FIXTURE: ZURN #Z5665-BWL FLUSH VALVE: ZURN "AQUAFLUSH" #Z6000-WS1-YK



- FLOOR MOUNTED MANUAL FLUSH VALVE WATER CLOSET WITH 1.6 GPF, ELONGATED BOWL WITH OPEN SEAT AND SELF SUSTAINING CHECK HINGES. VALVE TO HAVE SOLID RING PIPE SUPPORT. STANDARD HEIGHT 0F 15" AFF TO RIM. FIXTURE: ZURN #Z5655-BWL

FLUSH VALVE: ZURN "AQUAFLUSH" #Z6000-WS1-YK



- VITREOUS CHINA WATERLESS URINAL.WITH INTEGRAL TRAP SEAL. PROVIDE COMPLETE WITH ADDITIONAL "GREEN SEALANT". INSTALL AT ADA HEIGHT OF 17"AFF TO RIM. FIXTURE: ZURN #Z5795

TRAP SEALANT: ZURN "ZGS-1200Z (1 GALLON BOTTLE)



 RECTANGULAR DROP IN COUNTER MOUNTED LAVATORY WITH FAUCET HOLES ON 4" CENTERS. FAUCET TO BE TWO HANDLE, MANUAL METERING TYPE WITH ADA COMPLIANT ROCKER HANDLES AND 0.5 GPM AERATOR. PROVIDE WITH OPEN GRID STRAINER. ALL PIPING AND TRAPS TO BE INSULATED PER SPECS AND FREEZE PROTECTION NOTES. SOME FIXTURES REQUIRE A WATER SAVER P-TRAP. REFER TO PLANS FOR SPECIFIC FIXTURES. COORDINATE COUNTERTOP OPENING WITH G.C. FIXTURE: ALLEN + ROTH #ML-20522

FAUCET: ZURN #Z86500-XL-RKR-3M NOTE THAT HW NOT SUPPLIED TO THIS FIXTURE.



- 24x24x10 MOP SERVICE BASIN WITH WALL GUARDS, MOP BRACKET AND BUCKET HOOK FAUCET. PROVIDE COMPLETE WITH STAINLESS STEEL BUMPERS AND STAINLESS STEEL WALL GUARDS ON BOTH WALLS.

FIXTURE: ZURN #Z1996-24 FAUCET: ZURN #Z841M2-RC NOTE THAT HW NOT SUPPLIED TO THIS FIXTURE



- DOUBLE BOWL RESIDENTIAL STYLE STAINLESS STEEL SINK WITH ADA COMPLIANT 5" DEEP BOWLS. TWO FAUCET HOLES ON 8" CENTERS AND BASKET STRAINER. PROVIDE COMPLETE WITH SCALD GUARDS ON TRAP AND SUPPLIES. TWO HANDLE GOOSENECK FAUCET WITH 1.0 GPM LAMINAR FLOW AERATOR AND HOT AND COLD INDEXES. FIXTURE: ELKAY #LRADQ3321 (33" x 21-1/4" x 5") FAUCET: ZURN Z-871A4-XL-21F-HCT



ADA COMPLIANT. VANDAL RESISTANT DOUBLE BUBBLER WATER COOLER WITH FRONT PUSH BUTTON ACTIVATION AND INTEGRAL BOTTLE FILLER. UNIT SHALL BE MANUFACTURER RATED FOR OUTDOOR APPLICATIONS. 8 GPH CHILLING OF 50 DEG F WATER. COORDINATE WITH E.C. TO PROVIDE 20 GFI PROTECTED CIRCUIT. LOW BOWL ON THE RIGHT WITH BOTTLE FILLER.

FIXTURE: ELKAY #VRCTL8WSK BOTTLE FILLER ACCESSORY: ELKAY #VRCWS



#### **PLUMBING FIXTURE SCHEDULE**

FREEZE PROOF HOSE BIBB WITH TEE KEY HANDLE OPERATION. ASSE 1052 COMPLIANT FIXTURE:WOODFORD #67



POINT OF USE TANKLESS WATER HEATER. SET OUTLET TEMP TO 110 DEG F MAXIMUM. PERFORMANCE SHALL BE 51 DEG RISE @ 1.0 GPM (240V).



EWH1

THE FOLLOWING FIXTURES ARE MORE GENERIC FIXTURES. THE P.C. MAY SUBMIT ANY BRAND THAT MEETS THE LISTED CRITERIA. ALL EQUIPMENT SHALL STILL BE SUBJECT TO APPROVAL OR REJECTION BY THE ENGINEER DURING SUBMITTAL REVIEW.

PISTON TYPE WATER HAMMER ARRESTOR SIZED FOR FIXTURES BEING SERVED.

3" OUTLET, ROUND FLOOR DRAIN WITH NICKEL BRONZE GRATE, AUXILIARY TRAP PRIMER CONNECTION AND VANDAL PROOF SCREWS.

ADJUSTABLE PVC FLOOR CLEANOUT WITH BRONZE COVER AND VANDAL PROOF SCREWS.

GCO IN LANDSCAPE, GCO SHALL BE A GLUE ON THREADED PLUG.

BUILDING INSIDE THE JANITORS CLOSET.

MXV1 - ASSE 1070 COMPLIANT POINT OF USE MIXING VALVE. SET OUTLET TEMP TO 110 DEG F.

### BACKFLOW PREVENTER & PRV NOTES

A NEW RPZ TYPE BACKFLOW PREVENTER SHALL BE PROVIDED AND INSTALLED BY THE G.C. UNDER THE CIVIL SCOPE OF WORK. REFER TO CIVIL SITE PLANS. P.C. TO INSTALL LINE SIZED PRV RATED FOR 75psi WHERE PIPE ENTERS THE

# FREEZE PROTECTION NOTES

THE RESTROOMS AND JANITORS CLOSET ARE NOT BEING PROVIDED WITH ANY HEATERS AT OWNERS REQUEST, PER NCPC 305.4. ALL WATER PIPING SHALL BE PROVIDED WITH A MINIMUM OF R6.5 INSULATION ON ALL PIPE AND FITTINGS. PROVIDED INSULATION SHALL ALSO COMPLY WITH ASTM C177. INSULATION THICKNESS MAY VARY BETWEEN PIPE SIZES TO ACCOMPLISH THIS R-VALUE RATING.

ALL EXPOSED INSULATION IN THE RESTROOMS SHALL BE WRAPPED IN A PVC JACKET, COLOR TO BE SPECIFIED BY THE ARCHITECT.

ALL PIPING SHALL SLOPE DOWN TO THE INCOMING SHUT OFF VALVE TO ALLOW FOR DRAINING OF THE SYSTEM. A DRAIN VALVE WITH HOSE THREAD END SHALL BE LOCATED JUST DOWNSTREAM OF THE BUILDING MAIN SHUT OFF VALVE, ALL PIPING FROM THIS POINT SHALL SLOPE UP AT LEAST 1/16" PER FOOT TO ALLOW WINTER DRAINING.

### HOT WATER SERVICE NOTES

PER NC PLUMBING CODE SECTION 607.1, THIS NON RESIDENTIAL OCCUPANCY IS NOT REQUIRED TO HAVE HOT WATER AT THE LAVATORIES OR MOP SINK.

A POINT OF USE WATER HEATER IS PROVIDED AT THE CONCESSION STAND SINK FOR OCCUPANT CONVENIENCE ONLY.

# SEWER CAMERA AND SMOKE TEST

AFTER ALL NEW UNDERGROUND PIPING AND FIXTURES ARE INSTALLED, THE PLUMBING CONTRACTOR SHALL PERFORM A FULL UNDERGROUND CAMERA OF THE NEW PIPING AS WELL AS THE EXISTING PIPING BELOW THE EXISTING PARKING LOT.

THE PLUMBING CONTRACTOR SHALL FLUSH THE SYSTEM WITH WATER AND THEN CAMERA THE LINE TO IDENTIFY ANY CONSTRUCTION DEBRIS STUCK IN THE PIPES OR LOW SPOTS IN THE PIPING. ALL DEFICIENCIES SHOULD BE ADDRESSED TO ENSURE A FULLY FUNCTIONING SYSTEM.

THE SEWER CAMERA SHALL HAVE RECORDED VIDEO CAPABILITY. THIS VIDEO FILES SHOULD BE SHARED WITH THE ENGINEER AND BUILDING OWNER/LANDLORD.

A SMOKE VENT TEST SHOULD ALSO BE PERFORMED TO MAKE SURE NO OPEN SEWER PIPES REMAIN IN THE SPACE OR ABOVE THE

CEILING.

# PLUMBING LEGEND

CW - COLD WATER

HW **HOT WATER** 

SANITARY SEWER

VENT

WC WATER CLOSET

LAVATORY

UR URINAL JANITORS MOP SINK

STAINLESS STEEL SINK

ELECTRIC WATER COOLER

WATER HAMMER ARRESTOR

FPHB - FREEZE PROOF HOSE BIBB

ELECTRIC WATER HEATER

FLOOR DRAIN

- FLOOR CLEANOUT

EXTERIOR GRADE CLEANOUT

PRESSURE REDUCING VALVE

**BACKFLOW PREVENTER** 

POINT OF USE MIXING VALVE

PLUMBING CONTRACTOR

GENERAL CONTRACTOR

MECHANICAL CONTRACTOR

ELECTRICAL CONTRACTOR EC

BELOW FINISHED FLOOR

PIPE INVERT

BELOW FINISHED GRADE

ABOVE FINISHED FLOOR

ABOVE GROUND

ABOVE FINISHED GRADE

UG UNGERGROUND

# **FIXTURE RUN OUT SIZES**

CW = COLD WATER HW = HOT WATER 110 DEG F

THE FOLLOWING FIXTURES SHALL BE PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR.

- 1/2"CW & 1/2"HW

WC1 & WC2 - 1"CW UR1 & UR-2 - 3/4"CW - 1/2"CW

MXV1

SK1 - 1/2"CW & 1/2"HW - 1/2"CW EWC EWH1 - 1/2"CW & 1/2"HW FPHB - 1/2"CW

# PLUMBING SPECIFICATIONS

- PLUMBING CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FEES, AND PERMITS REQUIRED FOR AND REASONABLY INCIDENTAL TO THE EXECUTION OF THE PLUMBING WORK.
- 2. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE BUILDING CODE, PLUMBING, ENERGY, AND LOCAL BUILDING CODES.
- 3. THE PLUMBING CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLUMBING PLANS, SCHEDULES AND DETAILS PRIOR TO INSTALLATION OF THE PLUMBING SYSTEM AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE OWNER, ARCHITECT AND/OR ENGINEER FOR RESOLUTION. FIELD VERIFY ALL EXISTING LINE SIZES AND LOCATION PRIOR TO BIDDING.
- 4. IT WILL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO INSURE THAT ITEMS TO BE FURNISHED UNDER THIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS, AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS.
- 5. THE PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF THE OTHER TRADES PRIOR TO THE INSTALLATION OF ANY OF HIS PIPING OR EQUIPMENT.
- 6. MEASUREMENTS: BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK, THE PLUMBING CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LINE SIZES AND SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF SAME. HE SHALL ALSO BE RESPONSIBLE FOR VERIFYING THE INVERT ELEVATION OF THE EXISTING SANITARY PIPING PRIOR TO CONSTRUCTION.
- OF MATERIALS: ALL MATERIALS USED SHALL BE NEW UNLESS OTHERWISE SHOWN OR CALLED FOR, AND SHALL BE FURNISHED IN ACCORDANCE WITH STANDARD SPECIFICATION OF THE AMERICAN SOCIETY FOR TESTING MATERIALS. THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, THE AMERICAN CONCRETE INSTITUTE, AND OTHER GUIDE SPECIFICATIONS.
- 8. DIAGRAMS AND COORDINATION: THE DRAWINGS ARE DIAGRAMMATIC AND SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. THE DRAWINGS INDICATE OFFSETS REQUIRED, BUT BY NO MEANS INDICATE ALL SUCH SITUATIONS.
- 9. INSPECTIONS: THE CONTRACTOR MUST AT ALL TIMES LEND ANY ASSISTANCE NECESSARY FOR ENGINEERS OR THEIR AUTHORIZED REPRESENTATIVE TO MAKE TESTS, INSPECTIONS, ETC.
- 10. BLOWING OUT, CLEANING AND TESTING SYSTEMS: ALL PIPING AND EQUIPMENT SHALL BE BLOWN OUT UNDER PRESSURE AND CLEANED OF FOREIGN MATTER BEFORE THE SYSTEM IS PUT INTO OPERATION. EQUIPMENT SHALL NOT BE CONNECTED TO PIPING UNTIL IT HAS BEEN BLOWN OUT AND CLEANED. PRESSURE TEST ALL NEW WATER PIPING SYSTEM. ANY DEFECTS MADE EVIDENT BY THE TEST SHALL BE CORRECTED BY THIS CONTRACTOR WITHOUT EXTRA COST TO THE OWNER. DISINFECT WATER PIPING IN ACCORDANCE WITH N.C. PLUMBING CODE, SECTION 610.1.
- 11. GUARANTEE: CONTRACTOR SHALL GUARANTEE HIS MATERIAL, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS AFTER DATE OF FINAL ACCEPTANCE BY ENGINEERS AND OWNERS (PARTS AND LABOR). ALL GUARANTEE FAILURE SHALL BE CORRECTED OR REPLACED BY CONTRACTOR AS SOON AS POSSIBLE AFTER NOTIFICATION OF SUCH FAILURE.
- 12. PIPING AND FITTINGS: <u>SANITARY WASTE & VENT PIPING</u>: PVC PIPE AND FITTINGS CONFORMING TO ASTM D-2665. NO FOAM CORE PVC PIPE WILL BE ACCEPTABLE. ALL TRAPS EXPOSED IN UN-HEATED SPACES SHALL BE WRAPPED WITH INSULATION THAT IS SIMILAR TO THAT OF THE WATER PIPING LISTED IN SECTION 15 OF THESE SPECS.
- 13. ABOVE GROUND WATER PIPING: TYPE L HARD COPPER WATER PIPING CONFORMING TO ASTM-B-88. WROUGHT-COPPER FITTINGS CONFORMING TO ASTM-B-16.23. ALL WATER PIPING SHALL BE SLOPED AT MINIMUM 1/16" DOWN TOWARDS BUILDING MAIN VALVE IN JANITORS CLOSET. THIS IS REQUIRED TO ALLOW FOR DRAINING OF THE WATER FROM THE BUILIDNG DURING THE OFF SEASON.
- 14. <u>UNDERGROUND WATER PIPING</u>: TYPE K COPPER.
- 15. INSULATION: PROVIDE INSULATION OF ALL NEW PIPING AS SHOWN: ALL INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES WRITTEN INSTRUCTIONS BY AN APPROVED INSULATION SUBCONTRACTOR. TEST ALL PIPING PRIOR TO COVERING.
- PIPE INSULATION (HEATED AREAS) SHALL BE EITHER 1" FIBERGLASS WITH PAPER COVERING. 1/2" ARMAFLEX MAY BE USED IN WALLS. PIPE INSULATION (UN-HEATED AREAS) SHALL COMPLY WITH NCPC 305.4 AND SHALL BE WRAPPED WIN MINIMUM R6.5 INSULATION. THICKNESS AS REQUIRED FOR EACH INDIVIDUAL PIPE SIZE. ALL INSULATION IN UN-HEATED AREAS SHALL HAVE THE ASTM C177 CERTIFICATION AND APPROVAL.
- 16. PROVIDE BALL VALVES TO ISOLATE ALL GROUPS OF FIXTURES AND AS SHOWN ON THE PLANS TO FACILITATE FUTURE SERVICING.
- 17. PROVIDE DIELECTRIC UNIONS OR FLANGES TO ISOLATE DISSIMILAR METALS.
- 18. HORIZONTAL DRAINAGE PIPING 3" AND LARGER SHALL HAVE A MINIMUM FALL OF 1/8" PER FOOT AND PIPING 2" AND SMALLER SHALL HAVE A MINIMUM FALL OF 1/4" PER FOOT. FIELD VERIFY INVERTS PRIOR TO CONSTRUCTION.
- 19. CLEANOUTS SHALL BE PROVIDED IN ALL SANITARY PIPING AS SHOWN OR INDICATED BY
- 20. WCO SHALL HAVE STAINLESS STEEL COVERS.
- 21. ALL VENT PIPING SHALL SLOPE UP TO THE DISCHARGE POINT.
- 22. MAINTAIN ALL FIRE RATINGS. SUBMIT UL ASSEMBLY TO LOCAL FIRE MARSHAL FOR
- 23. G.C. SHALL BE RESPONSIBLE FOR ALL FLOOR SLAB POURING. TRENCHING AND BACKFILL SHALL BE BY P.C.

PLUMBING SHEET INDEX

P001 PLUMBING COVER SHEET P002 PLUMBING DETAILS P201 PLUMBING FLOOR PLANS

P301 WASTE & VENT RISER DIAGRAM P302 DOMESTIC WATER RISER DIAGRAM

ER TOW HARNE 07/10/2023

SERVI LECTRIC

ш.

SULTANT PLUMBING

S

SEAL

15886

07/10/2023

MO

 $\Box$ 

CES LICENSE NO. F-0238

SHEET NUMBER

CREEK

NEILL'S

P002

FLOOR DRAIN -FINISHED FLOOR COORDINATE HEIGHT WITH -FLOOR FINISH TILE **AUXILIARY TRAP** PRIMER CONNECTION. SEE PLANS FOR REQUIRED LOCATIONS. SPOOL PIECE 1. FLOOR SHALL BE SLOPED TO DRAIN BY G.C. FOR AN AREA APPROX

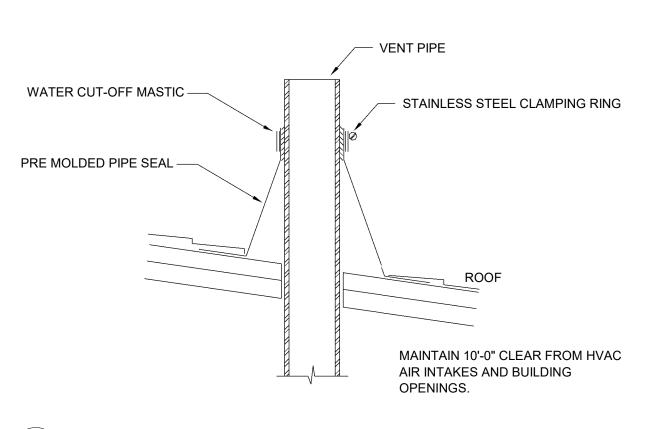
- 12" DIAMETER AROUND DRAIN IN EXISTING SAW CUT FLOORS. FOR NEW SLAB, FLOOR SHOULD SLOPE CONTINUOUSLY TO DRAIN. COORDINATE EXACT LOCATIONS WITH G.C.
- 2. REFER TO SPECIFICATIONS FOR PIPING MATERIAL DETAILS.

1 FLOOR DRAIN DETAIL

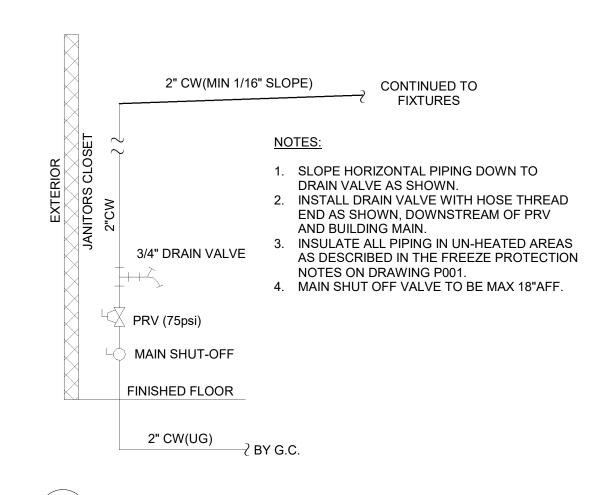
P002 NOT TO SCALE

COUNTERTOP LAVATORY SHOWN. SEE FIXTURE SCHEDULE FOR ACTUAL LAVATORY LAVATORY FRAMING AND COUNTER PROVIDED BY G.C. (IF REQ'D) – WATER SAVER - OFFSET TAILPIECE TRAP PRIMER (IF REQ'D) - CLEANOUT PLUG PIPING IN WALL & UNDER FLOOR BY FLOOR DRAIN WITH — AUXILIARY TRAP - FINISHED WALL PRIMER INLET CONNECTION. FINISHED FLOOR 1/2" COPPER PIPE-UNDER SLAB TO TRAP PRIMER INLET CONNECTION.

4 WATER SAVER P-TRAP P002 NOT TO SCALE



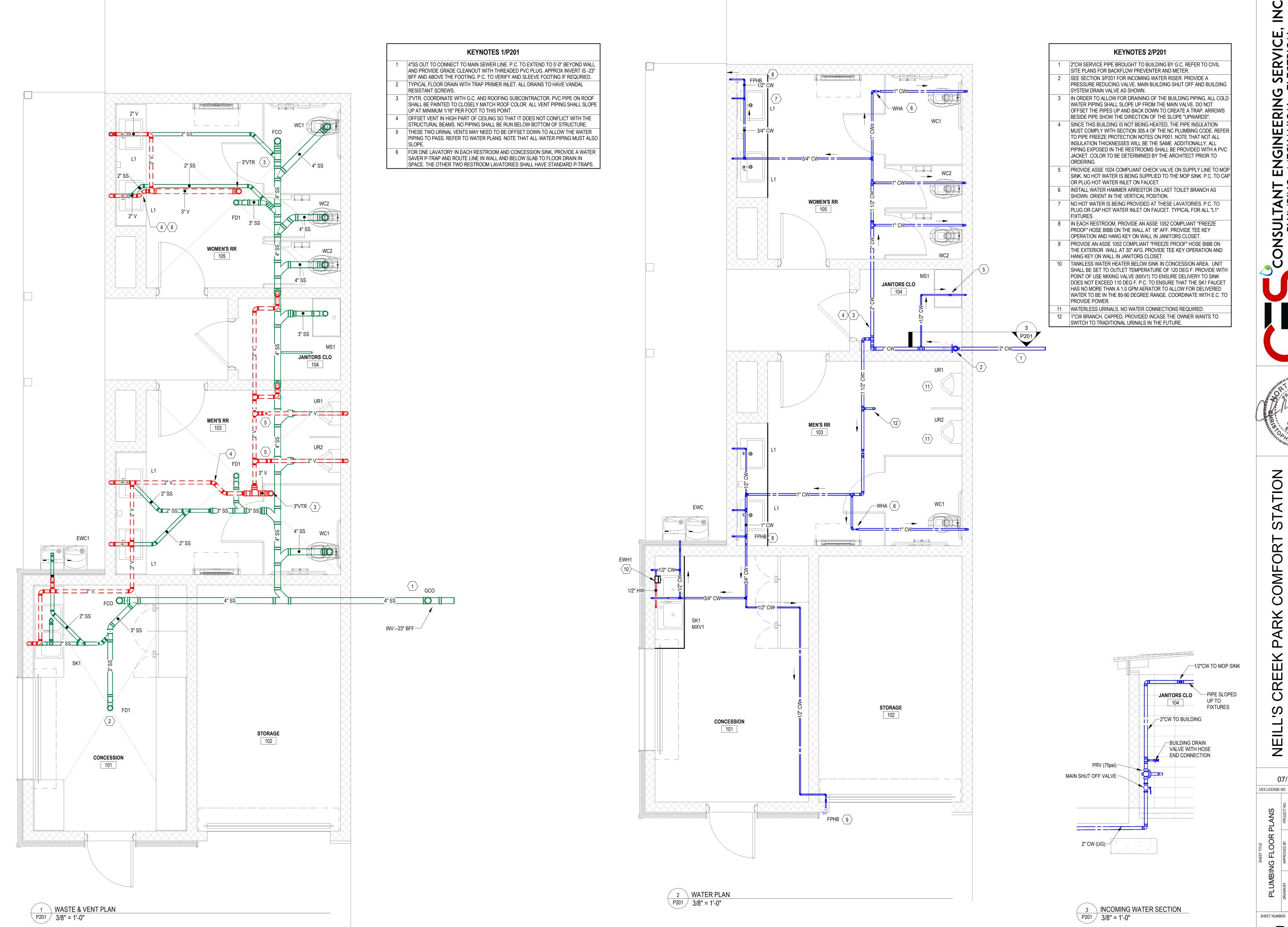
2 VENT THROUGH ROOF SLOPED NOT TO SCALE



INCOMING WATER & BUILDING DRAIN P002 NOT TO SCALE

- LAVATORY OR SINK. REFER TO SCHEDULES FOR EXACT TYPE. 1/2" HOT WATER (110 F) TO FAUCET 1/2" H.W. STOP 1/2" COLD WATER TO FAUCET INSULATE ALL PIPING PER CODE 1/2" C.W. TO MXV1 ASSE 1070 POINT OF USE MIXING VALVE. SET TO 110F OUTLET TEMP 120F HOT WATER 1/2" C.W. SUPPLY OUT OF WALL, PROVIDE ESCUTCHEON \_\_\_\_ JUNCTION BOX OR RECEPTACLE BY E.C. TANKLESS WATER HEATER MOUNT ON WALL OR INSIDE CABINET/VANITY BELOW IF ALLOWED BY THE AHJ, THE MIXING VALVE MAY BE OMITTED AND THE HEATER OUTLET SET TO 110 DEG F. P.C. TO CONFIRM WITH LOCAL AHJ FIXTURE AS HIGH AS POSSIBLE. SET OUTLET TEMP TO 120F. FINISH FLOOR

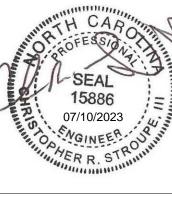
5 TANKLESS WATER HEATER NOT TO SCALE



NGINEERING SERVICE MECHANICAL • ELECTRICAL ш •

S

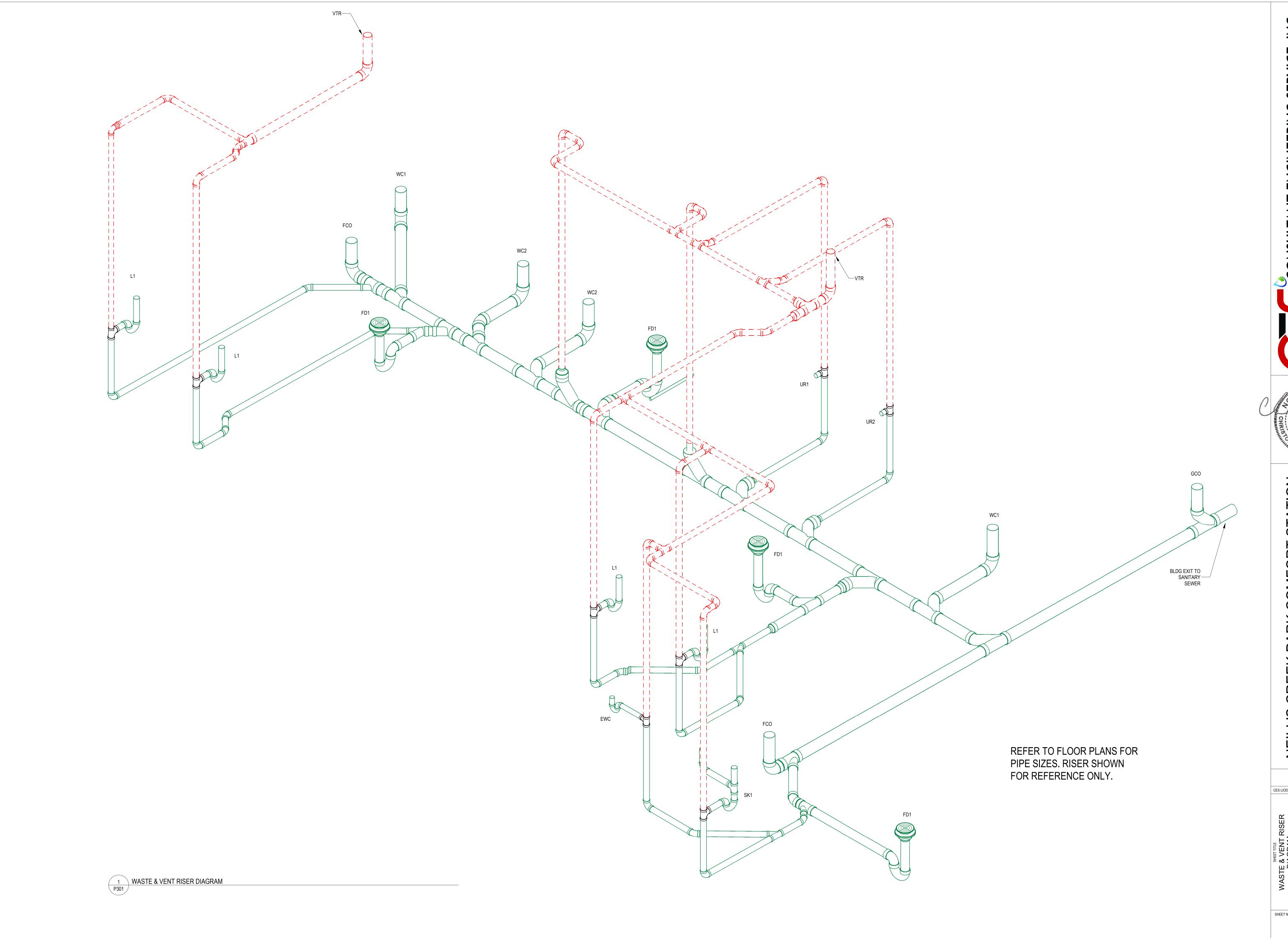




RIVER TOWNSHIP, TOWN OF HARNETT COUNTY, NC CREEK

NEILL'S 07/10/2023 CES LICENSE NO. F-0238

P201

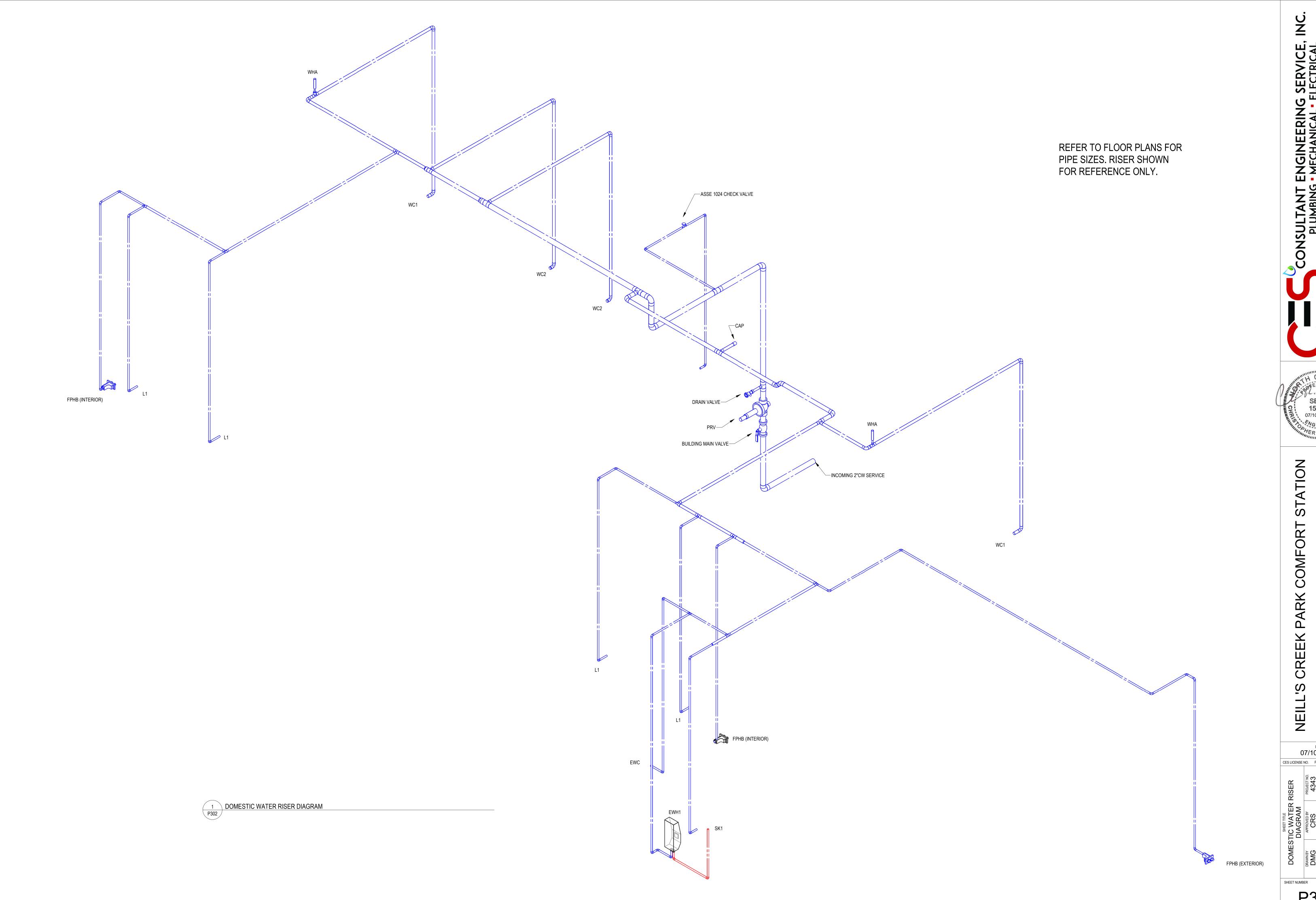


STATION CREEK PARK COMFORT ACK RIVER TOWNSHIP, TOWN OF HARNETT COUNTY, NC NEILL'S

07/10/2023 CES LICENSE NO. F-0238

As instruments of service these drawings and the design represented are the prope CONSTRUCTION DOCUMENTS

P301



ACK RIVER TOWNSHIP, TOWN OF HARNETT COUNTY, NC

07/10/2023

P302