

# GIS data classes used within the November 2013 Environmental Statement Engineering Maps

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# 1 List of acronyms

AG Above Ground

BEN Built Environment

BG Below Ground

CCCC Contract

C220 Euston

C221 London Metropolitan

C222 Country South

C223 Country North

C224 West Midlands Metropolitan

C240/C241 Route Wide

CN Construction

CON Construction

**ENG** Engineering

**ENV** Environment

EW Earthwork

HW Highway

HYD Hydrology

INF Infrastructure

LD Landscape

Ln Line

ORI Originator

Ply Polygon

Pt Point

RE Rail Engineering

SW Surface Water

TL Tunnel

#### GIS data classes used within the November 2013 Environmental Statement Engineering Maps

TPT Transport

UT Utility

UTI Utility

VB Viaduct / Bridge

## 2 Introduction

This document provides a list of GIS data classes which have been used within the engineering maps of the November 2013 London-West Midlands Environmental Statement ("the Environmental Statement"). The two engineering map series produced, *Construction Phase (CT-o5)* and *Proposed Scheme (CT-o6)*, both form part of Volume 2 of the Environmental Statement.

For each legend item, a description is provided and the corresponding GIS data class is listed. The description is taken directly from the *data dictionary and definitions* section of the relevant map book. In some instances, multiple GIS data classes have been used to depict one legend item.

This information is provided as a tool to assist in navigating and understanding the information in the Environmental Statement but does not modify or replace these documents. Whilst every effort has been made to ensure that the shapefile information exactly replicates the information in the Environmental Statement, no absolute assurance can be given that there are no discrepancies. If there are any discrepancies, the information in the Environmental Statement documents should be relied on as definitive.

All data classes listed here are released by High Speed Two Ltd under the Open Government Licence agreement. Any alterations to this information may result in inaccuracies with maps published by High Speed Two Ltd as part of the Environmental Statement and could result in misleading information. The purpose, and what this shapefile represents, is contained within the shapefile name. Renaming this shapefile will result in the loss of this information. Any conversions of this shapefile to another geospatial data format may result in inaccuracies and therefore could result in misleading information.

Because of licence restrictions, any third-party data shown on the Environmental Statement mapping has not been released. Therefore, these data classes are not listed within this document.

## 2.1 Example notation

As the line of route is split into five contract areas, not all GIS data classes exist across all contract areas. In order to illustrate this, each GIS data class is given a matrix. For example, the GIS data class ENV\_ORI\_CCCC\_LD\_GrassedAreas\_Ply\_CTo6\_Formal\_ES is only relevant to the London Metropolitan and Country North contract areas, and as a result is given the following matrix:

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	*	✓	*

Therefore, the two GIS data classes which make up the 'Grassed areas' legend item in the Proposed Scheme map series are:

- ENV\_MMD\_C221\_LD\_GrassedAreas\_Ply\_CTo6\_Formal\_ES
- ENV\_CSI\_C223\_LD\_GrassedAreas\_Ply\_CTo6\_Formal\_ES

# 3 Construction Phase (CT-05)

## 3.1 Depot, station, headhouse or portal building

Extends to cover operational footprint of each depot and station and the footprint of each tunnel vent shaft and headhouse at surface level. Excludes any ancillary buildings associated with these structures.

BEN\_ORI\_CCCC\_AG\_StationFootprint\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	*	*	<b>✓</b>

BEN\_ORI\_CCCC\_AG\_SpaceStorey\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	*	*	✓

INF\_ORI\_CCCC\_TL\_Headhouse\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	*	*	✓

INF\_ORI\_CCCC\_TL\_Shaft\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	×

## 3.2 Tunnel portal

The footprint of a tunnel portal.

INF\_ORI\_CCCC\_TL\_Portal\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.3 Main construction compound

Main Construction Compounds in which main contractors offices and welfare facilities will be located.

 ${\tt CON\_ORI\_CCCC\_CN\_MainConstructionCompounds\_Ply\_CTo5\_Formal\_ES}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

#### CON\_PBR\_C24o\_CN\_MainConstructionCompound\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

#### $CON\_PBR\_C241\_CN\_MainConstructionCompound\_Ply\_CTo5\_Formal\_ES$

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.4 Satellite construction compound

Represents satellite construction compounds which serve local works for major construction elements within a main contract.

CON\_ORI\_CCCC\_CN\_SatelliteConstructionCompounds\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
<b>✓</b>	✓	✓	✓	✓

#### CON\_PBR\_C24o\_CN\_SatelliteConstructionCompound\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

#### CON\_PBR\_C241\_CN\_SatelliteConstructionCompound\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.5 Temporary material stockpile

Represents temporary stockpiling of topsoil, subsoil and other excavated materials to be used for reinstatement purposes, and also stockpile areas for managing movement of excavated materials during construction.

CON\_ORI\_CCCC\_EW\_Stockpile\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_TemporaryEarthworksStockpile\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	✓	✓	✓

## 3.6 Rail alignment formation

The space required to accommodate the railway infrastructure which typically includes the tracks, overhead line equipment, drainage, lineside access paths and cable routes for electrification and communication systems.

HS2\_ORI\_CCCC\_RE\_RailAlignmentFormation\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.7 Landscape earthworks

Landscape earthworks to provide permanent landscape, visual or acoustic mitigation.

 ${\tt CON\_ORI\_CCCC\_EW\_InfrastructureMitigationEarthworks\_Ply\_CTo5\_Formal\_ES}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 3.8 Engineering earthworks

Engineering (structural) earthworks which include railway slopes and crossings (roads etc.).

CON\_ORI\_CCCC\_EW\_BottomOfSlope\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

CON\_ORI\_CCCC\_EW\_TopOfSlope\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

CON\_ORI\_CCCC\_EW\_Symbols\_Rail\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	<b>✓</b>	<b>✓</b>	✓	✓

 $CON\_ORI\_CCCC\_EW\_BottomOfSlope\_NonRail\_Ln\_CTo5\_Formal\_ES$ 

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_TopOfSlope\_NonRail\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_Symbols\_NonRail\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 3.9 Land potentially required during construction

Boundary defining the maximum possible extent of construction works required to build HS2 as far as the current level of design allows. This only covers surface works and includes all tunnel portals, vent shafts and headhouses, but does not apply to wholly tunnelled sections or to air rights. It also encompasses associated highway, access, drainage and utility works.

CON\_ORI\_CCCC\_CN\_ConsolidatedConstructionBoundary\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

### 3.10 Tunnels external extent

The external excavated extent of each tunnel bore.

INF\_ORI\_CCCC\_TL\_TunnelExcavatedExtent\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 3.11 Construction traffic route

Public highways which may be used for HGV construction traffic.

CON\_ORI\_CCCC\_CN\_ConstructionTrafficRoute\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.12 New, diverted or realigned public right of way (PRoW)

New, realigned or diverted Public Rights of Way (PRoW).

TPT\_ORI\_CCCC\_HW\_PublicRightofWayNew\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 3.13 Stopped-up PRoW<sup>1</sup>

Public rights of way that will be temporarily closed due to the construction of the scheme.

TPT\_ORI\_CCCC\_HW\_StoppedUpPublicRightOfWay\_Ln\_CTo5\_Formal\_ES

## 3.14 Temporary PRoW diversion / realignment

Indicative temporary diversions to public rights of way as a result of construction of the scheme. These will vary depending on construction phase and local conditions.

 ${\tt CON\_ORI\_CCCC\_CN\_LocalPedestrianDiversionsTemporary\_Ln\_CTo5\_Formal\_ES}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	✓	*	✓

## 3.15 Temporary highway diversion / realignment

Indicative temporary highway diversion layouts during the construction phase.

CON\_ORI\_CCCC\_CN\_LocalHighwayDiversionsTemporary\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 3.16 Main utility works

Represents all new major utility installations (included in the hybrid Bill) and also modifications to existing utilities required to construct the scheme. Includes water, electricity, telecommunications and gas.

UTI\_ORI\_CCCC\_UT\_ElectricityCablesOH\_HVModified\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	✓	✓

UTI\_ORI\_CCCC\_UT\_ElectricityTowersOH\_HVModified\_Ply\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	×	*	✓	*

UTI\_ORI\_CCCC\_UT\_ElectricalHVModified\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	×	✓	✓	✓

UTI ORI CCCC UT WaterMainsModified Ln\_CTo5 Formal ES

<sup>&</sup>lt;sup>1</sup> 'Stopped Up Public Rights of Way' shapefiles have not yet completed their quality assurance checks and have been temporarily excluded from the dataset. Once the checks have been completed the shapefiles will be made available.

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	✓

#### $UTI\_ORI\_CCCC\_UT\_SewersLargeModified\_Ln\_CTo5\_Formal\_ES$

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	×	✓	✓

#### UTI\_ORI\_CCCC\_UT\_GasModified\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	<b>✓</b>

#### UTI\_ORI\_CCCC\_UT\_FuelModified\_Ln\_CTo5\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	*	✓	✓

## 3.17 Chainage

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 77+000 refers to the point, 77,000m, or 77km, from Euston Station. Chainage values increase in intervals dependent on the map scale. For maps at 1:50,000 scale chainage is shown at 5km intervals. For maps at 1:25,000 scale chainage is shown at 2km intervals. For maps at 1:10,000, 1:5,000 and 1:2,500 scale chainage is shown at 1km intervals.

Chainage has been included on the maps as a useful tool for comparing different map sets showing the different environmental themes or engineering plans, due to map sets having different scales and therefore showing differing amounts of alignment on the map.

#### HS2\_PBR\_C240\_RE\_HighSpeedRailwaysChainageMarkers\_Ln\_Formal\_ES\_CTo5

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 3.18 Rail alignment

 $Longitudinal\ geometry\ of\ the\ tracks\ consisting\ of\ a\ series\ of\ straights\ and\ curves.$ 

 $HS2\_PBR\_C240\_RE\_HighSpeedRailwaysAlignment2DCentreline\_Ln\_Formal\_ES\_CTo5$ 

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

 $HS_2\_PBR\_C_241\_RE\_Standard MainLine Railways Alignment_2D Centreline\_Ln\_Formal\_ES\_CT_{05}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	<b>✓</b>

# 4 Proposed Scheme (CT-o6)

## 4.1 Depot, station, headhouse or portal building

Extends to cover operational footprint of each depot and station and the footprint of each tunnel vent shaft and headhouse at surface level. Excludes any ancillary buildings associated with these structures.

BEN\_ORI\_CCCC\_AG\_StationFootprint\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	×	*	✓

BEN\_ORI\_CCCC\_AG\_SpaceStorey\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	*	*	✓

INF\_ORI\_CCCC\_TL\_Headhouse\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	*	*	✓

INF\_ORI\_CCCC\_TL\_Shaft\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	×	×

## 4.2 Tunnel portal

The footprint of a tunnel portal.

INF\_ORI\_CCCC\_TL\_Portal\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 4.3 Electricity substation

Includes all auto-transformers and feeder stations.

 ${\sf ENG\_ORI\_CCCC\_RE\_ElectricitySubstations\_Ply\_CTo6\_Formal\_ES}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 4.4 Land drainage area

Provision of land to attenuate or infiltrate overland flows at or beyond the HS2 railway boundaries; for example, where existing land drainage systems are altered by the HS2 works, where the existing landform is reshaped by landscape earthworks or where surface water from third party land is intercepted by the HS2 perimeter drainage system.

HYD\_ORI\_CCCC\_SW\_LANDR\_AttenuationPondNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	*	×

HYD\_ORI\_CCCC\_SW\_LANDR\_InfiltrationBasinNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	*	×

## 4.5 Ecological mitigation pond

Ponds whose primary function is to provide ecological mitigation. This could be a standalone pond or part of a wider wetland habitat creation plan.

ENV\_ORI\_CCCC\_LD\_EcologicalMitigationPond\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	✓

## 4.6 Balancing pond

The proposed location and extent of balancing ponds for drainage attenuation and infiltration. Outer boundary represents the perimeter.

HYD\_ORI\_CCCC\_SW\_FACDR\_AttenuationPondNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	*	*	✓

HYD\_ORI\_CCCC\_SW\_HWYDR\_AttenuationPondNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	×	✓	*	<b>✓</b>

## 4.7 Replacement floodplain storage

Provision of storage to replace floodplain occupied by the Proposed Scheme. Equivalent storage is provided for events up to the 1 in 100 (1%) annual probability event with an allowance for climate change.

HYD\_ORI\_CCCC\_SW\_HS2DR\_AttenuationPondNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	✓	✓

HYD\_ORI\_CCCC\_SW\_HS2DR\_InfiltrationBasinNew\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	*	✓	*	*

#### 4.8 Woodland habitat creation

Ecological mitigation area to provide new woodland planting, connectivity enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.

ENV\_ORI\_CCCC\_LD\_Planting\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	<b>✓</b>

## 4.9 Wetland habitat creation

Ecological mitigation area to provide new wetland habitat creation, enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.

ENV\_ORI\_CCCC\_LD\_PlantingWetlands\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	×

## 4.10 Grassland habitat creation

Soft landscape design that can include any seeded areas for the purpose of creating grassland except for the engineering earthworks.

ENV\_ORI\_CCCC\_LD\_GrasslandHabitatCreation\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	*

#### ENV\_ORI\_CCCC\_LD\_SoftLandscaping\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	*	✓	✓

## 4.11 Landscape mitigation planting (scrub / woodland)

Screening planting, using woodland, for visual mitigation and landscape integration purposes.

ENV\_ORI\_CCCC\_LD\_LandscapeMitigationPlanting\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### 4.12 Grassed areas

Any other area grassed not included in landscaped earthworks or ecological habitat.

ENV\_ORI\_CCCC\_LD\_GrassedAreas\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	<b>✓</b>	×	✓	*

## 4.13 Sustainable placement

The on-site placement for disposal of surplus excavated material to avoid causing environmental effects (e.g. transport) that would otherwise be associated with the off-site disposal of that material. "On-site" in this context means within the land required for the purposes of the Proposed Scheme and "off-site" means external land (or landfill site) which is not specifically required for the purposes of the Proposed Scheme.

CON\_ORI\_CCCC\_EW\_DepositionExcavatedMaterials\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	*

## 4.14 Public realm

Specifically provided to show areas to be used for public realm. This layer is mainly associated with station sites and is to be used to indicate general areas for designed soft and hard landscaping.

ENV\_ORI\_CCCC\_LD\_PublicRealm\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	*	*	✓

## 4.15 Engineering earthworks

Engineering (structural) earthworks which include railway slopes and crossings (roads etc.).

CON\_ORI\_CCCC\_EW\_BottomOfSlope\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_TopOfSlope\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	✓	✓	✓

#### ${\tt CON\_ORI\_CCCC\_EW\_Symbols\_Rail\_Ln\_CTo6\_Formal\_ES}$

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_Foundations\_Rail\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	<b>✓</b>

#### CON\_ORI\_CCCC\_EW\_BottomOfSlope\_NonRail\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_TopOfSlope\_NonRail\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_Symbols\_NonRail\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	<b>✓</b>	✓	✓	✓

#### CON\_ORI\_CCCC\_EW\_Foundations\_NonRail\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	<b>✓</b>	<b>✓</b>	<b>√</b>	✓

## 4.16 Landscape earthworks

Landscape earthworks to provide permanent landscape, visual or acoustic mitigation.

CON\_ORI\_CCCC\_EW\_InfrastructureMitigationEarthworks\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 4.17 Rail alignment formation

The space required to accommodate the railway infrastructure which typically includes the tracks, overhead line equipment, drainage, lineside access paths and cable routes for electrification and communication systems.

HS2\_ORI\_CCCC\_RE\_RailAlignmentFormation\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	<b>✓</b>

## 4.18 Returned to suitable development use

Post construction land will be reinstated to enable potential future development.

 ${\tt CON\_ORI\_CCCC\_EW\_SuitableDevelopmentUse\_Ply\_CTo6\_Formal\_ES}$ 

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	*	*	✓

## 4.19 Watercourse diversion

Includes rivers, streams, ditches and other open channels, diversions to these, together with any new culverts required.

 $HYD\_ORI\_CCCC\_SW\_HS_2DR\_Watercourses Diversion\_Ln\_CTo6\_Formal\_ES$ 

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	✓	<b>✓</b>

## 4.20 Ditches – new

The proposed location and extent of drainage ditches.

HYD\_ORI\_CCCC\_SW\_HS2DR\_DitchNew\_Ln\_CTo6\_Formal\_ES

Eusto	n	London Met.	Country South	Country North	West Mids Met.
×		✓	<b>✓</b>	<b>✓</b>	<b>✓</b>

#### HYD\_ORI\_CCCC\_SW\_HWYDR\_DitchNew\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	×	✓	×	✓

#### HYD\_ORI\_CCCC\_SW\_LANDR\_DitchNew\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	*	✓

#### HYD\_ORI\_CCCC\_SW\_FACDR\_DitchNew\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	*	*	✓

## 4.21 Hedgerow habitat creation

Ecological mitigation to provide new hedgerow planting, connectivity enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.

#### ${\tt ENV\_ORI\_CCCC\_LD\_LandscapeMitigationPlantingHedgerows\_Ln\_CTo6\_Formal\_ES}$

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	*	✓	×

#### ENV\_ORI\_CCCC\_LD\_PlantingHedgerows\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	×

## 4.22 Main utility works

Represents all new major utility installations (included in the hybrid Bill) and also modifications to existing utilities required to construct the scheme. Includes water, electricity, telecommunications and gas.

#### UTI\_ORI\_CCCC\_UT\_ElectricityCablesOH\_HVModified\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	✓	✓	✓

#### UTI\_ORI\_CCCC\_UT\_ElectricityTowersOH\_HVModified\_Ply\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	*	*	✓	*

#### UTI\_ORI\_CCCC\_UT\_ElectricalHVModified\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	×	✓	✓	✓

#### $UTI\_ORI\_CCCC\_UT\_WaterMainsModified\_Ln\_CTo6\_Formal\_ES$

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	*	✓

#### UTI\_ORI\_CCCC\_UT\_SewersLargeModified\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	×	✓	✓

#### UTI\_ORI\_CCCC\_UT\_GasModified\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

#### UTI\_ORI\_CCCC\_UT\_FuelModified\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	*	*	✓	✓

## 4.23 New, diverted or realigned public right of way (PRoW)

New, realigned or diverted Public Rights of Way (PRoW).

TPT\_ORI\_CCCC\_HW\_PublicRightofWayNew\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
*	✓	✓	✓	✓

## 4.24 Stopped-up PRoW<sup>2</sup>

Public rights of way that will be permanently closed due to the construction of the scheme.

TPT\_ORI\_CCCC\_HW\_StoppedUpPublicRightOfWay\_Ln\_CTo6\_Formal\_ES

<sup>&</sup>lt;sup>2</sup> 'Stopped Up Public Rights of Way' shapefiles have not yet completed their quality assurance checks and have been temporarily excluded from the dataset. Once the checks have been completed the shapefiles will be made available.

#### 4.25 Tunnels external extent

The external excavated extent of each tunnel bore.

 $INF\_ORI\_CCCC\_TL\_TunnelExcavatedExtent\_Ply\_CTo6\_Formal\_ES$ 

	Euston	London Met.	Country South	Country North	West Mids Met.
ſ	×	✓	✓	✓	✓

## 4.26 Rail alignment

Longitudinal geometry of the tracks consisting of a series of straights and curves.

HS2\_PBR\_C240\_RE\_HighSpeedRailwaysAlignment2DCentreline\_Ln\_Formal\_ES\_CTo6

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	<b>✓</b>

 $HS_2\_PBR\_C_241\_RE\_Standard MainLine Railways Alignment_2D Centreline\_Ln\_Formal\_ES\_CTo6$ 

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓

## 4.27 HS2 Access road

Access road to HS2 infrastructure such as electricity substations, balancing ponds and maintenance access points to the railway.

TPT\_ORI\_CCCC\_HW\_AccessRoad\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 4.28 Noise fence barrier

Denotes fence-style barriers provided as part of the noise mitigation measures. Note that other noise barriers have also been included in the form of landscaping and engineering cuttings - see the SV map series for more detail on noise mitigation.

BEN\_ORI\_CCCC\_AG\_NoiseBarriers\_Ln\_CTo6\_Formal\_ES

Euston	London Met.	Country South	Country North	West Mids Met.
×	✓	✓	✓	✓

## 4.29 Chainage

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 77+000 refers to the point, 77,000m, or 77km, from Euston Station. Chainage values increase in intervals dependent on the map scale. For maps at 1:50,000 scale chainage is shown at 5km intervals. For maps at 1:25,000 scale chainage is shown at 2km intervals. For maps at 1:10,000, 1:5,000 and 1:2,500 scale chainage is shown at 1km intervals.

Chainage has been included on the maps as a useful tool for comparing different map sets showing the different environmental themes or engineering plans, due to map sets having different scales and therefore showing differing amounts of alignment on the map.

HS2\_PBR\_C240\_RE\_HighSpeedRailwaysChainageMarkers\_Ln\_Formal\_ES\_CTo6

Euston	London Met.	Country South	Country North	West Mids Met.
✓	✓	✓	✓	✓