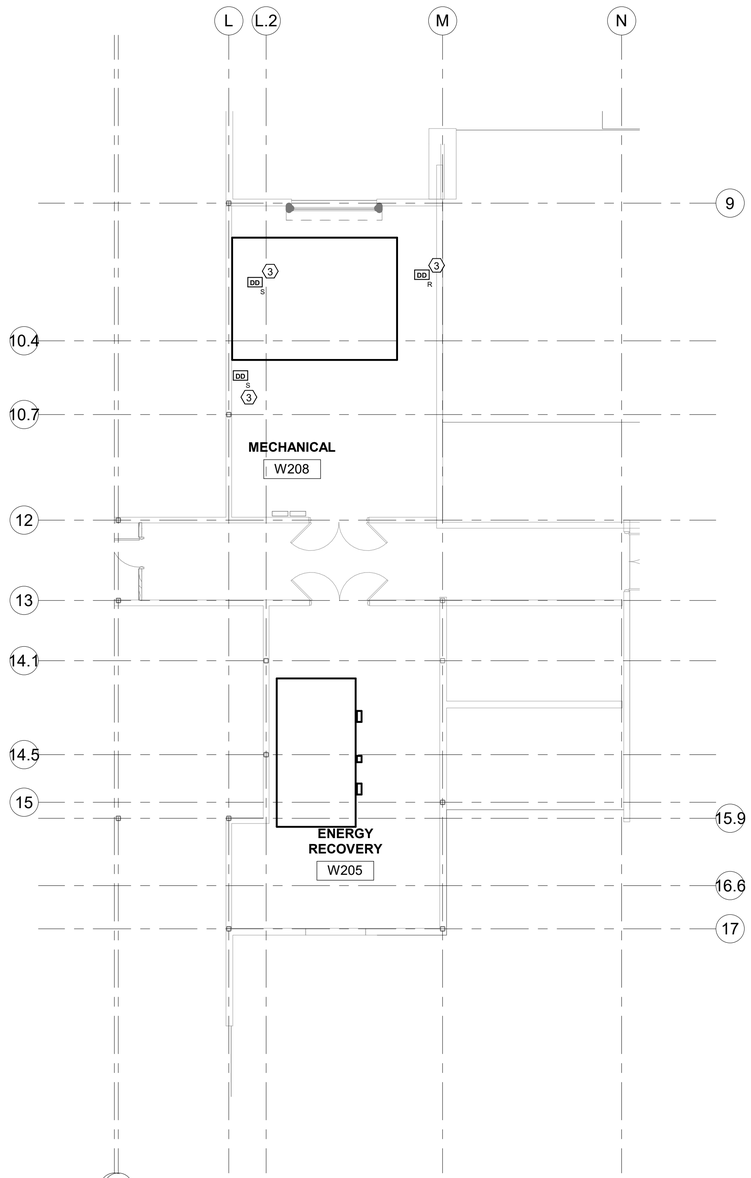
PROJECT NO.
25064
DATE:
JANUARY 21, 2026

FIRST FLOOR PLAN
- ELECTRICAL

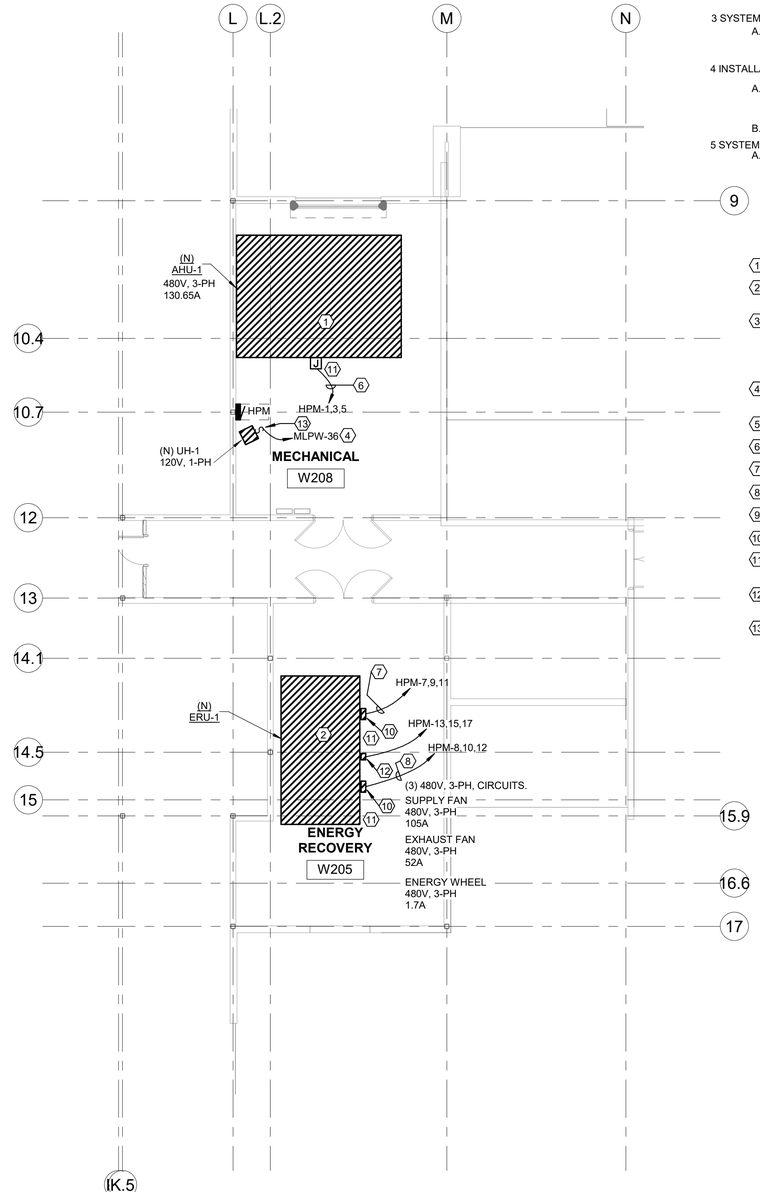
E3.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:56 AM



2 SECOND FLOOR PLAN - SYSTEMS
1/8" = 1'-0"



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

NORTH

FIRE ALARM GENERAL NOTES:

1 QUALITY ASSURANCE:

A. All system components of the fire alarm system shall be listed by Underwriters Laboratory (UL), Inc. for fire alarm use. All major components shall bear the UL label.

B. All fire alarm system components shall comply with applicable provisions of NFPA 72.

C. Manufacturer's authorized representative shall be licensed by the Arkansas Alarm System licensing board. Bidders shall include license number with bid.

D. Fire alarm system to be compatable with existing building fire alarm system.

2 WIRING:

A. All wiring shall be approved Fire Alarm cable in accordance with Wires and Cables Section. Install in raceways.

B. All fire alarm wiring shall be plenum rated, red in color. Used in all areas except where CIC or other special type cable is required. CIC cable shall not be terminated directly to fire alarm panel terminals

C. Fire alarm wiring shall be in conduit when located exposed, such as in mechanical rooms or rooms without ceiling as well as above hard ceilings. Flexible metal conduit may be used where it is infeasible to install hard conduit.

3 SYSTEM COMPONENTS:

A. Provide the following system components maching existing fire alarm system where indicated on the Drawings:

1. Duct mounted smoke detectors

4 INSTALLATION:

A. Study manufacturer's data sheets, instruction manuals and wiring diagrams of the fire alarm and detection system and determine all wiring, installation and connection requirements for a complete and operating system.

B. Identify each junction box as fire alarm system.

5 SYSTEM TESTING:

A. The manufacturer's authorized representative shall perform a quality inspection of the final installation and, in the presence of the Owner's representative, shall perform a complete functional test of this system. Test the complete system in accordance with NFPA Standard 7211. Demonstrate proper operation of all fire alarm system components as well as interfacing requirements with Energy Management System and telephone system

KEYED NOTES

1. NEW AHU TO BE FED VIA NEW VFD WITH INTEGRAL DISCONNECT SWITCH.
2. NEW ERU PROVIDED WITH INTEGRAL VFD'S WITH INTEGRAL DISCONNECT SWITCHES.
3. NEW DUCT MOUNTED SMOKE DETECTORS SHALL BE SUPPLIED, INSTALLED, AND CONNECTED TO EXISTING FIRE ALARM SYSTEM AND AHU CONTROLS TO SHUT DOWN AHU UPON ACTIVATION OF A DUCT SMOKE DETECTOR. SMOKE DETECTORS REQUIRED IN BOTH THE SUPPLY AND RETURN DUCTWORK.
4. EXISTING CIRCUIT FOR AHU LIGHTS WILL BE CONNECTED TO (N) UH-1. EXTEND CONDUIT & WIRING AS REQUIRED.
5. NOT USED.
6. PROVIDE (3) 2/0 AWG CU & (1) #4 AWG CU GROUND IN (1) 2" CONDUIT.
7. PROVIDE (3) 1/0 AWG CU & (1) #4 AWG CU GROUND IN (1) 2" CONDUIT.
8. PROVIDE (3) #6 AWG CU & (1) #6 AWG CU GROUND IN (1) 1" CONDUIT.
9. NOT USED.
10. VFD PROVIDED WITH INTEGRAL DISCONNECT SWITCH.
11. CONNECT WIRING AS REQUIRED TO POWER DISTRIBUTION BLOCK PROVIDED WITH UNIT.
12. FACTORY MOUNTED MOTOR STARTER/DISCONNECT SWITCH FOR ENERGY WHEEL.
13. PROVIDE MOTOR RATED 120V, 1-POLE DISCONNECT SWITCH FOR UNIT HEATER.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 14261
MATTHEW DAVID GRAY
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC

1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO.
25064
DATE:
JANUARY 21, 2026

SECOND FLOOR
PLAN - ELECTRICAL

E3.02

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:57 AM

Branch Panel: HDPW

Location: ELECTRICAL W120 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 10,000A
Supply From: MDPW | **Phases:** 3 | **Bus Rating:** 800 A
Mounting: SURFACE | **Wires:** 4 | **MCB Rating:**
Enclosure: NEMA 1

Notes: EXISTING PANEL

CKT	Circuit Description	Trip (A)	Poles	"A" PHASE (VA)		"B" PHASE (VA)		"C" PHASE (VA)		Poles	Trip (A)	Circuit Description	CKT
1	PANEL "HPW1"	80	3	13280	65320					3	200	PANEL "HPW2"	2
3	--	--	--			13280	65240			--	--	--	4
5	--	--	--					13280	65240	--	--	--	6
7	TRANSFORMER "TLDPW1"	350	3	96075								*	8
9	--	--	--			96075							10
11	--	--	--					96075					12
13	ELEVATOR	110	3	13900								*	14
15	--	--	--			13900							16
17	--	--	--					13900					18
19	TVSS	60	3	0									20
21	--	--	--			0							22
23	--	--	--					0					24
25	SPACE W/ BUS	0	3	0									26
27	--	--	--			0							28
29	--	--	--					0					30
31													32
33													34
35													36
37													38
39													40
41													42
		Total Load:		188575 VA		188495 VA		188495 VA					
		Total Amps:		681 A		680 A		680 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
				Total Conn. Load:	565565 VA
				Total Est. Demand:	565565 VA
				Total Conn. Current:	681 A
				Total Est. Demand Current:	680 A

Branch Panel: MLPW

Location: ELECTRICAL W120 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10,000A
Supply From: | **Phases:** 3 | **Bus Rating:** 400 A
Mounting: SURFACE | **Wires:** 4 | **MCB Rating:**
Enclosure: NEMA 1

Notes: EXISTING PANEL

CKT	Circuit Description	Trip (A)	Poles	"A" PHASE (VA)		"B" PHASE (VA)		"C" PHASE (VA)		Poles	Trip (A)	Circuit Description	CKT
1	WATER HEATER-FIRST FLR NORTH	25	3	2000	3900					3	60	FUME HOOD EXHAUST FAN "FHEF-1"	2
3	--	--	--			2000	3900			--	--	--	4
5	--	--	--					2000	3900	--	--	--	6
7	WATER DHEATER-FIRST FLR SOUTH	25	3	2000	3900					3	60	CHP-1 *	8
9	--	--	--			2000	3900			--	--	--	10
11	--	--	--					2000	3900	--	--	--	12
13	WATER HEATER-SECOND FLR	25	3	2000	3900					3	60	CHP-2 *	14
15	--	--	--			2000	3900			--	--	--	16
17	--	--	--					2000	3900	--	--	--	18
19	"HWRP-1"-FIRST FLR NORTH	20	1	550	950					2	20	EXISTING AIR COMPRESSOR	20
21	"HWRP-1"-FIRST FLR SOUTH	20	1			550	950			--	--	--	22
23	"HWRP-1"-SECOND FLR	20	1					550	1000	1	20	DDC AND FE PANELS-FIRST FLR SOUTH	24
25	VACCUM PUMP "VP-1"	20	3	1350	595					1	20	AIR TERMINALS-FIRST FLR SOUTH	26
27	--	--	--			1350	525			1	20	AIR TERMINALS-FIRST FLR NORTH	28
29	--	--	--					1350	1190	1	20	AIR TERMINALS-SECOND FLR	30
31	REC-SUMP PUMP "SP-1"	20	1	900	1000					1	20	DDC AND FE PANELS-SECOND FLR	32
33	REC-MICRO-BIOTECH FAUCET SENSOR	20	1			1000	1000			1	20	MED GAS ALARM PANEL	34
35	REC-MICRO-BIOTECH FAUCEST SENSOR	20	1					1000	180	1	20	UNIT HEATERS - HOT WATER *	36
37	CONTROL AIR CEMPRESSOR "CAC-1"	20	3	600									38
39	--	--	--			600	0			1	20	Spare	40
41	--	--	--					600	0	1	20	Spare	42
		Total Load:		23645 VA		23675 VA		23570 VA					
		Total Amps:		197 A		197 A		196 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	0 VA	0.00%	0 VA		
Motor	23400 VA	100.00%	23400 VA	**Total Conn. Load:**	70890 VA
POWER, OTHER	180 VA	100.00%	180 VA	**Total Est. Demand:**	70890 VA
				Total Conn. Current:	197 A
				Total Est. Demand Current:	197 A

Branch Panel: HPM

Location: MECHANICAL W208 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 10,000A
Supply From: MDPW | **Phases:** 3 | **Bus Rating:** 400 A
Mounting: SURFACE | **Wires:** 4 | **MCB Rating:** MLO
Enclosure: NEMA 1

Notes:

CKT	Circuit Description	Trip (A)	Poles	"A" PHASE (VA)		"B" PHASE (VA)		"C" PHASE (VA)		Poles	Trip (A)	Circuit Description	CKT
1	AHU FANS	250	3	36266									2
3	--	--	--			36266							4
5	--	--	--					36266					6
7	ENERGY REOVERY UNIT "ERU-1" - SUPPLY...	225	3	29098	14410					3	110	ERU-1 - EXHAUST FANS	8
9	--	--	--			29098	14410			--	--	--	10
11	--	--	--					29098	14410	--	--	--	12
13	ERU-1 ENERGY WHEEL	15	3	477									14
15	--	--	--			477							16
17	--	--	--					477					18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
		Total Load:		80250 VA		80250 VA		80250 VA					
		Total Amps:		290 A		290 A		290 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	87293 VA	100.00%	87293 VA		
POWER, OTHER	153457 VA	100.00%	153457 VA	**Total Conn. Load:**	240750 VA
				Total Est. Demand:	240750 VA
				Total Conn. Current:	290 A
				Total Est. Demand Current:	290 A

Switchboard: MDPW

Location: | **Volts:** 480/277 Wye | **A.I.C. Rating:** 10,000A
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:**
Enclosure: NEMA 1 | **MCB Rating:** 1200 A

Notes: EXISTING PANEL

CKT	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Remarks
1	HDPW	3	800 A	800 A	565565 VA	
2	CHILLER "CH-1" *	3	500 A	500 A	341295 VA	
3	HPM *	3	400 A	400 A	240750 VA	
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
				Total Conn. Load:	1147610 VA	
				Total Amps:	1380 A	

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	87293 VA	100.00%	87293 VA		
POWER, OTHER	494752 VA	100.00%	494752 VA	**Total Conn. Load:**	1147610 VA
				Total Est. Demand:	1147610 VA
				Total Conn. Current:	1380 A
				Total Est. Demand Current:	1380 A

Notes:
TWO EXISTING 300 AMP CIRCUIT BREAKERS FEEDING EXISTING CHIILER SHALL BE REMOVED AND REPLACED WITH ONE THREE POLE FIVE-HUNDRED AMP CIRCUIT BREAKER AS SHOWN.

GENERAL NOTE

1. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY A.I.C. RATINGS OF EXISTING PANELS AND NOTIFY ENGINEER OF ANY DISCREPANCIES. A.I.C. RATINGS NOTED ARE BASED ON INFORMATION FROM EXISTING DRAWINGS.

* : DENOTES CIRCUIT INCLUDED IN HVAC EQUIPMENT REPLACEMENT SCOPE OF WORK

KEYED NOTES

1. EXISTING BREAKER TO BE REMOVED AND REPLACED WITH BREAKER AS INDICATED.
2. EXISTING BREAKER TO BE REMOVED AND REPLACED WITH BLANK-OFF PANELS TO CREATE EMPTY SPACE IN PANEL.
3. EXISTING SPACE TO BE USED FOR NEW BREAKER AS INDICATED.
4. EXISTING CIRCUIT BREAKER SHALL REMAIN IN PLACE TO FEED NEW PUMPS.

SCM
ARCHITECTS P.L.L.C.
1400 Kirk Road, Suite 220
Little Rock, Arkansas 72223
(501) 224-3055 FAX: (479)-966-4777
www.scmarchitects.com

CERTIFICATE OF AUTHORIZATION
ENFRA TME, LLC
No. 2790
ARKANSAS

LICENSED PROFESSIONAL ENGINEER
No. 14261
01/21/26

BURNS HALL HVAC REPLACEMENT
NWACC
1 COLLEGE DRIVE, BENTONVILLE, AR 72712

REVISIONS:

PROJECT NO. 25064
DATE: JANUARY 21, 2026

PANEL SCHEDULES - ELECTRICAL

E6.01

SCM ARCHITECTS P.L.L.C.

1/21/2026 10:43:57 AM