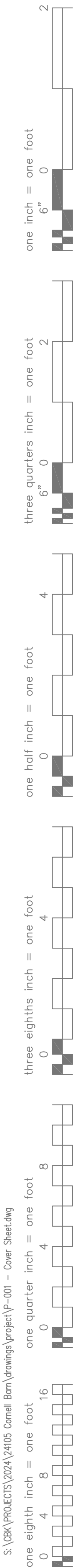


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PLUMBING GENERAL NOTES

INTENT OF DRAWINGS

DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK. BASIC DESIGN CONCEPTS INDICATED ARE MINIMAL AND MUST BE FOLLOWED OR BETTERED. DO NOT SCALE DRAWINGS. CONSULT ARCHITECTURAL DRAWINGS FOR SPACE CONDITIONS.

WORK IS NOT SHOWN IN FINITE DETAIL BUT IS INTENDED TO INCLUDE ITEMS NECESSARY FOR COMPLETION AND PROPER OPERATION.

COORDINATION OF WORK

CAREFULLY CHECK SPACE REQUIREMENTS WITH OTHER TRADES TO INSURE THAT ALL MATERIALS CAN BE INSTALLED IN THE SPACES ALLOTTED THERETO, INCLUDING FINISHED SUSPENDED CEILINGS.

TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION. ALL WORK IS NEW UNLESS DESIGNATED AS EXISTING.

WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH OTHER TRADES TO INSURE THAT ALL TRADES HAVE THE INFORMATION NECESSARY SO THEY MAY PROPERLY INSTALL ALL THE NECESSARY CONNECTIONS AND EQUIPMENT. IDENTIFY ALL WORK ITEMS (VALVES, DRAINS, ETC.) IN AN APPROVED MANNER IN ORDER THAT THE GENERAL CONTRACTOR WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS. CONSULT WITH OTHER TRADES REGARDING EQUIPMENT SO, WHEREVER POSSIBLE, MOTORS AND CONTROLS ARE OF THE SAME MANUFACTURE.

FURNISH AND SET ALL SLEEVES FOR PASSAGE OF PIPES AND CONDUITS THROUGH STRUCTURAL MASONRY, CONCRETE WALLS AND FLOORS, AND ELSEWHERE AS WILL BE REQUIRED FOR THE PROPER PROTECTION OF EACH PIPE PASSING THROUGH BUILDING SURFACES. PROVIDE REQUIRED SUPPORTS AND HANGERS FOR PIPING, FIXTURES AND EQUIPMENT, SO LOADING WILL NOT EXCEED ALLOWABLE LOADINGS OF STRUCTURE.

ALL CUTTING AND PATCHING REQUIRED FOR PLUMBING WORK IN THE BUILDING STRUCTURE SHALL BE DONE BY THE GENERAL CONTRACTOR. PROVIDE ALL ITEMS AND WORK CALLED FOR IN THIS DIVISION OF THE SPECIFICATIONS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS INCLUDES ALL INCIDENTALS, EQUIPMENT, APPLIANCES, SERVICES, HOISTING, SCAFFOLDING, SUPPORTS, TOOLS, SUPERVISION, LABOR, CONSUMABLE ITEMS, FEES, LICENSES, ETC., NECESSARY TO PROVIDE COMPLETE SYSTEMS. PERFORM START UP AND CHECK OUT ON EACH ITEM AND SYSTEM TO PROVIDE FULLY OPERABLE SYSTEMS.

COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS. COMPLY WITH ALL FEDERAL, STATE, CITY, AND OTHER APPLICABLE CODES AND ORDINANCES SUBJECT TO PLUMBING DESIGN. IF ANY CONFLICT ARISES BETWEEN THESE SPECIFICATIONS, CODES AND ORDINANCES, IMMEDIATELY NOTIFY THE ARCHITECT. DO NOT DEVIATE FROM THE SPECIFICATIONS NOR INSTALL ANY WORK WHICH MAY BE IN CONFLICT WITH CODES AND ORDINANCES UNTIL THE CONFLICT IS RESOLVED AND THE SOLUTION APPROVED BY THE ARCHITECT.

NEW YORK STATE BUILDING CODE AND PLUMBING CODE.

PIPE HANGERS AND SUPPORTS: MSS SP-58. ASME STANDARDS. UL COMPLIANCE. COMPLY WITH REQUIREMENTS OF LOCAL UTILITY COMPANY.

CONFORM THE PLUMBING WORK TO THE REQUIREMENTS HEREIN. PROVIDE OFFSETS, FITTINGS, DRAINS, AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK, AND ARRANGE THE WORK ACCORDINGLY. PROVIDE SUCH PIPING, FITTINGS, VALVES, AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

WORKMANSHIP- ONLY THE BEST OF WORKMANSHIP IN ACCORDANCE WITH PRESENT STANDARDS WILL BE ACCEPTABLE. ANY WORK INSTALLED AND ADJUDGED BY THE ENGINEER TO BE BELOW STANDARDS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

PERMITS AND FEES

PLACE VALVES, UNIONS, DRAINS, AND ITEMS REQUIRING MAINTENANCE, ADJUSTMENT, OR REPAIR, IN ACCESSIBLE LOCATIONS.

ESTABLISH CEILING MARKER LOCATIONS AND SIZES.

ELECTRICAL CONNECTIONS

POWER SUPPLY AND ALARM WIRING WILL BE PROVIDED UNDER ELECTRICAL.

TO FACILITATE ELECTRICAL CONNECTIONS EQUIP ELECTRICAL ITEMS WITH NEMA ENCLOSURES HAVING ADEQUATE KNOCKOUTS, CONNECTORS, TERMINAL BLOCKS AND/OR CONTACTS.

ALL PIPING SHALL BE INSTALLED PER SEISMIC REQUIREMENT.

PIPE HANGER AND SUPPORT INSTALLATION

REFER TO MSS-SP-58; STANDARD FOR PIPE HANGERS AND SUPPORTS.

SUPPORT, ANCHOR, AND GUIDE PIPING SYSTEMS TO WITHSTAND STATIC AND DYNAMIC LOAD CONDITIONS, TO ALLOW FOR EXPANSION AND CONTRACTION; TO PREVENT VIBRATION AND SWAYING; TO MAINTAIN ALIGNMENT AND MINIMIZE VERTICAL DEFLECTION.

DO NOT SUPPORT PIPING FROM OTHER PIPING OR DUCTWORK. DO NOT USE WIRE, TAPE, METAL BANDS, OR OTHER MAKE-SHIFT DEVICES AS MEANS OF SUPPORT OR ATTACHMENT.

PIPE SLEEVE INSTALLATION

PROVIDE FOR PIPING PASSING THROUGH WALLS, PARTITIONS, AND SLAB SLEEVES SIZED AT LEAST 1 INCH LARGER THAN OD OF PIPE FOR UNINSULATED LINES AND OF PIPE PLUS INSULATION FOR INSULATED LINES.

SLEEVES ARE REQUIRED FOR PIPING PASSING THROUGH FIRE-RATED WALLS CONSTRUCTED OF METAL STUDS AND GYPSUM WALLBOARD. FLANGE ENDS OF SLEEVES TIGHT TO BOTH SIDES OF WALL. TERMINATE SLEEVES THROUGH WALLS, PARTITIONS, AND CEILINGS FLUSH WITH FINISHED SURFACES; THROUGH SLABS 1/2" ABOVE FLOOR FINISH IN HABITABLE SPACES AND 2" ABOVE ROUGH FINISH IN PIPE SPACES AND OTHER UNFINISHED AREAS.

FILL VOID SPACES BETWEEN PIPING AND PIPE SLEEVES WITH PENETRATION SEAL, OR WITH MINERAL WOOL SEALED WITH FIRE TESTED AND APPROVED ELASTOMERIC CAULKING MATERIALS.

SUBMITTALS

PLUMBING:

PRODUCT DATA: SUBMIT MANUFACTURER'S TECHNICAL PRODUCT DATA, INCLUDING RATED CAPACITIES OF SELECTED MODEL CLEARLY INDICATED, FURNISHED SPECIALTIES AND ACCESSORIES; AND INSTALLATION INSTRUCTIONS.

SHOP DRAWINGS: SUBMIT MANUFACTURER'S ASSEMBLY TYPE SHOP DRAWINGS INDICATING DIMENSIONS, ROUGHING-IN REQUIREMENTS, REQUIRED CLEARANCES, AND METHODS OF ASSEMBLY OF COMPONENTS AND ANCHORAGES.

MAINTENANCE DATA: SUBMIT MAINTENANCE DATA AND PARTS LISTS FOR EACH TYPE OF PLUMBING FIXTURE AND ACCESSORY, INCLUDING "TROUBLE-- SHOOTING" MAINTENANCE GUIDE. INCLUDE THIS DATA, PRODUCT DATA, AND AS BUILT DRAWINGS IN 3 RING BINDER AT COMPLETION OF PROJECT.

ADJUSTMENTS

UPON COMPLETION OF WORK, PERFORM THE FOLLOWING ADJUSTMENT PROCEDURES:

ADJUST SYSTEMS COMPONENTS FOR PROPER PERFORMANCE.

OPEN AND CLOSE VALVES, SET IN PROPER OPERATING POSITION.

PIPING IDENTIFICATION

CONSPICUOUSLY IDENTIFY PIPING WITH SELF-ADHERING VINYL PLASTIC COLOR BANDS AND PIPE MARKERS IMPRINTED WITH LEGEND, BASED ON ANSI A13.1 "SCHEME FOR THE IDENTIFICATION OF PIPING SYSTEMS"

APPLY LEGENDS TO FEED AND CROSS MAIN PIPING ADJACENT TO CHANGES IN DIRECTION, WHERE PIPES PASS THROUGH WALLS OR FLOORS, AT INTERVALS NOT EXCEEDING 40 FEET ON STRAIGHT PIPING RUNS, AND ADJACENT TO CROSS MAIN CONNECTIONS WITH FEED MAIN.

MINIMUM LETTER SIZE:

1/2" FOR PIPING 3/4" TO 1-1/4" OD.
3/4" FOR PIPING 1-1/2" TO 2" OD.

MINIMUM COLOR BAND WIDTH:

8" FOR PIPING 3/4" TO 2" OD.

OPERATING INSTRUCTIONS

INSTRUCT OWNER'S OPERATING PERSONNEL ON PROPER CARE, MAINTENANCE AND OPERATING PROCEDURES.

CLEANING

CLEAN PIPING PRIOR TO PAINTING AND INSTALLATION OF INSULATION.

UPON COMPLETION OF WORK PERFORM THE FOLLOWING CLEANING PROCEDURES:

REMOVE PROTECTIVE COVERS AFTER PAINTING.
CLEAN PIPING AND EQUIPMENT.
REMOVE SURPLUS MATERIALS AND RUBBISH.
RESTORE DAMAGED SURFACE FINISHES.

INSTALLATION - GENERAL

PREPARATION: CUT PIPE AND TUBING ENDS SQUARE, REMOVE BURRS AND REAM TO ORIGINAL BORE. CLEAN JOINT SURFACES PRIOR TO ASSEMBLY. WIPE OFF EXCESS JOINTING COMPOUNDS AND FLUX RESIDUE.

SCREWED- USE AMERICAN STANDARD TAPER PIPE THREADS. CUT SHARP AND TRUE AND SUITABLE FOR NORMAL ENGAGEMENT. SCREW THREADED ITEMS UP CLOSE TO SHOULDERS WITH NOT MORE THAN THREE INCOMPLETE THREADS EXPOSED. DO NOT USE LAMP WICK, CORD, WOOL OR OTHER "WICKING" MATERIALS. REPAIR LEAKS WITH NEW MATERIALS. DO NOT PEEN OR CAULK. "TEFLON" PIPE JOINT TAPE OR JOINT COMPOUNDS COMPOSED OF RED LEAD AND GRAPHITE GROUND IN LINSEED OIL WILL BE PERMITTED APPLIED TO MALE THREADS ONLY.

SOLDER: MAKE UP JOINTS WITH 95-5 TIN-ANTIMONY WIRE SOLDER AND NON-- CORROSIVE FLUX. DO NOT USE 50-50 OR OTHER TIN-LEAD SOLDERS.

MECHANICAL COUPLING: USE MANUFACTURER'S MATERIALS AND METHODS.

PIPE HANGER AND SUPPORT INSTALLATION

REFER TO MSS-SP-58; STANDARD FOR PIPE HANGERS AND SUPPORTS.

SUPPORT, ANCHOR, AND GUIDE PIPING SYSTEMS TO WITHSTAND STATIC AND DYNAMIC LOAD CONDITIONS, TO ALLOW FOR EXPANSION AND CONTRACTION; TO PREVENT VIBRATION AND SWAYING; TO MAINTAIN ALIGNMENT AND MINIMIZE VERTICAL DEFLECTION.

DO NOT SUPPORT PIPING FROM OTHER PIPING OR DUCTWORK. DO NOT USE WIRE, TAPE, METAL BANDS, OR OTHER MAKE-SHIFT DEVICES AS MEANS OF SUPPORT OR ATTACHMENT.

FIRE/SMOKE STOPPING

FILL VOID SPACE BETWEEN PIPING AND PIPE SLEEVES WITH AN APPROVED FIRE/SMOKE SEAL.

TESTING

GENERAL: TEST PLUMBING SYSTEMS TO SATISFACTION OF BUILDING OFFICIAL. DO NOT CLOSE IN, CONCEAL, OR COVER UP ANY WORK UNTIL IT HAS BEEN TESTED, INSPECTED, AND APPROVED.

FLUSH PIPING, PRIOR TO TESTING, TO REMOVE FOREIGN MATERIALS WHICH MAY HAVE ENTERED DURING COURSE OF INSTALLATION. CLEAN FILTERS AND STRAINERS AFTER FLUSHING.

GUARANTEE

SUPPLY TWO COPIES OF A WARRANTY COUNTERSIGNED AND GUARANTEED BY CONTRACTOR, STATING THAT IMPERFECT SYSTEM OPERATION AND ALL DEFECTS IN LABOR AND MATERIALS OF WORK WILL BE REPAIRED WITHOUT COST TO OWNER FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION, AND STATING THAT ALL EQUIPMENT HAS BEEN FULLY SERVICED AND LEFT IN PROPER OPERATING CONDITION.

ALSO GUARANTEE THAT SERVICING WILL BE PROVIDED WITHOUT COST DURING GUARANTEE PERIOD.

PLUMBING SPECIFICATIONS

PLUMBING MATERIALS:

DOMESTIC HOT AND COLD WATER: PIPING -- HARD DRAWN COPPER TUBING TYPE "L" WITH SOLDERED JOINTS WITH PEX A ON ALL CONCEALED CONNECTIONS TO FIXTURES

SANITARY WASTE AND DRAINAGE: PIPING -- NO HUB CAST IRON VENT: SCHEDULE 40 PVC.

VALVES

GATE -- GVT: 2" AND SMALLER ALL BRONZE, SOLID WEDGE, RISING STEM, SOLDER ENDS, 200 PSI WOG, NIBCO FIGURE S-111.

GATE-GVS: 2" AND SMALLER, ALL BRONZE, SOLID WEDGE, RISING STEM, THREADED ENDS, 200 PSI WOG, NIBCO FIGURE S-111.

CHECK -- CVT: ALL BRONZE, HORIZONTAL SWING, REGRINDING TYPE, Y PATTERN, RENEWABLE SEAT AND DISC, 200 PSI NON-SHOCK COLD WATER; SOCKET END NIBCO FIGURE S-413-W, THREADED END, NIBCO FIGURE T-413-Y.

BALL -- 2" AND SMALLER BVB -- BRONZE BODY AND BALL, TEFLON SEATS AND SEALS, LEVER HANDLE, 400 PSI WOG, SOCKET END-NIBCO S-580, THREADED END-NIBCO T-580.

PIPE HANGER MATERIAL STANDARDS

BOLTING -- ASTM A307, GRADE A.

CAST IRON -- ASTM A48, GRADE 30.

FORGINGS -- AST, A521, GRADE CA.

MALLEABLE IRON -- ASTM A47, ASTM A197.

STEEL -- ASTM A36, ASTM A569, ASTM A570.

STEEL PIPE -- ASTM A53, ASTM A120.

STEEL ROD -- ASTM A36, ASTM A575.

PIPE HANGER COMPONENTS

COMPONENTS: DESIGNED WITH MINIMUM SAFETY FACTOR OF 5; OF ALL METAL CONSTRUCTION; ASSEMBLED WITH CORROSION RESISTANT SQUARE HEAD MACHINE BOLTS AND SQUARE OR HEX HEAD NUTS, STEEL WASHERS; IN SUCH MANNER AS TO PREVENT SELF-DISENGAGEMENT.

PIPE ATTACHMENTS: CAPABLE OF VERTICAL ADJUSTMENT UNDER LOAD, SHAPED TO OD OF PIPING, SIZED TO ALLOW CONTINUOUS INSULATION.

SURFACE FINISH -- UNINSULATED COPPER AND BRASS PIPING; COPPER-- PLATED OR PLASTIC COATED.

SURFACE FINISH -- CHROME PLATED PIPING: CHROME PLATED.

SURFACE FINISH -- GENERALLY: CORROSION RESISTANT PAINT COATING.

ESCUTCHEONS

PAINTED SURFACES: PRIME COATED SHEET STEEL.

ACOUSTICAL SURFACES: FACTORY PAINTED TO MATCH SURFACE SHEET STEEL.

PREFINISHED SURFACES: CHROME-PLATED CAST BRASS.

PIPE SLEEVES, SEALS AND ADAPTORS

INTERIOR PARTITIONS: #20 GAUGE GALVANIZED STEEL, LOCK SEAM JOINT.

FLOOR DRAIN SEAL

PROVIDE GREEN DRAIN WATERLESS DRAIN TRAP SEAL AT ALL FLOOR DRAINS.

FIRE/SMOKE STOPPING

FILL VOID SPACE BETWEEN PIPING AND PIPE SLEEVES WITH AN APPROVED FIRE/SMOKE SEAL.

PIPE INSULATION

PIPE: SECTIONAL, PREMOLDED FIBROUS GLASS, FACTORY APPLIED FLAME RETARDANT VAPOR BARRIER JACKET. PROVIDE ON ALL HW & CW PIPING 1" THICKNESS FOR CW AND 1-1/2" FOR HW.

MINIMUM DENSITY: 3.5 LBS. PCF.
MAXIMUM K-FACTOR: 0.25 AT 75 DEGREES FAHRENHEIT, MEAN.

VALVES AND FITTINGS: PREMOLDED, FIBROUS GLASS FITTING COVERS, OR FABRICATED MITERED SEGMENTS OF PIPE INSULATION, FINISHED WITH 20-20 COUNT GLASS CLOT EMBEDDED IN SURFACE COATING. NO STAPLES, TACKS OR BANDS.

SURFACE FINISH: EXPOSED: UNIFORM COAT OF SURFACE COATING. CONCEALED: NONE REQUIRED.

ABBREVIATIONS LIST

CW	COLD WATER
C.D.	CLEAN OUT
DN.	DOWN
FD	FLOOR DRAIN
F.C.D.	FLOOR CLEAN OUT
GPM	GALLONS PER MINUTE
HW	HOT WATER
MS	MOP SINK
S	SANITARY
SK	SINK
V	VENT
V.I.F.	VERIFY IN FIELD
WF	WATER FOUNTAIN
V	WASTE
WCD	WALL CLEANOUT
WHA	WATER HAMMER ARESTOR
ELAVH	ELECTRIC HOT WATER HEATER
HLAV	HANDICAPPED LAVATORY
HWC	HANDICAPPED WATER CLOSET
LAV	LAVATORY
WC	WATER CLOSET
SK	SINK
WASH	WASHER
RTU	ROOFTOP UNIT
VTR	VENT THROUGH ROOF
PSK	PANTRY SINK
BT/SH	BATH TUB/SHOWER
RHW	RECIRCULATING HOT WATER
WH	WALL HYDRANT
HWH	HOT WATER HEATER

PLUMBING LEGEND

SYMBOL	DESCRIPTION
— — — — —	COLD WATER PIPING
— — — — —	HOT WATER PIPING
— — — — —	RECIRCULATING HOT WATER PIPING
— GAS —	GAS PIPING
— W —	WASTE PIPING
— SAN —	SANITARY PIPING
— UGS —	UNDERGROUND SANITARY PIPING
— LPG —	LIQUID PROPANE GAS PIPING
— ST —	STORM PIPING
— — — — —	VENT PIPING
○	ELBOW UP
⊕	ELBOW DOWN
⊕	TEE UP
⊕	TEE DOWN
⊕	VALVE IN RISER
⊕	GATE VALVE
⊕	OS&Y GATE VALVE
⊕	ANGLE VALVE
⊕	GLOBE VALVE
⊕	CHECK VALVE
⊕	BALL VALVE
⊕	BUTTERFLY VALVE
⊕	SAFETY RELIEF VALVE
⊕	PLUG VALVE
⊕	PRESSURE REDUCING VALVE
⊕	BACKWATER VALVE
⊕	PIPE ANCHOR
⊕	PIPE GUIDE
⊕	PIPE SLEEVE THRU WALL
⊕	P-TRAP
⊕	RUNNING TRAP
⊕	HOSE BIBB
⊕	WALL HYDRANT
⊕	TRAP SEAL PRIMER
⊕	FLAP CONNECTION
⊕	STRAINER
⊕	UNION
⊕	FLANGE CONNECTION
⊕	CLEAN OUT
⊕	FLOOR CLEAN OUT
⊕	WALL CLEAN OUT
⊕	FLOOR DRAIN
⊕	AREA DRAIN
⊕	FLOOR SINK
⊕	ROOF DRAIN
⊕	SHOWER HEAD
⊕	PRESSURE GAUGE
⊕	THERMOMETER
⊕	CONNECT TO EXISTING
⊕	DISCONNECT FROM EXISTING
⊕	RISER DESIGNATION
⊕	CURB VALVE WITH COVER PLATE

GENERAL NOTES

1. THE PLUMBING INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE PLUMBING SECTION OF THE BUILDING CODE OF THE STATE OF NEW YORK
2. CONTRACTOR SHALL SCHEDULE AND PERFORM HIS WORK IN COORDINATION WITH THE OWNERS REPRESENTATIVE.
3. ALL WORK SHALL BE IN COMPLIANCE WITH OWNERS REQUIREMENTS AND IN COOPERATION WITH THE OWNERS REPRESENTATIVE.
4. LOCATIONS OF EQUIPMENT ROUGHING SHOWN ON THIS DRAWING ARE DIAGRAMMATIC AND THE CONTRACTOR SHALL VERIFY FINAL EQUIPMENT SIZE, LOCATION AND ALL ROUGHING REQUIREMENTS.
5. THE FIXTURE LOCATIONS SHOWN ARE DIAGRAMMATIC. SEE ARCHITECTURAL DRAWINGS FOR FINAL LOCATIONS.
6. PITCH ON DRAIN PIPING SHALL BE NO LESS THAT 1/4" PER FOOT OF RUN.
7. ALL PIPING INSTALLED ON THE PROJECT SHALL BE PRESSURE TESTED PER NEW YORK STATE CODE. WATER PIPING SHALL BE HYDROSTATICALLY TESTED TO 200 PSIG FOR A PERIOD OF ONE HOUR WITHOUT LOSS OF PRESSURE. SANITARY, WASTE AND VENT ROUGH PIPING SHALL BE TESTED AS A SYSTEM OR IN SECTIONS. IF TESTED AS A SYSTEM ALL OPEN PIPING SHALL BE TIGHTLY CLOSED, EXCEPT THE HIGHEST OPENING, AND THE SYSTEM COMPLETELY FILLED WITH WATER TO POINT OF OVERFLOW. ALL SYSTEM JOINTS SHALL BE INSPECTED FOR WATER TIGHTNESS. ANY JOINT FOUND LEAKING SHALL BE REPAIRED AND THE TEST REPEATED UNTIL SYSTEM JOINTS ARE WATER TIGHT. IF SYSTEM IS TESTED IN SECTIONS, EACH OPENING SHALL BE TIGHTLY PLUGGED EXCEPT THE HIGHEST OPENING OF THE SECTION UNDER TEST, AND EACH SECTION SHALL BE FILLED WITH WATER BUT NO SECTION SHALL BE TESTED WITH LESS THAN 10-FOOT HEAD OF WATER. WATER SHALL BE KEPT IN THE SYSTEM OR THE PORTION UNDER TEST FOR AT LEAST 15 MINUTES BEFORE INSPECTION STARTS. AFTER THE FIXTURES HAVE BEEN SET AND THEIR TRAPS FILLED WITH WATER, THEIR CONNECTIONS SHALL BE TESTED AND PROVED GAS AND WATER TIGHT. GAS TIGHTNESS TESTS SHALL BE CONDUCTED USING EITHER THE SMOKE OR PEPPERMINT TEST.
8. THE USE OF THREADED ROD FOR SUPPORTS IN COMPRESSION SHALL NOT BE ACCEPTED. THE CONTRACTOR SHALL USE B-LINE SYSTEMS B22 CHANNEL, IN SINGLE OR COMBINATION SHAPES, WITH APPROPRIATE ACCESSORIES. B-LINE B280 POST BASE SHALL BE USED FOR ALL VERTICAL SUPPORTS. FINISH SHALL BE B-LINE "DURA-GREEN" EPOXY COATING.

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3	06-27-2025	ISSUED FOR PRICING
2	01-09-2025	ISSUED FOR PERMIT
1	12-20-2024	PROGRESS SET

ISSUE NO.	ISSUE DATE	DESCRIPTION

COOPERATIVE EXTENSION /
PUTNAM COUNTY
PROPOSED BUILDING AT TILLY
FOSTER FARM MECHANICAL /
PLUMBING / ELECTRIC CORNELL
100 NY 312
BREWSTER, NEW YORK, 10509

SYMBOLS, ABBREVIATIONS,
DRAWING LIST AND NOTES

PROJECT NO.:	2752-00	SCALE: AS INDICATED
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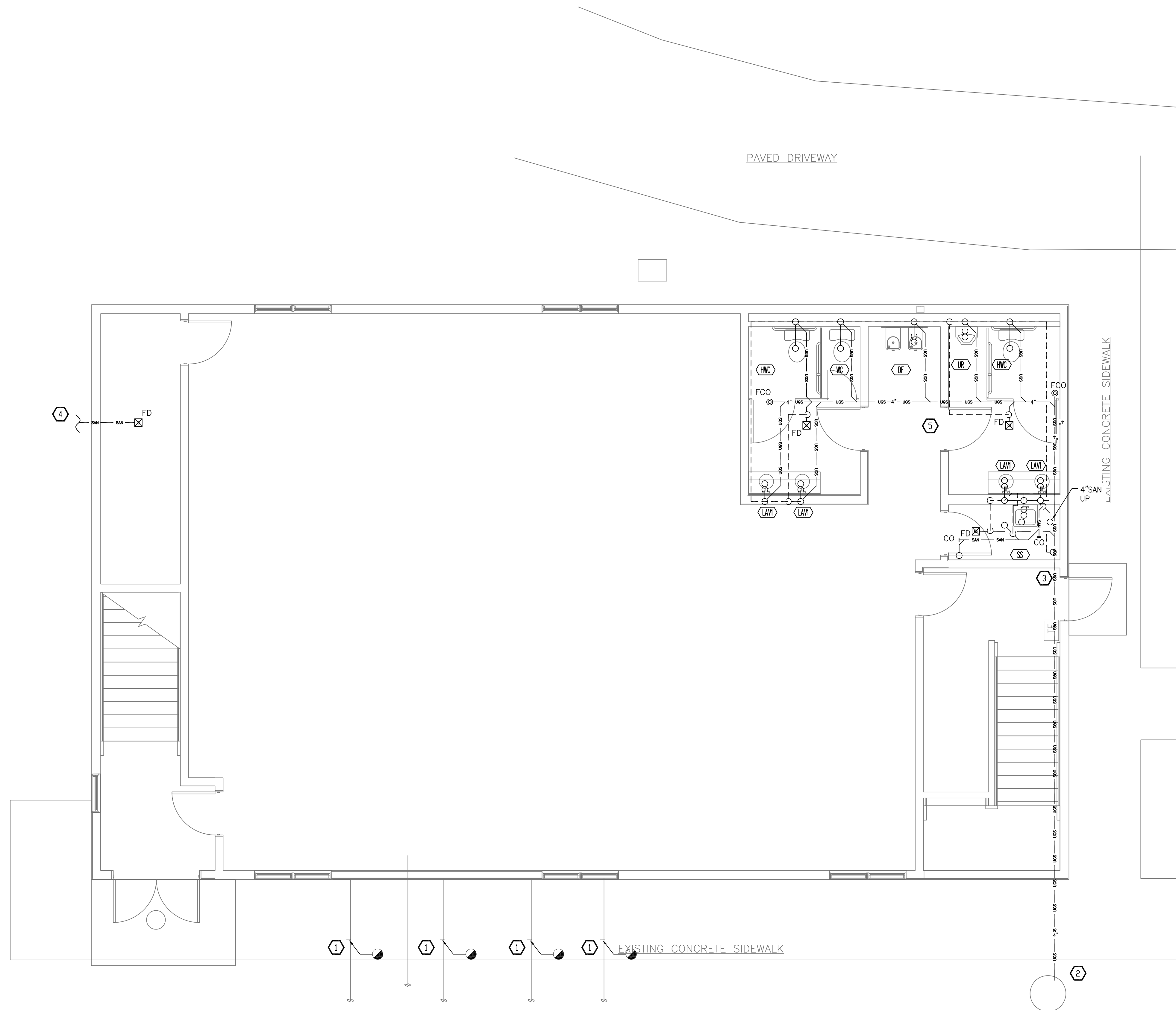
DRAWING NO.:

P-001

FIRST FLOOR SANITARY CONSTRUCTION PLAN

DRAWING NO.:

P-201



1 FIRST FLOOR SANITARY CONSTRUCTION PLAN
SCALE: 1/4"=1'-0"

CONSTRUCTION WORK NOTES

- ① EXISTING SANITARY TO BE CUT BACK AND CAPPED.
- ② EXTEND NEW 4" SANITARY TO EXISTING MANHOLE. MODIFY MANHOLE AS NEEDED. COORDINATE WITH SITE ENGINEER.
- ③ 3" VENT TO ROOF.
- ④ 3" SANITARY TO SITE SANITARY. COORDINATE WITH SITE ENGINEER.
- ⑤ PIPING WHICH CAN BE ACCOMMODATED WITHIN THE PROPOSED WOOD TRUSS FRAMING SHOULD BE ROUTED THROUGH THE TRUSS WHERE FEASIBLE.

3	06-27-2025	ISSUED FOR PRICING
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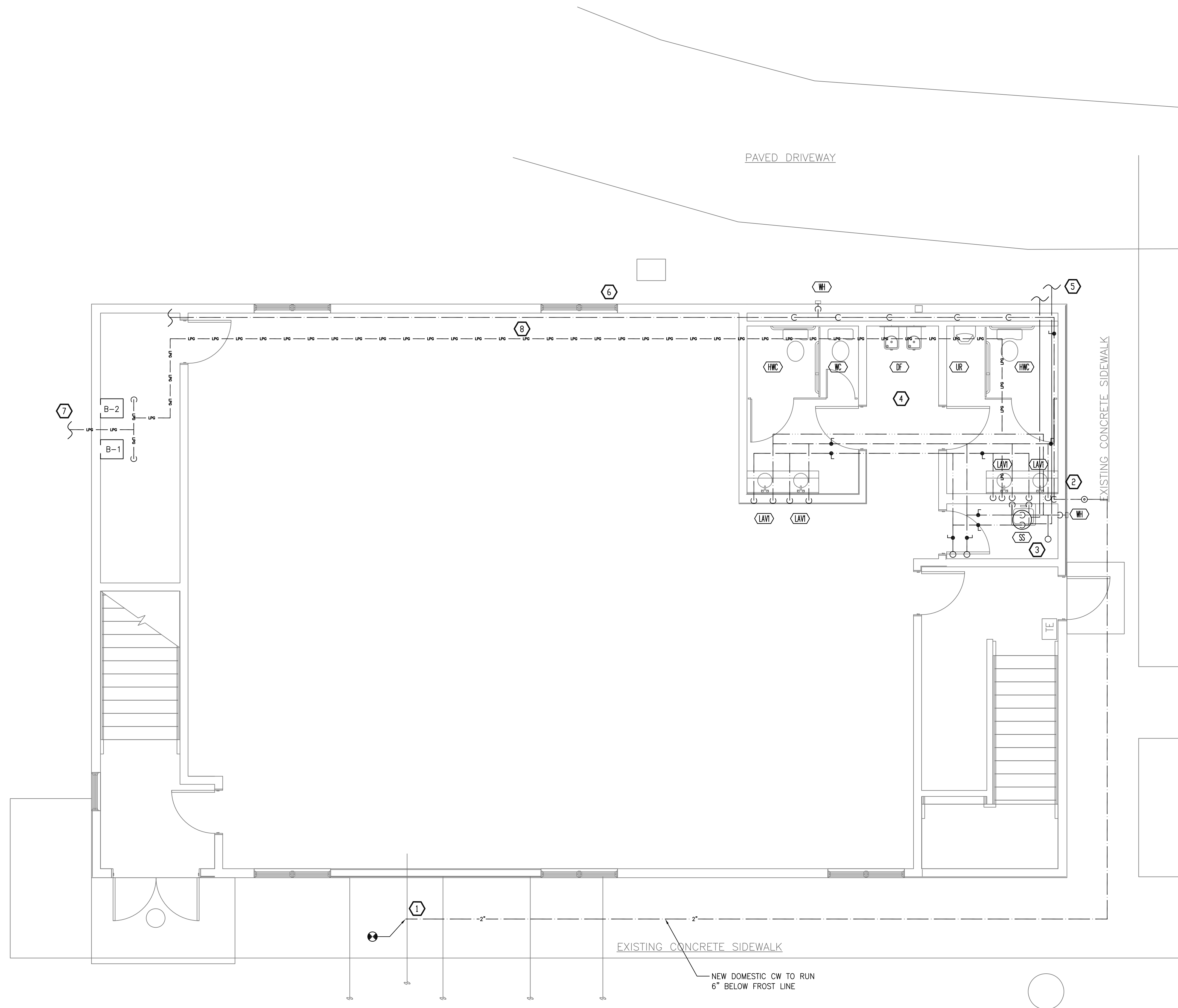
COOPERATIVE EXTENSION /
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PROPOSED BUILDING AT TILLY
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BREWSTER, NEW YORK, 10509

FIRST FLOOR DOMESTIC WATER AND PROPANE CONSTRUCTION PLAN

PROJECT NO.:	2752-00	SCALE: AS INDICATED
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DRAWING NO.:

P-202



① FIRST FLOOR DOMESTIC WATER CONSTRUCTION PLAN
SCALE: 1/4"=1'-0"

CONSTRUCTION WORK NOTES

- | | | | |
|---|--|---|---|
| 1 | EXISTING 1-1/2" CW PIPING TO BE CUT BACK AS SHOWN. CONNECT NEW 1-1/2" CW TO EXISTING. COORDINATE WITH SITE PLANS | 6 | 3" MAKEUP TO HEATING SYSTEMS. |
| 2 | PROVIDE AND INSTALL NEW CURB VALVE. | 7 | TO PROPANE TANK. COORDINATE WITH SITE ENGINEER. |
| 3 | WATER HEATER TO BE HUNG ABOVE SERVICE SINK. SEE DETAIL ON P-301. | 8 | PIPING WHICH CAN BE ACCOMMODATED WITHIN THE PROPOSED ROUTED THROUGH THE TRUSS WHERE FEASIBLE. |
| 4 | HOT AND COLD WATER PENETRATING TRUSSES ACROSS CORRIDOR. | | |
| 5 | 3' INTAKE AND EXHAUST VENTS TO EXTERIOR. INSTALL PER MANUFACTURER'S INSTRUCTIONS. | | |

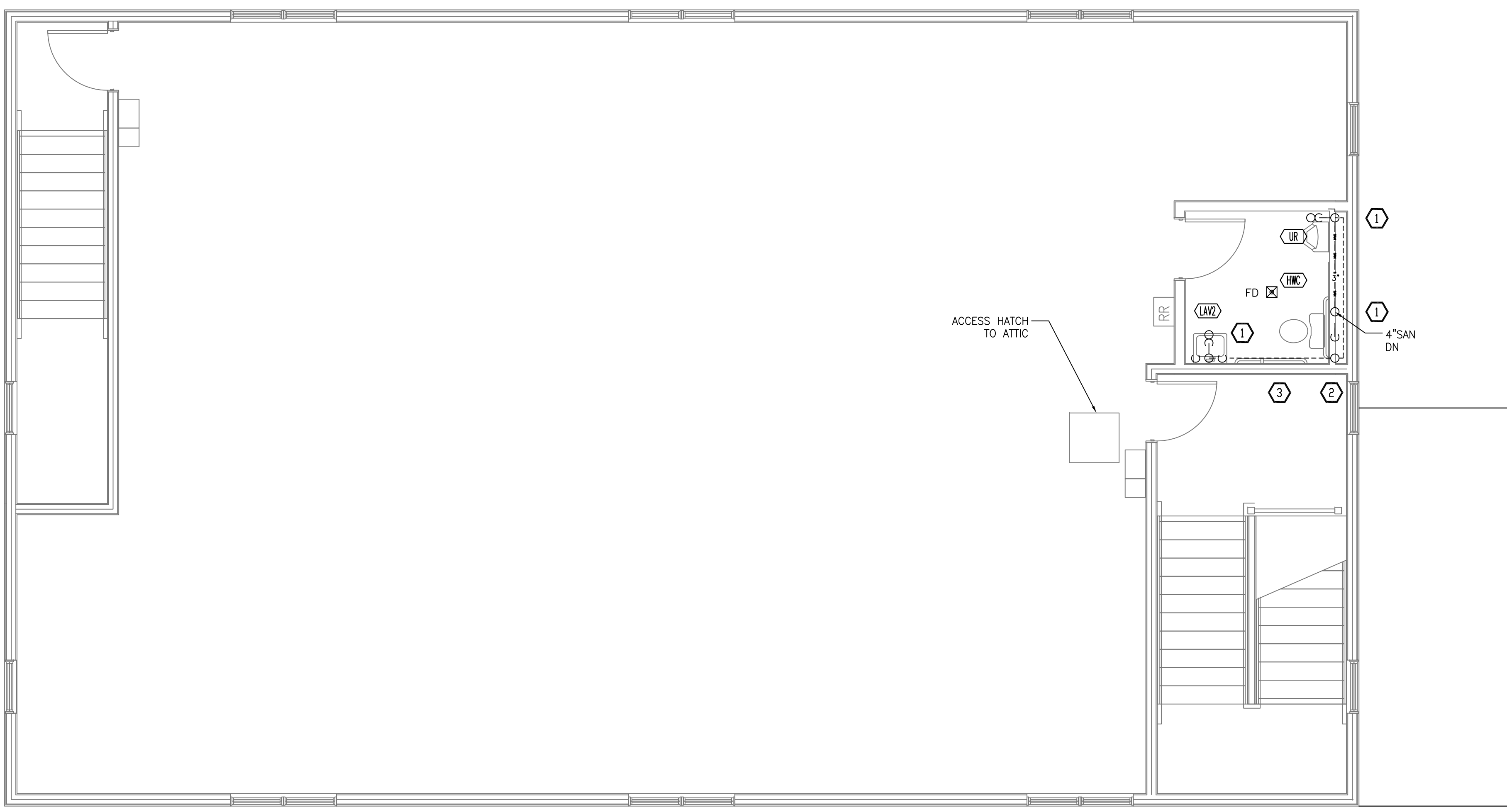
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one eighth inch = one foot
0 4 8 16
one eighth inch = one foot
0 4 8
one quarter inch = one foot
0 4
three eighths inch = one foot
0 4
one half inch = one foot
0 4
three quarters inch = one foot
0 6"
one inch = one foot
0 6" 2

1 SECOND FLOOR CONSTRUCTION PLAN
SCALE: 1/4"=1'-0"

CONSTRUCTION WORK NOTES

- 1 PIPING FED FROM BELOW.
- 2 3" VENT TO ROOF.
- 3 PIPING WHICH CAN BE ACCOMMODATED WITHIN THE PROPOSED WOOD TRUSS FRAMING SHOULD BE ROUTED THROUGH THE TRUSS WHERE FEASIBLE.



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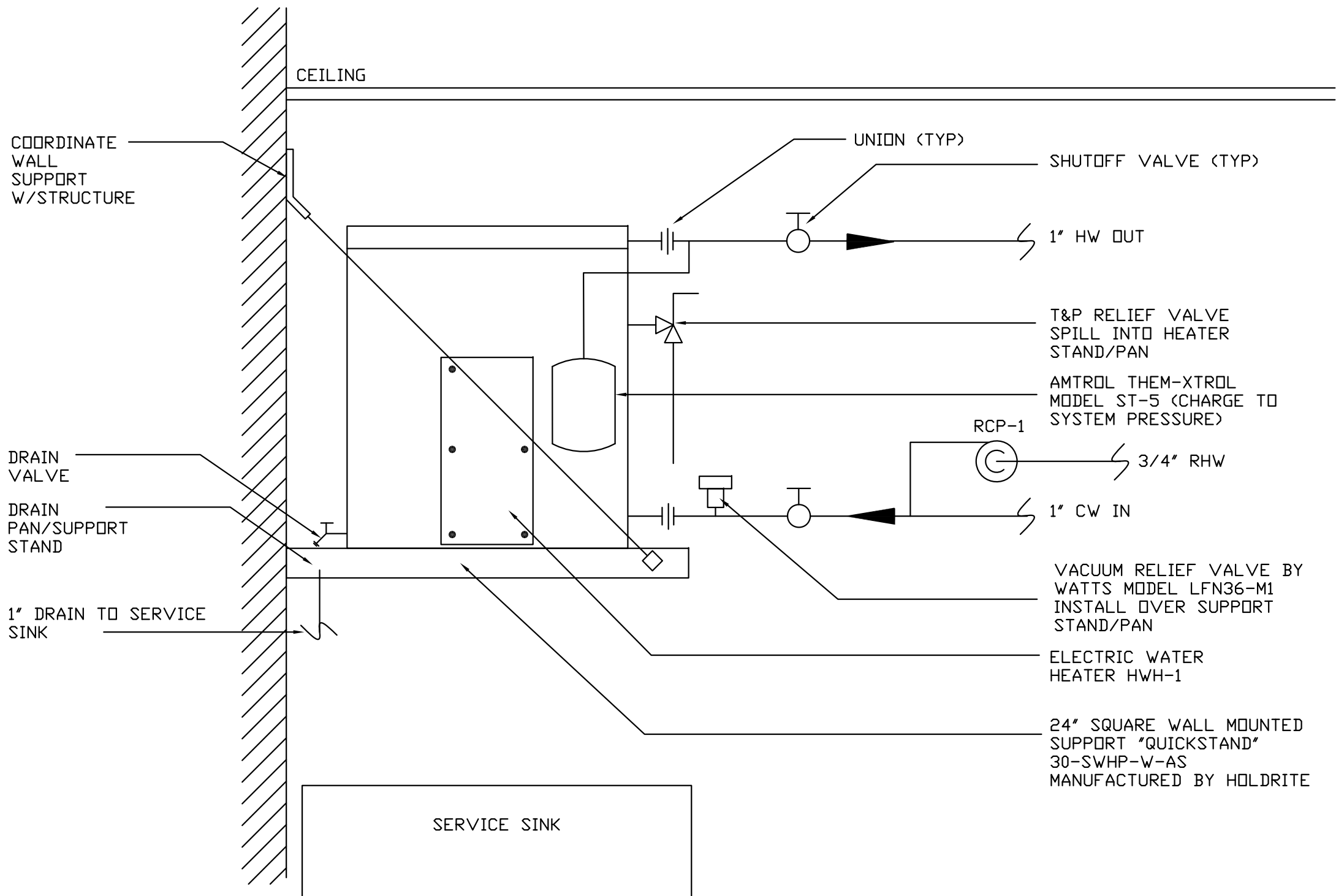
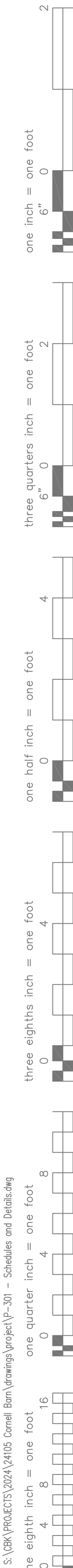
SECOND FLOOR
CONSTRUCTION PLAN

PROJECT NO.: 2752-00 SCALE: AS INDICATED

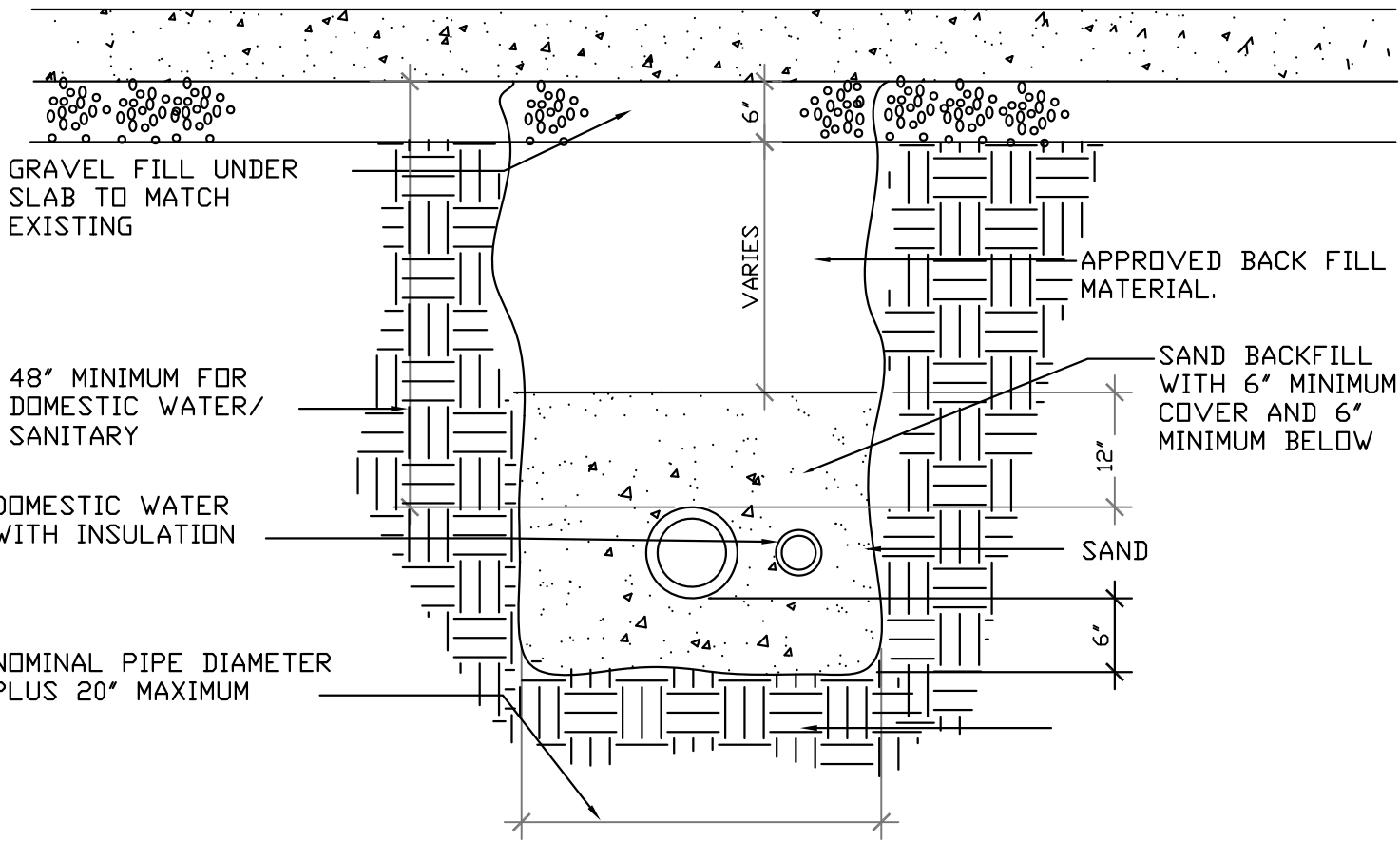
DRAWING NO.:

P-203

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1 WALL MOUNTED WATER HEATER INSTALLATION DETAIL
SCALE: NOT TO SCALE



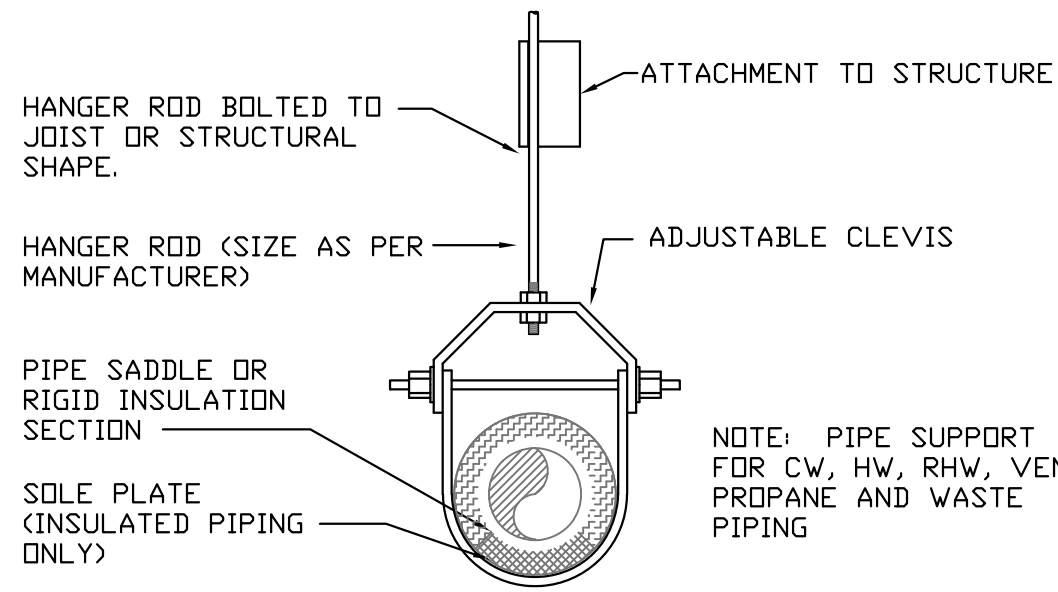
2 TRENCHING DETAIL
SCALE: NOT TO SCALE

PUMP SCHEDULE								
UNIT NO.	GPM	HD FT H2O	RPM	MOTOR HP.	ELECTRICAL DATA	CONNECTIONS		TYPE
						SUCT.	DISCH.	
RCP-1	9	30	3300	1/6	120V-1PH	3/4"	3/4"	HORIZONTAL IN LINE
REMARKS: 1. RCP-1 TO RUN BASED ON A TIMECLOCK.								

COMPLIANCE WITH IECC TO THE BEST OF MY KNOWLEDGE, BELIE, AND PROFESSIONAL JUDGEMENT THIS APPLICATION IS IN COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE 2020		
PIPING INSULATION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE VALUE AND CITATION
105-140° F	NDM PIPE SIZES < 1'-1-1/2" THICK (K < 0.27 BTU/IN/HR-FT*-F) TABLE C403.2.8	NDM PIPE SIZES < 1'-1-1/2" THICK (K RANGE 0.21-0.28 BTU/IN/HR-FT*-F) TABLE C403.11.3
40-60° F	NDM PIPE SIZES < 1'-0.5" THICK (K < 0.27 BTU/IN/HR-FT*-F) TABLE C403.2.8	NDM PIPE SIZES < 1'-0.5" THICK (K RANGE 0.21-0.28 BTU/IN/HR-FT*-F) TABLE C403.11.3

FIXTURE CONNECTION SCHEDULE					
MARK	DESCRIPTION	HW	CW	W	V
HLAV/LAV	HANDICAPPED LAVATORY	1/2"	1/2"	2"	1-1/2"
HWC/WC	HANDICAPPED WATER CLOSET	-	1"	3"	2"
SS	SERVICE SINK	3/4"	3/4"	2"	1 1/2"
FD	FLOOR DRAIN	-	-	3"	1 1/2"
DF	DRINKING FOUNTAIN	-	1/2"	2"	1 1/2"
UR	URINAL	-	3/4"	3"	2"
WH	WALL HYDRANT	-	1/2"	-	-

HOT WATER HEATER SCHEDULE								
UNIT	MANUFACTURER	MODEL	TEMPERATURE RISE (DEG.F)	HEATER RECOVERY (GPH)	GAL	PROPANE INPUT (MBH)	ELECTRIC VOLT PH	LOCATION
HWH-1	LOCHINVAR	WAL125PM	100	145	-	125	120 1	ABOVE SERVICE SINK



3 PIPE HANGER DETAIL
SCALE: NOT TO SCALE

PLUMBING FIXTURE SCHEDULE	
TAG NUMBER	DESCRIPTION
LAV1	LAVATORY: KOHLER - CAXTON RECTANGLE UNDER-MOUNT BATHROOM SINK - K-20000 - WHITE FINISH FAUCET: KOHLER - GEOMETRIC - TOUCHLESS SINGLE-HOLE LAVATORY FAUCET WITH INSIGHT SENSOR TECHNOLOGY, DC-POWERED, 0.5 GPM - K-13466 - POLISHED CHROME (CP) FINISH MIXING VALVE: WATTS - LFUSG-B-M2 UNDER SINK GUARDIAN MIXING VALVE - 3/4" COMPRESSION QUICK-CONNECT - 80°F-120°F - 0.25GPM-2.25GPM - LEAD FREE PIPE COVER: TRUEBRO - LAV GUARD 2 - FAST FIT UNDER-SINK PIPING COVERS - WASTE AND SUPPLY PIPING APPLICATIONS - MOLDED VINYL - CHINA WHITE
LAV2	LAVATORY: KOHLER - CHESAPEAKE WALL-MOUNT BATHROOM SINK - K-1722 - WHITE FINISH FAUCET: KOHLER - GEOMETRIC - TOUCHLESS SINGLE-HOLE LAVATORY FAUCET WITH INSIGHT SENSOR TECHNOLOGY, DC-POWERED, 0.5 GPM - K-13466 - POLISHED CHROME (CP) FINISH MIXING VALVE: WATTS - LFUSG-B-M2 UNDER SINK GUARDIAN MIXING VALVE - 3/4" COMPRESSION QUICK-CONNECT - 80°F-120°F - 0.25GPM-2.25GPM - LEAD FREE PIPE COVER: TRUEBRO - LAV GUARD 2 - FAST FIT UNDER-SINK PIPING COVERS - WASTE AND SUPPLY PIPING APPLICATIONS - MOLDED VINYL - CHINA WHITE
HWC1	WATER CLOSET: KOHLER - KINGSTON ULTRA - 1.1 GPF, WALL MOUNTED, REAR SPUD FLUSHOMETER, ELONGATED BOWL - K-84323-L - VITREOUS CHINA - WHITE FINISH FLUSHOMETER: SLOAN - CX MANUAL FLUSHOMETER - 1.1 GPF, PISTON VALVE, SINGLE-FLUSH, PUSH BUTTON, FILTERED, REAR SPUD FIXTURE CONNECTION, INTEGRATED CONTROL STOP, 12-5/8" ROUGH-IN, 8-1/2"(W) X 9-1/4"(H) - CX 158-1.1 - WALL BOX PANEL DIMENSION - POLISHED CHROME FINISH
UR1	URINAL: KOHLER - TEND - CONTEMPORARY WASHOUT URINAL - 3/4" REAR SPUD, 1.1 GPF, SPLASH CONTAINMENT - K-20713-ER - VITREOUS CHINA - WHITE FINISH FLUSHOMETER: SLOAN - CX MANUAL FLUSHOMETER - 0.125 GPF, PISTON VALVE, SINGLE-FLUSH, PUSH BUTTON, FILTERED, REAR SPUD FIXTURE CONNECTION, INTEGRATED CONTROL STOP, 12-5/8" ROUGH-IN, 8-1/2"(W) X 9-1/4"(H) - CX 198-0.125 - WALL BOX PANEL DIMENSION - POLISHED CHROME FINISH
DF1	DRINKING FOUNTAIN: ELKAY - ENHANCED ezH2O BOTTLE FILLING STATION & VERSATILE BI-LEVEL ADA COOLER - FILTERED - LZSTL8WSSP - STAINLESS STEEL FINISH FILTER: WATERSENTRY PLUS FILTER SYSTEM
SS1	SERVICE SINK: KOHLER - BANNON - 22-1/4" WALL-MOUNTED SERVICE SINK, 8" WIDESPREAD FAUCET HOLES, RECTANGULAR BASIN - K-6714 - KOHLER ENAMELED CAST IRON - WHITE FINISH FAUCET: KOHLER - TRITON BOWE - SERVICE SINK FAUCET - 8" CENTER, 8-7/8" WAL-TO-SPOUT OUTLET WITH WALL BRACE AND PAIL HOOK, 1/2" TURN FULL BRASS CERAMIC VALVE, 13.5 GAL/MIN, 60 PSIG-7/16" VANDAL-RESISTANT METAL LEVER HANDLES - SOLID BRASS CONSTRUCTION WITH CHROME PLATING - K-838T60-4A - POLISHED CHROME (CP) FINISH PIPE COVER: TRUEBRO - LAV GUARD 2 - FAST FIT UNDER-SINK PIPING COVERS - WASTE AND SUPPLY PIPING APPLICATIONS - MOLDED VINYL - CHINA WHITE
FD1	FLOOR DRAIN: JAY R. SMITH - MEDIUM DUTY FLOOR DRAIN WITH 12" ROUND TOP - MODEL 2130 TRAP SEALER: RECTORSEAL - THE GREEN SOLUTION - WATERLESS 4" SURESEAL DRAIN TRAP SEALING GASKET - SS4009V
WH1	WALL HYDRANT: ZURN - NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING - ZURN Z1320-EZ

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3	06-27-2025	ISSUED FOR PRICING
2	01-09-2025	ISSUED FOR PERMIT
1	12-20-2024	PROGRESS SET
ISSUE NO.	ISSUE DATE	DESCRIPTION



COOPERATIVE EXTENSION /
PUTNAM COUNTY
PROPOSED BUILDING AT TILLY
FOSTER FARM MECHANICAL /
PLUMBING / ELECTRIC CORNELL
100 NY 312
BREWSTER, NEW YORK, 10509

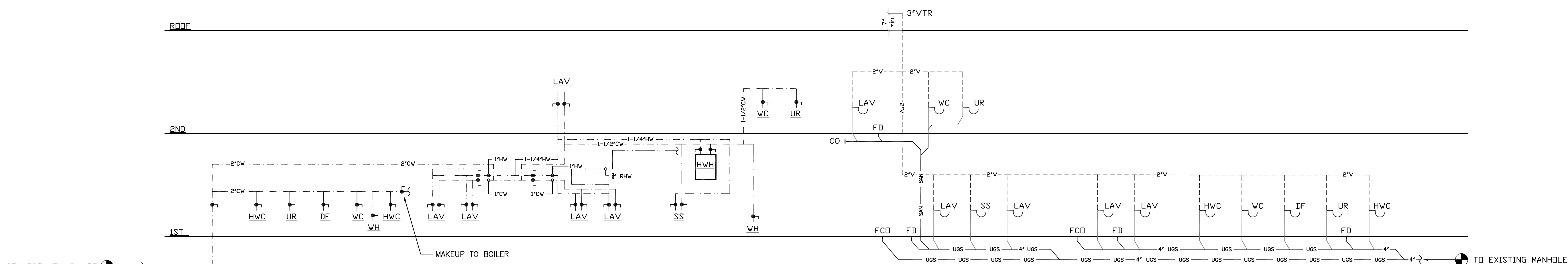
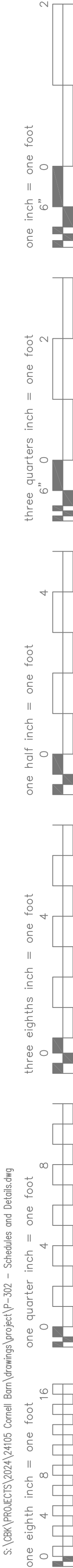
SCHEDULES, RISER DIAGRAMS
AND DETAILS

PROJECT NO.: 2752-00 SCALE: AS INDICATED

DRAWING NO.:

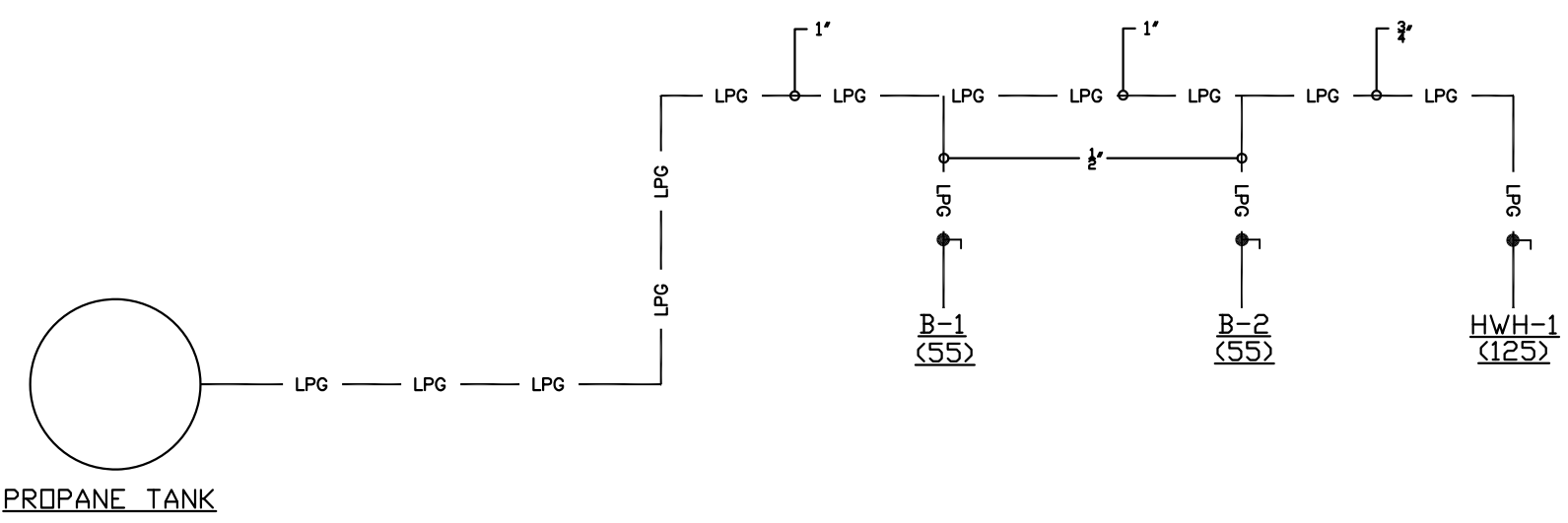
P-301

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1 DOMESTIC WATER RISER DIAGRAM
SCALE: NOT TO SCALE

2 WASTE AND VENT RISER DIAGRAM
SCALE: NOT TO SCALE



3 GAS RISER DIAGRAM
SCALE: NOT TO SCALE

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DRAWING NO.:
P-302