

# HS2 Planning Context Report

Prepared for South Bucks District

July 2017



# Table of Contents

Table of Contents	4
Preface	5
Purpose	5
Status	5
Structure	5
Other Relevant Documents	5
1 Introduction to HS2	6
The HS2 Project	6
Control of Environmental Impacts	7
Environmental Minimum Requirements	10
Existing Legislation and Other Safeguards	12
2 HS2 in South Bucks District	13
Introduction	13
Permanent Works	13
Preparatory and Temporary Works	14
3 Landscape and Restoration	15
4 Schedule 17 Requests for Approval – Programme	16
5 Planning Context Report Plans – Construction and Operation	18
Annex 1 – Signposting	35

## Preface

### Purpose

This Planning Context Report provides an overview of HS2 works that will take place within South Bucks District (the District) and a programme for making requests for approval under Schedule 17 to the High Speed Rail (London - West Midlands) Act 2017 (“the HS2 Act”).

The report has been prepared in fulfilment of the requirements of paragraph 16 (1) (a) of Schedule 17 to the Act, which states:

*A planning authority need not consider a request for approval under Part 1 [of Schedule 17 to the Act] unless:*

*a) the nominated undertaker has deposited with the authority a document setting out its proposed programme with respect to the making of requests under that Part to the authority,*

This document accordingly sets out the proposed programme for making requests under Schedule 17 to the HS2 Act. This document also meets the requirement of paragraph 9.2 of the High Speed Rail (London – West Midlands) Planning Memorandum (the “Planning Memorandum”), which states that the ‘...report is to include an indication of the location of the scheduled and non-scheduled works to which requests for approval are expected to relate.’

### Status

This document is deposited for information only. It does not require the approval of the planning authority.

### Structure

This document contains three sections:

#### **Section 1: Introduction to HS2**

Describes in outline the HS2 project, summarises the planning regime and outlines obligations with respect to mitigation of environmental impacts.

#### **Section 2: HS2 in South Bucks District**

Outlines the proposals within the District, and describes the permanent, preparatory and temporary works.

#### **Section 3: Landscape and Restoration**

Outlines landscape and restoration works proposed after construction.

#### **Section 4: Programme for Requests for Approval under Schedule 17**

Sets out the programme for submission of requests for approval.

#### **Section 5: Planning Context Report Plans – Construction and Operation**

Illustrates the location of permanent and temporary works in the District.

### Other Relevant Documents

To understand the full background to the HS2 proposals and to the planning regime under which requests for approval are to be made, reference should be made to the following documents:

- The HS2 Act;
- The HS2 Environmental Statement ; and
- The High Speed Rail (London – West Midlands) Environmental Minimum Requirements (“the EMRs”).

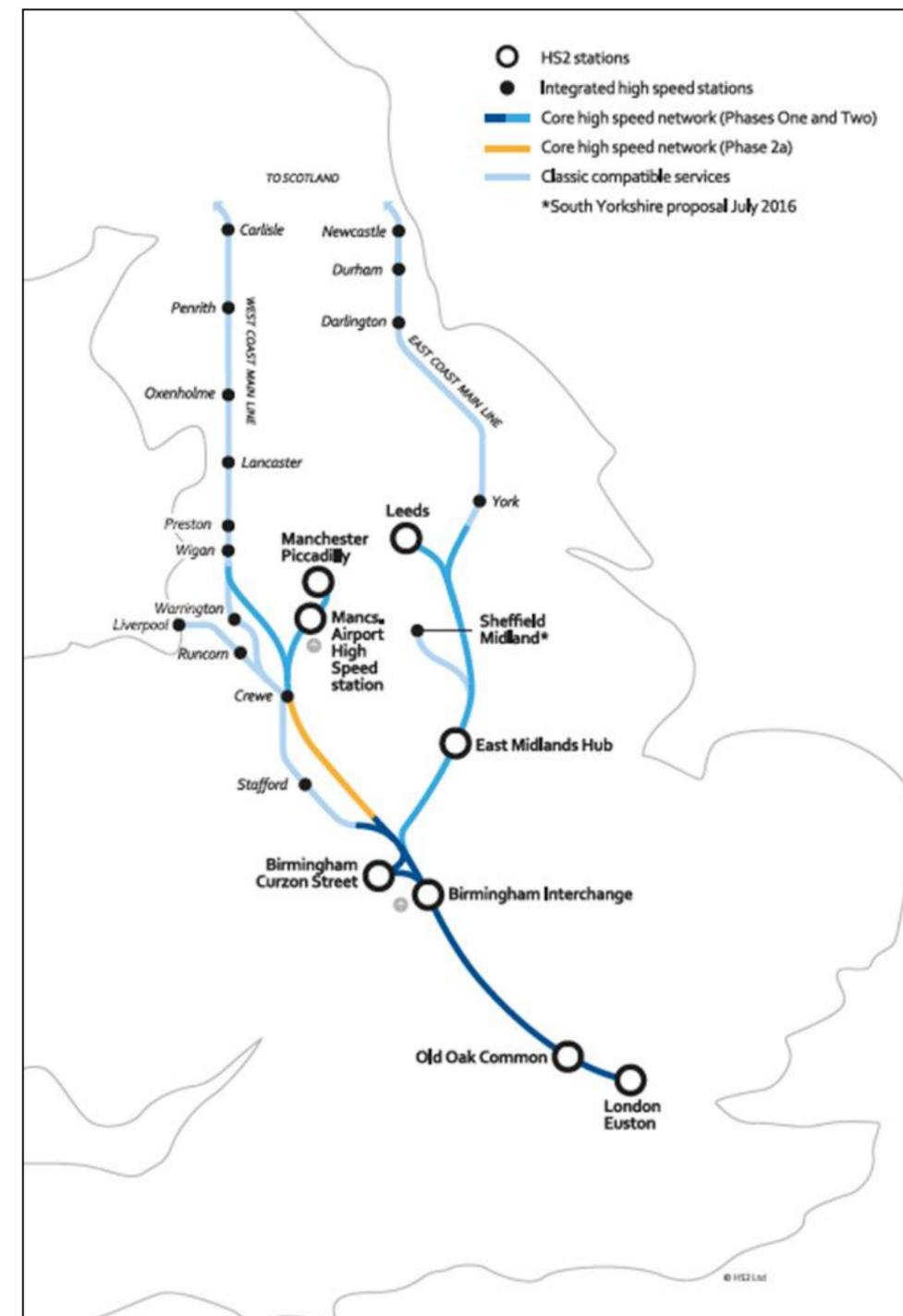
Annex 1 signposts these and other relevant documents.

# 1 Introduction to HS2

## The HS2 Project

- 1.1 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 On 23<sup>rd</sup> February 2017 Royal Assent was granted for Phase One of HS2, which comprises of a new high speed railway between London and the West Midlands with stations at London Euston, Old Oak Common, Birmingham Interchange, and Birmingham Curzon Street. Figure 1 illustrates the Phase One route between London – West Midlands and Phase Two proposals.

Figure 1: HS2 route map



## Control of Environmental Impacts

- 1.3 The environmental impacts of the construction, maintenance and operation of HS2 will be controlled in three ways:
- Controls within the HS2 Act such as approvals for designs and construction arrangements;
  - Policies, commitments and undertakings entered into outside of the HS2 Act, including the EMRs; and
  - Existing legislation, unless explicitly or implicitly dis-applied or modified by the HS2 Act.

1.4 These controls are summarised below.

### **Environmental Statement**

- 1.5 The HS2 Phase One Environmental Statement (ES) was published in November 2013. It has been supplemented by a number of additional volumes as further information has become available, and in light of proposed changes to the project<sup>1</sup>.
- 1.6 The ES identifies the likely significant effects that will arise from the construction and operation of HS2 and identifies the range of mitigation measures that could be used to reduce or eliminate these effects. The assessment is based on a number of assumptions about design and construction practices.
- 1.7 As the project is taken forward to detailed design and construction there may be changes to assumed construction methods and design, subject to the requirements of the Act, the EMRs, and any approvals required from consent granting bodies, and in response to the requirements of any relevant Undertakings or Assurances.

## Controls in the Act

### **The Planning Regime**

- 1.8 Section 20 to the HS2 Act grants deemed planning permission under Part 3 of the Town and Country Planning Act 1990 ("the TCPA") for the works authorised by the HS2 Act. This permission is subject to the requirement that certain approvals need to be obtained from the relevant planning authorities under the planning regime established by Schedule 17 to the Act. The conditions in Schedule 17 are enforceable by the planning authority in accordance with the TCPA.

- 1.9 The principal works authorised by the HS2 Act are described in Schedule 1 (the "scheduled works"). The descriptions in Schedule 1 to the HS2 Act set out the type of work and their location, for example:

*Work No.1/1 – A railway (23.48 kilometres in length) partly in tunnel, commencing at a point 235 metres east of the junction of North Gower Street with Drummond Street passing north-westwards and terminating beneath a point 80 metres north-west of the bridge carrying Ickenham Road over the Marylebone to Aylesbury Railway. Work No. 1/1 includes shafts at Coburg Street, Mornington Street, Granby terrace, Parkway, Adelaide Road, Alexandra Place, Canterbury Works and Greenpark Way, a station at Old Oak Common and a Crossover Box at Victoria Road.*

- 1.10 The scheduled works must be constructed in the locations and to the levels relevant to each scheduled work shown on the deposited plans and sections (the 'Limits of Deviation'). The scheduled works may deviate vertically downwards from the levels shown to any extent, and may deviate upwards up to 3 metres subject to the upper limits defined for certain works such as stations, depots or shafts.
- 1.11 Section 2 to the HS2 Act authorises, within the Act limits, the construction and maintenance of a wide range of other development for the purposes of or in connection with the scheduled works, or otherwise for Phase One purposes. Section 2 also authorises, within the Act limits, the carrying out and maintenance of landscaping and other works to mitigate adverse effects of the construction, maintenance or operation of the works and to carry out and maintain works for the benefit or protection of land affected by the works.
- 1.13 Such ancillary works may be constructed within Act limits as defined on the deposited plans. The HS2 Act only grants deemed planning permission for the construction of works which are not scheduled works if they are within the scope of the ES that accompanies the HS2 Act.
- 1.14 Schedule 2 to the Act authorises further works, including surveys and investigation of land, support of buildings, works to trees, discharge of water, and temporary works to certain waterways.
- 1.15 Schedule 17 to the Act defines the detailed planning regime which will apply to the planning authority affected by works to construct and operate HS2.
- 1.16 The planning regime under Schedule 17 is different to that of the TCPA. It differs from the TCPA process in how it defines the matters that require approval and the grounds that the planning authorities can have regard to in determining requests for approval. The grounds for the imposition of conditions and/or the refusal of Schedule 17 submissions are limited in comparison to the TCPA process. This is because the works already have deemed planning permission through the Act and there are other complementary controls imposed through the HS2 Act and EMRs.

<sup>1</sup> An Environment Statement has been published with the Additional Provision tabled by the Promoter in September 2014. In addition, Supplementary Environmental Statements and Additional Provision Environmental Statements were published and tabled by the Promoter in July 2015, September 2015, October 2015 and December 2015.

1.17 Schedule 17 requires the nominated undertaker to submit the following details to planning authorities, for approval or agreement:

- Plans and specifications of certain works;
- Matters ancillary to development (“construction arrangements”);
- Road Transport (lorry routes);
- Bringing into use; and
- Site restoration schemes.

1.18 Planning authorities who have given the Secretary of State undertakings, as set out in the Planning Memorandum, with respect to the handling of planning matters under Schedule 17, have become ‘qualifying authorities’. The main provisions of the Planning Memorandum are summarised in Section 1.51 below.

1.19 The District has become a qualifying authority.

1.20 In relation to qualifying authorities, the operations or works for which plans and specifications will be submitted for approval are identified in Table 1.

**Table 1: Operations or works requiring approval of plans and specifications**

PLANS AND SPECIFICATIONS	
BUILDING WORKS (paragraph 2 of Schedule 17)	The erection, construction or alteration of any building, other than a temporary building.
OTHER CONSTRUCTION WORKS (paragraph 3 of Schedule 17)	Road vehicle parks; Earthworks; Sight, noise or dust screens; Transformers, telecommunication masts or pedestrian accesses to railway lines; Fences or walls, and Lighting equipment.
WASTE AND SPOIL DISPOSAL AND EXCAVATION (Paragraph 7 of Schedule 17)	Disposal of waste or spoil. Excavations of bulk materials from borrow pits.

1.21 In relation to qualifying authorities, development must be carried out in accordance with matters ancillary to development (construction arrangements) approved by the relevant planning authority (paragraph 4 of Schedule 17).

1.22 Schedule 17 enables the Secretary of State to make a class approval for construction arrangements, except in relation to construction camps (paragraph 5 of Schedule 17). A class approval was made by the Secretary of State on 24<sup>th</sup> March 2017, following consultation with the planning authorities affected, for the following generic construction arrangement matters: handling of re-usable spoil and topsoil; storage sites; site screening; artificial lighting; suppression of dust; road mud control measures. The approval of construction camps is not included in the class approval.

1.23 Where lorry movements exceed 24 per day whether to or from a construction site, the lorry route must be approved (paragraph 6 of Schedule 17) by the relevant qualifying authority.

1.24 The relevant qualifying authority approves a bringing into use request for approval (paragraph 9 of Schedule 17), for most scheduled works, apart from any which are below ground, and maintenance depots. The purpose of bringing into use requests is to ensure that appropriate mitigation has been incorporated, and no such work can be brought into use without such approval.

1.25 A site restoration scheme will be submitted for agreement with the relevant planning authority in accordance with paragraph 12 of Schedule 17.

1.26 The planning authority must have regard to statutory guidance issued by the Secretary of State in accordance with paragraph 26 of Schedule 17 to the HS2 Act.

#### **Other Consents in the Act**

1.27 In addition to the planning regime described above, Schedules 4 and 33 to the HS2 Act contain provisions setting out the protections to be provided for various bodies with statutory responsibilities likely to be affected by the works.

#### **Schedule 4 – Accesses to highways affecting traffic**

1.28 To control the impact of constructing new or altering existing accesses onto the local road network, local highway authorities have an approval role. For the opening of an access onto, or the alteration of, a road at a place shown on the deposited plans the works must be carried out in accordance with plans and specifications approved by the highway authority. In addition the local highway authority may require the access to be moved elsewhere within the Act limits where that is reasonably capable of being done. If an access is required at a location other than that shown on the deposited plans, the consent of the highway authority is required, subject to its approval of plans and specifications.

#### **Schedule 4 – Stopping up, diversion and interference with the highway**

1.29 During construction the temporary closure, diversion or interference with highways will be required. In order to address local impacts the Act provides for highway authority input. Where a

highway is specified within the Act, the nominated undertaker must consult the highway authority about the exercising of the powers before doing so. Where the powers are to be exercised in relation to a highway not specified within the Act the nominated undertaker must obtain the consent of the highway authority.

### **Schedule 33 – Highways**

- 1.30 Part 1 of Schedule 33 requires the nominated undertaker in exercising the powers in the Act in relation to highways to have regard to the potential disruption of traffic and to seek to minimise such disruption so far as reasonably practicable, and gives highway authorities rights of approval over various matters concerning details of the works affecting highways.
- 1.31 Additional controls are contained in Schedule 4. Where the nominated undertaker constructs a new or alters an existing highway, the construction or alteration must be completed to the reasonable satisfaction of the highway authority, who shall certify that fact in writing to the nominated undertaker.
- 1.32 Where the nominated undertaker constructs or realigns a highway that is constituted or comprises a carriageway, it must be carried out in accordance with plans, sections and specifications approved by the highway authority.

### **Schedule 33 – Water**

- 1.33 The construction of HS2 will have impacts on inland waterways and land drainage, flood defences, water resources and fisheries. In order to address these impacts the Act includes a range of controls for the relevant authorities.
- 1.34 The impacts on inland waterways are addressed in Part 4 of Schedule 33, this gives the Canal and River Trust the power to approve plans and specifications for works affecting waterways for which it is responsible.
- 1.35 Part 5 of Schedule 33 states that before beginning to construct any “specified work” (in the main, those affecting drainage, flood storage and flood defence, the flow or purity of water and conservation of water resources), the nominated undertaker will submit plans, including method statements, for the works to the Environment Agency or local drainage authorities (i.e. lead local flood authorities, or internal drainage boards) for approval. Works will be constructed in accordance with the approved plans.
- 1.36 The Environment Agency or local drainage authorities may, amongst other matters, make conditions requiring the nominated undertaker at its own expense to construct such protective works as are reasonably necessary to safeguard any drainage work against damage or to ensure its efficiency for flood defence purposes is not impaired during the construction of the specified works.
- 1.37 These provisions have effect instead of the normal consenting regime which would apply, for example, under the Land and Drainage Act 1991, or the Environmental Permitting Regulations 2010.

### **Schedule 33 - Other Controls**

- 1.38 Schedule 33 – Protective provisions also include the requirement for consultations and agreements from statutory utilities undertakers.

### **Schedule 18 – Listed Buildings**

- 1.39 The HS2 Act disappplies the normal controls requiring conservation area consent and listed building consent under the Planning (Listed Building and Conservation Areas) Act 1990, for the demolition, alteration or extension of listed buildings and unlisted buildings. The disapplication applies to the extent specified in Schedule 18 to the Act.
- 1.40 In recognition of the removal of the requirement for listed building consent, heritage agreements have been entered into between the nominated undertaker, Historic England and relevant local authorities. These agreements require approvals to detailed method statements in relation to the works subject to the disapplication of the normal listed building controls.

## Environmental Minimum Requirements

- 1.41 There are a variety of control mechanisms and mitigation strategies outside of the HS2 Act. These are captured in the EMRs.
- 1.42 The EMRs are a suite of documents that have been developed in consultation with local authorities and other relevant stakeholders. The nominated undertaker is contractually bound to comply with the controls set out in the EMRs, through the Development Agreement with the Secretary of State.
- 1.43 The controls contained in the EMRs, along with powers contained in the HS2 Act and the Undertakings given by the Secretary of State, will ensure that impacts which have been assessed in the ES will not be exceeded, unless any new impact or impacts in excess of those assessed in the ES:
- results from a change in circumstances which was not likely at the time of the ES<sup>2</sup> ;
  - would not be likely to be environmentally significant<sup>3</sup> ;
  - results from a change or extension to the project, where that change or extension does not itself require environmental impact assessment (EIA) under either (i) article 4(1) of and paragraph 24 of Annex 1 to the EIA Directive<sup>4</sup> ; or (ii) article 4(2) of and paragraph 13 of Annex 2 to the EIA Directive<sup>5</sup>; or
  - would be considered as part of a separate consent process (and therefore further EIA if required).
- 1.44 In addition to general principles, the EMRs comprise:
- a number of specific requirements, including that the nominated undertaker will use reasonable endeavours to adopt mitigation measures that will further reduce any adverse environmental impacts caused by HS2, insofar as these mitigation measures do not add unreasonable costs to the project or unreasonable delays to the construction programme;
  - the undertakings and assurances given to Parliament and petitioners by the Secretary of State during the passage of the High Speed Rail (London – West Midlands) Bill (the Bill); and
  - the Code of Construction Practice, Planning Memorandum, Heritage Memorandum, and Environmental Memorandum.

<sup>2</sup> i.e. a situation that could not reasonably have been anticipated at the time of the ES.

<sup>3</sup> This covers all effects (both positive and adverse) where those effects are simply of no environmental significance.

<sup>4</sup> 2011 consolidated EIA Directive (2011/92/EU).

<sup>5</sup> Broadly, this would not allow those changes or extensions to the project which would give rise to adverse environmental effects within the EIA.

### Undertakings and Assurances

- 1.45 During the passage of the Bill through Parliament, the Secretary of State entered into a range of undertakings and assurances. The HS2 Act Register of Undertakings and Assurances contains all the undertakings and assurances given to petitioners and to Parliament before and during the passage of the Bill. The register forms part of the EMRs and as a result the nominated undertaker is contractually bound to deliver them.

### Code of Construction Practice

- 1.46 The Code of Construction Practice (CoCP) is Annex 1 of the EMRs. It sets out specific details and working practices in relation to site preparation (including site investigation and remediation, where appropriate), demolition, material delivery, excavated material disposal, waste removal and all related engineering and construction activities.
- 1.47 The CoCP sets out the measures that nominated undertaker and contractors are required to implement in order to limit disturbance from construction activities, as far as reasonably practicable:
- General requirements related to community relations, hours of work, pollution incident control and security, etc;
  - Agriculture, forestry and soils;
  - Air quality;
  - Cultural heritage;
  - Ecology;
  - Ground settlement;
  - Land quality;
  - Landscape and visual;
  - Noise and vibration;
  - Traffic and transport; and
  - Water resources and flood risk.
- 1.48 Local Environmental Management Plans (LEMPs) will be prepared for each local authority area.
- 1.49 The LEMPs will include a number of specific measures by topic, as relevant to each local authority area. The LEMPs will build on the general environmental requirements contained in the CoCP and will set out how the project will adapt and deliver the required environmental and community protection measures within each relevant local authority area.

- 1.50 The nominated undertaker and/or its contractors will engage with the local communities, local authorities and other stakeholders in order to develop the LEMPs.

#### **Planning Memorandum**

- 1.51 The Planning Memorandum is Annex 2 of the EMRs. It sets out in detail the responsibilities and requirements in relation to planning matters for those authorities that choose to become qualifying authorities. It also sets out requirements for the nominated undertaker in the implementation of Schedule 17 of the HS2 Act.

#### **Heritage Memorandum**

- 1.52 The Heritage Memorandum is Annex 3 of the EMRs. It provides a framework for the nominated undertaker, Historic England, local authorities and other stakeholders to work together to ensure that the design and construction of Phase One is carried out with proper regard to the historic environment.

#### **Environmental Memorandum**

- 1.53 The Environmental Memorandum is Annex 4 of the EMRs. It provides a framework for the nominated undertaker and representatives of the National Environment Forum to work together to ensure that the design and construction of the HS2 Phase One is carried out with due regard for environmental considerations.

#### **Planning Forum**

- 1.54 The HS2 Phase One Planning Forum was established to help co-ordinate and secure the expeditious implementation of the planning provisions in the Act. The primary objectives and functions of the Planning Forum are:
- To prepare notes on related matters, which will set out standards and practices to be followed by those implementing the planning regime.
  - To consider common design items for certain structures associated with the railway (such as bridges, acoustic barriers or retaining walls).
- 1.55 The Planning Forum has a number of sub-groups:
- Highways Subgroup.
  - Environmental Health Subgroup;
  - Heritage Subgroup; and
  - Flood Risk and Drainage Subgroup.

#### **Environmental Management System**

- 1.56 As part of the sustainability policy, the nominated undertaker will develop an environmental management system (EMS) in accordance with *BS EN ISO 14001*. The EMS provides the process by which environmental management, both within its organisation and in relation to its

operations, is undertaken to ensure the relevant findings of the ES are addressed through the construction phase.

- 1.57 The nominated undertaker will require each of its main contractors to have an EMS certified to *BS EN ISO 14001*. Their EMS will include roles and responsibilities, together with appropriate control measures and monitoring systems to be employed during planning and constructing the works for all relevant topic areas. Where the lead contractor is a joint venture, the EMS will be certified to cover the activities of the joint venture.

#### **Management of Construction Traffic**

- 1.58 The HS2 Routewide Traffic Management Plan (RTMP) describes the principles and objectives for the management of transport, highways and traffic during the delivery of the works. It codifies the discussions held with the highway authorities along the HS2 Phase One route via the Highway Subgroup to the Planning Forum and takes into account the best practice used during the delivery of similar large construction projects.
- 1.59 The RTMP document will be supplemented with a series of Local Traffic Management Plans (LTMPs) along the route. LTMPs will set out the full range of local controls, significant works programmes for highways and other appropriate matters.
- 1.60 Regular local Traffic Liaison Group (TLG) meetings have been established with local highway authorities so that matters such as LTMPs and site specific traffic management schemes can be reviewed prior to submission or approval and the implementation of schemes reviewed and other monitoring reported, along with other matters of interest discussed and co-ordinated.

#### **Excavated Material & Waste Management**

- 1.61 Measures to reduce potential impacts from waste management are described in section 15 of the CoCP. An integrated design approach has been developed to use excavated material to satisfy the fill material requirements wherever reasonably practicable. This approach will reduce the need for imported materials and reduce the amount of excavated material requiring off-site disposal. This includes reuse of all topsoil and agricultural subsoil as close to the point of excavation as practicable.
- 1.62 All waste generated from the design, construction and operation will 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. Information Paper E3 provides further detail.

#### **Management of Noise and Vibration**

- 1.63 The nominated undertaker will obtain consents under Section 61 to the Control of Pollution Act 1974, which will include noise limits and vibration limits where relevant and site specific management and mitigation requirements for noise and vibration, both on and off site.

- 1.64 In relation to the control of construction noise and vibration, Information E23 provides further detail. Information Papers E20, E21 and E22 provide further detail on operational noise from the railway.
- 1.65 Noise and vibration monitoring will be carried out at different times during the lifetime of the railway. Where noise and vibration performance deviates from expected conditions, actions will be taken as described in Information Paper F4.

### **Existing Legislation and Other Safeguards**

- 1.66 Unless a piece of existing legislation is expressly or impliedly dis-applied or modified by the HS2 Act, it will continue to apply. For example, environmental permits in relation to discharges will still be required and the Control of Pollution Act 1974 (COPA) will continue to apply.

#### ***Oversite Development***

- 1.67 The HS2 Act does not grant approval for any oversite development. Consent for any such development will be applied for and determined through normal planning processes. However, the HS2 Act does authorise works to enable future oversite development, for example the construction of additional foundations or deck structures.
- 1.68 The HS2 Act also puts in place requirements in respect of the environmental assessment of oversite development. It defines the circumstance where the planning application for such development proposed to replace a building demolished or substantially demolished for HS2 must be accompanied by an environmental impact assessment.

#### ***Safety and Security***

- 1.69 HS2 will create a railway designed, built and operated with world-class health, safety and security standards. All HS2 infrastructure will be designed in accordance with appropriate standards and policies for public safety. The following are some key design principles that will be applied:
  - Adoption of hostile vehicle mitigation and blast resilient glazing and facades where appropriate;
  - Application of Crime Prevention Through Environmental Design principles across all of the HS2 network but with particular emphasis on all publicly accessible spaces;
  - Selection of vandal-resistant materials and designs;
  - Appropriate use of surveillance systems and lighting;
  - Integration of natural way-finding into designs to configure spaces that are easy to navigate and use of signage that is clean and unambiguous.

## 2 HS2 in South Bucks District

### Introduction

- 2.1 The HS2 works take place in two different locations within South Bucks District, as described below.
- Works to construct the Colne Valley Viaduct as it enters the District at its north east boundary with the London Borough of Hillingdon at the River Colne. The route then continues north westwards for approximately 1.3km, partly on the Colne Valley Viaduct and partly on the Colne Valley Viaduct North Embankment, where it crosses Shire Lane and enters Three Rivers District.
  - The construction of the approach tracks and highway works associated with the Heathrow Express Depot in proximity to Iver and Langley railway stations, to the North of the Great Western Main Line.
- 2.2 Section 5 of this report illustrates the location of works in the Borough. This section describes the permanent, preparatory and temporary works in the District.
- 2.3 As the project is taken forward to detailed design and construction there may be changes to assumed construction methods and design, subject to the requirements of the Act, the EMRs, and any approvals required from consent granting bodies, and in response to the requirements of any relevant Undertakings or Assurances.

### Permanent Works

#### Colne Valley viaduct and Colne Valley viaduct north embankment

- 2.4 The route enters South Bucks District on the Colne Valley Viaduct at the point where it crosses the River Colne in the north east of the District. Approximately 1.16km of the viaduct lies within the District, with the rail level being between 12-15 metres above ground/water level. Running north-westwards from the River Colne, the viaduct crosses the A412 Denham Way/North Orbital Road, then joins the Colne Valley viaduct north embankment just to the south of Shire Lane. The route then leaves the District as it crosses Shire Lane. Part of the embankment falls within the District and will be up to 12 metres high adjacent to the viaduct, gradually decreasing in height as it continues westwards to enter the Tilehouse Lane cutting.
- 2.5 In addition to the Colne Valley Viaduct there will be a number of other key permanent and/or mitigation works in the District including:
- localised realignment of the River Colne where the viaduct crosses the watercourse. As a part of the realignment, some floodplain compensation will be required to the south of the crossing point in proximity to the old Denham Laboratories site (now under development).
  - a number of balancing ponds for railway drainage, located to the west and east of the Colne Valley viaduct, north of the River Colne up to Bridleway DEN/3. The ponds will be located at

approximately 200m intervals to discharge surface water runoff into the River Colne and its tributaries.

- the provision of an access to the east of the Colne Valley viaduct to provide an additional access to Denham Waterski Club.
  - the reinstatement of existing planting along the viaduct from the crossing of the River Colne up to the boundary of A412 Denham Way/North Orbital Road.
  - realignment of Bridleway DEN/3 around the southern end of the Colne Valley north embankment.
  - noise fence barriers, or equivalent noise reduction measures, throughout the west side of the 1.3km route in South Bucks District between the River Colne and Shire Lane, along the north approach embankment past Shire lane and then continuing along the base of the cutting northwards into Three Rivers District;
  - noise fence barriers, or equivalent noise reduction measures on the east side of the viaduct running northwards from the River Colne crossing, then reducing to a trackside barrier to the northern end of the viaduct.
- 2.6 Once the Colne Valley viaduct north embankment crosses Shire Lane, the route will leave the District and enters Three Rivers District.

#### Heathrow Express Works

- 2.7 Main works will also be undertaken in the south of the District near Iver and Langley stations. This work is required in order to relocate the Heathrow Express depot currently at Old Oak Common.
- 2.8 The work will consist of the construction of new railway tracks and a junction approximately 800m to the west of Iver railway station and to the south of the Mansion Lane traveller site. The new railway tracks will be to the north of the Great Western Mainline and consist of a shallow cutting, approximately 2m deep and 600m long which continues east until the boundary with Slough Borough.
- 2.9 A section of Hollow Hill Lane will be realigned by up to approximately 25m to the west of its existing alignment and lowered by approximately 4m. A new road underbridge will be constructed across the realigned Hollow Hill Lane upon which the new Heathrow Express depot trackwork will be constructed. The underbridge will be constrained in height by the need to connect the new depot to the existing GWML at its current level. Hollow Hill Lane will require lowering to ensure adequate overhead clearance for road vehicles and realignment to meet current road safety standards. The majority of these highway works will take place in Slough Borough, however at the northern end of the realignment, some of these works will encroach into the District.

## Preparatory and Temporary Works

2.10 Building and preparing the railway for operation will comprise the following general stages:

- advance works, including: site investigations; site surveys; preliminary mitigation works; preliminary enabling works;
- diverting utilities;
- civil engineering works, including: establishment of construction compounds and temporary construction accesses;
- site preparation and enabling works including demolition, site clearance; main earthworks and structural works;
- railway installation works, including: infrastructure installation; connections to utilities; and changes to the existing rail network;
- site restoration; and
- system testing and commissioning.

### Primary Utility Works

2.11 Within the District there are limited major utility works, consisting of lowering and protection of utility assets in Hollow Hill Lane.

### Worksites and Compounds

2.12 Construction of the HS2 route will require engineering works along the entire length of the route, and within land adjacent to the route. This will comprise two broad types of activity:

- civil engineering works, such as earthworks, tunnelling and construction and erection of bridges and viaducts; and/or
- railway installation works, such as laying ballast or slabs and tracks, and/or installing power supply and communications features.

2.13 Construction of the route will be subdivided into sections, each of which will be managed from compounds. The compounds will act as the main interface between the construction work sites and the public highway, as well as performing certain other functions. Compounds will either be main compounds or satellite compounds, which are generally smaller. Some compounds will be used for civil engineering works and others for railway installation works, and in some cases for both. In addition, there will also be smaller site compounds for some utilities works.

Table 2: Compound name and construction activity

Compound Name	Principal Construction Activity
Colne Valley viaduct laydown	Construction of Colne Valley Viaduct and Colne Valley viaduct north

Compound Name	Principal Construction Activity
satellite compound	embankment.
(A portion of ) Colne Valley viaduct north embankment satellite compound	Civil engineering works associated with the Colne Valley viaduct north embankment.
Colne Valley viaduct north launch satellite compound	Construction of Colne Valley Viaduct and Colne Valley viaduct north embankment.
Hollow Hill Lane main compound	Central project management office and logistics handling.  Coordination and management of the earthworks to the east and west of Hollow Hill Lane, including excavation of the floodplain storage area, construction of the embankment and cutting upon which the HEx depot east connection trackwork will be installed.  Land levelling and raising in the area where the depot maintenance shed and sidings will be constructed.
Heathrow Express Depot east connection satellite compound	Connection of the depot approach lines to the GWML  Alteration and installation of overhead line equipment.  Removal of Iver goods loop line.

### Roadheads and Material Transfer Areas

2.14 The following road heads will be used for the storage and loading and unloading of bulk earthworks material which is moved to and from the site on public highways. No roadheads are identified in the District.

2.15 Additional temporary stockpile sites may be required during work on particular elements of the route and will be adjacent to the works within the existing area of land required for construction.

### Demolition Works

2.16 Demolition works identified within the District are:

- The concrete batching plant adjacent to Thorney Lane.
- Three outbuildings associated with Weybeards Cottages to the East of the A412 in Denham.

## Archaeology

- 2.17 HS2 Ltd has sought to design the railway and to approach the task of construction in ways that reduce the impact on archaeological remains, as far as is reasonably practicable.
- 2.18 In accordance with the requirements of Heritage Memorandum and Code of Construction Practice, the nominated undertaker will develop an integrated investigation programme to deliver all archaeological works identified in the ES and as developed during the detailed design process. The programme will set out the key stages of investigation, for example:
- detailed desk-based assessment (where appropriate to inform location specific mitigation);
  - field evaluation (where appropriate to inform location specific mitigation); and
  - location specific mitigation (for example preservation in situ or archaeological excavation).
- 2.19 The investigation programme will be developed in light of, and in conjunction with, the overall construction programme and will be reviewed and updated, as necessary. The programme will aim to undertake as much of the work as possible in advance of any construction activities.

## Geotechnical Investigations

- 2.20 Geological investigations and intrusive site investigations (involving boreholes and trial pits) will be undertaken where necessary, to inform the detailed design.

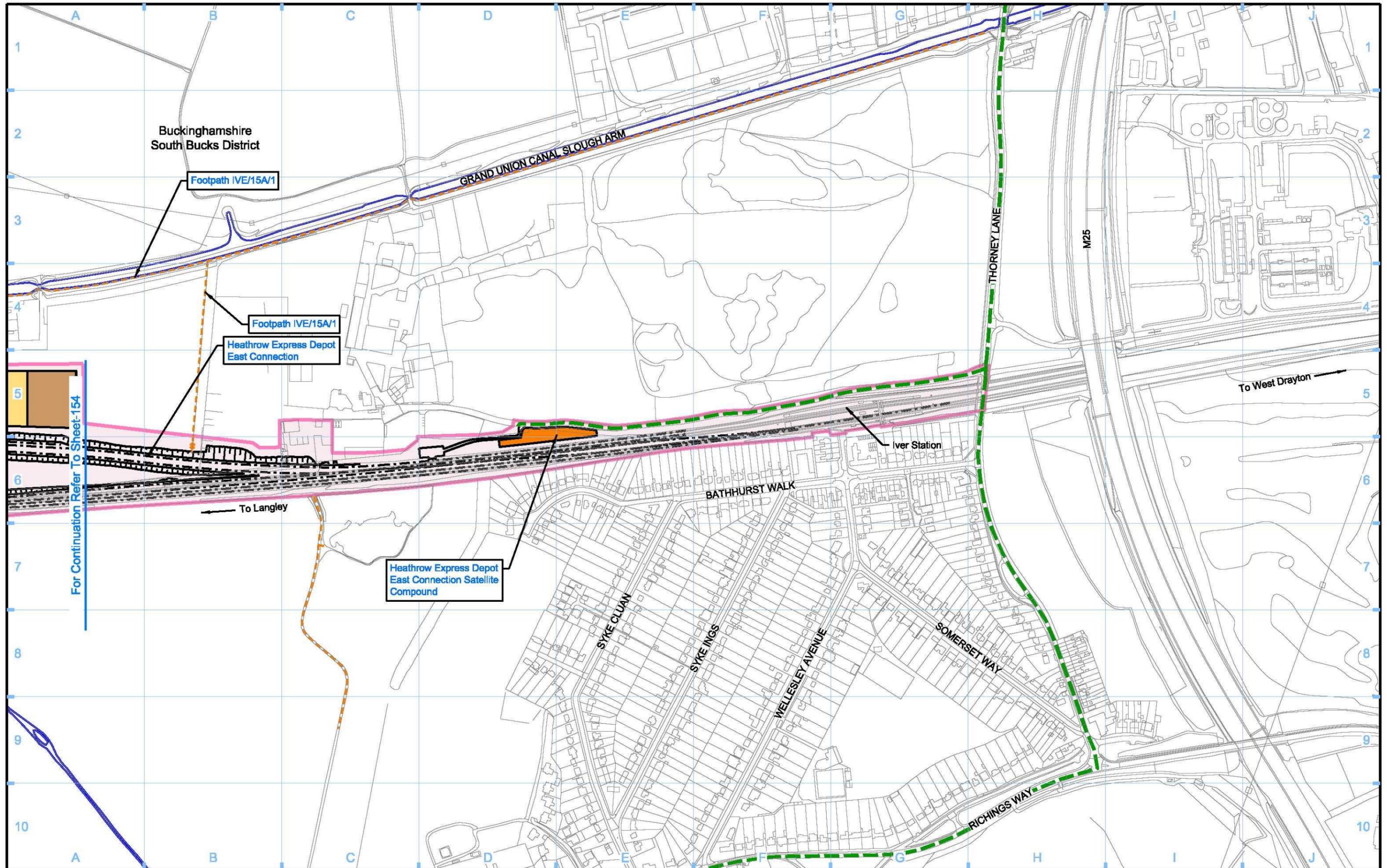
# 3 Landscape and Restoration

- 3.1 Different landscape types will be incorporated into HS2 works at various stages of the project. Some early landscape works may be proposed – for example new planting to compensate for the loss of prior habitat or to help integrate HS2 into the surrounding landscape. Planting and landscape techniques will be used for different purposes – for example to visually screen the railway, new structures or to reduce railway noise. Where possible, screen planting will be incorporated into the design along new embankments or cuttings in order to provide a combination of landscape integration, visual screening, and or ecological habitat connectivity.
- 3.2 New areas of woodland will be created along the route. This includes woodland to compensate for the loss of habitat and new planting to help integrate HS2 into the surrounding landscape. Certain areas of grassland will be created specifically to compensate for habitat loss resulting from the scheme.
- 3.3 Upon completion of construction works, land that is not required for operation of the railway will be restored. At this early stage of the design of the project, the presumption is that land would be restored as far as possible to its pre-existing condition. This will include reinstatement of field boundaries and hedgerows where possible. Hedgerows will be used to replace existing hedgerows removed during construction, to mitigate the impacts on wildlife or to create new visual screens. Any new planting, grassland and habitat creation will be maintained to ensure they become established and are properly maintained.

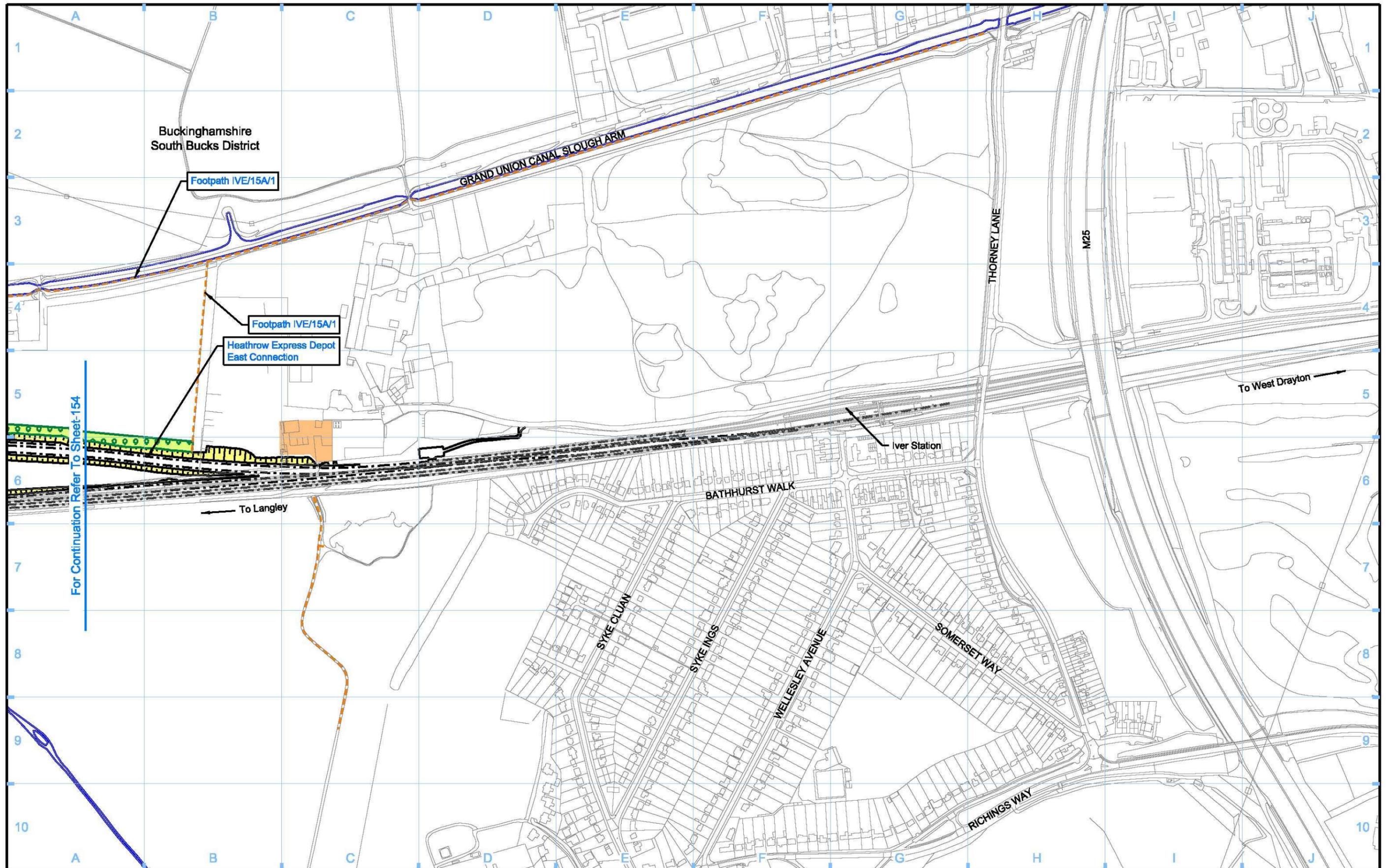
## 4 Schedule 17 Requests for Approval – Programme

Requests for Approval	2017 quarters				2018 quarters				2019 quarters				2020 quarters				2021 quarters				2022 quarters				2023 quarters				2024 quarters				2025 quarters				2026 quarters			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Little Hallings Wood Early Mitigation Planting																																								
Denham Water-ski Access Earthworks																																								
Colne Valley Viaduct and Mitigation																																								
River Colne Diversion and Compensation																																								
Colne Valley Viaduct Balancing Ponds and Drainage adjacent to A412																																								
Construction of cutting and embankment east of Hollow Hill Lane					Programme to be advised																																			
Realignment of Hollow Hill Lane					Programme to be advised																																			
Bringing into Use																																								
Class Approval																																								

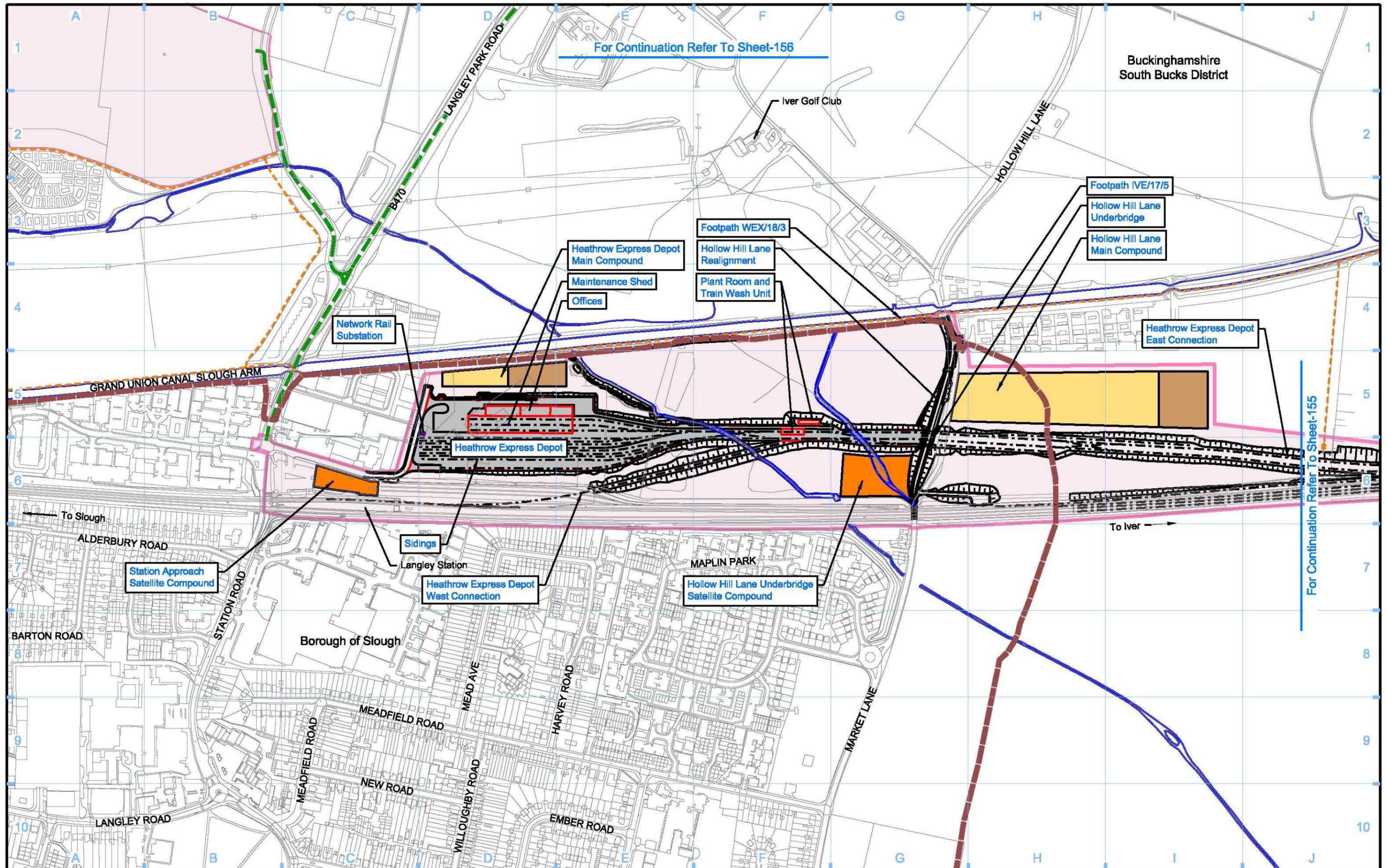
## 5 Planning Context Report Plans – Construction and Operation



<b>Legend</b> 					
<b>Map Number</b> <b>S17-CP-155</b>		<b>Map Name</b> <b>Construction Phase</b> <b>Sch 17 Planning Context Report Plan</b>			
<b>Planning Authority Area</b> South Bucks District		Registered in England. Registration number 05791886 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.		Scale at A3: 1:5,000 	
		© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.		Doc Number: C221-HS2-TP-DPL-010-511550 P00.0 Date:	



<b>Legend</b> 		<b>Map Number</b> <b>S17-OP-155</b>	 <small>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</small> <small>Registered in England. Registration number 06791088 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</small> <small>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.</small> <b>Scale at A3: 1:5,000</b>  <small>Doc Number: C221-HS2-TP-DPL-010-551550</small> <small>P00.0 Date:</small>
<b>Map Name</b> <b>Operational Phase</b> <b>Sch 17 Planning Context Report Plan</b>		<b>Planning Authority Area</b> South Bucks District	

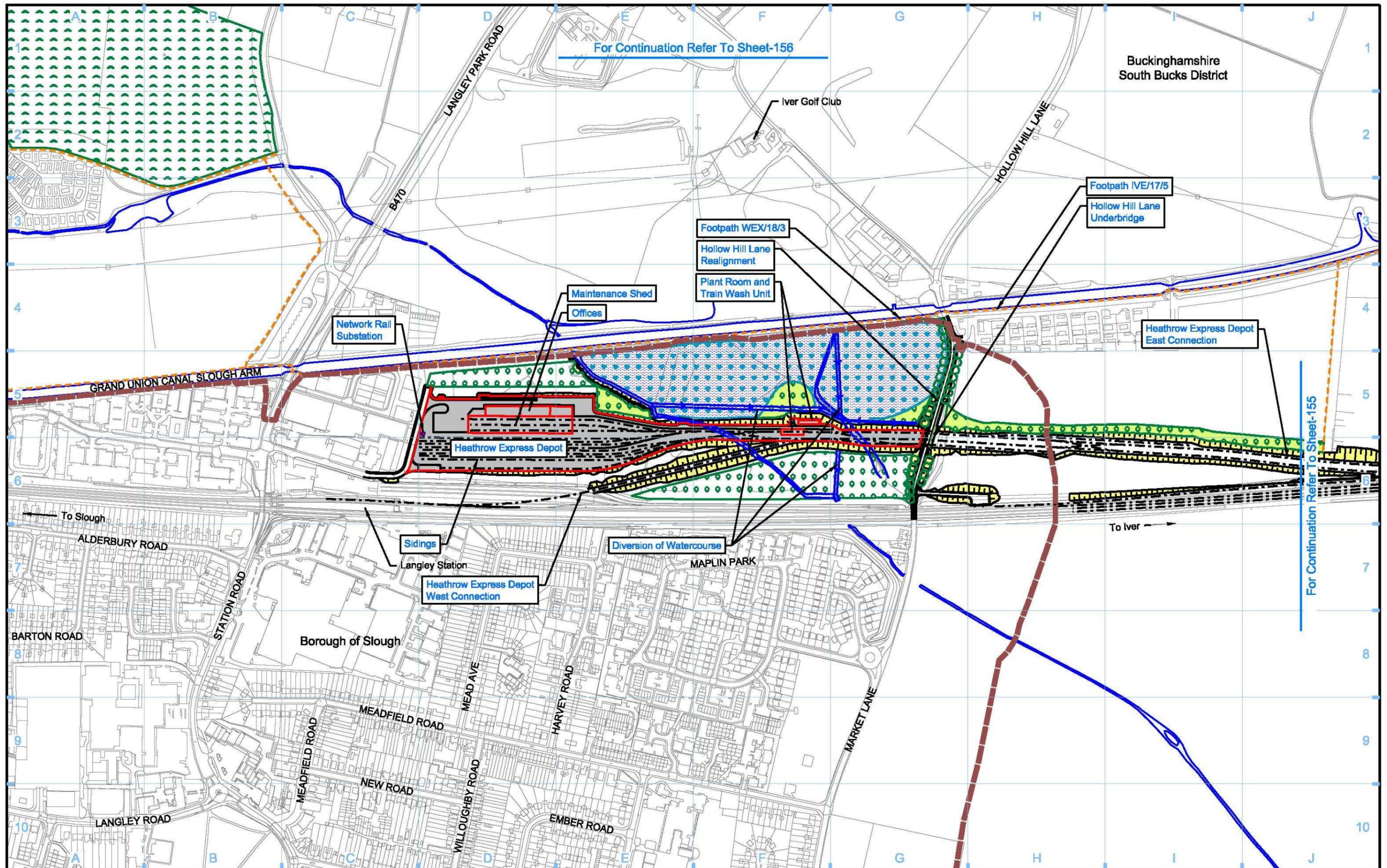


For Continuation Refer To Sheet-156

Buckinghamshire  
South Bucks District

For Continuation Refer To Sheet-155

<b>Legend</b> 		<b>Map Number</b> <p><b>S17-CP-154</b></p>		 <p>Scale at A3: 1:5,000</p>
<b>Map Name</b> <p>Construction Phase Sch 17 Planning Context Report Plan</p>		<p>Registered in England. Registration number 06791088 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</p>		
<b>Planning Authority Area</b> <p>Borough of Slough / South Bucks District</p>		<p>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190. Doc Number: C221-HS2-TP-DPL-010-511540 P00.0 Data:</p>		



For Continuation Refer To Sheet-156

Buckinghamshire  
South Bucks District

For Continuation Refer To Sheet-155

Legend	
	Depot, station, headhouse or portal building
	Tunnel portal
	Electricity substation
	Land drainage area
	Ecological mitigation pond
	Balancing pond
	Replacement floodplain storage
	Woodland habitat creation
	Wetland habitat creation
	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
	Sustainable placement
	Public realm/Replacement community facility
	Engineering earthworks
	Landscape earthworks
	Rail alignment formation
	Returned to suitable development use
	County boundary
	Borough / District boundary
	Planning authority boundary
	Watercourse diversion
	Existing watercourse
	Ditches - new
	Hedgerow habitat creation
	Main utility works
	Existing public right of way (PRoW)
	New, diverted or realigned PRoW
	Stopped-up PRoW
	Tunnels external extent
	Rail alignment
	HS2 Access road
	Noise fence barrier
	Chainage (e.g. 10+000)

Map Number: **S17-OP-154**

Map Name: **Operational Phase Sch 17 Planning Context Report Plan**

Planning Authority Area: **Borough of Slough / South Bucks District**

hs2

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

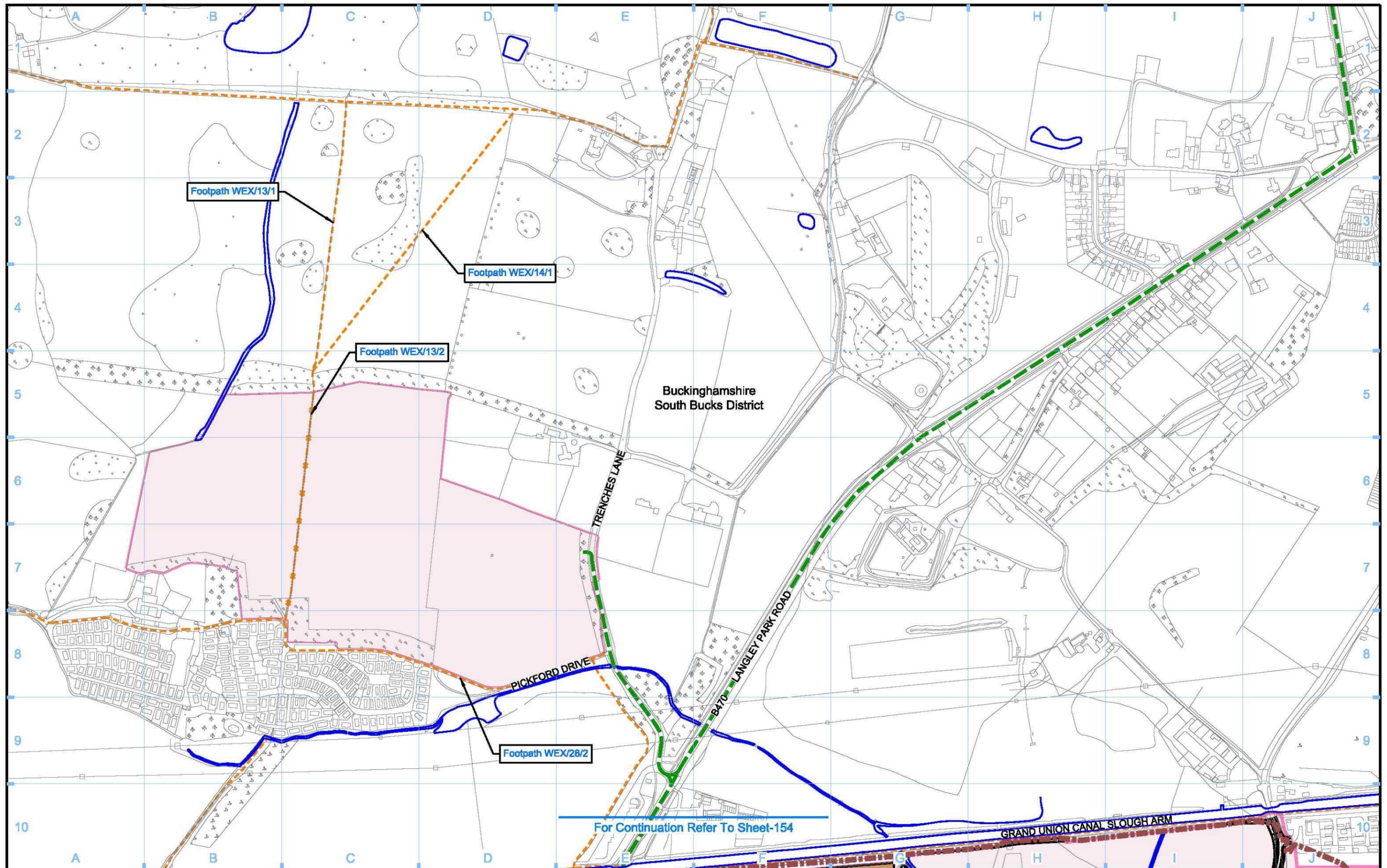
Registered in England. Registration number 06791888  
Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.

Scale at A3: 1:5,000

© Crown copyright and database rights 2017.  
Ordnance Survey Licence Number 100049190.

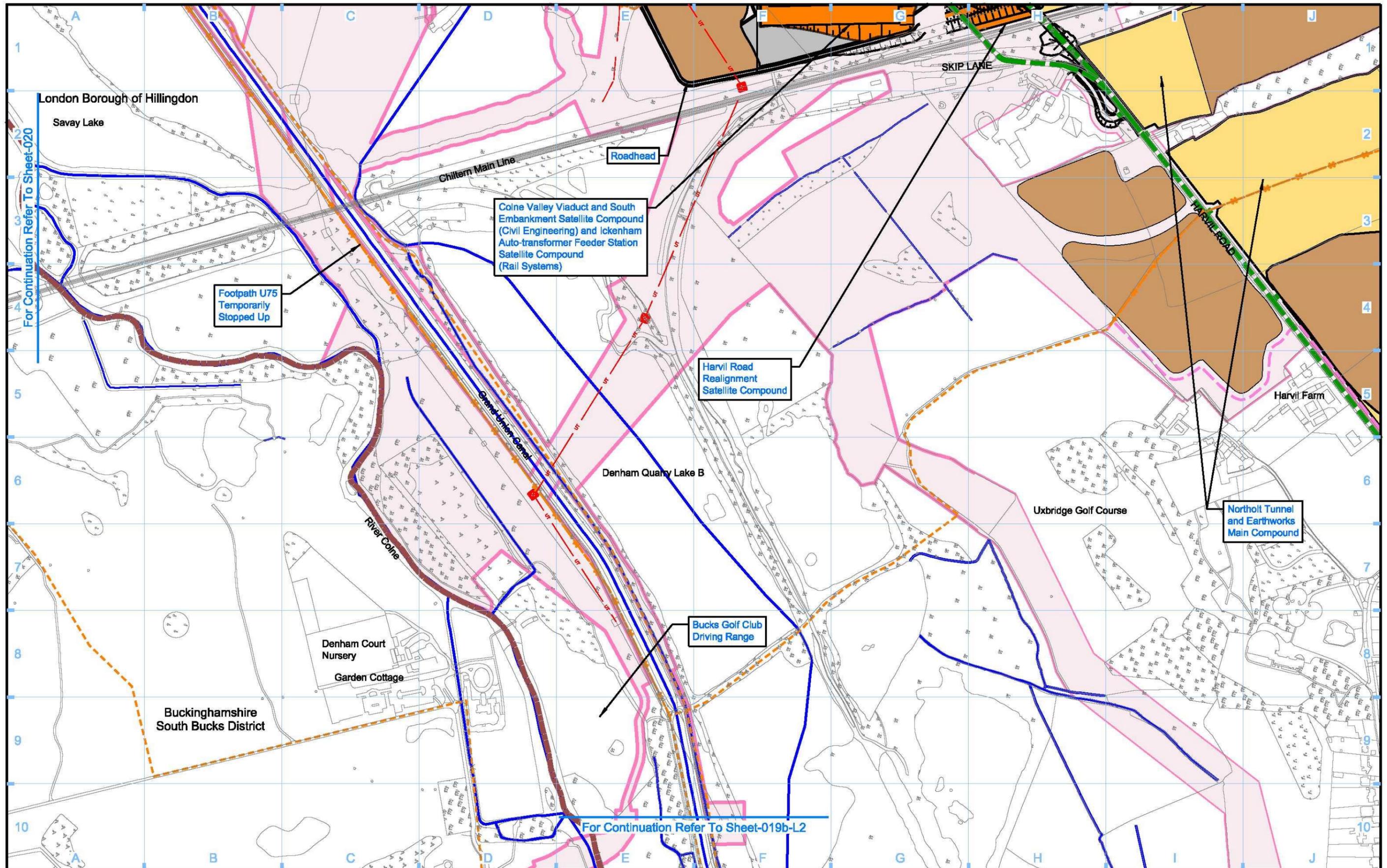
Doc Number: C221-HS2-TP-DPL-010-551540

P00.0 Date:



<b>Legend</b> 							
<b>Map Number</b> <b>S17-CP-156</b>		<b>Map Name</b> <b>Construction Phase</b> <b>Sch 17 Planning Context Report Plan</b>				<small>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</small>	
<b>Planning Authority Area</b> South Bucks District		<small>Registered in England. Registration number 06791888          Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</small>		<small>Scale at A3: 1:5,000</small> 		<small>© Crown copyright and database rights 2017.          Ordnance Survey Licence Number 100049190.</small>	
				<small>Doc Number: C221-HS2-TP-DPL-010-511560</small>		<small>P00.0 Data:</small>	





London Borough of Hillingdon  
Savay Lake

For Continuation Refer To Sheet-020

Footpath U75  
Temporarily  
Stopped Up

Colne Valley Viaduct and South  
Embankment Satellite Compound  
(Civil Engineering) and Ickenham  
Auto-transformer Feeder Station  
Satellite Compound  
(Rail Systems)

Roadhead

Harvil Road  
Realignment  
Satellite Compound

Denham Quarry Lake B

Northolt Tunnel and Earthworks  
Main Compound

Denham Court  
Nursery  
Garden Cottage

Bucks Golf Club  
Driving Range

Buckinghamshire  
South Bucks District

For Continuation Refer To Sheet-019b-L2

Legend	
	Depot, station, headhouse or portal building
	Tunnel portal
	Main construction compound
	Satellite construction compound
	Temporary material stockpile
	Rail alignment formation
	Landscape earthworks
	Engineering earthworks
	County boundary
	Borough / District boundary
	Land potentially required during construction
	Temporary replacement community facility
	Planning authority boundary
	Existing watercourse
	Tunnels external extent
	Construction traffic route
	Existing public right of way (PRoW)
	New, diverted or realigned PRoW
	Stopped-up PRoW
	Temporary PRoW diversion / realignment
	Temporary highway diversion / realignment
	UT - Main utility works
	Chainage (e.g. 10+000)
	Rail alignment

Map Number  
**S17-CP-019b-L1**

Map Name  
**Construction Phase  
Sch 17 Planning Context Report Plan**

Planning Authority Area  
**South Bucks District /  
London Borough of Hillingdon**

**hs2**

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

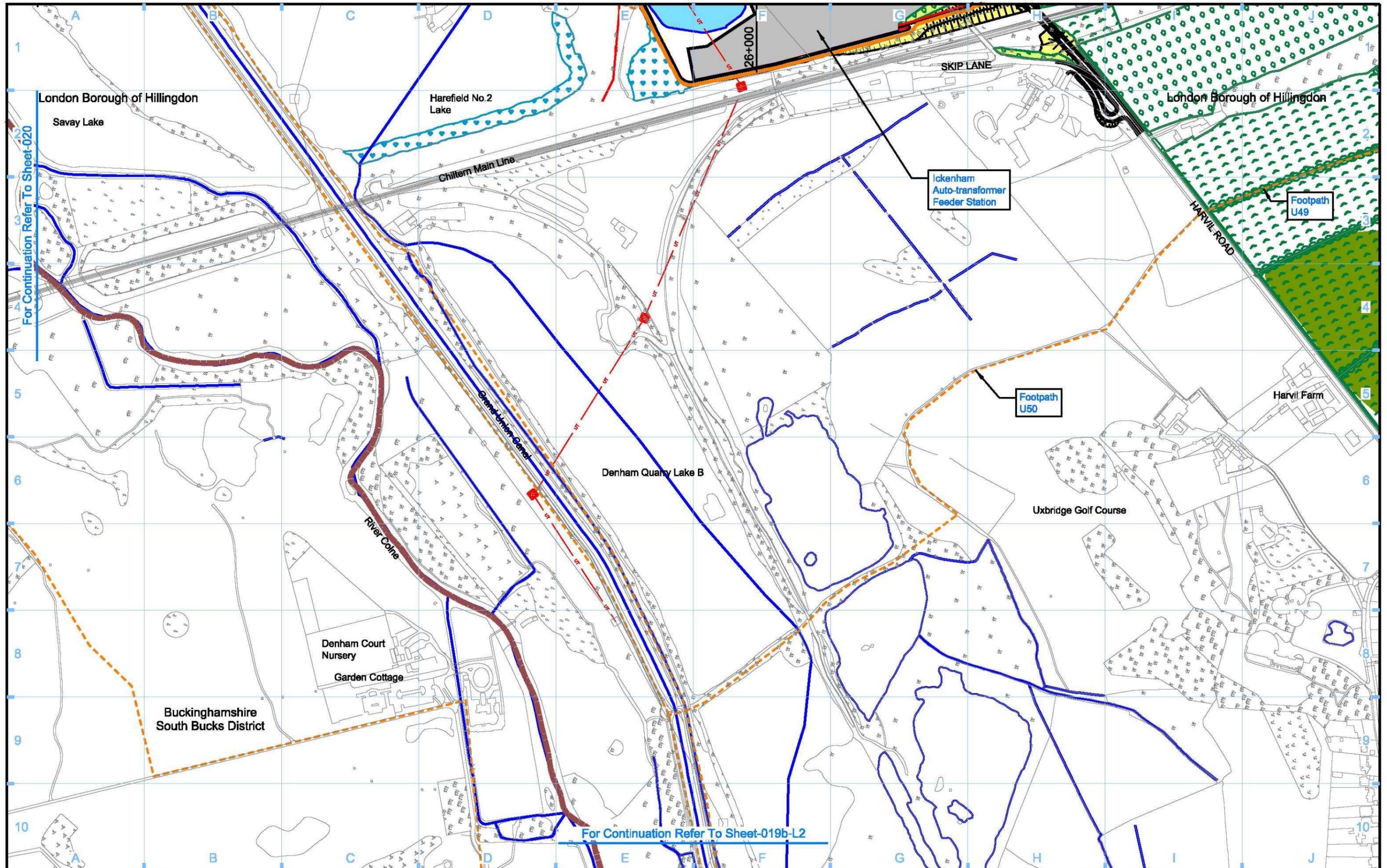
Registered in England. Registration number 06791686  
Registered office: 2 Snow Hill, Queensway,  
Birmingham, B4 6QA.

Scale at A3: 1:5,000

0 50 100 150 200 250  
Metres

© Crown copyright and database rights 2017.  
Ordnance Survey Licence Number 100049190.

Doc Number: C222-HS2-TP-DPL-020-050703 P00.1 Date:



London Borough of Hillingdon  
Savay Lake

Harefield No.2  
Lake

SKIP LANE

London Borough of Hillingdon

For Continuation Refer To Sheet-020

Chiltern Main Line

Ickenham  
Auto-transformer  
Feeder Station

Footpath  
U49

HARVIL ROAD

Great Union Canal

Denham Quarry Lake B

Footpath  
U50

Harvil Farm

Denham Court  
Nursery  
Garden Cottage

Uxbridge Golf Course

Buckinghamshire  
South Bucks District

River Colne

For Continuation Refer To Sheet-019b-L2

Legend	
	Depot, station, headhouse or portal building
	Tunnel portal
	Electricity substation
	Land drainage area
	Ecological mitigation pond
	Balancing pond
	Replacement floodplain storage
	Woodland habitat creation
	Wetland habitat creation
	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
	Sustainable placement
	Public realm/Replacement community facility
	Engineering earthworks
	Landscape earthworks
	Rail alignment formation
	Returned to suitable development use
	County boundary
	Borough / District boundary
	Planning authority boundary
	Watercourse diversion
	Existing watercourse
	Ditches - new
	Hedgerow habitat creation
	Main utility works
	Existing public right of way (PRoW)
	New, diverted or realigned PRoW
	Stopped-up PRoW
	Tunnels external extent
	Rail alignment
	HS2 Access road
	Noise fence barrier
	Chainage (e.g. 10+000)

Map Number  
**S17-OP-019b-L1**

Map Name  
**Operational Phase  
Sch 17 Planning Context Report Plan**

Planning Authority Area  
South Bucks District /  
London Borough of Hillingdon

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

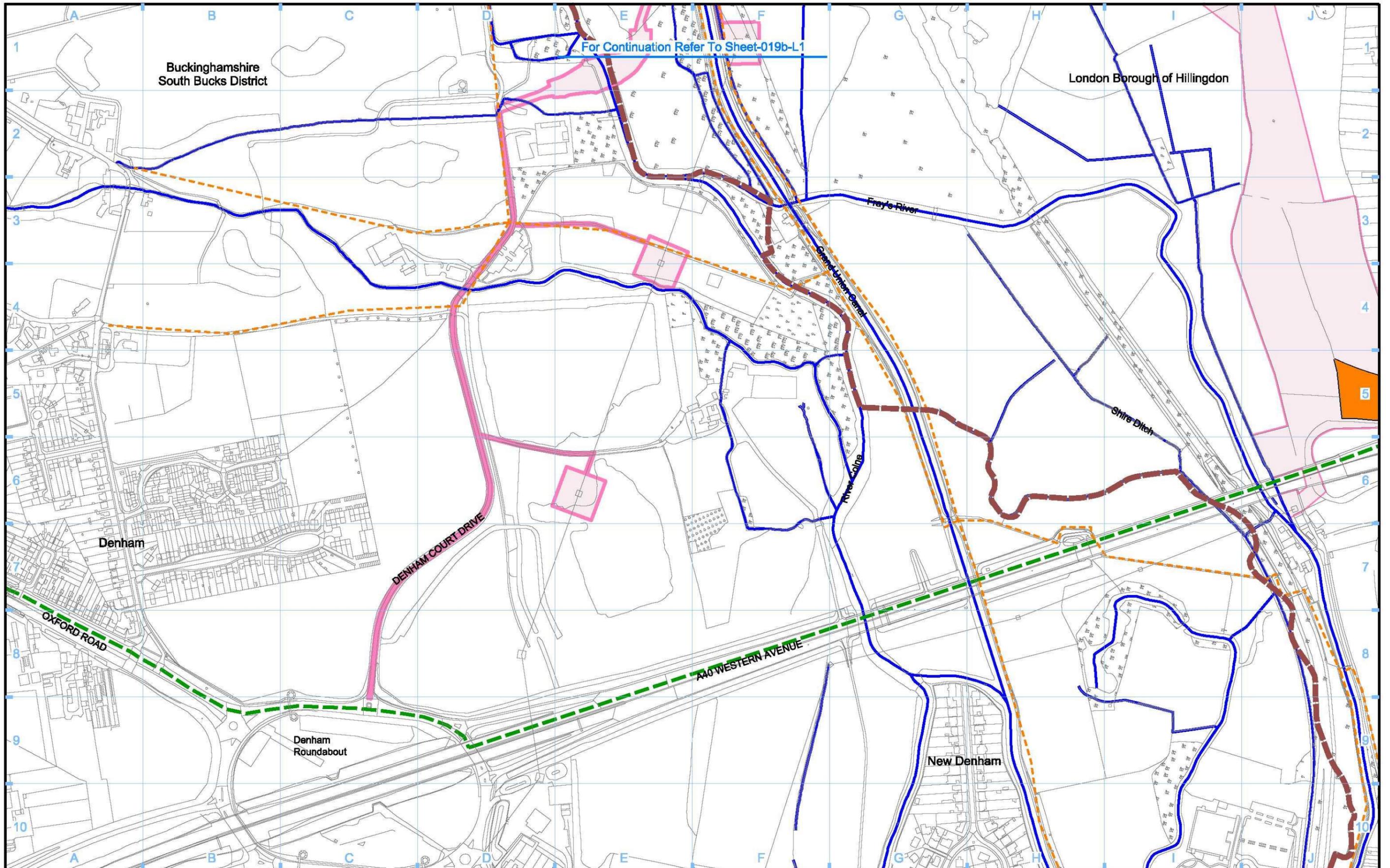
Registered in England. Registration number 06791888  
Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.

Scale at A3: 1:5,000

© Crown copyright and database rights 2017.  
Ordnance Survey Licence Number 100049190.

Doc Number: C222-HS2-TP-DPL-020-060703

P00.1 Date:



Legend	
	Depot, station, headhouse or portal building
	Tunnel portal
	Main construction compound
	Satellite construction compound
	Temporary material stockpile
	Rail alignment formation
	Landscape earthworks
	Engineering earthworks
	County boundary
	Borough / District boundary
	Land potentially required during construction
	Temporary replacement community facility
	Planning authority boundary
	Existing watercourse
	Tunnels external extent
	Construction traffic route
	Existing public right of way (PRoW)
	New, diverted or realigned PRoW
	Stopped-up PRoW
	Temporary PRoW diversion / realignment
	Temporary highway diversion / realignment
	UT - Main utility works
	Chainage (e.g. 10+000)
	Rail alignment

Map Number: **S17-CP-019b-L2**

Map Name: **Construction Phase Sch 17 Planning Context Report Plan**

Planning Authority Area: **South Bucks District / London Borough of Hillingdon**

**hs2**

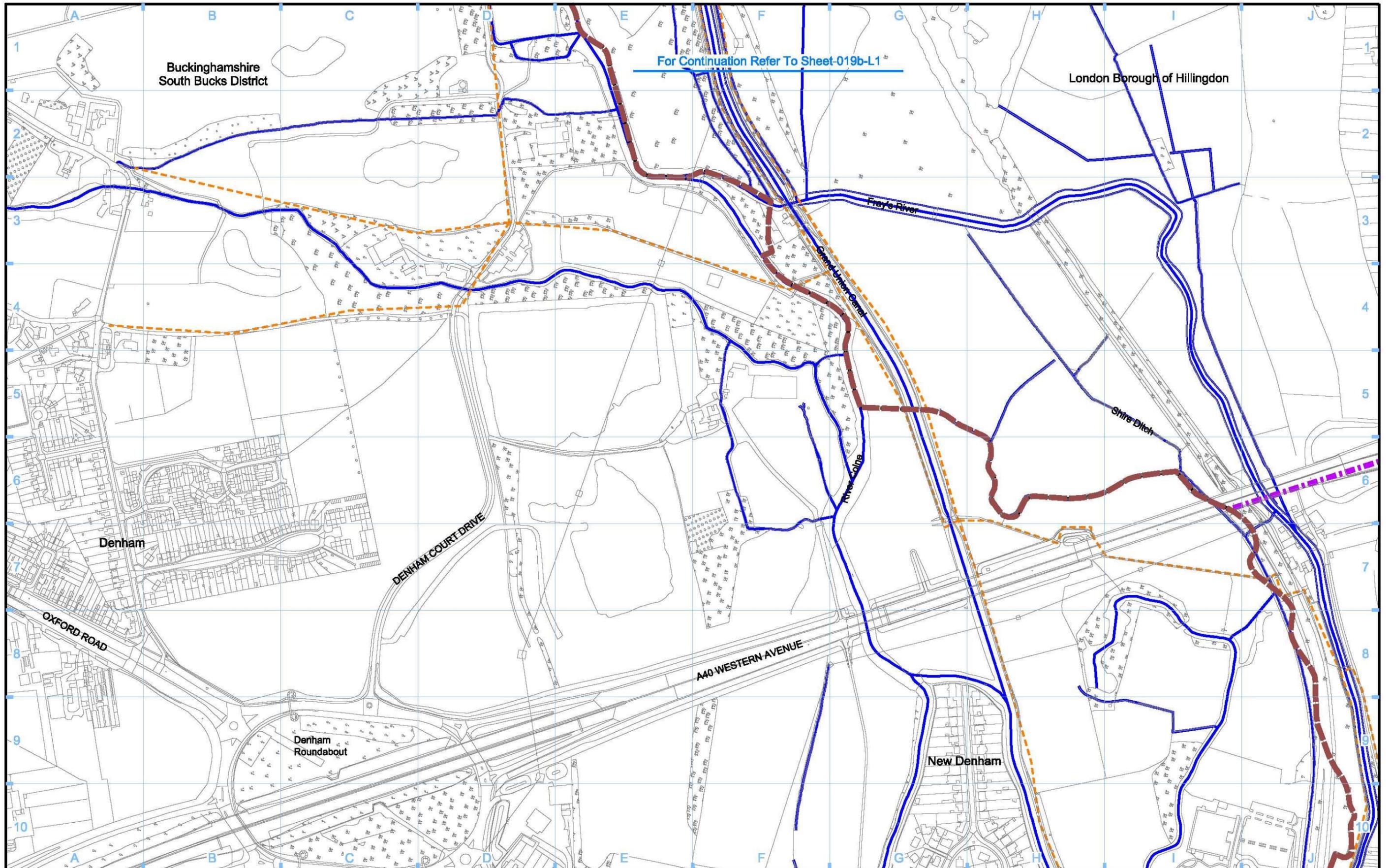
HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791886  
Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.

Scale at A3: 1:5,000

© Crown copyright and database rights 2017.  
Ordnance Survey Licence Number 100049190.

Doc Number: C222-HS2-TP-DPL-020-050709 P00.0 Date:



For Continuation Refer To Sheet-019b-L1

Buckinghamshire  
South Bucks District

London Borough of Hillingdon

Denham

Denham  
Roundabout

New Denham

Legend	
	Depot, station, headhouse or portal building
	Tunnel portal
	Electricity substation
	Land drainage area
	Ecological mitigation pond
	Balancing pond
	Replacement floodplain storage
	Woodland habitat creation
	Wetland habitat creation
	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
	Sustainable placement
	Public realm/Replacement community facility
	Engineering earthworks
	Landscape earthworks
	Rail alignment formation
	Returned to suitable development use
	County boundary
	Borough / District boundary
	Planning authority boundary
	Watercourse diversion
	Existing watercourse
	Ditches - new
	Hedgerow habitat creation
	Main utility works
	Existing public right of way (PRoW)
	New, diverted or realigned PRoW
	Tunnels external extent
	Rail alignment
	HS2 Access road
	Noise fence barrier
	Chainage (e.g. 10+000)

Map Number  
**S17-OP-019b-L2**

Map Name  
**Operational Phase  
Sch 17 Planning Context Report Plan**

Planning Authority Area  
**South Bucks District /  
London Borough of Hillingdon**

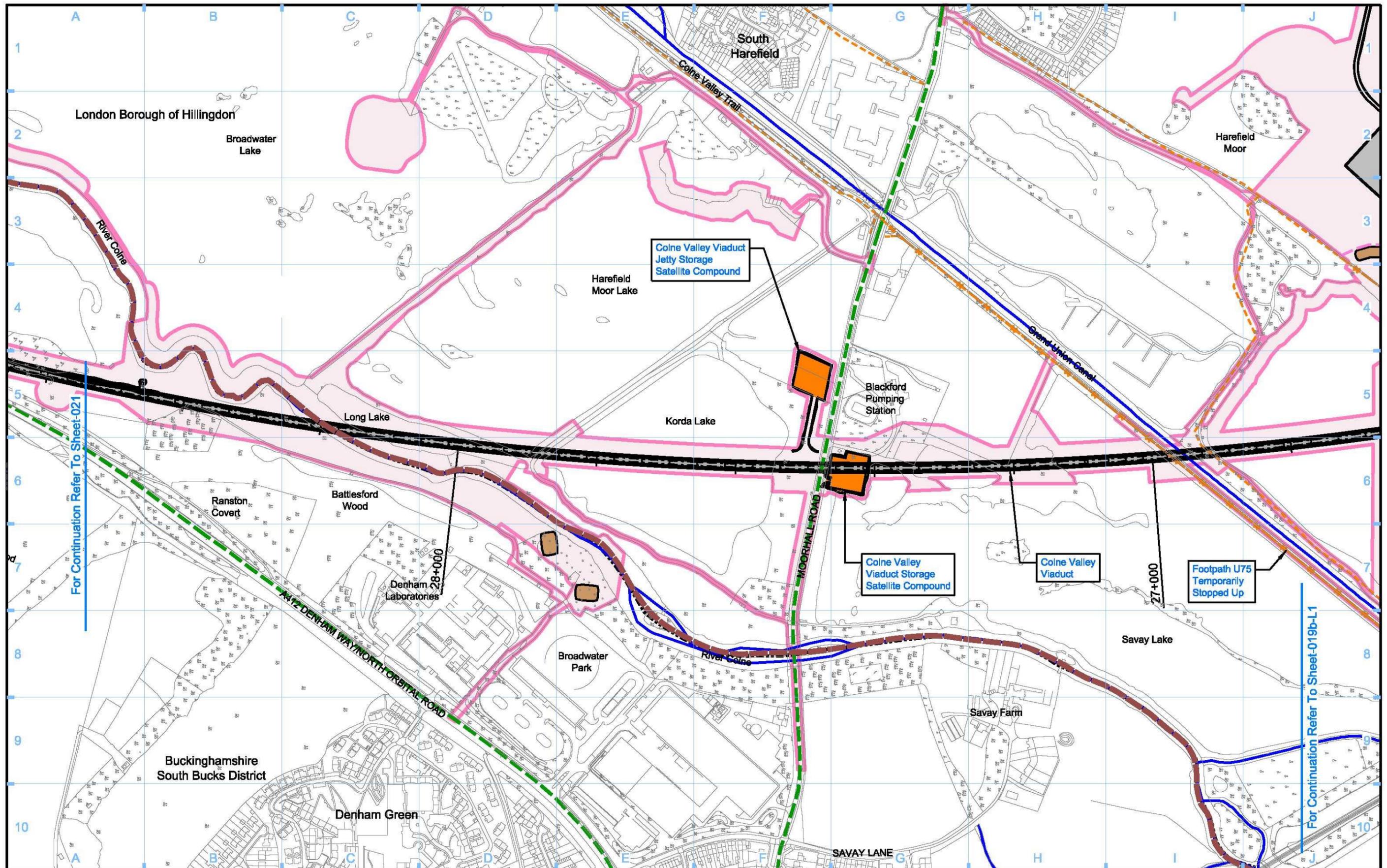
Registered in England. Registration number 06791686  
Registered office: 2 Snow Hill, Queensway,  
Birmingham, B4 6QA.

Scale at A3: 1:5,000

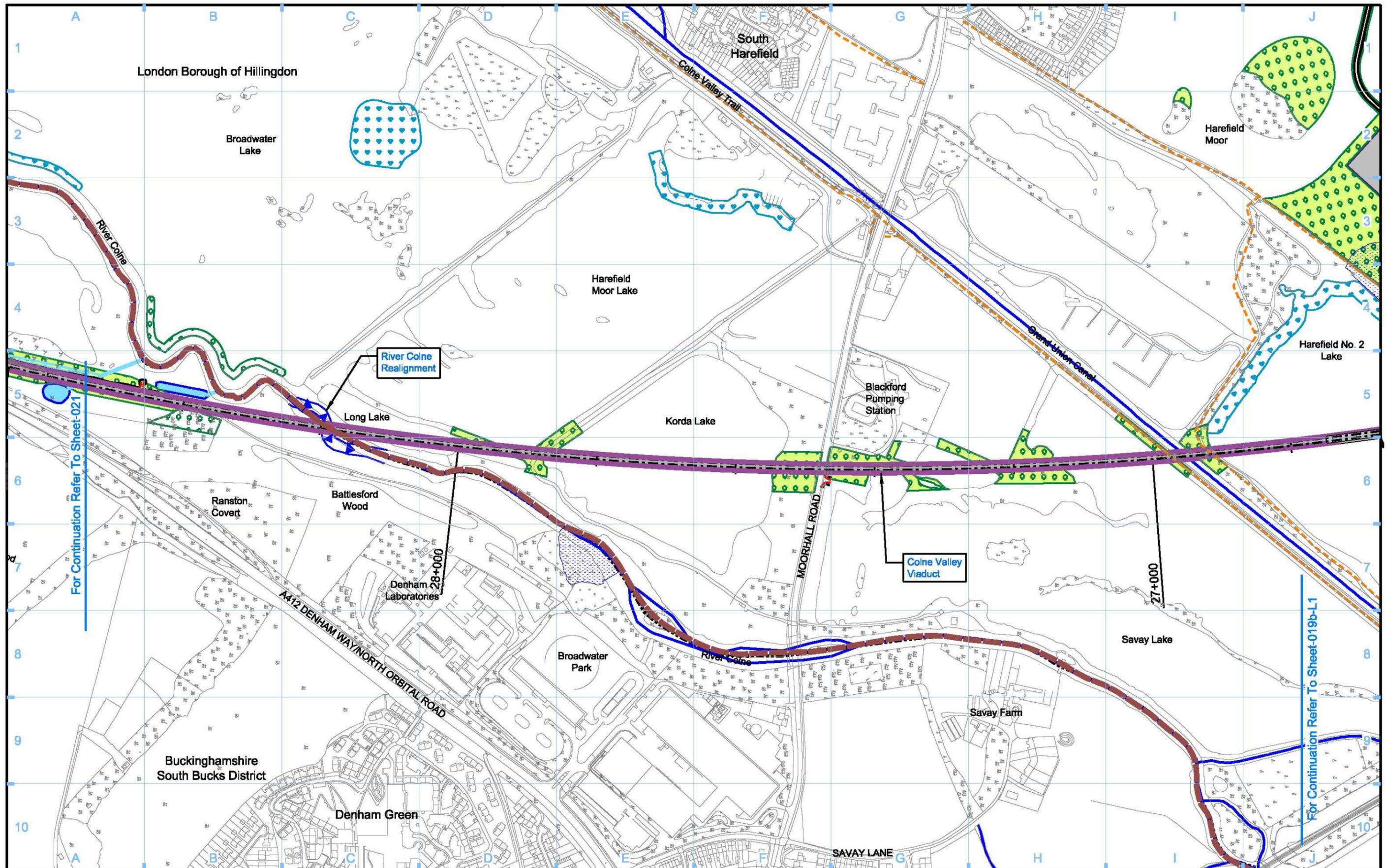
0 50 100 150 200 250  
Metres

© Crown copyright and database rights 2017.  
Ordnance Survey Licence Number 100049190.

Doc Number: C222-HS2-TP-DPL-020-060709 P00.1 Date:



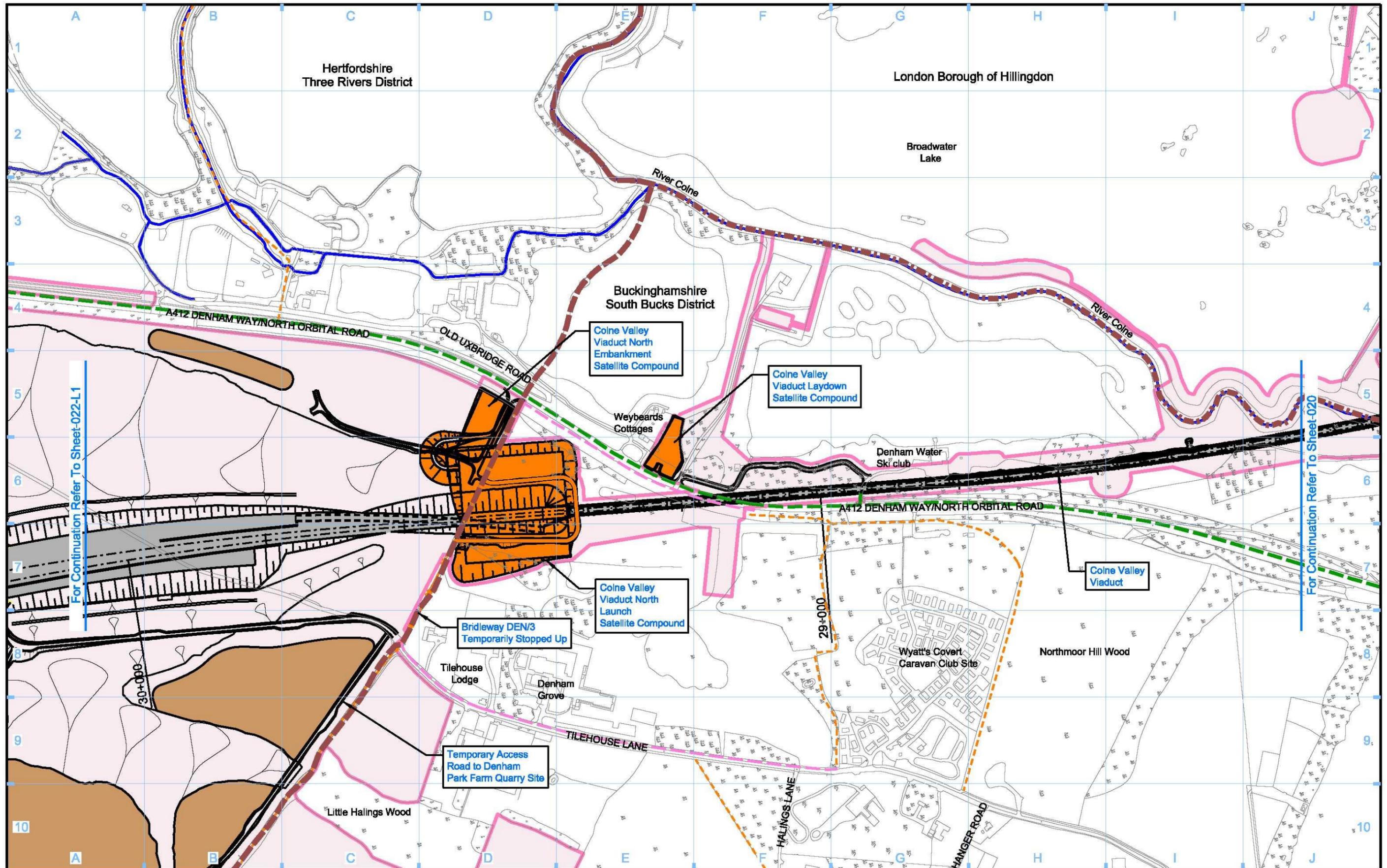
<b>Legend</b> 				<b>Map Number</b> <b>S17-CP-020</b> <b>Map Name</b> <b>Construction Phase</b> <b>Sch 17 Planning Context Report Plan</b> <b>Planning Authority Area</b> <b>South Bucks District /</b> <b>London Borough of Hillingdon</b>	 <small>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</small> <small>Registered in England. Registration number 06791886 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</small> <b>Scale at A3: 1:5,000</b>  <small>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.</small> <b>Doc Number: C222-HS2-TP-DPL-020-050704</b> <b>P00.1 Data:</b>
-------------------	--	--	--	--	--



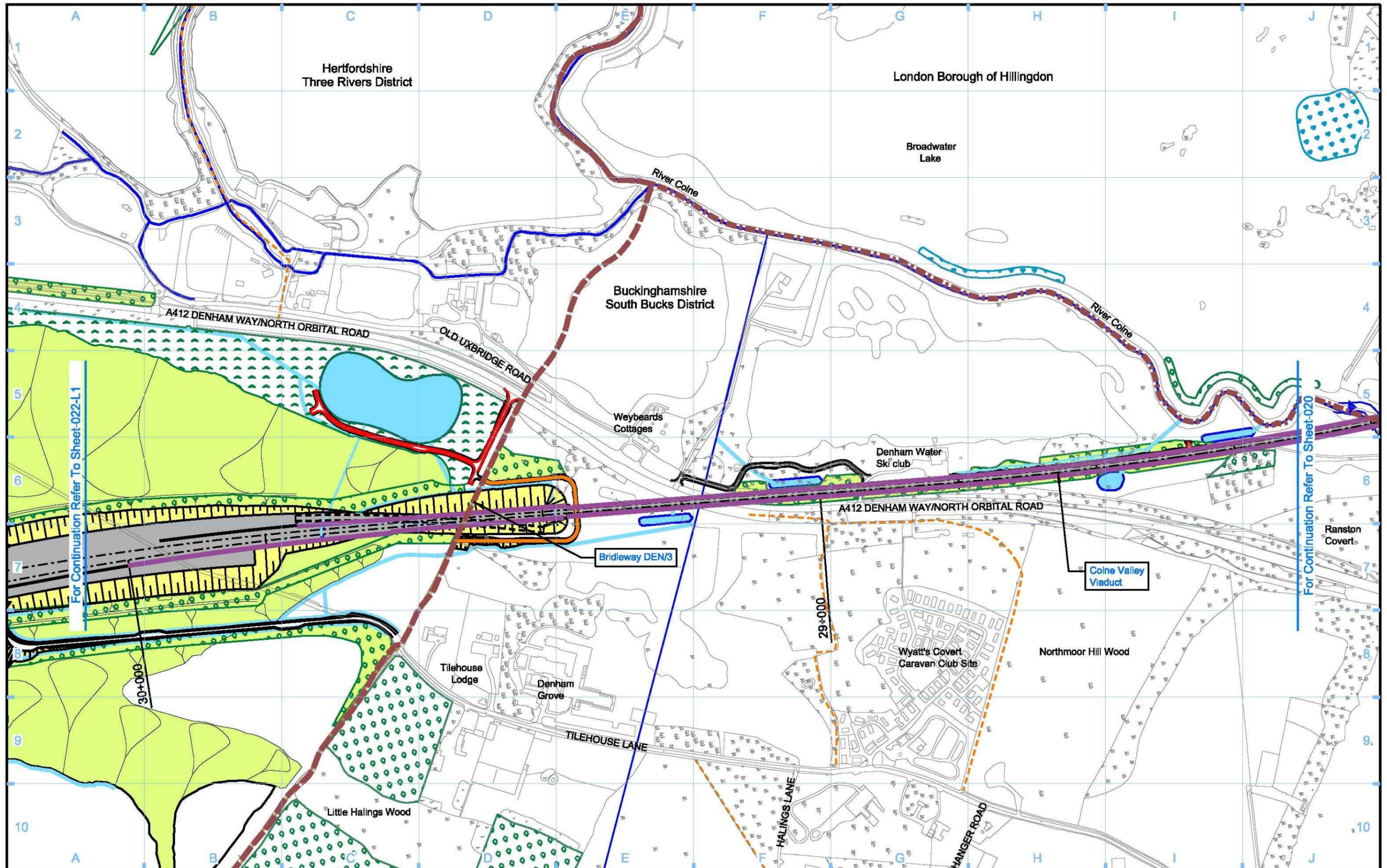
For Continuation Refer To Sheet-021

For Continuation Refer To Sheet-019b-L1

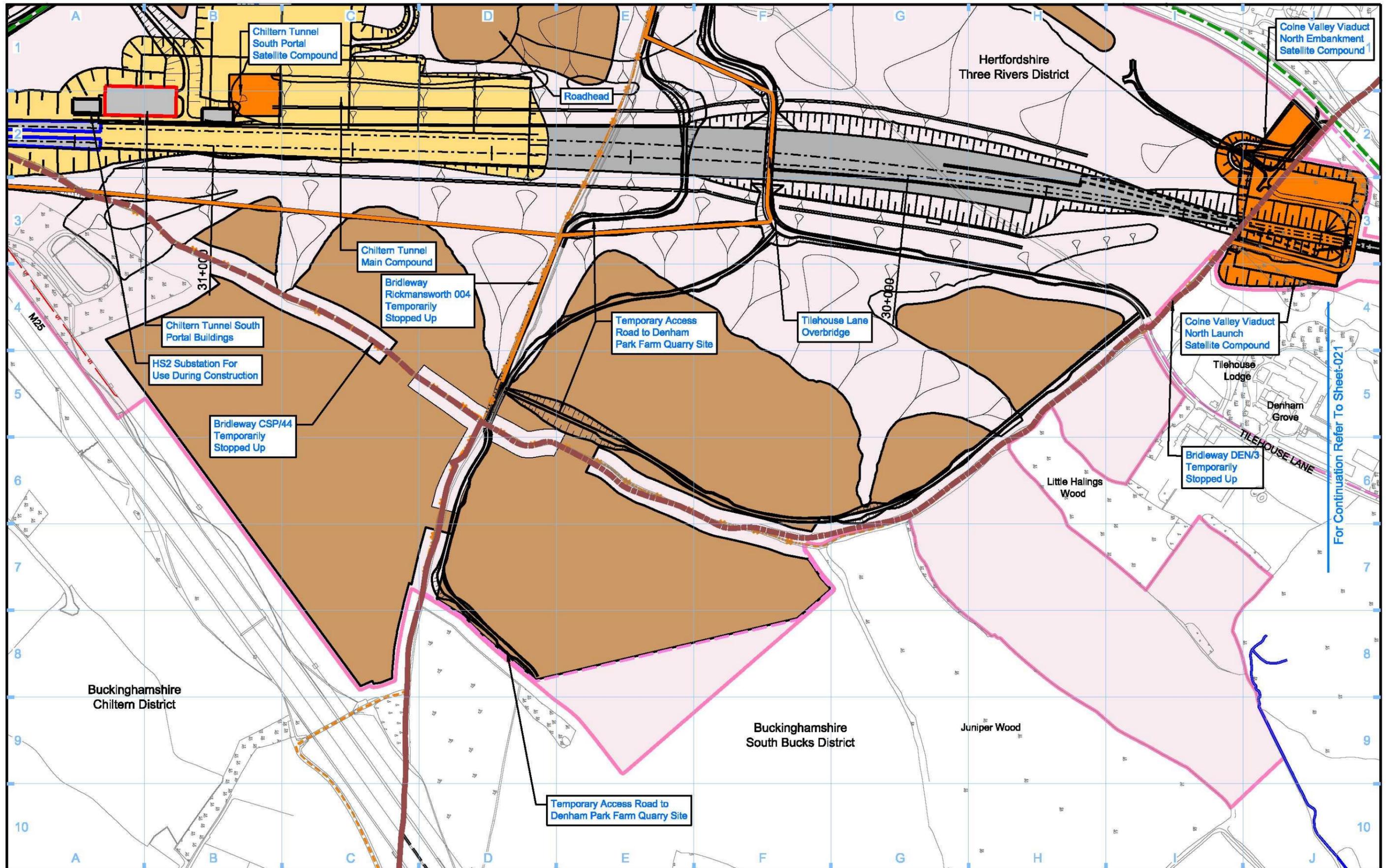
<b>Legend</b> 		<b>Map Number</b> <b>S17-OP-020</b>	 <b>Scale at A3: 1:5,000</b>  <small>Registered in England. Registration number 06791686 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</small> <small>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.</small> <b>Doc Number: C222-HS2-TP-DPL-020-060704</b> <b>P00.1 Data:</b>
<b>Map Name</b> <b>Operational Phase</b> <b>Sch 17 Planning Context Report Plan</b>		<b>Planning Authority Area</b> <b>South Bucks District /</b> <b>London Borough of Hillingdon</b>	



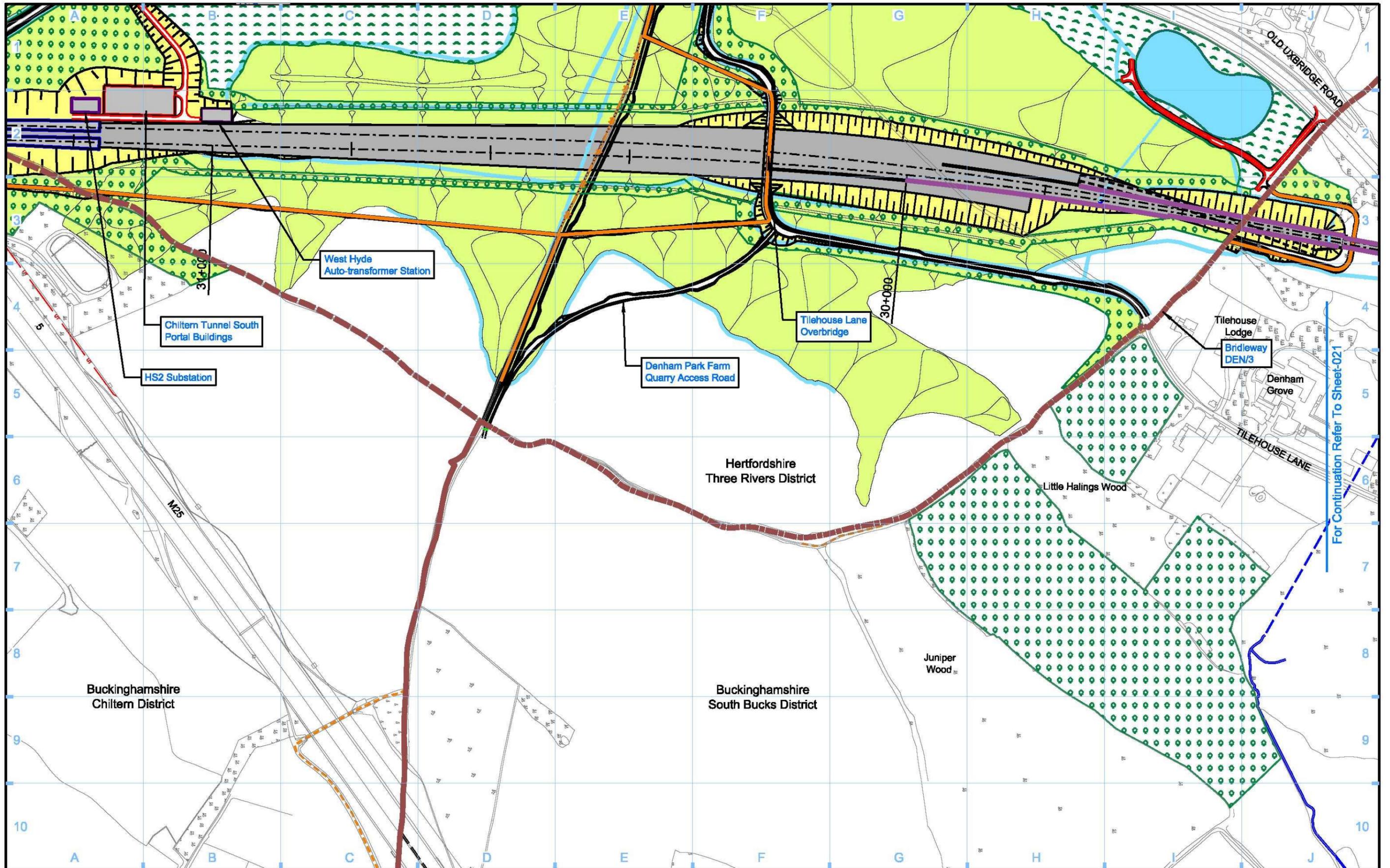
<b>Legend</b> <ul style="list-style-type: none"> <li>Depot, station, headhouse or portal building</li> <li>Tunnel portal</li> <li>Main construction compound</li> <li>Satellite construction compound</li> <li>Temporary material stockpile</li> <li>Rail alignment formation</li> <li>Landscape earthworks</li> <li>Engineering earthworks</li> <li>County boundary</li> <li>Borough / District boundary</li> <li>Land potentially required during construction</li> </ul>		<ul style="list-style-type: none"> <li>Temporary replacement community facility</li> <li>Planning authority boundary</li> <li>Existing watercourse</li> <li>Tunnels external extent</li> <li>Construction traffic route</li> <li>Existing public right of way (PRoW)</li> </ul>		<ul style="list-style-type: none"> <li>New, diverted or realigned PRoW</li> <li>Stopped-up PRoW</li> <li>Temporary PRoW diversion / realignment</li> <li>Temporary highway diversion / realignment</li> <li>Main utility works</li> </ul>		<ul style="list-style-type: none"> <li>Chainage (e.g. 10+000)</li> <li>Rail alignment</li> </ul>		<b>Map Number</b> <b>S17-CP-021</b> <b>Map Name</b> <b>Construction Phase</b> <b>Sch 17 Planning Context Report Plan</b> <b>Planning Authority Area</b> <b>Three Rivers District /</b> <b>London Borough of Hillingdon / South Bucks District</b>		<p>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</p> <p>Registered in England. Registration number 06791686        Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</p> <p>© Crown copyright and database rights 2017.        Ordnance Survey Licence Number 100049190.</p> <p>Scale at A3: 1:5,000</p> <p>Doc Number: C222-HS2-TP-DPL-020-050705</p> <p>P00.1 Date:</p>	
--	--	---	--	---	--	--	--	--	--	--	--



<b>Legend</b> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black; margin-right: 5px;"></span> Depot, station, headhouse or portal building</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; border: 1px solid black; margin-right: 5px;"></span> Tunnel portal</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: purple; border: 1px solid black; margin-right: 5px;"></span> Electricity substation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black; margin-right: 5px;"></span> Land drainage area</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: cyan; border: 1px solid black; margin-right: 5px;"></span> Ecological mitigation pond</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black; margin-right: 5px;"></span> Balancing pond</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Replacement floodplain storage</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black; margin-right: 5px;"></span> Woodland habitat creation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black; margin-right: 5px;"></span> Wetland habitat creation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Grassland habitat creation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Landscape mitigation planting (scrub / woodland)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black; margin-right: 5px;"></span> Grassed areas</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black; margin-right: 5px;"></span> Sustainable placement</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; border: 1px solid black; margin-right: 5px;"></span> Public realm/Replacement community facility</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Engineering earthworks</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black; margin-right: 5px;"></span> Landscape earthworks</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; border: 1px solid black; margin-right: 5px;"></span> Rail alignment formation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black; margin-right: 5px;"></span> Returned to suitable development use</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> County boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Borough / District boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid red; margin-right: 5px;"></span> Planning authority boundary</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid blue; margin-right: 5px;"></span> Watercourse diversion</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid blue; margin-right: 5px;"></span> Existing watercourse</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid blue; margin-right: 5px;"></span> Ditches - new</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid blue; margin-right: 5px;"></span> Hedgerow habitat creation</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid red; margin-right: 5px;"></span> Main utility works</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px dashed orange; margin-right: 5px;"></span> Existing public right of way (PRoW)</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid orange; margin-right: 5px;"></span> New, diverted or realigned PRoW</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px dashed orange; margin-right: 5px;"></span> Stopped-up PRoW</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px dashed black; margin-right: 5px;"></span> Tunnels external extent</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid black; margin-right: 5px;"></span> Rail alignment</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid red; margin-right: 5px;"></span> HS2 Access road</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid purple; margin-right: 5px;"></span> Noise fence barrier</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid black; margin-right: 5px;"></span> Chainage (e.g. 10+000)</li> </ul>		<p>Map Number: <b>S17-OP-021</b></p> <p>Map Name: <b>Operational Phase Sch 17 Planning Context Report Plan</b></p> <p>Planning Authority Area: <b>Three Rivers District / London Borough of Hillingdon / South Bucks District</b></p>	<p>hs2</p> <p>Registered in England. Registration number 06791888 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</p> <p>Scale at A3: 1:5,000</p> <p>0 50 100 150 200 250 Metres</p> <p>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.</p> <p>Doc Number: C222-HS2-TP-DPL-020-060705</p> <p>P00.1 Data:</p>
--	--	---	---



<b>Legend</b> <ul style="list-style-type: none"> <li>Depot, station, headhouse or portal building</li> <li>Tunnel portal</li> <li>Main construction compound</li> <li>Satellite construction compound</li> <li>Temporary material stockpile</li> <li>Rail alignment formation</li> <li>Landscape earthworks</li> <li>Engineering earthworks</li> <li>County boundary</li> <li>Borough / District boundary</li> <li>Land potentially required during construction</li> <li>Temporary replacement community facility</li> <li>Planning authority boundary</li> <li>Existing watercourse</li> <li>Tunnels external extent</li> <li>Construction traffic route</li> <li>Existing public right of way (PRoW)</li> <li>New, diverted or realigned PRoW</li> <li>Stopped-up PRoW</li> <li>Temporary PRoW diversion / realignment</li> <li>Temporary highway diversion / realignment</li> <li>Main utility works</li> <li>Chainage (e.g. 10+000)</li> <li>Rail alignment</li> </ul>		<b>Map Number</b> <b>S17-CP-022-L1</b> <b>Map Name</b> <b>Construction Phase</b> <b>Sch 17 Planning Context Report Plan</b> <b>Planning Authority Area</b> <b>Three Rivers District / Chiltern District / South Bucks District</b>		 <small>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</small> <small>Registered in England. Registration number 06791886 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</small> <b>Scale at A3: 1:5,000</b>  <small>© Crown copyright and database rights 2017. Ordnance Survey Licence Number 100049190.</small> <b>Doc Number: C222-HS2-TP-DPL-020-050708</b> <b>P00.1 Date:</b>	
--	--	--	--	--	--



<b>Legend</b> <ul style="list-style-type: none"> <li>Depot, station, headhouse or portal building</li> <li>Tunnel portal</li> <li>Electricity substation</li> <li>Land drainage area</li> <li>Ecological mitigation pond</li> <li>Balancing pond</li> </ul>		<ul style="list-style-type: none"> <li>Replacement floodplain storage</li> <li>Woodland habitat creation</li> <li>Wetland habitat creation</li> <li>Grassland habitat creation</li> <li>Landscape mitigation planting (scrub / woodland)</li> <li>Grassed areas</li> <li>Sustainable placement</li> </ul>		<ul style="list-style-type: none"> <li>Public realm/Replacement community facility</li> <li>Engineering earthworks</li> <li>Landscape earthworks</li> <li>Rail alignment formation</li> <li>Returned to suitable development use</li> <li>County boundary</li> <li>Borough / District boundary</li> </ul>		<ul style="list-style-type: none"> <li>Planning authority boundary</li> <li>Watercourse diversion</li> <li>Existing watercourse</li> <li>Ditches - new</li> <li>Hedgerow habitat creation</li> <li>Main utility works</li> <li>Existing public right of way (PRoW)</li> <li>New, diverted or realigned PRoW</li> </ul>		<ul style="list-style-type: none"> <li>Stopped-up PRoW</li> <li>Tunnels external extent</li> <li>Rail alignment</li> <li>HS2 Access road</li> <li>Noise fence barrier</li> <li>Chainage (e.g. 10+000)</li> </ul>		<b>Map Number</b> <b>S17-OP-022-L1</b> <b>Map Name</b> <b>Operational Phase</b> <b>Sch 17 Planning Context Report Plan</b> <b>Planning Authority Area</b> <b>Three Rivers District / Chiltern District / South Bucks District</b>		<p>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.</p> <p>Registered in England. Registration number 06791886  Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6QA.</p> <p>Scale at A3: 1:5,000</p> <p>© Crown copyright and database rights 2017.  Ordnance Survey Licence Number 100048190.</p> <p>Doc Number: C222-HS2-TP-DPL-020-060708 P00.1 Date:</p>	
--	--	---	--	---	--	--	--	--	--	---	--	---	--

For Continuation Refer To Sheet-021

## Annex 1 – Signposting

Document	Link
High Speed Rail (London – West Midlands) Act 2017	<a href="http://www.legislation.gov.uk/ukpga/2017/7/contents/enacted">http://www.legislation.gov.uk/ukpga/2017/7/contents/enacted</a>
Schedule 17 Fee Regulations	<a href="http://www.legislation.gov.uk/uksi/2017/223/contents/made">http://www.legislation.gov.uk/uksi/2017/223/contents/made</a>
Schedule 17 Appeal Regulations	<a href="http://www.legislation.gov.uk/uksi/2017/227/contents/made">http://www.legislation.gov.uk/uksi/2017/227/contents/made</a>
High Speed Rail (London – West Midlands) Environmental Minimum Requirements	<a href="https://www.gov.uk/government/publications/environmental-minimum-requirements">https://www.gov.uk/government/publications/environmental-minimum-requirements</a>
	<a href="https://www.gov.uk/government/publications/high-speed-rail-london-west-midlands-bill-register-of-undertakings-and-assurances">https://www.gov.uk/government/publications/high-speed-rail-london-west-midlands-bill-register-of-undertakings-and-assurances</a>
Schedule 17 Statutory Guidance	<a href="https://www.gov.uk/government/publications/high-speed-rail-london-to-west-midlands-act-2017-schedule-17-statutory-guidance">https://www.gov.uk/government/publications/high-speed-rail-london-to-west-midlands-act-2017-schedule-17-statutory-guidance</a>
Phase One Information Papers	<a href="https://www.gov.uk/government/collections/high-speed-rail-london-west-midlands-bill#information-papers">https://www.gov.uk/government/collections/high-speed-rail-london-west-midlands-bill#information-papers</a>
Phase One – Planning Forum Notes	<a href="https://www.gov.uk/government/publications/planning-forum-notes">https://www.gov.uk/government/publications/planning-forum-notes</a>
Phase One Environmental Statement	<a href="https://www.gov.uk/government/collections/hs2-phase-one-environmental-statement-documents">https://www.gov.uk/government/collections/hs2-phase-one-environmental-statement-documents</a>
	<a href="https://www.gov.uk/government/collections/additional-provision-september-2014">https://www.gov.uk/government/collections/additional-provision-september-2014</a>
	<a href="https://www.gov.uk/government/collections/supplementary-environmental-statement-and-additional-provision-2-july-2015">https://www.gov.uk/government/collections/supplementary-environmental-statement-and-additional-provision-2-july-2015</a>
	<a href="https://www.gov.uk/government/collections/supplementary-environmental-statement-2-and-additional-provision-3-september-2015">https://www.gov.uk/government/collections/supplementary-environmental-statement-2-and-additional-provision-3-september-2015</a>
	<a href="https://www.gov.uk/government/collections/supplementary-environmental-statement-3-and-additional-provision-4-october-2015">https://www.gov.uk/government/collections/supplementary-environmental-statement-3-and-additional-provision-4-october-2015</a>
	<a href="https://www.gov.uk/government/collections/supplementary-environmental-statement-4-and-additional-provision-5-december-2015">https://www.gov.uk/government/collections/supplementary-environmental-statement-4-and-additional-provision-5-december-2015</a>