Aboyne Bridge - Modular Bridge Option

Public Meetings: 29th January and 4th February 2026

Aberdeenshire COUNCIL | wsp

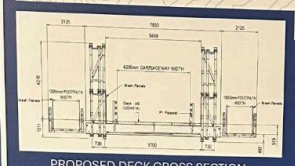
The vehicle crossing proposal consists of a modular steel structure constructed parallel to the existing Aboyne Bridge. The structure comprises of a single lane carriageway with suspended footpaths on either side of the road.

Bridgeview Road would be realigned using an earthwork embankment with flood relief culvert units, providing a similar cross section to the existing structure mitigating additional flood risk.

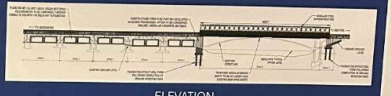
The proposed structure connects to Charlestown Road via a signalised junction accommodating up to 16.5m long articulated vehicles. Due to alignment constraints vehicles would only be able to access the new structure from the Aboyne Green end of Charlestown Road.

The modular bridge deck allows the structure to be installed with a reduced time frame and cost compared to traditional bridge decks.

ALIGNMENT PLAN



PROPOSED DECK CROSS SECTION



ELEVATION

PROPOSED CHARLESTOWN ROAD JUNCTION ALIGNMENT

Option 1 – Discounted

Accommodates up to 16.5m long articulated vehicles to/from both Charlestown Road and Bridgeview Road. Option discounted due to large 3 phased signalised zone with poor intervisibility.

Option 2 – Discounted

Junction restricted to small vehicles only (3.5t) with reduced overall footprint. Option discounted due to limited vehicle size.

Option 3 – Discounted

Charlestown Road widened to accommodate up to 16.5m articulated vehicles allowing for a reduced signalised zone. Option discounted due to substantial additional required works.

Option 4 – Selected Alignment

Option provides no vehicle access to/from the new bridge and Bridgeview Road; however, alignment caters for up to 16.5m long articulated vehicles. Allows for a reduced two phased signalised junction.

Visit our project website by scanning the QR code or visiting **www.engage.aberdeenshire.gov.uk/aboyne-bridge**

Aboyne Bridge – Modular Footbridge Option

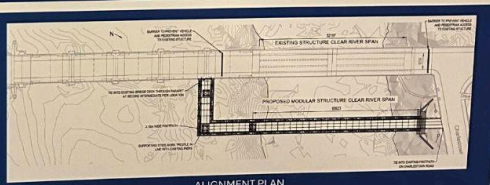
Public Meetings: 29th January and 4th February 2026

Aberdeenshire COUNCIL | wsp

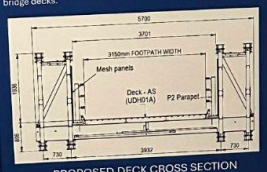
The pedestrian crossing option consists of a modular steel structure constructed parallel to the existing Aboyne Bridge. The structure comprises of a 3.15m width pedestrian footpath.

The proposed structure connects to the exiting footpath on Charlestown Road, and ties into the existing structure beyond the critical main river span.

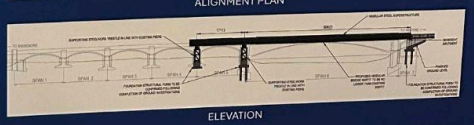
The modular bridge deck allows the structure to be installed with a reduced time frame and cost compared to traditional bridge decks.



ALIGNMENT PLAN



PROPOSED DECK CROSS SECTION



ELEVATION

MODULAR PARALLEL BRIDGE DECK EXAMPLE

To aid visualisation of both the pedestrian and vehicle modular bridge options, the photographs shown here provided a recent example of the installation of a parallel modular bridge deck. The structure was installed due to the deterioration in the condition of the original concrete structure.

EXAMPLE OF PARALLEL BRIDGE DECKS

OVERHEAD VIEW OF PARALLEL BRIDGE DECKS

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Aboyne Bridge – Existing Bridge Propping Option

Public Meetings: 29th January and 4th February 2026

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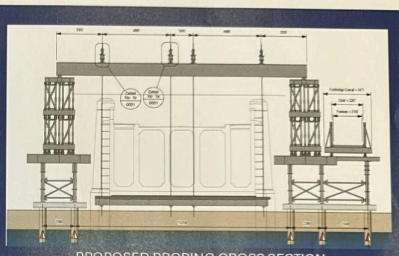
wsp

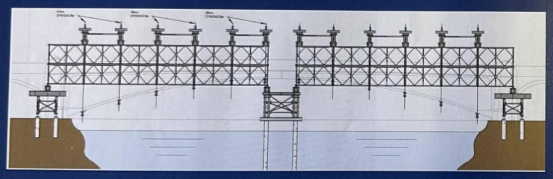
Intrusive investigations carried out to Aboyne Bridge in 2025 found elements of the structure to be in a worst condition than indicated through previous investigations. As a result, strengthening and repair of the existing structure without first propping the river span is considered to be unfeasible.

A temporary works specialist has been engaged to develop a temporary propping solution to support the weight of the existing structure whilst a comprehensive structural refurbishment can be safely carried out. Images show the outline concept design which has been developed. The design consists of a parallel proprietary truss system, cross beams and hangers. The temporary propping allows large elements of the existing reinforced concrete structure to be broken out and replaced.

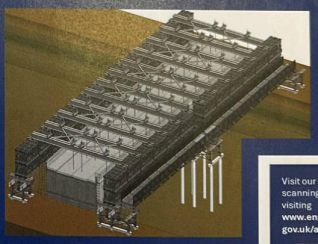
The temporary propping system also includes a temporary footbridge to maintain pedestrian access during the refurbishment works.



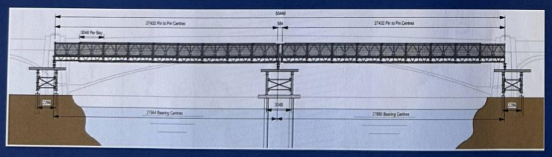
PROPOSED PROPING CROSS SECTION



ELEVATION ON PROPING SYSTEM



3D VIEW



ELEVATION ON TEMPORARY FOOTBRIDGE

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