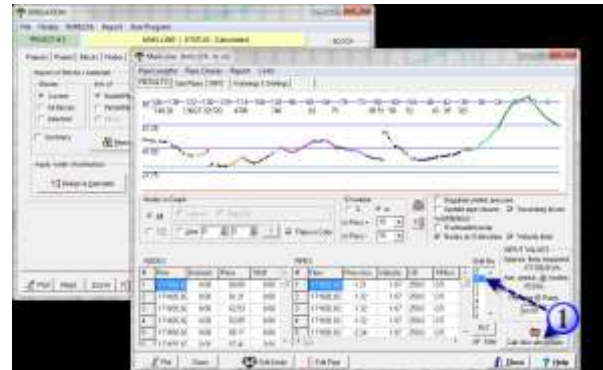


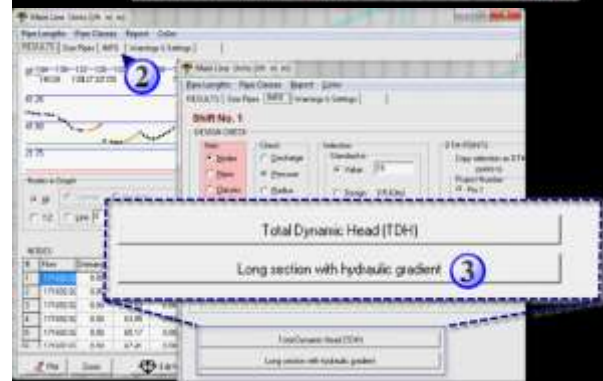
Irrigation design tools: Long sections with hydraulic gradient

In this tips and tricks feature, I will explain how you can make use of the long section feature to visualize the mainline hydraulic gradient in profile view.

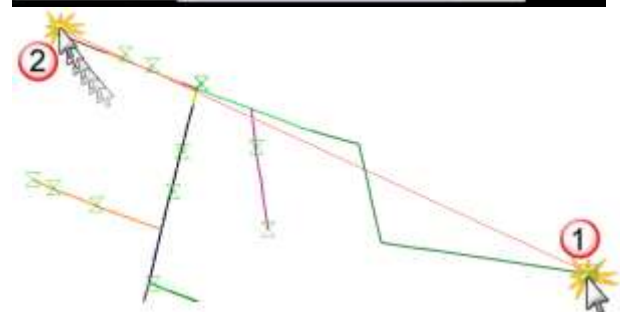
Step 1: After designing and sizing the mainline for the active shift, Run a CalcFlow (1) to simulate the pressures in the pipeline for the chosen shift.



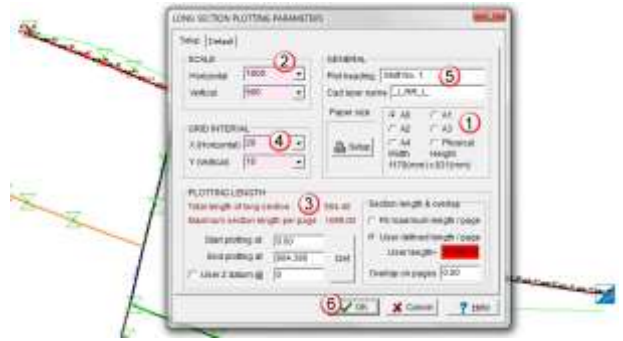
Click on Info (2) and select "Long section with hydraulic gradient" (3) to activate the function.



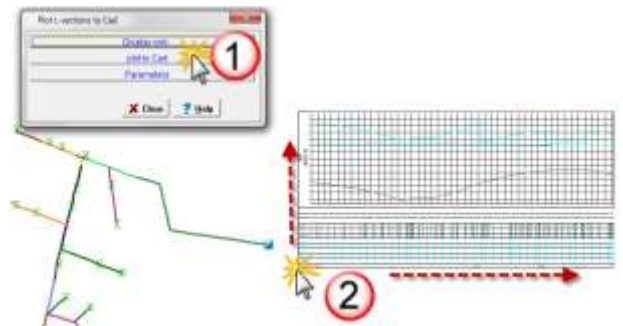
Step 2: Indicate the section of pipe that you would want to look at. In this example, I will click on the pump node (1) and a valve node (2) some distance away. Model Maker will then track the pipe route to gather all the required information.



After this step, the section is drawn in the CAD environment. This may then be used to plot to your printer if you prefer, so on the dialog that appear, select the paper size you would want to plot to (1), define the scales to be used (2) and compare the section length (3) with the available size on the paper you chose in (1) above. Enter a relevant grid interval (4) and section heading (5) and select OK (6).

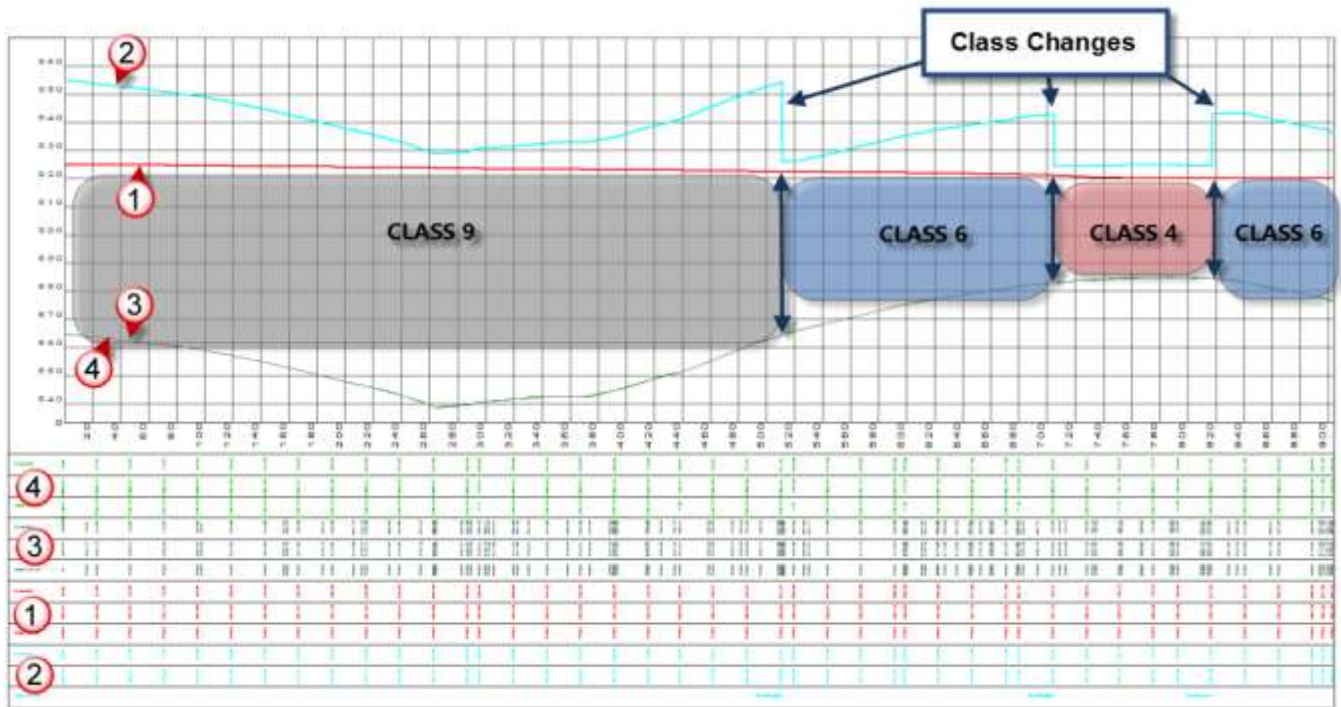


Step 3: In the next dialog, select plot to CAD (1) then indicate a position (2) on screen where the section may be drawn. The section will always draw upward and to the right away from the point that you indicate (2), so be sure to choose an open space.



Tip: While you are still in the place mode (before you right click to escape) you may press **Ctrl+Z** to **undo** the section and Model Maker will erase the last section that was drawn. Then simply choose a new position and place the section again with a left click. Escape when done.

Step 4: Escape out of the irrigation functions to view and edit the section with normal CAD functions. The end result will look something like this:



- (1) Hydraulic gradient
- (2) Pipe class profile
- (3) Pipe profile
- (4) Ground profile