KIT BASHING WITH TOWNSTREET CASTINGS – STRUCTURES

Part 1 – Overview and Central Bridge Pier

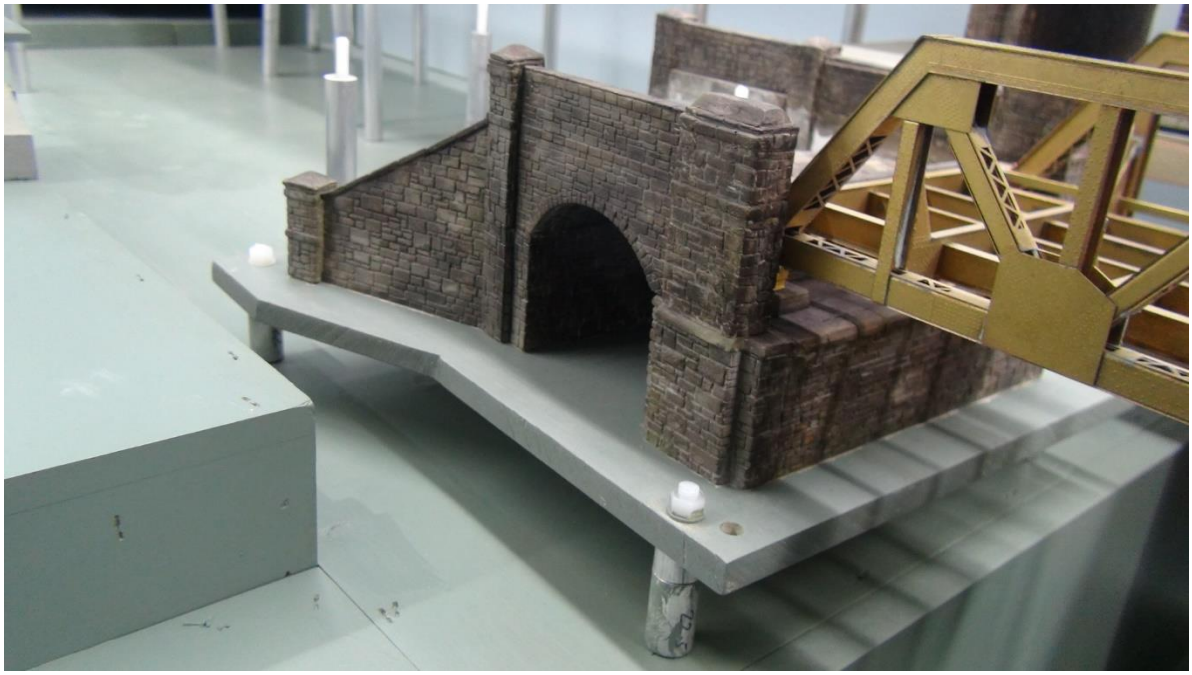
By David Wager

This article explains some of the methods used to create bridge abutments and piers by adapting standard kit components from the 'Townstreet' Stonecast range.

https://townstreetuk.co.uk/

I will start with some views of the finished assemblies as installed on the layout. The bridges themselves still need a number of modifications to 'Anglicise' them, and deck / track-work has yet to be installed.

The viaduct in the background is constructed by using standard parts from the Townstreet range.



The abutment decks on which feet of the Pony Truss bridges sit, need to be a fair bit wider than the standard components in the Townstreet viaduct range. Therefore parts such as the curved arches require a tricky cut and butt to achieve the desired width. Many of the other parts; arch faces, piers, pilasters, wing walls and parapets are more easily adapted.

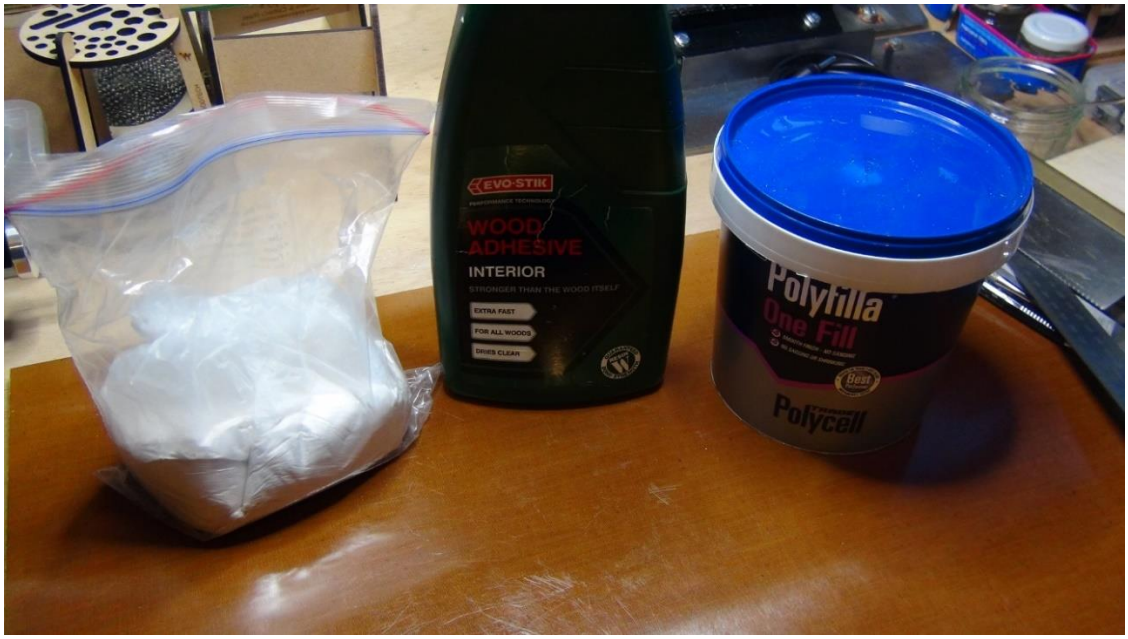
You will see that each of the assemblies is mounted on a shaped piece of MDF which can be adjusted for position and height. This allows each of the assemblies / modules to be removed and reinstalled as required (at least in the early stages in the layout build). Note that the method employed creates fairly heavy and reasonably fragile assemblies. This is for a home layout (not exhibition!)

CENTRAL PIER

The original pier was constructed quite some time ago, again by kit bashing, but this supported a single track / twin span bridge. So the first task was to widen the support and modify the pilasters so that the new double track / twin span bridge could be installed.

After removing the original pilasters, long and narrow infills were cut from castings. These would enable the 'flat area' to be extended before reaching the new end pillar components. Some sanding and filling over the surfaces was needed to compensate for any unevenness in the castings at the joint lines. Then comes the task of filling the joints and scribing the stonework. This is done in such a way as to 'blend in' the infill pieces and the jointing.

Materials used: PVA wood glue, Polyfilla'One Fill' and Stonecast powder. A bag of stonecast powder was supplied by Townstreet, but this can also be made up by filing spare castings. The powder needs to be kept dry during storage.



The Polyfilla ‘One Fill’ provides a lightweight fill for initial large volumes. The surfaces (where the scribing is to be done), are finalised using the stonecast powder. This will match the material of the castings so that when paint is applied, a uniform appearance can be achieved.

Castings are painted prior to assembly. I have found that Colron Wood Dye (Dark Jacobean) gives a great surface finish and the colour that I am representing.

Sadly the spirit based dye is no longer available but I have found an alternative which will be discussed in Part 3. When gluing with PVA keep it well away from the surfaces and joints that will be exposed. After fills are done they will be painted to match, but if PVA is on the surface of the stonecast the paint will not soak in properly to reveal the realistic surface texture. Leave the dye to dry overnight.

Warning: the spirit based dye is toxic, so application needs to be done outside or by using a spray booth

Here are the tools used

A fairly course razor saw is used to cut the castings. If the teeth are too fine, they will soon block and cutting will come to a halt. The cut edges are finished using a large file (not the best ones), or with sanding paper. This is best done on a flat surface with the casting moved against the file or paper. Trial (dry) fits of components are essential with smaller files used to adjust the fit. Unfortunately the files soon block so cleaning with a wire brush needs to be done frequently.

Scribing the stonework needs patience and some practice. Dental tools are ideal for this. These parts were of random stone design so after scribing the outline of the stones, run around them with a tool to take off sharp corners. Leave on the corners if representing cut stone. The trick is to continue the lines from the existing castings as far as possible and to blend them in.

Here is the final result of the pier. I will come on to weathering in Part 3.

And some detail of the stone scribing

And some more