



Department  
for Transport



# High Speed Two Phase 2a: West Midlands to Crewe Design Refinement Consultation

September 2016

Cm 9285

C25



# High Speed Two Phase 2a: West Midlands to Crewe Design Refinement Consultation

Presented to Parliament  
by the Secretary of State for Transport  
by Command of Her Majesty

September 2016



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# Contents

- Foreword 3
- 1. Introduction 5
  - 1.1 Background 5
  - 1.2 Refinement of the Phase 2a route 6
  - 1.3 What we are consulting on 7
  - 1.4 Consultations on working draft Environmental Impact Assessment and Equality Impact Assessment Reports 8
  - 1.5 Next steps 9
- 2. Crewe tunnel extension 10
  - 2.1 Summary of the November 2015 scheme 10
  - 2.2 Issues identified with the November 2015 scheme 10
  - 2.3 Design development since November 2015 11
  - 2.4 Why the Secretary of State is minded to make the change 13
  - 2.5 Question 13
- 3. HS2 to West Coast Main Line Connection spurs south of Crewe 14
  - 3.1 Summary of the November 2015 scheme 14
  - 3.2 Issues identified with the November 2015 scheme 14
  - 3.3 Design development since November 2015 15
  - 3.4 Why the Secretary of State is minded to make the change 17
  - 3.5 Question 17
- 4. Temporary construction facility (railhead) with potential to convert to a permanent maintenance facility near Stone 18
  - 4.1 Summary of the November 2015 scheme 18
  - 4.2 Issues identified with the November 2015 scheme 19
  - 4.3 Design development since November 2015 20
  - 4.4 Why the Secretary of State is minded to make the change 23
  - 4.5 Question 23

5. How to respond to the consultation and next steps	24
5.1 How to respond	24
5.2 Events	25
5.3 What will happen next?	25
5.4 Confidentiality and data protection	25

# Foreword



One of my first steps as the new Secretary of State for Transport was to confirm our plans for HS2. I am pleased to say that we are making excellent progress through Parliament, and are on track to start construction of the first part of the route next year.

We need a better transport system for the 21st century. HS2 will help us deliver that, providing a new north-south spine for our national railway network.

It will create space on our crowded railways and increase connectivity between our cities, supporting growth and regeneration, creating thousands of jobs and bringing our country closer together.

It presents huge opportunities for the UK supply chain. Already, HS2 Limited is letting major contracts and creating jobs. HS2 Limited is working with British businesses, including many small and medium-sized firms, to make sure they are well prepared to bid for contracts and benefit from the project.

There is also potential for HS2 to increase the amount of freight transported by rail – meaning fewer cars and lorries on our roads, cutting congestion and carbon.

Last year, the Government confirmed that it would accelerate the section of the route from the West Midlands to Crewe, now known as Phase 2a, so that it opens in 2027, six years earlier than planned. This means that passengers, communities and cities across the North West and Scotland will realise more of the benefits of HS2 sooner.

Since then HS2 Limited has been working hard to develop the design for Phase 2a, and as part of the process has recommended a small number of changes to ensure the route is of the highest quality and reduces impacts on people and the environment as far as is practicable, while keeping costs down.

Many of these changes are small in scale but some are more significant, altering the local impact of the scheme. To ensure well-informed decision making I have decided to consult on a number of these changes, as we did in 2013 for Phase One.

In each instance, I have considered the options available and indicated my preferred proposal for each refinement, but I want to give those affected the opportunity to make their views known and provide further evidence to inform my decision.

I am launching this consultation today together with two other consultations, on the Phase 2a working draft Environmental Impact Assessment and Equality Impact Assessment Reports.

Work on the design is continuing alongside these consultations which may lead to further changes being identified. The full route will then be published when we deposit the hybrid Bill in 2017, at which point those affected will have an opportunity to comment on the full route.

HS2 is a once in a generation opportunity to transform Britain's railways, and I look forward to continuing engagement in order to make it a reality and ensure that we maximise the benefits of HS2.

A handwritten signature in black ink, appearing to read 'Chris Grayling', with a long horizontal flourish extending to the right.

The Rt Hon Chris Grayling MP  
Secretary of State for Transport

# 1. Introduction

## 1.1 Background

- 1.1.1 High Speed Two (HS2) is a new high speed railway proposed by the Government to connect major cities in Britain. It will be built in phases. Phase One comprises the section of HS2 between London and the West Midlands, and will become operational in 2026. Phase Two extends the line to the north-west and north-east: to Manchester with connections to the West Coast Main Line (WCML) at Crewe and Golborne; and to Leeds with a connection to the East Coast Main Line (ECML) approaching York, completing what is known as the “Y” network.
- 1.1.2 More information about Phase Two of HS2 is set out in the January 2013 command paper “High Speed Rail: Investing in Britain’s Future – Phase Two: The route to Leeds, Manchester and beyond”<sup>1</sup>.
- 1.1.3 From July 2013 to January 2014, the Government consulted on the proposed route for Phase Two. In November 2015, following public consultation, the Government published “High Speed Two: East and West: The next steps to Crewe and beyond”<sup>2</sup>, which outlined the Government’s plan to accelerate part of the Phase Two route from the West Midlands to Crewe, and set out the preferred line of route for what is now known as Phase 2a.
- 1.1.4 Phase 2a is due to become operational in 2027, one year after the opening of Phase One. This is six years earlier than originally planned, bringing more of the benefits of HS2 to the North sooner.
- 1.1.5 A key part of the Government’s vision for HS2 is to improve connectivity across Britain’s railways. The 2015 command paper also highlighted two proposals on improving connectivity which the Government wished to consider further: Crewe Hub; and options to serve Stoke-on-Trent and Macclesfield.
- 1.1.6 The Government believes there could be benefits from better integrating HS2 services with the existing network in a Crewe Hub station. We are working with

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1 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69738/hs2-phase-two-command-paper.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69738/hs2-phase-two-command-paper.pdf)

2 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/480712/hs2-east-and-west.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480712/hs2-east-and-west.pdf)



Network Rail and HS2 Limited to examine options for a Crewe Hub station which would allow additional HS2 services to call at Crewe, address existing constraints, and provide for future growth. This work is on-going, and the Secretary of State is yet to make a decision. Crewe Hub is not included in this consultation document and we will provide a further update on the scheme in autumn 2016.

- 1.1.7 In November 2015, the Secretary of State also asked HS2 Limited to explore how we might best serve Stoke-on-Trent and Macclesfield, including through HS2 services running onto the existing network via the Handsacre Junction. This work is also on-going.
- 1.1.8 The 2015 command paper also set out the intention to take a decision on the route for the rest of Phase Two from Crewe to Manchester and from the West Midlands to Leeds (referred to as Phase 2b) in autumn 2016.

## **1.2 Refinement of the Phase 2a route**

- 1.2.1 Since the Government set out the preferred route for Phase 2a in November 2015, engineers and environmental specialists have continued developing the design of the Phase 2a route to ensure that it is as efficient, cost effective and environmentally sensitive a railway as is reasonably practicable. HS2 Limited, the company set up to develop the scheme on behalf of the Government, has also continued to engage with a number of local stakeholders including local authorities, land owners, environmental bodies, Network Rail and utility companies.
- 1.2.2 This work and engagement has led HS2 Limited to refine the design of the railway, and in a small number of locations propose changes to the design that go beyond simply developing the November 2015 design. It is these changes that we are consulting on in this document, and which are set out below.
- 1.2.3 The Secretary of State has decided to formally consult at an early stage on these proposed refinements. This will allow him to consider the views of the public before making a decision on whether the changes should be included within the design of HS2 which is set out as part of the hybrid Bill for Phase 2a deposited in Parliament.
- 1.2.4 In addition to these proposed changes, HS2 Limited will continue to refine the design of the railway, taking into consideration best practice, views expressed in response to this consultation and the parallel consultations on the Phase 2a working draft Environmental Impact Assessment (EIA) and Equality Impact Assessment (EQIA) reports, and HS2 Limited's ongoing engagement with local communities and other parties with an interest.
- 1.2.5 The continuing design work includes consideration of cost, environmental impacts and technical factors, including finding the preferred vertical alignment. The draft EIA Report published at the same time as this consultation sets out how continuing

design work will examine possible amendments to the design, or possible alternative solutions to the design, where that may be more appropriate. Further detailed engineering studies are ongoing and will be reported in the formal EIA Report.

- 1.2.6 The proposals for the Phase 2a scheme will be deposited in Parliament as part of a hybrid Bill. People specially and directly affected by the proposals will be able to petition Parliament as part of the Bill process. The formal EIA Report, which is deposited alongside the Bill, will also be subject to public consultation.

## 1.3 What we are consulting on

- 1.3.1 The development of a major engineering project such as HS2 involves a process of design refinement right up until the point of construction. When refining the design, HS2 Limited has considered making improvements, where possible, on environmental, technical, service and cost grounds. The majority of these are minor and are reflected in the scheme design whose environmental impacts are set out in the working draft EIA Report, and whose equality impacts are set out in the working draft EQIA Report. These are both being consulted on in parallel to this consultation.
- 1.3.2 However, there are three proposed changes to the design of the route that involve either introducing new operational rail infrastructure that was not envisaged in November 2015, or a significant alteration to the original design that gives rise to new or increased significant environmental effects<sup>3</sup> on people, wildlife, land or property compared to the November 2015 design.
- 1.3.3 The Secretary of State has decided to consult on these proposed changes before making a decision on whether to include them within the design that will be submitted to Parliament alongside the hybrid Bill. This consultation sets out the options examined and the Secretary of State's proposed changes.
- 1.3.4 In summary, the three proposed changes are:
1. south of Crewe, to extend the Crewe tunnel shown in the November 2015 design south by approximately 2100m and re-site the tunnel portal south of the A500 and Weston Lane;
  2. south of Crewe to move the spur lines that connect HS2 to the WCML further south and to extend their length;
  3. near Stone, to build a temporary construction facility (railhead) in-between the proposed HS2 route and the M6, which has the potential to subsequently

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3 A significant environmental effect is defined in 'HS2 Phase Two: West Midlands to Crewe Draft EIA Scope and Methodology Report', see [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/506111/HS2\\_Phase\\_2a\\_EIA\\_Scope\\_and\\_Methodology\\_Report\\_Final\\_for\\_Comms\\_08-03-2016\\_WEB\\_1400.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/506111/HS2_Phase_2a_EIA_Scope_and_Methodology_Report_Final_for_Comms_08-03-2016_WEB_1400.pdf)

become a permanent maintenance facility to replace the Infrastructure Maintenance Depot (IMD) currently shown at Crewe. This proposed change has been included for consultation because of the potential for a permanent facility at the site. Further studies will be carried out to consider the location and the facilities to be included in the proposed scheme and the outcome of these studies will be reported in the formal EIA Report.

1.3.5 The locations for the three proposed changes are shown on the map below.

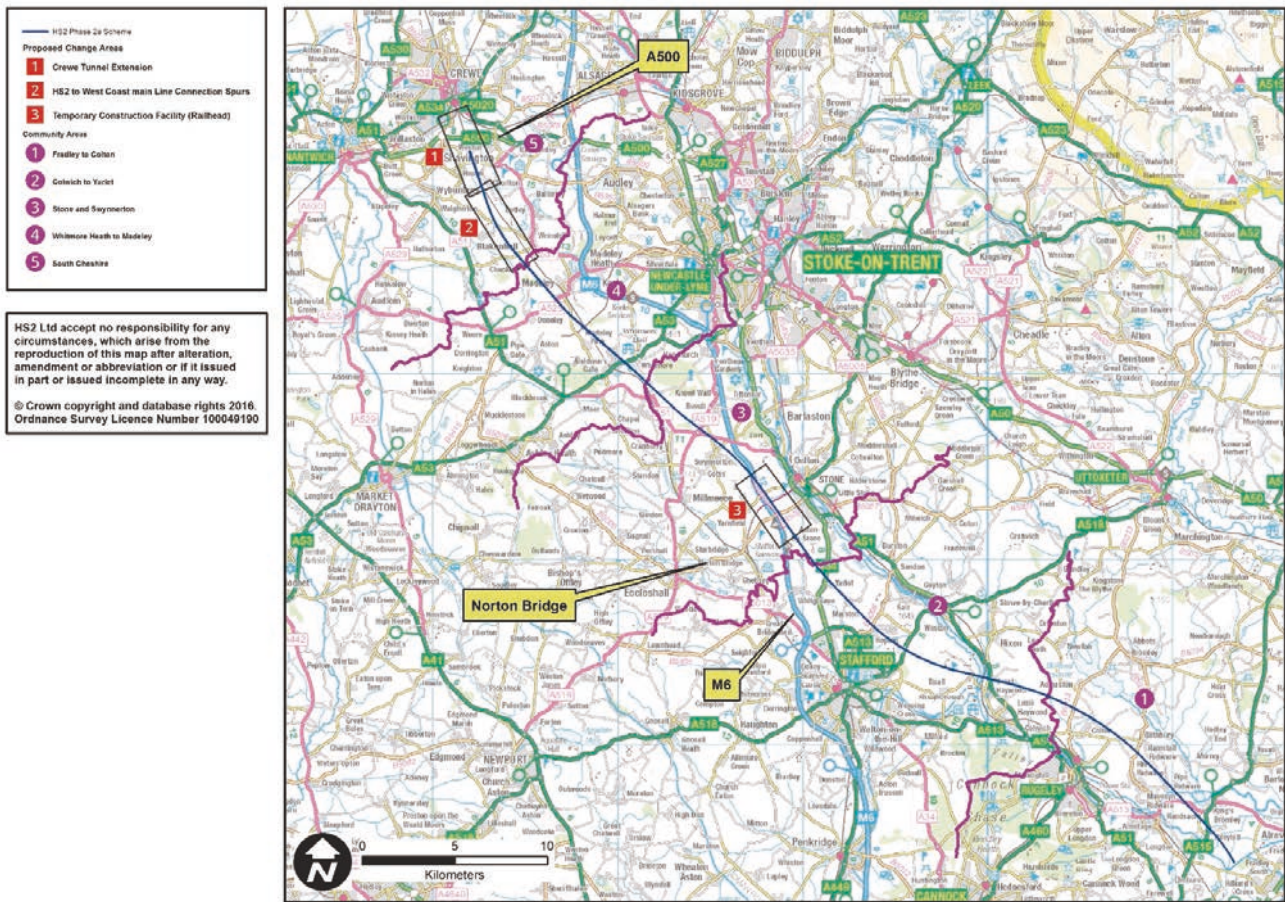


Figure 1.1: Phase 2a route map with proposed changes and community areas

## 1.4 Consultations on working draft Environmental Impact Assessment and Equality Impact Assessment Reports

1.4.1 In parallel with this consultation HS2 Limited is consulting on draft environmental information that will be developed for the formal EIA Report, which will be deposited in Parliament alongside the hybrid Bill by the end of 2017. This working draft EIA Report sets out, at the present level of understanding and development, the likely environmental impacts and, where possible, the likely significant environmental effects of the proposed scheme for HS2 Phase 2a. Following the conclusion of both

consultations, the EIA Report will be updated to reflect the Secretary of State's decisions on which proposed design changes to include in the design submitted alongside the hybrid Bill.

- 1.4.2 HS2 Limited is also consulting on the working draft EQIA Report, which sets out the likely equality impacts of the proposed scheme for HS2 Phase 2a.
- 1.4.3 Further information on the working draft EQIA report, the working draft EIA Report consultation, and a set of maps showing plans and profiles for the Phase 2a route, can be found at [www.gov.uk/hs2](http://www.gov.uk/hs2).

## **1.5 Next steps**

- 1.5.1 The responses to this consultation will inform the Secretary of State's decision on the next stage of design for the Phase 2a route. The Government aims to reach a decision on the design that will be incorporated into the hybrid Bill to allow it to be deposited in Parliament by the end of 2017, along with the formal EIA Report.

## 2. Crewe tunnel extension

### 2.1 Summary of the November 2015 scheme

2.1.1 The design presented in November 2015 for Phase Two of HS2 showed the HS2 lines approaching Crewe above ground before going into a tunnel to pass under Crewe. The Crewe tunnel southern entrance (portal), was located on Network Rail land in the Basford Hall area, in-between the West Coast Main Line (WCML) and the freight sidings near Basford. The HS2 lines approaching this tunnel portal from the south were shown on a viaduct crossing over the entrance to the existing freight depot before passing through further freight sidings and into a deep cutting. The design showed the A500 dual carriageway and Weston Lane bridges demolished and rebuilt on a new alignment and at an increased height to accommodate the HS2 route.

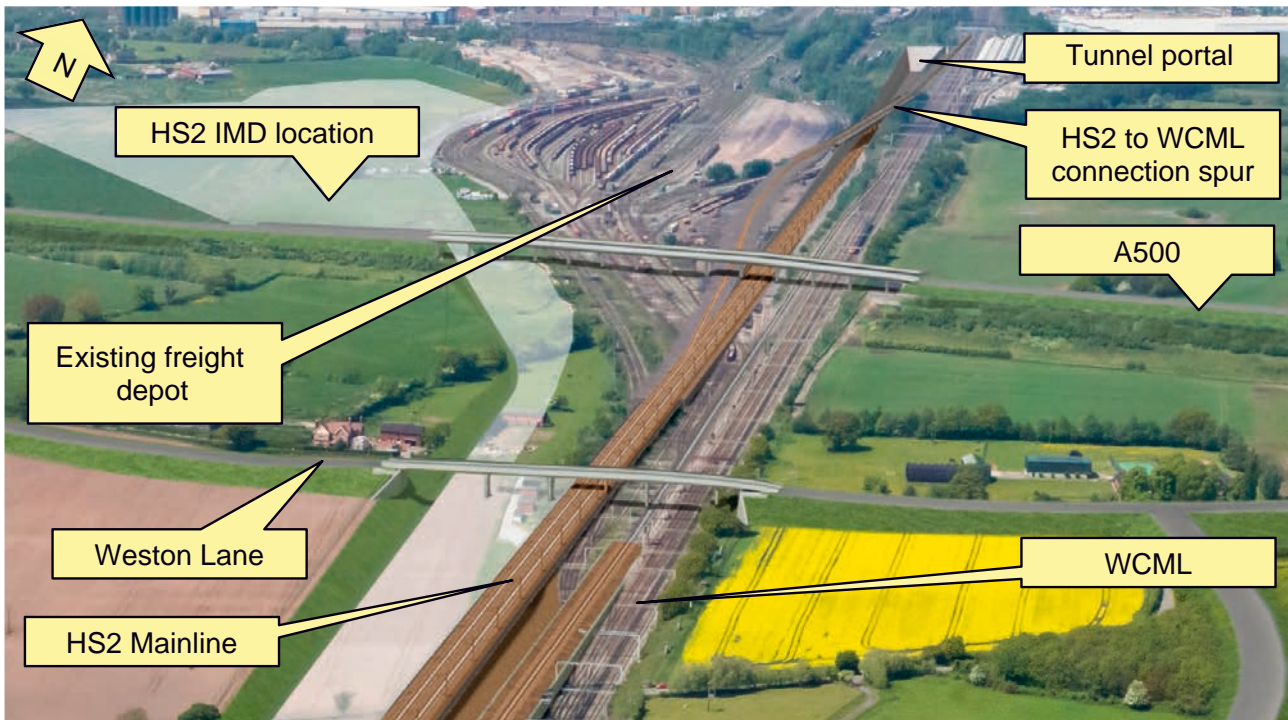


Figure 2.1: Crewe approaches from the south, November 2015 scheme

## 2.2 Issues identified with the November 2015 scheme

- 2.2.1 Since November 2015, further work has identified a number of disadvantages to the November 2015 scheme. The previously consulted route showed the HS2 mainlines running on viaduct over the entrance to Basford freight yard at a similar level to the existing A500, then dropping down to go through Basford freight sidings, before dropping further to the tunnel portal in-between the conventional rail lines at Crewe South Junction. This would require closures of the conventional railway to carry out works for the A500 dual carriageway to be re-built before the existing A500 bridge could be demolished. It would also require re-siting of the existing freight and maintenance sidings.
- 2.2.2 Space for construction, maintenance and emergency service access at the HS2 Crewe South Tunnel portal would be constrained, with conventional railway infrastructure on all sides. This would incur significant expense to the project.
- 2.2.3 Approaching Crewe on a high level embankment and viaduct would have had a significant visual impact.
- 2.2.4 More detailed work on construction planning has shown that it would be less disruptive during the construction period to extend the tunnel to the south, simplifying the civil engineering works required with the previous design and removing the need to relocate the existing rail freight sidings, while remaining broadly cost neutral.

## 2.3 Design development since November 2015

- 2.3.1 HS2 Limited has continued work to consider how best to design the scheme on the approach to Crewe. This development work is geographically linked to the design of the HS2 to WCML connection south of Crewe, which is described in more detail in Section 3.

### The proposed scheme

- 2.3.2 The proposed scheme design south of Crewe lowers the route on the approach to Crewe and moves the tunnel portal to the south of the A500 and Weston Lane. The advantage of this is that it reduces disruption and closures to conventional rail lines during construction and simplifies works to the A500 dual carriageway.
- 2.3.3 Extending the tunnel to the south of Weston Lane requires an additional vent shaft in the east Basford area. The tunnel and vent shaft would be constructed as part of Phase 2b.
- 2.3.4 The proposed scheme seeks to minimise, as far as reasonably practicable, the amount of work required that would be disruptive to the local area as well as the WCML services and existing freight and maintenance operations.

- 2.3.5 The proposed scheme stays as close as possible to the existing WCML to avoid bringing the railway closer to residents and removes nearly all impacts to the conventional railway.
- 2.3.6 The proposed scheme would significantly reduce the complexity of construction, and result in the lowering of the through lines on the approach to Crewe, which would have a lower visual impact on the surrounding area.
- 2.3.7 The cost of constructing the longer tunnel is estimated to be broadly comparable to that of constructing the surface route option (which was set out in the November 2015 route), once the relative scale and complexity of the surface works is taken into consideration.

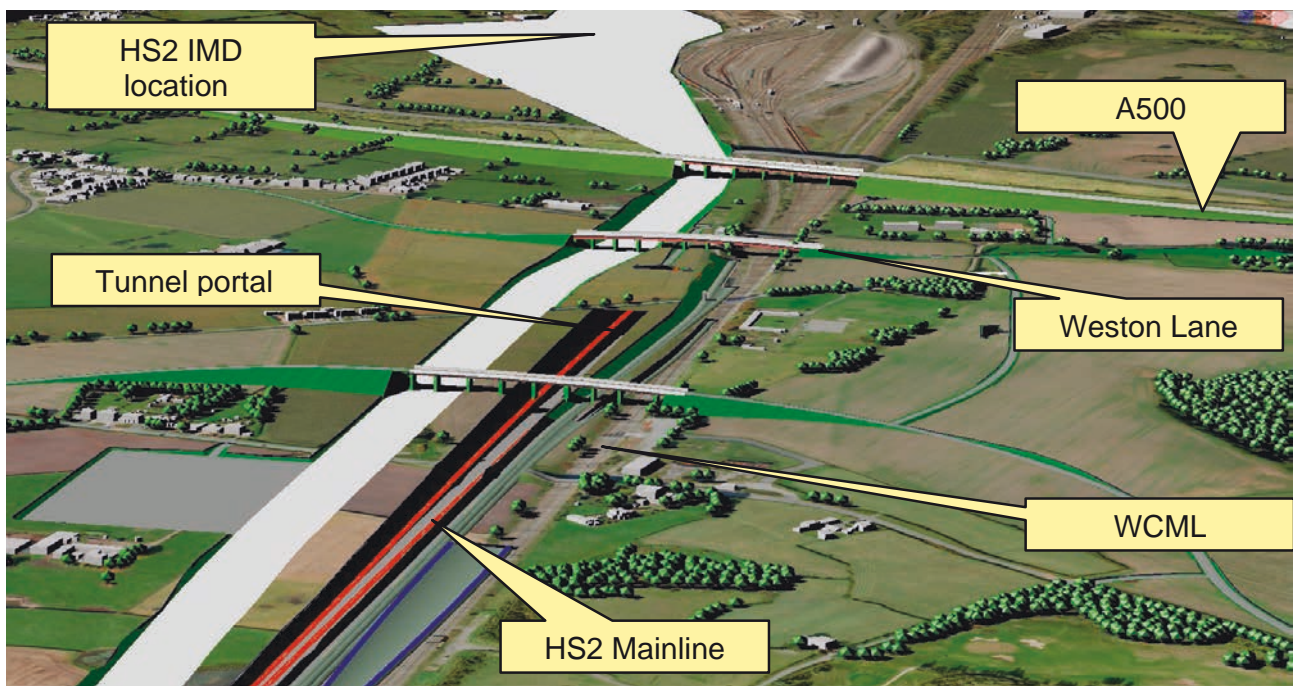


Figure 2.2: Crewe approaches, proposed tunnel extension

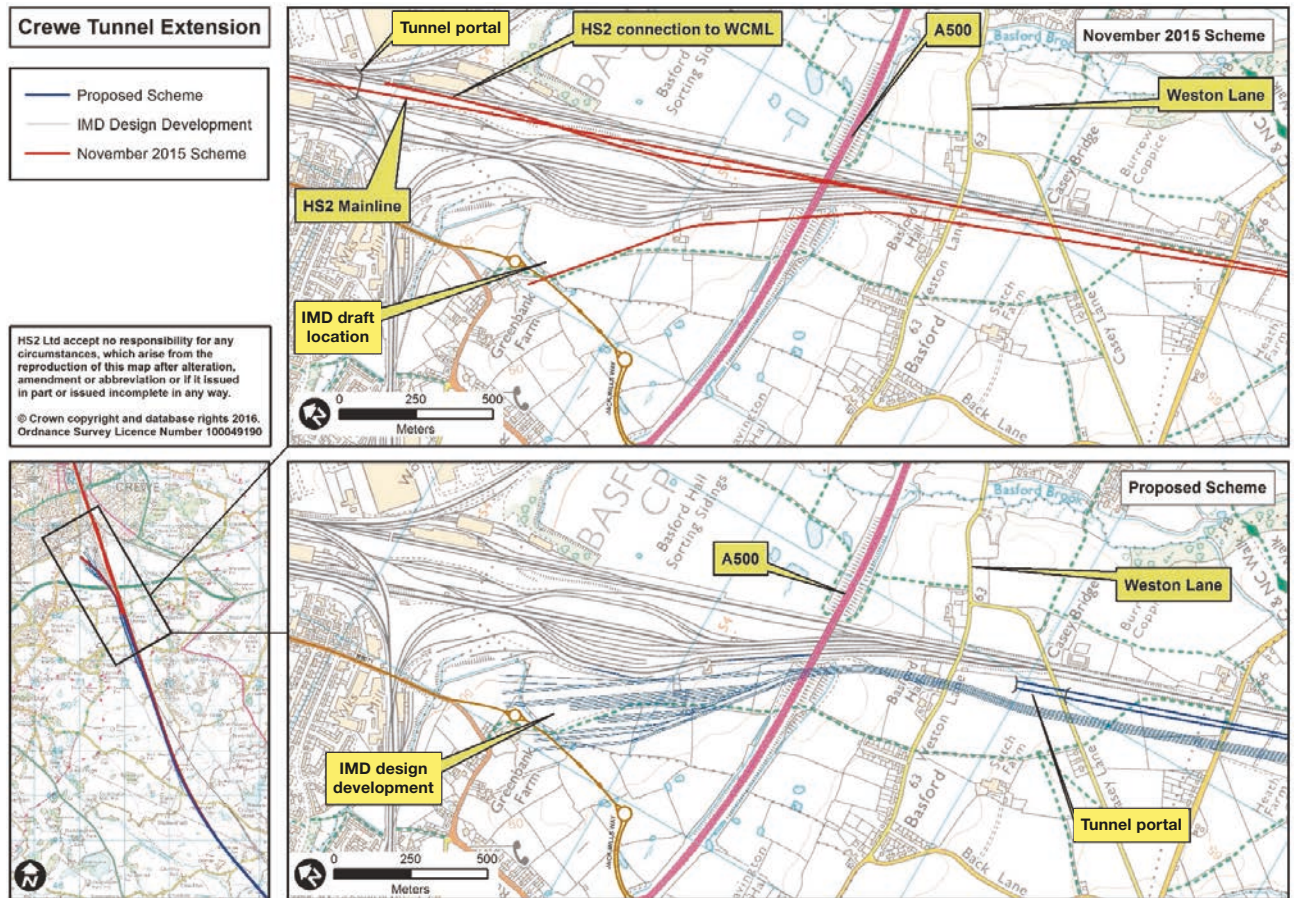


Figure 2.3: Maps showing tunnel portal location in 2015 scheme and proposed scheme.

## 2.4 Why the Secretary of State is minded to make the change

- 2.4.1 The Secretary of State is minded to include the proposed change in the design to support the hybrid Bill, as it delivers the benefits related to the November 2015 design but with reduced disruption to the local community and existing railway.

## 2.5 Question

- 2.5.1 This proposed change consists of extending the Crewe Tunnel south by approximately 2100m and re-siting the tunnel portal south of the A500 and Weston Lane. Please give your views on this proposal, indicating whether or not you support the proposal together with your reasons.



## 3. HS2 to West Coast Main Line Connection spurs south of Crewe

### Proposed change

The Secretary of State is minded to move the spur lines that connect HS2 to the West Coast Main Line (WCML) south of Crewe, further south and to extend their length.

### 3.1 Summary of the November 2015 scheme

- 3.1.1 In the November 2015 design, the route connected to the WCML via two spurs: a 'northbound spur' that connected to the WCML carrying trains towards Crewe and a 'southbound spur' that connected from the WCML carrying trains towards London.
- 3.1.2 Heading north, the northbound spur diverged from the HS2 mainline near Weston Lane to the south of Crewe, before passing over or through some of the existing Basford Hall sidings, over the top of the HS2 main lines and joining to the WCML just south of Crewe South Junction.
- 3.1.3 Heading south, the southbound spur diverged from the WCML near Weston Lane, before passing over a realigned line of the WCML on a viaduct near Newcastle Road and connecting to the HS2 mainlines near Chorlton and Lane End Farm.
- 3.1.4 Both spurs were approximately 3km in length.

### 3.2 Issues identified with the November 2015 scheme

- 3.2.1 In reviewing this part of the design in further detail, it was considered that there were complex engineering and interfacing operational issues associated with the route announced in November 2015. The location of the crossing and connection into the WCML would result in an impact on the operation of the WCML and Network Rail's regionally important freight and maintenance operations at Basford Hall during construction, and would result in the permanent loss of land and loss of rail access to some sidings. These sidings and associated rail connections into the WCML are linked to one of Network Rail's primary maintenance hubs for the entire WCML and are of great importance for regional freight operations. The location shown would additionally require major changes to the surrounding road network.

- 3.2.2 In addition, it has been determined that the length of the spurs could not accommodate overhead electrification ‘neutral sections’<sup>4</sup>, making traction power supply transfer from the HS2 system to the existing railway network’s power system unfeasible. The short length of the spurs would also not allow train controls to be readily transferred between existing railway systems and HS2 systems.
- 3.2.3 As with the Crewe tunnel design refinement in Section 2, the design in this area also necessitated modifications to multiple conventional rail sidings and the rebuilding of the A500 at a higher level. This and the re-alignment of one of the WCML tracks would have been significantly disruptive to existing freight and passenger services during construction.
- 3.2.4 When combined with the Crewe tunnel design refinement in Section 2 that looked to move the southern Crewe tunnel portal further south, moving the spurs connecting HS2 lines to the WCML south also has the advantage of reducing complexity and disruption during construction.

### **3.3 Design development since November 2015**

- 3.3.1 The importance of the interface with existing railway infrastructure, including Network Rail’s freight operations at Basford Hall, and the need to reduce disruption during construction and operation on the WCML, has been instrumental in considering the design in this area. Disruption to the surrounding road network and the proximity of the proposed scheme to Chorlton has also been an important consideration.
- 3.3.2 As part of the development of the design, a refinement to the scheme has been developed which seeks to limit the disruption to the existing rail infrastructure, as well as minimising the land required for construction and operation by keeping the HS2 mainline and spur connections as close to the WCML as possible.
- 3.3.3 This development work is geographically linked to the proposal to extend the tunnel portal south of Crewe, which is described in more detail in section 2.

#### **The proposed scheme**

- 3.3.4 In the proposed scheme, the western track of the WCML would be diverted to the west of the existing WCML and two additional lines would run closely parallel to it. These would primarily carry freight traffic, separating this traffic from HS2 services coming from the HS2 spurs at the point at which the spurs connect to the WCML. This diversion of the WCML western track and the additional two freight tracks would run parallel to and between the HS2 mainline and the existing WCML. At the southern end, the three tracks would connect back to the WCML 900m south of

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4 A neutral section is an insulated section that prevents two differing electrical systems (in this case HS2 and Network Rail currents) from touching, by introducing an electrical clearance (an earth section).

Den Lane Bridge over the WCML. At the northern end, the three tracks connect back to the WCML and Basford Hall Junction and sidings close to the A500.

- 3.3.5 As the new section of the WCML would be built offline for the majority of the diversion length, the effects of construction on the WCML and disruption to WCML passenger and freight services is reduced.
- 3.3.6 The HS2 spurs divert from the HS2 mainline near Checkley Lane, which is approximately 2000m south of the location in the route announced in November 2015. This enables the required grade separated crossing of the HS2 mainline by the HS2 northbound spur to be on a lower alignment and further away from Chorlton. This also allows sufficient space for a 'neutral section' which allows for trains to switch safely between HS2 and WCML traction power systems.
- 3.3.7 The location and reduction in height of viaducts and crossing structures would reduce visual impacts and noise for residential properties located within Chorlton. Construction activities are predominantly limited to the west side of the WCML which would also reduce visual and noise impacts on residential properties.
- 3.3.8 The connection of the HS2 spurs into the WCML is the subject of ongoing detailed engineering and operational studies as part of the development of the design. These studies will consider engineering, environmental and operational impacts, and will be informed through this consultation and continued engagement with Network Rail and other stakeholders. The outcome of these studies and any change to the design will be reported in the formal EIA Report.

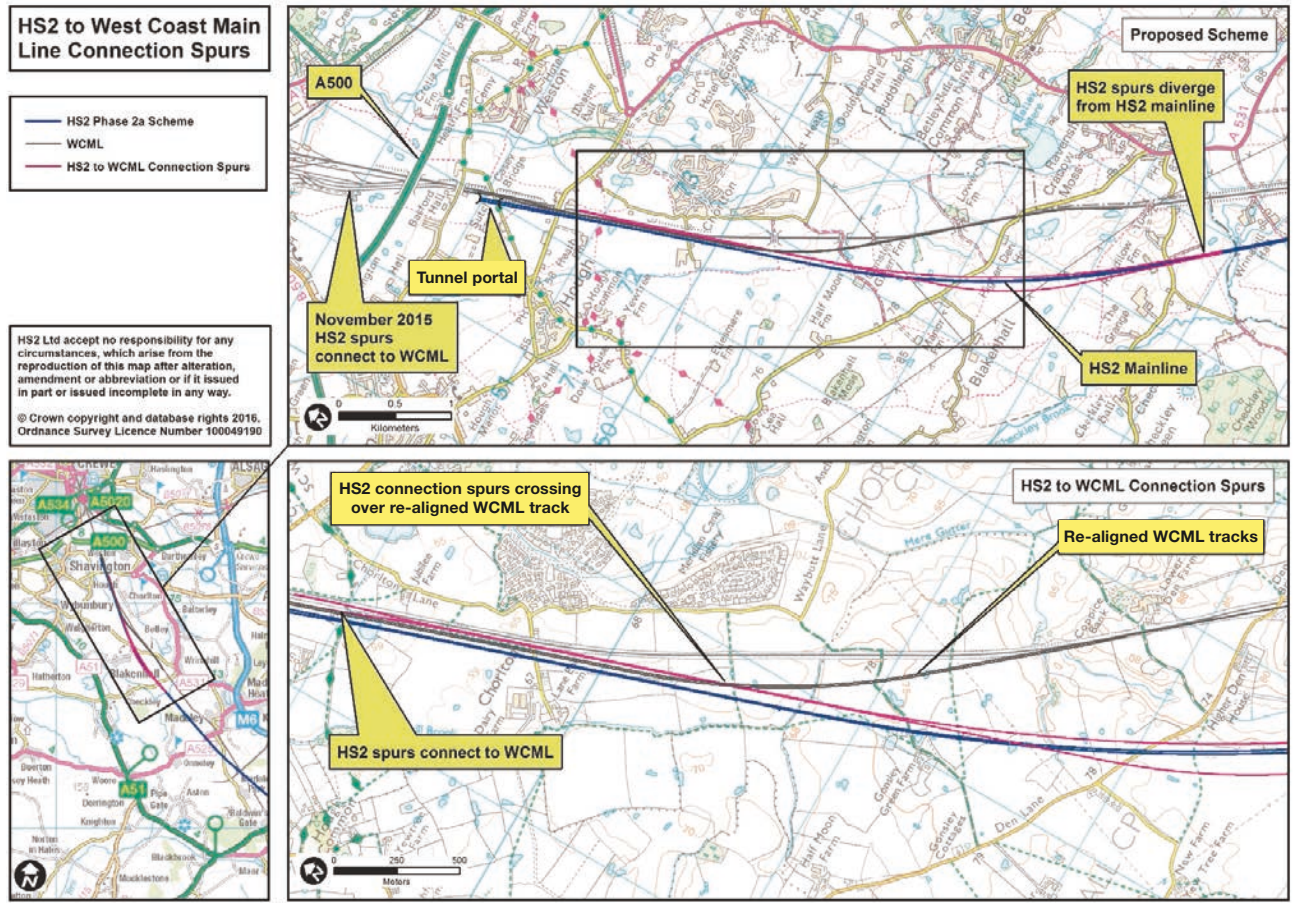


Figure 3.1: Maps showing West Coast Main Line connection spurs, proposed scheme

### 3.4 Why the Secretary of State is minded to make the change

3.4.1 The Secretary of State is minded to include the proposed scheme in the design to support the hybrid Bill, as the proposed spurs extension accommodates the necessary length to transfer trains from HS2 systems to conventional rail systems, and the movement south will cause less disruption during construction and less visual and noise impact to residents of Chorlton.

### 3.5 Question

3.5.1 This proposed change consists of moving the spur lines that connect HS2 to the WCML south of Crewe, further south and extending their length. Please give your views on this proposal, indicating whether or not you support the proposal together with your reasons.

## 4. Temporary construction facility (railhead) with potential to convert to a permanent maintenance facility near Stone

### Proposed change

The Secretary of State is minded to build a temporary construction facility (railhead) near Stone, in-between the proposed HS2 route and the M6, which has the potential to subsequently become a permanent maintenance facility to replace the Infrastructure Maintenance Depot (IMD) currently shown at Crewe. This proposed change has been included for consultation because of the potential for a permanent facility at this site.

### 4.1 Summary of the November 2015 scheme

- 4.1.1 The route for HS2 announced in November 2015 included a permanent Infrastructure Maintenance Depot (IMD) south of Crewe in the west Basford Area. It was considered that this area would also be suitable for a temporary construction railhead, which would serve as the main compound for all railway systems installation works for the Proposed Scheme.
- 4.1.2 Facilities at the railhead would include offices, storage, a rail marshalling yard, pre-assembly depot and railway reception lines to manage trains arriving from the conventional railway. Sidings with storage and construction facilities for the track and overhead line equipment would be provided.
- 4.1.3 The IMD and railhead facilities would share both land footprint and infrastructure including buildings, utilities connections, rail sidings, connections to the conventional railway and environmental mitigation. Sharing of these elements would avoid the cost and environmental impact of providing these facilities separately.

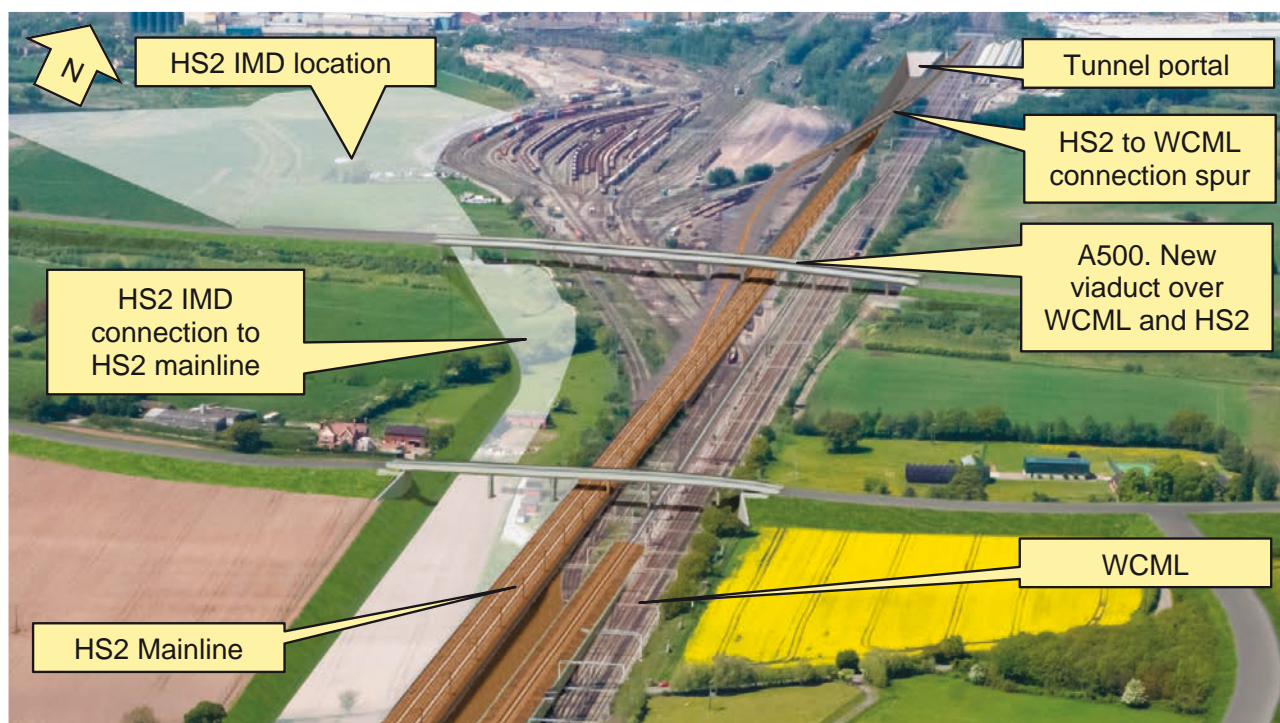


Figure 4.1: Crewe HS2 IMD, November 2015 scheme

## 4.2 Issues identified with the November 2015 scheme

- 4.2.1 Further work on the Phase 2a scheme since November 2015 has identified a number of disadvantages to building the railhead and IMD at Crewe.
- 4.2.2 With a railhead south of Crewe, at the northern end of the Phase 2a route, the rail systems installation could only be delivered in one direction from north to south. Design development work undertaken since November 2015 by HS2 Limited suggests that it would be significantly more efficient to install the railway systems from a central location along the route, which could facilitate construction activities to the north and the south simultaneously.
- 4.2.3 The proposed depot location south of Crewe severs a newly built road that is planned to serve new homes and jobs in this area. The site includes land that has planning permission for up to 370 new homes, some of which have already been built, and covers an area with planning permission for a new business park. It also has the potential to disrupt strategically important Network Rail supply chain facilities at Crewe during construction.

## 4.3 Design development since November 2015

### Temporary construction facility (railhead) near Stone

- 4.3.1 The proposal to re-locate the railhead main compound near to Stone is included in the proposed scheme. The railhead would be located north-west of Stone and immediately adjacent to the M6 on one side and the new HS2 line on the other.
- 4.3.2 The railhead would be used during the construction of the HS2 route. It would serve as the main compound for all railway systems installation works and would be required to allow receipt and stabling of construction trains.
- 4.3.3 The railhead near Stone would be in a good strategic location, located at a mid-way point along the HS2 Phase 2a route and therefore able to support construction activities heading north and south simultaneously. Additionally, it would have good connections to the existing Norton Bridge to Stone Railway.
- 4.3.4 Road access to the railhead compound, including options to access the site from the M6 and/or the local road network, will be considered as part of the ongoing design development of the proposed scheme. The presence of the railhead compound may require the temporary closure of Yarnfield Lane, although options are being considered to determine if use of Yarnfield Lane could be maintained during the operation of the railhead compound.
- 4.3.5 Facilities at the railhead, and associated compound, would include offices, storage, a rail marshalling yard, pre-assembly depot and railway reception loops to manage trains from the national network. Sidings with storage and construction facilities for the track and overhead line equipment would be provided.
- 4.3.6 During railway systems construction, the railhead would be used to import bulk materials, such as track ballast, rail and sleepers, by train via the Norton Bridge to Stone Railway. Materials would be stockpiled within the footprint of the railhead compound. Construction equipment, such as large earth moving machinery, would be used to transport materials from the railhead through the compound.
- 4.3.7 The railway sidings and office area on the site would be illuminated. Lighting at the railways and office area will be designed, positioned and directed to seek to prevent unnecessary disturbance to local residents, existing railway operations or passing motorists.

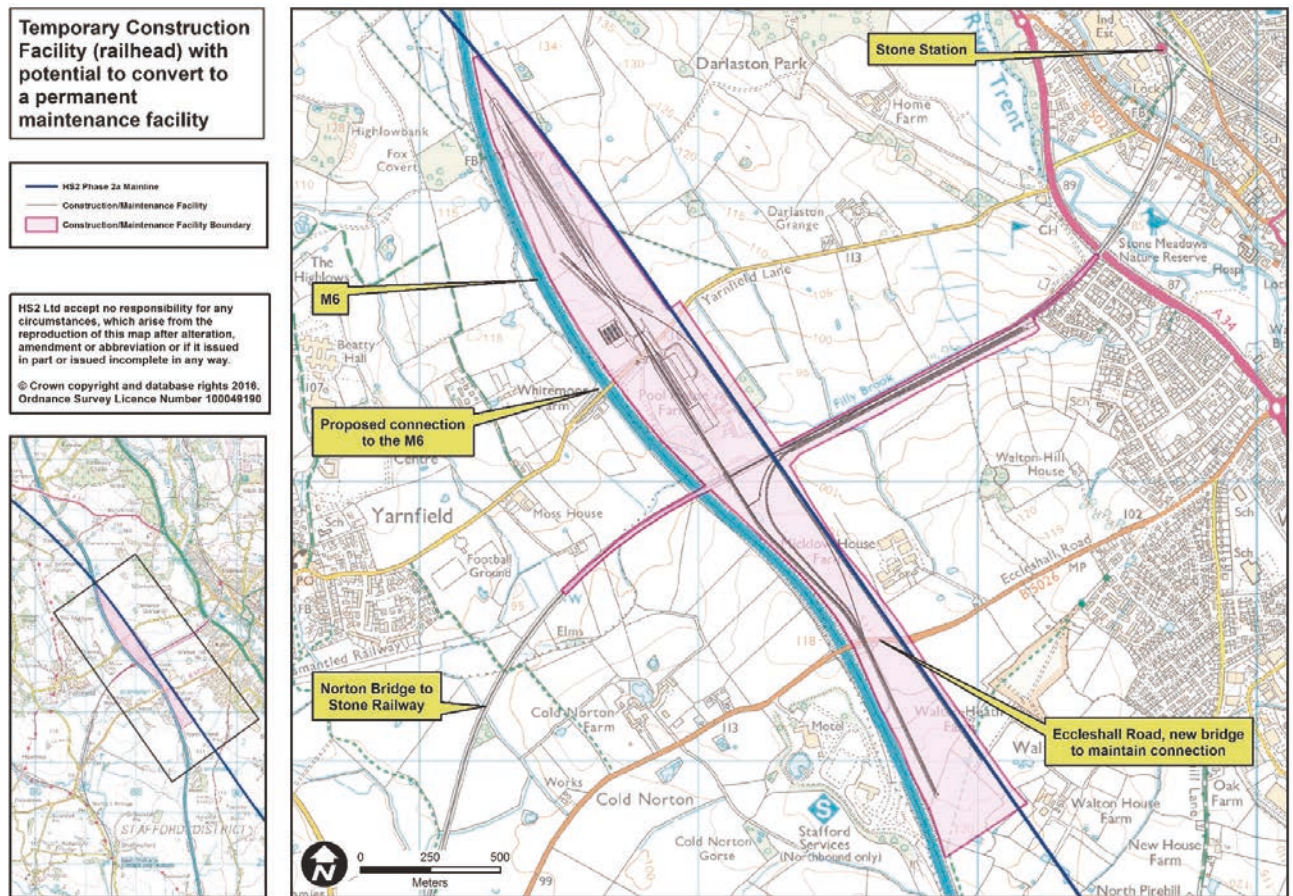


Figure 4.2: Railhead near Stone, proposed scheme

### Permanent maintenance facility near Stone

4.3.8 In identifying the location near Stone as the most appropriate site for a railhead, HS2 Limited has also identified that this location could provide a suitable location for a permanent maintenance facility instead of the IMD currently identified at south Crewe.

4.3.9 A maintenance facility near Stone would be likely to include the following infrastructure:

- a two track siding for plant train stabling, approximately 140m in length;
- a two track siding for ballast train stabling, approximately 250m in length;
- a siding for refuelling and water provision;
- workshop area with associated siding;
- secure compound and covered and open store areas for rail systems parts;
- laydown area for track and overhead line equipment;



- ballast storage area;
  - administration building and staff welfare facilities; and
  - car parking.
- 4.3.10 If the temporary railhead and permanent maintenance facility share a common footprint and infrastructure, this would significantly reduce the cost and the environmental impact of providing these facilities separately.
- 4.3.11 The footprint of a permanent maintenance facility near Stone would be unlikely to require an increase in land from that which has been identified for the railhead and associated compound.
- 4.3.12 Permanent maintenance facilities near Stone could also mean that the maintenance loops located at Pipe Ridware, in the Fradley to Colton area, may not be required.
- 4.3.13 The site of the proposed new railhead near Stone is therefore being considered as an alternative location to south Crewe for a permanent maintenance base. Further studies will be carried out to consider the location and the facilities to be included in the proposed scheme and the outcome of these studies will be reported in the formal EIA Report.

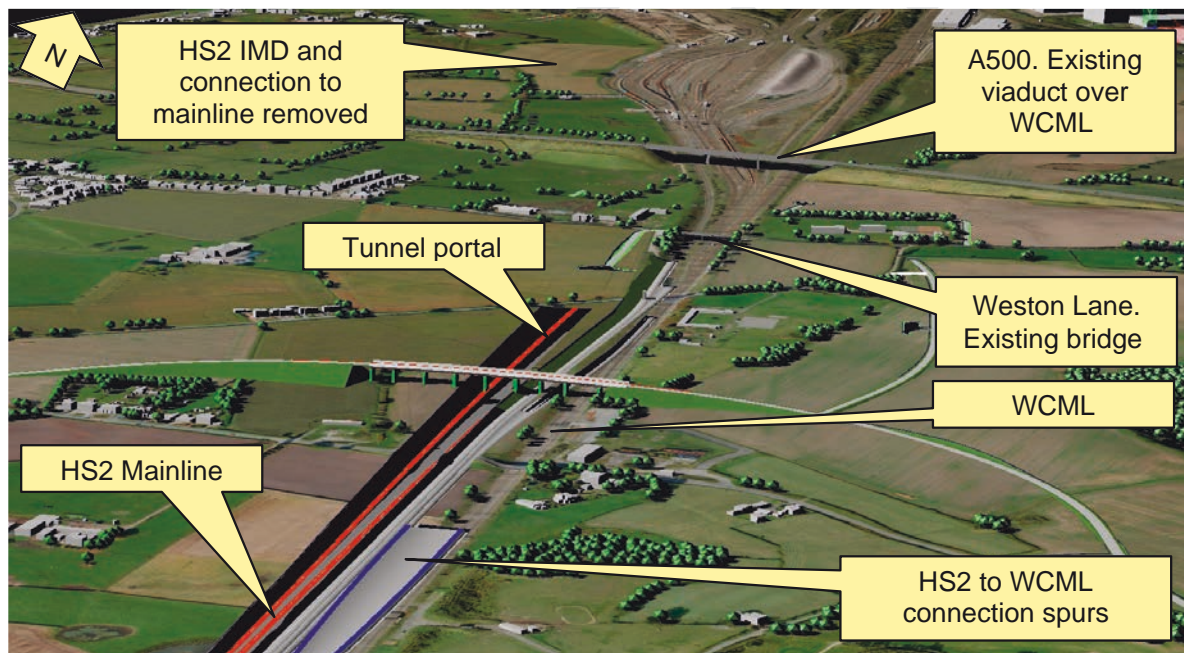


Figure 4.3: Approaches to Crewe if tunnel extended, HS2 to WCML connection spurs moved southwards and IMD removed from Crewe area

## **4.4 Why the Secretary of State is minded to make the change**

- 4.4.1 A temporary construction facility (railhead) near Stone is considered necessary in order to achieve significant programme and construction benefits for the Phase 2a route.
- 4.4.2 The Secretary of State is also considering moving the permanent maintenance facility previously shown south of Crewe to the area near Stone identified for the temporary railhead, to minimise the cost and environmental impacts of providing these facilities separately and to remove the risks and complexities associated with the currently identified location at Crewe.
- 4.4.3 HS2 Limited is carrying out further work to identify the impacts of this proposal. The impacts of the permanent facility have not been assessed in the working draft EIA report. However we have decided to include this potential change in this consultation document in order to seek early views. If a decision is taken to move the permanent maintenance facility near to Stone, the impacts of the scheme will be included in the formal EIA report, which will be deposited alongside the hybrid Bill. There will be a further opportunity to comment at this stage as part of the formal EIA report consultation.

## **4.5 Question**

- 4.5.1 This proposed change consists of building a temporary construction facility (railhead) in-between the proposed HS2 route and the M6, with the potential that its use could then be changed to become a permanent maintenance facility. Based on the limited information available, please give your views on the potential change of use of the site to a permanent maintenance facility, as well as the railhead, indicating whether or not you support the proposal together with your reasons.

## 5. How to respond to the consultation and next steps

### 5.1 How to respond

5.1.1 The consultation closes at 23:45 on 7th November 2016. Please ensure that you send your response before that date to ensure that it is included in our analysis and consideration.

5.1.2 You can respond to this consultation in the following ways:

1. online: you can respond online at [www.gov.uk/hs2](http://www.gov.uk/hs2)
2. email: you can email your response to: [DesignRefinement2a@dialoguebydesign.co.uk](mailto:DesignRefinement2a@dialoguebydesign.co.uk)
3. post: you can post your response and additional material to the following FREEPOST address:

FREEPOST DESIGN REFINEMENT 2a

5.1.3 Copies of this consultation document and the consultation response form are available to download at [www.gov.uk/hs2](http://www.gov.uk/hs2) or to order in hard copy by calling 020 7944 4908. Please also use this number if you would like alternative formats (Braille, audio CD, etc.).

5.1.4 If you use the FREEPOST address, you do not need to include any other address information and you do not need a stamp.

5.1.5 Please only use the email or postal addresses listed above when responding to the Design Refinement Consultation. We cannot guarantee to include responses sent to any other address.

5.1.6 All responses must include your name and organisation (if applicable). When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

- 5.1.7 If you have any queries you can contact us by email at: [HS2Enquiries@hs2.org.uk](mailto:HS2Enquiries@hs2.org.uk) or by telephone on 0207 944 4908.

## 5.2 Events

- 5.2.1 We are holding a series of consultation events to provide further information about the issues described in this document. Visitors to these events will have an opportunity to speak with members of HS2 Limited staff and view maps relevant to the local area. Further information on these events is available on the HS2 website at: [www.gov.uk/hs2](http://www.gov.uk/hs2) or by contacting 0207 944 4908.

## 5.3 What will happen next?

- 5.3.1 The consultation closes at 23:45 on 7th November 2016. Responses to the consultation will be summarised in an independent report that will be considered by the Secretary of State when making decisions on the issues described in this document.

## 5.4 Confidentiality and data protection

- 5.4.1 Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the Freedom of Information Act 2000 (FOIA) or the Environmental Information Regulations 2004.
- 5.4.2 If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.
- 5.4.3 In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.
- 5.4.4 The Department will process your personal data in accordance with the Data Protection Act (DPA) and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.





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# High Speed Two Phase 2a: West Midlands to Crewe Design Refinement Consultation Response form

**This consultation seeks your views on the Design Refinement Consultation document.**

**This consultation will close at 23:45 on 7th November 2016**

**For more information please visit [www.gov.uk/hs2](http://www.gov.uk/hs2) or call 020 7944 4908**

Please respond to us by using one of the methods below:

**Online**

[DesignRefinement2a.dialoguebydesign.net](http://DesignRefinement2a.dialoguebydesign.net)

**By email**

[DesignRefinement2a@dialoguebydesign.co.uk](mailto:DesignRefinement2a@dialoguebydesign.co.uk)

**By post**

FREEPOST DESIGN REFINEMENT 2A

Separate consultations are also being undertaken on the working draft Environmental Impact Assessment and Equality Impact Assessment Reports. There are separate response mechanisms for these consultations.

Please refer to the High Speed Two (HS2) website ([www.gov.uk/hs2](http://www.gov.uk/hs2)) for more details about these consultations and how to respond.



# High Speed Two Phase 2a: West Midlands to Crewe

## Design Refinement Consultation

The questions on which the Government is seeking your views are set out below. In each case, the Government is interested in your views on its proposals, as well as any additional evidence you feel it should consider in reaching its final decisions.

**Please write your response clearly in black ink**, within the boxes and, if applicable, attach additional evidence to the response form, clearly stating the question to which it refers.

## Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act (DPA) 1998, and the Environmental Information Regulations 2004).

**If you want information that you provide to be treated as confidential please tick  the box below.**

Please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals with, amongst other things, obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, in itself, be regarded as binding on the Department for Transport or HS2 Limited.

The Department for Transport and HS2 Limited will process your personal data in accordance with the DPA 1998, and in the majority of circumstances, this will mean that your personal data will not be disclosed to third parties.

I wish my response to be treated as confidential.

*Please write your reasons below. Please attach additional pages as required.*

# PART ONE

## Information about you

It is important to give us your name to ensure your response is included. Your email address will be used to inform you of the outcomes of the consultation.

## Your contact details

First name
Surname
Address
Postcode
Email

## Are you responding on behalf of an organisation or group?

Yes	No
-----	----

## If yes, please state the name of your organisation:

--

*Please note: if you are providing a response on behalf of an organisation or group the name and details of the organisation or group may be subject to publication or appear in the final report.*

## What category of organisation or group are you representing?

Please tick  one box that applies.

- Academic (includes universities and other academic institutions)
- Action group (includes rail and action groups specifically campaigning on the high speed rail network proposals)
- Business (local, regional, national or international)
- Elected representative (includes MPs, MEPs, and local councillors)
- Environment, heritage, amenity or community group (includes environmental groups, schools, church groups, residents' associations, recreation groups, rail user groups and other community interest organisations)
- Local government (includes county councils, district councils, parish and town councils and local partnerships)
- Other representative group (includes chambers of commerce, trade unions, political parties and professional bodies)
- Statutory agency
- Real estate, housing associations or property-related organisations
- Transport, infrastructure or utility organisation (includes transport bodies, transport providers, infrastructure providers and utility companies)
- Other
- Prefer not to say

## Please tell us whom the organisation or group represents and, where applicable, how you assembled the views of members.

*Please write in the box below. Please attach additional pages as required.*

# PART TWO

## Consultation questions

The HS2 Phase 2a: West Midlands to Crewe Design Refinement Consultation document provides information about three proposed changes to the design of the route that involve either introducing new operational rail infrastructure that was not envisaged in November 2015, or a significant alteration to the original design that gives rise to new or increased significant environmental effects on people, wildlife, land or property compared to the November 2015 design.

The Secretary of State for Transport is seeking views on the questions listed below in the same order as they are listed in the consultation document. In each case, the Secretary of State for Transport is interested in your views and whether or not you support the proposed changes, and why, as well as any additional evidence that you feel the Secretary of State should consider in reaching his decision.

Before answering any of the questions please read the consultation document: 'HS2 Phase 2a: West Midlands to Crewe Design Refinement Consultation' which can be found at: [www.gov.uk/hs2](http://www.gov.uk/hs2)

### Question 1 – Crewe Tunnel Extension

(Section 2 of the 'HS2 Phase 2a: West Midlands to Crewe Design Refinement Consultation' document).

This proposed change consists of extending the Crewe Tunnel south by approximately 2100m and re-siting the tunnel portal south of the A500 and Weston Lane. Please give your views on this proposal, indicating whether or not you support the proposal together with your reasons.

*Please provide as much detail as possible in the box below. Please attach additional pages as required.*

## Question 2 – HS2 to West Coast Main Line connection spurs south of Crewe

(Section 3 of the 'HS2 Phase 2a: West Midlands to Crewe Design Refinement Consultation' document).

This proposed change consists of moving the spur lines that connect HS2 to the West Coast Main Line (WCML) south of Crewe, further south and extending their length. Please give your views on this proposal, indicating whether or not you support the proposal together with your reasons.

*Please provide as much detail as possible in the box below. Please attach additional pages as required.*

## Question 3 – Railhead and potential maintenance facility near Stone

(Section 4 of the 'HS2 Phase 2a: West Midlands - Crewe Design Refinement Consultation' document).

This proposed change consists of building a temporary construction facility (railhead) in-between the proposed HS2 route and the M6, with the potential that its use could then be changed to become a permanent maintenance facility. Based on the limited information available, please give your views on the potential change of use of the site to a permanent maintenance facility, as well as the railhead, indicating whether or not you support the proposal together with your reasons.

*Please provide as much detail as possible in the box below. Please attach additional pages as required.*

# PART THREE

## Submitting your response

Thank you for completing the response form. Please send it to the Freepost address below.

### **FREEPOST DESIGN REFINEMENT 2A**

*Please note: no additional address information is required and you do not need a stamp.  
Please use capital letters.*

Or email your response to [DesignRefinement2a@dialoguebydesign.co.uk](mailto:DesignRefinement2a@dialoguebydesign.co.uk)

This consultation will close at 23:45 on 7th November 2016. Please ensure you send your response by this date.

Please only use the response mechanisms described in this form when responding to this consultation. We cannot guarantee that responses sent to other addresses will be included in this consultation.





# High Speed Two Phase 2a: West Midlands to Crewe Design Refinement Consultation

## About you

As part of our commitment to considering diversity in the delivery of HS2 we want to understand who is responding to our consultations.

Information you give us will help us improve future engagement activities.



Completing this form is voluntary and is not a requirement for your response to be accepted. The form will not be linked to the information you have provided in your response or your name and we won't share the information with anyone else. We will use this information to provide a summary of the types of people who responded to this consultation. This summary will not identify individuals who have provided information.

**Please complete the information below and return this form with your response,** either by email to [DesignRefinement2a@dialoguebydesign.co.uk](mailto:DesignRefinement2a@dialoguebydesign.co.uk) or by post, using the Freepost address below.

### **FREEPOST DESIGN REFINEMENT 2A**

*Please note: no additional address information is required and you do not need a stamp. Please use capital letters.*

#### **Q1. How would you describe your national identity?**

<input type="checkbox"/> British	<input type="checkbox"/> Scottish	<input type="checkbox"/> Prefer not to say
<input type="checkbox"/> English	<input type="checkbox"/> Welsh	
<input type="checkbox"/> Northern Irish	<input type="checkbox"/> Other ( <i>please specify</i> ) _____	

#### **Q2. How would you describe your ethnicity?**

##### **Asian**

<input type="checkbox"/> Bangladeshi	<input type="checkbox"/> Chinese	<input type="checkbox"/> Indian
<input type="checkbox"/> Pakistani	<input type="checkbox"/> Other Asian background ( <i>please specify</i> ) _____	

##### **Black**

<input type="checkbox"/> African	<input type="checkbox"/> Carribean	
<input type="checkbox"/> Other Black background ( <i>please specify</i> ) _____		

##### **Mixed ethnic background**

<input type="checkbox"/> Asian and White	<input type="checkbox"/> Black African and White	<input type="checkbox"/> Black Carribean and White
<input type="checkbox"/> Other Mixed background ( <i>please specify</i> ) _____		

##### **White**

<input type="checkbox"/> English	<input type="checkbox"/> Gypsy or Irish Traveller	<input type="checkbox"/> Irish
<input type="checkbox"/> Northern Irish	<input type="checkbox"/> Scottish	<input type="checkbox"/> Welsh
<input type="checkbox"/> Other White background ( <i>please specify</i> ) _____		
<input type="checkbox"/> Prefer not to say		

### Q3. Do you consider yourself to be a disabled person?

The Equality Act 2010 defines a disabled person as someone with a physical or mental impairment, which has a substantial and long-term adverse effect on the person's ability to carry out normal day-to-day activities.

- Yes                       No                       Prefer not to say

Into which category or categories does your disability fall?  
(please tick as many as apply)

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Hearing impairment  | <input type="checkbox"/> Mobility          | <input type="checkbox"/> Speech impairment |
| <input type="checkbox"/> Visual impairment   | <input type="checkbox"/> Mental ill health | <input type="checkbox"/> Manual dexterity  |
| <input type="checkbox"/> Learning difficulties (where a person learns in a different way i.e. someone who is dyslexic) | <input type="checkbox"/> Prefer not to say |  |
| <input type="checkbox"/> Other ( <i>please specify</i> ) _____   |  |  |

### Q4. What is your gender?

- Male                       Female                       Prefer not to say

### Q5. What is your religion or belief?

- |  |  |                                |
|--|--|--------------------------------|
| <input type="checkbox"/> Buddhist                              | <input type="checkbox"/> Christian         | <input type="checkbox"/> Hindu |
| <input type="checkbox"/> Jewish                                | <input type="checkbox"/> Muslim            | <input type="checkbox"/> Sikh  |
| <input type="checkbox"/> None                                  | <input type="checkbox"/> Prefer not to say |                                |
| <input type="checkbox"/> Other ( <i>please specify</i> ) _____ |  |                                |

### Q6. Are you married or in a civil partnership?

- Yes                       No                       Prefer not to say

### Q7. What is your age?

- |                                   |                                |  |
|-----------------------------------|--------------------------------|--|
| <input type="checkbox"/> Under 16 | <input type="checkbox"/> 35-39 | <input type="checkbox"/> 55-59             |
| <input type="checkbox"/> 16-24    | <input type="checkbox"/> 40-44 | <input type="checkbox"/> 60-64             |
| <input type="checkbox"/> 25-29    | <input type="checkbox"/> 45-49 | <input type="checkbox"/> 65+               |
| <input type="checkbox"/> 30-34    | <input type="checkbox"/> 50-54 | <input type="checkbox"/> Prefer not to say |

**Q8. What is your sexual orientation?**

Bisexual

Gay man

Gay woman

Heterosexual/straight

Prefer not to say

**Data Protection**

All information supplied will be held by HS2 Ltd and will remain secure and confidential and will not be associated with other details provided in your response. The data will not be passed on to any third parties or used for marketing purposes in accordance with the Data Protection Act 1998.