Plateia

by CGS Labs

Continue the alignment design with tangent polygon

Tutorial

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Continue the alignment design with tangent polygon

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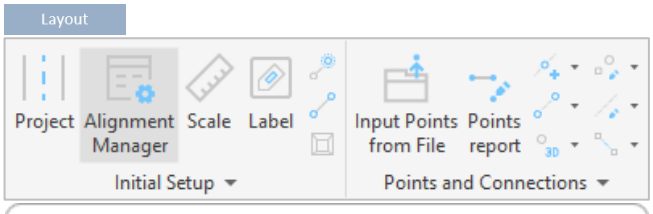
1. DEFINE A NEW ALIGNMENT

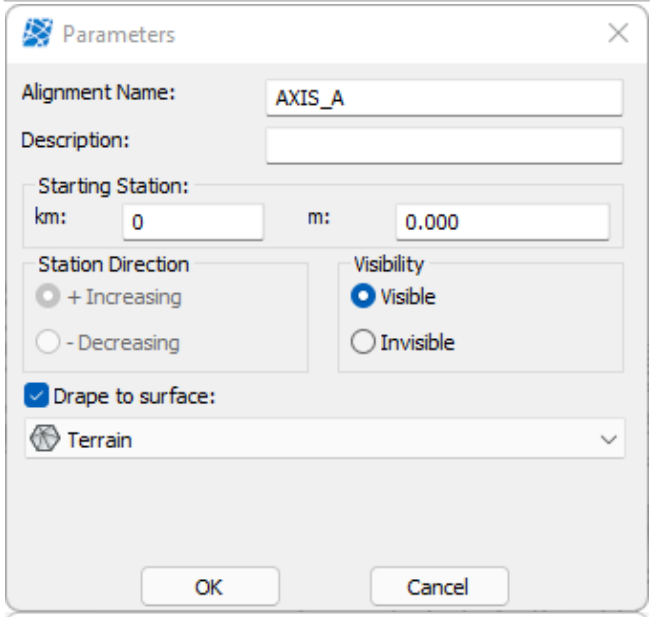
1. Click on the Layout tab and run the Alignment Manager command.



2. Define the Alignment Name.

3. Check the box at the Drape to surface and select the surface from the drop-down menu.

4. When you have finished, confirm parameters by clicking the OK button.

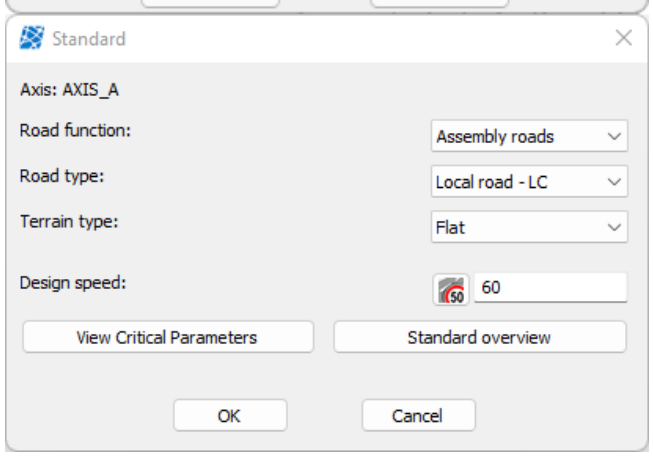


After that, a new dialogue box named Alignment Manager opens. This is intended for the management of alignments present in the drawing. In this dialogue box, you can then edit axis parameters, category and station. You can also add new or delete the existing axis directly in this dialogue with the right click anywhere in the window.

5. In the Alignment Manager dialogue box double-click on the Category.

6. In the Standard dialogue box define the following:

- Road function: Assembly roads
- Road type: Local road - LC
- Terrain type: Flat
- Design speed: 60 km/h

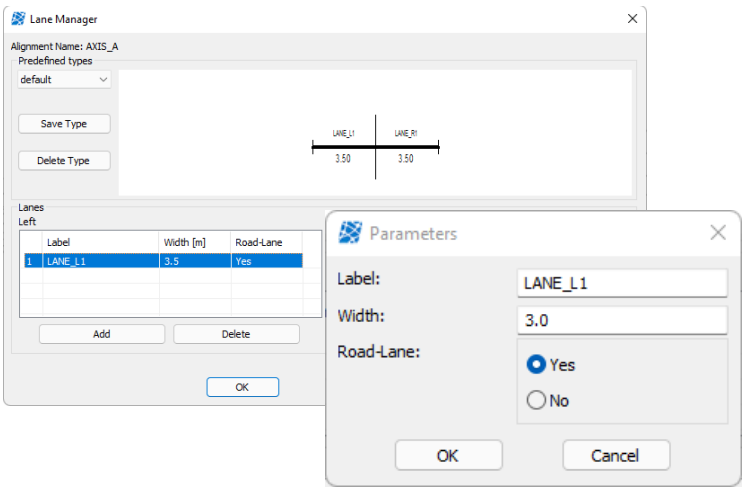


You can also preview Critical parameters and Standard overview at the bottom of the dialogue box.

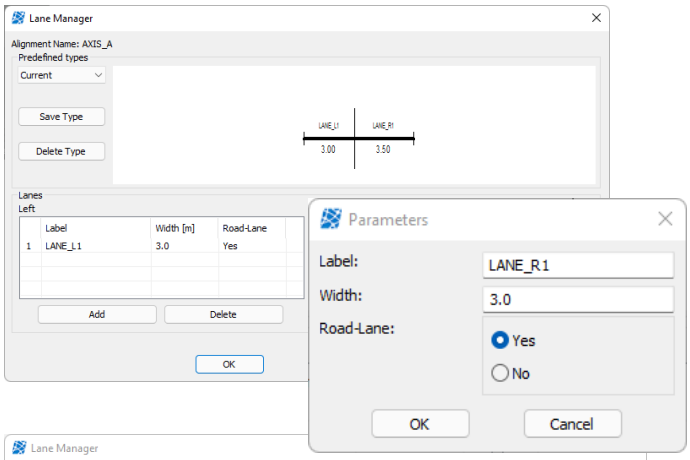
7. Confirm by pressing OK.

8. In Alignment Manager then double-click on the Lanes. At the top of the dialogue box, you have a list of predefined types of lanes. Select Default.

9. Double-click on the LANE_L1, change the width to 3.0 meters and press OK.

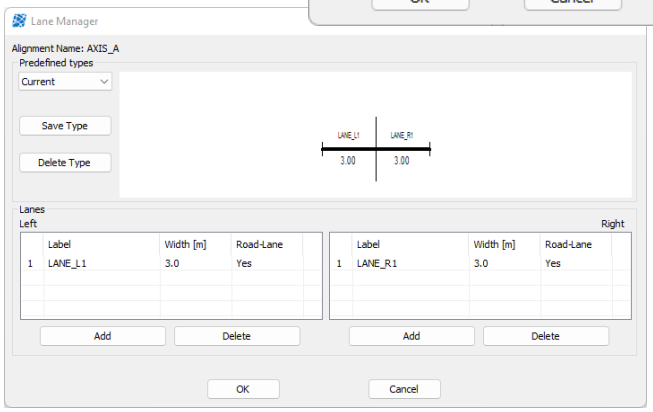


10. Repeat the previous step, but this time, double-click on the LANE_R1. Change the width to 3.0 meters and confirm by clicking OK.



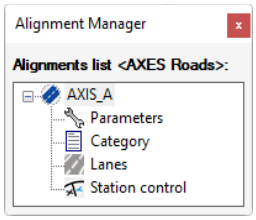
In the image on the right, you can verify if you have entered all the parameters correctly. If you find any differences simply double-click on that lane and correct it.

11. When finished, click OK.



2. DESIGN AN ALIGNMENT – Draw with Tangent Polygon

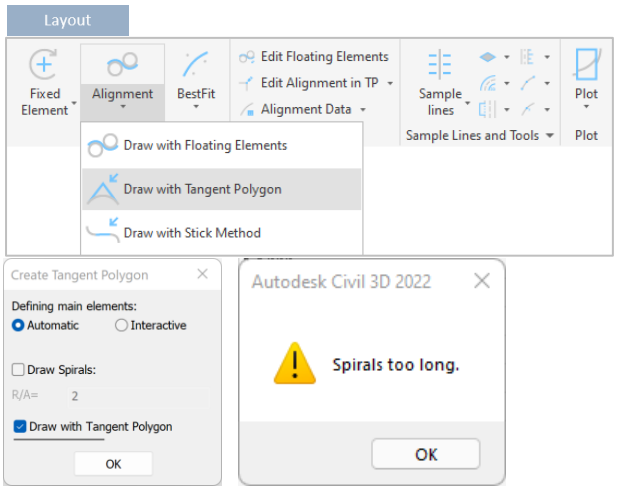
IMPORTANT! Before you start drawing an alignment you have to always check that this alignment is set as active (the icon next to the alignment name is coloured blue). If it is not, double-click on the axis in the Alignment Manager.



1. Run the Draw with Tangent Polygon command.

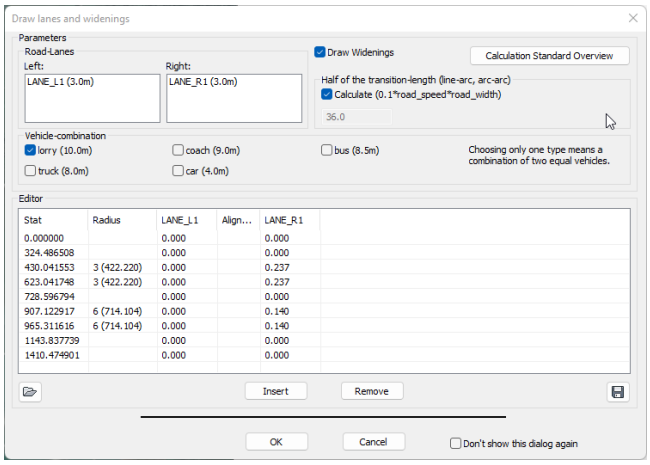
2. In Create Tangent Polygon dialogue box, parameters are set to default. Confirm by clicking OK.

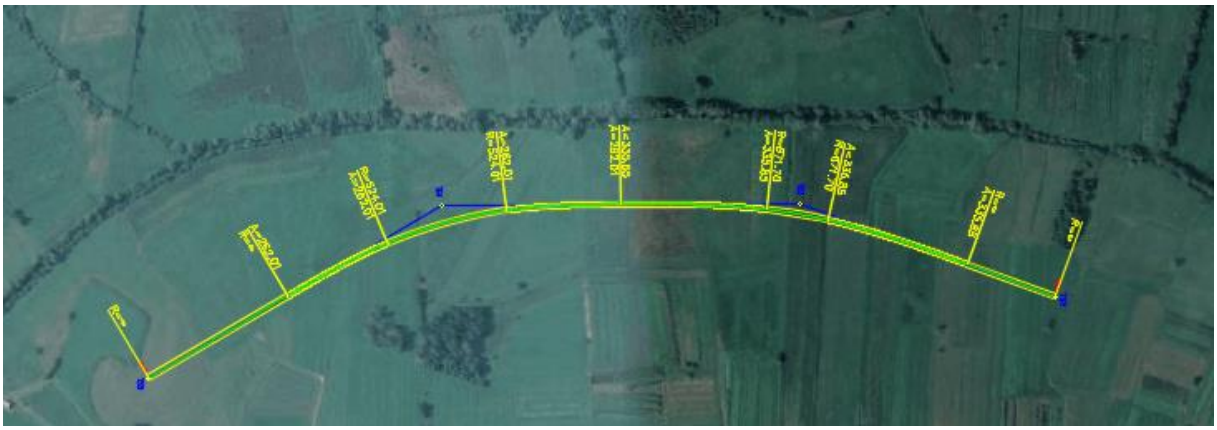
3. Select the first point of the tangent polygon in the drawing. Continue with inserting a tangent polygon interactively. The main elements are drawn across it. Finish by pressing Enter.



4. The Draw lanes and widening dialogue box opens. The program calculates individual lane widening. You can change parameters, import or save widenings in a file or check a calculation standard.

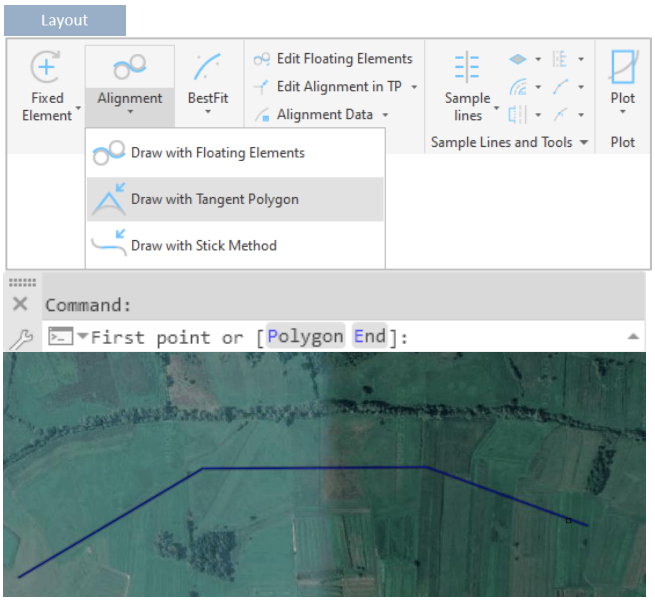
5. Confirm by clicking the OK button.





3. CONTINUE THE ALIGNMENT DESIGN WITH A TANGENT POLYGON AT THE END OF THE AXIS

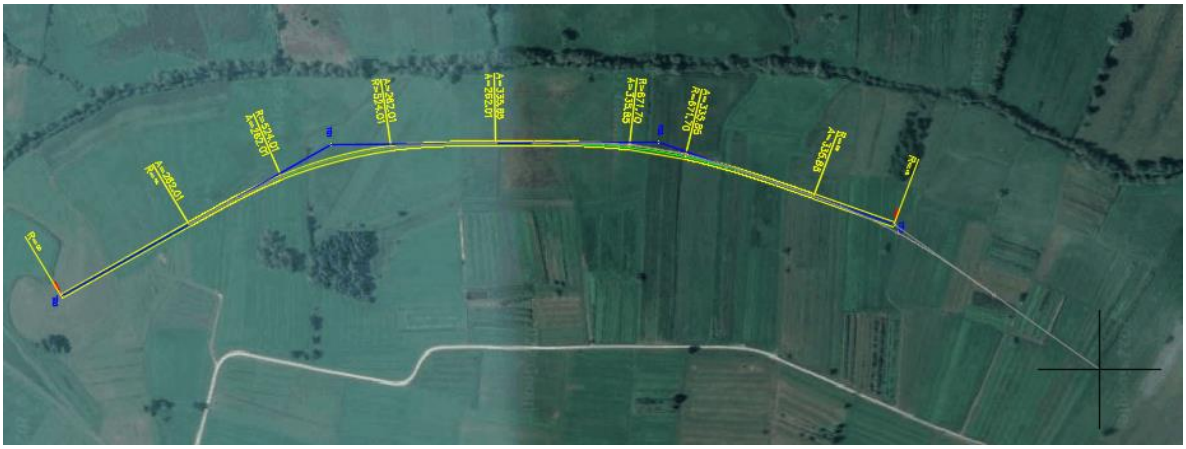
1. Run the Draw with Tangent Polygon command again.



2. Select the Polygon option in the command bar.

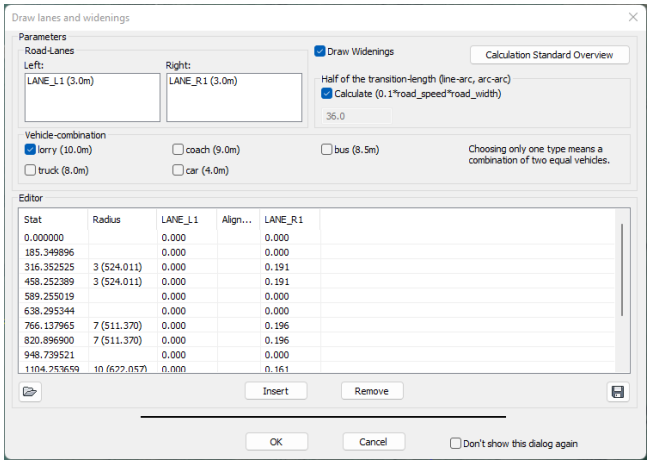
3. Select tangent polygon in the drawing.

4. Continue drawing tangent polygon by defining new points in the drawing. Finish by pressing Enter.



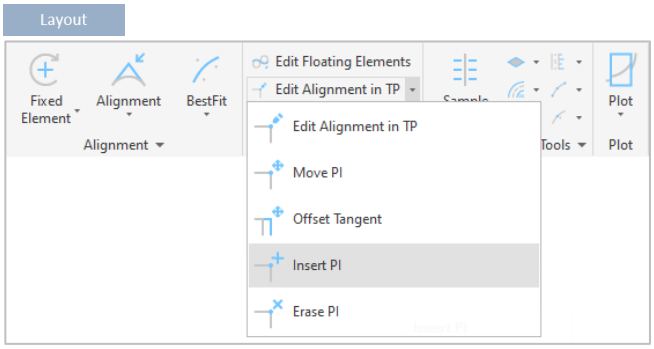
5. The Draw lanes and widening dialogue box opens. The program calculates individual lane widening. You can change parameters, import or save widenings in a file or check a calculation standard.

6. Confirm by clicking the OK button.



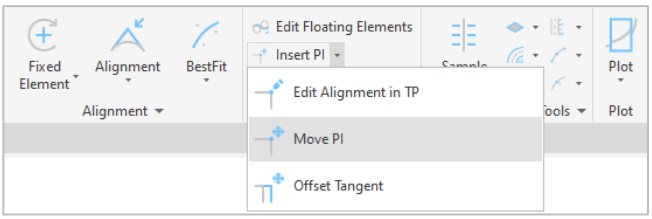
4. CONTINUE THE ALIGNMENT DESIGN WITH A TANGENT POLYGON AT THE BEGINNING OF THE AXIS

1. Run the Insert PI command.



2. Click between the first and the second vertex.

3. Run the Move PI command. Move the first vertex.



4. It opens the Draw lanes and widenings dialogue box.

5. Confirm by clicking the OK button.