

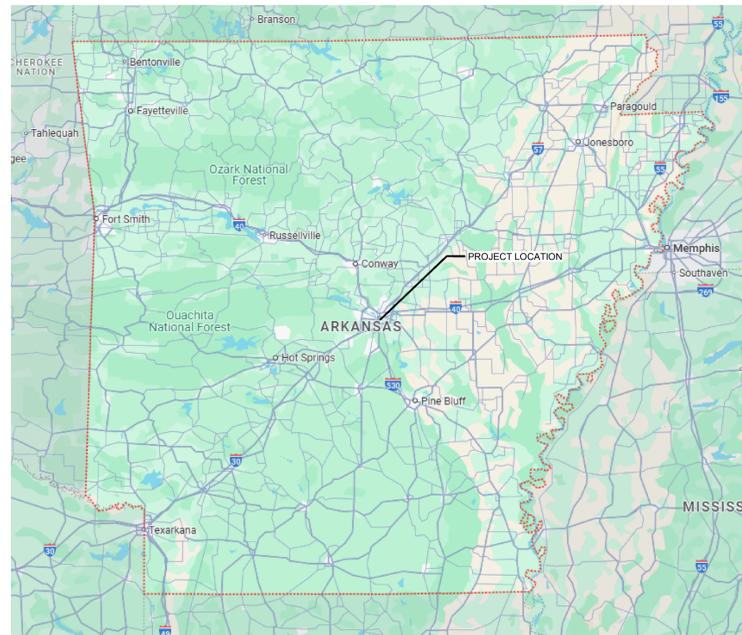


1 GALLERIA BLVD.
SUITE 325
METAIRIE, LA 70001
Phone: (504) 883-8291

NOT FOR CONSTRUCTION

CORPORATE SEAL

ENGINEER SEAL



1200 PRESIDENT CLINTON AVE. LITTLE ROCK, AR 72201

CLINTON SUSTAINABLE ENERGY DISTRICT - DRAWING INDEX		
SHEET NUMBER	SHEET TITLE	CURRENT DRAWING
G000	TITLE SHEET	CD REVIEW
M000	MECHANICAL LEGENDS, GENERAL NOTES, AND SCHEDULES	CD REVIEW
M100	CLINTON CENTRAL ENERGY PLANT - MECHANICAL	CD REVIEW
M101	HEIFER CENTRAL ENERGY PLANT - MECHANICAL	CD REVIEW
M200	CSED - SANITARY SEWER DIVERSION	CD REVIEW

CLINTON SUSTAINABLE ENERGY DISTRICT - DRAWING TABLE OF CONTENTS		
PACKAGE NUMBER	SHEET NUMBER SERIES	DESCRIPTION
1	[G,M]1XXX	SANITARY SEWER DIVERSION CREDITS
2	[G,S,M,ATC,E]2XXX	ENERGY UPGRADES

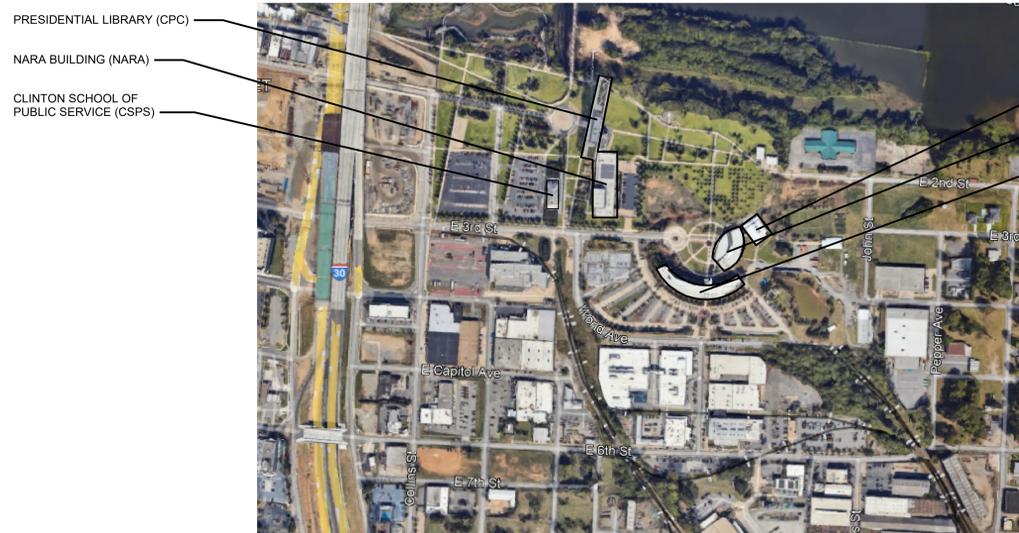
APPLICABLE CODES AND STANDARDS

- ARKANSAS FIRE CODE 2021
- ARKANSAS BUILDING CODE 2021
- ARKANSAS MECHANICAL CODE 2021
- ARKANSAS ELECTRICAL CODE 2020
- ARKANSAS FUEL GAS CODE 2018
- ARKANSAS ENERGY CODE 2009
- ARKANSAS PLUMBING CODE 2018
- NATIONAL ARCHIVES AND RECORDS ADMINISTRATION 1571 - ARCHIVAL STORAGE STANDARDS

SITE CONDITIONS:

WIND:
118 MPH
EXPOSURE CATEGORY B

SEISMIC:
RISK CATEGORY: IV
SITE CLASS: D
S_s: 0.55
S₁: 0.17
S_{Ds}: 0.4
S_{D1}: 0.24



CLINTON SUSTAINABLE ENERGY DISTRICT
CLINTON FOUNDATION
1200 PRESIDENT CLINTON AVE LITTLE ROCK, ARKANSAS

MARK	DATE	DESCRIPTION
ISSUE DATE:	08-06-25	
PROJECT NUMBER:	70-23-0018	
SHEET TITLE: COVER SHEET		
SHEET NUMBER: G000		

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ENGINEER SEAL

CLINTON SUSTAINABLE ENERGY DISTRICT
CLINTON FOUNDATION
1200 PRESIDENT CLINTON AVE LITTLE ROCK, ARKANSAS

RENOVATION GENERAL NOTES:

- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- REFER TO ALL PROJECT DRAWINGS FOR DETAILS OF CONSTRUCTION AND INSTALLATION REQUIREMENTS.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FULL COORDINATION OF PROJECT INCLUDING THE EQUIPMENT AND INSTALLATION OF THE MECHANICAL WORK.
- CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE REQUIREMENTS OF THESE NOTES AS WELL AS OTHER NOTES SHOWN ON THE CONTRACT DOCUMENTS.
- THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS (SEE SCHEDULES). THE SELECTION OF WHICH HAS INFLUENCED THE DESIGNS OF OTHER TRADES (ELECTRICAL, STRUCTURAL, ETC.). IF SUBSTITUTE MANUFACTURERS, SIZES, OR MODEL NUMBERS SUBMITTED, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND ALL HIS SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES. ALL COSTS OF ALL TRADES ASSOCIATED WITH THE SUBSTITUTION SHALL BE INCLUDED.
- COORDINATION OF ALL MODIFICATIONS TO EACH DISCIPLINE WHICH RESULT FROM SUBSTITUTION OF EQUIPMENT OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUBSTITUTIONS WHICH ARE INSTALLED AND SUBSEQUENTLY ARE PROVEN UNSATISFACTORY BY OWNER AND/OR ENGINEER, WITHIN THE WARRANTY PERIOD, SHALL BE REMOVED COMPLETELY BY THE CONTRACTOR AND REPLACED WITH THE ORIGINAL DESIGN OR CORRECTED AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, OR COMPONENT.
- INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.
- CONTRACTOR SHALL NOT SCALE DRAWINGS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY THE CONTRACT DOCUMENTS.
- UNLESS NOTED OTHERWISE, THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM.
- EXACT LOCATIONS OF ALL EQUIPMENT, DUCTS, DIFFUSERS, ETC. SHALL BE COORDINATED WITH OTHER TRADES. SLOPED PIPING (PLUMBING), LIGHTING, AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES. REFER TO ARCHITECTURAL, ELECTRICAL, AND OTHER DRAWINGS FOR COMPLETE INFORMATION PRIOR TO BID.
- NO OTHER TRADES, I.E., ELECTRICAL, CEILING, PLUMBING, ETC., SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM DUCTWORK OR PIPING.
- REPLACE ALL ARCHITECTURAL FEATURES REMOVED OR DAMAGED DURING THE COURSE OF THE WORK.

HVAC GENERAL NOTES:

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

ONE LINE PIPE SYMBOLS

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

ONE LINE PIPE SYMBOLS

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

TWO LINE PIPE SYMBOLS

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

DUCTWORK SYMBOLS

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

DEMOLITION AND RENOVATION SYMBOLS

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

FLOW METER SCHEDULE

DESIGNATION	PROVIDER	REFERENCE PRODUCT	SERVES	TYPE	FLUID TYPE	METER SIZE (INCH)	LINE SIZE (INCH)	MAX FLUID TEMP. (F)	DESIGN FLUID FLOW (GPM)	METER MAX CONT. FLOW (GPM)	DESIGN PRESSURE LOSS (PSID)	REQUIRED UPSTREAM DIAMETERS	REQUIRED DOWNSTREAM DIAMETERS	ACCURACY (%)	ELECTRICAL REQUIREMENTS	REMARKS
FM-MUW-CPL	ENFRA	BADGER RC DL M120	COOLING TOWER MAKE-UP	NUTATING DISC / POSITIVE DISPLACEMENT	WATER	1 1/2	2	120	60	100	3.0	-	-	+/- 1.50%	24 VDC	HR-LCD REGISTER WITH 4.20 mA ANALOG OUTPUT AND SCALED/UNSCALED DIGITAL OUTPUT. ANALOG OUTPUT TO BE IN GALLONS PER MINUTE. DIGITAL OUTPUT PULSE TO BE IN CUBIC FEET.
FM-MUW-HH	ENFRA	BADGER RC DL M55	COOLING TOWER MAKE-UP	NUTATING DISC / POSITIVE DISPLACEMENT	WATER	1	2	120	20	100	1.0	-	-	+/- 1.50%	24 VDC	HR-LCD REGISTER WITH 4.20 mA ANALOG OUTPUT AND SCALED/UNSCALED DIGITAL OUTPUT. ANALOG OUTPUT TO BE IN GALLONS PER MINUTE. DIGITAL OUTPUT PULSE TO BE IN CUBIC FEET.

MARK DATE DESCRIPTION

ISSUE DATE: 08-06-25

PROJECT NUMBER: 70-23-0018

SHEET TITLE:
MECAHNICAL LEGENDS,
GENERAL NOTES AND
SCHEDULES

SHEET NUMBER:

M000

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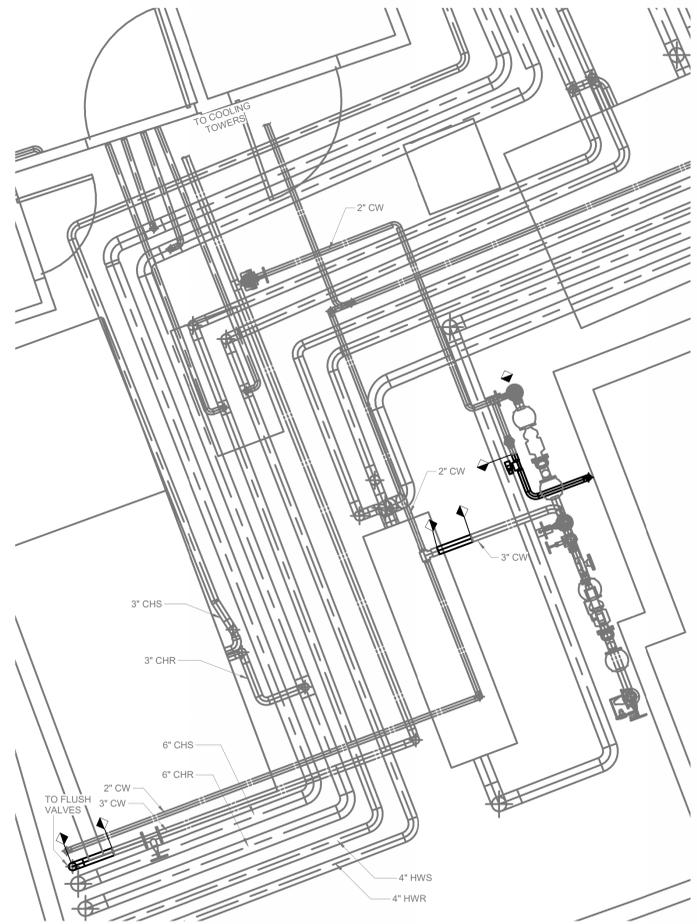
CORPORATE SEAL

ENGINEER SEAL

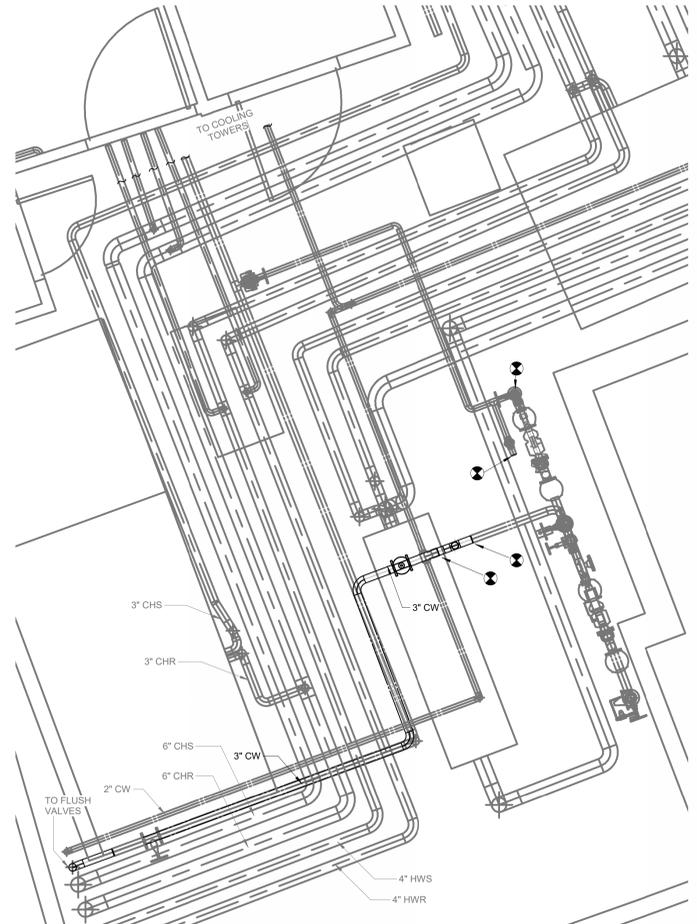
CLINTON SUSTAINABLE ENERGY DISTRICT
CLINTON FOUNDATION
1200 PRESIDENT CLINTON AVE LITTLE ROCK, ARKANSAS

KEYED NOTES:

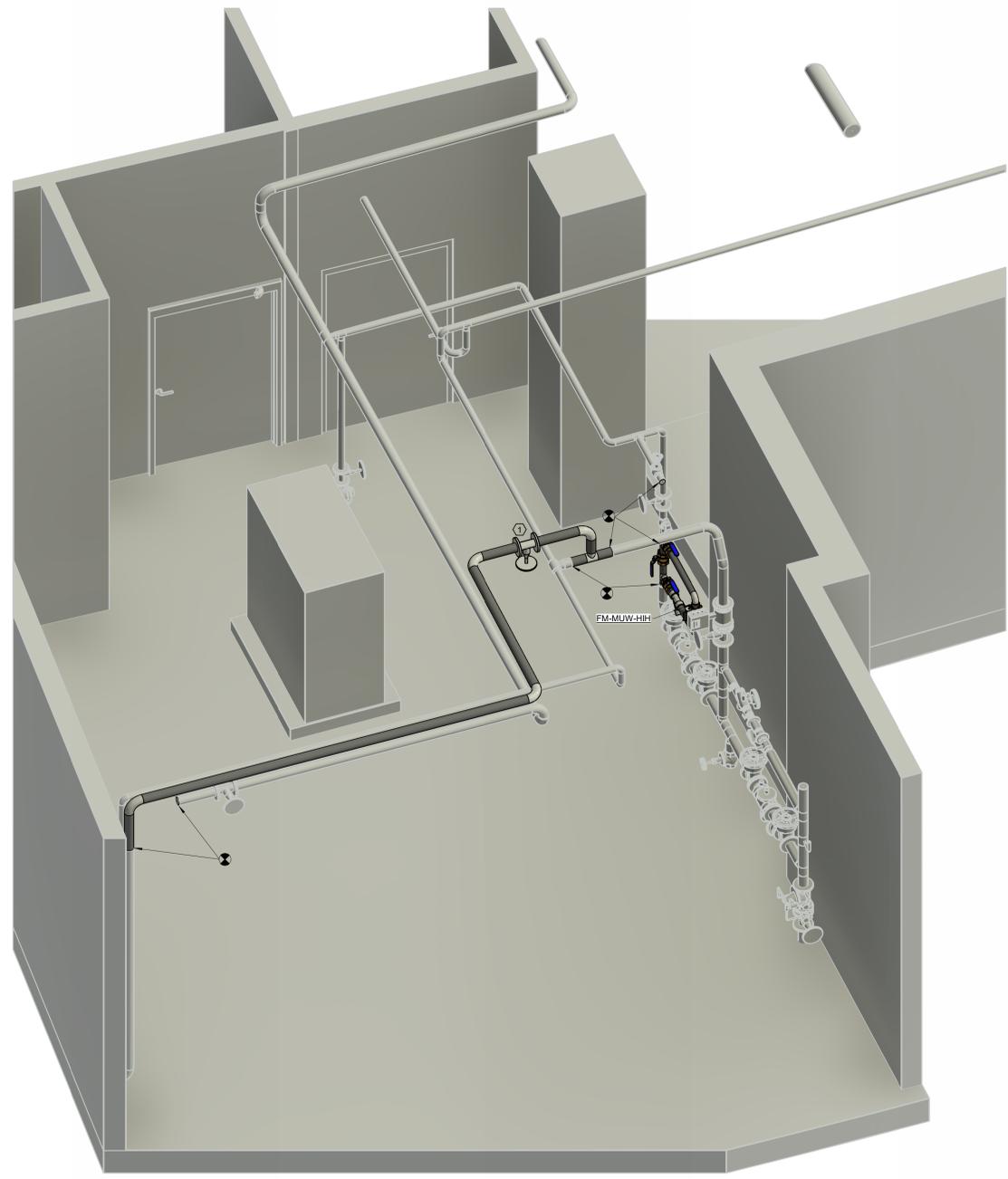
- ① PROVIDE ISOLATION VALVE WITH CHAIN OPERATOR



① CSED - SANITARY SEWER UPGRADE - HEIFER - DEMOLITION
3/8" = 1'-0"



② CSED - SANITARY SEWER UPGRADE - HEIFER - NEW
3/8" = 1'-0"



③ CSED - SANITARY SEWER UPGRADES - HEIFER - PERSPECTIVE VIEW

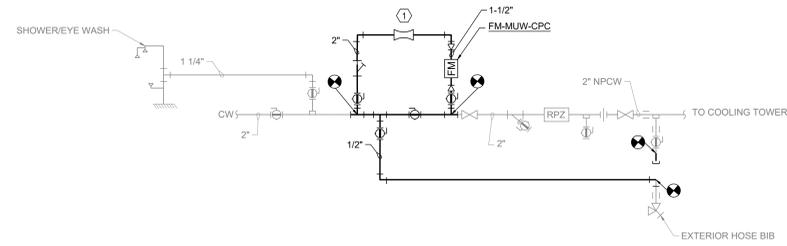
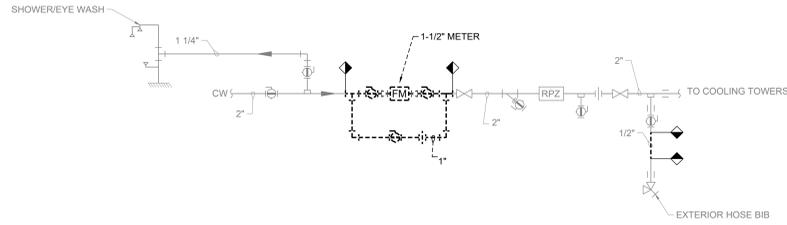
MARK	DATE	DESCRIPTION
ISSUE DATE:	08-06-25	
PROJECT NUMBER:	70-23-0018	
SHEET TITLE:		
HEIFER CENTRAL ENERGY PLANT - MECHANICAL		
SHEET NUMBER:		
M101		

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CLINTON SUSTAINABLE ENERGY DISTRICT
 CLINTON FOUNDATION
 1200 PRESIDENT CLINTON AVE LITTLE ROCK, ARKANSAS

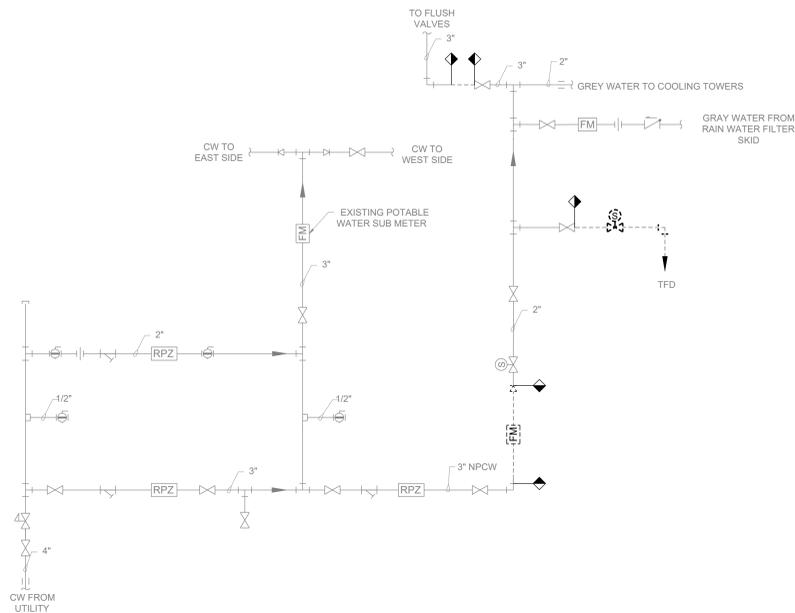
KEYED NOTES:

- ① 80-GPM AUTOMATIC FLOW LIMITING VALVE EQUAL TO GRISWOLD K-VALVE WITH REPLACEABLE CARTRIDGE TYPE
- ② 40-GPM AUTOMATIC FLOW LIMITING VALVE EQUAL TO GRISWOLD K-VALVE WITH REPLACEABLE CARTRIDGE TYPE

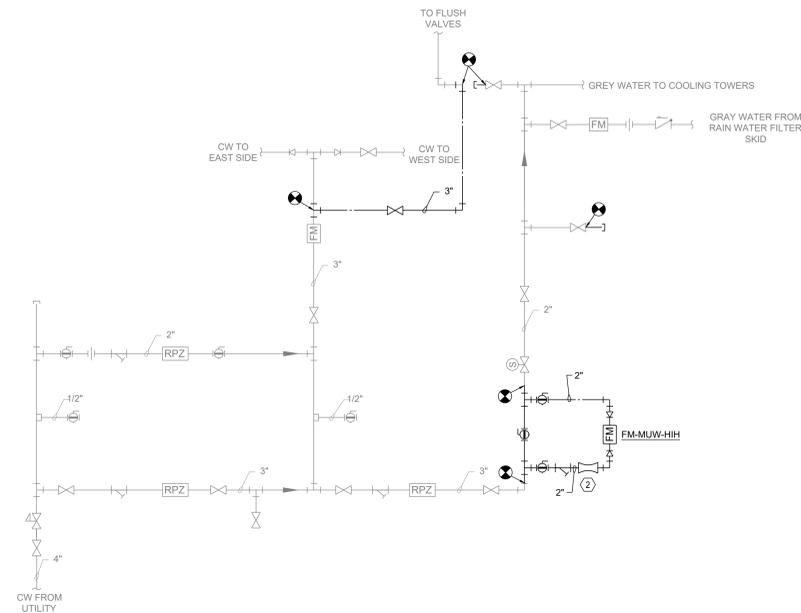


WILLIAM J CLINTON DOMESTIC WATER/MAKE-UP WATER PIPING DIAGRAM - DEMOLITION ①
SCALE: NONE

① WILLIAM J CLINTON DOMESTIC WATER/MAKE-UP WATER PIPING DIAGRAM - NEW
SCALE: NONE



② HEIFER INTERNATIONAL DOMESTIC WATER - MAKEUP WATER PIPING DIAGRAM - DEMOLITION
NOT TO SCALE



② HEIFER INTERNATIONAL DOMESTIC WATER - MAKEUP WATER PIPING DIAGRAM - NEW
NOT TO SCALE

MARK	DATE	DESCRIPTION
ISSUE DATE:	08-06-25	
PROJECT NUMBER:	70-20-0018	
SHEET TITLE: CSED - SANITARY SEWER DIVERSION		

SHEET NUMBER:
M200