FIRE SPRINKLER SYSTEM UPGRADE HIGGINSVILLE HABILITATION CENTER Higginsville, Missouri

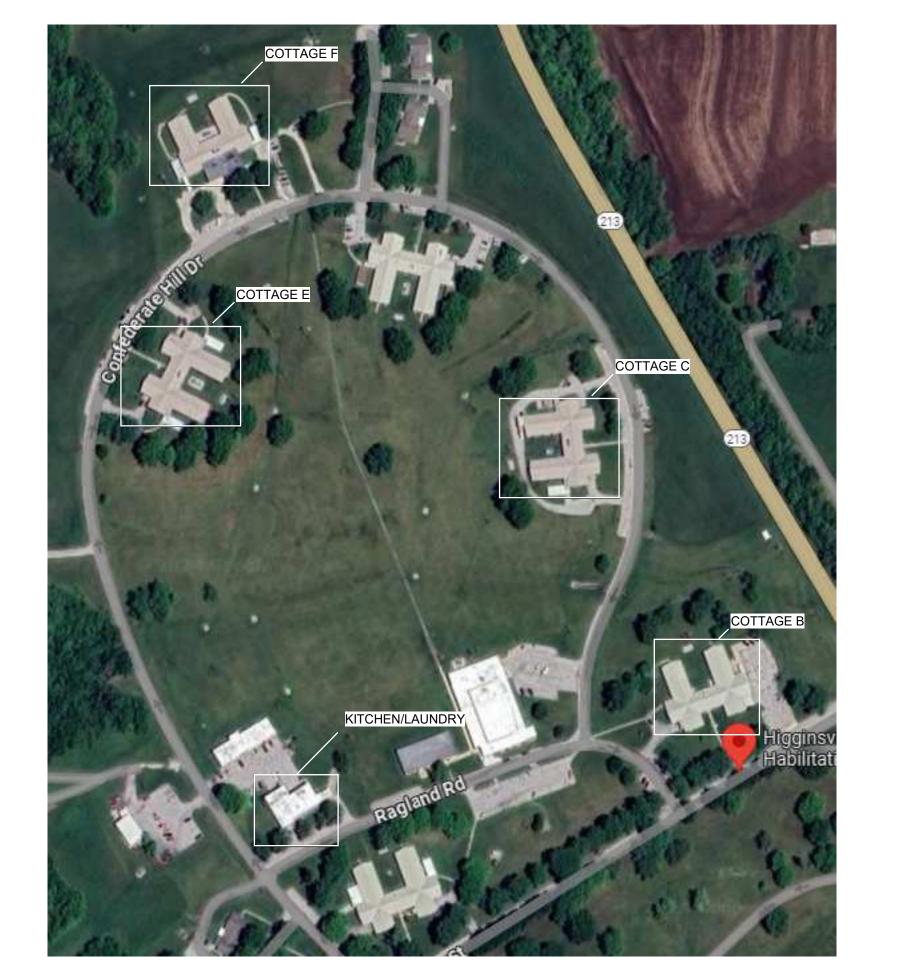
OWNER:

STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR

PROJECT MANAGEMENT:

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION <u>SHEET LIST</u>

000	COVER SHEET
01	ATTIC FLOOR PLAN - COTTAGE B
02	ATTIC FLOOR PLAN - COTTAGE C
800	ATTIC INSULATION DETAILS
000	MECHANICAL GENERAL NOTES AND LEGEND
102A	HVAC ATTIC PLAN - COTTAGE B
103A	HVAC ATTIC PLAN - COTTAGE C
400	MECHANICAL SCHEDULES AND DETAILS
000	ELECTRICAL LEGEND, NOTES, AND DETAILS
01B	ELECTRICAL PLAN - OVERALL - COTTAGE B
01C	ELECTRICAL PLAN - OVERALL - COTTAGE C
2000 [°]	FIRE PROTECTION GENERAL NOTES AND LEGEND
2101A	FIRE PROTECTION PLAN - KITCHEN-LAUNDRY
2102A	FIRE PROTECTION PLAN - COTTAGE B
2102B	FIRE PROTECTION PLAN - BASEMENT - COTTAGE B
2103A	FIRE PROTECTION PLAN - COTTAGE C
2103B	FIRE PROTECTION PLAN - BASEMENT - COTTAGE C
2D104B	FIRE PROTECTION DEMOLITION PLAN - BASEMENT - COTTAGE E
2104B	FIRE PROTECTION PLAN - BASEMENT - COTTAGE E
2D105B	FIRE PROTECTION DEMOLITION PLAN - BASEMENT - COTTAGE F
2105B	FIRE PROTECTION PLAN - BASEMENT - COTTAGE F
°500	FIRE PROTECTION DETAILS



DESIGNER: H

PROJECT NUMBER: M2405-01

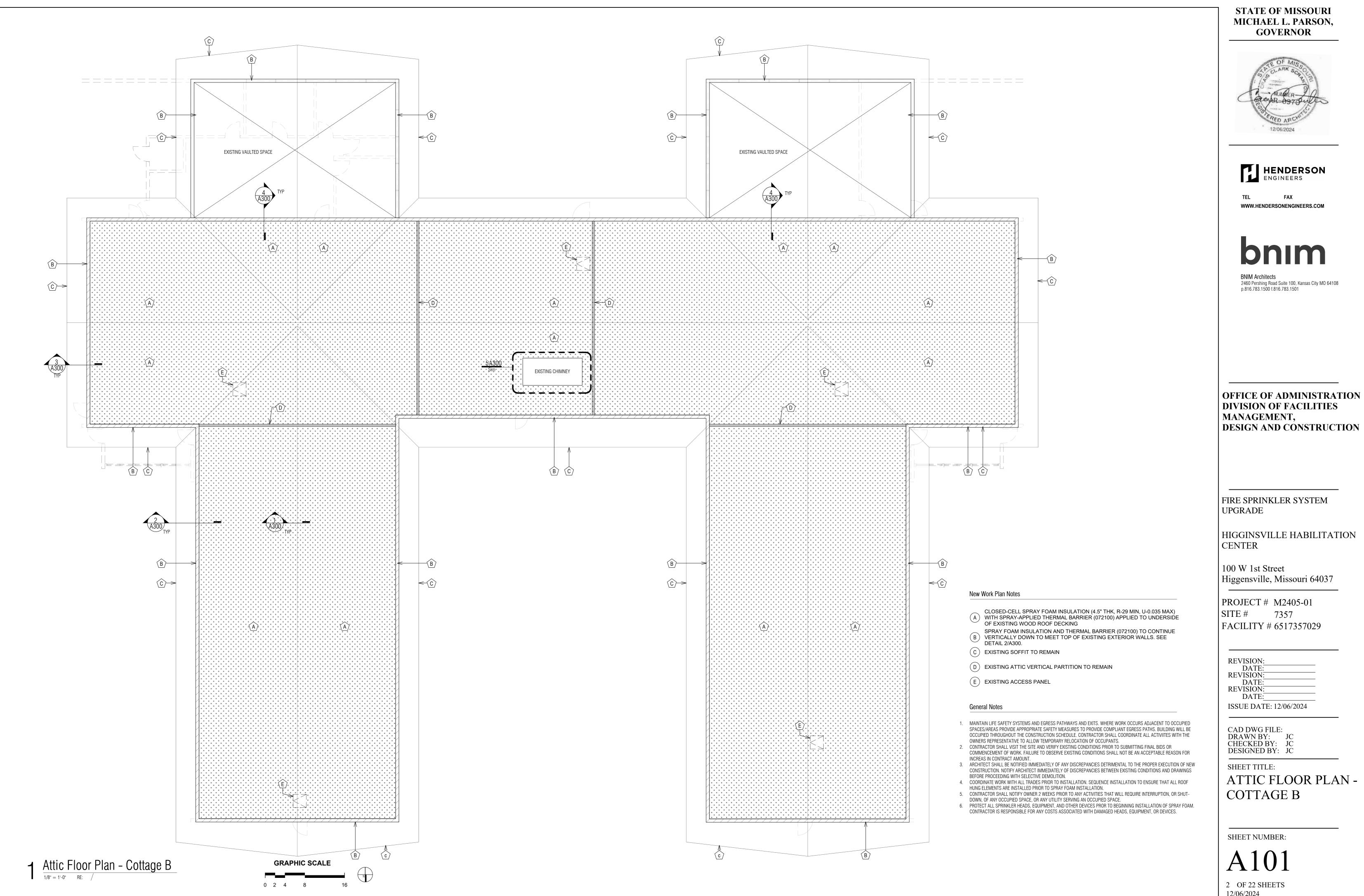
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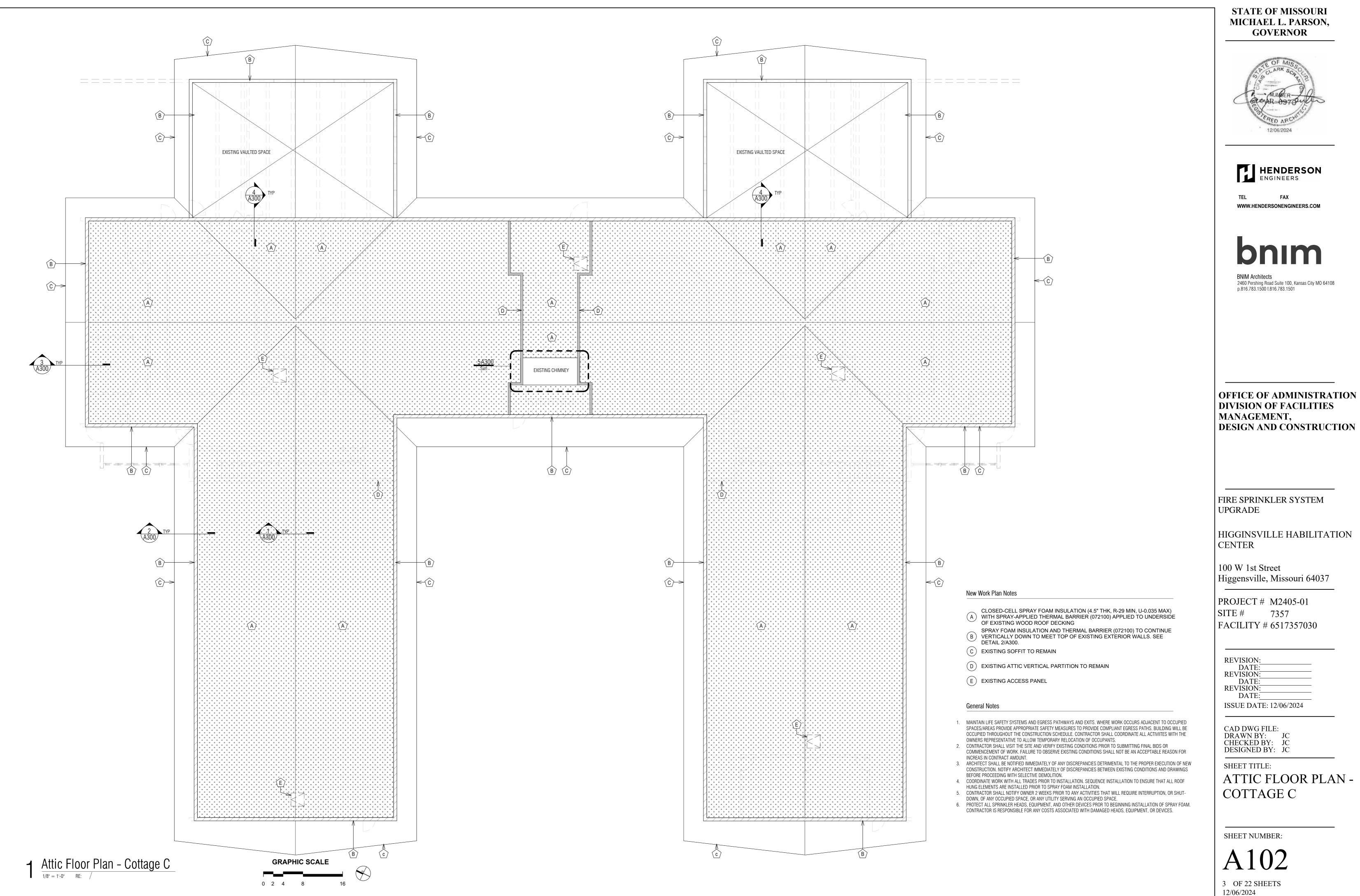
HENDERSON ENGINEERS

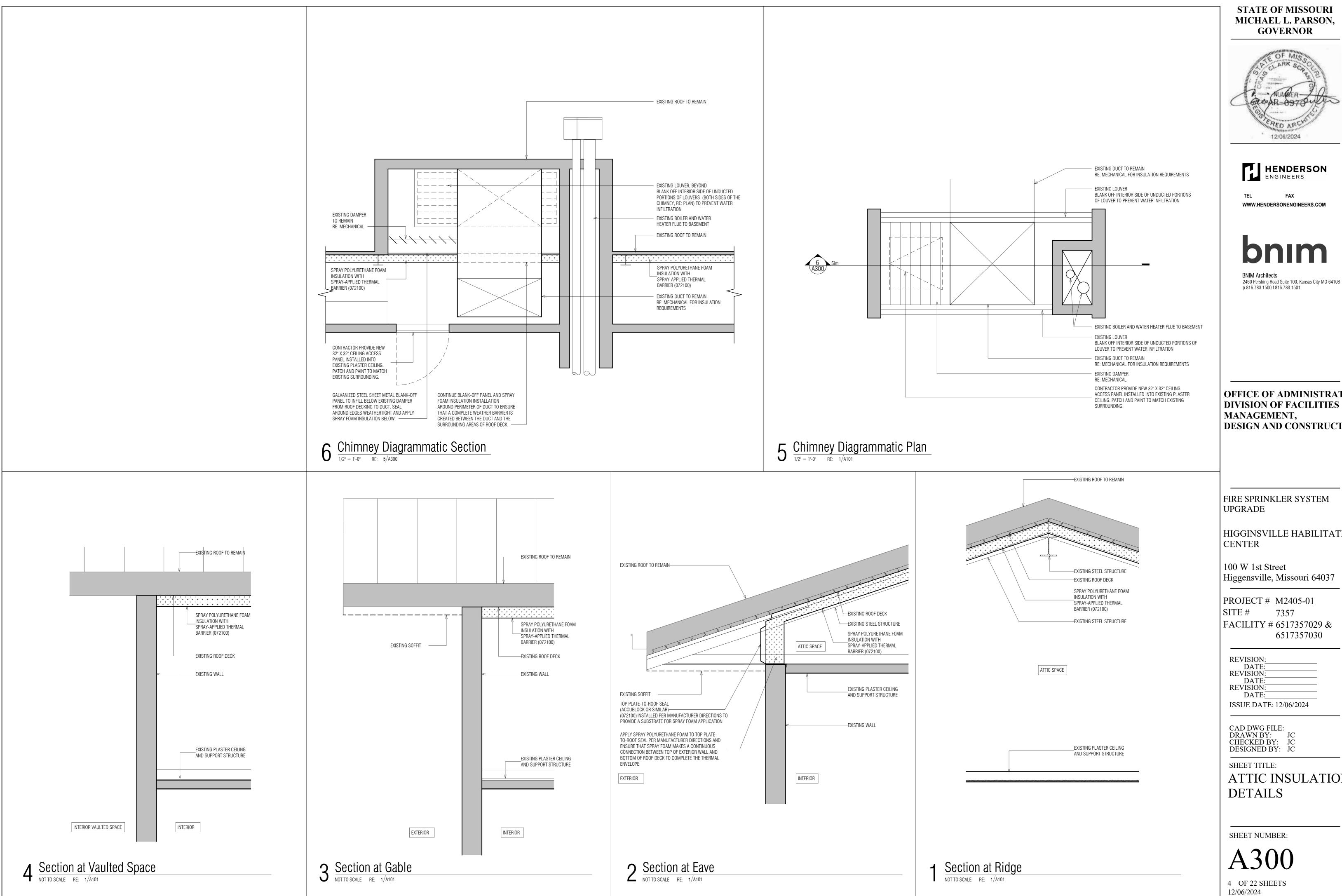
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	6517357029
	6517357030
	6517357032
	6517357033

SHEET NUMBER:









OFFICE OF ADMINISTRATION DESIGN AND CONSTRUCTION

HIGGINSVILLE HABILITATION

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: 12/06/2024

ATTIC INSULATION

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBR STANDARD MOUNTING HEIGHT	HVAC DUCTWORK AND ACCESSORIES	PIPING SYMBOLS	PIPING LINETYPES	3.02
STANDARD MOONTING HEIGHT THERMOSTATS (USER ADJUSTABLE) (TOP OF DEVICE) 46" CONTROLS (TOP OF DEVICE) 46" INSTALL DEVICES AT THE MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ABOVE OR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS ARE AFF OR AFG TO TOP OF THE DEVICE UNO. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS. ANNOTATION 1 MECHANICAL PLAN NOTE CALLOUT	Image: Constraint of the second consecond consecond constration of the second constrationt	PIPING SYMBOLS DIRECTION OF FLOW CONTROL VALVE THREE-WAY CONTROL VALVE HTHREE-WAY HTHREE-WAY	PIPING LINETTPES EXISTING PIPING TO BE REMOVED OR RELOCATED EXISTING PIPING TO REMAIN)
Image: Construction of the construc	Image: Provide the second s	STRAINER WITH BLOWOFF RELIEF / SAFETY VALVE SOLENOID VALVE PRESSURE REDUCING VALVE GAS PRESSURE REGULATOR THERMOSTATIC MIXING VALVE PA PIPE ANCHOR PIPE GUIDE PIPE GUIDE PIPING SUPPORT F & TRAP BUCKET TRAP BUCKET TRAP BUCKET TRAP BUCKET TRAP PRESSURE GAUGE ITHERMOSTATIC TRAP BACKFLOW PREVENTER PRESSURE GAUGE ITHERMOMETER PRESSURE AND TEMPERATURE TEST PLUG UNION F LANGE CONNECTION VACUUM RELIEF VALVE IMV MANUAL AIR VENT PRESSURE / VACUUM SWITCH ICLEANOUT CAP ELBOW UP ELBOW DOWN IELBOW NOWN PELBOW UP WITH SHUT-OFF VALVE (SOV) IELBOW UP WITH SHUT-OFF VALVE (SOV) IELBOW NOWN WITH SHUT-OFF VALVE (SOV) IELBOW UP WITH SHUT-OFF VALVE (SOV) IELBOW UP WITH SHUT-OFF VALVE (SOV) IELBOW UP WITH SHUT-OFF VALVE (SOV) <td></td> <td></td>		
AIR TEMPERATURETHTOTAL HEAT CAPACITYEDEXHAUST DUCTTSPTOTAL STATIC PRESSUREEDBENTERING DRY BULBTTTEMPERATUREEFFEXHAUST FANTYPTYPICALEFFEFFICIENCYTYPTYPICALEMSENERGY MANAGEMENTU/FUNDERFLOORSYSTEMU/GUNDERGROUNDESPEXTERNAL STATICU/SUNDERSLAB	MD MOTORIZED DAMPER BD BACKDRAFT DAMPER ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS.		HATCHING LEGEND	
PRESSUREUHUNIT HEATERETREXISTING TO REMAINUNOUNLESS NOTED OTHERWISEEWBENTERING WET BULBVAVVARIABLE AIR VOLUMEEWTENTERING WATERVELVELOCITYTEMPERATUREVFDVARIABLE FREQUENCYFCUFAN COIL UNITDRIVE	REFER TO DUCTWORK SPECIFICATIONS FOR DUCTWORK INSULATION AND LINER INFORMATION. HVAC CONTROL DEVICES		NOT IN SCOPE (NIS)	Ř
FFAFROM FLOOR ABOVE FROM FLOOR BELOWVRFVARIABLE REFRIGERANT FLOWFFBFROM FLOOR BELOWVRVVARIABLE REFRIGERANT FLOWFFIFINSPER INCH FPMVRVVARIABLE REFRIGERANT VOLUMEFPMFEET PER MINUTE GCW/WITHGCGENERAL CONTRACTOR GPMW/OWITHOUT WITHOUTGPMGALLONS PER MINUTE HOA 	HUMIDISTAT Image: Definition of the sense sense of the sense of the sense of the sense sense of		LINETYPE LEGEND THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS A EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTUR THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASIN WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAF ETC.	K E. NG, DN
	SP STATIC PRESSURE TS TEMPERATURE SENSOR		EXISTING NEW DEMOLISH —	

RAL NEW NOTES:

R TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME ACQUAINTED WITH THE EXISTING CONDITIONS OF THE ECT. REVIEW THE GENERAL NOTES. SPECIFICATIONS AND R DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, NEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES R TO SUBMISSION OF BID.

ING CONDITIONS WERE TAKEN FROM ORIGINAL /INGS AND SITE VISITS AND MAY NOT REFLECT EXACT UILT" CONDITIONS. FIELD VERIFY EXISTING CONDITIONS R TO SUBMITTING FINAL BIDS. COORDINATE NEW WORK DEMOLITION WITH OTHER DISCIPLINES AND EXISTING DITIONS PRIOR TO CONSTRUCTION.

RDINATE THE INSTALLATION OF THE MECHANICAL EMS WITH OTHER TRADES TO ENSURE A NEAT AND RLY INSTALLATION. INSTALL DUCTWORK AS TIGHT TO CTURE AS POSSIBLE. COORDINATE WITH OTHER TRADES OID CONFLICTS. COORDINATE INSTALLATION OF WORK TO AVOID CONFLICTS WITH ELECTRICAL PANELS, ING FIXTURES, ETC. ANY MODIFICATIONS REQUIRED DUE CK OF COORDINATION WILL BE THE RESPONSIBILITY OF CONTRACTOR AT NO EXTRA COST TO THE OWNER.

NG INSTALLATION OF NEW WORK, AVOID DAMAGING ING SURFACES AND EQUIPMENT TO REMAIN. REPAIR GE CAUSED DURING CONSTRUCTION AT NO EXTRA COST E OWNER.

IDE TEMPORARY BARRIERS TO CONTAIN DUST AND IS RESULTING FROM THE PERFORMANCE OF THE WORK E AREA WHERE WORK IS BEING PERFORMED.

ECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL S SHALL BE PROVIDED BY DIVISION 23 UNLESS RWISE NOTED.

MECHANICAL EQUIPMENT IS SHOWN AT APPROXIMATE TIONS. FIELD MEASURE FINAL EQUIPMENT LOCATIONS R TO FABRICATION AND MAKE ADJUSTMENTS AS IRED TO FIT THE EQUIPMENT WITHIN THE AVAILABLE . VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET FACTURER'S RECOMMENDATIONS REGARDING SERVICE RANCE AND PROPER AIRFLOW CLEARANCE AROUND PMENT.

R TO ARCHITECTURAL DRAWINGS FOR RELATED TRUCTION DETAILS AS APPLICABLE TO THE HVAC EM. VERIFY CHASES AND PENETRATIONS SHOWN ON ITECTURAL DRAWINGS THAT ARE INTENDED FOR WORK AND PIPING MEET REQUIREMENTS.

OR AIR QUALITY MEASURES: PROTECT INSIDE OF ALLED AND DELIVERED) DUCTWORK AND HVAC UNITS I EXPOSURE TO DUST, DIRT, PAINT AND MOISTURE. ACE INSULATION THAT HAS BECOME WET AT ANY TIME IG CONSTRUCTION, DRYING THE INSULATION IS NOT PTABLE. SEAL ANY TEARS OR JOINTS OF INTERNAL GLASS INSULATION. REMOVE DEBRIS FROM NG/RETURN AIR PLENUM INCLUDING DUST. VACUUM N ANY DUCTWORK CONNECTED TO HVAC UNITS THAT OPERATED DURING THE CONSTRUCTION PERIOD AFTER FILTERS ARE INSTALLED AND PRIOR TO TURNING SYSTEM TO THE OWNER. THE INTERNAL SURFACES AND CIATED COILS OF ANY HVAC UNITS THAT WERE ATED SHALL ALSO BE CLEANED.

HEAD HANGERS AND SUPPORTS FOR EQUIPMENT, WORK AND PIPING SHALL BE FASTENED TO BUILDING OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS ABOVE FLOOR SLAB OR ROOF EXCEPT WHERE RETE INSERTS IN CONCRETE SLABS ARE ALLOWED BY PECIFICATIONS.

RDINATE LOCATION OF EQUIPMENT SUPPORTS WITH TION OF EQUIPMENT ACCESS PANELS/DOORS TO ENABLE ICE OF EQUIPMENT AND/OR FILTER REPLACEMENT.

PENETRATIONS THROUGH THE BUILDING COMPONENTS CORDANCE WITH THE CONTRACT SPECIFICATIONS. ROOF PENETRATIONS THROUGH FIRE RATED ONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.

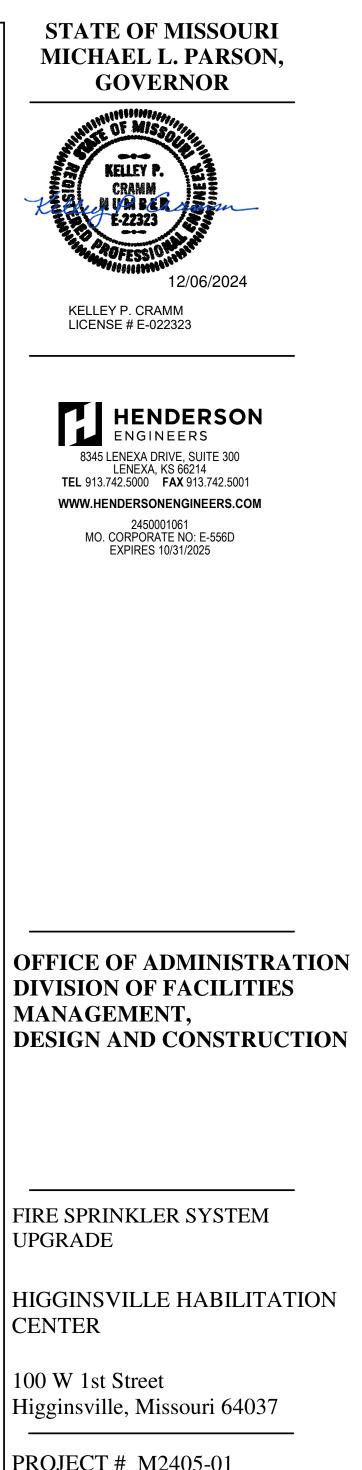
WORK CROSSING FIRE RATED WALLS OR OTHER FIRE D ASSEMBLIES SHALL BE MINIMUM 26 GAUGE SHEET

IDE FIRE DAMPERS, AS APPLICABLE, IN DUCTWORK AT NGS AND WALLS AT LOCATIONS SHOWN ON THE PLANS. DAMPERS SHALL CONFORM TO NFPA AS APPLICABLE. RDINATE SLEEVE LENGTH WITH REQUIREMENTS OF LLED LOCATION.

IDE WALL OR DUCT ACCESS PANELS OR DOORS FOR SS TO FIRE DAMPERS. ACCESS PANEL OR DOOR SHALL NIMUM SIZE OF 10" BY 10" AND SHALL BE INSTALLED N 12" OF DAMPER. PROVIDE A REMOVABLE DUCT ION WHERE DUCT SIZE IS TOO SMALL FOR A 10" BY 10" SS DOOR.

IDE WALL MOUNTED LOUVERS AND DAMPERS WITH BLE MOUNTING FRAME TO MATCH WALL CONSTRUCTION. NOINATE WITH ARCHITECTURAL DRAWINGS.

VERIFY THAT THE EXISTING EQUIPMENT INCLUDING SSORIES BEING REUSED FOR THIS PROJECT IS NOT GED AND IS IN GOOD WORKING ORDER. REPORT ANY CIENCIES TO THE OWNER OR ARCHITECT. SUBMIT TO THE ER AND ARCHITECT A WRITTEN REPORT DESCRIBING S PERFORMED TO VERIFY OPERATION AND RESULTS OF



PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357023 6517357029 6517357030

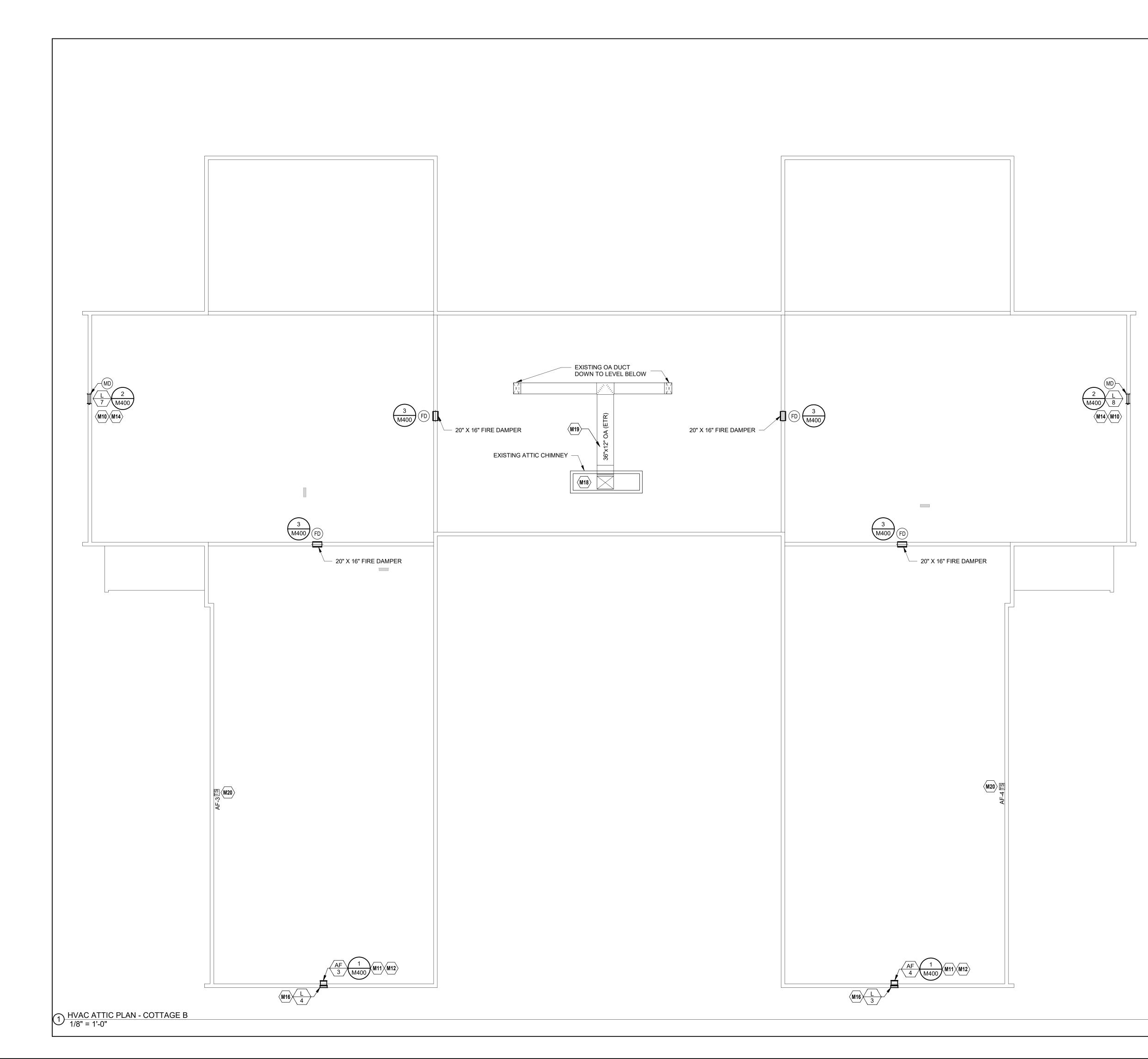
REVISION: DATE REVISION DATE REVISION DATE:

ISSUE DATE: 12/06/2024

CAD DWG FILE: DRAWN BY: KL CHECKED BY: JP DESIGNED BY: KL

SHEET TITLE: MECHANICAL GENERAL NOTES AND LEGEND

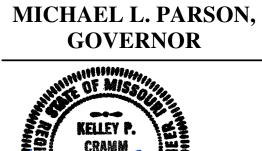
SHEET NUMBER: M000 5 OF 22 SHEETS 12/06/2024



MECHANICAL PLAN NOTES:

- M10 FIELD VERIFY NO EXISTING VENTS, FLUES, GAS PRESSURE REGULATORS OR EXHAUST DISCHARGE FROM BUILDING IS WITHIN 10'-0" OF OUTDOOR AIR INTAKE
- M11 EXHAUST FANS SHALL BE LOCATED MINIMUM 10'-0" FROM ANY BUILDING AIR INTAKE.
- M12 FAN SHALL CONTROL TO A LINE VOLTAGE THERMOSTAT SET AT 85 F. SET POINT SHALL BE ADJUSTABLE. FAN SHALL BE ON WHEN THE SET POINT IS EXCEEDED AND OFF WHEN THE SET POINT IS MET.
- M14 MOTORIZED DAMPER SHALL BE INTERLOCKED WITH ASSOCIATED ATTIC FAN. WHEN ATTIC FAN IS ON, DAMPER SHALL BE OPEN. WHEN FAN IS OFF, DAMPER SHALL CLOSE.
- M16 LOUVER TO MATCH ATTIC FAN SIZE. COORDINATE FINAL LOUVER SIZE WITH PURCHASED FAN SIZE PRIOR TO ORDERING LOUVER.
- M18 VERIFY NO EXISTING SYSTEMS UTILIZE EXISTING CHIMNEY PRIOR TO SEALING OFF WITH SPRAY FOAM INSULATION. REFER TO ARCHITECTURAL DETAIL FOR MORE INFORMATION.
- M19 INSULATE THE ENTIRE LENGTH OF THE EXISTING OUTSIDE AIR DUCTWORK WITHIN ATTIC SPACE. M20 PROVIDE NEW LINE VOLTAGE THERMOSTAT WITH REMOTE
- TEMPERATURE SENSOR OPTION TO CONTROL ATTIC FAN. INSTALL TEMPERATURE SENSOR IN THE ATTIC AT THE LOCATION SHOWN. INSTALL THERMOSTAT ON THE MAIN FLOOR WHERE ACCESSIBLE. COORDINATE FINAL LOCATION OF THERMOSTAT WITH OWNER PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR MORE INFORMATION. DIVISION 26 CONTRACTOR SHALL PROVIDE WIRING FOR 120V THERMOSTAT INTERLOCK WITH ATTIC FAN (RE: ELECTRICAL DRAWINGS). WIRING BETWEEN THERMOSTAT AND REMOTE TEMPERATURE SENSOR SHALL BE BY DIVISION 23.

N



STATE OF MISSOURI



KELLEY P. CRAMM LICENSE # E-022323

HENDERSON ENGINEERS 8345 LENEXA DRIVE, SUITE 300 LENEXA, KS 66214 TEL 913.742.5000 FAX 913.742.5001

WWW.HENDERSONENGINEERS.COM 2450001061 MO. CORPORATE NO: E-556D EXPIRES 10/31/2025

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, **DESIGN AND CONSTRUCTION**

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357029

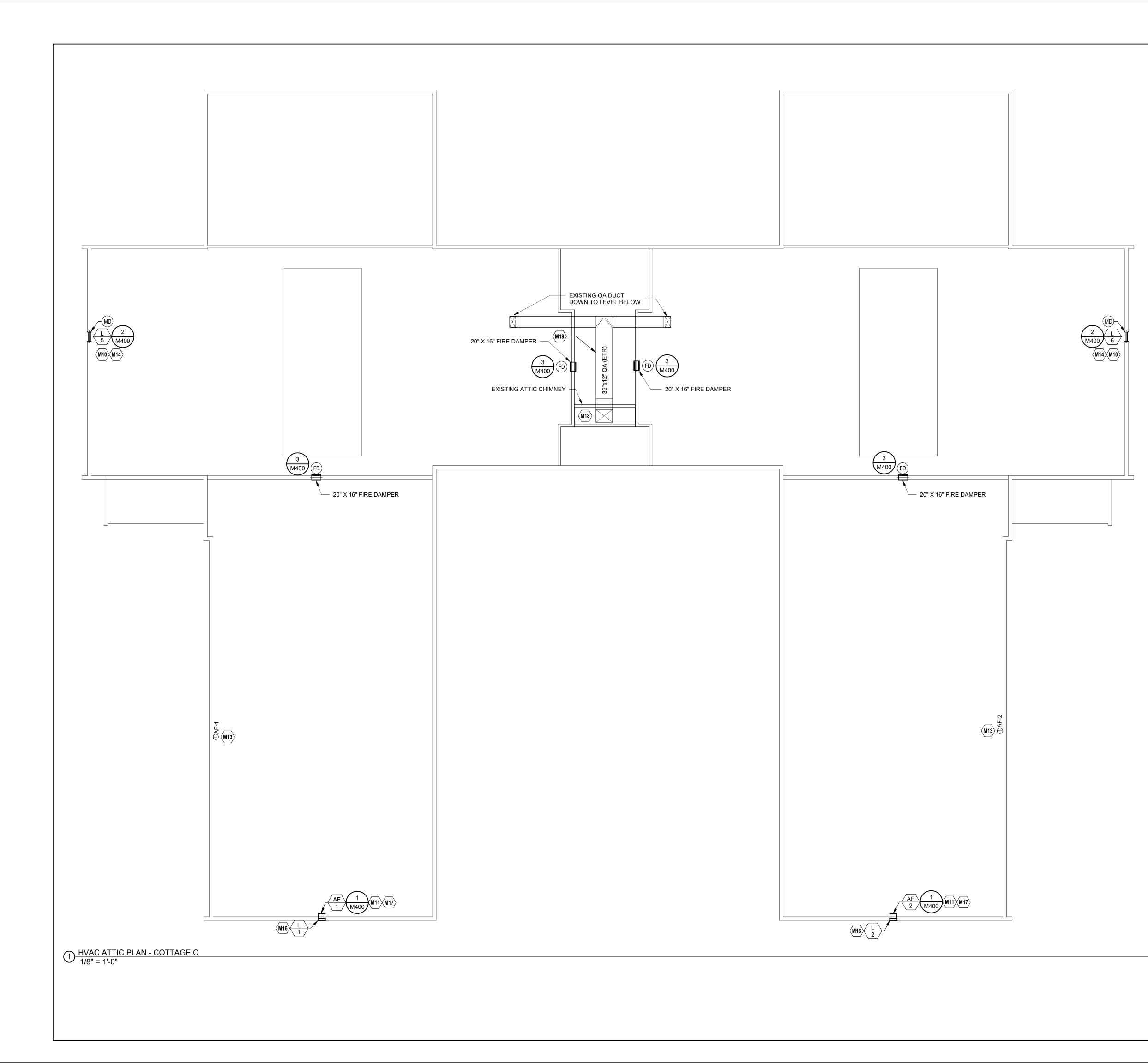
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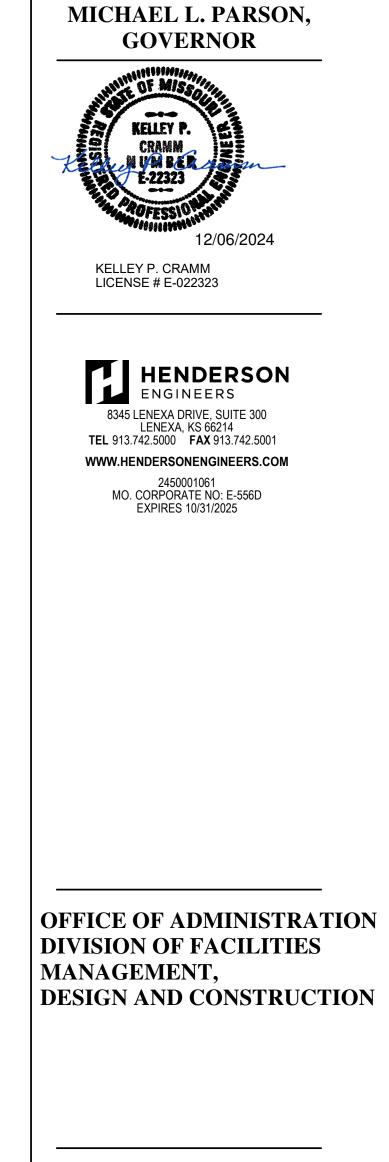
SHEET TITLE: HVAC ATTIC PLAN -COTTAGE B

SHEET NUMBER: M102A 6 OF 22 SHEETS 12/06/2024



MECHANICAL PLAN NOTES:

- M10 FIELD VERIFY NO EXISTING VENTS, FLUES, GAS PRESSURE REGULATORS OR EXHAUST DISCHARGE FROM BUILDING IS WITHIN 10'-0" OF OUTDOOR AIR INTAKE
- M11 EXHAUST FANS SHALL BE LOCATED MINIMUM 10'-0" FROM ANY BUILDING AIR INTAKE.
- M13 THERMOSTAT MOUNTED IN ATTIC AND TIED INTO EXISTING BAS. DIVISION 23 CONTRACTOR SHALL PROVIDE WIRING FOR 24V THERMOSTAT.
- M14 MOTORIZED DAMPER SHALL BE INTERLOCKED WITH ASSOCIATED ATTIC FAN. WHEN ATTIC FAN IS ON, DAMPER SHALL BE OPEN. WHEN FAN IS OFF, DAMPER SHALL CLOSE.
- M16 LOUVER TO MATCH ATTIC FAN SIZE. COORDINATE FINAL LOUVER SIZE WITH PURCHASED FAN SIZE PRIOR TO ORDERING LOUVER.
 M17 CONNECT NEW ATTIC FAN TO EXISTING BAS. EXTEND
- CONTROL WIRING FROM NEAREST BAS PANEL TO FAN AND THERMOSTAT. BAS SHALL MONITOR TEMPERATURE WITHIN ATTIC AND SHALL BE ABLE TO CONTROL FAN ON AND OFF. M18 VERIFY NO EXISTING SYSTEMS UTILIZE EXISTING CHIMNEY
- PRIOR TO SEALING OFF WITH SPRAY FOAM INSULATION. REFER TO ARCHITECTURAL DETAIL FOR MORE INFORMATION.
- M19 INSULATE THE ENTIRE LENGTH OF THE EXISTING OUTSIDE AIR DUCTWORK WITHIN ATTIC SPACE.



STATE OF MISSOURI

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

PROJECT #M2405-01SITE #7357FACILITY #6517357030

REVISION

DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024

CAD DWG FILE: DRAWN BY: KL CHECKED BY: JP DESIGNED BY: KL

SHEET TITLE: HVAC ATTIC PLAN -COTTAGE C

SHEET NUMBER: M103A 7 OF 22 SHEETS 12/06/2024



LOUVER SCHEDULE

							MIN FREE AREA	MAX VEL	MAX APD (IN			
MARK	AREA SERVED	SERVICE	MANUFACTURER	MODEL	SIZE (W" x H")	CFM	(SF)	(FPM)	W.C.)	N		
L 1	ATTIC	VENTILATION	GREENHECK	ESD-435	15" x 15"	550	0.87	630	0.09	A		
L 2	ATTIC	VENTILATION	GREENHECK	ESD-435	15" x 15"	550	0.87	630	0.09	A		
L 3	ATTIC	VENTILATION	GREENHECK	ESD-435	15" x 15"	550	0.87	630	0.09	A		
L 4	ATTIC	VENTILATION	GREENHECK	ESD-435	15" x 15"	550	0.87	630	0.09	A		
L 5	ATTIC	VENTILATION	GREENHECK	ESD-435	20" x 14"	550	1.09	500	0.08	А,		
L 6	ATTIC	VENTILATION	GREENHECK	ESD-435	20" x 14"	550	1.09	500	0.08	А,		
L 7	ATTIC	VENTILATION	GREENHECK	ESD-435	20" x 14"	550	1.09	500	0.08	А,		
L 8	ATTIC	VENTILATION	GREENHECK	ESD-435	20" x 14"	550	1.09	500	0.08	А,		

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- PROVIDE 1/2" MESH ALUMINUM BIRD SCREEN. Α.
- PROVIDE ANODIZED FINISH. COLOR AS SELECTED BY ARCHITECT. В. FRAME TYPE SHALL MATCH WALL CONSTRUCTION, COORDINATE WITH ARCHITECT. C.
- PROVIDE WITH INTEGRAL 120V MOTOR OPERATED LOW-LEAKAGE DAMPER. D.
- INTERLOCK MOTOR-OPERATED DAMPER WITH ASSOCIATED ATTIC FAN. Ε. PROVIDE WITH GRAVITY BACKDRAFT DAMPER. F.

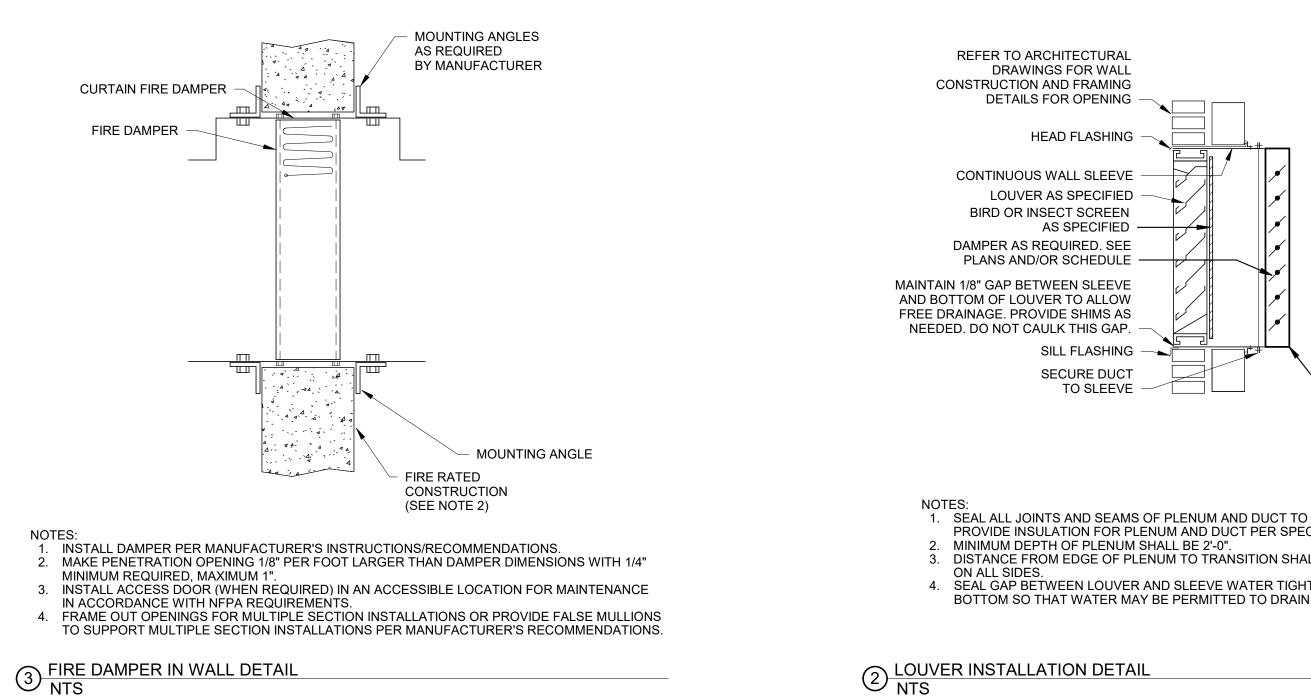
	FAN SCHEDULE														
												ELEC	TRICAL		
	SERVICE					ESP		NOM	FAN	DRIVE	VFD		STARTER		
MARK	DESCRIPTION	MANUFACTURER	MOUNTING	MODEL	CFM	(IN)	BHP	HP	RPM	(BELT/DIRECT)	(Y/N)	DISC TYPE	TYPE	WEIGHT (LBS)	NOTES
AF 1	ATTIC VENTILATION	GREENHECK	WALL	SE1-10-428-P	550	0.05	0.04	0.05	1650	DIRECT	No	NF	MAG	16	ALL
AF 2	ATTIC VENTILATION	GREENHECK	WALL	SE1-10-428-P	550	0.05	0.04	0.05	1650	DIRECT	No	NF	MAG	16	ALL
AF 3	ATTIC VENTILATION	GREENHECK	WALL	SE1-10-428-P	550	0.05	0.04	0.05	1650	DIRECT	No	NF	MAG	16	ALL
AF 4	ATTIC VENTILATION	GREENHECK	WALL	SE1-10-428-P	550	0.05	0.04	0.05	1650	DIRECT	No	NF	MAG	16	ALL

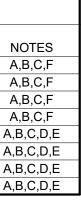
MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

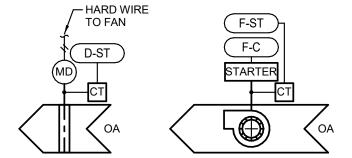
NOTES:

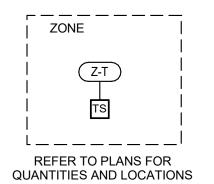
PROVIDE FACTORY MOUNTED DISCONNECT SWITCH. PROVIDE FACTORY MOUNTED STARTER.

NOMINAL MOTOR HP SHALL BE NO LARGER THAN THE FIRST AVAILABLE NOMINAL MOTOR SIZE GREATER THAN THE BHP PROVIDE WITH AUXILIARY CONTACTS FOR SHUTDOWN UPON NOTIFICATION FROM FIRE ALARM SYSTEM. D.









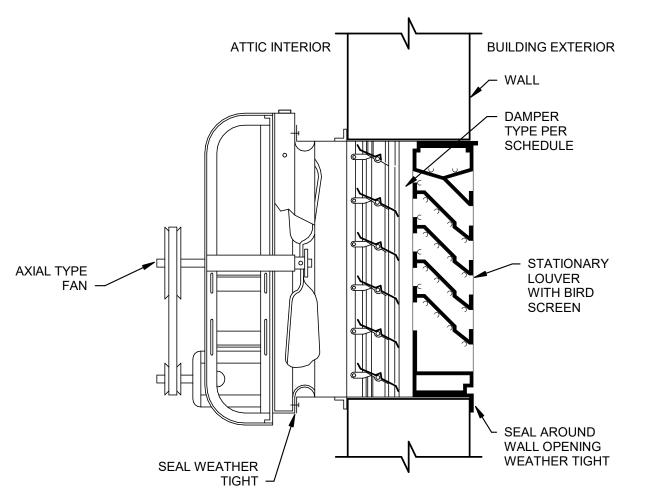
ATTIC FAN CONTROL (COTTAGE C) NTS

	POINTS LIST -
POINT ID	DESCRIPTION
ZONE LEVEL SE	NSORS
Z-T	ZONE TEMPERATURE
FAN	
F-C	FAN COMMAND (START/STOP)
F-ST	FAN STATUS
DAMPER (TWO-F	POSITION)
D-ST	DAMPER STATUS
PROVIDE UNIQU	WWN SHALL BE PROVIDED BY BAS CONTRACTOR UNLESS NOTED OTHERWISE. E POINT NAME FOR EACH CONTROL POINT CONSISTENT WITH THE MARK IDEN IFICATION FOR ADDITIONAL REQUIREMENTS.

NOTES: D. POINT SHALL BE ADJUSTABLE.

BAS CONTROLS CONTACT INFORMATION: CONTROL SERVICE COMPANY (AUTOMATED LOGIC) 816-600-5800

ALL BAS CONTROLS WORK SHALL BE COMPLETED BY CSC LEE'S SUMMIT. CONTACT THE NUMBER ABOVE FOR BID PRICING AND EXISTING SYSTEM INFORMATION.



1 SIDEWALL AXIAL FAN DETAIL NTS

- SEAL AROUND PERIMETER

1. SEAL ALL JOINTS AND SEAMS OF PLENUM AND DUCT TO PROVIDE WATER TIGHT CONSTRUCTION. PROVIDE INSULATION FOR PLENUM AND DUCT PER SPECIFICATIONS. 3. DISTANCE FROM EDGE OF PLENUM TO TRANSITION SHALL BE NOT MORE THAN DEPTH OF PLENUM SEAL GAP BETWEEN LOUVER AND SLEEVE WATER TIGHT ON TOP AND SIDES. DO NOT SEAL THE BOTTOM SO THAT WATER MAY BE PERMITTED TO DRAIN FREELY.

	STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR
	KELLEY P. CRAMM UM BER E-22323 12/06/2024 KELLEY P. CRAMM LICENSE # E-022323
	Figure 1Bigure 1Bi
D N	OFFICE OF ADMINISTRATION DIVISION OF FACILITIES IANAGEMENT, DESIGN AND CONSTRUCTION
U H	IRE SPRINKLER SYSTEM UPGRADE
1(ENTER 00 W 1st Street ligginsville, Missouri 64037
S]	ROJECT # M2405-01 ITE # 7357 ACILITY # 6517357023 6517357029 6517357030
	REVISION: DATE: REVISION: DATE: REVISION: DATE: DATE: ISSUE DATE: 12/06/2024
	CAD DWG FILE: DRAWN BY: KL CHECKED BY: JP DESIGNED BY: KL SHEET TITLE:
1	MECHANICAL SCHEDULES AND DETAILS
_	sheet number: $M400$
	8 OF 22 SHEETS 12/06/2024

SEQUENCE OF OPERATIONS ATTIC FAN (COTTAGE C ONLY)

GENERAL DESCRIPTION The units described by this sequence consist of an attic ventilation fan that controls to a thermostat located within the attic. The intake louver damper is hard wire interlocked to operate with the fan.

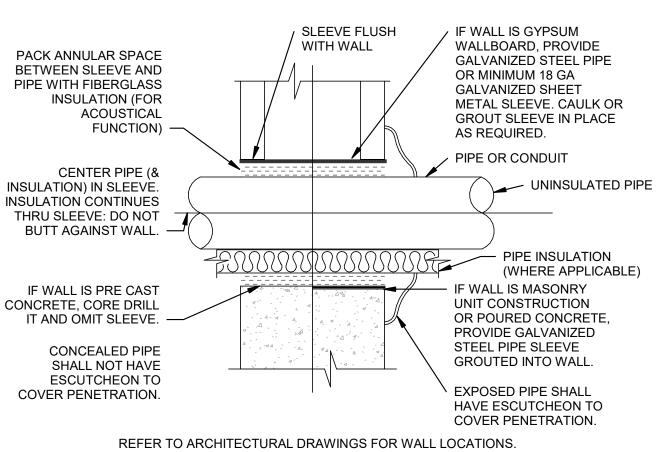
COMPONENT CONTROL LOOPS FAN CONTROL - CONSTANT VOLUME BAS THERMOSTATIC <u>CONTROL</u>

When in any mode: Cycle the fan to maintain Zone Temperature (Z-T) setpoint.

T - ATTIC FAN POINT NOTES ALARM TYPE SETPOINT RANGE AI 85 F D BO BI F-ST <> F-C BI

K IDENTIFIER ON THE EQUIPMENT SCHEDULE (E.G. RH01-D-C)

HIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBR		
STANDARD MOUNTING HEIGHTS UDIBLE APPLIANCE (CENTERLINE) 84"		LIGHTING LIGHT FIXTURE
LARM (TOP OF DEVICE)46"NNUNCIATOR PANEL (TOP OF DISPLAY)60"	<pre>XX###</pre> PLAN NOTE CALLOUT	a = LOWER CASE LETTER IS SWITCH IDENTIFIER
ONTROLS (TOP OF DÈVICE) 46" ATA WALL OUTLET SAME AS ADJACENT DEVICE, UNO XIT SIGN (WALL MOUNTED) 92"	(1) MECHANICAL OR FIRE PROTECTION PLAN NOTE CALLOUT	[OS] A = UPPER CASE LETTER INDICATES LIGHT FIXTURE TYPE
IRE ALARM ANNUNCIATOR PANEL (TOP OF DISPLAY)60"IRE ALARM BELL (EXTERIOR) (CENTERLINE)120"	1 PLUMBING PLAN NOTE CALLOUT	[OS] = INTEGRAL OCCUPANCY SENSOR
IRE ALARM CONTROL PANEL/UNIT (TOP OF DISPLAY)60"ITERCOM (TOP OF DEVICE)46"ULL STATION (TOP OF DEVICE)46"	1 ELECTRICAL OR FIRE ALARM PLAN NOTE CALLOUT	$ \begin{array}{ c } \hline \\ \hline $
ECEPTACLE (BOTTOM OF DEVICE) 16" ECEPTACLE (ABOVE COUNTER) +6" ABOVE BACKSPLASH/COUNTER, 40" MAX	(1) TECHNOLOGY PLAN NOTE CALLOUT	
ECEPTACLE (CLOCK) (CENTERLINE)84"ECEPTACLE (EQUIPMENT ROOMS) (TOP OF DEVICE)46"ECEPTACLE (EXTERIOR)24"	PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR	LIGHT FIXTURE CIRCUITED AS A NIGHT LIGHT (NL) EMERGENCY LIGHT FIXTURE WITH EMERGENCY LIGHTING
ECEPTACLE (GARAGES)24"EMOTE INDICATING LIGHT (EQUIPMENT ROOMS) (TOP OF DEVICE)46"EMOTE INDICATING LIGHT (FINISHED AREAS)CEILING	1 FURNISHED AND INSTALLED, UNO). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES	BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE
AFETY SWITCH (TOP OF DEVICE) 46" TARTER (TOP OF DEVICE) 46"	EQUIPMENT DESIGNATION (OWNER FURNISHED,	NIGHT LIGHT/EMERGENCY LIGHT FIXTURE WITH EMERGENCE BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE
WITCH (TOP OF DEVICE)46"ELEPHONE WALL OUTLET (TOP OF DEVICE)46"ELECOMMUNICATIONS BACKBOARD6"	CONTRACTOR INSTALLED, UNO)	LIGHT FIXTURE WITH DUAL BALLASTS CIRCUITED SEPARATE (SHADING IMPLIES EMERGENCY LIGHT FIXTURE)
ELEVISION OUTLET REFER TO DRAWINGS ISIBLE APPLIANCE (CENTERLINE) 84"	CU MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED, UNO)	レママ ^[#] LIGHTING TRACK (# INDICATES RELAY NUMBER)
STALL DEVICES/OUTLET BOXES AT THE MOUNTING HEIGHTS SHOWN ABOVE	CONNECTION POINT OF NEW WORK TO EXISTING	••••• MIRROR LIGHTS
NO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED BOVE, OR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS, ARE AFF OR FG TO BOTTOM OF DEVICE, UNO. ALL DEVICES SHALL BE INSTALLED IN		
OMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.	1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER	 EXTERIOR PEDESTRIAN POST TOP LIGHT FIXTURE EXTERIOR LIT BOLLARD LIGHT
	SECTION CUT DESIGNATION	
AMPERE FUSE SIZEMCBMAIN CIRCUIT BREAKERCABOVE FINISHED CEILINGMCCMOTOR CONTROL CENTERFABOVE FINISHED FLOORMFRMANUFACTURER	DEDICATED EQUIPMENT ACCESS TILE	FACE HATCHED EMERGENCY LIGHTING UNIT EQUIPMENT WITH BATTERY
FGABOVE FINISHED GRADEMINMINIMUMHJAUTHORITY HAVINGMLOMAIN LUGS ONLY		PACK - CEILING/WALL MOUNTED
JURISDICTIONMLVMAGNETIC LOW-VOLTAGEIUAIR HANDLING UNITMOCPMAXIMUM OVERCURRENTCAMPERE INTERRUPTINGPROTECTION		AFEA (AREA FOR EVACUATION ASSISTANCE) SIGN - CEILING/WALL MOUNTED, ARROWS AS INDICATED
CAPACITY MTD MOUNTED AMPERE SWITCH SIZE N/A NOT APPLICABLE	CIRCUITING & WIRING	REFER TO LIGHT FIXTURE SCHEDULE FOR MORE INFORMATION POWER EQUIPMENT
AMPERE TRIP SETTING NIC NOT IN CONTRACT S AUTOMATIC TRANSFER NIS NOT IN SCOPE SWITCH NF NON-FUSED	7 5 3 HOMERUN TO PANELBOARD. INFORMATION AT ARROWS OR [R#] P1 ARE CIRCUIT NUMBERS AND PANELBOARD FOR D4 25 7 [R#] P1 TERMINATION. REFER TO PANELBOARD SCHEDULES FOR	ELECTRICAL PANELBOARD (SURFACE OR FLUSH MOUNT)
AUDIO VISUAL NL NIGHT LIGHT (24HR ON) S BUILDING AUTOMATION NRTL NATIONALLY RECOGNIZED	BRANCH CIRCUIT CONDUCTOR SIZES.	ELECTRICAL CABINET (SURFACE OR FLUSH MOUNT), TYPE A
SYSTEM TESTING LABORATORY ESS BATTERY ENERGY STORAGE (CSA, ETL, NSF, UL) SYSTEM NTS NOT TO SCALE	INDICATES RELAY NUMBER CIRCUIT CONTINUATION OR PARTIAL CIRCUIT	PLYWOOD TERMINAL BOARD FOR TELEPHONE SYSTEM, UNC
KRBREAKEROSOCCUPANCY SENSORCONDUITPPOLE	CONDUIT CONCEALED	SIZE AS NOTED ELECTRICAL EQUIPMENT ON HOUSEKEEPING PAD
ATV CABLE TELEVISION SYSTEM PH/Ø PHASE CTV CLOSED CIRCUIT TELEVISION PNL PANEL	CONDUIT CONCEALED (EMERGENCY)	
DCANDELAPNLBDPANELBOARDKTCIRCUITPROVIDE FURNISH AND INSTALLDDEAPPLICABLE CODEPTPOTENTIAL TRANSFORMER		
ADOPTED BY JURISDICTION PV PHOTOVOLTAIC CURRENT TRANSFORMER QTY QUANTITY	— – – EXPOSED CONDUIT ——EM—— EXPOSED CONDUIT (EMERGENCY)	
IFRCENTERR/RELRELOCATEIFLCONTROL/CONTROLLEDRCPTRECEPTACLE/DCUMULATIVE VOLTAGE DROPRLARUNNING LOAD AMPS		200/3/150/3R = AMPERES/POLE/FUSE/NEMA ENCLOSURE RATING 200/3/150/3R CB = CIRCUIT BREAKER (200/3/CB)
DEMO DEMOLITION RTU ROOFTOP UNIT PDT DOUBLE-POLE, SCCR SHORT-CIRCUIT CURRENT	LOW VOLTAGE CABLE (NOT ROUTED IN CONDUIT)	FM = FACTORY FURNISHED AND MOUNTED NF = NON-FUSED
DOUBLE-THROW RATING PST DOUBLE-POLE, SD SMOKE DUCT DETECTOR SINGLE-THROW SF SQUARE FEET	CONDUIT TURNING DOWN CONDUIT TURNING UP	OL = SIZE INDICATED ON ONE-LINE DIAGRAM NO VALUE FOR NEMA ENCLOSURE = NEMA 1
ETR/EX EXISTING TO REMAINSPDTSINGLE-POLE,CELECTRICAL CONTRACTORDOUBLE-THROW	CONNECTION POINT OR EQUIPMENT TERMINATION	COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER, 30/3/15/1/3R = AMPERES/POLE/FUSE/NEMA STARTER
F EXHAUST FAN SPST SINGLE-POLE, M EMERGENCY SINGLE-THROW MS ENERGY MANAGEMENT SSBJ SUPPLY-SIDE BONDING	EQUIPMENT TERMINATION	30/3/15/1/3R SIZE/NEMA ENCLOSURE RATING CB= CIRCUIT BREAKER (30/3/CB/1)
SYSTEM JUMPER V ELECTRONIC LOW-VOLTAGE ST SHUNT TRIP		FM = FACTORY FURNISHED AND MOUNTED NF= NON-FUSED NO VALUE FOR NEMA ENCLOSURE = NEMA 1
RMSENERGY-REDUCINGSWBDSWITCHBOARDMAINTENANCE SWITCHSWGRSWITCHGEAR/ELECTRIC VEHICLETBBTELECOMMUNICATIONS		MAGNETIC MOTOR STARTER, NEMA SIZE AS NOTED. 3-POLE
NCELECTRIC WATER COOLERBONDING BACKBONEAPFIRE ALARM ANNUNCIATORTBDTO BE DETERMINED		VFD VARIABLE FREQUENCY DRIVE
PANEL TGB TELECOMMUNICATIONS ACP FIRE ALARM CONTROL PANEL GROUND BUS BAR CA FAULT CURRENT AMPS TL TWISTLOCK		
AVAILABLETMGBTELECOMMUNICATIONSCUFAN COIL UNITMAIN GROUND BUS BARFINISHED FLOORTX/XFMR TRANSFORMER		EMERGENCY POWER OFF BUTTON
A FULL LOAD AMPS TYP TYPICAL R FLOOR U/F UNDERFLOOR		STOP-START PUSH BUTTON CONTROL STATION
C GENERAL CONTRACTOR U/G UNDERGROUND EC GROUNDING ELECTRODE U/S UNDERSLAB CONDUCTOR UH UNIT HEATER		HAND-OFF-AUTO PUSH BUTTON CONTROL STATION MUSHROOM-TYPE PUSH BUTTON
ES GROUNDING ELECTRODE UNO UNLESS NOTED OTHERWISE SYSTEM UPS UNINTERRUPTIBLE POWER		OVERHEAD PADDLE FAN
FRGROUND FAULT RELAYSUPPLYGROUNDVDVOLTAGE DROPISOLATED GROUNDVFDVARIABLE FREQUENCY	BRANCH CIRCUIT CONDUCTOR TABLE	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
CSHORT CIRCUIT CURRENTDRIVE/J-BOX JUNCTION BOXVSVACANCY SENSOR	WHERE TICK MARKS ARE NOT SHOWN, THE FOLLOWING SHALL GOVERN:	$= \frac{1}{5}$ Switch Letter Designations As follows. FM = FACTORY FURNISHED AND MOUNTED
LINEAR FEET W WIRE A LOCKED ROTOR AMPS W/ WITH G/LTS LIGHTING/LIGHTS WP WEATHER PROOF	NEUTRAL # OF POLES HOT (PHASE)* (GROUNDED)**GROUNDING***	
AU MAKE-UP AIR UNIT WR WEATHER RESISTANT AX MAXIMUM WT WATERTIGHT	1P (1) (1) UNO (1)	
CA MINIMUM CIRCUIT AMPACITY XP EXPLOSION PROOF	2P (2) (1) UNO (1) 3P (3) (1) UNO (1)	
	* PROVIDE ADDITIONAL CONDUCTORS THROUGH ENTIRE CIRCUIT	
HROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN OMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS	(SWITCHED, UNSWITCHED/EM, ETC.) AS INDICATED THROUGHOUT CONSTRUCTION DOCUMENTS AND AS REQUIRED	
XISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK ND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE.	FOR A COMPLETE AND WORKING SYSTEM. ** REFER TO SPECIFICATIONS FOR LIMITATIONS ON SHARING	
HE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE IEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT NTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING.	NEUTRAL (GROUNDED) CONDUCTORS. DO NOT CIRCUIT AS A MULTI-WIRE BRANCH CIRCUIT, UNO.	
VHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION	*** PROVIDE ADDITIONAL ISOLATED GROUNDING CONDUCTORS WHERE INDICATED.	
OCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING INETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE,	REFER TO SPECIFICATIONS, PLANS, NOTES, WIRING AND	
TC.	CONTROL DIAGRAMS FOR ADDITIONAL CIRCUITING REQUIREMENTS.	
	HATCHING LEGEND	
	ENLARGED PLAN	
	~ 	
NEW		



REFER TO SPECIFICATIONS FOR ALTERNATIVE INSTALLATIONS. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR.

1 CONDUIT PENETRATION THRU NON-FIREWALL NTS

ELECTRICAL SHEET LIST							
Sheet Number	Sheet Name						
E000	ELECTRICAL LEGEND, NOTES, AND DETAILS						
E101B	ELECTRICAL PLAN - OVERALL - COTTAGE B						
E101C	ELECTRICAL PLAN - OVERALL - COTTAGE C						

(WHERE APPLICABLE)

NOTE: PROJECT IS DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES, THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS, AND LOCAL REQUIREMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NFPA 70 (NATIONAL ELECTRICAL CODE): 2020 INTERNATIONAL BUILDING CODE: 2018 W/ AMENDMENTS INTERNATIONAL ENERGY CODE: 2009 W/ AMENDMENTS

GENERAL ELECTRICAL DEMOLITION NOTES:

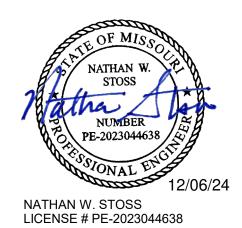
1.

- THE EXISTING CONDITIONS INDICATED IN THESE DRAWINGS ARE TAKEN FROM THE BEST INFORMATION AVAILABLE FROM VISUAL SITE INSPECTIONS AND EXISTING DRAWINGS. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND THE INTENT OF THE WORK PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL REPAIR ALL DAMAGE TO EXISTING 2. BUILDING, FIXTURES, AND FINISHES CAUSED BY CONTRACTOR DURING THE PERFORMANCE OF THE WORK. REPAIRS SHALL BE PERFORMED BY A QUALIFIED TRADESMAN AND SHALL BE COMPLETED IN A MANNER ACCEPTABLE TO THE OWNER.
- 3. REMOVAL OR RELOCATION OF ANY CONDUITS OR CABLES, WIRES, ETC. NOT INSTALLED IN CONDUIT, REQUIRED TO ALLOW INSTALLATION OF NEW WORK, SHALL BE CONSIDERED WORK REQUIRED BY THIS CONTRACTOR WHETHER OR NOT SUCH WORK IS SHOWN ON THE DRAWINGS.
- REMOVAL OF CONDUITS SHALL INCLUDE REMOVAL OF 4. HANGERS, SUPPORTS, AND ASSOCIATED MISCELLANEOUS MATERIALS.
- SHOULD ACTUAL CONDITIONS DEVIATE SUBSTANTIALLY FROM 5. THOSE INDICATED ON THE DRAWING, CONTRACTOR SHALL NOTIFY ENGINEER AND REQUEST INSTRUCTIONS.

GENERAL ELECTRICAL NOTES:

- READ THE SPECIFICATIONS AND REVIEW DRAWINGS OF ALL DIVISIONS OF WORK. COORDINATE THIS WORK WITH ALL OTHER DIVISIONS OF WORK AND ALL SUBCONTRACTORS. PROVIDE ALL SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.
- 2. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS, AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY NOTED IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- THE DRAWINGS REPRESENT THE BEST INFORMATION 3. AVAILABLE TO THE ENGINEER. ALL DIMENSIONS AND SIZES SHALL BE FIELD VERIFIED. DO NOT SCALE FROM THE DRAWINGS. SMALL DEVIATIONS SHALL BE RECONCILED DURING THE PERFORMANCE OF THE WORK.
- DRAWINGS AND SPECIFICATIONS GOVERN, WHERE THEY 4. EXCEED CODE REQUIREMENTS.
- COORDINATE ALL WORK WITH OTHER TRADES AND 5. CONTRACTORS, INCLUDING BUT NOT LIMITED TO, REQUIREMENTS ASSOCIATED WITH NON-BASIS OF DESIGN EQUIPMENT.
- 6. CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBER ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.
- PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" 7 DOCUMENTS TO THE ARCHITECT REFLECTING ANY VARIANCES OF INSTALLED PIPING, EQUIPMENT DEVICES, ETC LOCATIONS CONTRARY TO THE CONSTRUCTION DOCUMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- INSTALLATION SHALL COMPLY WITH LEGALLY CONSTITUTED 8. CODES AND THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
- 9. ALL JUNCTION BOXES SHALL BE RIGIDLY ATTACHED TO STRUCTURE OR MILLWORK.
- 10. PROVIDE CONDUIT FOR ALL CONTROLS WIRING LOCATED IN SPACES WITH EXPOSED CEILINGS. REFER TO MECHANICAL DOCUMENTS AND SCHEDULES FOR ALL DEVICE LOCATIONS. COORDINATE WORK WITH MECHANICAL CONTRACTOR.
- 11. PROVIDE ALL MISCELLANEOUS STEEL REQUIRED FOR THE PROPER INSTALLATION OF ELECTRICAL EQUIPMENT AND SYSTEMS.
- 12. REFER TO SPECIFICATIONS AND DETAILS FOR APPROVED CABLE AND RACEWAY INSTALLATION. NON-COMPLIANT INSTALLATIONS OF CABLE AND RACEWAY WILL NOT BE ACCEPTED AND WILL BE REQUIRED TO BE BROUGHT TO COMPLIANCE AT NO COST TO THE OWNER, PRIOR TO COMPLETION OF WORK.
- 13. ALL NEW AND EXISTING ELECTRICAL EQUIPMENT ALTERED UNDER THIS PROJECT SHALL BE VACUUM CLEANED OF ANY DEBRIS. ALL OPENINGS REMAINING SHALL BE SEALED WITH THE PROPER DEVICE (IE. KNOCKOUT BLANKS, BREAKER BLANKS, ETC) LISTED AND APPROVED FOR USE.
- 14. NO WORK SHALL BE PERFORMED PRIOR TO REVIEW AND APPROVAL OF ALL REQUIRED SHOP DRAWINGS, PRODUCT MATERIALS, AND EQUIPMENT SUBMITTALS. ANY WORK INSTALLED PRIOR TO MEETING THESE REQUIREMENTS SHALL BE DONE SO AT THE SOLE RISK OF THIS CONTRACTOR.
- 15. PROVIDE UPDATED TYPED PANEL DIRECTORIES TO REFLECT WORK PERFORMED UNDER THIS CONTRACT.
- 17. ALL CIRCUITRY SHALL BE #12 AWG IN 1/2" CONDUIT, MINIMUM, UNLESS OTHERWISE NOTED.
- 18. PROVIDE A SEPARATE CODE SIZED GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS AND RACEWAYS CONTAINING LINE VOLTAGE CIRCUITS. FOR ALL 20A CIRCUITS, EQUIPMENT GROUNDING CONDUCTOR SHALL MATCH PHASE CONDUCTOR SIZE. FOR CIRCUITS UPSIZED DUE TO VOLTAGE DROP, INCREASE EQUIPMENT GROUNDING CONDUCTOR SIZE PER NEC 2017 250.122.B.
- 19. GROUND AND NEUTRAL CONDUCTORS SHALL NOT BE SHARED UNLESS SPECIFICALLY NOTED ON PLANS.
- **20.** VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH SHOP DRAWING SUBMITTALS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN SUBMITTALS AND ELECTRICAL DRAWINGS.





HENDERSON ENGINEERS 8345 LENEXA DRIVE, SUITE 300

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MO. CORPORATE NO: E-556D EXPIRES 10/31/2025

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, **DESIGN AND CONSTRUCTION**

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

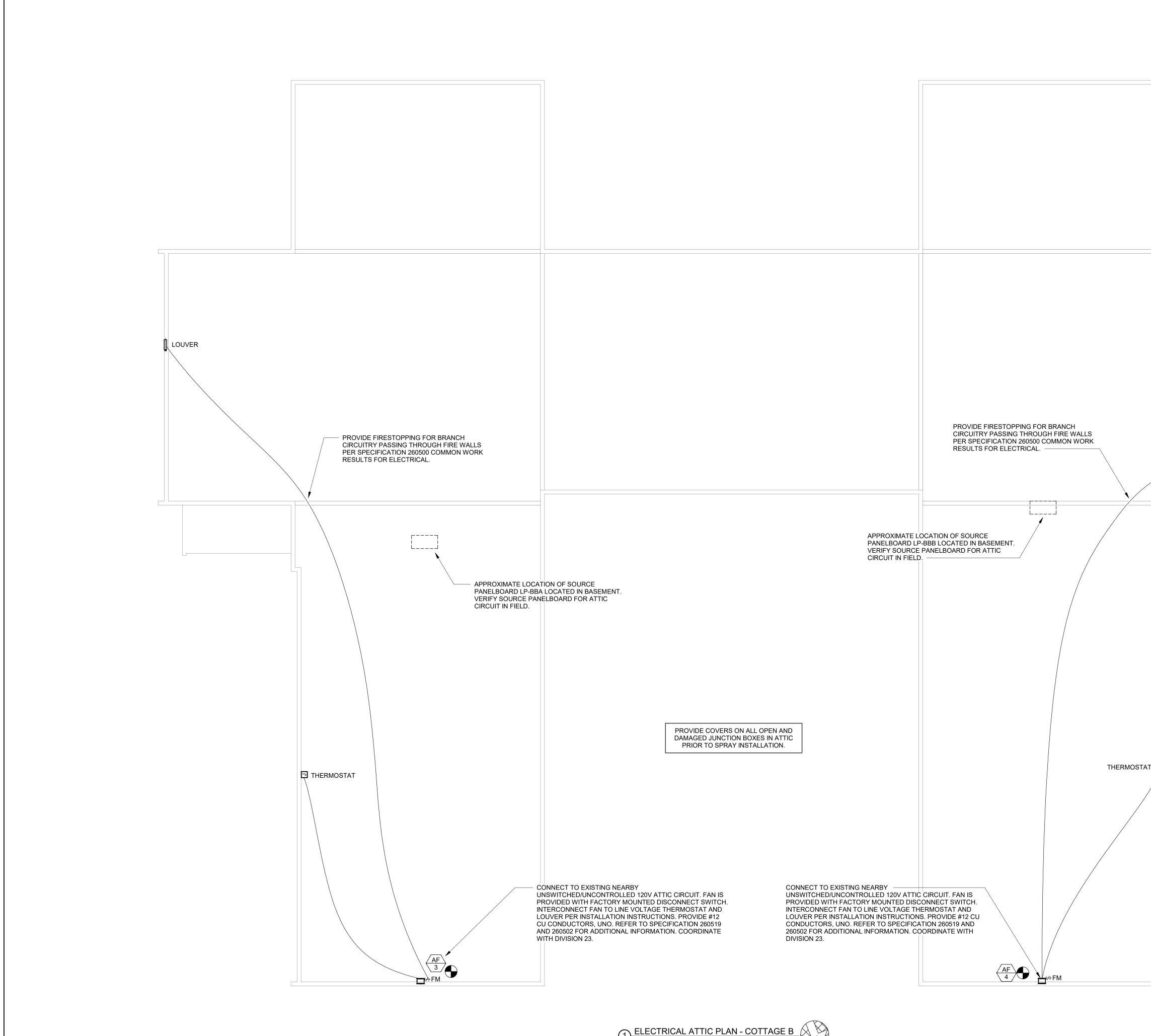
PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357023 6517357029 6517357030

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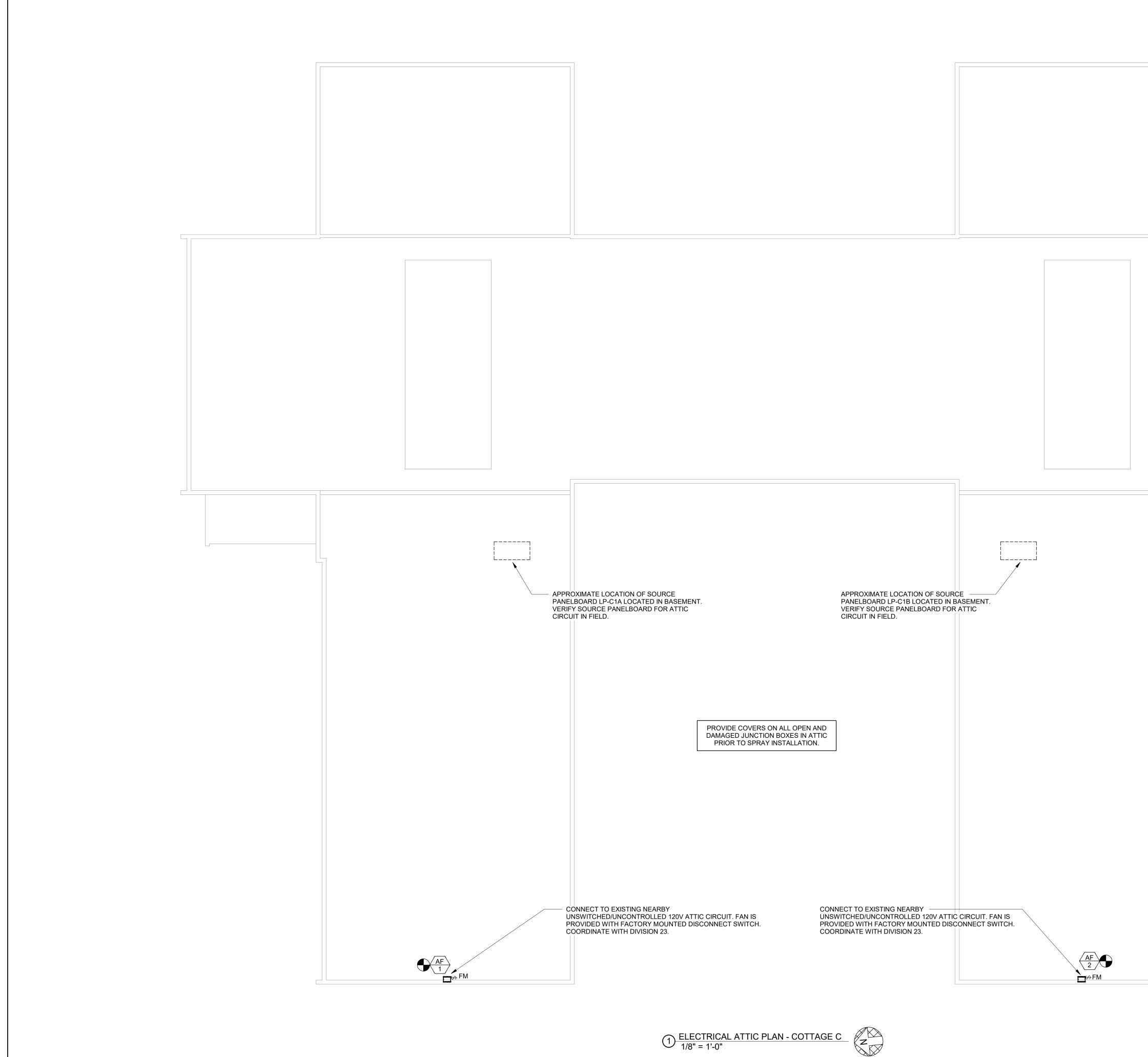
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SHEET TITLE: ELECTRICAL LEGEND, NOTES, AND DETAILS

SHEET NUMBER: 9 OF 22 SHEETS 12/06/2024



	STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR
	NUMBER PE-2023044638 LICENSE # PE-2023044638
	HENDERSON ENGINEERS 8345 LENEXA DRIVE, SUITE 300 LENEXA, KS 66214 TEL 913.742.5000 FAX 913.742.5001 WWW.HENDERSONENGINEERS.COM 2450001061 MO. CORPORATE NO: E-556D EXPIRES 10/31/2025
LOUVER	
	OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT,
	DESIGN AND CONSTRUCTION
	UPGRADE HIGGINSVILLE HABILITATION CENTER
	100 W 1st Street Higginsville, Missouri 64037 PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357029
	REVISION: DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024
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	12/06/2024



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	OFFICE OF ADMINISTRATI DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTI FIRE SPRINKLER SYSTEM UPGRADE HIGGINSVILLE HABILITATIO CENTER	ION
	100 W 1st Street Higginsville, Missouri 64037 PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357030 REVISION: DATE: REVISION: DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024 CAD DWG FILE: DRAWN BY: KRS CHECKED BY: OUER ALL OVER ALL	
	OVERALL - COTTAC C SHEET NUMBER: E101C 11 OF 22 SHEETS 12/06/2024	JΕ

FIRE PROTECTION SCOPE OF WORK NOTES:

- 1. INSTALL NEW ANTIFREEZE RISERS AND ASSOCIATED SUPPLY PIPING TO SERVE AREAS INDICATED ON DRAWINGS.
- INSTALL NECCESARY FIRE ALARM MONITORING DEVICES FOR NEW ANTIFREEZE RISERS. CONNECT NEW MONITORING DEVICES TO EXISITING FIRE ALARM.
- 3. UNTILIZE FLEX DROP SPRINKLERS TO EXISTING WET PIPE SYSTEM TO PROVIDE AREAS INDICATED WITH LIGHT HAZARD COVERAGE.
- 4. REPLACE REMOTE FIRE DEPARTMENT CONNECTIONS WHERE INDICATED ON DRAWINGS.
- 5. ALL NEW FIRE DEPARTMENT CONNECTIONS AND ASSOCIATED CHECK VALVES SHALL BE HYDROSTATICALLY TESTED AT 150 POUNDS PER SQUARE INCH (PSI) FOR A MINIMUM OF TWO HOURS. TEST SHALL MEET REQUIREMENTS SET FORTH BY NFPA 25 AND NFPA 13.
- DISCREPANCIES.
- CONSTRUCTION.
- ALLOWANCE.

- DRAWINGS.
- PART OF THIS PROJECT.
- PORTIONS WILL NOT BE ACCEPTABLE.
- LEFT IN SERVICE AS APPLICABLE.
- EACH WORKDAY.

FIRE PROTECTION GENERAL DEMOLITION NOTES:

1. COORDINATE ALL DEMOLITION WITH WHAT IS SHOWN ON ARCHITECTURAL PLANS. NOTIFY ARCHITECT OF ANY

2. COORDINATE NEW WORK AND DEMOLITION WITH OTHER DISCIPLINES AND EXISTING CONDITIONS PRIOR TO

3. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER OR OWNER, AS DEFINED IN BID DOCUMENTS, OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID. ADDITIONAL COMPENSATION WILL NOT BE PAID FOR LACK OF SUCH DETERMINATION, FAMILIARIZATION, AND/OR

4. EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND SITE VISITS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. COORDINATE NEW WORK AND DEMOLITION WITH OTHER DISCIPLINES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

5. OWNER RETAINS RIGHTS OF SALVAGE FOR EQUIPMENT AND FIXTURES TO BE REMOVED. COORDINATE WITH THE OWNER THE EQUIPMENT AND FIXTURES TO BE SALVAGED AND THE LOCATION FOR STORAGE. AVOID DAMAGE TO EQUIPMENT DURING DEMOLITION WORK AND DURING TRANSPORT TO OWNER'S DESIGNATED STORAGE LOCATION. PROPERLY DISPOSE OF MATERIALS THAT ARE REMOVED AND ARE NOT REQUESTED TO BE SALVAGED BY THE OWNER.

6. EQUIPMENT TO BE REMOVED SHALL BE KEPT FOR REINSTALLATION DURING THE CONSTRUCTION PHASE WHEN POSSIBLE AND/OR INDICATED ON THE DRAWINGS. AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN FOR NEW INSTALLATION. REPAIR ANY DAMAGE CAUSED DURING WORK AT NO EXTRA COST TO THE OWNER.

7. SEAL PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WHERE COMPONENTS ARE REMOVED AND WHERE THE EXISTING PENETRATION IS NOT USED FOR THE NEW INSTALLATION. REPAIR DAMAGED SURFACES TO MATCH ADJACENT AREAS OR AS INDICATED ON THE ARCHITECTURAL

8. PERFORM ALL WORK ACCORDING TO THE PHASING SCHEDULE FOR THIS PROJECT. PROVIDE ALL TEMPORARY DESIGN AND/OR CONFIGURATIONS THAT MEET APPLICABLE CODE REQUIREMENTS AS NECESSARY TO CONFORM TO THE REQUIRED CONSTRUCTION PHASING OF THE PROJECT.

9. ONLY THE PORTIONS OF THE BUILDING AFFECTED BY THE SCOPE OF THE PROJECT HAVE BEEN SHOWN. INFORMATION SHOWN AS EXISTING TO REMAIN IS NOT BEING MODIFIED AS A

10. ALL WORK SHALL BE PERFORMED SO AS TO NOT INTERRUPT SERVICE. THE CONTRACTOR SHALL PROPERLY NOTIFY THE BUILDING OWNER, LANDLORD, THE LEASER AND ADJACENT TENANTS AS APPLICABLE A MINIMUM OF 48 HOURS IN ADVANCE BEFORE PROCEEDING WITH THIS WORK.

11. REMOVE ALL UNUSED AND DEMOLISHED EQUIPMENT AND ASSOCIATED MATERIALS FROM SITE. ABANDONING UNUSED

12. SYSTEM(S) NOT ASSOCIATED WITH THE DEMOLITION SHALL BE

13. INSPECT EXISTING EQUIPMENT TO REMAIN TO VERIFY THAT EQUIPMENT IS OPERATING PROPERLY. NOTIFY OWNER OF DAMAGED AND/OR MALFUNCTIONING COMPONENTS.

14. ALL SYSTEMS TO BE LEFT IN SERVICE PRIOR TO THE END OF

FIRE PROTECTION GENERAL NOTES:

- 1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- 2. SYSTEM DESIGN, INSTALLATION AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE NFPA STANDARDS. SYSTEM SHALL ALSO MEET ALL APPLICABLE BUILDING CODES, FIRE CODES AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND INSURANCE CARRIER. VERIFY REQUIREMENTS PRIOR TO BID SUBMITTAL.
- 3. INFORMATION ON CONTRACT DOCUMENTS IS GENERAL INFORMATION AND FOR BID PURPOSES ONLY. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE FINAL SYSTEM DESIGN AND LAYOUT OF ALL COMPONENTS, COORDINATION WITH ALL OTHER TRADES, AND SYSTEM CALCULATIONS REQUIRED FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION, ENGINEER, AND OWNER'S INSURER.
- 4. THE CONTRACTOR SHALL FOLLOW THE ENGINEER OF RECORD'S SYSTEM DESIGN AND LAYOUT OF ALL COMPONENTS EXCEPT WHERE MODIFICATION TO THE DESIGN IS NECESSARY. MODIFICATIONS SHALL BE REFLECTED IN THE CONTRACTOR'S SHOP DRAWINGS AND CALCULATIONS.
- 5. DEVIATIONS FROM ENGINEER'S DESIGN WILL NOT BE CONSIDERED UNLESS A FORMALLY SUBMITTED RFI IS RECEIVED AND APPROVED.
- 6. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND LABOR REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM AS INDICATED IN THE DRAWINGS AND SPECIFICATIONS.
- 7. WHERE EXISTING SYSTEMS ARE PRESENT, CONTRACTOR SHALL MODIFY, RELOCATE AND/OR PROVIDE ADDITIONAL EQUIPMENT AS REQUIRED FOR SCOPE OF WORK AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH WALLS, CEILINGS, LIGHTS, DIFFUSERS, STRUCTURE, OBSTRUCTIONS, ETC. IN AREAS AFFECTED BY SCOPE OF WORK. NEW EQUIPMENT SHALL BE COMPATIBLE WITH EXISTING SYSTEMS. CONTRACTOR SHALL REMOVE ALL ABANDONED EQUIPMENT, COORDINATE SYSTEM MODIFICATIONS TO MINIMIZE SYSTEM IMPAIRMENT, AND PROVIDE FIRE WATCH AND/OR INTERIM FIRE PROTECTION MEASURES WHERE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, INSURANCE CARRIER OR OWNER.
- 8. PROVIDE ADDITIONAL MATERIALS AND LABOR REQUIRED DUE TO LACK OF COORDINATION OR TO MEET AUTHORITY HAVING JURISDICTION AND INSURANCE CARRIER REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
- 9. FORWARD COMPLETED CERTIFICATE OF COMPLETION AND CONTRACTOR MATERIAL TEST CERTIFICATES TO THE OWNER.
- 10. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

WATER SUPPLY INFORMATION:

OBTAINED FROM: JAYHAWK FIRE SPRINKLER

TEST DATE AND TIME: 08/12/2024

TEST HYDRANT DESIGNATION: YELLOW TEST HYDRANT LOCATION: SW CORNER OF COTTAGE B STATIC PRESSURE: 50 PSI RESIDUAL PRESSURE: 3 PSI

FLOW HYDRANT DESIGNATION: YELLOW FLOW HYDRANT LOCATION: ADMIN BUILDING PITOT PRESSURE: 3 PSI

WATER FLOW: 291 GPM

*THIS DOCUMENT NOTES THE EXISTING CONDITIONS ONLY. FURTHER WATER SUPPLY ANALYSIS AND INFASTRUCTURE IMPROVEMENTS TO BE ADDRESSED UNDER DIFFERENT PROJECT.

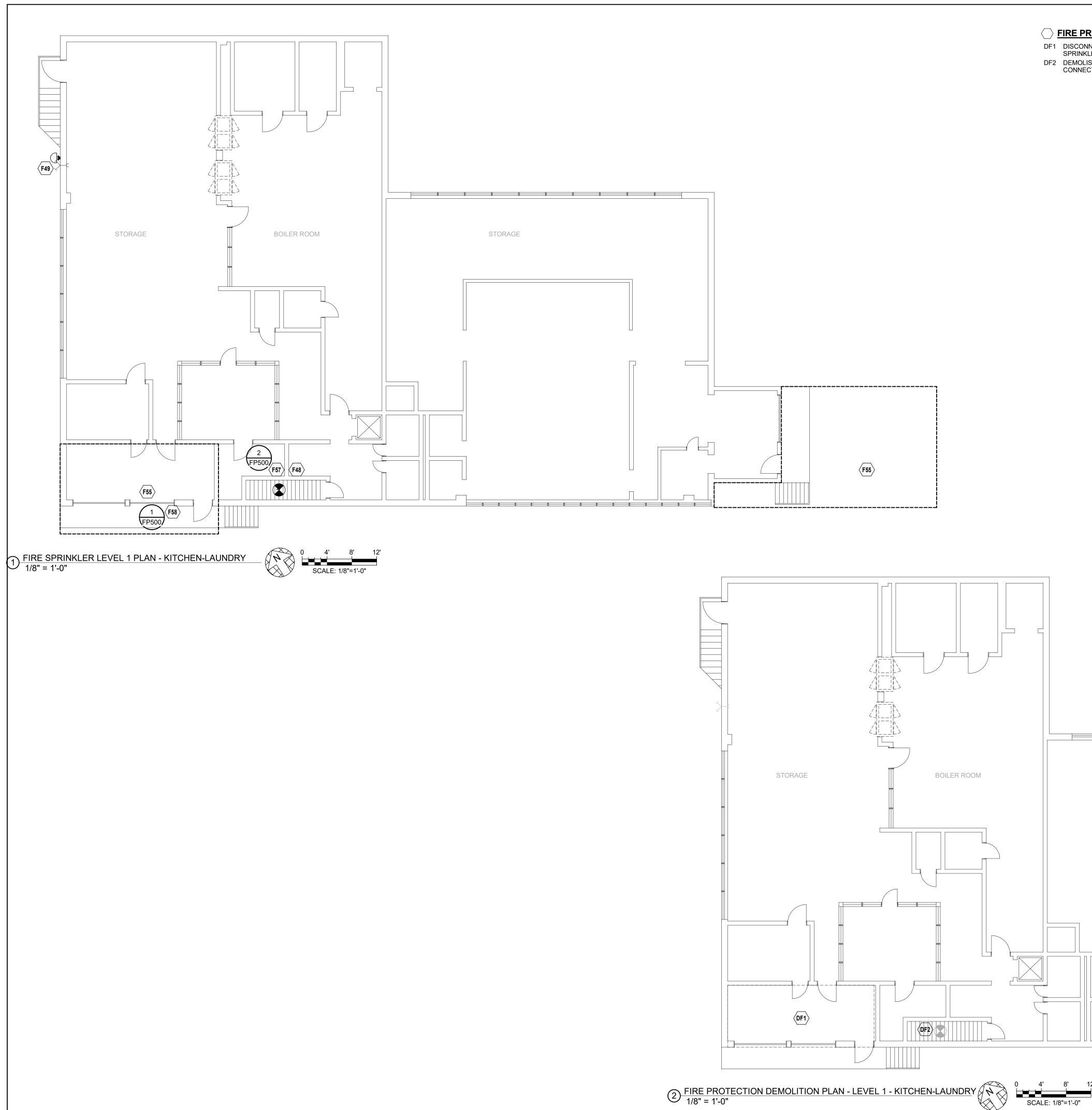
EXISTING SYSTEM FIRE CONTRACTOR INFORMATION:

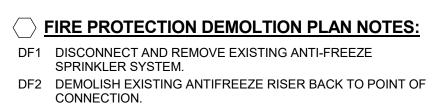
JOHNSON CONTROLS

ROBERT JOHN GARCIA ROBERT.JOHN.GARCIA@JCI.COM (913)-544-8875

		STATE OF MISSOURI MICHAEL L. PARSON,
FIRE PROTECTION SYMBOLS		GOVERNOR
THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABE ABBREVIATIONS	BREVIATIONS ARE USED. V2.07 FIRE ALARM	S OF MISSON
AFFABOVE FINISHED FLOORNICNOT IN CONTRACTAFGABOVE FINISHED GRADEOCON CENTERCDCANDELAPIVPOST INDICATOR VALVEDIDUCTILE IRONPROVIDE FURNISH AND INSTALL	FACP FIRE ALARM CONTROL PANEL/UNIT	CULP
ESFR EARLY SUPPRESSION PRV PRESSURE REDUCING FAST RESPONSE VALVE	FAAP FIRE ALARM ANNUNCIATOR PANEL	PE-2012097646 40 F
ETREXISTING TO REMAINRDRETURN DUCTFHCFIRE HOSE CABINETREVREVISIONFPFIRE PROTECTIONSDSUPPLY DUCT	FAAP RECESSED FIRE ALARM ANNUNCIATOR PANEL	CSSIONAL ENGE
GCCONTRACTORSFSQUARE FEETGPMGALLONS PER MINUTETYPTYPICAL		12/06/2024 CHRISTOPHER J. CULP LICENSE # PE-2013037646
JB/J-BOXJUNCTION BOXUNOUNLESS NOTES OTHERWISMAXMAXIMUMVVOLT(S)MINMINIMUMWWATTS	RT REMOTE TEST STATION WITH INDICATING LIGHT	
N/A NOT APPLICABLE WP WEATHERPROOF	RL REMOTE INDICATING LIGHT	
ANNOTATION	PS PRESSURE SWITCH LOW/HIGH	HENDERSON
T FIRE PROTECTION PLAN NOTE CALLOUT	FS WATERFLOW ALARM SWITCH [VT] CONTROL VALVE TAMPER SWITCH	ENGINEERS 8345 LENEXA DRIVE, SUITE 300
CONNECTION POINT OF NEW WORK TO EXISTING	DH MAGNETIC DOOR HOLD OPEN DEVICE	LENEXA, KS 66214 TEL 913.742.5000 FAX 913.742.5001
1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL	CM CONTROL MODULE	WWW.HENDERSONENGINEERS.COM 2450001061
F1 NUMBER LOWER NUMBER INDICATES SHEET NUMBER		MO. CORPORATE NO: E-556D EXPIRES 10/31/2025
1 SECTION CUT DESIGNATION		
DEDICATED EQUIPMENT ACCESS TILE	 ● PULL STATION ● FIREFIGHTER'S PHONE JACK 	
	HEAT DETECTOR (E INDICATES ELEVATOR RECALL)	
	SMOKE DETECTOR (E INDICATES ELEVATOR RECALL)	
	SINGLE STATION SMOKE DETECTOR	
UPRIGHT SPRINKLER PENDENT SPRINKLER		
CONCEALED SPRINKLER	DUCT MOUNTED SMOKE DETECTOR (SD=SUPPLY/RD=RETURN)	
	CARBON MONOXIDE DETECTOR R AREA OF REFUGE 2-WAY COMMUNICATION SYSTEM	
	WALL MOUNTED AUDIBLE NOTIFICATION APPLIANCE #W INDICATES WATTAGE (VOICE EVACUATION SYSTEMS ONLY)	
SIDEWALL SPRINKLER		
	WALL MOUNTED VISIBLE NOTIFICATION APPLIANCE ## INDICATES CANDELA	
FP FIRE PROTECTION (FP) SHUTOFF VALVE	#W WALL MOUNTED AUDIBLE/VISIBLE NOTIFICATION APPLIANCE ## INDICATES CANDELA ## #W INDICATES WATTAGE (VOICE EVACUATION SYSTEMS ONLY)	OFFICE OF ADMINISTRATION DIVISION OF FACILITIES
		MANAGEMENT,
BACKFLOW PREVENTER		DESIGN AND CONSTRUCTION
CAP	😕 🗯 🗰 INDICATES CANDELA	
ELBOW UP	CEILING MOUNTED AUDIBLE/VISIBLE NOTIFICATION APPLIANCE	
─────────────────────────────────────	## #W INDICATES WATTAGE (VOICE EVACUATION SYSTEMS ONLY)	
	ABORT SWITCH	
	=) BELL	FIRE SPRINKLER SYSTEM
	HATCHING LEGEND	UPGRADE
INSPECTOR'S TEST CONNECTION / AUXILIARY DRAIN		HIGGINSVILLE HABILITATION
SPRINKLER RISER TOP BEAM CLAMP	ENLARGED PLAN	CENTER
	NOT IN SCOPE (NIS)	100 W 1st Street
	LINETYPE LEGEND	Higginsville, Missouri 64037
TANDARD MOUNTING HEIGHTS	THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK	PROJECT # M2405-01
AUDIBLE APPLIANCE (TOP OF APPLIANCE) 90"	AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE	SITE # 7357
AUDIBLE APPLIANCE (TOP OF APPLIANCE)90"FIRE ALARM ANNUNCIATOR PANEL (TOP OF DISPLAY)60"FIRE ALARM BELL (EXTERIOR) (CENTERLINE)120"	VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR	FACILITY # 6517357023, 6517357029, 6517357030, 6517357032,
FIRE ALARM CONTROL PANEL/UNIT (TOP OF DISPLAY)60"PULL STATION (TOP OF DEVICE)46"	RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD	6517357030
VISIBLE APPLIANCE (CENTERLINE) 84"	ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE,	REVISION: DATE:
INSTALL DEVICES AT THE MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ABOVE, OR	ETC.	REVISION: DATE:
ELSEWHERE IN THE CONSTRUCTION DOCUMENTS, ARE AFF OR AFG TO TOP OF DEVICE, UNO. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH	EXISTING NEW	REVISION: DATE:
CURRENT ADA AND LOCAL REQUIREMENTS.	DEMOLISH — — — — FUTURE	ISSUE DATE: 12/06/2024
		CAD DWG FILE: DRAWN BY: NTS
		CHECKED BY: AJ DESIGNED BY: NTS
		SHEET TITLE:
		FIRE PROTECTION
		GENERAL NOTES AND
		LEGEND
		SHEET NUMBER:
		FP000

12 OF 22 SHEETS

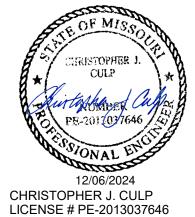




○ FIRE PROTECTION PLAN NOTES:

- F48 CONNECT FIRE SPRINKLER MONITORING DEVICES, TAMPER SWITCH, FLOW INDICATOR AND MONITOR MODULE TO FIRE ALARM SYSTEM. COORDINATE QUANTITY AND LOCATION OF DEVICES WITH FIRE PROTECTION SYSTEMS.
- F49 EXTERIOR WATERFLOW ALARM SHOWN OFFSET FOR CLARITY. CENTER ABOVE FIRE DEPARTMENT CONNECTION. CONNECT TO FIRE ALARM SYSTEM.
- F55 PROVIDE NEW ANTIFREEZE SYSTEM. F57 PROVIDE NEW ANTIFREEZE ASSEMBLY.
- F58 PROVIDE SPRINKLER PROTECTION BELOW OVERHEAD DOOR AS REQUIRED PER NFPA 13. PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE, NOT DOOR TRACKS.





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WWW.HENDERSONENGINEERS.COM

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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, **DESIGN AND CONSTRUCTION**

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357023

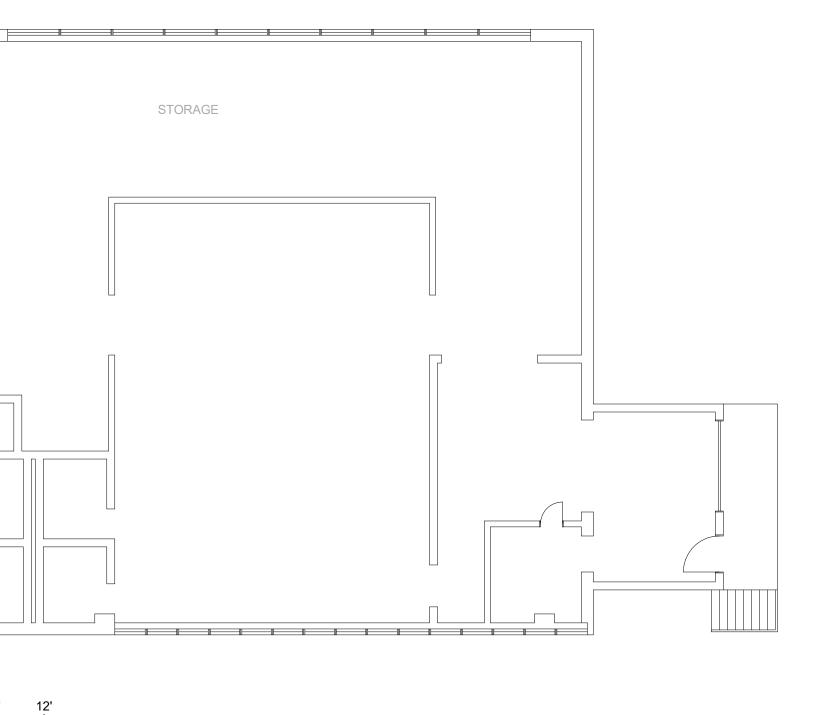
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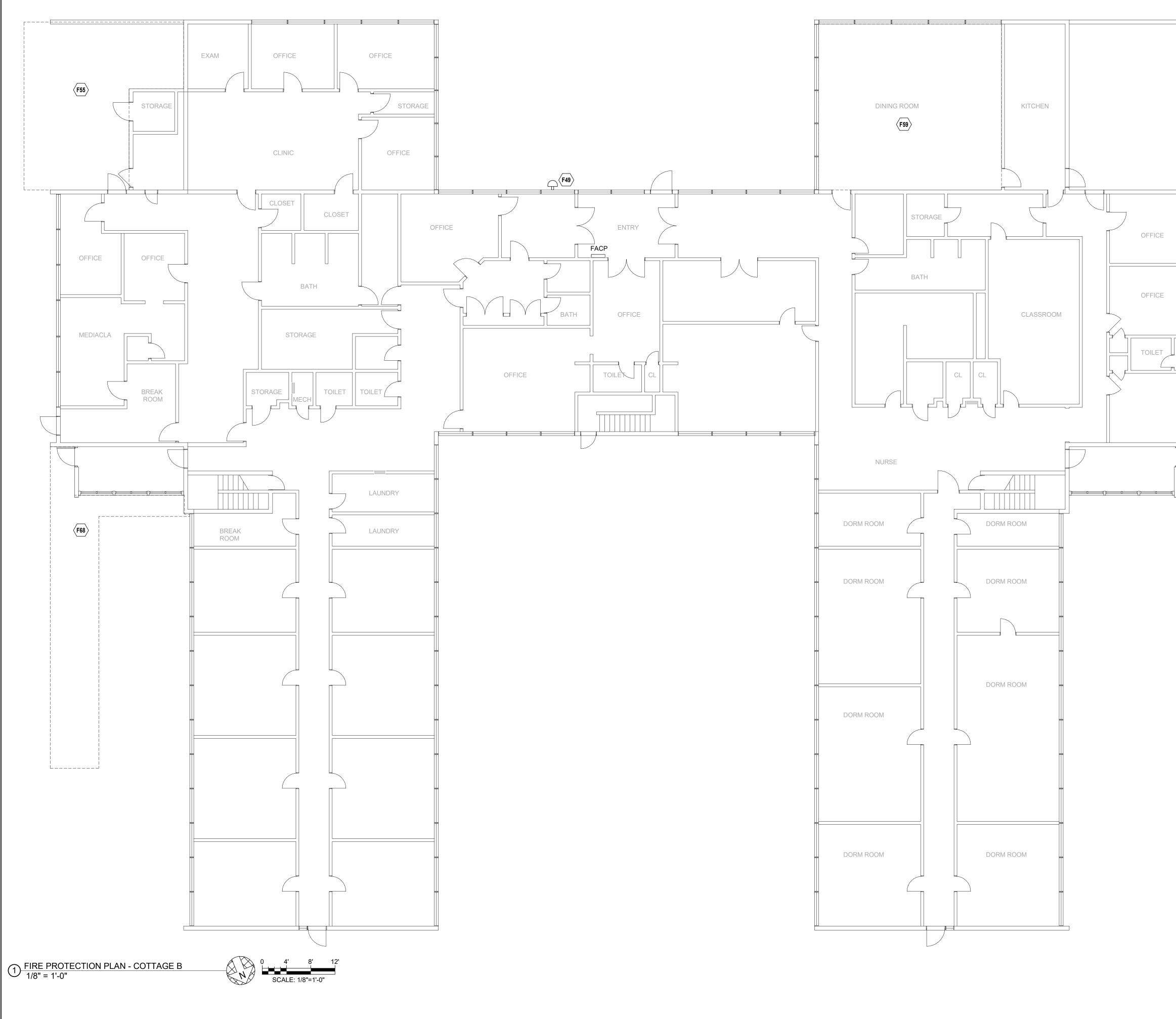
KEVISION.
DATE:
REVISION:
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DATE:
ISSUE DATE: 12/06/2024

CAD DWG FILE: DRAWN BY: NTS CHECKED BY: AJ DESIGNED BY: NTS

SHEET TITLE: FIRE PROTECTION PLAN -KITCHEN-LAUNDRY

SHEET NUMBER: **FP101A** 13 OF 22 SHEETS 12/06/2024





- FIRE PROTECTION PLAN NOTES:
- F49 EXTERIOR WATERFLOW ALARM SHOWN OFFSET FOR CLARITY. CENTER ABOVE FIRE DEPARTMENT CONNECTION. CONNECT TO FIRE ALARM SYSTEM.
- F55 PROVIDE NEW ANTIFREEZE SYSTEM.
- F59 INSTALL SPRINKLERS IN CONFERENCE ROOM TO MEET SPACING REQUIREMENTS AS OUTLINED IN NFPA 13 FOR LIGHT HAZARD OCCUPANCY.
- F68 SPRINKLER PROTECTION NOT REQUIRED FOR NONCOMBUSTIBLE CANOPY PER NFPA 13.

STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR



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OFFICE OFFICE TOILET

OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, **DESIGN AND CONSTRUCTION**

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357029

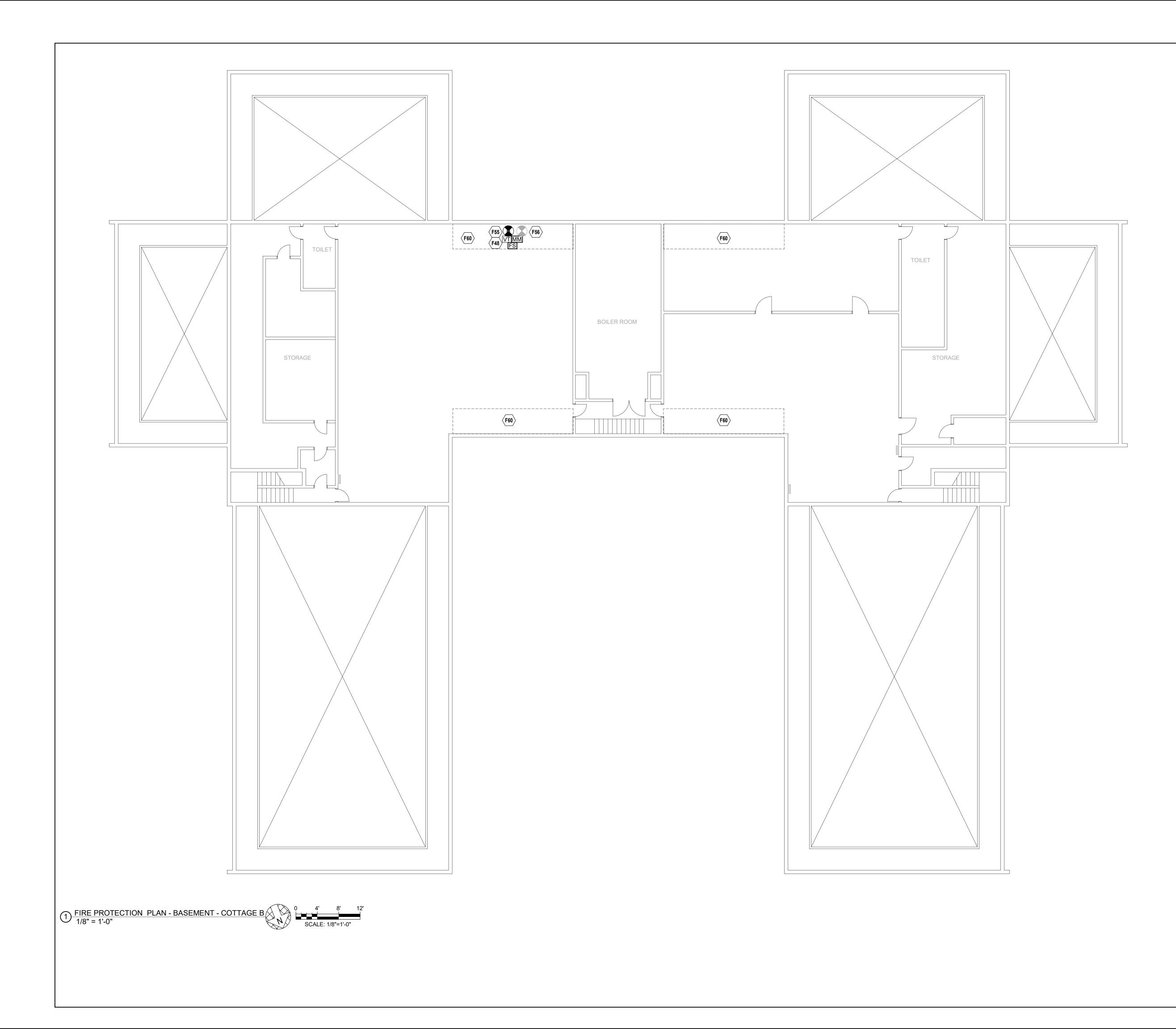
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ISSUE DATE: 12/06/2024

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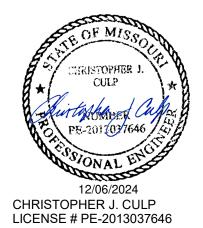
SHEET TITLE: FIRE PROTECTION PLAN -COTTAGE B

SHEET NUMBER: FP102A 14 OF 22 SHEETS 12/06/2024



- FIRE PROTECTION PLAN NOTES:
- F48 CONNECT FIRE SPRINKLER MONITORING DEVICES, TAMPER SWITCH, FLOW INDICATOR AND MONITOR MODULE TO FIRE ALARM SYSTEM. COORDINATE QUANTITY AND LOCATION OF DEVICES WITH FIRE PROTECTION SYSTEMS.
- F55 PROVIDE NEW ANTIFREEZE SYSTEM.F56 EXISTING WET PIPE FIRE RISER TO REMAIN.
- F60 INSTALL SPRINKLERS IN CEILING POCKETS TO PROVIDE COVERAGE IN ACCORDANCE WITH NFPA 13.

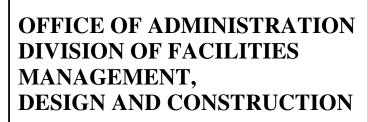




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TEL 913.742.5000 FAX 913.742.5001 WWW.HENDERSONENGINEERS.COM 2450001061

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FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

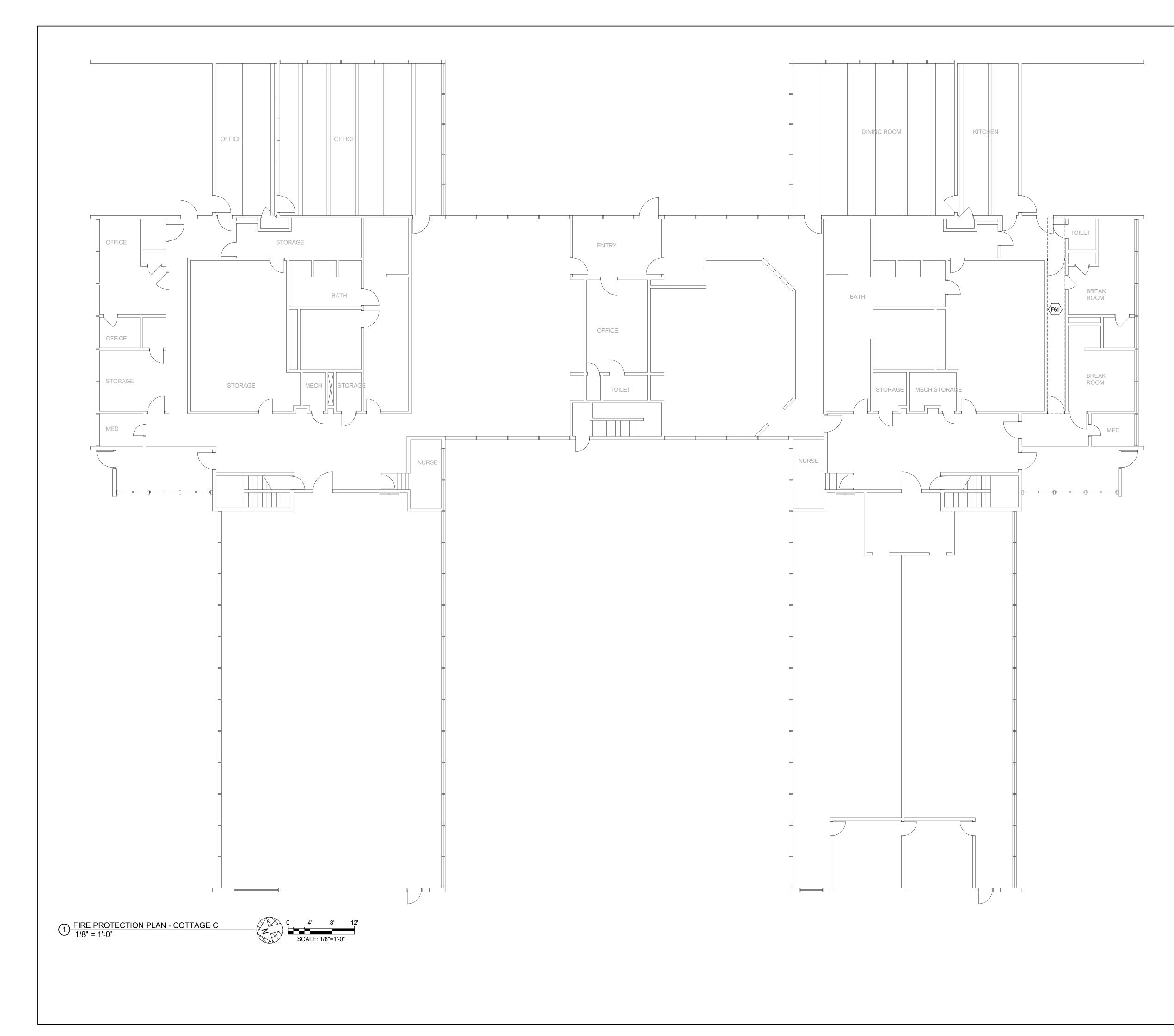
PROJECT # M2405-01SITE # 7357FACILITY # 6517357029

REVISION: DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024

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SHEET TITLE: FIRE PROTECTION PLAN - BASEMENT -COTTAGE B

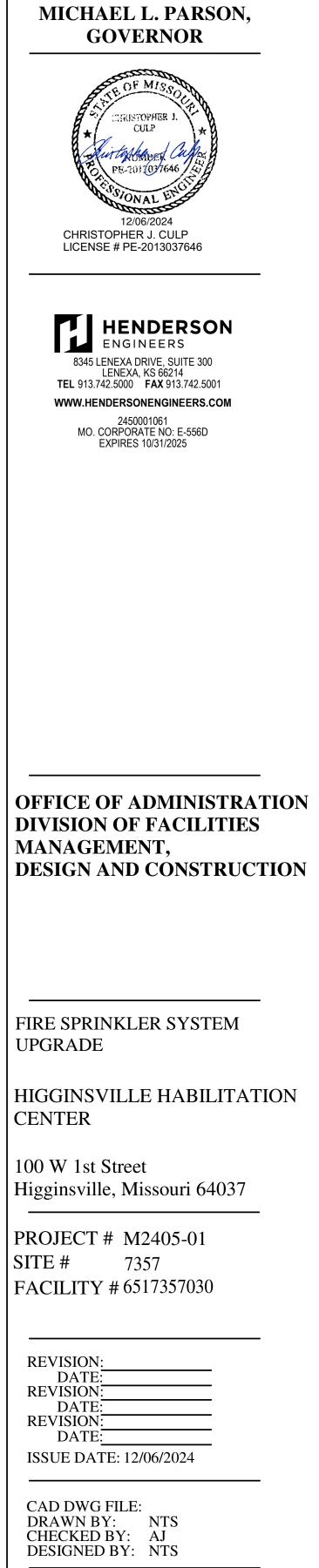
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FIRE PROTECTION PLAN NOTES:

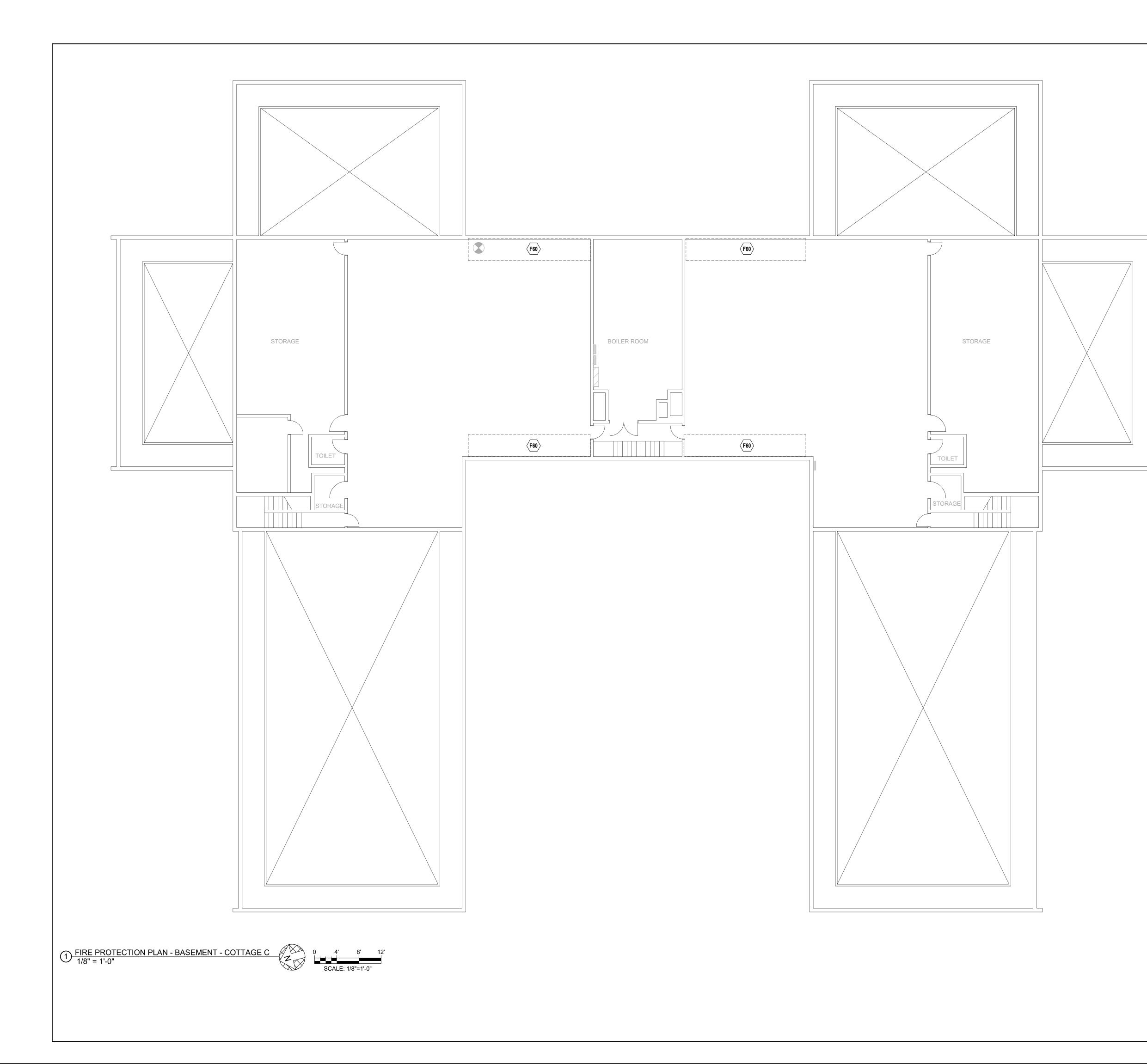
F61 INSTALL RECESSED PENDANT SPRINKLERS IN CORRIDOR SPACED IN ACCORDANCE WITH NFPA 13 FOR LIGHT HAZARD OCCUPANCY.



STATE OF MISSOURI

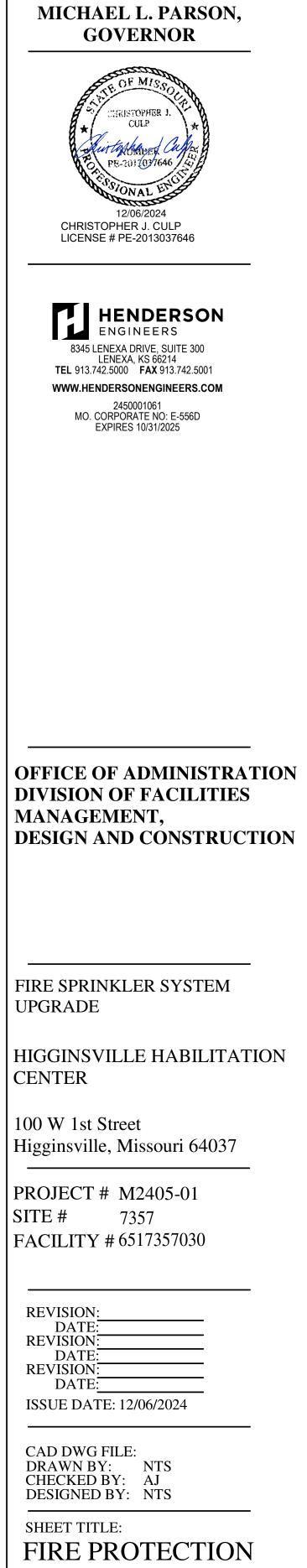
SHEET TITLE: FIRE PROTECTION PLAN - COTTAGE C

SHEET NUMBER: **FP103A** 16 OF 22 SHEETS 12/06/2024



FIRE PROTECTION PLAN NOTES:

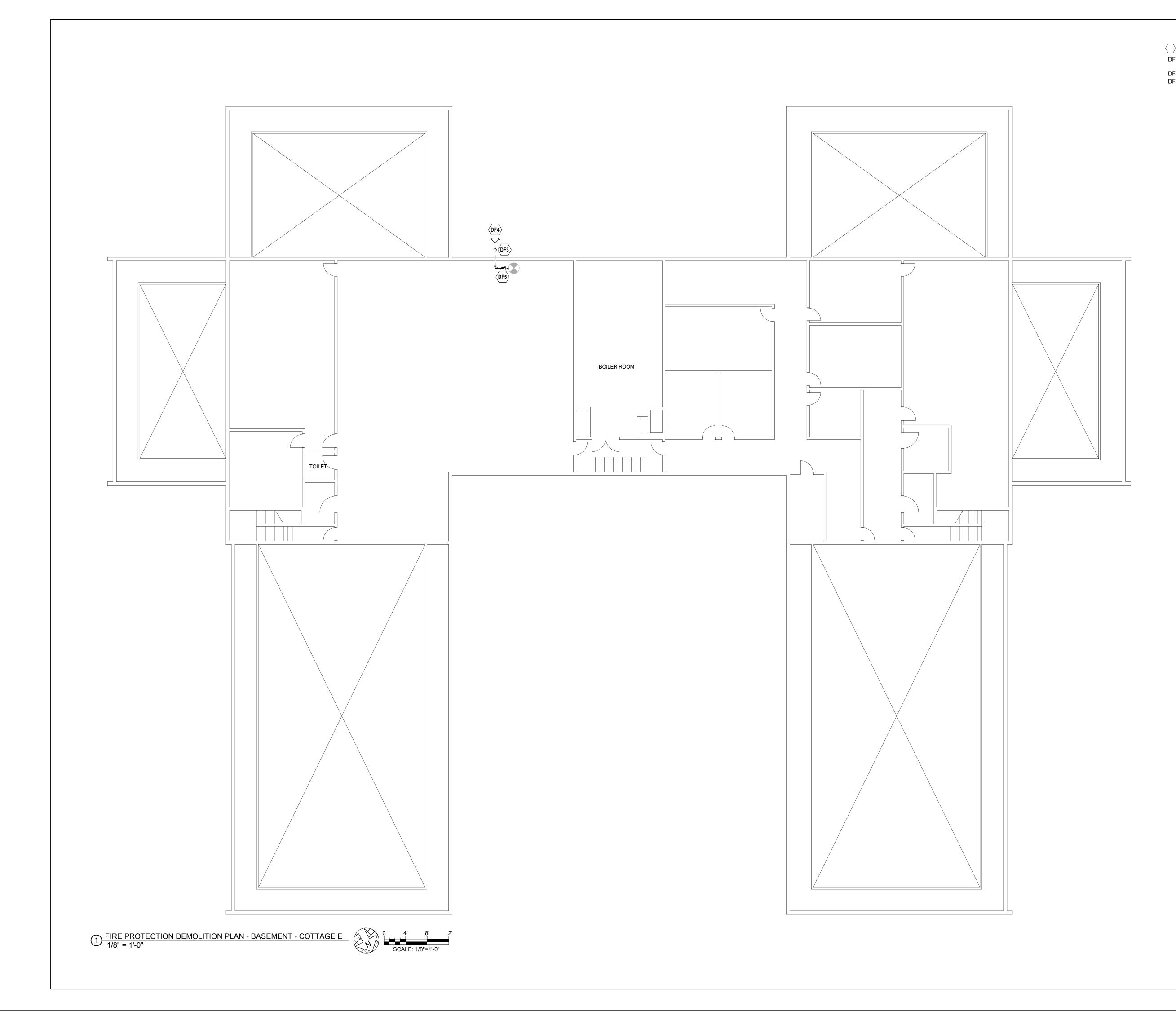
F60 INSTALL SPRINKLERS IN CEILING POCKETS TO PROVIDE COVERAGE IN ACCORDANCE WITH NFPA 13.



STATE OF MISSOURI

FIRE PROTECTION PLAN - BASEMENT -COTTAGE C

SHEET NUMBER: FP103B



STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR > FIRE PROTECTION DEMOLTION PLAN NOTES: DF3 DEMOLISH EXISTING FIRE DEPARTMENT CONNECTION UNDERGROUND PIPING BACK TO EXISTING RISER. DF4 DEMOLISH EXISTING FIRE DEPARTMENT SIAMESE CONNECTION. DF5 DEMOLISH EXISTING CHECK VALVE. SIGUER 12/06/2024 CHRISTOPHER J. CULP LICENSE # PE-2013037646 HENDERSON ENGINEERS 8345 LENEXA DRIVE, SUITE 300 LENEXA, KS 66214 TEL 913.742.5000 FAX 913.742.5001 WWW.HENDERSONENGINEERS.COM 2450001061 MO. CORPORATE NO: E-556D EXPIRES 10/31/2025 **OFFICE OF ADMINISTRATION DIVISION OF FACILITIES** MANAGEMENT, **DESIGN AND CONSTRUCTION** FIRE SPRINKLER SYSTEM UPGRADE HIGGINSVILLE HABILITATION CENTER 100 W 1st Street Higginsville, Missouri 64037 PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357032 REVISION: DATE: REVISION: DATE **REVISION**: DATE: ISSUE DATE: 12/06/2024 CAD DWG FILE: DRAWN BY: NTS CHECKED BY: AJ DESIGNED BY: NTS SHEET TITLE: FIRE PROTECTION **DEMOLITION PLAN -**

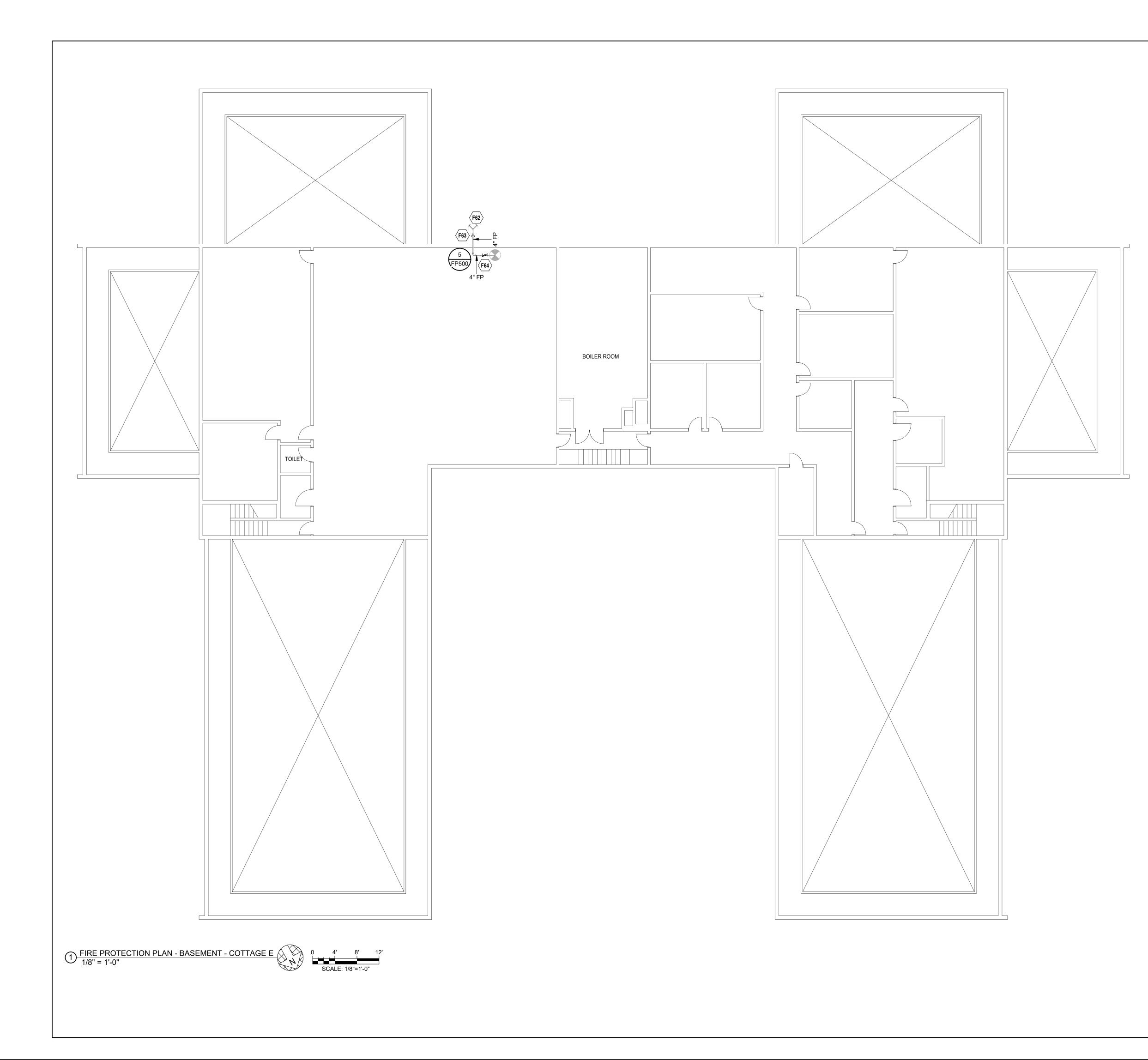
BASEMENT -

COTTAGE E

FPD104B

SHEET NUMBER:

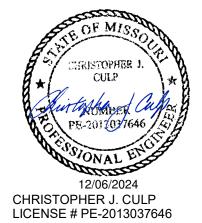
18 OF 22 SHEETS



- **FIRE PROTECTION PLAN NOTES:**
- F62 INSTALL NEW SIAMESE CONNECTION.
- F63 INSTALL AND CONNECT NEW UNDERGROUND PIPING TO REMOTE FIRE DEPARTMENT CONNECTION AND EXISTING RISER.

F64 INSTALL NEW CHECK VALVE AND BALL DRIP VALVE FOR REMOTE FIRE DEPARTMENT CONNECTION PIPING.





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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

FIRE SPRINKLER SYSTEM UPGRADE

HIGGINSVILLE HABILITATION CENTER

100 W 1st Street Higginsville, Missouri 64037

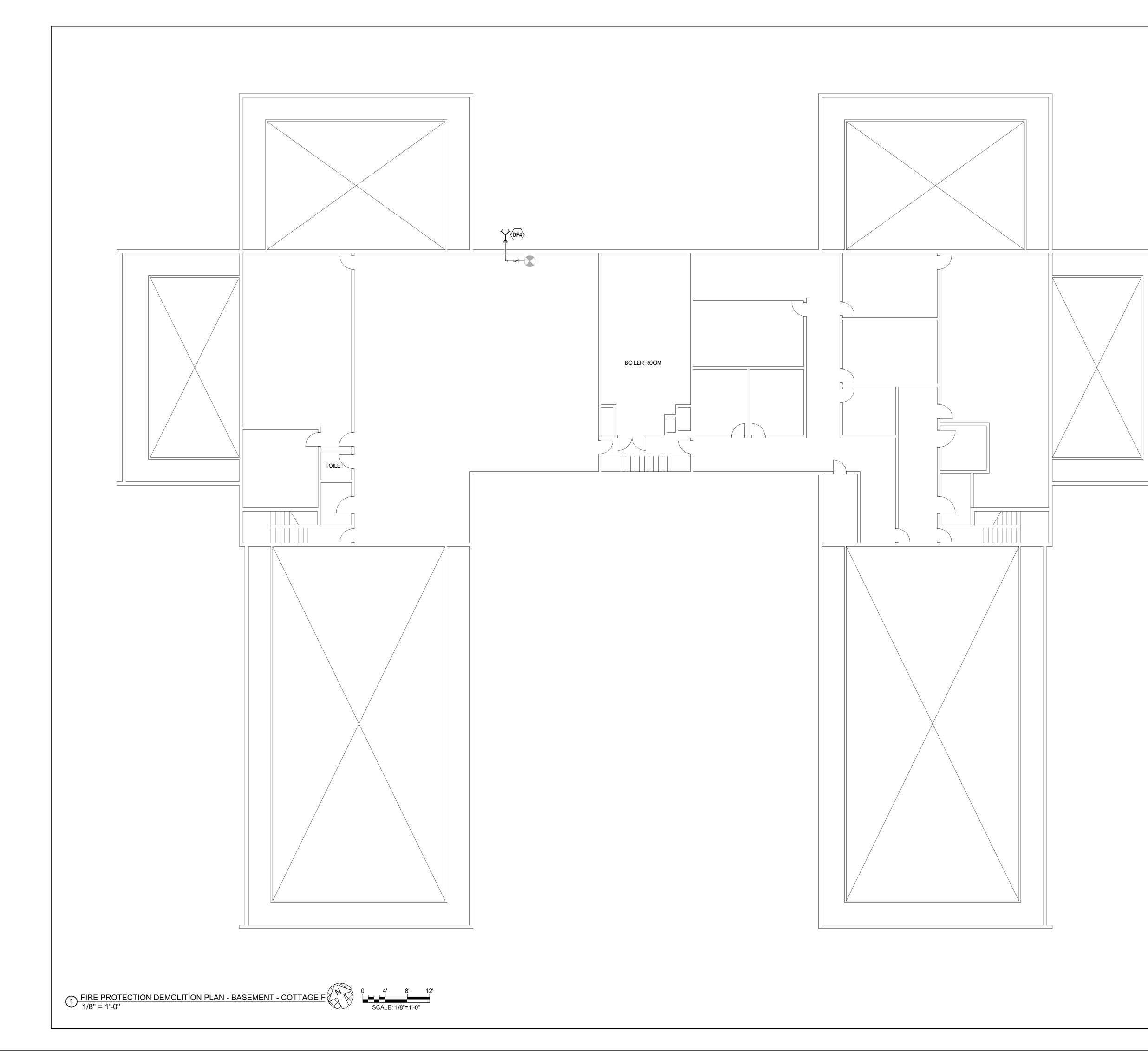
PROJECT # M2405-01SITE # 7357FACILITY # 6517357032

REVISION: DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024

CAD DWG FILE: DRAWN BY: NTS CHECKED BY: AJ DESIGNED BY: NTS

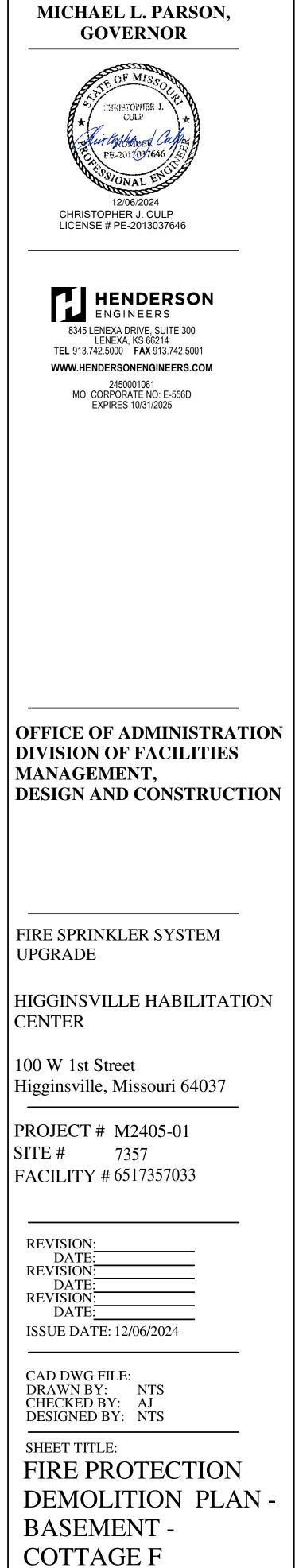
SHEET TITLE: FIRE PROTECTION PLAN - BASEMENT -COTTAGE E

sheet number: FP104B



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DF4	

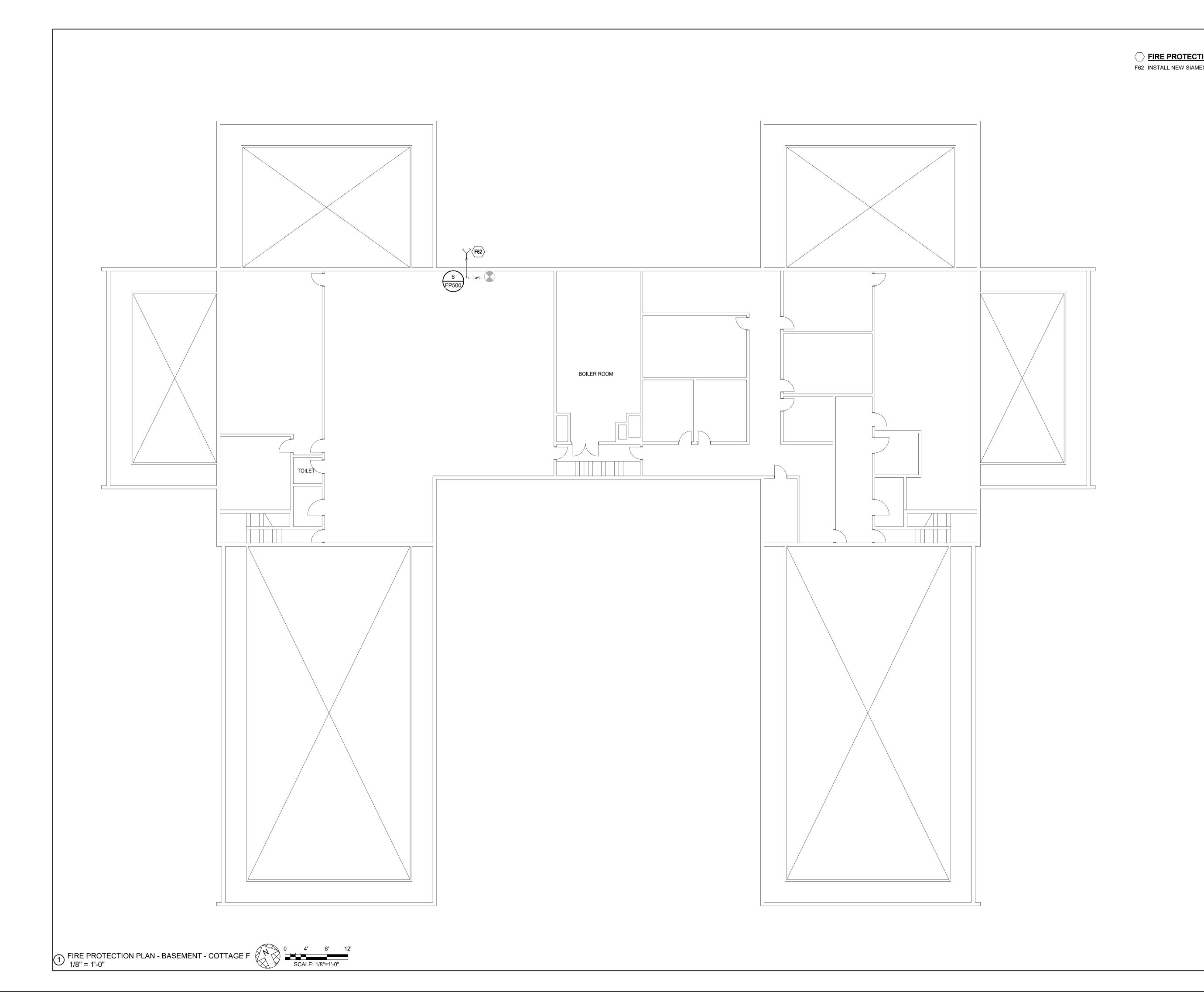
FIRE PROTECTION DEMOLTION PLAN NOTES: DEMOLISH EXISTING FIRE DEPARTMENT SIAMESE CONNECTION.



STATE OF MISSOURI

CUTTAGE	I
SHEET NUMBER:	





TION PLAN NOTES:	STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR
ESE CONNECTION.	CHRISTOPHER J. CULP 12/06/2024 CHRISTOPHER J. CULP 12/06/2024 CHRISTOPHER J. CULP LICENSE # PE-2013037646
	Figure
	OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION
	FIRE SPRINKLER SYSTEM UPGRADE
	HIGGINSVILLE HABILITATION CENTER
	100 W 1st Street Higginsville, Missouri 64037
	PROJECT # M2405-01 SITE # 7357 FACILITY # 6517357030, 6517357029 6517357030, 6517357032
	DATE: REVISION: DATE: REVISION: DATE: ISSUE DATE: 12/06/2024
	CAD DWG FILE: DRAWN BY: NTS CHECKED BY: AJ DESIGNED BY: NTS
	PLAN - BASEMENT - COTTAGE F
	SHEET NUMBER: FP105B 21 OF 22 SHEETS 12/06/2024

