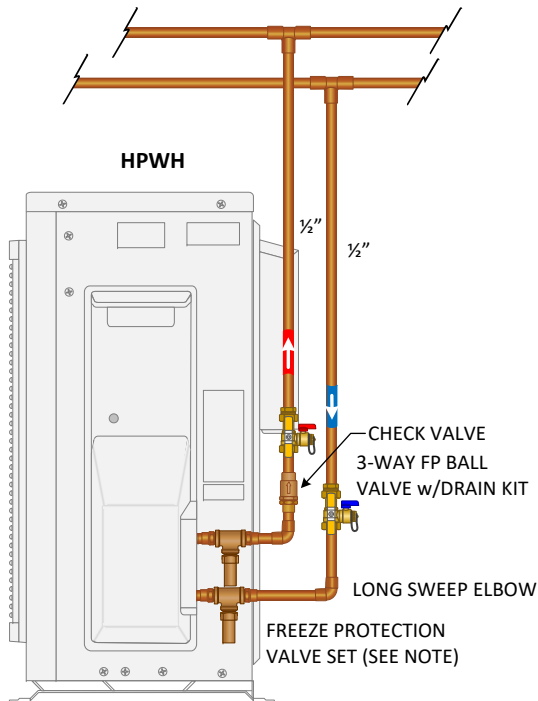
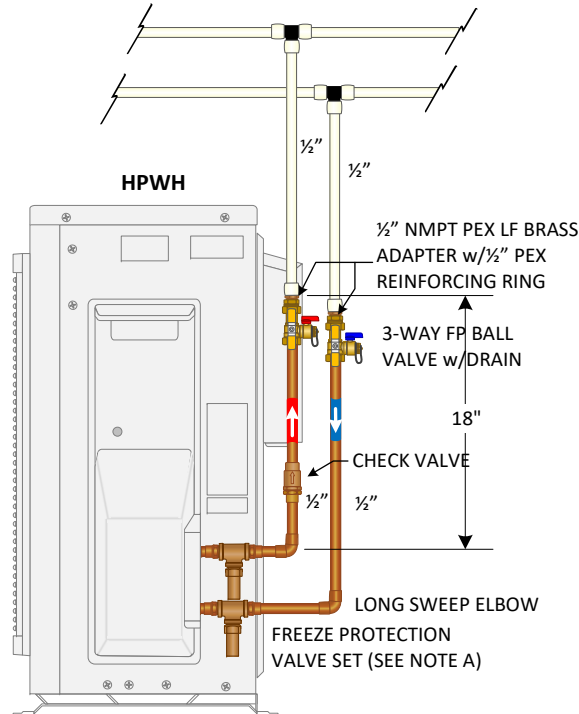


## HEAT PUMP WATER HEATER PIPING DETAIL (HPWH)



PIPING DETAIL A  
WITH COPPER PIPE



PIPING DETAIL B  
WITH PEX PIPE

### NOTES

**NOTE A:** TO PREVENT DAMAGE TO THE HPWH, WHERE TEMPERATURES ROUTINELY DROP BELOW FREEZING, WE RECOMMEND A FREEZE PROTECTION VALVE SET.

**NOTE B:** AREAS WHERE WATER HARDNESS IS GREATER THAN > 200 PPM, IT MAY BE NECESSARY TO PERIODICALLY SERVICE THE HPWH HEAT EXCHANGER. WE RECOMMEND INSTALLING A SERVICE VALVE FLUSH KIT TO THE HPWH. INSTRUCTIONS ON HOW TO DO THE PROCEDURE IS EXPLAINED IN OUR SANCO<sub>2</sub> TECHNICAL MANUAL.

**NOTE C:** INSULATE ALL PIPING PER CODE.

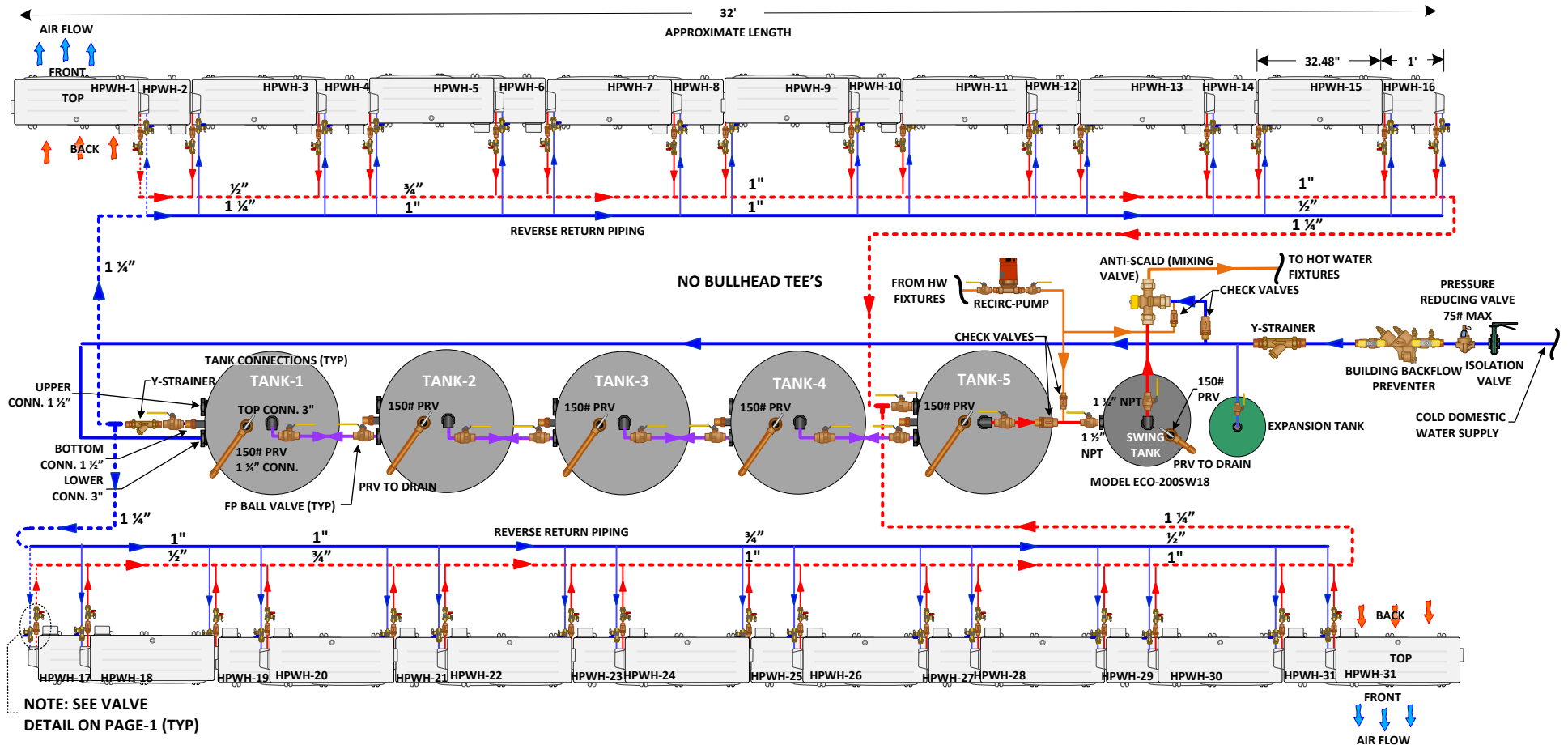
**NOTE D:** CHECK WITH LOCAL JURISDICTIONS FOR CODE REQUIREMENTS. SOME AREAS REQUIRE 18 INCHES OF COPPER PIPE AT THE HOT WATER HEATER OUTLET CONNECTION BEFORE TRANSITIONING TO PEX.

**NOTE:**  
DASHED LINES REPRESENT CRITICAL PIPING PATH. REFER TO ECO2 APPLICATION AN DESIGN MANUAL ON HOW TO DETERMINE TOTAL EQUIVALENT LENGTH (T.E.L.) DO NOT EXCEED 66 FEET OF T.E.L.

**NOTE A:** TO PREVENT DAMAGE TO HPWH'S INTERNAL COMPONENTS. WE MUST LIMIT THE INCOMING BUILDING WATER PRESSURE TO A MAXIMUM OF 75 PSI. THIS INCLUDES CALCULATING STATIC PRESSURE PLUS INCOMING WATER PRESSURE. THIS CAN BE CONTROLLED BY SELECTING A PROPERLY SIZED PRESSURE REDUCING VALVE.

**NOTE B:** MAXIMUM DISTANCE OF SEPARATION FROM THE FURTHEST HPWH TO THE FURTHEST STORAGE TANK IS 66 FEET. THE DESIGNER/ENGINEER MUST ACCOUNT FOR TOTAL EQUIVALENT LENGTH OF PIPE & FITTING PLUS STRAIGHT PIPE ALONG THE CRITICAL PIPING PATH. CONSULT WITH ECO2 SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECO2 APPLICATION AND DESIGN MANUAL.

**PLAN VIEW**



MODEL ECO-505GLNST	
STORAGE TANK CONNECTIONS	
COLD WATER INLET	3" FEMALE NPT
HOT WATER OUTLET	3" MALE NPT
COLD WATER TO HP	1 1/2" FEMALE NPT
HOT WATER FROM HP	1 1/2" FEMALE NPT

HPWH MODEL'S GS5-45HPC & GS5-45HPC-D	
HOT WATER OUTLET CONN.	1/2" NMPT
COLD WATER INLET CON.	1/2" NMPT
ALL PIPING & CONNECTIONS TO MAIN HEADERS CAN BE 1/2" COPPER OR PEX	

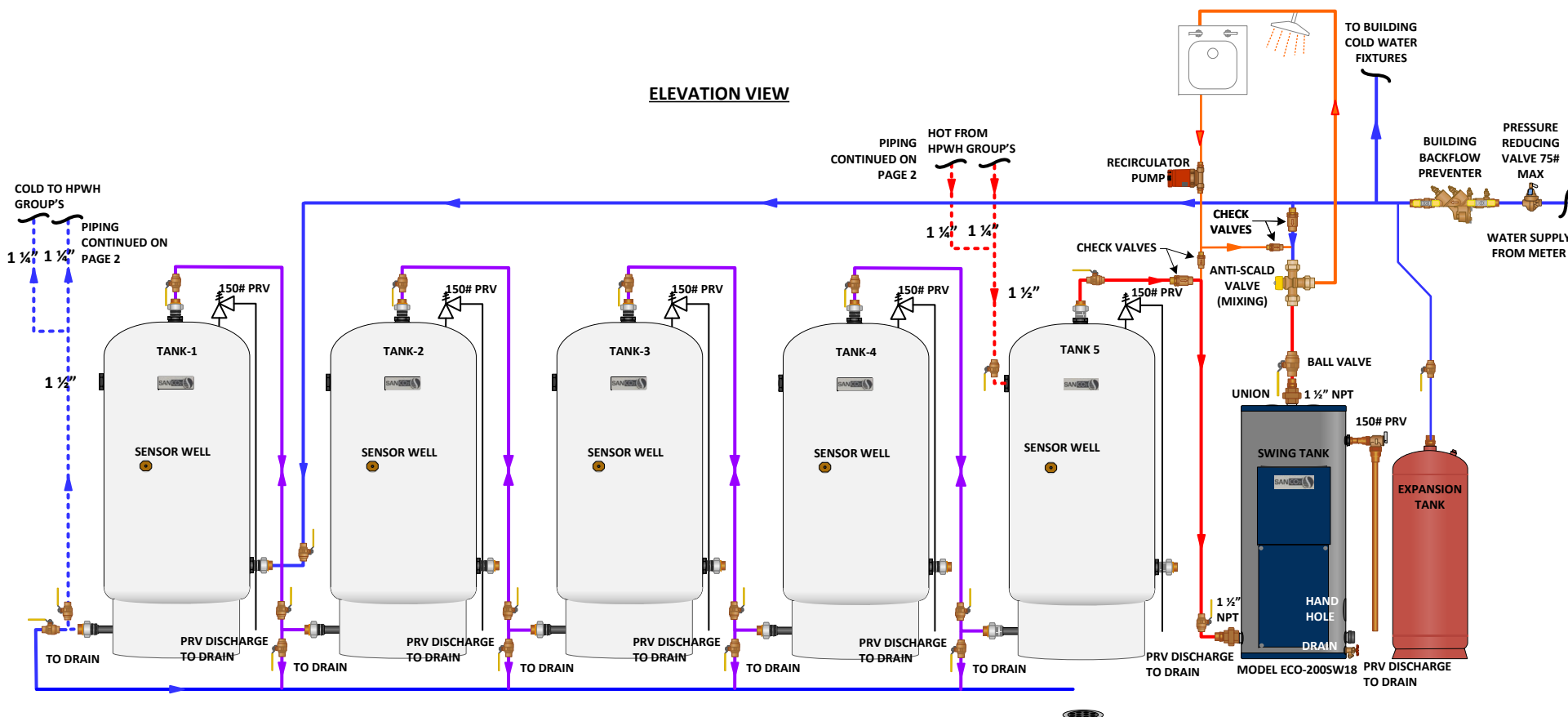
**NOTE:**  
DASHED LINES REPRESENT CRITICAL  
PIPING PATH. REFER TO ECO2  
APPLICATION AND DESIGN MANUAL ON  
HOW TO DETERMINE TOTAL  
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### ELEVATION VIEW



#### MODEL ECO-505GLNST

##### STORAGE TANK CONNECTIONS

COLD WATER INLET	3" FEMALE NPT
HOT WATER OUTLET	3" MALE NPT
COLD WATER TO HP	1 1/2" FEMALE NPT
HOT WATER FROM HP	1 1/2" FEMALE NPT

HPWH MODEL'S GS5-45HPC & GS5-45HPC-D	
HOT WATER OUTLET CONN.	1/2" NMPT
COLD WATER INLET CON.	1/2" NMPT
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