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Version 3.0

This document sets out the draft text for the Construction Arrangements Class Approval.

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Notes through this document:

All references to CoCP will be deleted in final version, they are kept at present for ease of reference.

1. Introduction

- 1.1. The High Speed Two (HS2) (London to West Midlands) Bill enables the Secretary of State to make class approvals for a number of ancillary matters that are subject to the planning regime in Schedule 176 of the Bill. Schedule 176, Part 1, Paragraph 4 of the Bill deals specifically with conditions relating to ancillary matters.
- 1.2. This power to make class approvals is set out in Schedule 176, Part 1, paragraph 5(1) of the Bill and states that the ancillary matters that can be subject to a class approval are:
 - Schedule 176, Para 4(2)(a) – handling of re-useable spoil or topsoil;
 - Schedule 176, Para 4(2)(b) – storage sites for construction materials, spoil or topsoil;
 - Schedule 176, Para 4(2)(d) – works screening;
 - Schedule 176, Para 4(2)(e) – artificial lighting;
 - Schedule 176, Para 4(2)(f) – dust suppression; and
 - Schedule 176, Para 4(2)(g) – road mud control measures.
- 1.3. The text in the following sections is a draft of the arrangements to be approved by the Secretary of State for the ancillary matters listed above that are subject to class approval. The management measures set out reflect the measures set out in the HS2 Draft Code of Construction Practice (CoCP), which forms part of the Environmental Minimum Requirements (EMRs).
- 1.4. This document may be updated in accordance with any changes to the draft CoCP through Parliament and any assurances or undertakings made through Parliament that includes commitments on ancillary matters subject to class approval.
- 1.5. HS2 Ltd is sharing this document [in May 2016](#) for discussion with the routewide planning forum. [This version aligns with the Draft Code of Construction Practice published in March 2016. ~~in~~ Earlier versions of the draft class approval document were shared with Planning Forum in July 2014, and July 2015.](#) The purpose is to inform members of the Planning Forum of the text that is likely to be contained in the class approval document.
- 1.6. The above text is for introductory purposes. It will not form part of the text for class approval when an application is submitted to the Secretary of State, following Royal Assent.

2. Handling of re-usable spoil or topsoil

Matters to which the arrangements relate:

"Handling during removal, storage and re-use of any spoil or topsoil removed during the course of carrying out the development"

- 2.1. The nominated undertaker¹ will require that its contractors will act to minimise waste generation where reasonably practicable and will maintain responsibility for the waste generated during construction. [CoCP 15.2.1 & 15.2.3].
- 2.2. All waste will be managed in accordance with the waste hierarchy as set out in the Waste (England and Wales) Regulations 2011 and in such a way as to prevent harm to human health, amenity and the environment. [CoCP 15.2.2]. In addition, a Site Waste Management Plan will be prepared, in line with good practice, by the Nominated Undertaker's lead contractors². [CoCP 15.2.9~~8~~]
- 2.3. All waste will be handled in accordance with the CL:AIRE Definition of Waste: Development Industry Code of Practice³ and/or in accordance with any Environmental Permit⁴ or exemption from permitting. Also, Materials Management Plans (MMP) will be developed to describe the methods for reusing soils at specific sites, or a cluster of sites. The movement and placement of materials will be as described in the MMP tracking system and recorded in a verification report for each site or cluster of sites. [CoCP 15.2.4 & 15.2.8 SUMMARISED].
- 2.4. Reasonable precautions will be taken in relation to the handling and storage of agricultural and forestry soils, including the following, as appropriate:
 - The separate handling and storage of different soils, particularly topsoils and subsoils and those recovered from ancient woodlands;
 - Handling soils that are in a suitably dry condition and not during wet weather to avoid long-term damage to soil structure from compaction;
 - Seed or seal medium or long-term excavated material and soil stockpiles;
 - The prevention of soil contamination with chemicals or other materials; and
 - The control of weeds on soil stores either through treatment or removal. [CoCP 6.2.4]

¹ The body or bodies appointed to implement the powers of the hybrid Bill to construct and maintain the Proposed Scheme.

² The lead contractor on a construction site responsible for planning, managing and co-ordinating themselves and/or the works and all other contractors working on their site, or any other contractor directly employed by the nominated undertaker to undertake construction work on site.

³ Contaminated Land: Applications in Real Environments (2011) The Definition of Waste: Development Industry Code of Practice (Version 2, March 2011).

⁴ Issued or exempted under the Environmental Permitting (England and Wales) Regulations 2010 (As Amended).

- 2.5. The sourcing, testing, stripping, handling, storage and spreading of site-won and imported topsoil will comply with BS 6031: Code of practice for earthworks. [CoCP 12.3.6]

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3. Storage sites for construction materials, spoil or topsoil

Matters to which the arrangements relate:

"Storage sites [sites on land within the Act limits at which materials are to be stored until used or re-used in carrying out the development or disposed of as waste] for construction materials⁵, spoil or topsoil."

- 3.1. To reduce the likelihood of either an environmental incident or nuisance occurring, the location of storage, machinery and equipment will be located, where relevant, to minimise environmental effects and where practicable, to be outside flood risk areas [CoCP 5.3.1 – 7th bullet].
- 3.2. Stockpiles and mounds will be kept away from sensitive receptors (including natural and historic features), watercourses and surface drains where reasonably practicable and sited to take into account the predominant wind direction relative to sensitive receptors.
- 3.3. Stockpiles and mounds will be maintained to avoid material slippage.
- 3.4. Materials stockpiles likely to generate dust will be enclosed or securely sheeted, kept watered or stabilised as appropriate.
- 3.5. Fine dry material will be stored inside buildings or enclosures with measures in place to ensure no escape of material and of overfilling during delivery. [Above 4 measures from CoCP 7.2.63].

⁵ Construction Materials means minerals, aggregates or other construction materials required for the development

4. Works Screening

Matters to which the arrangements relate:

"The provision where necessary on lands within the Act limits of any screening for working sites on such land required for the purpose of carrying out the development."

- 4.1. The lead contractor has a statutory duty to prevent unauthorised access to construction sites. Lead contractors will risk assess each site and use appropriate measures where necessary with site hoardings and works screening being used when necessary in the interests of site security, noise attenuation, works screening and public safety. [CoCP 5.5.1 & 5.6.1]
- 4.2. Although measures may vary from location to location the following principles will be adopted for site hoarding and fencing as appropriate:
 - Where hoarding is required, it will be 2.4m in height and will be raised to 3.6m and possibly altered in form to enhance acoustic performance for specific locations; [CoCP 5.6.3]
 - Temporary fences may be used in certain areas, such as for short-term occupation of sites or at more remote locations; [CoCP 5.6.4]
 - Adequate fencing and hoardings will be maintained to an acceptable condition to prevent unwanted access to the construction site, to provide noise attenuation, screening, and site security where required. This will include the need to provide viewing points at relevant locations, if appropriate;
 - Different types of fencing will be used, including hoardings used for noise control;
 - The side of hoardings facing away from the site will be painted, and kept free of graffiti or posters;
 - Site information boards will be provided with out of hours contact details, a 24 hour telephone number (for comments/complaints), community information and information on the works programme, at key locations;
 - Notices on site boundaries will be displayed to warn of hazards on site such as deep excavations, construction access, etc.;
 - Signage will be provided to indicate re-routed pedestrian/cycle paths;
 - Information will be provided on routes to alternative community facilities;
 - Notices will be displayed confirming that businesses whose access or view may be affected by construction works, remain open with directions for how to access them;
 - Protective fencing and/or specialist fencing (e.g. reptile fencing) will be maintained to protect environmentally sensitive features during construction;
 - Existing walls, fences, hedges and earth banks will be retained for the purpose of screening as far as reasonably practicable; [CoCP 5.6.1]
 - Fencing and hoarding will, as far as is reasonably practicable, be located such that it does not damage sensitive habitats, trees or hedgerows; and [CoCP 5.6.7]

- Hoarding and fencing in areas at risk of flooding will be permeable to floodwater, unless otherwise agreed with the Environment Agency⁶, to ensure that the fluvial floodplain and areas liable to other sources of flooding, continues to function effectively for storage and conveyance of floodwater. [CoCP 5.6.6]
- 4.3. The design of hoardings around construction activities shall ensure they are fit for purpose and include a consideration of the character of the surrounding landscape (e.g. use of open mesh fencing where possible and appropriate in rural areas, solid hoarding in urban areas, and use of artwork where appropriate, or use of vegetation on hoardings). Fencing and hoarding shall be kept well maintained throughout construction. [CoCP 5.6.2]
- 4.4. Where appropriate, lighting to site boundaries will be provided and illumination will be sufficient to provide a safe route for the passing public. In particular, precautions will be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas. [CoCP 5.4.1]
- 4.5. Clear sight lines will be maintained around hoardings and fencing with no hidden corners in order to avoid, where reasonably practicable, opportunities for anti-social behaviour and crime and to ensure safety of vehicles. Footways of adequate width to facilitate pedestrian flows will be provided with signs provided to facilitate safe access around the site boundary. [CoCP 5.6.5]

⁶ The Agency established to protect and improve the environment and contribute to sustainable development. Responsibilities include: water quality and resources, flooding and coastal risk management and contaminated land.

5. Artificial Lighting

Matters to which the arrangements relate:

"The use of artificial lighting on land within the Act limits for the purpose of carrying out the development"

- 5.1. Site lighting will change frequently throughout the construction programme of HS2. This will largely depend on the requirements of health and safety, the construction programme and site security. Therefore, the following measures set out how site lighting will be managed on site taking both HS2 needs and the requirements of adjacent receptors in to account.
- 5.2. Site lighting will be provided to enable the safety and security of the construction sites. It will be at the minimum luminosity necessary and use low energy consumption fittings. Where appropriate, lighting to site boundaries will be provided and illumination will be sufficient to provide a safe route for the passing public. In particular, precautions will be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas. Where appropriate, lighting will be activated by motion sensors to prevent unnecessary usage.
- 5.3. Lighting will comply with the Institution of Lighting Engineers' guidance notes for the reduction of light pollution and the provisions of *BS 5489, Code of Practice for the Design of Road Lighting*, where applicable.
- 5.4. Lighting will also be designed, positioned and directed so as not to unnecessarily intrude on adjacent buildings, ecological receptors, structures used by protected species and other land uses to prevent unnecessary disturbance, interference with local residents, railway operations, passing motorists, or the navigation lights for air or water traffic. This provision will apply particularly to sites where night working will be required.
- 5.5. At construction sites where potentially significant lighting impacts are identified, the lead contractor will develop and implement lighting controls as part of their Environmental Management System. [All of the above from CoCP 5.4]

6. Dust Suppression

Matters to which the arrangements relate:

"The suppression of dust caused by construction operations carried out on land within the Act limits for the purpose of carrying out the development."

- 6.1. Dust management will be focussed primarily on controlling the specific activities which produce dust, as well as some general measures which will be applicable at all times.

General Provisions

- 6.2. The nominated undertaker will require its contractors to ~~manage control and limit~~ dust during the construction works ~~as far as reasonably practicable and~~ in accordance with Best Practicable Means⁷ (BPM). This will include the following as appropriate:

- having regard to the general site management and good housekeeping procedures (relevant to limiting dust and air pollution);
- controls and measures to control or mitigate the effect of potential nuisance caused by the construction works, as determined by an up-to-date and site-specific assessment of the risks;
- dust and air pollution monitoring measures to be employed during construction of the project;
- measures relevant to control risks associated with asbestos dust; and
- having regard to current publications on 'best practice' which include:
 - Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance: Institute of Air Quality Management (IAQM), January 2014.
 - Air Quality Monitoring in the Vicinity of Demolition and Construction Sites: IAQM November 2012.
 - The Control of Dust and Emissions during Demolition and Construction: GLA Supplementary Planning Guidance Document, July 2014. [CoCP 7.1.1]

Site management

- 6.3. The site layout will be planned to locate machinery and dust-causing activities away from sensitive receptors, where reasonably practicable.

⁷ Defined in the Control of Pollution Act 1974 and Environmental Protection Act 1990 as measures which are 'reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to financial implications'.

- 6.4. Appropriate methods, such as the erection of hoardings or other barriers along the site boundary, will be used, where appropriate, to mitigate the spread of dust. ~~to any sensitive buildings or other environmental receptors.~~ [CoCP 7.2.1.]

Construction plant, vehicles and equipment

- 6.5. Measures will be implemented to limit dust emissions from construction plant and vehicles, which will include the following, as appropriate:
- The operation of construction plant in accordance with the manufacturer's written recommendations;
 - The enclosure, shielding or provision of filters on plant likely to generate excessive quantities of dust beyond the site boundaries;
 - Using devices such as dust extractors, filters and collectors on drilling rigs and silos;
 - The movement of construction traffic around the site will be kept to the minimum reasonable for the effective and efficient operation of the site and construction of the project;
 - Construction plant will be located away from site boundaries which are close to sensitive receptors where reasonable and practicable;
 - Cutting and grinding operations will be conducted using equipment and techniques which incorporate appropriate dust suppression measures; and
 - Damping down of dust generating equipment and vehicles within the site and the provision of dust suppression in all areas of the site that are likely to generate dust. [Relevant parts extracted from CoCP 7.2.2.]

Transportation, storage and handling of materials

- 6.6. Dust management measures will be implemented to limit pollution arising from the transportation and storage of materials, including the following, as appropriate:
- Covering materials, deliveries or loads entering and leaving the construction site for the purposes of preventing materials and dust spillage. This will apply to the transport of materials by road, rail or waterway;
 - Stockpiles and mounds will be kept away from sensitive receptors (including natural and historic features), watercourses and surface drains where reasonably practicable and sited to take into account the predominant wind direction relative to sensitive receptors;
 - Stockpiles and mounds will be maintained to avoid material slippage;
 - Materials stockpiles likely to generate dust will be enclosed or securely sheeted, kept watered or stabilised as appropriate;
 - Fine dry material will be stored inside buildings or enclosures with measures in place to ensure no escape of material and of overfilling during delivery;

- Mixing of large quantities of concrete or bentonite slurries will be undertaken in enclosed or shielded areas;
- The number of handling operations for materials will be kept to the minimum reasonably practicable;
- Materials handling areas will be maintained to constrain dust emissions through the use of measures such as watering facilities to reduce or prevent escape of dust from the site boundaries; and
- Mixing of grout or cement-based materials will be undertaken using appropriate techniques/mitigation suitable for the prevention of dust emissions. [Relevant parts extracted from CoCP 7.2.64.]

Haul routes

- 6.7. Haul routes will be provided through the works for use by construction vehicles to access the works. The construction and maintenance of haul routes, will include the following measures, as appropriate:
- The surfacing and maintenance of haul routes will be designed to control dust emissions as far as reasonably practicable, taking into account the contractors intended level of traffic movements;
 - The inspection of haul routes regularly and their prompt repair if required;
 - Methods to clean and suppress dust on haul routes (including watering) and in designated vehicle waiting areas. The frequency of cleaning will be suitable for the purposes of suppressing dust emissions from the site boundaries; and
 - The enforcement of speed limits on haul roads for safety reasons and for the purposes of suppressing dust emissions. [Relevant parts extracted from CoCP 7.2.75.]

Demolition activities

- 6.8. Dust pollution from demolition activities will be limited through the use of the following measures, as appropriate:
- Stripping of insides of buildings before demolition;
 - Blasting works will be kept to the minimum reasonably practicable in the context of the design and programme requirements of the project;
 - Buildings or structures to be demolished will be sprayed with water or screened as necessary, prior to and during demolition;
 - Rubble chutes will be shielded or enclosed or use water to suppress dust emissions from such equipment;
 - Skips will be covered and secured; and
 - The burning of any material will not be permitted on site. [Relevant parts extracted from CoCP 7.2.86.]

Excavations and earthworks activities

- 6.9. Dust pollution from excavations and earthworks activities will be limited through the use of the following measures, as appropriate:
- Topsoil will be stripped as close as reasonably practicable to the period of excavation or other earthworks activities to avoid risks associated with run-off or dust generation;
 - Drop heights from excavators to vehicles involved in the transport of excavated material will be kept to the reasonably practicable minimum;
 - Materials will be compacted after deposition, with the exception of topsoil and subsoil on land to be restored for agriculture, forestry, landscaping and wildlife habitats; and
 - Soil spreading, seeding, planting or sealing of completed earthworks will be undertaken as soon as reasonably practicable following completion of the earthworks. [CoCP 7.2.97.]

Grouting activities

- 6.10. Dust pollution associated with grouting activities will be limited through the use of the following measures, as appropriate:
- Dust extractors, filters and collectors on silos for example; and
 - The mixing of grout or cement based materials will be undertaken using a process suitable for the prevention, as far as reasonably practicable, of dust emissions. [CoCP 7.2.108.]

Conveying, processing, crushing, cutting and grinding activities

- 6.11. Dust pollution associated with processing and crushing rock, for use as aggregate or other materials within the works, and for conveying material, processing, crushing, cutting and grinding and liming will be limited through the use of the following measures, as appropriate:
- Drop heights from conveyors, excavators, and crushing plant to stockpiles will be kept to the minimum reasonably practicable;
 - The enclosure of conveyer transfer points, and damping of conveyor loads;
 - Using enclosed conveyers where crossing roads, other public areas and property not owned by the nominated undertaker;
 - The use of suitable temporary enclosures for cutting and grinding activities; and
 - The application of water sprays to damp down in dry weather. [CoCP 7.2.119.]

Monitoring

6.12. The nominated undertaker will require its contractors to implement inspection and monitoring procedures to assess the effectiveness of measures to prevent dust. Relevant local authorities will be consulted regarding the monitoring procedures to be implemented which will include the following measures, as appropriate:

- site inspections covering the establishment of operation of the construction site;
- inspection procedures for areas adjacent to the construction site to visually assess any dust which may be generated;
- reference to inspection and maintenance schedules for construction vehicles, plant and machinery; and
- inspection procedures relating to the level of traffic movements, use and condition of haul routes. [CoCP 7.3.1]

7. Road Mud Control Measures

Matters to which the arrangements relate:

"Measures to be taken on land within the Act limits to prevent or reduce the carrying of mud on to any public highway as a result of carrying out the development."

- 7.1. All reasonably practicable measures will be put in place to avoid/limit and mitigate the deposition of mud and other debris on the highway. These measures will have regard to the nature and use of the site(s) in question, and will include:
- Hardstanding at the access and egress points will be cleaned at appropriate intervals;
 - Vehicle wash down points to clean vehicle wheels at each exit point onto the highway;
 - The correct loading of vehicles and sheeting of loads where necessary to avoid spillage during their journeys;
 - Appropriate wheel cleaning measures will be employed to prevent the transfer and accumulation of mud and other granular deposits on the public highway;
 - The use of mechanical road sweepers combined with water sprays for the suppression of dust to clean hardstandings, roads and footpaths in the vicinity of the site;
 - measures to avoid water runoff onto the adjacent highway (footways or carriageways), including avoiding ponding adjacent to hoardings on the carriageway;
 - ensure no material is deposited onto the public highway which will affect drainage interceptors, etc; and
 - The flushing of gullies in the vicinity of the site.
- 7.2. For works which are being undertaken on the highway which are not protected by secure temporary-type fencing or hoarding, then at the completion of each day's works, the site is to be left in a tidy condition. All surplus materials arising from the works will be cleared from the highway, leaving it in a clean and tidy condition in accordance with the reasonable requirements of the highway authority. [CoCP 14.2.9 – 14.2.10]