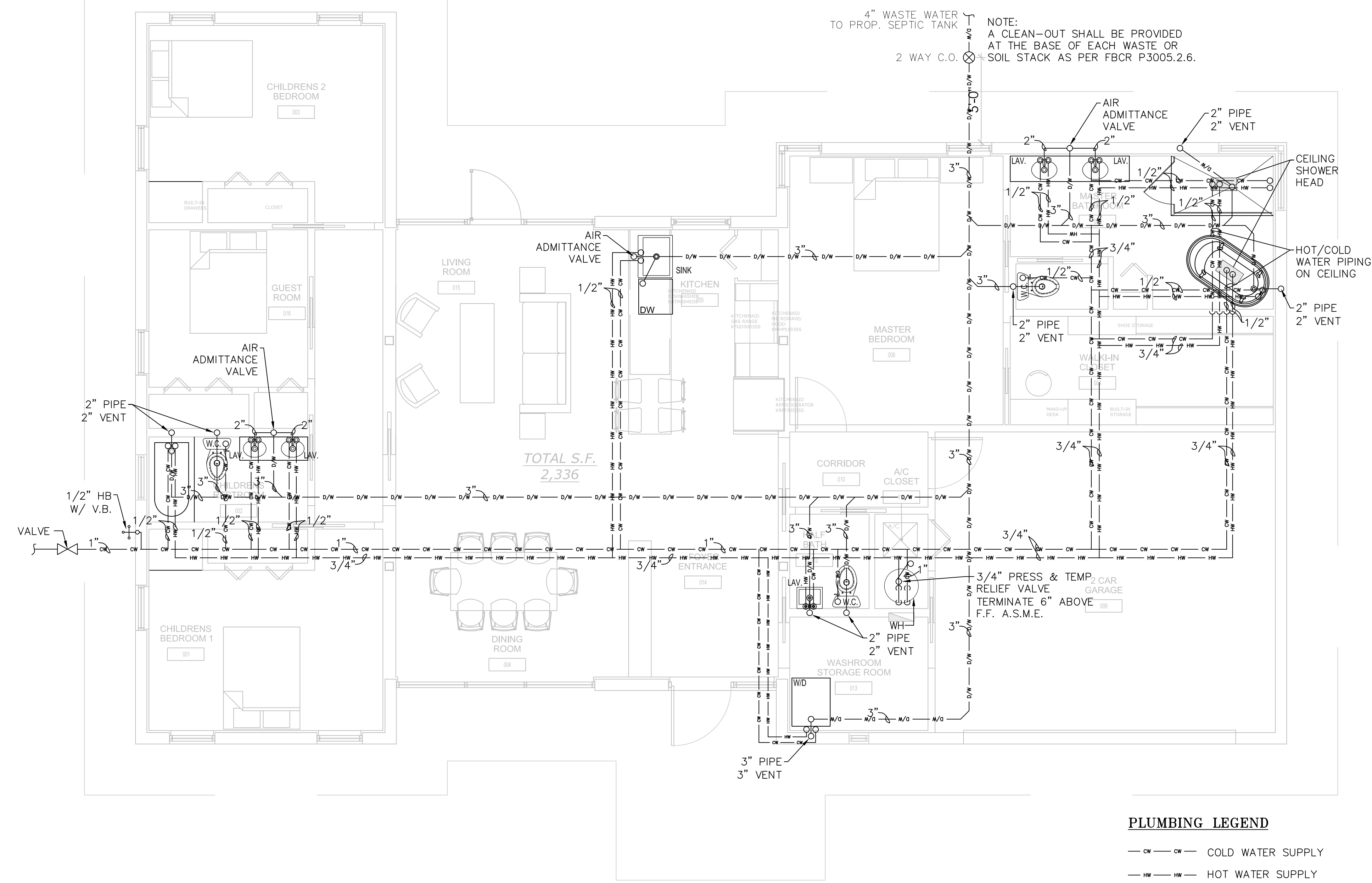


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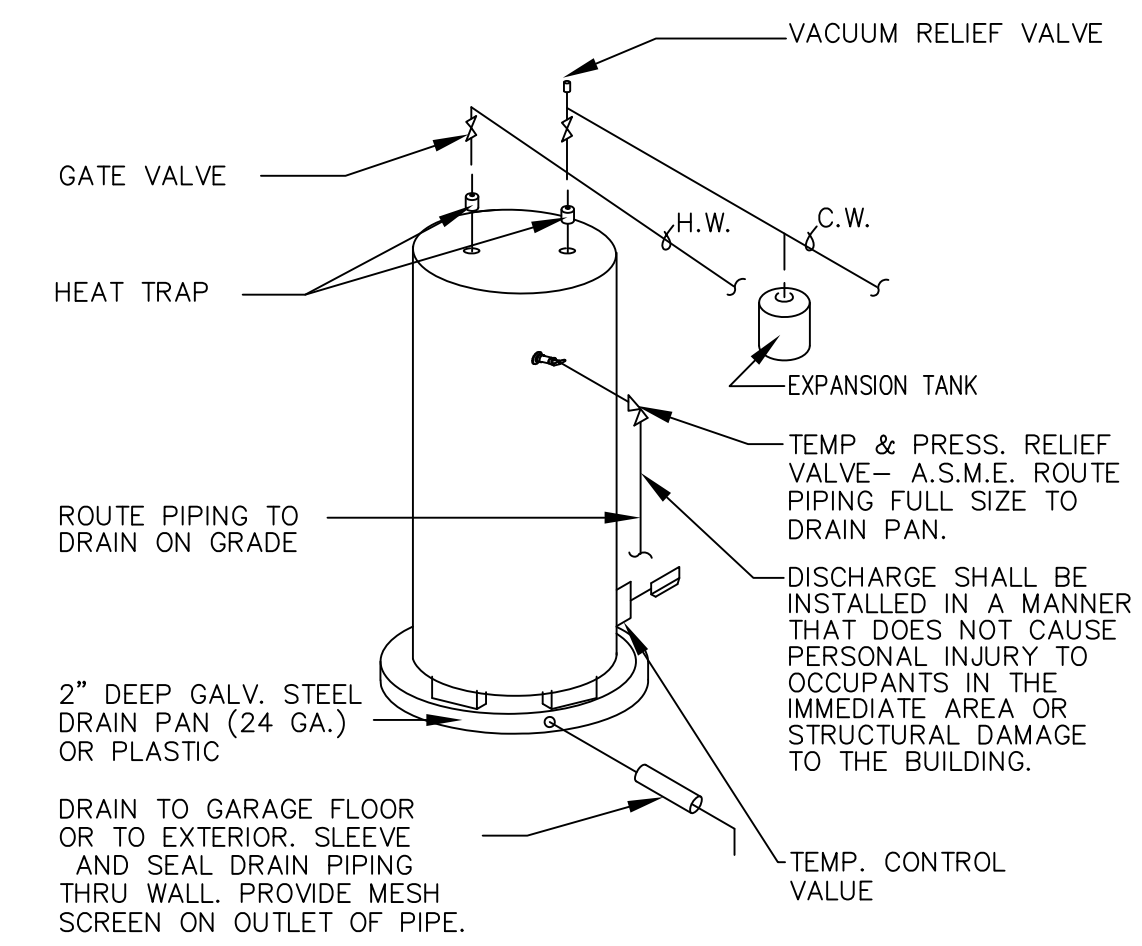


**PLUMBING PLAN**

SCALE = 1/4" = 1'-0"  
ALL PLUMBING PIPES ARE DISTRIBUTED UNDER CONCRETE SLAB

NO.	DESCRIPTION	WASTE	WATER		REMARKS (GPM)
			COLD	HOT	
WC	WATER CLOSET (3)	3"	1/2"	—	1.28 GALLONS PER FLUSHING CYCLE
LAV.	LAVATORY (5)	1 1/4"	1/2"	1/2"	1.5 GPM @ 60 PSI
TUB/SHWR	TUB / SHOWER (1)	1 1/2"	1/2"	1/2"	1.5 GPM @ 80 PSI
G.T.	GARDEN TUB (1)	1 1/2"	1/2"	1/2"	1.5 GPM @ 80 PSI
SHWR	SHOWER (1)	2"	1/2"	1/2"	1.5 GPM @ 80 PSI
SINK	KITCHEN SINK (1)	2"	1/2"	1/2"	1.5 GPM @ 60 PSI
W	CLOTHES WASHER (1)	2"	1/2"	1/2"	WATER FACTOR OF 8 OR LOWER (ENERGY STAR / WATER SENSE CERTIFIED) 6.5 GALLONS PER CYCLE OR LESS (ENERGY STAR / WATER SENSE CERTIFIED)
DW	DISH WASHER (1)	1" 1W	—	1/2"	UNDER COUNTER AS SELECTED BY OWNER
REF.	REFRIGERATOR (1)	—	1/2"	—	

(1) PROVIDE ANTI-SCALD VALVE. (2) PROVIDE MECH SHOCK ABSORBER TO EACH SUPPLY



**WATER HEATER DETAIL (TYP.)**

50 GALLON DUAL ELEMENT SIMULTANEOUS WIRED

- NOTES:**
- 50 GAL EWH DUAL 3500 KW WIRE FOR SIMULTANEOUS OPERATION TOTAL 7000 KW/240V/29.17 AMPS ENERGY FACTOR 0.95
  - CALCULATIONS**  
7KW x 4.1= 28.7  
28.7 x 2= 57.4  
35+ 57.4= 92.4  
4.5V.s 7 KW= 72 GPH Vs 92 GPH

HOT WATER HEATER	# OF ELEMENTS	EF	KW	AMP	BREAKER
50 SIMULTANEOUS	2	.95	7	36.46	40

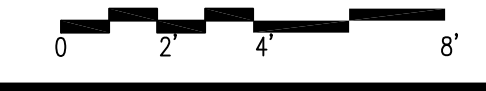
**PLUMBING LEGEND**

- CW — COLD WATER SUPPLY
- HW — HOT WATER SUPPLY
- DW — WASTE
- CONDENSATE LINE

**NOTE: SANITARY**  
2" OR LESS 1/4" / FOOT SLOPE OVER 2"  
1/8" / FOOT SLOPE PITCH TO BE UNIFORM THROUGHOUT STRAIGHT RUNS

**PLUMBING**

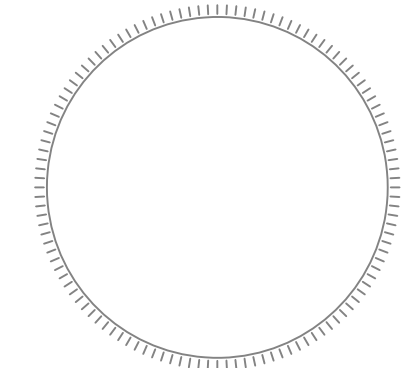
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND WITH ALL APPLICABLE REGULATIONS.
- ALL HORIZONTAL SANITARY PIPING SHALL SLOPE AT 1/8" PER FOOT MINIMUM FOR 3" AND LARGER AND AT 1 1/4" SLOPE FOR 2 1/2" PIPES AND SMALLER.
- PLUMBING FIXTURES: FIXTURES SHALL BE AS SELECTED BY OWNER AND SHALL BE COMPLETE WITH DRAINS, TRAPS, SUPPLIES AND ANY OTHER ACCESSORY REQUIRED. FIXTURES AND FAUCETS SHALL COMPLY WITH THE FBC WATER SAVING STANDARDS.
- MATERIALS:  
A. PIPING:  
SOIL, WASTE AND VENT, AND STORM: SANITARY PIPE, PVC, DWV SCHEDULE 40 UNDER GROUND, AND ABOVE GROUND.  
DOMESTIC WATER: CPVC PIPE AND FITTINGS INSIDE BUILDING WALLS, COPPER TYPE "K" OUTSIDE UNDER GROUND.  
CONDENSATE DRAIN: DWV PVC PIPE AND FITTINGS. INSULATE ALL ABOVE GROUND CONDENSATE PIPING WITH 1/2" FOAM PLASTIC INSULATION WITH SOLVENT SEALED SEAMS.  
DOMESTIC WATER SUPPLY ASSEMBLY: CHROME FINISH TUBING WITH ANGLE SHUT OFF VALVES.  
P & T RELIEF LINES COPPER PIPE AND FITTINGS.  
DRAIN PAN LINES: DWV PVC AND FITTINGS.  
ALL AUTOMATIC ELECTRIC WATER HEATERS SHALL MEET THE STANDARDS OF THE LATEST ENERGY EFFICIENCY CODE.  
VALVES: DOMESTIC WATER VALVES SHALL BE OF BRONZE BODY, SWEAT ENDS.  
HOSE BIBS: SHALL BE 3/4" ROUGH BRASS CONSTRUCTION WITH SHUT OFF VALVE AND VACUUM BREAKER.
- ALL OUTDOOR FLOOR CLEAN OUTS SHALL BE TERMINATED UP TO GRADE AND SHALL BE MARKED.
- PROVIDE WALL CLEANOUTS AT THE BASE OF EVERY STACK.
- CONTRACTOR SHALL PROVIDE MAINTENANCE FREE MECHANICAL SHOCK ARRESTORS AT ALL FIXTURES WITH QUICK CLOSING VALVES. VENT SYSTEMS USING AIR ADMITTANCE VALVES SHALL COMPLY WITH THIS SECTION. INDIVIDUAL AND BRANCH-TYPE AIR ADMITTANCE VALVES SHALL CONFORM TO ASSE 1050.
- THE FLOW VELOCITY OF THE WATER DISTRIBUTION SYSTEM SHALL BE CONTROLLED TO REDUCE THE POSSIBILITY OF WATER HAMMER. A WATER HAMMER ARRESTOR SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS, WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- BATHTUB, SHOWER AND WHIRLPOOL BATHTUB VALVES. THE HOT WATER SUPPLIED TO BATHTUBS AND WHIRLPOOL BATHTUBS SHALL BE LIMITED TO A MAXIMUM TEMPERATURE OF 120 F (49 C) BY A WATER-TEMPERATURE-LIMITING DEVICE THAT CONFORMS TO ASSE 1070, EXCEPT WHERE SUCH PROTECTION IS OTHERWISE PROVIDED BY A COMBINATION TUB/SHOWER VALVE IN ACCORDANCE WITH SECTION P2708.3. ACCESS PANEL FOR WHIRLPOOL BATH TUB PUMP SHALL BE PROVIDED PER FBCR 2720.1.
- DISHWASHER CONNECTION. THE COMBINED DISCHARGE FROM A SINK DISHWASHER, AND WASTE GRINDER IS PERMITTED TO DISCHARGE THROUGH A SINGLE 1 1/2"(38 MM) TRAP. THE DISCHARGE PIPE FROM THE DISHWASHER SHALL BE INCREASED TO A MINIMUM OF 3/4"(19 MM) IN DIAMETER AND SHALL CONNECT WITH A WYE FITTING BETWEEN THE DISCHARGE OF THE FOOD-WASTE GRINDER AND THE TRAP INLET OR TO THE HEAD OF THE FOOD GRINDER. THE DISHWASHER WASTE LINE SHALL RISE AND BE SECURELY FASTENED TO THE UNDERSIDE OF THE COUNTER BEFORE CONNECTING TO THE SINK TAIL PIECE OR THE FOOD GRINDER.



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REVISIONS	
ISSUE	ISSUE DATE/FOR

PROJECT No: 1605 DRAWN BY: SETOFPLANS.COM  
SCALE: CHECKED BY: DHIER  
DATE: 07/25/2018  
SHEET No.