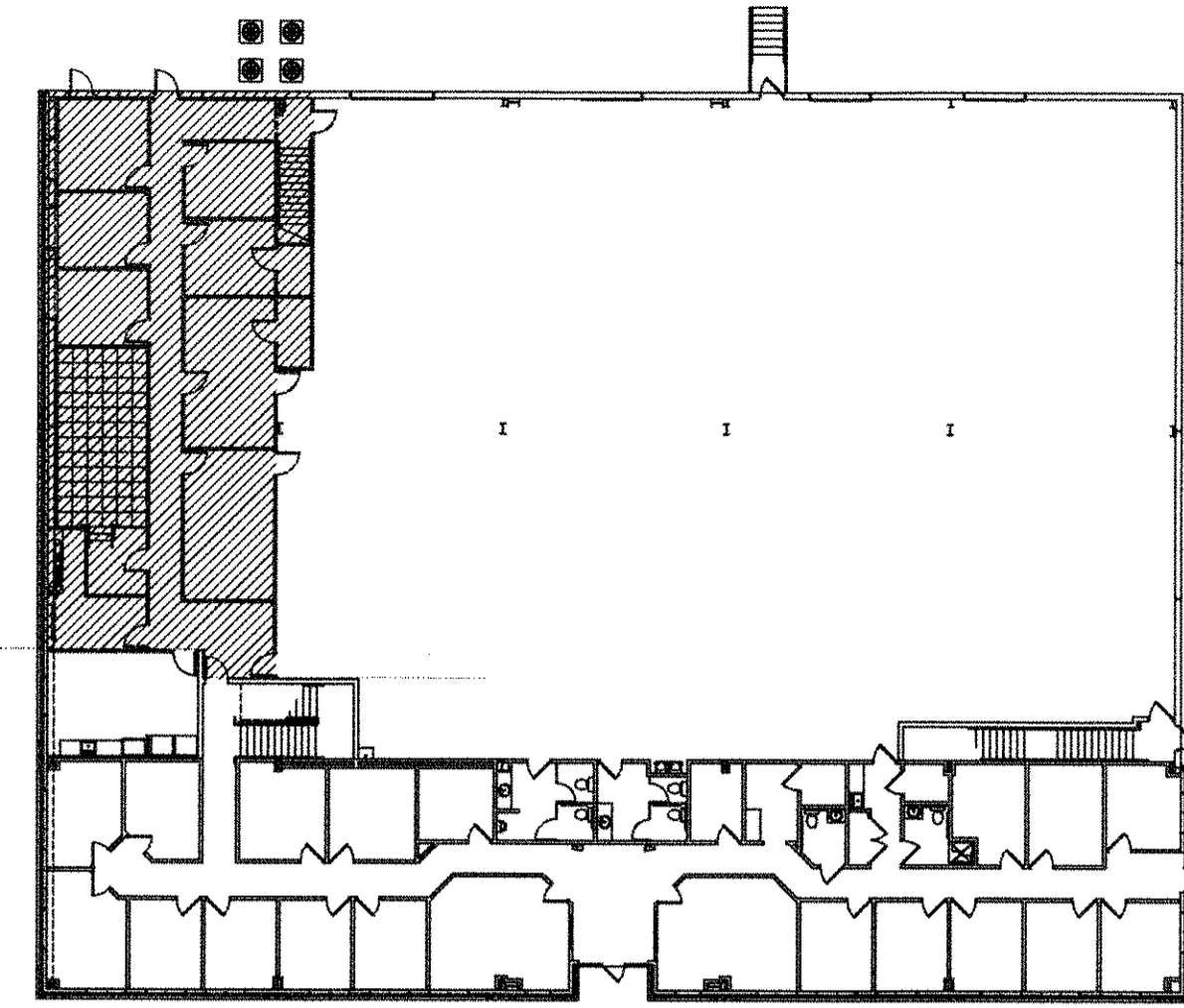
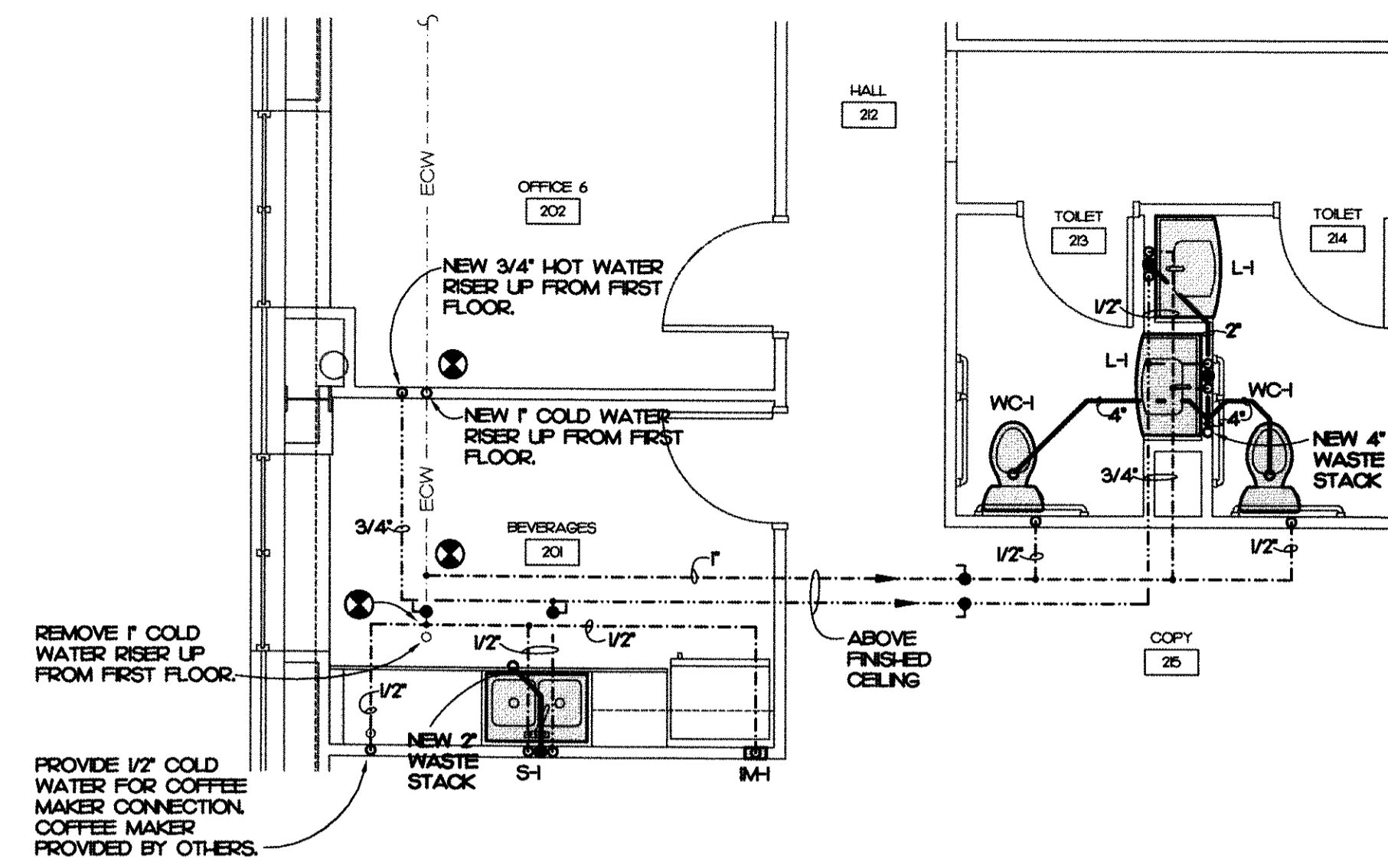


# PLUMBING KEY NOTES

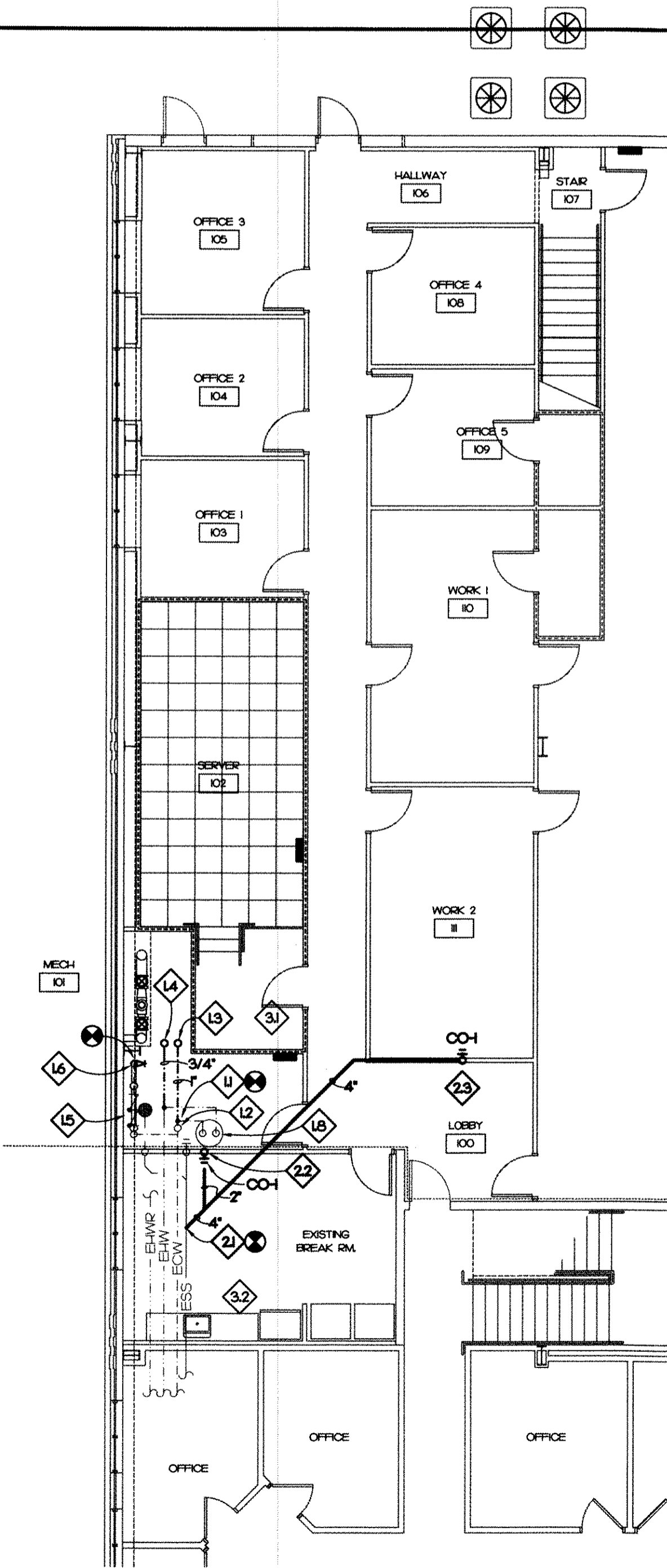
- 1.1 CONNECT TO EXISTING COLD WATER ABOVE NEW FINISHED CEILING.
- 1.2 REMOVE EXISTING 1" COLD WATER RISER AND CAP PIPING AS REQUIRED.
- 1.3 NEW 1" COLD WATER RISER UP TO SECOND FLOOR.
- 1.4 NEW 3/4" HOT WATER RISER UP TO SECOND FLOOR.
- 1.5 EXISTING 2" REDUCED PRESSURE ZONE, PRESSURE REDUCING VALVE, AND STRAINER.
- 1.6 DOMESTIC WATER SUPPLY UP FROM BELOW FINISHED FLOOR. PROVIDE WITH MAIN SHUT OFF VALVE.
- 1.7 EXISTING WATER PIPING ABOVE FINISHED CEILING.
- 1.8 EXISTING WATER HEATER AND RECIRCULATING PUMP TO REMAIN.
- 2.1 CONNECT TO EXISTING SANITARY SEWER PIPING BELOW FINISHED FLOOR. IT IS THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND INVERT ELEVATION OF THE EXISTING WASTE LINE AND MAKE CONNECTION AS REQUIRED.
- 2.2 NEW 2" WASTE STACK DOWN FROM SECOND FLOOR.
- 2.3 NEW 4" WASTE STACK DOWN FROM SECOND FLOOR.
- 3.1 ELECTRICAL EQUIPMENT BY ELECTRICAL CONTRACTOR.
- 3.2 NO WORK IN THIS AREA. PLUMBING FIXTURES TO REMAIN.



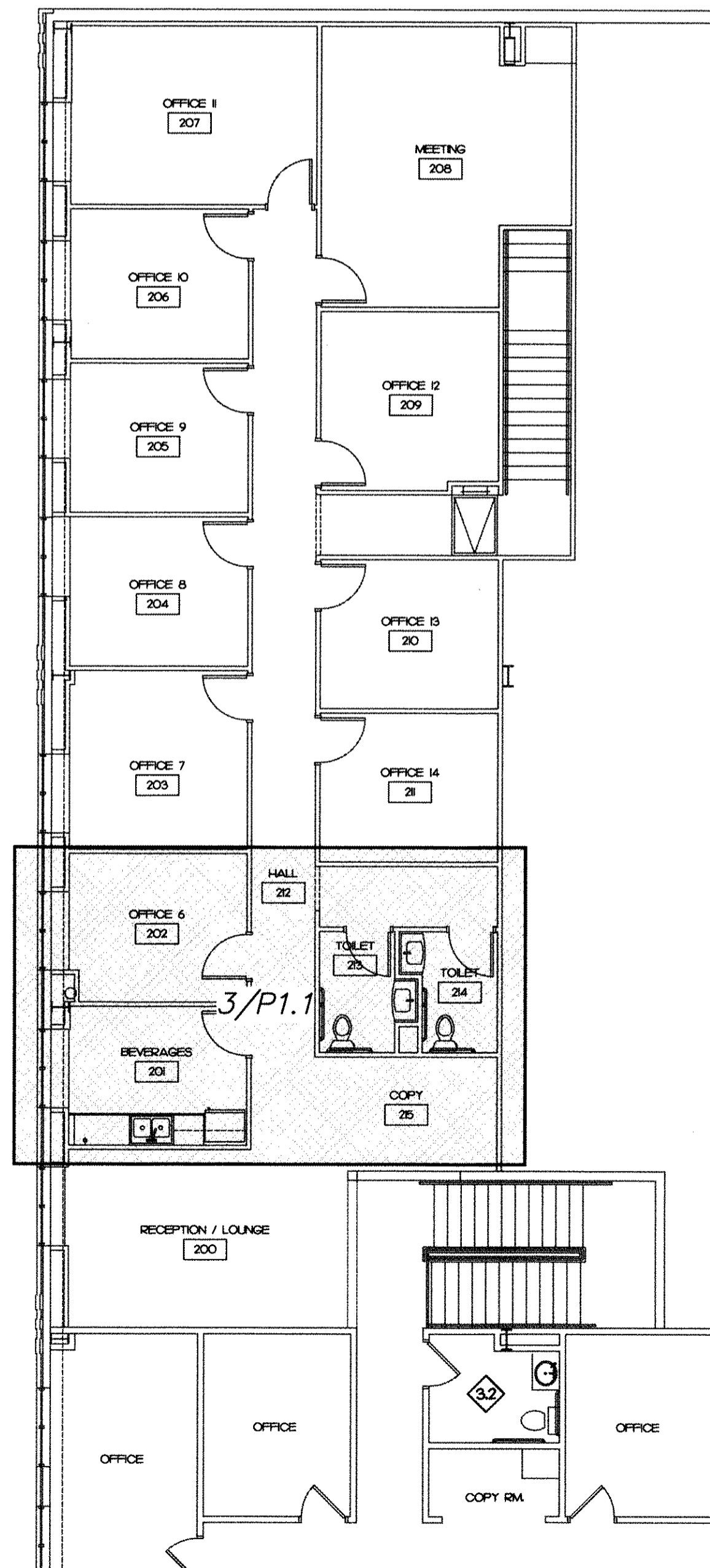
6 KEY PLAN  
PL1 NOT TO SCALE



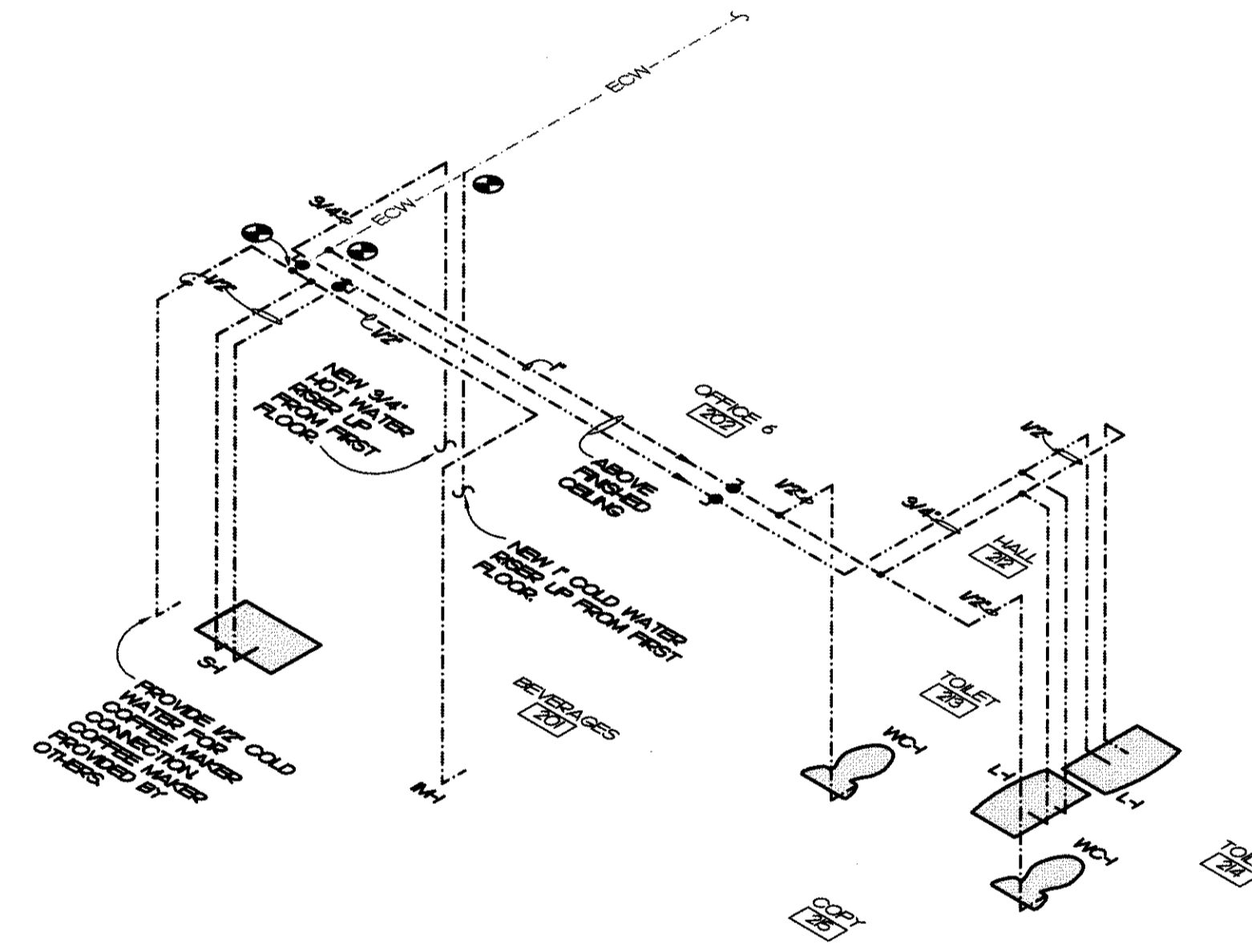
3 ENLARGED PLUMBING PLAN  
PL1 NOT TO SCALE



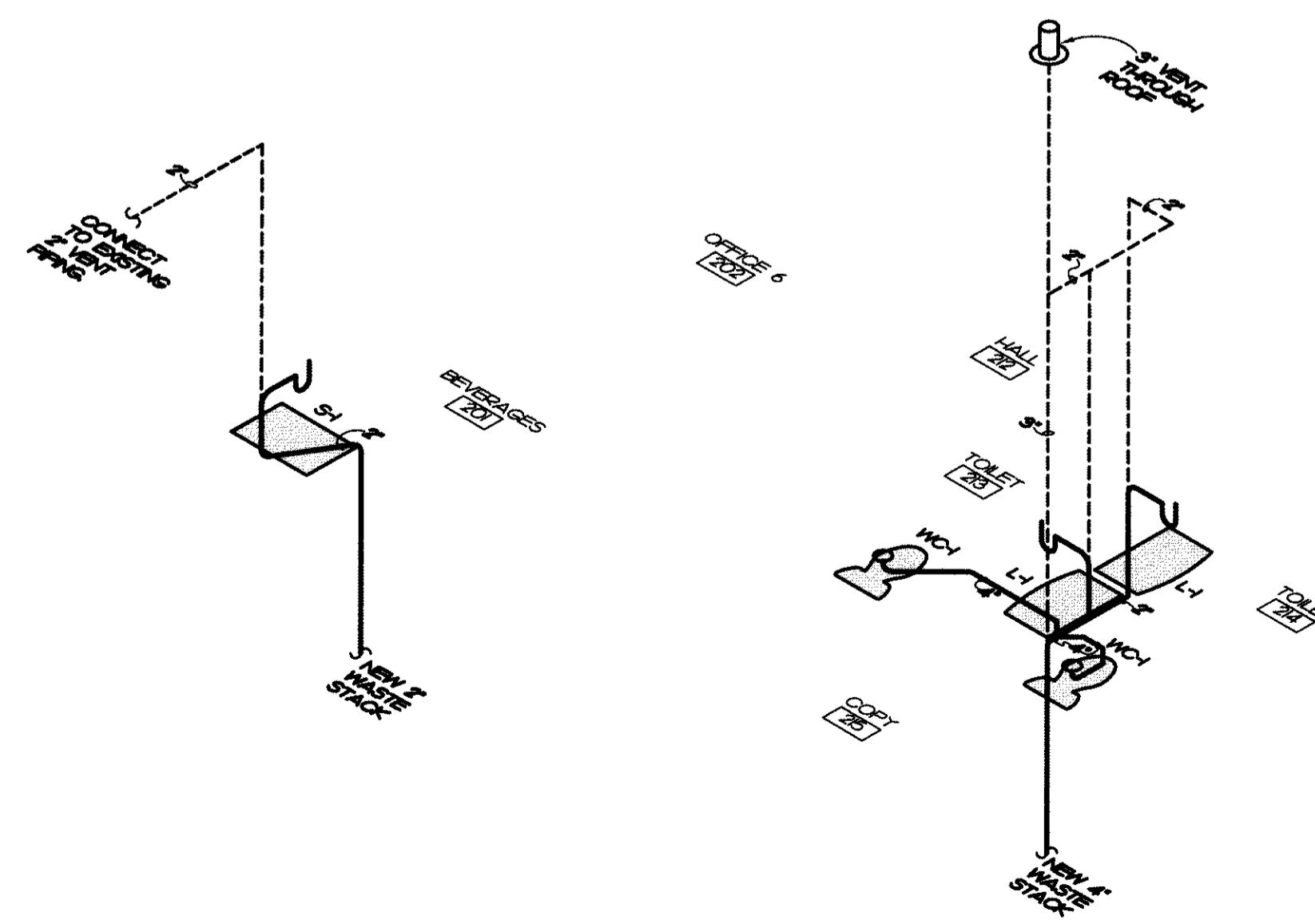
1 1st FLOOR PLUMBING PLAN  
PL1 SCALE: 1/8" = 1'-0"



2 2nd FLOOR PLUMBING PLAN  
PL2 SCALE: 1/8" = 1'-0"



4 WATER PIPING RISER  
PL1 NOT TO SCALE

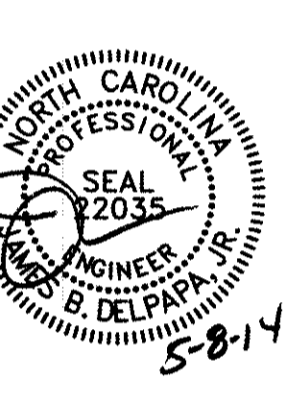


5 WASTE PIPING RISER  
PL1 NOT TO SCALE

Interior Alteration

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1609 Heritage Commerce Ct  
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**ATLANTEC**  
ENGINEERS, PA  
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919-374-1111  
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RANDOLPH, NC 28134  
704-287-3333  
14032



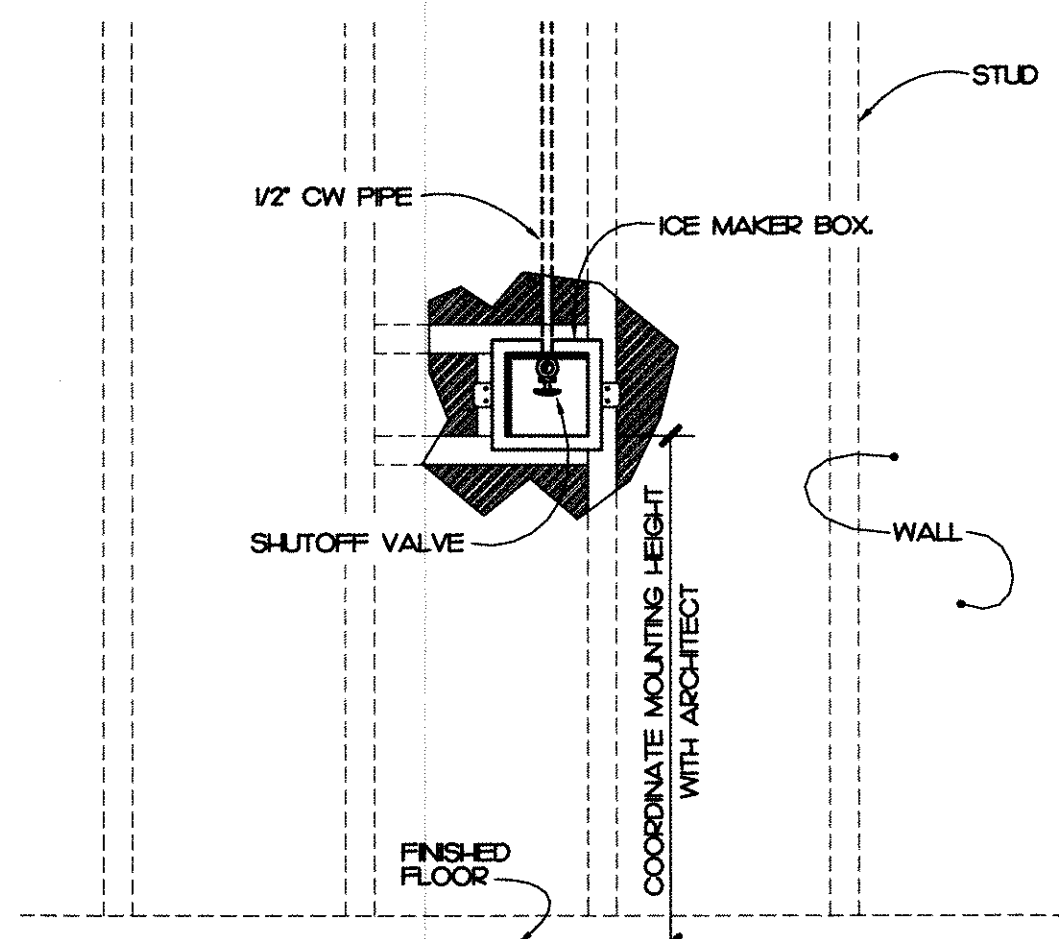
**MAURER ARCHITECTURE**

115.5 EAST HARGETT STREET, SUITE 300  
RALEIGH, NORTH CAROLINA 27601  
TEL. 919-829-4969 FAX. 919-829-0860

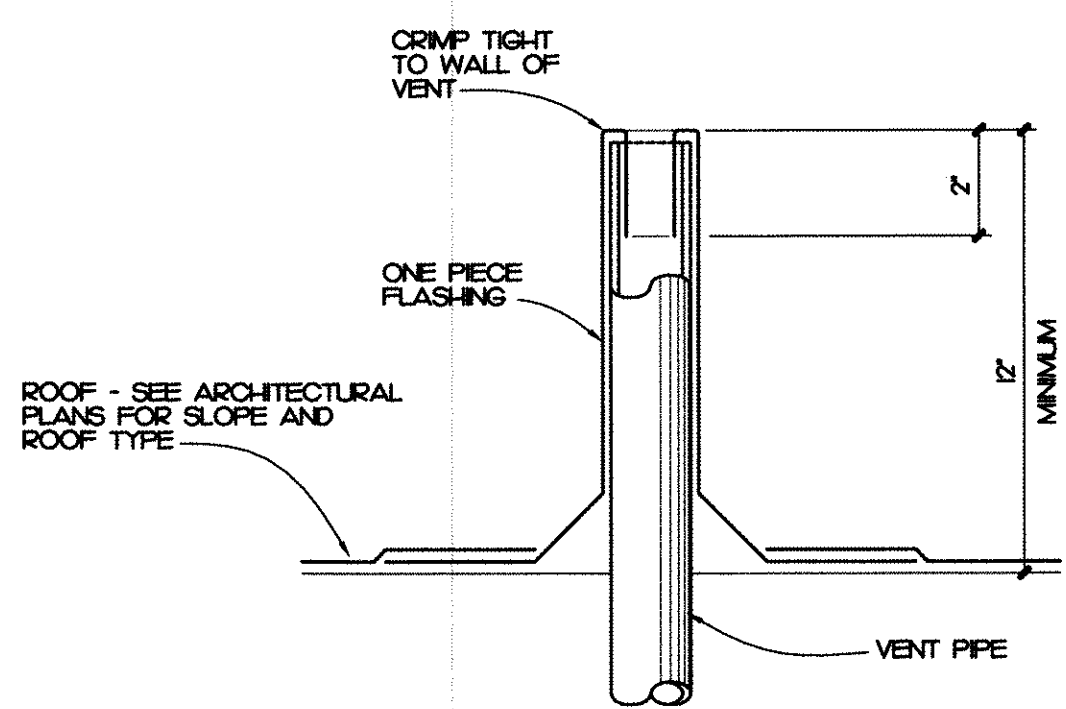
DATE	05.05.14
DR.	DRD
CH.	JBD
PROJ. #	13049
REVISIONS	DATE
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PLUMBING PLANS  
AND RISERS

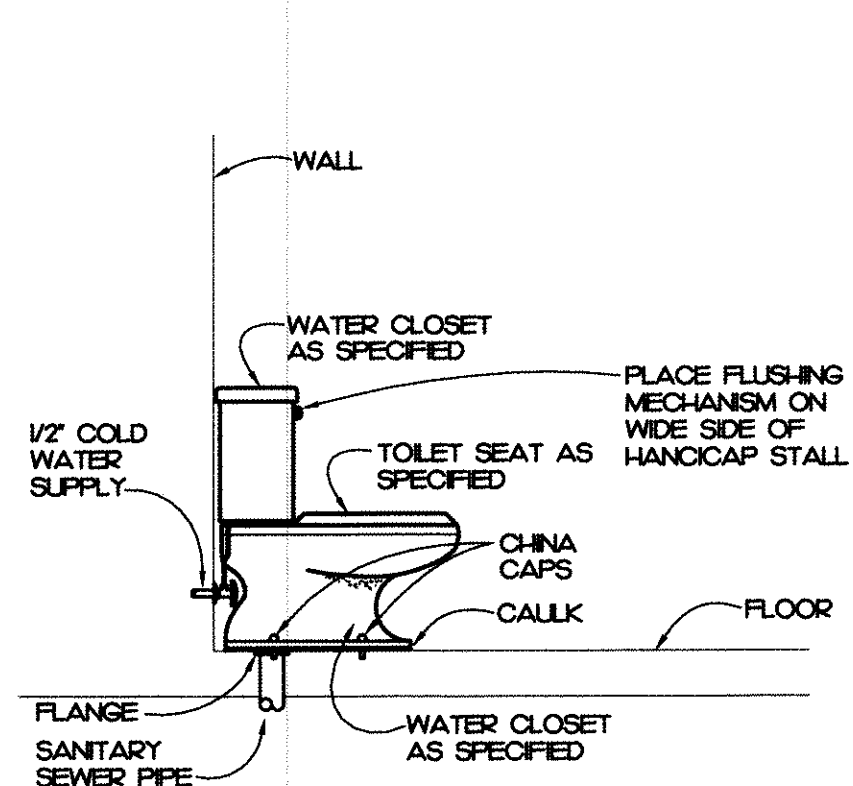
**P1.1**



1 ICE MAKER BOX DETAIL  
P21 NOT TO SCALE



2 VENT THROUGH ROOF DETAIL  
P21 NOT TO SCALE

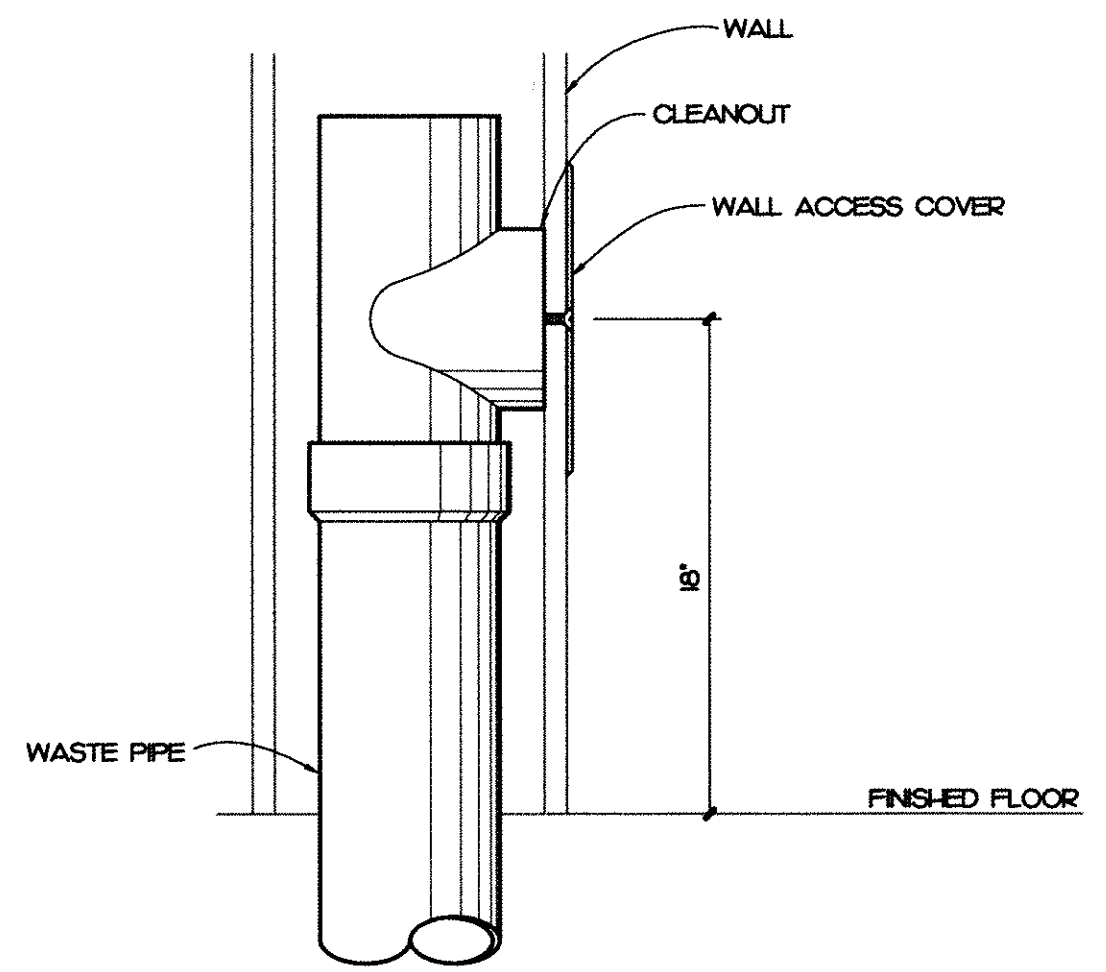


3 WATER CLOSET DETAIL  
P21 NOT TO SCALE

### PLUMBING FIXTURE SCHEDULE

SYMBOL / IMAGE	DESCRIPTION	3 - EQUALS						PIPING CONNECTIONS		
		MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	COLD WATER	HOT WATER	SANITARY SEWER
CO-1	WALL CLEANOUT	ZURN	CO248-PVC	MIFAB		JR SMITH				SEE PLUMBING DRAWINGS
	ACCESS COVER	ZURN	CO290-SS7	MIFAB		JR SMITH				
	PVC CLEANOUT BODY AND PLUG TO BE GAS AND WATER TIGHT. PLUG TO HAVE A BRASS THREADED INSERT TO RECEIVE SECURING SCREW FOR STAINLESS STEEL ROUND ACCESS COVER.									
IM-1	ICE MAKER BOX	OATEY CO.	38608	GUY GRAY				1/2"		
		PLASTIC ICE MAKER BOX WITH VALVE, SUPPLY TUBE TO REFRIGERATOR, AND WATER HAMMER ARRESTOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECT.								
L-1	LAVATORY	INTEGRAL								
	Faucet	DELTA	523-HDF-HGM	CHICAGO FAUCETS	2200-4	MOEN	8470			
	TRAP	McGUIRE	8902	ELJER	804-185	KOHLER	K-8999			2"
	SUPPLY	McGUIRE	158LK	ELJER	802-025	KOHLER	K-760HP	1/2"	1/2"	
	LAVATORY BASIN IS INTEGRAL WITH COUNTERTOP AND SUPPLIED BY OTHERS. PROVIDE WITH AN OVERFLOW. FAUCET SHALL BE CHROME FINISH, SINGLE LEVER, 4" CENTERS, WITH 3/8" COPPER SUPPLY TUBE INLETS, AND PROVIDED WITH AN AERATOR. RIGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS, FULL TURN BRASS STEM, REDUCER, AND FLANGE. INLET SHALL BE 3/8" IPS. OUTLET SHALL BE 3/8" IPS. P-TRAP SHALL BE CHROME PLATED CAST BRASS BODY WITH CLEANOUT, CAST BRASS ELBOW, CAST BRASS SLIP NUT, AND FLANGE. PROVIDE WITH OFFSET STRAINER AND McGUIRE PROWRAP INSULATOR.									
S-1	2-COMPARTMENT SINK	JUST	DL-ADA-933-A-GR	ELKAY	LRAD-339					
	Faucet	DELTA	400	KOHLER	K-8572	MOEN	7437	1/2"	1/2"	
	TRAP	McGUIRE	8902	KOHLER	K8999	ELJER	804-185			2"
	SUPPLY	McGUIRE	170	KOHLER	K-76-6-P	BRASSCRAFT	CS400AC			
	SINK IS TO BE 18 GAUGE STAINLESS STEEL, SELF-RUNNING, DECK MOUNTED FAUCET SHALL BE CHROME FINISH, WITH 1/2" INLET AND PROVIDED WITH AN AERATOR. RIGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS AND FLANGE. INLET AND OUTLET SHALL BE 3/8" IPS. PROVIDE WITH DSH-WASHER CONNECTION AND DISPOSAL IF REQUIRED BY ARCHITECT. PROVIDE WITH McGUIRE PROWRAP INSULATOR AND SPRAYER NOZZLE WITH SINK.									
WC-1	WATER CLOSET	KOHLER	K-3427	ELJER	09-7045	TOTO	CST704L			4"
	SEAT	KOHLER	K-4670-C	ELJER	124-0255	TOTO	SC34			
	SUPPLY	McGUIRE	185	KOHLER	K-7638	ELJER	802-0225	1/2"		
	TOILET SHALL BE MADE OF VITREOUS CHINA WITH A WHITE FINISH AND A 12" ROUGH-IN. TOILET SHALL INCLUDE POLISHED CHROME TRIP LEVER. SEAT SHALL BE EXTRA HEAVY WEIGHT SOLID PLASTIC WITH OPEN FRONT LESS COVER FOR ELONGATED BOWL. SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS, FULL TURN BRASS STEM AND FLANGE. INLET SHALL BE 3/8" IPS. OUTLET SHALL BE 3/8" IPS. THE FLUSHING LEVER MECHANISM SHALL BE ON THE WIDE SIDE OF THE STALL.									

- PLUMBING SCHEDULE NOTES AND LEGEND:
- THE PLUMBING CONTRACTOR MAY SUBSTITUTE FIXTURES WITH OWNERS' APPROVAL.
  - SUBMIT CUT SHEETS FOR ALL PROPOSED FIXTURES TO ARCHITECT PRIOR TO BIDDING.
  - PROVIDE VACUUM BREAKER ON ALL EQUIPMENT REQUIRING PLUMBING.
  - REFER TO MANUFACTURERS WEB SITE FOR CUT SHEETS AND DATA ON THE FIXTURES AND APPURTENANCES USED IN THIS SCHEDULE.
- ADA COMPLIANT



4 WALL CLEANOUT DETAIL  
P21 NOT TO SCALE

## PLUMBING GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
- ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE PLUMBING CONTRACTOR.
- ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMAN. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL OF HIS WORK WITH ALL OTHER CONTRACTORS.
- THE PLUMBING PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION. ALL DISCREPANCIES OR INTERFERENCES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
- THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE PLUMBING WORK. THE PATCHING SHALL BE BY THE PLUMBING CONTRACTOR AND FINISHING BY GENERAL CONTRACTOR.
- WATER PIPING BELOW GRADE SHALL BE TYPE "K" COPPER (NO JOINTS BELOW GRADE) AND ABOVE GRADE TYPE "K" COPPER, SUPPORTED AS REQUIRED AND SHALL BE HYDROSTATICALLY TESTED FOR ONE HOUR AT 50 PSI. TEST TO COMPLY WITH ALL EPA STANDARDS. THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE.
- WATER PIPING LOCATED ABOVE CEILING AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE OF CEILING INSULATION (UNDERSIDE) AND WALL INSULATION (INSIDE).
- ALL COLD AND HOT WATER PIPING SHALL BE INSULATED. INSULATE WASTE PIPING AS DESIGNATED ON PLUMBING DRAWINGS. INSULATION SHALL BE FIBERGLASS. EXPOSED PIPING TO BE WRAPPED WITH ALUMINUM JACKET.
- DO NOT SUPPORT PIPING FROM BAR JOIST BRIDGING AND/OR ROOF DECK.
- WATER SHUT-OFF VALVES ABOVE FINISHED CEILING ARE TO BE FREE FROM OBSTRUCTIONS SUCH AS DUCTWORK, LIGHTS, WIRING AND OTHER PIPING SO AS TO PROVIDE EASY ACCESS. MOUNT NO MORE THAN 2'-0" ABOVE FINISHED CEILING.
- IF THE WATER PRESSURE EXCEEDS 80 PSI A PRESSURE REDUCING VALVE SHALL BE INSTALLED WHERE THE WATER ENTERS THE BUILDING.
- PLUMBING CONTRACTOR SHALL PROVIDE A DIELECTRIC UNION WHEN CONNECTING DISSIMILAR MATERIAL.
- WATER HEATERS SHALL HAVE AN EFFICIENCY MEETING REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL AND CONTROL CONNECTIONS TO THE EQUIPMENT FURNISHED UNDER HIS CONTRACT.
- VENT AND SANITARY SEWER PIPING SHALL BE SCHEDULE 40 PVC. VENT AND SANITARY SEWER PIPING LOCATED IN A RETURN AIR PLENUM SHALL BE CAST IRON. SANITARY SEWER AND VENT PIPING SHALL BE GAS AND AIR TIGHT.
- THE PLUMBING CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION OF ANY WORK.
- THE PLUMBING CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS FOR WORK BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH WORK BY OTHERS AND AVOID ALL CONFLICTS.
- LOCATIONS OF UTILITIES (WASTE AND WATER PIPING, ETC.) PROVIDED BY OTHERS, THAT ARE TO BE CONNECTED TO ARE ASSUMED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE LOCATIONS AND MAKE FINAL CONNECTIONS AS REQUIRED.
- VERIFY THE LOCATION OF ALL EQUIPMENT SUPPLIED BY OTHERS.
- ALL EQUIPMENT DIRECTLY CONNECTED TO THE WATER SYSTEM SHALL BE PROVIDED WITH A DOUBLE CHECK VALVE AS APPROVED BY THE CITY OF RALEIGH.
- ALL VENT PIPING THROUGH THE ROOF SHALL BE A MINIMUM OF 5'-0" FROM ALL MAKE-UP AIR INLETS OR A MINIMUM OF 2'-0" ABOVE THE TOP OF ALL MAKE-UP AIR INLETS. VENTS THROUGH ROOF ARE TO BE ON REAR OF BUILDING.
- SEE ARCHITECTURAL DRAWINGS FOR PLUMBING MINIMUM FACILITY CALCULATIONS.
- ALL INDIRECT WASTE IS TO BE PROVIDED WITH AN AIR GAP 2 TIMES THE SIZE OF THE WASTE INLET.
- ALL EQUIPMENT REMOVED FROM THE BUILDING DURING DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO THE OWNER FOR DISPOSAL. CARE SHOULD BE TAKEN IN REMOVAL OF ITEMS TO MINIMIZE DAMAGE. ANY ITEM WHICH IS NOT WANTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PREMISES.
- THE PLUMBING CONTRACTOR SHALL VERIFY BUILDING FLOOR ELEVATION IS ABOVE MAN-HOLE RIM ELEVATION OR PROVIDE A BACKWATER VALVE AS REQUIRED.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR DEMOLITION AT NO COST TO THE OWNER.
- THE PLUMBING CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.

## PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
---	COLD WATER PIPING
--->---	WATER PIPING DIRECTION OF FLOW
--- ECW ---	EXISTING COLD WATER PIPING
---	HOT WATER PIPING
--- EHW ---	EXISTING HOT WATER PIPING
---	HOT WATER RETURN PIPING
--- EHW-R ---	EXISTING HOT WATER RETURN PIPING
○	BALL VALVE
⊥	CHECK VALVE
⊥	GATE VALVE
○	WATER PIPING TURNED DOWN
○	WATER PIPING TURNED UP
---	PIPING SIDE CONNECTION
---	SANITARY SEWER / WASTE PIPING
--->---	SANITARY SEWER / WASTE PIPING DIRECTION OF FLOW
---	EXISTING SANITARY SEWER / WASTE PIPING
---	VENT PIPING
---	EXISTING VENT PIPING
○	VENT PIPE UP
○	PLUMBING FIXTURE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR
○	PLUMBING FIXTURE PROVIDED BY OTHERS AND INSTALLED BY PLUMBING CONTRACTOR
○	CONNECT TO EXISTING

## PLUMBING LOAD SUMMARY

	WATER DEMAND FU	WATER DEMAND GPM	SANITARY SEWER DEMAND FU
EXISTING TOTAL	78	38	65
ADDITION	19	19	12
NEW TOTAL	97	43	77

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 TEL. 919-829-4969 FAX. 919-829-0860

DATE	05.05.14
DR.	DRD
CH.	JBD
PROJ. #	13049
REVISIONS	DATE
--	--/--

PLUMBING NOTES,  
 FIXTURE SCHEDULE,  
 AND DETAILS  
**P2.1**