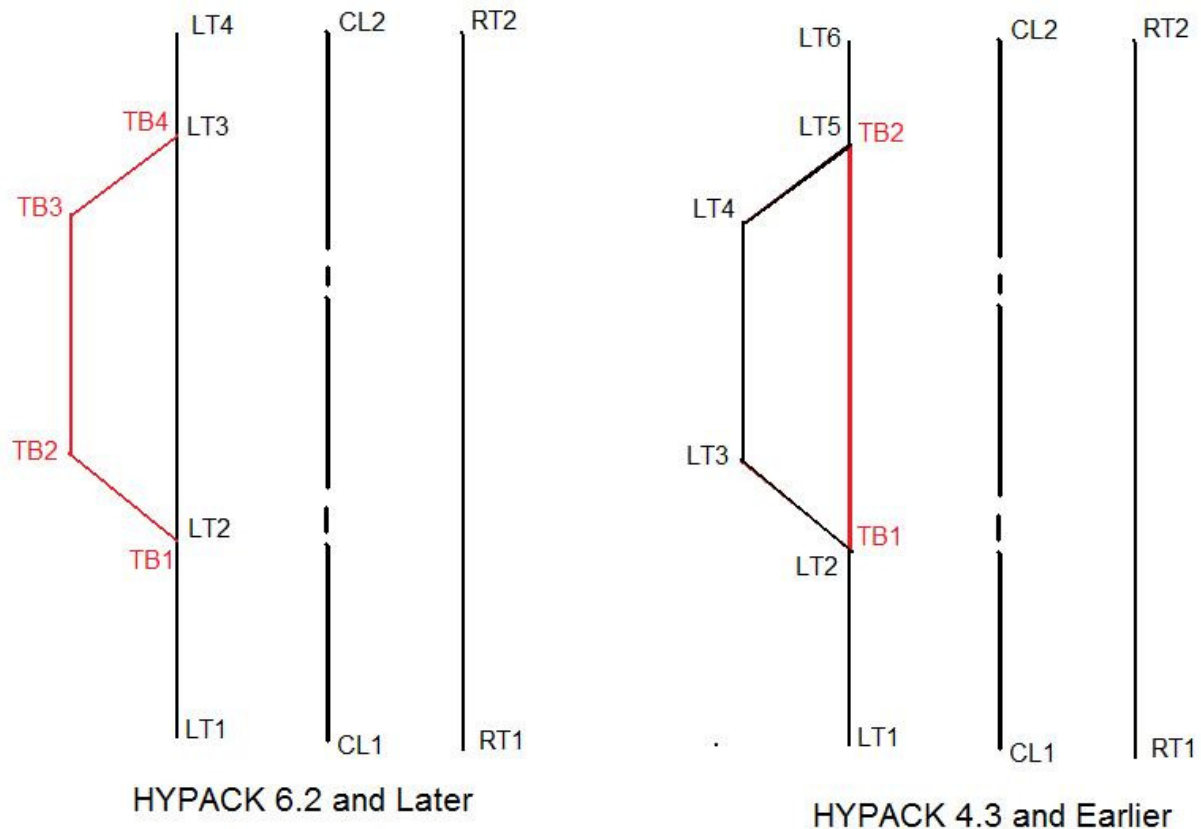


Turning Basins in CHANNEL DESIGN

By Pat Sanders



We recently ran into a problem with a client who had created a PLN file in CHANNEL DESIGN for HYPACK® 4.3 and then re-used the same PLN file in HYPACK® 6.2B.

He discovered a problem in their volume computations and got in touch with me. After spending the good part of a day fiddle-farting around, it finally dawned on me that the PLN file was not correct.

In HYPACK® 4.3 and earlier versions, the TOE LINES were always described as running around the outside of the Turning Basin and the TURNING BASIN was the straight-line connector that delineated where the channel depth began to change from the center channel depth to the turning basin depth. In the right side of the figure, we can see the LEFT TOE is described with LT1 thru LT6 and the LEFT BASIN by TB1 and TB2. This approach worked, but it was limited. The user couldn't have turns in the basin border with the center channel.

In HYPACK® 6.2 and later versions, we modified the channel definition to be more flexible. In the left side of the figure, we can see the current scheme for defining a

channel. The LEFT TOE is described by points LT1 thru LT4. It no longer goes around the outside of the turning basin, but defines the outer edge of the center channel depth. The Turning Basin is defined by **TB1** thru **TB4**. This approach is more flexible, as the user can have multiple LEFT TOE points along the edge of the turning basin. The requirement that the Turning Basin 'take off' and 'return' to points described in the Left Toe list remains. In our example, **TB1** = LT2 (has the same coordinates) and **TB4** = LT3.

I have checked the documentation in our HYPACK 6.2 and 2008 training notes and found that the descriptions are correct.

Channel Boy.