

## SCHEDULE 1

Article 3(a) and (b)

### PARTICULARS OF THE BARRIERS, LIGHTS, TRAFFIC SIGNS AND OTHER DEVICES

1. Cattle-cum-trespass guards of standard railway design shall be provided adjacent to the ground, which is made-up to the level of the carriageway. The guards shall extend the full distance between the fence on each side of the railway.

2. A barrier shall be pivoted as close to the railway as practicable on both sides of the road on each approach to the crossing.

3. It shall be possible to raise and lower the barriers. When lowered, the barriers shall be as nearly horizontal as possible and shall extend across the full width of the carriageway and the footway.

4. When the barriers are fully lowered, their uppermost surfaces shall be not less than 900mm above the road surface at the centre of the carriageway and the under-clearance between the barriers and the road surface shall not exceed 1 metre.

5. When in the fully raised position, the barriers shall be inclined towards the carriageway at an angle of between 5 and 10 degrees from the vertical. No part of either barrier or of any attachment thereto which is less than 5 metres above the level of the carriageway shall be horizontally displaced from the nearer edge of the carriageway by less than 450mm. No part of any barrier or any attachment thereto which in either case is less than 2 metres above the level of the footway shall normally be horizontally displaced from that edge of the footway further from the carriageway by less than 150mm.

6. The barriers shall be as light as possible but shall also be strong enough to prevent distortion or fracture likely to be caused by wind pressure. It shall be possible to raise them by hand. The barriers shall be at least 125mm deep at their mid-point and at least 75mm deep at their tip.

7. The barriers shall be fitted with skirts so arranged that when the barriers are lowered the skirts fence in the space between the barrier and the ground.

8. Three electric lamps, or equivalent (light emitting diodes) each of not less than 5 watts nominal rating or equivalent and with lenses of not less than 50mm diameter, shall be fitted to each barrier, one within 150mm of its tip and the other 2 equally spaced. When illuminated, the lamps shall show a red light in each direction along the carriageway.

9. The barriers shall display on both front and rear faces alternate red and white bands each approximately 600mm long and to the full depth of the barriers. A band of red retro-reflecting material not less than 50mm deep shall be provided along the full length of each red band.

10. Suitable screening shall be provided for each barrier machine to guard against danger to persons from the operating mechanisms and moving parts of the machine.

11. A traffic light signal of the size, colour and type shown in Diagram 3014 of the Regulations shall be provided on the left hand side of the road on each approach to the crossing and as close as practicable to the barrier. There shall be an additional traffic light signal of the same type on the right hand side of the road on each approach to the crossing so located as to be either in line with or on the railway side of the stop line mentioned in paragraph 13. The traffic light signals on each side of the railway shall be positioned so as to face outwards from the crossing towards approaching road traffic. All the signals shall be capable of directional adjustment.

A further traffic light signal of the same type shall be provided on the right-hand side of the road when approaching from the Articlave direction. This shall face traffic approaching the crossing from the residential properties on Stable Lane which is close to the crossing on the left-hand side when approaching from the Articlave direction.

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

12. An audible warning device shall be provided on or adjacent to each left hand side traffic light signal post on each approach to the crossing. Facilities shall be provided to reduce the sound output of these devices and any reduced sound output shall operate to suit local day and night conditions.

13. A reflectorised stop line of the size and type shown in Diagram 1001 in the Regulations shall be provided across the left hand side of the carriageway on each approach to the crossing approximately 4.5 metres before the left hand side traffic light signal.

14. Where the road passes over the crossing, reflectorised edge of carriageway road markings of the size and type shown in Diagram 1012.1 in the Regulations shall be provided along each edge of each footway.

15. The centre line of the carriageway shall be marked on the crossing between the stop lines mentioned in paragraph 13 with a reflectorised double continuous line road marking of the size and type shown in diagram 1013.1A in the Regulations. The centre line shall be continued for a distance of 30 metres in both directions measured along the centre of the carriageway from the ends of the double continuous line with a reflectorised continuous line and a broken line on its right hand side of the size and type shown in diagram 1013.1D in the Regulations. Two white reflectorised warning arrows in each direction 13.75 metres and 43.75 metres from the ends of the continuous and broken line of a size and type shown in Diagram 1014 in the Regulations shall be provided on each approach to the double lines.

16. A traffic sign of the size, colour and type shown in diagram 770 in the Regulations shall be provided on the left-hand side of each road approach to the crossing facing traffic approaching the crossing. Below this a traffic sign of the size, colour and type shown in diagram 773 in the Regulations shall be provided facing traffic approaching the crossing.

An additional traffic sign of the size, colour and type shown in diagram 770 in the Regulations shall be provided on the left-hand side of the road approach for traffic leaving Circular Road. Below this a traffic sign of the size, colour and type shown in diagram 773 variant in the Regulations shall be provided facing traffic approaching the crossing.

An additional traffic sign of the size, colour and type shown in diagram 770 in the Regulations shall be provided on the left-hand side of the road approach from the Articlave direction for traffic leaving the private road to the caravan park. Below this a traffic sign of the size, colour and type shown in diagram 773 variant in the Regulations shall be provided facing traffic approaching the crossing.

An additional traffic sign of the size, colour and type shown in diagram 770 in the Regulations shall be provided on the left-hand side of the road approach for traffic leaving Stable Lane. Below this a traffic sign of the size, colour and type shown in diagram 773 variant in the Regulations shall be provided facing traffic approaching the crossing.

17. There shall be a signalling control centre at Coleraine. A closed circuit television camera shall be provided at the crossing and shall be connected to a viewing monitor adjacent to the crossing control point in the control centre.

18. The control point shall have push-buttons to:

- (a) lower the barriers – the ‘lower’ push-button;
- (b) raise the barriers – the ‘raise’ push-button;
- (c) release the protecting signals – the ‘crossing clear’ push-button;
- (d) stop the lowering or raising of the barriers – the ‘stop’ push-button.

19. Facilities shall be provided at the crossing to operate the barriers and other protective equipment.

20. Lighting shall be provided as necessary so that during the hours of darkness in conditions of normal visibility it can be seen from the control point that the crossing is clear whilst the barriers are being lowered, and until the ‘crossing clear’ push-button is pressed.

21. Protecting railway signals shall be provided and these shall be interlocked with the barriers so that it shall not be possible, other than by hand, to raise the barriers from their positions across the carriageway unless the protecting railway signals are set at Danger and whilst the barriers are raised it shall not be possible to clear those signals.

22. In this Schedule –

‘the Regulations’ means the Traffic Signs Regulations (Northern Ireland) 1997 (1).

## SCHEDULE 2

Article 3(c)

### CONDITIONS AND REQUIREMENTS TO BE COMPLIED WITH BY THE RAILWAY UNDERTAKING

1. The carriageway shall be approximately 8.4 metres wide at the crossing.
2. The ground at the two edges of the carriageway over the crossing shall be made-up to the level of the carriageway for a distance of approximately 2 metres beyond each edge.
3. The surface of the carriageway and footways over the crossing shall be maintained in good and even condition.
4. The barriers shall be kept in the fully raised position except during the time when engines, carriages or other vehicles passing along the railway have occasion to cross the road.
5. The electric lamps or equivalent (light emitting diodes) on each barrier mentioned in Schedule 1 shall be lit at all times except when the barriers are in the fully raised position.
6. The crossing shall be illuminated during the hours of darkness to such a standard that the operator can ascertain in conditions of normal visibility that the crossing is clear before the barriers are fully lowered.
7. The protecting signals shall be controlled from the signalling control centre containing the crossing control point.
8. The picture of the crossing shall be exhibited on the television monitor before the sequence of events to close the crossing to road traffic begins. The picture shall continue to be exhibited until either the barriers are fully raised after the ‘raise’ push-button is pressed, or if automatic raising is in operation after the ‘crossing clear’ push-button is pressed.
9. Visual indicators and an audible alarm shall be provided at the control point. The indicators shall show when:
  - (a) the main power supply is available;
  - (b) all the barriers are fully raised;
  - (c) all the barriers are fully lowered;
  - (d) at least one of the intermittent red lights of the traffic light signals on each side of the railway is showing along the carriageway.
10. The audible alarm shall sound if:
  - (a) any barrier is horizontally dislocated when in the fully-lowered position;

---

(1) [S.R. 1997 No. 386](#): relevant amending Regulations are [S.R. 1999 No. 484](#)

*Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.*

- (b) the main power supply fails;
- (c) all the red traffic light signals facing in one direction fail.

11. When the 'lower' push button is pressed or the train occupies a track circuit, the sequence of events to close the crossing to road traffic shall begin. The sequence shall be:

- (a) the amber lamps shall immediately show and the audible warning shall begin. The lights shall show for approximately 3 seconds;
- (b) immediately the amber lamps are extinguished the intermittent red lights shall show;
- (c) 4 to 6 seconds later, the left-hand side barriers shall begin to descend and shall take a further 6 to 10 seconds to reach the lowered position;
- (d) the right-hand side barriers shall then begin to descend taking 6 to 10 seconds to reach the lowered position;
- (e) the audible warning shall stop when all the barriers are fully lowered.

12. The arrangements shall be such that the protecting railway signals can only be cleared after the barriers are fully lowered and after the 'crossing clear' push-button has been pressed. Unless the protecting signals have been cleared for another train, all the barriers shall rise simultaneously either after the 'raise' push-button has been pressed or automatically as soon as the train has passed clear of the crossing.

13. If a train overruns a protecting signal the arrangements shall be such that the red lights will immediately show omitting the amber sequence, the audible warning will sound and all barriers remain in the raised position.

14. Controls to automatically initiate the crossing closure sequence for trains approaching from Bellarena will be implemented at Castlerock Station. The crossing closure sequence will be initiated as a train enters the platform but the barriers will not lower. The road lights shall extinguish after a defined time. Pressing the lower button after automatic initiation of the crossing closure sequence will continue to close the crossing.

15. The intermittent red lights shall continue to show until the barriers have begun to rise and shall be extinguished before the barriers have risen to an angle of 45 degrees above the horizontal

16. If, during the lower sequence, both red road lights on any RTL are failed before the point in the sequence that the barriers are due to start lowering, then the barriers shall remain in the raised position. In this situation, the barriers can only be lowered from the local control unit until the fault is rectified. Once the barriers have begun to lower a further red light failure shall not stop or prevent them lowering.

17. If the barriers do not achieve the fully raised position within 10 seconds of starting to raise, then the barriers stop in their present positions. The red RTL's shall re-illuminate and a failed indication and alarm is given at the supervising control centre. A further 2 seconds may be added if required to allow for relay operation.

18. A failure indication can only be extinguished when the barriers are either in the fully raised or fully lowered position. In the fully raised position, the failure indication shall only extinguish if the RTL's are also extinguished. (RTL's shall be taken to be extinguished if the controls are set for them to be extinguished. No light proving is required).

19. Should automatic lowering or raising take an abnormally long time an audible and visual warning shall be given at the control point.