

## SCHEDULE 1

Article 3(a) and (b)

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

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 be as nearly at right angles as possible to the centre line of the carriageway.

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 carriageway shall not exceed 1000mm.

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 any 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 and no part of any barrier or of any attachment thereto which is less than 2 metres above the level of the footway shall 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. The barriers shall be at least 125mm deep at their mid-point and at least 75mm deep at their tip.

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

8. The barriers shall be fitted with skirts of a pale colour and light construction so arranged that when the barriers are lowered the skirts fence in the space between the barriers and the ground.

9. The barriers shall display on both front and rear faces alternative 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 mechanism 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 14. 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.

12. On the Steeple Road approach to the crossing, an additional road traffic light signal of the size and type shown in Diagram 3014 of the Regulations shall be provided on the right hand side of the carriageway, adjacent to the road traffic signal mentioned in paragraph 11 so as to be visible to road users exiting the Business Park which adjoins the crossing.

13. 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 to suit local day and night conditions.

14. A reflectorised stop line of the size, colour 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 5.0 metres before the left hand side traffic light signal. The stop line shall be extended across to the start of the back edge of the footway line as described in paragraph 15 where the entrance from the Business Park emerges onto Station Road..

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

16. The centre line of the carriageway shall be marked on the crossing between the stop lines mentioned in paragraph 14 and for a distance of 12 metres on each side of the railway measured along the centre of the carriageway from the stop lines with a reflectorised double continuous line carriageway marking of the size, colour and type shown in Diagram 1013.1A in the Regulations. The centre line shall be continued for a distance of 12 metres on each side of the railway measured along the centre of the carriageway from the ends of the double continuous line with a reflectorised double line of the size, colour and type also shown in Diagram 1013.1D in the Regulations wherein the continuous line is on the left-hand side of the broken line.

17. Arrow road markings of the size and type shown in Diagram 1014 in the Regulations shall be provided on each approach to the crossing at a distance of 45 metres and 110 metres respectively prior to the commencement of the continuous double lines.

18. Reflecting road studs shall be laid between the double continuous white lines referred to in paragraph 16. The studs shall be white bi-directional reflecting and laid at 4 metre intervals. Any studs laid within 2 metres of a running rail shall be of plastic construction.

19. There shall be a signal box at Belfast Central from where the crossing is controlled and monitored. A closed circuit television camera capable of providing a picture shall be positioned at the crossing and shall be connected to a viewing monitor adjacent to the crossing control point in Belfast Central signal Box.

20. 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 lowering or raising of the barriers – the “stop” push button.

21. Facilities shall be provided at the crossing to operate the barriers and any other protecting equipment.

22. 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.

23. Any lighting, which is provided, shall be at least to the same standard as the lighting of the carriageway.

24. 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 to Danger and whilst the barriers are raised it shall not be possible to clear those signals.

25. Traffic signs of the size, colour and type shown in Diagrams 770 and 773 in the Regulations shall be provided on the left hand side of each road approach to the crossing, facing traffic approaching the crossing.

26. Additional traffic signs of the size, colour and type shown in Diagrams 770 and 773 in the Regulations shall be provided on the approaches to Station Road from Oriel Park, the access road from the Ministry of Defence premises and the access road from the Business Park which adjoins the crossing. These signs shall be arranged so as to face towards traffic approaching by each of the aforesaid roads towards Station Road. Distance and direction to hazard signs of the size, colour and type shown in Diagram 573 in the Regulations shall be provided.

27. In this Schedule “the Regulations” means the Traffic Signs Regulations (Northern Ireland) 1997(1).

## SCHEDULE 2

Article 3(a) and (b)

### Conditions and Requirements to be Complied with by the Railway Undertaking

1. The surface of the carriageway and footways over the crossing shall be maintained in a good and even condition. The carriageway shall be not less than 6.8 metres wide and the footway less than 1.5 metres wide on the station side of the carriageway and not less than 2.0 metres wide on the Ballymena side of the crossing.

2. 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.

3. 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 fully raised.

4. The picture of the crossing shall be exhibited on the television monitor before the sequence of events to close the crossing to road 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.

5. If the road approaches to the crossing are lit, the crossing shall be lit to at least the same standard.

6. The protecting signals shall be controlled from the signal box containing the crossing control point. This control point shall be so located so that there is a clear view of the viewing monitor providing a picture of the crossing.

7. 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 in each of the traffic light signals on each side of the railway is showing along the carriageway.

8. The audible alarm shall sound if—

- (a) any barrier is horizontally dislocated when in the fully lowered position;
- (b) the main power supply fails;

(1) [S.R. 1997 No. 386](#): relevant amending Regulations are [S.R. 1984 No. 58](#)

(c) both the intermittent red lights of any of the road traffic signals fail.

9. When the “lower” push-button is pressed, or the train either occupies a track circuit or operates a treadle the sequence of events to close the crossing to road traffic shall begin. The sequence of operation shall be—

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

10. 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 after the “raise” push-button has been pressed or automatically as soon as the train has passed clear of the crossing.

11. 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.

12. If any barrier fails to rise from the lowered position the intermittent red lights shall continue to show.

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