Real RailWay

RealRailway User's manual

For NAM Version 32 Pre-Release

NOTE: THIS IS A PRE-RELEASE EDITION OF REALRAILWAY, DESIGNED FOR USE WITH NETWORK ADDON MOD VERSION 32 PRE-RELEASE. AS SUCH, CERTAIN FEATURES WITHIN THE MOD MAY NOT BE COMPLETE OR FULLY FUNCTIONAL, AND CERTAIN INFORMATION WITHIN THE MANUAL MAY NOT BE COMPLETE.

USE AT YOUR OWN RISK. IF YOU FIND ANY ISSUES, PLEASE REPORT THEM TO THE APPROPRIATE NAM PRE-RELEASE BUG REPORT THREAD. THIS INFORMATION WILL BE USED TO HELP WITH BUGFIXING THE MOD, AS WELL AS REVISING THE MANUAL.

Contents

1. Preface

1.1. Overview

The **RealRailway** (abbreviated **RRW**) is a NAM component mod that changes the look of the default heavy rail network and adds functionality. It is a successor to the Rail Addon Mod (RAM). The major difference between these mods is that where the RAM started from the Maxis look of the network and added elements to that, the RRW is a redesign, with its basic premise being a slight yet important rescaling of the rail width. Any content that has been added by the RAM has been included by the RRW, and expansion of rail options will remain the RRW's main goal.

The RealRailway's name is an analogy to the popular **RealHighway Mod**, whose increased realism compared to earlier content has revealed issues of scale and balance across the other networks. This has been the primary impetus behind the RRW's creation. Technically, however, the two are not any more related than other NAM components are. The RRW will most likely not become as large as the RHW due to the different nature of real life rail networks. The emphasis of the mod will lie first on increasing the network's fluidity and only second on width, capacity and interchangeability with itself or other networks.

The scope of the RRW models the default **Rail Network**, sometimes called **Heavy Rail**. Other Rail-Type networks, such as Elevated Rail, Monorail, Light Rail, and High Speed Rail, are explicitly excluded.

1.2. Disclaimer

The usage of this download is on your own risk. We try to test our products extensively, so they should work properly, but errors may still exist. If such errors exist, please bring them up in an appropriate NAM support thread.

You are welcome to modify the items for yourself and show them in your city journals or equivalent, but please don't distribute them without asking first. Any such modifications are considered third-party and are not endorsed by the NAM Team, unless brought to the attention and interest of the NAM Team.

1.3. Compatibility

1.3.1. Compatibility with the Game

The NAM and its plugins is only compatible with SimCity 4 "Rush Hour" or SimCity 4 Deluxe, Version 1.1.638 or higher. It is required that you install the Simcity 4 Patch (for Version 1.1.638) before proceeding with installing. If you have purchased Simcity 4 Deluxe from Steam, the Version number will be 1.1.640, and should be pre-patched.

Attempting to use this mod with other versions of SimCity 4 will cause the game to instantly crash upon loading.

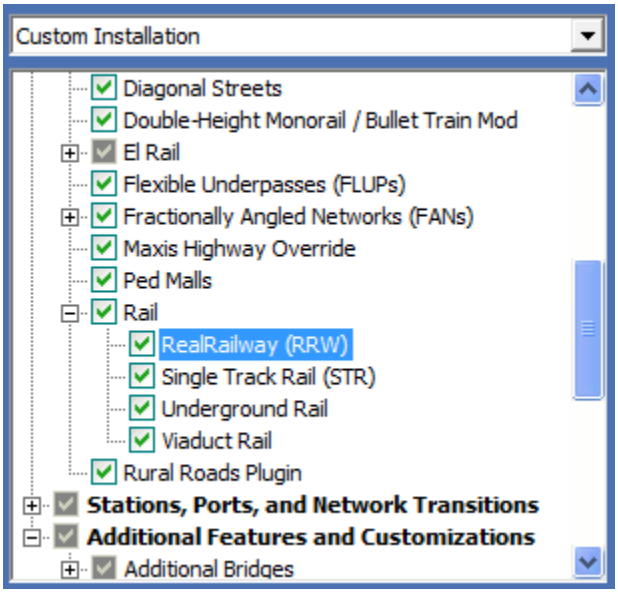
1.3.2. Compatibility with other Rail Mods

In principle, the RRW is incompatible with other Rail texture mods, such as the **SFBT** and **dedgren** retexture options available in the NAM, and the **RUM** by **rivit**. Any other mod that

changes the tunnel caps as well is also incompatible with the RRW, though this is an aesthetic incompatibility and may still be usable. There will be no conflict, however, outside of the puzzle pieces. If you have any of these retexture mods installed, it is advised to remove them.

1.4. Installation and Setup

Select the "RealRailway (RRW)" option in the installer, found under **NAM Networks and Network Expansions**. For access to **Wide Radius Curves**, **Fractionally Angled Networks**, and **Single Track Rail** (all under the same menu), be sure to **select those items as well**.



1.5. Useful Links

RealRailway Development and Support on SC4Devotion

1.6. Usage of this User's Guide

This user's guide is designed specifically to inform the end user of as much information in a convenient **PDF file**. Not all information is available here; only **basic information** essential to understanding the mod itself is available, and **not all advanced information may be available here**.

1.7. Changelog

- NAM 32 Pre-Release
  - Added new textures for DTR (Dual Track Rail), STR (Single Track Rail), and parts of Viaduct Rail
  - Added Mini-Curves and Mini-Switches
  - Added reworked puzzle pieces for DTR and STR
  - Removed Rail Y-Stack piece from Tab Ring
  - Removed PTR (Pizza Track Rail)

2. Changes to the Rail Network

The two most significant changes to all Rail networks are the **colouring** of the network itself and its **geometry**. Other significant changes include changes to other aspects of network **appearance**, such as Rail crossings, and **what can and can no longer be drawn** using the Rail Tool itself.

2.1. Network Colouring

The colouring of texture has been completely revamped and are taken from real life examples.

Source: Bing Maps

2.1.1. Colouring of Rails

Rails in real life are commonly **dark brown**. In real life, the shiny surface on the rails is only a few inches wide, which is too little to represent in game (keeping in mind that one pixel represents a 12.5×12.5 centimetre, or 4.9×4.9 inch, square). Second, dark rails are more lenient towards the mipmapping process (using low-resolution versions of the same texture at farther zoom levels) the game employs. Thus, whereas the grey Maxis rails were prone to pixelate and distort when viewed from afar, the RRW rails should blend more properly while retaining the needed contrast with the ballast and ties.

2.1.2. Colouring of Ties

The **ties** or **sleepers** (the pieces of timber that lie under the rails and above the ballast) in real life railways vary in shades of brown, as opposed to Maxis' **dark red**, which are far darker than the rails and ballast, so a shade of brown is used for the ties.

2.1.3. Colouring of Ballast

The colouring of **ballast** (the rocks that lie underneath the rails) in real life tends to vary wildly from region to region, and even on the same stretch of track. Depending on what materials are used, the age, the frequency of traffic, maintenance practises, surroundings, and so forth, this can range from **grey** to **brown**. The colour of ballast chosen is **light grey/brown**, to be as neutral as possible, in contrast of the **blue-grey** ballast employed by Maxis.

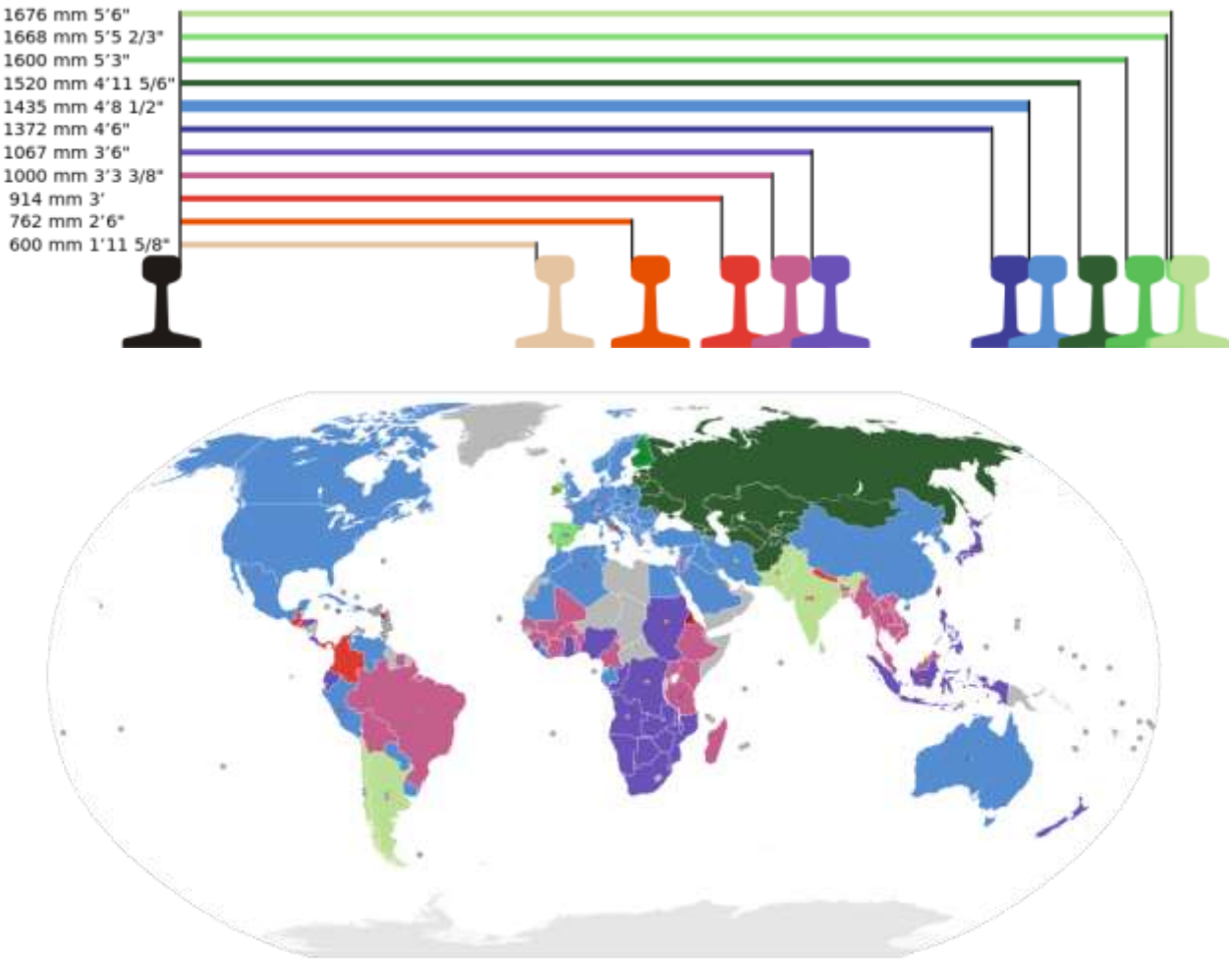
2.2. Network Dimensions

In general, the scaling used with the Rail Network's original textures were far overscaled than they should be in real life.

Source: Google Maps

2.2.1. Spacing of Tracks and Track Gauge

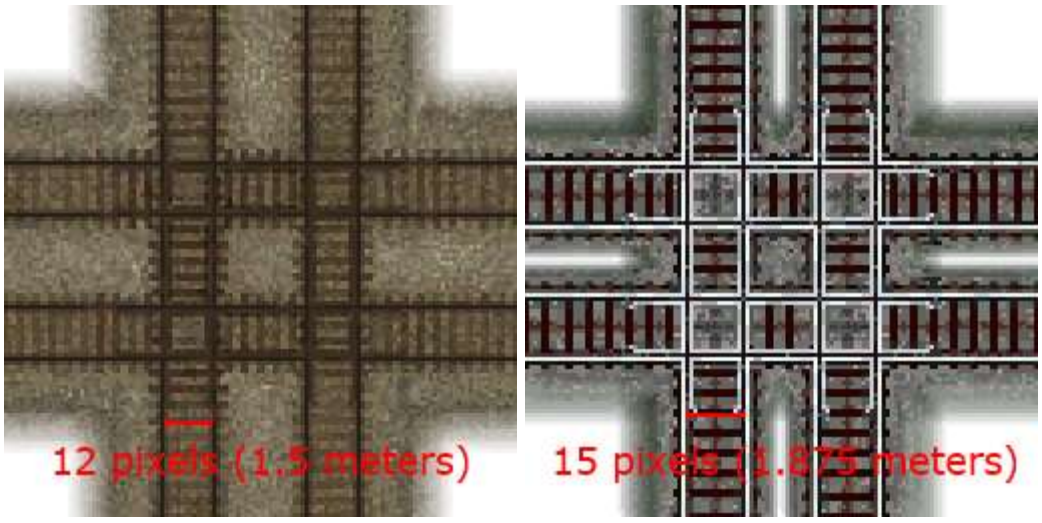
The **track gauge** (the inner gap between the rails) appears as being far narrower than in the original textures. A reference of various track gauges and where they're used around the world is shown below.



Source: Wikipedia (http://en.wikipedia.org/wiki/Track_gauge)

For reference, **standard gauge** (light blue, 1435mm) is the gauge used mainly throughout the world (60% of the world), particularly North America, Australia, China, most of Europe, and most of the Middle East.

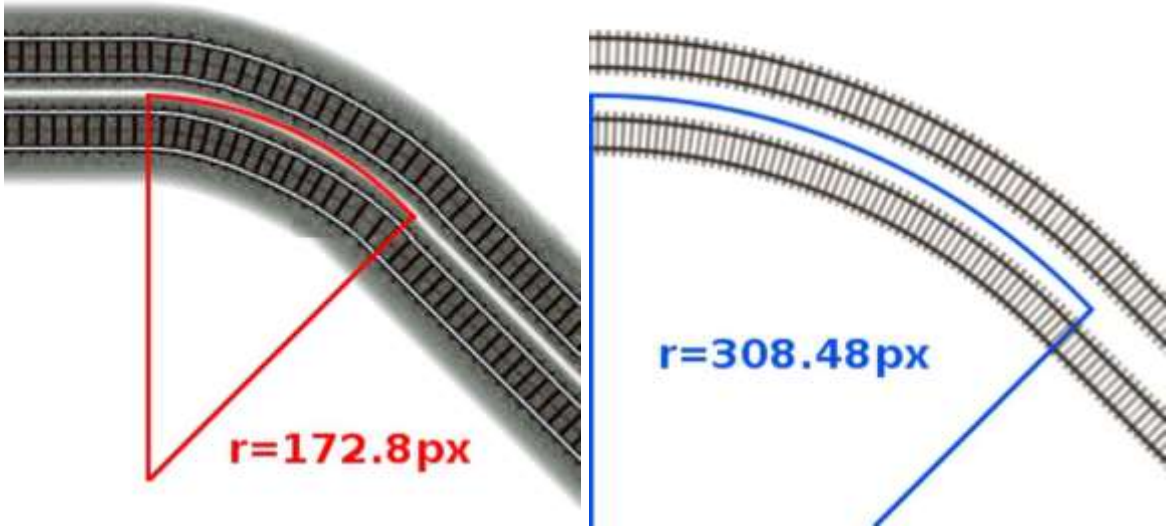
Recalling the fact that each texture is a **128x128 pixel square** representing a **16x16 meter area**, the track gauge used for the RRW's textures is about **12 pixels**, or **1500mm**, 65mm wider than standard gauge and 20mm short of the gauge used by Russia and surrounding countries, but still close enough in-game. The default textures use a track gauge of about **15 pixels**, or **1875mm**, which is far wider than the widest track gauge currently in use in the world (1676mm).



The narrower track gauge also provides a larger space between the two individual tracks on the default Rail network (DTR), which is common in real-life. This space is increased from 33 pixels to 36 pixels (4.125m/13.53ft to 4.5m/14.76ft).

2.2.2. Radius of Network Bends

The minimal curve radius used for the Rail Network's network bends (45° bends) and switches is nearly doubled from the default of **173 pixels** (21.25m or 70ft) to **308 pixels** (38.56m or 126.5ft). These bends, now called **Mini-Curves**, require one extra tile of space to be properly created.



2.3. Changes to other Textural and Aesthetic Features

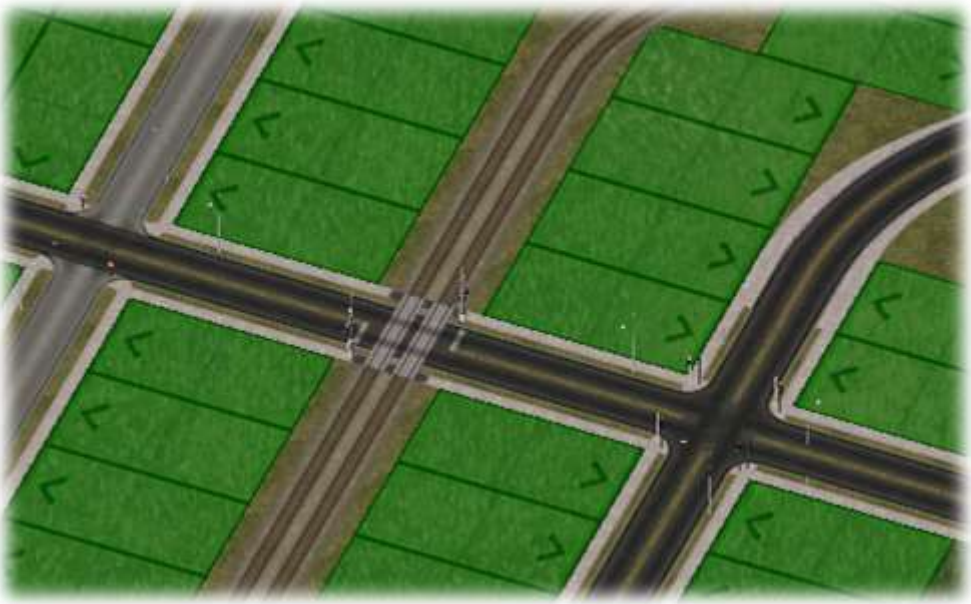
2.3.1. Rail Crossings

A majority of, but not all, Rail Crossings have been updated to RRW standards. Currently, only **orthogonal-orthogonal crossings** with **Street**, **Road**, and **Avenue** are available, as well as three of the Network Widening Mod's networks: **TLA-3**, **AVE-2**, and **ARD-3**.

Additionally, these crossings also have subtle differences in appearance depending on what is zoned next to it, and these change according to what density of zoning is used.

2.3.2. Changes to Rail Dirt along Zones

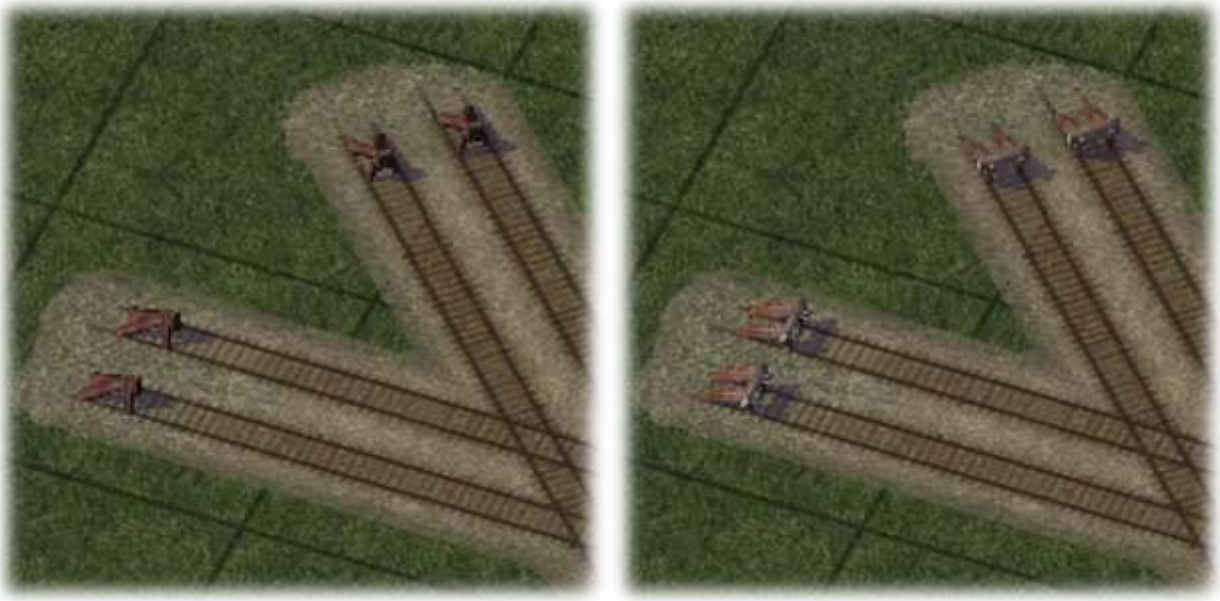
<Information not complete yet>



<Information not complete yet>

2.3.3. Buffer Stops

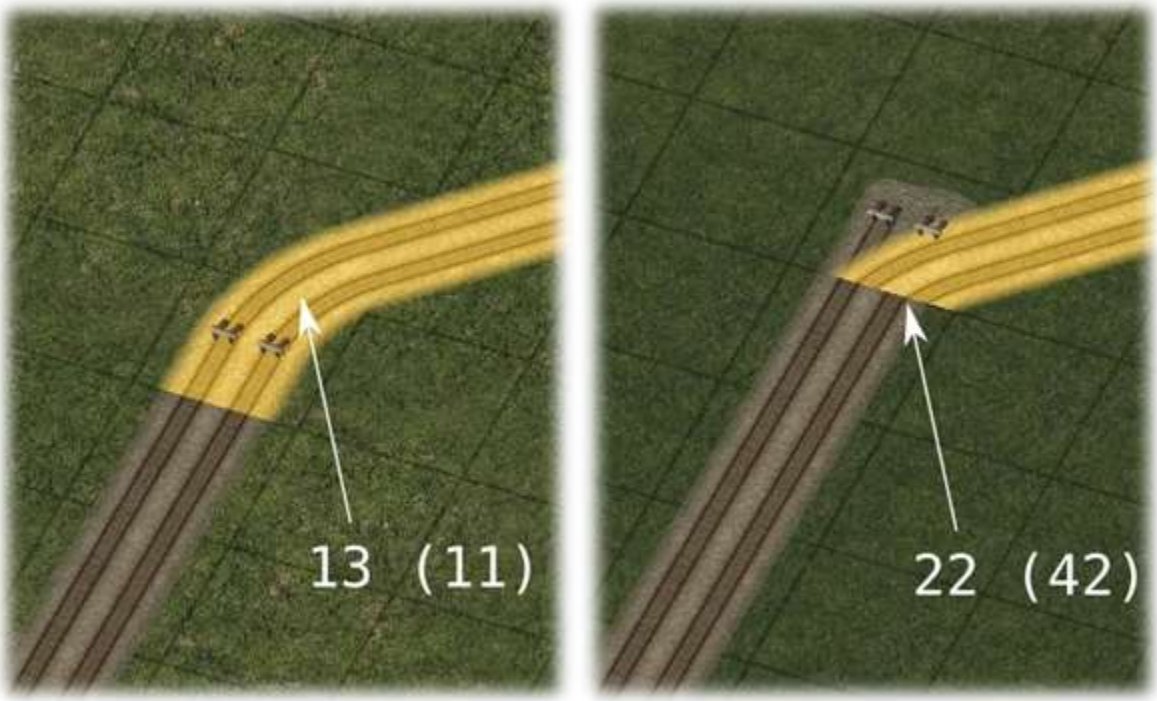
<Information not complete yet>



2.4. Changes to the Rail Tool

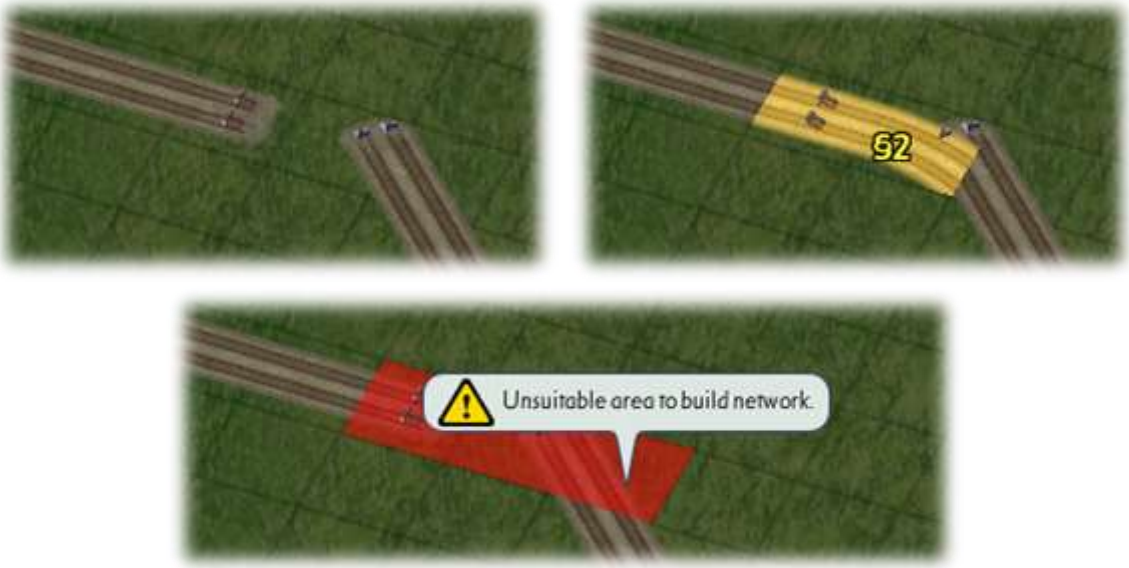
Using the Rail Tool to drag out networks now has changed from the original Rail Tool. Subtle differences that were once possible with the original Rail Tool can no longer be for the sake of making new functionalities in the RRW possible, and for simplifying certain aspects of the Rail Tool. The most notable is the **Orthogonal-Diagonal Bend**.

With the original Rail Tool, there were two ways to drag this bend, as shown below.



Though the two bends look identical, their placement (the numbers illustrated) is not. Dragging out one way or the other will place either a **13 flag** (shown left) or a **22 flag** (shown right); 11 and 42 are mirrored versions of the same bend. These numbers represent flags that the Rail INRULs use. With the RRW, **only instances using the 13/11 flag is permitted**. Instances that use the **22/42 flag** can **no longer be dragged** and pre-existing instances will **no longer be draggable**.

Examples of this change can also be shown in practise, as shown below. The first example shows a diagonal stub and orthogonal stub next to each other. Dragging two tiles straight across easily fills the gap and creates a network bend; dragging one tile further, however, will produce an "Unsuitable area" message.



The second example shows the two stubs at different positions. Though this was possible before, dragging straight across using the Rail Tool does not fill in the gap, but dragging at an angle will.

This change is important to keep in mind when dragging out Mini-Switches and Mini-Curves with the RRW; some instances will require dragging in a different direction, or extending an existing stub before dragging out further.

2.5. Non-Permissible Setups

There are a number of previously possible base network setups that are **not texturally supported** or **may no longer be created** with using the RRW. These are mostly **unrealistically tight switches and curves** and **unrealistically overlapping Rail line setups**, and some of these setups are completely **redundant**. These setups may still function

as originally intended but will not be updated to RRW specifications, and **rebuilding these instances is recommended**.

2.5.1. Boomerang Bend and Diagonal S-Bend

These bends require larger footprints to be drawn out; 4×2 for the **Boomerang Bend** instead of 3×2, and 4×3 instead of 3×1 for the **S-bend**. This also includes the **Boomerang Bend with Switch** setup.

2.5.2. Overlapping Switches

There are cases where two switches overlap with one another and the turn radius for each switch is too small to be realistic. Here, each switch needs to be further apart from one another in order to work with the RRW geometry.

2.5.3. End stubs in close proximity to a switch or curve

Since each curve is one tile larger, dragging out **one extra tile** further resolves the issues shown below.

2.5.4. Double Diagonal Rail

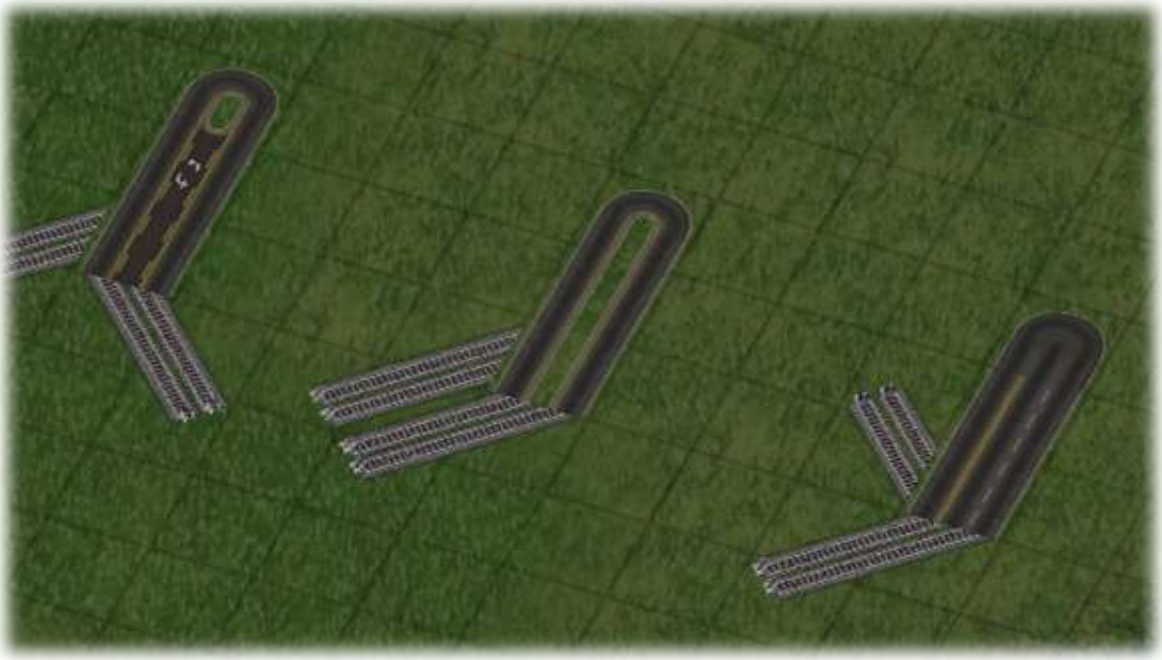
Dragging two stretches of rail together such that they overlap in the middle is no longer possible using RRW. **All instances of double diagonal Rail will have to be destroyed** and **any stations that use double diagonal Rail will have to be replaced** with a single rail equivalent. Stations that are no longer compatible with this setup include **Marrast's Double Diagonal Rail Stations**, as shown below.

Despite this change, **there isn't much of a capacity advantage** to using double diagonal Rail. The **shared middle tile** would need to deal with two Rail's worth of traffic, and even with the DIP effect, where the shared middle tile's capacity is increased to 125%, it still falls short of the capacity of two separate Rail lines.

2.5.5. Overlapping Diagonal Rail Stubs

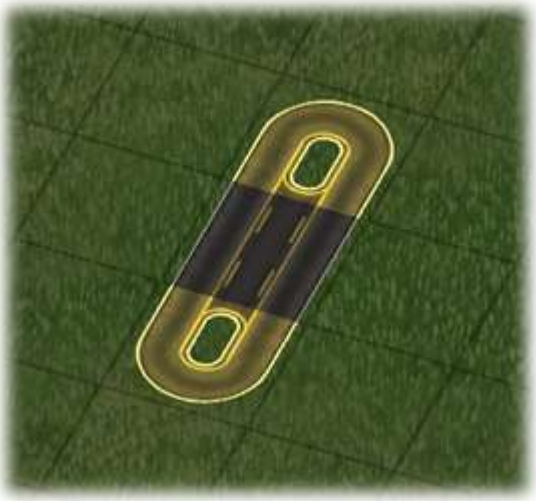
Similarly, **overlapping Rail stubs** are no longer possible using the RRW. These stubs serve very little use to general Rail functionality.

NOTE: These stubs are used as **starters** for many of the **Network Widening Mod** and three of the **Street Addon Mod's** networks, but since **placing down the intended starters from the starters button will still work**, there is no need to create an NWM or SAM network starter using the method shown below (and attempting to create a starter using this method will fail).



If an **extremely short stretch of an NWM or SAM network** three tiles long is created, such as TLA-3, bulldozing both stubs will destroy the starter; the Rail stub tile will not show.

If this happens, the starter should be replaced by selecting it from the corresponding starters Button.



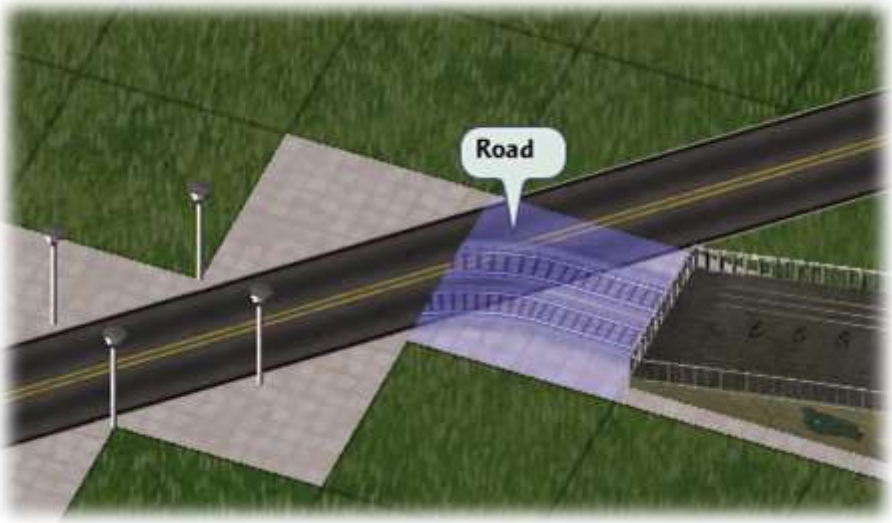
2.6. Changes to other Rail-based Features

Other NAM plugins that make use of Puzzle Pieces based off of the Rail Network are mostly unchanged. These pieces are not part of RRW, but play a different role outside the scope of RRW.

2.6.1. Underground Rail

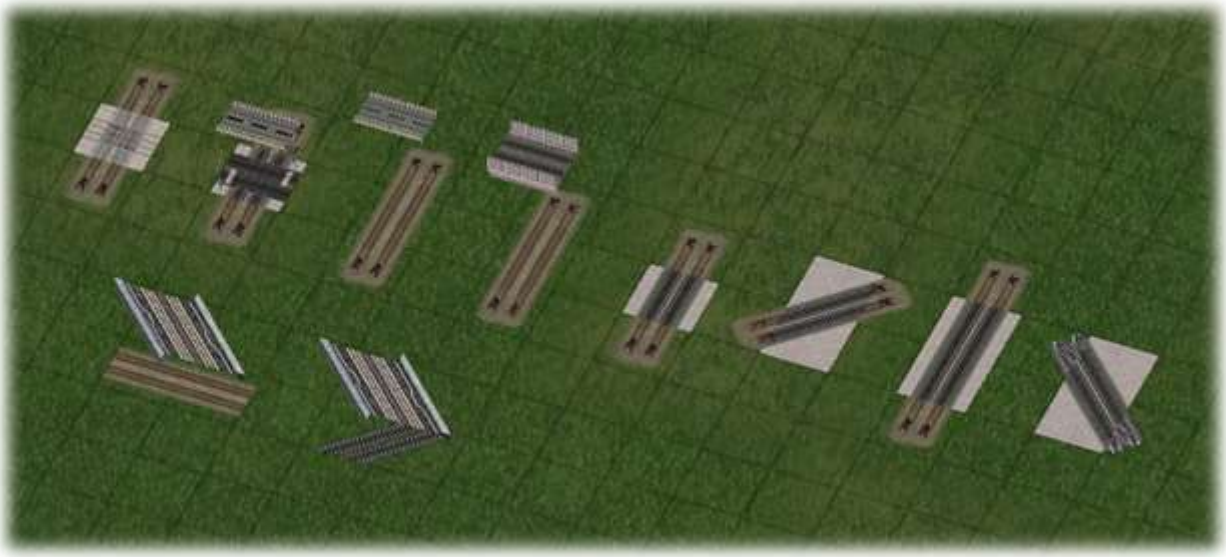
Underground Rail Puzzle Pieces are mostly unchanged and will still function as before. At the moment, the tunnel entrance is unchanged, but will still function the same.

Hovering over any other Underground Rail pieces will display the new Rail textures, but network bends will not. Since these pieces represent an underground network and are hidden from sight, there is no need for these pieces to have the same turn radius or footrpint as its above-ground counterpart.



2.6.2. Other NAM Plugins with Rail Crossings

Many other NAM Plugins that have Rail Crossings, such as Ground Light Rail, Elevated Rail over Road, Double Height Elevated Rail and Monorail, Underground Rail Crossings with Rail, and High Speed Rail, **may or may not have the proper Rail Texture**, but will **still function as intended regardless**.



3. Networks and Features

Because this is a mod that overrides an existing network, the RRW's base network, the original **Rail Network**, is identical in function as it was in past versions of the NAM.

NOTE: Sometimes, the term "Heavy Rail" is used here. This to distinguish between **Ground Light Rail**, which is a different network altogether.

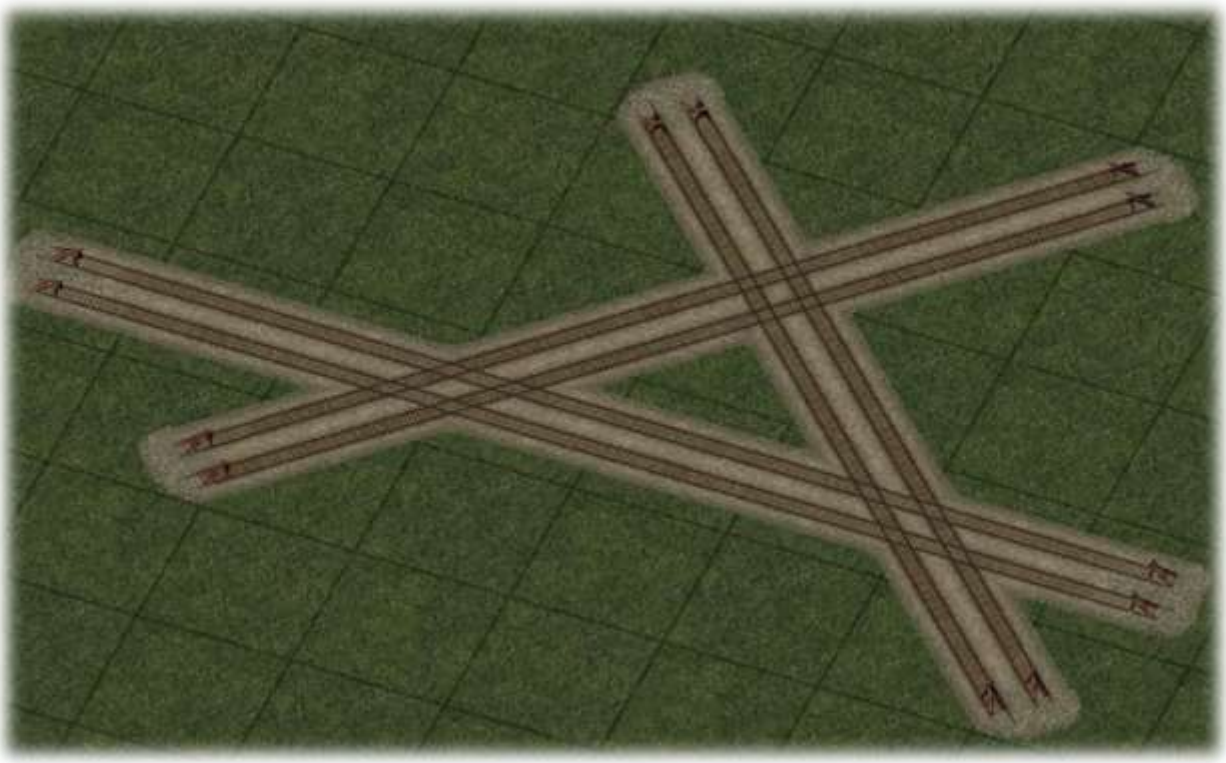
3.1. Primary Networks

3.1.1. Double Track Rail

Double Track Rail (also called **Dual Track Rail**, abbreviated **DTR**) is the name of the type of Rail Network composed of **two tracks**, with each track going in **opposite directions**.

DTR is primarily created using the **Rail Tool**, and because of this, DTR is considered the **Base Network** needed to create every RRW Network.

Currently, DTR is only available in orthogonal and diagonal orientation, and only as a ground level (L0) network. No fractionally angled or elevated counterpart exists except in the form of Puzzle Pieces.



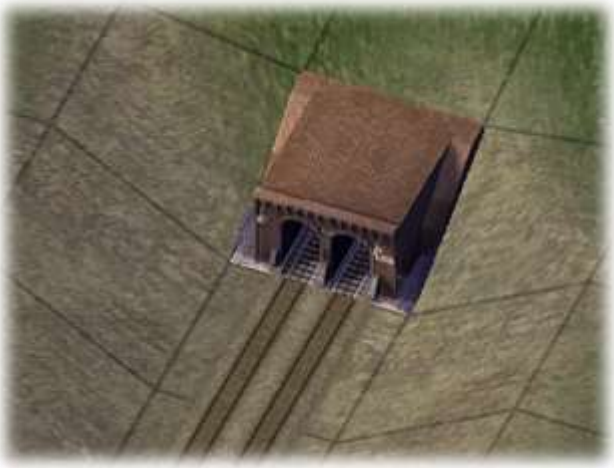
3.1.2. Single Track Rail

Single Track Rail (abbreviated **STR**) is the name of the type of Rail Network composed of a single bidirectional track. STR can only be created using **starter pieces**, and is classified as a **Starter-Based Network** or **Override Network**.

Currently, draggable STR is only available in orthogonal and diagonal orientation. No fractionally angled or elevated counterpart exists.

3.2. Tunnels

The **Tunnel Caps** that come with the original **Rail Network** are yet to be replaced with a corresponding RRW Tunnel Cap. All existing tunnels will still function as intended.



3.3. Bridges

So far, only two bridges has been updated to RRW specifications: The **Level Rail** Bridge, one of the game's default bridges, and a 15.5m variant for use with Viaduct Rail.

No other existing Rail bridges have been updated to RRW specifications. However, such bridges remain fully functional and can still be used until they have been converted.

3.4. Puzzle-based Features

All of these Puzzle Pieces are directly based off of the Rail Addon Mod's original Puzzle Pieces and the NAM Core's original content, and retain their original functionality with the RRW. The

RRW currently does not add any new functionality other than what has already existed in the Rail Addon Mod. The only change with these features is the textures, which are automatically updated upon installation of the RRW.

3.4.1. Viaduct Rail Puzzle Pieces

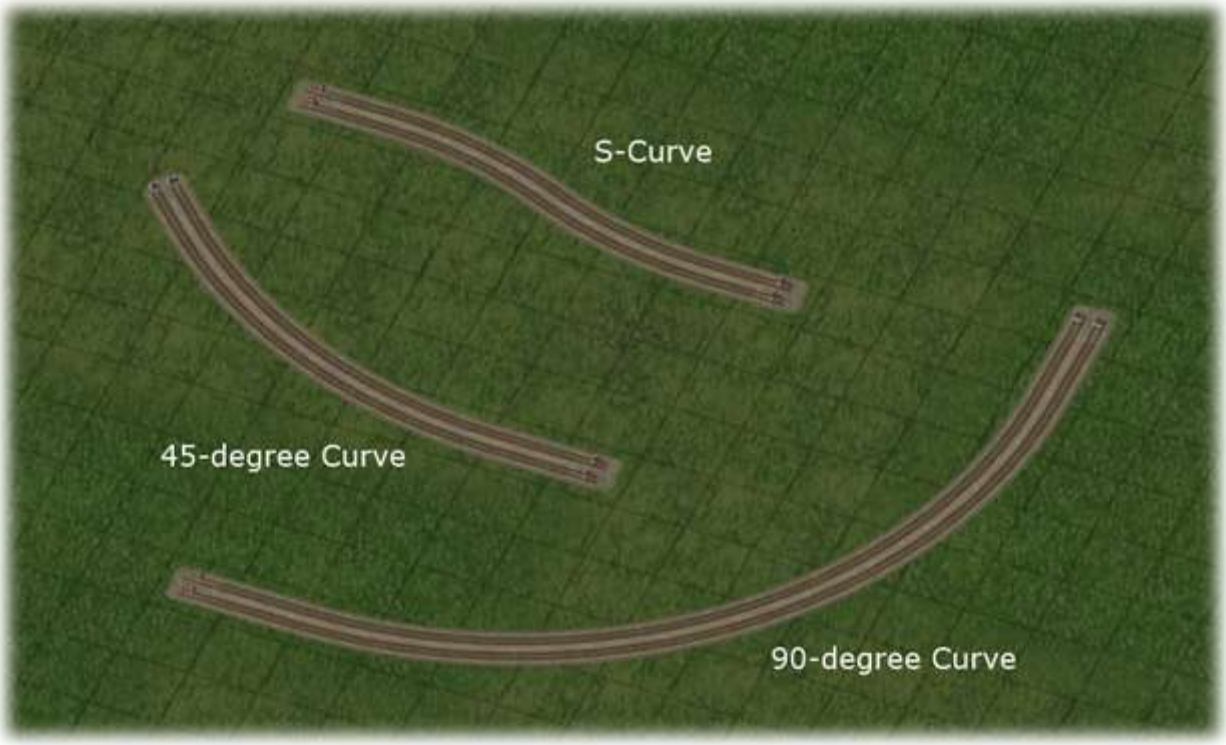
Viaduct Rail Networks are the RealRailway's elevated networks, and compose the RealRailway's equivalent of the RealHighway's elevated networks.

NOTE: The term "Viaduct Rail" is used to distinguish between the **Elevated Rail Network**, which is a different type of network altogether. The term "Elevated Heavy Rail" is sometimes used for "Viaduct Rail".

The majority of all orthogonal **Viaduct Rail Puzzle Pieces** have been updated to use the new RRW texture specifications, but **switches,** and **diagonal bends** have not been updated due to the small turn radius found on the bends and switches. However, all existing instances will still function as intended.

3.4.2. Dual Track Rail Switches and Curves

The **Wide Radius Curves** puzzle pieces from previous NAM versions have been retextured and repathed. They are available under their traditional button. Functionally, they are the same as before, but the only significant change is that these pieces now employ the use of **overhangs**, reducing the footprint of these pieces and allowing multiples of the same piece to be placed closer together, or for other items (such as flora) to be placed where the overhangs are.


S-Curve
45-degree Curve
90-degree Curve


Track Switches
Crossover Switch

3.4.3. Fractionally Angle Double Track Rail (FA-DTR)

Fractionally Angled Networks (abbreviated FANs) exist for the RealRailway in the form of **puzzle pieces**. The puzzle pieces consist of straight FA pieces, curves, and FA switches.

NOTE: The acronym "FARR" is oftentimes used to describe a Fractionally Angled Railway. Technically, the acronym stands for "Fractionally Angled Railroad" so that the extra "R" can be distinguishd from "FAR", which stands for "Fractionally Angled Road".

3.4.4. Single Track Rail Switches and Curves

The STR puzzle pieces and starters from the RAM have been retextured and repathed. They are available as before under the STR button.

3.4.5. Mini-Curves and Mini-Switches

With the increased turn radius, all DTR and STR **network bends** and **switches** have been redesigned. In contrast to the NAM's Wide Radius Curves and the previously default network bends, these are termed **Mini-Curves** and **Mini-Switches** due to their size. They are essentially miniature draggable versions of the larger curves and switches.

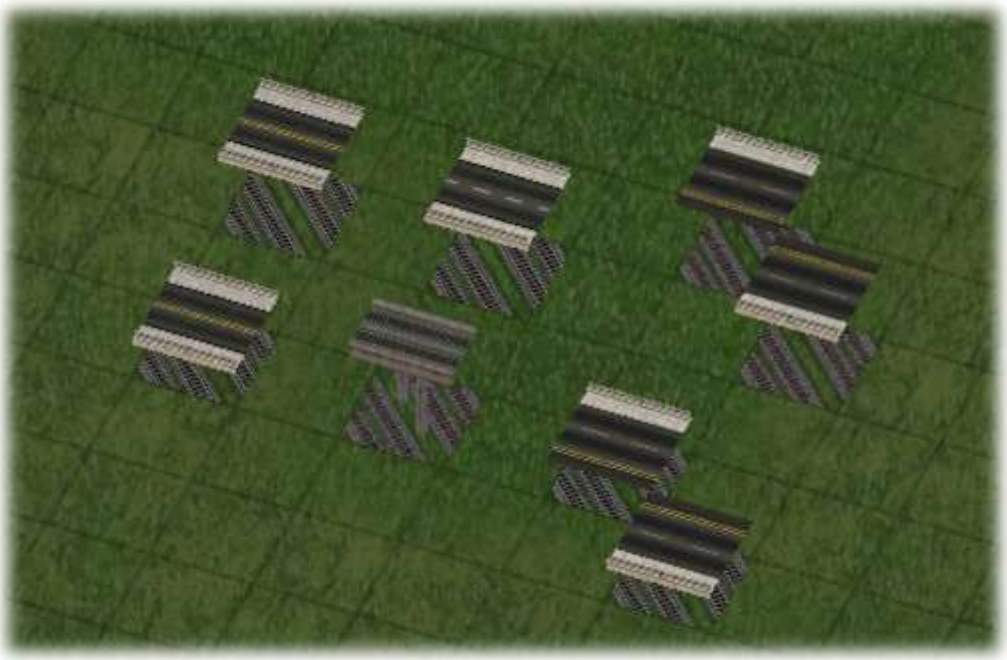
3.5. Depreciated Puzzle Pieces

3.5.1. Rail Y-Stack

The **Y Stack** piece, previously available in the Wide Radius Curve tab menu, has been disabled for the RRW, as this piece is rather unrealistic. Prefab interchanges tend to fall out of realism due to their small size. If you have this placed in one of your cities, it will continue to function, but once you bulldoze it, you can't replace it.

3.5.2. Viaduct Networks over Double Diagonal Rail

All **Viaduct Networks** (Elevated Road, Elevated One Way Road, Elevated Avenue, Viaduct Rail) have a piece for passing over **Double Diagonal Rail**. Since Double Diagonal Rail is no longer possible with RRW, **these pieces no longer have any use**. Any existing rail line or viaduct that uses these pieces will need to be replaced.



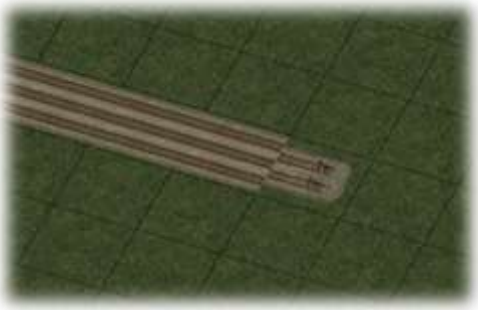
4. Features for Future Developments

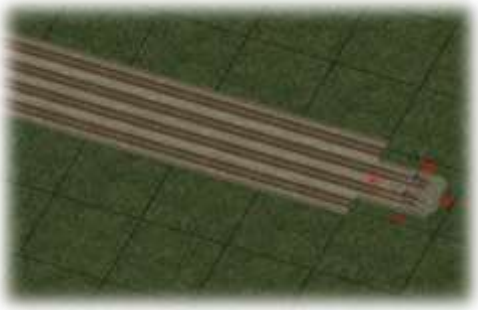
4.1. Possible Features to be Added

The following is a list of networks and features that are planned to be added in future releases, but it is undetermined as to when.

4.1.1. Triple Track Rail and Quad Track Rail

These two networks were some of the **Rail Addon Mod's** originally planned networks, which represent the Railway equivalent to the **Network Widening Mod's** ARD-3 and NRD-4/RD-4. At the moment, DTR and STR development are at the highest priority.





4.1.2. Expansion of Draggable Components

Both **Draggable FARR** (Fractionally Angled Railroads) and **Draggable Switches** are planned for a future release.

4.1.3. Additional Support for Viaduct Railways

Support for converting the rest of the Viaduct Railway pieces, such as increasing the turn radius for the network bends, is planned in a future update.

4.1.4. Additional Support for Tunnels and Bridges

Creating new RRW bridges and tunnel caps relies on recreating the bridges and tunnels. Since this may be a tedious process, it is unknown as to when all bridges will be updated. However, certain bridges may be updated in future releases.

4.1.5. Additional Support for Lot-based Railyards

RRW-compatible railyards and sidings are planned by the developers of the mod.

4.1.6. Additional Support for other NAM Plugins

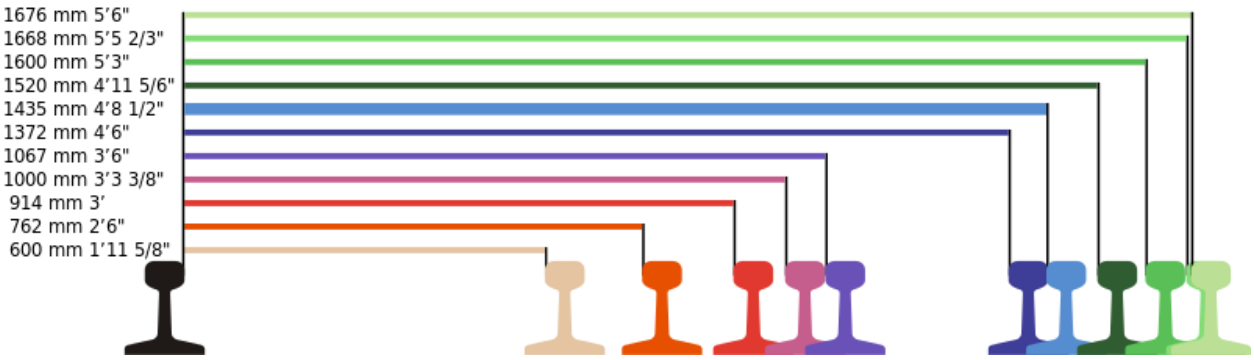
Certain NAM Plugins, particularly those with Railway crossings, lack proper RRW textures and may receive the correct textures in a future update.

4.2. Features that Will Not be Added

The following is a list of networks that will not be added in the foreseeable future, due to design decisions or in-game limitations.

4.2.1. Railways of Differing Gauges

Railways of differing gauges (widths), such as wide gauge and narrow gauge, are not a planned feature.



Source: Wikipedia (http://en.wikipedia.org/wiki/Track_gauge)

4.2.2. Mixed-Gauge Railways

Railways of multiple gauges within the same railway (such as dual gauge) are not a planned feature.

Source: Wikipedia (http://en.wikipedia.org/wiki/Dual_gauge)

4.2.3. SAM-like Implementation for Rail Network

Railways of differing textures that coexist with the default Rail network, akin to how the **Street Addon Mod** (SAM) works, are not a planned feature. The aforementioned concepts (mixed-gauge railways, railways of differing gauges) count as SAM-like setups. Any third-party textures that feature differently coloured features will only exist as texture overrides that only apply to the base network.

Creator: Indiana Joe (Matt)

5. Tutorials and How-To's

5.1. Starting Out with the RealRailway Mod

The RRW can be introduced in existing cities without having to start a new region. However, your existing rail networks **will not update automatically**. If this is your **first time** using the RRW, simply **redragging** or **clicking** every instance of Rail with the Rail Tool will update your networks.

During this process, you may notice that some parts cannot be updated. These will display an "Unsuitable area" message. This will only happen in the vicinity of curves and certain switches that have been dragged in a way that the RRW will no longer allow. If this happens, you need to **bulldoze the track and rebuild it**.

These rules also apply to any **STR** you have in your city. However, with STR, many of the main textures will appear darker and other textures may not be visible. Redrawing these networks will fix these issues, in addition to updating them.

6. Known Transient Issues

There are certain issues in the RRW that may occur. Since these are transient issues, meaning they can happen without RRW, these can be hard to fix, if they can be fixed at all.

6.1. Z-Fighting Issues

Certain video cards can lead to Z-fighting issues, where two planar models glitch into one another and lead to **one texture overlaying or blending on top of another**, usually in the wrong way. This can be fixed to an extent, but may still happen randomly.

6.2. Unintended Traffic Routes

Orthogonal-diagonal crossings may end up being used as a network switch, leading to traffic routes that go in an unintended direction. This issue is already known with the original Rail Network, and nothing can fix this short of rebuilding the entire rail line in a different way.

7. Frequently Asked Questions

7.1. Questions Concerning the RAM and Updating

7.1.1. What is the RRW and what is the RAM?

The **RealRailway Mod (RRW)** is the successor of the **Rail Addon Mod (RAM)**.

7.1.2. Will this be compatible with any of the old RAM content?

The RRW is **backwards compatible** with any former RAM content, meaning all existing content has been converted to the new specs. You don't need to **bulldoze** existing rail networks.

7.1.3. Will STR be updated?

Further upgrading of the RAM's Single Track Railway network will be included in future updates.

7.1.4. Does STR require RRW, and does RRW require STR?

No and no. STR and RRW are **mutually exclusive plugins**, meaning that one plugin does not require the other to be installed. If you wish to use STR but not the RRW, or vice versa, you are free to do so.

7.1.5. Why does the Rail Network still use the old textures?

RRW does not automatically update any Rails in your city, and since RRW relies on a new set of textures that don't directly modify the existing textures, it is necessary to **redraw** any stretch of existing Rail so that it updates.

7.1.6. Why am I not seeing any draggable switches or draggable FARR?

These features require quite a lot of work to get right, and in order to get the RRW ready for release, these features have been culled away from development but are planned to be worked on in a future update.

7.2. Questions Concerning Tunnels and Bridges

7.2.1. Are there compatible tunnels and bridges?

With the exception of two bridges, no.

7.2.2. Will existing bridges and tunnels be compatible?

That depends on how the bridge is made. Some bridges will have the Rail textures that are "baked into" the bridge itself, in which case, the entire bridge would need to be **remade**. Other bridges may already reference the modified Railway textures, so no existing reworking will be needed. Future bridges may have to be made like this in order to work with or without the RRW.

The tunnels will need to be recreated from scratch.

7.3. Questions Concerning Textures and Texture Mods

7.3.1. Why do the textures look the way they are?

This is due to realism. Refer to Changes to the Rail Network for more information.

7.3.2. Why are you not using HD textures?

Even though HD textures **increase download size and loading time**, the benefits of using HD textures are **minimal**, if there's any at all.

7.3.3. What's the purpose of converting the Rail Network to a model-based network?

Using a combination of a texture-based network with model-based pieces has always led to inconsistencies with **brightness**. This is mainly the fault of how the game handles both. Textures that are directly applied to a **non-model network** will appear slightly **darker than the original**, whereas a texture applied to a **model-based network** will actually **retain its original colouration**. This always requires some sort of colour correction, most usually on the textures used on S3D models.

Making the Rail Network entirely **model-based** removes this inconsistency and the need to create colour-corrected textures.

7.3.4. Is a SAM-like setup planned?

No.

7.3.5. Are there textural variations planned?

No, but anyone is free to make their own. :)

7.4. Questions Concerning Rail Switches and Rail Curves

7.4.1. Are there any Puzzle Pieces involved here?

Primarily, no. The majority of the Puzzle Pieces involved will be from the former **RAM content**. All other features will be **draggable** in future updates.

7.4.2. What is the difference between a network bend and a network curve?

A network bend is a network's naturally drawn "curve", whereas a network curve is anything whose turn radius and footprint is larger, typically in the form of the NAM's Wide Radius Curves. The term "network bend" is used to differentiate between a naturally drawn curve and the NAM's WRCs, even though the term "curve" is oftentimes used to refer to both.

7.4.3. What are Mini-Curves/Switches? How are these made?

Mini-Curves and Mini-Switches are the names of the modified network bends and switches. Since these are drawn naturally with the Rail Tool but have a larger turn radius, they are called Mini-Curves/Switches since they are essentially smaller versions of the Puzzle-Based equivalents.

Because these are naturally drawn, there is no puzzle-based equivalent or any complicated draggable pattern needed to draw these out.

7.4.4. Is there a benefit to using draggable content over traditional puzzle pieces?

For one, there's no need to tab through any menus, and none of this would even need to take up the menus. But from a developmental perspective, implementing draggable setups is far more **efficient** in terms of the number of transit tiles used compared to using puzzle pieces. In other words, **fewer transit tiles** are needed to create a setup that a puzzle piece can, especially with a highly modular piece that would need to be replicated using multiple puzzle pieces.

7.5. Questions Concerning Cross Integration with other Networks and other NAM Plugins

7.5.1. Is there support for crossing the RRW over with other NAM Plugins?

Yes, but much of this may be limited at first.

7.5.2. Are there plans to rework the GLR or HSR?

At the moment, no. If any such plans do arise, they would be considered **separate** since GLR and HSRP are considered **separate networks** and are also **beyond the scope** of the RRW itself.

7.6. Questions Concerning Compatibility with Third-Party Addons

7.6.1. Is there any lot support textures?

Yes. These textures replace the original textures so there should be no problem.

7.6.2. What about railyard textures for railyard lots?

Quite likely.

7.6.3. Are existing DTR stations compatible?

Any station that references the modified **lot support** textures will be **compatible** right away. However, some stations will reference **custom textures** or have textures that are a part of the **BAT** itself, in which case, this can only be solved if the **original creator** or a maintainer releases an updated station.

7.7. General Development and Third-Party Modding

7.7.1. What about overhead wires?

Strictly speaking, they're considered third-party.

7.8. Miscellaneous Questions

7.8.1. Can I get a large pepperoni pizza with extra cheese?

The NAM Team doesn't serve **pizza**. And no, we don't **deliver**.

8. Credits

8.1. Current Developers

- **Swordmaster** (Lead development, transit models, textures, pathing, and coding)
- **threestooges** (prop models)

8.2. Documentation

- **GDO29Anagram / Ganaram Inukshuk**
- **Swordmaster**
- **threestooges**

8.3. Testing

- **NAM Team and Associates**
- **art128**
- **rooker1**

8.4. Other Contributors

- **Tarkus, FrankU, Simcoug, vester, vortext** (ideas and support from the get-go)
- **memo** (all the tools without which neither the textures nor the code for this mod would exist)

8.5. Special Mention

- **dedgren** (original idea)