

Date: 23 June 2025

Ref: CVLNC018

Email: cvltrackaccess@amey.co.uk

DB Cargo (UK) Ltd
Freightliner Heavy Haul Ltd
Freightliner Ltd
GB Railfreight Ltd
Network Rail
Office of Rail and Road (ORR)
RailAdventure UK Ltd
Rail Express Systems Ltd
Transport for Wales (TfW)
Transport for Wales Rail Ltd
Vintage Trains Ltd
Welsh Ministers

Dear colleague,

**CVL Network – CVL Network Code Condition G1 Network Change Proposal:
Cardiff Bay Electrification System (OLE) Commissioning Cardiff Bay to
Butetown**

This Network Change Notice is issued in accordance with Condition G1.1 of the Network Code and constitutes a formal proposal for a Network Change under that Condition. This Notice is issued to describe specific elements of the overall “CVL Transformation Programme” and is a consequence of having issued a G5 Notice of Intended Scope on 23rd January 2024.

Seilwaith Amey Cymru / Amey Infrastructure Wales Limited (“AIW”) wishes to implement the Network Changes described above and is required under Condition G1 to give notice of its proposal to the parties shown above. Condition G2 allows all affected train operators to consider the scheme and bring to AIW’s attention any matters that concern them regarding the change. Access Beneficiaries may also assess the impact of the proposed change on their business and inform AIW what the direct costs and benefits of implementing the change are likely to be (if any).

This Network Change Notice details AIW's proposals:

Proposed Scheme Title	Proposed Scheme Detail	Appendix*
Energisation of the Overhead Line Electrification system ("OLE") from Heath to Coryton and from Heath for Caerphilly	<p>This energisation event will see all the 25kv and HV distribution assets from the new Queen Street North Junction MPPTSS to Cardiff Bay Buffer stop on the Dn Bay line only.</p> <p>This will see the entry into service of the new OLE, overhead line switches, HV cabling, Note: the Electrical substation at Queen Street North Junction was brought into use at a previous commissioning namely EE3B.</p>	Appendix A
Major Feeding Diagram ("MFD")	Major Feeding Diagram for Core Vally Lines Network	Appendix B

* *Note:* Full details of these works as well as the detailed specification of the scheme is set out in the relevant Appendix to this notice and includes a plan showing where the work is to be done and the parts of the Network and associated railway assets likely to be affected.

In accordance with Conditions 5.7 and 5.12 of Part G of the CVL Network Code, any expansion of the scope of the Transformation Programme, including further detail to previously consulted scope, will be consulted with Access Beneficiaries. As defined by Condition G7 of the CVL Network Code, AIW will follow Condition G1 in order to consult with Access Beneficiaries and to establish changes to the CVL Network.

AIW is proposing these changes as part of the Transformation Programme to increase the capability of the Cardiff Core Valley Lines Network (the "CVL").

In accordance with Condition G1.2(d), AIW is seeking comments from you to establish whether or not you are content for the changes to be implemented. We invite you to consider the proposed scheme and forward your comments to us by **23 July 2025**. If a formal response is not received by this date, it will be deemed that you accept the proposal without compensation.

Costs and Compensation

Condition G2 of the CVL Network Code allows all affected train operators to consider the scheme and bring to AIW's attention any matters that concern them regarding the change. Train Operators may also assess the impact of the proposed change on their business and inform AIW what the direct costs and benefits of implementing the change are likely to be (if any).

Additional Terms and Conditions

Once this G1 Network Change has become an established Network Change (as defined in Part G of the CVL Network Code), AIW may, if it wishes to make any modification to the terms or conditions (including as to the specification of the works to be done, their timing, the manner of their implementation, the costs to be incurred

and their sharing, and the division of risk) on which the change was established, use the following variation procedure:

AIW shall ensure the specific variation (or variations) is formally communicated to all parties to this notice (the original consultation notice) for consideration. The parties to the consultation shall consider and respond to the variation (or variations) in accordance with the procedures set out in Conditions G1 and G2 allowing for the changes in detail that must follow as a result of the procedure applying only to the proposed variation. It shall not be necessary for AIW to re-issue the entire Network Change notice for consultation.

Please respond using the standard form (b), (c), (d) or (e) as appropriate, each of which can be located on AIW's website <https://tfw.wales/projects/consultation-centre/cvl-infrastructure-manager>. Please send all responses electronically to cvltrackaccess@amey.co.uk.

Respondents should clearly indicate if they consider that all or part of their response is "sensitive information" as defined in Part A of the CVL Network Code.

Please let me know if you require any further details to enable you to respond formally to this notice.

If you are no longer the appropriate person in your organisation to receive communications such as this, I would be grateful if you could let me know.

I look forward to receiving your response to enable the progression of this proposal.

Yours faithfully,

Gary

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Appendix A – Proposed scheme for the energisation of the Overhead Line Electrification System (“OLE”) from Cardiff Bay to Butetown Commissioning Event EE3A

Reasons for Proposed Change

As part of the CVL Transformation programme and the requirement to support the introduction of new electric rolling stock on the CVL Network, the railway is being electrified with a 25kV overhead line contact system. The OLE is supported by 25kV substations distributing the electricity around the Network.

The stage of energisation described in Appendix A will bring into service the OLE from Cardiff Bay to Butetown. During later stages the Electrical Control Room (ECR) will expand its control area to cover the electrification infrastructure to Cardiff Bay and Rhymney.

NB This electrification system is of a new discontinuous type. For electric traction to operate in the area the locomotive or rolling stock needs to be certified as compatible with the system. The system does not compromise the running of any type of diesel trains on the CVL Network.

Specification of Works

This energisation event will bring into use all 25kV OLE and HV distribution assets from the limit of electrification between Queen Street South Junction through to the end of the Bay Platform Down site only.

This will see the Entry into Service of all new OLE, overhead line switches, HV cabling, and electrical substations as detailed on the Major Feeder Diagram (“MFD”) (TRAN01-PSP-ZZ-CVL-DDR-Y-EP-000003-S1-P04, see Appendix B).

The 25kV contact system has been taken from Network Rail’s UKMS100 design range. This is an interoperable statement of verification against the Energy National Technical Specification Notice (“ENE NTSN”). The system will be compliant with BS EN 50122-01. The system has a minimum energised wire height, in accordance with GL RT 1210 and Rail Industry Standards (“RIS”) RIS 1853 and RIS 2715.

The part of the electrification system brought into use at this stage does not include any Permanently Earthed Sections (“PES”)

NB Catenary Free Sections (“CFS”) have no overhead contact system at all and trains must pass through with the pantograph lowered. Permanently Earthed

Sections (“PES”) have a physically continuous overhead contact system but the wires are not energised. Trains can pass through PES areas with the pantograph raised.

There are no CFS within the limits of this commissioning event.

The 25Kv route runs as follows:

CAR 00.325Km Queens MPTSS through to the CAM 99.014km Dn route of 25kV cable

Proposed Timescale

The works at Cardiff Bay will be undertaken in week 25 of the 2025/26 Railway Calendar, from the 19th to 21st September 2025.

Amendments to Sectional Appendix

Sectional Appendix Changes are shown in Annex 2 to this document.

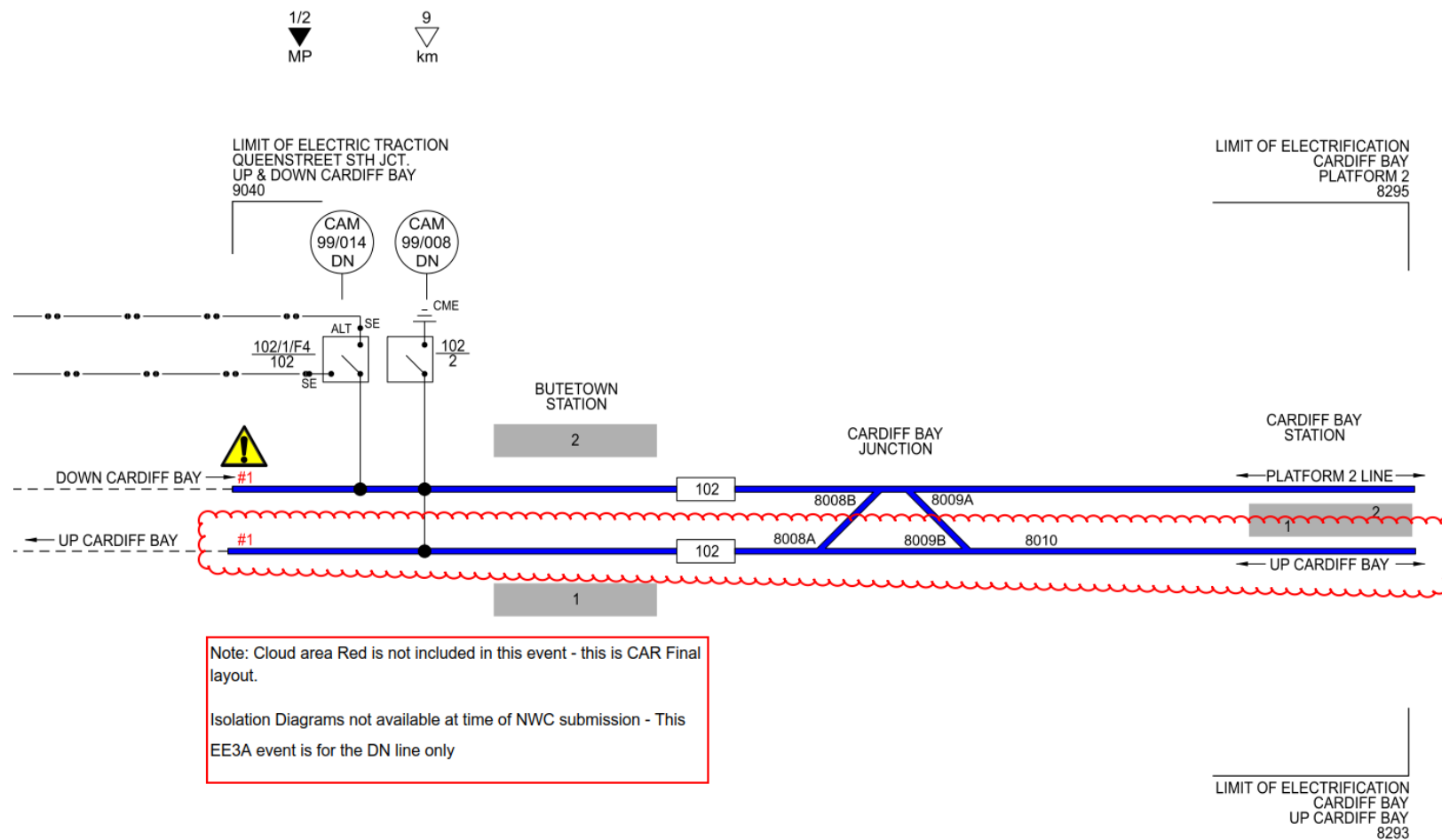
To support the alterations described above, the following revisions will be made to the Western Route Sectional Appendix (March 2025).

The new requirements are shown in **Red** font

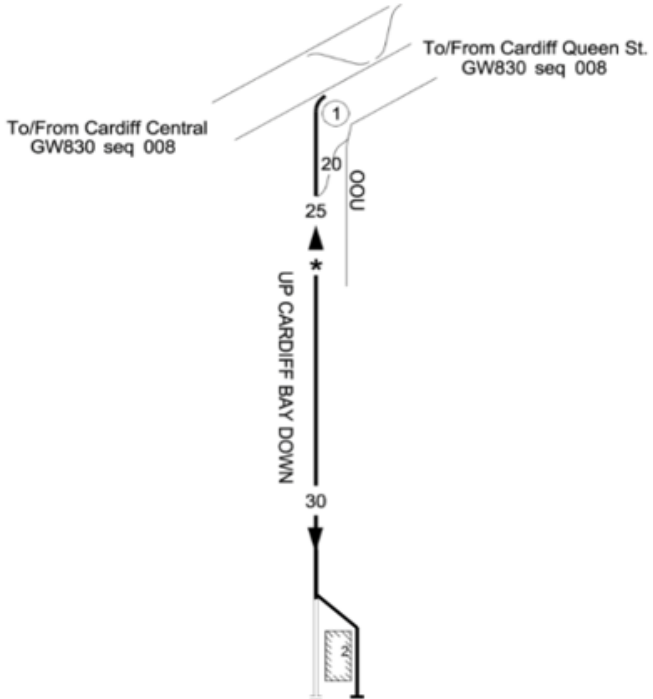
Changes to Operating Instructions

Section diagrams (see Annex 1 and 2 to Appendix A)

Annex 1 Section Diagram for the Energisation of the OLE Bay to Bute Town (Dn only)



Annex 2 – Sectional Appendix change

LOR	Seq.	Line of Route Description	ELR	Route	Last Updated
GW839	001	Queen St. South Jn to Cardiff Bay	CAM	Wales - TFW CVL	05/03/2024
Location		Mileage M Ch	Running lines & speed restrictions		Signalling & Remarks
Queen Street South Jn		0 66			<p>OT RA6 Wales Rail Operating Centre (Valleys) (CF) AC CVLIC</p> <p>① - Up/Down Cardiff Bay Chord</p> <p>Bay Line electrified</p> <p>Platform 151 metres, 165 yards</p>
Limit of Electrification		0 48 *			
		0 41			
CARDIFF BAY/ BAE CAERDYDD		0 02			

Seilwaith Amey Cymru / Amey Infrastructure Wales Limited is a company registered in England and Wales with registered number 11389544 and registered office at Transport for Wales CVL Infrastructure Depot/Ty Trafnidiaeth, Treforest Industrial Estate, Gwent Road, Pontypridd, United Kingdom, CF37 5UT

