

# Byelaws for the operation of the NSME passenger carrying miniature railways

# **Amendment Record Sheet**

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## Contents

Bye Laws for the operation of the miniature railways	
Track Marshal's Duties	1
Motive Power	3
Running of trains	4
Official Running Events	5
Public Running	6
Raised Track Steaming Bay Preparation	7
Raised Track Carriage Shed Access	7
Road Locomotive Operation	7
Duties of key operational personnel	8
Station Master's Duties	8
Guard's Duties	9
Drivers Duties	10
Steaming Bay Marshal's Duties	11
Motive Power Coordinator duties	12
The Signaller's duties	13
Raised Track Carriage Shed Marshal's Duties	13
Appendix(i) - Protocols for train movements within Ground Level Station area	14
Appendix (ii) - Raised Track truck running clearances	16
Appendix (iii) - Coupling and Drawbar Standard	17
Appendix (iv) - Raised Track Signals	18

### Bye Laws for the operation of the miniature railways

**Important Note**: These Bye Laws are intended to be gender neutral. Use of the term 'he' or 'his' should not be read as to exclude 'she' or 'her'

- 1. The Management Committee shall appoint a competent individual as **Track Marshal** for all events that involve the operation of one or more of the railways in the society's site.
- 2. Such events may be Club Running Days, Public Running Days, organised group visits such as local schools, or Birthday Parties.
- 3. The **Track Marshal** has overall responsibility for safety on the site and its surroundings while setting up, during train operations and while clearing away after the event.
- 4. For Public Running Days an **Assistant Track Marshal** shall also be appointed.

#### Track Marshal's Duties

- 5. The **Track Marshal** is responsible for the preparation of the site to meet the needs of the particular event on the day. With help from the **Assistant Track Marshal** and other society members, the following non-railway related items must be in place,
  - a. Event signage on Abbey driveway
  - b. Disabled parking signage and area close to main gate
  - c. Tables and chairs in front of clubhouse
  - d. Welcome sign positioning in gateway
  - e. Preparation of Gents and Ladies toilets
  - f. Restricted access barriers in front of ground level lift
  - g. Waste bins for clubhouse, raised track and ground level platforms
  - h. Securing garden tool and storage wagons to prevent public access
  - i. Closure and securing of internal site gate when birthday parties are held.
- 6. For operation of either one or both railways, the following actions must be undertaken.
  - a. The appointment of suitable individuals to the key roles defined in this document. In the event that insufficient numbers of individuals or locomotives are available, the **Track Marshal** must restrict train operation to a level deemed safe with the number and competency of members available.
  - b. The Track Marshal must have a copy of the most recent Fitness to Run (F2R) inspection records from the Rolling Stock Superintendent and Motive Power Superintendent prior to putting rolling stock or society owned motive power into service.
  - c. Before running commences the **Track Marshal** will inspect the tracks to confirm they are safe to run trains, confirm that signals are in place and functioning and that **Drivers**, **Guards** and other duty members are aware of the standard safety notices, any special safety notices and written duties for their tasks.
  - d. The **Track Marshal** shall appoint competent individuals to the following key roles for the operation of the railway(s)

- Station Master(s) \*
- Steaming Bay Marshal (Raised Track) \*
- Carriage Shed Marshal (Raised Track) \*
- Guards
- Signaller (Ground Level Track)
- Motive Power Co-ordinator (Ground Level Track) \*
- on Public Running Days, staff in the ticket office \* and Clubhouse \*
- Duties for these roles are set out in Clauses 89 to 153 of this document.
- 7. Radios are available for ease and speed of communication and may be used at the **Track Marshal**'s discretion. Allocation to roles in Clause 6d above, marked with \* is recommended.
- 8. With the **Steaming Bay Marshal** and the **Motive Power Co-ordinator** the **Track Marshal** will roster the available locomotives for the start of the event and agree running times with the **Drivers**.
- 9. In consultation with the **Station Master(s)**, **Steaming Bay Marshal** and, where appointed, the **Motive Power Co-ordinator** the **Track Marshal** will give permission for locomotives to leave and enter the steaming bays or other preparation areas and shall be vigilant that the limitations on the number of trains permitted on the track at any one time are not exceeded (see Clauses 57 and **Error! Reference source not found.**)
- 10. He shall keep a watch out that members of the public do not cross the line(s) except by means of the footbridge (to the Ground Level track) or across the tunnel (to the central area of the Raised Track and the ticket office) and that access to restricted areas is properly signed and controlled. Throughout the public running session, the Track Marshal will liaise frequently with the other duty members and be alert to potential incidents, problems and concerns.
- 11. The **Track Marshal** will record on the Running Day Record Sheet, the names of all members involved with the event, and the duties undertaken. The report shall be made available to the next meeting of the Management Committee.
- 12. If any incidents or problems do occur the **Track Marshal** must take appropriate action immediately. The **Track Marshal** has the final decision on whether running should be suspended on safety grounds.
- 13. All accidents, incidents or near misses must be recorded. Damaged infrastructure or rolling stock must be reported to the relevant Safety Lead and the Management Committee at the earliest opportunity.
- 14. Where an item of rolling stock is believed to be defective and the cause of a derailment it must be quarantined from further use until rectified.
- 15. The **Track Marshal** is responsible that the site is cleared, and all buildings are secured at the end of the running day.

#### **Motive Power**

- 16. All locomotives using the Society's facilities must only be operated by persons having current membership of a recognised Model Engineering Society
- 17. Steam locomotives must not be operated without a current boiler certificate except when a society boiler inspector is undertaking a test on the boiler. (This is to comply with Insurance requirements for Public Liability). Road locomotives must, in addition, be insured under the Road Traffic Act Regulations unless operating only within the boundaries of the NSME site.
- 18. Locomotives in steam must not be left unattended at any time.
- 19. All locomotives must be fitted with an audible warning device.
- 20. Locomotives must be prepared and disposed of in the steaming bays or in the case of road locomotives in the area designated.
- 21. Dropped fires must be placed in the containers provided.
- 22. Locomotives with internal combustion engines or battery powered must be disabled when left unattended.
- 23. Petrol or diesel cans must **NOT** be left in the steaming bays, or in any area that is close to locomotives in steam or readily accessible by the public.
- 24. Owners/**Drivers** of visiting locomotives must sign the visitors running book. (Located in the Clubhouse) and present their certificate of Public Liability Insurance cover issued by a recognised Model Engineering Society or Personal Public Liability Insurance.
- 25. Visitors with Steam Locomotives must have the entry countersigned by a NSME member to confirm that the boiler certificate and relevant membership have been inspected and the visitor has been made aware of the Society's operating rules and procedures. AKA '*Rules of the Road*'
- 26. Family members and friends of either NSME Members or day visitors who intend to drive any locomotive and who are not members of a recognised Model Engineering Society must be signed in as Day Members and pay the designated fee to receive Insurance cover.
- 27. The driving of locomotives by day members, either NSME owned or visiting locomotives, is at the sole discretion of the **Track Marshal**.

#### **Running of trains**

Note: For the purposes of these Bye Laws the term `train` shall be deemed to include the locomotive, driving truck and passenger coaches or other wagons (if attached)

- 28. The maximum speed permitted on both tracks is 8 mph but may be subject to additional restriction as signed or directed.
- 29. Multiple headed trains are permitted subject to:
  - a. A secure chain or solid coupling between the locomotives. (See appendix (iii))
  - b. The **Driver** on the locomotive attached to the leading passenger coach shall be the principal **Driver** in control.
- 30. All driving trucks shall be fitted with working brakes and have footboards or footrests. Driving trucks used on the ground level track shall preferably be to a gauge of 7¼ inches. Track brakes are not permitted.
- 31. All trains shall have solid couplings compliant with the Society's specification fitted with coupling pins and retainers throughout. (*See appendix (iii) for specification*). This requirement also applies to couplings between locomotives and tenders. On vehicles designed for 7<sup>1</sup>/<sub>4</sub> inches gauge a supplementary form of secure retention must be fitted between the locomotive and the driving truck (e.g. safety chains / cables).
- 32. Safety chains or cables are not essential where the control unit of an electric or IC locomotive is fitted with a working dead-man device.
- 33. Passenger coaches must have valances and footboards.
- 34. Raised track trucks must conform to the minimum clearances specified in the recommended profile. (See Appendix (ii)
- 35. **Drivers** must take all reasonable precautions to prevent their engines from putting oil or water onto the track.
- 36. During the hours of darkness, a train must display a red light at the rear of the train.
- 37. Before moving off the **Driver** will warn of his intention to move by one short blast on his audible warning device. On the ground level track the **Driver** must warn of his intention to reverse with two short blasts on the audible warning device.
- 38. **Drivers** must keep a good look out at all times and any concerns must be reported as soon as possible to the **Track Marshal** or other nominated official.
- 39. A responsible and competent **Driver** must accompany inexperienced **Drivers**.
- 40. **Drivers** under the age of 14 are only permitted if they are family members of a society member and are accompanied as in Clause 39 above.
- 41. **Drivers** of age 14 and under 16 may drive a locomotive without an accompanying responsible and competent **Driver** when so authorised by the committee.
- 42. No **Driver** under the age of 16 may haul fare paying passengers.
- 43. Subject to Clause 41 above, **Drivers** under the age of 16 are permitted to haul passengers if:
  - a. The **Driver** is a bona fide member of a Model Engineering Club / Society.
  - b. The passengers are also members of a bona fide Model Engineering Club / Society or are members of the **Driver's** own family.
- 44. When signals are in use they must be obeyed. A red signal must not be passed except with the express permission of the **Track Marshal** or relevant nominated official. Where signals are deliberately passed at red under such circumstances, **Drivers** must

proceed with due caution and be prepared to stop promptly. Yellow signals indicate a stop aspect is likely at the next signal and **Drivers** should proceed with caution.

- 45. Even with signals in use, **Drivers** are reminded that they should remain alert at all times and be observant of the track ahead.
- 46. **Drivers** on the raised track may only reverse under the direct instruction of the **Track Marshal** or other relevant nominated official.
- 47. Once a locomotive is on the track, coal and water supplies will normally be available in the station areas. On the raised track this will be at the departure platform. On the ground level this will be on the run round road.
- 48. No person shall ride on the lifts, traversers or turntables except on the ground level track turntable where the **Driver** may remain on the driving truck whilst the train is turned.
- 49. The **Track Marshal** or other relevant nominated official will advise **Drivers** of the expected minimum running time they have been allotted at the start of their run.
- 50. The **Track Marshal** or other relevant nominated official shall have the option of instructing the removal from the running track of any engine or **Driver** that is causing unnecessary delays on the track.
- 51. For detailed running protocol in the Ground Level Station area see Appendix (i).

#### **Official Running Events**

- 52. Any Management Committee Member shall have authority as a **Track Marshal** on any occasion. Other Society Members may be nominated as **Track Marshal** or **Motive Power Co-ordinator** for specific events at the discretion of the Management Committee.
- 52. For Society Running events a **Track Marshal** may be appointed at the discretion of the Management Committee.
- 53. For Public Running events a **Track Marshal** shall always be appointed together with a **Motive Power Co-ordinator** for the Ground Level Station
- 54. All visitors and non-members shall remain in the public areas of the site or on the platforms. Only Members shall normally be permitted onto the track beds, steaming bays and carriage sheds. Such access shall be undertaken by all personnel with due caution and so as not to hinder or endanger the passage of locomotives or trains.
- 55. Non-members may be authorised to enter such areas at the discretion of the **Track Marshal** or other relevant nominated official, but it is a preference that a Society Member accompanies them.
- 56. When disabled visitors request access to the ground level platform, the concrete path from the workshop area to the turntable area should be used to access the arrival platform. Disabled persons should be placed on the carriage after the unloading of passengers from the incoming train.
- 57. At Society Running events:
  - a. Up to six trains shall be permitted on the raised track at any one time.
  - b. Up to five trains shall be permitted on the ground level track with additional locomotives permitted to await their run in the No 2 Road unless instructed otherwise.
- 58. Both the above will be regulated by the **Track Marshal** (where appointed) or relevant nominated official.

- 59. Engines will only move onto the track when permitted to by the **Track Marshal**. In this the **Steaming Bay Marshal** shall assist him on the Raised Track and the **Motive Power Co-ordinator** (where appointed) or **Station Master** on the Ground Level track.
- 60. Excessive speed is forbidden at all times and the current maximum and signed speed limits must be observed. The **Track Marshal** (where appointed) or relevant nominated official shall give warnings of infringement and, if the warnings are unheeded, instruct the person concerned to terminate their run.
- 61. On the Ground Level track, incoming trains may not enter the station if another train is already in the arrival platform. They shall be held clear of the station entry shed until called forward by the **Signaller**..
- 62. Passengers and non-members must use the footbridge for access to and from the Ground Level Station unless directed otherwise by the **Track Marshall** (where appointed) or other relevant nominated official. Where such alternative access is permitted (e.g. such as in Clause 56 above) they shall be accompanied by a Society Member.

#### Public Running

- 63. Regulations shall generally be as in Official Running Events Clauses 52 to 62 above subject to the following additions / amendments:
- 64. Passengers must board and alight in the designated station areas only.
- 65. Passengers must remain on the train when the train is on the circuit, unless instructed to alight by the **Driver** or **Guard**.
- 66. A **Guard** must be carried on all trains with passengers.
- 67. Trains shall only proceed from the station with permission from the **Station Master**. He shall signal to the **Guard** that it is permissible to leave (e.g. by means of a hand signal or appropriate verbal instruction). The **Guard** shall then indicate to the **Driver** that it is safe to start (e.g. by means of a whistle, hand signal or appropriate verbal instruction).
- 68. On the Raised Track a maximum of four trains will be permitted at any one time, subject to an additional locomotive being permitted on the running line during a changeover / warm up lap
- 69. On the Ground Level track up to three trains will be permitted. Unless instructed otherwise by the **Motive Power Co-ordinator**, steam powered locomotives awaiting service, are to be held on No 3 Road where they can take on coal and water, if required, before moving forward past the Sector Plate Point to halt before Point 1 awaiting call on by the signaller. Battery or internal combustion powered locomotives awaiting service are to be held on No.2 Road until called forward to Point 3.
- 70. Fuelling of internal combustion powered locomotives to be undertaken well away from the station area at a designated location on the Tram Line leading to the Ground Level Lift.
- 71. **Drivers** requiring a break from running to inform **Motive Power Co-ordinator** and move from the No 3 Road to the spur to the Sector Plate or the Tram Line leading to the Ground level Lift for short-term stabling keeping No 3 Road available for locomotives in service.
- 72. Locomotives requiring attention such as a fire rake out must return to the steaming bay.

#### **Raised Track Steaming Bay Preparation**

- 73. The lift access to the Raised Track Steaming Bays is fitted with a lock.
- 74. The controls for the LV electrical power for the blowers on the Raised Track Steaming Bays and Road Vehicle area are in the dirty workshop.

**Note** - The steaming bays both have electrical power for blowers rated at 12v and 24v DC.. A battery located in the dirty workshop powers the lift.

75. The controls for the electrical power for the Ground Level unloading ramp are located in the clean workshop.

**Note**: During formal Club events assistance in the use of this can generally be sought from the **Track Marshall** or **Raised Track Steaming Bay Marshal**.

- 76. The controls for the LV electrical power to the Ground Level Steaming Bay are located in the carriage works.
- 77. The steaming bays are provided with a mains piped water supply. The main stopcock for the all the facilities is located in the Dirty Workshop.
- 78. The water supply for the Raised Track Station water crane comes via the stopcock in the Raised Track Station building and further stopcocks for the Ground Level Steaming Bay are located in the Carriage Works.

Note: Both the other stopcocks need to also be open for the feed to the Ground Level Steaming Bay to be active.

- 79. Depressing the push button in the control box raises the Raised Track lift. Lowering is by slowly opening the relief valve by turning the cock with the black knob against the biased spring.
- 80. When the running session has ended everything should be switched off and secured properly.

#### Raised Track Carriage Shed Access

- 81. Locomotives going to the Raised Track Carriage Shed to collect passenger trucks must proceed in the direction of normal running unless the signalling system is switched off.
- Only 5" gauge locomotives may use the access to the Raised Track Carriage Shed.
  3-1/2" gauge locomotives must remain on the running line while coaches are moved out of the carriage shed and coupled to the locomotive.

#### **Road Locomotive Operation**

- 83. The speed limit for Road Locomotives is 4 mphNote: This limit shall be considered to be a maximum, not a target to be achieved.
- 84. Road locomotives shall be prepared and disposed of in the designated area
- 85. They must be fitted with an audible warning device and comply with the appropriate Society's regulations on *Motive Power* above.
- 86. Due to the restricted nature of the main site, it shall not be normal practice to operate Road Locomotives within the confines of the site on Public Running days.
- 87. Where rides are given outside the designated confined areas
  - a. A clearly designated route must be established for the rides being given.

- b. Trailers conveying passengers must be securely enclosed or (for sit astride type trailers) have suitable footrests together with hand holds and back rests at the appropriate ends.
- 88. On completion of a run, the steaming / disposal area shall be cleared.

#### Duties of key operational personnel

#### Station Master's Duties

- 89. To make sure that the platform area is clear of debris from surrounding trees etc, and that all signs and barriers are in place and effective before the running of trains commences.
- 90. To manage the safe loading and dispatch of passenger carrying trains from the departure platform
- 91. Direct that members of the public so that they do not overcrowd the station area or stray into prohibited areas.
- 92. Be always alert to the safety of all persons on the platform.
- 93. By working with the train **Guard** and other duty holders, take the lead such that trains are unloaded and loaded quickly, safely and efficiently.
- 94. Children whose feet do not touch the running boards must be sat at the front of the coach and instructed to use the hand hold in the end panel.
- 95. At birthday party and visits by local schools or clubs, at least one adult must travel on each coach.
- 96. Dogs are not permitted to be carried on the trains.
- 97. When a train is loaded, give the following verbal safety briefing to passengers on the train.

# *"Please sit up straight and keep your feet on the running boards while the train is moving. Do not lean out or attempt to grab or touch anything near the train"*

- 98. Confirm that the locomotive **Driver** is ready and that the track ahead is clear to despatch the train. Indicate to the **Guard** that this is so by means of a clear signal (e.g. hand signal or appropriate verbal instruction).
- 99. When 3 or more trains are in use, be mindful of spacing of the trains and delay departures as necessary to even out distance between trains to avoid trains waiting for access to arrivals platform.
- 100. Take immediate action, and report to the **Track Marshal**, on any problems, hazards or concerns reported by **Drivers, Guards**, other Society members or members of the public.
- 101. If appropriate suspend running of trains pending a decision from the Track Marshal.
- 102. Act on instructions from the Track Marshal.
- 103. At the end of running of trains make sure that everything connected with the station area is safely and securely stored. and confirm so to the **Track Marshal**

#### **Guard's** Duties

- 104. To monitor the safety of passengers on the train from the time they start to board until they are safely unloaded at the end of the trip.
- 105. Assist passengers to board and alight from the passenger cars quickly and safely
- 106. Confirm that they are correctly seated (facing the direction of travel) and that children are under the control of a responsible adult.
- 107. When informed by the **Station Master** that the train is loaded and ready to depart, and the **Driver** has confirmed readiness by raising a hand, indicate to the **Driver** that it is safe to start the train on its journey by use of a whistle signal.
- 108. During the trip, monitor passenger behaviour and warn any passenger behaving in an unsafe manner.
- 109. In an emergency alert the **Driver** immediately by two blasts of the whistle and, if fitted, apply the train brakes.
- 110. When the behaviour of a passenger has resulted in 2 warnings, inform the individual involved, with the **Station Master** or **Track Marshal** present, that a further infringement will result in a refusal to allow boarding of another train.
- 111. Immediately report any problems, hazards or concerns on passenger behaviour to the **Station Master** and / or the **Track Marshal**. If appropriate suspend running pending a decision.

#### **Drivers Duties**

#### THE FOLLOWING CLAUSES 112 TO 124 ARE KNOWN AS THE "**RULES OF THE ROAD**" AND SHALL BE PROVIDED TO VISITING DRIVERS

- 112. The **Driver** is responsible for the safe operation and driving of the locomotive at all times. Speed limits must be observed.
- 113. Locomotives must be prepared for running and cleaned up in the designated areas in accordance with the Society Byelaws.
- 114. Locomotives in steam must not be left unattended at any time. Battery or Internal Combustion locomotives must be disabled when left unattended.
- 115. The **Driver** must have permission from the Track Marshal (in conjunction with the **Steaming Bay Marshal** or **Motive Power Coordinator** as applicable) to move from the steaming bay to the running track or return.
- 116. Before moving forward, the **Driver** must sound one short blast of the locomotive audible warning device. On the ground level track, before reversing the **Driver** must give two short blasts. Reversing on the raised track requires the express permission of the **Track Marshal** and in the station area, the **Steaming Bay Marshal**)
- 117. **Drivers** must be alert, operate within the capabilities of the locomotive and track, be observant of the track ahead and be prepared to stop promptly at all times. When signals/flags are in use they must be obeyed. A red signal/flag must not be passed without the express permission of a relevant nominated official (e.g. **Track Marshal** or hand signaller). Where signals are passed at red under such circumstances, **Drivers** must proceed with due caution and be prepared to stop promptly
- 118. When hauling coaches on the ground level railway, the coach fitted vacuum braking system shall be used with the **Driver's** combined brake valve and vacuum gauge unit carried on the locomotive..
- 119. If the **Guard** indicates an emergency with two blasts of his whistle the train must be stopped as quickly as it is safe to do so, and any necessary action taken to ensure the safety of passengers. If necessary the **Guard** should be sent for assistance only after all passengers have been disembarked and are in a place of safety.
- 120. Report all incidents, hazards or concerns immediately to the **Track Marshal** or other relevant nominated official.
- 121. When the locomotive is steamed up and ready the **Driver** will notify the **Steaming Bay Marshal** for permission to proceed onto the track.
- 122. When attached to a train in the platform that has been loaded and is ready to depart, indicate to the **Station Master** and **Guard** by raising a hand, readiness to depart,
- 123. At running events when no **Steaming Bay Marshal** or **Motive Power Coordinator** has been appointed, **Drivers** using the steaming bay must place coal supplies, ash buckets and transfer rails themselves, and clear <del>all</del> away and switch off power supplies on completion of running.
- 124. At such events, each **Driver** is responsible for setting the protecting signal to danger before manoeuvres on and off the raised track.

#### **Steaming Bay Marshal's Duties**

The **Steaming Bay Marshal** shall be responsible for the supervision of the raised track steaming bays and their environs and shall act on behalf of the **Track Marshal** in overseeing that operations are undertaken in a safe manner in this area.

- 125. Oversee the safe use of the access facilities to the raised track steaming bay including the Ground Level lift.
- 126. Make sure that the steaming bay area is clear of debris from surrounding trees etc, that coal supplies, ash buckets, and transfer rails, water supply and low voltage power supply are in place before the preparation of locomotives commences.
- 127. Confirm all locomotives offered for steaming are in possession of a current Boiler Certificate and that the owner has current membership of a recognised Club or Society
- 128. Advise visiting **Drivers** of the `Rules of the Road` and relevant Bye Laws together with general guidance on the use of the NSME site and check that all details have been entered in the visitors running book.
- 129. In conjunction with the **Track Marshal**, direct and control the safe access to and from the running track. This shall include.
  - a. Advising **Drivers** when they can and cannot gain access to the running track and confirm the number of carriages that they require when passenger hauling.
  - b. Notify the **Carriage Shed Marshal** appointed to supervise the release of carriages from the carriage store
  - c. Inform the locomotive **Drivers** the order in which locomotives will be released onto the raised track.
  - d. Make certain the protective signals are placed to danger during manoeuvres on and off the running track.
  - e. Not to permit the maximum number of trains running to exceed that laid down in the Bye Laws
  - f. Liaise with **Drivers** and relevant officials (e.g. the **Track Marshal**) when trains are to be moved on / off the running line so as to give other **Drivers** warning of the event.
- 130. Keep a watch that the steaming bay facilities are not abused and that the bay(s) and equipment are cleared up and secured properly at the end of the running session.

#### **Motive Power Coordinator duties**

The **Track Marshal** shall appoint a Ground Level **Motive Power Co-ordinator** on Public Running Days. The purpose of the role being to co-ordinate and expedite the availability of locomotives and rolling stock. He will appoint the **Signaller** and **Turntable Operator**.

- 131. He shall confirm with the **Driver** of each locomotive, prior to commencing operation, the maximum capacity in terms of fully loaded passenger vehicles for that locomotive, and to inform the **Station Master** of such capacities.
- 132. He shall confirm with the **Driver** of each locomotive when the locomotive is ready to commence passenger hauling and its subsequent availability on completion of each duty.
- 133. He shall confirm the correct operation of the vehicle based vacuum braking system on each set of coaches before entering service.
- 134. When a single coach in a set of 3 has a defective braking system, the set may be used. Where more than one coach has a defective braking system the set must be taken out of service until the fault has been rectified.
- 135. When a single or two coach train is to be used e.g. on a club running day, the vehicle fitted vacuum braking system may be isolated when the locomotive **Driver** is confident that the locomotive brakes are adequate for safe control of the train.
- 136. He shall expedite the departure of an appropriate locomotive from the steaming bay, No 2 or No 3 Road to the relevant section of the platform for passenger train operation, such that train turnaround time is efficiently minimised.
- 137. He shall intervene should the **Signaller** indicate conflicting movements of Locomotives or Trains
- 138. He shall advise the **Station Master** of any changes in locomotive availability or hauling capacity during the train running period.
- 139. He shall act on requests from the **Track Marshal**.
- 140. To confirm on Public Running Days that Points 1, 2 and 3, which are fitted with trailable, point levers, are set for the normal operation of trains by placing the removable pin in the centre of the point body that prevents the point lever moving beyond its centre point. This enables the points to be trailed for locomotive movements and return to their original route position. For normal operation
  - Point 1 to be set for No.1 Road Arrival Platform
  - Point 2 to be set for straight running to No.1 Road Departure Platform
  - Point 3 to be set for straight running to No.1 Road Departure Platform
- 141. The **Motive Power Coordinator** shall be the only person authorised to remove (and replace) the pin when rolling stock movements require it.
- 142. On club running days the pin should be in place and routes set as in clause 140 above. The disc on the lever indicates the lie of the points and whether they have gone fully home.
- 143. On club running days, **Drivers** are responsible for setting their route and confirming that the points are lying correctly. When it is necessary to remove the pin or set the points for a specific move, on completion of the move the **Driver** shall reset the points and pin to the default condition as in Clause 140 above.

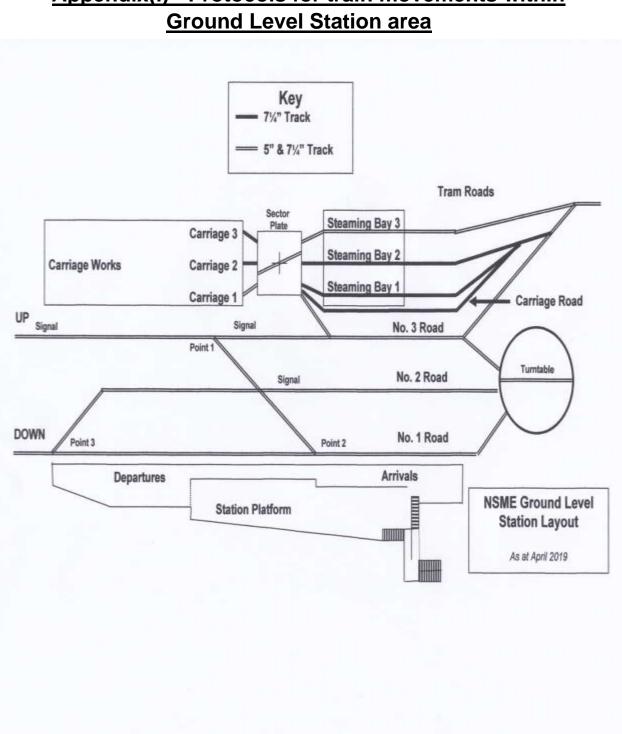
#### The Signaller's duties

- 144. On public running days on the Ground Level Railway, a **Signaller** shall be appointed to control engine and train movements in the area of the GL Carriage Works
- 145. The **Signaller** will be positioned at the east end of the Carriage Works and be equipped with a red and green flag.
- 146. **Drivers** approaching the station, or on No. 3 Road must stop their train clear of Point 1 until they receive a 'proceed' indication from the **Signaller**.
- 147. The **Signaller** must take particular care to give clear indications to **Drivers** to avoid conflicting movements between incoming trains and any train on Road 2, road 3 or occupying Road No 1 Arrival Platform

#### **Raised Track Carriage Shed Marshal's Duties**

The **Raised Track Carriage Shed Marshal** shall be responsible for the supervision of the raised track carriage shed and its environs and shall act on behalf of the **Track Marshal** in overseeing that operations are undertaken in a safe manner in this area.

- 148. He shall confirm with the **Steaming Bay Marshal**, the carriage formation required for each locomotive in service and prepare the formations accordingly.
- 149. On arrival of a locomotive to collect coaches, he shall check that the locomotive has stopped clear of the through line swing track section.
- 150. Operate the through line swing track section toward the inside of the circuit and then operate the shed connection swing track section to join the through line.
- 151. Move coaches or locomotive as necessary to form the train. When coupled together instruct the **Driver** to move toward the tunnel and obey all signals.
- 152. When the train has cleared the area of the swing sections, return the shed connection swing track section to the clear position against the fence and move the through line swing track section to join the through line.
- 153. If there is a locomotive or train between the swing track section and the tunnel when the through line swing track section is restored to its normal position, the protecting signal at S8 will automatically clear. If there is no locomotive or train between the swing track section and the tunnel when the through line swing track section is restored to its normal position, the **Carriage Shed Marshal** must manually reset Signal S8 by pressing the button on the signal override column.

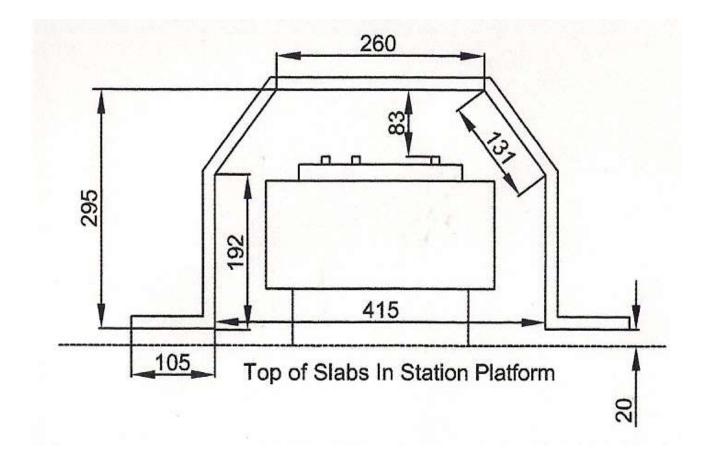


# Appendix(i) - Protocols for train movements within

Notes

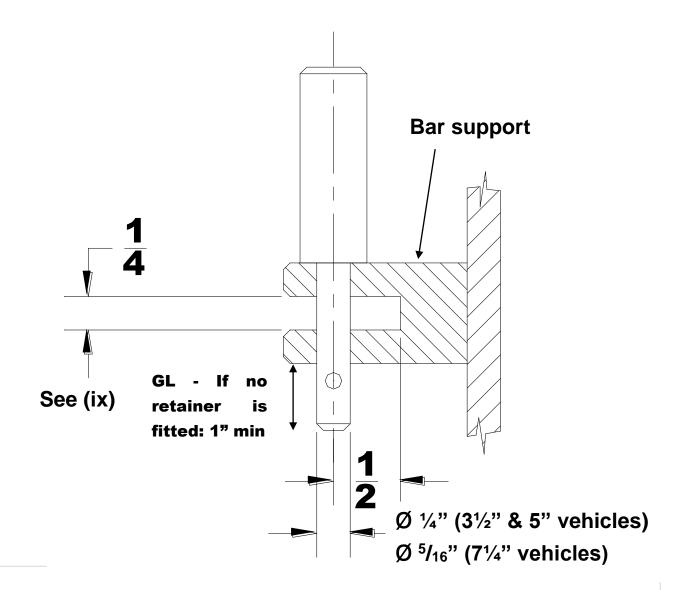
- 1. These procedures shall apply during any running session where a Track Marshal has been appointed to oversee the session. They may be amended at the discretion / instruction of the Track Marshal.
- 2. The Track Marshal shall designate responsible members to act as Ground Level Station Master and Motive Power Co-ordinator (if required) to oversee the following under delegated authority of the Track Marshal

- 3. Whilst normal protocol shall be to run out of the station on the down road and return on the up road, at Society running events alternative running arrangements may be permitted at the discretion of the **Track Marshal**.
- 4. The following protocols for train movements shall apply during Public Running and Birthday Party events:
  - a. Departing Trains
    - i) These shall generally be held at the end of the Departure platform (holding point #4) until loading has been safely completed.
    - ii) The **Station Master** shall then give permission for the train to leave when satisfied it is safe to proceed onto the down running line. When the **Guard** is satisfied the train is safe to leave, the **Guard** shall in turn indicate this to the **Driver**.
  - b. Arriving Trains
    - iii) Shall approach the station at caution and be prepared to stop at the "STOP HERE UNTIL CALLED FORWARD" board at the holding position at the outer end of the carriage works. On receiving a signal to proceed from the Signaller or Motive Power Co-ordinator (where appointed) or the Station Master, the locomotive Driver shall check that the point is correctly set for the intended route across No 2 Road to the No 1 Road Arrival Platform.
- 5. After stopping the train and ensuring the rear vehicle is clear of Point 2 leading to the No 1 Road Departure Platform the **Driver** shall (with assistance from other authorised members as required / available) uncouple the engine from the train, proceed forward onto the turntable and turn the engine.
- 6. If the **Driver** intends making the engine available at the first opportunity to haul another train, then proceed onto No 3 Road and await instructions from the **Signaller** or **Motive Power Co-ordinator** (if one is on duty) or **Station Master**.
- 7. If the **Driver** wishes to delay the return to hauling duties (e.g. a break or minor maintenance is needed on the engine / problems with the fire then proceed onto No 3 Road and via either Point to Sector Plate or Point to Tram Roads standing the locomotive clear of the 3 Road running line.
- 8. If the Driver has serious concerns about the availability of the engine for further duties, or wishes to withdraw from hauling duties, the Driver shall advise the Motive Power Coordinator (if one is on duty) or the Station Master who shall arrange for the locomotive to either proceed via No 3 Road onto the sector plate or directly onto the Tram Roads into the Steaming Bays.
- 9. Light engine running
  - a. If it is intended to proceed onto the running line for a run without any rolling stock, then the **Driver** may proceed directly onto the Down line after receiving authority to do so from the **Motive Power Coordinator** or **Station Master**.
  - b. During Public Running sessions, the running of light engines shall not be permitted unless there are good operational reasons, and the **Motive Power Coordinator** or **Station Master** has authorised the run
- 10. Other Movements
  - a. These shall all be carried out under the authority of the Motive Power Coordinator or Station Master. In particular, if there are operational problems during a running session (e.g. locomotive failure) at their discretion, the Motive Power Coordinator or Station Master may authorise movements contrary to any or all the above to resolve the problems subject to ensuring conflicting and unsafe movements are avoided.



Note: The above profile is based on a truck with 46 inch bogie centres. The clearances should be adjusted by truck builders in proportion for trucks with longer bogie centres and may be reduced in proportion for trucks with shorter bogie centres.

# Appendix (iii) - Coupling and Drawbar Standard



#### Notes:

- (i) All dimensions are in inches.
- (ii) All items to be made from steel with minimum UTS of 18 tons/sq. in.
- (iii) Minimum width of main bar to be 5/8 inches. Minimum thickness to be 1/8 inches
- (iv) Minimum amount of material between outside of pinhole and outside edge of bar to be 3/16 inches.
- (v) Pin hole in bar to be clearance size to aid assembly and permit movement in service (see (vii) below).
- (vi) Bar support to be rigidly fixed to mainframe of vehicle by brazing, riveting, welding or bolts of size and strength equivalent to the minimum cross-sectional dimensions for the coupler and pin.
- (vii) Slot in bar support to have at least 1/16 inches clearance and the pin hole to be clearance size both to ease assembly and permit movement in service due to track / vehicle undulations.
- (viii) Raised track Pin to be held in place in service by use of a catch, cotter, D pin, bullet spring retainer or nut. Ground level track preference will be given to retainers but a pin at least one inch longer than the base of the support bar is acceptable.
- (ix) Height from rail level to the bottom face of the slot for the bar is recommended as 5 inches (Ground level track) and 4 inches (Raised track). Locomotive owners shall use joggled bars to suit this height where the slot on the locomotive drawbar does not match this dimension.
- (x) When using NSME rolling stock, the dimension between pin holes shall be 8 inches for the ground level coaches and 6 inches for the raised track.
- (xi) Drawbar length between locomotives and driving trucks may be modified to suit the owner's requirements.

