SAFE Notice 2019

Number: 2-2840 Amendment 2

Hunter Valley Network and Interstate Network

Lookout Working

Commencing 2nd January 2019 to 3rd July 2019 the following additional arrangements as detailed in this SAFE Notice will apply for working in the NSW ARTC Network while using the ARTC Network Rule ANWT 310 Lookout Working and Procedure ANPR 711 Lookouts whilst performing infrastructure maintenance.

SAFE Notice 2-2840 has been amended to include application on the ARTC Interstate Network in addition to the Hunter Valley Network. In addition to the extension to the Interstate Network, there is an increase to the maximum number of workers involved with Lookout Working from six (6) to eight (8) including the Protection Officer and Lookouts.

All affected Rail Safety Workers who implement Lookout Working must be briefed in this SAFE Notice before working in the ARTC Network.

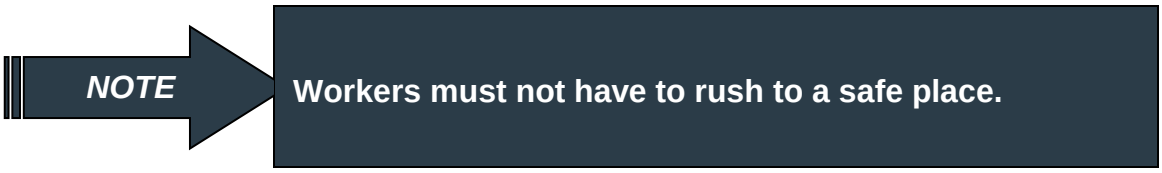
Additional requirements to ANWT 310 Lookout Working when working within the ARTC Network.

Restrictions on the use of Lookout Working

The maximum number of workers involved with Lookout Working is eight (8) including the Protection Officer and Lookouts.

Safe Places

When workers are warned that rail traffic is approaching the worksite, workers must be in a safe place, at least 10 seconds before rail traffic arrives, and remain clear until authorised by the Protection Officer to leave the safe place and resume work.



Protection Officer

Before work commences, the Protection Officer must compile an:

- Individual Worker Brief (IWB) – RLS-FM-009 (or endorsed equivalent) where there are only 2 people working under Lookout Working inclusive of the *Protection Officer* and *Lookout*, or
- Pre Work Brief (PWB) – RLS-FM-005 (or endorsed equivalent) where there are more than 2 people working under Lookout Working inclusive of the Protection Officer and Lookout, and
- Worksite Protection Plan (WPP) – RLS-FM-006 (or endorsed equivalent), include on the worksite protection plan the minimum warning time, maximum permanent track speed and required sighting distance.

A Protection Officer must make sure the minimum warning times are appropriate for the locations of Lookouts. (See following page)

WARNING

If minimum warning times are not appropriate, then Lookout Working must not be used.

NOTE

Where moving worksites are established over a large area the Minimum Warning Time must be continually reassessed for the location of the Lookout and the location where work is taking place.

NOTE

If the safety assessment identifies the use of two Lookouts in any running direction is insufficient for the work or location, then a higher form of protection must be used.

NOTE

Where Lookout Working is to be used within the limits of a *Local Possession Authority (LPA)* the Protection Officer must also contact the Possession Protection Officer about:

- **commencing Lookout Working, and**
- **ending Lookout Working.**

NOTE

Information about likely rail traffic movements is provided only as a guide for rail traffic movements and is not to be relied upon as the only safety measure.

Placing Lookouts

The Protection Officer must make sure that:

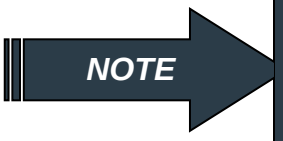
- when rail traffic approaches, Lookouts can warn workers in time to allow them to:
  - react to the warning of the approach of rail traffic, and
  - move themselves and their equipment to a safe place at least 10 seconds before the rail traffic arrives.

When using Lookout Working on multi *bidirectional* tracks a minimum of one Lookout must be used in each direction. Workers must move themselves and their equipment to a safe place when rail traffic is approaching on the track being worked on or any track that has to be crossed to access the safe place.

Moving worksites over a large area

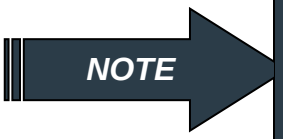
Protection Officer

1. Make sure all workers and their equipment are in a safe place before repositioning Lookouts.
2. Reposition the Lookout, and for each *route* or track leading to the worksite, calculate the Minimum Warning Time.
3. Make sure the Lookout is in position and the track is clear before allowing workers to commence work.



Where moving worksites are established over a large area the Minimum Warning Time must be continually reassessed for the location of the Lookout and the location where work is taking place.

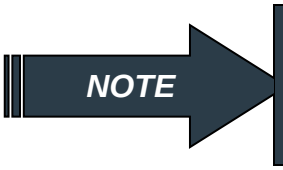
Additional requirements to ANPR 711 Lookouts when working within the ARTC Network.



The maximum number of Lookouts in any running direction on each track is two (2).

The additional Lookout must stay within sight and hearing of the Lookout closest to the worksite.

If the use of two lookouts in any running direction is insufficient for the work or location, then a higher form of protection must be used.



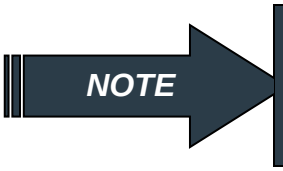
Information about likely rail traffic movements is provided only as a guide for rail traffic movements and is not to be relied upon as the only safety measure.

Minimum Warning Time

Minimum Warning Time (MWT) is the minimum time required for a Lookout to warn workers on track about approaching rail traffic.

The minimum warning time required must be written on the Worksite Protection Plan (WPP) and be calculated as follows:

1. Time it might take a Lookout to see approaching rail traffic and warn workers (Reaction Time) = A seconds
2. Time it takes the workers to hear the warning and start to move = B seconds
3. Time required to move workers, tools, equipment and materials clear of the track to a Safe Place = C seconds
4. The minimum time to be in a Safe Place before rail traffic arrives = **10** seconds



If using a single Lookout in a single line bidirectional area, the reaction time (A) will need to have additional time included to look in both directions.

The Minimum Warning Time required = (A + B + C + **10**) seconds

Minimum Sighting Distance

The minimum sighting distance needed to see an approaching rail traffic movement is dependent on the minimum warning time required and the maximum permanent track speed and is determined from the below Table.

Approaching rail traffic will travel over the distances shown, within the times shown at the top of the table, when travelling at the speeds shown on the left.

Distance Travelled / Time Taken

Speed Km/h	20 seconds	25 seconds	30 seconds	35 seconds	40 seconds	45 seconds
160	890m	1110m	1335m	1555m	1780m	2000m
150	840m	1045m	1250m	1460m	1670m	1875m
140	780m	970m	1170m	1360m	1555m	1750m
130	730m	905m	1085m	1265m	1445m	1625m
120	670m	835m	1000m	1170m	1335m	1500m
110	620m	765m	920m	1070m	1225m	1375m
100	560m	695m	835m	975m	1110m	1250m
90	500m	625m	750m	875m	1000m	1125m
80	450m	555m	670m	780m	890m	1000m
70	390m	485m	585m	680m	780m	875m
60	340m	420m	500m	585m	670m	750m
50	280m	350m	420m	485m	555m	625m
40	230m	280m	335m	390m	445m	500m
30	170m	210m	250m	295m	335m	375m
25	140m	175m	210m	245m	280m	315m
20	120m	140m	170m	195m	225m	250m
15	90m	110m	130m	150m	170m	190m

Example Calculation 1

The Minimum Warning Time required = (A + B + C + **10**) seconds	
(A) Reaction time	3 Seconds
(B) Time it takes the workers to hear the warning and start to move	6 Seconds
(C) Time required to move the workers, tools, equipment and materials clear of the track	10 Seconds
Minimum time to be in a Safe Place before rail traffic arrives	**10** Seconds
Minimum warning time required	**Total 29 Seconds**

Maximum permanent track speed for worksite location is 145kmh as identified in the Route Access Standards (RAS) or Network Information Books (NIB's).

The Minimum Sighting Distance of approaching rail traffic from the above Table is 1250 metres (rounding up to 30 seconds and 150kmh).

The Lookout must be positioned to be able to see approaching rail traffic at least 1250m away in order to give the minimum warning time required.

Example Calculation 2

The Minimum Warning Time required = (A + B + C + **10**) seconds	
(A) Reaction time	6 Seconds
(B) Time it takes the workers to hear the warning and start to move	5 Seconds
(C) Time required to move the workers, tools, equipment and materials clear of the track	15 Seconds
Minimum time to be in a Safe Place before rail traffic arrives	**10** Seconds
Minimum warning time required	**Total 36 Seconds**

Maximum permanent track speed for worksite location is 60kmh as identified in the Route Access Standards (RAS) or Network Information Books (NIB's).

The Minimum Sighting Distance of approaching rail traffic from the above Table is 670 metres (rounding up to 40 seconds).

The Lookout must be positioned to be able to see approaching rail traffic at least 670m away in order to give the minimum warning time required.

Verification of Sighting Distance

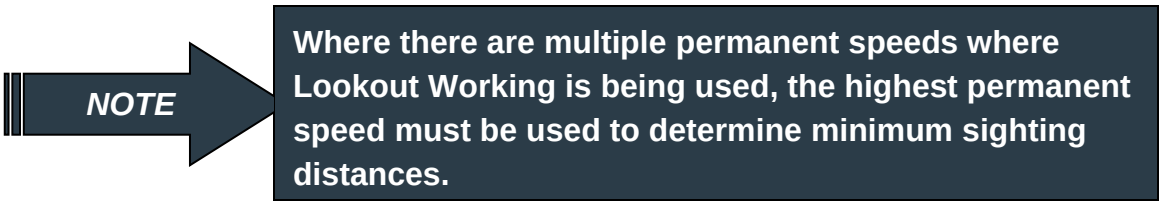
To ensure the sighting distance is correct, one of the following methods must be used:

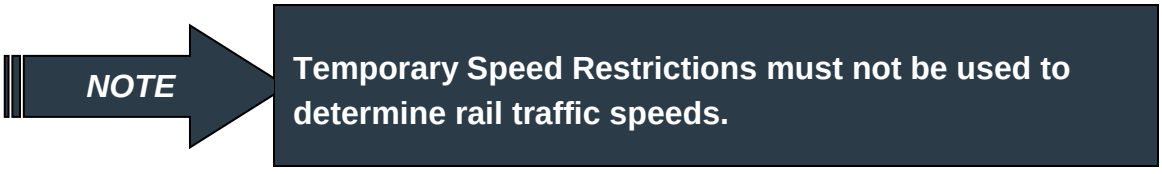
- approved Network Diagrams which identify actual kilometre to prominent *infrastructure* or locations, or
- technological devices such as sighting distance scopes, or
- physically drive or walk the sighting distance to accurately measure and identify the specific marker for the sighting distance.

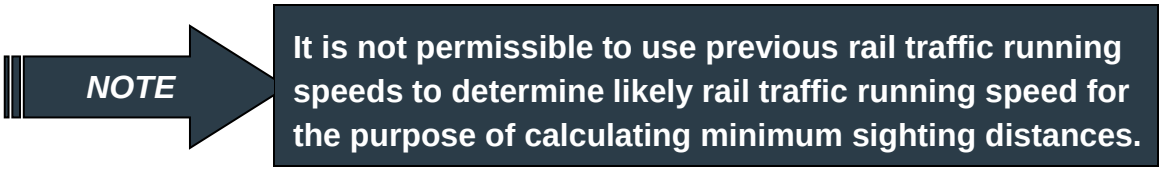
Permanent Rail Traffic Speeds

Permanent Speeds are identified in Network Information Booklets (NIB's) and Route Access Standards (RAS).

A Protection Officer for Lookout Working must have a current printed copy of the relevant NIB or RAS with them to determine the minimum sighting distance required.







ARTC Authorisation to Implement Lookout Working Hunter Valley ONLY

These following requirements apply to ARTC employees and Contractors engaged by or on behalf of ARTC to work in the ARTC Hunter Valley Network only.

The ARTC representative engaging the Protection Officer must confirm that they are listed on the approved Protection Officer list for the Area.

A Protection Officer will only be permitted to manage Lookout Working in a Provisioning Centre's area if they are listed as an approved Protection Officer for that area.

For Asset Delivery work, the Area Managers must maintain a register of approved Protection Officers for their respective Provisioning Centre's area.

For Asset Development work, the ARTC Manager Corridor Works or their nominated delegate must maintain a register of approved Protection Officers for each Provisioning Centre's area.

The Hunter Valley Principal Advisor Safety or their nominated delegate will administer a central register of all approved Protection Officers for each Provisioning Centre's area.

To be listed as an approved Protection Officer for Lookout Working the following criteria must be met:

- person will be a Protection Officer Level 1 with a minimum of 6 months experience since obtaining the qualification, and
- has managed Lookout Working at least 6 times in the Provisioning Centre's area in the past 6 months with Live running tracks by working under instruction of a Lookout Working Registered Protection Officer, and
- must be able to produce 6 examples of Pre-Work Briefings and Worksite Protection Plans as evidence of experience in the use of Lookout Working.
- must have signed off on this Safe Notice.

Where a Protection Officer does not meet the above requirements, an on track assessment must be conducted by the Area Manager (or their delegate) / Manager Corridor Works (or their delegate).

For ARTC employees in regional teams, the Protection Officer must have managed Lookout Working at least 6 times in the Provisioning Centre's area in the past 12 months with Live Running Lines.

Safeworking Arrangements

All work must be carried out as per the appropriate ARTC Network Rules and Procedures.

SAFE Notice recipients must ensure this SAFE Notice is circulated to and understood by all personnel affected by, or needing to know, its content.

SAFE Notices must be issued to all affected Qualified Workers.

Qualified Workers who receive a SAFE Notice must follow the requirements in the SAFE Notice.

02 January 2019

Approved by Manager Operations Services Hunter Valley and General Manager Operations Services Interstate

ARTC

FOR THE INFORMATION OF ALL QUALIFIED WORKERS AND USERS OF THE ARTCNETWORK