Trimble Civil Engineering and Construction

Quantm 8.3
Release Notes

Build 8.3.1.2

Enhancements

The Quantm 8.3 release includes these new features and enhancements:

- Use the new CO_2 Calculator to forecast carbon dioxide emissions that will be generated during the construction of alignments in your project. Enter expected CO_2 output values for moving materials, preparing land, and constructing structures along each alignment. In addition, you can forecast the CO_2 emissions that will be produced by traffic using the new alignment. The calculator is currently available for roads only. (details)

- You can now set a minimum radius lower than 35 meters for horizontal alignments! (details)

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Bug Fixes

And fixes for these resolved issues:

- The default maximum height of retaining walls had to be 9999 meters. Now any height is allowed. (details)

- In some cases, installing Quantm 8.3 removed the previously configured license key, making the software unusable. (details)

- You could not change the wall cost. (details)

Details

- [QTM-14](): CO_2 Calculator

To calculate CO2 emissions for the construction and usage of a specific alignment in your project, follow these steps:

1. On the menu, select Data > Cost Parameters.
2. On these tabs, enter CO_2 values per meter^2/mile^2 (as applicable):
   - Global tab - emissions for moving haul, dump, borrow, and fill, materials.
   - Template Materials tab - emissions for construction per material.
   - Bridge and Tunnels tabs - emissions for constructing these specific structures.
   - Areas tab - emissions for preparing site areas

   Note: You would typically get average local CO2 emissions data from your regional transportation authority.
3. Right-click the alignment you want to report on and select CO_2 Report.
4. In the Traffic Composition section, enter percentages for the types of vehicle traffic (cars and trucks) that are expected to use the alignment.

Note: The numbers shown are samples and do not reflect actual values.

5. In the Traffic Flow section, enter projections for the average speed and traffic volume. The total CO_2 emissions are reported in the Environmental Impact section; you can report as daily or annual. Weekdays and weekend days are treated the same.

6. If desired, you can also show these values in a Microsoft Excel spreadsheet by clicking the Report button.

7. Select Alignment Summary and review the CO_2 emissions values and percentages (%) for each of the categories you filled, as well as the total. The Summary also reports on the future CO_2 emissions from traffic (from the values entered in the CO_2 Report dialog).

M-15: Horizontal alignment radius - To set the minimum radius allowed for a horizontal alignment, select Data > Geometric Parameters on the menu. In the Curves group on the Horizontal tab, edit the value in the Radius (m) field.

- [QTM-21](): Retaining wall height - To change the maximum height of retaining walls, select Data > Cost Parameters on the menu. Then click the Wall tab and edit the Height for any wall.
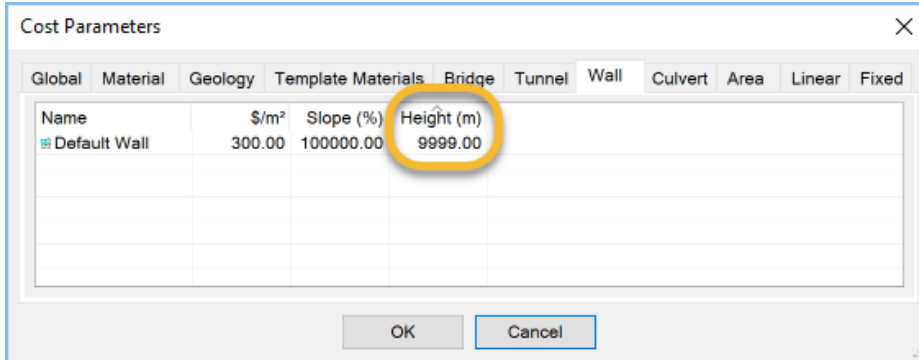
- [QTM-38](): Installing the Quantm 8.3 MSI file to upgrade an 8.1 installation deleted the older HASP license key without upgrading it to a new, required HASP key (if you upgraded from version 8.2, the newer HASP license was installed).

- [QTM-41](): When you went to the Cost Parameters dialog tab shown above, you could also not edit wall costs if you had not previously entered a CO_2 cost, even if you were not calculating CO_2 emissions.