The purpose of this factsheet is to set out the expected approach for managing the excavated material and waste that would arise from the construction of the Proposed Scheme.
Introduction

1.1.1 High Speed Two (HS2) is the Government’s proposal for a new, high speed north-south railway. The proposal is being taken forward in phases: Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route to Crewe. Phase 2b will extend the route to Manchester, Leeds and beyond (the ‘Proposed Scheme’).

1.1.2 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act (2017). In July 2017, the Government introduced a hybrid Bill to Parliament to seek powers for the construction and operation of Phase 2a. A hybrid Bill to seek powers for the construction and operation of Phase 2b is expected to be introduced to Parliament in 2020.

1.1.3 HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.

1.1.4 The work to produce the Phase 2b Bill will include an Environmental Impact Assessment (EIA), the results of which will then be reported in an Environmental Statement (ES). The ES would be submitted alongside the Phase 2b Bill when it is introduced to Parliament. The emerging findings of the EIA were reported in a working draft Environmental Statement (WDES)¹ that was consulted on in late 2018.

1.1.5 As was the case with Phase One and Phase 2a, when the Phase 2b Bill is introduced to Parliament, the Secretary of State will also publish draft Environmental Minimum Requirements (EMRs). The EMRs will set out the environmental and sustainability commitments that will be observed in the construction and operation of Phase 2b.

1.1.6 A series of information papers were produced for the Phase One and Phase 2a hybrid Bills, explaining the commitments made in those Bills and EMRs. It is the Secretary of State’s intention to follow a similar process for the Phase 2b Bill. These information papers for Phase 2b will be used to provide information about Phase 2b itself, the powers contained in the Phase 2b Bill when it is introduced to Parliament and how decisions on Phase 2b have been reached. It is currently proposed that these information papers for

¹ The WDES presented draft environmental information based on a stage in the ongoing design and assessment process for the Proposed Scheme. It included a description of the existing environment; an evaluation of the anticipated environmental impacts of the Proposed Scheme; and the measures being proposed at the time to manage the anticipated impacts. The ES submitted alongside the hybrid Bill will reflect any changes made following further work on the design and EIA, the WDES consultation, and any further consultation on the Proposed Scheme.
Phase 2b will be published at the time the Phase 2b Bill is introduced in Parliament.

1.1.7 The Secretary of State for Transport will be ‘the Promoter’ of the Phase 2b Bill. The Promoter will also eventually appoint a body responsible for delivering the Proposed Scheme under the powers to be granted by the Phase 2b Bill. This body will be known as the ‘nominated undertaker’. There may well be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Phase 2b Bill, the policies established in the Phase 2b EMRs and any commitments provided in the Phase 2b information papers.

1.1.8 These Phase 2b Factsheets have been produced to provide information on the emerging proposals for measures to manage the design process for Phase 2b and to control impacts which may arise from the construction and operation of the Proposed Scheme. These measures may then be applied to Phase 2b as commitments made through the eventual Phase 2b Bill, EMRs or information papers.

2 Overview

2.1.1 The purpose of this factsheet is to set out the expected approach for managing the excavated material and waste that would arise from the construction of the Proposed Scheme.

2.1.2 Only if excavated material is not required or is unsuitable for the construction of the Proposed Scheme would it be considered waste.

3 Material generation and reuse

3.1.1 The construction of the Proposed Scheme is likely to lead to the generation of several million tonnes of excavated material. An aim of HS2 Ltd is for as much of this material as possible to be reused as part of the Proposed Scheme for the construction of embankments and environmental mitigation earthworks.

3.1.2 It is likely that the Proposed Scheme would also lead to the generation of demolition material and construction waste. It is anticipated that at least 90% of this material may be diverted from landfill through reuse, recycling and recovery.

3.1.3 Forecast volumes for excavated material, demolition material and construction waste will be calculated and continually refined as part of the development of the ES.
3.1.4 A smaller quantity of domestic type waste may be produced during construction from worker accommodation sites.

4 Environmental effects of Waste Management

4.1.1 The design, construction and operation of the Proposed Scheme would lead to the generation of solid waste. In England and Wales, waste producers are legally required to apply the waste hierarchy to decisions concerning the management of waste.

4.1.2 The waste hierarchy as described in the Government Review of Waste Policy in England 2011 (see Figure 1) sets out the preferred approach to the management of waste from waste prevention, to reuse, recycling, energy recovery and landfill. It supports the need to achieve efficient use of material resources, minimise the amount of waste produced (or otherwise increase its value as a resource) and reduce, as far as possible, the amount of waste that is disposed to landfill. In keeping with the HS2 Environmental Policy, the nominated undertaker would apply the waste hierarchy in relation to the reduction and sustainable management of solid waste generated from the design, construction and operation of the Proposed Scheme to:

- improve resource efficiency and environmental performance; and
- reduce costs.

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4 The HS2 Environmental Policy is available here: https://www.gov.uk/government/publications/hs2-environmental-policy
4.1.3 All waste generated from the design, construction and operation of the Proposed Scheme would be managed in accordance with the waste hierarchy. This places waste prevention as the preferred option at the top, followed by reuse, recycling and other recovery, with landfill disposal at the bottom as the last resort.

4.1.4 Disposal is seen as a last resort due to a range of potential adverse effects associated with the use of landfill. These include natural resource depletion, methane production and nuisance effects (e.g. dust and odour). There is also a need to conserve existing landfill capacity for wastes for which there is currently no alternative treatment option that can be used to recover material resources and/or energy.

4.1.5 Excavated material would only be classified as waste if it is surplus to the design requirements or unsuitable for use in the construction of the Proposed Scheme.

5 Prevention through the design approach and mitigation

5.1.1 An integrated design approach would be developed to use excavated material to satisfy the fill material requirements wherever reasonably practicable. This includes reuse of all topsoil and agricultural subsoil as close to the point of excavation as practicable.

5.1.2 The reuse of excavated material within the Proposed Scheme would be managed in accordance with the Definition of Waste: Code of Practice
published by CL:AIRE. This involves the preparation of a Materials Management Plan that would set out how the suitable excavated material is to be used as a resource within the construction of the Proposed Scheme.

5.1.3 For the excavated material which could not be beneficially reused for the earthworks of the Proposed Scheme, the nominated undertaker would seek timely opportunities for such material to be used in other local construction projects or the restoration of mineral sites, provided that the transportation of that material does not result in significant environmental effects.

6 Transportation of excavated materials

6.1.1 Excavated material would be moved along the construction corridor of the Proposed Scheme where this is reasonably practicable. For longer distances or when it is not reasonably practicable to use the construction corridor, excavated material would be transported by public highway along designated construction routes. Where reasonably practicable, rail would be considered for the transportation of large quantities of excavated material over long distances.

6.1.2 The traffic and transport impacts and effects from the movement of excavated material, demolition material and construction waste would be contained in the ES and the Transport Assessment.

7 More information

7.1.1 Further factsheets and details on the Proposed Scheme can be found at: www.hs2.org.uk/phase2b