

HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

Supplementary Environmental Statement 3 and
Additional Provision 4 Environmental Statement

Volume 5 | Technical appendices map book
Landscape and visual assessment

October 2015

SES3 and AP4 ES 3.5.2.7

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Department
for Transport

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Map series name	LV-02 - Landscape Character Areas	LV-07 - Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints	LV-08 - Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints
Map series description	<i>Maps showing the landscape character areas that have been considered for assessment and illustrating significant residual effects during construction and operation.</i>	<i>Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.</i>	<i>Maps showing the operational phase year one and year fifteen zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.</i>
Community Forum Area name			
CFA 04 – Kilburn (Brent) to Old Oak Common	✓	✗	✗
CFA 05 – Northolt Corridor	✗	✗	✗
CFA 06 – South Ruislip to Ickenham	✗	✗	✗
CFA 07 – Colne Valley	✗	✗	✗
CFA 08 – The Chalfonts and Amersham	✗	✗	✗
CFA 09 – Central Chilterns	✓	✓	✗
CFA 10 – Dunsmore, Wendover and Halton	✗	✗	✗
CFA 11 – Stoke Mandeville and Aylesbury	✗	✗	✗
CFA 12 – Waddesdon and Quainton	✗	✗	✗
CFA 13 – Calvert, Steeple Claydon, Twyford and Chetwode	✗	✗	✗
CFA 14 – Newton Purcell to Brackley	✗	✗	✗
CFA 15 – Greatworth to Lower Boddington	✗	✗	✗
CFA 16 – Ladbroke and Southam	✗	✗	✗
CFA 17 – Offchurch and Cubbington	✗	✗	✗
CFA 18 – Stoneleigh, Kenilworth and Burton Green	✗	✗	✗
CFA 19 – Coleshill Junction	✗	✗	✗
CFA 20 – Curdworth to Middleton	✗	✗	✗
CFA 21 – Drayton Bassett, Hints and Weeford	✗	✗	✗
CFA 22 – Whittington to Handsacre	✗	✗	✗
CFA 23 – Balsall Common and Hampton-in-Arden	✗	✗	✗
CFA 24 – Birmingham Interchange and Chelmsley Wood	✗	✗	✗
CFA 25 – Castle Bromwich and Bromford	✓	✓	✓
CFA 26 – Washwood Heath to Curzon Street	✗	✓	✓
Off-route – Heathrow Express (HEx) Depot Relocation	✗	✗	✗
Off-route – Modifications to WCML between Lichfield and Colwich	✗	✗	✗

Mapping explanatory notes

Structure of the HS2 Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement

The Supplementary Environmental Statement 3 (SES3) and Additional Provision 4 Environmental Statement (AP4 ES) comprises:

- Non-technical summary (NTS). This provides a summary in non-technical language of the SES3 (Part 1) and AP4 ES (Part 2) and of any likely significant environmental effects, both beneficial and adverse, which are new or different to those reported in the High Speed 2 (HS2) Phase One Environmental Statement (ES) submitted to Parliament in November 2013 in support of the hybrid Bill ('the Bill') for Phase One of HS2 (hereafter referred to as 'the main ES') as updated by subsequent SES and AP ES documents;
- Volume 1: Introduction to the SES3 and AP4 ES. This introduces the supplementary environmental information and design changes included within the SES3 and amendments, which have resulted in the need to amend the Bill, within the AP4 ES. It also explains any changes to the scope, methodology, assumptions and limitations required for the environmental assessment;
- Volume 2: CFA reports and Map Books. These describe the supplementary environmental information and design changes included within the SES3 (Part 1) and amendments within the AP4 ES (Part 2). Any new or different likely significant environmental effects arising from these changes and amendments in each CFA, compared to those reported in the main ES, as updated by SES and SES2 documents (and SES3 for the AP4 amendments) are reported. The AP1, AP2 and AP3 amendments are also taken into account where relevant. In addition, the main local alternatives that have been considered are described, where relevant;
- Volume 3: Route-wide effects. This reports new or different likely significant route-wide effects arising from the supplementary environmental information and design changes included within the SES3 (Part 1) and amendments within the AP4 ES (Part 2) compared to those reported in the main ES as updated by SES and SES2 (and SES3 for the AP4 amendments). The AP1, AP2 and AP3 amendments are also taken into account where relevant;
- Volume 4: Off-route effects. This reports new or different likely significant off-route effects arising from the supplementary environmental information included within the SES3 and an amendment within the AP4 ES compared to those reported in the main ES as updated by SES and SES2 (and SES3 for the AP4 amendment). The AP1, AP2 and AP3 amendments are also taken into account where relevant;
- Volume 5: Appendices and Map Books. This contains environmental information and associated maps in support of the other volumes of the SES3 and AP4 ES; and
- Glossary of terms and list of abbreviations. This contains any new or different terms and abbreviations used throughout the SES and AP ES reports, compared to those included in the main ES.

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 SES3 and AP4 ES 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 SES3 and AP4 ES 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. 77+000 or 158+500.

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 77+000 refers to the point, 77,000m, or 77km, from Euston Station. Chainage values increase in intervals 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 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 differing amounts of alignment on the map.

Map sheet layout

Each map in Volume 2 is presented twice, with the main ES map (published November 2013) on the left hand page and the SES3 and AP4 ES map on the right. For the CT-o5 and CT-o6 map series, the SES3 and AP4 ES map is annotated with different coloured clouds which highlight the areas of change. The coloured text box provides a brief description of the design change and amendment, and gives the SES3 and AP4 ES reference number. Only maps which have been amended as a result of the SES3 and AP4 ES are included within the map books. Other design changes which are within the existing limits of the Bill and do not result in new or different likely significant effects are also shown on the maps, but are not indicated by a cloud. The below table highlights the coloured clouds used, and their description.

Cloud / text box colour	Description
Blue	Design changes relating to the SES3 (Part 1 of each Volume 2 CFA report).
Red	Proposed amendments relating to AP4 (Part 2 of each Volume 2 CFA report).
Grey	Proposed amendments and design changes relating to previous APs and SESs, provided for reference.

Each Volume 5 map is annotated to describe the change to a receptor or significant effect, and to give the SES3 and AP4 ES reference number. For more detailed information about the SES3 and AP4 ES annotation, refer to the map series legend. Only maps which have been amended as a result of the SES3 and AP4 ES are included within the map book. Changes to receptors or significant effects relating to previous APs and SESs are also provided for reference.

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 the West Midlands to the left.

The exception to this, are map series LV-o3 and LV-o4, which present 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 the West Midlands to the top.

Map books

In total there are 35 map books which make up the SES3 and AP4 ES, spread across volumes 2, 4 and 5. A list of the titles is provided below for reference.

Name	Name
Volume 2 Community forum area map book: CFA4 Kilburn (Brent) to Old Oak Common	Volume 2 Community forum area map book: CFA23 Balsall Common and Hampton-in-Arden
Volume 2 Community forum area map book: CFA5 Northolt Corridor	Volume 2 Community forum area map book: CFA24 Birmingham Interchange and Chelmsley Wood
Volume 2 Community forum area map book: CFA6 South Ruislip to Ickenham	Volume 2 Community forum area map book: CFA25 Castle Bromwich and Bromford
Volume 2 Community forum area map book: CFA7 Colne Valley	Volume 2 Community forum area map book: CFA26 Washwood Heath to Curzon Street
Volume 2 Community forum area map book: CFA8 The Chalfonts and Amersham	Volume 4 Off-route effects map book
Volume 2 Community forum area map book: CFA9 Central Chilterns	Volume 5 Technical appendices map book: Agriculture, forestry and soils
Volume 2 Community forum area map book: CFA10 Dunsmore, Wendover and Halton	Volume 5 Technical appendices map book: Air quality
Volume 2 Community forum area map book: CFA11 Stoke Mandeville and Aylesbury	Volume 5 Technical appendices map book: Community
Volume 2 Community forum area map book: CFA12 Waddesdon and Quainton	Volume 5 Technical appendices map book: Cultural heritage
Volume 2 Community forum area map book: CFA13 Calvert, Steeple Claydon, Twyford and Chetwode	Volume 5 Technical appendices map book: Ecology
Volume 2 Community forum area map book: CFA14 Newton Purcell to Brackley	Volume 5 Technical appendices map book: Land quality
Volume 2 Community forum area map book: CFA15 Greatworth to Lower Boddington	Volume 5 Technical appendices map book: Landscape and visual
Volume 2 Community forum area map book: CFA16 Ladbroke and Southam	Volume 5 Technical appendices map book: Socio-economics
Volume 2 Community forum area map book: CFA17 Offchurch and Cubbington	Volume 5 Technical appendices map book: Sound, noise and vibration
Volume 2 Community forum area map book: CFA18 Stoneleigh, Kenilworth and Burton Green	Volume 5 Technical appendices map book: Traffic and transport
Volume 2 Community forum area map book: CFA19 Coleshill Junction	Volume 5 Technical appendices map book: Water resources
Volume 2 Community forum area map book: CFA20 Curdworth to Middleton	Volume 5 Technical appendices map book: Cross-topic appendix 1 - Committed developments
Volume 2 Community forum area map book: CFA22 Whittington to Handsacre	

HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

Supplementary Environmental Statement 3 and
Additional Provision 4 Environmental Statement

Volume 5 | Data dictionary and definitions

October 2015

Data dictionary and definitions

Legend features	Definition	Source	Copyright
5m contours	5m contour lines showing illustrating the surrounding topography.	GeoStore	©GeoPerspectives
Community forum boundary	The Environmental Statement has been split into 26 sections called Community Forum Areas.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.
Construction compounds	Main construction compounds in which main contractors offices and welfare facilities will be located. Satellite construction compounds which serve local works for major construction elements within a main contract.	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 2015.
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 2015.
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.	High Speed Two (HS2) Ltd	
Existing woodland and tree belts	A dataset showing large areas of trees that are likely to have an impact on whether the scheme is visible during construction and vegetation. It was used in the ZTV as part of the base models.	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	
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	
Photomontage location	Shows the locations from which verifiable photomontages have been produced. The locations are based on a fully surveyed point.	High Speed Two (HS2) Ltd	
Proposed tree planting	A dataset showing proposed planting that may have an impact on whether the scheme is visible during construction and operation. It was used in the operation year 15 ZTV.	High Speed Two (HS2) Ltd	
Public Rights of Way	Public rights of way are highways which can be used for the following purposes:	Birmingham City Council	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of

Legend features	Definition	Source	Copyright
	<ul style="list-style-type: none">- Footpaths - pedestrian's only- Bridleways - pedestrians, cyclists and equestrians- Restricted byways - as bridleways plus non-motorised vehicles- Byways open to all traffic. <p>Definitive Map data supplied by surveying authorities (i.e county councils, London Boroughs and metropolitan borough councils in the West Midlands).</p>		Publication 2015.
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	
Significantly affected viewpoint Non significantly affected viewpoint	This dataset shows the locations of the visual receptors from which the schemes visual impact has been assessed and shows whether or not the impact is significant or non-significant during construction and operation.	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 2015.
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 2015. All rights reserved.
Zone of Theoretical Visibility (ZTV) Construction	This is a computer generated model showing areas of land within which the activities undertaken during the construction of the scheme may be theoretically visible. ZTV has been used as a tool for identifying likely areas for survey and assessment based on initial scheme design.	High Speed Two (HS2) Ltd	
Zone of Theoretical Visibility (ZTV) Operation Year 1	This is a computer generated model showing areas of land within which the scheme may be theoretically visible on day 1 of operation.	High Speed Two (HS2) Ltd	
Zone of Theoretical Visibility (ZTV) Operation Year 15	This is a computer generated model showing areas of land within which the scheme may be theoretically visible after 15 years of operation by incorporating an assumed height of 7.5 metres for any mitigation planting.	High Speed Two (HS2) Ltd	

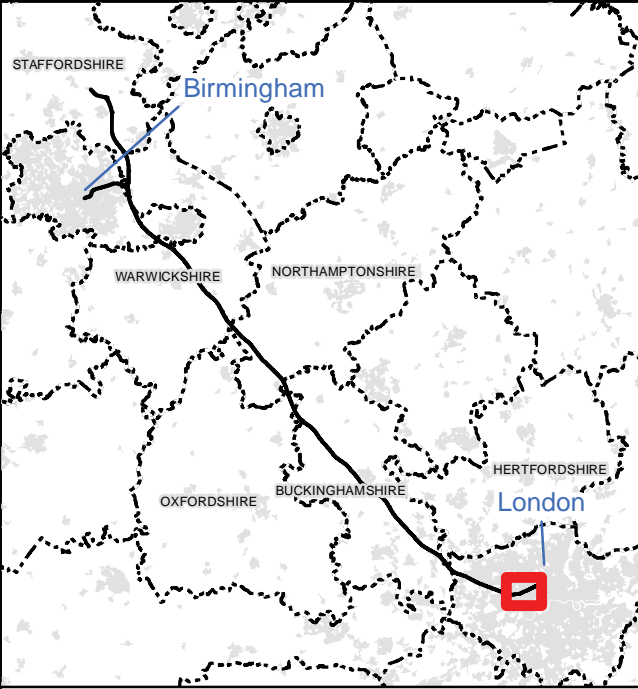
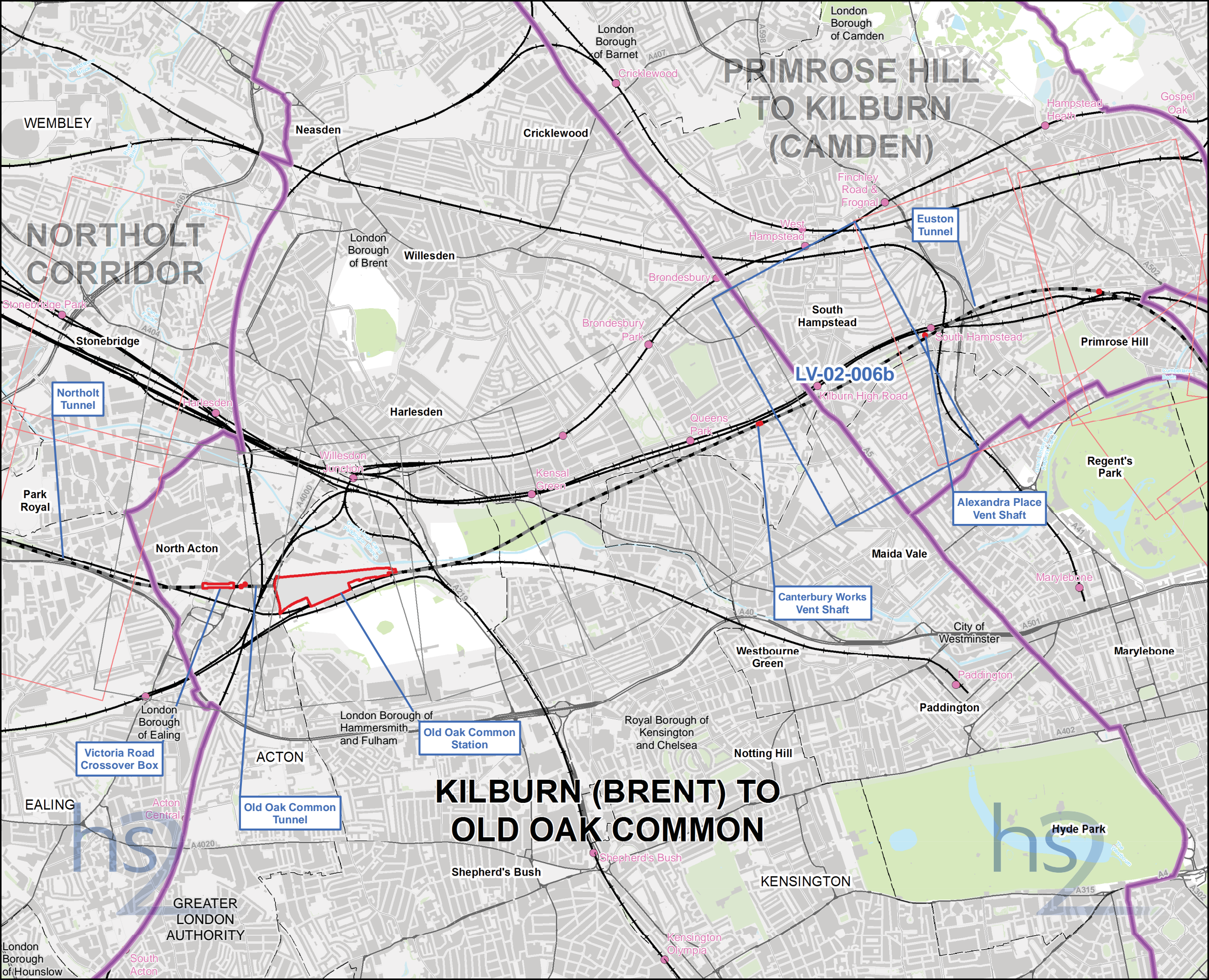
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HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

Supplementary Environmental Statement 3 and
Additional Provision 4 Environmental Statement

Volume 5 | CFA4 Kilburn (Brent) to Old Oak Common
LV-02 - Landscape Character Areas

October 2015



Map Series Information:

Maps showing the landscape character areas that have been considered for assessment and illustrating significant residual effects during construction and operation.

Main Map Legend

	Route in tunnel		Map sheets included in this community forum with amendment
	Route on surface		Map sheets included in this community forum with no amendment
	Depot, station, headhouse or portal building		Map sheets not included in this community forum
	Community forum boundary		
	Existing railway station		
	County boundary		
	District/Borough boundary		

Map Number: LV-02-INDEX-CFA4

Map Name: Index Map of: Landscape Character Areas SES3 and AP4 ES

Community Forum Area CFA4: Kilburn (Brent) to Old Oak Common

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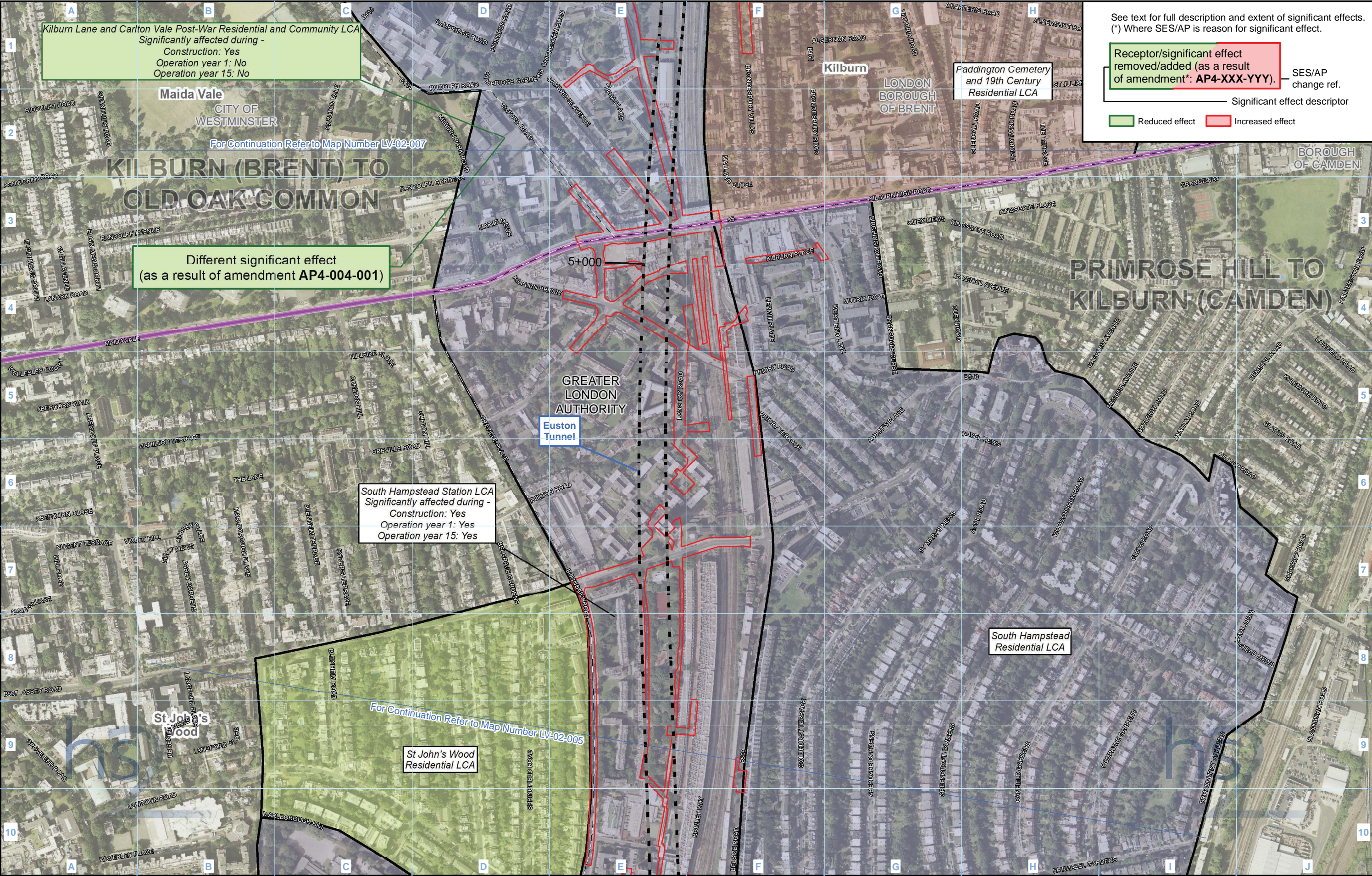
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Scale at A3: 1:30,000

0 300 600 900 1,200 Metres

Doc Number: C251-ETM-EV-MAP-010-002000-AP04-P01

Date: 23/09/15



See text for full description and extent of significant effects.
(*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Reduced effect Increased effect

Legend

Route in tunnel
Route on surface

Depot, station, headhouse or portal building
Land potentially required during construction
Community forum boundary

County boundary

District/Borough boundary
Landscape character areas (LCA)

Engineering earthworks:
Embankment
Cutting

Non engineering earthworks:
Embankment
Cutting

Map Number LV-02-006b

Map Name
**Landscape Character Areas
SES3 and AP4 ES**

Community Forum Area CFA4:
Kilburn (Brent) to Old Oak Common

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HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

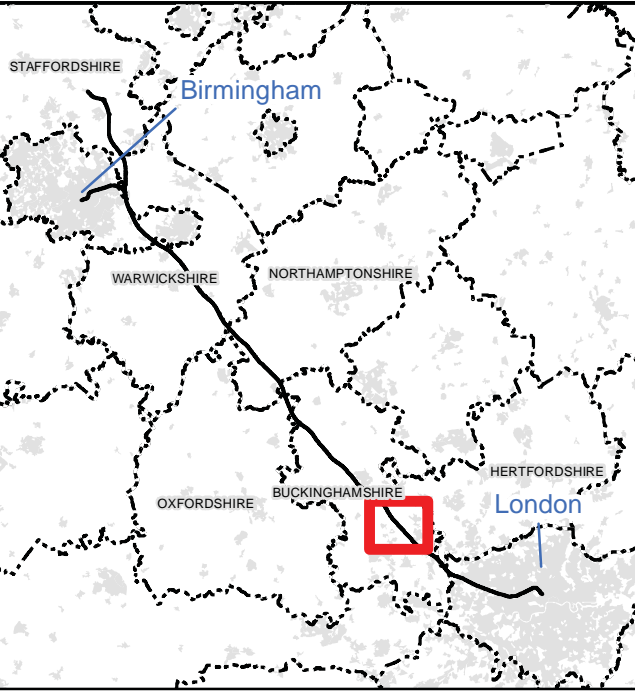
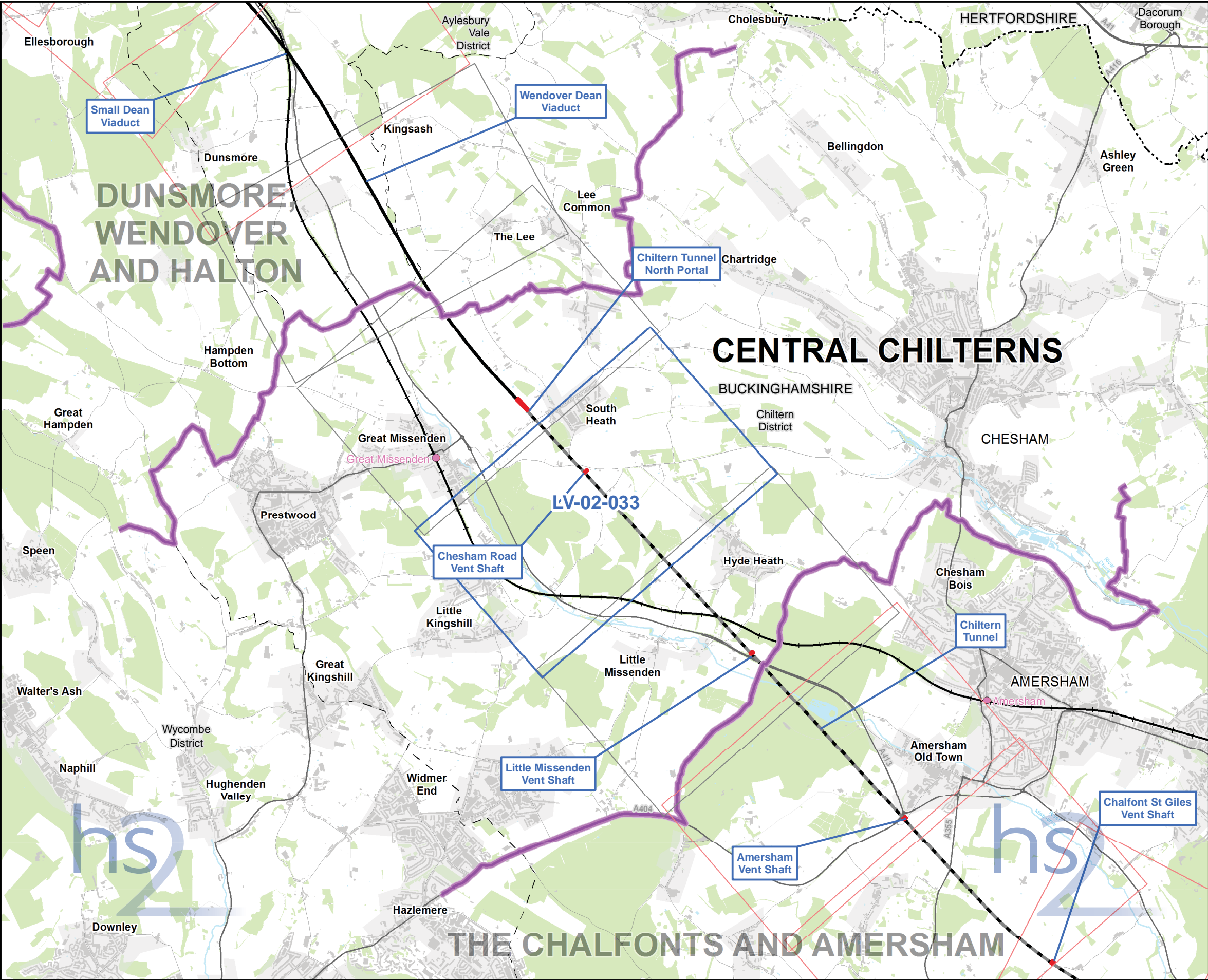
Supplementary Environmental Statement 3 and
Additional Provision 4 Environmental Statement

Volume 5 | CFA9 Central Chilterns

LV-02 - Landscape Character Areas

LV-07 - Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

October 2015



Map Series Information:

Maps showing the landscape character areas that have been considered for assessment and illustrating significant residual effects during construction and operation.

Note: Not all data layers in the legend are represented on every map.

Main Map Legend

Route in tunnel

Route on surface

Depot, station, headhouse or portal building

Community forum boundary

Existing railway station

County boundary

District/Borough boundary

Map sheets included in this community forum with amendment

Map sheets included in this community forum with no amendment

Map sheets not included in this community forum

Map Number

LV-02-INDEX-CFA9

Map Name

Index Map of:
Landscape Character Areas
SES3 and AP4 ES
Community Forum Area CFA9:
Central Chilterns

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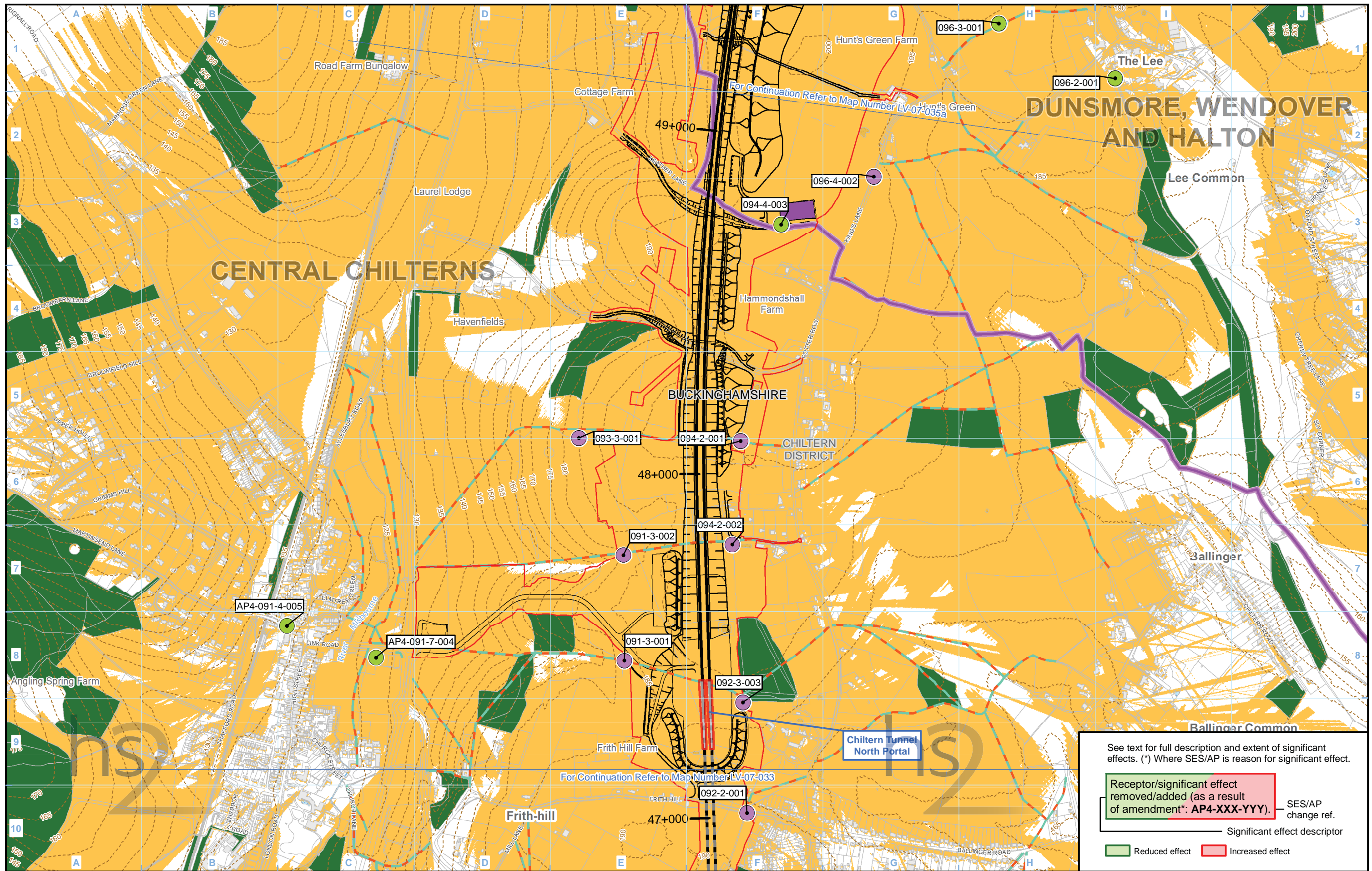
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Scale at A3: 1:50,000

0 500 1,000 1,500 2,000
Metres

Doc Number: C252-ETM-EV-MAP-020-004534-AP04-P01

Date: 21/09/15



Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Land potentially required during construction
- Community forum boundary
- County boundary
- District/Borough boundary
- Public Rights of Way
- 5m contours
- Water body
- Watercourse
- Existing woodland and tree belts
- Construction compounds
- ZTV Construction
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Photomontage location
- Viewpoint number
- Engineering earthworks:
 - Embankment
 - Cutting
- Non engineering earthworks:
 - Embankment
 - Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works and operational structures. Theoretical visibility does not necessarily mean a location would be subject to adverse effects. An explanation of what the ZTV represents and how it should be interpreted is provided in section 12 of Volume 1.

Map Number
LV-07-034

Map Name
Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA9:
Central Chilterns

See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Reduced effect

Increased effect

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Doc Number: C252-ETM-EV-MAP-020-004542-AP04-P01

Date: 25/09/15

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HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement

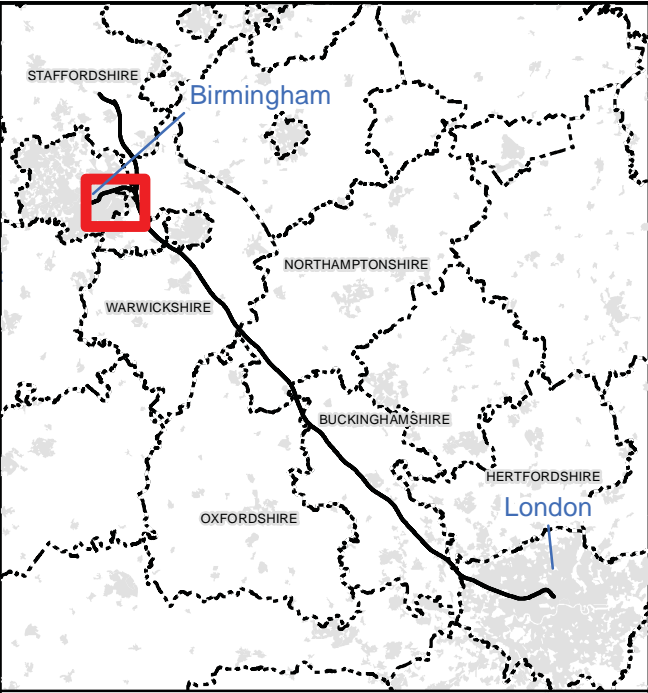
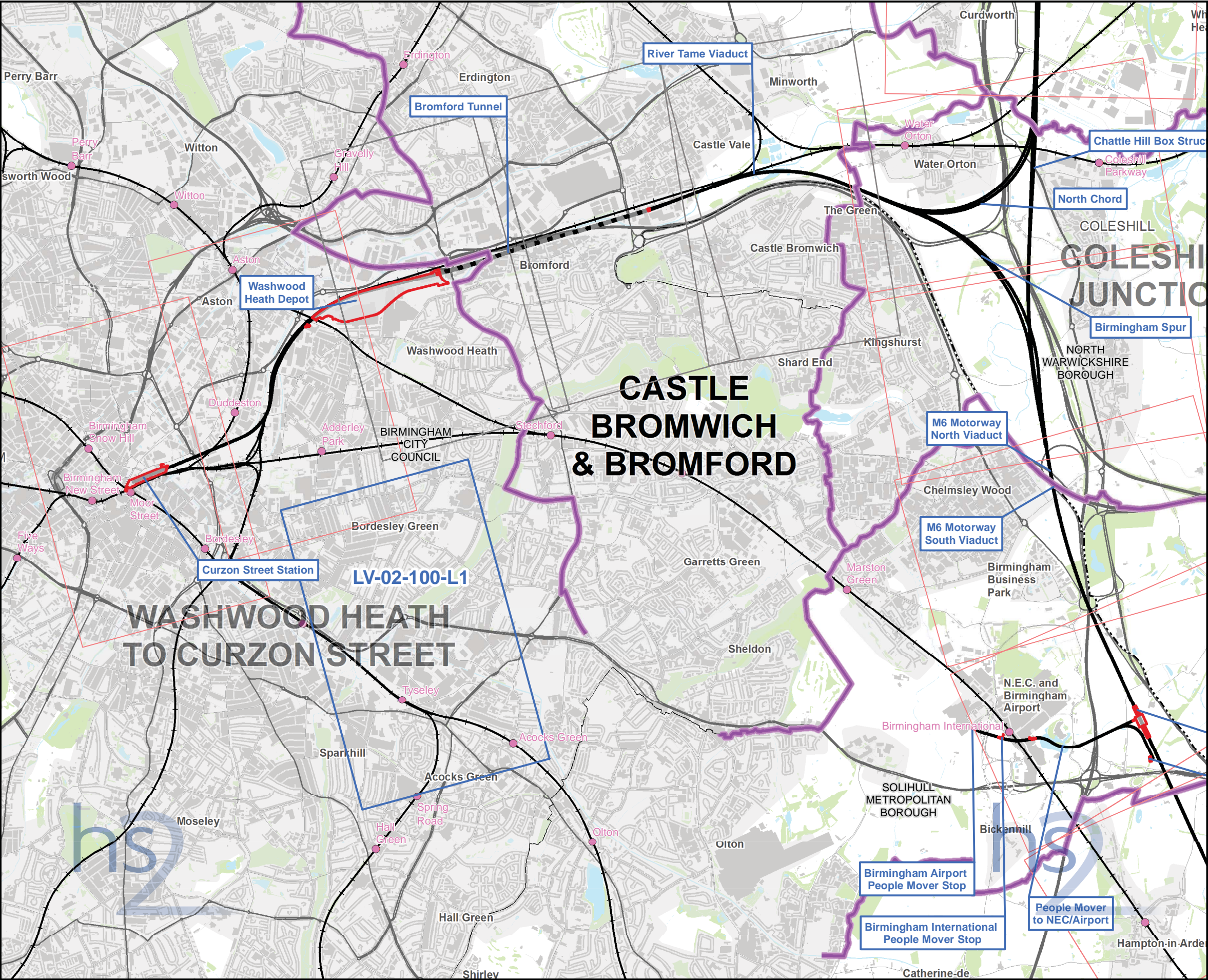
Volume 5 | CFA25 Castle Bromwich and Bromford

LV-02 - Landscape Character Areas

LV-07 - Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

LV-08 - Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

October 2015



Map Series Information:

Maps showing the landscape character areas that have been considered for assessment and illustrating significant residual effects during construction and operation.

Route in tunnel

Route on surface

Depot, station, headhouse or portal building

Community forum boundary

Existing railway station

County boundary

District/Borough boundary

Map sheets included in this community forum with amendment

Map sheets included in this community forum with no amendment

Map sheets not included in this community forum

Map Number

Map Name

Community Forum Area CFA25:

Map Number

Map Name

Community Forum Area CFA25:

Map Number

Map Name

Community Forum Area CFA25:

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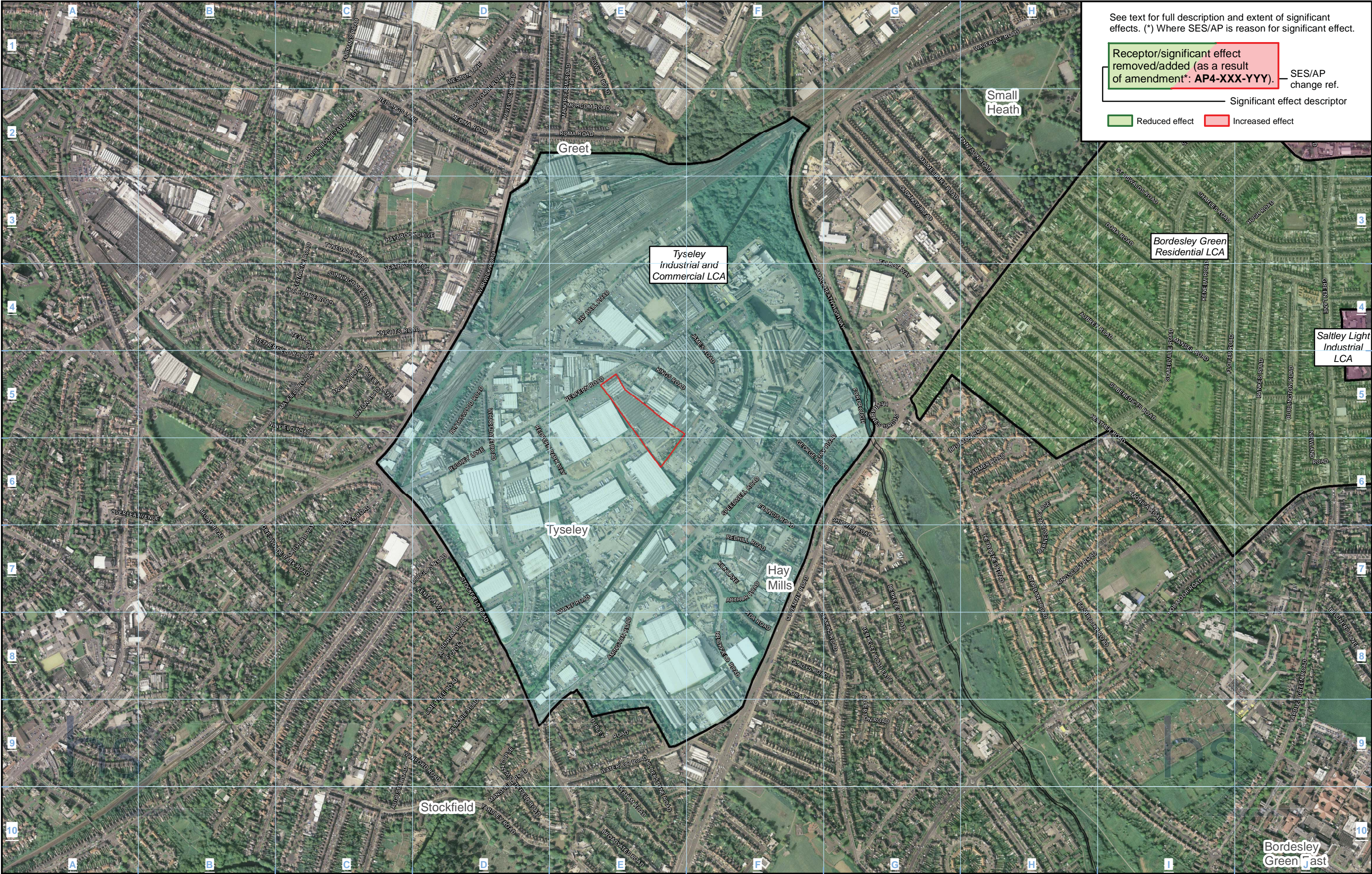
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Scale at A3: 1:50,000

0 500 1,000 1,500 2,000
Metres

Doc Number: C254-ARP-EV-MAP-040-000663-AP04-P01

Date: 15/09/15



Legend

Route in tunnel
Route on surface
Depot, station, headhouse or portal building
Land potentially required during construction
Community forum boundary
County boundary

District/Borough boundary
Landscape Character Areas (LCA)

Engineering earthworks:
Embankment
Cutting

Non engineering earthworks:
Embankment
Cutting

Map Number
LV-02-100-L1

Map Name
Landscape Character Areas
SES3 and AP4 ES

Community Forum Area CFA25:
Castle Bromwich & Bromford

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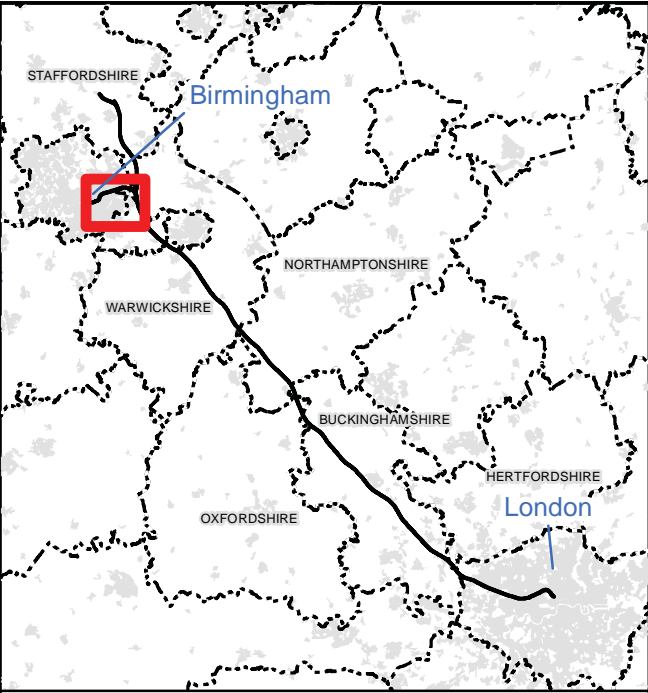
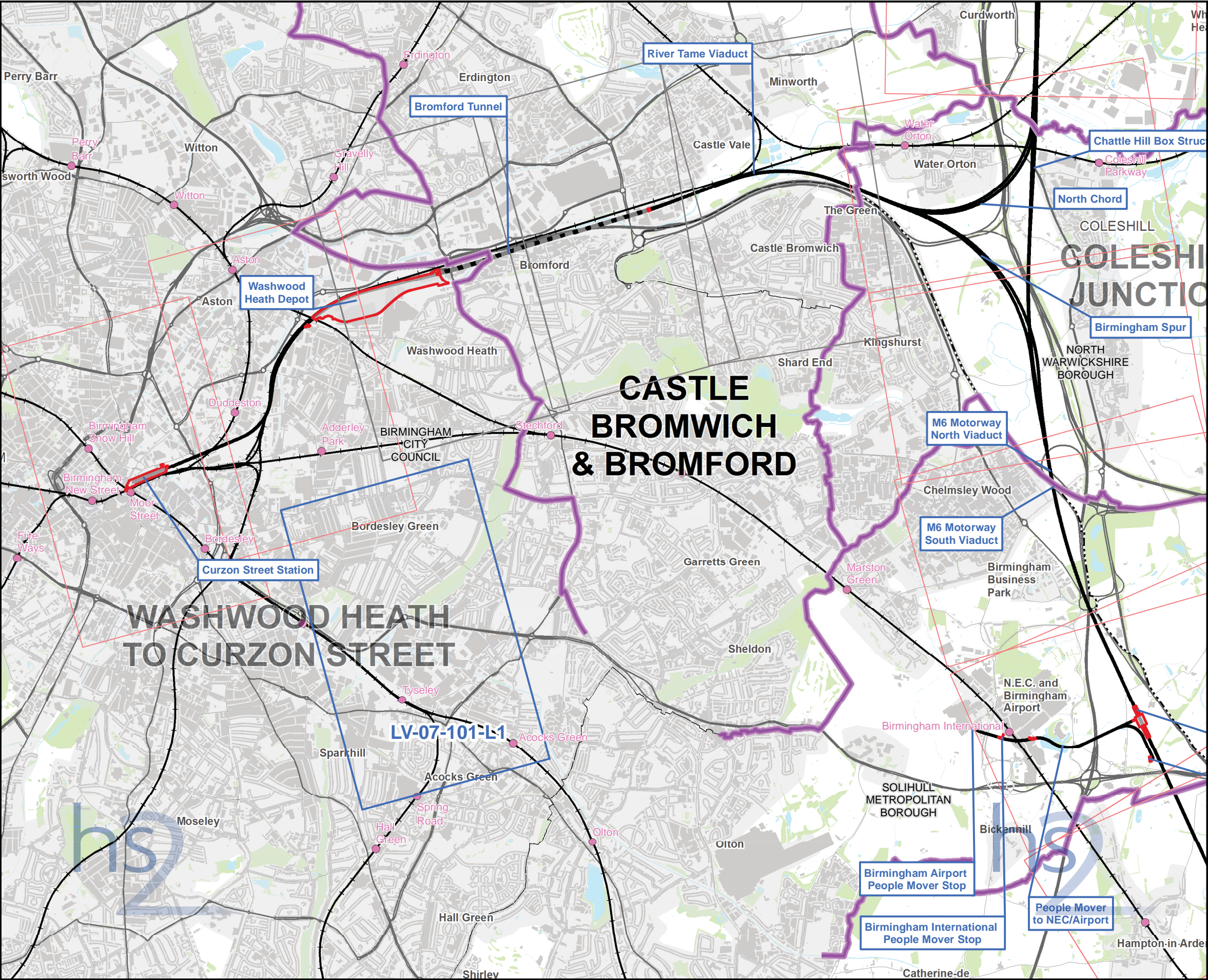
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Doc Number: C254-ARP-EV-MAP-040-000274-AP04-P01

Date: 24/09/15

Scale at A3: 1:10,000

0 100 200 300 400
Metres



Map Series Information:

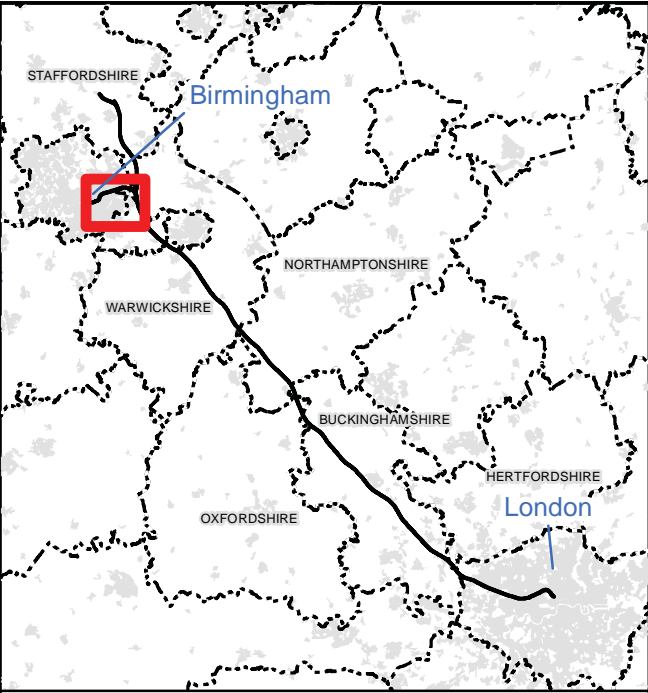
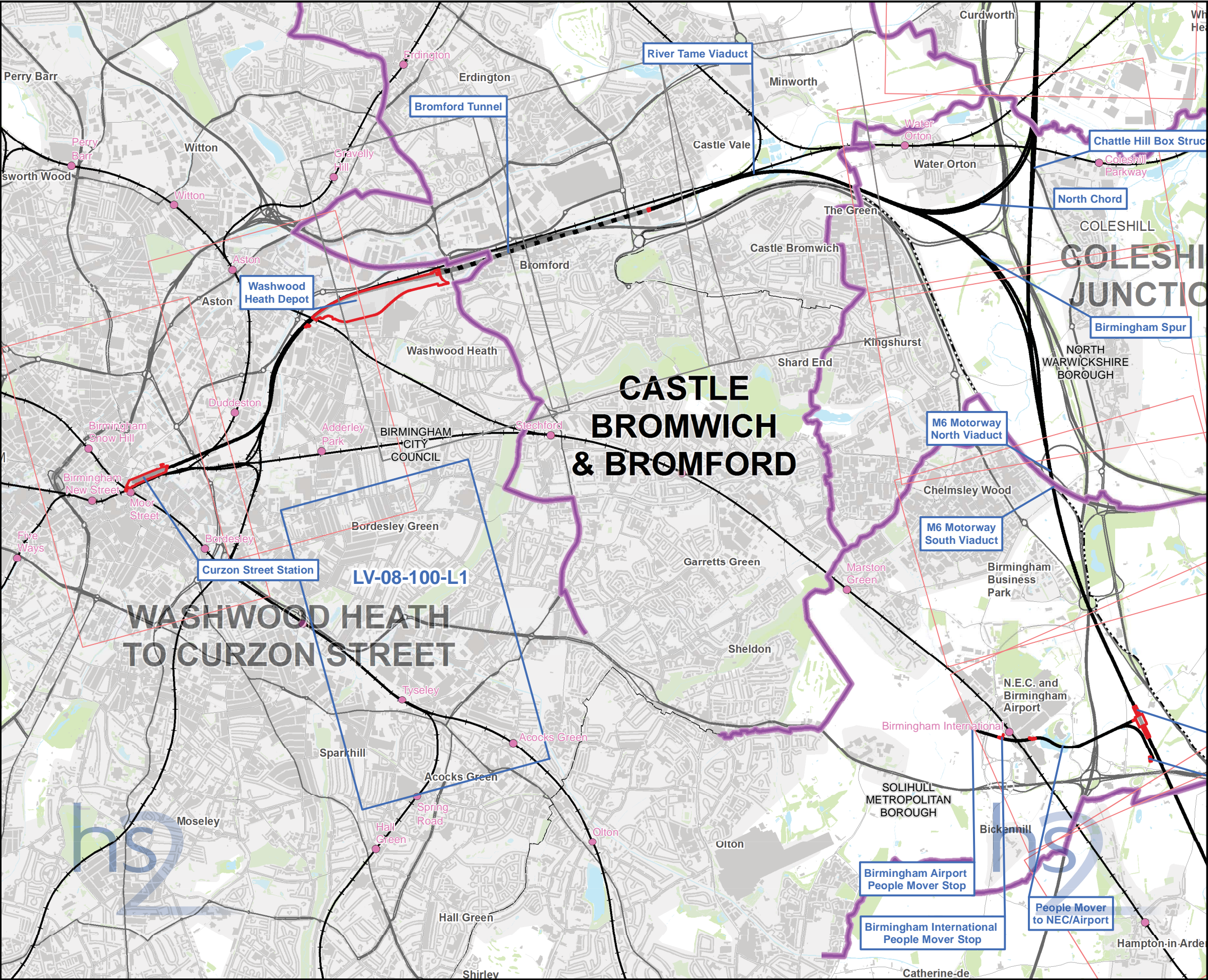
Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.

Main Map Legend

	Route in tunnel		Map sheets included in this community forum with amendment
	Route on surface		Map sheets included in this community forum with no amendment
	Depot, station, headhouse or portal building		Map sheets not included in this community forum
	Community forum boundary		
	Existing railway station		
	County boundary		
	District/Borough boundary		

Map Number	LV-07-INDEX-CFA25
Map Name	Index Map of: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES
	Community Forum Area CFA25: Castle Bromwich & Bromford

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Doc Number: C254-ARP-EV-MAP-040-000668-AP04-P01	Date: 15/09/15	



Map Series Information:

Maps showing the operational phase year one and year fifteen zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.

- Main Map Legend**
- Route in tunnel
 - Route on surface
 - Depot, station, headhouse or portal building
 - Community forum boundary
 - Existing railway station
 - County boundary
 - District/Borough boundary

- Map sheets included in this community forum with amendment
- Map sheets included in this community forum with no amendment
- Map sheets not included in this community forum

Map Number	LV-08-INDEX-CFA25
Map Name	Index Map of: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES
Community Forum Area CFA25:	Castle Bromwich & Bromford

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Metres

Doc Number: C254-ARP-EV-MAP-040-000671-AP04-P01 **Date:** 15/09/15



See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Reduced effect

Increased effect

Legend

Route in tunnel

Route on surface

Depot, station, headhouse or portal building

Land potentially required during construction

Community forum boundary

County boundary

District/Borough boundary

Public Rights of Way

5m contours

Water body

Watercourse

Existing woodland and tree belts

Construction compound

ZTV construction

Non significantly affected viewpoint

Significantly affected viewpoint

Photomontage location

Viewpoint number

Engineering earthworks:

Embankment

Cutting

Non engineering earthworks:

Embankment

Cutting

The zone of theoretical visibility(ZTV) is a computer generated model that indicates the theoretical visibility of the construction works and operational structures. Theoretical visibility does not necessarily mean a location would be subject to adverse effects. An explanation of what the ZTV represents and how it should be interpreted is provided in section 8 of Volume 1.

Map Number

LV-07-100-L1

Map Name

Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA25: Castle Bromwich & Bromford

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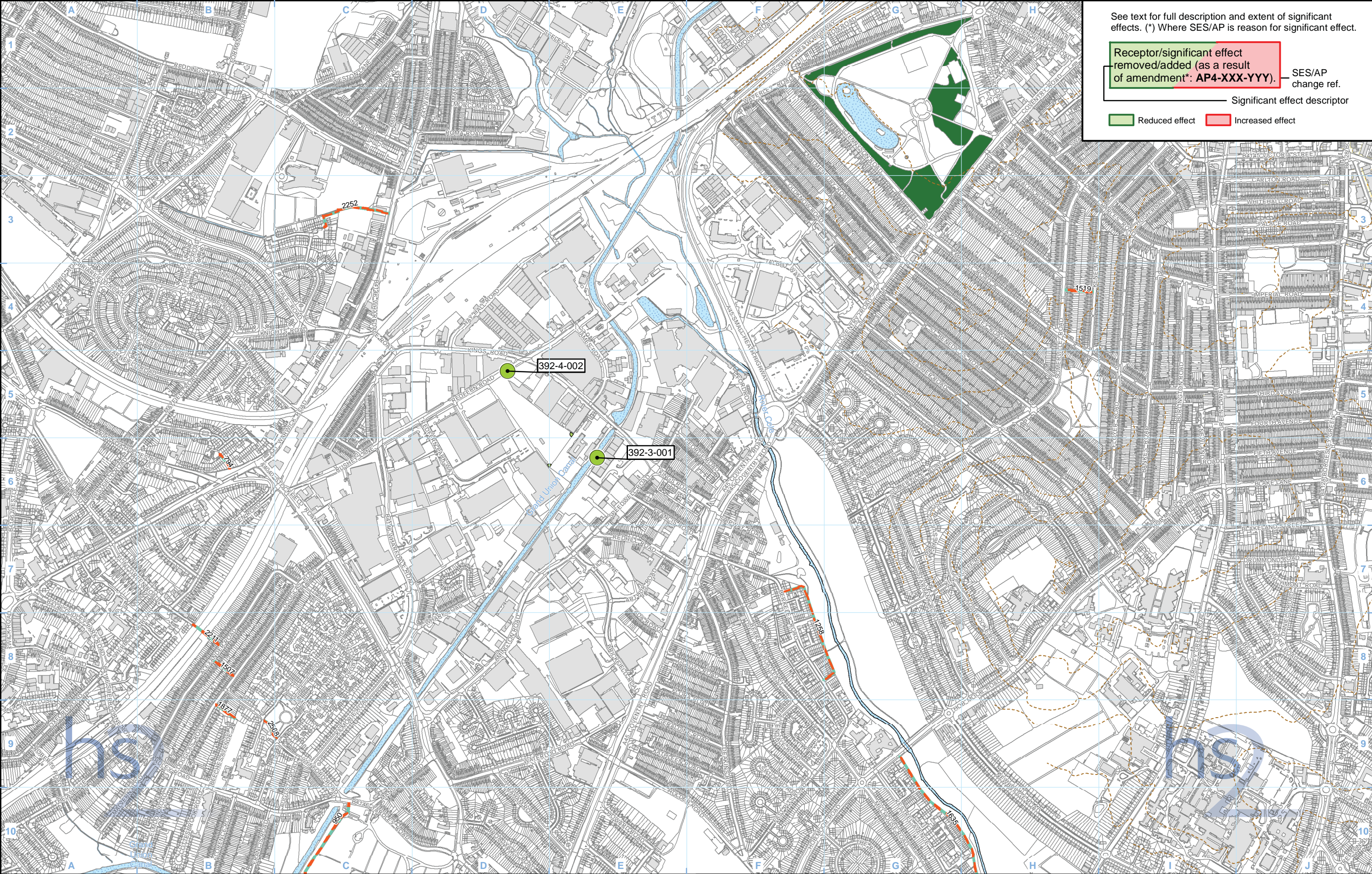
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Doc Number: C254-ARP-EV-MAP-040-000273-AP04-P01

Scale at A3: 1:10,000

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Date: 24/09/15



See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Reduced effect Increased effect

Legend

Route in tunnel

Route on surface

Depot, station, headhouse or portal building

Community forum boundary

County boundary

District/Borough boundary

Public Rights of Way

5m contours

Water body

Watercourse

Existing woodland and tree belts

Proposed tree planting

ZTV operation year 1

ZTV operation year 15

Non significantly affected viewpoint

Significantly affected viewpoint

Photomontage location

001-1-001 Viewpoint number

Engineering earthworks:

Embankment

Cutting

Non engineering earthworks:

Embankment

Cutting

The zone of theoretical visibility(ZTV) is a computer generated model that indicates the theoretical visibility of the construction works and operational structures. Theoretical visibility does not necessarily mean a location would be subject to adverse effects. An explanation of what the ZTV represents and how it should be interpreted is provided in section 8 of Volume 1.

Map Number

LV-08-100-L1

Map Name

Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA25: Castle Bromwich & Bromford

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Doc Number: C254-ARP-EV-MAP-040-000275-AP04-P01

Scale at A3: 1:10,000

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Date: 24/09/15

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HIGH SPEED RAIL (LONDON - WEST MIDLANDS)

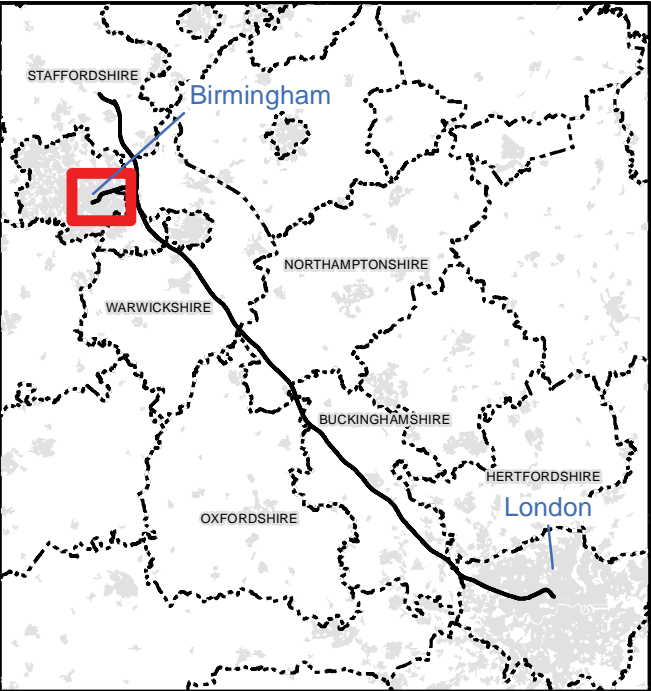
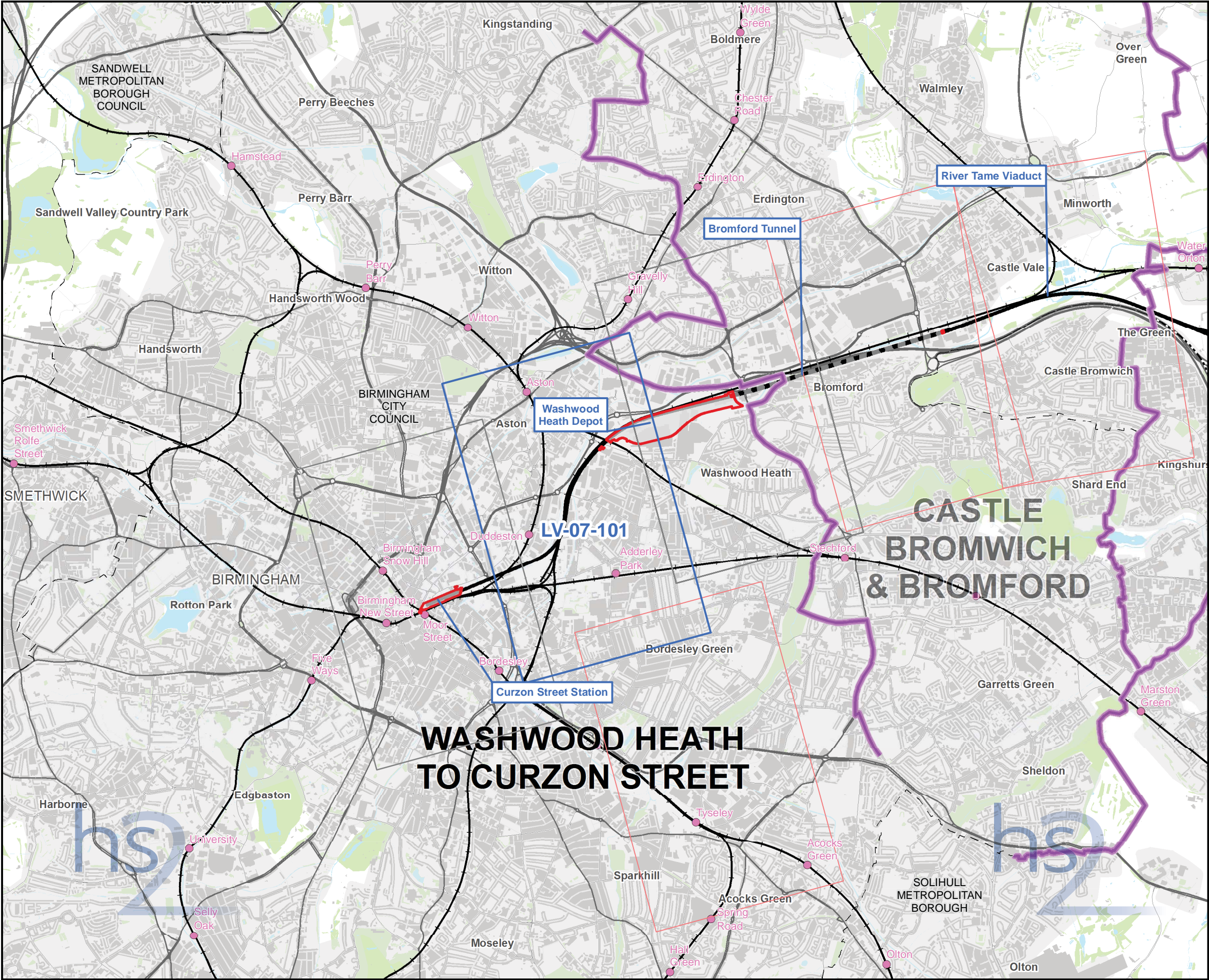
Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement

Volume 5 | CFA26 Washwood Heath to Curzon Street

LV-07 - Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

LV-08 - Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

October 2015



Map Series Information:

Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.

- Main Map Legend**
- Route in tunnel
 - Route on surface
 - Depot, station, headhouse or portal building
 - Community forum boundary
 - Existing railway station
 - County boundary
 - District/Borough boundary

- Map sheets included in this community forum with amendment
- Map sheets included in this community forum with no amendment
- Map sheets not included in this community forum

Map Number	LV-07-INDEX-CFA26
Map Name	Index Map of: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES
	Community Forum Area CFA26: Washwood Heath to Curzon Street

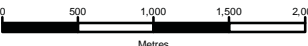


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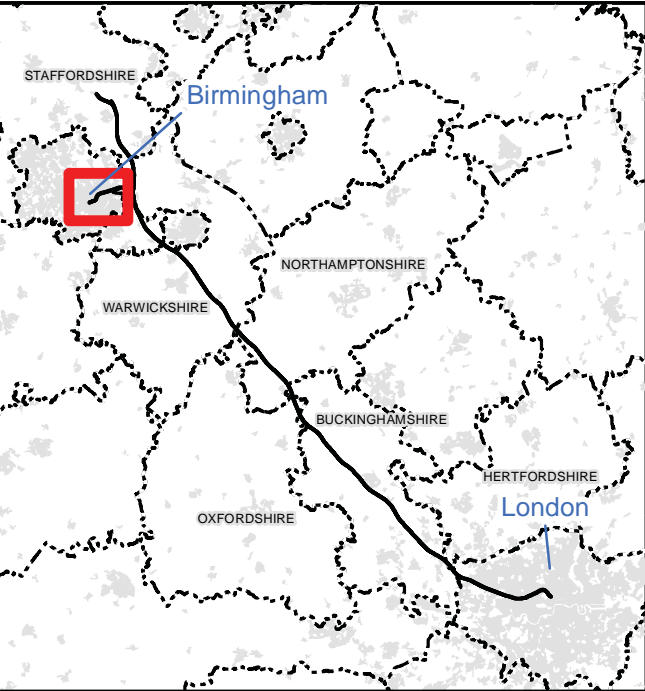
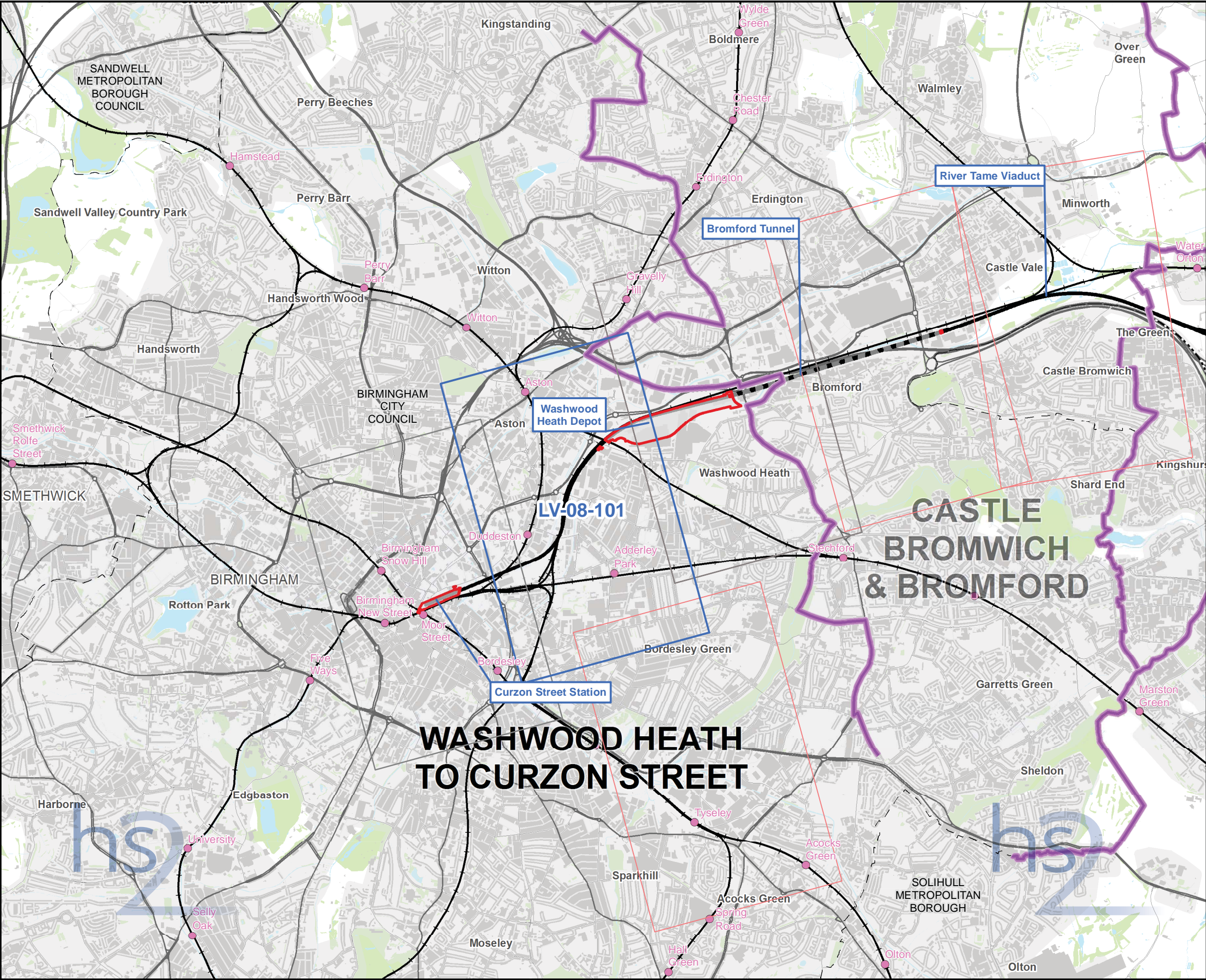
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Doc Number: C254-ARP-EV-MAP-040-000669-AP04-P01

Date: 15/09/15



Map Series Information:

Maps showing the operational phase year one and year fifteen zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.

Main Map Legend

Route in tunnel

Route on surface

Depot, station, headhouse or portal building

Community forum boundary

Existing railway station

County boundary

District/Borough boundary

Map sheets included in this community forum with amendment

Map sheets included in this community forum with no amendment

Map sheets not included in this community forum

Map Number: LV-08-INDEX-CFA26

Map Name: Index Map of: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA26: Washwood Heath to Curzon Street

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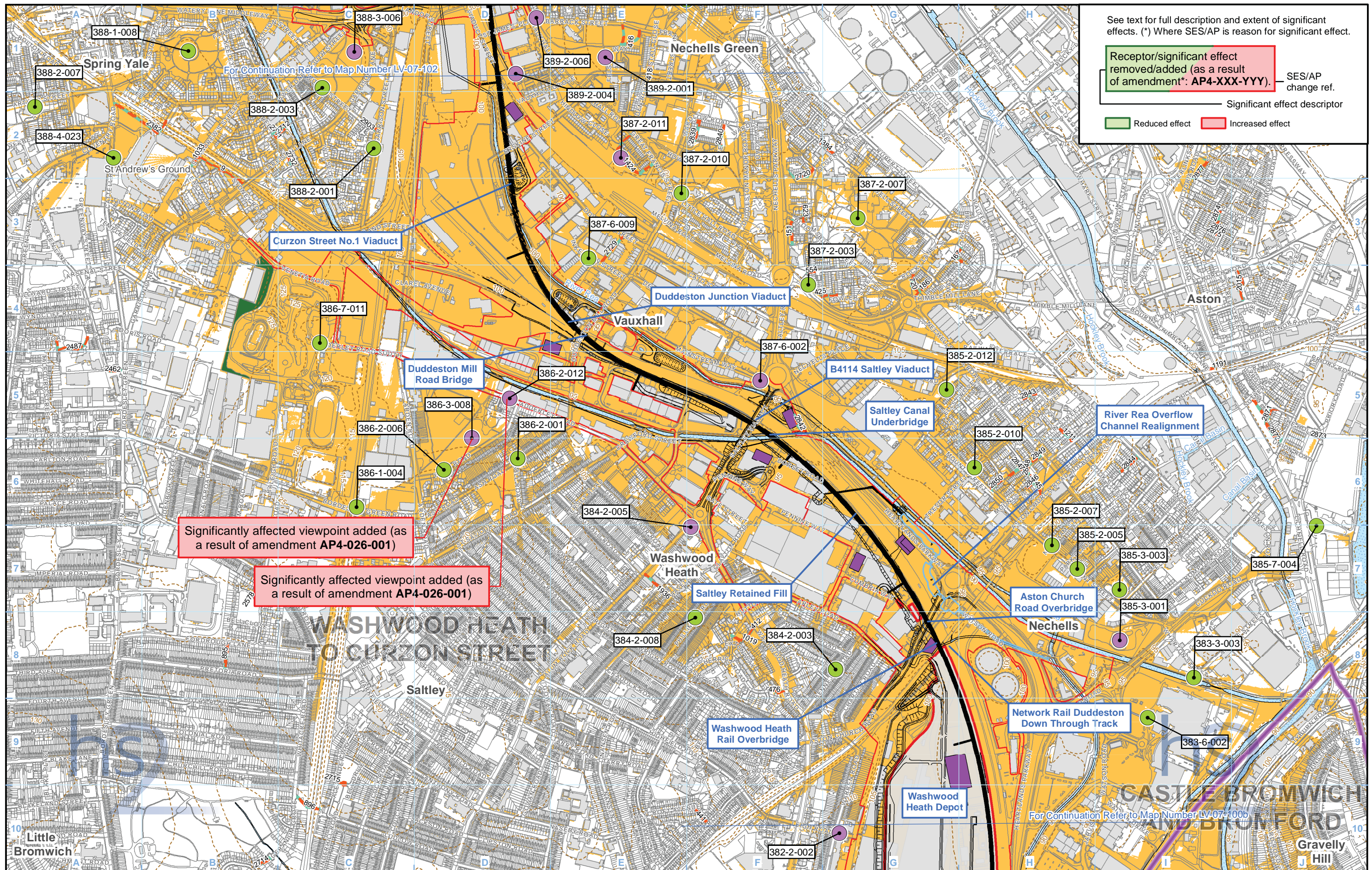
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Date: 15/09/15



See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Reduced effect Increased effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours			Cutting
Land potentially required during construction	Water body			Non engineering earthworks:
Community forum boundary	Watercourse			Embankment
County boundary	Existing woodland and tree belts			Cutting
	Construction compound			
			Photomontage location	
			001-1-001 Viewpoint number	

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works and operational structures. Theoretical visibility does not necessarily mean a location would be subject to adverse effects. An explanation of what the ZTV represents and how it should be interpreted is provided in section 8 of Volume 1.

Map Number LV-07-101

Map Name Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA26: Washwood Heath to Curzon Street

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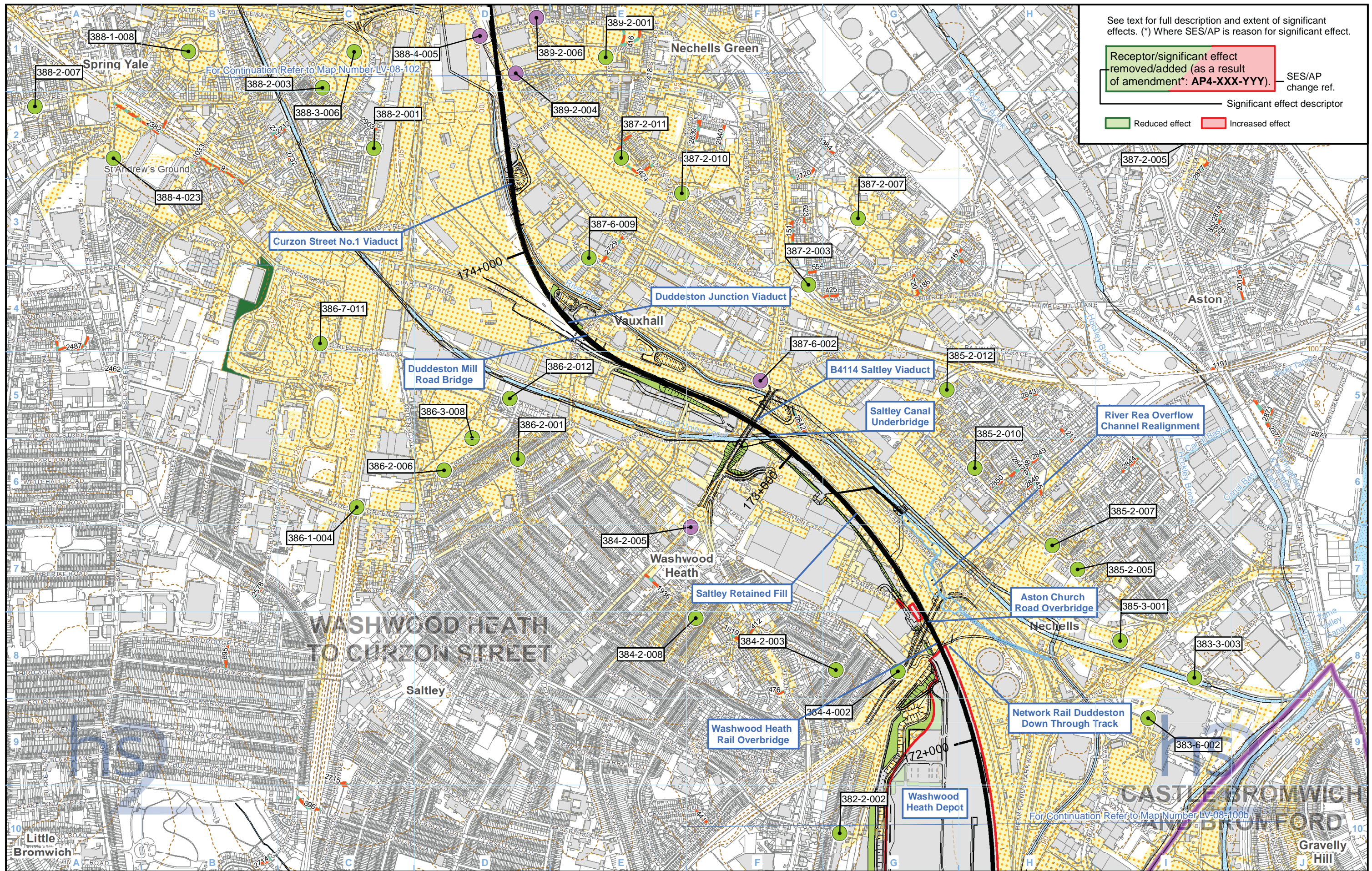
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Date: 24/09/15

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0 100 200 300 400 Metres



See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added (as a result of amendment*: AP4-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Reduced effect Increased effect

Legend

Route in tunnel	Public Rights of Way	ZTV operation year 1	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	5m contours	ZTV operation year 15	Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	Water body			Cutting
Community forum boundary	Watercourse			Non engineering earthworks:
County boundary	Existing woodland and tree belts			Embankment
District/Borough boundary	Proposed tree planting			Cutting
			Photomontage location	
			001-1-001 Viewpoint number	

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works and operational structures. Theoretical visibility does not necessarily mean a location would be subject to adverse effects. An explanation of what the ZTV represents and how it should be interpreted is provided in section 8 of Volume 1.

Map Number LV-08-101

Map Name

Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES3 and AP4 ES

Community Forum Area CFA26: Washwood Heath to Curzon Street

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Date: 24/09/15

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