

Introduction by Professor Sadie Morgan

The summer of 2017 marks the start of a new phase of design work on HS2. Civil engineering contractors are now on board to begin detailed designs for construction of the Phase One route from London to Birmingham. This work has been divided between four consortia, each taking responsibility for a section of the route, including tunnels, cuttings, embankments, viaducts and bridges.

At the same time, the government has introduced the High Speed Rail (West Midlands to Crewe) Bill into parliament – for Phase 2a of HS2. Formal consultation is now under way for this section of the route to allow the public, local authorities and other stakeholders to give their views on the proposals. The process allows local priorities and concerns to inform refinements to the design through ‘assurances and undertakings’ made in response to petitions.

Equally important to the experience of future passengers using the new railway will be the outcome of a procurement process launched by the Department for Transport to appoint a railway operator for the West Coast Mainline, including HS2 high speed services between London and Birmingham.

The panel's role

The HS2 Independent Design Panel will be providing advice on all these areas of design work, as well as continuing work to develop parliamentary designs for Phase 2b from Crewe to Manchester and from Birmingham to Leeds.

On Phase One, the panel will comment on contractor designs for key civil engineering structures and areas of significant environmental or social impact. On Phase 2a, the panel will advise on design issues being resolved through the hybrid bill process. The panel has also agreed to take on an expanded role in commenting on customer experience, including preparation by HS2 Ltd for rolling stock design.



Railway line near Edale in the Peak District
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Lessons learned from Phase One to benefit Phase Two

One of the key messages from the Design Panel to HS2 Ltd at this stage has been the importance of learning lessons from the design evolution of the Phase One route for the benefit of Phase Two. In particular, the panel has highlighted the potential for views from the train to make travelling by HS2 Ltd an enjoyable experience, and for the new railway to become a positive addition to the landscape.

There are many places on Britain's existing rail network where this is the case, for example where the train line from Sheffield to Manchester runs through the Peak District. However, there will only be views from the train on the Phase One route from London to Birmingham for approximately seven minutes of the journey. The panel would encourage HS2 Ltd to aim to improve on this for Phase Two, celebrating the new railway through the quality of its design, rather than hiding it behind embankments.

Contractor 'hot starts'

The panel has welcomed the approach taken by HS2 Ltd to engaging the newly appointed Phase One civil engineering contractors in 'hot start' sessions on their role in meeting the aspirations of the HS2 Design Vision. Consultants DK&A have been responsible for developing sessions in partnership with the HS2 Ltd Design directorate. These form part of a wider programme of contractor 'hot starts' organised by the HS2 Ltd Phase One directorate. Whilst supportive of the emphasis on design quality, the panel recommends that the time allowed for contractor design should be revisited. Allowing sufficient time to develop civil engineering designs could result in significant long term gains.

Civil engineering common design elements

Evidence of HS2 Ltd responding in a positive way to recommendations made by the Design Panel can be seen in the civil engineering common design elements work stream. The panel initially commented on this at a meeting in February 2017, raising concerns about the lack of ambition in the solutions presented. Since then, design work has been taken forward by Knight Architects, working with landscape architects MRG Studio. The panel considers the common design elements developed through this process to be best practice, and recommends that this approach should be applied to all relevant work on both Phase One and Phase Two.

HS2 art strategy

The Design Panel has offered its unreserved support to the HS2 art strategy, which promises a comprehensive art programme for HS2. There is a unique opportunity to showcase what the UK excels at – culture in all its forms including art, design, architecture and engineering. The panel calls for the art programme to be endorsed at the highest levels – and for appropriate funding to be made available.

Euston Station

A special Design Panel has been set up for Euston Station, combining members nominated by Camden Council, the GLA, TfL and HS2 Ltd. This group has been invited to comment on design work commissioned by both Camden and HS2 Ltd. Studio Egret West has been appointed by Camden to develop design principles for the station and wider area. Meanwhile, HS2 Ltd's consultants Wilkinson Eyre have been developing a station area masterplan. The panel has encouraged all those involved to work to develop a shared vision for the future of Euston. Given the length of time before Euston Station will be 'complete' the panel has also urged HS2 Ltd to build in flexibility to future proof the masterplan.

Leeds Station

At a meeting in July, the panel welcomed the opportunity to engage with proposals for Leeds Station at an early design stage – and praised the quality of collaboration between the different stakeholders. The panel warmly supports the concept of the approach being driven by the place, and encourages Leeds City Council to be more ambitious in setting out its expectations in order to steer emerging proposals. The panel challenged all those involved to ensure that generous public spaces are created for interchange between high speed and classic rail services. Investigating the potential role of the existing 'dark arches' in the new station was also encouraged, to ensure the qualities of this dramatic and rare asset are captured.

Looking forward

The panel is expecting to be busy over the next few months, with reviews of Phase One civil engineering contractor design work beginning in the autumn. There will also continue to be meetings to discuss route wide topics including: Birmingham Interchange Station; Curzon Street Station; railway catenaries; and several topics relating to sustainability and customer experience.



Frame Projects
Secretariat to the
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