Joining the Helices

The first part of this project was to hand build the two helices which was completed and tested:

Figure 1 - 2 helices completed and tested

At this stage we envisaged that they would be joined by 2 plywood bridging units at the rear and one at the front about 140cm long. Now we move onto the second stage of the project, building the bridges. You can see the span below.

Figure 2 - Helices positioned in the Station House

When we placed the helices in our “Station House” we thought that a back drop would look rather nice so we commissioned a local printing shop to produce the backdrop from a photograph obtained

from Freepik (https://www.freepik.com/). The company used Photoshop to enhance it and produced the graphic on a pliable sheet.

Figure 3 - Original backdrop image

The image below shows the final backdrop wrapped around the rear walls and sides of the Station House (excuse the mess!!)

Figure 4 - Backdrop in situ

When the helices were placed in front of the backdrop, for us, it had the desired effect (image below).

Figure 5 - Helices in front of backdrop

At this stage we became perplexed, we thought that a wooden structure in front of the mountains would distract from the image. Also, not being conventional modellers, we thought that it might be a

good idea to go “futuristic,” have something that looks like the trains are “floating” between the helices.

On hunting around the internet I found a UK site that specialised in plastics (https://www.simplyplastics.com/). I sent off for some samples and built a proof of concept:

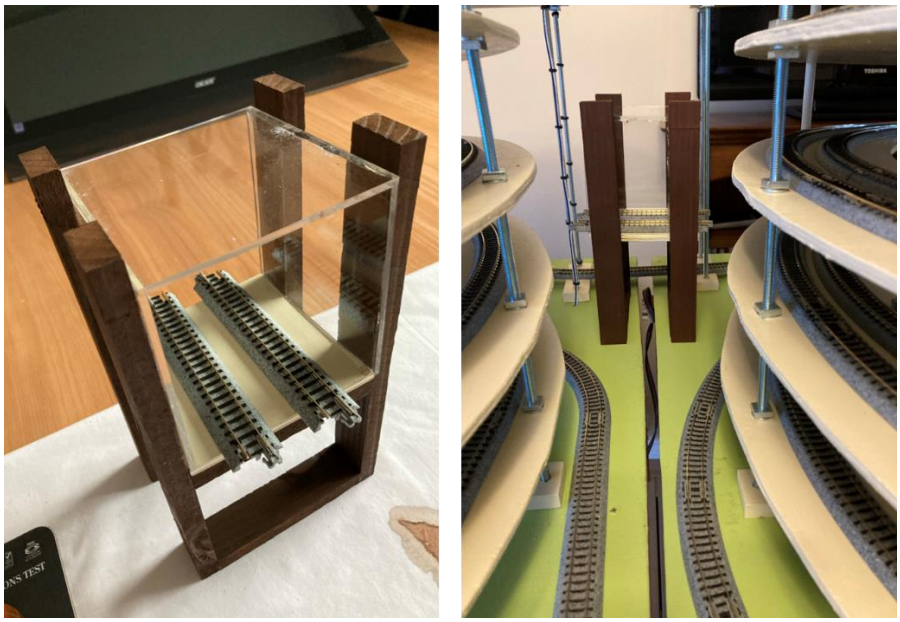

Figure 6 - Proof of concept

The wooden frame held the track bed, and the plastic formed the side panels. The roof was just place in situ as it may need to be lifted if there is a problem with the trains/track. When it was placed between the helices, we thought that the concept worked well and progressed with this idea. One main amendment, the track bed was also going to be clear plastic.

Figure 7 - Plastic lengths from delivery to assembly

Each bridging unit is 100 mm wide to accommodate 2 tracks and the height is 70 mm. The thickness of all lengths is 10 mm. The protective covering was peeled back to facilitate joining the lengths with super glue. Essentially they were clear Perspex square tubes.

The next step was to build the frame:

Figure 8 - Building the frame

We decided that a middle support would detract from the final effect. Once the frame was glued and set, each support was additionally pinned as the units were quite heavy, then they were stained. The covering was removed from the plastic, track laid and the roofs were put in place.

These images show the final result. The glare is the reflection from the windows at the front of the Station House.

We took some video footage…

Three trains crossing the divide: https://youtu.be/DKLWM6Xgplk

The video footage is taken from an angle to feature the upper bridging unit: https://youtu.be/F88bxcA028A

You will see 2 trains running around the left helix and one of them crossing the upper bridge to the right helix: https://youtu.be/2PTa1gLBDvs

…now we have to build the front bridging unit. This will be a plywood piece as there are 4 tracks to encompass and we can make it into a mini featurette (somehow 😉).

Have we achieved the “floating” effect? You can decide.

It may not be “proper” modelling but it’s all about fun, for us.