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 the left-hand side 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, be as nearly as possible at right angles to the centre line of the carriageway and shall extend across the left hand side of the road. The tip of each barrier shall extend to a point within 450mm of the centre of the carriageway and no closer than 150mm and a clear exit of at least 3 metres width shall be left to the right hand edge of the carriageway.
- 4. When 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 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 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 barrier booms shall be at least 130mm deep throughout their entire length.
- 7. Two 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, and the other one near its centre. When illuminated, the lamps shall show a red light in each direction along the carriageway.
- 8. 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.
- 9. 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.
- 10. 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 12. 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.
- 11. 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.

- 12. 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 1 metre before the left hand side traffic light signal.
- 13. A reflectorised pedestrian stop line of the size and type shown in Diagram 1003.2 in the Regulations shall be provided across the right hand side of the carriageway on each approach to the crossing and any footway or made-up ground on both sides of the carriageway on both sides of the railway. The line shall be not less than 1 metre before the right hand side traffic light signal and not nearer than 2 metres to the running edge of the nearest rail and shall be as nearly as possible at right angles to the centre line of the carriageway.
- 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 any footway or made-up ground along each edge of the carriageway.

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- (a) The centre line of the carriageway shall be marked on the crossing between the stop lines mentioned in paragraph 12 and for a distance of 12 metres on each side of the railway measured along the centre of the carriageway from stop lines with a reflectorised double continuous line road marking of the size and type shown in Diagram 1013.1A in the Regulations.
- (b) The centre line shall be continued for a distance of 36 metres on each side of the railway measured along the centre of the carriageway from the ends of the double continuous line mentioned in paragraph 15a, with a reflectorised double line of the size, colour and type shown in Diagram 1013.1D in the Regulations wherein the continuous line is on the left-hand side of the broken line.
- (c) At least one carriageway marking of the size, colour and type shown in Diagram 1014 in the Regulations shall be marked on the carriageway in an appropriate position on the approach side of the road marking described in paragraph 15b.
- 16. A traffic sign of the size, colour and type shown in Diagram 775 in the Regulations shall be provided below or adjacent to each traffic light signal post and shall face outwards from the crossing towards approaching road traffic.
- 17. A traffic sign of the size, colour and type shown in Diagram 784 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 786 in the Regulations shall be provided facing traffic approaching the crossing.
- 18. A traffic sign of the size, colour and type shown in Diagram 786 in the Regulations shall be provided on the left-hand side of the road on each side of the railway facing traffic leaving the crossing.
- 19. 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 the size, colour and type shown in Diagram 773 in the Regulations shall be provided facing traffic approaching the crossing.
- 20. A telephone mounted in a weather-proof box connected to the monitoring signal box at Coleraine shall be provided on or adjacent to the traffic light signal post on the right hand side of the road on each approach to the crossing. A traffic sign of the size, colour and type shown in Diagram 787 in the Regulations shall be provided on the face of the telephone box.
- 21. A level crossing speed restriction board for 40 miles per hour shall be provided on the up railway approach to the crossing approximately 330 metres before the crossing. A similar speed restriction board for 40 miles per hour shall be provided on the down railway approach to the crossing

approximately 340 metres before the crossing. The boards shall be provided with class 1 retroreflecting material or shall be illuminated.

- 22. Two independent power supplies shall be provided at the crossing, one of which may consist of standby batteries of sufficient capacity to operate the whole installation for 12 hours.
- 23. In this Schedule "the Regulations" means the Traffic Signs Regulations (Northern Ireland) 1997(1) and Traffic Signs (Amendment) Regulations (Northern Ireland) 2003(2).

SCHEDULE 2

Article 3(c)

CONDITIONS AND REQUIREMENTS TO BE COMPLIED WITH BY THE RAILWAY UNDERTAKING

- 1. The carriageway shall be approximately 6.5 metres wide at the crossing and the footways not less than 2.0 metre wide on the both sides of the carriageway over the crossing.
- 2. The ground shall be made up to the level of the carriageway for a distance of not less than 1.0 metre beyond the northern edge of the carriageway over the crossing.
- 3. The surface of the carriageway 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. If the road approaches to the crossing are lit the crossing shall be lit to at least the same standard.
- 7. Visual indicators and an audible alarm shall be provided in the monitoring signal box. The indicators shall show when the barriers are raised and when the main power supply is available, and the alarm shall sound if the main power supply fails if a period of approximately 3 minutes elapses and there is no indication that the barriers are raised.
- 8. The barriers, the audible warning devices and the traffic light signals mentioned in Schedule 1 shall be activated automatically, as described in paragraph 9, by the approach of a train but means shall also be provided at the crossing for their manual operation and control.
- 9. When the train either occupies a track circuit or operates a treadle the audible warning devices and the traffic light signals shall begin to operate and the barriers shall be lowered in accordance with the following sequence—
 - (a) the amber lights shall 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 begin to show;
 - (c) 4 to 6 seconds later, the barriers shall begin to descend and shall take a further 6 to 10 seconds to reach the lowered position;
 - (d) not less than 27 seconds shall elapse between the time when the amber lights first show and the time when the train reaches the crossing;

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^{(1) 1997} No. 386

^{(2) 2003} No. 214

- (e) both barriers shall begin to rise simultaneously as soon as possible after the train has passed the crossing and shall take 4-10 seconds to reach the raised position. The intermittent red lights shall continue to show and the audible warning device shall continue to sound until the barriers have risen to an angle of 45 degrees above the horizontal.
- 10. In the event of the failure of both intermittent red lights in any of the road traffic signals, when the intermittent red lights should be shown, both barriers shall descend immediately (if not already lowered) and shall remain lowered.
- 11. Should a total power failure occur both barriers shall descend under gravity or remain lowered as the case may be. If after the barriers have begun to lower one barrier fails to reach the fully lowered position, neither barrier shall rise until both have been fully lowered.
- 12. If either barrier fails to rise from the lowered position the intermittent red lights shall continue to show provided a total power failure has not occurred.