Milepost

Simulations

Peace River

Contents

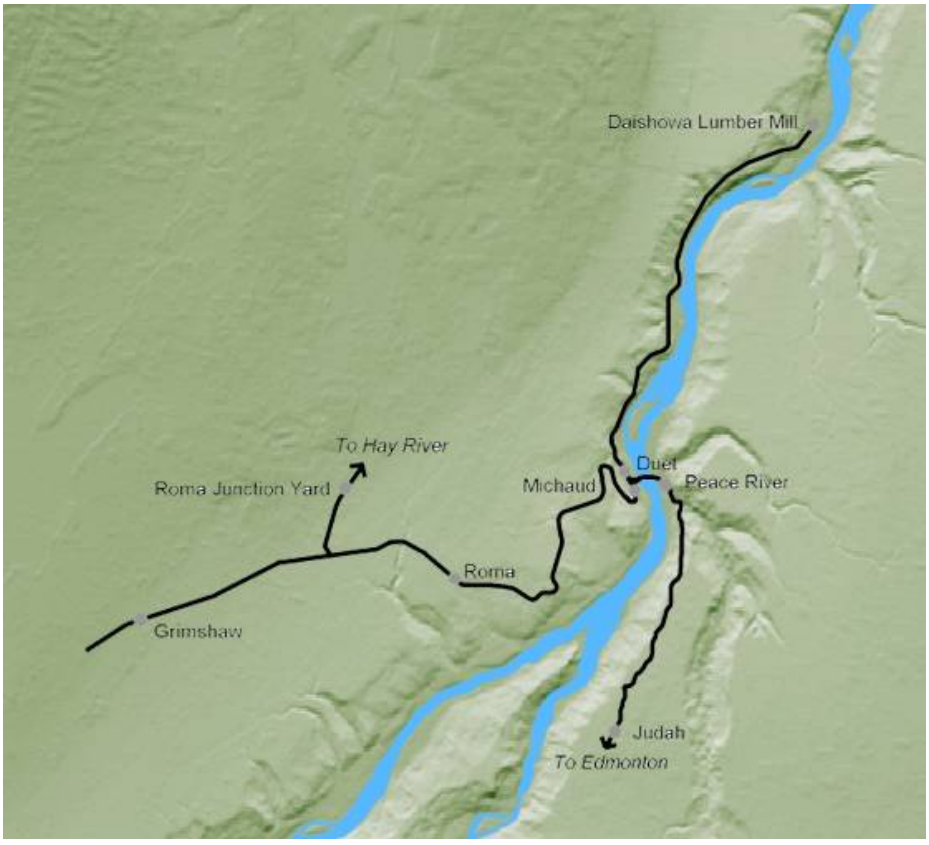
Introduction

The 40 mile route is set in the present day in the northern Canadian Prairies around the town of Peace River in Northern Alberta.

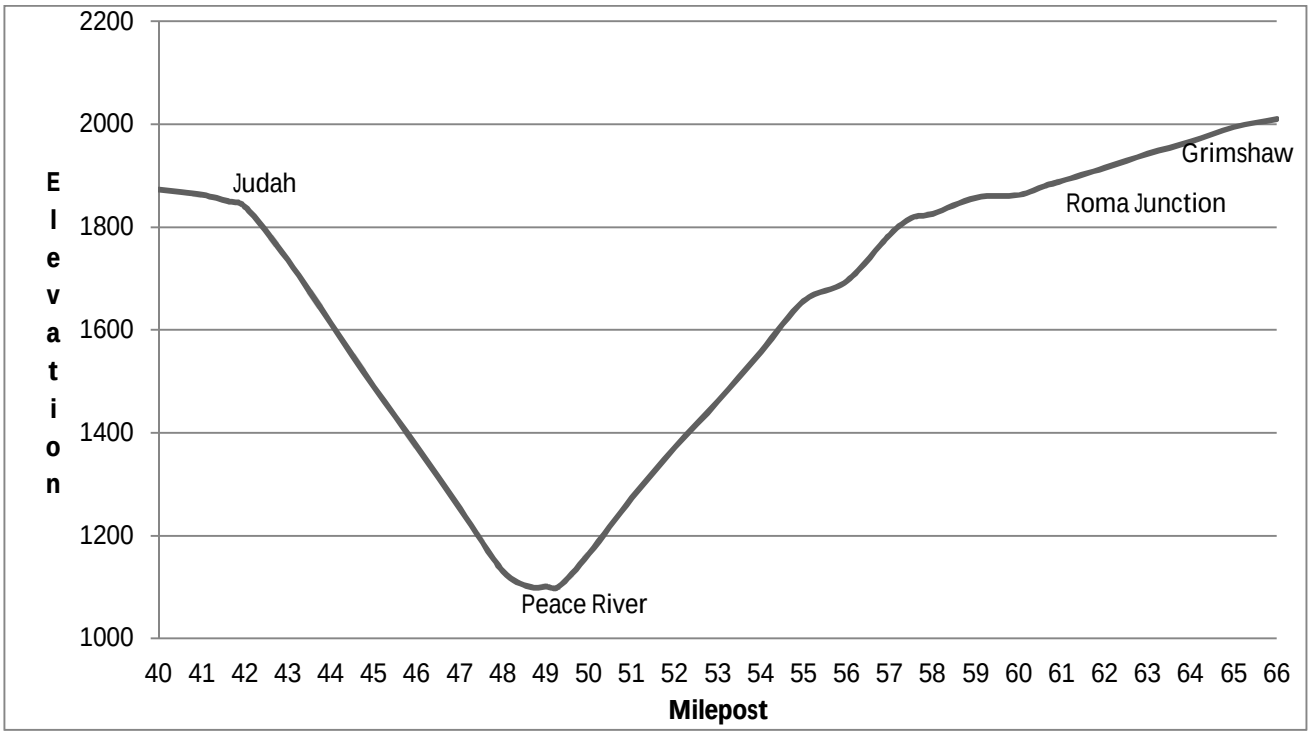
The route starts at Judah Siding which is at the top of the 2.4% grade where the railway climbs out of the Peace River Valley. Not much is here other than a few sidings. However it is of operational importance as trains often do multiple trips up to Judah siding with parts of a train due to the steep grades. From here the route heads north descending into the Peace River Valley. Before arriving at Peace River the line crosses the impressive Heart River Bridge. At Peace River there is a small yard and depot. Just after the depot the line crosses the Peace River on a 600 meter bridge.

At the west side of the bridge is Michaud which is a junction for the 11 mile Peace Valley branch to the north going to Daishowa lumber mill along the river valley, which is also included with the route. The main line continues to the west with a double horseshoe curve climbing out of the Peace Valley on a 2.2% grade to Roma Junction. At Roma Junction the line to the north goes to Roma Junction Yard which is the hub of operations in the area. North from Roma Junction Yard is the 350 mile line north to Hay River, Northwest Territories. West from Roma Junction the line comes to Grimshaw which has several Grain Silos where grain is loaded as well as some other industrial customers.

A map of the included route can be seen below.



An elevation profile of the route can be seen below.



History

In 1907 J. D. McArthur founded the Edmonton, Dunvegan and British Columbia Railway (ED&BCR) which was granted a charter to build a railway line north from Edmonton to Dunvegan (on the Peace River) and on into British Columbia with possibly ambitions of reaching the Yukon and Alaska. The railway was to help develop the region's rich agricultural, forest and oil resources with little development already in the region due to its remoteness.

In 1912 construction started on the ED&BCR heading north from Edmonton reaching Smith on the Athabasca River in 1914. During 1915 the line opened round the south of Lesser Slave Lake to McLennan before heading west towards the Smokey River. The ED&BCR reached Spirit River just west of Rycroft in 1916 which would be the end of their mainline never reaching Dunvegan or the Peace River as they then built a branch to the south to Grande Prairie. The ED&BCR eventually reached British Columbia at Dawson Creek on another branch from Grande Prairie.

In 1913 J. D. McArthur founded another railway the Central Canada Railway (CCR) which was granted a charter to build north from a junction with the ED&BCR at Winagami Junction just west of McLennan to cross the Peace River at Peace River and then head westwards. The CCR would become a feeder line for the ED&BCR and allow them to interchange with Peace River navigation traffic.

By 1914 the CCR had reached Reno where it faced a choice on which route it would take to descend into the Peace Valley. One option was to descend into the Heart River Valley keeping the grade below 1% but this would have required many bridges and the area was prone to landslides. The other option which was chosen, involved continuing on the high prairie to Judah at the top where it would descend on a much shorter but steeper grade of 2.4%. The railway then crossed the Heart River on the approach to Peace River. In August 1916 the first train entered Peace River on the newly constructed railway.

In February 1917 work commenced on the 2,700 foot long bridge over the Peace River which was complete by November 1918. After the bridge was completed no further construction was done for three years due to financial difficulties. In 1920 the Alberta Government took over the CCR and it was operated by Canadian Pacific. In 1922 the line was extended through Grimshaw to Berwyn and over the next couple of years was slowly extended further west eventually reaching Hines Creek 113 miles from McLennan.

In 1928 the Northern Alberta Railway (NAR) was formed jointly owned by Canadian Pacific and the government owned Canadian National. The NAR took over the ED&BCR and the CCR as well as the Alberta and Great Waterways Railway which was constructing a line in a north easterly direction from Edmonton towards Fort McMurray. The combined NAR had a total trackage of over 920 miles and was one of Canada's largest railways in terms of route mileage.

In 1942 when a rail link to Alaska was being considered one of the proposals was to start the new line at Hines Creek however to this date an Alaska rail link has never happened.

In 1961 the Great Slave Lake Railway was incorporated to build a railway from Roma Junction just east of Grimshaw to the shores of Great Slave Lake in Northwest Territories some 370 miles to the north. The main purpose of the railway would be to move lead concentrate from a new mine at Pine Point to a smelter at Trail in Southern British Colombia. Construction started in February 1962 and the first load of ore moved in November 1964. A branch was also built to the town of Hay River on the shores of Great Slave Lake. The Great Slave Lake Railway was operated by the Government owned Canadian National Railway (CN).

A new modern yard was built at Roma Junction to handle the increased traffic volume of not only ore heading south but lumber and grain could also now be moved south and the railway moved supplies north. All this increased traffic had to be moved over the NAR from Roma Junction to Edmonton.

In 1980 Canadian National got approval to buy Canadian Pacific's share of the NAR and on the 1st January 1981 all of the NAR now become part of Canadian National.

In 1988 the mine at Pine Point shut as the ore became too expensive to mine and the rails to Pine Point from the junction with the Hay River branch were removed in 1993. This has had a significant impact on traffic north of Roma Junction.

In 1990 a new branch was built from Michaud on the opposite side of the River from Peace River to the Daishowa Lumber Mill at Peace Valley. This generated new traffic for the area offsetting any reduction in ore traffic heading south of the Peace River area.

In 1998 all of the former Northern Alberta Railway and Great Slave Lake Railway north of Smith were sold to RailLink Canada and was operated as a short line under the name of the Mackenzie Northern Railway. In 1999 RailLink Canada was sold to Rail America which owned many other short lines in the USA and Canada. In 2000 all the railway west of Grimshaw to Hines Creek was abandoned.

In 2006 CN repurchased all the Mackenzie Northern Railway which they had only sold 9 years earlier. Since the recent CN takeover much of the remaining NAR has been upgraded to allow modern 6 axle locomotives where previously only 4 axle locomotives were allowed.

The next page shows a map of the area showing all the former Northern Alberta and Great Slave Lake in black and other railway lines in grey.

SD40-2W

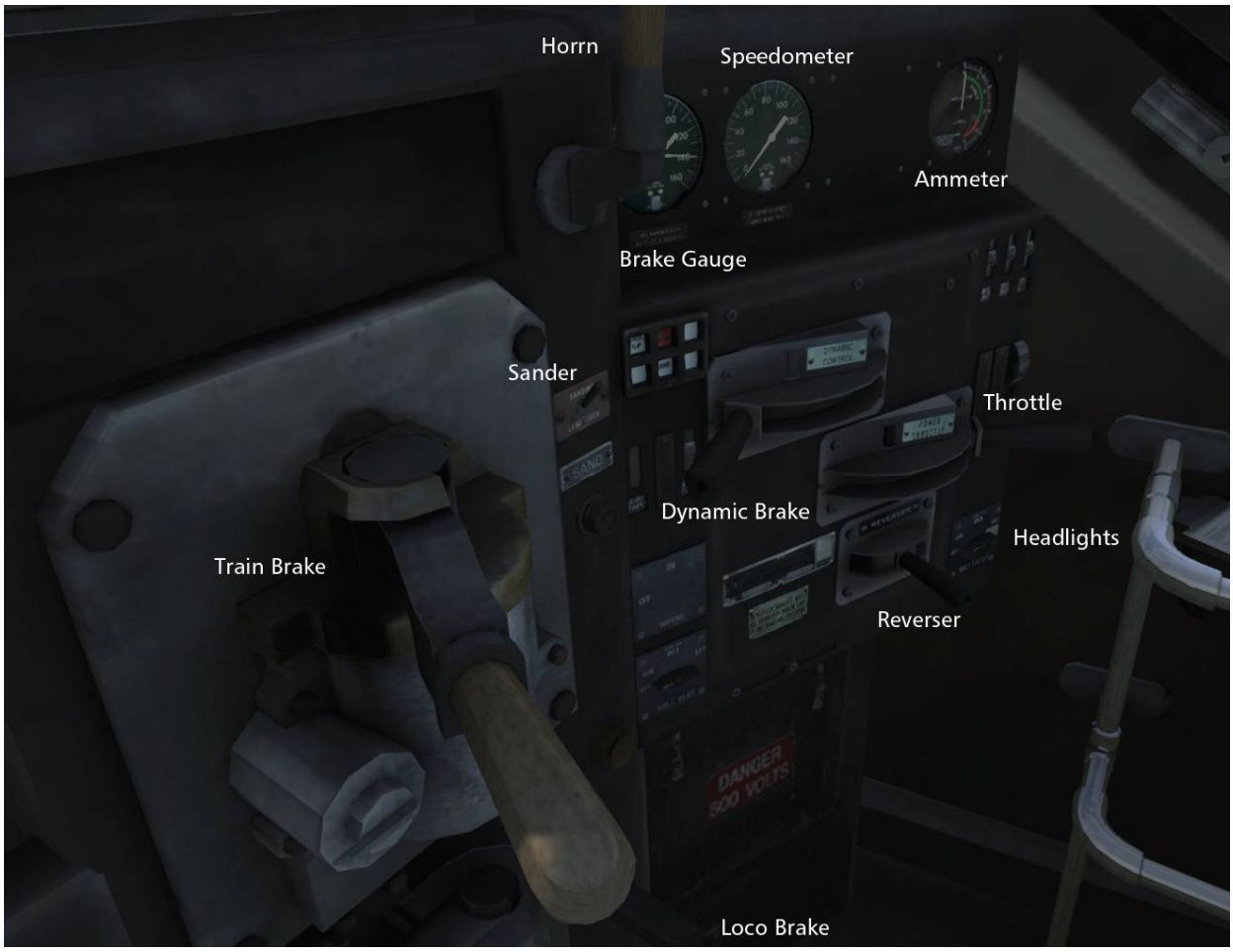
The EMD SD40-2W is a Canadian-market version of the highly successful SD40-2 diesel-electric locomotive, built for the Canadian National Railway by the Diesel Division of General Motors of Canada Ltd. (formerly General Motors Diesel) of London, Ontario. A total of 123 were constructed between May 1975 and December 1980. The major difference between the SD40-2W and a regular SD40-2 is the fitment of a wide-nose Canadian ‘comfort cab’, denoted by the 'W' in the model name.

The Canadian comfort cab or wide cab is a broad-nosed cab design found on several diesel locomotive types. It occupies the entire width of the locomotive, and typically has an access door on the front.

The wide cab is built with a specially reinforced nose. Instead of sheet metal, 1/8-inch-thick (3 mm) armour steel is used. This allows locomotives to simply plough through anything in their way with only minor paint damage. Also, toughened vertical supports reinforce the nose, keeping the crew safe. In addition, the windows of the cab meet Federal Railroad Administration Regulations Part 223, which states that windows must withstand the impact of a .22 calibre bullet or a cinder block.

The Canadian comfort cab is notably more spacious for the crew. It has significantly more open space than a standard locomotive cab, allowing crew members space to move about. In later years, the cab doors had improved weather strips and the cab had electrically heated windows installed. Many new EMD locomotives include the feature of the "Whisper Cab", a cab that is acoustically isolated from the rest of the locomotive.

SD40-2W Cab Controls



Rolling Stock

Boxcar

A boxcar is used to transport a wide variety of commodities including finished lumber products. Two Different liveries are included.

Bulk Head Flat Car

A Bulk Head Flat can be used to transport long bulky commodities. A load of logs and pipes are included.

Caboose

Cabooses were once a common sight at the end of every train however now they are only used on work trains or trains that have to make long reverse moves.

Center Beam Flatcar

A center beam car is used to transport lumber products. Three different liveries included.

Cylindrical Hopper

A Cylindrical Covered Hopper used for transporting grain and other bulk agricultural products. Two different liveries are included

Gondola

A open gondola can be used for loose bulk goods as well as materials for track maintenance.

4 Chute Covered Hopper

A covered hopper can be used to move bulk agricultural products as well as other bulk products

Tank Car

A tank car is used to transport liquid products including crude oil, petroleum products as well as ethanol.

Scenarios

The route includes career scenarios as well as being set up for Quick Drive starting at all significant places along the route. A selection of consists are available for quick drive. The route also includes two Free Roam scenarios starting at Peace River and Roma Junction Yard.

Career Scenarios
The following career scenarios are included with the route. The scenarios are set up slightly different from normal with a starting score of 1000 and you lose points for operational errors. It should be noted that all switches/points are manual so will not automatically be lined for you ahead and if are performing a move off the mainline you will need to check which way the switches are set.

Winter Work Train
Duration: 80 minutes **Difficulty:** Easy **Route Travelled:** Roma Junction Yard- Judah
Take a work train of gondolas from Roma Junction Yard over the Peace River to Judah on a freezing winter's morning.

Peaceful Morning Part 1
Duration: 80 minutes **Difficulty:** Medium **Route Travelled:** Judah-Roma Junction Yard
Take the wayfreight from Judah down the hill, over the Peace River to Roma Junction Yard dropping off some cars on the way.

Peaceful Morning Part 2
Duration: 45 minutes **Difficulty:** Medium **Route Travelled:** Roma Junction Yard-Grimshaw
Perform switching in Roma Junction Yard before taking your train to Grimshaw where more switching at the Grain Elevators is performed.

Peaceful Morning Part 3
Duration: 60 minutes **Difficulty:** Medium **Route Travelled:** Grimshaw-Peace River
Make up your train to take back south before traveling to Peace River, where you will leave your train from Grimshaw behind and make up a new train to take up the branch to the Daishowa Lumber Mill at Peace Valley.

Peaceful Morning Part 4
Duration: 60 minutes **Difficulty:** Hard **Route Travelled:** Peace River-Peace Valley
Travel north up the branch from Peace River to Peace Valley where you switch the lumber mill to make up your new southbound train and switch the cars of train you bought up into the appropriate sidings.

Peaceful Morning Part 5
Duration: 65 minutes **Difficulty:** Hard **Route Travelled:** Peace Valley-Judah
Travel back south down the Peace Valley branch to Peace River where you will collect more cars and take your train up the steep grade to the siding at Judah.

Signalling

The route is not signalled in the traditional sense and was operated using Occupancy Control System which is similar to the Train Order system in the United States. An example of an OCS Clearance form is shown below.

OCS CLEARANCE

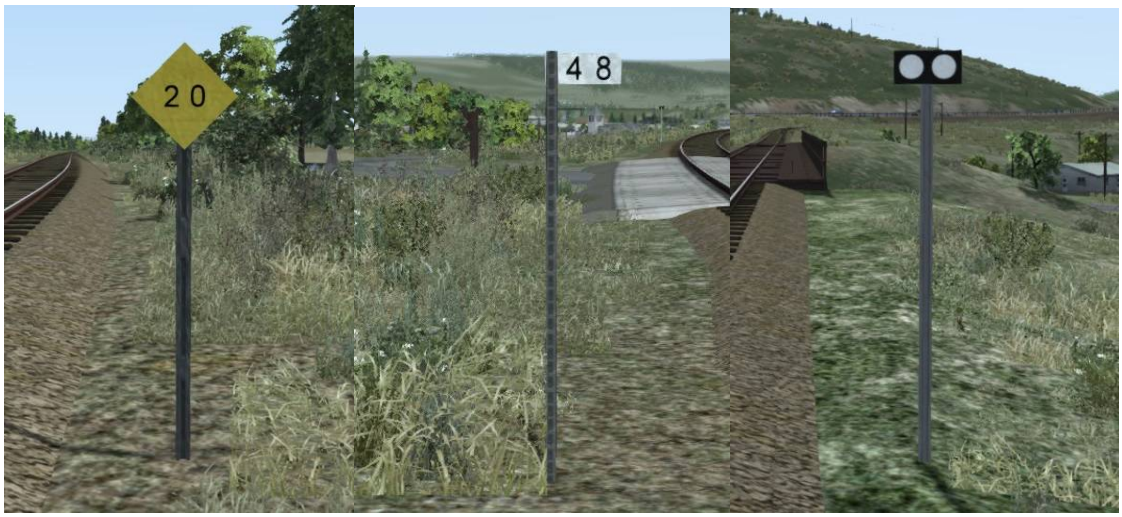
1	No 1603 To 506 CN5255 NORTH	Date 4/7/12
2	Clearance No _____ superseded	
4	Do not leave until _____ arrives at _____	
	Do not leave until _____ arrives at _____	
5	Proceed NORTH From MICHAUD To PEACE VALLEY Take siding/Clear _____ track at _____	
6	Work _____ between _____ and _____	
7	Protect against FOREMAN TRUDEAU Between MILEPOST 4 and MILEPOST 5 Protect against _____ Between _____ and _____ Protect against _____ Between _____ and _____	initials
8	Rule 104(b) WARNIING You may encounter the following switch(es) in the reversed position: _____ _____	
9	Rule 104(b) PERMISSON You may leave the following switch(es) in the reversed position: _____ _____	
10	Call RTC _____	
12	Complete at 11:20 RTC MNR Copied by CONDUCTOR JONES	
13	Clearance No _____ To _____ Is cancelled at _____ RTC _____	

Conductor Locomotive Engineer Trainman Other members

The above OCS Clearance number 1603 gives permission for Train number 506 with loco CN 5255 to proceed North from Michaud to Peace Valley. Item 7 indicates there is trackwork going on between milepost 4 and milepost 5 and you should hear from the Foreman before reaching this Milepost 4.

You can go back and check any train order you have been given at any time in the scenario. On the circled area seen below on the F4 HUD the icon on the right will display the current train order you have. You can use the arrows to go back and view a previous train order.

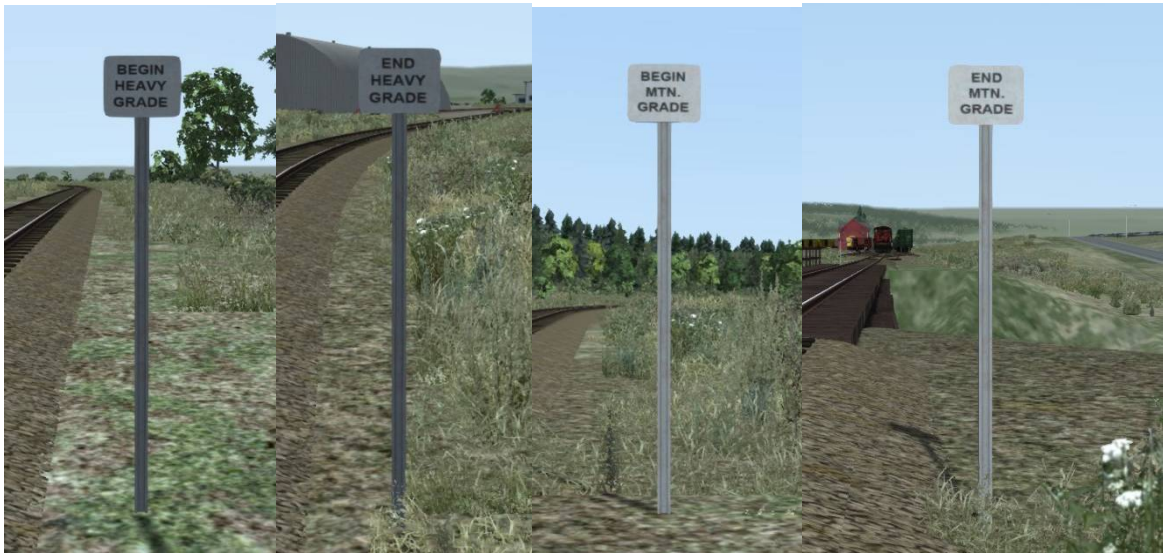
Signage



The **left** hand sign is a speed limit sign.

The **middle** sign is a milepost all mainline mileages are from McLennan.

The **right** sign is a warning to a flange operator of a upcoming obstruction such as bridge or grade crossing.



The **left** hand sign indicates the start of a downhill grade between 0.8% and 1.8%.

The **middle left** sign indicates the end of a downhill grade between 08% and 1.8%.

The **middle right** sign indicates the start of a downhill grade greater than 1.8%.

The **right** sign indicates the end of a downhill grade greater than 1.8%.

The **left** sign is a whistle sign normally situated a quarter of a mile from every grade crossing.

The **right** sign indicates you are entering the Yard Limits of a Yard.

Credits

Route created and rolling stock modified by Jonathan Lewis. Original SD40-2W model and some rolling stock model created by Dove Tail Games. Grain Car model created by Michael Stephan.

Thanks goes to Edward Gates and Simon Sauntson at Dove Tail Games for their help with project and all beta testers.

