



## SIGNAL SIGHTING - MINIMUM STANDARDS

All Signal Sighting Inspections must be carried out by nominated officers of the RTBU Locomotive Division (NSW). In most situations these will be nominated Sub-Divisional officers or their nominees. At the completion of any signal sighting inspection, a written report must be submitted to the RTBU Locomotive Division (NSW) Divisional Secretary by those officers who conducted the signal sighting inspection.

Signal Sighting Inspection Checklists are attached to these standards, and should be used for any signal sighting inspections. Original copies of the Inspection Checklists should be forwarded to the Divisional Secretary upon completion of the inspection.

The following guidelines are provided as minimum standards:

### MINIMUM STANDARDS

<p><b>General Standards</b></p>	<ul style="list-style-type: none"> <li>• No new or trial Signal Forms (types) or indications are to be brought into use anywhere without consultation with the RTBU Locomotive Division (NSW) Divisional Office.</li> <li>• Signal Forms (types) and indications to be consistent with the applicable Safeworking System. For example Indications used in Train Order Territory not to be used in Non Train Order Territory.</li> <li>• Signals must be located so as to provide a clear unobstructed view to the Driver of any approaching train, that will enable him to stop safely, taking into consideration the following: <ul style="list-style-type: none"> <li>Speed of the track</li> <li>Speed of all trains using the corridor</li> <li>Approach gradient of the track</li> <li>Braking capabilities of trains using the corridor (Freight and Passenger)</li> <li>Any unusual conditions on the approach to the signal</li> </ul> </li> </ul>
<p><b>Signal Locations:</b></p> <p><b>STOP Indications</b></p>	<ul style="list-style-type: none"> <li>• Signals capable of showing a STOP indication must be located wherever possible on constant gradients, so as to restrict as far as possible the potential for draw gear damage / failure on freight trains up to 1800 metres in length, as a result of stopping and starting at signals, the immediate approach to which is over undulating terrain.</li> </ul>

	<ul style="list-style-type: none"> <li>• Signals capable of showing a STOP indication should not be located on or near the top of maximum ascending grades in such positions that a train with maximum trailing tonnage and length may be required to lift from a standing start on the maximum grade.</li> <li>• Signals capable of showing a STOP indication should not be located on any maximum rising or falling grade that requires a stopped train to be secured by handbrakes to remain stationary.</li> </ul>
<p><b>Placement of Signals</b></p>	<ul style="list-style-type: none"> <li>• Signals are to be viewed for sighting purposes from a height equivalent to the normal seated position of Drivers operating locomotives and other passenger rollingstock common to the route.</li> <li>• Running Signals are to be located on the left hand side of the line to which they apply in the direction of travel wherever possible and repeating or co-acting signals used in conjunction with these if necessary. Crossing Loops in Single Line Territory may have the signals located on either side of the line, consistent with current practice.</li> <li>• Where possible signals should be located on straight tangents of track so as to allow the maximum approach sighting distance.</li> <li>• Where it is necessary for signals to be located on straight tangents of track between curves, the signals are to be located at the far end of the straight (as viewed in the normal direction of travel), so as to allow the maximum approach sighting distance.</li> <li>• Where it is absolutely necessary for signals to be located on curves, they should be angled across the curve to provide the greatest possible sighting distance.</li> <li>• Signals should not be located in positions where their indications can be confused with those of other signals.</li> <li>• Signals should not be located in locations where other lighting such as floodlights, traffic lights, headlights etc can make sighting difficult or confusing.</li> <li>• Signals should not be located in positions such that their indications can be obscured by train movements on adjacent tracks or by wagons or other equipment stowed in storage roads.</li> <li>• Signals should not be located in positions such that their indications are obscured by vegetation, cuttings, station awnings, bridge pylons, overhead wiring stanchions or other trackside structures.</li> </ul>

	<ul style="list-style-type: none"> <li>• Signals should not be located at ends of passenger platforms where their indications can be obscured by passengers standing on the platform.</li> <li>• Signals should not be located in positions where their indications can be confused with passenger information systems which may be located on platforms.</li> <li>• Any signal requiring train crews to alight from locomotives or cabs for the purposes of using signal post mounted telephones must be accessible at all times, in all weather and lighting conditions, and must meet with all OH&amp;S guidelines pertaining to walkways. This is to include provision of such infrastructure as steps and handrails where required.</li> <li>• Signals must not be located at locations where the height of the ballast shoulder precludes easy access to the ground from locomotives, and should also allow for the fact that trains may – for whatever purpose – actually pull up some distance prior to the signal rather than advancing to a point directly in front of the signal.</li> </ul>
<p style="text-align: center;"><b>Assessment of Signals</b></p>	<ul style="list-style-type: none"> <li>• RIC (or relevant track owner) to issue Signal Sighting Party documentation showing the cautionary indications that will be displayed by each signal approaching a Stop signal. The signal sighting party must assess the adequacy of the cautionary sequences applying to each Stop signal.</li> <li>• For signals applying to diverging routes, the Signal Sighting Party must assess the adequacy of both the main and turnout indications. When assessing the turnout indications, the party must consider all signalled routes and indication levels including Caution Turnout (Y/R), Medium Turnout (Y/Y), and Clear Turnout (G/G with route indication).</li> <li>• For cautionary signals that precede signals at diverging routes, the Signal Sighting Party must assess the adequacy of: <ul style="list-style-type: none"> <li>the cautionary signal indication to give unambiguous preliminary information about the route set beyond the protecting home signal, and</li> <li>braking distance between the cautionary signal and the home signal for all signalled routes beyond the home signal.</li> </ul> </li> <li>• The signal sighting exercise includes Fixed Signals, Fixed Stop Signals, Shunt Limit signs, Yard Limit signs, plates attached to signals.</li> </ul>

## Minimum Standards Checklist – Signal Sighting

<b>Signal Section or Location Name/ Details:</b>				
<b>Address:</b>				
<b>Inspecting Officer:</b>				
<b>Contact details:</b>		<b>Date of Inspection:</b>		
<b>Time:</b>		<b>Yes</b>	<b>No</b>	<b>Some</b>
				<b>N/A</b>
<b>General Signal Standards</b>				
RTBU Locomotive Division has been consulted on new signal forms/types				
Signal forms / types are consistent with relevant safeworking system				
Signals are located to provide a clear unobstructed view to driver				
<b>Stop Indications</b>				
Signals capable of Stop indications are located on constant gradients				
Signals capable of Stop indications are located on or near top of maximum ascending grades				
Signals capable of Stop indications are located on a rising or falling grade that requires stopped train to be secured by handbrake				
<b>Placement of Signals</b>				
Signals can be viewed from normal seated position of driver				
Running signals are located on left hand side of line (except Crossing Loops in Single Line Territory)				
Signals located on straight tangents of track				
When signals are located on curves, they are angled to provide greatest possible sighting				
Signals are located where indications cannot be confused with other signals				
Signals are located where other lighting does not makes sighting difficult				
Signals are located where they cannot be obstructed by other train movements				
Signals are located clear of obstructions such as vegetation, awnings, track infrastructure				
Signals located on platforms are not obstructed by passengers				
Signals are located where they cannot be confused with passenger information systems				
Signals requiring train crew to alight from locomotive are readily accessible				
Signals are located where the height of the ballast shoulder allows easy access to the ground from locomotives				
<b>Assessment of Signals</b>				
Signal Sighting Party documentation showing cautionary indications displayed by each signal				

approaching a Stop signal has been issued				
Signal Sighting Party has assessed adequacy of the cautionary sequences				
Signal Sighting Party has assessed the adequacy of main and turnout indications for diverging routes				
Signal Sighting Party has assessed cautionary signals preceding diverging routes				
Signal Sighting Party has assessed braking distance between cautionary signal and home signal for all signalled routes				
Signal Sighting exercise has assessed and is satisfied that all cautionary signals and braking distances meet standards				
Signal Sighting exercise has assessed and is satisfied with all fixed signals, fixed Stop signals, shunt limit signs, yard limit signs, plates attached to signals meet standards				

The inspection found that signals at the above location:

- Do** meet the minimum standards
  
- Partially** meet the minimum standards
  
- Do Not** meet the minimum standards

**Comments / Action Required:**

---



---



---



---



---

Date:

Signature of Inspecting Officer