Plumbing

Plumbing and heating:

The venting in this type of construction is somewhat different than frame built. Where this is most noticed, the vent pipes and sleeves must be placed into the forms during the setup. Also, roof vents and sleeves are placed during the setup. The poured walls are 9 5/8" thick, the dome is 14" thick at the base and tapers to 6" thick at the apex.

Most common vents are:

Furnace vents and fuel supply sleeves

Bath fan

Fireplace chimney and air supply

Toilet, shower, sink and tub

Kitchen hood fan, with fresh air supply

Air conditioner sleeve for copper lines

Water heater chimney

Central vacuum exhaust sleeve

Some of the vents require intake air as well as exhaust. On all vents where moisture may condense inside of the pipe, water damage may occur. In order to prevent this from happening, these precautions will help. Where vent pipes extend through the roof, a 90 degree street elbow is glued to riser, with a tee glued in a

vertical position onto the elbow. Then a pipe extension is glued upward into the tee, this should extend 7 feet above the concrete dome. The bottom of the tee should have a 12" pipe glued into it. This is best done to all vents except waste line vents.

Plumbing rough-in measurements (unless plan specs otherwise)

1. **Toilet drain from center line of drain to finished wall -12".**
2. **Toilet water supply 6" high from finished floor.**
3. **Toilet water supply 6" to left of center line of toilet as you face the drain.**
4. **Water supply 2" out from finished wall.**

Wash Basin:

1. **Basin drain line from finished floor – 18".**
2. **Basin water supply from finished floor – 22".**
3. **Basin water supply 4" from center line left & 4" right.**
4. **Basin trap size 1 ¼" = 1 ½" x 1 ¼" reducing slip nut and washer to convert to 1 ½" drain.**
5. **Basin line size 1 ½".**
6. **Basin water supply 2" out from finished wall.**
7. **If basin is wall hunt – put hangers 33" up from finished floor.**

Kitchen Sink:

1. **Kitchen sink drain with garbage disposal 16" high from finished floor.**
2. **Kitchen sink drain line size 2".**
3. **Sink trap size 1 ½".**
4. **Kitchen sink without garbage disposal 21" from finished floor.**

Bathtubs:

1. **Tub trap size 1 ½" P trap.**
2. **Tub drain line size 1 ½".**
3. **Tub drain in floor 3" below finished floor level.**
4. **Tub spout 5" above edge of tub.**
5. **Rub faucets 10" above top edge of tub.**

Showers:

1. **Trap size 2".**
2. **Drain size 2".**
3. **Drain line 2".**
4. **Shower head from finished floor 78".**
5. **Shower head from faucets to head 48".**

Toilets, washbasins, shower and floor drains under concrete floor:

1. **All drain lines should be pitched ¼" per foot (1" in 4')**
2. **Drain lines should be installed with wye fittings where you connect drain lines together**
3. **Toilet drain lines should not be over 7 feet from main sewer line, if it is over 7 feet it has to be vented.**
4. **Washbasins and showers should also be vented in basement.**

O.K. before another re-vent is needed:

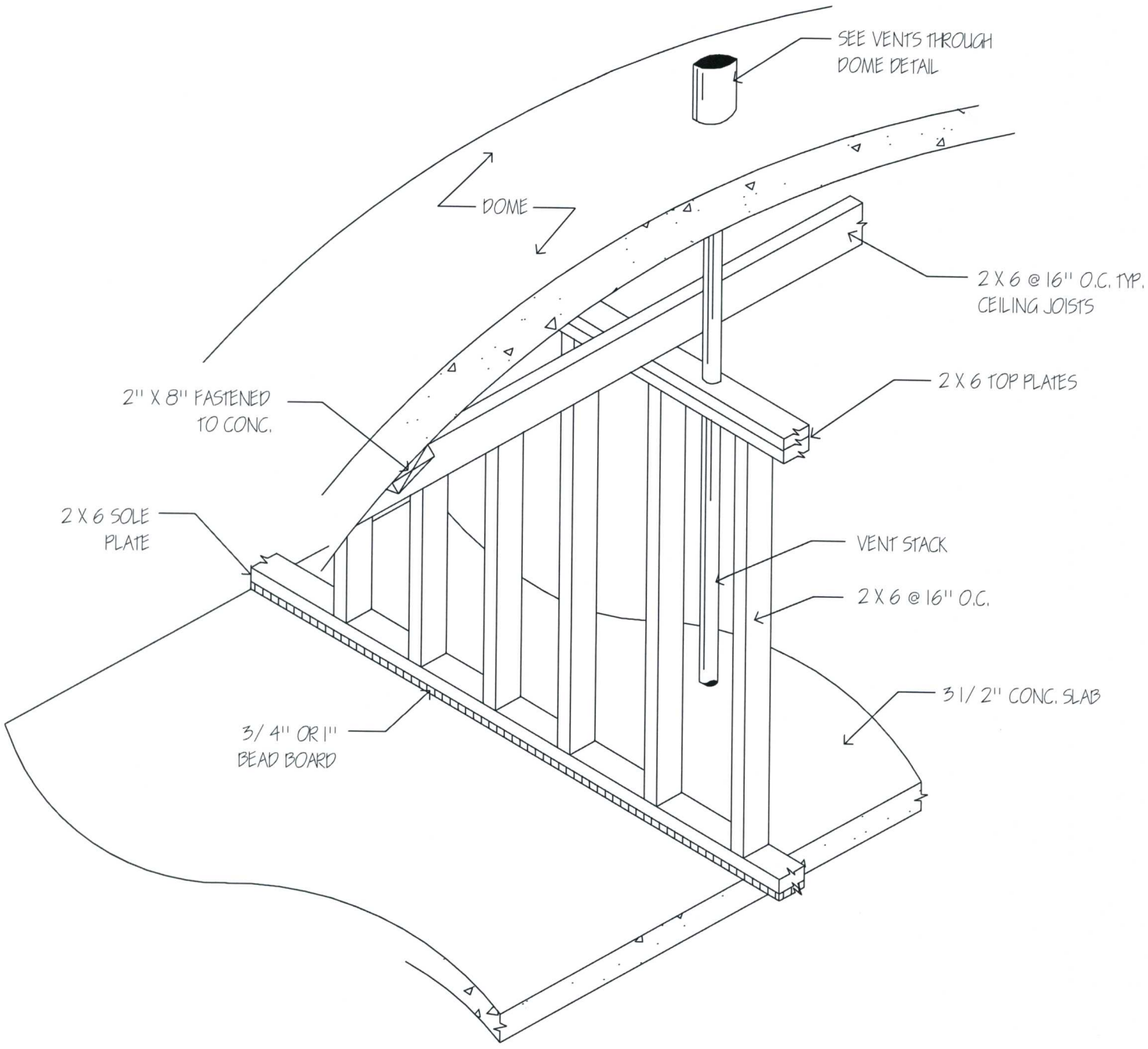
1 ½" – 3'6"	**3' – 7'**
2" – 5'0"	**4' – 7'**

***A 2" floor drain maybe 15' away from stack without re-venting.**

Use TYPE "K" copper (green stripe) BELOW FLOOR IN INSULATION OR SLEEVE (no fittings or coupling under floor surface).

Use TYPE "L" copper (blue stripe) below and above ground.

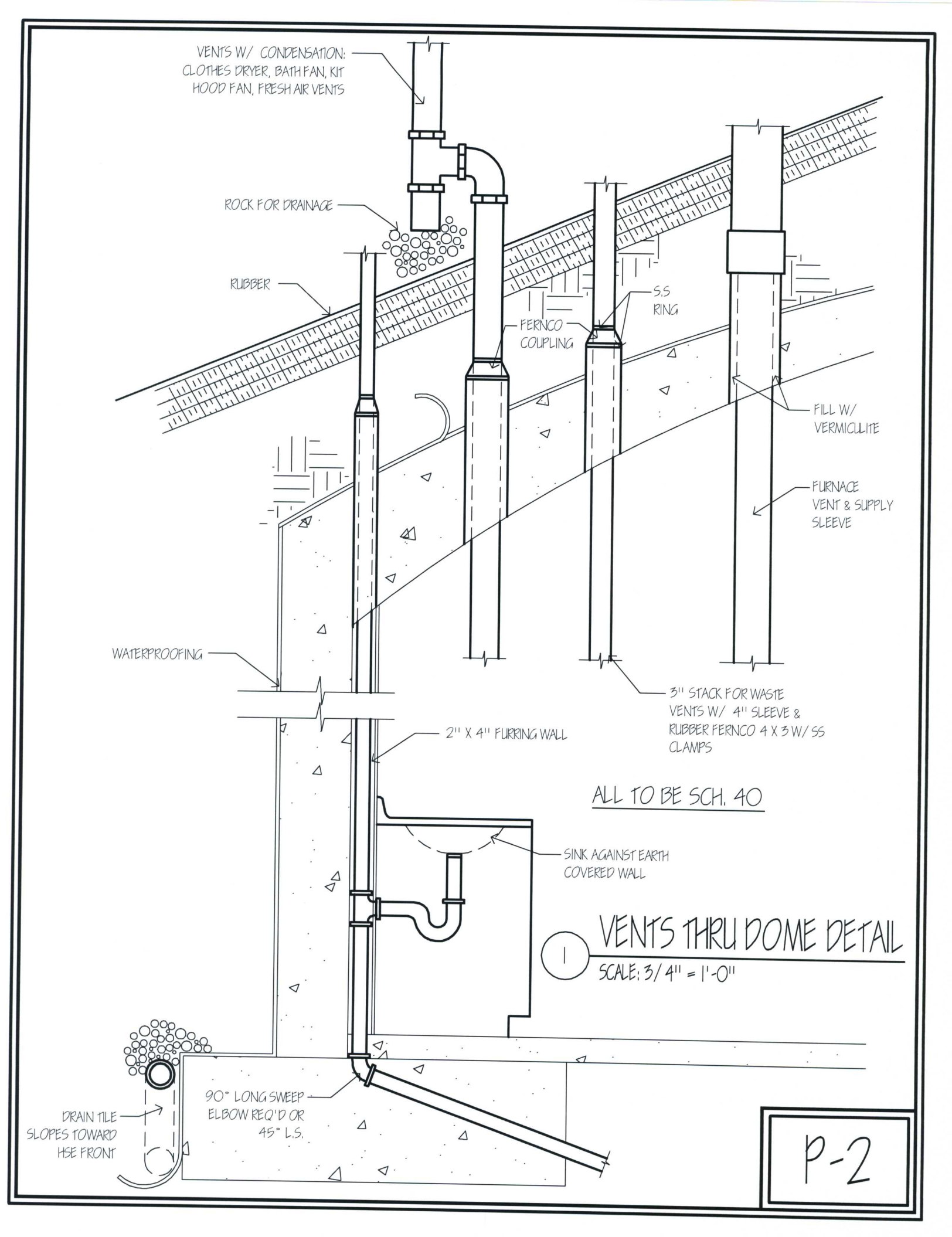
Use TYPE "M" copper (red stripe) in areas above ground.



1 PLUMBING WALL DETAIL

SCALE: 1/ 2" = 1'-0"

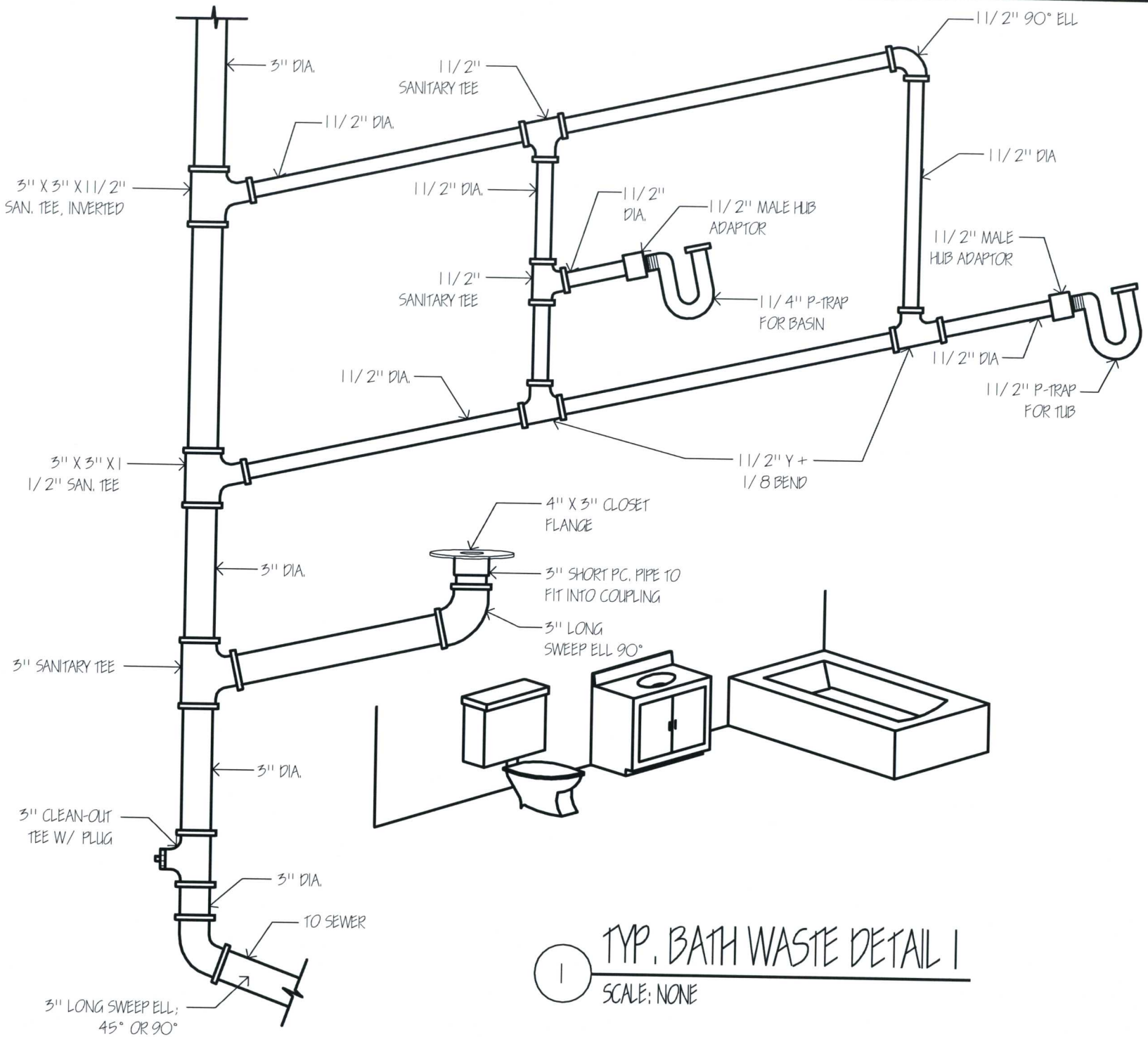
P-1



1 VENTS THRU DOME DETAIL

SCALE: 3/4" = 1'-0"

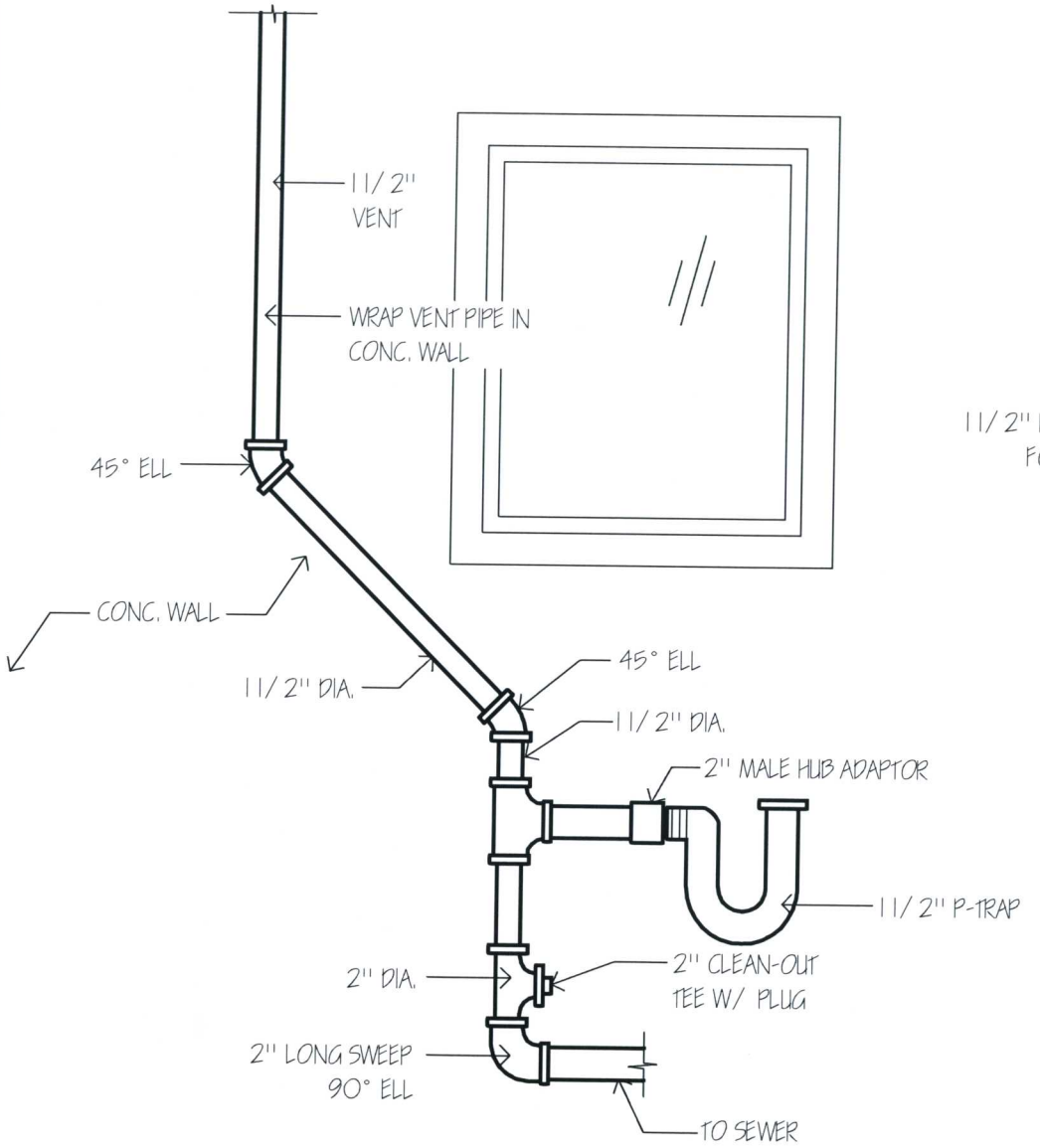
P-2

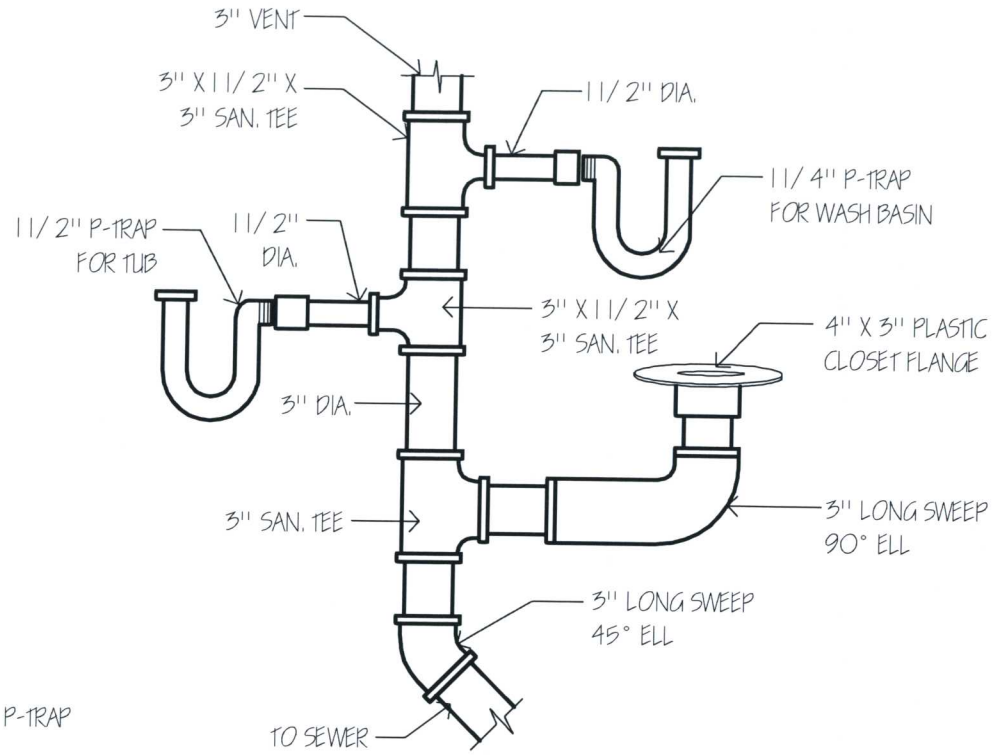


P-5

1 TYP. BATH WASTE DETAIL 1

SCALE: NONE





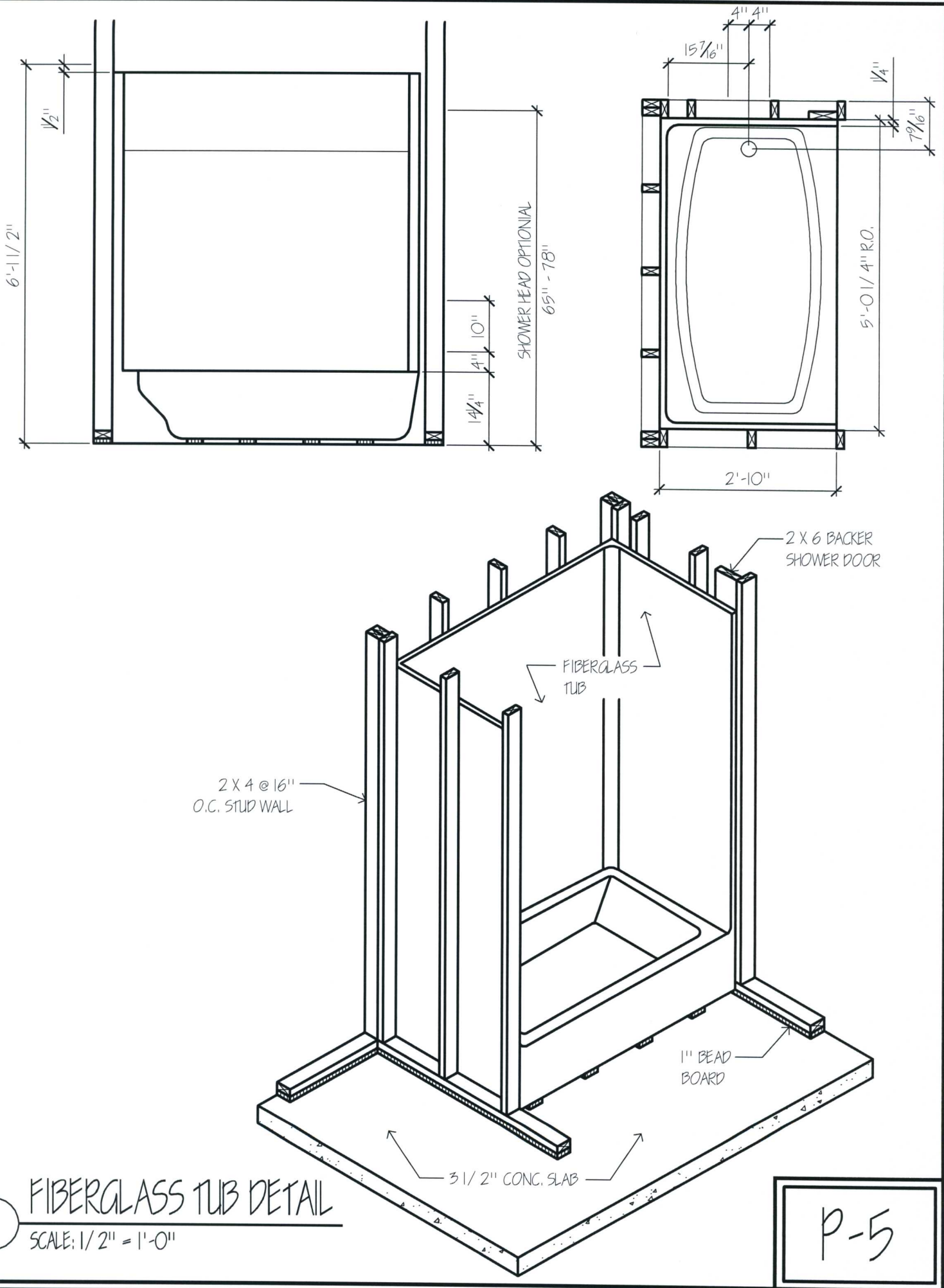
P-4

2 TYP. KITCHEN SINK WASTE DETAIL

SCALE: 1" = 1'-0"

1 TYP. BATH WASTE DETAIL 2

SCALE: 1" = 1'-0"



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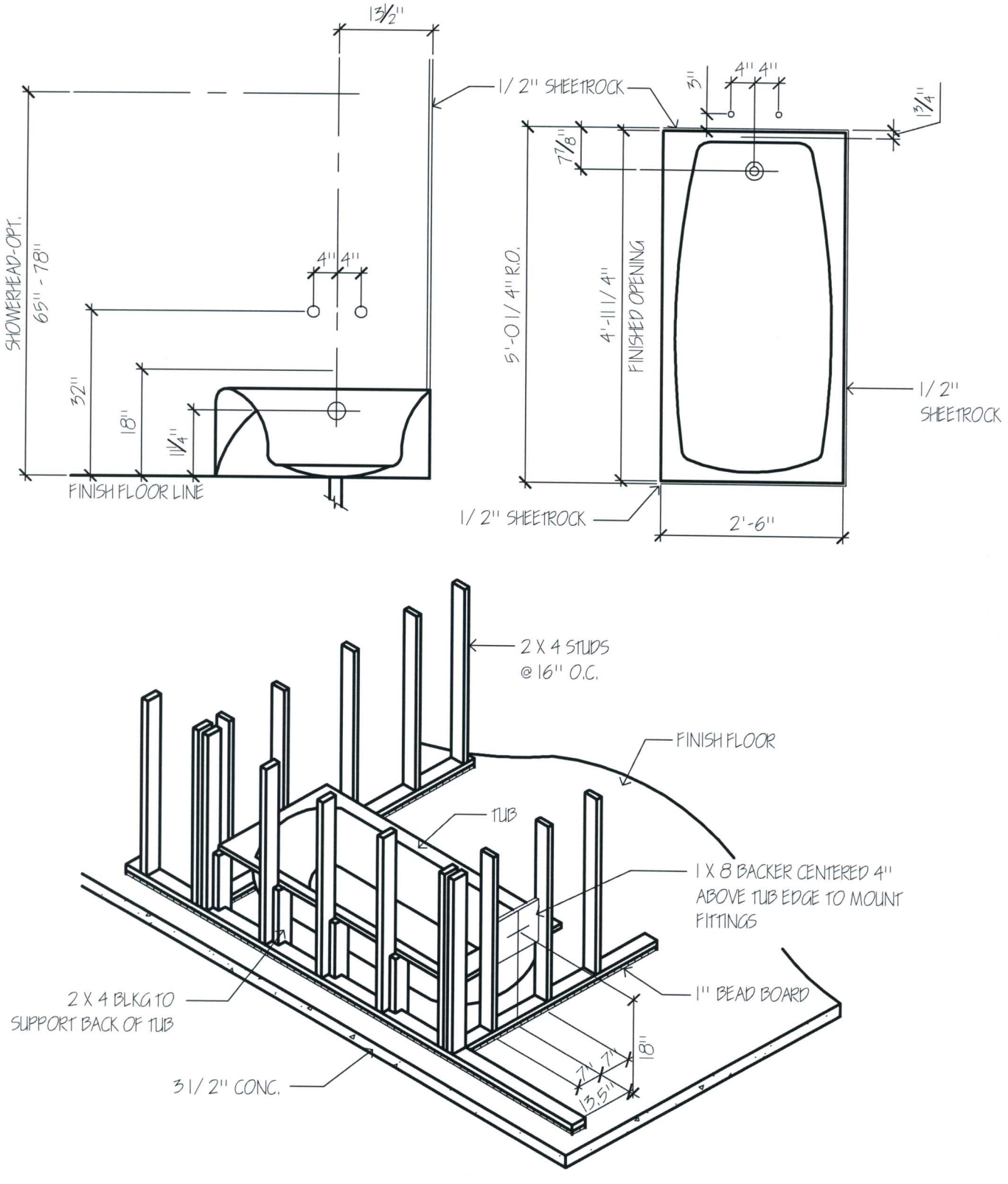
FIBERGLASS TUB DETAIL

SCALE: 1/2" = 1'-0"

P-5



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BATHTUB ROUGH-IN DETAIL

SCALE: 1/2" = 1'-0"