Southwold Wagons
for 2' 3" Narrow Gauge

by Richard Maxted

This is a "work in progress" to develop a series of 2'3" narrow gauge items & assets as a FREE resource for Railworks. The gauge was chosen to enable use of the already existing Railworks assets developed for the Talyllyn and Phorum Peninsular routes.

Historical Background

The Southwold Railway was opened in 1879 as a connection between Halesworth on the GER and the harbour at Southwold on the Essex coast. The last train ran in April 1929 and, despite several more or less madcap schemes to restart the line, the urgent need for steel in WW2 brought about its eventual total demise.

As a 3' gauge line, and with a wide variety of goods being handled, it had more in common with standard gauge practise than the more traditional narrow gauge lines serving one particular industry or market. This was reflected in its' stock of wagons which were really just small versions of fairly common Edwardian wagon designs. The line owned 23 four wheeled wagons of which two were flat (ish) wagons and two box vans. There were also up to 16 six wheel wagons owned by Thom. Moy. These were based on the Southwold's infamous 6 wheel coach underframes which used Cleminson's flexible underframes. A solution that avoided the need for bogies but produced almost continual groaning and screeching under the coach. The wagons were painted grey, except the vans which were maroon and later red-oxide when the line was taken over by the Southern Railway.

The Models

These models are for 2'3" gauge. To achieve this I have taken a couple of liberties. Firstly the wheels have been reduced in size from the original 2' diameter to about 1'9". To preserve the relationship between the wheel diameters and the underframe the whole wagon has been lowered slightly and the wheel mountings reduced in size by a few inches. The dimensions of the wagon bodies and the under frame remain untouched. This produces a pleasing (to my eyes at least) impression of the correct 3' proportions on a 2' 3" gauge.

I have modelled the main wagon types - the most recognisable characteristic were the rounded ends of the 3 plank wagons and the apparently over large axle boxes.

Version Control

As a work in progress I will occasionally update. Each release will contain all the stock previously released so that you will only need to keep a copy of the latest release.

Version	Description	Date
1	Original release	June 2012
2	Changed the loading of the wagons, added new sound file	July 2012
3	Major Reskin and new loads added	February 2014
4 & 4a	Major Sound Upgrade – Version 4a with sound fix	August 2015
5	Gloss black reduced shine, better coupling behaviour, new loaders	February 2020

Conditions & Licence – PLEASE READ THIS

For freeware that you develop for yourself or for release as freeware on any website or system, you have an absolute and total right of ownership. This package contains only assets made by me – it does not need any other downloads. It does use unmodified generic Railworks wagon sounds and a driver. You may use it, clone it, modify it, rebadge and rebrand it.

It may not be used where payment is sought or other commercial activities. I reserve absolutely the right to determine what is commercial. Charityware is commercial but is likely to be granted access.

If you release this stock modified then please do keep in mind that others will be using it in an original form. Please don't use the exactly the same names as mine in a public release just add your own. This is only to stop other folks having difficulties.

The Wagons Described

This is the DEFAULT wagon, for any other modification you need this wagon to get the wheels etc.

There were two designs; one with a single curved plank and one with the curve a little higher made from two planks. This looked a bit odd to be honest and so I have only modelled the 3 plank version with a single curved plank.

This wagon comes with a number of different loads described in the section below. It also has an automatic wagon number allocated which you can change.

This is the 2 PLANK wagon. Unlike the 3 plank wagons these had straight ends but like them it had full side tipping doors. These doors are not animated in the models.

Several versions of the wagon are available with different loads pre-set - the default has sand.

This is the FLAT WAGON. In fact it isn't truly a flat wagon as it has a small plank side to it. The wagon is fitted with tie downs which I am not sure are correct but look nice.

There is a straw bale load for this wagon.

This is the GREY BOX VAN. It uses the same under frame as the other wagons but the sides were lowered so that the door opened onto the floor without a step.

Once again it has automatic numbering. The doors are not animated at present.

I have also included RED VAN which is a copy of the grey van above.

It may be a better representation of what the Southwold Wagons looked like.

Installing & Locating the Wagons

Should be simplicity itself as I hope I have added an RWP file that works. Don't forget that if you have a good .zip file manager like 7-Zip you can actually open an RWP like any other file anyway.

All of my future and current 2'3"narrow gauge assets will be located in subdirectories of ~

Assets/richardmaxted/NarrowGauge

So far as the Southwold Wagons are concerned the relevant directories under this are~

- *Couplings – contains my own design of chopper couplings*
- *Freight/NGSWwagons – contains the wagons themselves*
- *RailNetwork/Audio - contains the new wagon sound file*
- *Under the Freight directory each wagon type has its own separate directory*

To use the wagons in scenarios you will need to enable them using the infamous blue cube. My assets will always be under **richardmaxted**. All my Narrow gauge assets will be in the **NarrowGauge** tick box under this. The wagons will be found under the wagons symbol in the normal fly-out. All my wagons start with "NG" so these will be "**NGSW**....etc".

Loading & Unloading

All of the wagons can carry loads, with the obvious exception of the box vans which do not have opening doors. The 3 plank, 2 plank and flat wagons can be loaded at the start of a scenario using the normal loading fly-out on the right hand side of the screen. Each open wagon type is also supplied with a number of "fixed load" variations so that you can run loaded wagons in quick drives etc.

Loads that can be loaded or emptied in TrainSim are either "bulk" or "container". The type of load requires a different loader / unloader to work and different animation. For the coal, milk churn and straw bales the loads are not animated themselves but are the simple "container" type that is either present or absent. These loads require a loader asset to be used such as crane, coal drop or the like.

In version 5 I have added loaders for coal, milk churns and straw bales, that can be added to any route or scenario as an asset. These are found in the "Infrastructure" section of the editor. For coal you click on a shovel, for milk you click on a churn, and for straw upon a hay bale.

The loader animation is a heavily modified standard crane type animation except nothing moves and there is no sound. Be patient and your wagon will load or unload.

The loads are gravel, sand, lightweight track and building supplies. There is a full truck of milk churns especially for my Leek & Manifold route. The coal load is only available for the three plank wagons.

Couplings

The Southwold Railway used a fairly simple chopper coupling. I have added a set of these to the wagons and they seem to work pretty well.

The height of the couplings may appear wrong in comparison to other NG stock. In version 5 they have been lowered as far as I can but are still high because of the wagon sizes.

This coupling is part of the free download and does not require permission to be used elsewhere.

Numbers

A new innovation for me was that these models have automatic numbering. I have finally worked out how to do this and I suspect have got a bit over enthused. In my defence the Southwold wagons were numbered but in a rather plain Southern Railway font. I have given them a more Edwardian Flavour using the Felix font type.

The wagon numbers are read automatically from the ".dcsv" files in each directory. You can change the number in the Scenario editor to any 2 digit number. To get a single digit number to show correctly use X as a blank spacer. So the number 4 would be 4X. If you don't want the wagon to be numbered then simply typing a single digit number stops the wagon number and the "No" decals from showing.

All stock numbering is the same size of textures so if you don't like the font then copy any number texture files and replace the existing ones.

Wagon Weights & Warnings

The wagon weights are not recorded in my Southwold book. Looking at the Campbell and Machrihanish Railway they had similar dimension wagons and so I have taken the weights from these. There is a texture that has all the wagon weights and warnings on it. This texture is a decal on the wagon sides and so it is possible to edit to provide new wagon weights and the side warning for the flat wagon.

Brakes

The wagon is modelled in the blueprint with only handbrakes which work, there is a set of data for airbrakes to allow these to pass the wagons and not lock on.

Sounds

This was a major update for version 4.0. Wagons use three basic sets of sounds for the couplers, the bangs & clanks and the rail noises.

Repaints and Additions

These wagons use a fairly extensive set of shaders including bump textures for the planking effects. In terms of the basics the under frame uses a separate texture from the wheels and from the main body. The van body is a separate texture from the open wagon bodies and the flat truck body. Version 5 has significantly modified the alpha shading of these textures to remove the gloss effects