

# High Speed Rail (London – West Midlands) Act 2017

HS2 Ltd

Warwick District Council

**B4453 Rugby Road Overbridge** 

Schedule 17 Plans and Specifications

Written Statement for Information

HS2 Consents ID: WAC.PS.10053

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## 1. Introduction

## 1.1 Background Information

Table 1: Schedule 17 Address Details and Description of Works

Details
High Speed Two
High Speed Two (HS2) Limited
c/o Agent: Balfour Beatty Vinci (BBV) IM House South Drive Coleshill Manor Coleshill West Midlands B46 1DF
Land 750m north-east of the junction of B4453 Rugby Road / Coventry Road and 200m south-west of Metcalfe Timber & Builders Merchants within the parish of Cubbington.  The works are located at; X (easting): 434782, Y (northing): 268855
<ul> <li>Plans and Specifications submission under Schedule 17 to the High Speed Rail (London – West Midlands) Act 2017 for works comprising:</li> <li>New overbridge structure, B4453 Rugby Road Overbridge carrying the realigned B4453 Rugby Road and realigned Footpath W130b over HS2;</li> <li>Earthworks to form approach embankments for the realignment of the existing B4453 Rugby Road and Footpath W130b;</li> <li>Earthworks for the construction of six side junctions/accesses, including two field accesses, three direct accesses for HS2 and one priority junction for the existing Metcalfe Timber &amp; Builders Merchants;</li> <li>Provision of two road vehicle parking / turning head areas;</li> <li>Provision of four concrete access stairs;</li> <li>Location of boundary fencing and gates;</li> <li>Installation of a vehicle restraint system (VRS) located on both sides of the carriageway on the approach embankments on both sides of the overbridge; and</li> </ul>

#### 1.2 Terms of Reference

- 1.2.1 This Written Statement is compiled in accordance with the High Speed Two (HS2) Phase 1 Planning Memorandum<sup>1</sup> and Planning Forum Notes (PFNs)<sup>2</sup> as required by the planning regime established under Schedule 17 of the High Speed Rail (London West Midlands) Act 2017 ('the Act')<sup>3</sup>.
- 1.2.2 This statement provides Warwick District Council (WDC) with information to assist with the determination of the Plans and Specifications submission under Schedule 17, in relation to the above description of works.
- 1.2.3 The information in this Written Statement is provided for information to assist in determining the request for approval. It is not for approval.

## 1.3 Introduction to High Speed 2

- 1.3.1 HS2 is a new high speed railway network that will connect major cities in Britain. It will bring significant benefits for inter-urban rail travellers through increased capacity and improved connectivity between London, the Midlands and the North. It will release capacity on the existing rail network and so provide opportunities to improve existing commuter, regional passenger and freight services.
- 1.3.2 Phase One of HS2 will provide a dedicated high speed rail service between London, Birmingham and the West Midlands. It will extend for approximately 230km (143 miles). Just north of Lichfield, high speed trains will join the West Coast Main Line for journeys to and from Manchester, the north west and Scotland.
- 1.3.3 For further information on HS2 and the route through WDC please refer to the Planning Context Report<sup>4</sup> for WDC, deposited with the Council by HS2 Ltd.

## 1.4 High Speed Rail (London - West Midlands) Act 2017

1.4.1 The Act<sup>5</sup> provides powers for the construction and operation of Phase 1 of High Speed Two. HS2 Ltd is the nominated undertaker in relation to the works subject to this Plans and Specifications submission.

<sup>&</sup>lt;sup>1</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/593594/Planning\_Memorandum.ndf

<sup>&</sup>lt;sup>2</sup> https://www.gov.uk/government/publications/hs2-phase-one-planning-forum-notes-for-local-authorities

<sup>&</sup>lt;sup>3</sup> High Speed Rail (London-West Midlands) Act 2017 Schedule 17 statutory guidance - GOV.UK (www.gov.uk)

<sup>4</sup> https://assets.publishing.service.gov.uk/media/5a82156a40f0b6230269abee/warwick\_district\_planning\_context\_report.pdf

- 1.4.2 Section 20 to the Act grants deemed planning permission for the works authorised by it, subject to the conditions set out in Schedule 17. Schedule 17 includes conditions requiring the following matters to be approved or agreed by the relevant Local Planning Authority (LPA).
  - Construction arrangements (including large goods vehicle routes);
  - Plans and Specifications;
  - Bringing into use requests; and
  - Site restoration schemes.
- 1.4.3 This is therefore a different planning regime to that which usually applies in England (i.e. the Town and Country Planning Act) and is different in terms of the nature of submissions and the issues that the LPAs can have regard to, in determining requests for approval.
- 1.4.4 Schedule 17 of the Act sets out the grounds on which the LPA may impose conditions on approvals, or refuse requests for approval.
- 1.4.5 This Written Statement includes information supporting the Plans and Specifications submission in relation to the matters outlined in **Table 2** below.

Table 2: Schedule 17 Plans and Specifications Submission Details

Table 2. Scriedule 17 Plans and Specifications Submission Details			
Site	Details		
Plans and Specifications (permanent works)	<ul> <li>New overbridge structure, B4453 Rugby Road Overbridge carrying the realigned B4453 Rugby Road and realigned Footpath W130b over HS2;</li> <li>Earthworks to form approach embankments for the realignment of the existing B4453 Rugby Road and Footpath W130b;</li> <li>Earthworks for the construction of six side junctions/accesses, including two field accesses, three direct accesses for HS2 and one priority junction for the existing Metcalfe Timber &amp; Builders Merchants;</li> <li>Provision of two road vehicle parking / turning head areas;</li> <li>Provision of four concrete access stairs;</li> <li>Location of boundary fencing and gates;</li> <li>Installation of a vehicle restraint system (VRS) located on both sides of the carriageway on the approach embankments on both sides of the overbridge; and</li> <li>New drainage system for the realigned highway and overbridge.</li> </ul>		

<sup>&</sup>lt;sup>5</sup> https://www.legislation.gov.uk/ukpga/2017/7/contents/enacted

1.4.6 The works to which this application relates, and the cumulative impact of the works in conjunction with other HS2 development, have been assessed and re compliant with paragraph 1.1.3 (bullet point 2) of the HS2 Phase 1 Environmental Minimum Requirements General Principles6.

#### 1.5 Code of Construction Practice

- 1.5.1 HS2 Ltd as the nominated undertaker is contractually bound to comply with the controls set out in the Environmental Minimum Requirements (EMRs)<sup>7</sup>. The EMRs include the HS2 Code of Construction Practice (CoCP)<sup>8</sup>.
- 1.5.2 The works subject to this request for approval of Plans and Specifications will be undertaken in accordance with the Code of Construction Practice, and with the Class Approval issued by the Secretary of State (March 2017)<sup>9</sup>.

## 1.6 Schedule 17 Statutory Guidance

1.6.1 The Schedule 17 Statutory Guidance issued by the Secretary of State (April 2021)<sup>10</sup> provides guidance to all planning authorities determining requests for approval under Schedule 17 to the Act. Paragraph 20 of the Statutory Guidance states that planning authorities should not through the exercise of Schedule 17 seek to modify controls already in place such as the Environmental Minimum Requirements (EMR), other controls in the Act such as those under Schedule 4 or 33, or existing legislation.

#### 1.7 Structure of Written Statement

- 1.7.1 This Written Statement is structured as follows:
  - A description of the location and main characteristics of the area in which the works will be carried out is provided in **Section 2**;

 $<sup>\</sup>frac{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/618074/General\_principles.pdf}{https://www.gov.uk/government/publications/environmental-minimum-requirements}$ 

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/593592/Code\_of\_Construction\_ Practice.pdf

<sup>9</sup> https://www.gov.uk/government/publications/high-speed-rail-london-west-midlands-act-2017-class-approval

<sup>&</sup>lt;sup>10</sup> https://www.gov.uk/government/publications/high-speed-rail-london-to-west-midlands-act-2017-schedule-17-statutory-guidance/high-speed-rail-london-west-midlands-act-2017-schedule-17-statutory-guidance

- **Section 3** describes the main works being undertaken in the area, as set out in Schedule 1 of the Act, and those that are the subject of this Schedule 17 Plans and Specifications submission;
- The design approach and rationale for the works which are the subject of this Schedule 17 Plans and Specifications submission are described in **Section 4**;
- **Section 5** summarises the pre-submission consultations that were undertaken, including a list of the consultees, dates, attendees at meetings and a brief summary of the outcome of these discussions;
- A high-level programme for the works and how they fit into the wider programme for other works in the area, as set out in Schedule 1 of the Act, is provided in Section 6; and
- **Section 7** identifies any other main consents, or known forthcoming consents associated with the works.

## 2. Site Location and Characteristics

#### 2.1 Site Location

- 2.1.1 The B4453 Rugby Road Overbridge is located approximately 3.6km north east of Royal Leamington Spa, 7.6km to the north east of Warwick, 10km to the south of Coventry and 6.5km to the south east of Kenilworth. Birmingham is situated towards the north west, with Birmingham International train station located approximately 22km to the north west of the asset.
- 2.1.2 North Cubbington Wood is located approximately 0.5km to the north east of the asset and Weston Wood is located 1.4km to the north. Sandalwood is located 0.3km to the east of the asset boundary and South Cubbington Wood is located 0.45km to the south.
- 2.1.3 The existing use of the site is open and agricultural land; the existing B4453 Rugby Road runs through the site. There are a number of buildings in close proximity to the asset, including the Metcalfe Timber & Builders Merchants, 200m to the south-west and a number of residential properties in Cubbington, which lies approximately 0.8km to the south east of the asset. The land is encompassed within Flood Zone 1 and therefore is at a low risk of flooding.
- 2.1.4 The asset is partially located within a number of sites designated for nature conservation (statutory and non-statutory), as set out in the HS2 Phase One, London-West Midlands Environmental Statement (ES)<sup>11</sup>.
- 2.1.5 There are two ancient woodland sites within the asset boundary of B4453 Rugby Road Overbridge. These are South Cubbington Wood Ancient Woodland Inventory Site (AWIS) and North Cubbington Wood AWIS. The ES states that these ancient woodlands represent an irreplaceable resource.
- 2.1.6 There are no statutory designated sites located within 500m of the asset boundary. There are two (non-statutory) designated sites situated partially within the asset boundary. These are South Cubbington Wood Local Wildlife Site (LWS) and North Cubbington Wood. North Cubbington Wood is ancient woodland, which lies to the immediate north of South Cubbington Wood. Although not part of the adjacent South Cubbington Wood LWS, it forms part of the Princethorpe Woodlands Living Landscape area that also includes Waverley and Weston Woods LWS.

<sup>&</sup>lt;sup>11</sup> Vol 2 CFA17 Offchurch and Cubbington.pdf (publishing.service.gov.uk)

- 2.1.7 There are no designated heritage assets situated within, or partially within the asset boundary. There are three non-designated heritage assets situated within, or partially within the asset boundary:
  - Bytham River (OFC041);
  - Archaeological remains associated with South/North Cubbington Woods (OFC045); and
  - B4453 Rugby Road ridge and furrow (OFC047).
- 2.1.8 The Cubbington Conservation Area and historic settlement area (OFC043) is a designated heritage asset situated approximately 130m south-west of the asset boundary.
- 2.1.9 The impacts on these and/or their setting are described in the ES, Volume 5, CFA 17 impact assessment tables: Offchurch and Cubbington (Ref: volume 5 appendix CH-003-017, ES 3.5.2.17.6).

## 2.2 Surrounding Highway Network

- 2.2.1 The asset is situated along the B4453 Rugby Road which connects the settlement of Cubbington, located to the west of the asset, to Western under Wetherley located to the east. The surrounding roads that can be accessed from the B4453 Rugby Road include Church Lane, located approximately 0.73km to the south west of the asset, Coventry Road situated around 0.68km to the west of the asset, and Weston Lane, which lies approximately 2km to the east of the asset.
- 2.2.2 Public Right of Way (PRoW), Footpath W130b, crosses the existing B4453 Rugby Road approximately 200m to the west of the asset and runs in a northerly direction, crossing the HS2 line approximately 400m north of the asset. This PRoW is to be realigned as part of the B4453 Rugby Road Overbridge.

3. Description of the Works

## 3.1 Introduction

**Revision: C01** 

- 3.1.1 This Written Statement supports the Schedule 17 submission for the approval of Plans and Specifications for B4453 Rugby Road Overbridge, in the vicinity of Cubbington, Royal Leamington Spa.
- 3.1.2 The Plans and Specifications submitted for approval are listed in the pro-forma accompanying the application. A summary of the proposed works for approval is provided in Section 3.2 below.
- 3.1.3 Section 3.3 summarises the indicative mitigation relevant to the works being submitted in accordance with paragraph 7.5.2 of the Planning Memorandum.
- 3.1.4 Sections 3.4 3.6 provide information on other aspects of the works to assist in understanding the context of planned construction methodology and how EMR controls apply to the works being submitted for approval. The information in Sections 3.4 3.6 is not for approval under Schedule 17.

## 3.2 Works for Approval

3.2.1 The relevant scheduled works as set out under Schedule 1 of the Act<sup>12</sup> to which this Schedule 17 submission relates are:

"District of Warwick, Parish of Cubbington -

Work No. 2/162 - A diversion of Rugby Road commencing at a point 564 metres southeast of the junction of the access to Oakdene with Coventry Road and terminating at a point 25 metres north-east of its junction with the access to Wychwood. Work No. 2/162 includes a bridge over Work No. 2/146;"

3.2.2 **Figure 1** below provides an extract from sheet 2-107 of Volume 2.2 Calvert – Burton Green of the Replacement Plans as amended in Select Committee<sup>13</sup>. The works listed in paragraph 3.2.1 can be seen within this extract.

<sup>&</sup>lt;sup>12</sup> https://www.legislation.gov.uk/ukpga/2017/7/schedule/1/enacted

<sup>&</sup>lt;sup>13</sup>https://assets.publishing.service.gov.uk/media/5a817a3b40f0b62305b8f2ac/Plans - Volume 2.2 Calvert - Burton Green.pdf



#### 3.2.3 The works submitted for approval under Schedule 17 comprise:

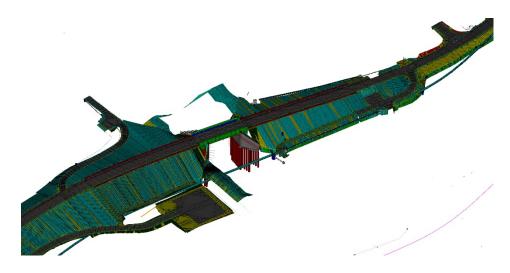
- New overbridge structure, B4453 Rugby Road Overbridge carrying the realigned B4453 Rugby Road and realigned Footpath W130b over HS2;
- Earthworks to form approach embankments for the realignment of the existing B4453 Rugby Road and Footpath W130b;
- Earthworks for the construction of six side junctions/accesses, including two field accesses, three direct accesses for HS2 and one priority junction for the existing Metcalfe Timber & Builders Merchants;
- Provision of two road vehicle parking / turning head areas;
- Provision of four concrete access stairs;
- Installation of a vehicle restraint system (VRS) located on both sides of the carriageway on the approach embankments on both sides of the overbridge; and
- New drainage system for the realigned highway and overbridge.

3.2.4 The proposed works are shown on the General Arrangement Plan (drawing reference 1MC08-BBV\_MSD-PL-DGA-NS01\_NL02-135602). The General Arrangement Plan also shows Cubbington Cutting, running beneath the overbridge, which has been consented separately and was granted approval by WDC on 31 July 2023 (ref. W/22/1770/HS2).

#### **Structures: Overbridge**

- 3.2.5 A new structure is proposed in the form of an overbridge over Cubbington Cutting to maintain connectivity of the B4453 Rugby Road in the area, being the B4453 Rugby Road Overbridge. An extract from the 3D design model showing the general layout of the proposed B4453 Rugby Road Overbridge is shown in Figure 2 for information.
- 3.2.6 The proposed structure is a single span integral bridge comprising a 1300mm thick cast in-situ deck slab supported on contiguous piled abutment walls. The overall length of the bridge is 25m. The deck is at a maximum gradient of 1.2% and crosses HS2 perpendicular at 8° to the track alignment. The deck cross section includes a 6m wide carriageway and two 2.0m wide raised verges at each side of the carriageway, which amounts to an overall width of 10m between the internal faces of the parapets.
- 3.2.7 The structure has contiguous reinforced concrete (RC) piled abutment walls at both ends, fully integral with the RC capping beams. The piles are 1.20m in diameter, 21.3m in length and have a spacing of 1.6m between centres.

Figure 2: Extract from the 3D design model showing the proposed B4453 Rugby Road Overbridge



- Revision: C01
  - 3.2.8 The overbridge will have RC Containment Class H4a parapets on both sides. These will be a minimum of 1.8m in height for the full length of the bridge.
  - 3.2.9 Highway drainage will be incorporated into a combined kerb drainage system which will drain surface water off the overbridge. The kerb will carry surface water run-off from the overbridge connecting to a sealed carrier drainpipe and over-the-edge filter drain/ ditch system off the overbridge and conveyed down the embankment to the filter drain system located at the toe of the embankment. To the east and west of the overbridge, surface water run-off will discharge via a sealed pipe running adjacent to the track system, discharging to a land drainage ditch and an existing field ditch. To the west of the overbridge, surface water run-off will discharge into an existing field ditch. The combined kerb material is dependent on the unit used and may comprise of either ductile iron or a composite material.
  - 3.2.10 The proposed finish of the exposed faces of the concrete wingwalls, abutments and piers is F2, which means the irregularities in the finish shall be no greater than those obtained from the use of wrought thicknessed square edged boards arranged in a uniform pattern. The finish is intended to be left as struck but imperfections such as fins and surface discolouration shall be made good.
  - 3.2.11 The overbridge parapets will be formed of pre-cast concrete and fitted to the external flanks of the overbridge superstructure. The parapet design incorporates a crease detail approximately one third of the way up the parapet running along its length and the top section is flared outwards.
  - 3.2.12 The proposed finish of the concrete parapets is F3 which means the resulting finish shall be smooth and of uniform texture and appearance. The formwork lining shall leave no stain on the concrete and shall be so joined and fixed to its backing that it imparts no blemishes. It shall be of the same type and obtained from only one source throughout any one structure. Any imperfections in the finish will be made good. Internal ties and embedded metal parts shall not be used.

#### **Earthworks**

3.2.13 The overbridge is located within Cubbington Cutting. The earthworks for the asset will facilitate the realignment of the existing B4453 Rugby Road, and comprises an engineered fill to form approach embankments, access roads to Maintenance Access Strips and a Global System for Mobile Communication – Railway (GSM-R) compound and road vehicle parking/turning heads. The access stairs will be located in each quadrant of the Bridge, with full stairs to the MAS on

- the northwest & southeast locations. The GSM-R will be consented separately as part of the wider works associated with Cubbington Cutting.
- 3.2.14 All earthworks will be overlaid by landscaping earthworks and soft planting. The gradient varies approximately between a 1:2.5 and 1:4 based on the proximity of the Limits of Deviation (LoD) boundary. The proposed planting will comprise hedgerows, woodland and grassland alongside the realigned B4453 Rugby Road and the HS2 line which will provide screening and landscape integration and also provides habitat connectivity to South Cubbington Wood. This planting is shown on the Landscape and Environmental Masterplan (LEMP), References: 1MC08-BBV\_MSD-PL-DGA-NS01\_NL02-135603.
- 3.2.15 As previously mentioned, the mainline earthworks asset (Cubbington Cutting) crossed by the B4453 Rugby Road Overbridge has been consented separately and was granted approval by WDC on 31 July 2023 (ref. W/22/1770/HS2).

#### Earthworks associated with the B4453 Rugby Road realignment

- 3.2.16 The proposed structure is offset from the existing highway to allow the asset to be constructed off-line and to minimise disruption to the public.
- 3.2.17 Earthworks are proposed to create six side junctions / accesses, including two field accesses, three direct accesses for HS2 and one priority junction for access to Metcalfe Timber & Builders Merchants Access. The three direct HS2 accesses shall be designed to connect from the realigned B4453 Rugby Road to the Maintenance Access Strips.

#### **Road vehicle parks**

- 3.2.18 Vehicular parking is provided on both the eastern and western sides of the B4453 Rugby Road Overbridge crossing and the HS2 mainline. This parking serves as vehicle access to abutments for maintenance, the vehicles will be two long wheelbase vans or 4X4 all-terrain vehicles, at a frequency of once per year. The parking area has been designed to be the minimum size to accommodate the types of vehicles detailed.
- 3.2.19 Maintenance Access Strips will serve the adjacent Cubbington Cutting, which is being consented as part of a separate Schedule 17 application.

#### **Fences and walls**

3.2.20 There will be HS2 boundary fencing around the B4453 Rugby Road Overbridge which will tie into the Cubbington Cutting Boundary fencing. There will also be fencing along the highway boundary of the realigned B4453 Rugby Road which

will tie into the highway boundary fencing along the existing Rugby Road to the east and west of the overbridge.

3.2.21 There will be HS2 security fencing around the adjacent Cubbington Cutting crest, which tie into the Rugby Road Overbridge wingwall. The handrails will be between 0.9m -1.1m in height. This fencing is to be consented separately via the Cubbington Cutting Schedule 17 submission.

## 3.3 Indicative Mitigation

- 3.3.1 The Planning Memorandum (paragraph 7.5.2) states: 'When designs of HS2 works are submitted for approval, the nominated undertaker shall, where reasonably necessary for the proper consideration of the design proposed, provide an indication or outline of the appropriate mitigation measures (if any) which it intends to submit subsequently under paragraphs 9 or 12 of the Planning Conditions Schedule....' and '.....While not material to approvals under paragraph 2 or 3, this information will provide reassurance in advance of the request for approval under paragraph 9 that the mitigation is appropriate, and will present an opportunity to raise concerns.'
- 3.3.2 Details of the indicative mitigation relevant to the design proposed in this application are shown on the drawing Landscape and Environmental Masterplan (drawing reference: 1MC08-BBV\_MSD-PL-SGA-NS01\_NL02-135603).
- 3.3.3 The mitigation will comprise part of the overall mitigation scheme in relation to the scheduled works listed in section 3.2 above. In addition to the works for which approval of Plans and Specifications is required, the overall mitigation scheme in this location also includes the following:
  - Archaeological
  - Heritage
  - Landscape
  - Noise
  - Ecological

#### **Archaeological**

3.3.4 No design mitigation is required, based on findings of the Early Works archaeological investigations. Details of archaeological investigation undertaken to enable construction works can be found in Section 3.5.2.

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#### Heritage

3.3.5 The works described in this written statement are screened from Cubbington Conservation Area and historic settlement area (OFC043) by topography and later, not significant, buildings which make up much of the modern settlement. Moreover, the Conservation Area largely has an inward focus, and the key views are within the Conservation Area rather than away from it. As such no design mitigation is required.

#### Landscape

- The landscape proposals will integrate the overbridge into the wider landscape. The B4453 Rugby Road Overbridge passes over Cubbington Cutting and continues on the east side of the cutting, where the woodland planting provides a screening mitigation function. The wider connectivity with the wider landscape is assured by the native species rich hedgerow, respectively by the mixed native woodland planting which tie and integrate into the surrounding landscape.
- 3.3.7 Landscape planting will include native broad-leaved woodland, shrub and hedgerows and the selection of species will reflect tree and shrub species native to the area landscape and take into account possible climate change impacts associated with the quality and availability of water and the potential increase in pests and diseases.
- 3.3.8 A Landscape and Environmental Masterplan for B4453 Rugby Road Overbridge (Drawing Reference: 1MC08-BBV\_MSD-PL-DGA-NS01\_NL02-135603) is submitted as part of this pack and shows the aforementioned landscaping surrounding the asset.

#### **Noise**

- 3.3.9 Paragraph 7.5.2 of the Planning Memorandum, states: '....Where the works for approval will have a mitigating effect in relation to operational noise from the railway or new roads, the nominated undertaker will provide information to show, so far as is reasonably practicable at that stage in the design process, how the noise mitigation performs and the expected conditions. While not material to approvals under paragraph 2 or 3, this information will provide reassurance in advance of the request for approval under paragraph 9 that the mitigation is appropriate and will present an opportunity to raise concerns.'
- 3.3.10 A noise demonstration report, document reference: 1MC08-BBV\_MSD-EV-REP-NS01\_NL03-100087, has been produced to accompany the Schedule 17 application that provides this information and includes the following:

- a) A description of the additional mitigation options considered to control noise;
- b) Plans showing the surrounding environment and receptor positions;
- c) Details of the methodology used in predicting noise and vibration levels;
- d) Assumptions relating to the acoustic performance of rolling stock and track;
- e) Tables setting out the predicted levels of operational noise at all individual receptors where the lowest observable adverse effect level (LOAEL) is likely to be exceeded.
- 3.3.11 The predicted levels of noise provided in line with item e) above show that none of the operational noise impacts in the vicinity of the overbridge are 'environmentally significant.'
- 3.3.12 Information Paper E20 outlines the measures that are required to be put in place to control operational airborne noise. It sets out various objectives to minimise operational noise effects as summarised below.
- 3.3.13 There are no undertakings and assurances (U&As) for noise and vibration that are applicable to the B4453 Rugby Road Overbridge.
- 3.3.14 The noise demonstration report for the Cubbington to Stonehouse Area that incorporates the B4453 Rugby Road Overbridge shows that no reasonably practicable measures need to be taken for the purpose of mitigation of the effect of operational noise to meet the objectives set out in HS2 Planning Forum Note (PFN) 14. The mitigation options that were considered were not selected as they would have limited impact in resultant noise levels and represented a low benefit when compared with cost.

#### **Ecological**

3.3.15 B4453 Rugby Road Overbridge is partially located within South Cubbington Wood and North Cubbington Wood, both are Ancient Woodland Inventory Site (AWIS). The HS2 Phase 1 Environmental Statement (ES), Volume 2, Community Forum Area CFA17, Offchurch and Cubbington 14, states that these ancient woodlands

<sup>&</sup>lt;sup>14</sup> UK.GOV. (2013). London -West Midlands Environmental Statement – Volume 2 | Community Forum Area report - CFA17 | Off church and Cubbington, November 2013. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/398118/Vol\_2\_CFA17\_Offchurc h\_and\_Cubbington.pdf

represent an irreplaceable resource. As a result of the construction of the scheme, the remaining woodland on either side of the route will be smaller in size and more vulnerable to degradation through edge effects, such as encroachment of scrub and wind throws during storms. The impacts were reported in the ES to result in a permanent adverse effect on the conservation status of the ancient woodland that will be significant at a country/metropolitan level (Ancient Woodland Strategy).

- 3.3.16 There are two (non-statutory) designated sites situated partially within the asset boundary. These are South Cubbington Wood Local Wildlife Site (LWS) and North Cubbington Wood. North Cubbington Wood is ancient, replanted woodland, which lies to the immediate north of South Cubbington Wood. Although not part of the adjacent South Cubbington Wood LWS, it forms part of the Princethorpe Woodlands Living Landscape area that also includes Waverley and Weston Woods LWS. These two woodlands are also Warwickshire Wildlife Trust Ecosites. Ecosites are not formally designated sites, however, they have been identified as having the potential to contain important ecological features that may be a material consideration at planning. Although these sites were not referenced in the ES, the habitats for which they are identified were assessed under the HS2 environmental baseline.
- 3.3.17 There are five important hedgerows (Hedgerows Regulations 1997) within the asset boundary, these will be partially lost during construction. The ES states that these hedgerows are of district/borough value.
- 3.3.18 The baseline habitats recorded in the ES within the asset boundary include the following:
  - Three arable fields. The ES states that this habitat has negligible value;
  - An area of bare ground. The ES states that this habitat has negligible value;
  - Three intact species-poor hedgerows and five intact species-rich hedgerows. Intact species rich hedgerows are a priority habitat and a Local Biodiversity Action Plan habitat (LBAP). Five of these hedgerows are classified as being 'important' under the hedgerow's regulations 1997. Important and species-rich hedgerows qualify as a habitat of principal importance; these hedgerows are not abundant and have district/borough value. The species-poor hedgerows are common within the landscape, and they are individually of local/parish value. However, due to the wildlife corridors created by hedgerows, the hedgerow network within the land required for construction of the Proposed Scheme is considered to be of district/borough value within the ES; and
  - Lowland mixed deciduous woodland (South Cubbington Wood and North Cubbington Wood). Semi-natural broadleaved woodland is a habitat of principal

importance (HPI) identified in Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The ES states that South Cubbington Wood is

3.3.19 The ES assumes total clearance of habitats within the land required for construction. Some of the habitat loss, and subsequent adverse impacts on designated sites and protected species of ecological value within the area, has been mitigated under the construction Early Works Contract (EWC). However, the detailed design process will look to mitigate this further. The detailed design also addresses the adverse effects to designated sites and habitats and species of ecological value arising from operation of the HS2 Scheme through various mitigation measures as detailed in the paragraphs below.

considered to be of county/metropolitan value.

- 3.3.20 Further landscape mitigation planting to mitigate for the habitat clearance in relation to this asset is to be undertaken as part of the main works and includes, but is not limited to;
  - Linear planting of native broadleaved species alongside the realigned B4453
     Rugby Road; and
  - Hedgerow planting on the north side of the asset (both sides of the railway). This hedgerow is continued with species rich grassland and with woodland planting on the embankments either side of the asset.
- 3.3.21 The compensation planting is primarily for visual screening and landscape integration but also provides habitat connectivity to South Cubbington Wood.
- 3.3.22 The ES identified that badger (Meles meles) is present within the asset area. Badger is considered to be of local/parish value within this area. The asset is not located within a known badger territory and there are no setts identified within the asset boundary. To prevent badger from accessing the trace from the overbridge badger fencing will be incorporated within the security fencing for Cubbington Cutting but is not required for the asset itself.
- 3.3.23 The ES identified an assemblage of bat species, including Myotis species, noctule (Nyctalus noctula) and Leisler's (Nyctalus leisleri) bats, associated with tree roosts at the southern section of South Cubbington Wood. This assemblage is identified as being up to regional value. The assemblage of bats using foraging and commuting habitats associated with the accessible areas of South Cubbington Wood (land lying to the southeast of Rugby Road) is of district/borough value. There are no known bat roosts located within the asset boundary but there are two known roosts located within two buildings near Sandalwood (located adjacent to the asset, within 50m), at the eastern end of the existing B4453 Rugby

Road. No bat roosts will be impacted by the asset's construction or operation. The asset borders but does not sever a 'new assumed bat commuting route' (new ACR) which runs along the edge of South Cubbington Wood. No bat fencing is required for this asset.

- 3.3.24 While there are no great crested newt (GCN) ponds located within the asset boundary the asset is partially located in GCN Assumed Metapopulation (AMP) 64. GCN are a species of principal importance and are identified in the ES as being of county/metropolitan value. AMP 64 is located within and adjacent to South Cubbington Wood and is formed of four ponds, three of which have a GCN population. One of the ponds (within South Cubbington Wood) is considered to be likely absent of GCN and is dry most years; this pond will be lost during construction.
- 3.3.25 Construction works within AMP 64 are covered under WP 054 Cubbington Enabling Works North Contract AMP 64 Method Statement for Works under HS2 Organisational GCN Licence (Document Number: 1EW04-LMJ-EV-MST-NS01\_NL02-054002). There will be no significant habitat fragmentation during construction or operation of the asset, but the realigned B4453 Rugby Road will continue to act as a barrier to GCN movement north of the road. However, this is not considered to be significant as it does not differ from the baseline and there will be a substantial permanent increase in the availability of high quality terrestrial habitat, five new ponds and increased connectivity between aquatic and terrestrial habitats. Additionally, to avoid potential entrapment of GCN in drainage systems there will be mitigation measures, such as ladders in gully pots, amphibian curbs and/ or climate tunnels (underneath the road) within the new road infrastructure.
- 3.3.26 There is a barn owl (Tyto alba) nest located within 1km of the asset boundary. This will be removed, and mitigation provided during in the construction phase under the EWC Barn Owl Mitigation Plan (Document number: HS2-HS2-EV-REP-000-000041). The EWC will provide barn owl nesting boxes in areas more than 1.5 km from the route. Implementation of these measures will likely increase numbers of barn owls within the wider landscape. During operation, the asset will not significantly impact barn owls due to their displacement from the LLAU. The asset will not pose a barrier to movement.
- 3.3.27 Full details of the species composition for these habitats are currently being finalised as part of the detailed design.
- 3.3.28 Monitoring of landscape planting and habitat establishment will be agreed through the Bringing Into Use (BIU) application. A programme of protected

species surveys will also be implemented post completion of the mitigation, in order to assess the effectiveness of the proposed mitigation. If mitigation is found to be underperforming, the mitigation will be altered to improve performance.

#### 3.4 Construction Method

- 3.4.1 This section summarises the general construction methodology and the main temporary works arrangements. The arrangements described may alter, are for information and background only and do not form part of this request for approval.
- 3.4.2 The works subject to this request for approval of Plans and Specifications will be undertaken in accordance with the HS2 Code of Construction Practice (CoCP) and the Class Approval issued by the Secretary of State (March 2017).
- 3.4.3 It is anticipated that the overbridge will be constructed via top-down methodology in the following high-level sequence:
  - Topsoil and subsoil stripping;
  - Preparation of the piling platform;
  - Piling works;
  - Construct abutments;
  - Construct the deck slab;
  - Install parapets, ducts for utilities, surface course;
  - Earthworks, ducts for utilities, road and bridge drainage, road construction on each side of the overbridge and realigned road and footpath; and
  - Open the road and footpath realignment and B4453 Rugby Road Overbridge to traffic and pedestrians.
- 3.4.4 The temporary construction compound that will manage the construction of the asset will be Fosse Way Compound.
- 3.4.5 Approval has been sought from the local authority for large goods vehicle (LGV) and heavy goods vehicle (HGV) construction routes.
- 3.4.6 Construction will affect the existing B4453 Rugby Road and Footpath W130b, so traffic management will be required at the tie-ins between the realigned and the existing B4453 Rugby Road. Consultation with local authorities will be required to agree on traffic management.

**B4453** Rugby Road Overbridge

#### **Historic Environment** 3.5

- 3.5.1 As set out within the HS2 Heritage Memorandum 15 (part of the HS2 Environmental Minimum Requirements), a route-wide generic written scheme of investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS) 16 has been prepared in consultation with Historic England (HE) and the local planning authorities along the route. It sets out the research framework and general principles for design, evaluation, investigation, recording, analysis, reporting and archive deposition to be adopted for the design development and construction.
- 3.5.2 The HS2 Heritage Memorandum also sets out how the historic environment (including heritage assets and their setting) will be addressed during design. The HS2 Environmental Memorandum sets out the approach to landscape and visual mitigation which takes account of the historic environment.

#### **Archaeological Summary Statement**

- 3.5.3 The arrangements for the management of archaeology during construction are not a matter for approval under Schedule 17.
- 3.5.4 Following guidance of the ES and Historic Environmental Research and Delivery Strategy (HERDS) the area has undergone archaeological trial trenching by the EWC. The final trial trenching report for this area has been produced (Document Number: 1EW04-LMJ\_WEX-EV-REP-NS01\_NL03-029009\_C01).
- 3.5.5 The southern central area is the most relevant area of evaluation associated with the construction asset. Eleven trenches excavated within this area contained archaeology. These mainly contained furrows or drainage features such as gullies, thought to be modern in date. One trench contained an artefactually sterile ditch along with two linear features, a probable minor palaeochannel and a sandy geological anomaly.
- 3.5.6 No further archaeological works are required in this area to mitigate the works described in this written statement.
- 3.5.7 The unexpected finds procedure (document reference: 1MC08-BBV\_MSD-EV-PRO-N000-100001) will be employed to mitigate any unexpected archaeology that has not previously been recorded by EWC.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/593595/Heritage\_Memorandu m.pdf

<sup>16</sup> https://www.gov.uk/government/publications/hs2-phase-one-historic-environment-research-and-delivery-strategy

#### **Built Heritage**

- 3.5.8 The HS2 Heritage Memorandum also sets out how the historic environment (including heritage assets and their setting) will be addressed during design. The HS2 Environmental Memorandum sets out the approach to landscape and visual mitigation which takes account of the historic environment.
- 3.5.9 There are no designated or non-designated built heritage assets within the limits of deviation/limit of land to be acquired or used (LOD/LLAU). Therefore, no relevant works such as historic building recording, movement monitoring or setting assessment has been considered necessary under Schedule 18 of the Act or through the GWSI:HERDS process. Discussion of any impact and associated mitigation on the setting of built heritage are covered above in Section 3.3.5.

## 3.6 Environmental Management during Construction

3.6.1 The Environmental Memorandum (part of the HS2 Environmental Minimum Requirements) sets out the arrangements for the management of environmental issues during construction and the CoCP sets out specific details and working practices that apply. The CoCP is supported by Local Environmental Management Plans (LEMPs) which include specific measures by topic, relevant to each relevant local authority area. The LEMP relevant to the works subject to this Schedule 17 submission is High Speed Rail (London-West Midlands), Local Environmental Management Plan, Warwick District Council (December 2017) and can be found here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/669187/warwick\_local\_environment\_management\_plan.pdf

3.6.2 Environmental management arrangements during construction do not form part of this request for approval of Plans and Specifications under Schedule 17.

#### **Dust**

3.6.3 As set out in Environmental Minimum Requirements Annex 1: Code of Construction Practice, 'The nominated undertaker will require its contractors to control and limit dust, air pollution, odour and exhaust emission during the construction works as far as reasonably practicable and in accordance with best practicable means (BPM)'.

#### Noise

3.6.4 Best practicable means (BPM) will be applied during construction works to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors (including local businesses and quiet areas designated

by the local authority) arising from construction activities. Works will comply with the Section 61 whereby extended hours between 0700 and 1900 on weekdays only will be required.

#### Water

3.6.5 Standard mitigation measures covered in the HS2 CoCP, Section 16, will be adhered to during the construction, including the use of appropriate dewatering methods to ensure that the quality of any encountered groundwater is not impacted by the works.

## 4. Design Approach and Rationale

### 4.1 Introduction

- 4.1.1 The proposed structure is a single span integral bridge of overall length 25m, comprising a cast in-situ deck slab supported on contiguous piled abutment walls.
- 4.1.2 The deck is at a maximum gradient of 1.2%, crossing the HS2 line perpendicular at 8° to the track alignment. The deck cross section includes a 6m wide carriageway and two 2.0m wide raised verges at each side of the carriageway, which gives the overall width of 10.00m between the internal faces of the parapets.
- 4.1.3 The deck is supported by contiguous RC piled abutment walls at both ends, fully integral with the RC capping beams. The piles are 1.20 m in diameter, 21.3m in length and have a spacing of 1.6m between centres. There is reinforced concrete, containment Class H4a parapets on either side of the bridge. These will be a minimum of 1.8m high for the full length of the bridge.
- 4.1.4 Over-the-edge drainage on east and west approaches to the structure collected by ditches/filter drains at the toe of the embankment. Run-off from the bridge deck is channelled to each end of the structure using bridge deck units connecting into a sealed pipe system and conveyed to the filter drain/ ditch system at the toe of the embankment. Road and embankment run-off on the east side of HS2 is combined with railway perimeter drainage and it will then discharge via a sealed pipe running adjacent to the track system, eventually discharging to a land drainage ditch and an existing field ditch. To the west of the bridge, run-off will discharge into an existing watercourse.
- 4.1.5 Four vehicular accesses (three HS2 Vehicular Accesses (Direct Accesses) and Metcalfe & Timber Builders Merchants Access (Priority Access)) shall be designed from Rugby Road to Maintenance Access Strips that run alongside the HS2 mainline earthworks. These Maintenance Access Strips terminate at either the crest or toe of landscape earthworks and will be continued in adjacent earthworks Federated model submissions. Key accesses at Rugby Road include:
  - Access to the Metcalfe Timber & Builders Merchants in the North-eastern quadrant is maintained.
  - Access to Rugby Road in the south-western quadrant will be provided to serve the GSM-R mast compound.

- 4.1.6 Vehicular parking is provided on both the eastern and western sides of the crossing between Rugby Road and the HS2 mainline. This parking serves as access to abutments for maintenance.
- 4.1.7 Landscape earthworks and associated soft landscape planting will be incorporated overlaying all highways earthworks associated with the road. These elements will terminate at the interface between the overbridge and mainline earthworks.

## 4.2 Design Rationale

4.2.1 The B4453 Rugby Road Overbridge has been designed in accordance with HS2's Design Vision. HS2's Design Vision considers three core design principles consisting of People, Place and Time. The B4453 Rugby Road Overbridge is part of Scheduled Work and therefore has been subject to design refinement, assuring that it integrates into the surrounding landscape and mitigates the environmental impact, where possible. It has been designed to maintain the eastwest connectivity of the existing B4453 Rugby Road and provide maintenance access along Cubbington Cutting.

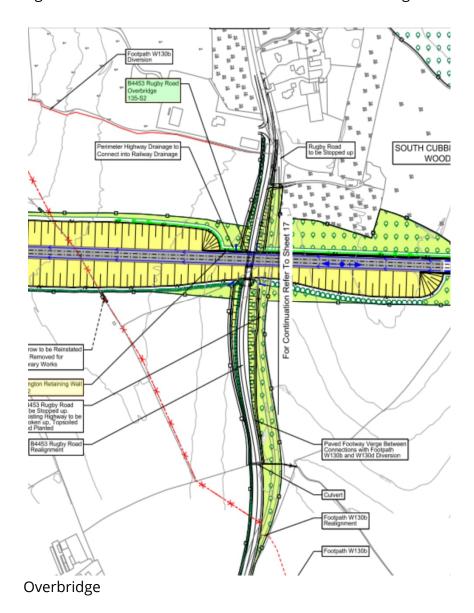
## 4.3 Design Constraints

- 4.3.1 Some of the main constraints are detailed below:
  - Metcalfe Timber & Builders Merchants on the eastern end of the realignment.
     The highway alignment and junction design will need to consider the appropriate vehicle movements;
  - The existing B4453 Rugby Road and Footpath W130b. The highway and footpath realignment and new structure will have to be constructed whilst the existing road and footpath remains open to the public;
  - Various utilities need to be diverted and phased in a manner to compliment to construction sequence;
  - The South Cubbington Ancient Woodland straddles the south edge of B4453 Rugby Road. The design must avoid any land take in this area;
  - Integration of proposed works to the immediate and surrounding landscape;
  - Requirement to keep the works within the LoD and LLAU; and
  - Requirement to provide sufficient headroom clearance between the overbridge and HS2 railway track.

## 4.4 Design Evolution since Final Preliminary Design

4.4.1 There have been minor design changes to B4453 Rugby Road Overbridge since the original Environmental Statement (London- West Midlands Environmental Statement (Volume 5 Map Books, CFA17 Offchurch and Cubbington) and the finalisation of the Final Preliminary Design (FPD). The design submitted in the original ES is shown in **Figure 3** below.

Figure 3: Extract from Environmental Statement showing B4453 Rugby Road



4.4.2 Between FPD and detailed design, Cubbington Cutting has been raised by approximately 2m in order to remove the need for a retaining wall. As a result,

the B4453 Rugby Road Overbridge has been raised in order to maintain adequate headroom clearances. The approach earthworks consequently are larger and wider and have been brought closer to the HS2 line on the western side of the bridge to reduce the span of the bridge from a 2-span bridge to a single span bridge. The abutments of the bridge have been amended in line with the span and level changes. Due to the increased height of the earthworks, the abutment now incorporates a diaphragm (pile) wall which retains soil either side of the bridge.

- 4.4.3 Access stairs have been added in each quadrant of the Bridge, with full stairs to the MAS on the northwest & southeast locations. The southwest & northeast stairs only reach the top of the wingwall as they are only required for maintenance and HS2 maintenance staff can access these opposite quadrants via access from the northwest & southeast, whilst staying within the 200m limit standard of walking distance.
- 4.4.4 Additional vehicular accesses have been provided since the FPD design to coordinate with maintenance access strips at Cubbington Cutting and accesses to key locations such as a new G-SMR compound to the South West and the Metcalfe Timber & Builders Merchants to the north east. The culvert to the east of Rugby Road Overbridge and beneath the approach earthworks has been further developed and its position updated to coordinate with the new diaphragm walls.

## 4.5 Options Considered

- 4.5.1 An initial sift process (sequentially more detailed appraisal of options) to determine the most appropriate type of bridge construction was carried out through a series of qualitative value engineering workshops with scoring based on multiple design criteria.
- 4.5.2 At exemplar design four further options were considered. These options were:
  - Option 1 Single span cast in situ reinforced concrete deck
  - Option 2 Single span cast in situ prestressed slab
  - Option 3 Single span precast T beams
  - Option 4 Three span cast in situ prestressed slab

## 4.6 Selected Option

4.6.1 Option 1 was the selected option for the overbridge and was selected by BBV during the exemplar design optioneering. The main drivers to selecting this

option were the cost savings demonstrated within the Whole Life Costing of the options and the overall improvements associated with reducing the bridge span from two spans to one span. Additionally, the top down construction method of the selected option allowed for the highway realignment to be constructed closer to the existing B4453 Rugby Road without impacting its operation during construction.

4.6.2 Option 1 has been designed to adhere to technical requirements whilst also seeking to preserve the local environment and amenity as set out in Schedule 17 to the Act as well as the HS2 Design Vision and design policy, including the provision of landscape planting to screen the overbridge and its position within the wider landscape and siting of the bridge to avoid adverse impacts to the nearby woodlands. Therefore, it is considered that the placement and design of the overbridge is optimal, and that there are no further reasonable modifications that can be made to the proposals.

## 4.7 Consideration against the relevant grounds for refusal in the Schedule 17

- 4.7.1 As set out above, the proposed development includes a range of activities for which approval of Plans and Specifications is required, in line with Schedule 17 of the Act. These activities fall into the following categories:
  - Buildings and/or Structures
  - Earthworks
  - Fences

#### **Structure: Overbridge**

4.7.2 As detailed in Section 3 above, an overbridge structure, B4453 Rugby Road Overbridge, is proposed. Possible grounds for refusal relating to buildings and/or structures are set out in are set out in Schedule 17, Section 20(3), Part 1, Section 2 of the Act. An assessment of the proposed development against these grounds is set out below in **Table 3**.

Table 3: Structures - Assessment of Proposed Development Against Possible Grounds for Refusal

Possible Ground fo	r Refusal	Assessment of Proposed Development
1 ' '	planning authority is a ty, it may only refuse to	The overbridge is situated within the LoD and has been designed to adhere to technical requirements

#### **Possible Ground for Refusal Assessment of Proposed Development** approve plans or specifications for the whilst also seeking to preserve the local purposes of this paragraph on the ground environment and amenity as set out in Schedule 17 to the HS2 Act as well as the HS2 Design Vision and that: design policy. (b) The design or external appearance of the building works ought to be The landscape proposals will integrate the modified: overbridge into the wider landscape. The B4453 Rugby Road Overbridge passes over Cubbington (i) to preserve the local Cutting and continues on the east side of the environment or local cutting, where the woodland planting provides a amenity screening mitigation function. The wider connectivity with the wider landscape is assured by the native species rich hedgerow, respectively by the mixed native woodland planting which tie and integrate into the surrounding landscape. Landscape planting will include native broad-leaved woodland, shrub and hedgerows and the selection of species will reflect tree and shrub species native to the area landscape and take into account possible climate change impacts associated with the quality and availability of water and the potential increase in pests and diseases. The proposed structure is a single span integral bridge comprising a 1300mm thick cast in-situ deck slab supported on contiguous piled abutment walls. The overall length of the bridge is 25m. The deck is at a maximum gradient of 1.2% and crosses HS2 perpendicular at 8° to the track alignment. The deck cross section includes a 6m wide carriageway and two 2.0m wide raised verges at each side of the carriageway, which amounts to an overall width of 10m between the internal faces of the parapets. The structure has contiguous reinforced concrete (RC) piled abutment walls at both ends, fully integral with the RC capping beams. The piles are 1.20m in diameter, 21.3m in length and have a spacing of 1.6m between centres. The earthworks for the asset will facilitate the realignment of the existing B4453 Rugby Road, and comprises an engineered fill to form approach embankments, access roads to Maintenance Access Strips and a Global System for Mobile Communication - Railway (GSM-R) compound and road vehicle parking/turning heads. The overbridge has been designed to retain

**B4453** Rugby Road Overbridge

Possible Ground for Refusal	Assessment of Proposed Development
	functionality whilst allowing for planting either side to screen the overbridge and minimise visual impact where possible. Further details of the planting will be set out within the Landscape and Environmental Masterplan for the Cubbington Cutting Schedule 17 Plans and Specifications application and as part of future BIU consents.  This will therefore achieve the best option to preserve the local environment and local amenity and provide a good design solution. The design does all that is practicable to preserve and enhance local environment and local amenity.
(ii) to prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area,	The realigned B4453 Rugby Road has been designed to maintain connectivity from east to west. The maintenance access tracks will not adjoin the public highway and are being constructed to provide access to the HS2 line. Therefore, the proposals will not result in any prejudicial effects on road safety or the free flow of traffic.
(iii) to preserve a site of archaeological or historic interest or nature conservation value, and is reasonably capable of being so modified,	As set out in Section 3.3 the proposed development is not located in a particularly sensitive area with regards to historic interest or nature conservation.  There are no statutory environmental designations
	within the asset boundary.  The proposed planting for the B4453 Rugby Road Overbridge includes hedgerows and species rich grassland which will maintain and hence connectivity for commuting mammals etc.
	The impact of the proposed development has been assessed as part of the ES and the scheme remains EMR compliant following design refinement.
	Details of the ecological mitigation on the overbridge and how it ties in with the surrounding landscape are set out in Section 3.3.
	The nature and location of the proposed overbridge are not considered likely to significantly impact the setting of retained built heritage assets.
(b) the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.	The proposed development is a Scheduled Work (No. 2/162) with a defined limit of deviation. There is no opportunity to locate the bridge elsewhere

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**B4453** Rugby Road Overbridge

Possible Ground for Refusal	Assessment of Proposed Development
	while remaining within this permitted Limit of Deviation.

#### **Earthworks**

Possible grounds for refusal relating to earthworks are set out in Schedule 17, 4.7.3 Section 20(3), Part 1, Section 3 of the Act. An assessment of the proposed development against these grounds is set out below in Table 4.

Table 4: Earthworks - Assessment of Proposed Development Against Possible Grounds for Refusal			
Possible Ground for Refusal	Assessment of Proposed Development		
That the design or external appearance of the works ought to, and could reasonably, be modified —  (a) to preserve the local environment or local amenity,	The earthworks to facilitate the overbridge are of a relatively minor nature in the context in the construction of the railway and as such are not considered to result in a significant impact on the local environment or amenity.		
	The earthworks are required to form the overbridge structure and therefore, there is no overriding reason that these earthworks ought to, or could reasonably be, modified to preserve the local environment or local amenity.		
	The design does all that is practicable to preserve and enhance local environment and local amenity.		
	The earthworks for Cubbington cutting have been consented separately with approval granted by WDC on 31 July 2023 (W/22/1770/HS2).		
(b) to prevent or reduce prejudicial effects on road safety or on the free flow of traffic in the local area.	The earthworks are located either side of the overbridge and as such will not impact any road. The earthworks have been situated in such a way as to support the formation of the overbridge.		
(c) to preserve a site of archaeological or historic interest or nature conservation value.	As set out in Section 3.3 the proposed development is not located in a particularly sensitive area with regards to historic interest or nature conservation value,		
	The location and design of the proposed earthworks have been developed to add nature conservation value to the area and enhance the habitat connectivity across the rail alignment. Details of the ecological mitigation on the overbridge and how it ties in with the surrounding landscape are set out in section 3.3.		
	The earthworks are minor. The impact of the proposed development has been assessed as part of the ES and the scheme remains EMR compliant following design refinement.		

Possible Ground for Refusal	Assessment of Proposed Development
	The nature and location of the proposed earthworks are not considered likely to significantly impact the setting of retained built heritage assets. Construction activities will be undertaken in accordance with the GWSI: HERDS, as detailed in Section 3.5 of this report.
If the development does not form part of a scheduled work, that the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.	The location of the landscape earthworks is determined by the location of the overbridge which is a Scheduled Work (2/162) that cannot be located elsewhere. The location of the earthworks elsewhere within the development's permitted limits is therefore not an applicable consideration.

#### **Fences and Walls**

- 4.7.4 Possible grounds for refusal relating to earthworks are set out in Schedule 17, Section 20(3), Part 1, Section 3 of the Act. An assessment of the proposed development against these grounds is set out below in **Table 5.**
- 4.7.5 As detailed in Section 3, fencing and VRS are proposed within the site boundary. The locations are set out in the submitted General Arrangement Drawing (Drawing Reference: 1MC08-BBV\_MSD-PL-DGA-NS01\_NL02-135602)

Table 5: Fences and Walls - Assessment of Proposed Development Against Possible Ground for Refusal

Possible Grounds for Refusal	Assessment of Proposed Development
That the development ought to, and could reasonably, be carried out elsewhere within the development's permitted limits.	The fences have been designed for function and safety, to prevent access from B4453 Rugby Road and adjacent footways to the railway. Therefore, the location of the fencing is considered optimal and should not be modified.  The vehicle restraint system has been designed for function to provide errant protection. Therefore, the location of the vehicle restraint system is considered optimal and should not be modified.

#### **Conclusion**

4.7.6 Taking the above into account, it is considered that the B4453 Rugby Road Overbridge meets the requirements of the HS2 Act. The design has been developed in accordance with Information Paper - D1: Design Policy and whilst

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**B4453** Rugby Road Overbridge

the design of development should be sympathetic to local context, environment, and social setting, it must also meet the objectives of maintenance and cost/quality decisions and provided the best value to funders. Therefore, there are no reasonable modifications that can be made to the scheme and no part of the scheme would be better located elsewhere within the permitted limits.

# 5. Pre-submission Consultation

5.1.1.1 Details of the pre-submission consultation undertaken with key stakeholders to discuss the proposals for B4453 Rugby Road Overbridge is summarised in **Table**6. Comments raised during the pre-application submission stage by the LPA and responses to these are summarised in **Table 7**.

Table 6: Pre-submission Consultation with the LPA, statutory consultees and other relevant stakeholders

Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
Warwickshire County Council (WCC) Highways	08/10/2020	Meeting – present B4453 Rugby Rd realignment proposals Attended by BBV, DJV, WCC representatives	Pre-detailed design meeting to agree - highway design basis, the form and dimensions of the overbridge and diversion of Footpath W130b
WCC Highways	24/05/2022	HS2 Highway design interface meeting  Attended by BBV, DJV, WCC representatives and Warwickshire Police	WCC consented to the new highway design for B4453 Rugby Road. Consideration of design options for Footpath W130b
WCC Highways	19/01/2023	HS2 Highway design interface meeting  Attended by BBV, DJV, WCC representatives	WCC consented to the proposed highway mitigation measures and no objections to the departures for B4453 Rugby Road.
WCC Highways	23/03/2023	HS2 Highway design interface meeting  Attended by BBV, DJV, and WCC representatives	Page turn review of Schedule 4.3 pre- app pack submitted to WCC for review on 08/03/23
WCC Highways	04/07/2023	HS2 Highway design interface meeting – footpath W130b Attended by BBV,	DJV to review design of Footpath W130b

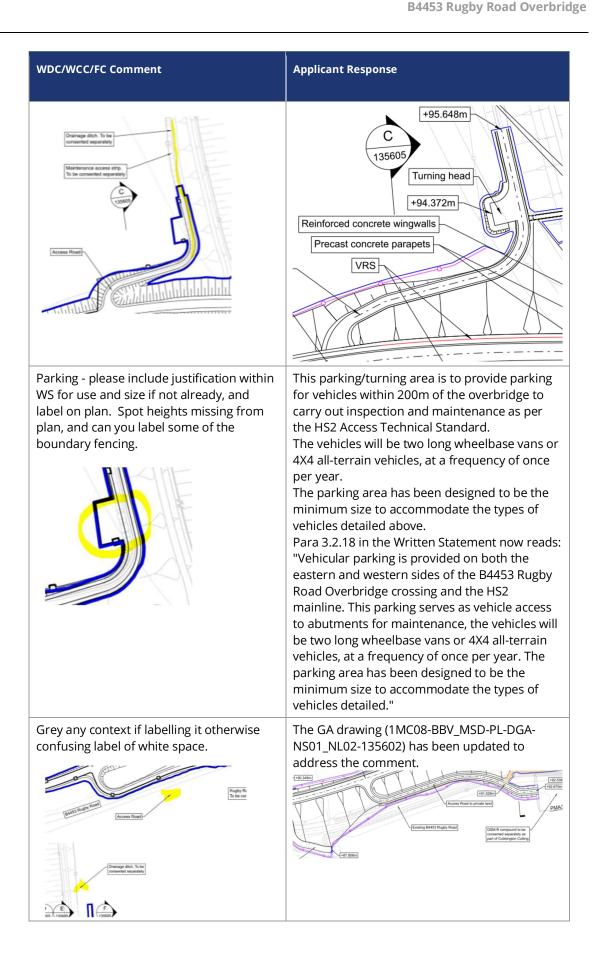
**B4453** Rugby Road Overbridge

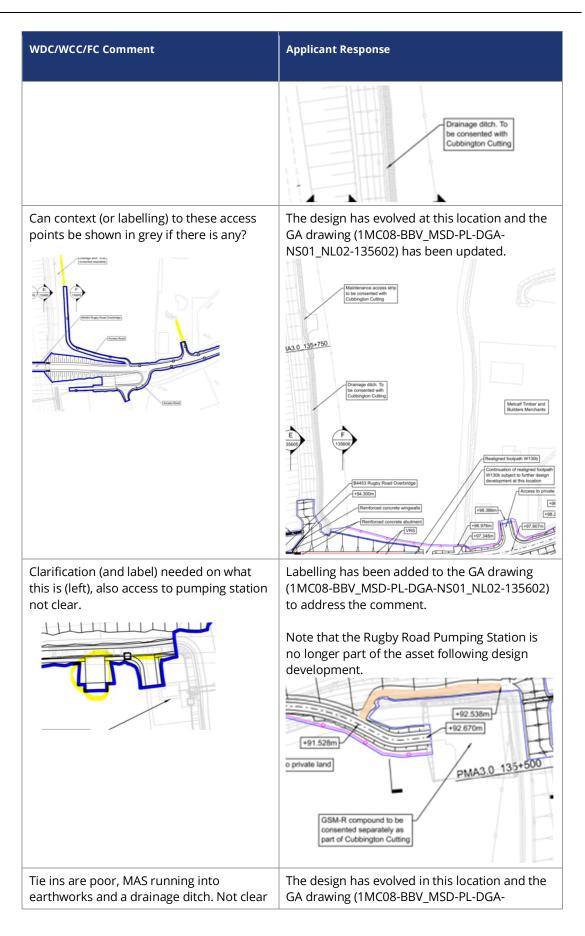
Consultee Name	Consultation Date	Method of Consultation / Attended by	Summary of Consultation Outcome
		DJV, and WCC representatives	
WCC Highways	29/08/2023	HS2 Highway design interface meeting – footpath W130b Attended by BBV, DJV, and WCC representatives	DJV to review design of highway – access to affected properties
WCC	22/11/2023	Meeting – realignment of footpath W130b at B4453 Rugby Rd Overbridge & A445 Leicester Lane Overbridge  Attended by BBV, DJV, and WCC representatives	Discussion of proposed design detail for realignment of footpath W130b. Realignment to be along Rugby Rd carriageway to cross HS2 via the overbridge.
Warwick District Council (WDC) WCC Forestry Commission (FC)	03/10/2023	Pre-application comments from WDC, WCC and Forestry Commission	Pre-application comments are discussed in Table 6.

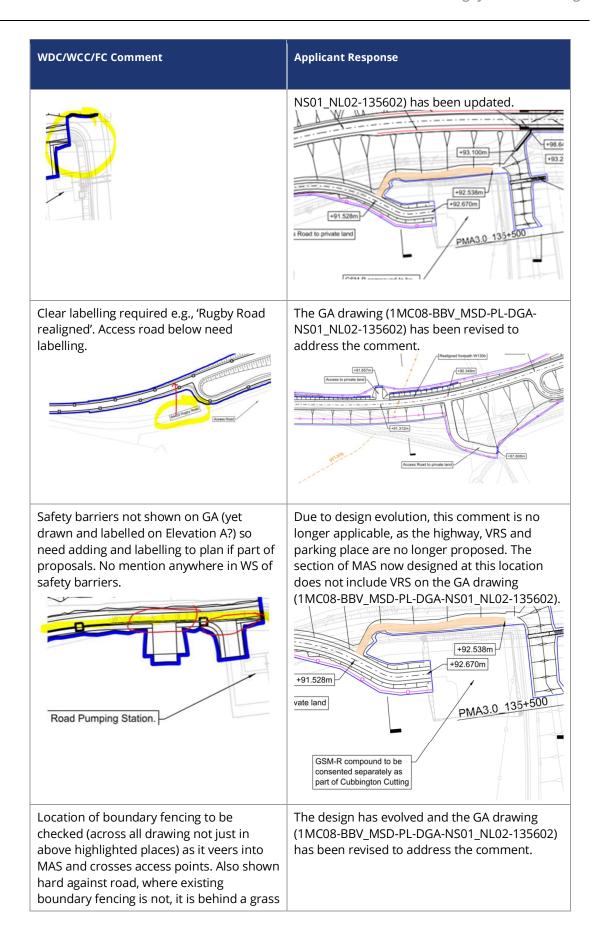
Table 7: Comments raised by WDC and WCC during the Pre-Application Period and the Applicant's Response

WDC/WCC/FC Comment	Applicant Response
WDC comments	
Boundary fencing appears to be shown immediately adjacent to the road. Existing conditions on Google Maps show Rugby Road to have grass verges either side, with hedgerows, and then boundary fences screened behind this. The proposals appear a bit back to front, and not in keeping with the surroundings. Could the location of the fencing be reviewed. It would also be a concern that the fencing	Boundary fencing has been updated following design development and is shown on the drawings within this pack.

WDC/WCC/FC Comment	Applicant Response
shown would not tie-in with existing fencing beyond the application boundary, can fencing be shown in grey outside of the site boundary to show it ties in. Fencing is also shown in front of the residential properties including across their access points, with no landscaping buffer.	
It would be useful to provide a section through Rugby Road in the suggested position to illustrate the boundary fencing, for clarity on the matter.	See above response. An additional Section G (1MC08-BBV_MSD-PL-DSE-NS01_NL02-135606) has been added to the drawings.
Could this show existing with no solid fill within site boundary please so the existing Rugby Road arrangement can be seen.	Drawing (1MC08-BBV_MSD-PL-DLO-NS01_NL02-135601) has been revised so that the existing Rugby Road arrangement can be seen.
Greyed context appears to contradict proposals – no tie in / alignment and clash of MAS/drainage ditch. Labelling both MAS and drainage ditch to same thing. Does not correspond well with W/22/1770 consent.	The grey context has been removed from the GA drawing (1MC08-BBV_MSD-PL-DGA-NS01_NL02-135602) to avoid confusion, the disconnect in designs and poor tie in is due to B4453 Rugby Road Overbridge and Cubbington Cutting being at different design stages. Cubbington Cutting having already been accepted by the LPA, however the design has now evolved and any changes to the Cubbington Cutting design will be picked up by a future Schedule 17 consent.







### WDC/WCC/FC Comment **Applicant Response** verge. If tying back to existing boundary fencing this needs to be shown in grey outside of the site boundary to illustrate Section C. Overbridge should be in Sections provided are represented as a 'slice 'distance' (greyed maybe) but should be through' of the asset at that location and do not visible. Appropriate to respond by way of show objects that are distant from the location written response on the type of section of the section line. provided and that this would not show the bridge. Where is drainage ditch, needs to be Due to design evolution, this comment is no longer applicable, as a drainage ditch is no shown. longer proposed at this location. Wingwalls not clear on GA plan, can they The GA drawing (1MC08-BBV\_MSD-PL-DGAbe shown with lines and labelled. NS01 NL02-135602) has been revised to address the comment, wingwalls have been labelled. Lines very unclear, section through deck The section drawing (1MC08-BBV\_MSD-PL-DSEneeds clarification /tidying. NS01\_NL02-135605) has been revised to address the comment, the section through the deck is now clearer and labelled. 100.583m What are these? The section drawing (1MC08-BBV\_MSD-PL-DSE-

### WDC/WCC/FC Comment **Applicant Response** NS01\_NL02-135605) has been revised to address the comment, the section through the deck is now clearer and labelled. The GA drawing (1MC08-BBV MSD-PL-DGA-This drainage ditch should be greyed on GA plans as it is referred to in section, is NS01 NL02-135602) has been revised to not illustrated at all within GA. address the comment. PMA3.0 135+750 No grass verge between road and Comments on landscape are noted. All boundary fencing? Hedges to be planted at landscaping proposals should be considered back edge? Is this correct? Linked with indicative at this stage. Landscape design work is ongoing and will not be finalised until comments regarding fence location above. Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals. Avoid hatching over areas landscape is not Comments noted. All landscaping proposals proposed, egg over access tracks/pumping should be considered indicative at this stage. Landscape design work is ongoing and will not station. Hatches should align relatively be finalised until Bringing into Use submissions accurately with the plan. are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the

### WDC/WCC/FC Comment **Applicant Response** submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals. The LEMP (1MC08-BBV MSD-PL-DGA-NS01\_NL02-135603) has been amended to remove hatching over the G-SMR compound. OC093 EFD-1/EFA/EFB OC094 EFA/EFB **WCC** comments Public footpath W130b connects with The Environmental Minimum Requirements Rugby Road, on both its northern and and the implementation of the Code of southern sides, towards the western end Construction Practice will mitigate the effects of of the application site for these works. If construction across the scheme, including the public footpath is to remain open where PRoWs are affected during the during works then suitable measures must construction and operation phase. be employed to ensure the safety of public rights of way users, and it must also be

acceptable condition following works.

The mitigation planting has been overlaid with a revised site layout, but not all planting

ensured that the surface of the public footpath and any path furniture, such as gates or signposts, are be restored in an

proposals have been updated to account for these changes. Thus, woodland screen planting overlaps with the location for the Rugby Road Pumping Station and what appears to be a separate vehicular parking area to the south of this facility.

Comments on landscape are noted. All landscaping proposals should be considered indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals.

Note that the Rugby Road Pumping Station is no longer part of the asset following design development.

It is noted Rugby Road pumping station

Note that the Rugby Road Pumping Station is

WDC/WCC/FC Comment	Applicant Response
has been removed from the scope of works and will be consented as part of a separate Schedule 17 application. However, the Landscape Officer has requested information regarding these proposed works in order to assess if mitigation is adequate. The Written Statement should aim to include indicative heights and design information where possible to help understand the potential visual impact.	no longer part of the asset following design development.
The proposed hedges are shown to be planted to the back edge of the boundary fencing. Is this correct?	Comments on landscape are noted. All landscaping proposals should be considered indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals.
There also appears to be a short section of hedging along the edge of a vehicular parking area to the south west of the railway line. An area of verge should be included along the front edge of the hedge.	Comments on landscape are noted. All landscaping proposals should be considered indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals.
Replacement roadside hedge planting to the north of the railway line appears to be limited to screening the frontage of the timber yard along the western edge of the Rugby Road. However, previously the roadside hedgerows extended up to South Cubbington Wood.	Comments on landscape are noted. All landscaping proposals should be considered indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals.

**B4453** Rugby Road Overbridge

#### WDC/WCC/FC Comment **Applicant Response** Replacement roadside hedge planting to Comments on landscape are noted. All the north of the railway appears to be landscaping proposals should be considered limited, however previously the roadside indicative at this stage. Landscape design work hedgerows extended up to South is ongoing and will not be finalised until Cubbington Wood. Could justification why Bringing into Use submissions are made. The this hedging is not shown to extend be Local Authorities views on the proposed added to the WS, or can landscape landscaping proposals are being sought, as per proposals be amended to include more the details set out in the submitted Indicative hedging in line with existing conditions. Mitigation Letter. This process provides the Similarly to the south of the railway, the Local Authority with the opportunity to shape Landscape Officer requests clarity on the mitigation provided by the final landscaping whether the replacement roadside hedges proposals. extend as far as the retained hedges on the settlement edge. The Noise Assessment indicates that No additional landscape earthworks bunds are additional landscape earthwork bunds proposed for this asset. The noise would be incorporated within the demonstration report for the Cubbington to proposed development. For clarity, the Stonehouse Area that incorporates the B4453 gradient(s) for all proposed landscape Rugby Road Overbridge, 1MC08-BBV MSD-EVearthworks should be provided. REP-NS01\_NL03-100087, shows that no reasonably practicable measures need to be taken for the purpose of mitigation of the effect of operational noise to meet the objectives set out in HS2 Planning Forum Note (PFN) 14. The mitigation options that were considered were not selected as they would have limited impact in resultant noise levels and represented a low benefit when compared with cost. Please show landscape proposals in all Comments on landscape are noted. All areas adjacent to the site boundary line landscaping proposals should be considered where possible. Example below; indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals. **Forestry Commission** Paragraph 3.3.22: we welcome the Noted - Refer to the HS2 Phase 1 Environmental recognition of the losses of ancient Statement (ES), CFA17, Volume 2, which woodland and the impacts arising from provides a robust assessment of the proposals construction of the scheme, although the and adequately report the likely significant assessment should consider wider impacts effects of both construction and operation of

WDC/WCC/FC Comment	Applicant Response
than just the 'edge effects' mentioned in the statement. This may include the severance of working connections between habitats, disturbance from the construction and operation of the development site, and increased dust, water and air pollution.	the Proposed Scheme. The ES fully complies with all legal requirements and has been developed in accordance with the accepted best practice methodologies.
Paragraph 3.3.22 goes on to note that the Environmental Statement states that the permanent adverse effects on both ancient woodlands are considered to be of county/metropolitan value. The HS2 Phase 2b Environmental Statement recognises ancient woodland as irreplaceable habitats of national significance; while we recognise that this site lies along the Phase 1 section, we would expect this principle to be applied to all ancient woodlands within this application.	
Paragraph 3.3.27 describes the approach to compensation, with proposed planting to the east of the railway (referred to as site OC092). However without any detail as to the extent and design of the planting we are unable to assess whether this is sufficient to account for the losses and impacts at North and South Cubbington Woods	Comments on landscape are noted. All landscaping proposals should be considered indicative at this stage. Landscape design work is ongoing and will not be finalised until Bringing into Use submissions are made. The Local Authorities views on the proposed landscaping proposals are being sought, as per the details set out in the submitted Indicative Mitigation Letter. This process provides the Local Authority with the opportunity to shape the mitigation provided by the final landscaping proposals.
Paragraphs 3.3.24/.25 both refer to important hedgerows. Such habitats may contain ancient or veteran trees, which are also recognised as irreplaceable habitats and protected by paragraph 180c of the NPPF. The noted hedgerows (and arable field boundaries) should be surveyed to identify any ancient or veteran trees, or the presence of trees that are beginning to develop features associated with veteran trees, so that their protection can be secured wherever possible and a suitable compensation strategy put in place should they be lost	Noted - The Environmental Minimum Requirements and the implementation of the Code of Construction Practice will mitigate the effects of construction across the scheme, including on hedgerows.

# 6. Construction Programme

6.1.1 A high level programme for the works subject to this submission and how they fit into the overall programme for other works in the area is contained in **Table 8**. The programme for works on site may vary from the indicative dates shown.

Table 8: Proposed Programme and Sequence of Works

Anticipated Start on Site Date (quarter/year)	Activity	Estimated Completion of Works (quarter/year)
Q3 2023	Site Commencement	Q1 2024
Q4 2023	Piling platform and piling works	Q1 2024
Q3 2024	Capping beams and deck	Q4 2024
Q3 2024	Parapets, waterproofing	Q4 2024
Q4 2024	Site Completion	Q4 2024

## 7. Other Consents

7.1.1 Other main consents likely to be required for the works are summarised in **Table 9.** Consent requirements may alter during design development and further consents not identified in **Table 9** may be required.

Table 9: Other Consent Requirements

Consent	Works Requiring Consent
HS2 Act, Schedule 4, Part 3	Changes to the LHA highway, new highway alignment across HS2 structure. Engagement has been held on 14-10-20 to present the design parameters, with Warwickshire CC acceptance.
HS2 Act, Schedule 33, Part 5	Permanent, temporary works or operations that are likely to affect the flow, level or quality of main rivers, associated floodplains and groundwater.
HS2 Act, Schedule 17	Cubbington Cutting. Approval granted by the WDC on 31 July 2023 (W/22/1770/HS2).
Schedule 17, Part 1, para 9: Bringing into Use	Scheduled works that are to be brought into use.