

Adding a imaginary bridge center

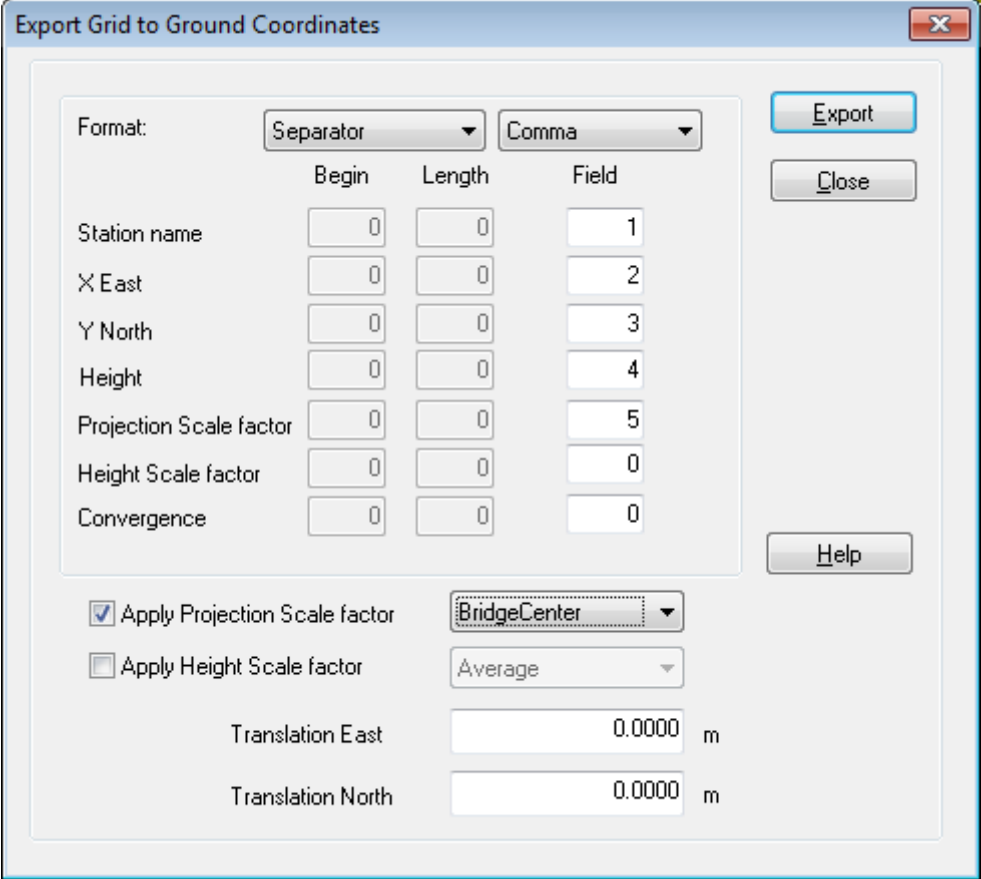
Our clients specifies that the transformation from MGA to scale factor 1 coords needs to originate from the centre of the proposed structure. So this is not actually a control point I have traversed in but a point I have come up with from the design.

Basically my bridge control network needs to take my MGA points and rescale them from this imaginary point in the centre of the bridge. I have attached a sketch showing the bridge structure and the surrounding control points I need to rescale to SF1.

To get your SF1 coordinates just add the imaginary bridge center to your MOVE3 project and the re-run the constrained adjustment.

The screenshot shows the 'Edit station' dialog box for a station named 'TER'. The station name is 'BridgeCenter'. The coordinates are: X East: 352888.4700 m, Y North: 6313209.4850 m, and Height: 0.0000 m. The 'Known' section has checkboxes for X East, Y North, and Height, all of which are unchecked. The 'Standard Deviations' section has input fields for X East, Y North, and Height, all of which are empty. The 'Precision of idealisation XY' is 0.0000 m and the 'Precision of idealisation height' is 0.0000 m. The 'Deselection' checkbox is unchecked. The dialog has buttons for 'Add GPS', 'Apply', 'Apply all', 'OK', 'Cancel', and 'Help'.

Then do the Grid To Ground export while applying the Scale factor at BridgeCenter and uncheck the Height scale factor.



The exported file will contain the SF1 coordinated.

It is up to you to decide if you want these coordinates to be MGA94 look alike or not by applying a translation.

Please note the coordinate list below has been rounded to meters and decimeters.