

# Traction action

By John D'Angelo

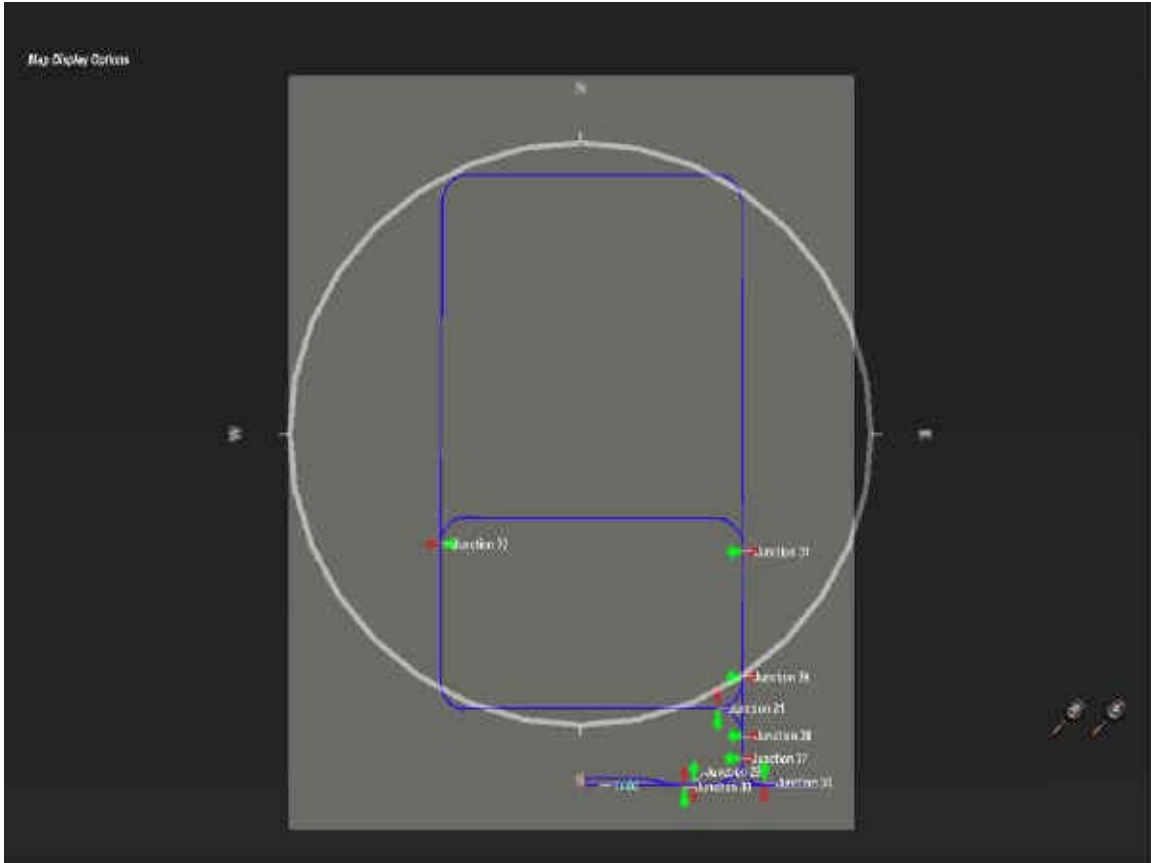


The beginning of a traction route.

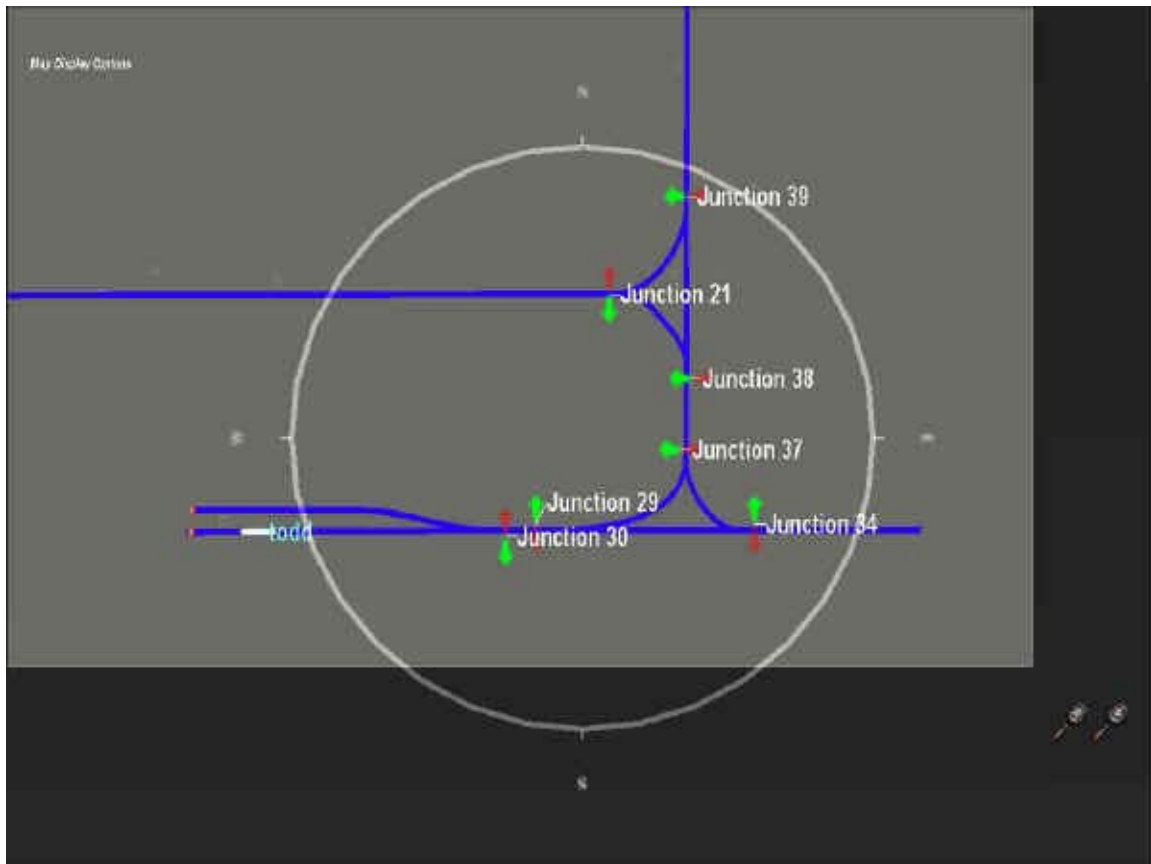
**W**ho amongst us doesn't care for the sight of a trolley coming down a city street? I think that creating a trolley (or *traction* if you prefer) route can give you some real interesting possibilities for your imagination. A Trainz-based trolley line can run right through a town or city, giving close-up views of the surrounding area and letting you add all kinds of detail for effect. As your trolley passes through town you will be able to see up-close views of homes, gardens, shops, traffic lights, street lamps, people and all those other great details of city life.

There are a few steps you need to take when you create your route. Doing so will make the track laying part just a bit more difficult than laying regular track. I hope that this article will help you understand those extra steps and let you get started on your own traction route.

For this article I created a single baseboard trolley route. The route is a simple out and back route from the trolley yard through the city with two routes. Once the route is completed it could easily be added to any other Trainz route by merging it with another map.



A single baseboard trolley route.



A close-up of the trolley yard track plan.

As you can see from the above screen shots the map shows a simple two-car trolley yard with a turning wye instead of a turntable to turn cars around. There is another wye connection at the base of the route to allow movement out to the main route and then back to the trolley yard. The main line has two routes: an outer loop and an inner loop. A normal day's operation would be for both trolleys to leave the yard and enter the main line via Junction 39. One trolley would be assigned to the short loop and the other trolley to the long loop. They both would circle through the city picking up and dropping off passengers until it was time to return to the yard via Junction 21. In the above picture, Todd has just returned to the trolley barn.

### **Construction of the town roads**

Before I laid down the trolley tracks, I created the town roads. I decided I wanted the roads and intersections to be large enough to carry a single-track trolley line and handle automobiles. The best-sized road I have found for this is a Boulevard. For this route I used the *Boulevard with Centerline Markers* (KUID:35412:37027). In addition to being wide enough to have a trolley line running through it and allow vehicular traffic at the same time, this boulevard has sidewalks attached, making it perfect for a city scene.

To have the boulevard meet at intersections I used three different types of boulevard intersections: *Intersection Right* (KUID:35412:37029), *Intersection* (kuid:35412:37062) and *T Intersection* (KUID: 35412:37063).

First I laid down the boulevard spline using the grid lines as a guide, leaving a space at the intersections for the insertion of the intersections. The intersections are scenery objects and are placed like any other scenery item. After the intersections were placed I joined the boulevard splines to the intersections to complete the roadwork. By the way, you will notice that all the road sections and track items in this article were created by Mike10. All I can say is THANKS MIKE!



A completed intersection.





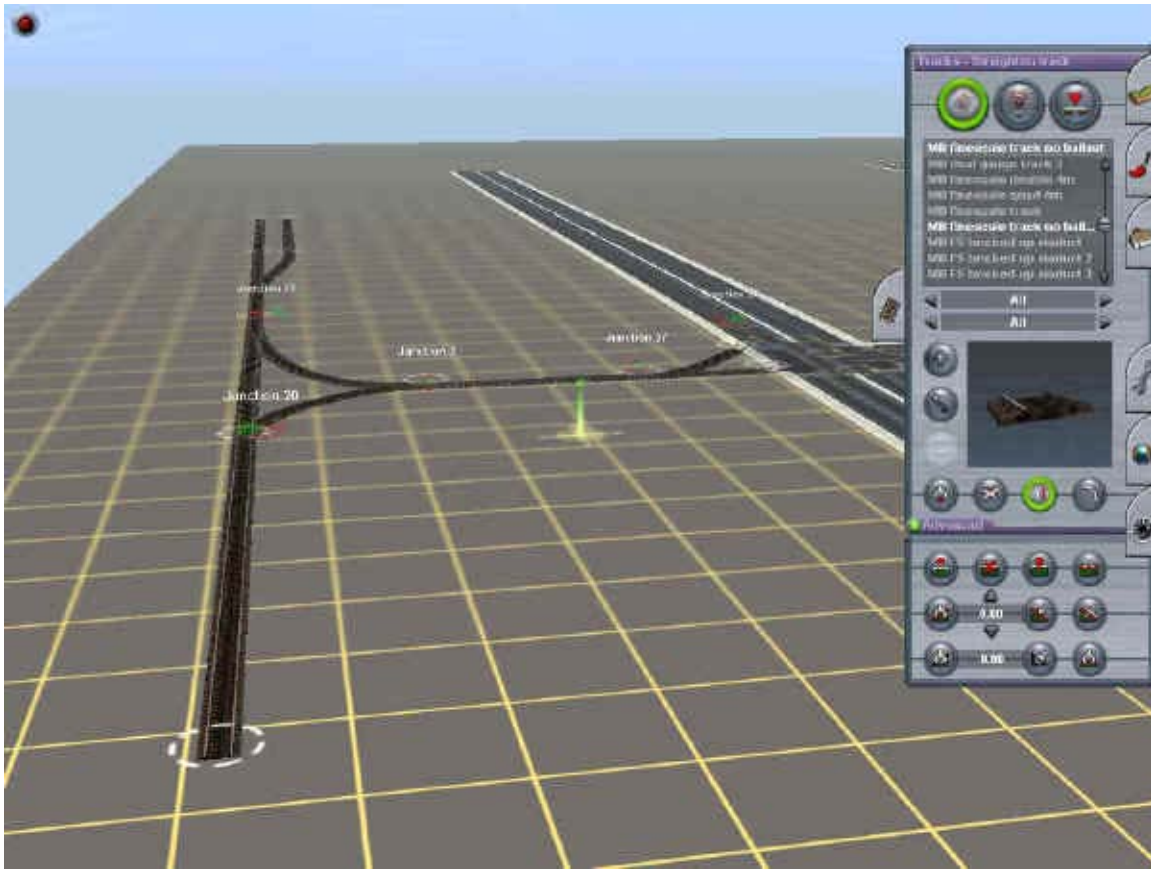
Moving the track onto the road.

After the straight sections were laid down I joined the ends of the straight sections with additional track. Once the two ends were joined with the straight sections a proper curve was formed.



Creating the curve.

I finally extended the straight sections from the expanded route to form the switches. For all switches that were in the roadway I used the *Streetlever* (KUID:30671:24003). This lever is at road level without any lever sticking up, and is perfect for trolley use. After I completed the main line, I made the trolley yard. I used Mike 10's *MB\_finescale\_track\_no\_ballast* (KUID:35412:38111). This track has ties but no ballast. I'll decide on what ground cover I'll use later on.



The trolley yard.

I used the *Engine\_Shed\_double\_1942*(KUID:1942:28001) as the trolley barn (car storage house) at the two-track section of the yard.

I guess that's it....

Oh, I almost forgot! The trolleys need electricity to run, so the final step of track laying will be installing catenary. I chose *Catenary\_Single* for my catenary system. This is standard in Trainz2004. I used the same procedure as I used when I laid the track, creating straight sections first, and then working on the curves.



Above: Placing the catenary. Below: Curving the catenary.

Making the curved catenary takes a bit of fiddling. I chose to make a strip of catenary with three sections. Section 1 was joined to the straight section and section 3 was joined to the other straight section. I carefully placed section 2 directly in the middle of the cross hairs of the centerline for the boulevard. It looked neat and cars would not be driving into it.



More to come.

As you can see from this screen shot, the roads, track and catenary have been completed and the trolley is running fine, but there is no city! I decided to concentrate on creating specific scenes for areas of the city using material from the Trainz Download Station, then featuring these neighborhoods in future editions of *Download gold*, which should be fun. The first *Download gold* article relating to traction will be about what traction equipment can be found at the Trainz Download Station. I hope you enjoy it!

***John***

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