# Springfield Terminal Railway Timetable

# Introduction

The Springfield Terminal Railway was a shorttrack route connecting Springfield (Vermont) with the Boston & Maine Railroad at Charlestown (New Hampshire). This just over 6 mile long line was electrified.

An MSTS route depicting this railway was created by Paul Charland and is available for download at Elvas Tower (<u>http://www.elvastower.com</u>).

This document provides details and description of an OR timetable developed for this route.

# **General Information**

The timetable contains both passenger and freight trains between Springfield and Charlestown. The passenger trains run from the stop at the Adna Brown Hotel in Springfield non-stop to the passenger depot at Charlestown, which is adjacent to the Boston&Maine station. The passenger trains run between 06.00 and 23.00 connecting into and out of B&M services at Charlestown. The timing of the B&M services is based on the 1936 timetable. Connecting times at Charlestown are between 5 and 15 minutes. Both trolleys are used, with some services passing each other at Middle Siding. The trolleys are stabled in the Car Barn at Mineral Street Yard.

Freight trains run to Springfield Junction, just north of Charlestown passenger station. The freight trains run to connect with the two B&M freight trains which serve Springfield Junction, a southbound service in the morning and a northbound service in the afternoon. The freight trains serve the Mineral Street Yard at Springfield and the Clinton Street Yard 1 mile down the line, as well as the industries along the line, as required.

The freight train engines are stabled in the Car Barn at Mineral Street Yard.

There is an additional freight working using the Work Trolley which is also stabled at Mineral Street Yard.

## **Provided Files**

This set of files contains all timetable files (both Excel and text versions), as well as all required paths. See below for a full list of all provided files.

This set does not contain consist files, these must be created by the user. Full details of all required consists are provided in this document.

# **Notes and Advice**

# **Driveable trains**

In principle, all trains in the timetable can be driven as player train. But to run a proper 'shift', it is best to start with the first service of a shift working.

For both passenger and freight trains, all first services have a number as name, not prefixed by any letter. All subsequent 'legs' of these workings have the same number, prefixed by the letter **Z**. All services operated by the same engine are linked from start to end of the timetable.

Empty stock working for passenger trains between the Car Barn and Ada Brown Hotel have the number prefixed by the letter **E**. Selecting these services means the shift will properly start at the Car Barn.

All freight train names are appended with a letter showing the sequence.

The B&M trains can be selected as player train as well but are of no real interest to actually run as player train.

# **Starting the timetable**

From the OR menu, select the overall timetable file named : Springfield. Next, from the timetable sublist, select the timetable for the required type of service : STPassTrains or STFreight. The other timetables in the sublist are not of interest for player train selection. From the trains menu, select the required train.

# **OR Version**

This timetable requires OR version X1.3.1-52 or later.

## **Train operation**

- Because the line has no signals, it is advisable to use the F4 track monitor to check for authority and track clearance. Many trains have booked stops to wait for other services, and some services follow quite close behind one another.
- It should not be necessary at any time to change to Manual mode or operate switches manually.
- All coupling and uncoupling is automatic.
- If run properly, the roll out of the timetable is always the same regardless of which train has been selected as player train. There may be some slight differences in timing and sometimes in sequence of trains but this should not change the general pattern.
- When cars are to be detached in a siding or loop, ensure the full train is properly in the siding or the loop before the train comes to a stop.
   If only part of the train is in the siding or the loop when the train is stopped, the cars will be detached at that moment and this may result in blocking the next action or another working. There is no recovery out of such a situation as cars cannot be coupled manually.

# And finally ....

- Be sure to save often, in particular just before attach or detach actions.
- And most important : have fun!

# Installation

Unpack the **SpringfieldTimetable.zip** file. It can be unpacked in the route directory or in a temporary directory.

Unpacking the zip file will create a directory named *SpringfieldTimetable*.

This directory contains two subdirectories : *Timetable* and *Paths*.

Go to the *Timetable* directory. Select the subdirectory **OpenRails**, and copy (or move) this directory to the **ACTIVITIES** directory of the route.

Go to the *Paths* directory. Select all files (including the subdirectory **OpenRails**) and copy (or move) these files to the **PATH** directory of the route.

Create the consists as detailed in this document. The timetable requires 53 consists. The timetable is now ready to run.

# **Services**

# **STR Passenger Train Services**

## Description

The passenger service is provided by two trolleys. One trolley runs a full workday, leaving the Car Barn at 05:50 and returning at 22:35. The second trolley makes two return journeys and is stabled at the Car Barn in between. This set leaves the Car Barn at 11:25 and 13:55, returning at 12:15 and 14:55. Storage at the Car Barn is set up as a pool.

### Workings

All services are linked, with the incoming journey at both Springfield and Charlestown forming into the next return working. Services no. 6 (dep. Charlestown 11:47) and 10 (dep. Charlestown 14:18) are split into two separate workings to ensure they will wait at Middle Siding to allow the opposite working to pass. The second leg of these workings are named Z6 and Z10.

The names of the empty stock workings between the Car Barn and Ada Brown Hotel are prefixed by the letter **E**.

### **Timetable file**

The timetable file defining the passenger services is named **STPassTrains**.

#### Consists

The passenger service requires two consists :

TT\_Springfield\_Trolley\_1 (runs the full day service)

TT\_Springfield\_Trolley\_2 (runs the two additional return trips)

Advised rolling stock are the STR trolleys available at Trainsim.Com (search for files str\*.zip). Other stock may be used, but length should not exceed approx. 40 meter as longer trains may not fit in loops and this would prevent trains from passing each other.

# **STR Freight Train Services**

### Description

The main freight services are linked to the two B&M freight services which serve Springfield Junction. Starting around 09:00, the two freight engines collect all cars from the yards and sidings which must be transferred to the southbound service.

When the transfer shunts at Springfield Jn are completed, the cars which arrived from the north are set out as required.

In the mean time the cars which are due for the northbound connection are collected and finally the cars which were brought in from the south are set out.

There are two additional workings, one is a special early in the morning, the other is a MOW working which uses the work trolley, the work trolley will then help out with the remaining workings.

A major aspect of the freight working is the rather limited power of the small freight engines, combined with some very steep banks, especially either side of Cheshire bridge and on the approach to Mineral Street Yard. This limits the load for freight trains on these sections to just 3 or 4 cars. This means that a lot of additional shunting is required, and some workings even need a helper engine.

## Workings

There are 8 freight workings, all are split into multiple legs.

The two freight engines are stabled in the Car Barn, storage is set up as a pool.

The work trolley is stabled on the Team Track siding at Mineral Street yard.

The first services of each working have their number as name, not prefixed by any letter. All subsequent 'legs' of these workings have the same number, prefixed by the letter **Z**. All freight train names are appended with a letter showing the sequence.

Note that the start times of the intermediate workings are only approximate, therefor when starting an intermediate working it may have a delayed start.

All services operated by the same engine are linked from start to end of the full shift.

### Working 131

This is a special working, requested by Ready Mix cement works.

A box car for Ready Mix arrived yesterday and was to be loaded with bagged cement, and taken south again today. But a gondola placed at Ready Mix earlier had not yet been unloaded so the box car could not be placed. Ready Mix has now requested that the gondola is taken away and the box car is placed as early as possible, so the box car can still be loaded in time to be taken on the southbound train.

**131A** : start off at the Car Barn at 06:05, but wait at the junction for the 06:11 trolley from Springfield. Follow the trolley down to Ready Mix cement, and pick up the gondola.

**Z131B – Z131E** : drop off the gondola in the wye at Springfield Jn, pick up the box car waiting in the siding and place it at Ready Mix. When done, proceed to Clinton Street yard.

The working will form into 101A, which starts work at 09:00, so there is time for a (second) breakfast.

### Working 101

Collect cars at and around Clinton Street Yard for the southbound transfer.

**101A – Z101B** : start off at 09:00 but wait until the 08:52 trolley from Charlestown has passed by before proceeding onto the main line. Pick up the cars at Bryant Shipping and attach these cars to the car at JL Receiving.

**Z101C – Z101D** : leave the cars at JL Receiving and head to Bryant Receiving. Pick up the empty cars on this siding and take these to Bryant Shipping for loading.

**Z101E – Z101K** : next, run to JL Oil to pick up the tank car, then proceed to Mobil Oil and Socony to pick up the tanks cars there. Store the tank cars at Clinton Street yard. Pick up the cars at JL Receiving and attach to the tank cars. Then set out on the main line. Stop short of the connection to Young Propane.

**Z101L – Z101Q** : leave the cars on the main line and pick up the tank car at Young. Return to the waiting cars and pick up the box cars, leave the tank cars on the main line. Proceed to Springfield Jn, leave the cars in the siding and return to Young to pick up the remaining tank cars. Take the tank cars to Springfield Jn, run past the waiting cars, then set back to pick up the cars. Take the train to the South Main and wait for the arrival of the first portion of the second train.

**Z101R – Z101V** : after arrival of first portion of second train, set back to siding and pick up cars. Return to the South Main to await the second portion, and pick up these cars after these have arrived. Again return to the South Main and wait for the other engine to take out the cars, then run into the siding to wait for the B&M freight.

**Z101W** – **Z101X** : after the B&M freight has arrived in the South Main, pick up the cars and return to the siding.

The train will now form working 103.

## Working 102

Collect cars at and around Mineral Street Yard for transfer to southbound working.

**102A – Z102D** : Start at 09:06 and run out to the main line. Wait at the junction for Ada Brown Hotel for the 08:52 trolley from Charlestown, then proceed and pick up car at Vermont Snath. Take car back to Mineral Street Yard and store it in Slack A. Run round via BackTrack and push car into BackTrack.

**Z102E1 – Z102F** : Pick up cars at Springfield Fuels A and Shedd Coal A, take the cars to Springfield Fuels B, transfer cars to the cars in that siding.

**Z102G – Z102M**: Pick up car at Slack Coal and store it in Slack A. Proceed to BackTrack and pick up car stored there, then pick up car at Slack G3. Set back to Slack A and then Springfield Fuels B to pick up stored cars. When all cars are collected, head down the main line, following train 101. Stop short of the connection to Young Propane.

**Z101N – Z101P** : After train 101 has cleared the line, continue to Springfield Junction with the first portion of the train. After dropping the cars off at Springfield Junction return to the main line at Young to pick up the rest of the train, and take this also to Springfield Junction.

**Z102Q – Z102T** : After dropping off the second portion at Springfield Junction, run out to Ready Mix cement to pick up the box car. Return to Springfield Junction and pick up the Gondola stored on the wye. Store the cars in the siding.

**Z102U – Z102W** : Pick up the full train from South Main, run down the far end of Springfield Junction and set back to attach to the cars waiting in the siding. Wait until the B&M freight has arrived and the other engine has taken off the incoming cars, then attach the train to the waiting B&M engine. Return to the siding where the train will now form working 104.

## Working 103

Distribute cars off the southbound B&M freight and collect cars for the northbound transfer.

**103A** : At 11:05, set out for Clinton Street Yard, taking only the box cars destined for JL Shipping. At the junction with the main line, wait for the 11:01 trolley from Springfield.

**Z103B – Z103H** : At Clinton Street Yard, leave the cars in the siding. Proceed to JL Shipping, pick up the cars in the siding. Take these cars to Vermont Foundries and transfer them to the cars in that siding. Return to Clinton Street Yard and run round the cars stored there. Set back to attach to the cars and push them into JL Shipping. Return to Vermont Foundries, pick up the cars and take them to the yard.

### Time for a short break.

**Z103I** – **Z103K1** : Resume at 12:39, and after waiting for the 12:25 trolley from Charlestown to pass, set out on the main line. Stop at the connection with Wiggin's. Pick up the car at Wiggin's and attach to the train, then continue and stop just short of the connection to Young Propane.

Z103L – Z103P : Take the first portion of the train to Springfield Junction, store on the North Main.
From the siding at Springfield Junction, pick up the car bound for White's Hill Socony and return to the main line. Drop off the car at White's Hill Socony. Pick up the second portion which is waiting on the main line and take it to Springfield Junction, attach it to the first portion in the North Main.
Z103Q – Z103U : Pick up the car waiting in the siding at Springfield Junction and take it to Ready Mix Cement. Return to Springfield Junction, pick up the cars stored in North Main and take them to the siding. Detach the cars and run round to the far end of Springfield Junction.
The train will now form 106A, and there is a little break until the northbound B&M freight arrives.

## Working 104

Distribute cars off the southbound B&M freight.

**104A – Z104C** : After train 105 has left for Clinton Street Yard, pick up the next set of cars bound for Clinton Street Yard at the siding at Springfield Junction and head out onto the main line. Wait at the approach to Clinton Street Yard until the other train has completed its shunt work, then proceed into the yard.

There is now a little break until approx. 12:40.

**Z104D** – **Z104F** : After departure of the other train, take the tank car to Gas Co. Return to Clinton Street Yard and shunt the remaining cars to Vermont Foundries.

**Z104G – Z104I** : Wait until the work trolley has passed by, then follow this to Seaver's Siding. Wait here for the work trolley to return from the Power House and then continue to Springfield Junction. The train will form into 105A, and there is a little break until the northbound B&M freight arrives.

## Working 105

Distribute cars off the northbound B&M freight.

**105A – Z105D2** : After arrival of the B&M freight in the North Main, pick up the cars from this train and attach to the other engine which is waiting at the far end of Springfield Junction. Then take the cars stored on the other siding and attach to the B&M engine. Return to the cars just taken to the other engine and take the rear portion of this train to the other siding.

**Z105F – Z105J** : After departure of train 106, pick up the first portion from the cars stored in the South Main. Take the cars to the Middle Siding, then return to Springfield Junction to pick up the second portion and attach this to the cars at the Middle Siding. Take the train to Clinton Street Yard,

but wait at the approach until the other train has completed its shunting.

**Z105K – Z105R** : Run round the cars, set out the box cars at Bryant Receiving and the tank cars at JL Oil, Mobile Oil and Socony. Then return to Springfield Junction, but wait at Seaver's siding for train 106 coming down from Springfield Junction.

**Z105S – Z105V** : At Springfield Junction, pick up coal hoppers from the South Main. Wait until the work trolley has attached as helper, then proceed to Mineral Street Yard. Detach the helper at Middle Siding. Wait at the bottom of the bank to Mineral Street Yard for the other engine to attach, then continue to Mineral Street Yard. Stop in Slack A, but ensure the cars at the rear are clear of the switch.

**Z105V1 – Z105V4** : Detach the cars and proceed to TeamTrack and detach the other engine. Return to Slack A and propel the cars to Springfield Fuels B. Then shunt to REA and wait for the work trolley to arrive with the final set of cars.

**Z105W** – **Z105AC** : After arrival of the work trolley, pick up the cars one by one and store these in Slack G3, REA and Slack A. When done, return to the Car Barn. End of shift.

## Working 106

Distribute cars off the northbound B&M freight.

**106A** : Wait until the other engine has attached the cars transferred from the B&M freight, then shunt these into the South Main.

**Z106B – Z106F**: Leave all cars in the South Main except the box cars for JL Receiving. Take these cars to Clinton Street Yard, run round and propel into JL Receiving. Shunt to Sioux siding to await arrival of train 105.

**Z106G – Z106I** : After arrival of the other train, pick up the tank car and drop this off at Young Propane, then continue to Springfield Junction.

**Z106I1 – Z106L** : At Springfield Junction, pick up coal hoppers. Wait for the helper to attach and then proceed to Mineral Street Yard, dropping off the helper at Middle Siding.

**Z106M – Z106O** : Stop at the bottom of the bank to Mineral Street Yard, and take one hopper up to the yard and store in Slack Coal. Return to pick up the other cars, store in Slack A, run round and propel to Shedd Coal B.

**Z106P – Z106Q** : Return to the bottom of the bank and assist the other train up the bank. Other engine is detached in the Team Track. When until the other engine has completed its shunt work, then run to the Car Barn.

End of shift.

## Working 107

Work MOW cars and assist with cars off the northbound B&M freight. The work trolley is stored at the Team Track at Mineral Street Yard.

**107A** : Start at 12:30 and set out on the main line. At the junction, wait for the 12:25 trolley from Charlestown, then follow freight 103 down the main line to the Power House and pick up the hopper and the caboose which are stored there.

Z107B – Z107E : Take hopper and caboose to Mineral Street Yard. Wait at Seaver's siding for
train 104 and the 13:36 trolley from Springfield. At Mineral Street Yard, detach the cars in Slack A.
Run round, pick up the caboose and draw it out, then propel it into the BackTrack. Return to Slack A

and pick up the hopper.

**Z107F – Z107H2** : Take the hopper to Springfield Junction. There is a long break at Seaver's siding while waiting for the other trains to complete the shunt work at Springfield Siding. Continue after passage of the second freight. At Springfield Junction, store the hopper in the wye. Pick up the cars stored in the siding and propel these into the South Main. Shunt into the Hole track.

**Z107I – Z107O** : After the first engine has picked up coal hoppers, attach to the rear and assist to Middle Junction. Return to Springfield Junction (Hole track), wait for the second engine to pick up coal hoppers and assist this train to Middle Siding as well. Return again to Spingfield Junction to pick up the remaining cars and take these to Mineral Street Yard. Detach the cars at the yard and move into the TeamTrack.

End of shift.

## **Timetable file**

The freight trains are defined in file **STFreight**. The static consists for the cars at the various sidings are defined in file **STStatics**.

## Consists

### **Engine consists**

Two consists are used for the freight trains : TT\_Springfield\_Freight\_1 TT\_Springfield\_Freight\_2

One consist is defined for the work trolley : TT\_Springfield\_Workcar

Advised rolling stock are the STR steeple cabs and work trolley available at Trainsim.Com (search for files str\*.zip).

Other engines may be used, but do not use long engines or multiple engine consists as this is likely to cause problems with trains overlapping sidings and loops.

### Car consists

The table below lists all consists for freight cars used in this timetable.

The consists shown in column 'Lift' are placed as static consists at the location as indication. The consists shown in column 'Setout' are brought in on the B&M freights to be taken to the relevant siding.

The column 'Type' suggests the type of cars but that is only as an indication.

The columns 'Load' indicate if the cars are loaded or empty.

The columns 'L' show the maximum length. The consists may be shorter, but the maximum length should not be exceeded in order to avoid problems at sidings and yards. It is also advisable to use only older, shorter cars and not the modern extra long cars.

Siding	Туре	Lift	Load	L	Setout	Load	L	Remarks
Bryant Rec	Вох	TTS_BryantRec	E	2	TTF_BryantRec	F	2	Lift to Bryant Shipping
Bryant Shipping	Вох	TTS_BryantShip	F	2				

Gas Co Vermont	Tank				TTF_GasCo	F	1	
J&L Oil	Tank	TTS_JLOil	E	1	TTF_JLOil	F	1	-
J&L Rec	Вох	TTS_JLRec	E	1	TTF_JLRec	F	3	3
J&L Shipping	Вох	TTS_JLShip	F	2	TTF_JLShip	E	3	3
Mobil Oil	Tank	TTS_MobOil	E	1	TTF_MobOil	F	1	-
Socony Oil	Tank	TTS_Socony	E	1	TTF_Socony	F	1	-
Vermont Foundries	Gondola Hopper Flat	TTS_Found	E&F	3	TTF_Found	E&F	2	
Ready Mix	CovHopper	TTS_ReadyMixOut1	E	1				
	Box	TTS_ReadyMixIn1	F	1				Taken from Springfld Jn to Ready Mix, then back to Springfld Jn
	CovHopper Box				TTF_ReadyMixIn2	E/F	1	
White's Hill Socony	Tank				TTF_White	F	1	
Young Propane	Box Tank	TTS_Young	E	1	TTF_Young	F	1	
Snath	Вох	TTS_Snath	F	1				
Power House	- Hopper	TTS_Caboose TTS_Gravel	E	1				Picked up by work trolley
Wiggins	Вох	TTS_Wiggins	F	1				
REA	Вох				TTF_REA	F	1	
Shedd Coal A	Hopper	TTS_SheddA	E	1			T	
Shedd Coal B	Hopper				TTF_SheddB	F	2	2
Slack A	Box Tank				TTF_SlackA	E	1	
Slack Coal	Hopper	TTS_SlackC	E	1	TTF_SlackC	F	1	
Slack E	Вох							
Slack G-3	Вох	TTS_SlackG3	F	1	TTF_SlackG3	E	1	
Springfield Fuels A	Hopper	TTS_FuelsA	E	1				
Springfield Fuels B	Hopper	TTS_FuelsB	E	3	TTF_FuelsB	F	2	2

# **Boston and Maine trains**

## **Passenger trains**

## Description

The passenger train timings are as shown in the 1936 timetable. All trains are included, even the train at 03:52 which has no connection to or from Springfield.

## **Timetable File**

The timetable file which defines the B&M passenger trains is named **BMPassTrains**.

## Consists

## Engine consists

All passenger trains have the same type of engine so only one consist is defined :  $\ensuremath{\mathsf{TT\_LE\_BM\_Pass}}$ 

There are some B&M engines available at Trainsim.Com, steam as well as diesel.

### **Coach consists**

Separate consists are defined for each pair of trains, the same consist used in reverse on the return working. An additional consist is defined for the through sleepers to Canada (named BM\_ CanSlp), which are conveyed on train 79 northbound and 78 southbound.

The table below shows the composition of the trains as detailed in the 1936 timetable.

NB	SB	Consist	Coaches NB	Coaches SB
73	78	BM_73	Springfield - White River Jn	☐ White River Jn - Springfield (
77	72	BM_77	New York - White River Jn	White River Jn - New York
79	74	BM_79	New York - White River Jn New York - White River Jn ( New York - Sherbrooke (PQ))	White River Jn - New York
703	728	BM_703	Springfield - White River Jn	CC White River Jn - Springfield
717	712	BM_717	🖵 Springfield - White River Jn	🖵 White River Jn - New York
		BM_CanSlp	🗁 New York - Sherbrooke (PQ)	🗁 Sherbrooke (PQ) - New York
			Coaches Parlor Car Sleeping Car	

The through trains to and from New York may well have included New Haven coaches.

Canadian coaches could be used for the through sleepers to Canada.

Various sets of B&M and New Haven coaches are available at Trainsim.com.

# **Freight Trains**

### Description

Only the two freight trains which serve Springfield Junction are included.

#### **Timetable File**

The timetable file which defines the B&M freight trains is named **BMFreightTrains**.

#### Consists

#### Engine consists

The same engine is used for both trains, defined in consist : TT\_LE\_BM\_Freight

There are some B&M engines available at Trainsim.com, but the B&M mountain 4114 available at Elvas Tower makes a very fine engine for these trains.

#### Car consists

The front portions of the freight trains are made up of the consists defining the cars which are transferred to the STR.

The rest of the trains is made up by separate consists for the north and southbound trains :

TT\_BM\_SBFreight

TT\_BM\_NBFreight

The caboose is defined in a separate consist : TT\_BM\_Caboose

There are ofcourse plenty of freight wagons available at various sites to make up these freight trains.

# **Included files**

The zip file contains the following files :

Overall timetable list :

Springfield.timetablelist-or

Timetable files :

BMFreightTrains.xlsx and BMFreightTrains.timetable-or BMPassTrains.xlsx and BMPassTrains. timetable-or STFreight.xlsx and STFreight. timetable-or STPassTrains.xlsx and STPassTrains. timetable-or STStatics.xlsx and STStatics. timetable-or

Pool file :

Pools\_Springfield.xlsx and Pools\_Springfield. timetable-or

Path files :

In total, there are 165 path files. The path files are included in normal and binary format. Using binary path files saves time when starting the timetable. The path files are identified by a prefix :

bm\_pass : paths for B&M passenger trains
orpool : pool storage and access paths
tt\_ : STR passenger train paths (except tt\_bm)
tt\_bm : paths for B&M freight trains
ttf\_ : STR freight train paths
tts\_ : paths for static consists