



HIGH SPEED TWO PHASE ONE INFORMATION PAPER

E19: SUSTAINABLE PLACEMENT OF SURPLUS EXCAVATED MATERIAL

This paper outlines the approach to sustainable placement of surplus excavated material for Phase One of the HS2 project.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the Bill for Phase One of the scheme which is now enacted. Although the contents were maintained and updated as considered appropriate during the passage of the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

The Helpdesk can be reached at:

**High Speed Two (HS2) Limited
Two Snowhill, Snow Hill
Queensway
Birmingham, B4 6GA**

by email: HS2enquiries@hs2.org.uk

or by phone: 08081 434 434 (lines are open 24 hours)

E19: SUSTAINABLE PLACEMENT OF SURPLUS EXCAVATED MATERIAL

1. Introduction

- 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 two phases: Phase One will connect London with Birmingham and the West Midlands and Phase Two will extend the route to Manchester, Leeds and beyond.
- 1.2. 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.
- 1.3. In November 2013, HS2 Ltd deposited a hybrid Bill¹¹ with Parliament to seek powers for the construction and operation of Phase One of HS2 (sometimes referred to as 'the Proposed Scheme'). The Bill is the culmination of nearly six years of work, including an Environmental Impact Assessment (EIA), the results of which were reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.4. The Bill is being promoted through Parliament by the Secretary of State for Transport (the 'Promoter'). The Secretary of State will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill.
- 1.5. This body is known as the 'nominated undertaker'. There may well be more than one nominated undertaker – for example, HS2 Ltd could become the nominated undertaker for the main railway works, while Network Rail could become the nominated undertaker for works to an existing station such as Euston. But whoever they are, all nominated undertakers will be bound by the obligations contained in the Bill and the policies established in the EMRs.
- 1.6. These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the project have been reached.

¹ The High Speed Rail (London – West Midlands) Bill, hereafter 'the Bill'.

2. Sustainable placement

- 2.1. This Information Paper outlines Hs2 Ltd.'s approach to sustainable placement of excavated material within Phase One of the HS2 project. Sustainable placement is the on-site placement for disposal of surplus excavated material to avoid causing environmental effects² that would otherwise be associated with the off-site disposal of that material. 'On-site' in this context means within the land required for the purposes of the Proposed Scheme and 'off-site' means external land (or landfill site) which is not specifically required for the purposes of the Proposed Scheme.
- 2.2. The construction of HS2 Phase One will generate a significant amount of excavated material (approximately 130 million tonnes) from the construction of tunnels and cuttings. HS2 Ltd has taken an integrated design approach³ to, as far as reasonably practicable, use this excavated material elsewhere within the design of the scheme. For example, where material is required to form embankments and landscaping on various parts of the route. Please see Information Paper E3: Excavated Material and Waste Management for further information.
- 2.3. Excavated material becomes surplus if its irrecoverable physical, chemical or biochemical quality prevents it from being used in the Proposed Scheme, if there is more material than required for the construction of the Proposed Scheme or the requirement for a type of material is too far away from the excavation point to make its use practicable, due to cost or environmental implications. In principle, surplus material is that material which we have no use for or which is unsuitable for use within the Proposed Scheme.
- 2.4. Sustainable placement of surplus excavated material is recognised as a disposal activity and will be appropriately permitted by the Environment Agency and in line with the requirements of the EU Landfill Directive (1999/31/EC). Sustainable placement will only be used to dispose of naturally occurring surplus excavated material. HS2 Ltd considers disposal, including on-site disposal, to be the option of last resort.
- 2.5. The likely environmental effects of sustainable placement have been described and assessed in the relevant chapters of the ES. Compliance with the Code of Construction Practice will mitigate any environmental impacts that may arise during construction.
- 2.6. Where sustainable placement is necessary existing topsoil will be stripped and stored prior to placement of the excavated materials and will then be returned upon completion. Excavated material will be incorporated into the existing landform as far as possible.

² Primarily transportation effects and the associated environmental effects of noise, air quality and climate change.

³ An integrated design approach is one which takes into account all relevant design impacts and aspirations.

3. Sustainable placement sites

- 3.1. Local sites for sustainable placement have been selected based on their location and suitability for the disposal of surplus excavated material, for example to avoid source protection zone (SPZ) one, designated to protect potable water supplies. Where SPZ one is unavoidable, placement would be subject to an appropriate risk assessment identifying no adverse impact on:
- the groundwater abstractors ability to supply potable water; or
 - the quality of the wider aquifer in accordance with the objectives of the Water Framework Directive.
- 3.2. The assessment will define acceptance criteria to which the excavated material will be compared prior to placement; this will ensure that there is no impact.
- 3.3. Three sites were originally selected for sustainable placement, however, through design development two of these sites (Hunts Green Farm in CFA 10 and Shepherds Furze Farm, Calvert in CFA 13) are no longer required for the delivery of the Proposed Scheme. The remaining site for sustainable placement is made up of four closely located areas in the vicinity of Harvil Road in CFA6.
- 3.4. These changes have significantly reduced the quantity of material to be sustainably placed by the Proposed Scheme; from almost 7 million tonnes to approximately 2 million tonnes as shown in table 1.1.

Sustainable placement site	CFA	Quantity in original scheme (tonnes)	Quantity in Proposed Scheme following additional provisions (tonnes)
Harvil Road (four areas)	6 and 7 (London Borough of Hillingdon)	2,880,000	2,000,000 (sustainable placement removed from CFA 7)
South Heath	10 (Buckinghamshire)	1,930,000	0 – Sustainable placement removed from this site
Calvert	13 (Buckinghamshire)	2,040,000	0 – Sustainable placement removed from this site
Total		6,850,000	2,000,000

Table 1.1 – Quantity of material scheduled to be placed in sustainable placement sites.

Harvil Road

- 3.5. Sustainable placement is required in the Harvil Road area to dispose of surplus excavated material from the Brackenbury and Copthall cuttings.
- 3.6. Four areas were originally identified for the sustainable placement of surplus excavated material in the Harvil Road area, three in CFA6 and one in CFA7. Since the submission of the hybrid Bill design development has meant that there will be four sites, but not all are the same sites originally identified.

- 3.7. The area identified in CFA7, south-east of South Harefield, has been removed from the Proposed Scheme as it is a former landfill site and is designated as a special site due to its effect on important groundwater sources and is therefore not considered appropriate to be used for sustainable placement.
- 3.8. This has been the subject of an assurance provided by the Secretary of State which states 'The Promoter will require the nominated undertaker not to use plot 720d for the purposes of sustainable placement as described in the main Environmental Statement CFA 7 Vol 2 2.2.7, Page 14.' Plot 720d may be found on Sheet No. 2-04 in HS2 Phase One Plans and Sections Volume 2.1.
- 3.9. Of the three areas originally identified within CFA6, the area located to the north of Newyears Green Lane has been split in two to avoid an existing composting facility, which will now remain operational.
- 3.10. The two further areas located on the land between Breakspear Road South and Harvil Road to the south of the Proposed Scheme have been modified from the hybrid Bill to accommodate a temporary material storage site and maximise the volume of material to be placed.
- 3.11. These areas are also the subject of an assurance provided by the Secretary of State which states 'Regarding the site between Harvil Road and Breakspear Road South (plots 526,527,528,530, 531, 532 and a proportion of 511):
 - a) The Promoter will continue discussions with London Borough of Hillingdon regarding the use of this site as a permanent sustainable placement site.
 - b) The Promoter will, so far as reasonable practicable, seek to substantially reduce the area within this site used for permanent sustainable placement.'
- 3.12. In total these areas will be used for the permanent placement of approximately 2 million tonnes of surplus excavated material. This is a reduction of approximately 880,000 tonnes from the original scheme.
- 3.13. This sustainable placement will avoid approximately 230,000 road lorry movements in the Harvil Road area.
- 3.14. The original and revised sustainable placement sites are shown on maps CT-06-019a-R1 and CT-06-019a-L1 in the SES3 and AP4 ES Volume 2, CFA6 Map Book.
- 3.15. Upon completion, the reinstated land will be landscaped and used for habitat-rich grassland and woodland planting.

4. More information

- 4.1. More detail on the Bill and related documents can be found at: www.gov.uk/HS2.