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**PLUMBING KEYED NOTES:** 1

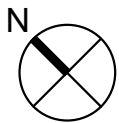
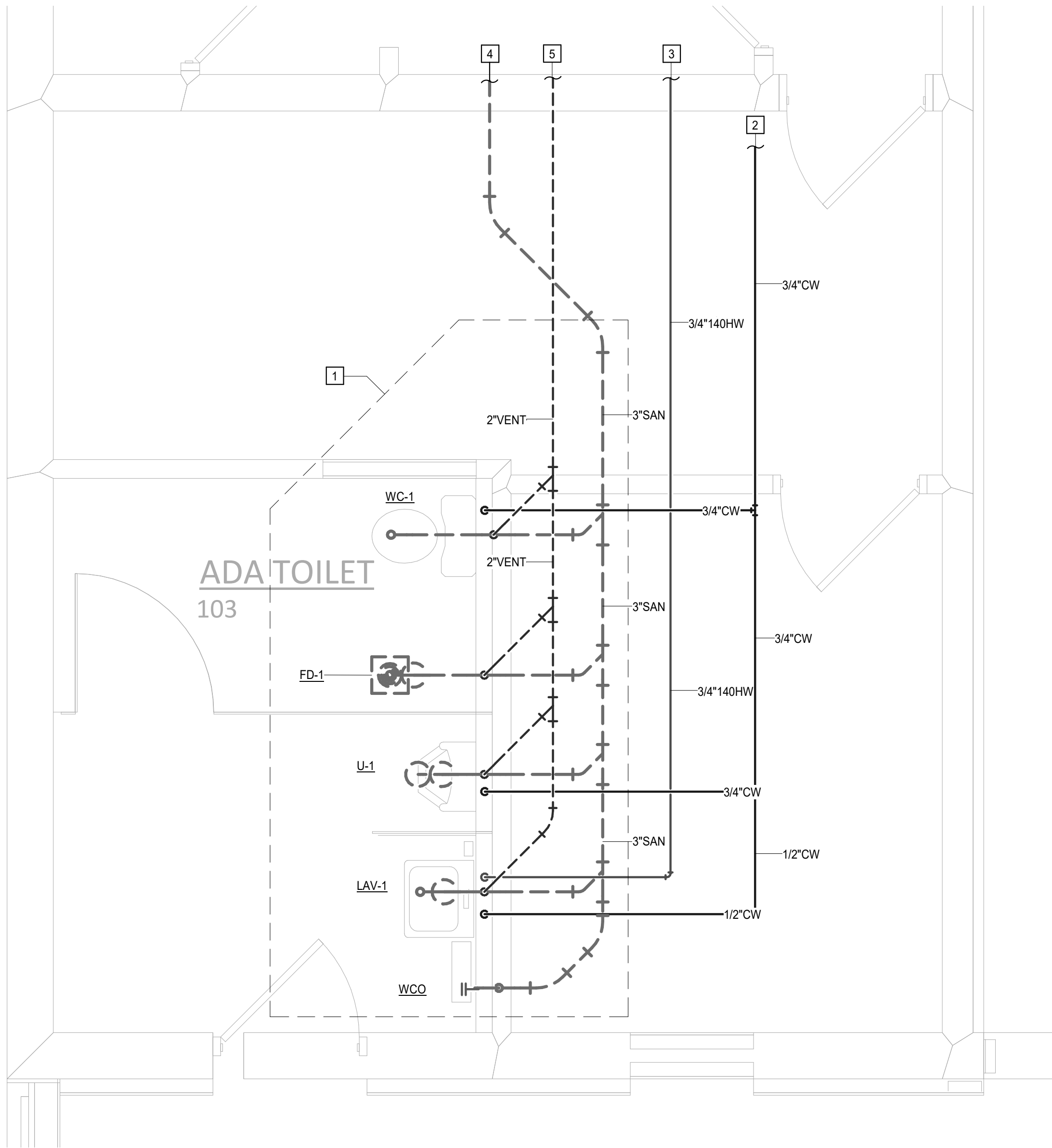
1. SAW CUT FLOOR AS REQUIRED FOR INSTALLATION OF NEW SANITARY SEWER PIPING.
2. TIE IN 3/4" COLD WATER TO EXISTING RESTROOM COLD WATER. CONTRACTOR TO FIELD VERIFY EXACT TIE IN LOCATION PRIOR TO CONSTRUCTION.
3. TIE IN 3/4" HW140 TO EXISTING RESTROOM HOT WATER. CONTRACTOR TO FIELD VERIFY EXACT TIE IN LOCATION PRIOR TO CONSTRUCTION.
4. TIE IN 3" SANITARY TO EXISTING RESTROOM SANITARY PIPE. CONTRACTOR TO FIELD VERIFY EXACT TIE IN LOCATION PRIOR TO CONSTRUCTION.
5. TIE IN 2" VENT TO EXISTING RESTROOM VENT PIPE. CONTRACTOR FIELD VERIFY EXACT TIE IN LOCATION PRIOR TO CONSTRUCTION.

**FIRE SPRINKLER NOTE:**

ADJUST EXISTING FIRE SPRINKLER SYSTEM TO SERVE RENOVATED AREA. LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND CALCULATIONS TO UPDATE CHANGES TO EXISTING SYSTEM AND TO COMPLY WITH NEW SPACE LAYOUT, NFPA 13, AND ALL STATE AND LOCAL CODE REQUIREMENTS.

**PLUMBING GENERAL NOTES**

1. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
2. ALL SANITARY PIPING 3" AND LARGER ROUTED AT 1/8" SLOPE PER FOOT UNLESS OTHERWISE NOTED. ALL PIPE LESS THAN 3" SHALL BE ROUTED AT 1/4" SLOPE PER FOOT.
3. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
4. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
5. PROVIDE A TWO-WAY CLEANOUT AT CIVILS POINT OF CONNECTION.
6. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
8. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
9. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
10. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
11. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
12. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
13. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
14. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
15. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
16. CONTRACTOR SHALL CHECK ALL LOCATIONS, MEASUREMENTS, DEPTHS, AND REPORT ANY DISCREPANCIES FOR CORRECTION BEFORE DEMOLITION.

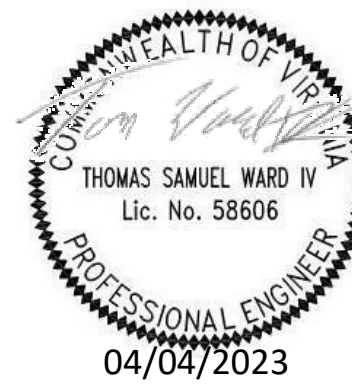


2 LEVEL 1 - PLUMBING BATHROOM ENLARGEMENT  
Scale: 1/2" = 1'-0"

ADDITION & RENOVATIONS  
FOR  
F & S COMMONWEALTH  
BUILDING MATERIALS  
1735 PLANTATION ROAD NE, ROANOKE, VIRGINIA

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PLUMBING FLOOR  
PLAN



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P1-0



**SALASOBRIEN**  
| expect a difference |

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DATE: 04/04/2023

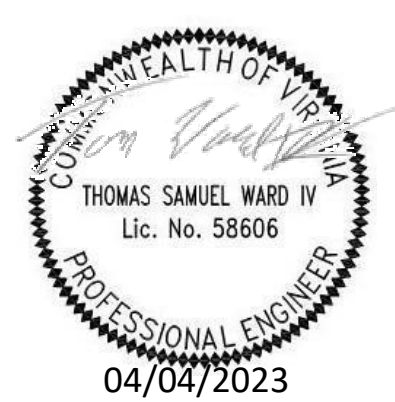
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ADDITION & RENOVATIONS  
FOR  
F & S COMMONWEALTH  
BUILDING MATERIALS  
1735 PLANTATION ROAD NE, ROANOKE, VIRGINIA

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PLUMBING DETAILS



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## PLUMBING PIPING LEGEND

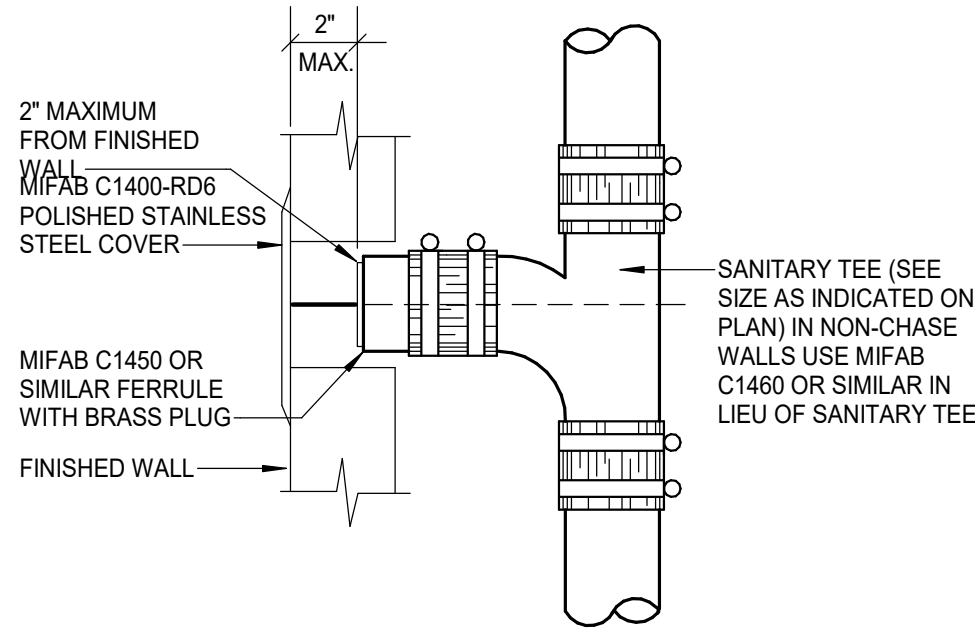
SYMBOLS	DESCRIPTION
	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
	STORM DRAIN PIPING (SD)
	STORM DRAIN PIPING BELOW GRADE (GW)
	CONDENSTATE DRAIN PIPING (CD)
	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	TRAP PRIMER LINE (TP)
	FIRE PROTECTION PIPING (F)
	FLOW DIRECTIONAL ARROW
	BALL VALVE (BV)
	UNION
	REDUCER OR INCREASER
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	REFER TO KEYED NOTE
	FLOOR DRAIN WITH P-TRAP (FD)
	HUB DRAIN (HD)
	NEW
	NEW CONNECTION
	INVERT ELEVATION
	1/8TH OF AN INCH SLOPE
	DELTA CHANGE SYMBOL
	RISER FLAG

## PLUMBING FIXTURE SCHEDULE

TYPE: WC-1 (A.D.A. COMPLIANT)	GENERAL NOTES:	ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS AND FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.
DESCRIPTION: WATER CLOSET, FLOOR MOUNTED, TANK TYPE, 1.28 GALLON PER FLUSH, VITREOUS CHINA, SIPHON JETTED BOWL, CHROME LEVER TRIP, TWO-PIECE TOILET AMERICAN STANDARD "CADET PRO" 215AA.104.		
SEAT: ELONGATED, CLOSED FRONT WITH COVER, HEAVY DUTY WHITE PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES, CHURCH & DWIGHT 1000-3.		
ROUGH-INS: 2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED HEIGHT.		
TYPE: FD-1		PROVIDE MOLDED CLOSED CELL ANTI-MICROBIAL VINYL INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE A.D.A. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (A.D.A.)
SERVICE: TOILET ROOMS AND GENERAL USE		
DESCRIPTION: FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 6" DIAMETER STAINLESS STEEL STRAINER WITH VANDAL PROOF SCREWS, 1/2" TRAP PRIMER CONNECTION, PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS. MIFAB F1100-6-3-7.		
ROUGH-INS: REFER TO FLOOR PLANS FOR SIZES, COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION.		INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.
TYPE: WCO		APPROVED EQUAL MANUFACTURERS AND MODEL NUMBERS CAN BE PROVIDED FOR THE MANUFACTURERS AND MODEL NUMBERS OF THE FIXTURES AND EQUIPMENT LISTED ABOVE.
DESCRIPTION: WALL CLEANOUT, CAST IRON CLEANOUT FERRULE WITH DUCTILE IRON COMBINED COVER/PLUG AND ROUND STAINLESS COVER, PLATE WITH CENTER SECURING SCREW, MIFAB C1450 WITH C1400-RD6. PROVIDE MIFAB C1460 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED FOR WALL CONSTRUCTION.		
TYPE: U-1 (A.D.A. COMPLIANT)		
DESCRIPTION: URINAL, WALL HUNG, WHITE VITREOUS CHINA, 1.0 GALLON PER FLUSH SIPHON JET ACTION, INTEGRAL TRAP, AMERICAN STANDARD "TRIMBROOK" 6561.017.		
FLUSH VALVE: 1.0 GALLON FLUSH CYCLE, EXPOSED, DIAPHRAGM TYPE, CHROME PLATED URINAL FLUSHOMETER, VACUUM BREAKER, SPUD COUPLING FOR 3/4" TOP SPUD. SLOAN ROYAL 186-1-H-573-CP CAP.		
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, UPPER AND LOWER BEARING PLATES WITH THREADED STUDS, MIFAB MC-32.		
ROUGH-INS: 2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED HEIGHT.		
TYPE: L-1 (A.D.A. COMPLIANT)		
DESCRIPTION: LAVATORY, WALL HUNG, WHITE VITREOUS CHINA, 18-1/2"X 17" BOWL WITH REAR OVERFLOW, FAUCET HOLES ON 4" CENTERS, AMERICAN STANDARD "LUCERNE" 0355.027.		
FAUCET: CHROME PLATED BRASS LAVATORY, SINGLE LEVER ON 4" CENTERS VANDAL RESISTANT AERATOR, MOEN 8439F05.		
MIXING VALVE: THERMOSTATIC MIXING VALVE, 140 DEGREES IN, 110 DEGREES OUT, BRONZE FINISH, UNION CONNECTION, SP51 PRESSURE DIFFERENTIAL, 0.5GPM MIN FLOW/4GPM MAX FLOW, SYMMONS "MAXLINE" 7-225-CK-W.		
STRAINER: 1-1/4" 17 GAUGE OFFSET WHEELCHAIR STRAINER, CHROME PLATED BRASS GRID DRAIN WITH ELBOW AND 17 GAUGE OFFSET TAILPIECE, MCGUIRE 155WC.		
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE, MCGUIRE 8872.		
TAILPIECE: GRAVITY FED TRAP PRIMER TAILPIECE, 1/2" NOMINAL BRANCH CONNECTION, SIOUX CHIEF" 213-092.		
SUPPLIES: 1/2" I.P.S. X 3/8" O.D CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS, MCGUIRE 2165LK.		
ROUGH-INS: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED HEIGHT.		

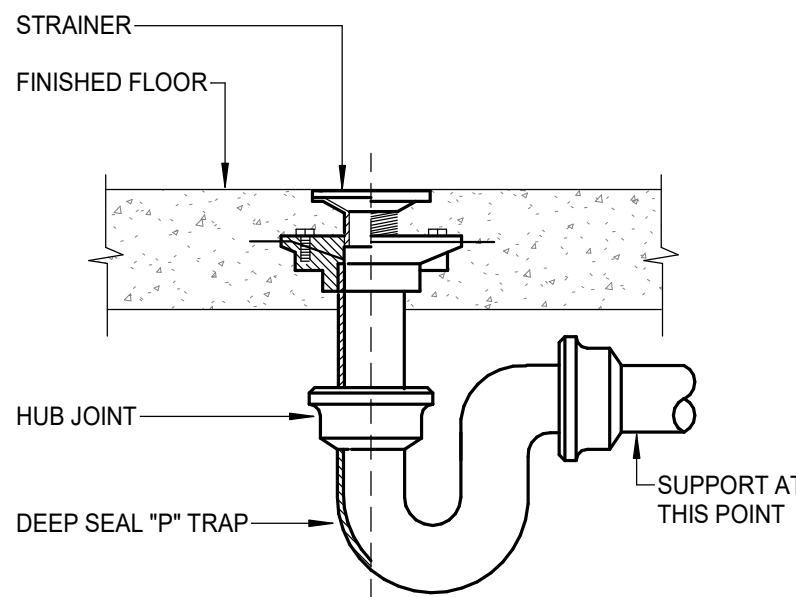
### 3 WALL CLEANOUT

Scale: 12" = 1'-0"



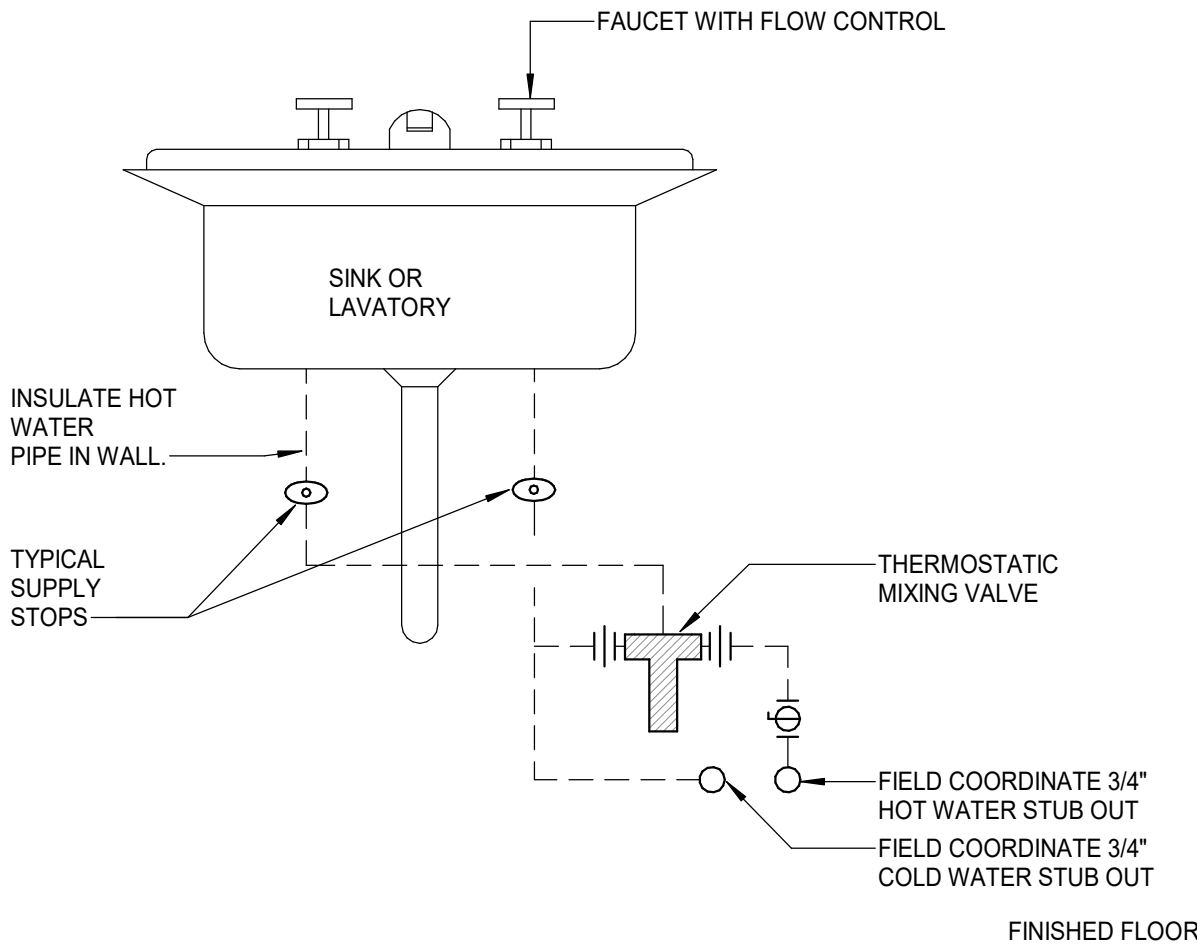
### 2 FLOOR DRAIN

Scale: 12" = 1'-0"



### 1 THERMOSTATIC MIXING VALVE PIPING AT LAVATORY

Scale: 12" = 1'-0"

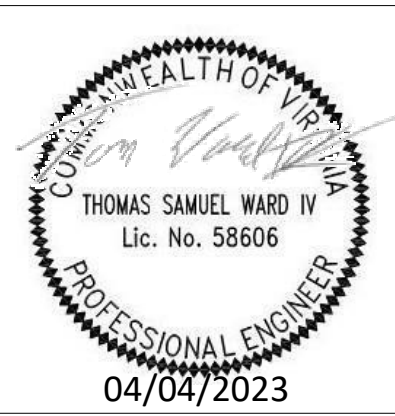




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PLUMBING  
SPECIFICATIONS



PLUMBING SPECIFICATIONS

<p><u>GENERAL</u></p> <p>A. PERFORM WORK IN ACCORDANCE WITH APPLICABLE STATUTES, ORDINANCES, CODES AND REGULATIONS OF GOVERNMENTAL AUTHORITIES HAVING JURISDICTION.</p> <p>B. OBTAIN ALL PERMITS REQUIRED.</p> <p>C. CONTRACT DRAWINGS ARE DIAGRAMMATIC ONLY AND DO NOT GIVE FULLY DIMENSIONED LOCATIONS OF VARIOUS ELEMENTS OF WORK. DETERMINE EXACT LOCATIONS FROM FIELD MEASUREMENTS.</p> <p>D. GUARANTEE WORK FOR 1 YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. DURING THAT PERIOD MAKE GOOD ANY FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIAL, EQUIPMENT OR WORKMANSHIP. AT THE OWNER'S OPTION, REPLACEMENT OF FAILED PARTS OR EQUIPMENT SHALL BE PROVIDED.</p> <p>E. PROVIDE FINISHES TO MATCH APPROVED SAMPLES. ALL EXPOSED FINISHES SHALL BE APPROVED BY THE ARCHITECT. SUBMIT COLOR SAMPLES AS REQUIRED</p> <p>F. PROVIDE EQUIPMENT HOUSEKEEPING PADS UNDER ALL FLOOR MOUNTED AND GROUND MOUNTED PLUMBING EQUIPMENT, AND AS SHOWN ON THE DRAWINGS. CONCRETE PADS ARE TO BE 4" THICK UNLESS OTHERWISE INDICATED ON THE DRAWINGS.</p> <p>G. PROVIDE NAMEPLATES WITH 1/2" HIGH LETTERS AND FASTENED WITH EPOXY OR SCREWS.</p> <p>H. MAINTAIN QUALITY CONTROL OVER SUPERVISION, SUBCONTRACTORS, SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS AND WORKMANSHIP TO PRODUCE WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS.</p> <p>I. COMPLY WITH INDUSTRY STANDARDS EXCEPT WHEN MORE RESTRICTIVE TOLERANCES OR SPECIFIED REQUIREMENTS INDICATE MORE RIGID STANDARDS OR MORE PRECISE WORKMANSHIP.</p> <p>J. PERFORM WORK BY PERSONS QUALIFIED TO PRODUCE WORKMANSHIP OF SPECIFIED QUALITY.</p> <p>K. SECURE PRODUCTS IN PLACE WITH POSITIVE ANCHORAGE DEVICES DESIGNED AND SIZED TO WITHSTAND STRESSES, VIBRATION, AND RACKING. UNDER NO CONDITIONS SHALL MATERIAL OR EQUIPMENT BE SUSPENDED FROM STRUCTURAL BRIDGING.</p> <p>L. COMPLY WITH INSTRUCTIONS IN FULL DETAIL, INCLUDING EACH STEP IN SEQUENCE. SHOULD INSTRUCTION CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT / ENGINEER BEFORE PROCEEDING.</p>	<p><u>PLUMBING FIXTURES AND FIXTURE CARRIERS</u></p> <p>ACCEPTABLE MANUFACTURERS:</p> <p>A. VITREOUS CHINA FIXTURES: AMERICAN STANDARD, ELJER, KOHLER, TOTO, ZURN.</p> <p>B. PLUMBING FAUCETS: AMERICAN STANDARD, CHICAGO, T&amp;S BRASS, ZURN, SYMMONS, MOEN COMMERCIAL HD</p> <p>C. SUPPORTS AND CARRIERS: ZURN, J.R. SMITH, WADE, JOSAM, WATTS/ANCON, MIFAB</p> <p>D. FLUSH VALVES: SLOAN, ZURN, MOEN COMMERCIAL HD</p> <p>E. SUPPLIES, STOPS AND CHROME PLATED TUBULAR BRASS: MCGUIRE, KOHLER, CHICAGO, ZURN, BRASSCRAFT</p> <p>F. WATER CLOSET SEATS: BENKE, CHURCH, OLSONITE, BEMIS, CENTOCO</p> <p>G. FLOOR DRAINS: ZURN, J.R. SMITH, JOSAM, WADE, WATTS/ANCON, SIOUX CHIEF, MIFAB</p> <p>H. CLEANOUTS: ZURN, J.R. SMITH, JOSAM, WADE, WATTS/ANCON, MIFAB</p> <p>I. STAINLESS STEEL SINKS: ELKAY, JUST</p> <p>J. THERMOSTATIC MIXING VALVES: LAWLER, SYMMONS, POWERS, HOLBY</p> <p>INSTALLATION</p> <p>A. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.</p> <p>B. PROVIDE NECESSARY STOPS, VALVES, TRAPS, UNIONS, VENTS, COLD WATER, HOT WATER, SANITARY, ETC. FOR A COMPLETE INSTALLATION.</p> <p>C. REMOVE PIPING AND SERVICES ROUGHED-IN INCORRECTLY AND INSTALL CORRECTLY, WITHOUT COST.</p> <p>D. EXPOSED PIPING, FITTINGS AND APPURTENANCES SHALL BE CHROME-PLATED BRASS.</p> <p>E. PROVIDE ISOLATION VALVES IN DOMESTIC WATER LINES TO ISOLATE ALL EQUIPMENT, RESTROOMS, HOSE BIBS, AND WHERE SHOWN ON DRAWINGS.</p>	<p><u>DOMESTIC WATER INSULATION</u></p> <p>A. ELASTOMERIC INSULATION: INSULATION MATERIAL SHALL BE 1/2" FLEXIBLE, CLOSED-CELL ELASTOMERIC INSULATION IN TUBULAR OR SHEET FORM. MATERIAL SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM E84, LATEST REVISION.</p> <p>B. FIBERGLASS INSULATION: 1/2" THICK HEAVY DENSITY, DUAL TEMPERATURE FIBERGLASS INSULATION WITH FACTORY APPLIED, ALL SERVICE, REINFORCED VAPOR BARRIER JACKET HAVING INTEGRAL LAMINATED VAPOR BARRIER. PROVIDE WITH A FACTORY APPLIED PRESSURE SENSITIVE TAPE CLOSURE SYSTEM AND MATCHING BUTT STRIPS.</p> <p>C. COVER ALL COLD &amp; HOT WATER PIPING WITH INSULATION BY SLITTING TUBULAR SECTIONS OR SLIDING UN-SLIT SECTIONS OVER THE OPEN ENDS OF PIPING OR TUBING. SEAMS AND BUTT JOINTS SHALL BE ADHERED AND SEALED USING ADHESIVE.</p> <p>D. ALL FITTINGS SHALL BE INSULATED WITH THE SAME INSULATION THICKNESS AS THE ADJACENT PIPING. ALL SEAMS AND MITERED JOINTS SHALL BE ADHERED WITH ADHESIVE.</p> <p>E. INSULATION APPLICATIONS: INDOOR CONCEALED: ELASTOMERIC INDOOR EXPOSED: FIBERGLASS OUTDOOR: ELASTOMERIC WITH WITH TWO COATS OF EITHER WB OR SB ARMAFLEX FINISH OR FOSTER 30-64 ELASTOMER FOAM COATING. ALL SEAMS SHALL BE LOCATED ON THE LOWER HALF OF THE PIPE.</p>
<p><u>EARTHWORK</u></p> <p>A. EXCAVATE AND BACKFILL FOR PIPE TRENCHES FOR UNDERGROUND PIPING, AND EXCAVATE FOR STRUCTURES INSTALLED AS PART OF MECHANICAL WORK.</p> <p>B. REMOVE EXCESS EXCAVATION MATERIAL OR MATERIAL UNSUITABLE FOR BACKFILL. EXCESS MATERIAL CAN BE SPREAD ON GRADE, OR SHALL BE REMOVED FROM SITE AS DIRECTED BY THE OWNER/ARCHITECT.</p>	<p><u>DOMESTIC WATER PIPING AND APPURTENANCES (PEX)</u></p> <p>A. FURNISH AND INSTALL DOMESTIC HOT AND COLD WATER PIPING.</p> <p>B. BELOW GRADE PIPING OUTSIDE BUILDING (BEYOND 5'-0" OF BUILDING); PROVIDE PVC WATER MAIN PIPE IN CONFORMANCE WITH AWWA C900. PROVIDE FITTINGS IN CONFORMANCE WITH ASTM 2466.</p> <p>C. BELOW SLAB AND ABOVE SLAB PIPING: PEX SYSTEM MUST BE LISTED ASTM F876/F877. TUBING SHALL BE LISTED PEX 5006 FOR CHLORINE RESISTANCE FOR CONTINUOUS USAGE UP TO 140°F. ALL TUBING INSTALLED IN RETURN AIR PLENUMS SHALL BE LISTED ASTM E84. THE LISTING MAY BE FOR THE TUBING ITSELF OR FOR THE TUBING INCLUDING INSULATION TO ACHIEVE THE LISTING. THE FITTINGS SHALL BE OF THE SAME MANUFACTURER AS THE TUBING AND THE INSTALLATION INSTRUCTIONS OF THE MANUFACTURER SHALL BE STRICTLY ADHERED TO.</p> <p>D. COPPER MANIFOLD: COMPRISED WITH PIPE SIZE INLET, SPUN CLOSED END AND 1/2" OUTLETS. THE 1/2" OUTLETS ARE BRAZED TO THE HEADER. THESE FITTINGS, AS A SYSTEM ARE PRESSURE RATED AT 160 PSI AT 73°F.</p> <p>E. TESTING: TEST UNDER A COLD WATER HYDROSTATIC PRESSURE OF NOT LESS THAN 200 PSI FOR AT LEAST 15 MINUTES AND CAREFULLY CHECK FOR LEAKS. REPAIR LEAKS AND RETEST SYSTEM UNTIL PROVEN WATERTIGHT. USE ONLY POTABLE WATER FOR THE TEST. PERFORM THE TEST BEFORE FIXTURES, FAUCETS, TRIM OR FINAL CONNECTIONS ARE MADE TO EQUIPMENT.</p>	<p><u>SOIL, WASTE AND SANITARY DRAIN PIPING, VENT PIPING AND APPURTENANCES</u></p> <p>A. ABOVE SLAB PIPING: SCHEDULE 40 PVC PLASTIC PIPE AND DWV FITTINGS WITH SOLVENT WELDED JOINTS. PIPE AND FITTINGS SHALL CONFORM TO ASTM D 1784-82.</p> <p>B. BELOW SLAB ON GRADE PIPING: SCHEDULE 40 PVC PLASTIC PIPE AND DWV FITTINGS. SOLVENT WELDED DWV JOINTS SHALL CONFORM TO IAPMO INSTALLATION STANDARD IS-9. PIPE AND FITTINGS SHALL CONFORM TO ASTM D 1784, ASTM D 1785, ASTM D 2665, ASTM D 3311 AND NPS STANDARD 14 &amp; 61.</p> <p>C. VENT PIPE AND FITTINGS: ABOVE SLAB PIPING. PROVIDE SCHEDULE 40 PVC PLASTIC PIPE AND DWV FITTINGS WITH SOLVENT WELDED JOINTS. PIPE AND FITTINGS SHALL CONFORM TO ASTM D 1784-82.</p> <p>D. BELOW SLAB ON GRADE PIPING: SAME AS DRAIN PIPE AND FITTINGS LISTED ABOVE.</p> <p>E. TESTING: BELOW SLAB ON GRADE AND ALL FLOORS IN MULTI-STORY BUILDINGS: TEST PIPE BELOW SLAB ON GRADE BEFORE BACKFILLING AND CONNECTING TO CITY SEWERS. MAINTAIN NOT LESS THAN 10 FOOT OF HYDROSTATIC HEAD FOR 1 HOUR WITHOUT A LEAK.</p> <p>F. RODDING SEWERS: ALL SANITARY SOIL AND WASTE LINES, BOTH IN THE BUILDING AND OUT, SHALL BE RODDED OUT AND FLUSHED OUT AFTER COMPLETION OF CONSTRUCTION AND PRIOR TO FINISH FLOOR BEING INSTALLED. ALL WORK MUST BE COMPLETED PRIOR TO SUBSTANTIAL COMPLETION. ALL FLOOR DRAINS AND CLEANOUT LOCATIONS MUST BE INCLUDED IN THIS WORK.</p>
<p><u>PLUMBING ALTERATIONS</u></p> <p>A. INSPECT AND SERVICE EXISTING EQUIPMENT, FIXTURES AND MATERIALS THAT ARE TO REMAIN OR TO BE REUSED.</p> <p>B. DISPOSAL OF EQUIPMENT, FIXTURES, MATERIALS, OR HOUSEKEEPING PADS TO BE ABANDONED. PRIOR TO DISPOSAL, THE CONTRACTOR SHALL VERIFY WITH THE OWNER WHAT IS TO BE SALVAGED BY THE OWNER AND WHAT IS TO BECOME THE PROPERTY OF THE CONTRACTOR.</p> <p>C. HANDLING OF EQUIPMENT AND MATERIALS TO BE REMOVED.</p> <p>D. INSPECTION: EXISTING MATERIALS AND EQUIPMENT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO BE REUSED SHALL BE INSPECTED FOR DAMAGED OR MISSING PARTS. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER, IN WRITING, ACCORDINGLY. IF USING MATERIALS SPECIFIED OR SHOWN ON THE DRAWING VOIDS OR DIMINISHES THE WARRANTY OR OPERATION OF REMAINING EQUIPMENT OR SYSTEMS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER, IN WRITING. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED.</p> <p>E. APPLICATION: EXISTING MATERIALS AND EQUIPMENT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO BE REUSED SHALL BE CLEANED AND RECONDITIONED, INCLUDING CLEANING OF PIPING SYSTEMS AND HVAC COILS PRIOR TO INSTALLATION AND REUSE. MATERIAL AND EQUIPMENT REMOVED THAT IS NOT TO BE SALVAGED FOR OWNER'S USE OR FOR REUSE ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE REMOVED FROM THE SITE. MATERIAL OR EQUIPMENT SALVAGED FOR OWNER'S USE SHALL BE CAREFULLY HANDLED AND STORED WHERE DIRECTED BY THE OWNER OR THE ARCHITECT / ENGINEER. RELOCATE MATERIAL AND / OR EQUIPMENT AS DIRECTED BY OWNER. MATERIALS AND EQUIPMENT NOT INDICATED TO BE REMOVED OR ABANDONED SHALL BE RECONNECTED TO THE NEW SYSTEM. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL WALK AREAS TO BE RENOVATED WITH OWNER TO IDENTIFY AND DOCUMENT ITEMS TO BE SALVAGED FOR OWNER'S USE.</p> <p>F. SEQUENCE AND SCHEDULE: COORDINATE UTILITY SERVICE OUTAGES WITH UTILITY COMPANY, ARCHITECT AND OWNER. REMOVE CONCRETE HOUSEKEEPING PAD WHERE MATERIALS OR EQUIPMENT HAVE BEEN REMOVED.</p>		