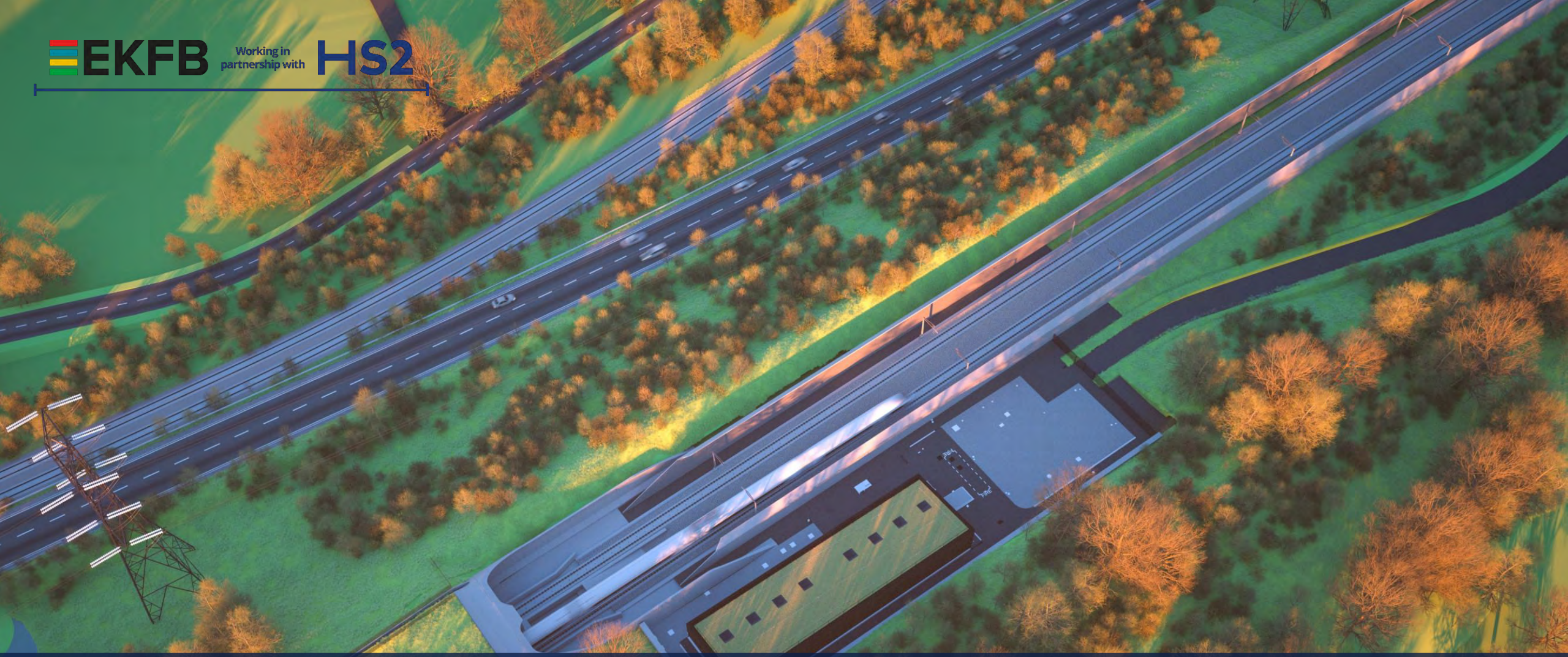
EKFB Working in partnership with HS2



Landscape Restoration in the Chilterns National Landscape

September 2025

1MC12-EKF-SE-PRE-CS03-000063 P01

Agenda

01	Overview of Landscape Strategy
02	Planning Application Approach
03	Worked Example – Rocky Lane Cutting and Small Dean Embankment
04	Q&A



Overview of Landscape Strategy

Environmental Statement

Undertakings & Assurances

Environmental Minimum Requirements

HS2 Design Vision

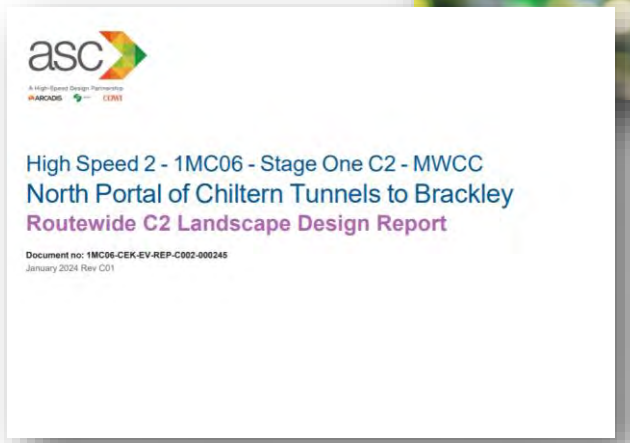
People | **Place** | **Time**

Landscape Vision

HS2 Technical Requirements







Landscape Design Principles

Integrated	Responsive	Multi-functional & Climate Resistant	Resource Efficient	Healthy & Inclusive
Landscape-led and integrated design that is part of hard working design and high performing infrastructure	Responsive to context, whilst expressing character, quality and sense of place	Multifunctional and climate resilient, able to adapt to uncertain and unpredictable change over time	Resource efficient, demonstrating environmental responsibility and contributing to the UK's net zero carbon targets by 2050 or sooner	Healthy, inclusive and nature rich, improving quality of life, health and wellbeing of people and their communities

Landscape Outcomes

Conserve	Restore	Enhance	Collaborative Design
Through responding to the changing landscape and views along the route and adopt a landscape design approach that creates screening and integration of HS2.	The landscape where it is in poor landscape condition and through good design bring about positive change and broad environmental benefits	The landscape where HS2 is highly visible and adopt a good landscape design approach to create effective integration and screening and provides the opportunity for enhancement of the local clay vale landscape character.	Create a landscape which respects the locally valued distinctiveness of this place, its historic landscape and biodiversity links, and helps set HS2 into the landscape and which fits with the local amenity. Locally, through the iimplementation of wider good design and negotiation respond to the potential for greater biodiversity links and habitat creation, public access and education.

Landscape Vision

2.2

The Landscape Vision as stated in the HS2 Landscape Design Approach is, a regenerative landscape and cityscape that delivers multiple benefits for people, places and the planet to shape a sustainable and resilient future



Landscape Design Principles

2.3

As stated in the HS2 Landscape Design Approach,

1
Integrated

Landscape-led and integrated design that is part of hard working and high performing infrastructure

2
Responsive

Responsive to context, whilst expressing character, quality and a sense of place

3
Multifunctional and climate resilient

Multifunctional and climate resilient, able to adapt to uncertain and unpredictable change over time

4
Resource efficient

Resource efficient, demonstrating environmental responsibility and contributing to the UK's net zero carbon targets by 2050 or sooner

5
Healthy and inclusive

Healthy, inclusive and nature rich, improving quality of life, health and wellbeing of people and their communities



C2 Route-wide Outcomes

2.4

The approach has been developed in two parts. Firstly, there are four common C2 route wide principles which have been adopted and secondly these have been further refined so that the principles respond to the specific requirements of the landscape at the local level. The four common C2 route wide principles are set out adjacent. The location specific principles are set out in Section 3 under each of the LCAs.

Conserve

Through responding to the changing landscape and views along the route and adopt a landscape design approach that creates screening and integration of HS2.

Enhance

The landscape where HS2 is highly visible and adopt a good landscape design approach to create effective integration and screening and provides the opportunity for enhancement of the local clay vale landscape character.

Restore

The landscape where it is in poor landscape condition and through good design bring about positive change and broad environmental benefits.

Collaborative Design

Create a landscape which respects the locally valued distinctiveness of this place, its historic landscape and biodiversity links, and helps set HS2 into the landscape and which fits with the local amenity. Locally, through the implementation of wider good design and negotiation respond to the potential for greater biodiversity links and habitat creation, public access and education.

Wider Benefits

As stated in the HS2 Landscape Design Approach, landscape design provides the opportunity to influence the environment in a positive way. A wide range of benefits can be achieved through a collaborative, interdisciplinary approach, with landscape design as a driving force for the project.

Landscape architects have the ability to deliver outcomes that work for their specific site as well as the wider context. Proposals can contribute to the ambition for a ‘Green Corridor’. This is a network of spaces and assets relating to green, blue and grey infrastructure that run along the HS2 route. Some of these benefits will be delivered through the works carried out by HS2 whilst others will be realised through the support of HS2 funds.

Within this report these wider benefits will be highlighted as either primary or secondary by the corresponding symbolism.



Climate change

Creating green and blue infrastructure, enhanced flood resilience and biodiverse habitats encourages climate change adaption by capturing and storing carbon emissions, reducing pollution, managing flood risk and connecting wildlife habitats.



Ecology and biodiversity

Creating wildlife habitats and ecological networks to help protect, maintain and enhance biodiversity. Ensuring species can move easily through the landscape helps make them less vulnerable to population decline.



Water improvement

Improving rivers and other aquatic environments through nature based design and management. These projects improve water quality and aquatic biodiversity, and can help alleviate flooding.



Landscape character

Bringing out the character of the landscape can help people connect to their local environment. Designing thoughtful and interconnected green infrastructure by the principles of conserve, enhance, restore, or transform can promote each area's special qualities.



Art and culture

Artists in all artforms will be invited to explore and celebrate the natural world along the route. This will create a cultural legacy of new community assets and significant national land art commissions to support community wellbeing and local placemaking.



Stronger communities

Acting as custodians by working to maintain or improve facilities. This kind of initiative brings together people from different social groups, creating a sense of unity and social cohesion.



Food and farming

Careful reinstatement of agricultural land to support farm businesses and productivity. There will be some opportunities for community allotment projects to encourage local sustainable food production.



Socioeconomics, skills, education and employment

Creating high quality open spaces connected to their local communities can increase local property values, provide a range of educational opportunities, support existing and new businesses and create job opportunities.



Access and recreation

Delivering new and improved cycle routes, footpaths and bridleways within a Green Corridor and making these public ways more accessible and inclusive. This promotes healthy exercise, low carbon travel, and connects people to the natural world around them.



Placemaking

Creating quality places where people want to live, work, play and learn. Design that responds to the physical, cultural and social identities that define a place to strengthen the connection between people and the places they share.



Historic environment

Conserving and enhancing the setting and understanding of our heritage. Enjoying these can give people a close connection to their local history and foster a sense of belonging.



Public realm

Designing, creating and managing the public realm which serves stations can create a sense of public pride alongside delivering vibrant spaces and commercial opportunities to support local business and enterprise.



Regeneration

Restoring and regenerating the environment and encouraging long-term sustainability and resilience. Landscape provides a positive context for regeneration opportunities.



Health and wellbeing

Providing more and higher quality green space. Quality outdoor space is good for physical and mental health and can increase life expectancy and decrease health inequality.



Public space

Creating, conserving or improving parks, gardens, playing fields and other public open spaces in towns and cities.

HS2 Phase 1 Environmental Statement

2.6

The key aims of the Act for Phase One of HS2 is

- To design the scheme such that significant environmental effects are eliminated, controlled or reduced where reasonably practicable.
- To prevent environmental risks and avoid or control the extent of environmental damage by developing mitigation measures to an appropriate standard and monitoring and enforcing them effectively; and

- To address sustainability principles in on- going design development, taking opportunities for environmental enhancement and compensation where practicable and reasonable.

The Environmental Statement (ES) and its amendments identify the effects of the scheme on the environment, and in relation to landscape its effects on the local character and on visual amenity. The ES in carrying out the assessment of effects has also considered measures to reduce the effects through mitigation measures. Such measure includes “false cuttings” i.e., new landscape earthworks which modify the local landform to screen or integrate the scheme, new planting whether it be screen woodland, or reinstating landscape features lost to the scheme during construction such as field boundary hedgerows or riparian vegetation associated with a watercourse.

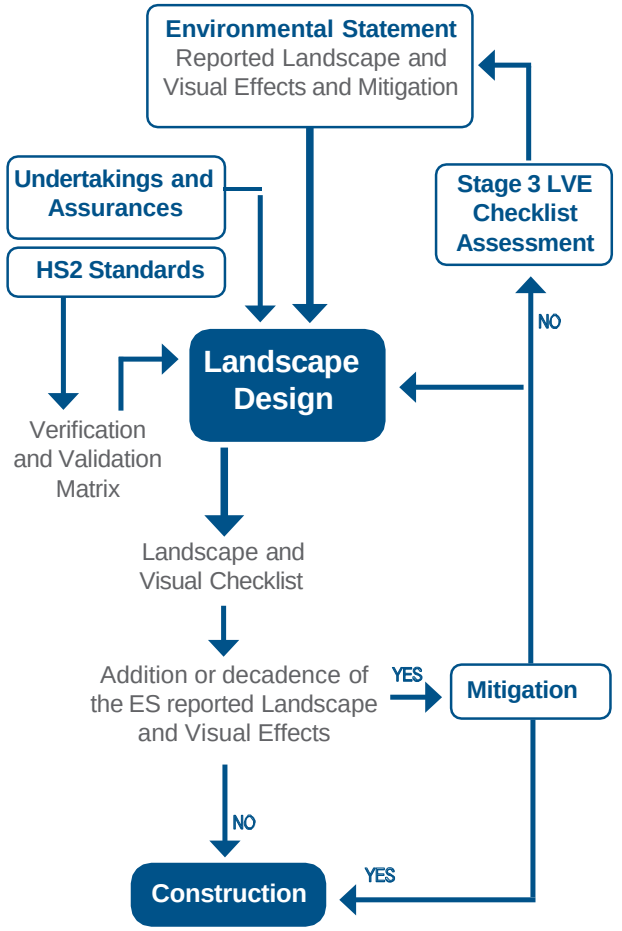
A key part of the landscape design approach is to understand the function of each mitigation measure and to develop a design that incorporates them in a seamless way with the local context as well as achieving their objectives within the timescales stated in the ES.

It is therefore a requirement of the design that the landscape and visual effects reported in the ES as amended will not result in any worsening or any new significant adverse effects arising from the scheme.

The design development and any changes to the design since the published ES is therefore managed through a certification process at key stages in the design. For landscape and visual amenity this is covered by the landscape and visual effects checklist process. The checklist follows three simple stages:

- Stage 1 – Screening for material changes: a check to understand whether the changes proposed would alter anything considered in the assessment of landscape and visual effects.
- Stage 2 – Scoping the landscape and visual assessment: an analysis of the material changes identified in Stage 1 to understand whether they have the potential to generate new significant landscape and visual effects.
- Stage 3 – Assessment: an assessment of the changes should Stage 2 of the compliance check highlight the potential for new significant effects.

The following theoretical visibility plan and photomontages demonstrate key actions of managing the mitigation HS2 taken up in the ES for the Wendover Viaduct.



Design Refinement

Design development is a key component of this project from Scheme design, through detail design and the consenting process. It is important that the landscape design approach and the need for design to reflect local context is adopted at each stage of the process. The approach therefore has to be robust but to a certain degree to be flexible in order to respond to design changes and to ensure that the scheme does not result in new or worsening of the landscape effects as reported in the ES as amended.

A new feature of the scheme includes the Global Systems for Mobile Communications – Railway (GSM- R) compounds and access which are required route- wide. Their locations are fixed for operational requirements and consequently their footprint impacts on proposed landscape mitigation measures. Each site has been reviewed to consider appropriate modification to the mitigation measures in order to avoid any new, different or worsening of the landscape of the visual effects reported in the Environmental Statement (ES) as amended.

Noise barriers have been modified and at some locations have been increased in height or have become more visible due for example to the implementation of the scheme design VE to change the vertical alignment of the track. At other locations noise barriers have been removed or their position changed from being at cutting crest to being within the cutting. In such cases the impacts of the changes have been considered and where appropriate the landscape design approach has considered new mitigation measures.

The appearance of overbridges has been enhanced through a cohesive architectural design approach throughout the route. In some instances, this has resulted in a change from a single span structure set within a cutting or false cutting as assessed in the ES and amended to a three-span structure. Other changes or modification to the overbridges is a change in the parapet height from the ES assessed 1800mm height over the railway tracks and 1500mm elsewhere to provide a 2015mm height parapet across the full length of the structure. The landscape design for each structure has been developed in collaboration with the bridge architect and the highway engineers to achieve an appropriate design at each location. This has been achieved through consideration of boundary treatments to avoid duplication and to ensure boundary, security fences and vehicle restraint systems (VRS) seamlessly connect with the bridge parapets.

A further development for overbridges has been the introduction of green verges on a number of the overbridges within Buckinghamshire. The intention of the grass verge is to enhance the appearance of the overbridge for its users by reflecting the local rural context within which they sit. The grass verge reduces the presence of the hard verge surface, helping to soften the appearance of the structure and potentially provide benefit for biodiversity connectivity. A detail has been agreed with Buckinghamshire Council and is presently undergoing testing.

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

3.2 Local Landscape Character

The majority of the landscape within the Chilterns NCA falls within a designated Area of Outstanding Natural Beauty (AONB). This is a diverse chalk downland landscape with a strong sense of place and community and comprises the Lee and Buckland Common Farmland Undulating Valley Slopes (upper slopes & plateau); Wendover Gap LCA (chalk valley), Chiltern Scarp - Wendover West LCA and Chiltern

Scarp -Coombe Hill LCA (chalk escarpment); Wendover Foothills (LCA) and Risborough Foothills LCA (chalk foothills) and Wendover LCA (spring line settlement) (See Appendix A).

The most notable feature of this landscape is the extensively wooded north-west facing escarpment and associated broad sweeping views over the adjacent Aylesbury Vale such as from the Monument on National Trust land at Coombe Hill (260m AOD) and from the Ridgeway national trial at Bacombe Hill.

Typically, the landscape comprises a patchwork of mixed agriculture with woodland, set within hedged boundaries. Arable farming is concentrated on deep, well drained soils of the Upper Misbourne valley, a typical chalk downland dry valley, and along the scarp foot and foothills in the north. Wendover, an historic spring line nucleated settlement, featuring historic buildings, and dating back to medieval times, sits in a natural break or gap in the scarp at the head of the Upper Misbourne valley, which provides an important north south road link (A413) and the Chilterns Railway London to Aylesbury line.

There are extensive Public Rights of Way (PRoW) which traverse this area; and include the national Ridgeway path and Icknield Way Trail.

Other local paths include Chiltern Way and Aylesbury Ring. Above the valley floors, undulating terrain and extensive clay-with-flint soils give rise to a diversity of land management practices including mixed farming, woodland, including blocks of ancient woodland at Jenkins Wood and Jones Hill Wood and pockets of common land. Settlement on the plateau is characterised by dispersed farmsteads and villages, linked by historic, small-scale routes such as Kings Lane and includes sunken lanes such as Leather Lane and Bowood Lane.

The Bronze Age is represented by Grim's Ditch, an ancient earth boundary which, although is located on private land is clearly defined in the landscape by a line of mature trees visible in northerly views from Leather Lane.



Figure 3.2.1 National Landscape Character Map - South Heath to Wendover





Figure 3.2.2 Local Landscape Character Map - South Heath to Wendover



Figure 3.2.3 Landscape Features Map - South Heath to Wendover

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

3.2

HS2 Route

In the south part of this area, HS2 traverses the west edge of the undulating, mostly in deep cutting (South Heath cutting) and gently rolling ridgeline at the west edge of higher ground within the Lee & Buckland Common Farmland LCA & Lee Undulating Valley Slopes LCA, approximately at the interface with the upper slopes of the Wendover Gap LCA to the west. HS2 then emerges into the Upper Misbourne valley, crossing the Wendover Gap LCA on a series of structures, shallow cuttings and embankments.

The north end of this LCA has a strong visual relationship with the higher ground within the Chiltern Scarp (Wendover West) LCA. To the west of the settlement of Wendover, HS2 passes through the undulating and lower ground of the Wendover Foothills LCA and Risborough Foothills LCA in Green Tunnel and cutting. The latter two LCAs have a strong visual relationship with higher ground of the Chiltern Scarp (Coombe Hill) LCA.

This area is covered by the following five Schedule 17 application areas, Chilterns P1 South Heath, AVDC P1 Bowood Lane area, AVDC P2 Wendover Dean, AVDC P3 Small Dean and AVDC P4 Nash Lee and one TCPA application for highway and underbridge changes at Small Dean.

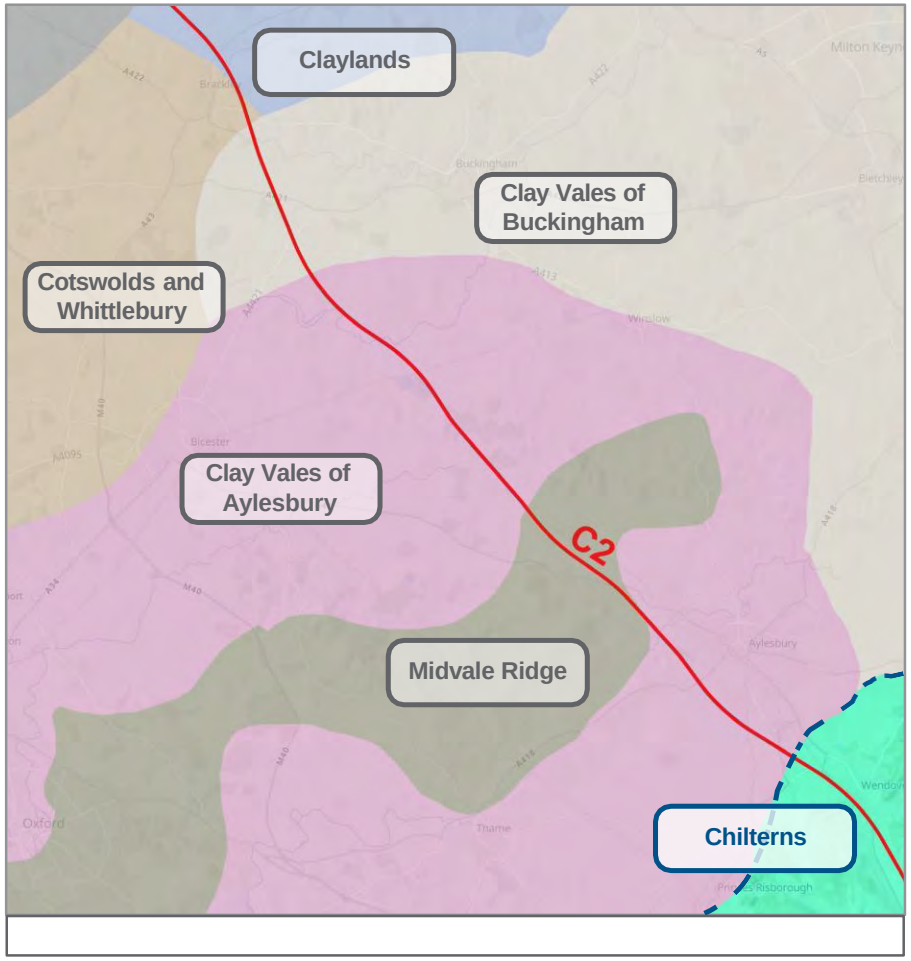






Figure 3.2.4 View from Small Dean Lane to north abutment
(top) View of Small Dean Viaduct from the north on the



Figure 3.2.5 Close view of the Wendover Viaduct central spans over Wendover Gap (60m from Viaduct).

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

3.2.2 Landscape Design Approach

The landscape design approach for the Chilterns NCA is aimed at conserving the high value, nationally important sensitive chalk downland landscape to achieve the HS2 landscape design vision. The landscape design principles are focused on screening and integration of HS2 and respond to the area's distinctive landscape character, sense of place, tranquility, historic environment and biodiversity.

The landscape design in the Chilterns NCA is primarily informed by the Chilterns AONB Forum Group Detailed Design Principles document, and the National Trust regarding the view from their property at Coombe Hill.

The landscape planting approach for the Chilterns NCA reflects the varying nature of the native species vegetation pattern within the LCAs and is designed to reflect the local context and existing vegetation that will enhance and reinforce the green infrastructure setting of Community Forum Areas (CFA) 9 and 10 (see Appendix C for information on Landscape Detail Descriptions and drawing references). The typical species mix selection for this area has been subject to further discussion with the local planning authority (BCC) as part of the Schedule 17 and Bringing Into Use processes and has informed the species choices at Detailed Design to protect, maintain and enhance the biodiversity of the area whilst enabling climate resilience by capturing and storing carbon emissions and reducing pollution. There have also been discussions held with the Chilterns Conservation Group in regard to plant species and grass seed mixes.



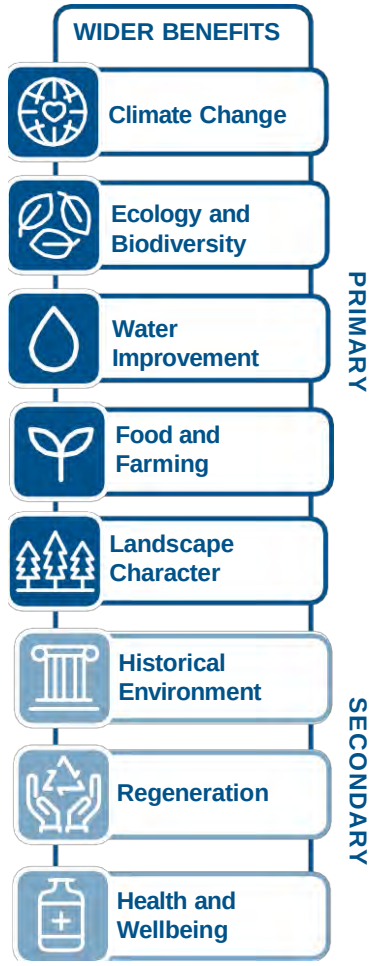
Figure 3.2.6 Ariel view of Small Dean Viaduct, A413 and associate

The landscape earthworks approach for the Chilterns NCA reflects the varying nature of the topography within the LCAs and where possible the earthworks design encourages careful reinstatement of land for farming purposes that will contribute towards local sustainable food production and productivity. This has been partly informed by comments from the respective Design Panel presentations for the KDEs in the area and in discussion with the local planning authority as part of the Schedule 17 process and at Detailed Design. U&A 639 is an important EMR in that it requires the design development to ensure any earthwork created in the Chilterns AONB is sensitively integrated into its surroundings by respecting natural contours and existing landscape features.

The three KDEs within the Chilterns AONB are the Wendover viaduct, Small Dean viaduct and Wendover green tunnel. The landscape design for these elements demonstrates collaborative design principles to conserve and enhance the setting and has been informed by comments from the respective Design Panel presentations and discussions with the local authorities as part of the Schedule 17 process and at Detailed Design. The existing landscape also contains a number of scattered historic features which include ancient sunken lanes (Holloways) and an ancient earthwork which are conserved to give people a close connection to their local history.

The landscape design seeks to reinforce and transform green infrastructure corridors along the route through a combination of woodland and linear tree belt planting, field boundary, lane side and Holloway hedgerows and wildflower grassland. These landscape elements will help to create wildlife habitats and ecological network that provide biodiversity connectivity across and along HS2 by linking in with the engineering assets at the green tunnel, viaducts, overbridges, underbridges and the water management features such as filtration ponds. The filtration ponds are designed and integrated within the landscape design for nature based design and management to alleviate flooding and improve water quality in the longer term.

The landscape design approach supports the Chilterns NCA's chalk downland landscape, adding to the wooded escarpment and sweeping views, providing a visually appealing and calming environment. It complements the Public Rights of Way, Ancient woodlands and common land contributing to not only biodiversity and nature-rich experiences, but also outdoor activities and physical exercise, positively impacting mental health and wellbeing. Overall, the landscape design approach for the Chilterns NCA offers a combination of natural beauty, community, and heritage that promotes well- being.



4.0 C2 Landscape Design

4.0
C2 Landscape Design Approach

1. Chilterns – Upper Misbourne Valley (South Heath to Wendover)
1. Landscape Planting
2. Landscape Earthworks
3. Landscape Response (Structures, Biodiversity, Heritage)

2. Clay Vales of Aylesbury (Stoke Mandeville, South West Aylesbury, Hartwell House and Thame Valley)
1. Landscape Planting
2. Landscape Earthworks
3. Landscape Response (Biodiversity, Structures)

3. Midvale Ridge (Waddesdon and Quainton)
1. Landscape Planting
2. Landscape Earthworks
3. Landscape Response (Structures, Biodiversity, Heritage)

4. Clay Vales of Buckingham (Calvert, Steeple Claydon, Twyford, Padbury Brook and Chetwode)
1. Calvert Integration Study
2. Landscape Planting
3. Landscape Earthworks
4. Landscape Response (Structures, Biodiversity, Heritage)

5. River Great Ouse Claylands (Newton Purcell, Finmere, Mixbury and Westbury)
1. Landscape Planting
2. Landscape Earthworks
3. Landscape Response (Structures, Biodiversity, Heritage)

6. Cotswolds and Whittlebury Ridge (Turweston)
1. Landscape Vision
2. Landscape Design
3. Landscape Response (Structures, Biodiversity, Heritage)

Introduction

This section provides a comprehensive summary of the measures taken to address various landscape design aspects in each identified character area. These aspects encompass planting, earthworks, and the landscape's design response to structures, biodiversity, and heritage assets.

The visualisations used to depict and understand these aspects represent the current stage of design progression. It should be noted that these visualisations may not fully reflect the final construction as they are subject to potential modifications.



Figure 4.1.1 Wendover Dean Viaduct (150m from Viaduct)

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

4.1

The Chilterns NCA is predominantly an Area of Outstanding Natural Beauty (AONB) with a diverse chalk downland landscape, featuring woodlands, farmland, and historic settlements. The landscape design approach aims to conserve the area's sensitive chalk downland. It focuses on planting and earthworks that screen and integrate HS2 while considering the area's distinctiveness, tranquillity, historic landscape, and biodiversity.



Figure 4.1.2 Detail view of Wendover Dean Viaduct pier (90m from Viaduct)

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

4.1

Landscape Planting

Lee & Buckland Common Undulating Plateau LCA. The planting design introduces new woodland blocks to tie into the historic pattern of ridgeline woodland and associated field boundary and lane side hedgerows.

Some of the woodland blocks form part of the advanced planting works being undertaken by a separate contract. Pockets of line side vegetation have been introduced within the upper slopes of the cutting to help break up the linear, unnatural appearance of the vegetation along the top of the South Heath cutting slope**.**

Wendover Gap LCA. The planting design responds to two different types of vegetation within this area. On the valley sides slopes at Wendover Dean and at Rocky Lane the landscape planting reinstates the existing

field boundary and lane side hedgerow pattern to link up the existing field boundaries and the network of new drainage ditches, balancing ponds and infiltration ponds in this area. Within the valley floor the planting design responds to a local more modern well tree landscape which is influenced by the north south infrastructure planting associated with the A413 and Chilterns Railway line corridor. This local enclosed treed valley floor provides a gateway for the users of the A413 between the rural chalk downland landscape of the Upper Misbourne valley to the south and the settlement of Wendover to the north.

West of the settlement of Wendover, the landscape planting responds to the linear north south pattern of the existing Wendover Bypass, Chilterns Railway and settlement edge vegetation. Line side vegetation is proposed along the Small Dean north embankment to help integrate this large scale engineered feature into the landscape and to break up the line of the noise barrier which is proposed to run along the top of this embankment in views form the Bypass and settlement edge.

Wendover Foothills (West) LCA and Risborough Foothills LCA. The planting design reinstates the historic field boundary and lane side hedgerow planting, along with a new linear woodland belt on both sides, to help screen HS2 in distant elevated views from Coombe Hill and associated National Trust Land to the south west and from the users on the A413 Wendover Bypass and B4009 to the east.

The landscape planting as previously discussed accompany the photo shown adjacent and plans following.

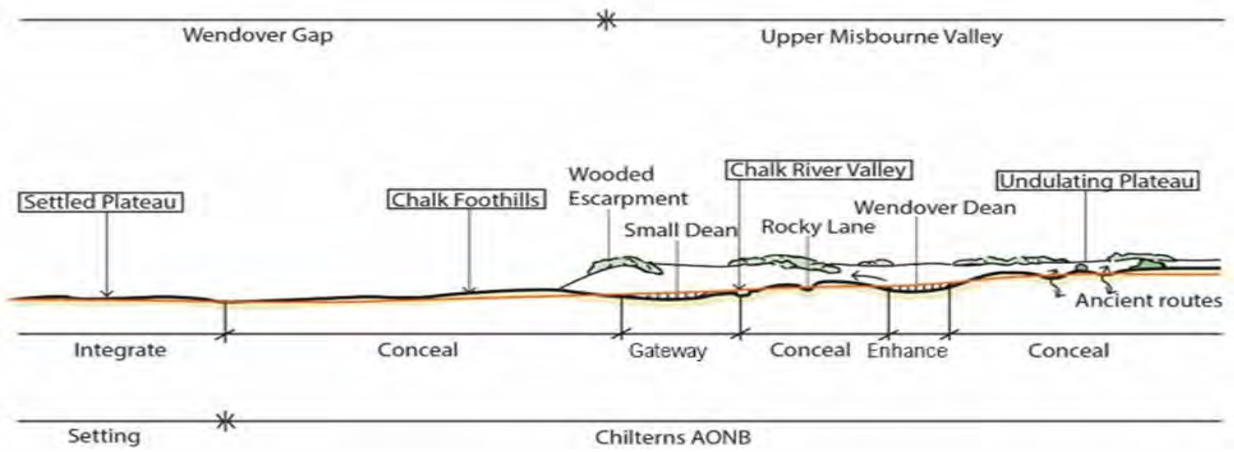


Figure 4.1.3 Diagrammatic Cross Section showing HS2 Route through Chilterns AONB north of the Chilterns Tunnel



Figure 4.1.4 Upper Misbourne Valley - South easterly view from Little London looking to Wendover Dean

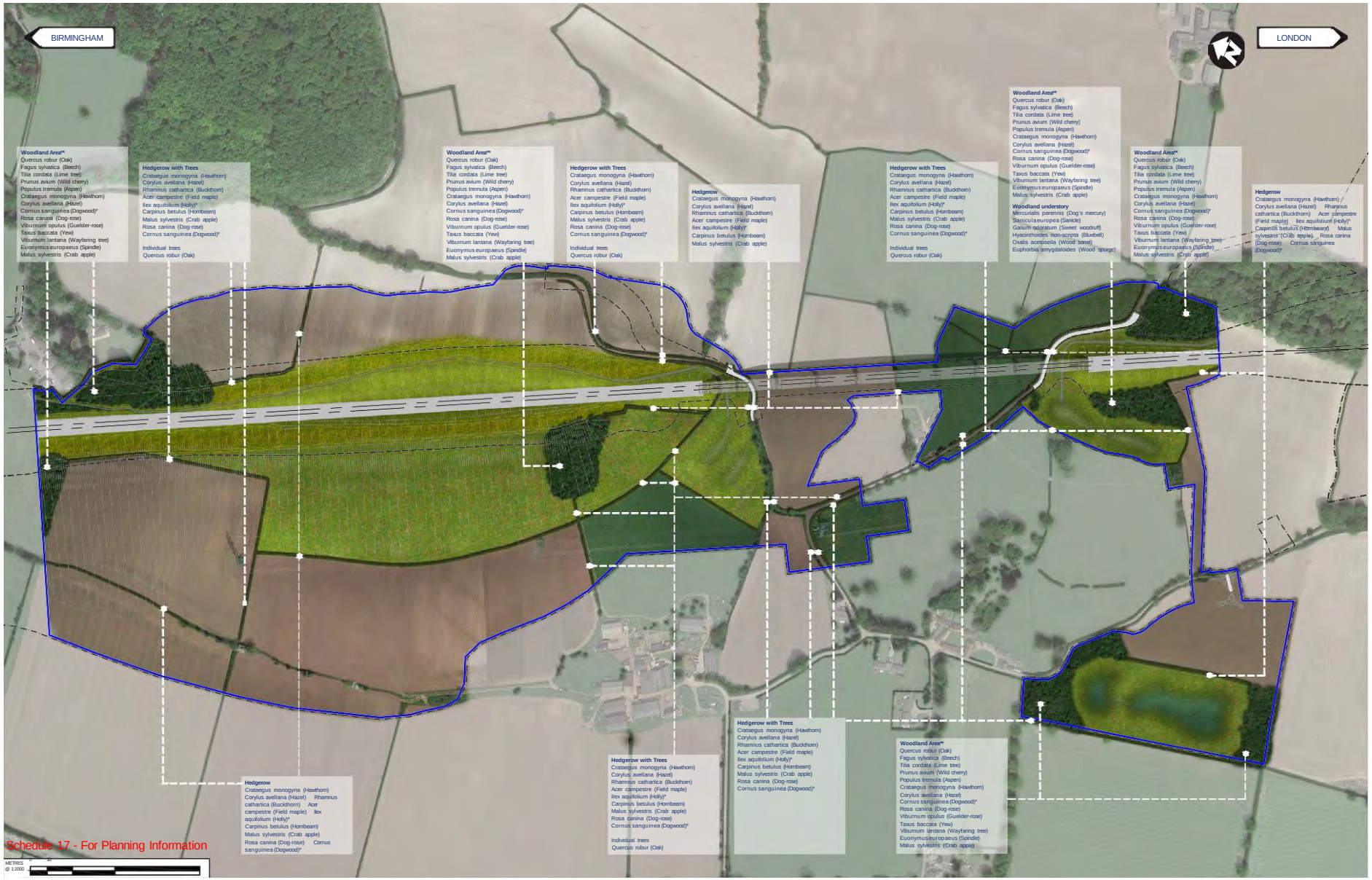


Figure 4.1.5 Wendover Dean Planting Plan (Woodland and Hedgerows)

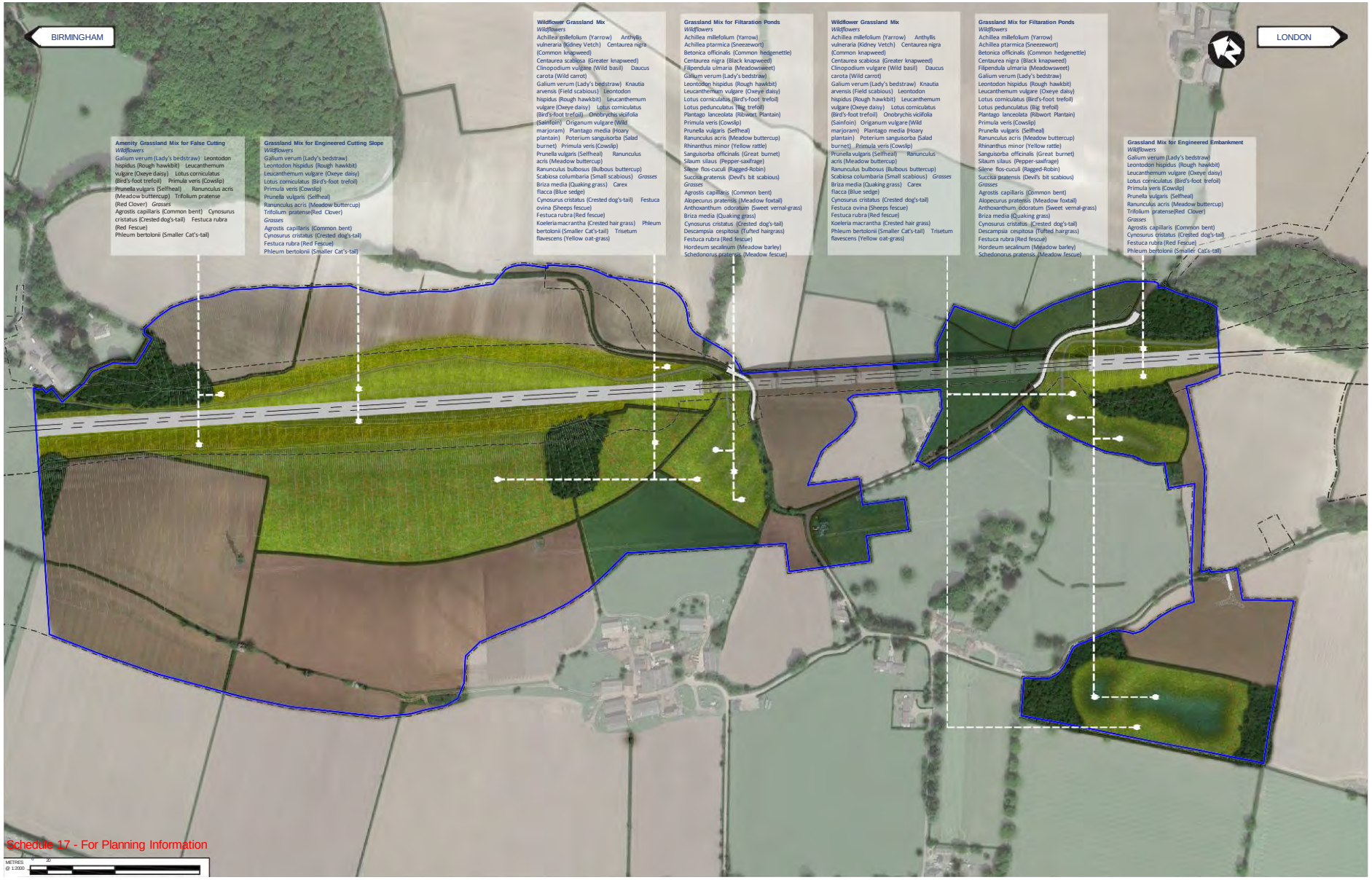


Figure 4.1.6 Wendover Dean Planting Plan (Grasslands)

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

4.1

Landscape Earthworks

Lee & Buckland Common Undulating Plateau LCA. There is limited scope for new landscape earthworks within this area due to the sensitivity of the gently rolling local ridgeline along which HS2 traverses, and which include a number of important assets such as ancient woodland, ancient lanes, Grim's Ditch scheduled monument and the setting to historic farmsteads along Kings Lane to the east. The landscape earthworks are limited to pockets of land around the North Chilterns tunnel portal to help set it and the associated buildings into the landscape. An area of sustainable placement with shallow slopes, located on the east side of HS2 within a large open field at Hunts Green, helps to set down into the landscape and screen the South Heath Auto Transformer Station (ATS).

Wendover Gap LCA. The landscape earthworks design responds to localised variations in the topography and how visible they are as features in the landscape. Key landscape earthworks are proposed at Rocky Lane cutting (both sides), Small Dean south embankment (west side) and Small Dean north embankment (both sides). They all form prominent and visible feature and as such the key design driver has been to design them to integrate and set down HS2 into the lower slopes of the valley side and to help screen it in local and wider views across the Upper Misbourne valley.

The landscape earthworks as previously discussed accompany the visuals and sections following.

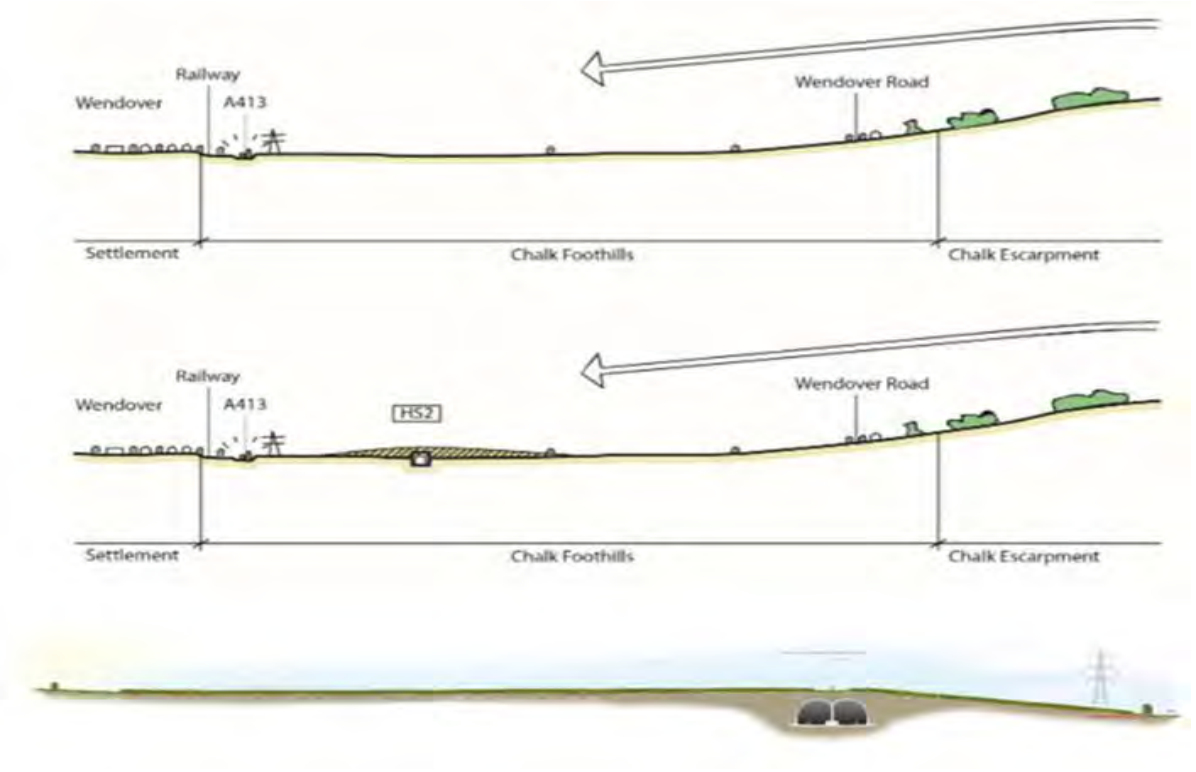


Figure 4.1.7 Diagrammatic Cross Section showing HS2 Tunnel Route through Chalk Foothills

Rocky Lane cutting

The west (downhill) side outward facing slope is to have a 1 in 6 at the south west end, where the land will be managed as wildflower grassland habitat. Northwards the outward slope is slackened out to a 1 in 8 slope so that it can be returned to agriculture. The east (uphill) side is slackened to a 1 in 8 slope and gently graded out to existing contours so that it blends and acts seamlessly with the new landform on the west (downhill) side in easterly views looking up from lower ground

with the valley. The south end of these earthworks will then blend in with the 1 in 2 engineered abutment slope which ties in with the north abutment to the Wendover Dean viaduct.

It is noted that post S17 consent for this earthwork along with the adjacent Wendover Dean North and South embankments (previously engineered slopes with minor slope grading at the toe) have subsequently been modified and this is presently being reviewed prior to a S17 resubmission to Buckinghamshire Council.

Small Dean north embankment

This is a modified engineered embankment of varying height which with varied slope profiles of 1v 2h to 1v 4h on the downside and 1v 2 and 1v 3h on the upside. This asset is an important feature as it links the Small Dean Viaduct and Wendover Green Tunnel South Portals KDEs and as such has been scrutinized by the

Independent Design Panel (IDP) as part of that process. A low earth bund sits atop the upside embankment slope in order to help reduce the massing of the 5m high noise barrier, that sits on top in lower lying views, from the A413 and from Bacombe Lane overbridge.

The upside earthworks have had to be locally adjusted to accommodate the position of a 400kV pylon tower. The earthworks design has also retained much of the A413 roadside vegetation which acts as a buffer to the embankment behind it. The upper north part of this earthwork has been profiled to seamlessly integrate with the earthwork which wraps the Wendover Green Tunnel south portal. Further integration of the embankment and the noise barriers into the landscape is provided

by the landscape planting. On the upside or A413 side the slopes will be planted with a mosaic of grassland, shrubs and trees and on downside or AONB side with a mix of trees and shrubs.

Small Dean south embankmet

The west (downhill) side outward facing slope is to have a 1 in 8 for the south part with a view to returning it to agriculture. The north part of this earthwork is to be gradually steepened so that it blends with the 1 in 2 engineered abutment slope which ties in with the south abutment to the Small Dean viaduct. Where the slope is steeper than 1 in 8, this will be planted up with trees to help create a managed (coppiced) woodland setting to the Small Dean viaduct.

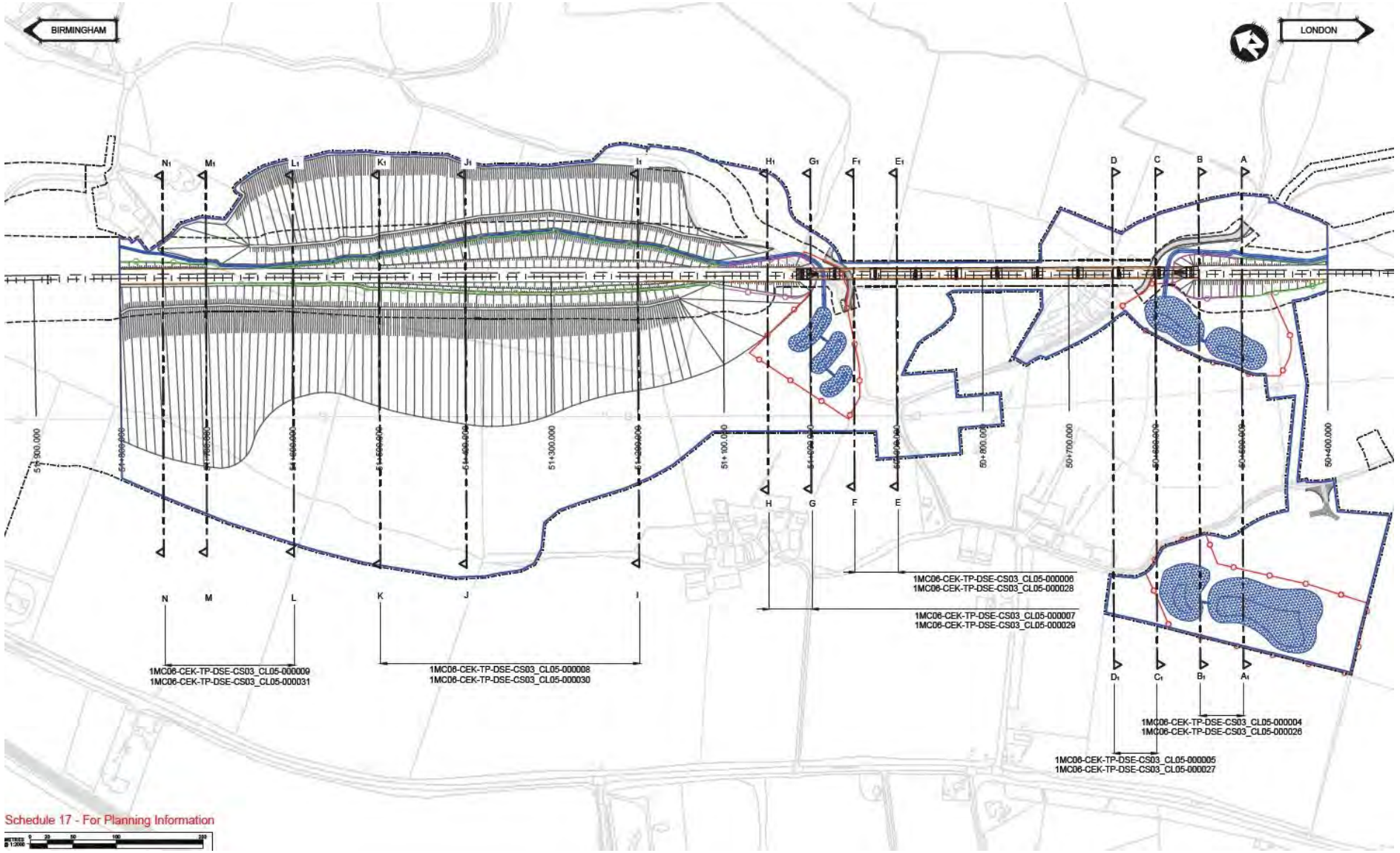


Figure 4.1.8 Wendover Dean Earthworks Plan

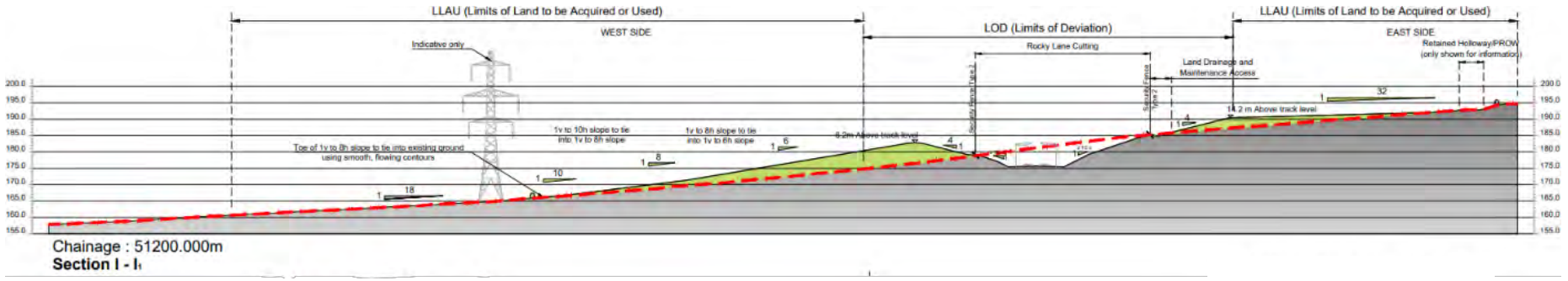


Figure 4.1.9 Rocky Lane Cutting

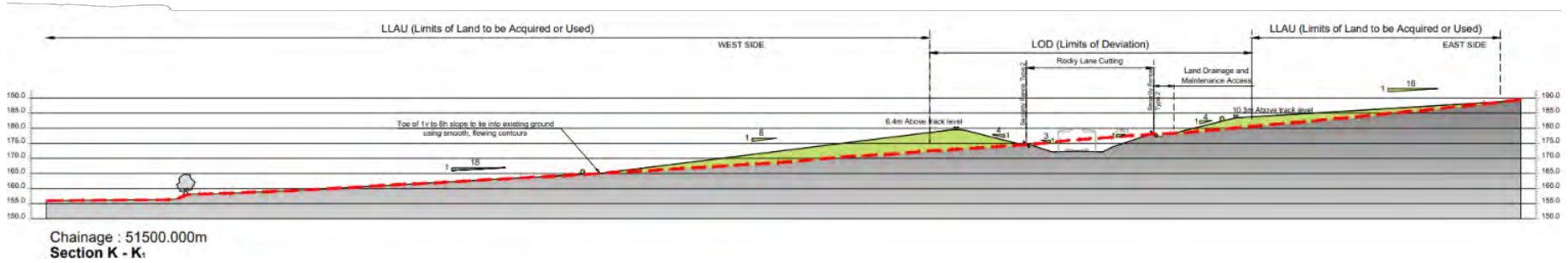


Figure 4.1.10 Small Dean South Embankment



Figure 4.1.11 Wendover Dean / Upper Misbourne Valley - Elevated view looking west from Chiltern Way.

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

Wendover Foothills (West) LCA & Risborough Foothills LCA

4.1

The landscape earthworks design responds to the undulating, low lying rolling nature of the landscape and the visual relationship this area has with the more elevated ground of the scarp landscape to the south west. It provides new landform on either side of the Wendover green tunnel, extending out to the LLAU on both sides so that the land rolls over the top of it. The outward facing slopes of the new landform is relaxed to a maximum of a 1 in 8 slope so that most of this area can be returned to agriculture. There was an alternative design of the landform which looked at retaining the Wendover Cricket Club and the introduction of a retaining wall between the green tunnel and the playing pitch. However, the Cricket Club has now been moved and the land has been reinstated.

as part of the wider landscape design approach to the green tunnel. Further north where HS2 emerges from the green tunnel north portal, the landscape earthworks design responds to the low-lying topography by providing a false cutting at Wendover north cutting (west side) to integrate and set down the HS2 alignment into the landscape and to help screen it in wider elevated views from the scarp landscape to the south west.



Figure 4.1.12 Aerial view from above the Wendover Green tunnel South Portal showing new landform looking south along HS2 alignment.



Figure 4.1.13 Aerial view of earthworks and planting screening at the Wendover Green Tunnel South Portal from east (200m from portal entrance)

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

4.1.3 Landscape response to structures

Wendover Dean viaduct (Wendover Gap LCA) - The focus of the landscape is to integrate the very visible viaduct's engineered abutment earthworks into the landscape so that they, in combination with the viaduct creates a balanced, uniform appearance, and allows the landscape to flow beneath the structure. In addition, the location of the filtration ponds adjacent to the viaduct abutments and the alignment of the farm access tracks and PRoW have also been considered so that they fit seamlessly with the existing features.

Through a combination of careful and sensitive engineering, architectural and landscape design the porous portal vents are proposed to be positioned on the roof rather than on the sides, which allows the porous portal sides to be backfilled. The backfill will be profiled to blend in with the earthworks over and on the approaches to the tunnel and in association with a mosaic chalk wildflower grassland, scrub and woodland will overtime help conceal these features. As part of the discussion with BCC a viewing area above the north portal had been considered during the Schedule 17 process.



Figure 4.1.14 View of Wendover Dean Viaduct from Durham Farm site, demonstrating landscape flow beneath structure. (40m from Viaduct).

There are four new GSM-R compounds within the Chilterns AONB (Points 20, 21, 23 and 24). These are at Wendover Dean (new standalone compound), Rocky Lane, within existing Auto Transformer Station (ATS) compound, and at either end of the Wendover Green Tunnel (within the Tunnel Portal compounds). The location of the latter three means that this new feature can rely on the existing mitigation measures that are already in place to help integrate HS2. The mitigation associated with the new compound at Wendover Dean is subject to further design development.



Figure 4.1.15 Aerial view of blended earthworks approach from east looking across A413 to the Wendover Green Tunnel South Portal and Services Building

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

Landscape response to Biodiversity connectivity

4.1

The landscape design seeks to reinforce and transform green infrastructure corridors along the route through a combination of woodland and linear tree belt planting, field boundary, lane side and Holloway hedgerows and wildflower grassland. These landscape elements will help to provide biodiversity connectivity across and along HS2 by linking in with the engineering assets at the green tunnel, viaducts, overbridges, underbridges and the water management features such as filtration ponds.

The landscape response to biodiversity as previously discussed accompany the visuals shown adjacent.



Figure 4.1.16 Close view of pier and wildflower grassland planting at Small Dean Viaduct (30m from Viaduct)



Figure 4.1.17 Oblique view of Wendover Dean Viaduct looking across filtration pond, supporting local water management and biodiversity (200m from Viaduct)

Chilterns – Upper Misbourne Valley (South Heath to Wendover)

Landscape response to Heritage assets

4.1

The existing landscape contains a number of scattered historic features which include ancient sunken lanes (Holloways) and an ancient earthwork.

Holloways (Lee & Buckland Common Undulating Plateau LCA and Wendover Gap LCA). Where HS2 severs the existing Holloway and the lane is realigned, the landscape design approach is to retain the existing feature and for the new alignment, working with the highway designers, to recreate the intimate Holloway character. A specific Holloway highway design has been developed as part of the Schedule 17 process which has set the new alignment down through new earthworks to create low false cuttings on both sides with associated hedgerow and tree line planting. This approach has also been applied to other new lanes within the AONB including Small Dean Lane and Grove Farm access.

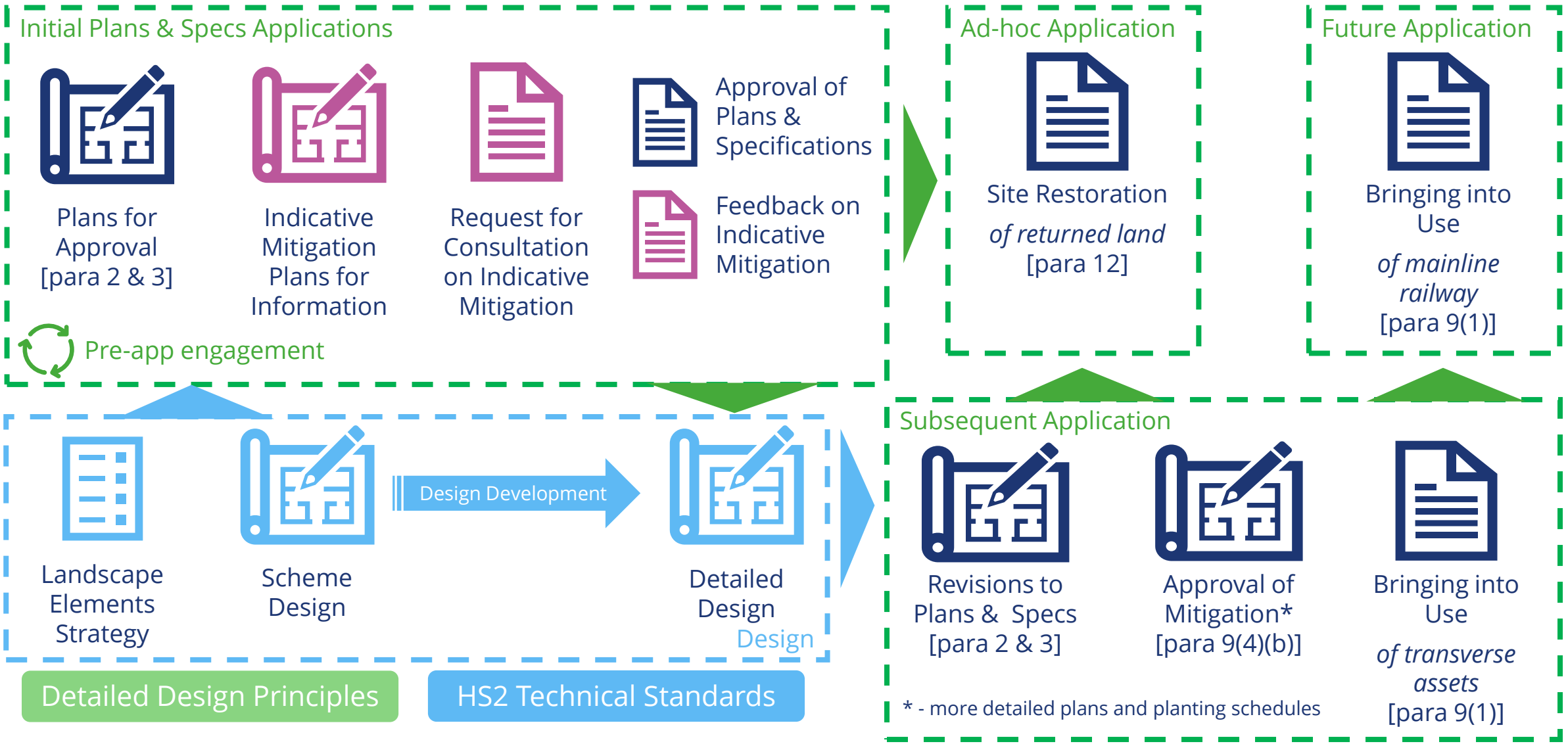
Grim's Ditch (Lee & Buckland Common Undulating Plateau LCA and Wendover Gap LCA), which presently is delineated in the wider landscape by a line of mature trees. Grim's Ditch is directly impacted by HS2 with a subsequent reduction in the length of the mature tree line which defines it. Discussion with Historic England has been held on how the scheme could minimise the land-take of the South Heath cutting on the heritage asset. The outcome of those discussions has agreed to investigate the introduction of retaining walls at the toe of the cutting slope on both sides of the track. The design development at this location is ongoing and will require S17 consent form Buckinghamshire Council.



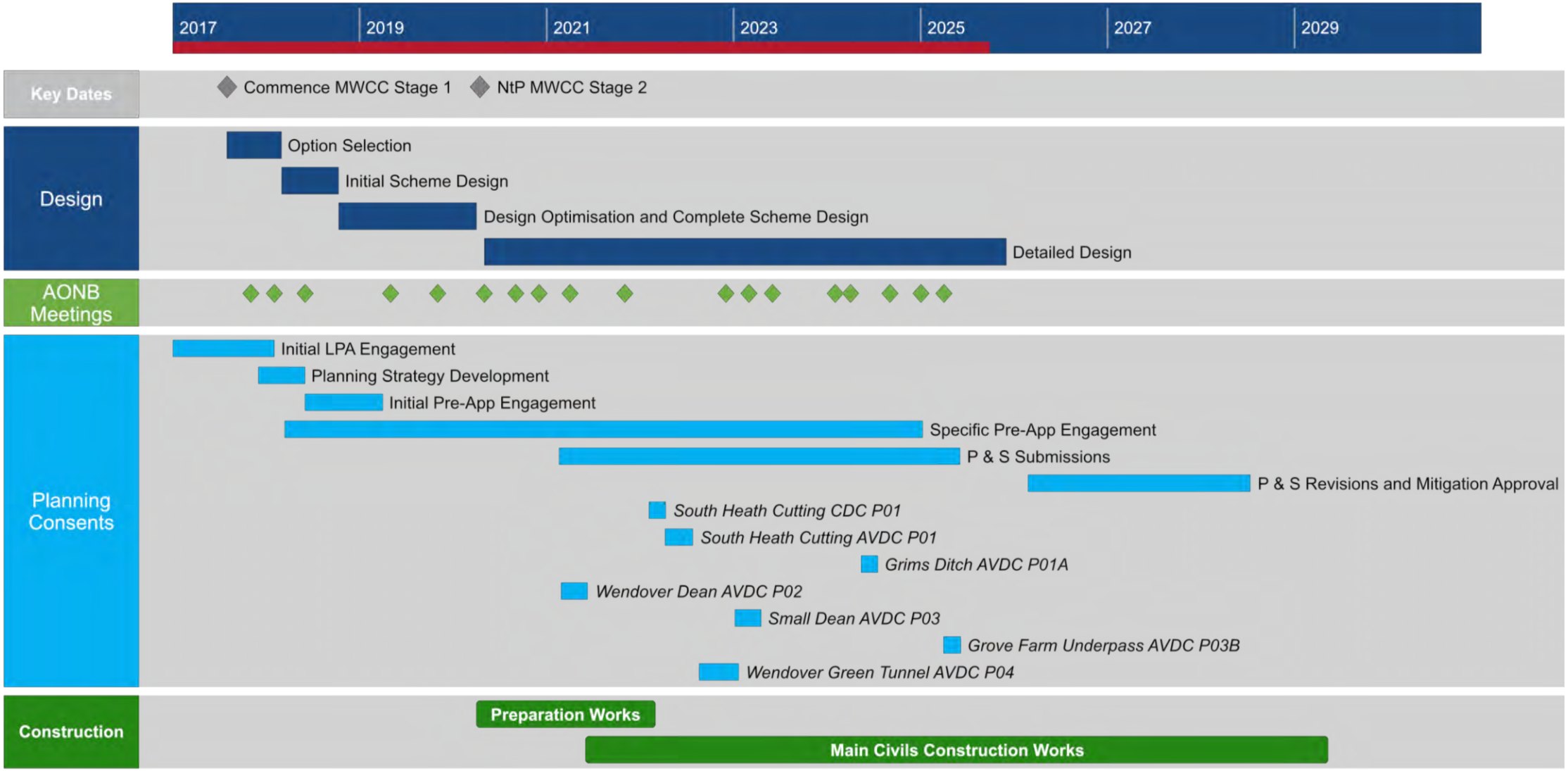
EKFB Working in partnership with HS2

Planning Approach

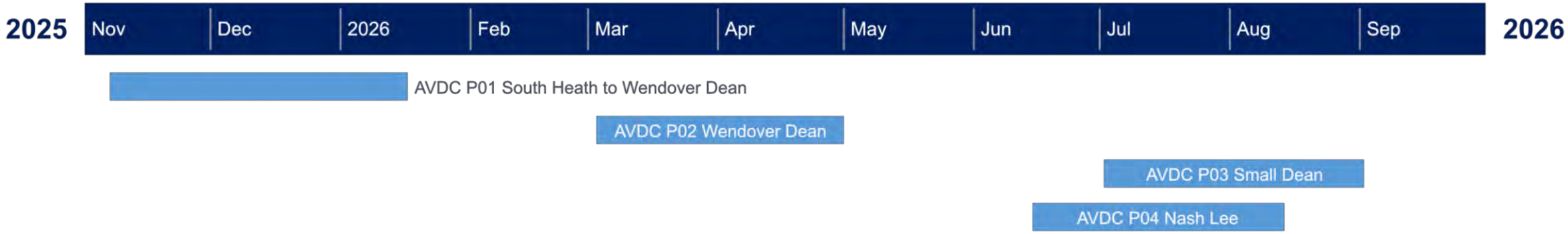
Planning Application approach



Chilterns AONB Review Group Engagement

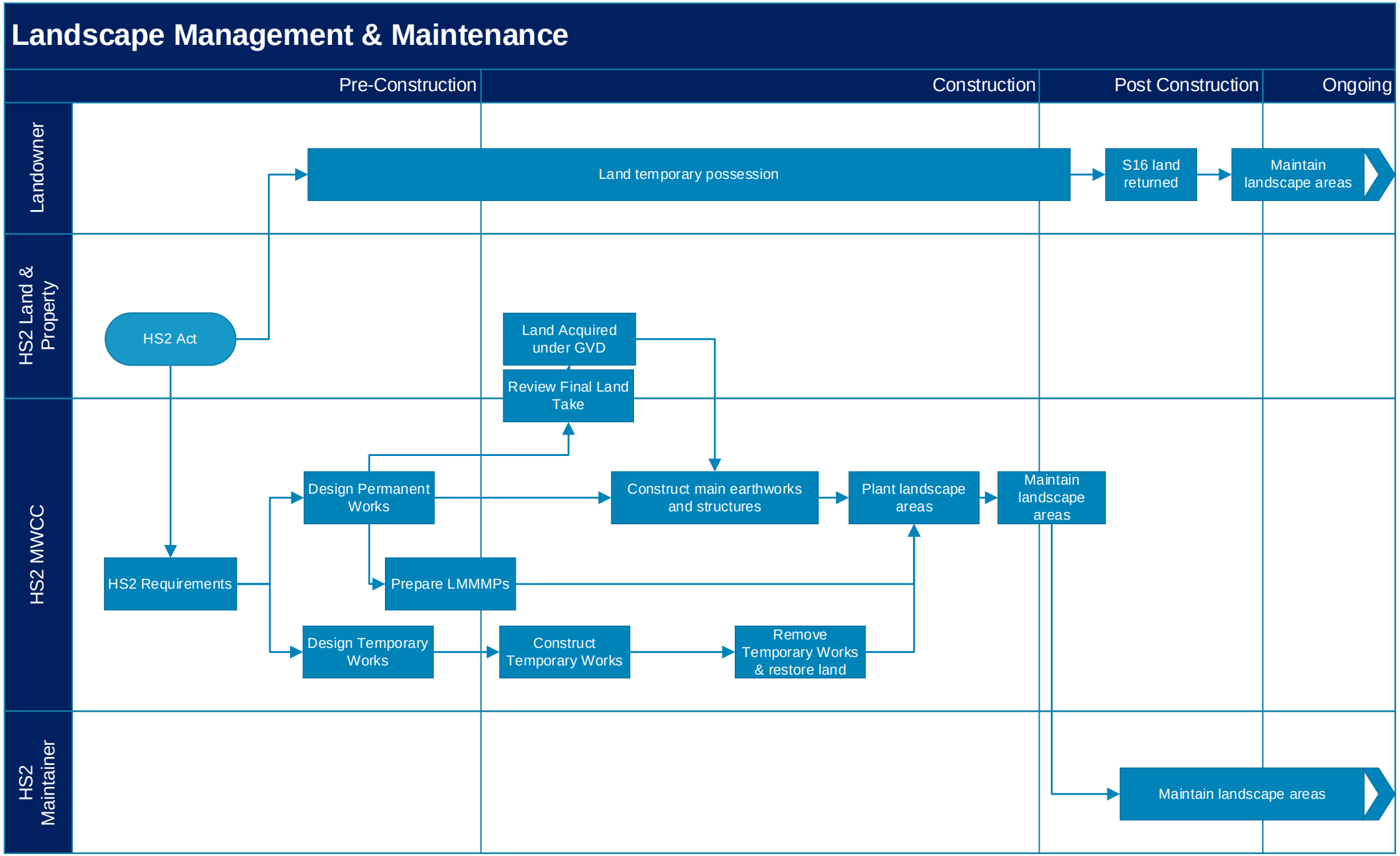


Future S17 Applications



- Minor design changes through Detailed Design
- Approval of Mitigation of the Scheduled Work

Landscape Management & Maintenance





Worked Example

Rocky Lane Cutting / Small Dean South Embankment


Search
Drawing Order
001 Base Info
1m LiDAR derived contours
Chainage
C23 Project Boundary (Final...
Land Acquisition
HS2 Acquired Land
GVD (General Vesting Decl...
NoE (Notice of Entry)
NTE Sch7 (Notice to Enter)
NTE Sch8 (Notice to Enter)
NTT (Notice to Treat)
Sch16 (Schedule 16)
Sch2 (Schedule 2)
Mines and Minerals
GVD Subsoil (General Vest...
LAA (Land Acquisition Are...
Possession ID Boundaries
ASC NTT Assessment May 24
NTT
052+300
052+200
052+100
052+000
051+900
051+800
051+700
051+600
051+500
051+400
051+300
051+200
Time
Land Possession Areas

LEGEND

General

- Schedule 17 Application Boundary
- LOD (Limits of Deviation)
- LLAU (Limits of Land to be Acquired or Used)
- HS2 Tracks
- PRoW (Public Rights of Way)
- Listed Buildings

Existing Environmental Elements

- Existing Native Species Hedgerows
- Existing Vegetation
- Surrounding Landscape and Agricultural Land

Environmental Elements

Noise (E1)

- E1.2: Proposed Noise Barrier

Landscape Elements

- Restored Land

Grassland (LE1)

- LE1.1: Proposed Amenity Grass
- LE1.3: Proposed Species Rich Grassland
- LE1.7: Proposed Infrastructure Grassland

Planting (LE2)

- LE2.1: Proposed Woodland
- LE2.6: Proposed Shrubs
- LE2.8: Proposed Scrub

Hedges (LE4)

- LE4.2: Proposed Native Species Hedges (Trimmed)
- LE4.3: Proposed Native Species Hedgerows (Untrimmed)

Wetland Habitats (LE6)

- LE6.1: Proposed Water Bodies and Associated Plants
- LE6.2: Proposed Banks and Ditches

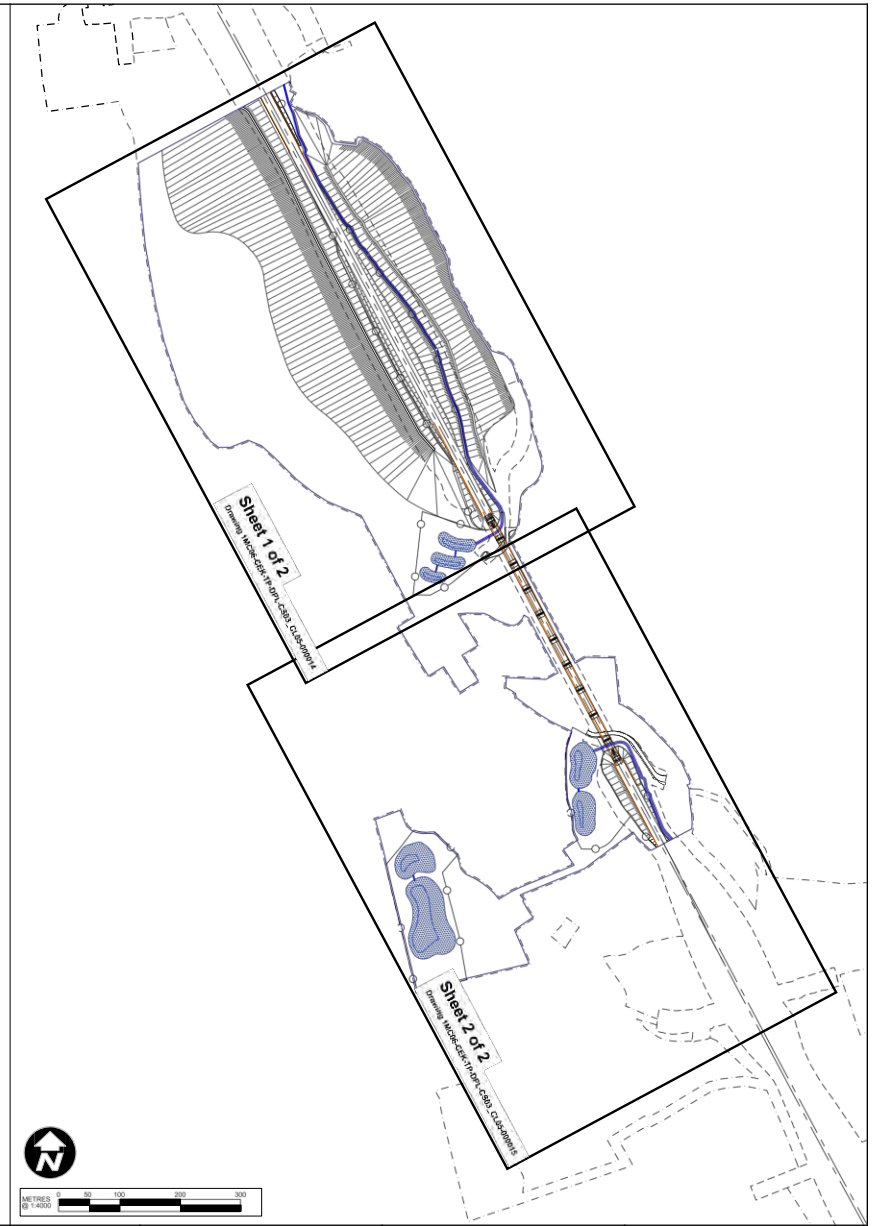
Environmental Functions (EF)

EFA	Visual Screening
EFB	Landscape Integration
EFC	Enhancing the Built Environment
EFD	Nature Conservation and Biodiversity
EFE	Visual Amenity
EFF	Heritage
EFG	Auditory Amenity
EFH	Water Quality
EFJ	Agricultural/Highway Boundary
EFK	Access

Reference

EFA - Environmental Function

LE1.2 - Environmental/Landscape Element



Schedule 17 - For Planning Information

Rev	Description	Drawn	Checked	Approved	HS2 Acc	
C03	Third Issue	JK 04/12/2020	ZK 04/12/2020	AB 04/12/2020		
C02	Second Issue	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020		
P06	Revised to address informal comments	BK 13/08/20	ZK 13/08/20	SF 13/08/20		
P05	Revised to address informal comments	BK 07/08/20	DS 07/08/20	SF 07/08/20		
P04	Revised to address informal comments	GM 07/08/20	DS 07/08/20	AB 07/08/20		

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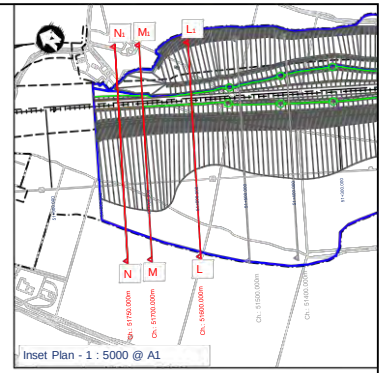
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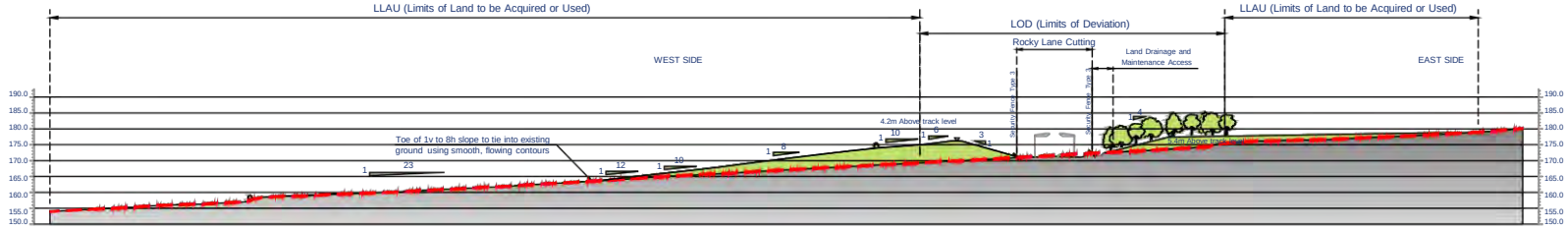
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Registered in England
Registration No. 06791686
Registered office:
2 Snow Hill, Queensway,
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Zone	CS03
Project/Contract	1MC06
Design Stage	SCHEME DESIGN
Discipline/Function	Town & Country Planning
Drawing Title	Wendover Dean Environmental Masterplan Key Plan
Drawn	J.Katrekar
Checked	Z.Krezinger
Approved	A.Barbour
Date	04/12/2020
Scale	AS SHOWN
Size	A1
Creator/Originator	CEK
Design Status	A3
Suitability	Suitable for Scheme Design
Drawing No.	1MC06-CEK-TP-DPL-CS03_CL05-000013
Rev.	C03

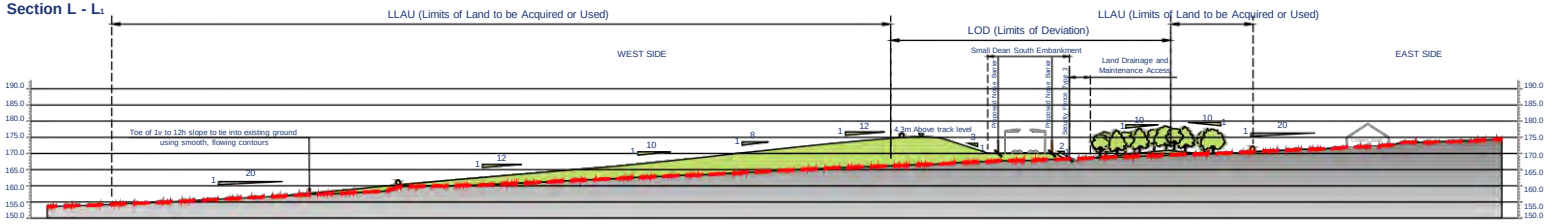
1MC12-EKF-SE-PRE-CS03-000063 P01





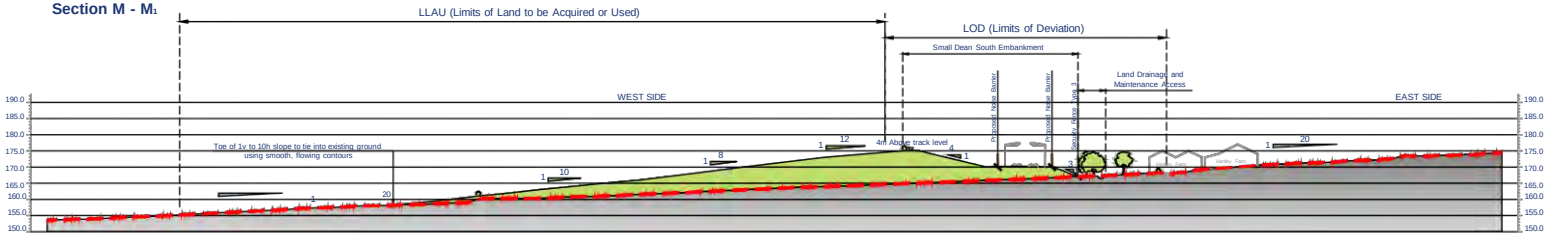
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Section L - L1



Chainage : 51700.000m

Section M - M1



Chainage : 51750.000m

Section N - N1

Schedule 17 - For Planning Information

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Rev	Description	Drawn	Checked	Approved	HS2 App
C01	First Issue	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020	
P02	Draft for comment	BK 14/10/2020	ZK 14/10/2020	SF 14/10/2020	
P01	Draft for comments	BK 07/08/20	DS 07/08/20	RK 07/08/20	

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Scale with caution as distortion can occur.

Legends/Notes:

- Existing Ground Level
- Existing Ground
- Earthworks Above Existing Ground Level
- 1 Existing Slope Profile
- 1 Proposed Slope Profile

Proposed Features

- Proposed Noise Barrier
- HS2 Tracks / Overhead Gantries

Indicative Vegetation

- Existing Vegetation
- Proposed Vegetation

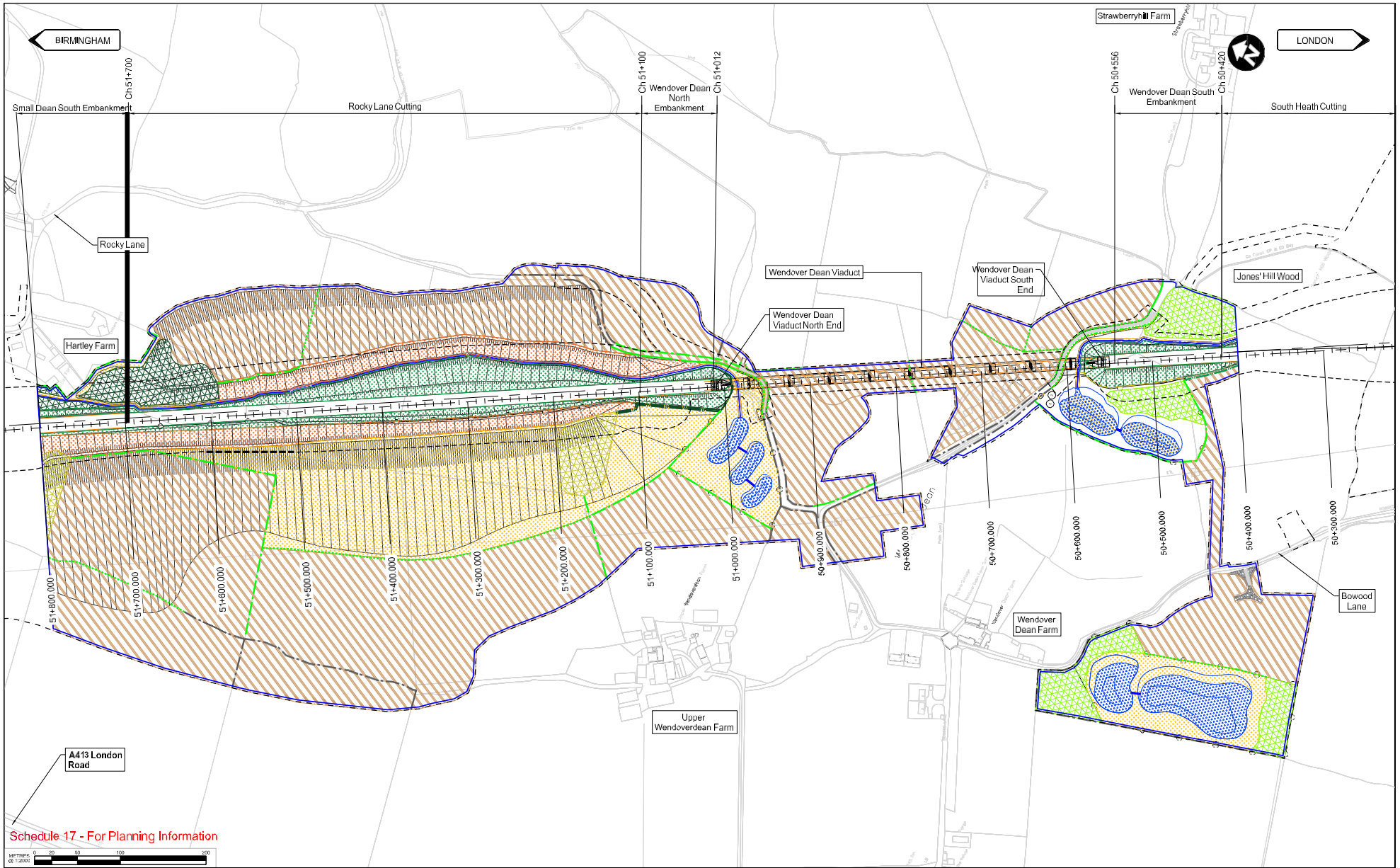
Note: 1. Height indicators are shown in metres Above Ordnance Datum.

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Zone	CS03
Project/Contract	1MC06
Design Stage	Scheme Design
Discipline/Function	Town & Country Planning
Drawing Title	Wendover Dean Landscape Cross Sections Sheet 6 of 6
Drawn	Z.Krezinger
Checked	D.Stebbings
Approved	S.Robinson
Date	27/10/2020
Scale	As shown @ A1
Size	
Creator/Originator	CEK
Design Status	A3
Suitability	Suitable for Scheme Design
Drawing No.	1MC06-CEK-TP-DSE-CS03_CL05-000031
Rev.	C01

1MC12-EKF-SP-PRE-CS03-000063 P01



Schedule 17 - For Planning Information

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Rev	Description	Drawn	Checked	Approved	HS2 App
C03	Third Issue	JK 02/12/2020	ZK 02/12/2020	AB 02/12/2020	
C02	Second Issue	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020	
P06	Revised to address informal comments	BK 19/09/20	ZK 19/09/20	SF 19/09/20	
P05	Revised to address informal comments	BK 07/09/20	DS 07/09/20	SF 07/09/20	
P04	Revised to address informal comments	GM 07/05/20	DS 07/05/20	AB 07/05/20	

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Legends/Notes:

- Schedule 17 Application Boundary
- LOD (Limits of Deviation)
- LLAU (Limits of Land to be Acquired or Used)
- HS2 Tracks

Proposed Landscaping

- Generic Woodland - Quick Effect & Planting
- Generic Woodland - Medium Effect
- Generic Woodland - Long Term Effect
- Woodland Edge
- Bushes / Shrubs
- Restored Land
- Feature Planting - Individual Trees
- Hedgerow Habitat Planting - Screen Effect
- Hedgerow Habitat Planting - Regular Low
- Hedgerow Habitat Planting - Regular Low Inc. Trees
- Aquatic / Wetland - Standard Commercial Mixes
- Grassland - Wildflower Meadow / Ecological Interest
- Grassland - Amenity
- Grassland - HS2 Infrastructure Grass Planting

Existing Planting

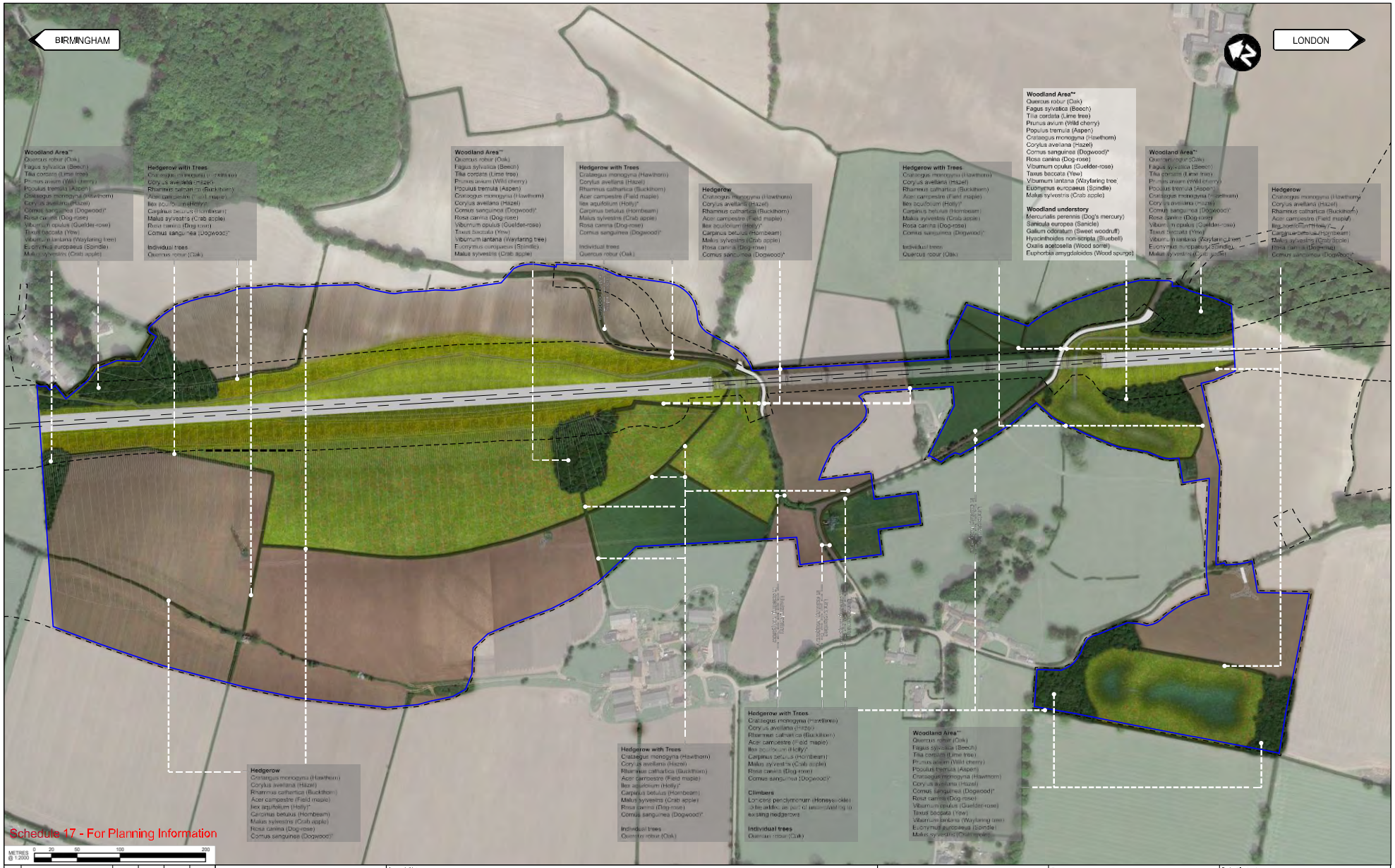
- Existing Hedgerows to be retained where possible
- Fencing

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Zone: CS03		Project/Contract: 1MC06	
Design Stage: SCHEME DESIGN		Discipline/Function: Town & Country Planning	
Drawing Title: Wendover Dean Landscape Planting Plan		Drawn: J.Katrekar	Checked: Z.Krezinger
		Approved: A.Barbour	
		Date: 02/12/2020	Scale: 1:2000
		Size: A1	
Creator/Originator: CEK	Design Status: A3	Suitability: Suitable for Scheme Design	Drawing No.: 1MC06-CEK-TP-DPL-CS03_GL05-000007
			Rev.: C03

1MC12-EKF-SE-PRE-CS03-000063 P01



Rev	Description	Drawn	Checked	Approved	HS2 App
C02	Second Issue	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020	
P05	Revised to address informal comments	BK 13/08/20	ZK 13/08/20	SF 13/08/20	
P04	Revised to address informal comments	BK 07/08/20	DS 07/08/20	SF 07/08/20	
P03	Revised to address informal comments	GM 07/05/20	DS 07/05/20	AB 07/05/20	
P02	Revised to address informal comments	ZK 02/12/19	RK 03/12/19	AB 03/12/19	

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Legend/Notes

- Schedule 17 Application Boundary
- LOD (Limits of Deviation)
- LLAU (Limits of Land to be Acquired or Used)
- HS2 Tracks
- Earthworks and Planting

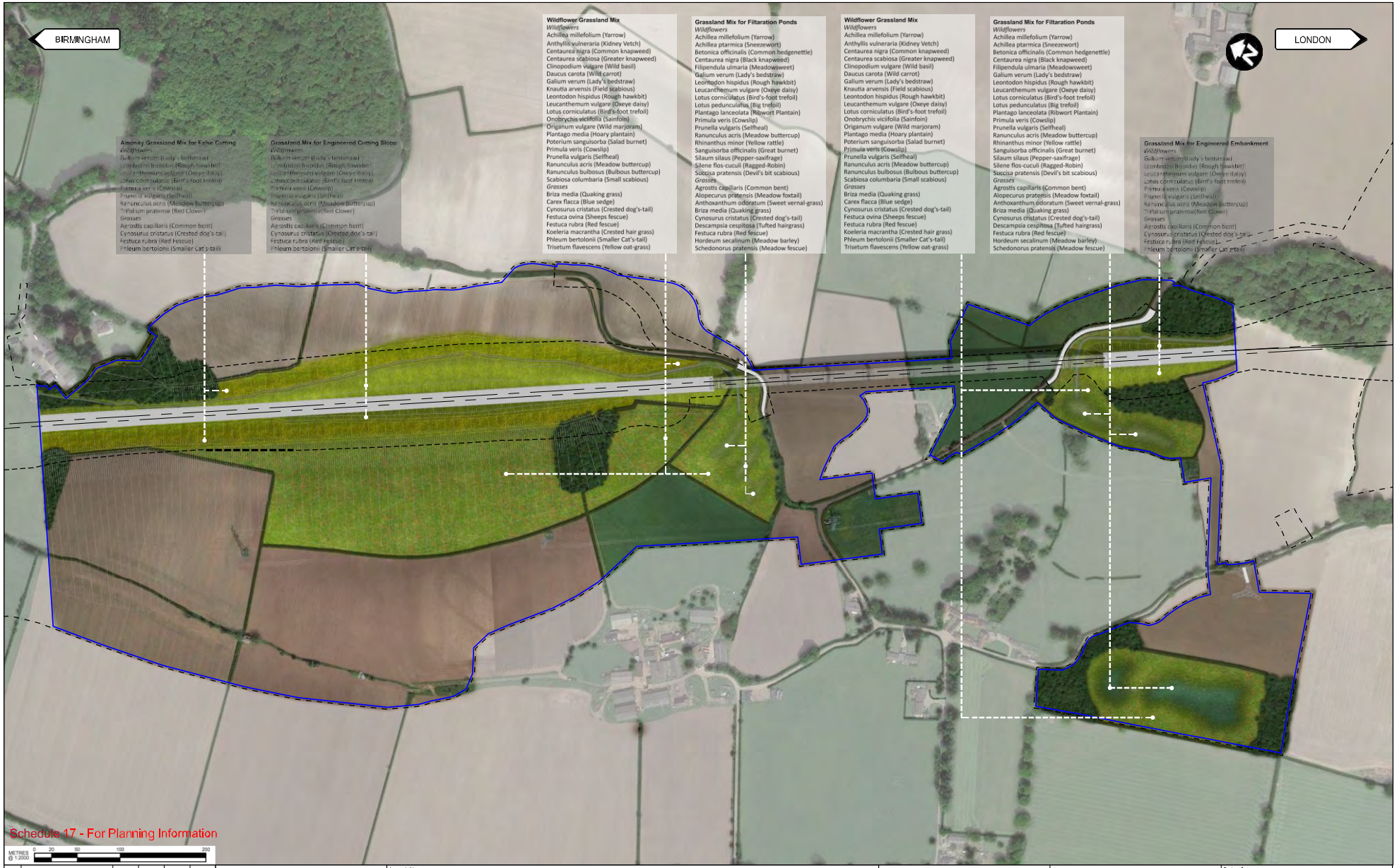
Note: * Species to be less than 2.5% of mix to avoid becoming dominant.
** Small woodland areas to comprise small number of species and at lower density

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Zone	CS03
Project/Contract	1MC06
Design Stage	SCHEME DESIGN
Discipline/Function	Town & Country Planning
Drawing Title	Wendover Dean Planting Plan (Woodland and Hedgerows)
Drawn	Z.KrezInger
Checked	D.Stebbings
Approved	S.Robinson
Date	29/10/2020
Scale	1:2000
Size	A1
Creator/Originator	CEK
Design Status	A3
Suitability	Suitable for Scheme Design
Drawing No.	1MC06-CEK-TP-DPL-CS03_CL05-000011
Rev.	C02

1MC12-EKF-SE-PRE-CS03-000063 P01



Schedule 17 - For Planning Information

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Rev	Description	Drawn	Checked	Approved	HS2 App
C02	Issued for Approval	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020	
P05	Revised to address informal comments	BK 13/08/20	ZK 13/08/20	SF 13/08/20	
P04	Revised to address informal comments	BK 07/08/20	DS 07/08/20	SF 07/08/20	
P03	Revised to address informal comments	GM 07/05/20	DS 07/05/20	AB 07/05/20	
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Legend/Notes

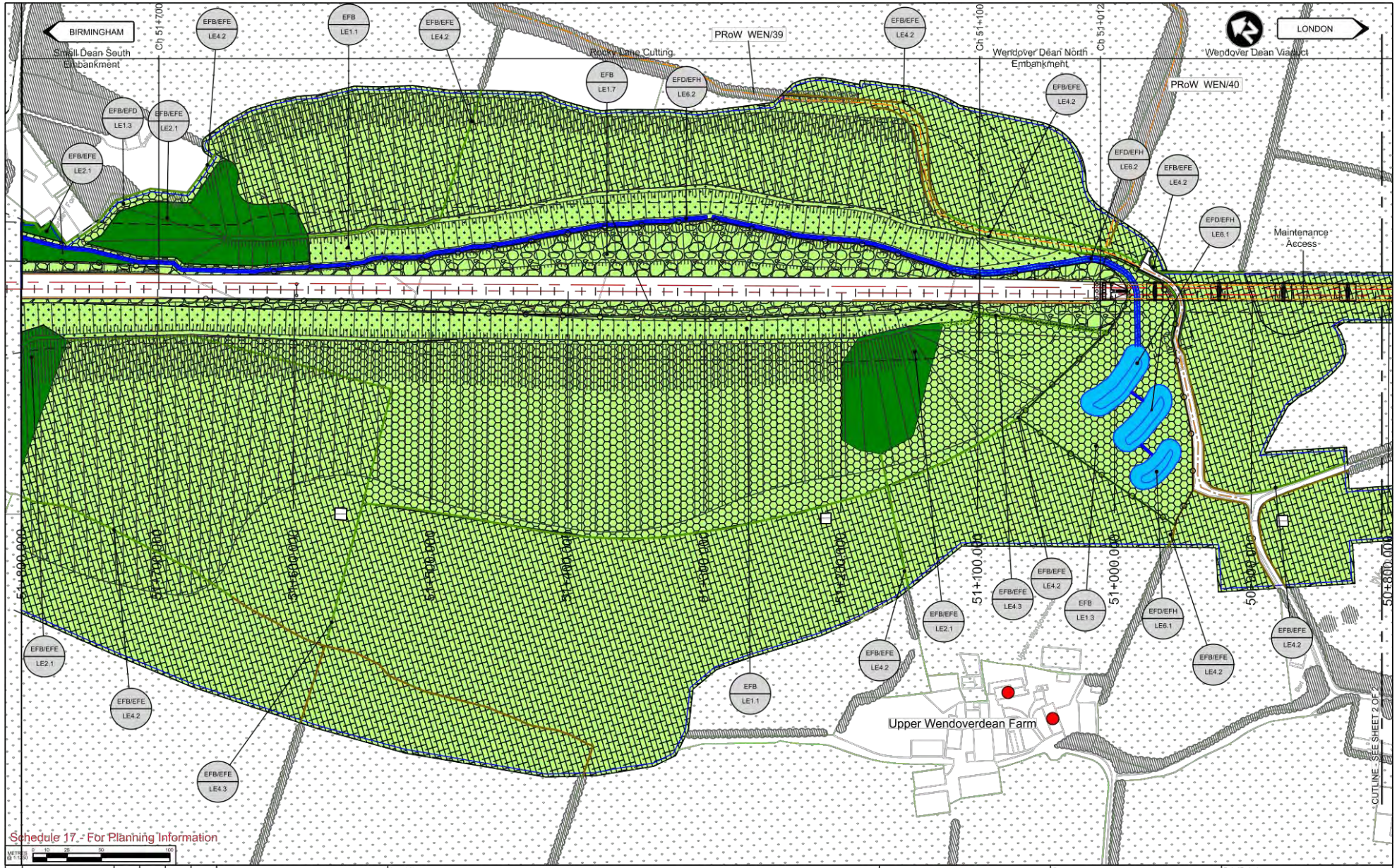
- Schedule 17 Application Boundary
- LOD (Limits of Deviation)
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- HS2 Tracks
- Earthworks and Planting

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Zone	CS03
Project/Contract	1MC06
Design Stage	SCHEME DESIGN
Discipline/Function	Town & Country Planning
Drawing Title	Wendover Dean Planting Plan (Grassland)
Drawn	Z.Krezinger
Checked	D.Stebbings
Approved	S.Robinson
Date	29/10/2020
Scale	1:2000
Size	A1
Creator/Originator	CEK
Design Status	A3
Suitability	Suitable for Scheme Design
Drawing No.	1MC06-CEK-TP-DPL-CS03_CL05-000012
Rev.	C02

1MC12-EKF-SE-PRE-CS03-000063 P01



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C02	Second Issue	ZK 27/10/2020	DS 27/10/2020	SR 27/10/2020	
P06	Revised to address informal comments	BK 19/08/20	ZK 19/08/20	SF 19/08/20	
P05	Revised to address informal comments	BK 07/08/20	DS 07/08/20	SF 07/08/20	
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Drawing produced in HS2 SnakeGrid (HS2PT+14) coordinate system

Scale with caution as distortion can occur.

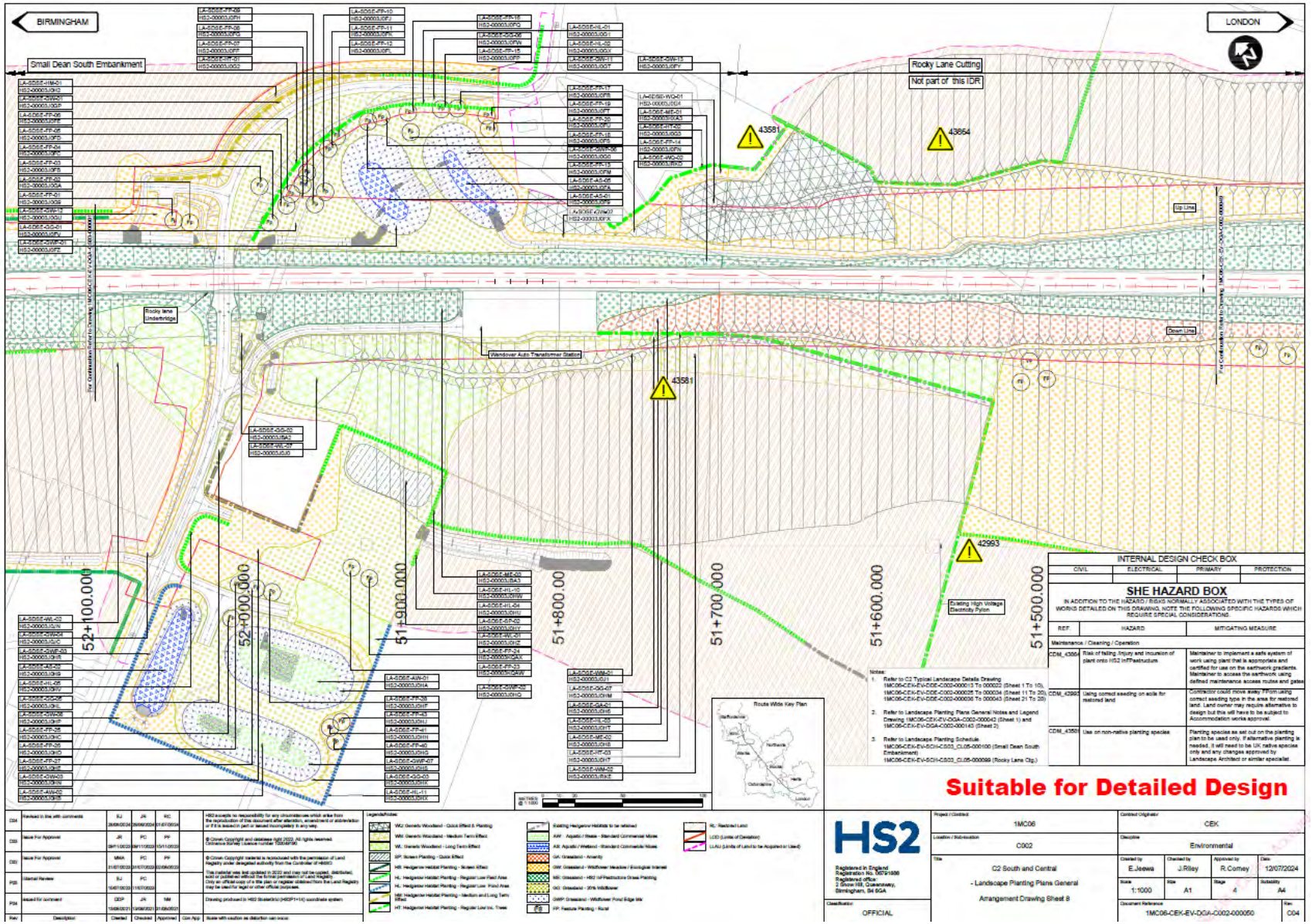
Legends/Notes:

HS2

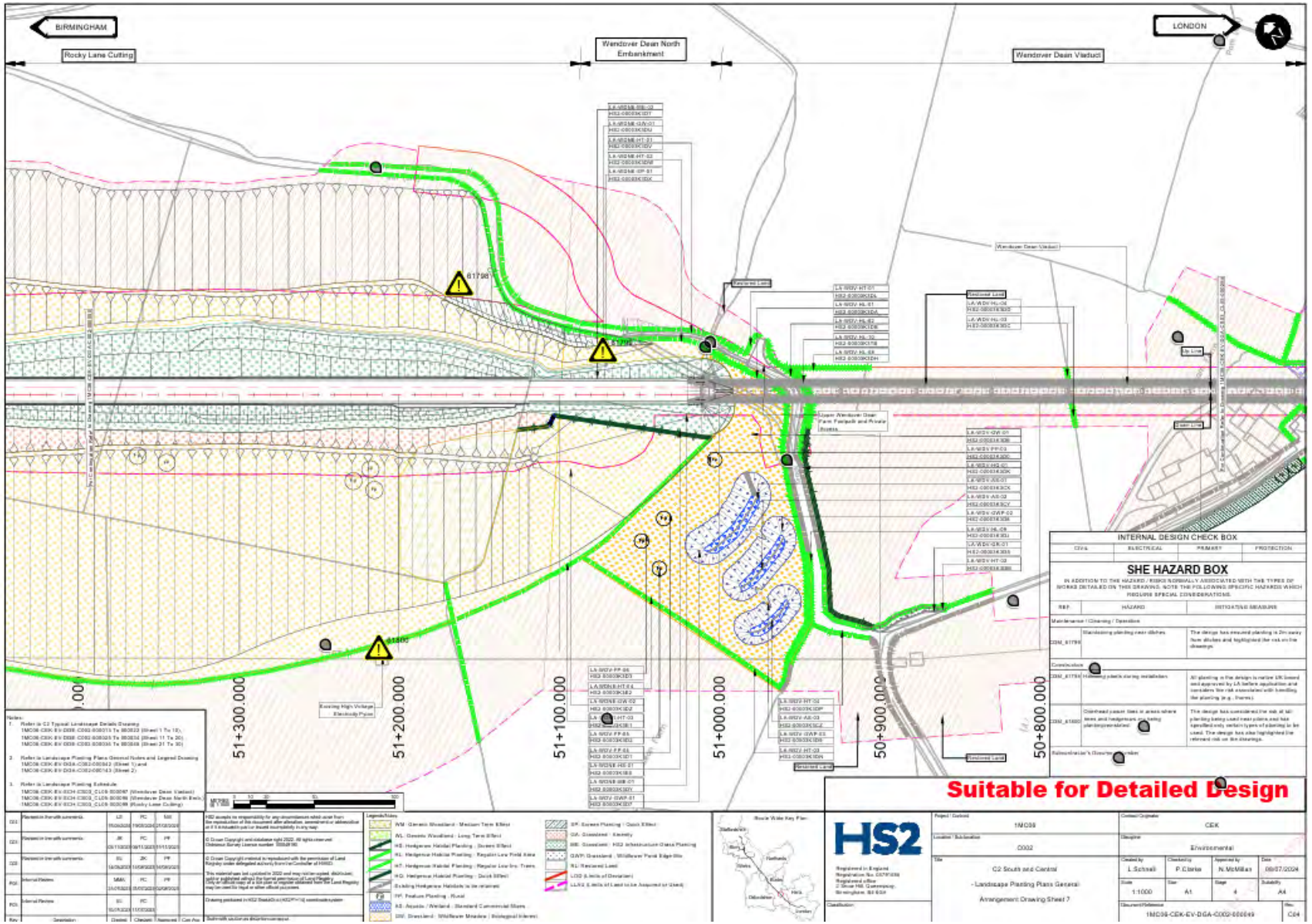
Registered in England
Registration No. 06791686
Registered office:
2 Snow Hill, Queensway,
Birmingham, B4 6GA

Zone: CS03		Project/Contract: 1MC06	
Design Stage: SCHEME DESIGN		Discipline/Function: Town & Country Planning	
Drawing Title: Wendover Dean Environmental Masterplan Sheet 1 of 2		Drawn: Z.Krezinger	Checked: D.Stebbings / Approved: S.Robinson
		Date: 29/10/2020	Scale: 1:1250 / Size: A1
Creator/Originator: CEK	Design Status: A3 / Suitability: Suitable for Scheme Design	Drawing No.: 1MC06-CEK-TP-DPL-CS03_CL05-000014	Rev.: C02

Detailed Design Planting Plan



Detailed Design Planting Plan



Small Dean South Embankment - Landscape Planting Schedule

Key Figures

Feature	Value	UoM
Land Area	171,414	m^2
Planting Area	34,866	m^2
Hedge length	3,076	lin.m
Planting Density	133	no./m^2
Hedgerow Regeneration	46	lin.m
Shrub Planting	34,855	no.
Tree Planting	9,595	no.
Base / Understory Planting seed	361	kg
Grass / Wildflower Seeding	1,772	Kg

Features include:
AS: Aquatic / Wetland - Standard Commercial Mixes
AW: Aquatic / Swale - Standard Commercial Mixes
BS - Bushes/Shrubs
EW - Edge Woodland - Low
FP: Feature Planting - Rural
GA: Grassland - Amenity
GG: Grassland - Wildflower Grassland
GW: Grassland - Wildflower Chalk Meadow
GWP: Grassland - Wildflower Pond Edge Mix
HH: Hedgerow Habitat Planting - High
HL: Hedgerow Habitat Planting - Regular Low (Field Area)
HL: Hedgerow Habitat Planting - Regular Low (Pond Area)
HM: Hedgerow Habitat Planting - Screen Effect
HS: Hedgerow Habitat Planting - Screen Effect with Trees
HT: Hedgerow Habitat Planting - Regular Low Inc. Trees
ME: Grassland - HS2 Infrastructure Grass Planting
SP - Screen Planting
WL: Generic Woodland - Long Term Effect
WM: Generic Woodland - Medium Term Effect
WQ: Generic Woodland - Quick Term Effect

Rocky Lane Cutting - Landscape Planting Schedule

Key Figures

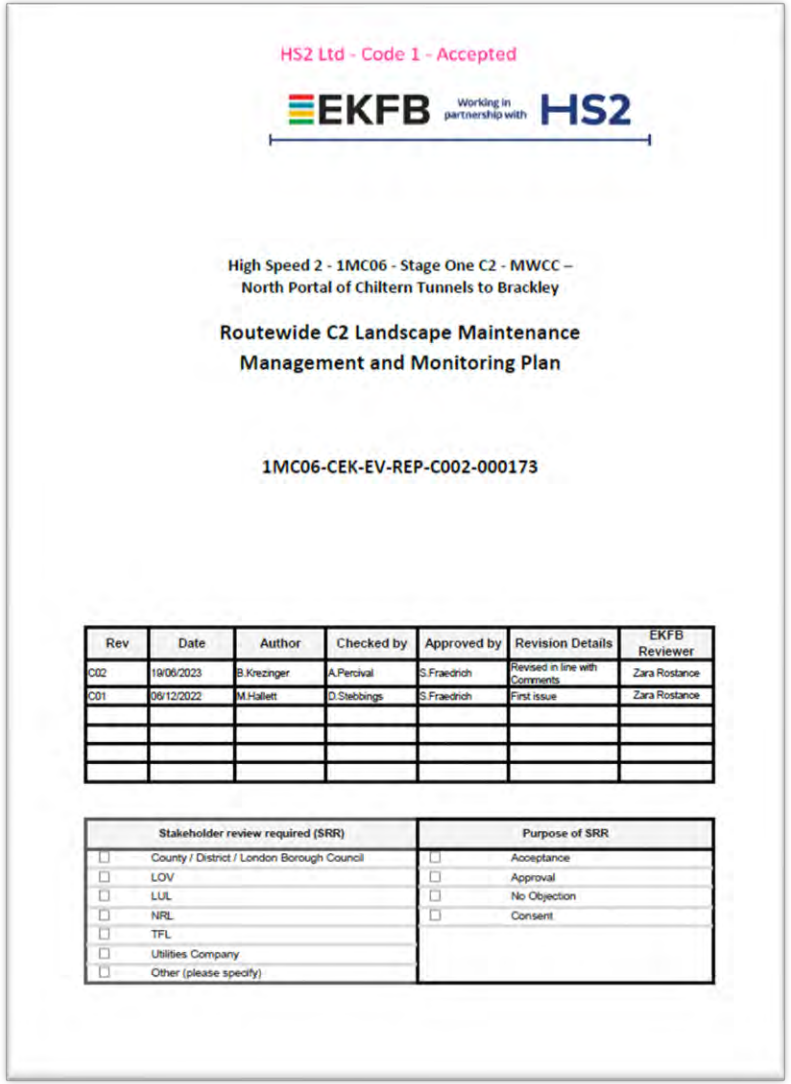
Feature	Value	UoM
Land Area	114,072	m^2
Planting Area	15,117	m^2
Hedge length	1,548	lin.m
Planting Density	82	no./m^2
Hedgerow Regeneration	0	lin.m
Shrub Planting	13,206	no.
Tree Planting	3,677	no.
Base / Understory Planting seed	143	kg
Grass / Wildflower Seeding	1,101	Kg

Features include:
AS: Aquatic / Wetland - Standard Commercial Mixes
AW: Aquatic / Swale - Standard Commercial Mixes
BS - Bushes/Shrubs
EW - Edge Woodland - Low
FP: Feature Planting - Rural
GA: Grassland - Amenity
GG: Grassland - Wildflower Grassland
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WQ: Generic Woodland - Quick Term Effect

LMMMP

Provides information for the aftercare tasks of all landscape typologies/ treatments

- Guidance
- Site specific information
- Aims and objectives
- U+A, consenting condition
- Asset typologies
- Non-standard management
- Appendix A - Document register
- Appendix B - Risks H&S
- Appendix C - Responsibilities
- Appendix D - LMMMP review
- Appendix E - Inspections
- Appendix F - Change



HS2 Ltd - Code 1 - Accepted

EKFB Working in partnership with HS2

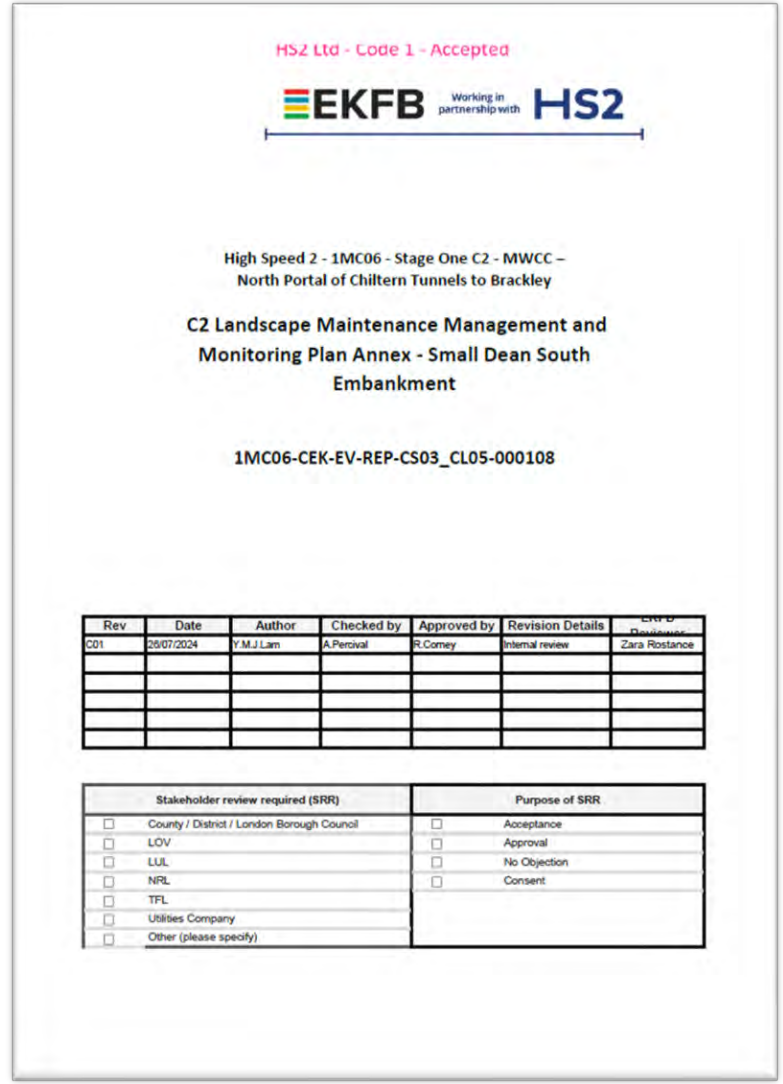
High Speed 2 - 1MC06 - Stage One C2 - MWCC – North Portal of Chiltern Tunnels to Brackley

Routewide C2 Landscape Maintenance Management and Monitoring Plan

1MC06-CEK-EV-REP-C002-000173

Rev	Date	Author	Checked by	Approved by	Revision Details	EKFB Reviewer
C02	19/06/2023	B.Krezinger	A.Percival	S.Fraedrich	Revised in line with Comments	Zara Rostance
C01	06/12/2022	M.Hallett	D.Stebbings	S.Fraedrich	First issue	Zara Rostance

Stakeholder review required (SRR)	Purpose of SRR
☐ County / District / London Borough Council	☐ Acceptance
☐ LOV	☐ Approval
☐ LUL	☐ No Objection
☐ NRL	☐ Consent
☐ TFL	
☐ Utilities Company	
☐ Other (please specify)	



HS2 Ltd - Code 1 - Accepted

EKFB Working in partnership with HS2

High Speed 2 - 1MC06 - Stage One C2 - MWCC – North Portal of Chiltern Tunnels to Brackley

C2 Landscape Maintenance Management and Monitoring Plan Annex - Small Dean South Embankment

1MC06-CEK-EV-REP-CS03_CL05-000108

Rev	Date	Author	Checked by	Approved by	Revision Details	EKFB Reviewer
C01	26/07/2024	Y.M.J.Lam	A.Percival	R.Corney	Internal review	Zara Rostance

Stakeholder review required (SRR)	Purpose of SRR
☐ County / District / London Borough Council	☐ Acceptance
☐ LOV	☐ Approval
☐ LUL	☐ No Objection
☐ NRL	☐ Consent
☐ TFL	
☐ Utilities Company	
☐ Other (please specify)	

Aims & Objectives

Small Dean South Embankment

Primary function of this asset is **Visual Mitigation**, Secondary function **Ecological Mitigation** and Tertiary function is **Landscape Enhancement**.

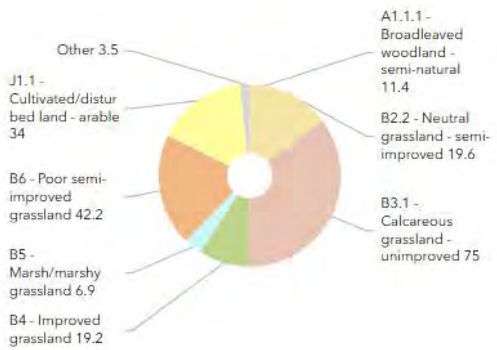
The primary aim of this asset is to screen and integrate the railway into the wider landscape through visual mitigation. This is to be achieved through a combination of landform either side of the trace and carefully designed planting set upon the earthwork, which replicates features present within the local character area (such as woodland, linear tree belts and hedgerows). An associated objective is to reinstate land for use as farmland, which will reflect the existing land use pattern and assist to integrate the existing local character.

The secondary aim is to support the ecological networks that provide biodiversity connectivity across this area of HS2 by creating a green infrastructure corridor that forms linkages with the engineering assets at the viaducts, drainage ditches, culverts and water management features (balancing ponds). The balancing ponds aim to use nature-based solutions to alleviate flooding and improve water quality in the longer term.

The tertiary aim is to enhance the landscape. This asset aims to enhance climate resilience through adding carbon sequestration and storage within the new soft landscape.

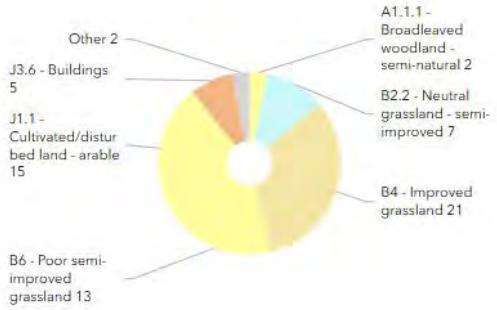
NNL in Biodiversity – Wendover Dean to Rocky Lane

Post-Construction Areas - Map Filter

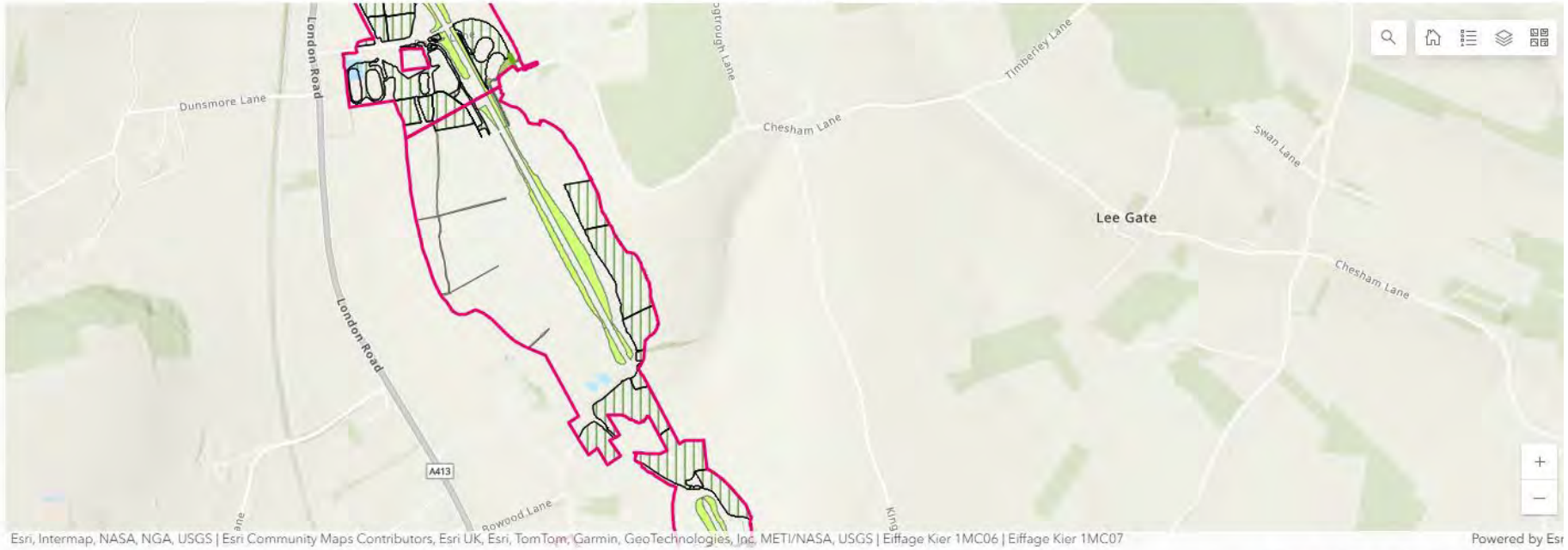


Ancient Woodland | Map Filter

Pre-Construction Areas - Map Filter



No Net Loss (NNL) in Biodiversity - Q2 2025



Pre-Con Bio Units	Pre-Con Bio Units	Post-Con Bio Units	Post-Con Bio Units
9k	595.1k	9.5k	780.5k
Areas	Linear	Areas	Lines

Areas (Map Filter)

Post Construction 212 Units

36.6%

Pre Construction 155 Units

Hedgerows (Map Filter)

Post Construction 18,902 Units

86.3%

Pre Construction 10,146 Units

Watercourses (Map Filter)

This area has no watercourses

Post-Con Bio Units 9.5k

Areas 6%

Pre-Con Bio Units 9k

Post-Con Bio Units 780.5k

Lines 31%

Pre-Con Bio Units 595.1k

NNL in Biodiversity – Chiltern Natural Landscape

Post-Construction Areas - Map Filter

Cannot render, too many categories
Received 1965
Maximum supported 300

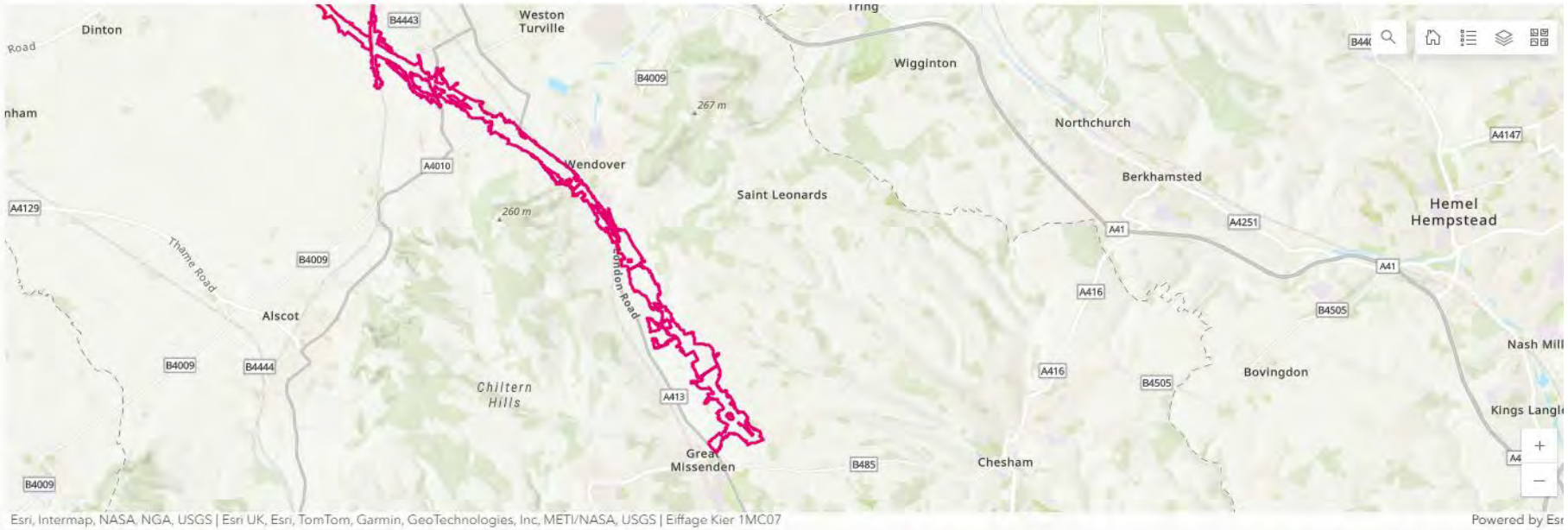
Ancient Woodland | Map Filter

Pre-Construction Areas - Map Filter

Cannot render, too many categories
Received 913
Maximum supported 300

Ancient Woodland | Map Filter

No Net Loss (NNL) in Biodiversity - Q2 2025



Pre-Con Bio Units
9k
Areas

Pre-Con Bio Units
595.1k
Linear

Post-Con Bio Units
9.5k
Areas

Post-Con Bio Units
780.5k
Lines

Areas (Map Filter)

Post Construction 1,894 Units
23.7%
Pre Construction 1,531 Units

Hedgerows (Map Filter)

Post Construction 139,432 Units
52.7%
Pre Construction 91,327 Units

Watercourses (Map Filter)

Post Construction 12,181 Units
-5.7%
Pre Construction 12,912 Units

Post-Con Bio Units 9.5k
Areas 6%
Pre-Con Bio Units 9k

Post-Con Bio Units 780.5k
Lines 31%
Pre-Con Bio Units 595.1k



Discussion