

How to Check Sediment Depth in Catch Basins, Vaults, and Tanks

A. Remove the manhole cover/grate

Using a ½-inch Allen wrench and a catch basin grate hook or crow bar.

B. Identify the sump depth (water level)

Using a probe or rod, identify the sump depth. This is done by inserting the rod through the water and sediment until it hits the bottom of the catch basin; water level will be visible for measurement upon removal. NOTE: Under normal conditions, the water level should be even with the outlet pipe. A higher level indicates a blockage in the outlet.

C. Identify the sediment level

- 1) Put the probe or rod in through the water until it touches the top of the sediment. Mark it with relation to a stationary point in the catch basin with tape or chalk (position A on the diagram).
- 2) Put the probe or rod in through the water and sediment until it touches the bottom of the catch basin and mark the probe with relation to the same stationary point as in item 1 above (Position B on the diagram). The difference between the two marks is the **sediment depth**.
- 3) The water mark left on the rod is the **sump depth**. Measure the ratio of sediment depth to sump depth to determine the allowable amounts. (Sediment Depth ÷ Sump Depth = <0.60)

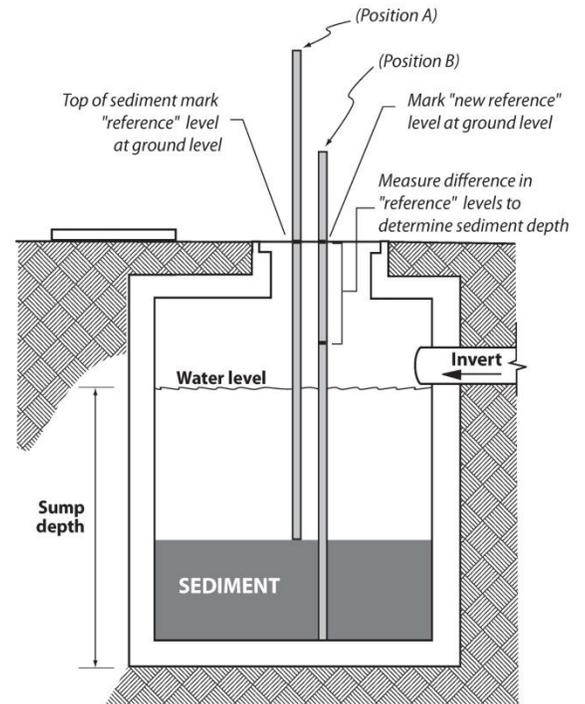


Diagram from King County Drainage Maintenance Standards

In Type I and Type II catch basins, the sediment must be removed if the sediment level exceeds 60% of the sump depth as measured from the bottom of the basin to the invert (inside bottom) of the pipe into or out of the basin, but there shall never be less than 6 inches clearance from the sediment surface to the invert of the lowest pipe.

Examples:

- (a) If the Sump Depth is 24 inches, then the maximum allowable sediment level is 14½ inches. Maximum sediment level = 0.60 x 24 = 14.4 inches
- (b) If the Sediment Depth is 22 inches and the Sump Depth is 30 inches, then $22 \div 30 = 0.73$ and the Sediment Depth is 73% of the Sump Depth, which exceeds the maximum allowable ratio.