Upgrade/Relocate Rooftop Units
Springfield DOLIR Office Building
Springfield, Missouri

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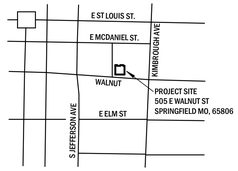
interpres
building solutions

OWNER: **STATE OF MISSOURI**
MIKE KEHOE,
GOVERNOR



SITE MAP

PROJECT MANAGEMENT: **OFFICE OF ADMINISTRATION**
DIVISION OF FACILITIES MANAGEMENT
DESIGN AND CONSTRUCTION

DESIGNER: **Interpres Building solutions**
1201 S Campbell Ave
Springfield, MO 65807

PROJECT NUMBER: O2516-01

SITE NUMBER: 1032
FACILITY NUMBER: 3101032001

SHEET NUMBER:

CVR

1 OF 11 SHEETS
9/30/2025

SCHEDULE OF MANUFACTURERS

DIVISION 22 - PLUMBING

220529 HANGERS SUPPORTS AND VIBRATION ISOLATION FOR PLUMBING PIPING AND EQUIPMENT

HANGERS AND SUPPORTS
1. ANVIL
2. B-LINE SYSTEMS
3. GRINNELL
4. TOLCO
5. UNISTRUT

ROOF EQUIPMENT RAILS
1. PATE
2. HIVANEC
3. THYCURB

PIPE STANDS
1. ERICO
2. MIRO INDUSTRIES
3. MICHIGAN HANGER CO

VIBRATION ISOLATORS
1. AMBER BOOTH
2. ANVIL
3. KINETICS NOISE CONTROL
4. KORFUND
5. MASON INDUSTRIES
6. TOLCO
7. VIBRATION ELIMINATOR.

220700 PLUMBING INSULATION
1. ARMACELL
2. JOHNS MANSVILLE
3. OWENS CORNING

221100 FACILITY PIPING AND SPECIALTIES

PIPING

COPPER
1. CERRO
2. CHASE
3. MUELLER
4. REVERE COPPER

FITTINGS

COPPER
1. CHASE
2. NIBCO
3. SIOUX CHIEF

221100 FACILITY PIPING AND SPECIALTIES

TRANSITION FITTINGS
1. CHARLOTTE PIPE
2. IPEX
3. KBI
4. NIBCO
5. SIOUX CHIEF

DIELECTRIC FITTINGS
1. CALPCO
2. CAPITOL MANUFACTURING
3. CENTRAL PLASTICS
4. HART INDUSTRIES
5. LOCHINVAR
6. PERFECTION
7. PIPELINE SEAL AND INSULATOR
8. SIOUX CHIEF
9. WATTS VICTAULIC
10. ZURN

ALIGNMENT GUIDES AND ANCHORS
1. FLEX HOSE CO
2. FLEXICRAFT INDUSTRIES
3. METRAFLEX

DIVISION 23 - MECHANICAL

230519 METERS AND GAUGES
1. ASHCROFT
2. MARSH
3. MUELLER
4. WATTS
5. WEISS

230523 VALVES FOR MECHANICAL PIPING

BALL, BUTTERFLY, GATE AND GLOBE VALVE
1. APOLLO
2. CENTERLINE
3. CRANE
4. HAMMOND
5. KENNEDY
6. KEYSTONE
7. NIBCO
8. NDUS
9. POWELL
10. VICTAULIC
11. WATTS

BALANCE AND FLOW CONTROL VALVES
1. BELL AND GOSSETT
2. FLOW DESIGN
3. FLOWSET
4. HAYS
5. ILLINOIS
6. NEXUS
7. PAGENT
8. SIEMENS
9. TACO
10. THRUSH

SWING AND CHECK VALVES
1. CRANE
2. HAMMOND
3. MILWAUKEE
4. WATTS

230514 VARIABLE FREQUENCY DRIVE
1. YASKAWA
2. ABB
3. DANFOSS

230529 HANGERS SUPPORTS AND VIBRATION ISOLATION FOR PLUMBING PIPING AND EQUIPMENT

HANGERS AND SUPPORTS
1. ANVIL
2. B-LINE SYSTEMS
3. GRINNELL
4. TOLCO
5. UNISTRUT

ROOF EQUIPMENT RAILS
1. PATE
2. HIVANEC
3. THYCURB

PIPE STANDS
1. ERICO
2. MIRO INDUSTRIES
3. MICHIGAN HANGER CO

VIBRATION ISOLATORS
1. AMBER BOOTH
2. ANVIL
3. KINETICS NOISE CONTROL
4. KORFUND
5. MASON INDUSTRIES
6. TOLCO
7. VIBRATION ELIMINATOR.

230553 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT
1. ALLEN SYSTEMS
2. BRADY CO
3. INDUSTRIAL SAFETY SUPPLY CO
4. SETON NAME PLATE CORP

230700 HVAC DUCT INSULATION

DUCT INSULATION
1. CERTAIN TEED
2. JOHNS MANVILLE
3. KNAUF
4. OWENS CORNING

FIRE RATED BLANKET
1. 3M
2. CERTAIN TEED
3. JOHNS MANSVILLE
4. NELSON FIRESTOP
5. THERMAL CERAMICS
6. UNIFRAX

230701 HVAC PIPING INSULATION
1. ARMACELL
2. ACROFLEX
3. REX

230902 BUILDING MANAGEMENT SYTEM
1. SCHNEIDER ELECTRIC - C&C GROUP
   1.1. CONTACT BRIAN SCHEPERS 573-291-5425

232113 HVAC PIPING AND SPECIALTIES

PIPING

COPPER
1. CERRO
2. CHASE
3. MUELLER
4. REVERE COPPER

STEEL PIPING
1. ARMCO
2. UNITED STATES STEEL
3. YOUNGSTOWN

PLASTIC PIPING
1. CABOT
2. CHARLOTTE
3. CHEMTROL
4. TYLER
5. PIPELIFE

FITTINGS

COPPER
1. CHASE
2. MUELLER
3. NIBCO

STEEL FLANGE
1. AMERICAN
2. GRINNELL
3. MIDWEST

STEEL WELDING
1. AMERICAN
2. BONNEY
3. FORGE

PLASTIC
1. CABOT
2. CHARLOTTE
3. CHEMTROL
4. PIPELIFE
5. TYLER

232113 HVAC PIPING AND SPECIALTIES

TRANSITION FITTINGS
1. CHARLOTTE PIPE
2. IPEX
3. KBI
4. NIBCO

DIELECTRIC FITTINGS
1. CALPCO
2. CAPITOL MANUFACTURING
3. CENTRAL PLASTICS
4. HART INDUSTRIES
5. LOCHINVAR
6. PERFECTION
7. PIPELINE SEAL AND INSULATOR
8. SIOUX CHIEF
9. WATTS VICTAULIC
10. ZURN

AIR CONTROL DEVICES
1. AMTROL
2. ARMSTRONG PUMPS
3. BELL AND GOSSETT
4. TACO
5. SPIROTHERM

EXPANSION TANK
1. AMTROL
2. ARMSTRONG
3. BELL AND GOSSETT
4. TACO

HYDRONIC PIPING SPECIALTIES
1. AMTROL
2. ARMSTRONG
3. BELL AND GOSSETT
4. SPIROTHERM
5. TACO

EXPANSION JOINTS
1. FLEX HOSE CO
2. FLEXICRAFT
3. FLEX PRESSION
4. METRAFLEX
5. UNISOURCE

ALIGNMENT GUIDES AND ANCHORS
1. FLEX HOSE CO
2. FLEXICRAFT INDUSTRIES
3. METRAFLEX

233400 FAN WALL
1. TEMTROL
2. HUNTAIR
3. FLAKTGROUP

233420 UV FILTERS
1. UV RESOURCES
2. FRESH AIRE
3. AIRBUS

235216 CONDENSING BOILERS
1. AERCO
2. FULTON
3. LOCHINNAR

238126 AIR COOLED CONDENSERS
1. AAON
2. ADDISON
3. TSI
4. TRANE

DIVISION 26 - ELECTRICAL

260519 CONDUCTORS AND CABLES
1. ALAN WIRE
2. ALCAN
3. ENCORE
4. GENERAL CABLE CORP
5. SOUTHWIRE

260533 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

METALLIC CONDUIT
1. AFC CABLE
2. ALFLEX
3. ALLIED TUBE AND CONDUIT
4. ANAMET ELECTRICAL
5. CROUSE HINDS
6. ELECTRI FLEX
7. MANHATTAN/CDT/COLE FLEX
8. MAVERICK TUBE CORP
9. O-Z GEDNEY
10. WHEATLAND TUBE CO

NON METALLIC CONDUIT
1. ABB INSTALLATION
2. AFC CABLE SYSTEMS
3. ARNCO CORP
4. CANTEX
5. CERTAINTEED
6. CONDUIT INTERNATIONAL
7. CROUSE HINDS
8. ELECTRI FLEX
9. LAWSON AND SESSIONS
10. MANHATTAN/CDT/COLE-FLEX
11. RACO

WIREWAY
1. B LINE
2. HOFFMAN
3. SQUARE D

SURFACE RACEWAY
1. ABB INSTALLATION
2. CROUSE HINDS
3. HUBBELL
4. PANDUIT
5. WALKER SYSTEMS
6. WIREMOLD

BOXES ENCLOSURES AND CABINETS
1. ABB INSTALLATION
2. COOPER
3. APPELTON ELECTRIC
4. FSR
5. HOFFMAN
6. LEGRAND
7. O-Z GEDNEY
8. RACO
9. WALKER

262416 PANELBOARDS

PANELBOARDS
1. EATON ELECTRIC
2. GENERAL ELECTRIC
3. SIEMENS
4. SQUARE D

SHEET INDEX:

1 **LAYDOWN DIAGRAM**
Scale: NTS

NORTH

ALTERNATE DESCRIPTIONS

ALTERNATE #1	REPLACE BOILER WITH TWO NEW CONDENSING HIGH EFFICIENCY BOILERS AND PROVIDE NEW PUMPS PIPING, FLUES AND ELECTRICAL CIRCUITING AS SHOWN.
ALTERNATE #2	REPLACE FAN IN MULTIZONE AIR HANDLER WITH NEW FAN WALL AND VARIABLE FREQUENCY DRIVES
ALTERNATE #3	PROVIDE NEW UV FILTERS IN EXISTING MULTIZONE AIR HANDLERS.

PHASING NOTES

1	CONTRACTOR SHALL NOT REMOVE EXISTING EQUIPMENT UNTIL NEW EQUIPMENT IS SECURED AND DELIVERED TO CONTRACTORS LOCAL POSSESSION. THIS IS SO THAT BUILDING IS NOT WITHOUT HEATING OR COOLING WHILE UNIT PRODUCTION/SHIPPING IS IN PROGRESS.

STATE OF MISSOURI
MICHAEL KEHOE
GOVERNOR

STATE OF MISSOURI
BRAD PALMER
NUMBER PE-2013036894
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL
INTERPRES CERTIFICATE OF AUTHORITY - MISSOURI 2013013378

interpres building solutions
1201 South Campbell / Springfield, MO 65807
417.631.4895 / www.interpresbuild.com

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT
DESIGN AND CONSTRUCTION

UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: MEP100
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
SCHEDULE OF MANUFACTURERS

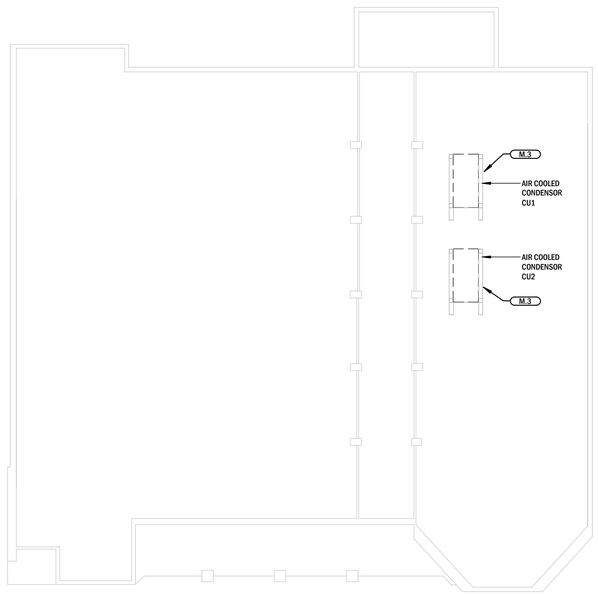
SHEET NUMBER:
MEP100

2 OF 10 SHEETS
9/30/2025

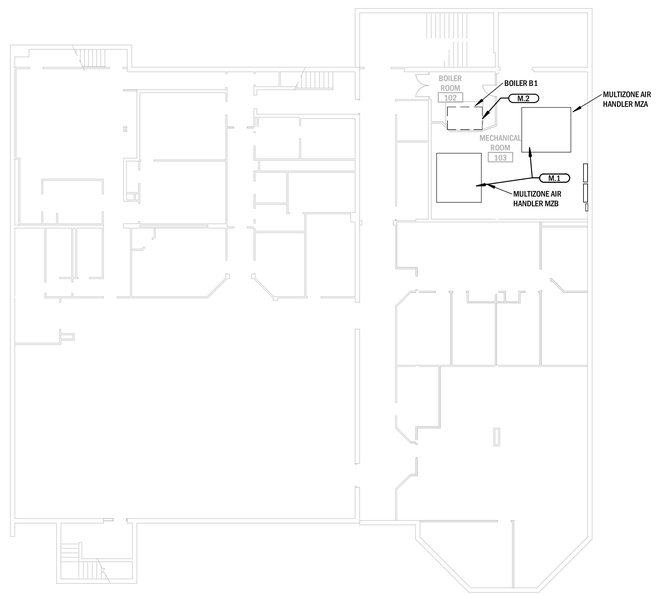
KEYNOTES

M.1	EXISTING MULTIZONE UNIT SHALL REMAIN. PREPARE FOR REPLACEMENT OF COMPONENTS IN BASE BID AND BID ALTERNATES AS DETAILED ON IMPROVEMENT PLAN AND IN SPECIFICATIONS.
M.2	ALTERNATE 1: REMOVE BOILER AND PREPARE PIPING AND ELECTRICAL CONNECTIONS FOR INSTALLATION OF NEW BOILERS AND CONNECTION TO EXISTING PIPING, POWER AND FLUES.
M.3	REMOVE AIR COOLED CONDENSER AND ASSOCIATED REFRIGERANT PIPING AND PREPARE FOR INSTALLATION OF NEW UNIT AS DETAILED ON IMPROVEMENT PLAN.

2 FIRST FLOOR MEP DEMOLITION PLAN
Scale: 1/16" = 1'-0"
NORTH



3 ROOF MEP DEMOLITION PLAN
Scale: 1/16" = 1'-0"
NORTH



1 BASEMENT MEP DEMOLITION PLAN
Scale: 1/16" = 1'-0"
NORTH

STATE OF MISSOURI
MIKE KEHOE
GOVERNOR

STATE OF MISSOURI
BRAD PALMER
NUMBER PE-2013039894
PROFESSIONAL ENGINEER
1.15.25

PROFESSIONAL SEAL
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UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
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REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: MEP200
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
DEMOLITION PLANS

SHEET NUMBER:
MEP200

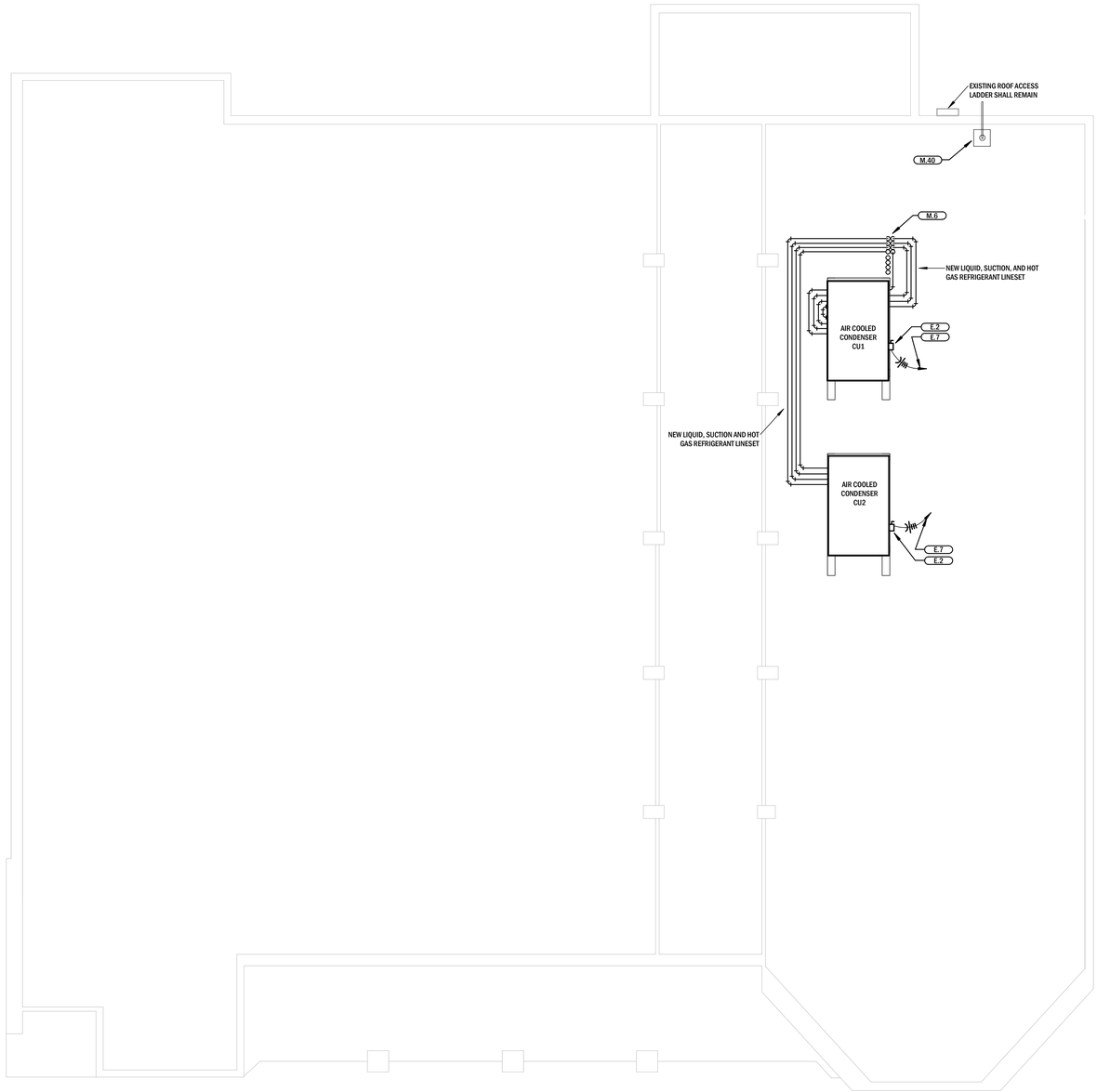
3 OF 10 SHEETS
9/30/2025

PHOTGRAPHIC DOCUMENTATION

1	CONTRACTOR SHALL DOCUMENT EXISTING ROOF CONDITION PRIOR TO COMMENCEMENT OF CONSTRUCITON AND THROUGHOUT THE CONSTRUCTION PROCESS. SEE SPECIFICATIONS FOR PHOTOGRAPHIC REQUIREMENTS.

KEYNOTES

E.2	PROVIDE NEW 400A, NON FUSED, NEMA 3R DISCONNECT FOR CONDENSER.
E.7	PROVIDE NEW 300A CIRCUIT BREAKER IN EXISTING PANEL PDP4 AND WIRE NEW CONDENSER TO EXISTING CIRCUIT. PREVIOUS UNITS ARE FED FROM A 300A CIRCUIT. REMOVE EXISTING BREAKER TO ACCOMODATE NEW UNIT. CONTRACTOR SHALL HAVE OPTION TO REUSE EXISTING CONDUIT FOR NEW FEEDERS TO EXISTING PANEL.
M.6	ROUTE REFRIGERANT LINES DOWN IN CHASE TO MECHANICAL ROOM BELOW. PROVIDE NEW WEATHERPROOF DOGHOUSE, NEW ROOF FLASHING AND REPAIR ROOF AT NEW PIPING PENETRATION. SEAL PENETRATIONS AND KEEP WEATHER TIGHT.
M.40	PROVIDE DAVIT CRANE EQUAL TO OZ LIFTING PRODUCTS ALUMI-LITE 500LB DAVIT CRANE WITH HAND WENCH, PROVIDE BASE FOR INSTALLATION ON ROOF TOP



1 ROOF MEP PLAN

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

NORTH

STATE OF MISSOURI
MIKE KEHOE
GOVERNOR

STATE OF MISSOURI
BRAD PALMER
NUMBER PE-2013039894
PROFESSIONAL ENGINEER
1-15-25

PROFESSIONAL SEAL

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OFFICE OF ADMINISTRATION
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DESIGN AND CONSTRUCTION

UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

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SITE # 1032
FACILITY # 3101032001

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DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: MEP300
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

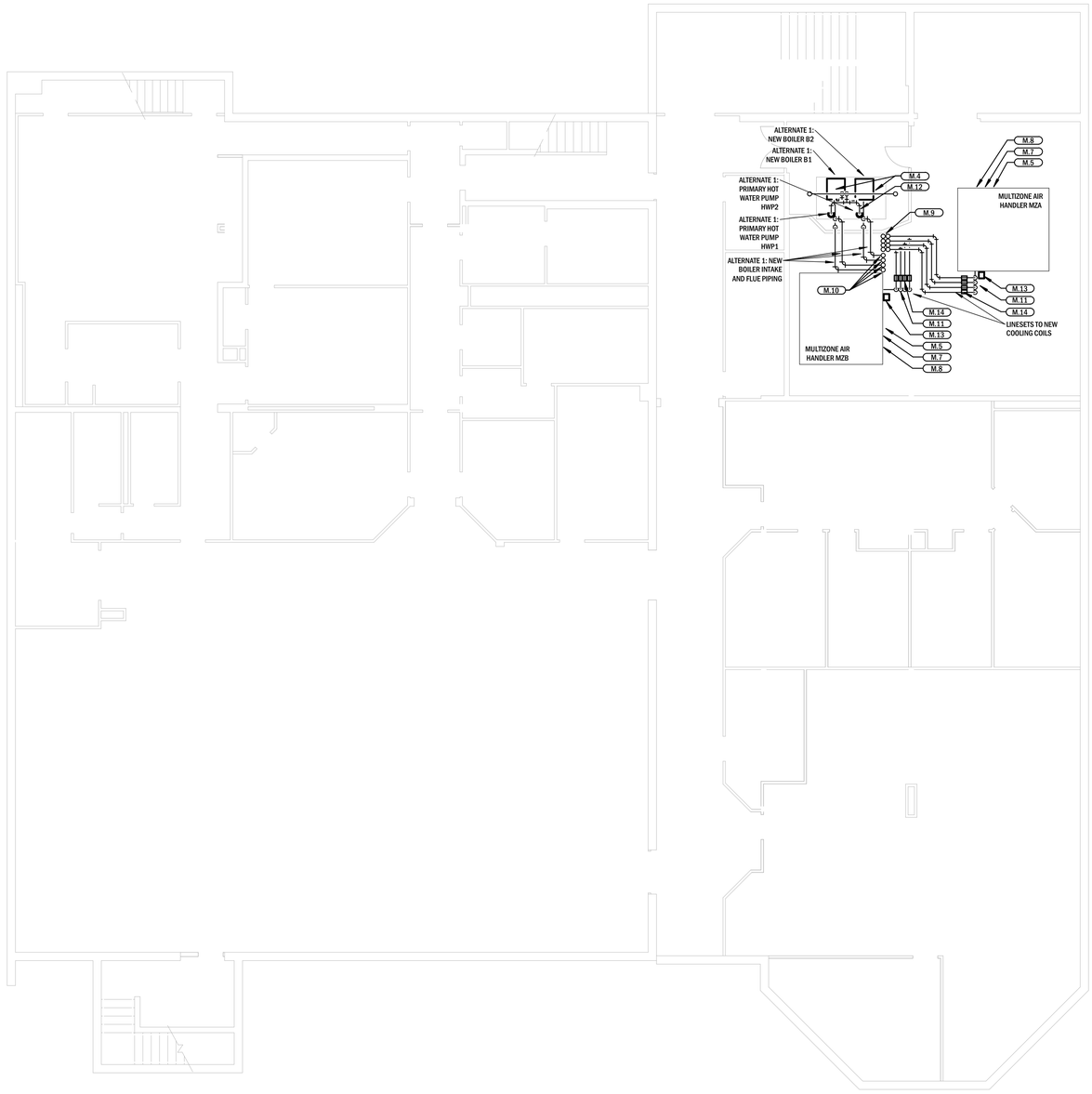
SHEET TITLE:
ROOF MEP PLAN

SHEET NUMBER:
MEP300

4 OF 10 SHEETS
9/30/2025

KEYNOTES

M.4	ALTERNATE 1: PROVIDE NEW BOILERS AND PUMPS. SEE HOT WATER LOOP IMPROVEMENT DIAGRAM .FOR ADDITIONAL DETAILS.
M.5	ALTERATE 2: EXISTING MULTIZONE UNIT SHALL BE REFURBISHED WITH NEW FAN WALL AND VFD
M.7	ALTERNATE 3: PROVIDE NEW UV FILTRATION ON DISCHARGE FACE OF COOLING COIL. SEE AIR HANDLER UPGRADE DETAIL.
M.8	PROVIDE NEW EVAPORATOR COIL IN AIR HANDLER CONNECTED TO NEW AIR COOLED CONDENSER.
M.9	ROUTE REFRIGERANT PIPING UP IN CHASE ABOVE.
M.10	ALTERNATE 1: ROUTE 6" FLUES UP THROUGH FLOORS ABOVE IN CHASE.
M.11	ROUTE REFRIGERANT LINESETS DOWN TO NEW EVAPORATER COILS IN EXISTING AIR HANDLERS.
M.12	ALTERNATE 1: NEW PIPING CONNECTION FOR BOILERS TO EXISTING HOT WATER PIPING LOOP. SEE HOT WATER LOOP DIAGRAMS FOR SIZING AND PIPING REQUIREMENTS.
M.13	REFRIGERANT LEAK DETECTION. CONNECT TO BUILDING MANAGEMENT SYSTEM. SEE SEQUENCE OF OPERATIONS FOR DETECTION OPERATION REQUIREMENTS.
M.14	REFRIGERANT CONTROL SOLENOID VALVES FOR REFRIGERANT SHUTOFF.



1 **BASEMENT MECHANICAL PLAN**
Scale: 1/8" = 1'-0"

NORTH

STATE OF MISSOURI
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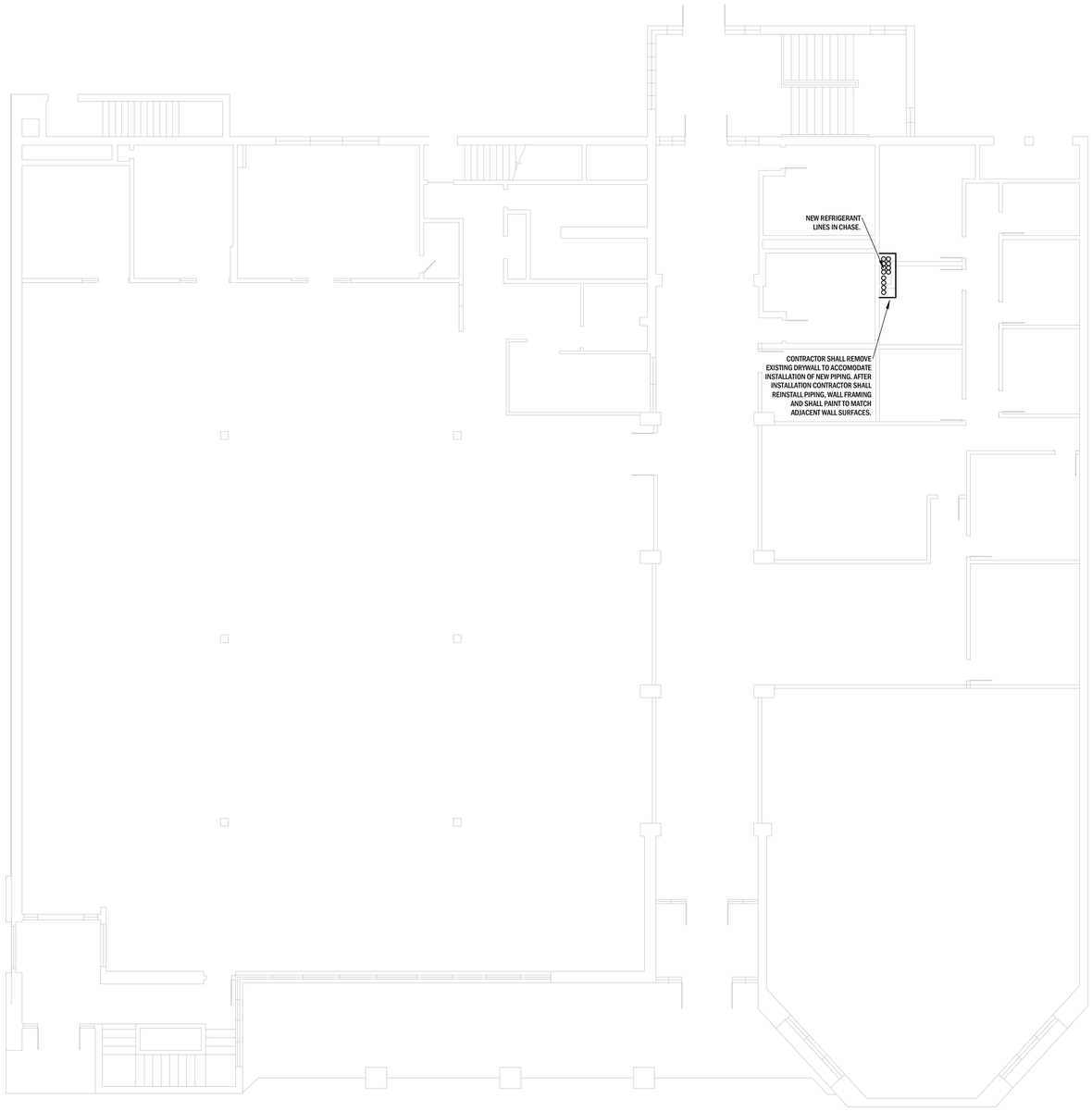
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: M100
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
MECHANICAL PLAN

SHEET NUMBER:
M100

5 OF 10 SHEETS
9/30/2025



1 FIRST FLOOR MECHANICAL PLAN

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

NORTH

STATE OF MISSOURI
MIKE KEHOE
GOVERNOR

STATE OF MISSOURI
BRAD PALMER
NUMBER PE-2013039894
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: M101
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

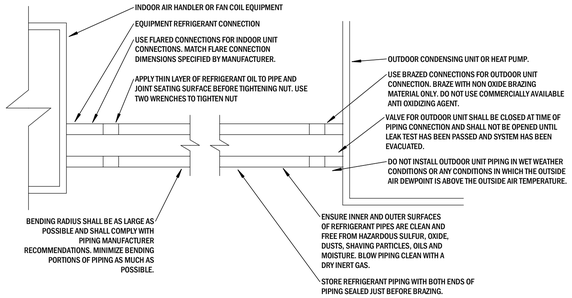
SHEET TITLE:

MECHANICAL PLAN

SHEET NUMBER:

M101

6 OF 10 SHEETS
9/30/2025



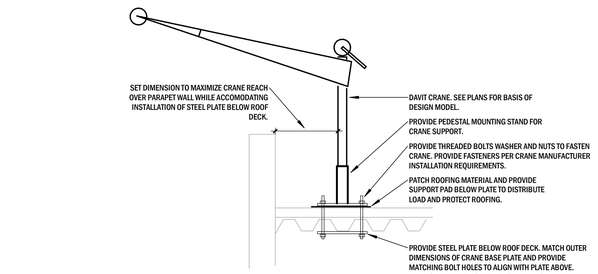
GENERAL NOTES:

CONTRACTOR SHALL OBTAIN MANUFACTURES RECOMENDATIONS FOR REFRIGERANT SYSTEM INSTALLATION AND SHALL COMPLY WITH ALL RECOMMENDATIONS REGARDLESS OF INDICATION ON THIS DETAIL OR ELSEWHERE ON DRAWINGS.

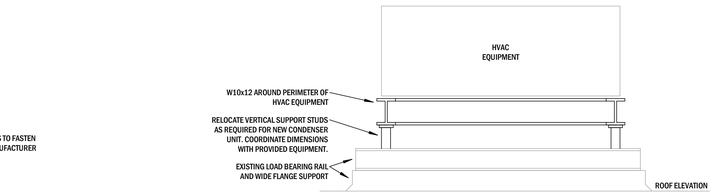
REFRIGERANT SYSTEM IS HIGHLY SENSITIVE TO DIRT, DEBRIS, WATER AND OTHER CONTAMINATES. CONTRACTOR IS RESPONSIBLE TO MAINTAIN TOOLS IN SUCH A FASHION AS TO NOT INTRODUCE EXCESS CONTAMINANTS TO THE SYSTEM.

TOOLS SHALL NOT BE INTERMINGLED BETWEEN REFRIGERANT TYPES SO AS TO MAINTAIN THE INTEGRITY AND PURITY OF THE SYSTEM REFRIGERANT.

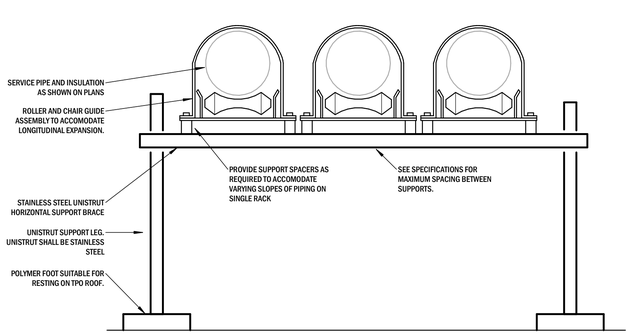
11 REFRIGERANT PIPING REQUIREMENTS DETAIL
Scale: NTS



8 ROOF MOUNTED DAVIT CRANE DETAIL
Scale: NTS



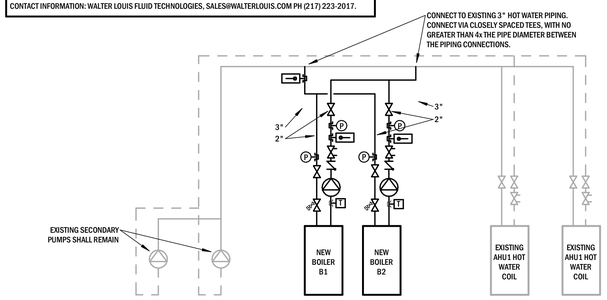
4 ROOF CONDENSER SUPPORT FRAME
Scale: NTS



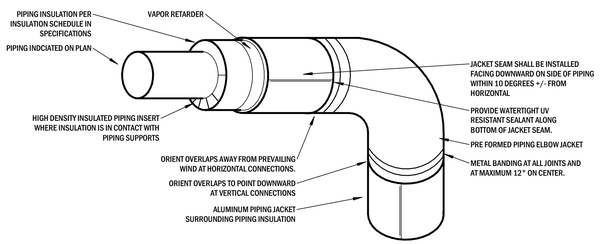
7 PIPING SUPPORT STAND DETAIL
Scale: NTS

WATER TREATMENT SYSTEM: THE WINNING CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING WALTER LOUIS FLUID TECHNOLOGIES AS THE WATER TREATMENT CONTRACTOR AND INCLUDE ALL COSTS ASSOCIATED WITH INSTALLATION, EQUIPMENT, LABOR AND CHEMICALS ASSOCIATED WITH PROVIDING A COMPLETE AND OPERATIONAL SYSTEM AS DESCRIBED ON THESE DOCUMENTS AND SPECIFICATIONS.

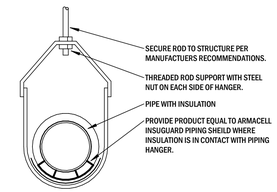
CONTACT INFORMATION: WALTER LOUIS FLUID TECHNOLOGIES, SALES@WALTERLOUIS.COM PH (217) 223-2017.



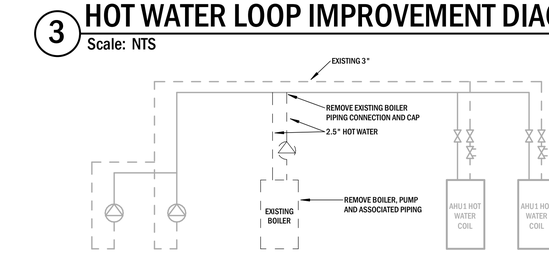
ALTERNATE 1:
3 HOT WATER LOOP IMPROVEMENT DIAGRAM
Scale: NTS



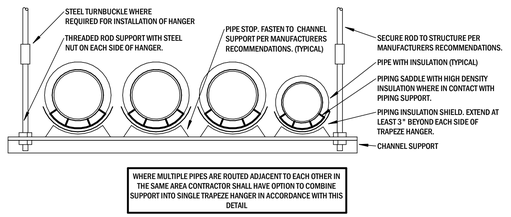
10 EXTERIOR PIPING INSULATION DETAIL
Scale: NTS



6 CLEVIS PIPE HANGER DETAIL
Scale: NTS



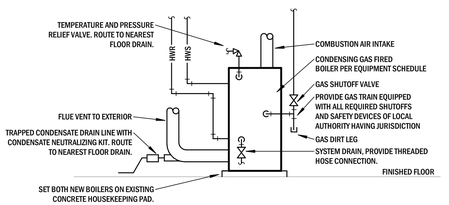
ALTERNATE 1:
2 HOT WATER LOOP DEMOLITION DIAGRAM
Scale: NTS



9 MULTIZONE AIR HANDLER UPGRADE DETAIL
Scale: NTS

WHERE MULTIPLE PIPES ARE ROUTED ADJACENT TO EACH OTHER IN THE SAME AREA CONTRACTOR SHALL HAVE OPTION TO COMBINE SUPPORT INTO SINGLE TRAPEZE HANGER IN ACCORDANCE WITH THIS DETAIL

5 MULTIPLE PIPE TRAPEZE HANGER DETAIL
Scale: NTS



1 ALTERNATE 1: BOILER DETAIL
Scale: NTS

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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT
DESIGN AND CONSTRUCTION

UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: M200
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
MECHANICAL DETAILS

SHEET NUMBER:
M200

7 OF 10 SHEETS
9/30/2025

POINTS LIST:

- AIP: LOOP TEMPERATURE
- AIP: HEATING TEMPERATURE SETPOINT
- ADP: BOILER CAPACITY (PERCENTAGE)
- BOP: BOILER STATUS
- BOP: BOILER ALARM STATUS

SEQUENCE OF OPERATIONS:

UPON A CALL FOR HEATING, BOILER PRIMARY PUMP SHALL ENERGIZE AND, UPON PROOF OF FLOW, BOILER GAS VALVE SHALL OPEN AND SHALL FIRE AND MODULATE POSITION TO MAINTAIN LOOP SETPOINT TEMPERATURE. SETPOINT SHALL BE MODULATED THROUGH THE BAS.

FACTORY CASCADE CONTROLLER SHALL STAGE SECOND BOILER ON AS REQUIRED TO MAINTAIN LOOP SETPOINT 180°F (ADJUSTABLE) AND SHALL ALTERNATE INITIAL FIRE SEQUENCE SO THAT BOILERS OPERATE IN ALTERNATING LEAD-LAG OPERATION TO MAINTAIN EQUIVALENT RUNTIME ON PRIMARY PUMPS AND BOILERS.

ALTERNATE 1: BOILER CONTROL SEQUENCE

POINTS LIST:

- ALL EXISTING POINTS SHALL REMAIN
- AIP: SUPPLY FAN SPEED (EACH FAN)
- AIP: SUPPLY FAN START/STOP
- AIP: DUCT DIFFERENTIAL PRESSURE
- BIP: SUPPLY FAN STATUS
- BOP: UV FILTER ENABLE/DISABLE
- BASE BID AIP: MECHANICAL ROOM REFRIGERANT DETECTION DEVICE
- BASE BID BOP: REFRIGERANT LEAK ALARM

SEQUENCE OF OPERATIONS:
BASEBID: NEW REFRIGERANT LEAK DETECTION DEVICES SHALL BE PROVIDED IN MECHANICAL ROOM AND SHALL SOUND ALARM, INITIATE ALARM AT BAS, AND SHUT DOWN CONDENSERS UPON DETECTION OF REFRIGERANT LEAK

ALTERNATE #2: NEW FAN WALL PLUG FANS SHALL BE CYCLE TO MAINTAIN DIFFERENTIAL PRESSURE SETPOINT IN SUPPLY AIR DUCT. FANS SEQUENCE SHALL BE OPTIMIZED FOR EFFICIENCY BASED FAN PERFORMANCE.

ALTERNATE #3: NEW EVAPORATOR COILS SHALL BE EQUIPPED WITH UV FILTERS. WHEN COOLING COIL IS IN OPERATION. UV LAMPS SHALL ENERGIZE AND SHALL OPERATE CONTINUOUSLY.

EXISTING UNIT IS EQUIPPED WITH INTERLOCKED ZONE ACTUATORS THAT DIVERT AIR FLOW BETWEEN COLD, HOT AND NEUTRAL DECKS TO DELIVER REQUIRED AIR TO ASSOCIATED ZONE BASED ON THERMOSTAT SETPOINT. EXISTING ACTUATORS SHALL REMAIN, AND NO NEW WORK IS ASSOCIATED WITH EXISTING ZONE DAMPERS AS PART OF THIS PROJECT SCOPE.

EXISTING HOT WATER COIL AND CONTROL VALVES SHALL REMAIN. VALVE OPENS TO MAINTAIN THE DISCHARGE AIR TEMPERATURE IN THE HOT DECK. NO NEW WORK IS ASSOCIATED WITH EXISTING HOT WATER VALVES AS PART OF THIS PROJECT SCOPE.

MULTIZONE AIR HANDLING UNIT

POINTS LIST:

- AIP: COOLING COIL DISCHARGE AIR TEMPERATURE
- AIP: SATURATED SUCTION TEMPERATURE
- BOP: COMPRESSOR STATUS (EACH OF THREE COMPRESSORS)
- BOP: UNIT ALARM STATUS

SEQUENCE OF OPERATIONS:

UPON A CALL FOR COOLING FROM THE MULTIZONE UNIT, EACH REFRIGERANT CIRCUIT SHALL STAGE ON TO PROVIDE 55°F (ADJUSTABLE) SUPPLY AIR DISCHARGE TEMPERATURE FROM EVAPORATER COOLING COIL. PROVIDE TEMPERATURE SENSOR DOWNSTREAM OF COOLING COIL.

AIR COOLED CONDENSER SEQUENCE

CONTACT C&C GROUP - BRIAN SCHEPERS FOR CONTROLS SCOPE.

EMAIL - BSCHEPERS@C-CGROUP.COM
MOBILE - 573-291-5425

PIPING MATERIAL SCHEDULE

PIPING			TEST PARAMETERS		FITTING		LABEL COLOR	
TYPE	SIZE	MATERIAL	PRESSURE	TIME	MATERIAL	TYPE	BACKGROUND	TEXT
HOT WATER SUPPLY AND RETURN	3" AND SMALLER	TYPE L COPPER	150 PSI	1 HR	CP	SL	GREEN	WHITE
HOT WATER SUPPLY AND RETURN	LARGER THAN 3"	SCHEDULE 40 BLACK STEEL	150 PSI	1 HR	ST	WE	GREEN	WHITE
CONDENSATE DRAIN	ALL	TYPE L COPPER TUBING	5 PSI	1 HR	WC-DWV	SL	--	--
REFRIGERANT PIPING	ALL	ACR COPPER TUBING - TYPE L	600 PSI	24 HR	CP	BZ	YELLOW	BLACK

ABBREVIATIONS:
BF: BUTT FUSION
BZ: BRAZED - NO FLUX
CI: CAST IRON
CP: COPPER
CR: CRIMPED
DWV: DRAINAGE WASTE AND VENT
FSFL: FORGED STEEL FLANGES
MAT: MATERIAL
MI: MALLEABLE IRON
PE: HIGH DENSITY POLYETHYLENE

ABBREVIATIONS:
GR: GROOVED
RS: RESIN SOCKET
SL: SOLDERED
SW: SOLVENT WELD
TH: THREADED
WC: WROUGHT COPPER
WE: WELDED
WF: WELDED AND FLANGED
ST: STEEL

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ALTERNATE 2: FAN WALL SCHEDULE

MARK		FW1 - MZA	FW2 - MZB
MANUFACTURER		NORTEK	NORTEK
MODEL NUMBER		22-65-182T-36x36x27-A3	22-65-182T-36x36x27-A3
FUNCTION		SUPPLY FAN	SUPPLY FAN
QUANTITY		3	3
ARRAY (ROWS/COILS)		1 ROW X 3 COILS	1 ROW X 3 COILS
INLET CONE LOCATION/TYPE		UPSTREAM REMOVABLE	UPSTREAM REMOVABLE
CELL SIZE		36x36x27x32	36x36x27x32
MOTOR WHEEL WEIGHT		177 LB	177 LB
FAN CELL WEIGHT		321 LB	321 LB
CELL MATERIAL		ALUMINUM/STEEL	ALUMINUM/STEEL
BLANK OFF MATERIAL		16 GAUGE STEEL	16 GAUGE STEEL
FAN WHEEL	WHEEL TYPE	HPF-A100	HPF-A100
	DIAMETER	22	22
	WIDTH	65	65
	MAX RPM	3166	3166
MOTOR	MANUFACTURER	TOSHIBA	TOSHIBA
	MODEL	40A003L12VS210	40A003L12VS210
	HP EACH/TOTAL	3.5/10.5	3.5/10.5
	POLES/RPM	4-POLE/1750	4-POLE/1750
	FRAME/CASING	182T/TEAO	182T/TEAO
	EFFICIENCY	88.5	88.5
	SERVICE FACTOR	1.15	1.15
	SHAFT ISOLATION	CERAMIC BEARINGS	CERAMIC BEARINGS
	FLA EACH/TOTAL	9/26 AMPS	9/26 AMPS
	MOTOR HP SF	3.0 %	3.0 %
	VOLTAGE/PHASE	240/3	240/3
ACCESORIES		ISL,RC,BL,CPI,BD, VFD, CP	ISL,RC,BL,CPI,BD, VFD, CP

ABBREVIATIONS:
ISL: PROVIDE ISOLATORS
RC: REMOVABLE INLET CONE
BL: CONTRACTOR SHALL PROVIDE STEEL BLANK OFF AROUND PERIMETER OF FANS
CPI: COPLANAR INSULATION
BD: BACKDRAFT DAMPERS
SF: SAFETY FACTOR
VFD: VFD FOR MOTOR CONTROL BY MECHANICAL CONTRACTOR
CP: REMOTE MOUNTED CONTROL PANEL WITH NEMA 1 ENCLOSURE, POWDER COAT FINISH, MOTOR STATUS LIGHTS

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AIR COOLED CONDENSER SCHEDULE

MARK		CU1	CU2
MANUFACTURER		TSI	TSI
MODEL		20A0LM54-3	20A0LM54-3
CONDENSER	EFFICIENCY	11.8 EER	11.8 EER
	REFRIG CIRCUITS	3	3
	TONS/CIRCUIT	18	18
	NOMINAL TONNAGE	54	54
	TOTAL CAPACITY	645.6 MBH	645.6 MBH
	AMBIENT TEMP	105 DEG F	105 DEG F
	REFRIGERANT TYPE	R454B	R454B
	WEIGHT	418	418
	DIMENSIONS	88"Wx180"Lx63"H	88"Wx180"Lx63"H
	MCA	256	256
	MOCP	300	300
	VOLTAGE	240/3	240/3
EVAPORATOR COILS	QTY MODEL	(1) 58D40.5X108-12-4-W-Z-R	(1) 58D40.5X108-12-4-W-Z-R
	CIRCUITS/ARR	3/INTERTWINED	3/INTERTWINED
	EVAPORATOR FPI	12	12
	EVAPORATOR ROWS	4	4
	FACE VELOCITY	523 FPM	523 FPM
	TOTAL CAPACITY	645.6 MBH	645.6 MBH
	SENSIBLE CAPACITY	489.5 MBH	489.5 MBH
	CONDENSATE RATE	149.4 LBS/HR	149.4 LBS/HR
ENTERING AIR DB/WB		84/68	84/68
LEAVING AIR DB/WB		55.1/54.1	55.1/54.1
EVAP SUCTION TEMP		45°F	45°F
COMP SUCTION TEMP		43°F	43°F
LINE LOSS		2°F	2°F
ACCESSORIES		SP,BMS,CPT	

ABBREVIATIONS:
BHP: BRAKE HORSEPOWER
HP: HORSEPOWER
TEMP: TEMPERATURE
AIR: AIRRANGEMENT
FPM: FEET PER MINUTE

ABBREVIATIONS:
SP: SINGLE POINT POWER CONNECTION
BMS: INTEGRATED WITH SCHNEIDER CONTROL SYSTEM
CPT: NEW COMPRESSOR CONTROL BOARD FOR STAGING OF CIRCUITS BASED ON CALL FROM BUILDING MANAGEMENT SYSTEM AND REFRIGERANT TEMPERATURES

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ALTERNATE 1: BOILER SCHEDULE

MARK	B1	B2	
MANUFACTURER	FULTON	FULTON	
MODEL NUMBER	EXE-500	EXE-500	
INPUT	500 MBH	500 MBH	
MIN INPUT FIRE	50 MBH	50 MBH	
OUTPUT	486 MBH	486 MBH	
FLOW	48 GPM	48 GPM	
PRESSURE DROP	0.9 PSI @ 48 GPM	0.9 PSI @ 48 GPM	
DESIGN PRESSURE	160 PSI	160 PSI	
VOLTAGE/PHASE	120/1	120/1	
MCA	12	12	
MOCP	20	20	
ACCESSORIES	VK, CK, PC, LC, PTRV, CC	VK, CK, PC, LC, PTRV, CC	

ABBREVIATIONS:
VK: VENT AND INTAKE KIT
CK: CONDENSATE NEUTRALIZATION KIT
PTRV: PRESSURE TEMPERATURE RELIEF
PC: PRIMARY PUMP CONTROL
LC: LOW WATER CUTOFF
CC: CASCADE CONTROLLER TO CONTROL EACH BOILER, BALANCE RUNTIME AND STAGE AS REQUIRED FOR THE SEQUENCE OF OPERATIONS. CONTROLLER SHALL BE COMPATIBLE WITH SCHNEIDER CONTROLS

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ALTERNATE 3: UV FILTER SCHEDULE

MARK	UVF1-MZA	UVF1-MZB
MANUFACTURER	UV RESOURCES	UV RESOURCES
MODEL NUMBER	RLM (X)	RLM (X)
STYLE	COIL DISINFECTION	COIL DISINFECTION
PLENUM DIMS (INCHES)	51x115	51x115
COIL DIMS (INCHES)	40x108	40x108
LAMPS PER ROW	2	2
NUMBER OF ROWS	2	2
LAMP LENGTH (INCHES)	61	61
WATTS PER LAMP	145	145
TOTAL WATTS	740	740
LAMP WATTS/SF OF COIL AREA	19.33	19.33
SERVICE VOLTAGE	120-277V	120-277V

ABBREVIATIONS:
--

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ALTERNATE 1: PUMP SCHEDULE

MARK	HWP1	HWP2				
DESCRIPTION	HHW	HHW				
MANUFACTURER	B&G	B&G				
MODEL	PL-130/2"	PL-130/2"				
TYPE	IL	IL				
DESIGN FLOW (GPM)	48	48				
DESIGN HEAD (FT.)	16	16				
WETTED MATERIAL	BR	BR				
WORK. CLASS (PSI)	150	150				
MOTOR TYPE	-	-				
MOTOR POWER	2/5 HP	2/5 HP				
RPM	3200	3200				
VOLTAGE/PHASE	230/1	230/1				
TRIPLE DUTY VALVE	--	--				
SUCTION DIFFUSER	--	--				
FLUID TEMP. RANGE (F)	40-225	40-225				
ACCESSORIES	--	--				

ABBREVIATIONS:
IL: IN-LINE
WR: WET ROTOR
BMES: BASE MOUNTED END SUCTION
BMHSC: BASE MOUNTED HORIZONTAL SPLIT CASE
BMVSC: BASE MOUNTED VERTICAL SPLIT CASE
BMCCES: BASE MOUNTED CLOSE COUPLED END SUCTION
BR: BRONZE/BRASS
SS: STAINLESS STEEL
IR: IRON

ABBREVIATIONS:
VSC: VARIABLE SPEED CONTROL
PPC: PROPORTIONAL PRESSURE CURVE CONTROL
CPC: CONSTANT PRESSURE CURVE CONTROL
DTC: DIFFERENTIAL TEMPERATURE CONTROL
BP: HEAVY DUTY BASEPLATE
B&G: BELL AND GOSSETT
HHW: HYDRONIC HEATING HOT WATER
AS: AQUASTAT WITH TIMECLOCK AND CORD AND PLUG
EFF: EFFLUENT
SP: SUMP PIT AS DETAILED OR PER MANUFACTURER RECOMMENDATIONS
OM: OIL MINDER

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HVAC SYMBOLS

	CEILING SUPPLY GRILLE
	CEILING RETURN/EXHAUST GRILLE
	LINEAR SUPPLY/RETURN GRILLE
	WALL SUPPLY/RETURN/EXHAUST GRILLE OR REGISTER
	DIFFUSER OR GRILLE WITH FLEX DUCT. SIZE OF FLEX DUCT SHALL EQUAL SIZE OF UPSTREAM DUCT.
	INDICATES CONNECTION TO EXISTING SYSTEM
RTU3	THERMOSTAT
CO2	CO2 SENSOR
T	REMOTE AVERAGING TEMPERATURE SENSOR
H	HUMIDISTAT
OR	TEMPERATURE OVERRIDE SENSOR
AT 8x8 100	DIFFUSER TAG - LETTER AND CEILING DESIGNATION, NECK SIZE AND CFM
FD	FIRE DAMPER
SD	SMOKE DAMPER
MD	MOTORIZED DAMPER
BD	BALANCE DAMPER
GBD	GRAVITY BACKDRAFT DAMPER
C	CONDENSATE DRAIN
R	REFRIGERANT LINESET (LIQUID, SUCTION AND HEAT RECOVERY WHERE APPLICABLE)
HPWS	HEAT PUMP WATER SUPPLY
HPWR	HEAT PUMP WATER RETURN
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
	SHUTOFF VALVE
	BALANCE VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	TWO WAY CONTROL VALVE. MODULATING UNLESS OTHERWISE NOTED AS TWO POSITION.
	THREE WAY CONTROL VALVE. MODULATING UNLESS OTHERWISE NOTED AS TWO POSITION.
PIC	PRESSURE INDEPENDENT TWO WAY MODULATING CONTROL VALVE
PIC	PRESSURE INDEPENDENT THREE WAY MODULATING CONTROL VALVE
	THROTTLING VALVE
P	PRESSURE GAUGE
	UNION/FLANGE
T	TEMPERATURE SENSOR WITH WELL
	FILLED TYPE THERMOMETER WITH WELL
	MANUAL AIR VENT
	WYE STRAINER AND HOSE CONNECTION CAP
	SUCTION DIFFUSER
	PUMP
	FLEXIBLE CONNECTION
	HIGH CAPACITY AIR VENT. PIPE DISCHARGE TO DRAIN OR FILL TANK.

ABBREVIATIONS

60"	DIMENSIONS NEXT TO ANY SYMBOL OR FIXTURE INDICATES MOUNTING HEIGHT TO CENTERLINE OF DEVICE.
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
HP	HEAT PUMP
DN	DOWN
EF	EXHAUST FAN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED

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DESIGN AND CONSTRUCTION

UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: M300
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

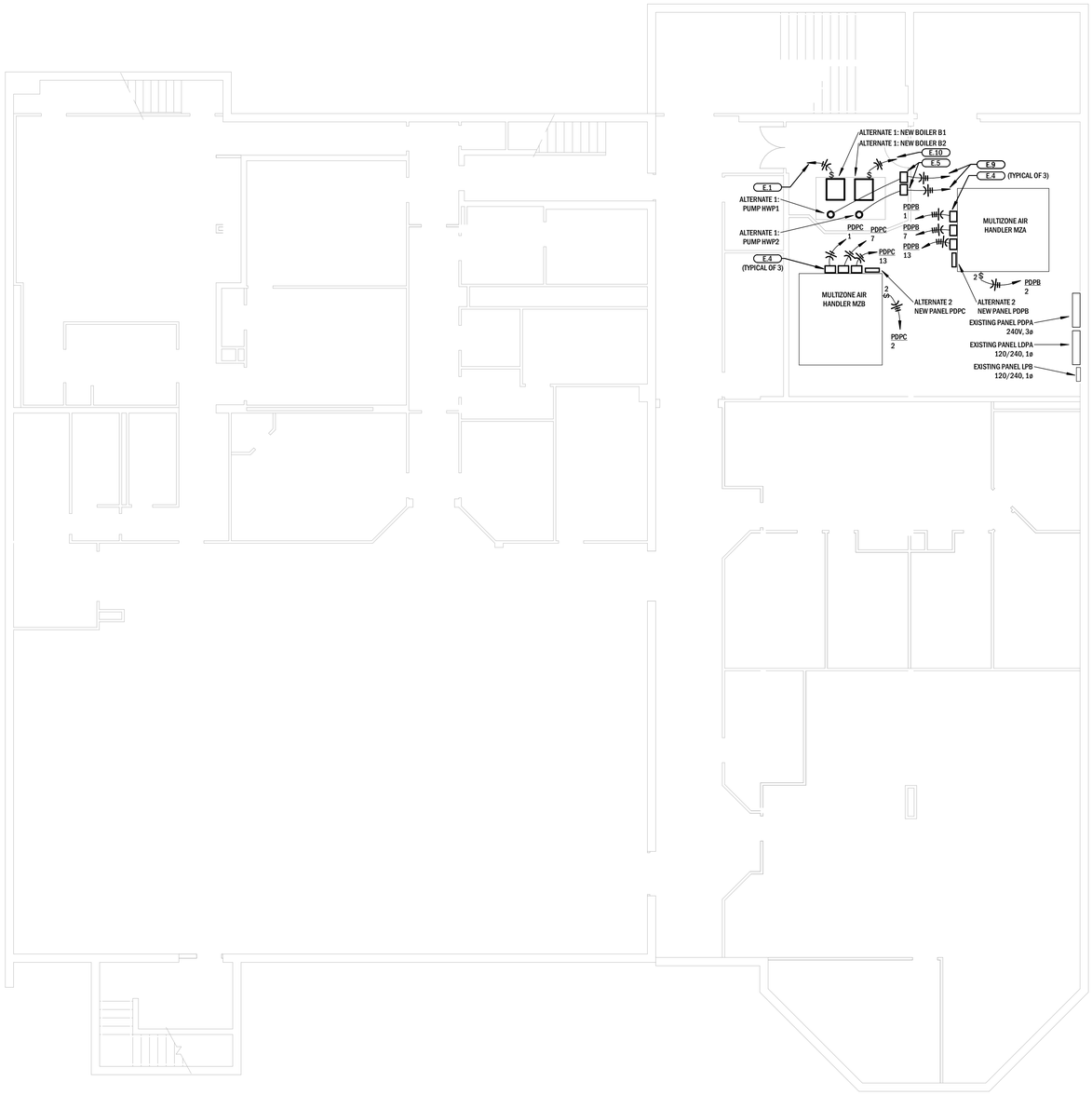
SHEET TITLE:
MECHANICAL SCHEDULES

SHEET NUMBER:
M300

8 OF 10 SHEETS
9/30/2025

KEYNOTES

E.1	ALTERNATE 1: CONNECT TO EXISTING CIRCUIT BREAKER PREVIOUSLY SERVING BOILER.
E.4	ALTERNATE 2: FAN WALL VFD WITH DISCONNECT. VFD SHALL BE FURNISHED BY MECHANICAL CONTRACTOR.
E.5	ALTERNATE 1: BOILER PUMP MOTOR STARTER. PROVIDE NEMA 00, 20A, 240, COMBINATION MOTOR STARTER WITH 30A, 2 POLE DISCONNECT, HAND/OFF/AUTO SELECTOR AND PILOT LIGHTS. COORDINATE COIL VOLTAGE WITH BUILDING MANAGEMENT SYSTEM.
E.9	ALTERNATE 1: WIRE TO NEW 2 POLE 20A CIRCUIT BREAKER IN PANEL PDPA.
E.10	ALTERNATE 1: WIRE BOILER TO EXISTING 20A 1 POLE SPARE CIRCUIT IN EXISTING PANEL LPB.



1 **BASEMENT ELECTRICAL PLAN**
Scale: 1/8" = 1'-0"

NORTH

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SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: E100
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER:
E100

9 OF 10 SHEETS
9/30/2025

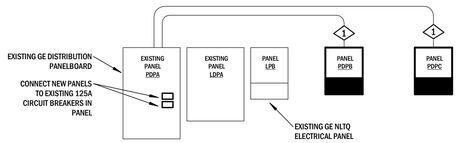
ALTERNATE 2

CIRCUIT BREAKER PANEL SCHEDULE

CKT NO	LOAD DESCRIPTION	C/B AMPS	WIRE SIZE	C/B ACC	LOAD (VA)	A	B	C	LOAD (VA)	C/B ACC	WIRE SIZE	C/B AMPS	LOAD DESCRIPTION	CKT NO
1	FAN WALL FAN 1	20	12		1080	1460			380		12	20	UV FILTERS	2
3	//	3	12		1080		1460		380		12	2	//	4
5	//	3	12		1080			1080				20	SPARE	6
7	FAN WAL FAN 2	20	12		1080	1080						20	SPARE	8
9	//	3	12		1080		1080					20	SPARE	10
11	//	3	12		1080			1080				20	SPARE	12
13	FAN WALL FAN 3	20	12		1080	1080						20	SPARE	14
15	//	3	12		1080		1080					20	SPARE	16
17	//	3	12		1080			1080				20	SPARE	18
						3620	3620	3240						
	AIC RATING	10000											PDPC	
	VOLTAGE	120/240												
	PHASE	3												
	AMPERAGE	125										30	MAXIMUM AMPS	
	MAIN CIRCUIT BREAKER	MLO												
	POLES	18												
	ENCLOSURE	NEMA 1												
	PANEL TYPE	NQOD												

CIRCUIT BREAKER PANEL SCHEDULE

CKT NO	LOAD DESCRIPTION	C/B AMPS	WIRE SIZE	C/B ACC	LOAD (VA)	A	B	C	LOAD (VA)	C/B ACC	WIRE SIZE	C/B AMPS	LOAD DESCRIPTION	CKT NO
1	FAN WALL FAN 1	20	12		1080	1460			380		12	20	UV FILTERS	2
3	//	3	12		1080		1460		380		12	2	//	4
5	//	3	12		1080			1080				20	SPARE	6
7	FAN WAL FAN 2	20	12		1080	1080						20	SPARE	8
9	//	3	12		1080		1080					20	SPARE	10
11	//	3	12		1080			1080				20	SPARE	12
13	FAN WALL FAN 3	20	12		1080	1080						20	SPARE	14
15	//	3	12		1080		1080					20	SPARE	16
17	//	3	12		1080			1080				20	SPARE	18
						3620	3620	3240						
	AIC RATING	10000											PDPB	
	VOLTAGE	120/240												
	PHASE	3												
	AMPERAGE	125										30	MAXIMUM AMPS	
	MAIN CIRCUIT BREAKER	MLO												
	POLES	18												
	ENCLOSURE	NEMA 1												
	PANEL TYPE	NQOD												



1 **ELECTRICAL RISER DIAGRAM**
Scale: NTS

ELECTRICAL SYMBOLS

FOR LIGHT SWITCH TYPES SEE LIGHTING CONTROL SCHEDULE.

	120V, 20A DUPLEX RECEPTACLE
	DEVICE MOUNTED IN FLOOR BOX. REFERENCE SPECIFICATIONS
	DEVICE MOUNTED IN BOX AT CEILING OR IN STRUCTURE
NEMA#	VOLTAGE AND AMPERAGE CORRESPONDING TO NEMA NUMBER SHOWN
AC	DEVICE INSTALLED ABOVE COUNTER
GF	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
WP	WEATHER PROOF WHILE IN USE COVER AND GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
TP	TAMPER PROOF RECEPTACLE
4	120, 20A QUADPLEX RECEPTACLE
U	120, 20A DUPLEX RECEPTACLE WITH USB CHARGING
	DATA DEVICE
	CONCEALED SERVICE FLOOR BOX WITH DEVICE SHOWN
S	SURFACE SERVICE FLOOR BOX WITH DEVICE SHOWN
P	FIRE RATED POKE THROUGH, SURFACE SERVICE FLOOR BOX WITH DEVICE SHOWN
	FIRE ALARM VISUAL STROBE
	FIRE ALARM AUDIBLE VISUAL SPEAKER STROBE
FAA	REMOTE FIRE ALARM ANNUNCIATOR
FACP	MAIN FIRE ALARM PANEL
D	MAGNETIC DOOR HOLD OPEN
F	FIRE ALARM MANUAL PULL STATION
SD	SMOKE DETECTOR
H	HEAT DETECTOR
DSD	DUCT SMOKE DETECTOR
OP	OCCUPANCY SENSOR LIGHTING CONTROL POWER PACK
	ROUGH-IN FOR WALL MOUNT THERMOSTAT. COORDINATE WITH MECHANICAL DRAWINGS
	DISCONNECT SWITCH
T	TIMESWITCH. SEE SCHEDULE FOR SPECIFICATIONS.
P	PHOTOCELL
L	LIGHTING CONTACTOR
	EMERGENCY LIGHT. WALL MOUNTED WHEN SHOWN TOUCHING WALL
	PENDANT LIGHT FIXTURE. SIZES VARY
	RECESSED CAN LIGHT
	SURFACE MOUNT OR SUSPENDED LINEAR FIXTURE
	RECESSED LINEAR FIXTURE
NL	INDICATES NIGHT LIGHT FIXTURE
OHE	OVERHEAD ELECTRICAL CONDUCTOR
UGE	UNDERGROUND ELECTRICAL CONDUCTOR
COMM	COMMUNICATIONS CONDUIT/CABLING
	HOMERUN, NEW RACEWAY AND WIRING TO DESIGNATED PANEL. PROVIDE QUANTITY AND SIZE OF WIRING AS REQUIRED FOR CIRCUIT BREAKER AND DESIGNATED IN PANEL SCHEDULE.
2	NEW RACEWAY AND WIRING FOR ELECTRICAL DEVICE TERMINATED AS NOTED. PROVIDE QUANTITY AND SIZE OF WIRING AS REQUIRED FOR CONNECTED ELECTRICAL DEVICE AND OCPD.

ABBREVIATIONS	
60"	DIMENSIONS NEXT TO ANY SYMBOL OR FIXTURE INDICATES MOUNTING HEIGHT TO CENTERLINE OF DEVICE
AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ASC	AVAILABLE SHORT CIRCUIT CURRENT
GFCI	GROUND FAULT CURRENT INTERRUPTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
(TIE)	REPRESENTS PARTIAL HOMERUN WITH REST OF CONNECTED DEVICES LOCATED ELSEWHERE ON PLANS
OCPD	OVERCURRENT PROTECTIVE DEVICE

FEEDER SCHEDULE 1

1	3-#1 AND 1-#6 GROUND IN 1.5" CONDUIT

STATE OF MISSOURI
MIKE KEHOE
GOVERNOR

STATE OF MISSOURI
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NUMBER PE-2013039894
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PROFESSIONAL SEAL

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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT
DESIGN AND CONSTRUCTION

UPGRADE/RELOCATE ROOFTOP UNITS

SPRINGFIELD DOLIR OFFICE BUILDING

SPRINGFIELD, MO

PROJECT# O2516-01
SITE # 1032
FACILITY # 3101032001

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: E200
DRAWN BY: BRP
CHECKED BY: BRP
DESIGNED BY: BRP

SHEET TITLE:
ELECTRICAL SCHEDULES AND DETAILS

SHEET NUMBER:
E200

10 OF 10 SHEETS
9/30/2025