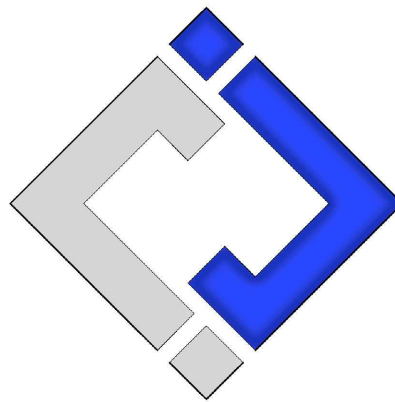


James Watson, P.E. October 30, 2024
PE-2015017071
MO Certificate of Authority # 2018029680



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J2 PROJECT No: J21007

J2 DESIGN: JAP

ISSUE TITLE DATE

CITY SUBMITTAL 01 / 25 / 2024

REVISION 2 10 / 30 / 2024



Mechanical - Electrical - Plumbing Design Drawings for
The Village at Discovery - Lot 4

Discovery Avenue & Alura Way
Lee's Summit, Jackson County, MO

SHEET TITLE

**SITE UTILITIES
PLAN**

SHEET NUMBER

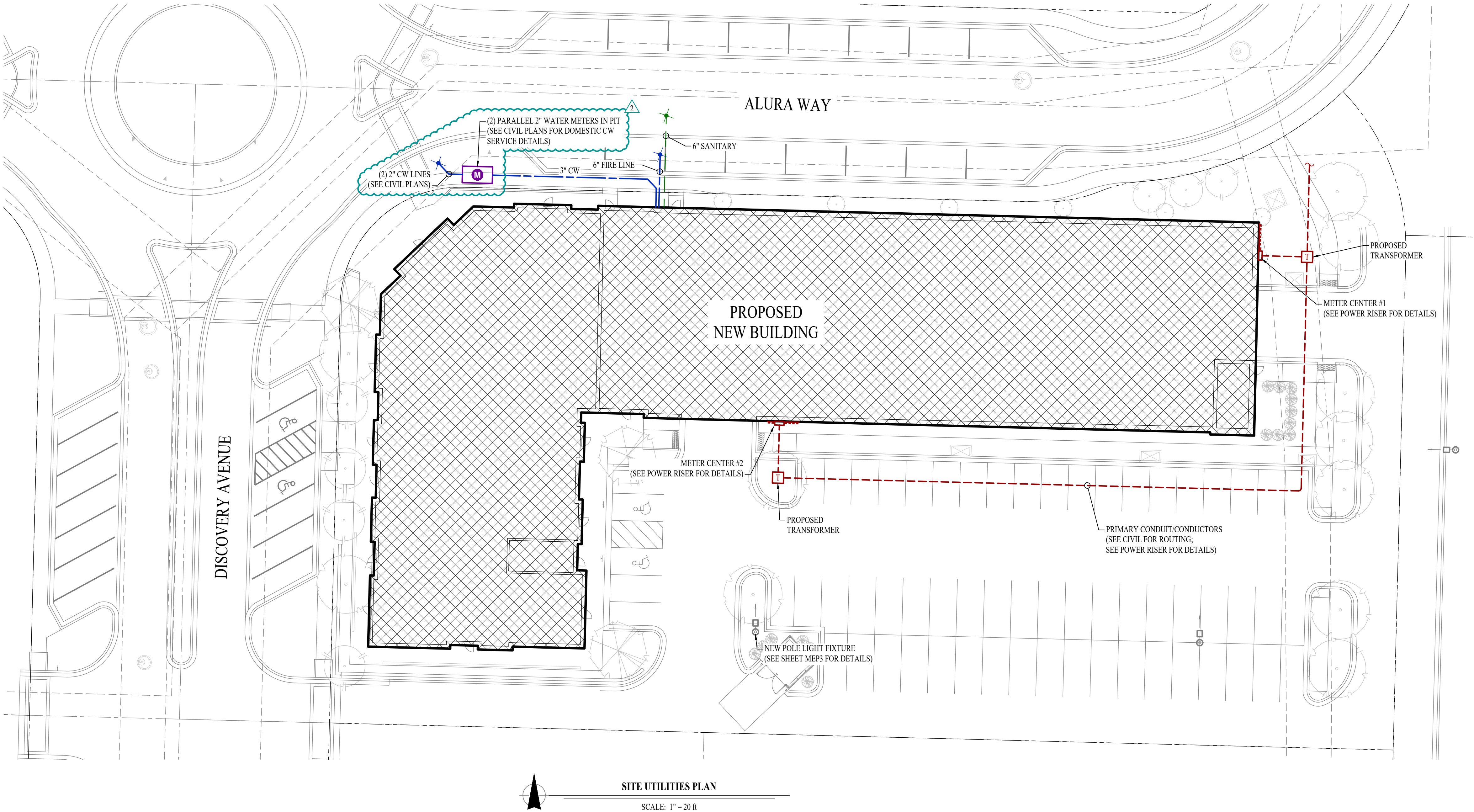
MEP2

SITE UTILITIES PLAN SYMBOL LEGEND

- SANITARY SEWER PIPING
- COLD WATER LINE
- WATER METER
- VALVE
- GAS LINE
- GAS METER
- TIE INTO EXISTING
- ELECTRIC

SITE UTILITIES PLAN GENERAL NOTES:

- REFER TO CIVIL PLANS FOR EXACT UTILITY LOCATIONS, CONNECTIONS, DETAILS, ETC.
- COORDINATE EXACT LOCATIONS OF ALL ELECTRICAL CONDUITS & EQUIPMENT WITH EVERGY.



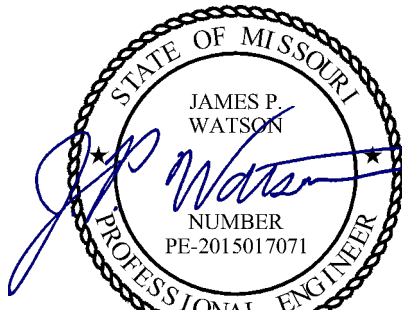
PLUMBING SPECIFICATIONS

1. GENERAL
- 1.1. PLUMBING CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL ESCUTCHEONS, ¼ TURN STOPS, P-TRAPS, AND SUPPLY LINES TO PROVIDE A COMPLETE SYSTEM AT EACH FIXTURE INDICATED ON PLANS UNLESS NOTED OTHERWISE.
2. SANITARY
- 2.1. BELOW AND ABOVE GRADE WASTE AND VENT PIPING IN BUILDING TO BE SOLID CORE SCH. 40 PVC DWV.
- 2.2. NO PIPE SMALLER THAN 2" BELOW GRADE.
- 2.3. WASTE AND VENT PIPING IN PLENUMS TO BE CAST IRON, OR PVC WITH AN INSULATION WRAP LISTED FOR USE AS SUCH AN ASSEMBLY.
- 2.4. ALL VENT PIPE TERMINATIONS ARE TO BE LOCATED EITHER 10' HORIZONTALLY OR 3' ABOVE MECHANICAL AIR INTAKE LOCATIONS.
3. DOMESTIC WATER
- 3.1. DOMESTIC WATER PIPING TO BE EITHER COPPER OR PEX. WHERE PEX PIPING IS USED, IT SHALL BE INCREASED ONE PIPE SIZE FROM WHAT IS INDICATED ON PLANS FOR ALL PORTIONS OF THE SYSTEM.
- 3.2. PEX-A MAY BE INSTALLED AT SIZES INDICATED ON PLANS IF AN ENGINEERED PLAN IS SUBMITTED SHOWING ACCEPTABLE PRESSURE DROPS AND FLUID VELOCITIES. APPROVAL MUST BE GRANTED PRIOR TO PURCHASE AND INSTALLATION.
- 3.3. COPPER WATER PIPING BELOW GRADE SHALL BE TYPE "K". BELOW GRADE JOINTS SHALL BE SILVER SOLDERED. THERE SHALL BE NO JOINTS IN WATER PIPING LOCATED BENEATH BUILDING SLAB.
- 3.4. COPPER WATER PIPING ABOVE GRADE SHALL BE TYPE "L".
- 3.5. PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK-CLOSE VALVES. FIXTURES REQUIRING WATER HAMMER ARRESTORS INCLUDE BUT ARE NOT LIMITED TO FLUSH VALVES, SENSOR FAUCETS, AND WASHING MACHINE BOXES. AIR CHAMBERS ARE NOT ACCEPTABLE.
- 3.6. ALL DOMESTIC WATER PIPING SHALL BE ROUTED WITHIN THERMAL ENVELOPE AND WITHIN WALL CAVITIES, ABOVE FINISHED CEILINGS, OR BELOW SLAB TO REMAIN CONCEALED UNLESS OTHERWISE NOTED. NOTIFY ENGINEER OF ANY NECESSARY ADJUSTMENTS THAT REQUIRE PIPING TO BE EXPOSED.
- 3.7. DOMESTIC WATER PIPING INSULATION
- 3.7.1. ALL HW PIPING, WHETHER COPPER OR PEX, SHALL BE INSULATED WITH PLENUM RATED CLOSED CELL ELASTOMERIC INSULATION. FOR PIPING LESS THAN ½", INSULATION THICKNESS TO BE 1". FOR PIPING ½" OR GREATER, INSULATION THICKNESS SHALL BE ½".
- 3.7.2. CW COPPER PIPING TO INSULATED WITH ½" PLENUM RATED CLOSED CELL ELASTOMERIC INSULATION. CW PEX NEED NOT BE INSULATED UNLESS NOTED OTHERWISE.

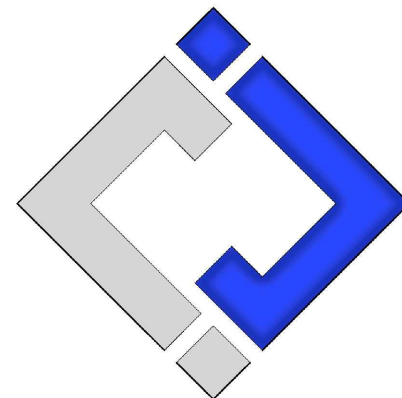
PLUMBING CONNECTION SIZING SCHEDULE					
FIXTURE		SANITARY PIPING		SUPPLY PIPING	
TYPE	TYPICAL ABBREVIATION	WASTE CONNECTION	VENT CONNECTION	COLD WATER CONNECTION	HOT WATER CONNECTION
DRINKING FOUNTAIN	DF	1-1/2"	1-1/4"	1/2"	-
FLOOR DRAIN	FD	3"	2"	-	-
HAND / HAIR SINK	HS / SK	2"	1-1/4"	1/2"	1/2"
HOSE BIBB	HB	-	-	3/4"	-
LAVATORY	LAV	1-1/2"	1-1/4"	1/2"	1/2"
MOP SINK	MS	3"	1-1/2"	1/2"	1/2"
ICE MAKER OUTLET BOX	REF	-	-	1/2"	-
SHOWER	SH	3"	1-1/2"	1/2"	1/2"
URINAL	UR	2"	1-1/4"	3/4"	-
WATER CLOSET (FLUSH TANK)	WC	3"	2"	1/2"	-
WATER CLOSET (FLUSH VALVE)	WC	3"	2"	1"	-
NOTES: 1. SIZES SHOWN ABOVE ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS					

PLUMBING FIXTURE SCHEDULE				
TAG	DESCRIPTION	MANUFACTURER (OR EQUAL)	MODEL (OR EQUAL)	NOTES
AAV	AIR ADMITTANCE VALVE	OATEY	39020	1.5" - 6 DFM MAX
BFP1	BACKFLOW PREVENTER	WILKINS	975XL2	RPZ - SIZE AS INDICATED ON PLANS
DN1	DOWNSPOUT NOZZLE	ZURN	Z199	
EXP	EXPANSION TANK	WATTS	DETA-100	
FCO	FLOOR CLEAN OUT	ZURN	Z1400	
FD1	FLOOR DRAIN	ZURN	Z4154Z	WITH Z1072 TRAP SEAL
FPHB	FROST PROOF HOSE BIBB	WOODFORD	MODEL 67	
FPRH	FROST PROOF ROOF HYDRANT	WOODFORD	SRH-MS	
FS	FLOOR SINK	ZURN	FD2370	
HB	HOSE BIBB	JR SMITH	5670-H	INTERIOR HOSE BIBB WITH VACUUM BREAKER
LA V1	LAVATORY - INTEGRAL BOWL	-	-	WITH PEISTER #G142-8000 CHROME FAUCET
LA V2	LAVATORY (WALL HUNG W/MANUAL FAUCET)	AMERICAN STANDARD	0355.012	WITH ZURN Z81104-XL FAUCET, 1/4 TURN STOPS, BRAIDED STAINLESS STEEL SUPPLIES, TRUBRO LAV GUARD 2, & 'TMV'
RD1	ROOF DRAIN	ZURN	Z100	
REF1	REFRIGERATOR BOX	SIoux CHIEF	696-G1000	
REF1	REFRIGERATOR BOX	SIoux CHIEF	696-G1000	
RH1	ROOF HYDRANT	WOODFORD	SRH-MS	
SK1	KITCHEN SINK	DAYTON	DSISR12722	WITH PEISTER #F-529-CRS FAUCET,ISE DISPOSAL #BADGER-1 & STS-00 AIR SWITCH
SP1	SUMP PUMP	ZOELLER	153-0002	120V, 1/2 HP WITH "OIL MINDER" CONTROLS
TMV1	THERMOSTATIC MIXING VALVE - POINT OF USE	WATTS	LFUSG	
TUB1	TUB / SHOWER	AQUARIS	G6030TS	WITH PEISTER R89-0300 SHOWER TRIM KIT
TUB2	ADA TUB / SHOWER	AQUATIC	2603SMTE	WITH GRAB BARS & ADA HANDHELD SHOWER ASSEMBLY
WB1	WASHER BOX	SIoux CHIEF	696-G2303	
WC1	WATER CLOSET - STANDARD HEIGHT - TANK	AMERICAN STANDARD	215CA.004	WITH CHURCH 7200SLC SEAT AND COVER, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WC2	WATER CLOSET - ADA HEIGHT - TANK	AMERICAN STANDARD	215AA.004	WITH CHURCH 7200SLC SEAT AND COVER, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.
WH1	WATER HEATER - ELECTRIC - LOWBOY	AO SMITH	ECLB-40	38 GALLON, 208V 1PH, 4500W; WITH 'EXP'
WH2	WATER HEATER - ELECTRIC - POINT OF USE	AO SMITH	EGSP6	6 GALLON, 120V, 1500W WITH HOLDRITE #40-SWHP-W WALL HUNG PLATFORM; WITH 'EXP'
YCO	YARD CLEAN OUT	ZURN	Z1400	
NOTES: 1. VERIFY NECESSARY FIXTURES MEET ADA REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION				

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
10/31/2024



James Watson, P.E. October 30, 2024
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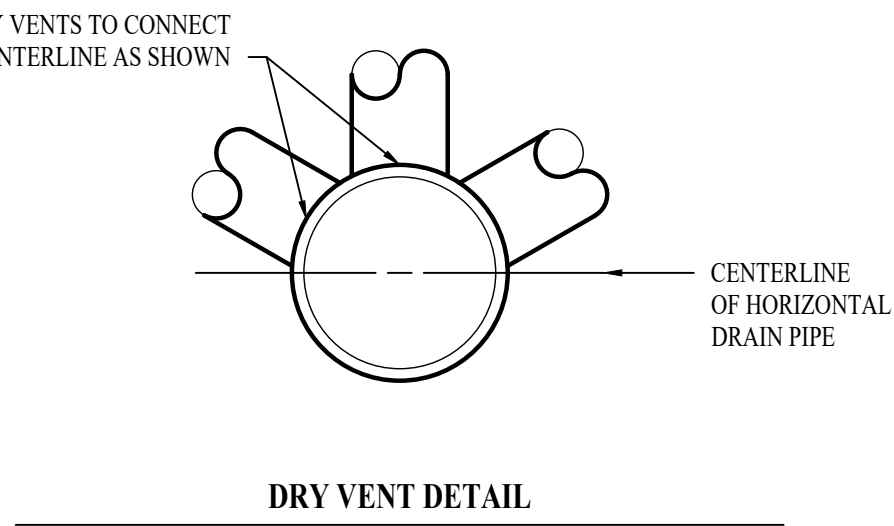
J2 DESIGN: JAP

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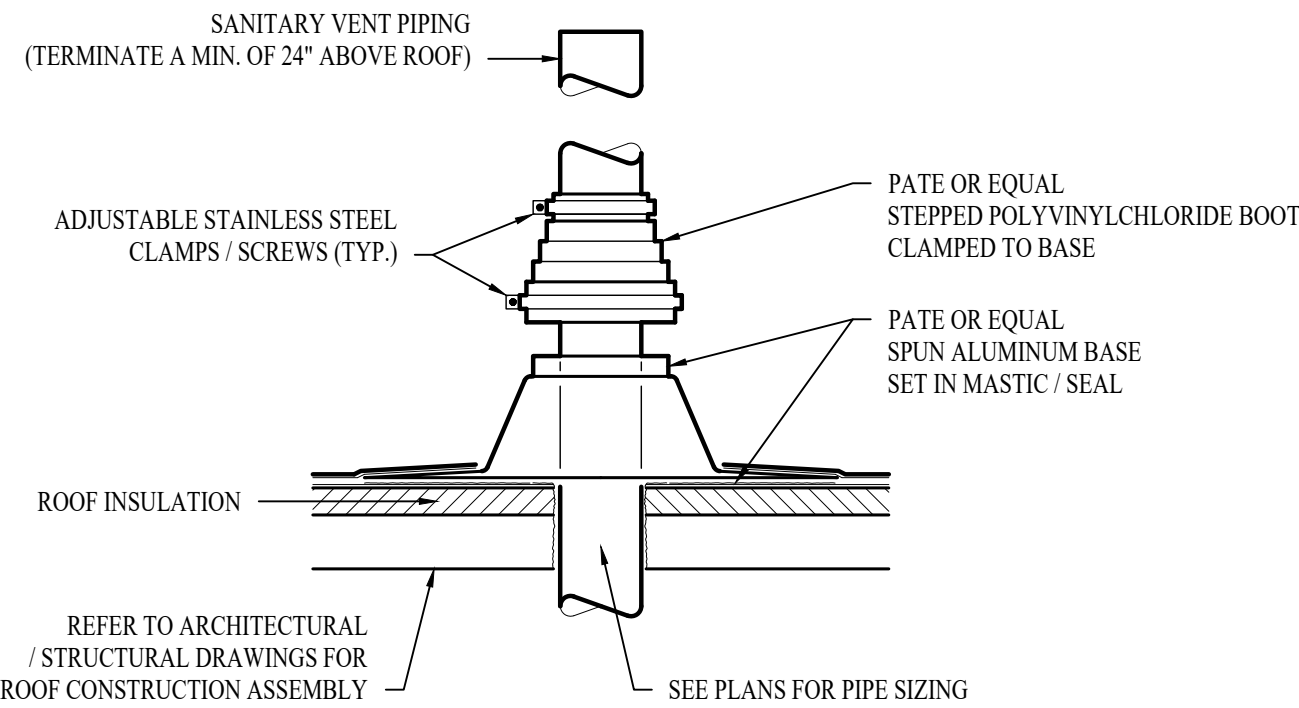
CITY SUBMITTAL 01 / 25 / 2024

REVISION 1 10 / 21 / 2024

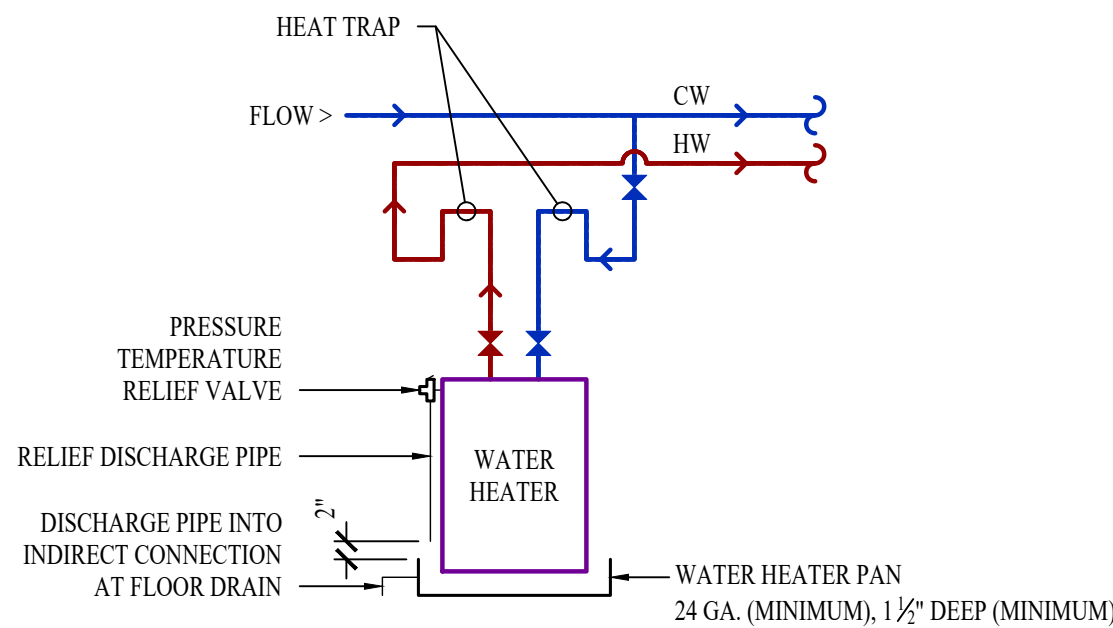
REVISION 2 10 / 30 / 2024



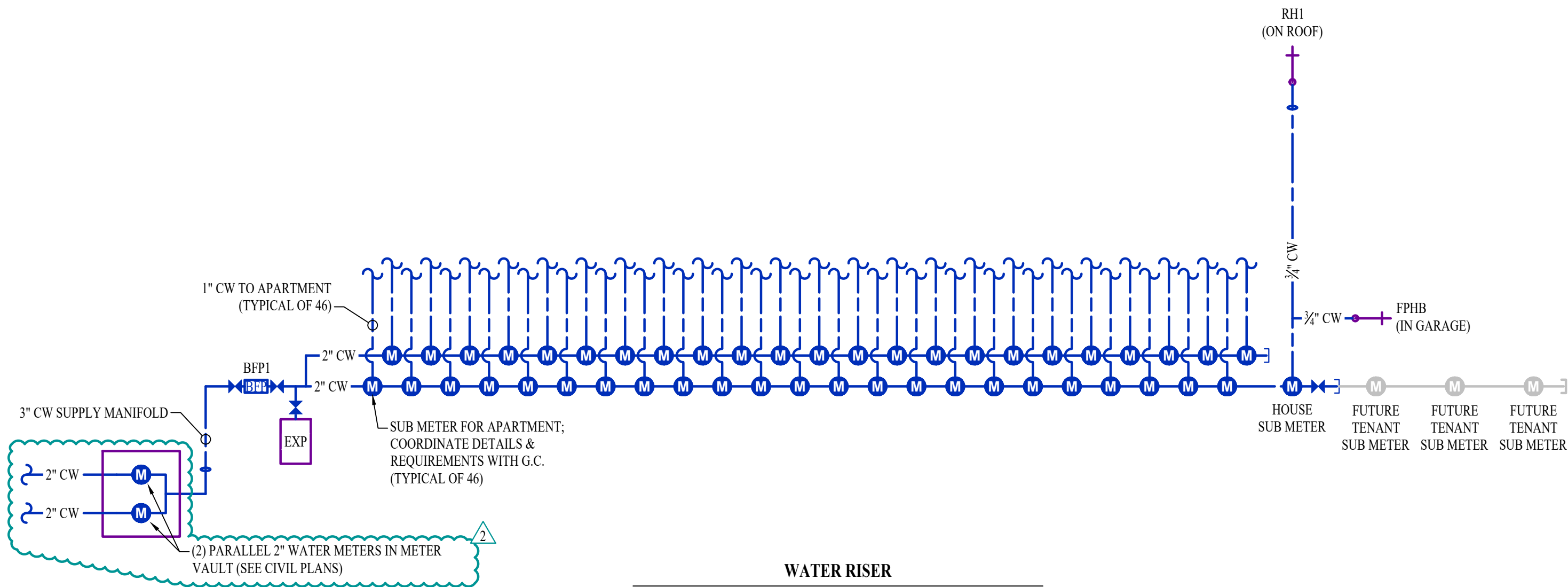
DRY VENT DETAIL



SANITARY VENT THRU ROOF DETAIL



WATER HEATER DETAIL



WATER RISER

Mechanical - Electrical - Plumbing Design Drawings for
The Village at Discovery - Lot 4

Discovery Avenue & Alura Way
Lee's Summit, Jackson County, MO

SHEET TITLE

**PLUMBING DETAILS
& SCHEDULES**

SHEET NUMBER

P501