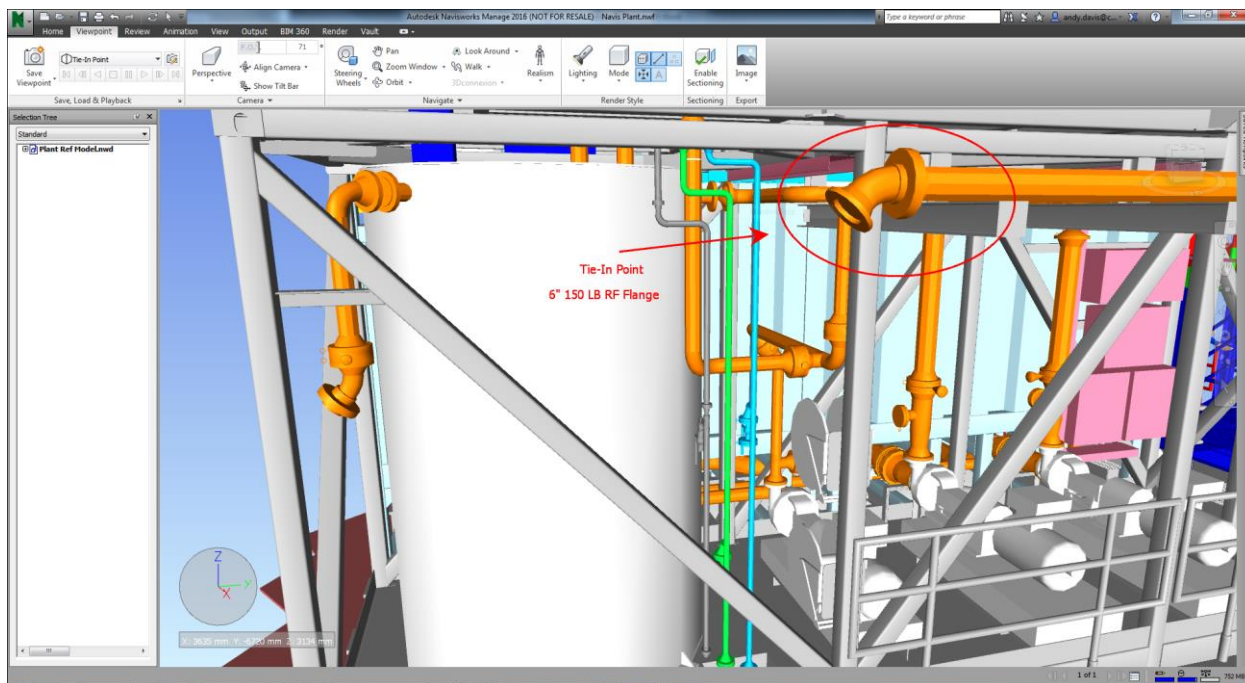


Using Coordination Models in AutoCAD Plant 3D

AutoCAD Plant 3D 2016 and Navisworks 2016

AutoCAD 2016 and vertical products, including AutoCAD Plant 3D, are now able to externally reference Navisworks models into drawing files as Coordination Models. In addition to providing virtual coordination for multi-disciplinary projects, Navisworks *nwc* and *nwd* files may be used as the starting point for brownfield refit jobs.

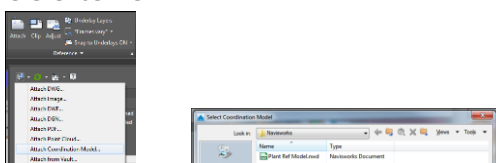
Even without the original design files, if a Navisworks model is available, it is possible to define tie-in points by snapping to the geometry in the coordination model.



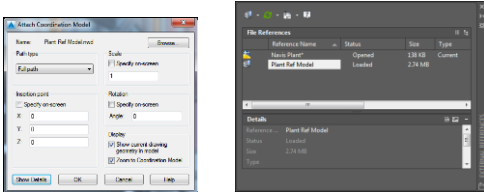
The image above shows a Navisworks model of process piping that has been marked up ready to be extended in AutoCAD Plant 3D.

Attach Coordination Model

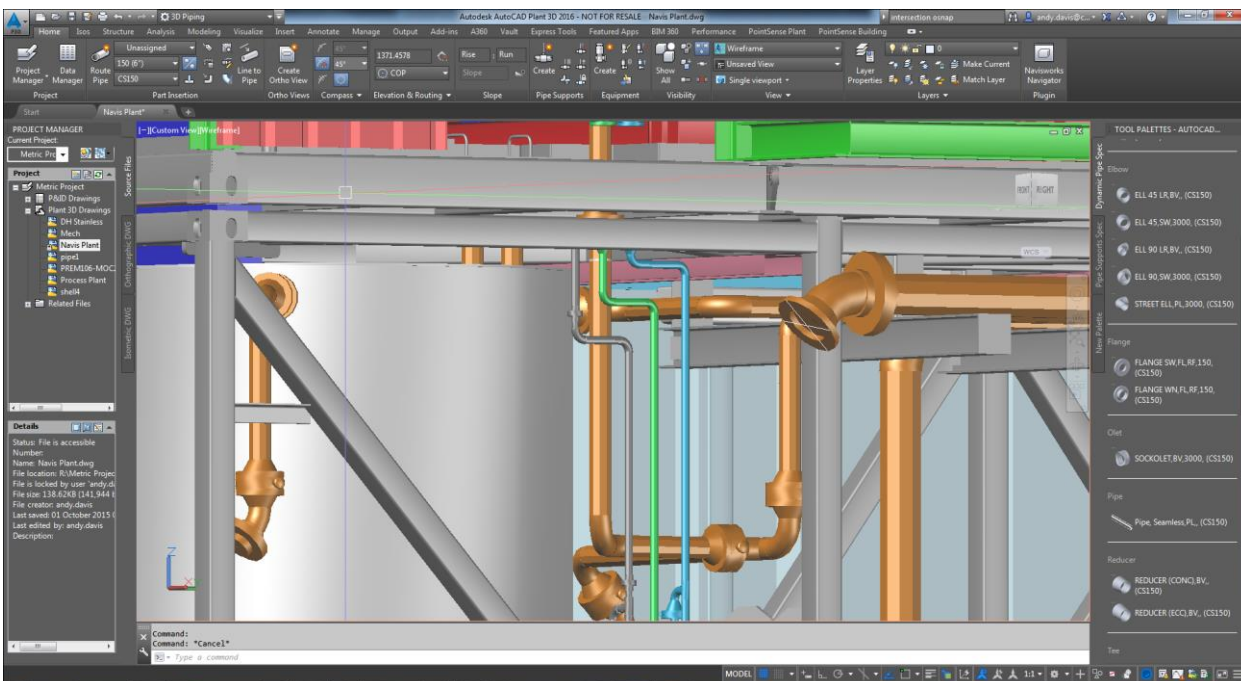
You attach a coordination model to an AutoCAD drawing in much the same way that you would attach any other external reference file.



If the unit of measurement in the attached file differs from the units in your current drawing, the model is scaled automatically based on the unit type in your drawing.

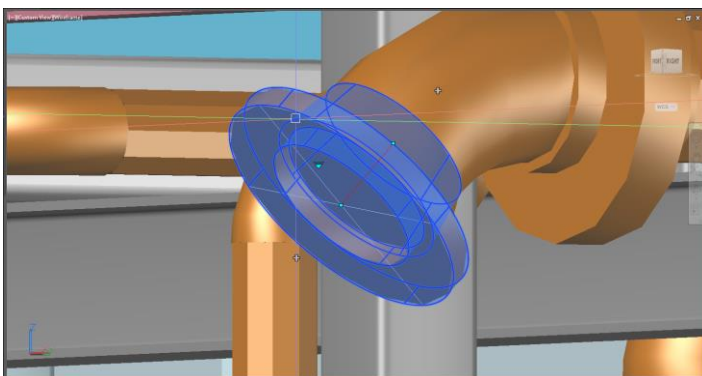


Below, we have referenced the coordination model into a new drawing in a Plant 3D project.

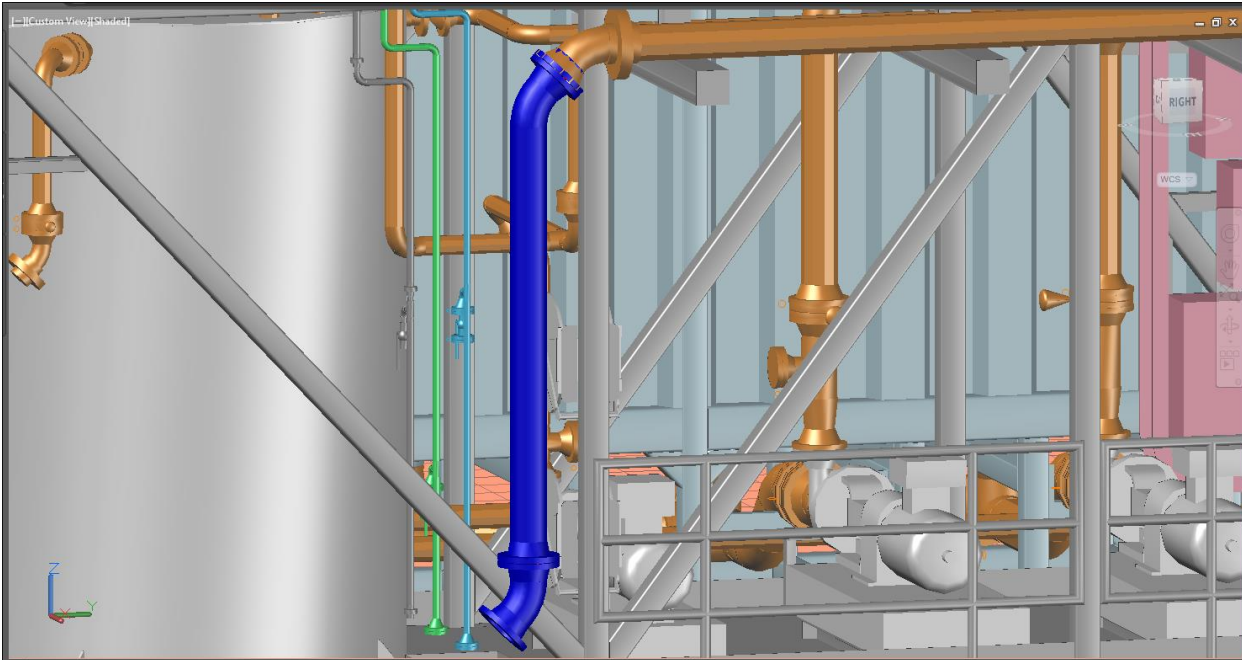


Coordination models support the standard 2D endpoint and centre object snaps. Using these snaps, we added a couple of reference lines to locate the centre and orientation of the tie-in point for our new pipework.

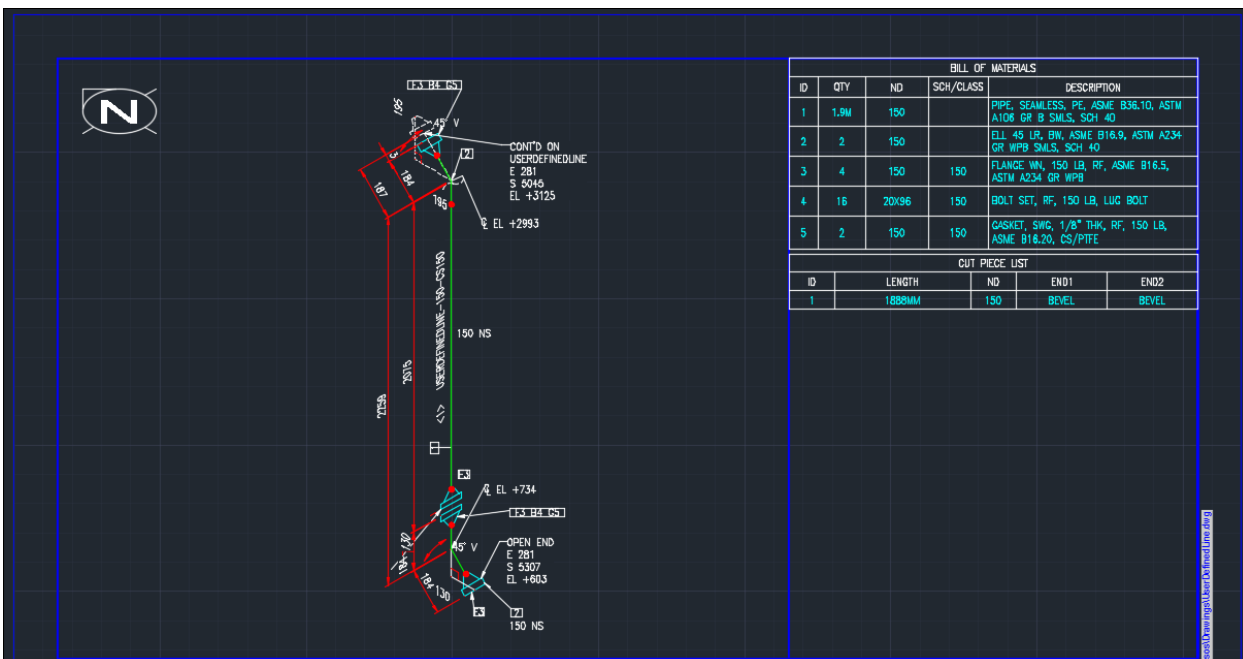
From there, we remodelled the flange as a Plant 3D asset in our drawing to provide the connection point for our new pipework.



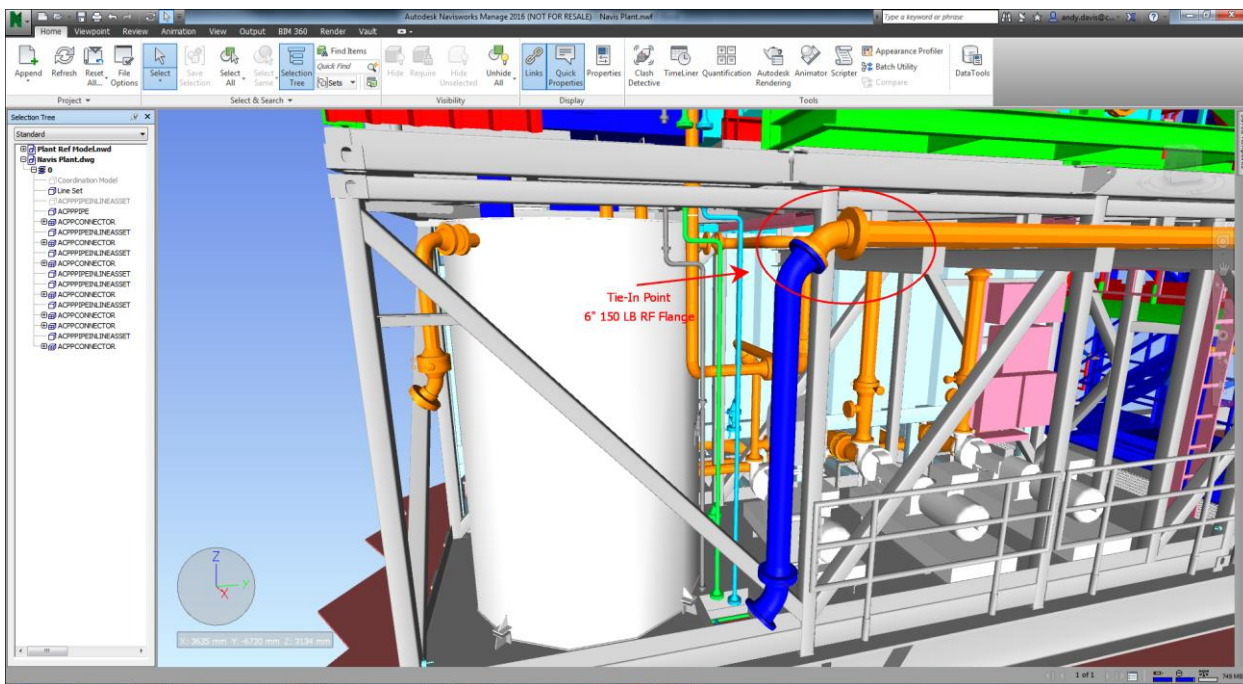
In our simple example, we added the blue pipework, below.



We set the status of the remodelled flange to *Existing* in our Plant 3D project so that it was not included in the BOM for our pipework when we produced the fabrication Isometric.



When we had completed our new pipework, we appended our Plant 3D drawing to the original coordination model in Navisworks to produce a complete, extended model.



Here we see the final model in Navisworks. We have hidden from view the remodelled flange and outline of the coordination model from our Plant 3D drawing.