03 Design Development

3.2.5 Design Inspiration

The design of the Pontcysyllte Aqueduct is the reference from which we have drawn our inspiration. The proposals have been developed to respect it's elegance and heritage strength, concluding in a 'respectful' design solution to the steps, over some of the more bold design options also explored.

Figure 03-8 shows some of the detailing developed during the original design process.

3.2.6 Materials - Steps and Handrail

In designing the stepped access, we considered all best practice guidance including Part K and M building regulations, Access for All Design Guide (Environment Agency), Easy Access to Historical Landscapes (Historic England.

We also held several Construction Design Management (CDM) workshops to explore the opportunities for reducing the number of handrails, concluding that a central handrail was a compliant option that minimises visual clutter and the impact to the heritage setting. These workshops also discussed the number of steps in a flight, the landings between the steps and the importance of regular height riders, regular depth of trends and designing the flights of steps with the same number of steps in each flight to standardise the route and provide more certainty to the user.

We carefully considered the form of the aqueduct, such as the mass, dimensions and geometry of the masonry, and the detail of the hand-tooled masonry. This is reflected in the final selection of the proposed materials.

Another key aim was to organically stitch the steps into the landscape setting and that of the Aqueduct. This has been achieved by feathering the steps on one or both of the edges, allowing the surrounding vegetation to merge the edges of the steps, therefore embedding the steps into the landscape.

Initial concepts looked at many alternative materials and configurations for the steps, including:

- feathering the edge of the steps into the landscape to flow organically into the woodland setting and localised topography.
- using materials which will pick up on the industrial heritage of the aqueduct, such as the profile of the handrail and supporting uprights reflecting the detailing

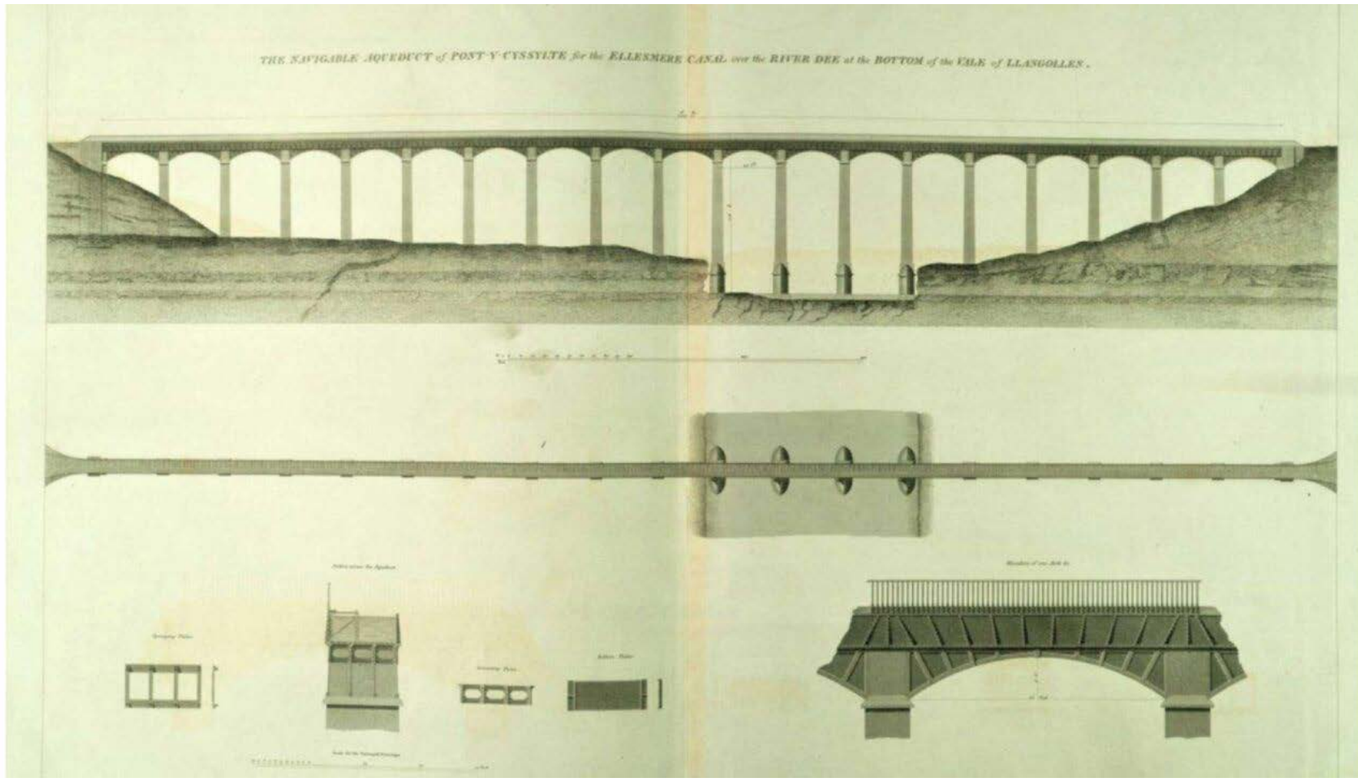
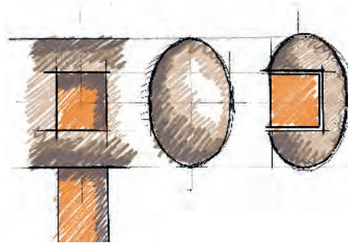


Figure 03-8: The Thomas Telford designs for the Pontcysyllte Aqueduct (Source reference: https://www.pontcysyllte-aqueduct.co.uk/object/documents/



Pier breakwater



Early sketch ideas for handrail profile based on pier breakwater

Figure 03-9: Exploring detailing of the aqueduct in the design of the handrails







Figure 03-10: Early step precedents and concept ideas

of the aqueduct.

- considering using ‘industrial’ materials such as CorTen for the edging of the steps and landings and for the handrails.
- exploring wooden and metal handrail options in terms of aesthetic, comfort, quality, durability and suitability to a heritage setting.
- considering different materials for the steps such as high quality pre-cast concrete and natural stone.
- comparing different stone samples on site in order to best match the existing materials.
- exploring different methods of construction of the steps, for example separate tread and riser infilled with bonded gravel or solid stone.
- locations for handrails, settling on central handrail allowing support both left and right in order to minimise visual clutter.
- different options for the type of gravel surfacing to be used on the landings/pathways in order to best match in with the existing materials in and around the site.

Some of the early precedents, many alternative solutions considered and design development ideas are shown in Figures 03-8 to 03-14

More detailed descriptions of the design choices made and the reasoning behind them is given in Section 5 Design Proposals.



Figure 03-11: Alternative path treatments



Figure 03-12: Early handrail precedents

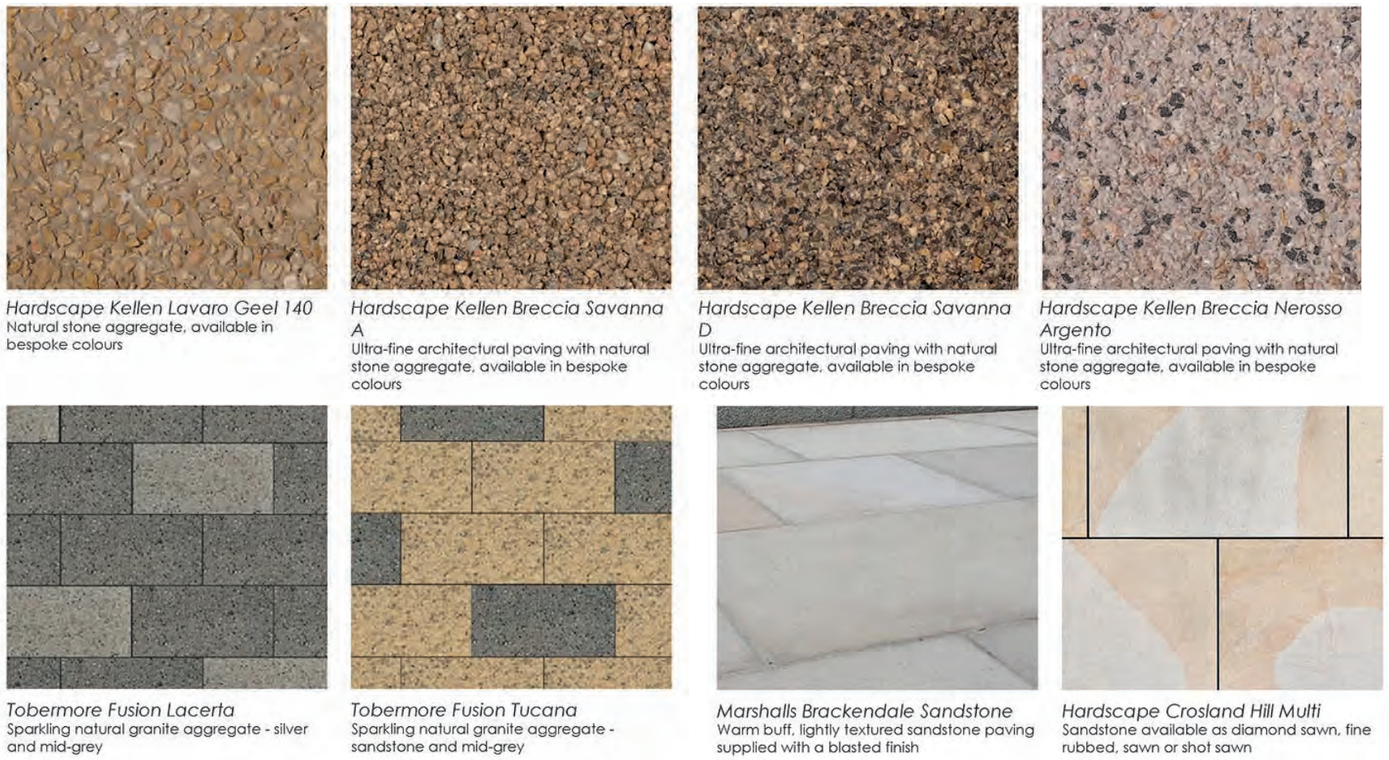


Figure 03-13: Some of the materials considered for construction of the steps



Figure 03-14: On-site comparison of materials to local vernacul

3.3 Consultation

3.3.1 Summary of Consulation Process

Extensive consultation was carried out with Key Stakeholders. A sample of the consultation materials is shown in Figure 03-15.

Below is a summary of the consultation process undertaken:

Wrexham CBC

- Planning pre-App process including written submission of outline proposals and site visit resulting in response from Wrexham County Borough Council (WCBC) on 31st July 2023.

Llangollen Rural Community Council (LRCC)

- Nicola Lewis-Smith and Phil Mabey met with LRCC on 5th December 2023 to present proposals for the steps.

Cadw

- Regular engagement has been undertaken with the Regional Inspector of Ancient Monuments and Archaeology throughout the design process. This work includes both the concept and pre-planning stages, with feedback provided to the design team for incorporation into the proposals.

Pontcysyllte Aqueduct & Canal World Heritage Site Board

- Proposals were presented on 14th December 2023.

Pontcysyllte Aqueduct & Canal World Heritage Site Planning, Landscape and Conservation Group

- Proposals were presented to the meeting on 14th September 2023 followed by a site visit.
- An update was also provided to the Group by Marcus Chaloner on 29th February 2024.

Public consultation

- A public consultation event was held at the Canal & River Trust Trevor Basin Visitor Centre on 19th February 2024.
- A series of further public consultation events were undertaken led by WCBC at local Community Centres in February 2024.

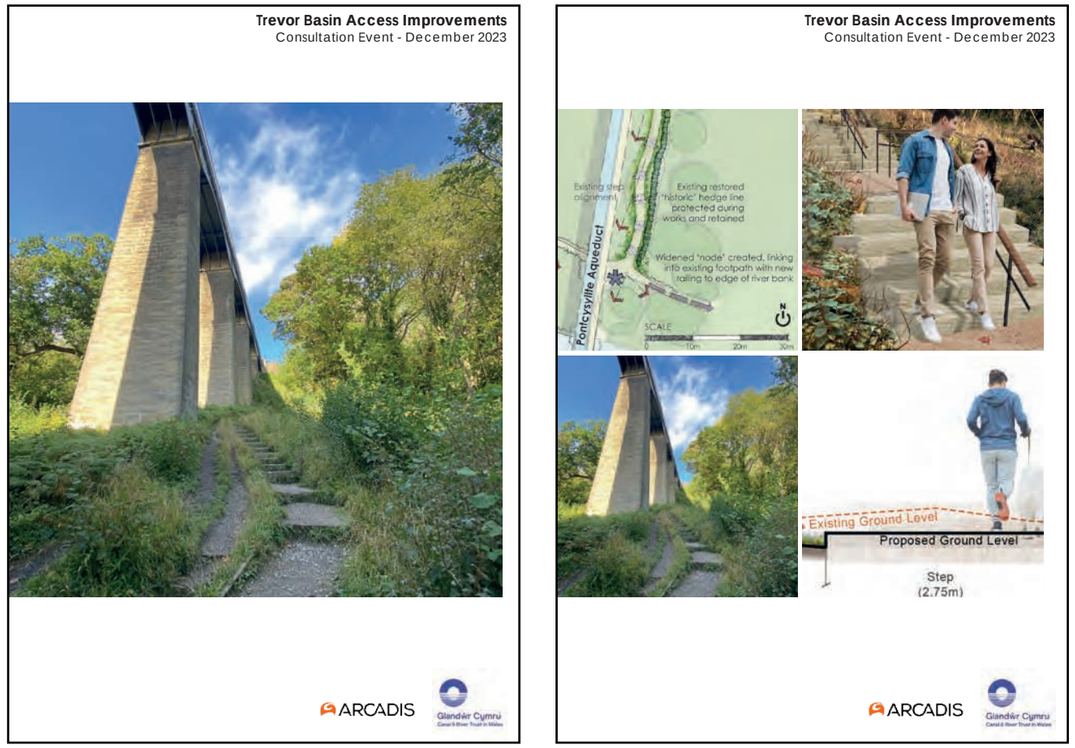


Figure 03-15: Example consultation materials

3.3.2 Consultation Feedback

Overall, all consultees feedback from each WCBC consultation was that the proposals were well received.

The Canal & River Trust met with Cadw's Regional Inspector of Ancient Monuments and Archaeology, Northeast Wales and Borders, Guy Salkeld, on 5th April 2024.

On reviewing the progressed design approach and proposed works and considering the proposed materials to be used, he welcomed and supported the approach and the proposed solution, and confirmed that Cadw would support the proposal.

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04 Informing the Design