High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report

Volume 2: Map book CA5: South Cheshire

hs

High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report

Volume 2: Map book CA5: South Cheshire



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited, One Canada Square, Canary Wharf, London E14 5AB

Telephone: 020 7944 4908

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared for High Speed Two (HS2) Limited:







High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2016, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ version/2 **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Contents

Mapping explanatory notes

Data dictionary and definitions

Map series name	Map series description
	These plans show the land potentially required during construction, the construction features, access
	requirements and infrastructure associated with construction of the Proposed Scheme. The plans also show the
CT as Construction Phase	construction phase arrangements for public access using Public Rights of Way.
CT-o ₅ – Construction Phase	The design of the Proposed Scheme will be informed through stakeholder engagement and further engineering
	and environmental studies.
	The base mapping shown on the plans is reflective of 2016 Ordnance Survey (OS) data.
	These maps show permanent features, infrastructure, restored land, and areas for landscaping, screening and
	ecological mitigation associated with the Proposed Scheme.
CT-o6 – Proposed Scheme	The design of the Proposed Scheme will be informed through stakeholder engagement and further engineering
	and environmental studies.
	The base mapping shown on the plans is reflective of 2016 Ordnance Survey (OS) data.
	The Environmental Baseline maps display a range of environmental data layers.
CT-10 — Environmental Baseline	The design of the Proposed Scheme will be informed through consultation and further engineering and
	environmental studies.
	The landscape and visual maps (series LV-11) display landscape character areas and visual assessment viewpoints
	in relation to landform (contours), settlements and PRoW.
	Landscape character areas are derived from either published sources or have been developed through extensive
	site survey in the absence of published data. Viewpoints have been selected to represent views of the Proposed
	Scheme from visual receptors that have the potential to be significantly affected during either construction or
Live the description of the section Associates	operation.
LV-11 — Landscape Character Areas and Viewpoints	All viewpoints lie within the zone of theoretical visibility of the Proposed Scheme, which is being developed for
	inclusion in the formal EIA.
	These maps indicate all viewpoints considered in the assessment of visual effects. The working draft EIA Volume 2
	reports only report viewpoints which are considered likely to be significantly affected by the Proposed Scheme.
	The design of the Proposed Scheme will be informed through stakeholder engagement and further engineering
	and environmental studies.
	SV-o1 presents the predicted operational sound from the new railway.
	The sound levels from the new railway (expressed as LpAeq,T) are presented in typical noise mapping colours in 5
	dB steps. There is a panel at the top right of the figure; the left-hand section of this panel contains a key
CV On anti-pad County Manager delibety Circlifford Effects	communicating the night-time and daytime sound levels represented by the various colours. The right-hand part
SV-o1 – Operational Sound Contour Maps and Likely Significant Effects	of the same panel contains text explaining how the sound levels presented on the figure inform the assessment of
	direct noise impacts and likely significant effects.
	The design of the Proposed Scheme will be informed through stakeholder engagement and further engineering
	and environmental studies.
	This map series shows surface water features such as rivers, streams, ponds, canals and reservoirs, flood zones,
	and surface water abstractions as referred to in the working draft EIA Report.
WD or Curfore Water Pagaline	All points where the alignment crosses a watercourse are also shown and labelled with their reference in the text.
WR-o1 – Surface Water Baseline	These are shown as "Surface water crossing locations".
	The design of the Proposed Scheme will be informed through stakeholder engagement and further engineering

Mapping explanatory notes

Structure of the HS2 Phase 2a working draft Environmental Impact Assessment Report

This document is part of the working draft EIA Report for Phase 2a of the proposed HS2 rail network, between the West Midlands and Crewe. The working draft EIA Report sets out the current design of the Proposed Scheme, the likely environmental impacts (and, where possible, the likely significant environmental effects) of the construction and operation of the Proposed Scheme and proposed mitigation measures. The mapping will be updated for the formal EIA Report to reflect further work on the design and environmental assessment between now and when the hybrid Bill is deposited.

The working draft EIA Report comprises the following documents:

- Non-technical summary. This provides a summary in non-technical language of: the Proposed Scheme and reasonable alternatives considered; the impacts of the Proposed Scheme (and where possible, the likely significant environmental effects), both beneficial and adverse and the proposed means of avoiding, reducing or managing the likely significant adverse effects.
- Volume 1: Introduction and methodology. This provides: a description of HS2, the EIA process and the approach to consultation and engagement; details of the permanent features of the Proposed Scheme and generic construction techniques, based on the current level of design; a summary of the scope and methodology for the environmental topics and a summary of the strategic, route-wide and route corridor alternatives to the scheme and local alternatives considered prior to November 2015.
- Volume 2: Community area reports and map books. These cover the following community areas: 1 Fradley to Colton; 2 Colwich to Yarlet; 3 Stone and Swynnerton; 4 Whitmore Heath to Madeley; and 5 South Cheshire. The reports provide the following for each area: an overview of the area; a description of the construction and operation of the Proposed Scheme within the area, based on the current level of design; a summary of local alternatives considered since November 2015; a description of the environmental baseline; a description of the environmental impacts of the Proposed Scheme (and, where possible, the likely significant environmental effects), both beneficial and adverse and the proposed means of avoiding, reducing or managing the likely significant adverse effects.

 The maps relevant to each community area are provided in separate Volume 2 map books.
- Volume 3: Route-wide effects. This describes the impacts and effects that are likely to occur at a geographical scale greater than the community areas described in Volume 2.
- Glossary of terms and list of abbreviations. This contains terms and abbreviations, including units of measurement, used throughout the working draft EIA Report.
- Alternatives report: This describes the evolution of the Proposed Scheme and the reasonable alternatives considered.
- Draft Code of Construction Practice (CoCP): This sets out the measures and standards to provide effective planning, management and control of potential impacts on individuals, communities and the environment during construction.

Copyright statements

Copyright statements are presented in the Data dictionary and definitions section at the front of the map book, due to limited space to include this on the individual maps themselves.

Ordnance Survey data

All maps produced as part of the working draft EIA Report contain Ordnance Survey (OS) data. HS2 Ltd use the most up to date mapping available, where possible, supplied by the OS and as such, we cannot be held responsible for any inaccuracies within this data.

As part of our licence conditions, all digital maps carry a watermark.

Chainage

Most of the maps presented as part of the working draft EIA Report have a chainage value shown next to the alignment. Chainage is presented on the maps in black font, in the form of XX+YYY. E.g. 192+000 or 239+500.

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 192+000 refers to the point, 192,000m, or 192km, 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 1km intervals. For maps at 1:10,000, 1:5,000 and 1:2,500 scales, 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 different amounts of alignment on the map.

Map orientation

The majority of the maps presented in these map books are presented with the railway alignment running horizontally across the page. The direction of travel to London would be following the alignment to the right hand side of the page, and Crewe to the left.

The exception to this, is map series LV-11, which presents the alignment running from bottom to top of the page. This is to allow more of the modelled outputs to be shown at the appropriate map scale. In this instance, the direction of travel to London would be to the bottom of the page, and Crewe to the top.

Map books

In total there are 5 map books which make up the working draft EIA Report, all within volume 2. A list of the titles is provided below for reference.

Name		
Volume 2 Community area map book: CA1 Fradley to Colton		
Volume 2 Community area map book: CA2 Colwich to Yarlet		
Volume 2 Community area map book: CA3 Stone and Swynnerton		
Volume 2 Community area map book: CA4 Whitmore Heath to Madeley		
Volume 2 Community area map book: CA5 South Cheshire		

This page is left intentionally blank

High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report **Data dictionary and definitions**

Data dictionary and definitions

Legend features	Definition	Source	Copyright
5m contours	A contour line showing points of equal elevation (height) above a reference level, such as mean sea level and therefore gives indication of the topography, showing valleys and hills, and the steepness of slopes. Spaced at intervals of 5m.	High Speed Two (HS2) Ltd	
Airborne sound study area	This defines the area within which operational airborne sound impacts of the scheme have been quantitatively assessed. This area is defined as within 1km of surface sections of the route in rural areas and within 500m of surface sections of the route in urban areas.	High Speed Two (HS2) Ltd	
Ancient Woodland Inventory Sites (AWIS)	Ancient Woodland Inventory. Ancient Woodland is land that has had continuous woodland cover since at least 1600AD. Natural England maintain an inventory of ancient woodlands. Additional woodlands which are considered likely to be ancient, but have not been formally added to the inventory are not included in the mapped data set.	Natural England	© Natural England copyright 2016 Contains Ordnance Survey data © Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. http://www.naturalengland.org.uk/Images/open- government-licence-NE-OS_tcm6-30743.pdf
Balancing pond	The proposed location and extent of balancing ponds for drainage attenuation and infiltration. Outer boundary represents the perimeter.	High Speed Two (HS2) Ltd	
Chainage	Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 192+000 refers to the point, 192,000m, or 192km, from Euston Station. Chainage values increase in intervals dependant 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.	High Speed Two (HS2) Ltd	
Community area boundary	The working draft EIA Report has been split into 5 sections called Community Areas.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.
Conservation area	Areas considered worthy of preservation or enhancement because of their special architectural or historic interest. Conservation Areas have been captured and digitised from desktop based studies using publically available local authority information. Accuracy of the data is dependent upon that of the individual data source and areas are provided as indicative site boundaries only.	Staffordshire County Council Cheshire Historic Environment Record	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. © Staffordshire County Council © Cheshire Historic Environment Record
Construction traffic route	Public highways which may be used for HGV construction traffic.	High Speed Two (HS2) Ltd	
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.

Legend features	Definition	Source	Copyright
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.	High Speed Two (HS2) Ltd	
District/Borough boundary	Ordnance Survey local authority boundary mapping.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.
Ditches – new	The proposed location and extent of drainage ditches.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Electricity substation	Includes all auto-transformers and feeder stations.	High Speed Two (HS2) Ltd	
Engineering earthworks	Engineering (structural) earthworks which include railway slopes and crossings (roads etc.).	High Speed Two (HS2) Ltd	
Engineering earthworks: Cutting	Cuttings created in the construction of the railway and associated works such as highways.	High Speed Two (HS2) Ltd	
Engineering earthworks: Embankment	Embankments created in the construction of the railway and associated works such as highways. Landscaping and/or fence barriers: These lines represent the	High Speed Two (HS2) Ltd	
Envisaged mitigation to avoid / reduce significant noise effects	envisaged mitigation provided specifically to reduce sound levels from the Proposed Scheme at sensitive receptors in order to reduce or remove likely operational significant noise effects. Examples include noise fence barriers or earth bunds (nonengineering earthworks) acting as noise barriers. These features are labelled with the height of the top of the barrier/bund above rail level. Engineering e.g. cuttings (green tunnels marked separately): These lines represent engineering features of the route which reduce sound levels from the Proposed Scheme at potentially significant sensitive receptors. These features, therefore, serve a material purpose in reducing or avoiding likely significant noise effects. Examples include engineering cuttings near to sensitive receptors. These features are labelled with the height of the top of the feature above rail level.	High Speed Two (HS2) Ltd	
Envisaged features further reducing noise effects	Other environmental features e.g. landscaping: These lines represent environmental mitigation features provided for reasons other than noise mitigation which also reduce sound levels from the Proposed Scheme to the surrounding environment. These features are not placed specifically to reduce or remove a likely significant noise effect. Examples include landscaping and visual mitigation earthworks (non-engineering earthworks). Engineering e.g. cuttings: These lines represent engineering features which reduce sound levels from the Proposed Scheme to the surrounding environment but are not placed specifically to reduce or remove a likely significant noise effect. Examples include cuttings and safety barriers on viaducts which are not close to sensitive receptors.	High Speed Two (HS2) Ltd	

Legend features	Definition	Source	Copyright
Existing public right of way (PRoW)	See Public Rights of Way.	See Public Rights of Way.	See Public Rights of Way.
Existing watercourse	See Watercourse.	See Watercourse.	See Watercourse.
Flood Zone 2	National Flood Zone 2 (FZ2). Land assessed, ignoring the presence of flood defences, as having between a 1% and 0.1% annual probability of river flooding.	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.
Flood Zone 3	National Flood Zone 3 (FZ3). Land assessed, ignoring the presence of flood defences, as having a 1% or greater annual probability of river flooding.	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.
Grassed areas	Any other area grassed not included in landscaped earthworks or ecological habitat.	High Speed Two (HS2) Ltd	
Grassland habitat creation	Soft landscape design that can include any seeded areas for the purpose of creating grassland except for the engineering earthworks.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Historic flooding area	Historic Flood Map is the maximum extent of all recorded individual Historic Flood Events Outlines from river, the sea and groundwater springs and shows areas of land that have previously been subject to flooding in England & Wales.	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.
HS ₂ Access road	Access road to HS2 infrastructure such as electricity substations, balancing ponds and maintenance access points to the railway.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Landscape character areas (LCA)	This dataset represents the landscape character areas that have been assessed route wide as defined by the Landscape Architects. Landscape character areas (LCAs) are single unique areas which are the discrete geographical areas of a particular landscape type.	High Speed Two (HS2) Ltd	
Landscape earthworks	Landscape earthworks to provide permanent landscape, visual or acoustic mitigation.	High Speed Two (HS2) Ltd	
Landscape mitigation planting (scrub / woodland)	Screening planting, using woodland, for visual mitigation and landscape integration purposes.	High Speed Two (HS2) Ltd	
Licensed surface water abstraction (excluding public water supplies)	A surface water abstraction licence issued by the Environment Agency, which abstracts more than 20 cubic metres a day. Data supplied as spreadsheet. Digitised within 2km. Excludes the precise location of public water supplies in order to comply with	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.

Legend features	Definition	Source	Copyright
	Security and Environmental Measures Direction 1998.		
Listed building Grade I	Buildings and structures in England of special architectural or historic interest. In some instances the source data for individual buildings is grouped under a single grid reference, in these instances the data may have been interrogated further to identify		© Historic England 2016. Contains Ordnance Survey data © Crown copyright and database right 2016
	addresses of individual buildings with Listed Building status so that these can be displayed individually on the map. The Listed		
Listed building Grade II*	Building data consists of approximately 375,000 standing	Historic England	The Historic England GIS Data contained in this material was obtained on 21 June 2016. The most
Listed building Grade II	structures. The information has been converted from paper records georeferenced to digital mapping. A small percentage of the data was manually located. The data is subject to continuous review and regularly updated as new structures are designated		publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk.
Local Nature Reserve (LNR)	and positional accuracy improves. A Local Nature Reserve (LNR) is a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities. Data supplied has the status of Declared. The boundaries are interpreted from material gathered from the local authorities and does not currently cover all LNRs. This national dataset is indicative not definitive. Definitive information can only be provided by individual local authorities and you should refer directly to their information for all purposes that require the most up to date and complete dataset.	Natural England	© Natural England copyright 2016 Contains Ordnance Survey data © Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. http://www.naturalengland.org.uk/Images/opengovernment-licence-NE-OS_tcm6-30743.pdf
Local Wildlife Site (LWS) - county/metropolitan value Local Wildlife Site (LWS) - less than county/metropolitan value	Local Wildlife Sites (LWSs) are identified and selected for their local nature conservation value. They protect threatened species and habitats acting as buffers, stepping stones and corridors between nationally-designated wildlife sites. Local Wildlife Sites (LWS) are local non-statutory nature conservation sites. They were formerly referred to as County Wildlife Sites.	Staffordshire Ecological Record Cheshire East Council	© Staffordshire Ecological Record © Cheshire East Council
	In some cases Local Wildlife data is not shown as this is still being verified.		
Main construction compound	Main Construction Compounds in which main contractors offices and welfare facilities will be located.	High Speed Two (HS2) Ltd	
Main utility works	Represents all new major utility installations and also modifications to existing utilities required to construct the scheme. Includes water, electricity, telecommunications and gas.	High Speed Two (HS2) Ltd	
National Nature Reserve (NNR)	A National Nature Reserve (NNR) is the land declared under the National Parks and Access to the Countryside Act 1949 or Wildlife and Countryside Act (1981) as amended.	Natural England	© Natural England copyright 2016 Contains Ordnance Survey data © Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. http://www.naturalengland.org.uk/Images/open- government-licence-NE-OS_tcm6-30743.pdf
New, diverted or realigned PRoW	New, realigned or diverted Public Rights of Way (PRoW).	High Speed Two (HS2) Ltd	3 / 13 1
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	High Speed Two (HS2) Ltd	

Legend features	Definition	Source	Copyright
	cuttings - see the SV map series for more detail on noise mitigation.		
Non engineering earthworks: Cutting	Cuttings created in the construction of landscape features and mitigation measures.	High Speed Two (HS2) Ltd	
Non engineering earthworks: Embankment	Embankments created in the construction of landscape features and mitigation measures.	High Speed Two (HS2) Ltd	
Non-residential receptors identified for assessment	The assessment of sound, noise and vibration considers the likely significant noise and vibration effects arising from the construction and operation of the Proposed Scheme on community facilities such as schools, hospitals, places of worship, and also commercial properties such as offices and hotels, collectively described as 'non-residential receptors'.	High Speed Two (HS2) Ltd	
Photomontage location (proposed)	Shows the locations from which verifiable photomontages have been produced. The locations are based on a fully surveyed point.	High Speed Two (HS2) Ltd	
Potential noise insulation qualifier	Potential noise insulation qualifier. Further information on noise insulation can be found in Volume 2 reports.	High Speed Two (HS2) Ltd	
Public realm/Replacement community facility	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. Replacement community facility: Area of land for the provision of a permanent replacement community facility, such as a playground, community centre or activity centre.	High Speed Two (HS2) Ltd	
Public Rights of Way	Public rights of way are highways which can be used for the following purposes: - Footpaths - pedestrians only - Bridleways - pedestrians, cyclists and equestrians - Restricted byways - as bridleways plus non-motorised vehicles - Byways open to all traffic. Definitive Map data supplied by surveying authorities.	Staffordshire County Council Cheshire East Council	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. © Staffordshire County Council © Cheshire East Council
Rail alignment	Longitudinal geometry of the tracks consisting of a series of straights and curves.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Registered park or garden	Parks and Gardens of special historic interest. Supplied by Historic England. Of the 1,590 Registered Parks and Gardens, over 91% were captured against the 1:10,000 Ordnance Survey Raster product. 135 records are potentially subject to movement under Positional Accuracy Improvement (PAI) improvements.	Historic England	© Historic England 2016. Contains Ordnance Survey data © Crown copyright and database right 2016 The Historic England GIS Data contained in this material was obtained on 17 September 2015. The most publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk.
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	High Speed Two (HS2) Ltd	

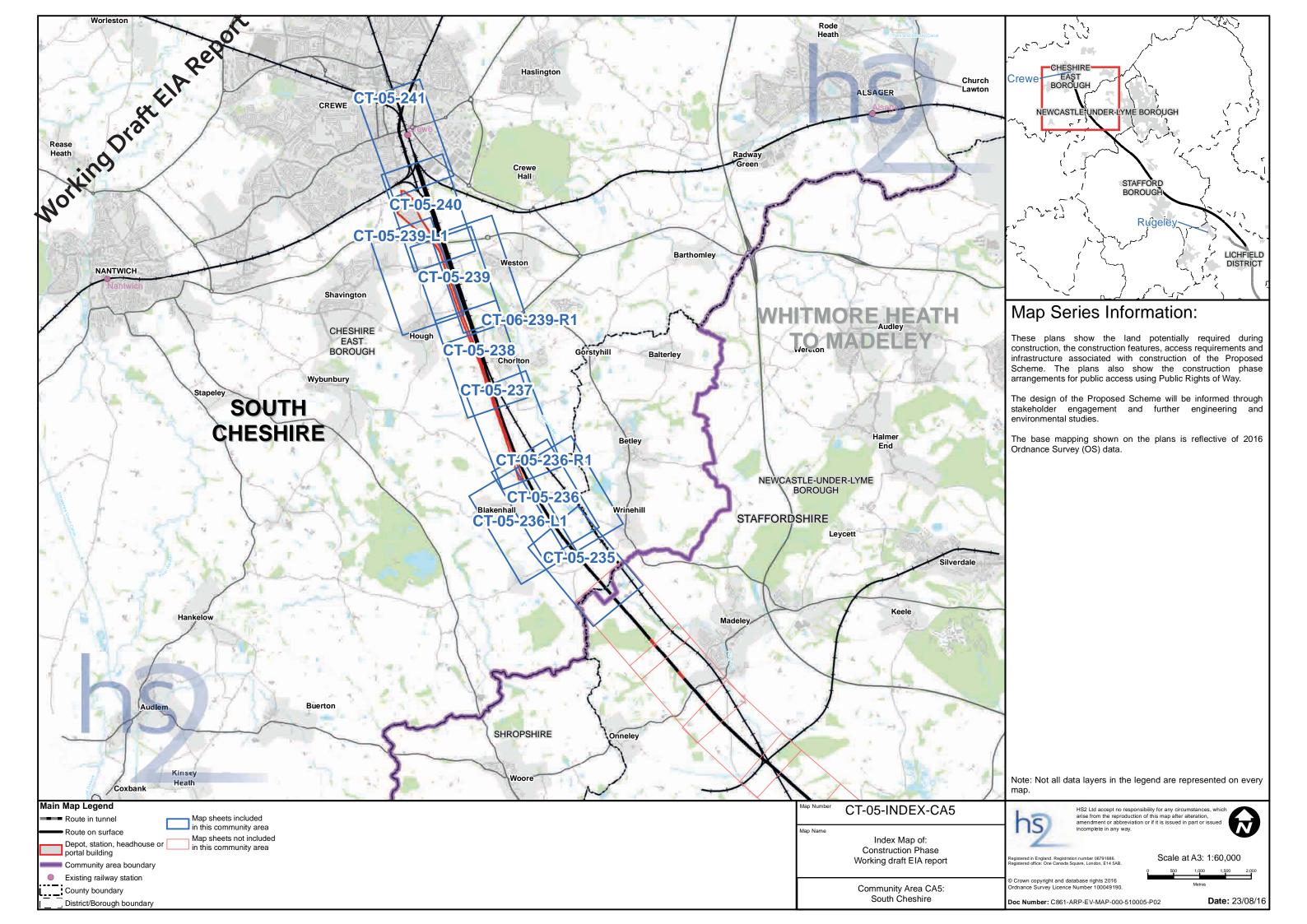
Legend features	Definition	Source	Copyright
	climate change.		
Returned to suitable development use	Post construction land will be reinstated to enable potential future development.	High Speed Two (HS2) Ltd	
Risk of Flooding from Surface Water	The Environment Agency's updated Flood Map for surface water gives an indication of the broad extent of areas likely to be at risk of surface water flooding, i.e. areas where surface water would be expected to flow or pond. The uFMfSW will pick out natural drainage channels, rivers, low areas in floodplains, and flow paths between buildings. But it will only indicate flooding caused by local rainfall. It does not show flooding that occurs from groundwater, overflowing watercourses, drainage systems or public sewers caused by catchment-wide rainfall events or river flow. It is therefore very important that users apply local knowledge and in particular the 'locally agreed surface water information' held by the lead local flood authority to assess how suitable the updated Flood Map for Surface Water is for their needs. The uFMfSW may be suitable for identifying where properties are in areas at risk of flooding for locations where surface water flooding is strongly influenced by topography but should not be used to define the flood risk at an individual property. Two rainfall events, one with a 1 in 30 and the other with a 1 in 100 chance of occurring in any year, are modelled and mapped.	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.
Route in tunnel Route on surface	Represents the proposed route of HS2, split into route on surface and tunnelled sections.	High Speed Two (HS2) Ltd	
Satellite construction compound	Represents satellite construction compounds which serve local works for major construction elements within a main contract.	High Speed Two (HS2) Ltd	
Scheduled monument	A schedule has been kept since 1882 of monuments considered to be of national importance by the government. The current legislation, the Ancient Monuments and Archaeological Areas Act 1979, supports a formal system of Scheduled Monument Consent for any work to a designated monument. The Scheduled Monument layer consists of approximately 22,380 monuments tied into the Ordnance Survey. The majority of these are fixed; however, a small number of records may be updated as digital positional accuracy improves. The data is subject to continuous review and regularly updated as new monuments are designated.	Historic England	© Historic England 2016. Contains Ordnance Survey data © Crown copyright and database right 2016 The Historic England GIS Data contained in this material was obtained on 17 September 2015. The most publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk.
Site of Special Scientific Interest (SSSI)	A Site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), as amended.	Natural England	© Natural England copyright 2016 Contains Ordnance Survey data © Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016. http://www.naturalengland.org.uk/Images/open- government-licence-NE-OS_tcm6-30743.pdf
Stopped-up PRoW	Public rights of way that will be closed due to construction of the scheme.	High Speed Two (HS2) Ltd	
Surface water crossing location	Locations where the route crosses a watercourse.	High Speed Two (HS2) Ltd	

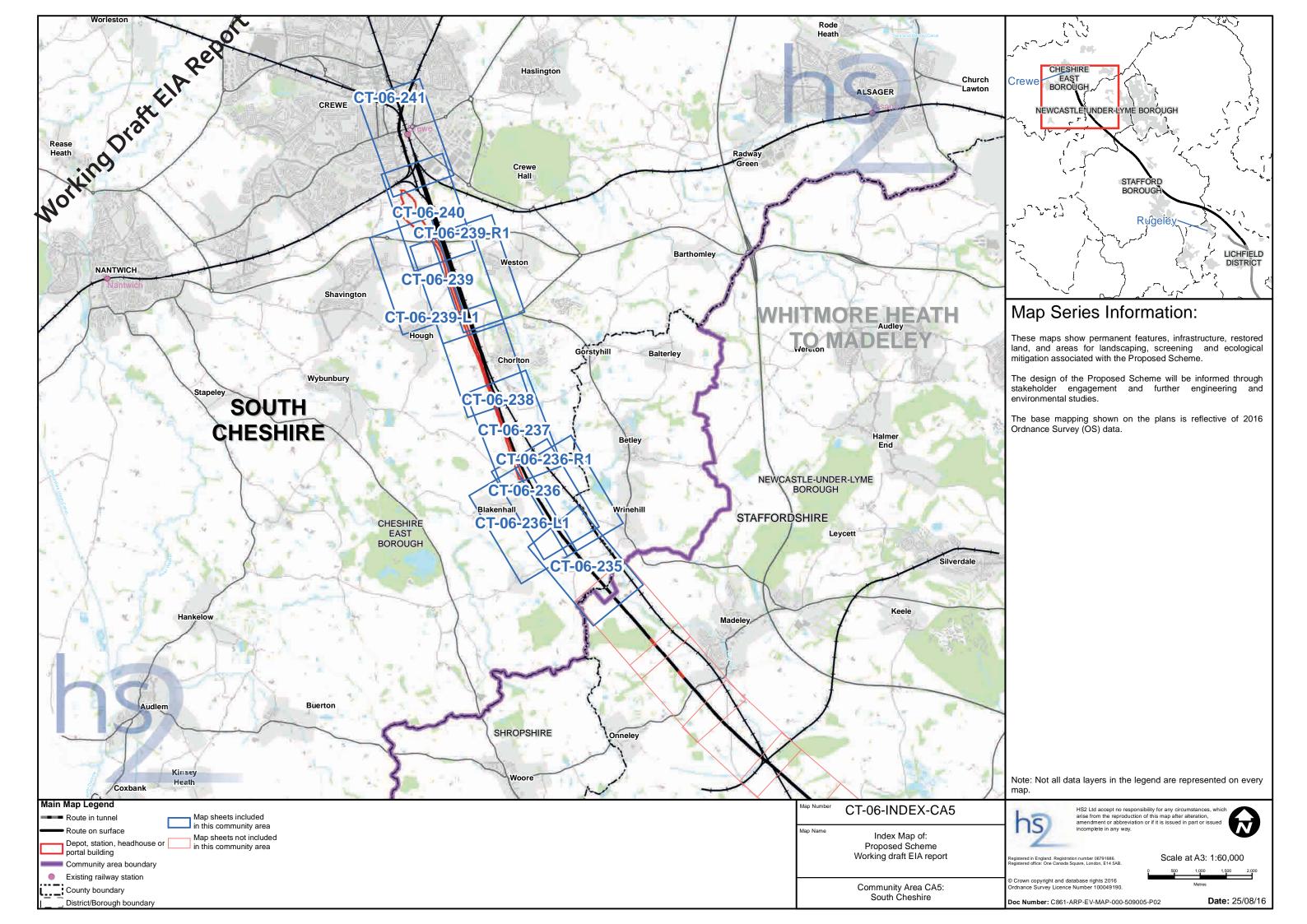
Legend features	Definition	Source	Copyright
Sustainable placement	Sustainable placement: the on-site placement for disposal of surplus excavated material to avoid causing environmental effects (e.g. transport) that would otherwise be associated with the off-site disposal of that material. "On-site" in 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.	High Speed Two (HS2) Ltd	
Temporary highway diversion / realignment	Indicative temporary highway diversion layouts during the construction phase.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Temporary replacement community facility	Area of land for the provision of a temporary replacement community facility, such as a playground, community centre or activity centre, whilst construction works are in progress.	High Speed Two (HS2) Ltd	
Tunnel portal	The footprint of a tunnel portal.	High Speed Two (HS2) Ltd	
Tunnels external extent	The external excavated extent of each tunnel bore.	High Speed Two (HS2) Ltd	
Viewpoint	This dataset shows the locations of the visual receptors from which the schemes visual impact has been assessed.	High Speed Two (HS2) Ltd	
Water body	Based on Ordnance Survey Vector Map District.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.
Watercourse	The Detailed River Network (DRN) is the only large-scale, accurate and fully attributed digital river centreline covering England and Wales.	Environment Agency	© Environment Agency copyright and/or database right 2016. All rights reserved.
Watercourse diversion	Includes rivers, streams, ditches and other open channels, diversions to these, together with any new culverts required.	High Speed Two (HS2) Ltd	
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.	High Speed Two (HS2) Ltd	
Woodland	Woodland areas derived from Ordnance Survey MasterMap data.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.
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.	High Speed Two (HS2) Ltd	

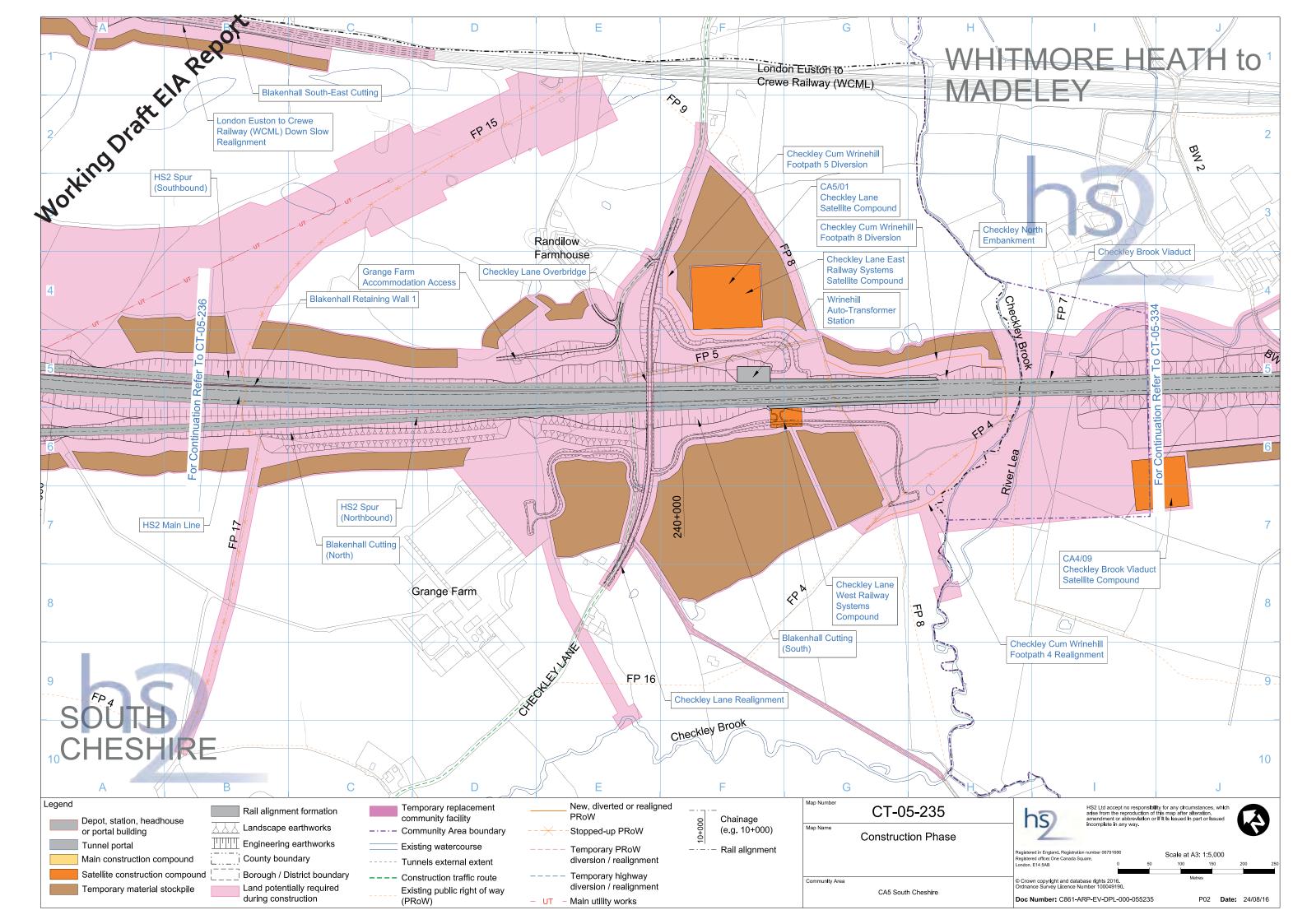
High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report

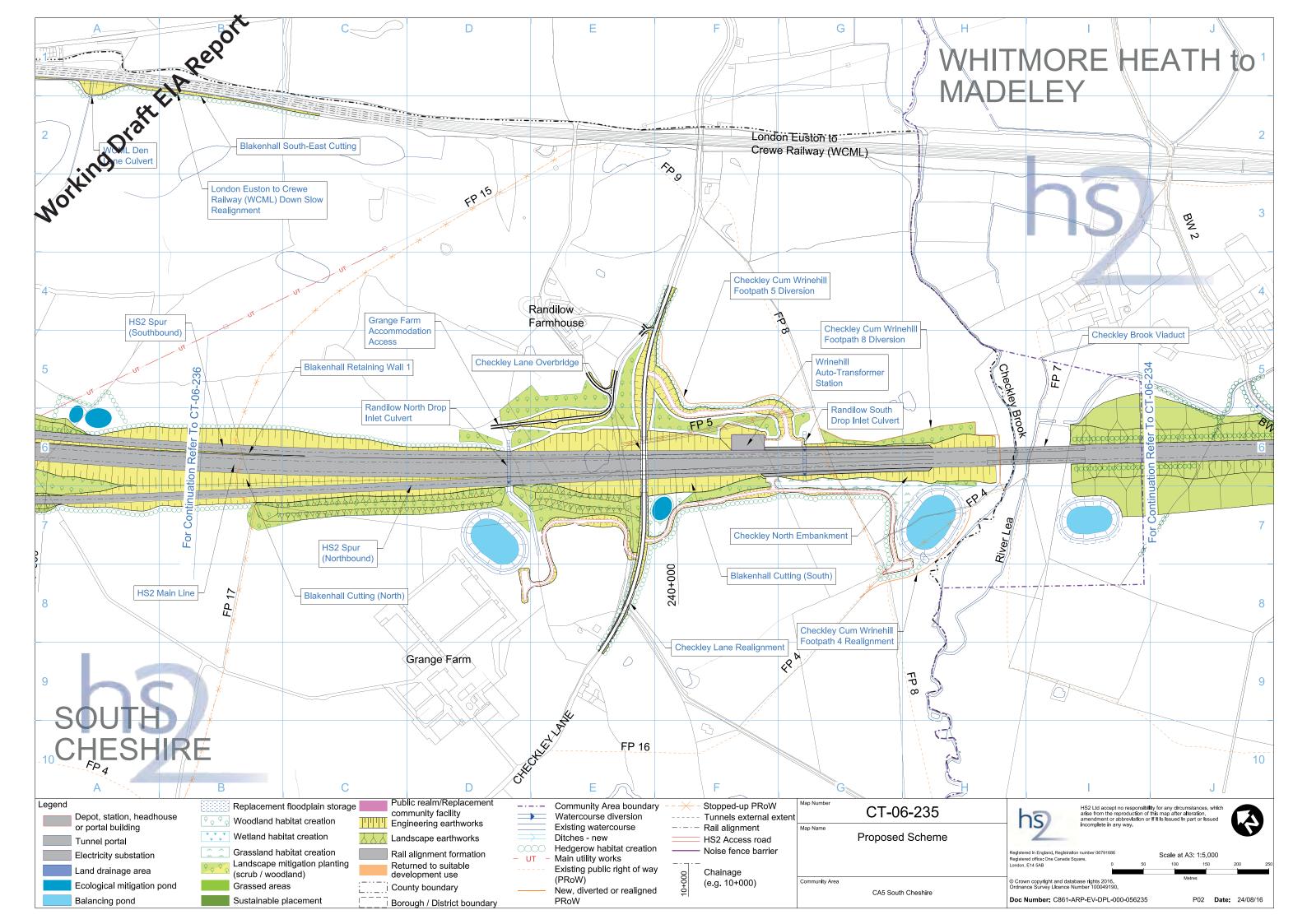
CT-05 – Construction Phase

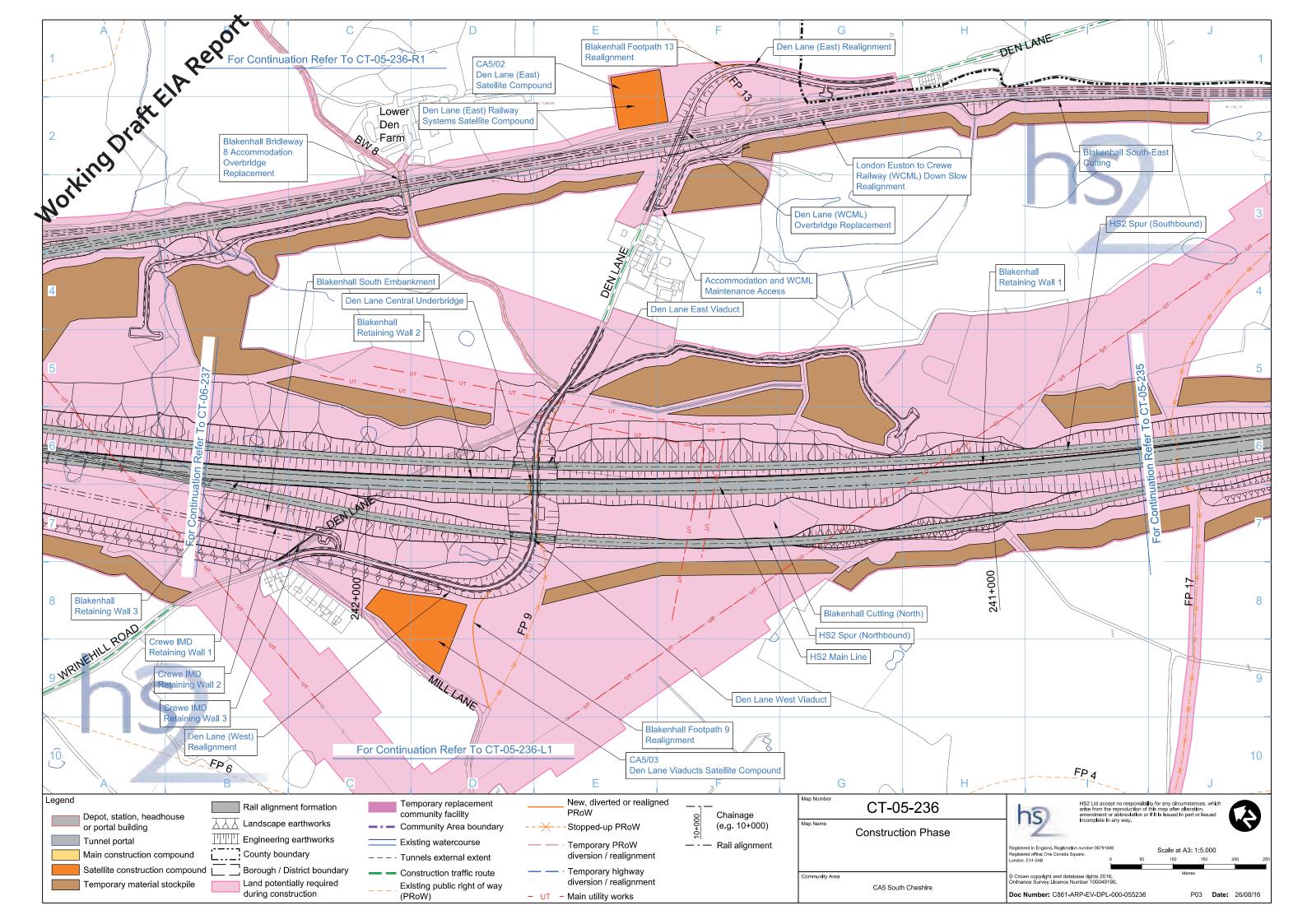
CT-06 – Proposed Scheme

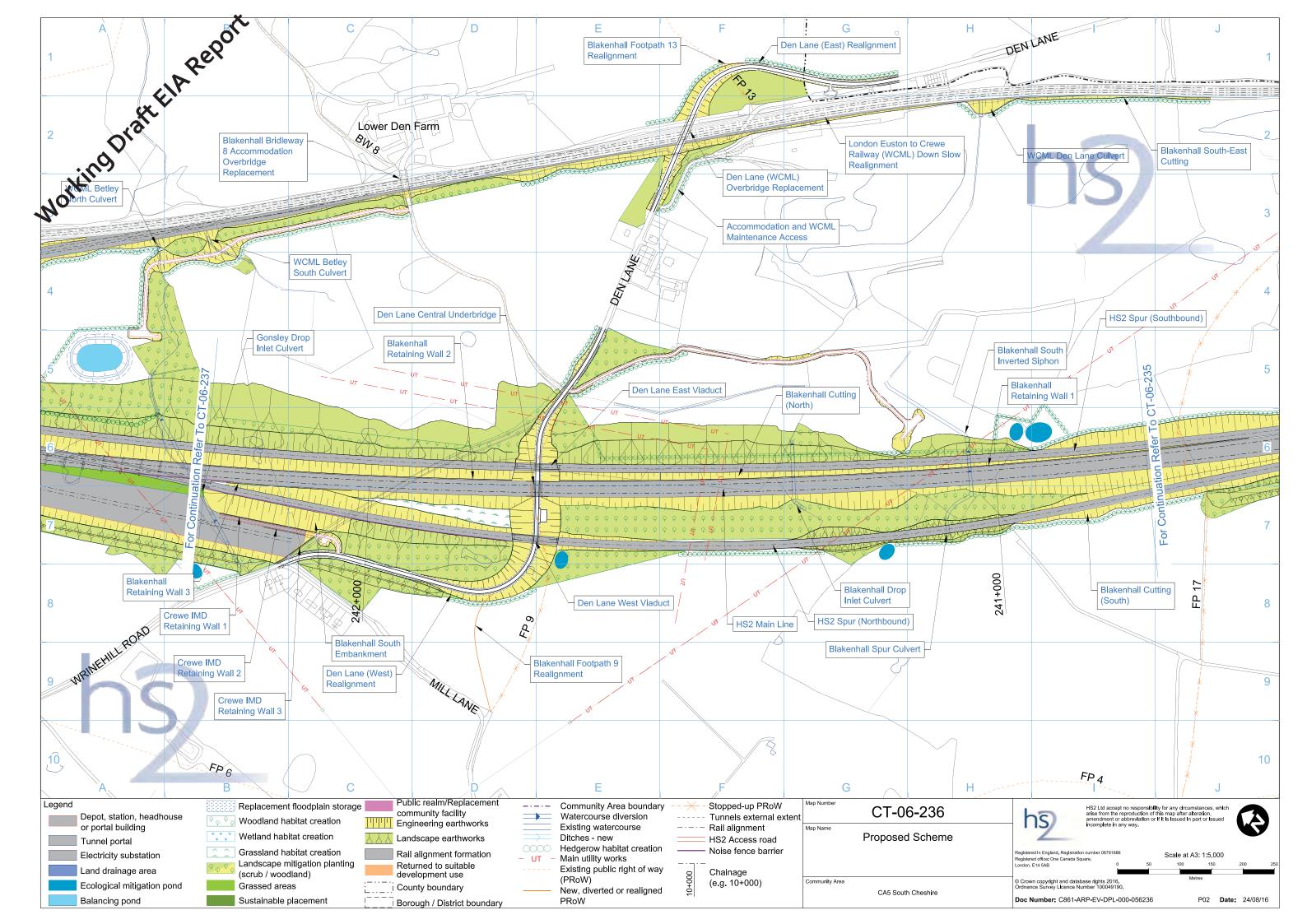


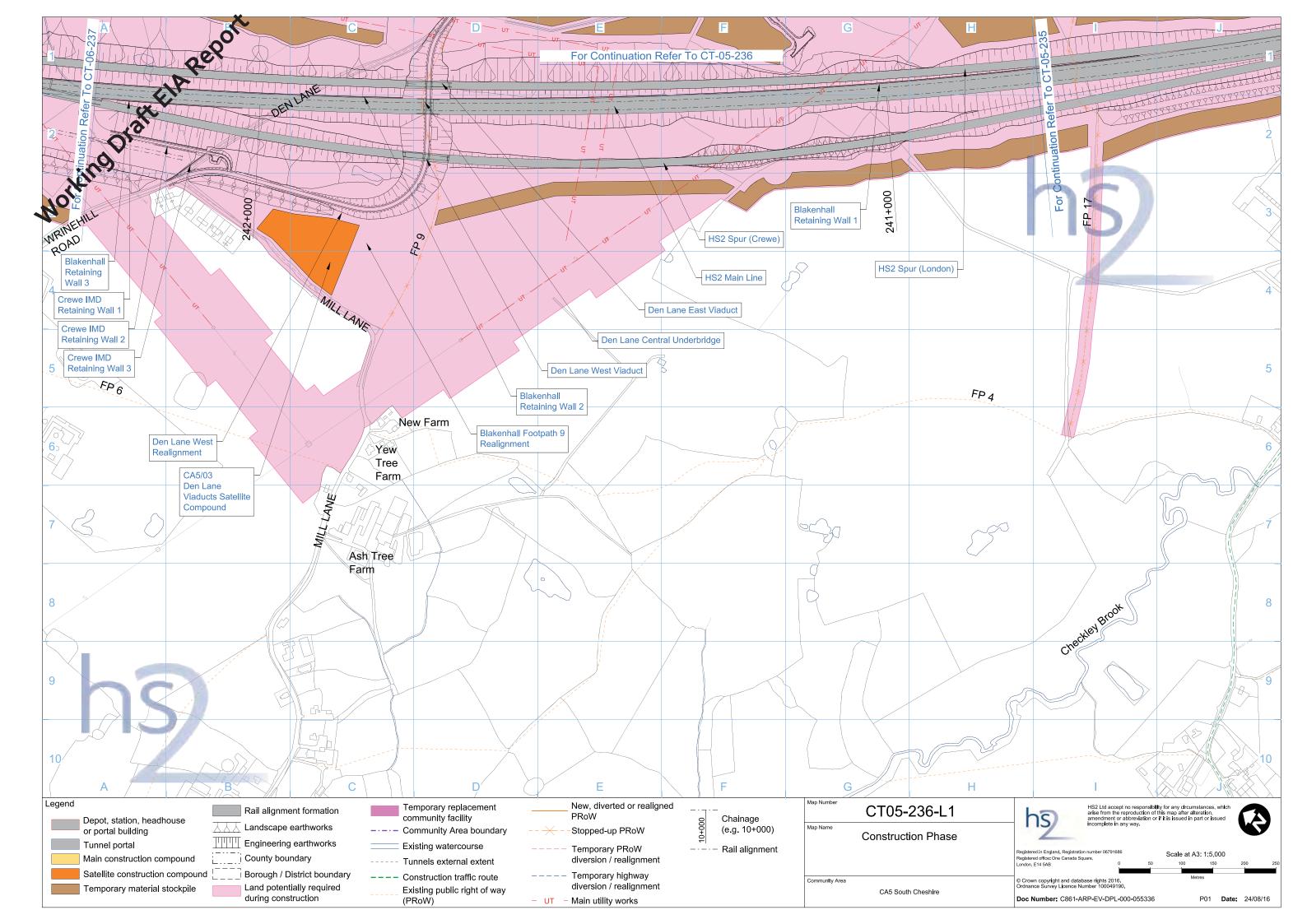


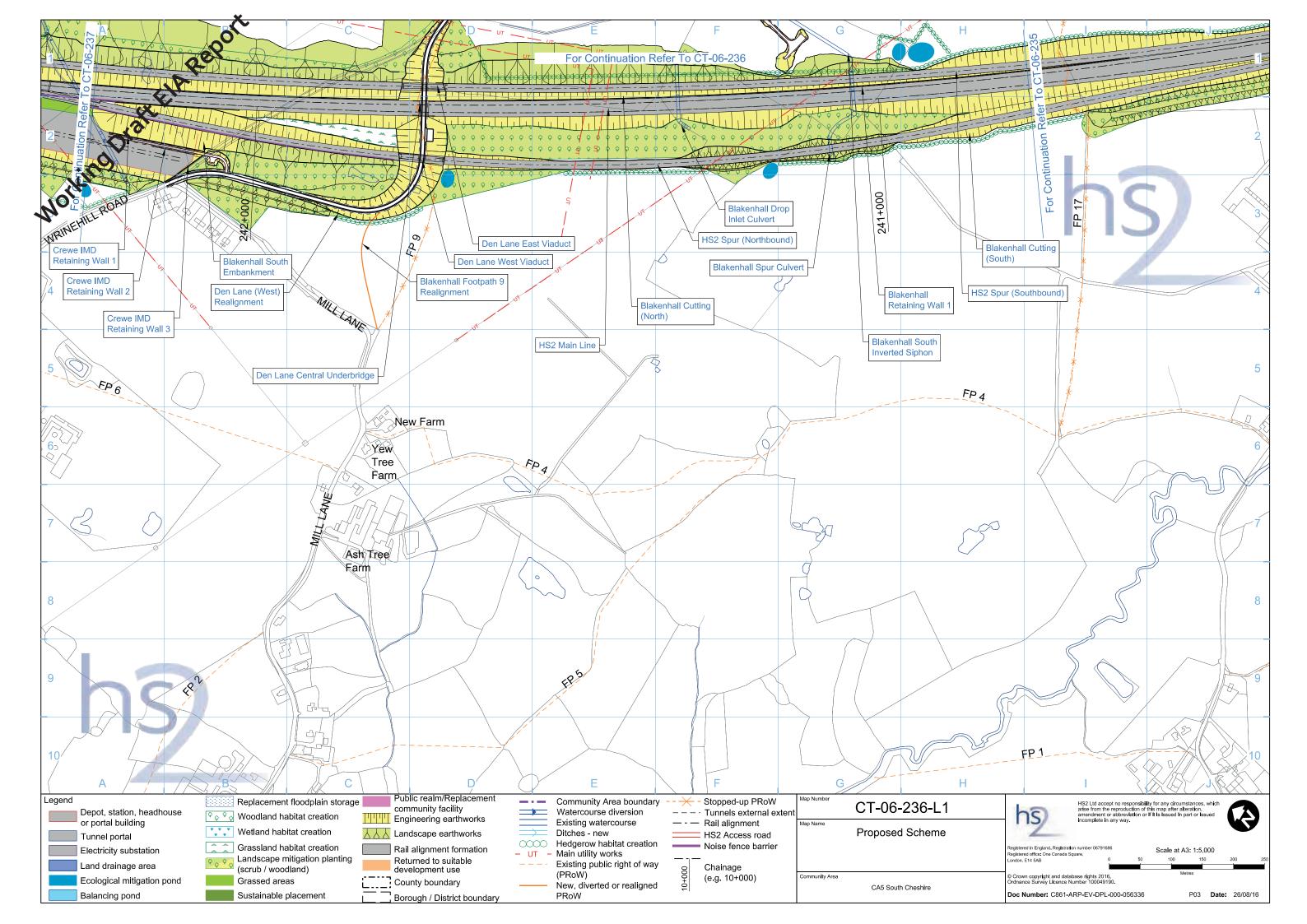


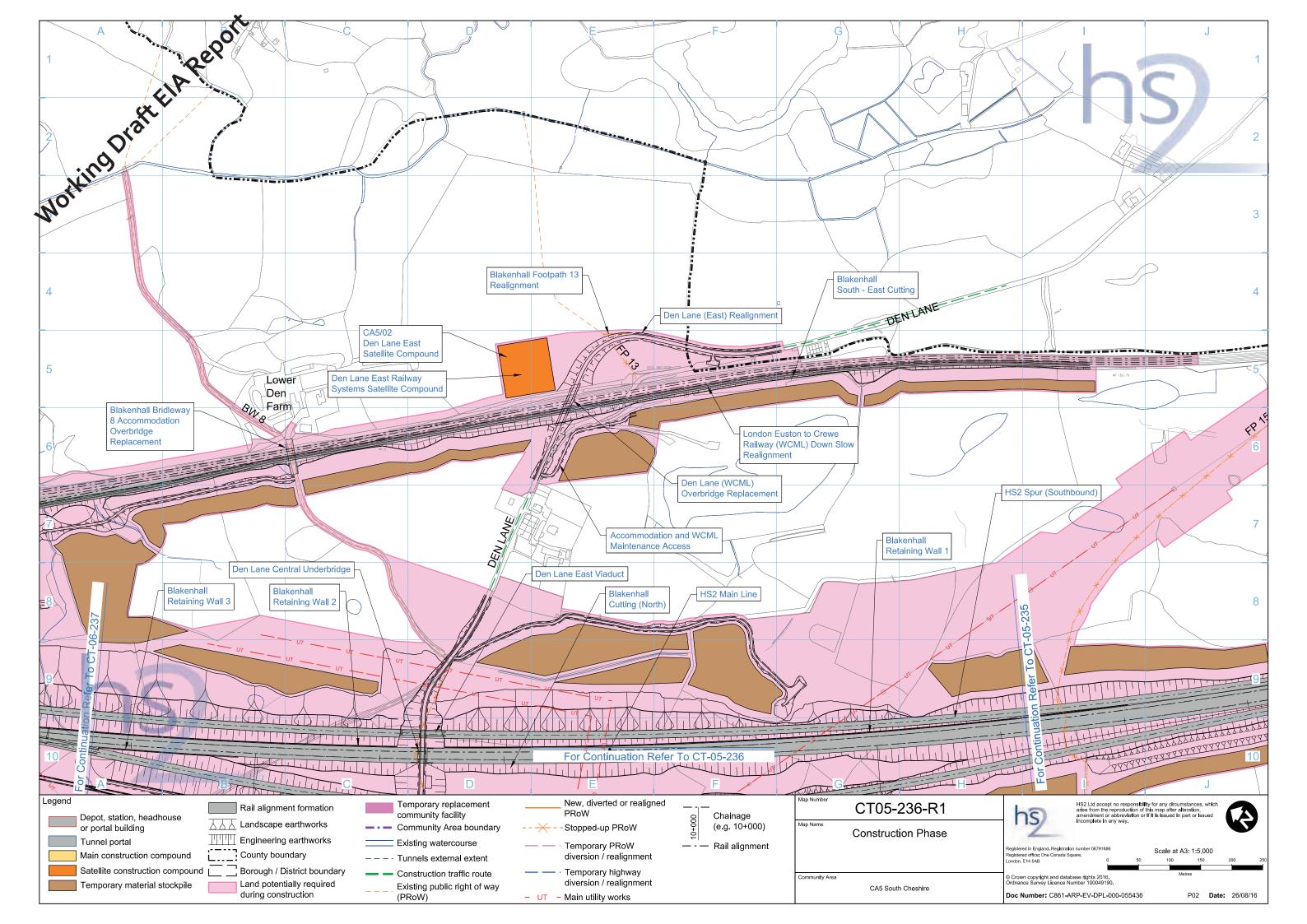


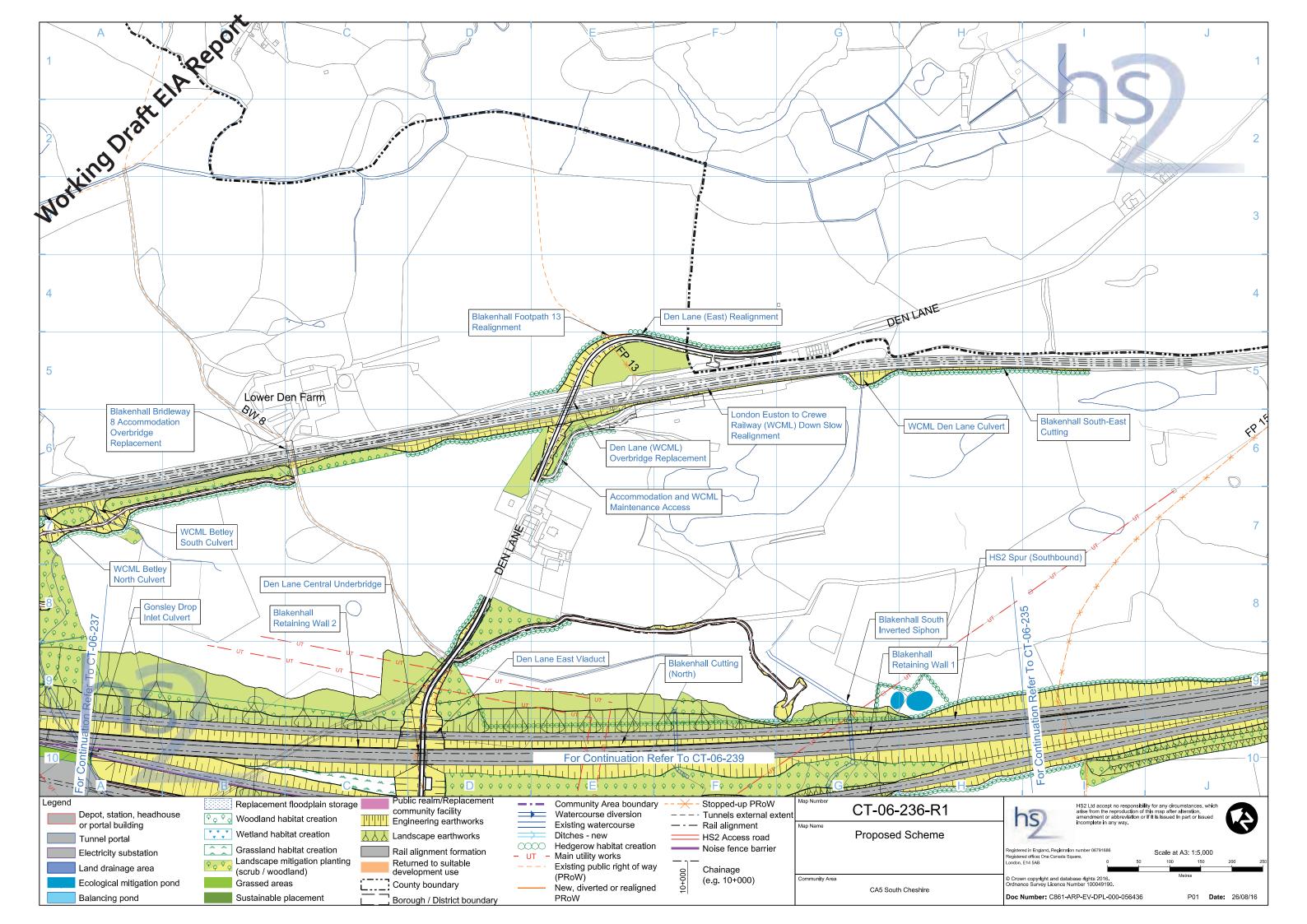


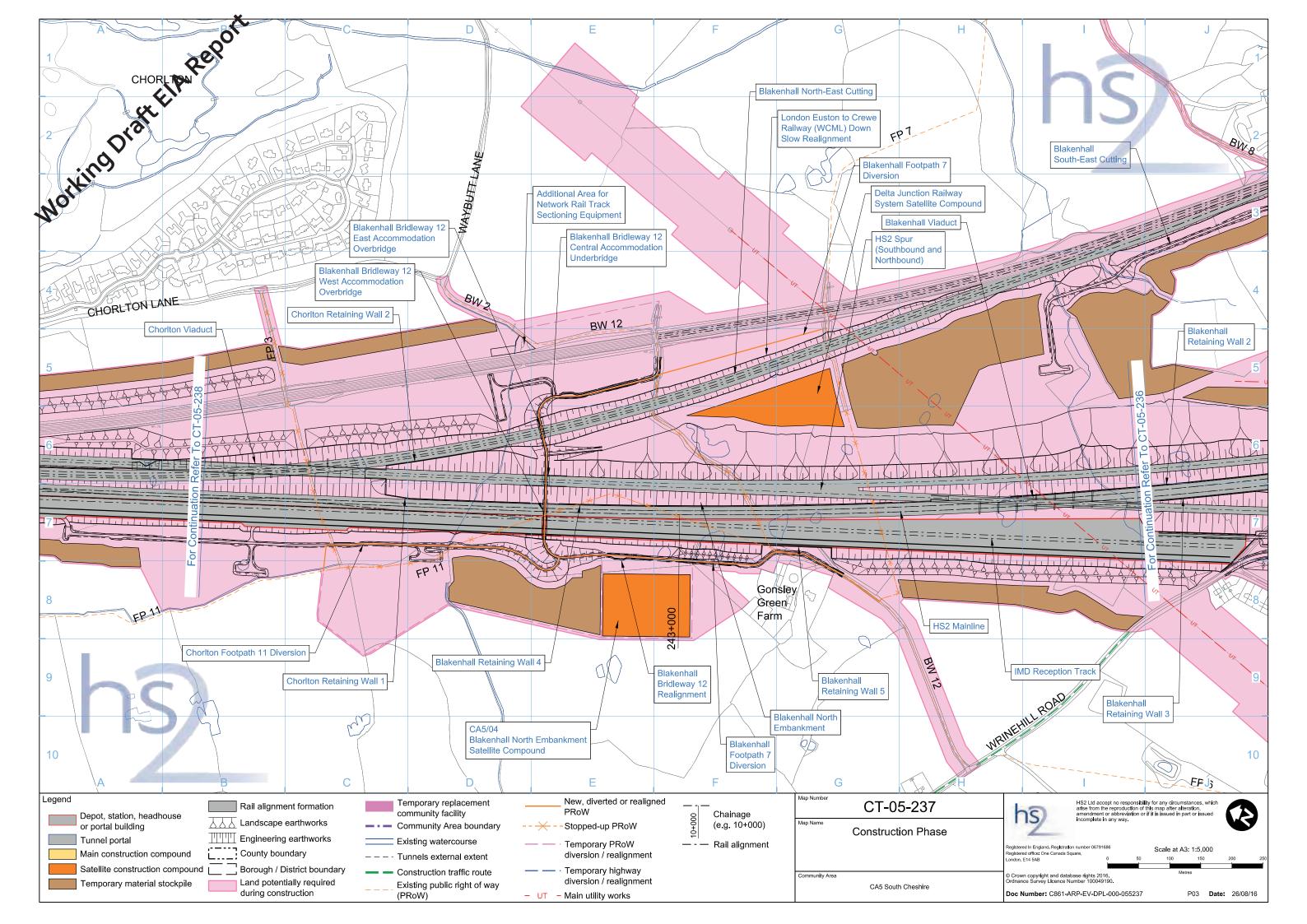


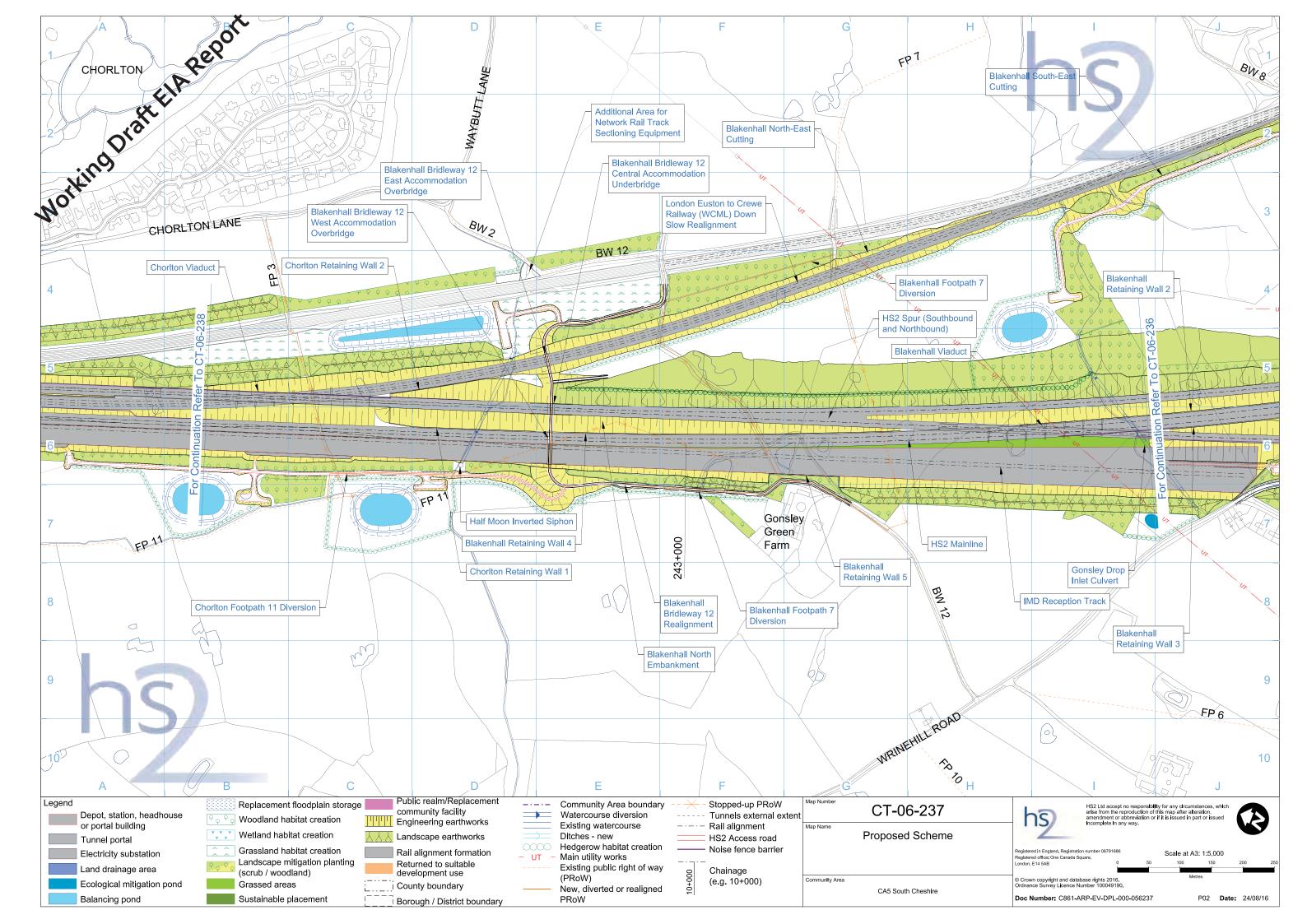


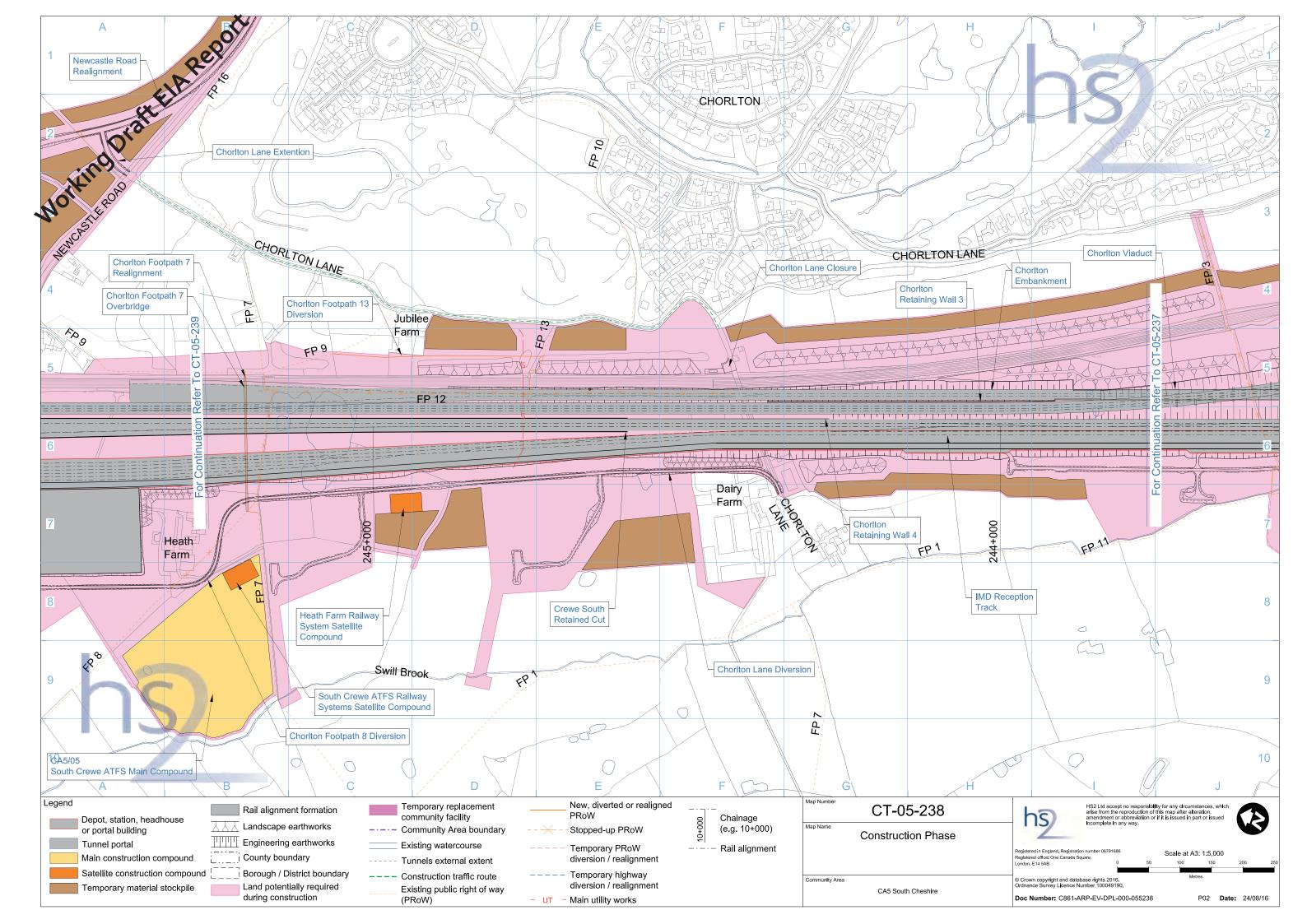


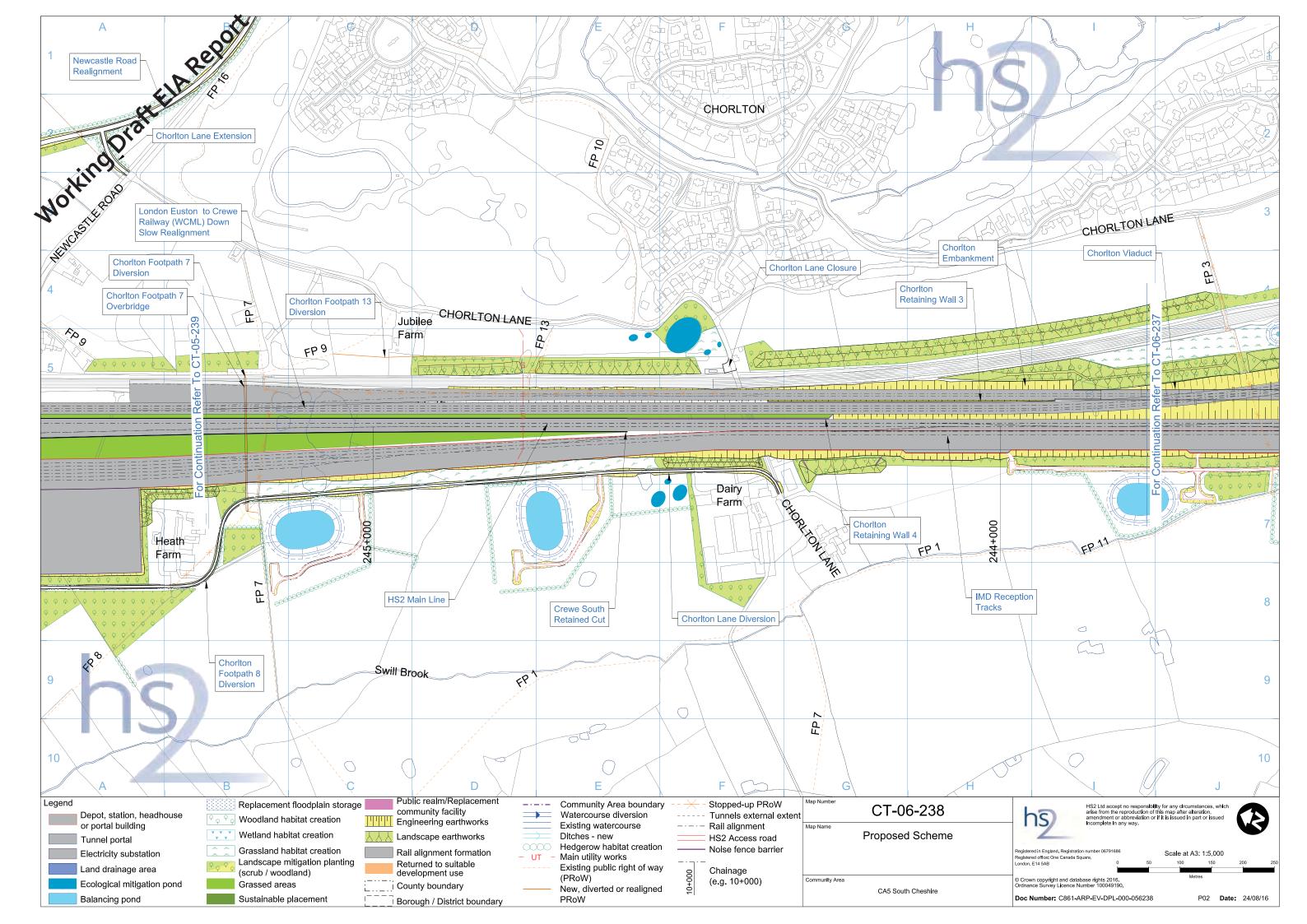


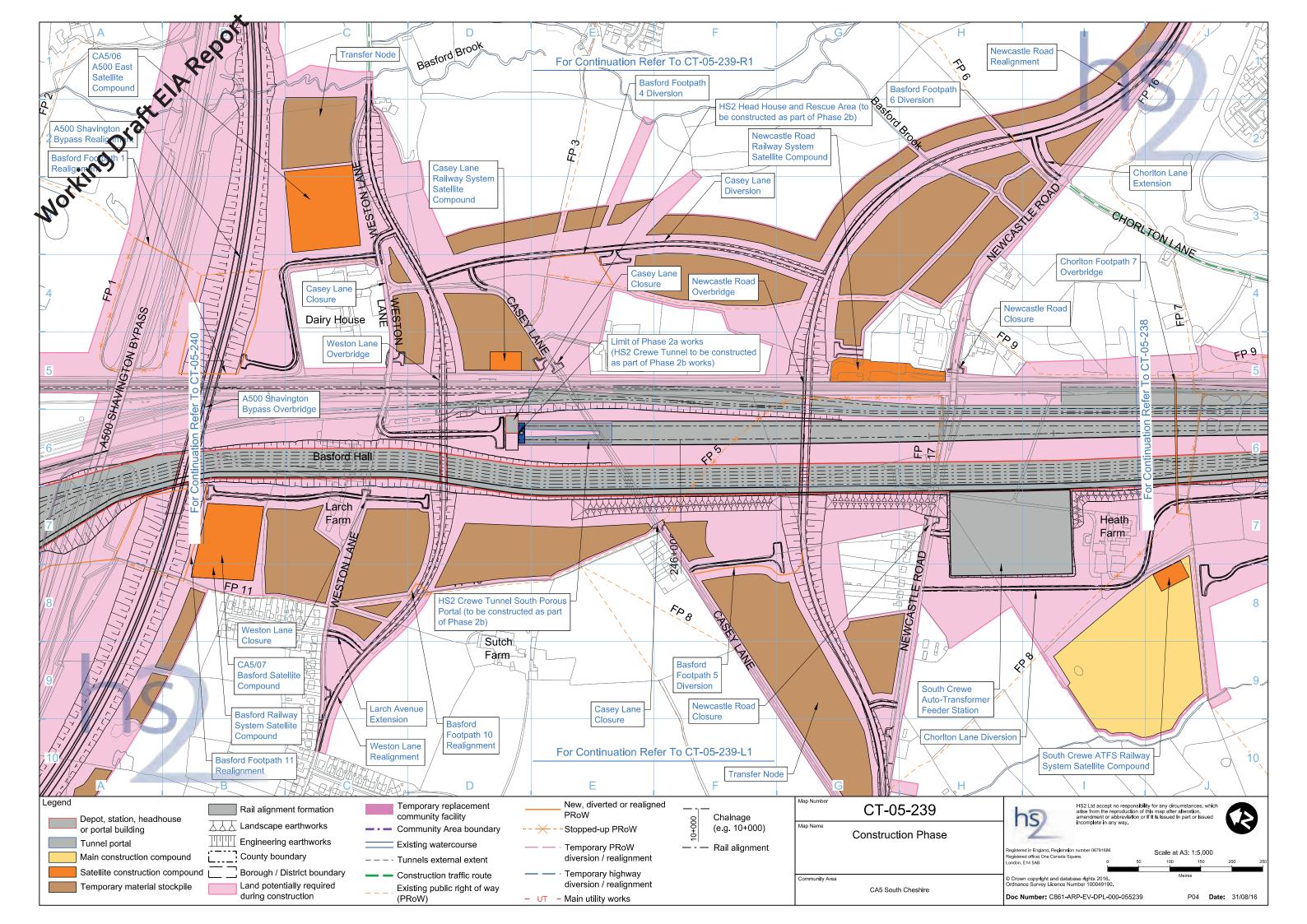


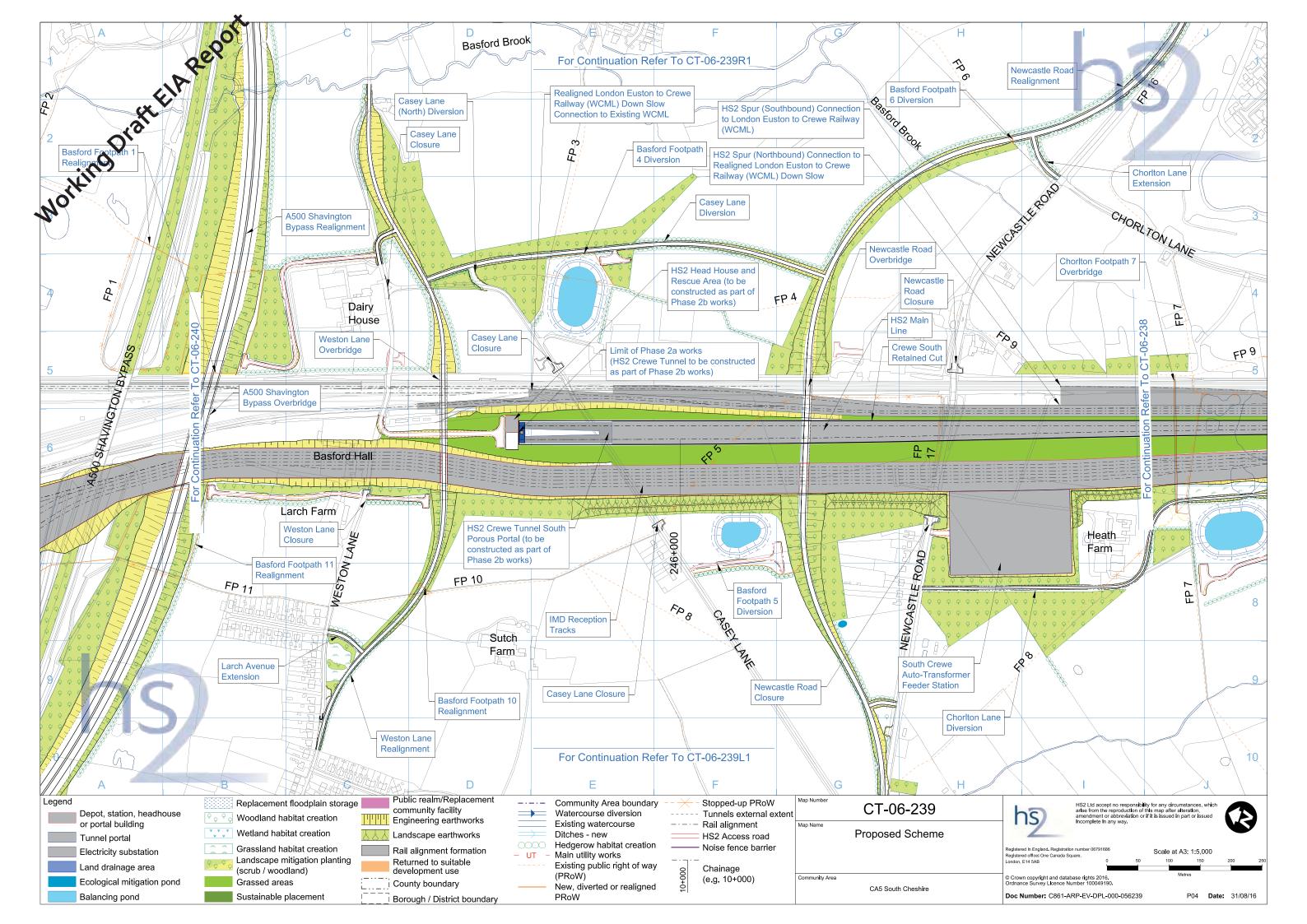


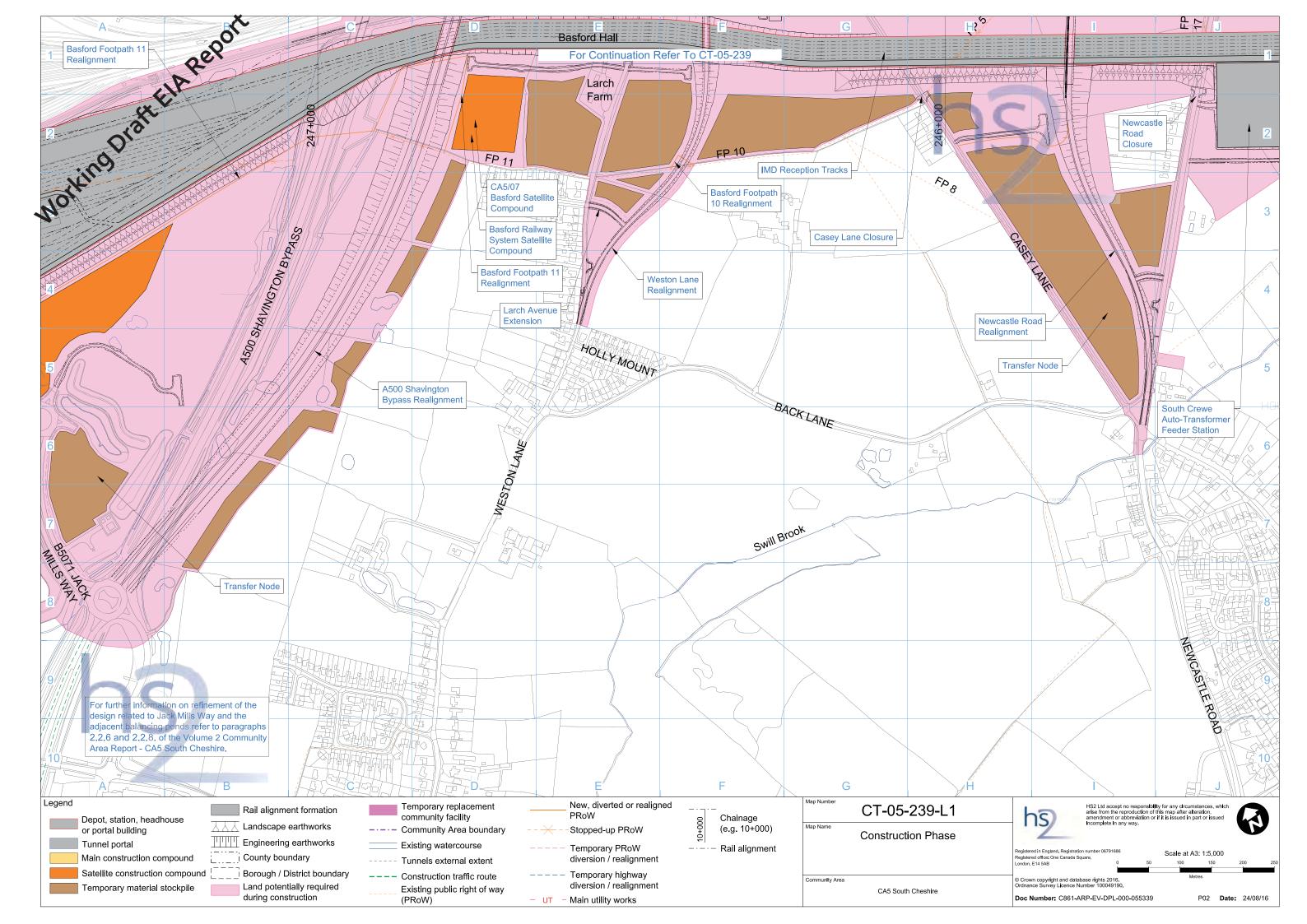


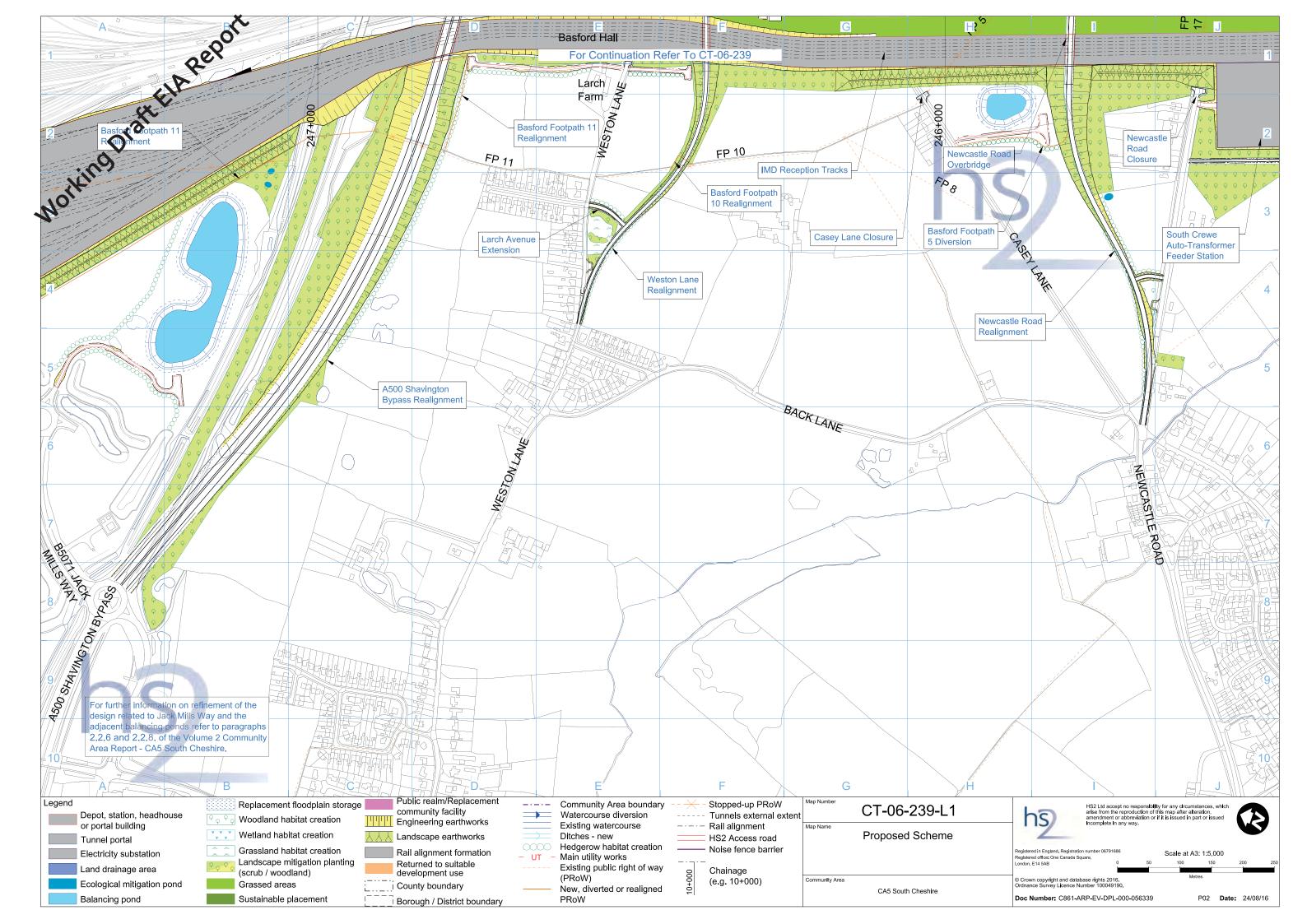


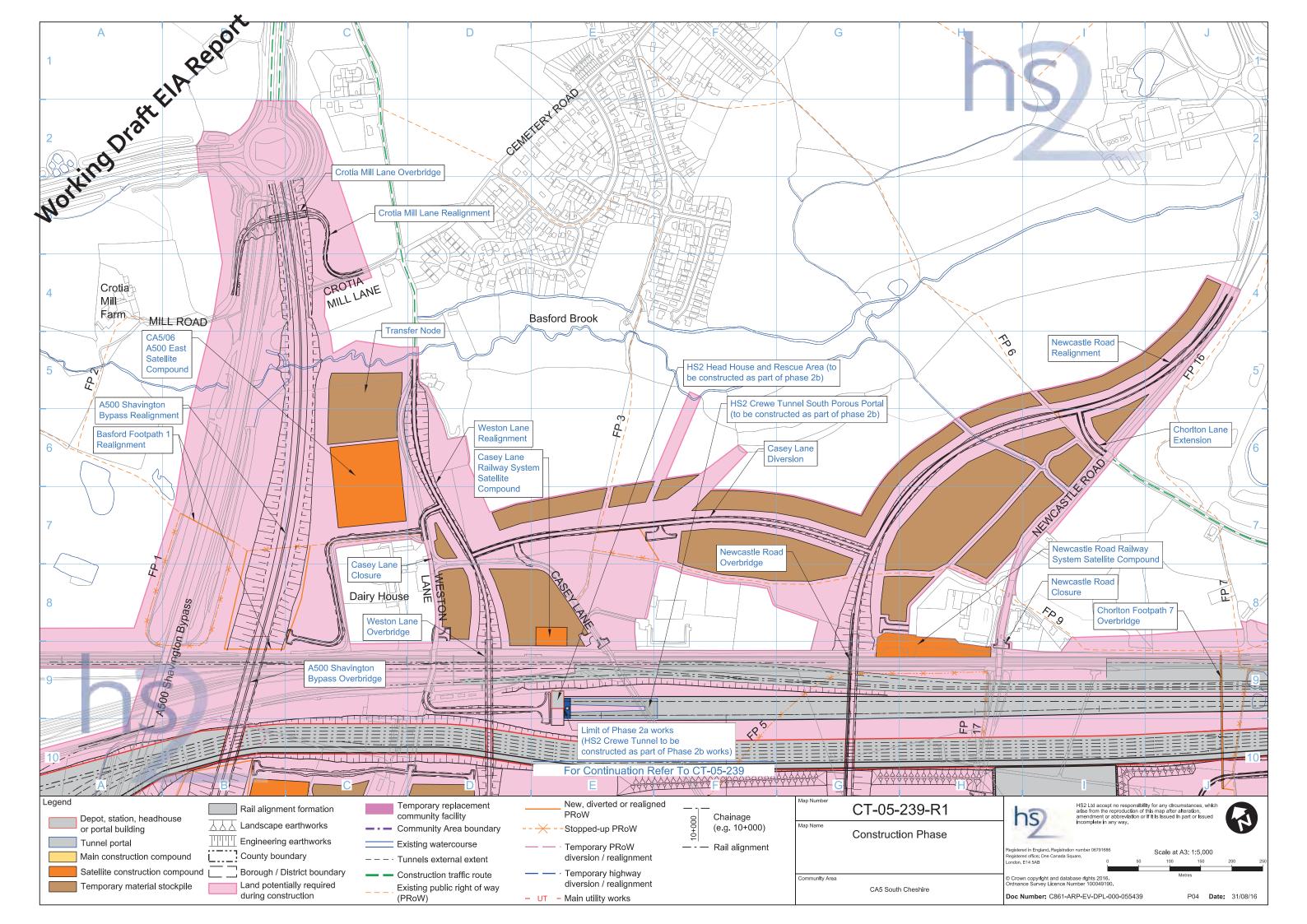


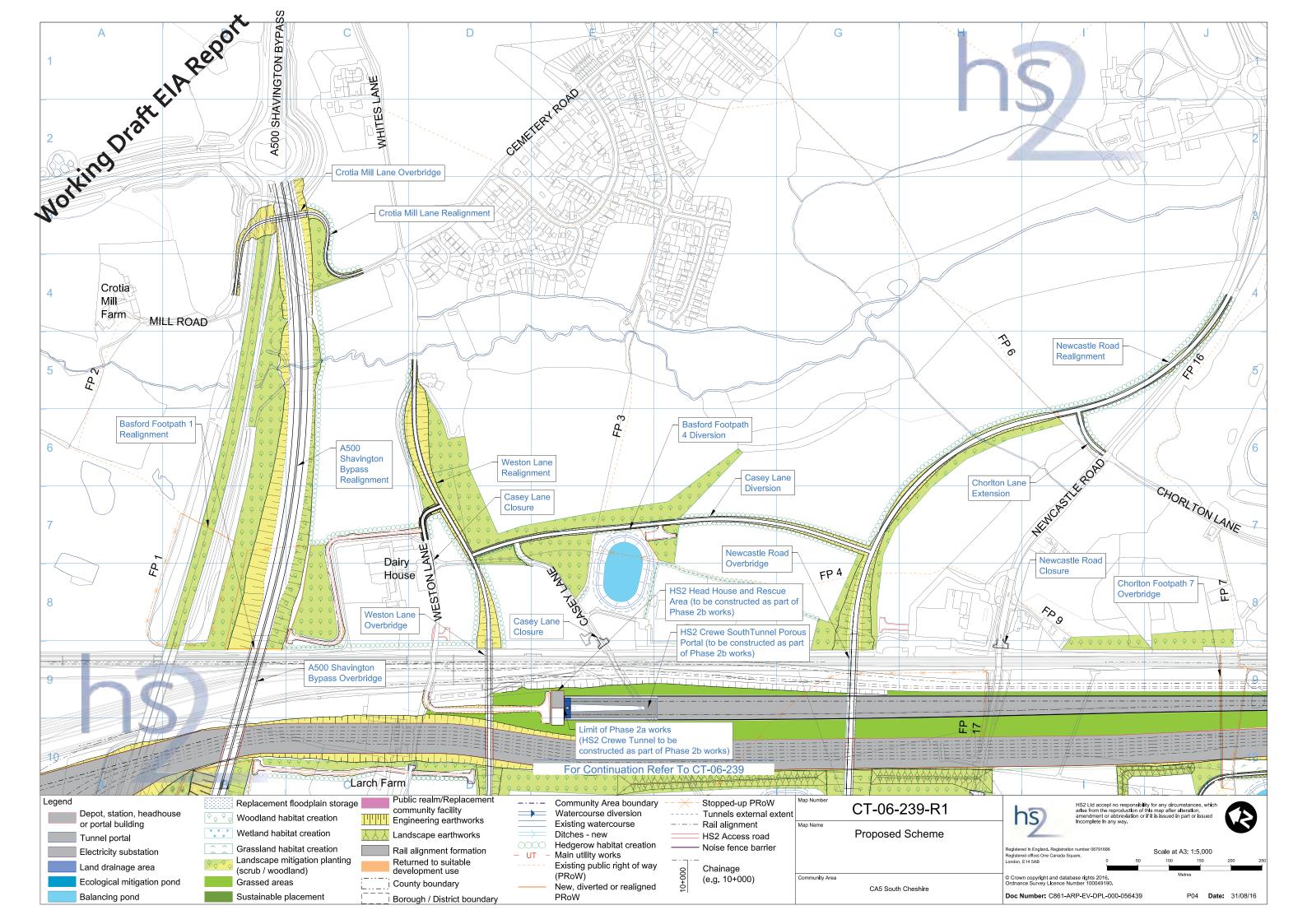


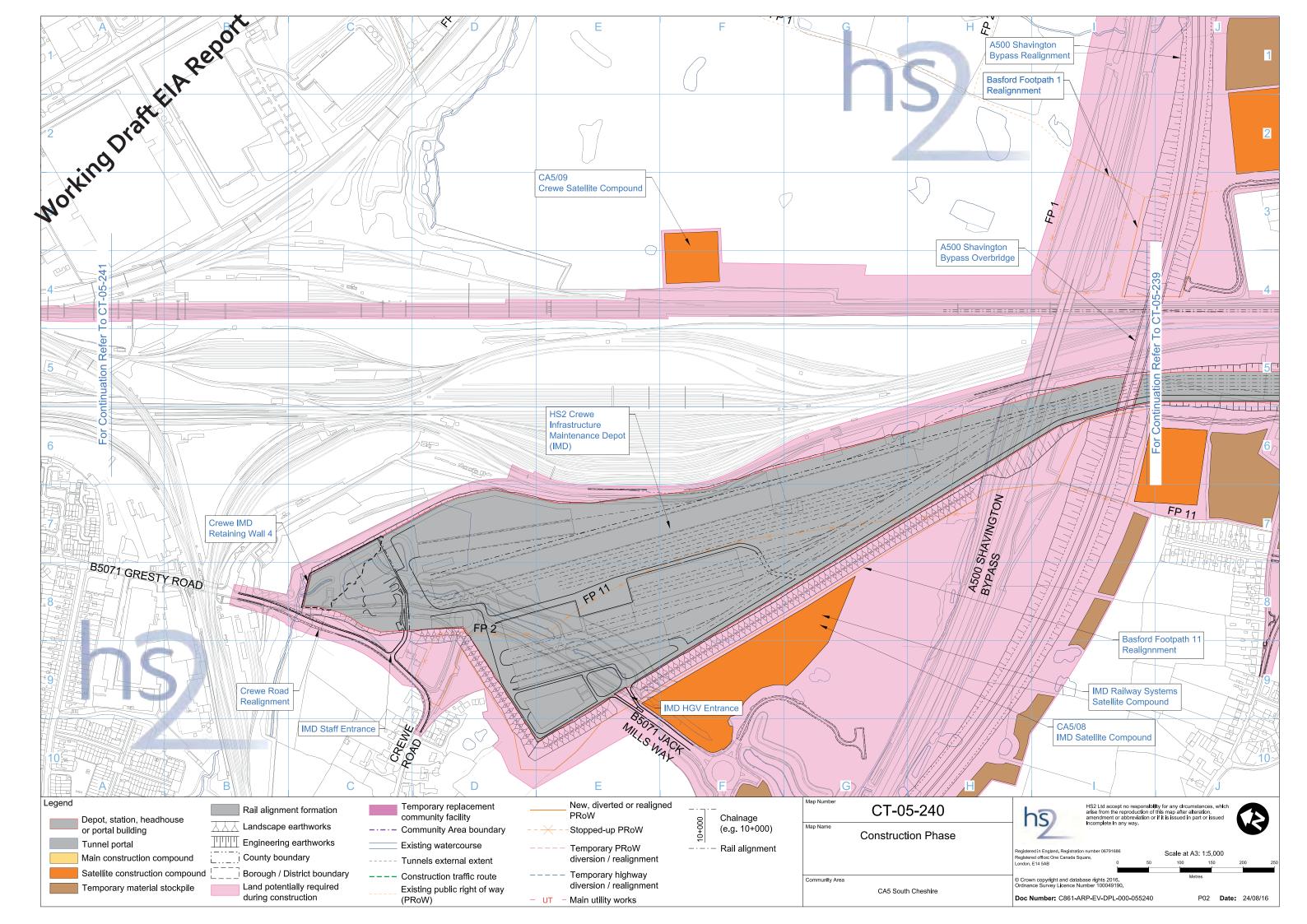


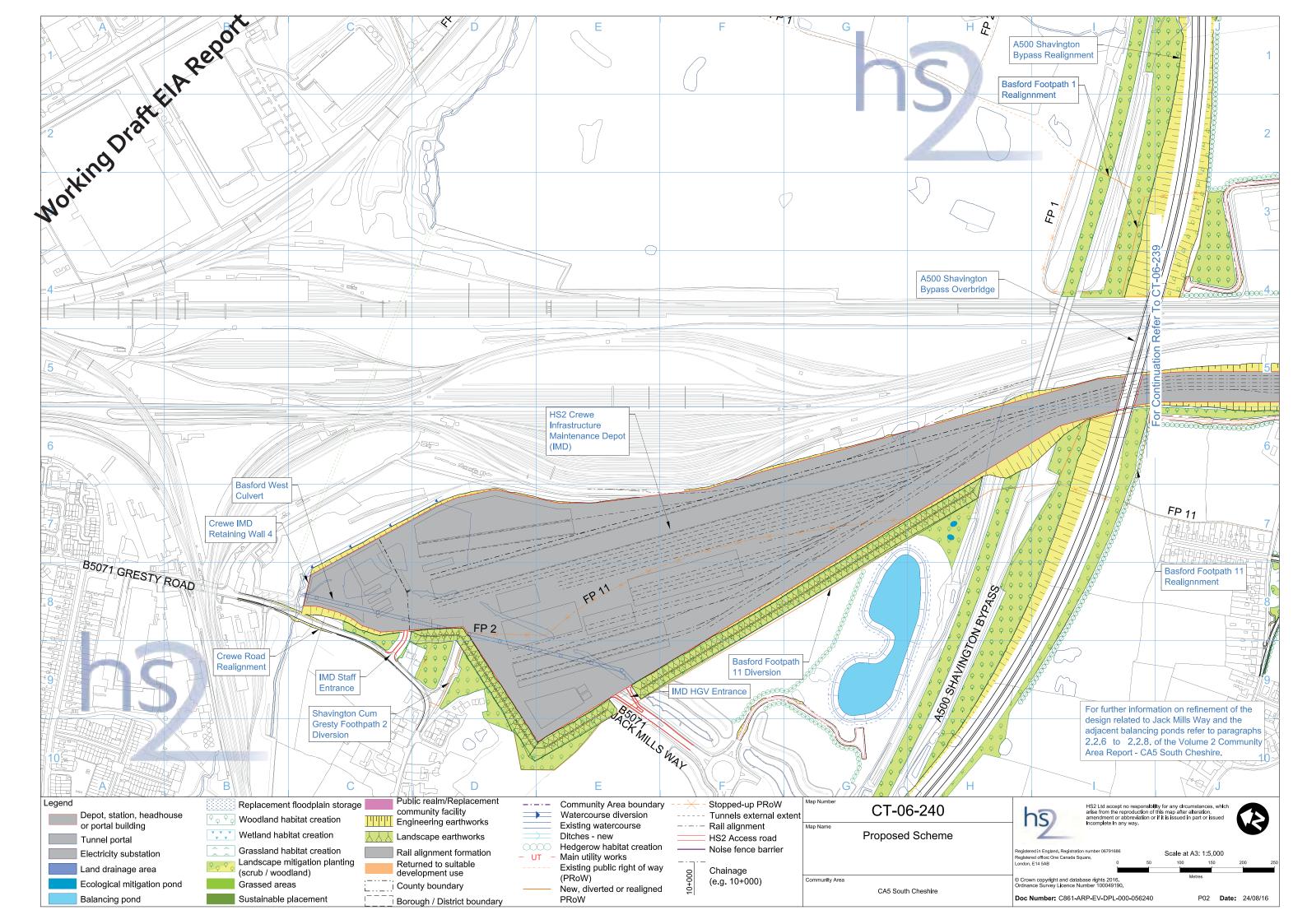


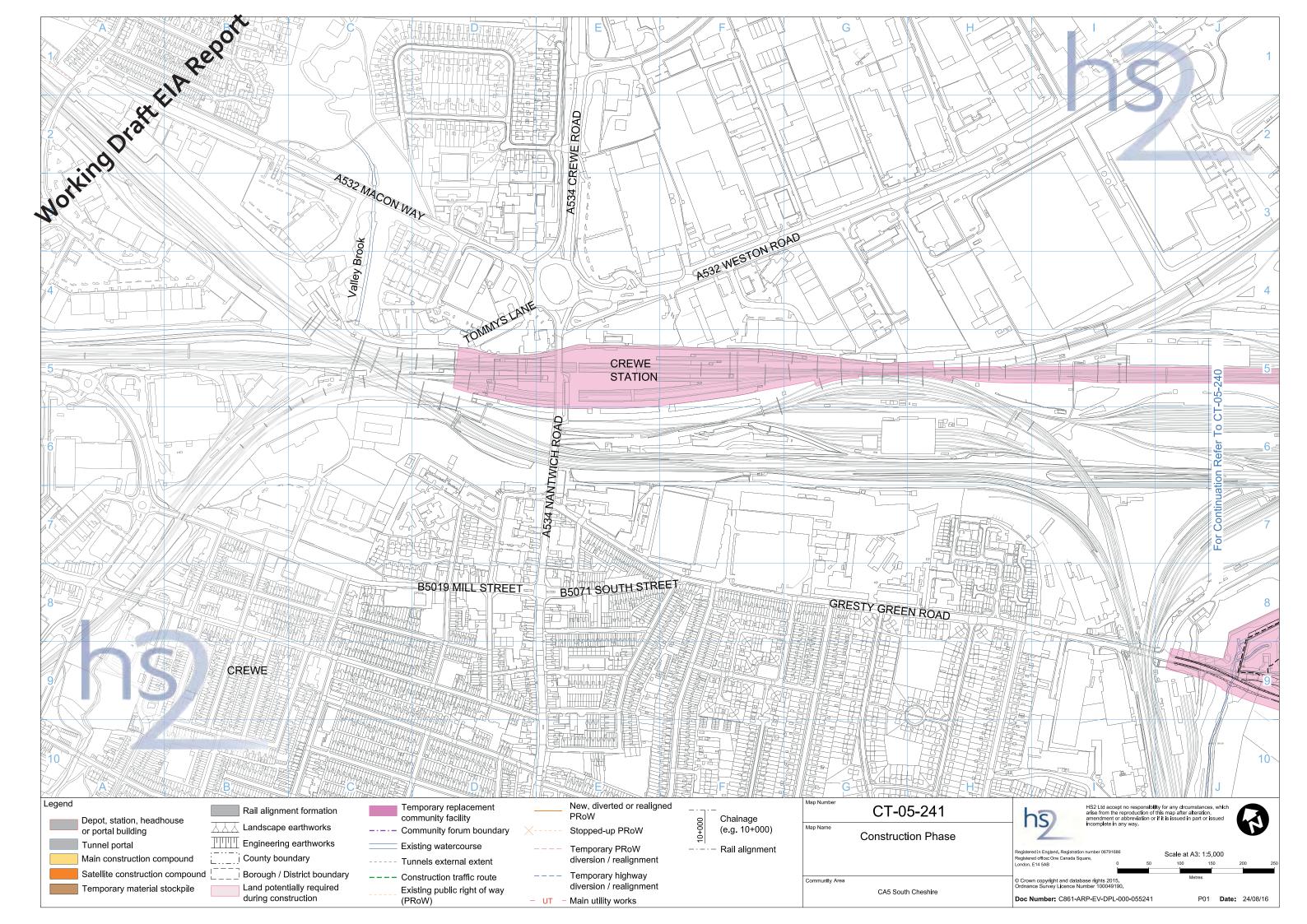


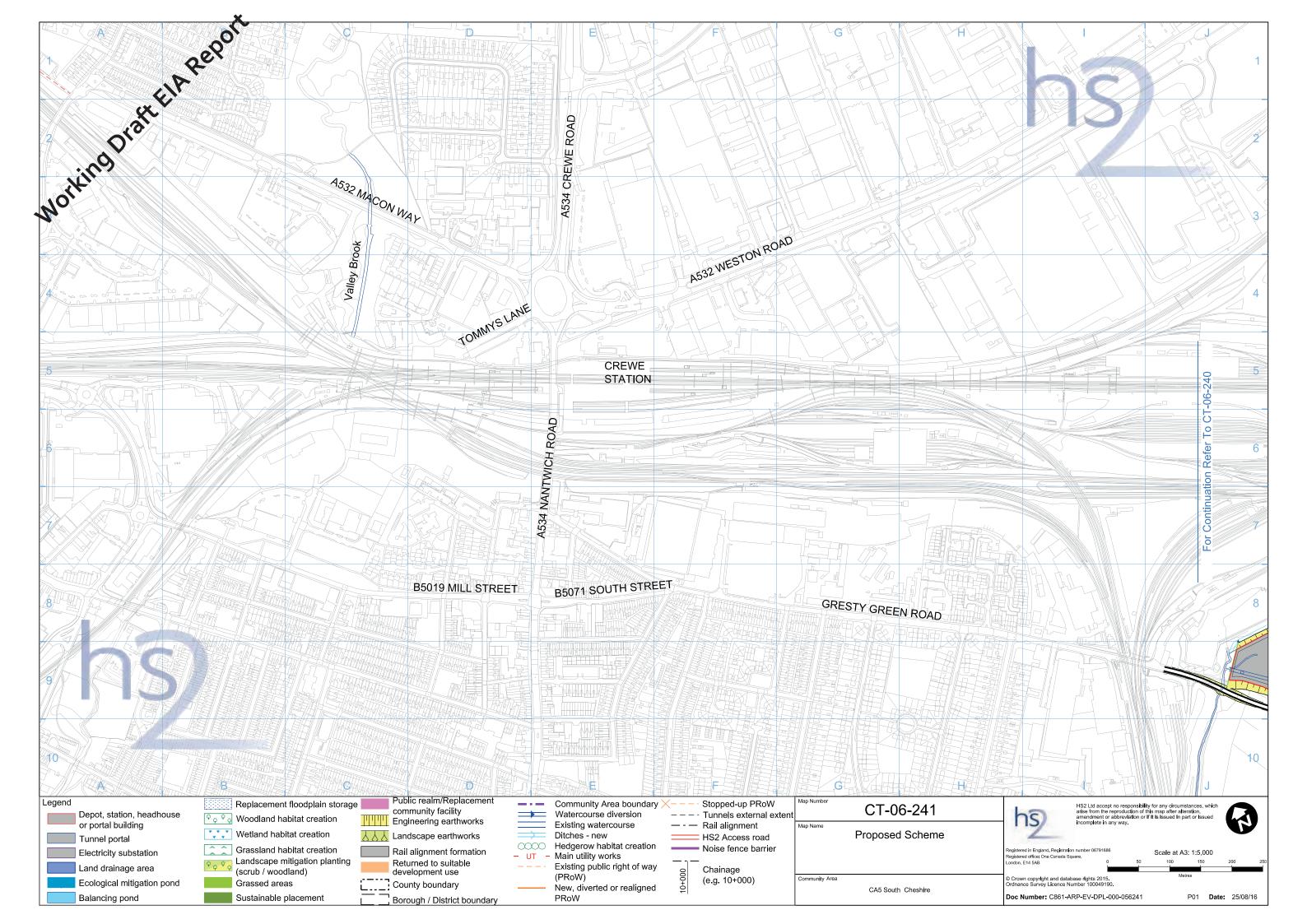






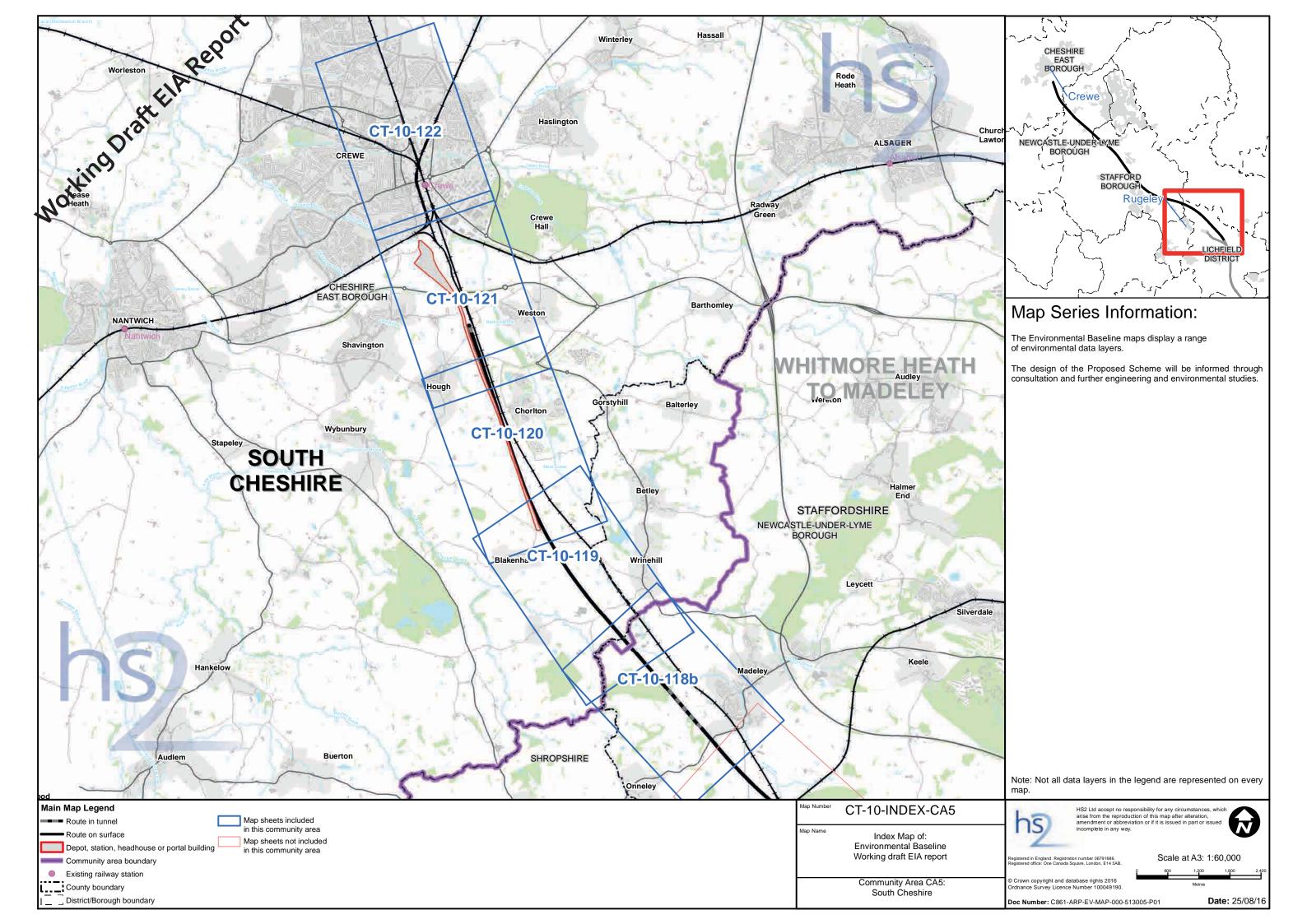


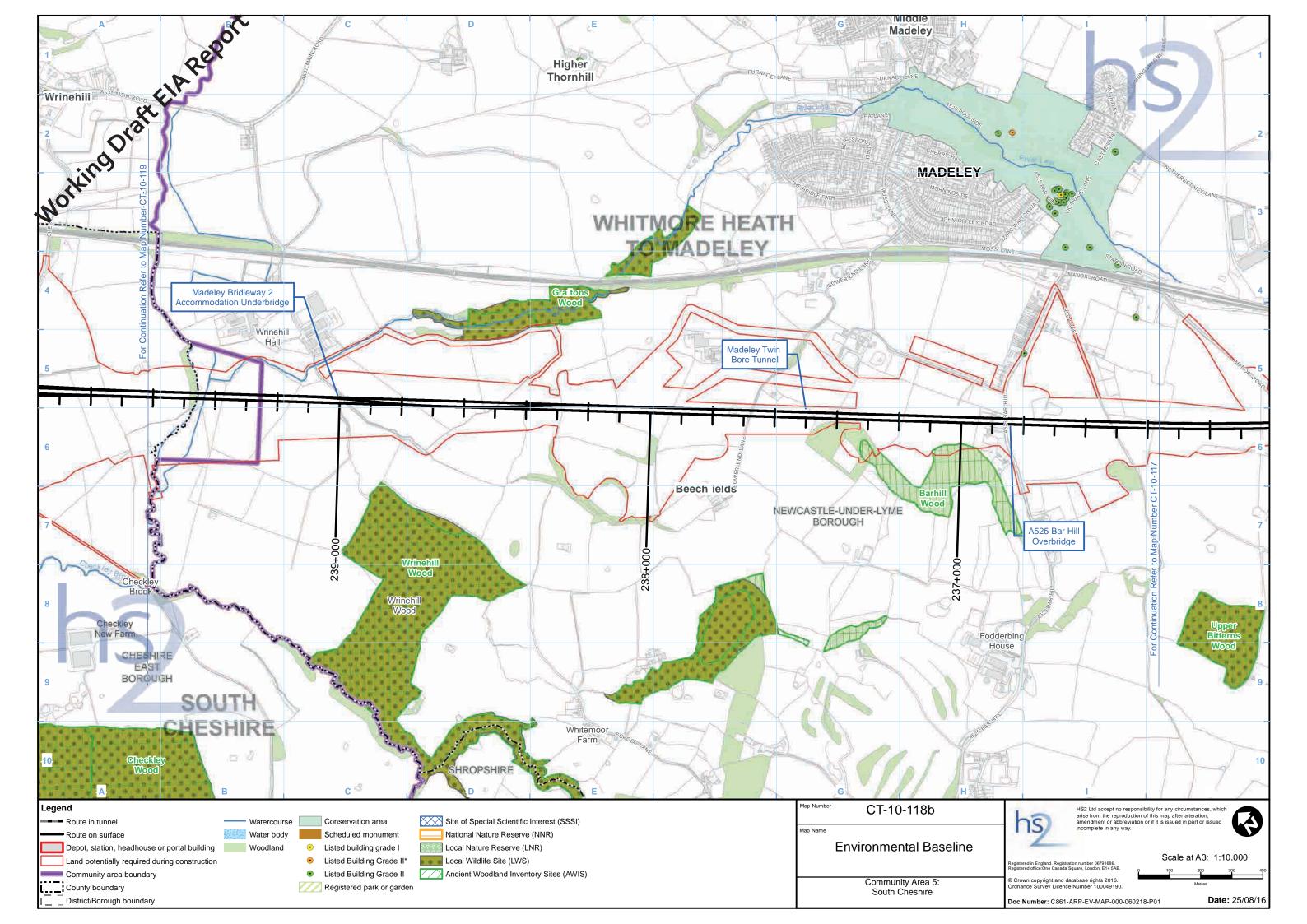


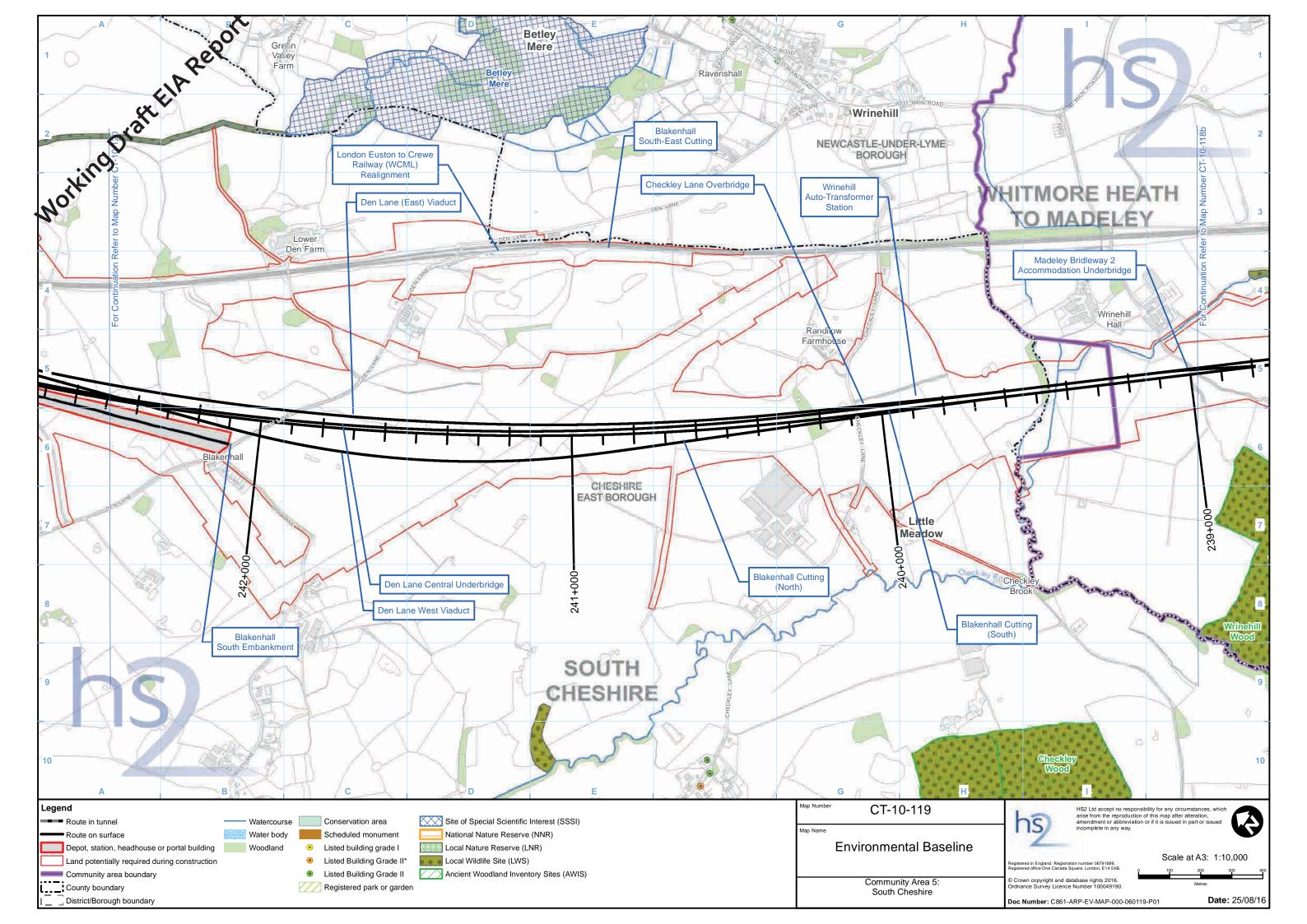


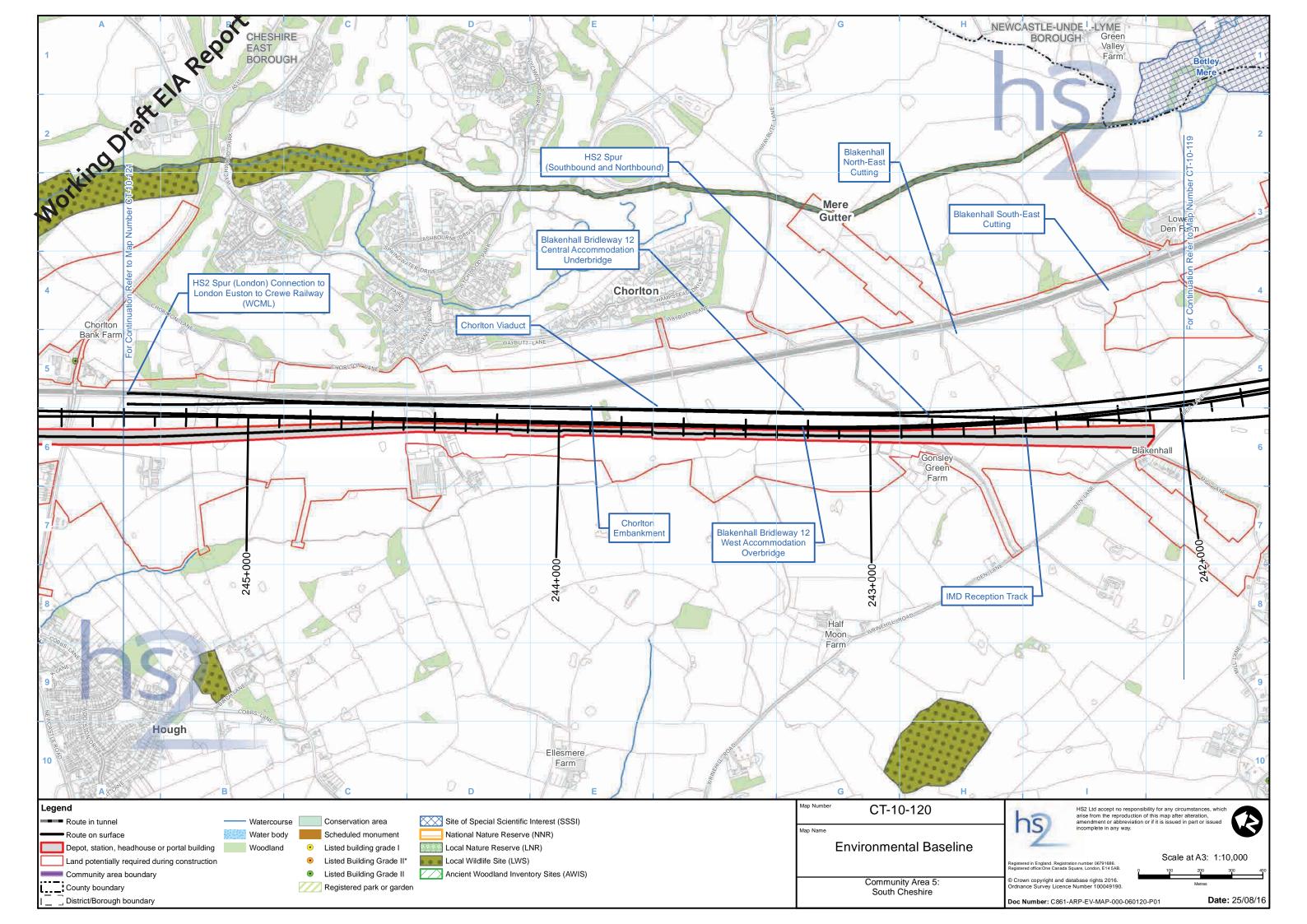
This page is left intentionally blank

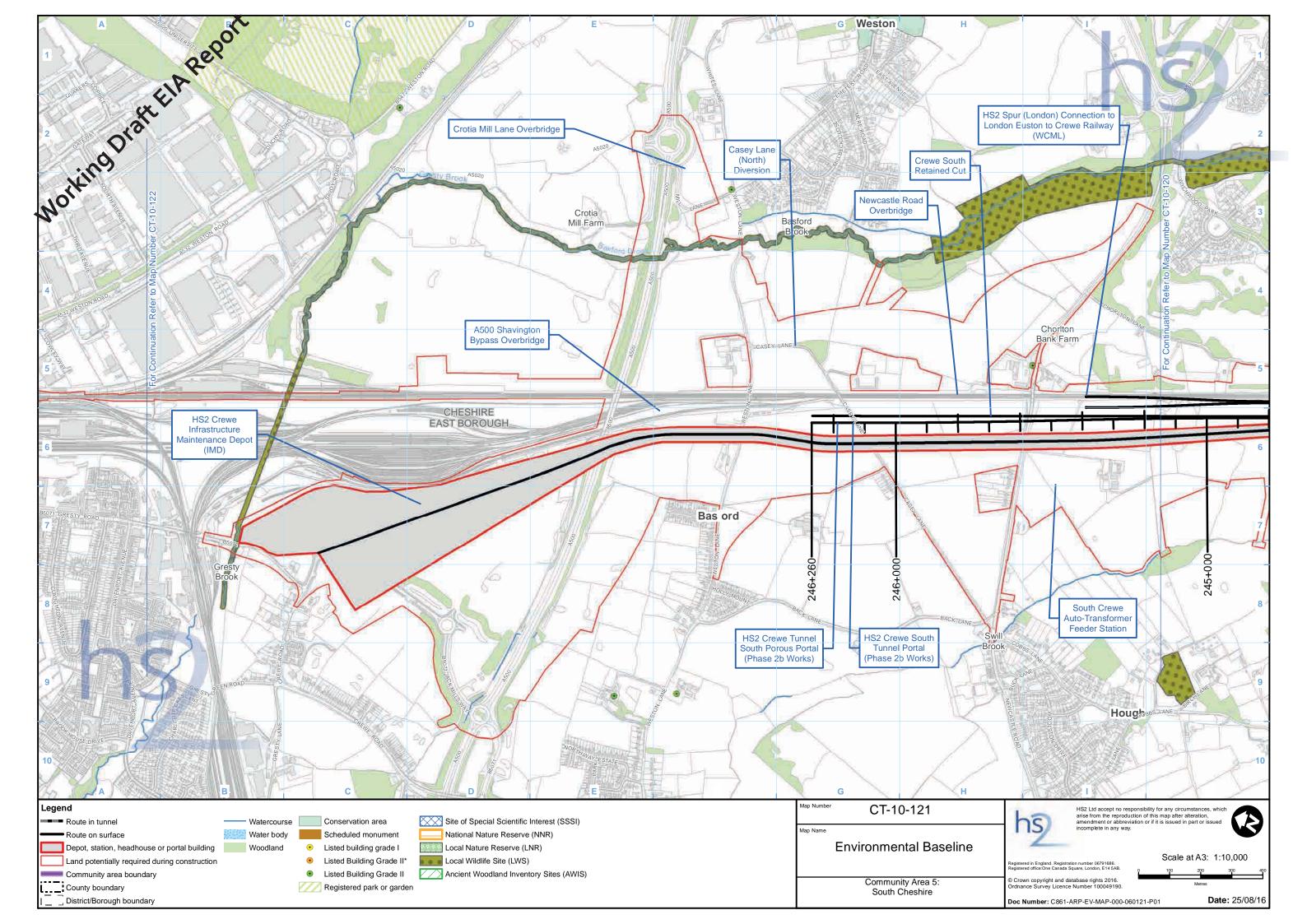
High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report CT-10 – Environmental Baseline

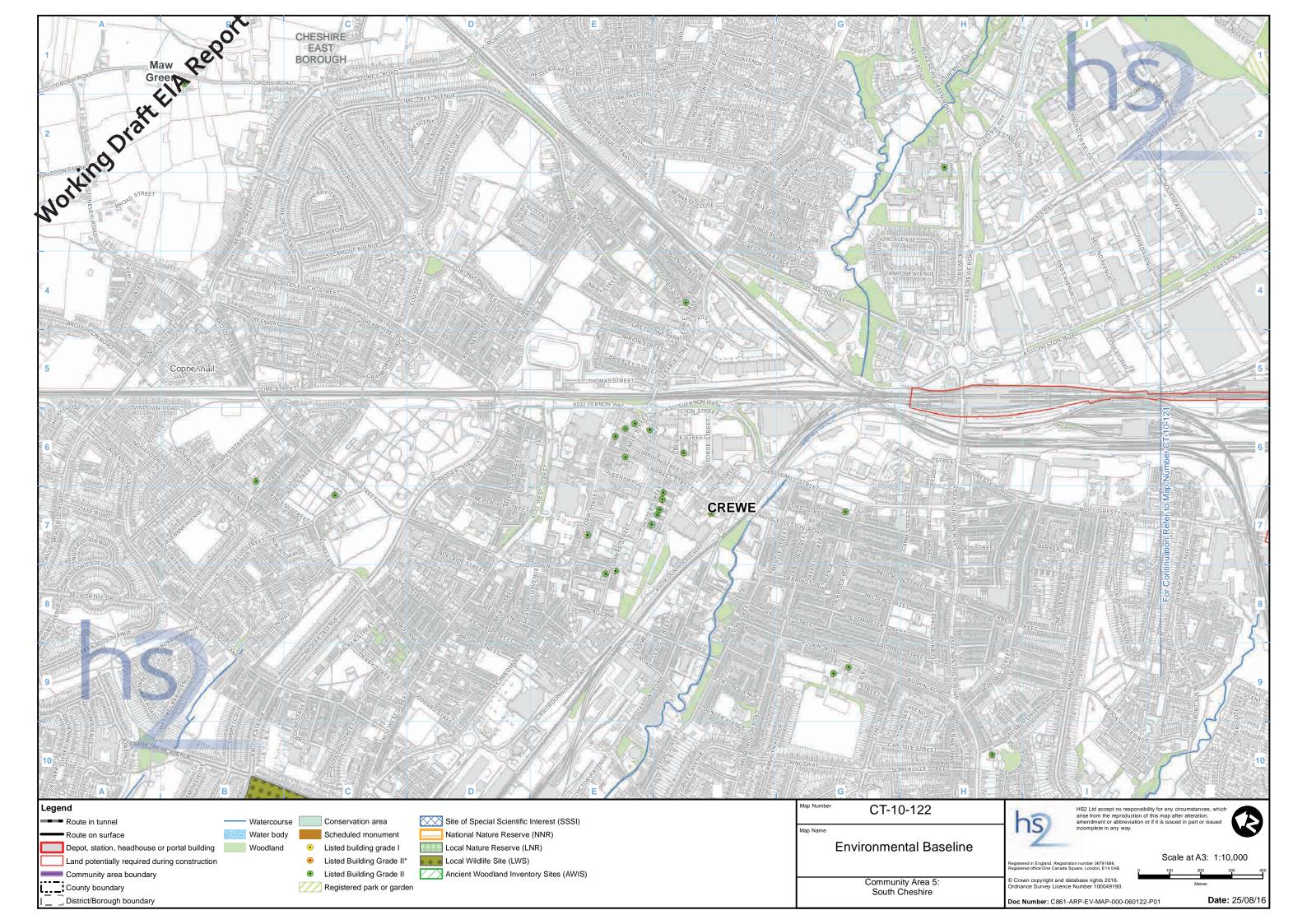






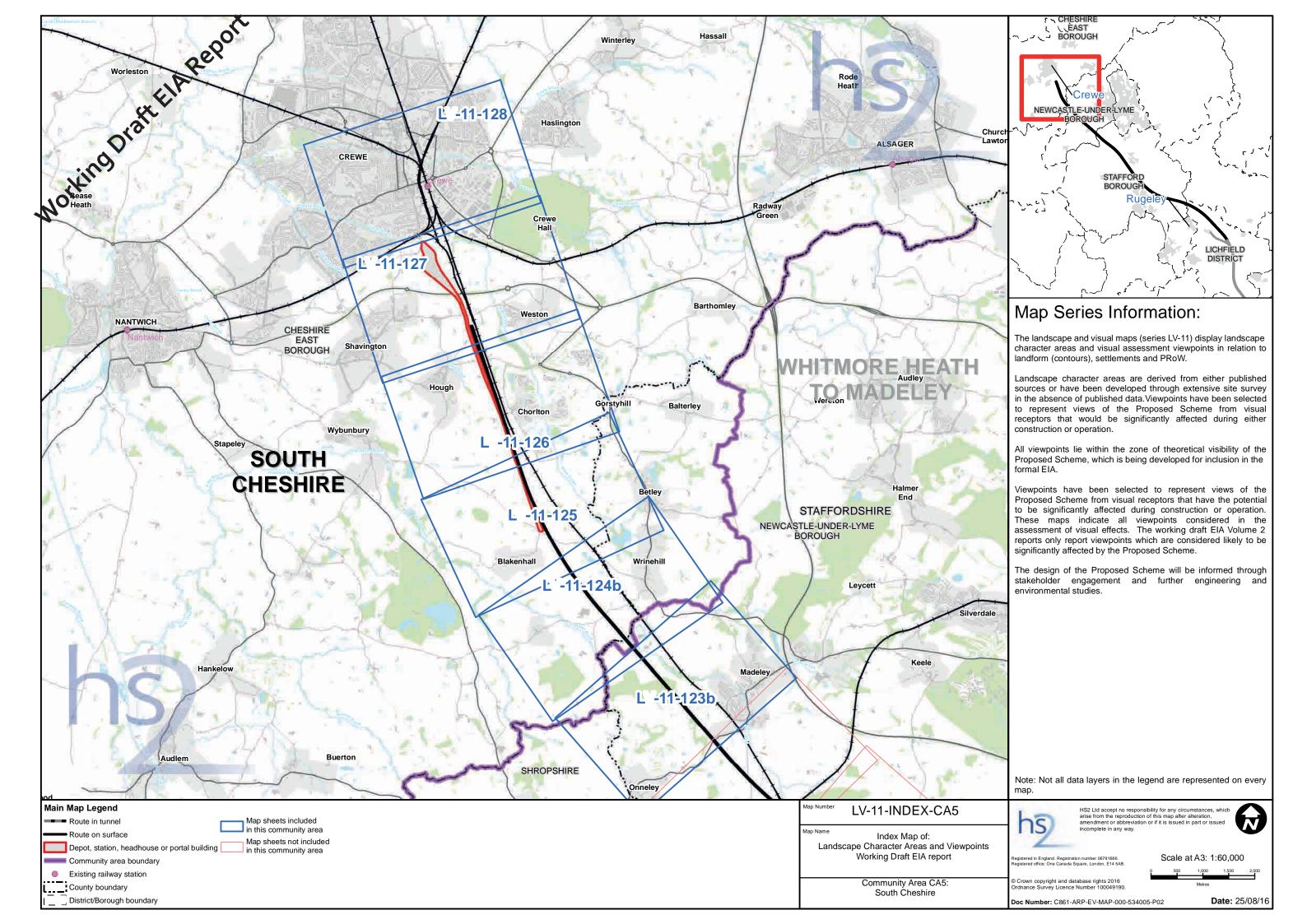


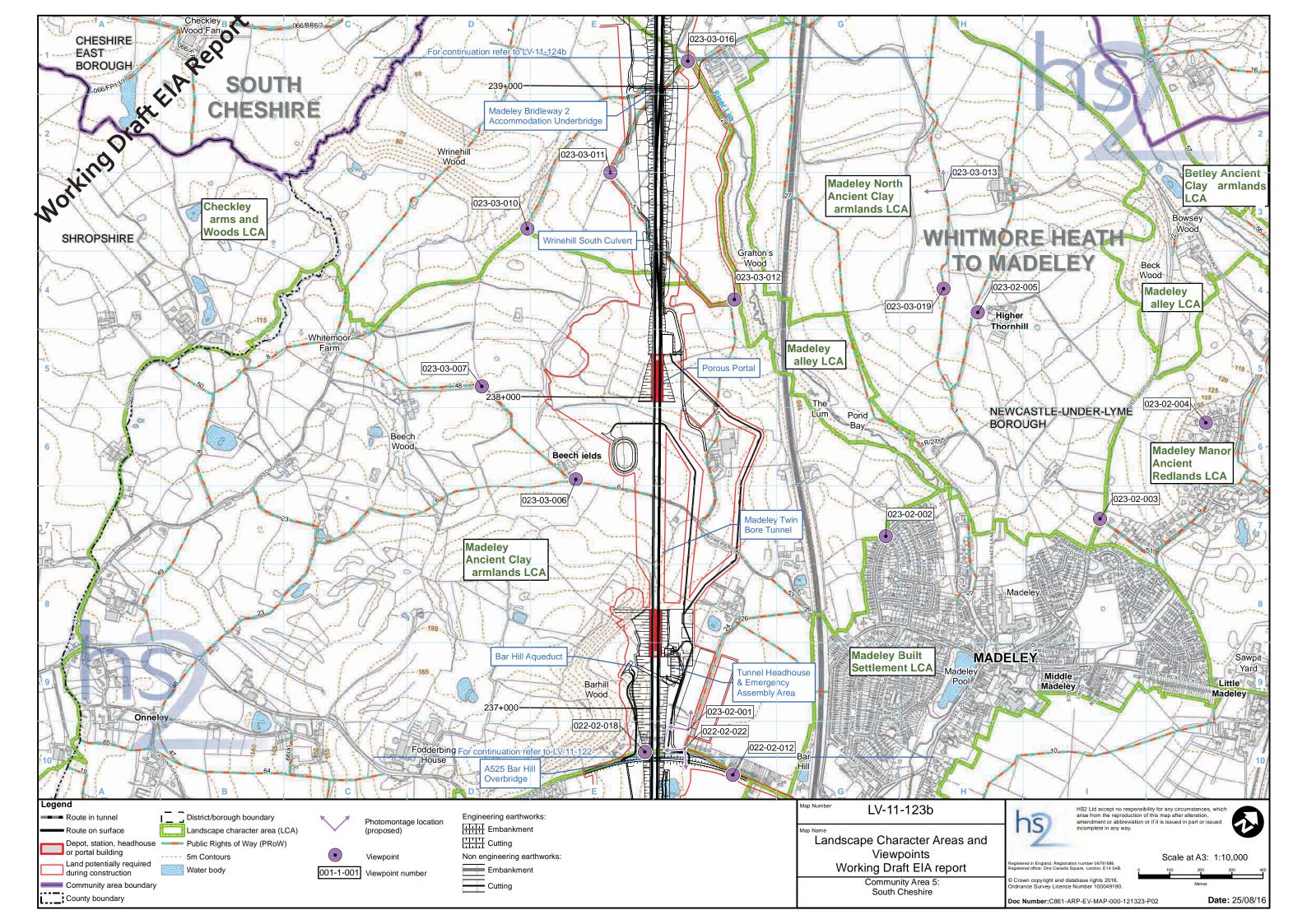


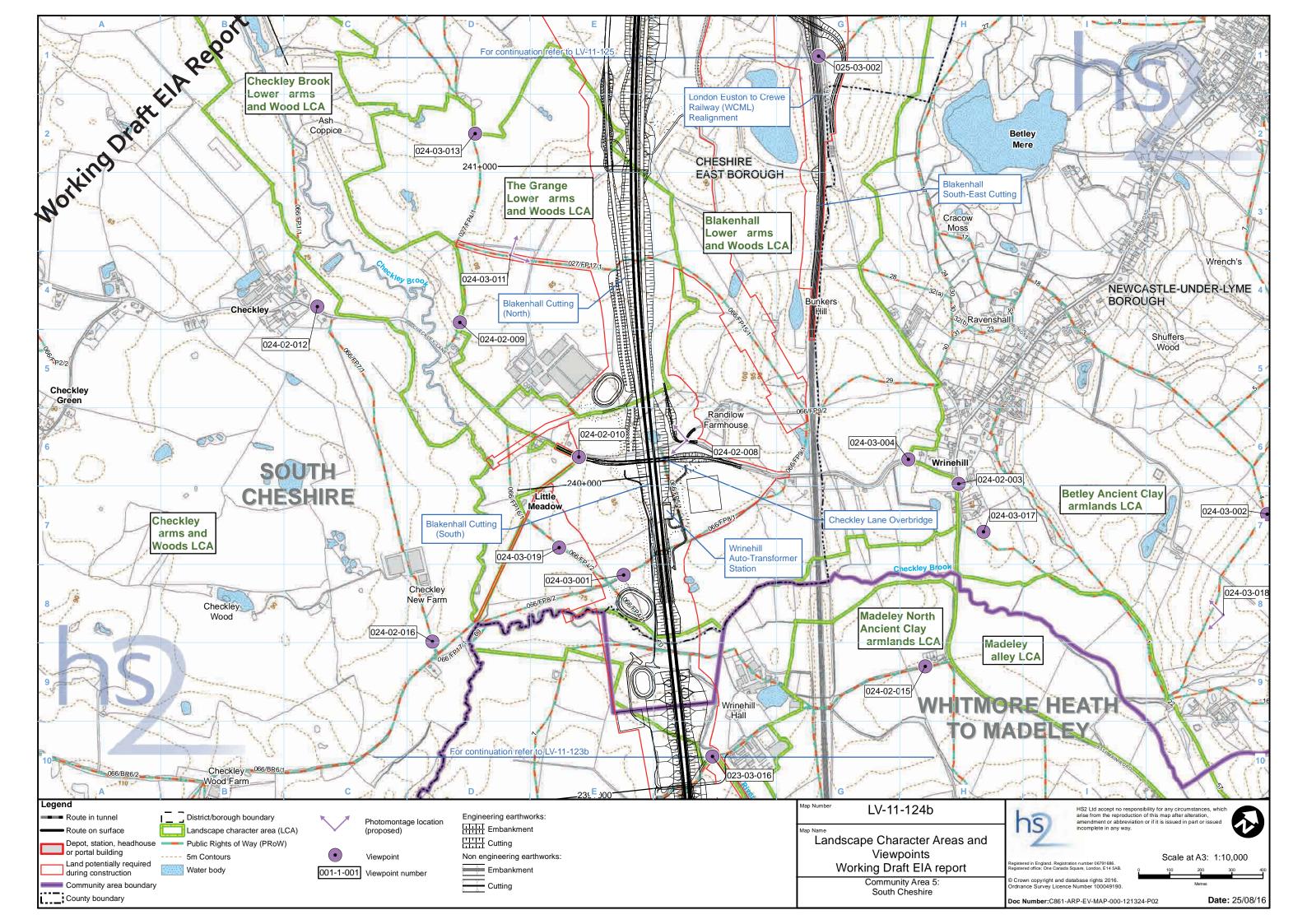


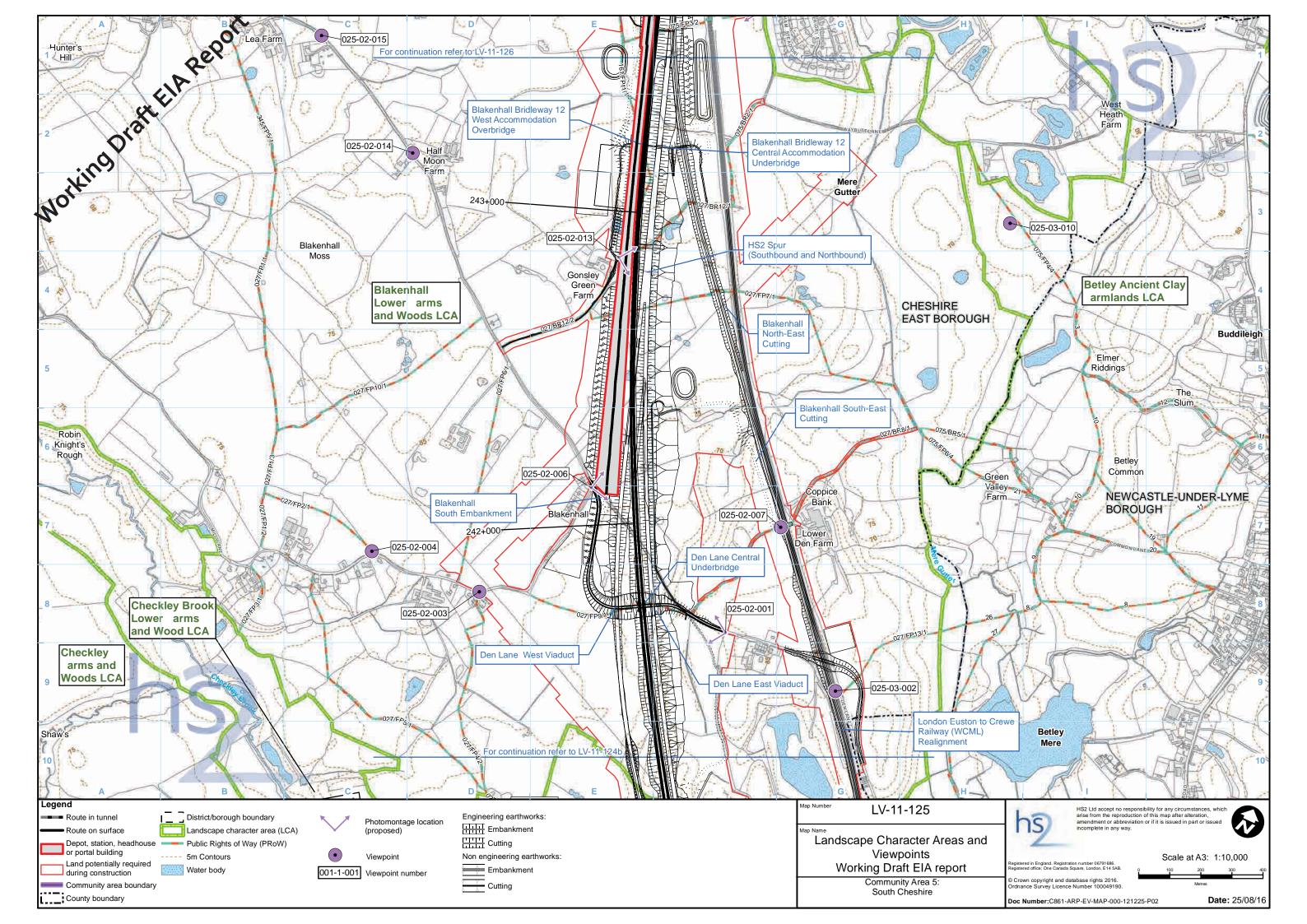
This page is left intentionally blank

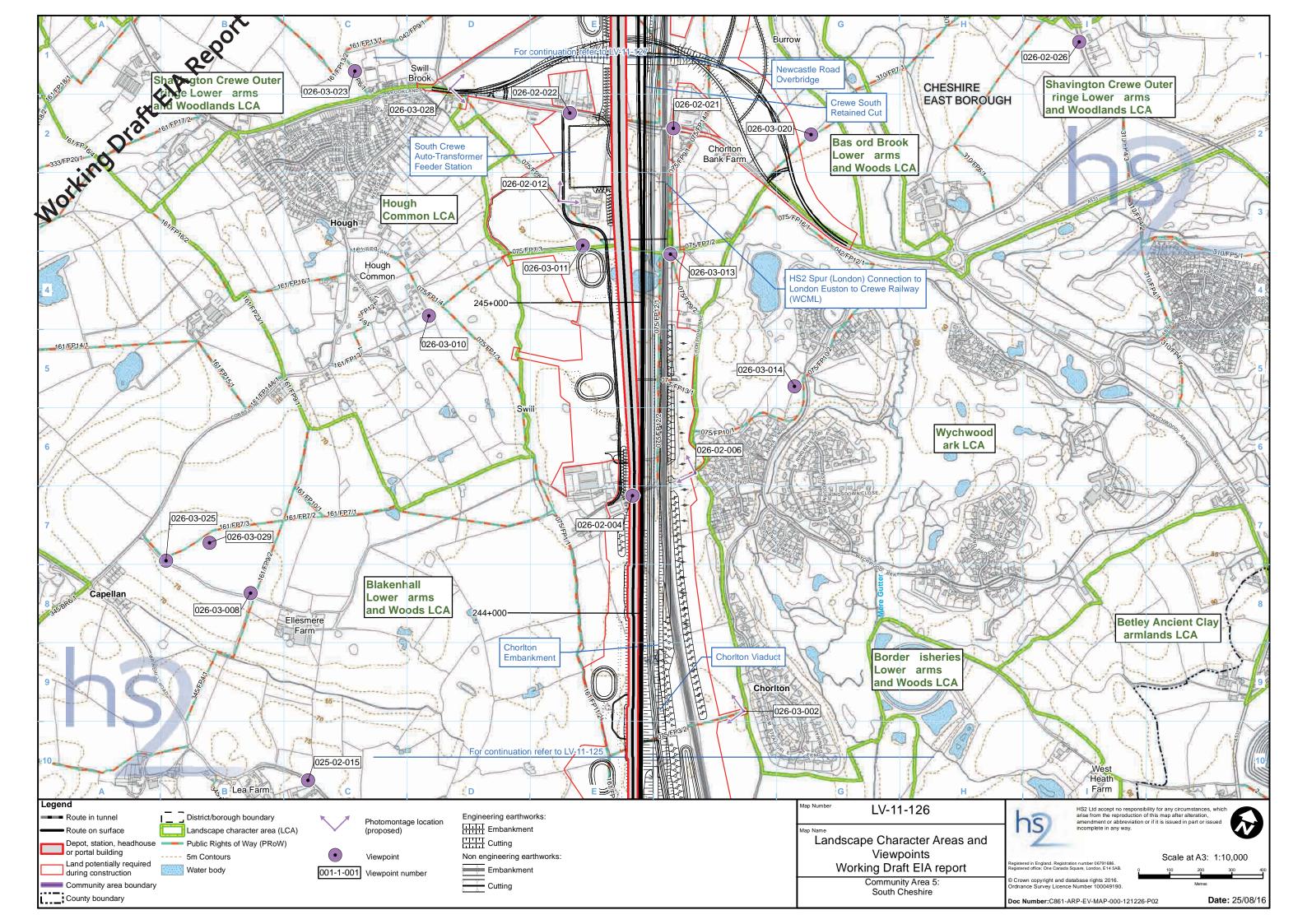
High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report LV-11 – Landscape Character Areas and Viewpoints

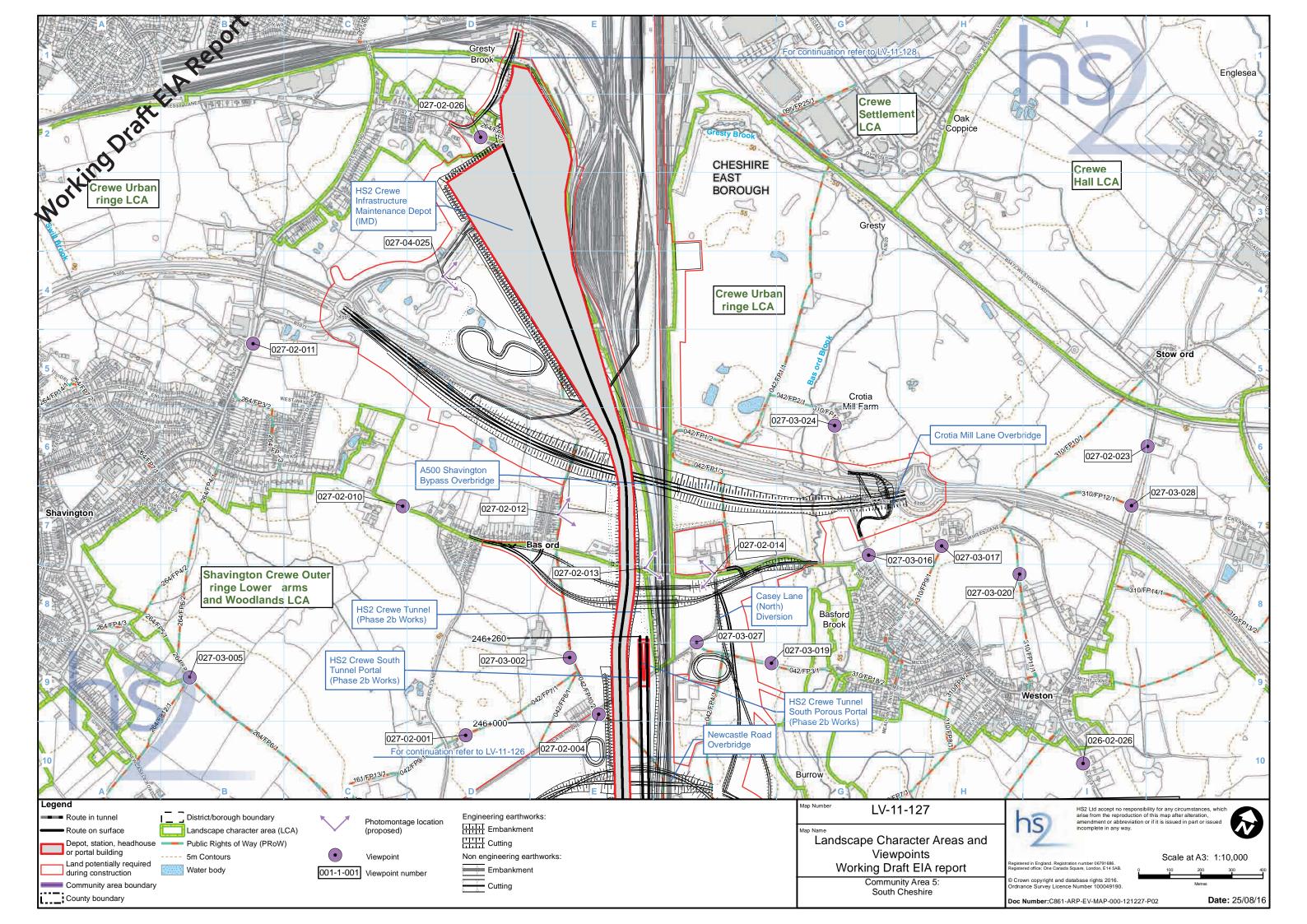


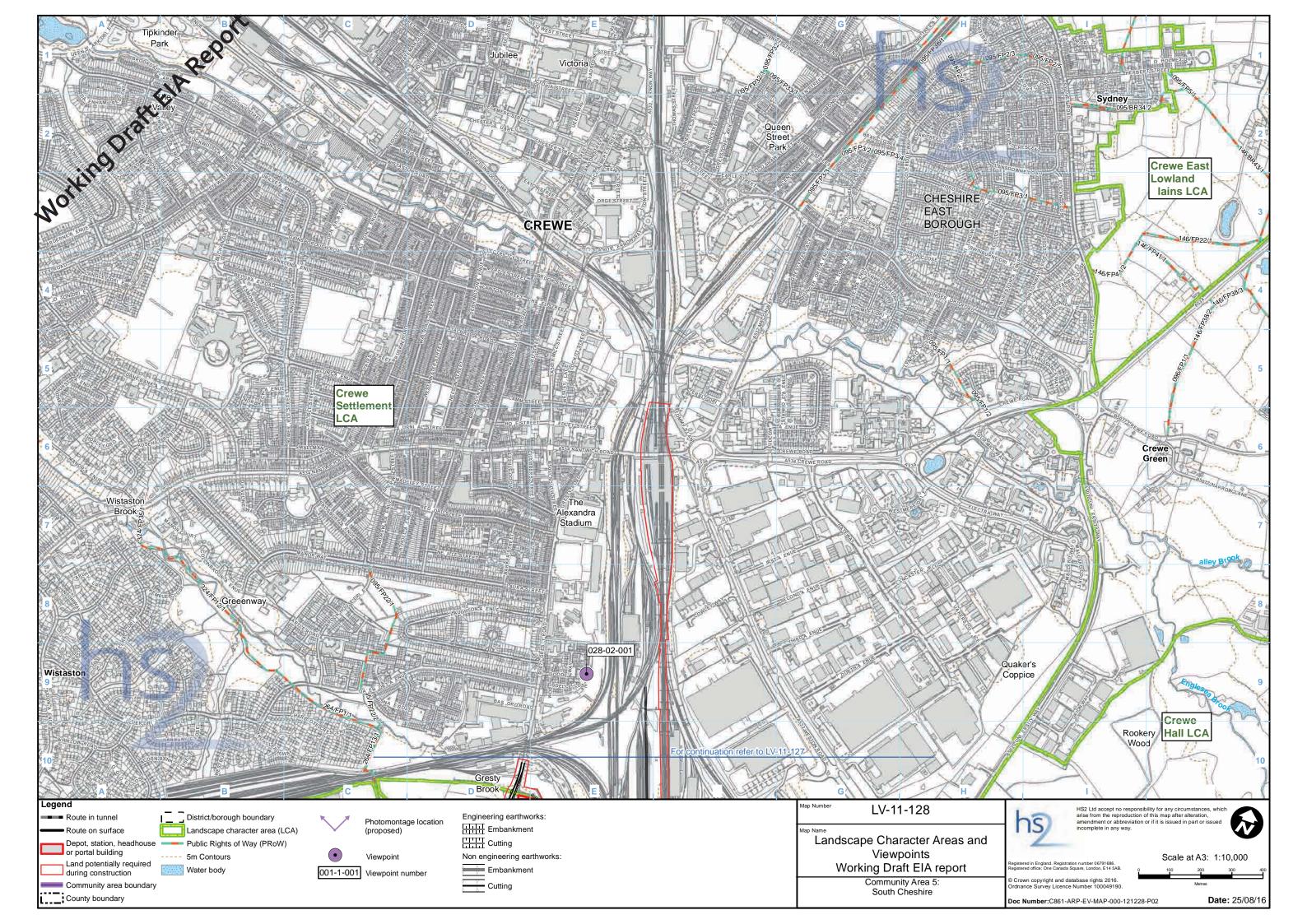






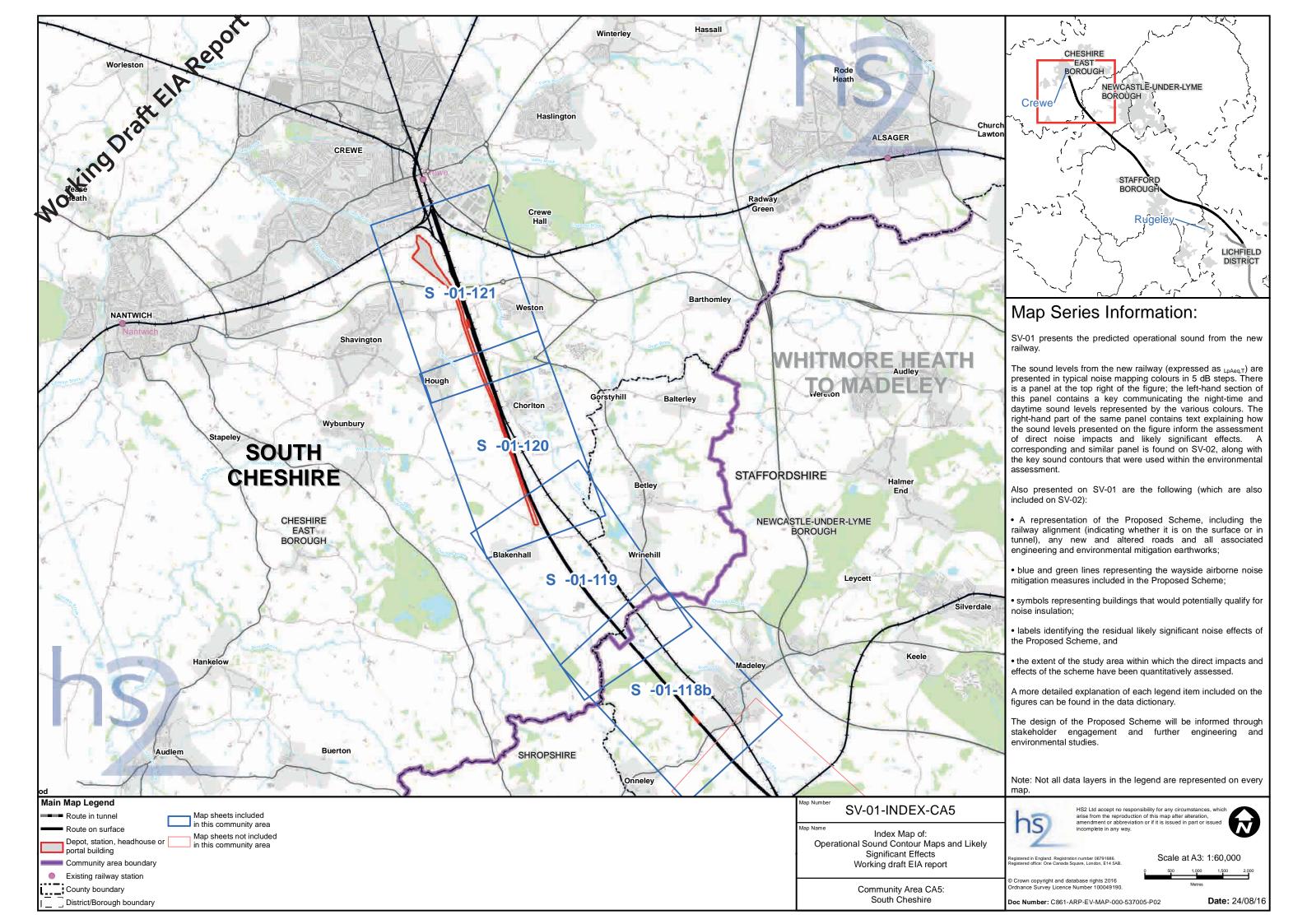


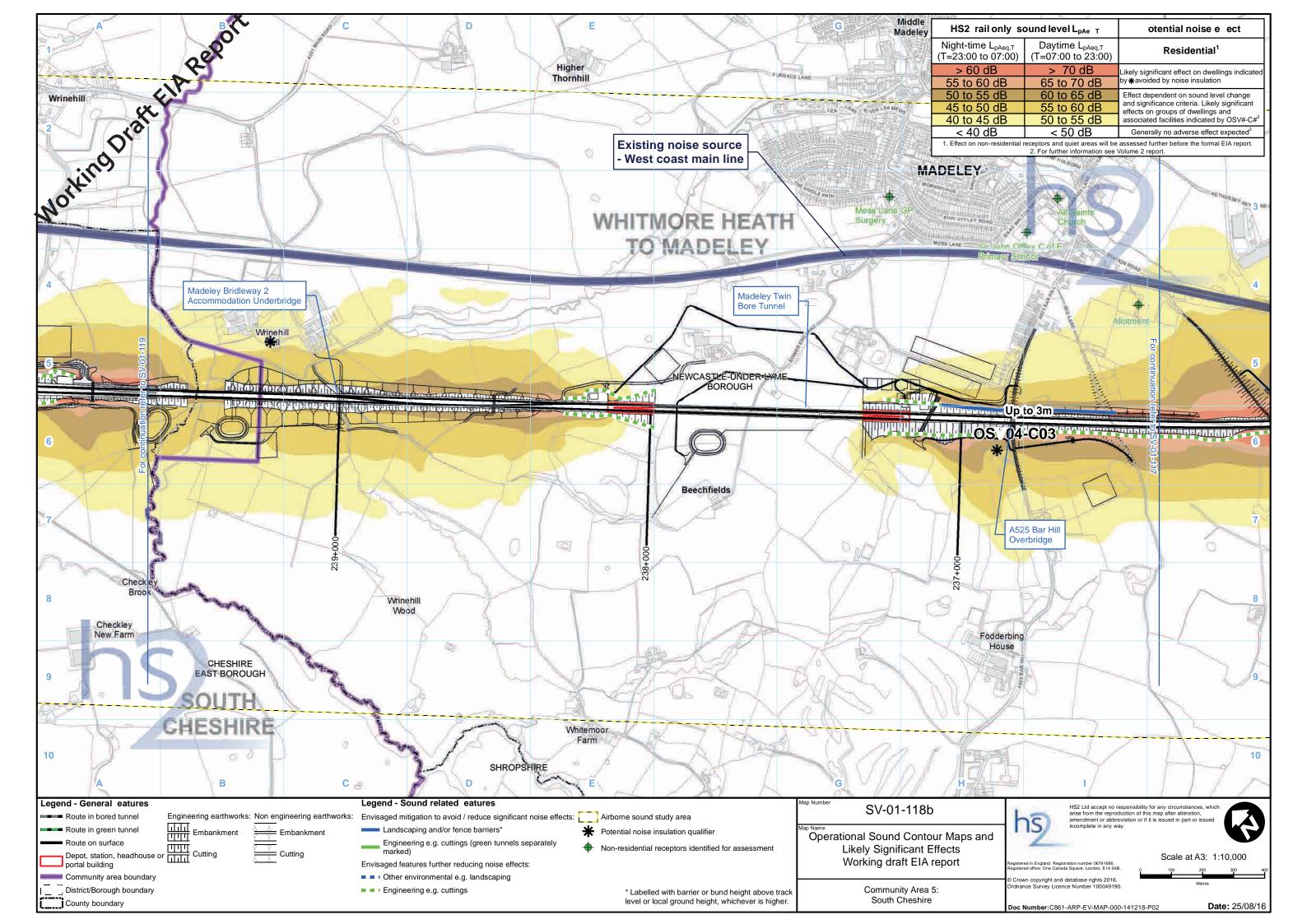


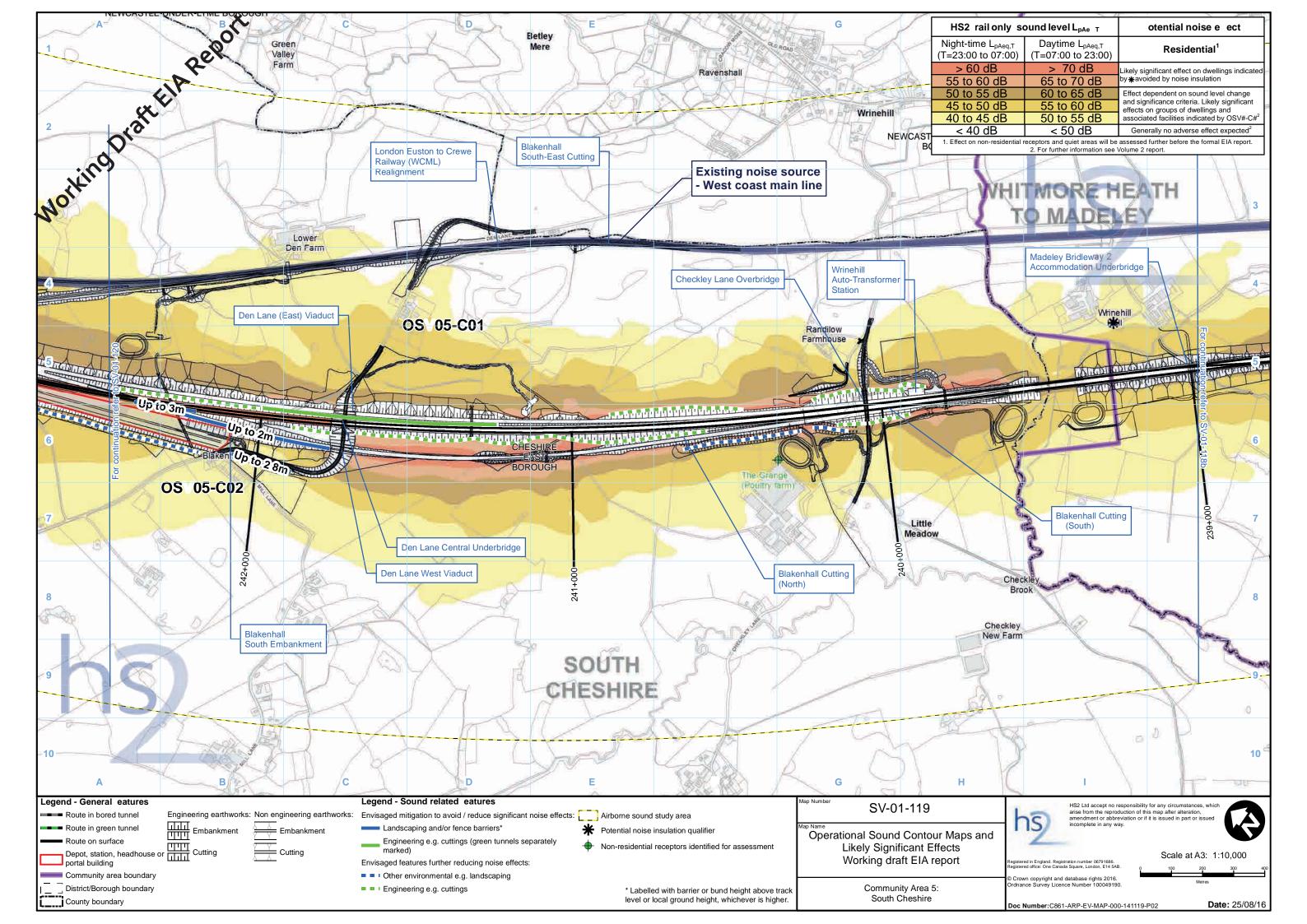


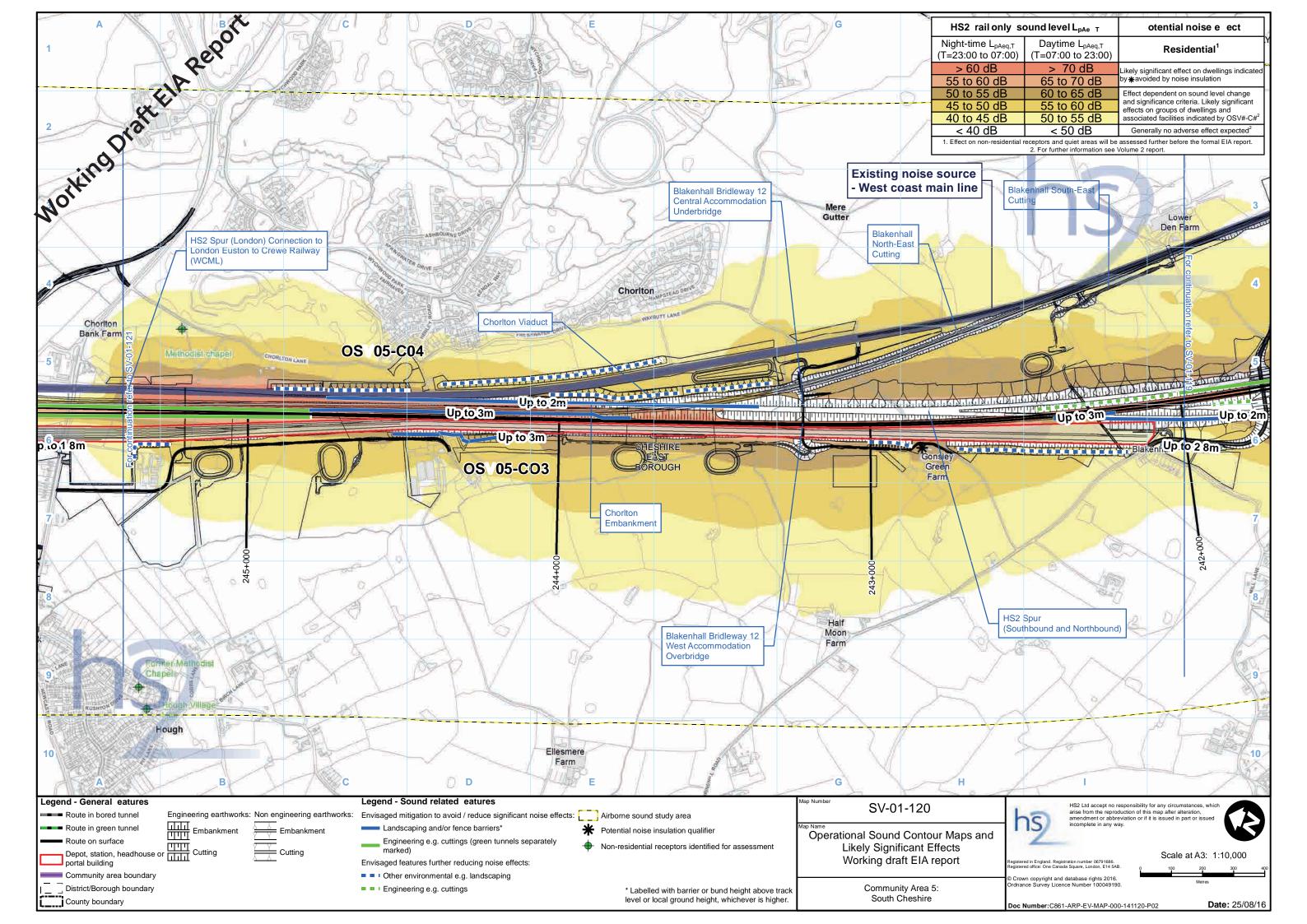
High Speed Two Phase 2a: West Midlands to Crewe
Working Draft Environmental Impact Assessment Report

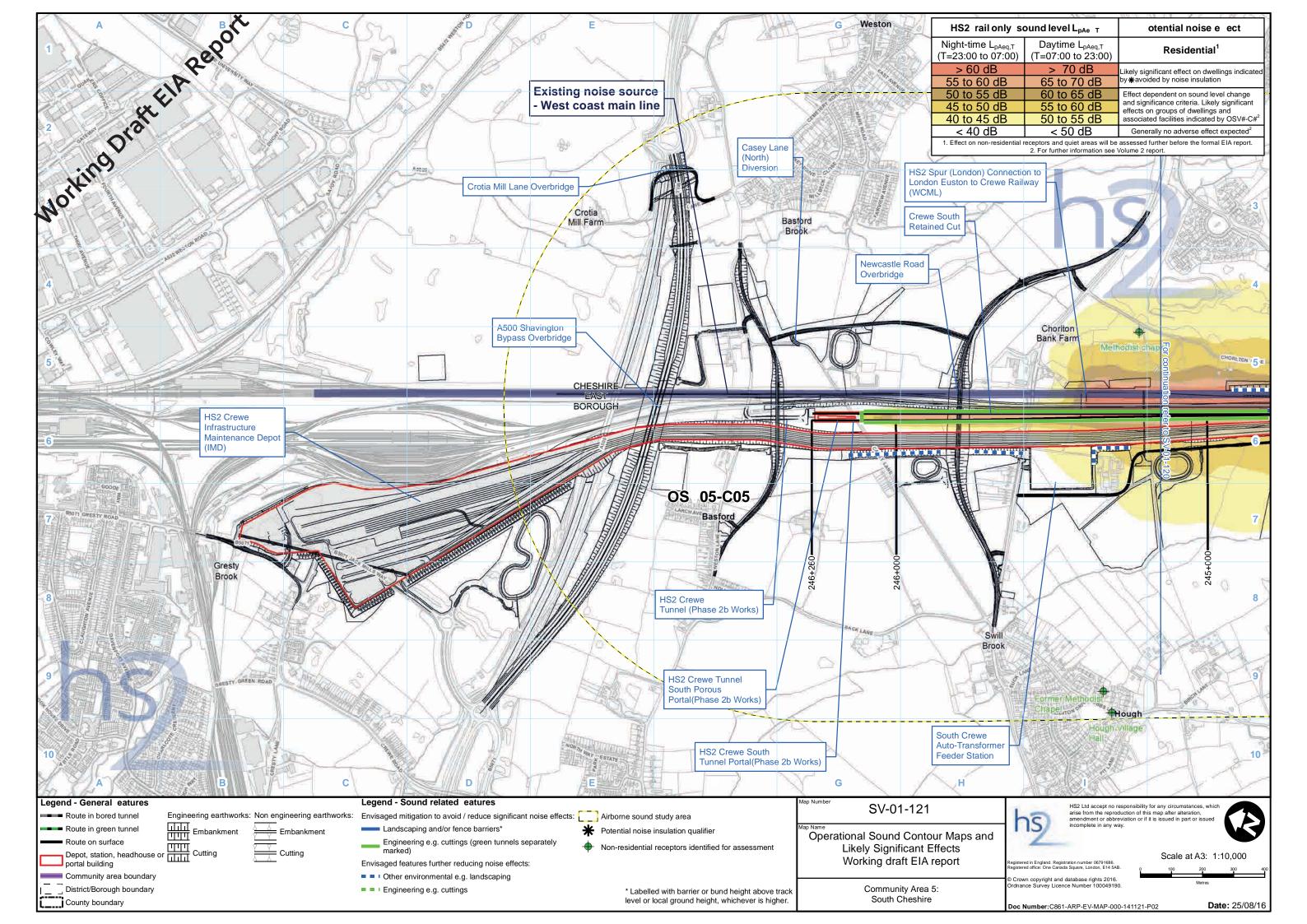
SV-01 – Operational Sound Contour Maps and Likely Significant Effects











High Speed Two Phase 2a: West Midlands to Crewe Working Draft Environmental Impact Assessment Report WR-01 – Surface Water Baseline

