



LEVEL CROSSINGS ACT 1983

THE NETWORK RAIL DUFFRYN LEVEL CROSSING ORDER 2023

Made on 29th June 2023

Coming into force on 1st July 2023

The Secretary of State for Transport, having been requested by Network Rail Infrastructure Limited (“the operator”) to make an Order under section 1 of the Level Crossings Act 1983¹ (“the Act”) makes the following Order in exercise of his powers under the Act and of all other enabling powers, in accordance with the draft Order which accompanied the request subject to those modifications the Secretary of State thought fit to make.

1. This Order may be cited as the Network Rail Duffryn Level Crossing Order 2023 and shall come into force on 1st July 2023.

Interpretation

2. In this Order:
 - a. “the operator” means Network Rail Infrastructure Ltd or any person who succeeds Network Rail Infrastructure Ltd as the person responsible for operating the level crossing;
 - b. “the local traffic authority” means Carmarthenshire County Council or any person who succeeds Carmarthenshire County Council;
 - c. “the specified road” means the road (including any footways) which crosses the railway at the crossing;
 - d. “the carriageway” means the carriageway of the specified road (excluding any footways);
 - e. “the crossing” means the level crossing described in Schedule 1 to this Order;
 - f. “the Regulations” means the Traffic Signs Regulations and General Directions 2016² and its successors;

¹ 1983 c.16

² (Part 1 of S.I. 2016/362)

- g. “road users” means anyone required to have regard to the Highway Code who is using the crossing, including pedestrians, mobility scooter users, cyclists, horse riders, vehicle drivers and motorcyclists;
- h. the expressions “left-hand side” and “right-hand side” means how they would appear to a person approaching the crossing along the specified road;
- i. where this Order specifies that the operator or local traffic authority must use a sign prescribed in the Regulations, if there is any amendment to the Regulations and the sign specified by this Order retains its status under the amended Regulations, its continued use is required by this Order and this Order should be read as if the amended Regulations and/or diagram number applies (if applicable);
- j. any requirement for a prescribed traffic sign from the Regulations in this order may be satisfied by the equivalent English and Welsh language traffic sign authorised under the Road Traffic Regulation Act 1984.

Application

- 3. The following provisions, being provisions which in the opinion of the Secretary of State are necessary or expedient for the safety or convenience of those using the crossing, apply in respect of the crossing:
 - a. the operator shall provide, operate and maintain the protective equipment specified in Schedule 2 and Schedule 4;
 - b. the local traffic authority shall provide and maintain the protective equipment specified in Schedule 3;
 - c. the operator and local traffic authority shall observe the conditions and requirements specified in Schedule 5.
- 4. The Traffic Signs Regulations and General Directions 2016 shall apply to any traffic sign specified in this Order as they would to a traffic sign caused or permitted to be placed by a local traffic authority.
- 5. The Network Rail Duffryn Level Crossing Order 2013 is revoked.

Signed by authority of the Secretary of State on 29th June 2023



Eryl Marsh
Head of Specialist Inspection, Railway Safety
Office of Rail and Road

Schedule 1 - The crossing

The level crossing known as Duffryn Level Crossing, where the unclassified road leading from the B4304 to the holiday resort to the south-west is crossed by the railway between Gowerton and Llanelli Stations.

At Ordnance Survey National Grid Reference SS 546 984.

At Unique Street Reference Number 47204136.

Schedule 2 - Protective equipment provided by the operator

Audible Warnings

1. Audible warning devices shall be provided, suitably located and of the appropriate volume, taking account of local requirements, to warn users who require an audible warning of the activation of the crossing.

Barriers

2. A lifting barrier shall be pivoted as close to the railway as practicable on both sides of the specified road on each side of the railway.
3. A barrier protection management system to detect when the barriers are obstructed shall be provided.
4. The barriers shall be kept fully raised except during the time when any train on the railway crosses the specified road, or when it is necessary to lower the barriers for short periods for the purpose of maintenance or testing. The electric lights on each barrier shall be lit except when the barriers are fully raised.
5. When lowered the barriers shall be as nearly horizontal as possible and shall extend across the full width of the carriageway and any footway(s).
6. When lowered, the barriers and skirts shall be of sufficient height to prevent, so far as is reasonably practicable, access to the railway, either over or under the barriers.
7. When in the fully raised position the barriers and skirts shall not obstruct or interfere with users of the crossing.
8. The barriers shall be as light as possible but shall also be strong enough to prevent foreseeable distortion or fracture likely to be caused by wind pressure.
9. The barriers shall be easily visible to road users. This shall require the use of:
 - a. alternate red and white bands to the full depth of the barriers to clearly indicate the position of the barriers to approaching road users. The bands shall be either 500 or 600 millimetres long approximately;
 - b. retro-reflective strips that are the same colour as the band on which they are placed; and
 - c. non-flashing red lights evenly placed along the length of the barrier.
10. Suitable guards or other protection shall be provided for each barrier machine to prevent danger to persons from the operating mechanism of the machine.

Carriageway and any footways

11. The carriageway and any footways over the crossing shall be wide enough to safely accommodate road users.
12. Tactile paving of a type specified in and located according published guidance shall be provided in each footway on each approach to the crossing.
13. The surface of the carriageway and any footways over the crossing shall be maintained in a good and even condition and, with the co-operation of the local traffic authority, kept consistent with the surface of the carriageway and any footways on each approach to the crossing.

Lighting

14. Lighting shall be provided at least to the same standard as the lighting of the carriageway on the approaches to the crossing.
15. Sufficient lighting shall be provided for the whole crossing to be visible when under local control.

Railway signalling

16. The level crossing shall be controlled from the control point that controls the protecting signals for the crossing.
17. Visual indicators and audible alarms shall be provided at the control point to indicate the condition of the crossing.
18. Facilities shall be provided at the control point to lower and raise the barriers, release the protecting signals and stop the lowering or raising of the barriers.
19. Facilities shall be provided at the crossing to operate the barriers and other protective equipment under local control when required.
20. A system shall be provided to confirm that the crossing is clear of obstruction before a train is signalled over it. This system shall be obstacle detection.
21. If the system normally operates the crossing automatically, facilities shall also be provided to allow the signaller to take manual control at the control point.
22. Protecting railway signals shall be provided. These shall be interlocked with the barriers so that it shall not be possible to raise the barriers after the protecting signal has displayed a proceed aspect unless any approaching train has passed over the crossing or sufficient time has elapsed to allow a train to have come to a stand. When the barriers are raised it shall not be possible to clear those signals. Minor barrier movements caused by wind, for example, should not result in signals reverting to a restrictive aspect.
23. A telephone, linked to the control point, shall be provided and located within easy reach of road users on each side of the railway. The position of each telephone shall be clearly marked by traffic signs to Diagram 787 and/or 788 in the Regulations. Instructions for users shall be provided inside the cabinet or adjacent to each telephone and shall be legible at all times.

Road Markings

24. A stop line to Diagram 1001 in the Regulations shall be provided in a suitable position on each side of the railway, from which vehicle drivers can clearly see the traffic light signals.
25. Road markings to Diagram 1012.1 in the Regulations shall be provided along the edges of the carriageway and any footways over the crossing.
26. The centre line of the carriageway shall be marked on the crossing between the stop lines with a road marking to Diagram 1013.1 version A in the Regulations.
27. The carriageway over the crossing shall be marked with a road marking to Diagram 1045 in the Regulations.

Traffic signs and traffic light signals

28. Traffic light signals to Diagram 3014 in the Regulations shall be provided at each corner of the crossing, and shall be suitably located, configured and aligned to warn road users that a train is approaching. The lights of the traffic light signals shall be provided with hoods to reduce the effect of sunlight glare.
29. A traffic sign to Diagram 775 in the Regulations shall be provided beneath the traffic light signals.
30. Light signals for pedestrians to Diagram 4006 in the Regulations shall be provided and shall be suitably located, configured and aligned to warn pedestrians and other footway users that a train is approaching.

Trespass prevention

31. Anti-trespass guards shall be provided adjacent to both sides of the crossing surface to deter trespass onto the railway. The guards shall extend the full distance between the fences on each side of the railway.

Schedule 3 – Protective equipment provided by the local traffic authority on the approaches to the crossing

Carriageway and any footways

32. Taking into account the applicable speed limits and road conditions, the road surface on each approach to the crossing shall be constructed and maintained to reduce the risk, so far as is reasonably practicable, of vehicle drivers losing control of their vehicles.
33. The vertical profile and surface of the carriageway and any footways approaching the crossing shall be maintained in a good and even condition.
34. The vertical profile and surface of the carriageway and any footways approaching the crossing shall, in co-operation with the operator, be kept consistent with the surface of the crossing and any footways to enable safe passage of road users over the crossing.

Road markings

35. The centre line of the carriageway shall be marked for a distance of approximately 14 metres on the southern side of the railway measured along the centre of the carriageway from the stop line with road markings to Diagram 1013.1 version A in the Regulations.
36. The centre line of the carriageway shall be marked for a distance of approximately 30 metres on the northern side of the railway measured along the centre of the carriageway from the stop line with road markings to Diagram 1013.1 version D in the Regulations.
37. The centre line shall be continued for a distance of approximately 18 metres on the southern side of the railway measured along the centre of the carriageway from the ends of the road markings described above with road markings to Diagram 1013.1 version D in the Regulations.
38. The centre line shall be continued for a distance of approximately 60 metres on the southern side of the railway and approximately 18 metres on the northern side measured along the centre of the carriageway from the ends of the road markings described above with road markings to Diagram 1004.1 in the Regulations.
39. At least one road marking to Diagram 1014 in the Regulations shall be marked on the carriageway in a suitable position on the approach side of the road markings described above on each side of the railway.

Traffic signs

40. Traffic signs to Diagrams 770 and 773 in the Regulations shall be provided together in a suitable position on the left-hand side of the carriageway on each approach to the crossing. Traffic signs to Diagrams 770 and 773 (permitted variant) in the Regulations shall be provided together on the right-hand side of the carriageway on the southern side of the railway, positioned to face traffic approaching from the road to the south.
41. Traffic signs to Diagrams 782 in the Regulations (including any first associated plate legend) shall be provided in a suitable position on the left-hand side of the carriageway on each approach to the crossing.

Schedule 4 – The operation of the crossing by the operator

42. The protecting signals shall be controlled from the control point.
43. Signalling controls for the level crossing shall result in the crossing being clear of road users and obstructions before a train arrives.
44. Visual indicators and audible alarms shall be provided at the control point to indicate the condition of the crossing.
45. The visual indicators at the control point shall show when:
 - a. standby power is in use or 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.

46. The audible alarms shall sound if:
 - a. any barrier is horizontally dislocated when in the fully lowered position;
 - b. the main power supply fails;
 - c. all the red traffic light signals facing in one direction fail.
47. Under normal operation, when a route is set from the protecting signal over the crossing and a train is approaching, the sequence of events shall be:
 - a. the barriers shall lower automatically;
 - b. the obstacle detection system shall check for road users and obstructions on the crossing;
 - c. the right-hand side barriers shall rise automatically if a road user or obstruction is detected on the crossing after the barriers have fully lowered to allow the release of the road user and obstruction;
 - d. the protecting signals shall only be cleared to a proceed aspect if the crossing is confirmed to be free of road users and obstructions.
48. The crossing barriers shall rise automatically and simultaneously after the train has traversed the crossing unless the protecting signals have been cleared for another train.
49. Where there is a significant risk of road users being struck by or stuck under a lowering barrier, the barrier protection management system shall amend the lowering sequence to prevent any barrier lowering onto a road user.
50. If a train passes any protecting signal at danger and the barriers have not already lowered, the red lights in the traffic light signals shall immediately illuminate, bypassing the amber phase. The barriers shall not automatically lower.

Closure sequence

51. When automatic barrier lowering is initiated or the 'lower' control is selected, the sequence of events to close the crossing to road users shall begin. The normal sequence shall be:
 - a. the amber lights shall immediately show and the audible warning for road users shall begin. The lights shall show for approximately 3 seconds;
 - b. immediately the amber lights are extinguished the intermittent red lights of the traffic light signals shall begin to flash and, if provided, the pedestrian light signals shall show at the same time;
 - c. 4 to 6 seconds later and if the obstacle detection system confirms the crossing is clear the left-hand side barriers shall begin to descend and take a further 6 to 10 seconds to reach the lowered position. The right-hand side barriers shall then begin to descend and shall take a further 6 to 10 seconds to reach the lowered position;
 - d. the audible warning shall stop when all the barriers are fully lowered.

Opening sequence

52. The intermittent red lights of the traffic light signals and, where provided, the pedestrian light signals, shall be extinguished before the barriers have risen to their fully raised position.

53. If any barrier fails to rise from the lowered position the intermittent red lights of the traffic light signals and, where provided, the pedestrian light signals shall continue to show.
54. Should automatic lowering or raising take an abnormally long time an audible and visual warning shall be given at the control point.
55. The operator shall periodically monitor the duration of closures of the crossing to road traffic and shall take action to ensure that the closure times are minimised effectively.

Schedule 5 - Collaboration

Responsibility of operator

56. The operator shall have in place effective arrangements to provide the local emergency services with up-to-date information about the operational status of the crossing to enable those services to plan their response to an emergency without unexpected disruption caused by the crossing.
57. The operator shall give notice in writing to the Secretary of State as soon as the provisions of Articles 3a and 3c of the Order have been met.
58. The operator shall periodically check the legibility and visibility of traffic signs and road markings on the crossing approaches and inform the local traffic authority of any action required.

Responsibility of local traffic authority

59. The local traffic authority shall take appropriate action when informed by the operator that work is required to maintain the legibility and visibility of traffic signs, including road markings, on the crossing approaches.
60. The local traffic authority shall consult the operator before any traffic signs, including road markings, or other road equipment other than those specified in this Order are placed or caused to be placed on the road in the vicinity of the crossing.