

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

Volume 5: Map Book

Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)

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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.

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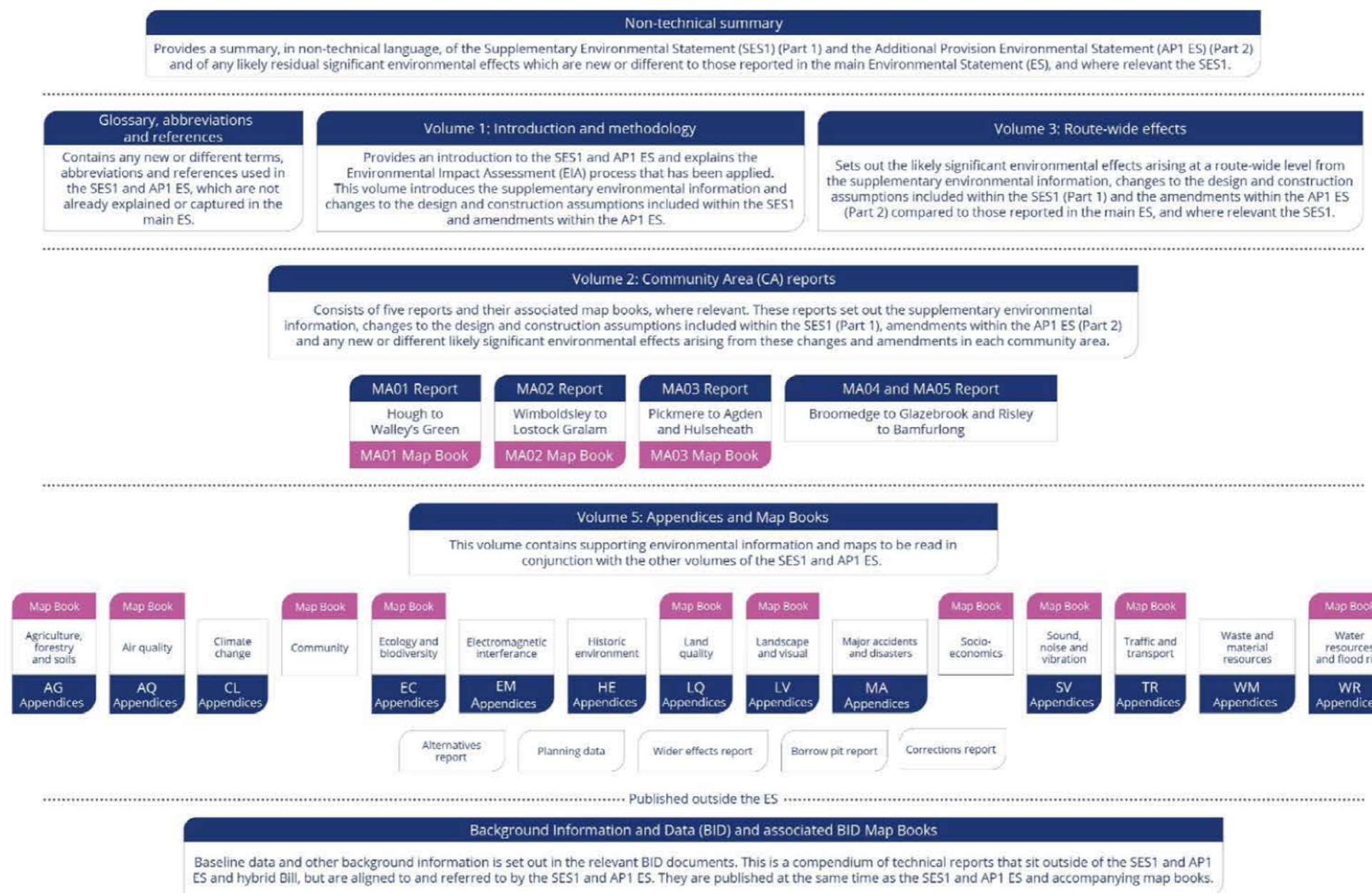
Data dictionary and definitions

Map series name	Map series description
LV-00 – Route Wide Landscape Character Areas and National Character Areas	Map showing the Landscape Character Areas (LCAs) in context with the National Character Areas (NCAs).
LV-02 – Landscape Character Areas	Maps showing the LCAs that have been considered for assessment and illustrating significant residual effects during construction and operation.
LV-07 – Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints	Maps showing the construction phase zone of theoretical visibility and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.
LV-08 – Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints	Maps showing the operational phase year one and year fifteen zone of theoretical visibility and the viewpoint locations from which the visual assessment of the Proposed Scheme has been undertaken.
LV-17 – Route wide Landscape Context	Map showing the route wide landscape proposals in context with the wider landscape.

Mapping explanatory notes

Structure of the Supplementary Environmental Statement 1 and the Additional Provision 1 Environmental Statement

This map book is part of the suite of documents that make up the Supplementary Environmental Statement 1 (SES1) and the Additional Provision 1 Environmental Statement (AP1 ES) for the High Speed Rail (Crewe – Manchester) scheme. The SES1 and the AP1 ES are separate documents; however, they are bound together and presented in a number of volumes shown in Figure 1.



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 SES1 and AP1 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 SES1 and AP1 ES have a chainage value shown next to the alignment. Chainage is presented on the maps in black font, in the form of XXX+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 2km intervals. For maps at 1:20,000, 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 (In Parliament - Session 2021 - 2022) on the left-hand page and the SES1 and the AP1 ES map on the right. For the CT-05 and CT-06 map series, the SES1 and the AP1 ES is shown with different coloured hatching, annotated with labels, which highlights the areas of change. The coloured text box provides a brief description of the design change and amendment, and gives the SES1 and the AP1 ES reference number. In some instances where the effect covers a large area, a box without hatching but with a label, is shown. Only maps which have been amended as a result of the SES1 and the AP1 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 hatching.

Each Volume 5 map is annotated to describe the change to a receptor or significant effect, and to give the SES1 and the AP1 ES reference number. For more detailed information about the SES1 and the AP1 ES annotation, refer to the map series legend. Only maps which have been amended as a result of the SES1 and the AP1 ES are included within the map book.

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 left hand side of the page, and Manchester to the right.

The exception to this, are map series LV-00, LV-02, LV-07 and LV-08, 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 Manchester to the top.

Further details on the approach to mapping is set out in Section 6 of Volume 1 of the SES1 and AP1 ES.

Map books

In total, there are 14 map books included in the SES1 and AP1 ES Volume 2 and Volume 5. A list of the map book titles and map series is provided below for reference.

Map book title (map series)	Name
Volume 2: Map book – MA01: Hough to Walley's Green (CT-05, CT-06, CT-10, LV-01, LV-03, LV-04, SV-05)	Volume 5: Map book – Land quality (LQ-01)
Volume 2: Map book – MA02: Wimboldsley to Lostock Gralam (CT-05, CT-06, CT-10, LV-01, LV-03, LV-04, SV-05)	Volume 5: Map book – Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)
Volume 2: Map book – MA03: Pickmere to Agden and Hulseheath (CT-05, CT-06, CT-10, LV-01, LV-03, LV-04, SV-05)	Volume 5: Map book – Planning Data/Committed Development (CT-13)
Volume 5: Map book – Agriculture (AG-01, AG-04)	Volume 5: Map book – Socio-economics (SE-01)
Volume 5: Map book – Air quality (AQ-01)	Volume 5: Map book – Sound, noise and vibration (SV-02, SV-03, SV-08, SV-09)
Volume 5: Map book – Community (CM-01)	Volume 5: Map book – Traffic and transport (TR-03, TR-04, TR-08)
Volume 5: Map book – Ecology and biodiversity (EC-01)	Volume 5: Map book – Water resources and flood risk (WR-02)

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

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	
Community area boundary	The Environmental Statement has been split into sections called Community Areas.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2019.
Construction compounds	A strategic construction hub for core project management (engineering, planning and construction delivery), commercial and administrative staff associated with the construction of the Proposed Scheme. These compounds will include an area for equipment and materials storage, as well as providing main welfare facilities for construction staff, with some compounds also providing overnight sleeping accommodation for construction staff.	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 2021.
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 2021.
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	
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	

Legend features	Definition	Source	Copyright
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 Area	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	
Large urban area	Urban areas derived from Ordnance Survey Meridian data.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2016.
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	
Other planting and hedgerows	Soft landscape design that can include any seeded areas for the purpose of creating grassland except for the engineering earthworks. 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	
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 (PRoW)	Public rights of way are highways which can be used for the following purposes: <ul style="list-style-type: none"> - 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.	Cheshire East council Cheshire West council	© Cheshire East council. © Cheshire West council.
Route in tunnel	Represents the proposed route of HS2, split into route on surface and tunnelled sections.	High Speed Two (HS2) Ltd	
Route on surface	Represents the proposed route of HS2, split into route on surface and tunnelled sections.	High Speed Two (HS2) Ltd	
Significantly affected photomontage	This dataset shows the locations of photomontages from which the schemes visual impact has been assessed as significant during either construction or operation.	High Speed Two (HS2) Ltd	

Legend features	Definition	Source	Copyright
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	
Significantly affected viewpoint or photomontage number	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	
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	
Water body	Any mass of water having definite hydrological, physical, chemical and biological characteristics.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2021.
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	
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	
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	

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

MA01: Hough to Walley's Green

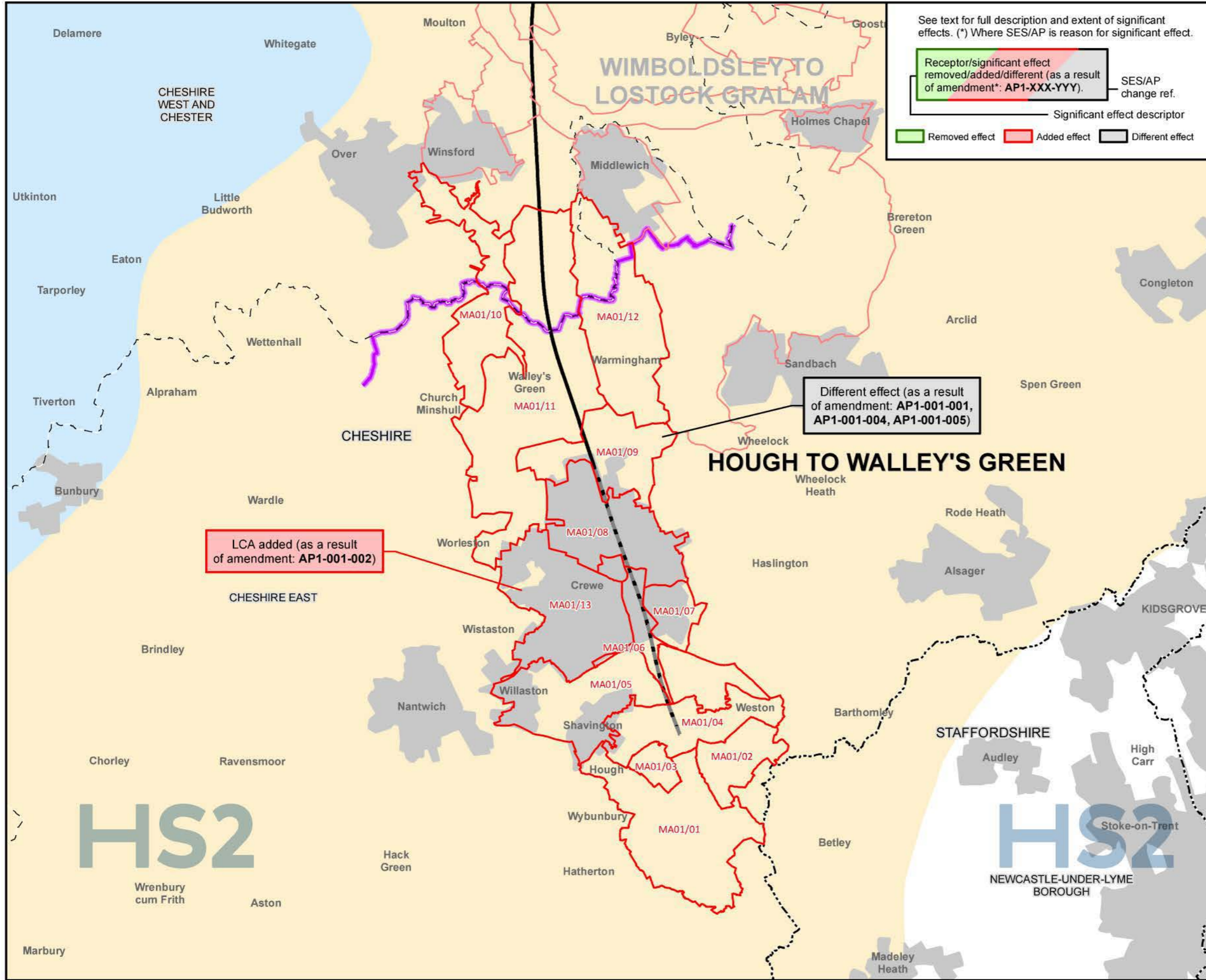
LV-00 – Route-wide Landscape Character Areas and National Character Areas

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

LV-17 – Route-wide Landscape Context



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

- Landscape Character Areas**
- MA01/01 - Blakenhall Lower Farms and Woods
 - MA01/02 - Wychwood Park
 - MA01/03 - Hough Common
 - MA01/04 - Shavington/Crewe Outer Fringe Lower Farms and Woods
 - MA01/05 - Crewe Urban Fringe
 - MA01/06 - Crewe Station Area and Sidings
 - MA01/07 - Crewe East Commercial and Industrial
 - MA01/08 - Crewe North
 - MA01/09 - Crewe Fringe Mosslands
 - MA01/10 - Upper Weaver Valley
 - MA01/11 - Wimboldsley Plain
 - MA01/12 - River Wheelock Farmland
 - MA01/13 - Crewe West

LCA added (as a result of amendment: AP1-001-002)

Different effect (as a result of amendment: AP1-001-001, AP1-001-004, AP1-001-005)

- Legend**
- Route in tunnel
 - Route on surface
 - Community area boundary
 - County boundary
 - District/Borough boundary
 - Large urban area
 - Landscape Character Area boundary (included in this community area)
 - Landscape Character Area boundary (not included in this community area)
 - Cheshire Sandstone Ridge
 - Shropshire, Cheshire and Staffordshire Plain

Map Number: LV-00-MA01

Map Name: Route Wide Landscape Character Areas and National Character Areas SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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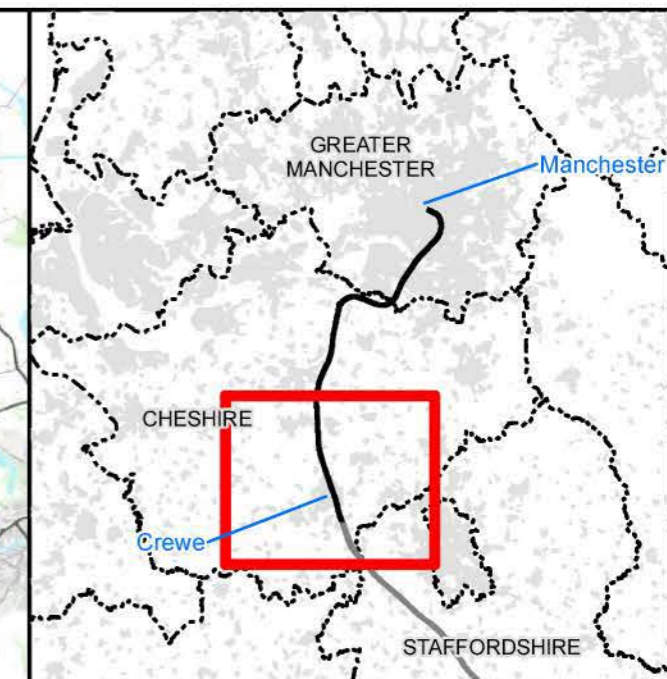
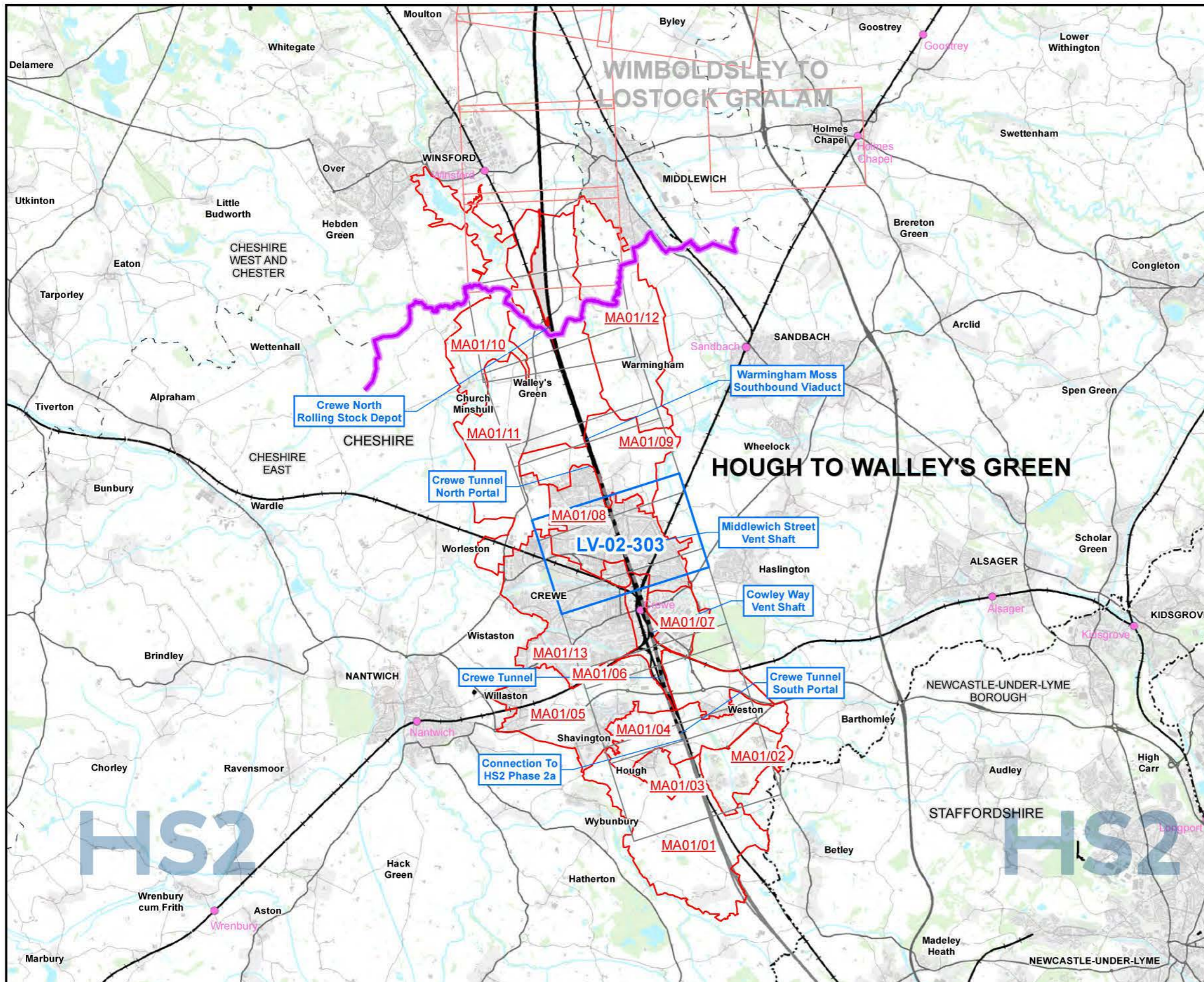
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Doc Number: 2PT24-MWJ-EV-MAP-M000-000320-P01

Date: 22/04/22

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Map Series Information:

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

LCA No.	LCA Name
MA01/01	Blakenhall Lower Farms and Woods
MA01/02	Wychwood Park
MA01/03	Hough Common
MA01/04	Shavington/Crewe Outer Fringe Lower Farms and Woods
MA01/05	Crewe Urban Fringe
MA01/06	Crewe Station Area and Sidings
MA01/07	Crewe East Commercial and Industrial
MA01/08	Crewe North
MA01/09	Crewe Fringe Mosslands
MA01/10	Upper Weaver Valley
MA01/11	Wimboldsley Plain
MA01/12	River Wheelock Farmland
MA01/13	Crewe West

Main Map Legend

	Route in tunnel
	Route on surface
	Depot, station, headhouse or portal building
	Community area boundary
	Existing railway station
	County boundary
	District/Borough boundary

	Landscape Character Area boundary
	Map sheets included in this community area
	Map sheets included in this community area with no amendment
	Map sheets not included in this community area
	Landscape Character Area Number

Map Number	LV-02-INDEX-MA01
Map Name	Index Map of: Landscape Character Areas SES1 and AP1 ES
	Community Area MA01: Hough to Walley's Green

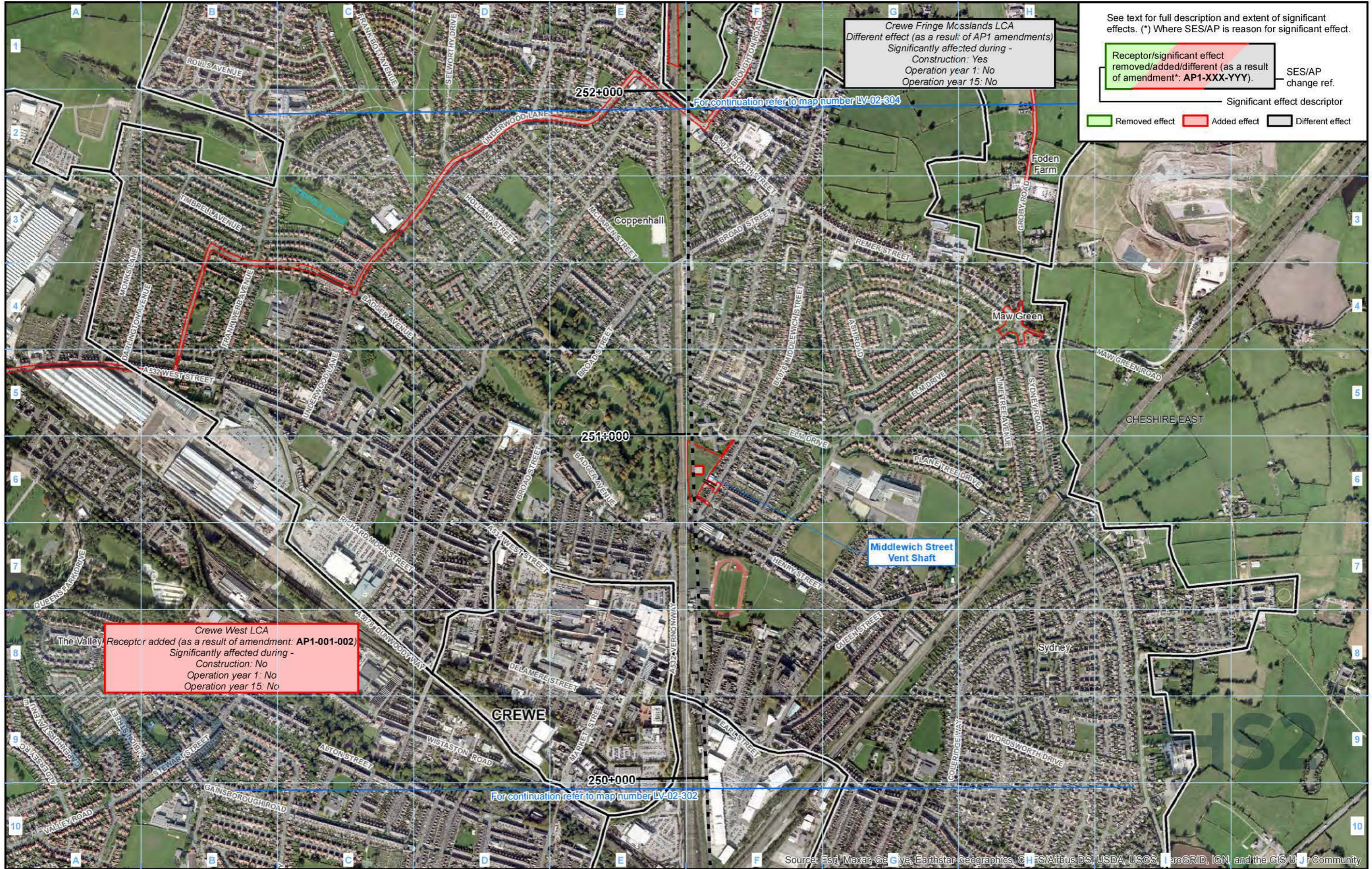
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Crewe Fringe Msslands LCA
 Different effect (as a result of AP1 amendments)
 Significantly affected during -
 Construction: Yes
 Operation year 1: No
 Operation year 15: No

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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Black)

Crewe West LCA
 The Valley Receptor added (as a result of amendment: AP1-001-002)
 Significantly affected during -
 Construction: No
 Operation year 1: No
 Operation year 15: No

For continuation refer to map number LV-02-302

For continuation refer to map number LV-02-304

Legend

- Route in tunnel
- Route on surface
- Community area boundary
- Depot, station, headhouse or portal building
- Land potentially required during construction
- County boundary
- District/Borough boundary
- Landscape character areas (LCA)

Engineering earthworks:

- Embankment
- Cutting

Non engineering earthworks:

- Embankment
- Cutting

Map Number: LV-02-303

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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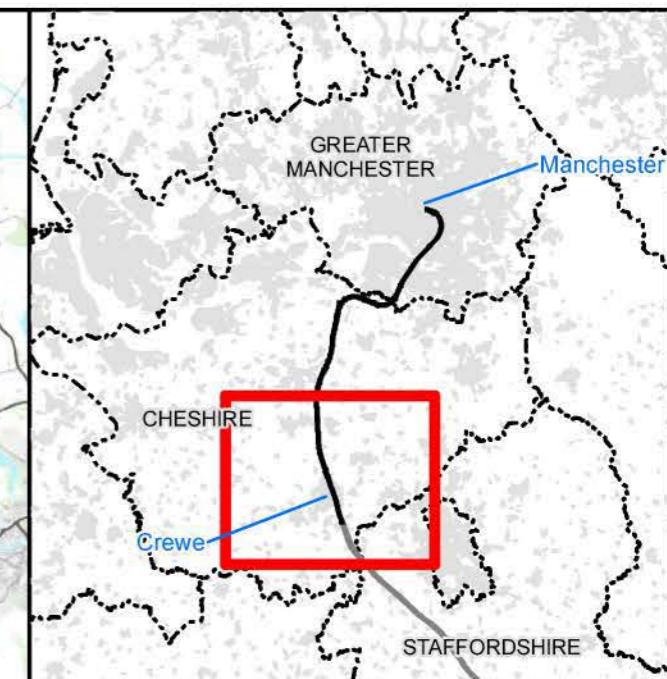
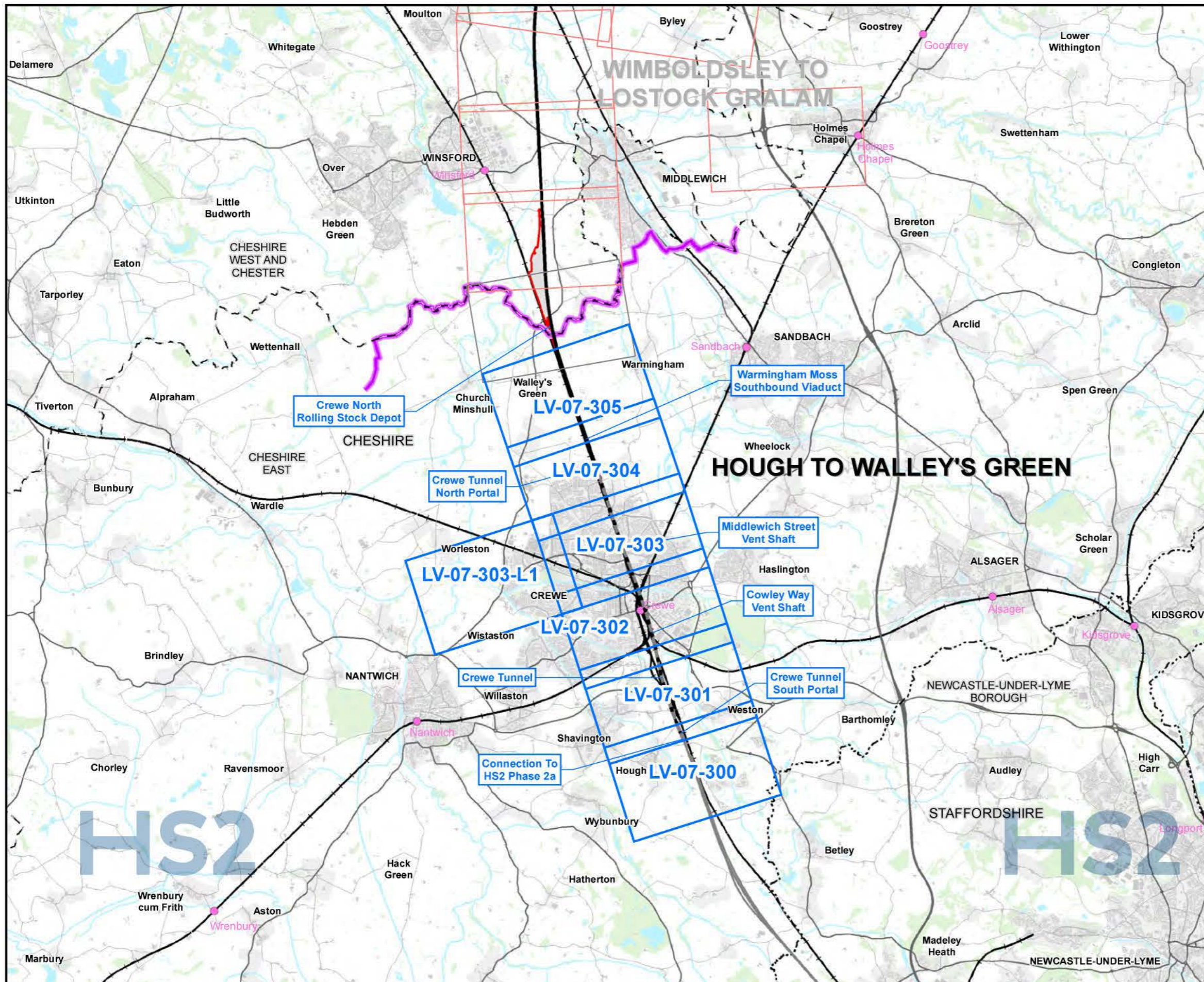
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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Map Series Information:

Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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

Map Number: LV-07-INDEX-MA01

Map Name: Index Map of: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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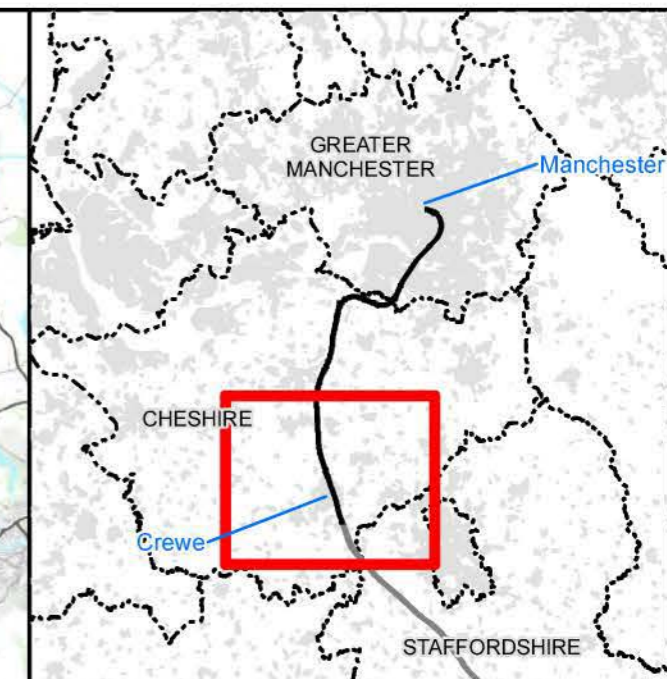
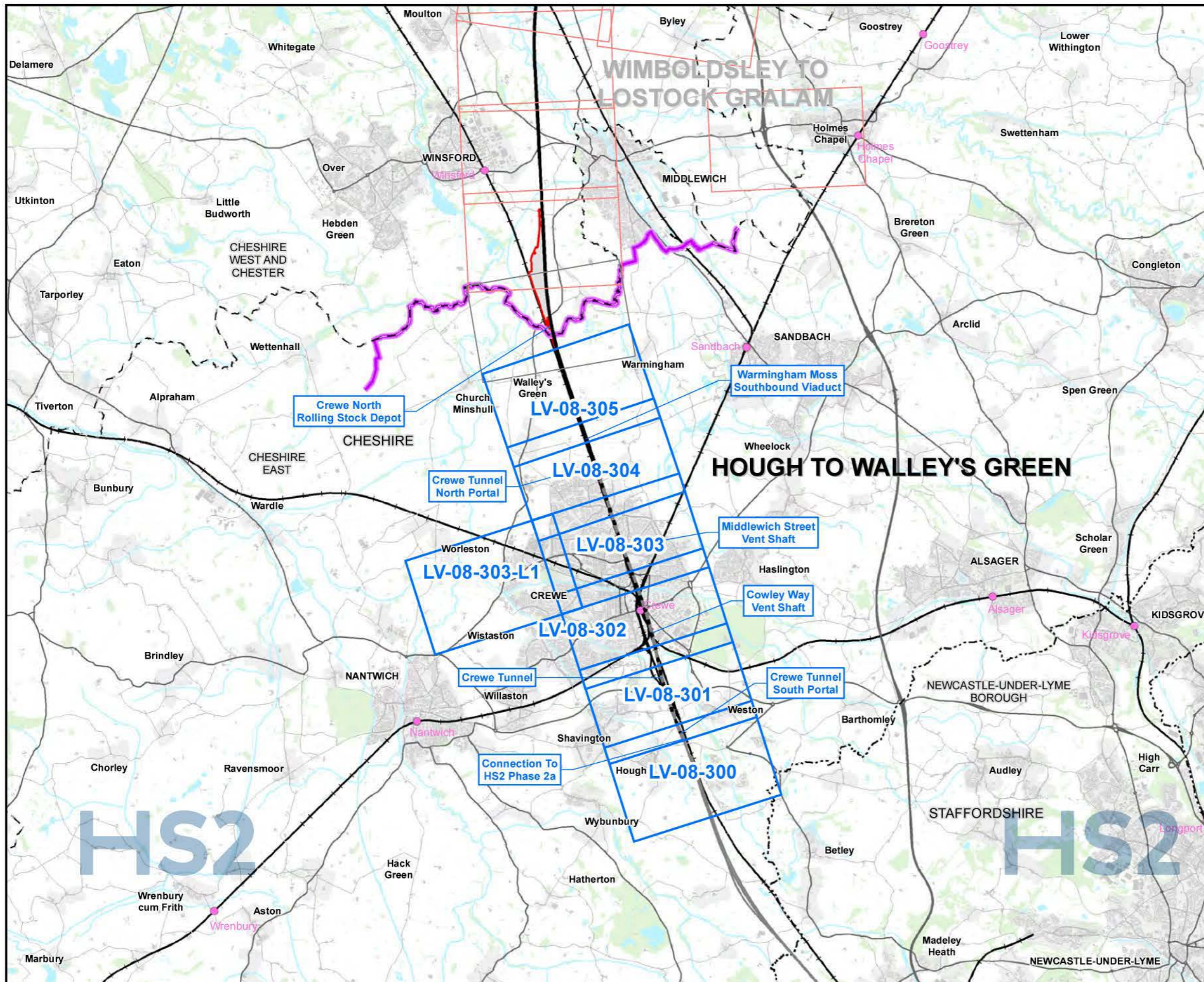
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Date: 21/04/22

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



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 AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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

Map Number: LV-08-INDEX-MA01

Map Name: Index Map of:
Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints
SES1 and AP1 ES
Community Area MA01:
Hough to Walley's Green

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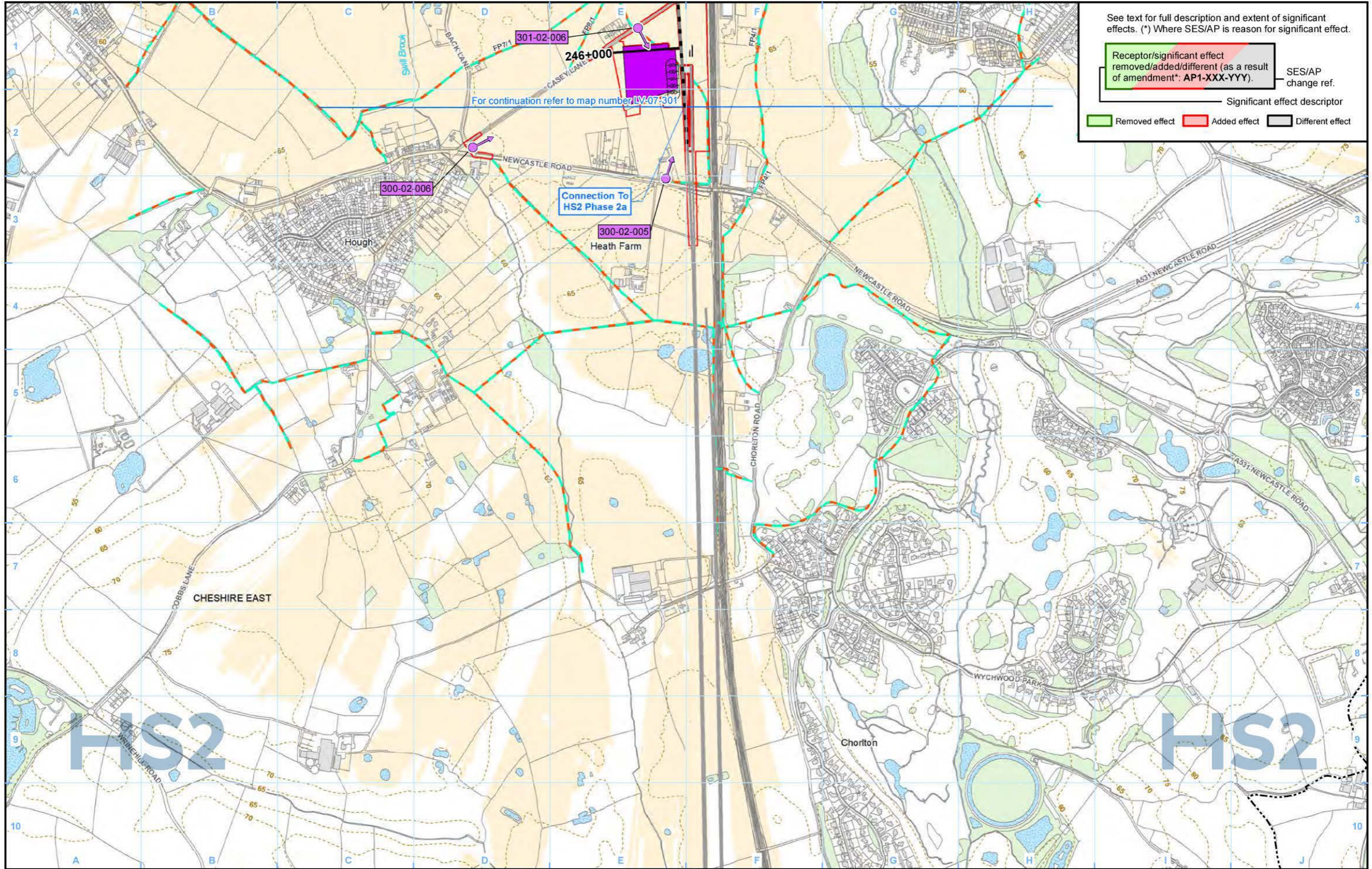
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Date: 21/04/22

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



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect (green) Added effect (red) Different effect (grey)

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-300

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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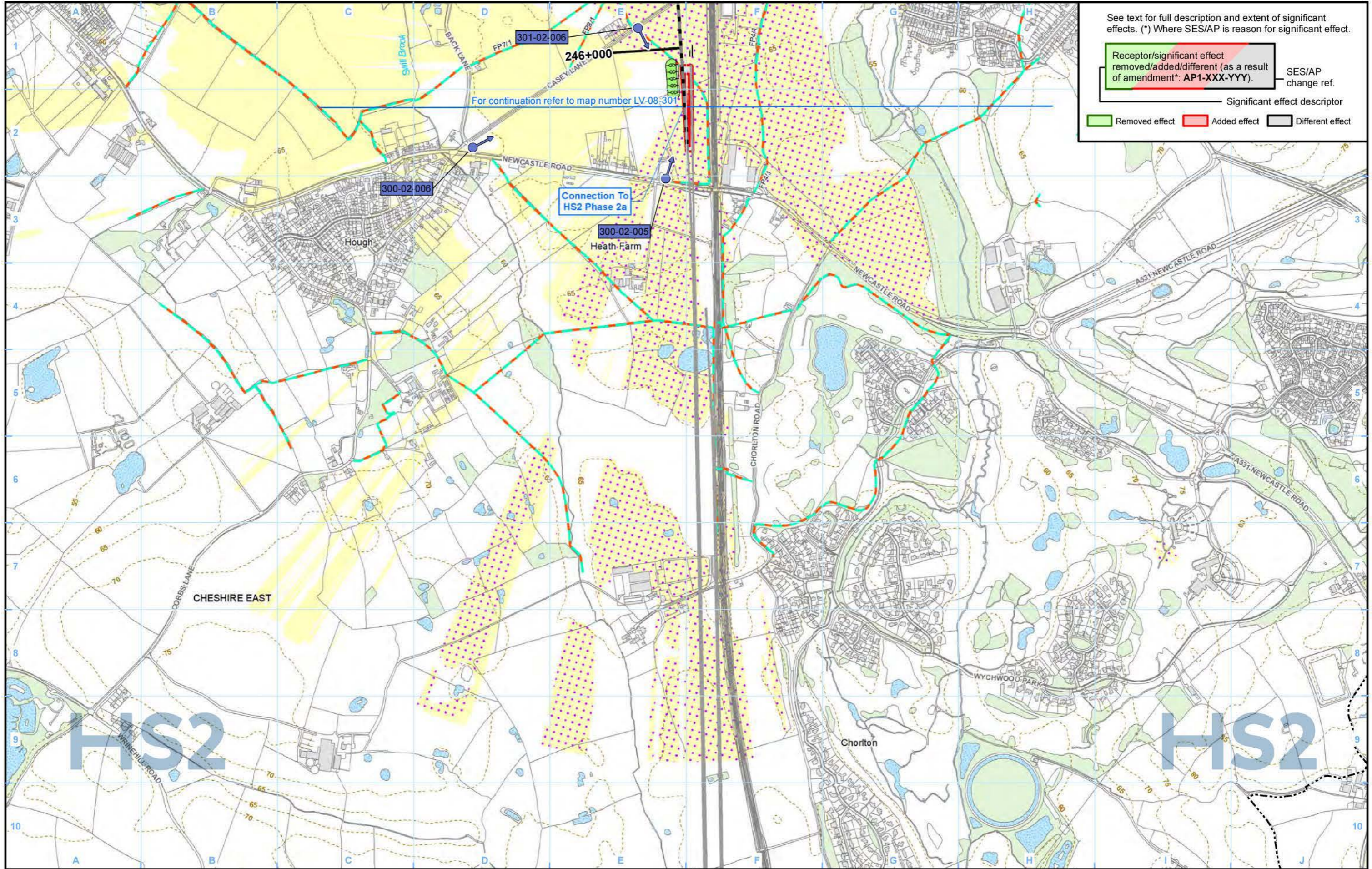
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See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-300

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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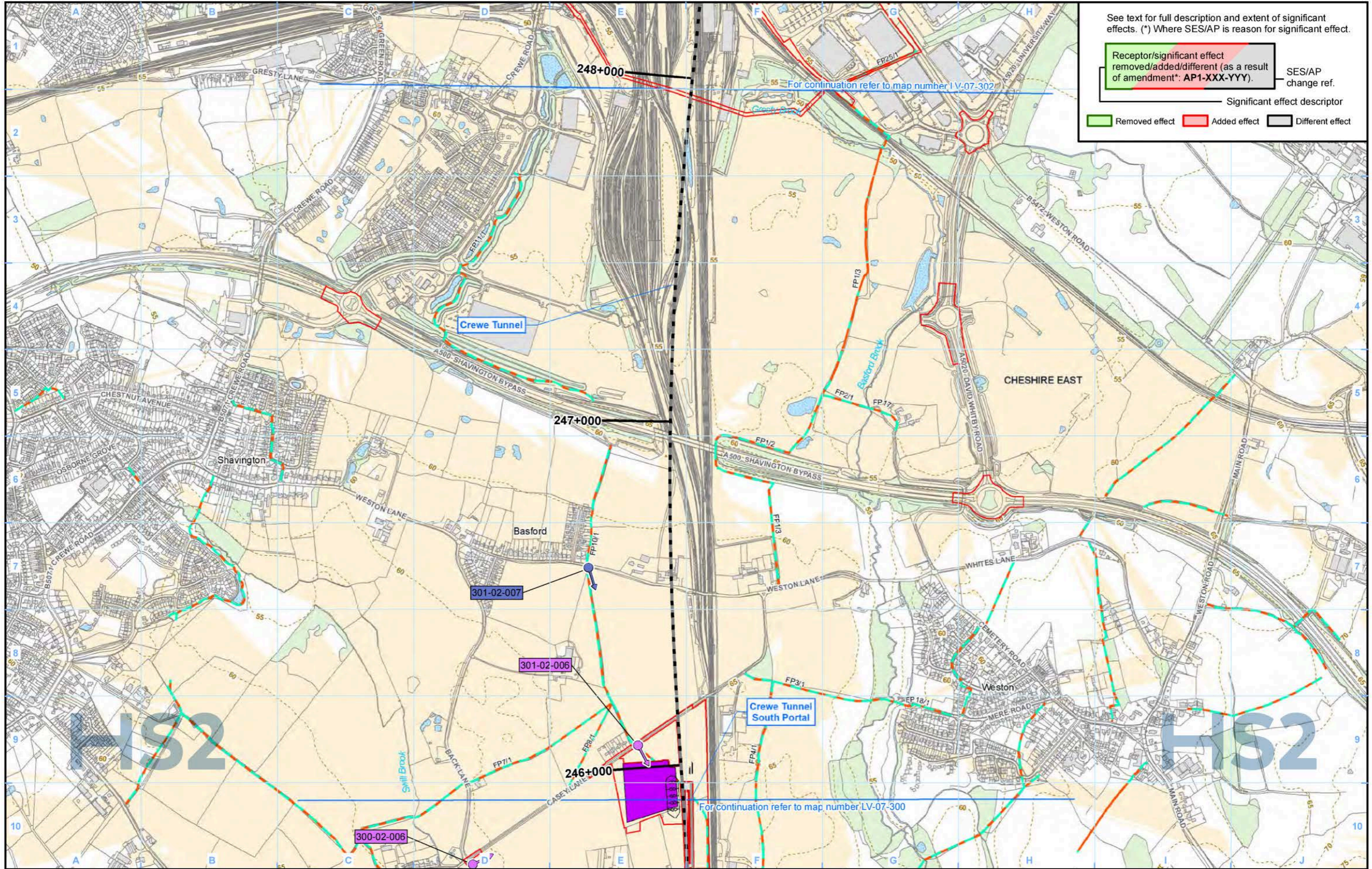
Metres

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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect



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

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number	LV-07-301
Map Name	Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES
Community Area	MA01: Hough to Walley's Green

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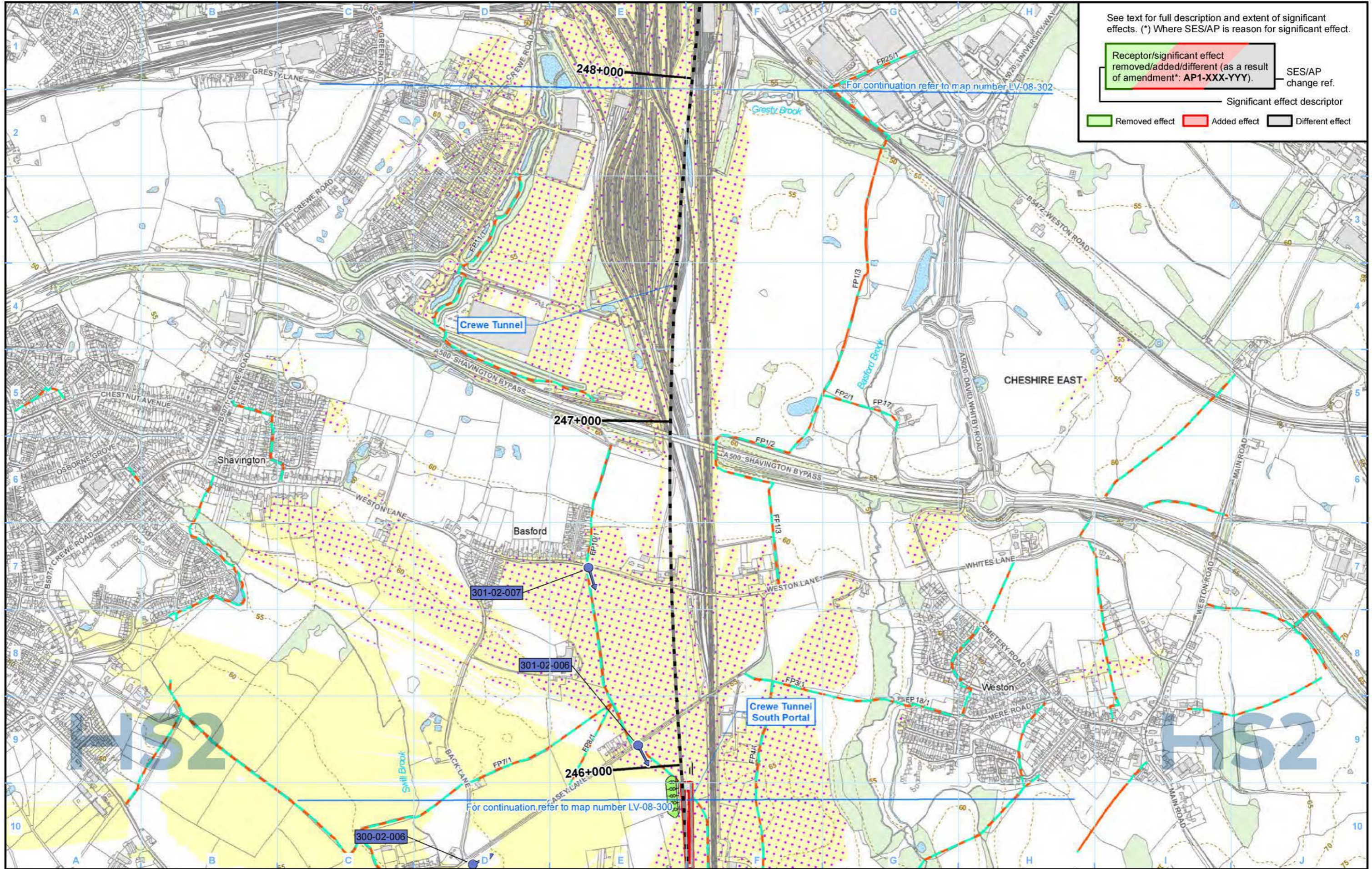
Metres

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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect



Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-002 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
County boundary	Proposed tree planting			Cutting
District/Borough boundary				

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-301

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

HS2

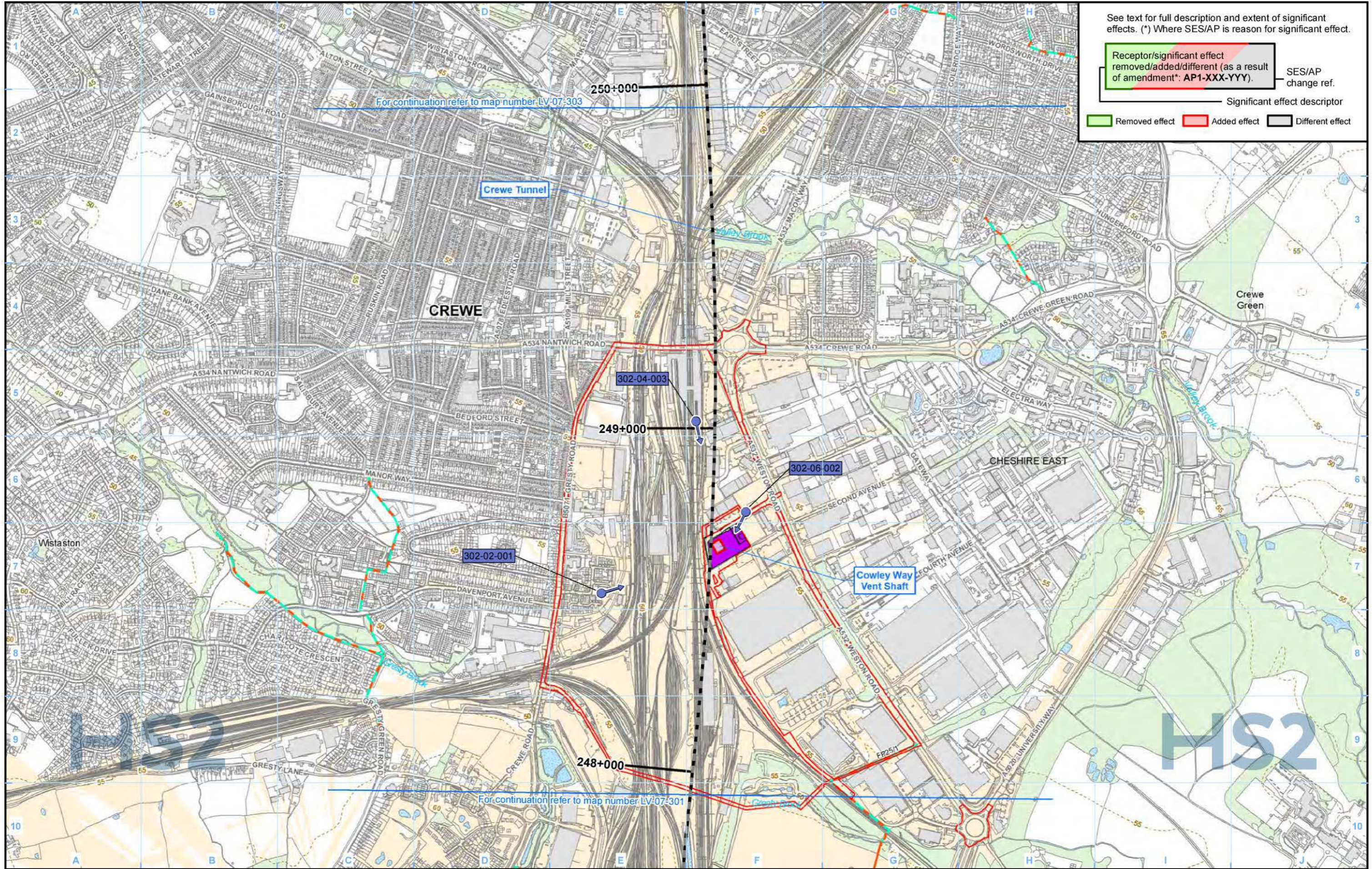
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Date: 22/04/22



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PROW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-302

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

HS2

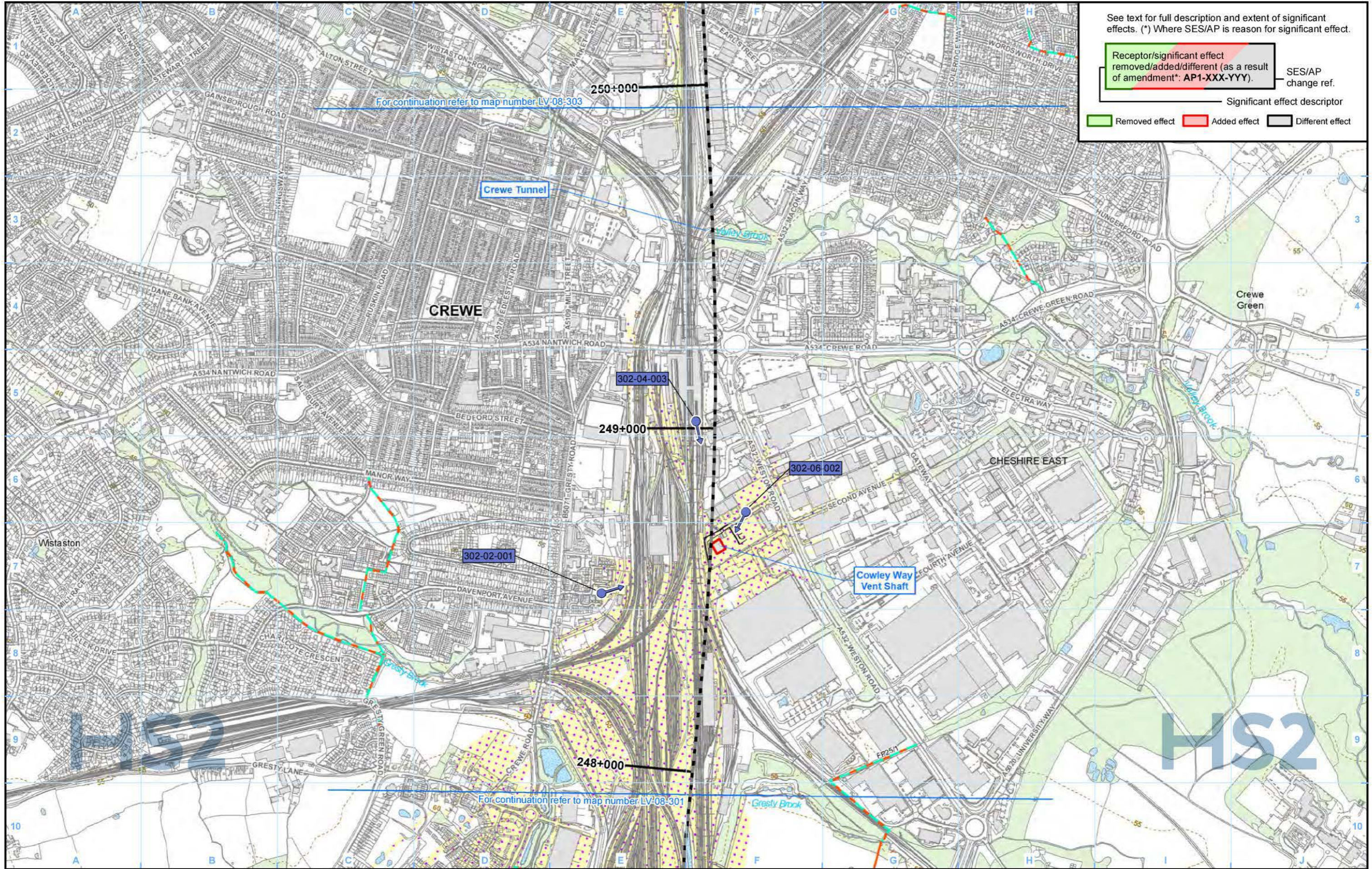
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-302

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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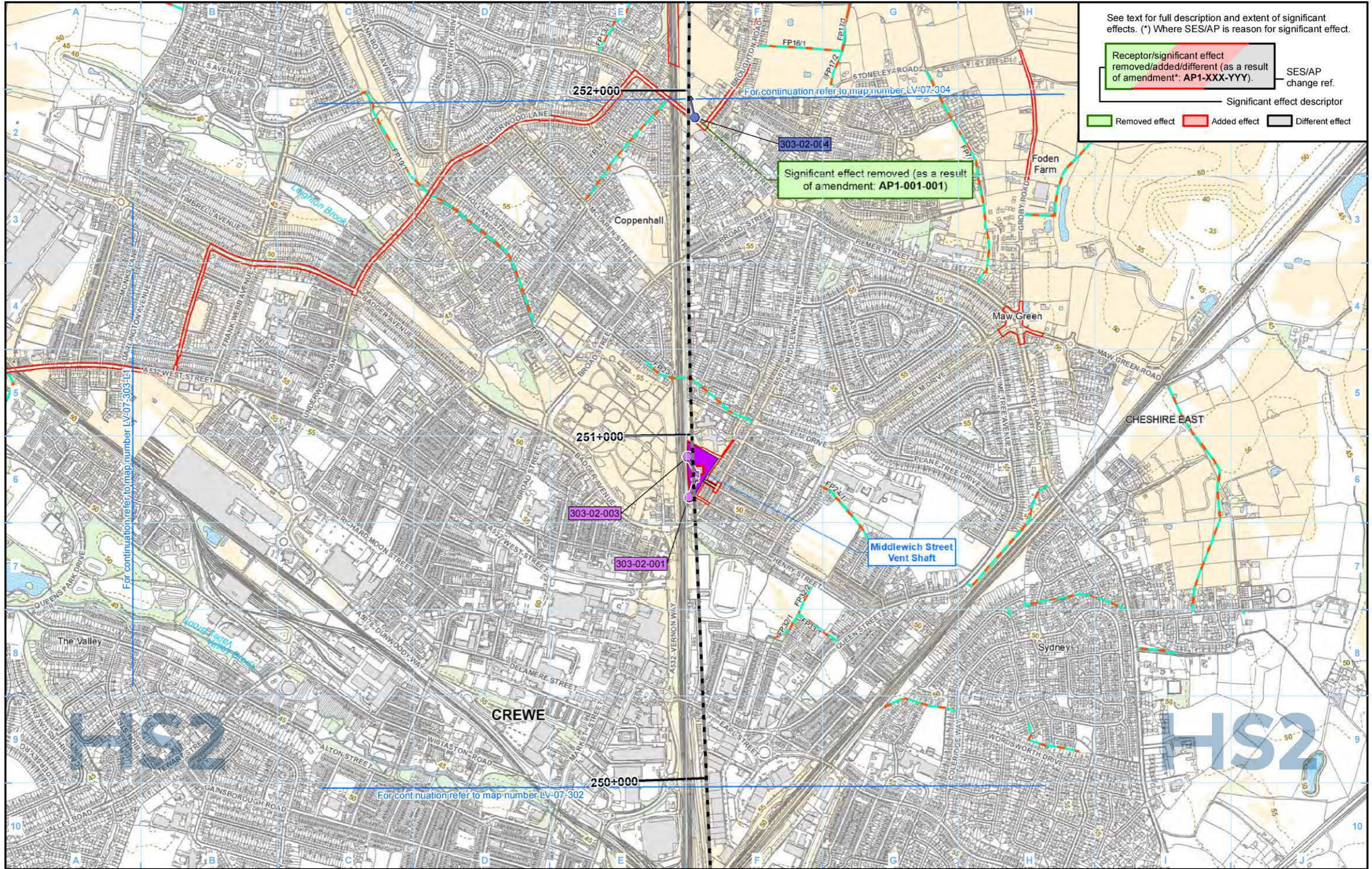
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Scale at A3: 1:10,000

Date: 22/04/22

Scale at A3: 1:10,000

Metres



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect (green) Added effect (red) Different effect (grey)

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Land potentially required during construction
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Construction compounds
- ZTV construction
- Non significantly affected viewpoint or photomontage number (001-01-001)
- Significantly affected viewpoint or photomontage number (001-01-001)
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-303

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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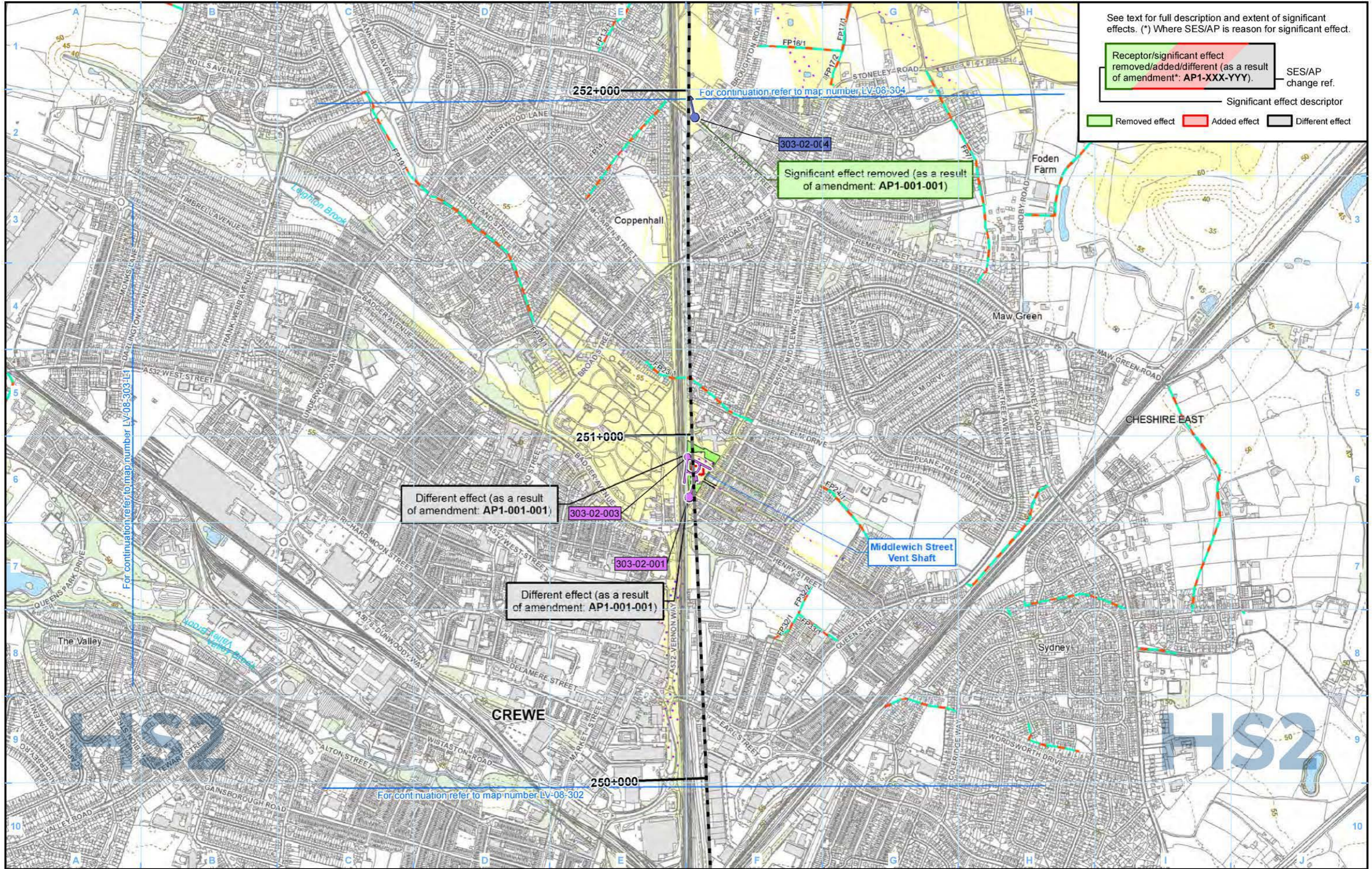
Doc Number: 2PT24-MWJ-EV-MAP-M000-001791-P01

Date: 22/04/22

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Metres



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-303

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

Scale at A3: 1:10,000

Doc Number: 2PT24-MWJ-EV-MAP-M000-001854-P01

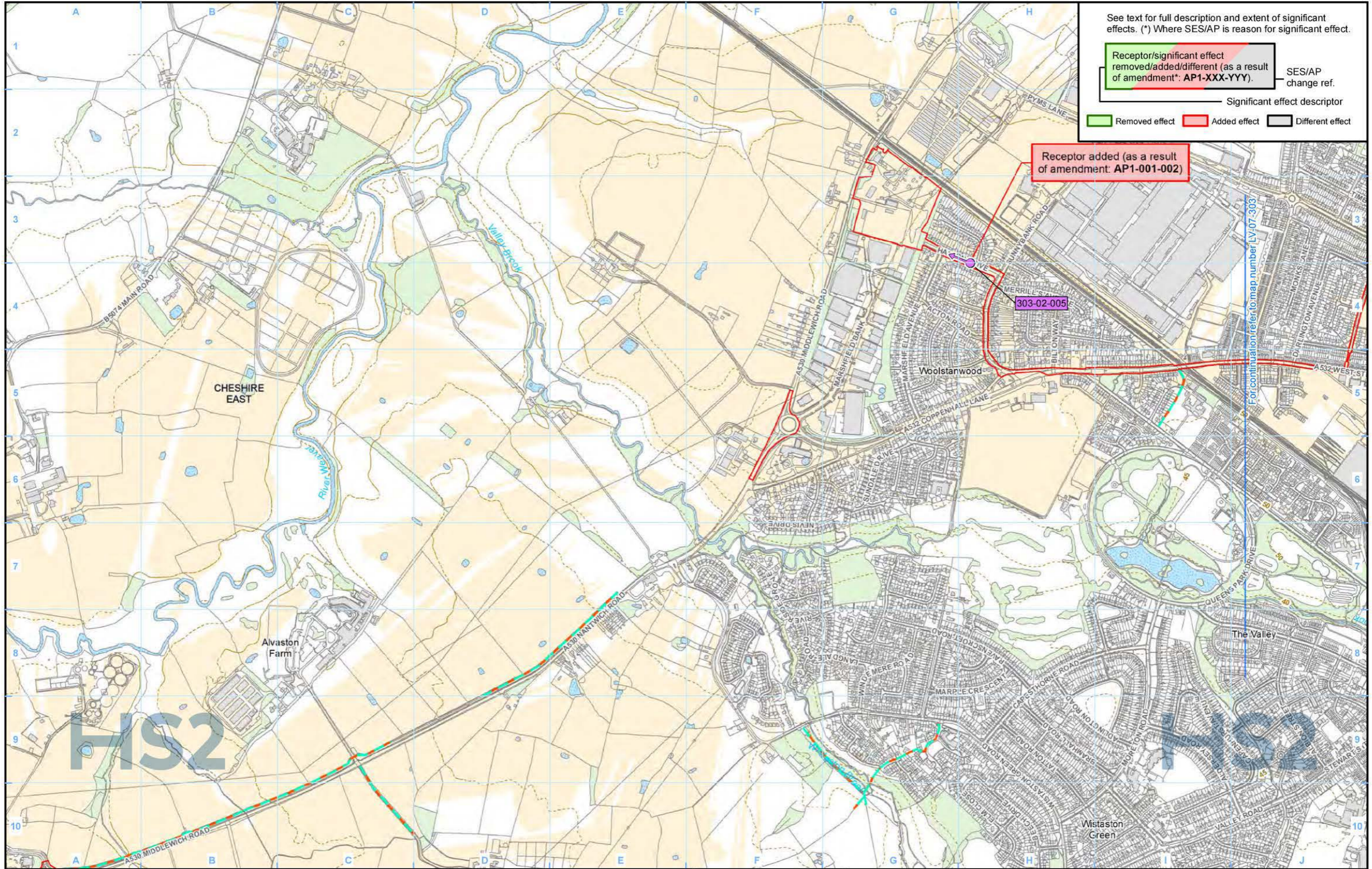
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Receptor added (as a result of amendment: AP1-001-002)

303-02-005

For continuation refer to map number LV-07-303

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number	LV-07-303-L1
Map Name	Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES
Community Area	MA01: Hough to Walley's Green

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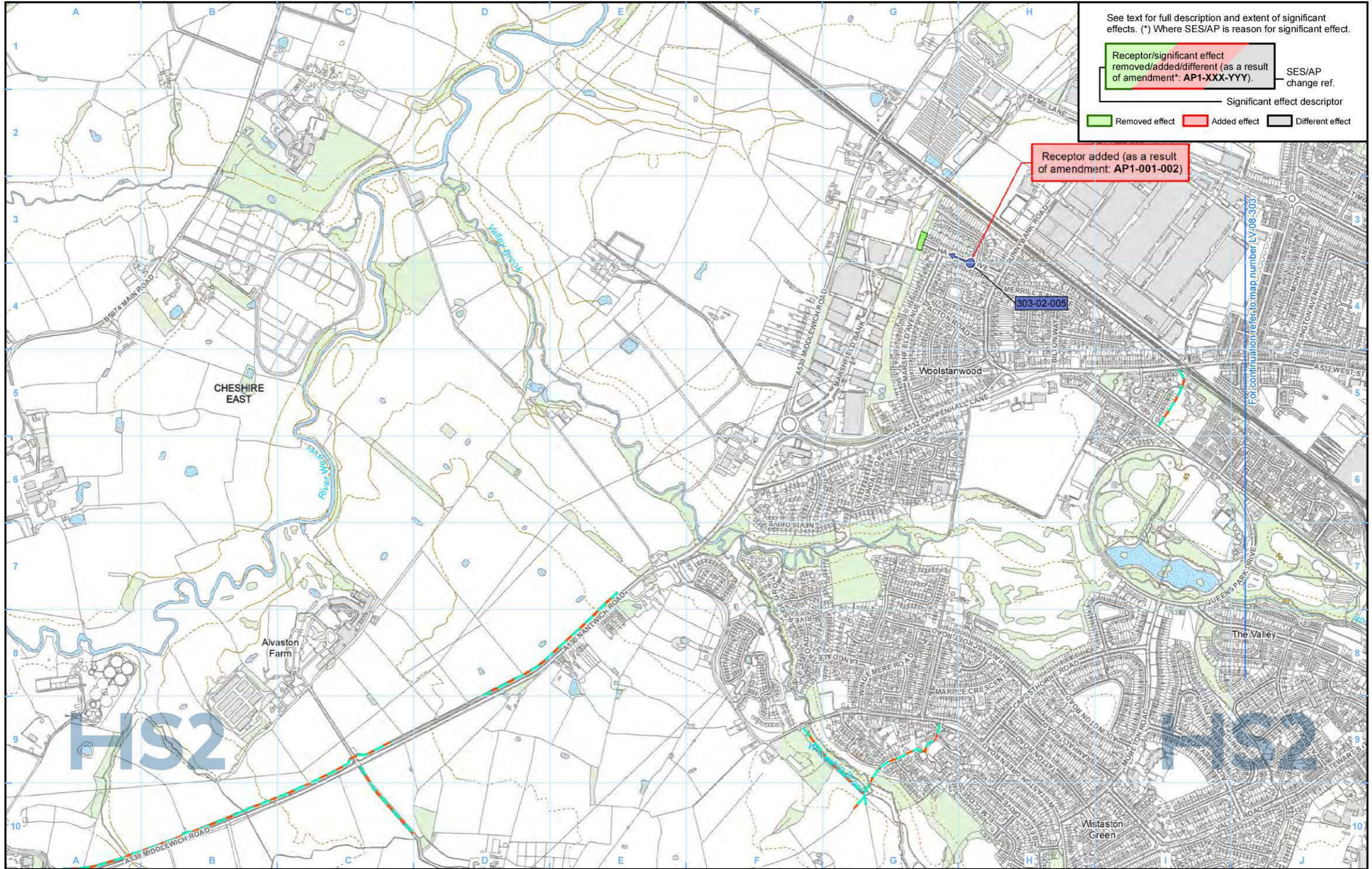
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Receptor added (as a result of amendment: AP1-001-002)

303-02-005

For continuation refer to map number LV-08-303

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

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number	LV-08-303-L1
Map Name	Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES
Community Area	Community Area MA01: Hough to Walley's Green

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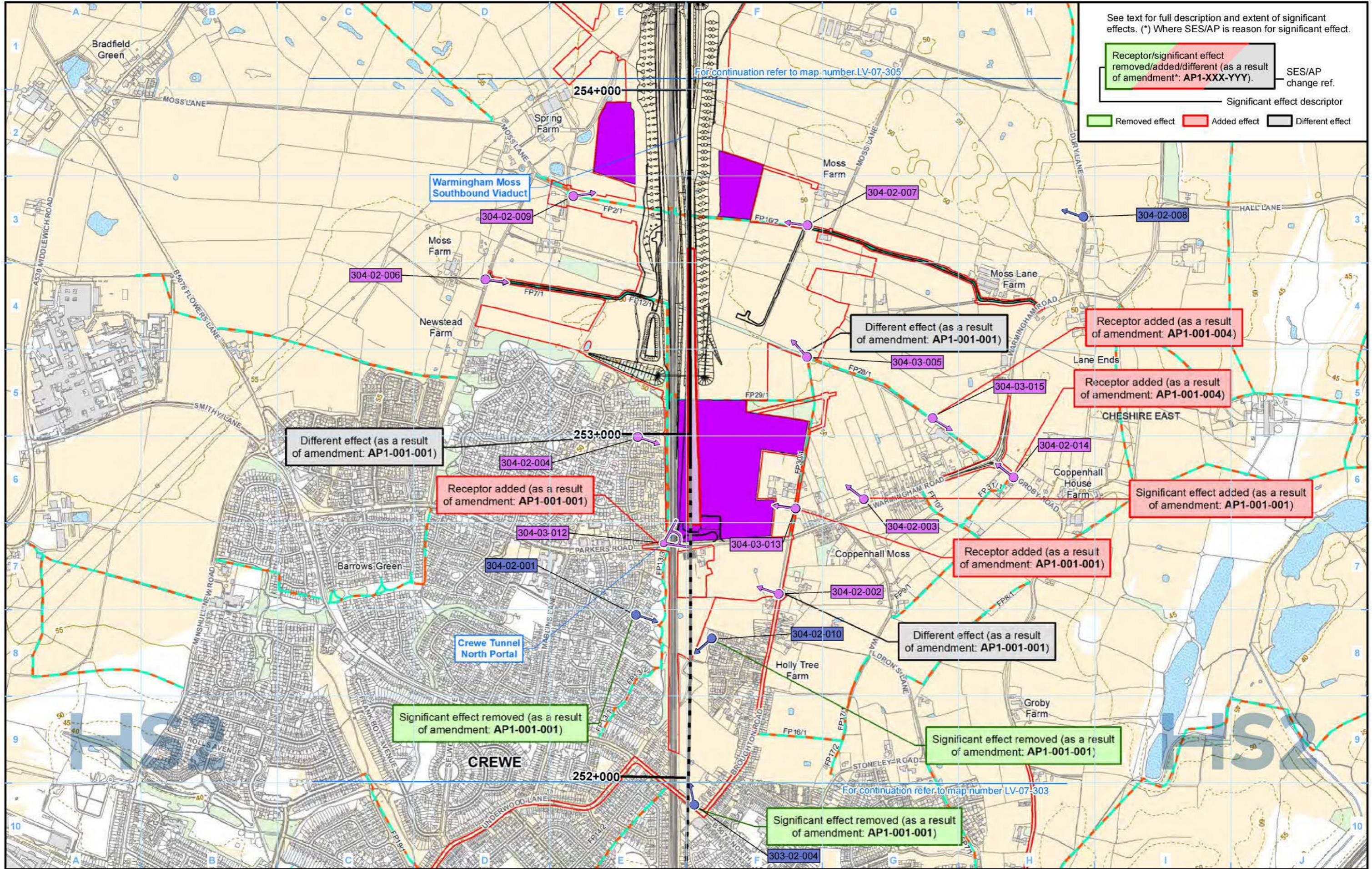
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

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

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-304

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

HS2

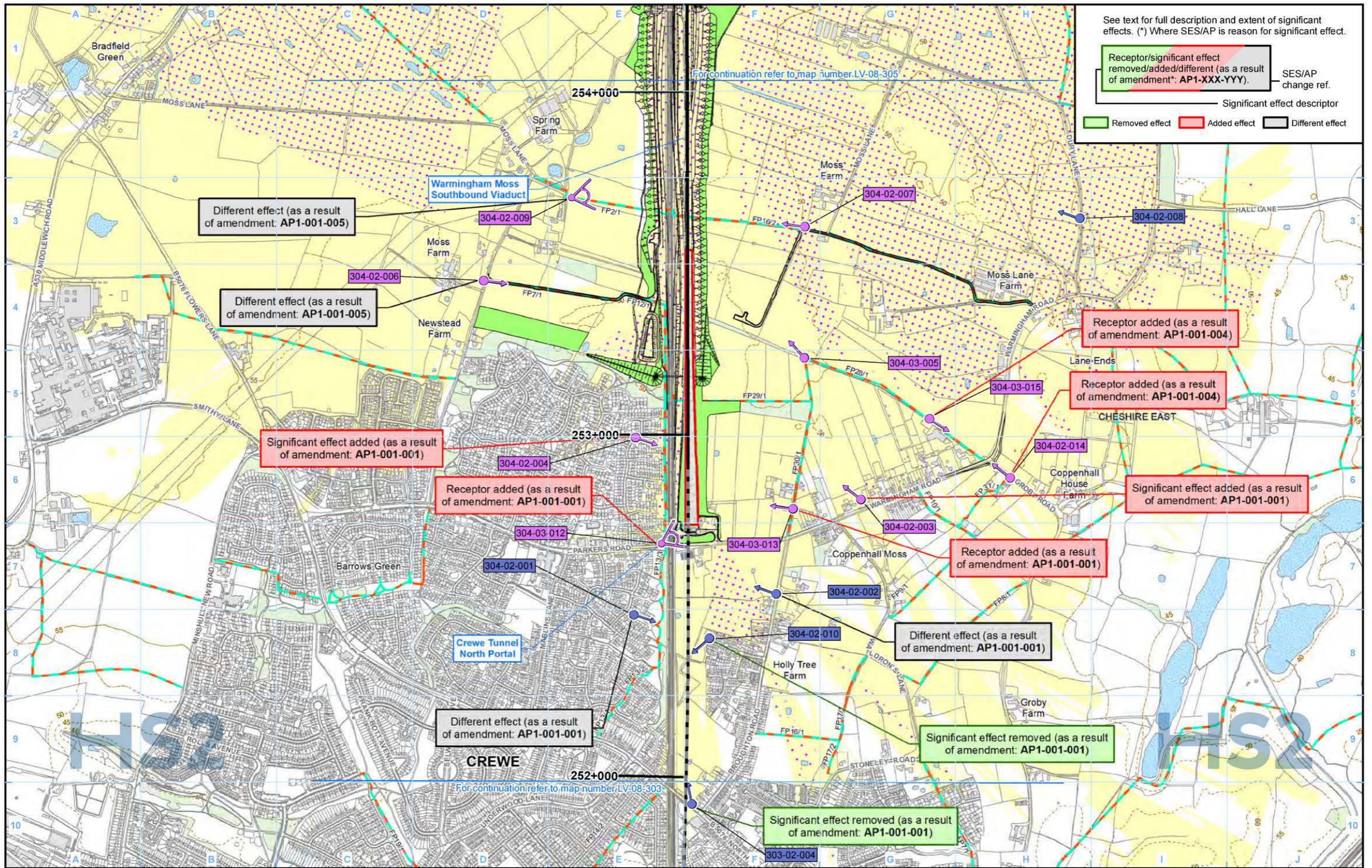
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-304

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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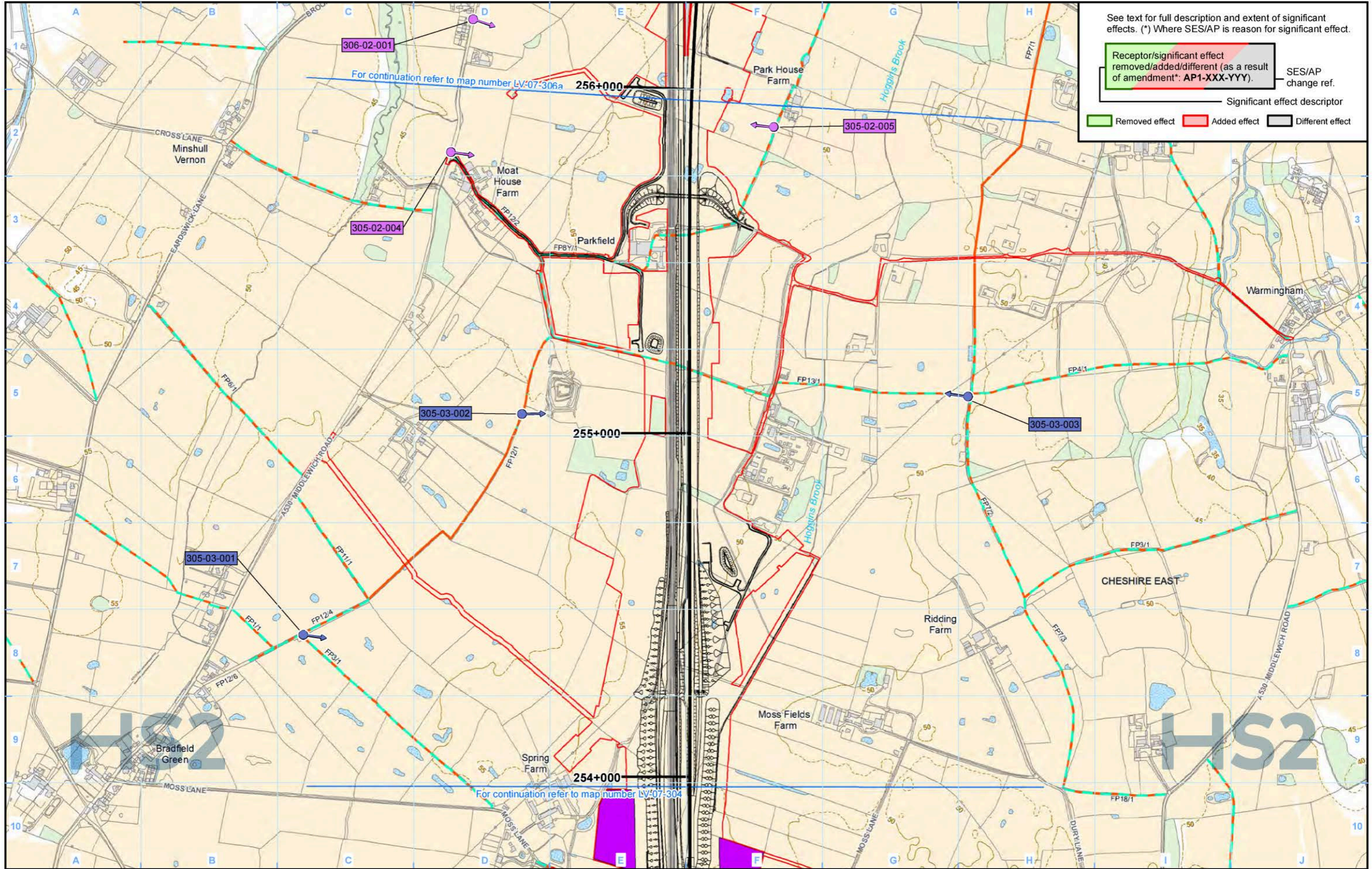
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-305

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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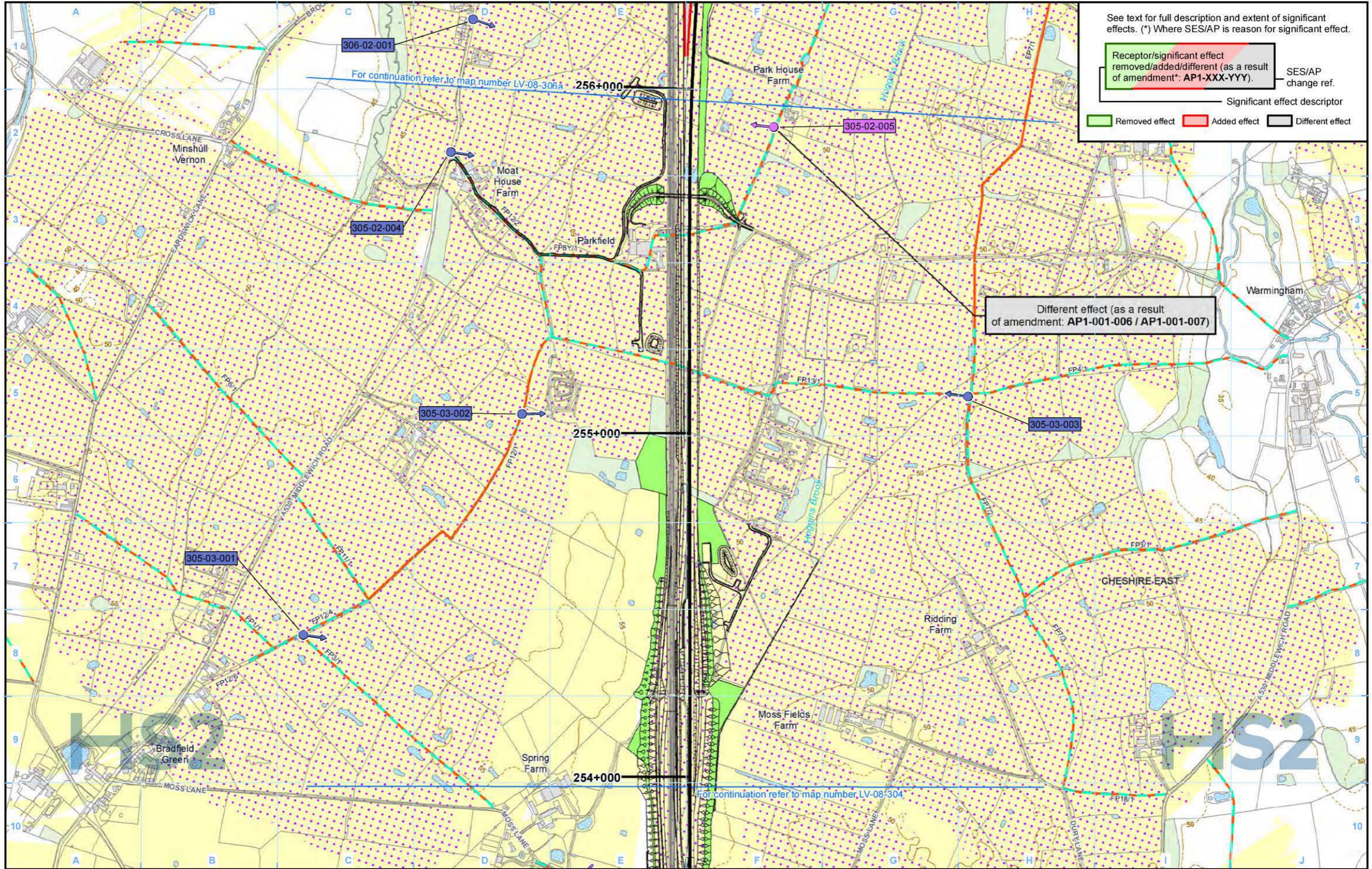
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location

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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-305

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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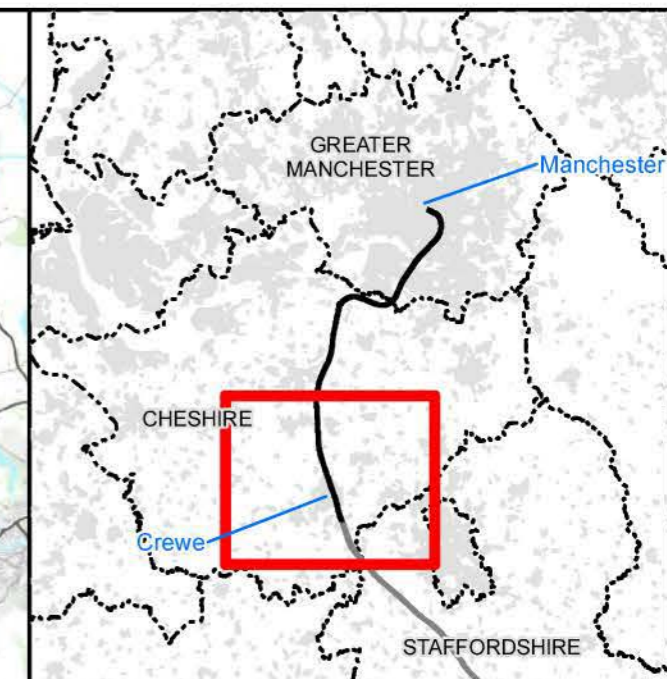
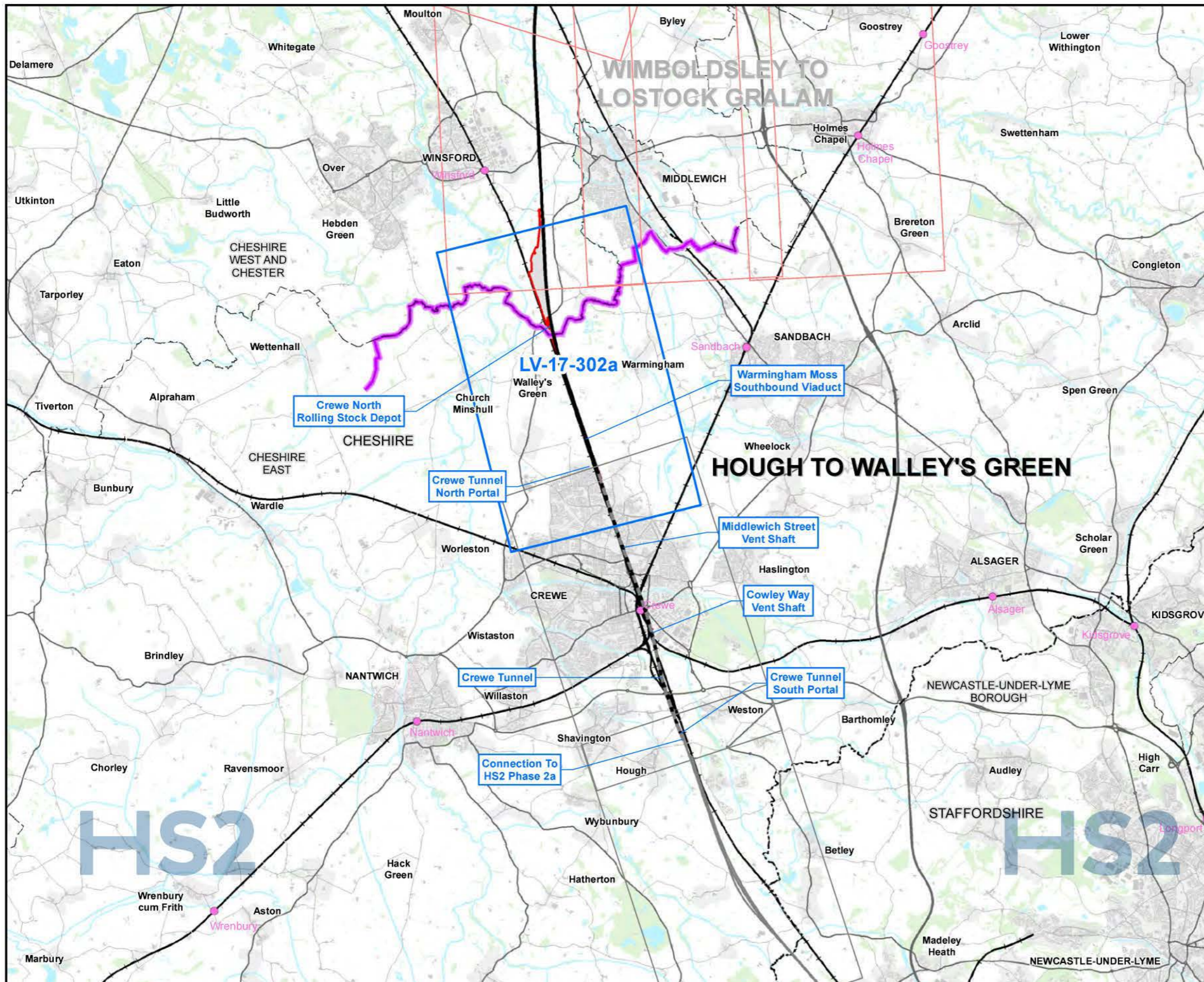
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Date: 22/04/22

Scale at A3: 1:10,000

Metres



Map Series Information:
 Maps showing the AP1 revised scheme and planting in context with the wider landscape.

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

Map Number: LV-17-INDEX-MA01
 Map Name: Index Map of:
 Route wide Landscape Context
 SES1 and AP1 ES
 Community Area MA01:
 Hough to Walley's Green

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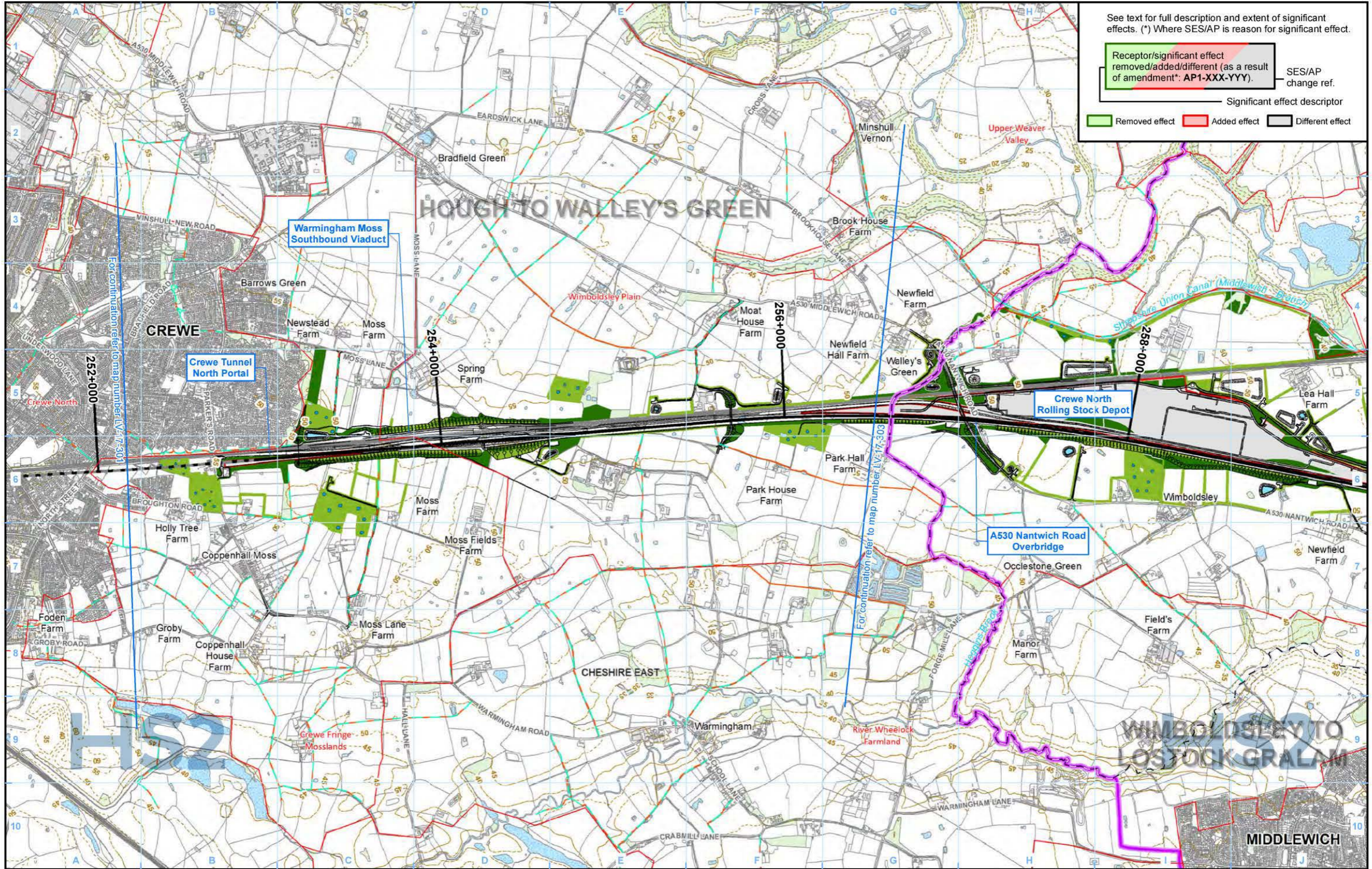
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Landscape Character Area boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Tree planting
- Other planting and hedgerows
- Ecological mitigation pond
- Balancing Pond

Engineering earthworks:

- Embankment
- Cutting

Non engineering earthworks:

- Embankment
- Cutting

Map Number: LV-17-302a

Map Name: Route wide Landscape Context SES1 and AP1 ES

Community Area MA01: Hough to Walley's Green

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Date: 13/04/22

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High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

MA02: Wimboldsley to Lostock Gralam

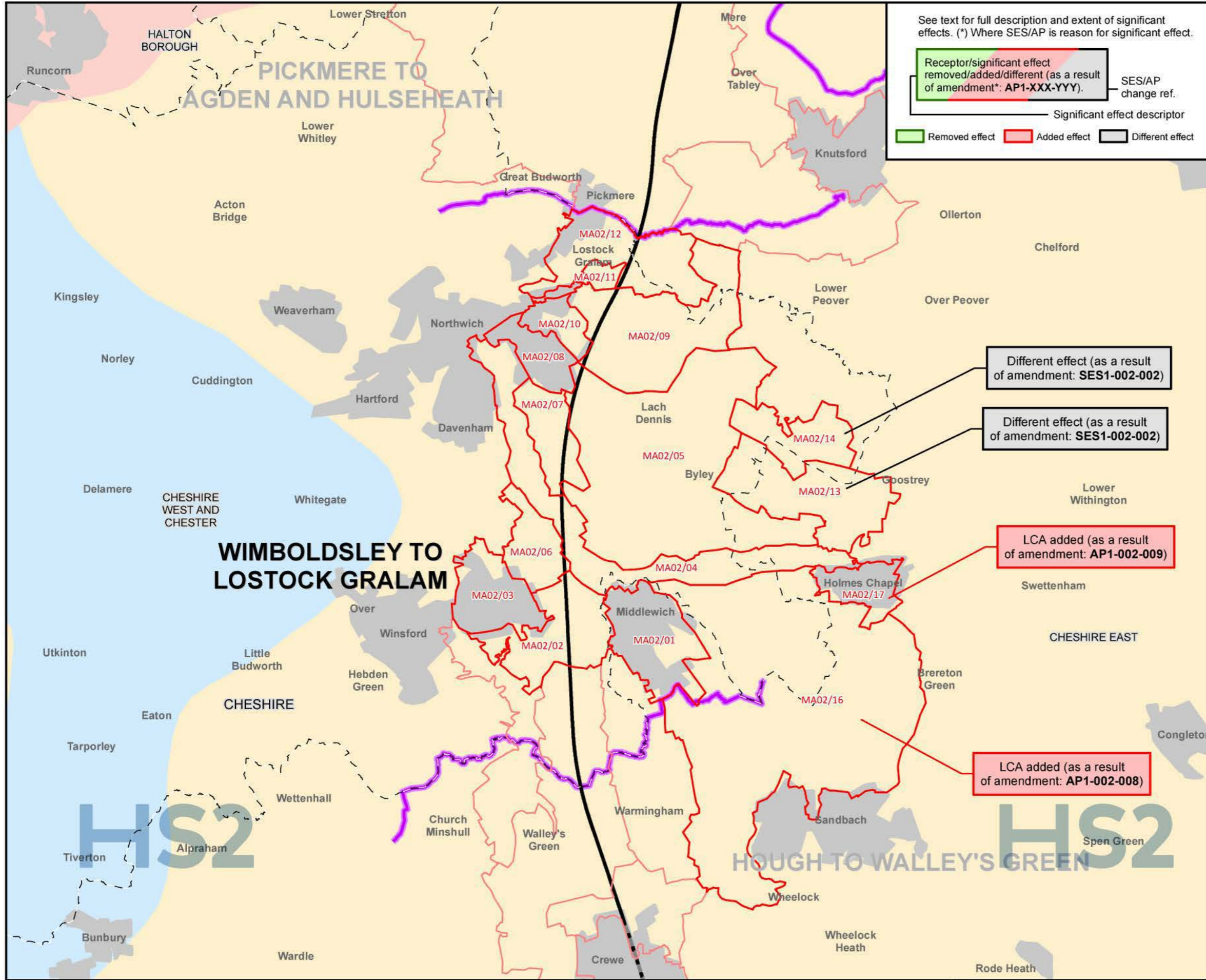
LV-00 – Route-wide Landscape Character Areas and National Character Areas

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

LV-17 – Route-wide Landscape Context



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

- ### Landscape Character Areas
- MA02/01 - Middlewich
 - MA02/02 - Winsford and Middlewich Fringe Farmland
 - MA02/03 - Winsford East
 - MA02/04 - Dane Valley
 - MA02/05 - Stublach Plain
 - MA02/06 - Bostock Hall Estate
 - MA02/07 - Whatcroft and Billinge Green Flashes
 - MA02/08 - Rudheath
 - MA02/09 - Lostock Plain
 - MA02/10 - Rudheath Lime Beds
 - MA02/11 - Lostock Gralam
 - MA02/12 - Wincham Brook and Holford Lower Wooded Farmland
 - MA02/13 - Cranage and Byley Sandy Woods
 - MA02/14 - Rudheath Woods, Shakerley and New Platt Meres Sandy Woods
 - MA02/16 - Cheshire East/Wimboldsley Plain
 - MA02/17 - Holmes Chapel

Different effect (as a result of amendment: SES1-002-002)

Different effect (as a result of amendment: SES1-002-002)

LCA added (as a result of amendment: AP1-002-009)

LCA added (as a result of amendment: AP1-002-008)

- ### Legend
- Route in tunnel
 - Route on surface
 - Community area boundary
 - County boundary
 - District/Borough boundary
 - Large urban area
 - Landscape Character Area boundary (included in this community area)
 - Landscape Character Area boundary (not included in this community area)
 - Cheshire Sandstone Ridge
 - Mersey Valley
 - Shropshire, Cheshire and Staffordshire Plain

Map Number: LV-00-MA02

Map Name: Route Wide Landscape Character Areas and National Character Areas SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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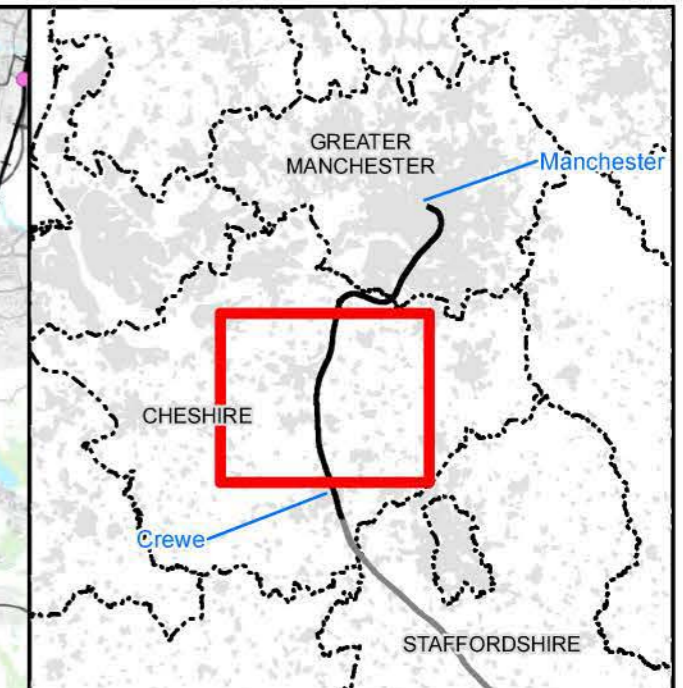
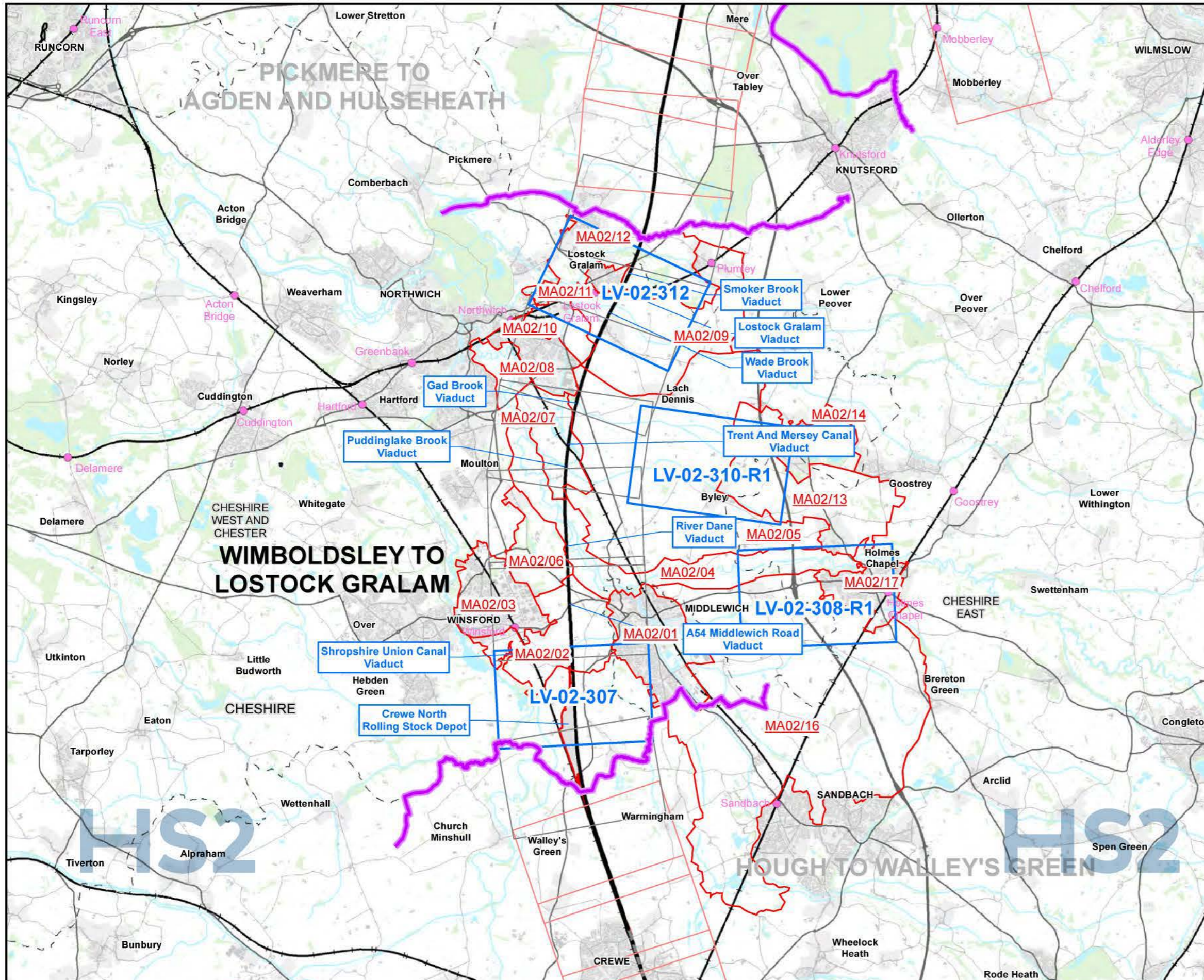
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Map Series Information:

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

LCA No.	LCA Name
MA02/01	Middlewich
MA02/02	Winsford and Middlewich Fringe Farmland
MA02/03	Winsford East
MA02/04	Dane Valley
MA02/05	Stublach Plain
MA02/06	Bostock Hall Estate
MA02/07	Whatcroft and Billinge Green Flashes
MA02/08	Rudheath
MA02/09	Lostock Plain
MA02/10	Rudheath Lime Beds
MA02/11	Lostock Gralam
MA02/12	Wincham Brook and Holford Lower Wooded Farmland
MA02/13	Cranage and Byley Sandy Woods
MA02/14	Rudheath Woods, Shakerley and New Platt Meres Sandy Woods
MA02/16	Cheshire East/Wimboldsley Plain
MA02/17	Holmes Chapel

Main Map Legend

	Route in tunnel
	Route on surface
	Depot, station, headhouse or portal building
	Community area boundary
	Existing railway station
	County boundary
	District/Borough boundary

	Landscape Character Area boundary
	Map sheets included in this community area
	Map sheets included in this community area with no amendment
	Map sheets not included in this community area
	Landscape Character Area Number

Map Number	LV-02-INDEX-MA02
Map Name	Index Map of: Landscape Character Areas SES1 and AP1 ES
	Community Area MA02: Wimboldsley to Lostock Gralam

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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Winsford and Middlewich Fringe Farmland LCA
Significantly affected during -
Construction: Yes
Operation year 1: Yes
Operation year 15: Yes

Upper Weaver Valley LCA
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

Wimboldsley Plain LCA
Significantly affected during -
Construction: Yes
Operation year 1: Yes
Operation year 15: Yes

River Wheelock Farmland LCA
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

Middlewich LCA
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

- Legend**
- Route in tunnel
 - Route on surface
 - Community area boundary
 - Depot, station, headhouse or portal building
 - Land potentially required during construction
 - County boundary
 - District/Borough boundary

- Landscape character areas (LCA)
- Engineering earthworks:
- Embankment
 - Cutting
- Non engineering earthworks:
- Embankment
 - Cutting

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map Number: LV-02-307

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Dane Valley LCA
Significantly affected during -
Construction: Yes
Operation year 1: Yes
Operation year 15: Yes

Holmes Chapel LCA
Receptor added (as a result of amendment: AP1-002-009)
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

Cheshire East/Wimboldsley Plain LCA
Receptor added (as a result of amendment: AP1-002-008)
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

Legend

- Route in tunnel
- Route on surface
- Community area boundary
- Depot, station, headhouse or portal building
- Land potentially required during construction
- County boundary
- District/Borough boundary

Landscape character areas (LCA)

Engineering earthworks:

- Embankment
- Cutting

Non engineering earthworks:

- Embankment
- Cutting

Source: Esri, Maxar, GeoEye, Earthstar, etc.

Map Number: LV-02-308-R1

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect (Green box) Added effect (Red box) Different effect (Black outline)

For continuation refer to map number LV-02-310

Legend

- Route in tunnel
- Route on surface
- Community area boundary
- Depot, station, headhouse or portal building
- Land potentially required during construction
- County boundary
- District/Borough boundary

Landscape character areas (LCA)

Engineering earthworks:

- Embankment
- Cutting

Non engineering earthworks:

- Embankment
- Cutting

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map Number: LV-02-310-R1

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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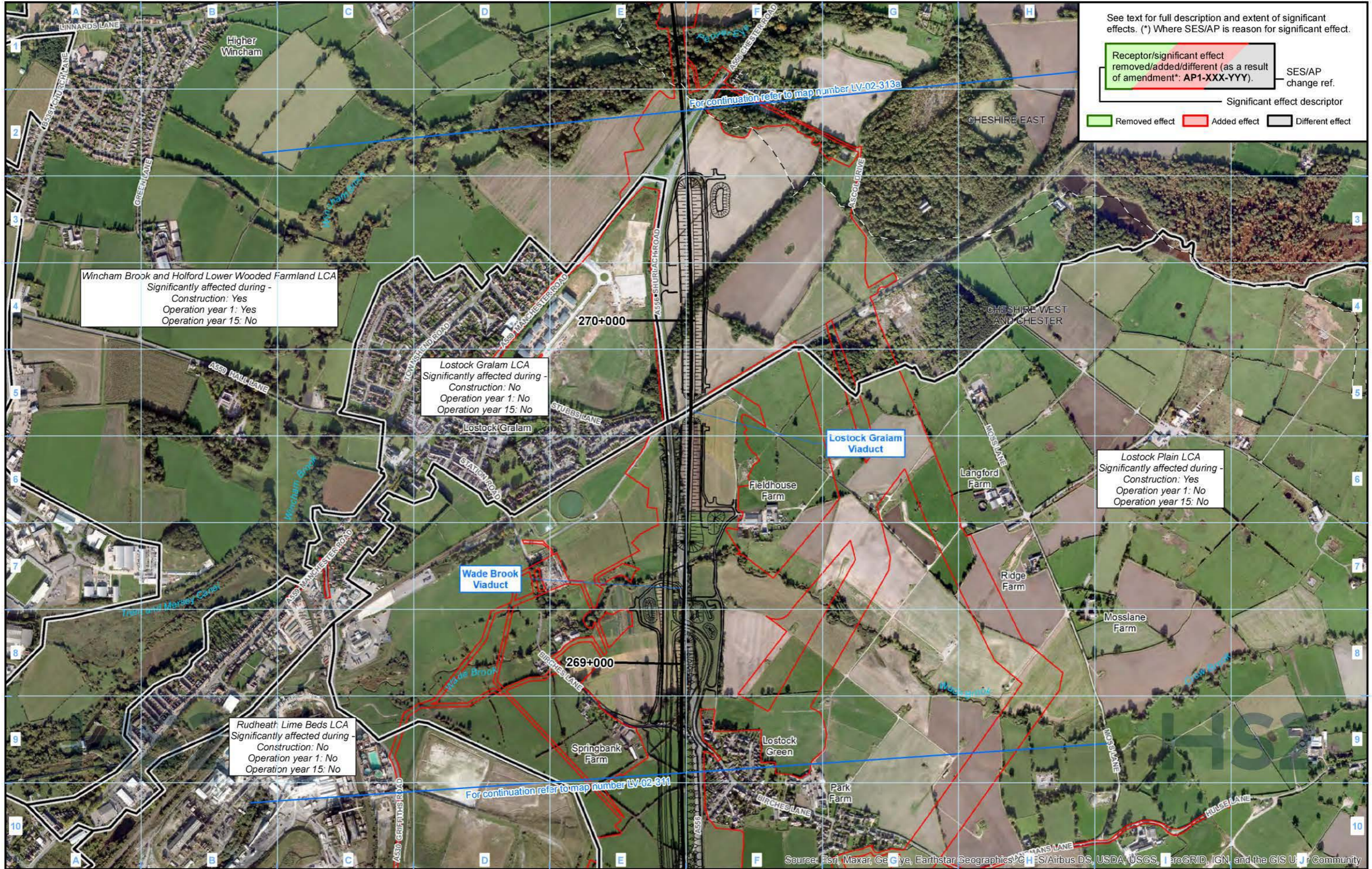
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect (green) Added effect (red) Different effect (black)

Wincham Brook and Holford Lower Wooded Farmland LCA
Significantly affected during -
Construction: Yes
Operation year 1: Yes
Operation year 15: No

Lostock Graim LCA
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

Lostock Plain LCA
Significantly affected during -
Construction: Yes
Operation year 1: No
Operation year 15: No

Rudheath Lime Beds LCA
Significantly affected during -
Construction: No
Operation year 1: No
Operation year 15: No

- Legend**
- Route in tunnel
 - Route on surface
 - Community area boundary
 - Depot, station, headhouse or portal building
 - Land potentially required during construction
 - County boundary
 - District/Borough boundary

Landscape character areas (LCA)

- Engineering earthworks:**
- Embankment
 - Cutting
- Non engineering earthworks:**
- Embankment
 - Cutting

Map Number: LV-02-312

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Graim

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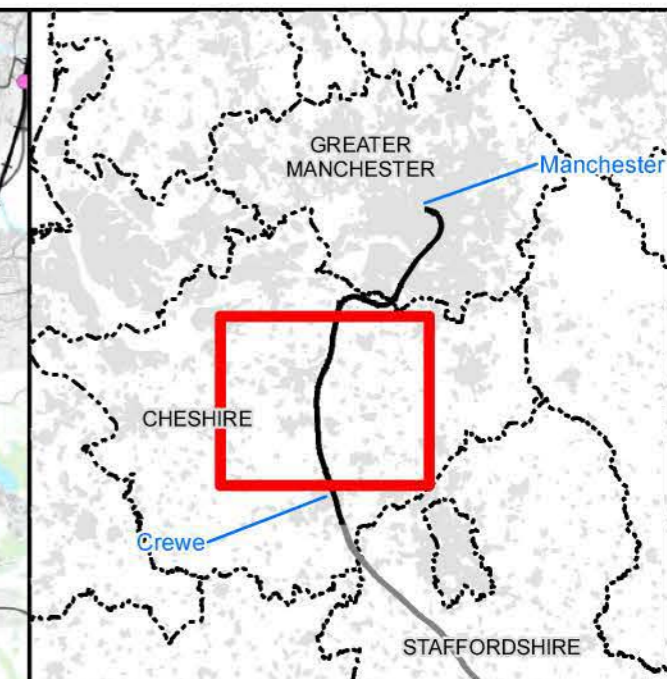
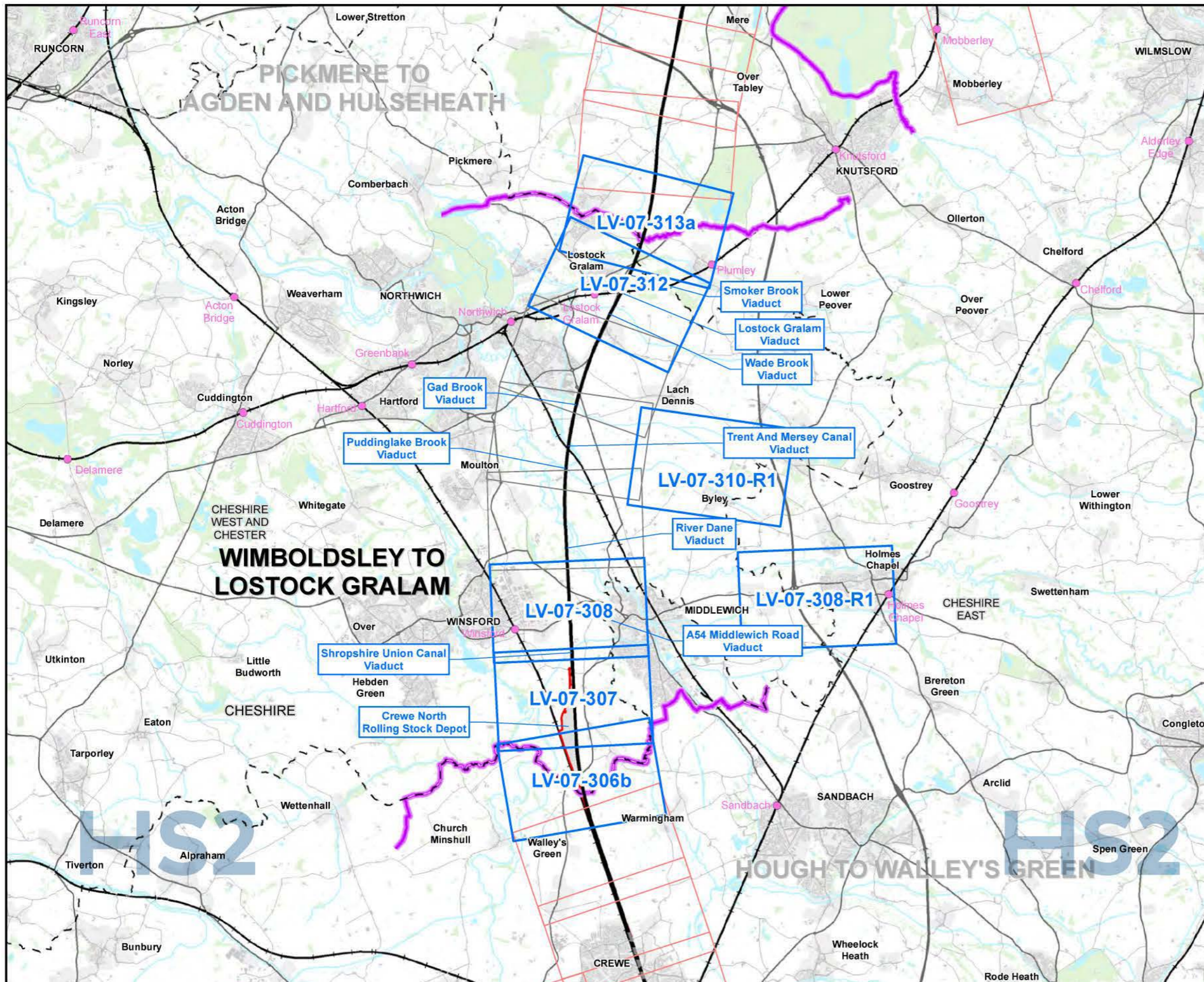
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Map Series Information:

Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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

Map Number: LV-07-INDEX-MA02

Map Name: Index Map of: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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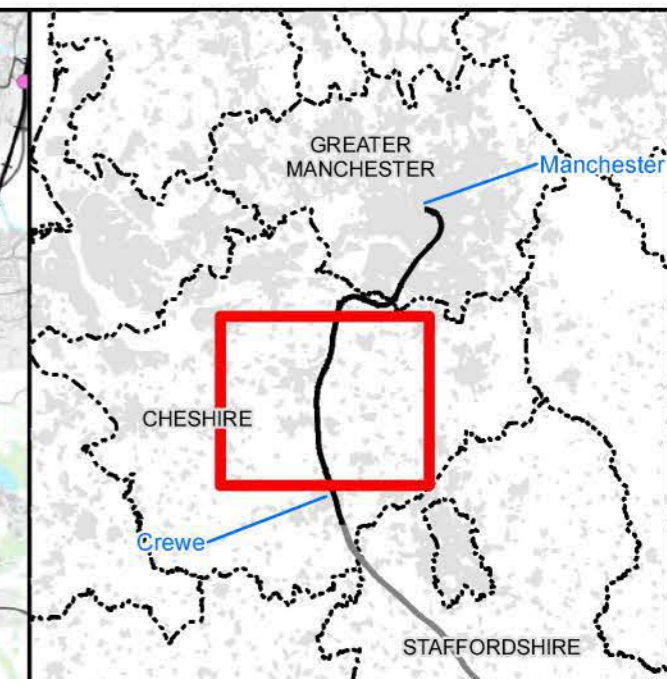
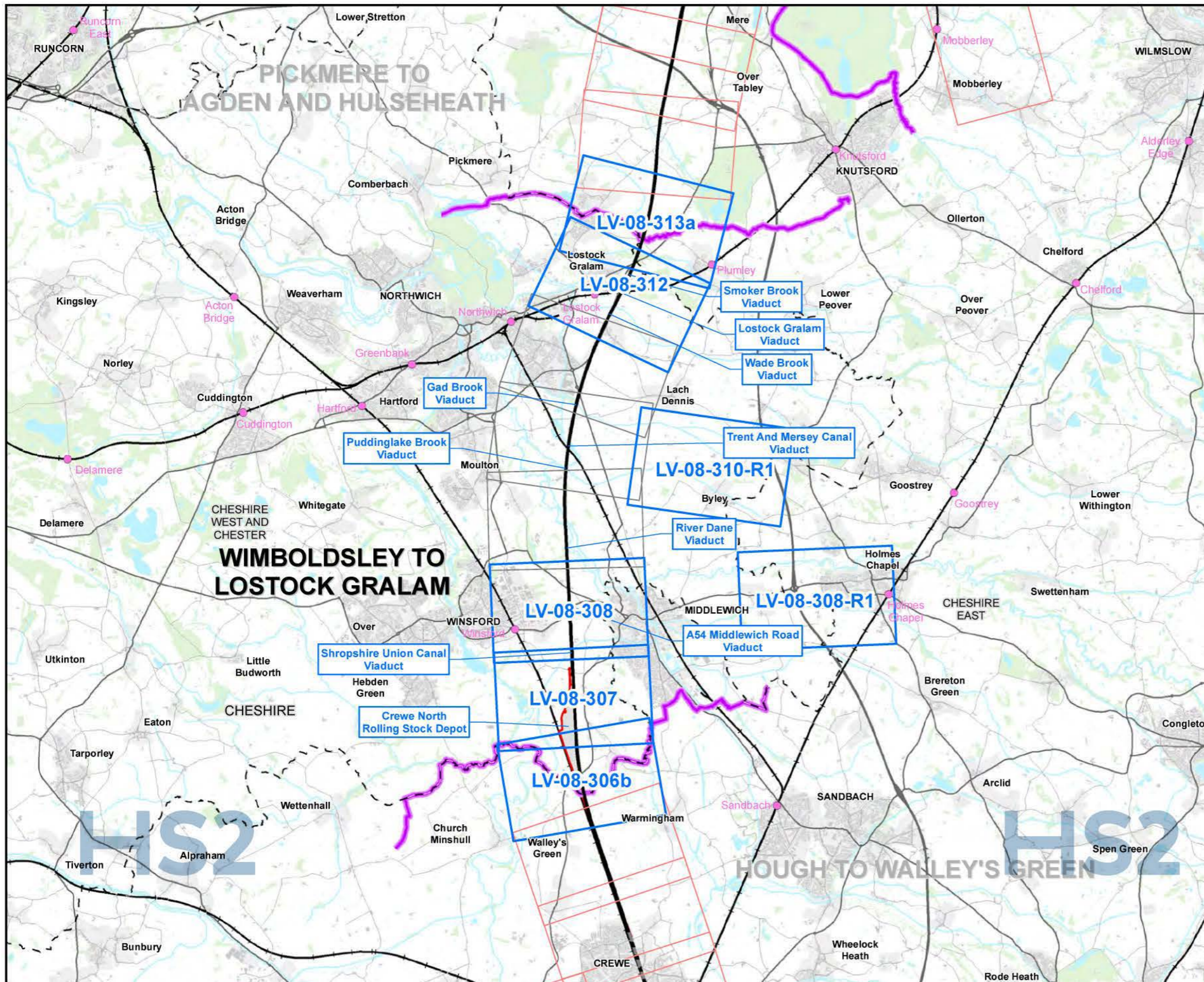
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Date: 21/04/22

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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 AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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

Map Number: LV-08-INDEX-MA02

Map Name: Index Map of:
Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints
SES1 and AP1 ES

Community Area MA02:
Wimboldsley to Lostock Gralam

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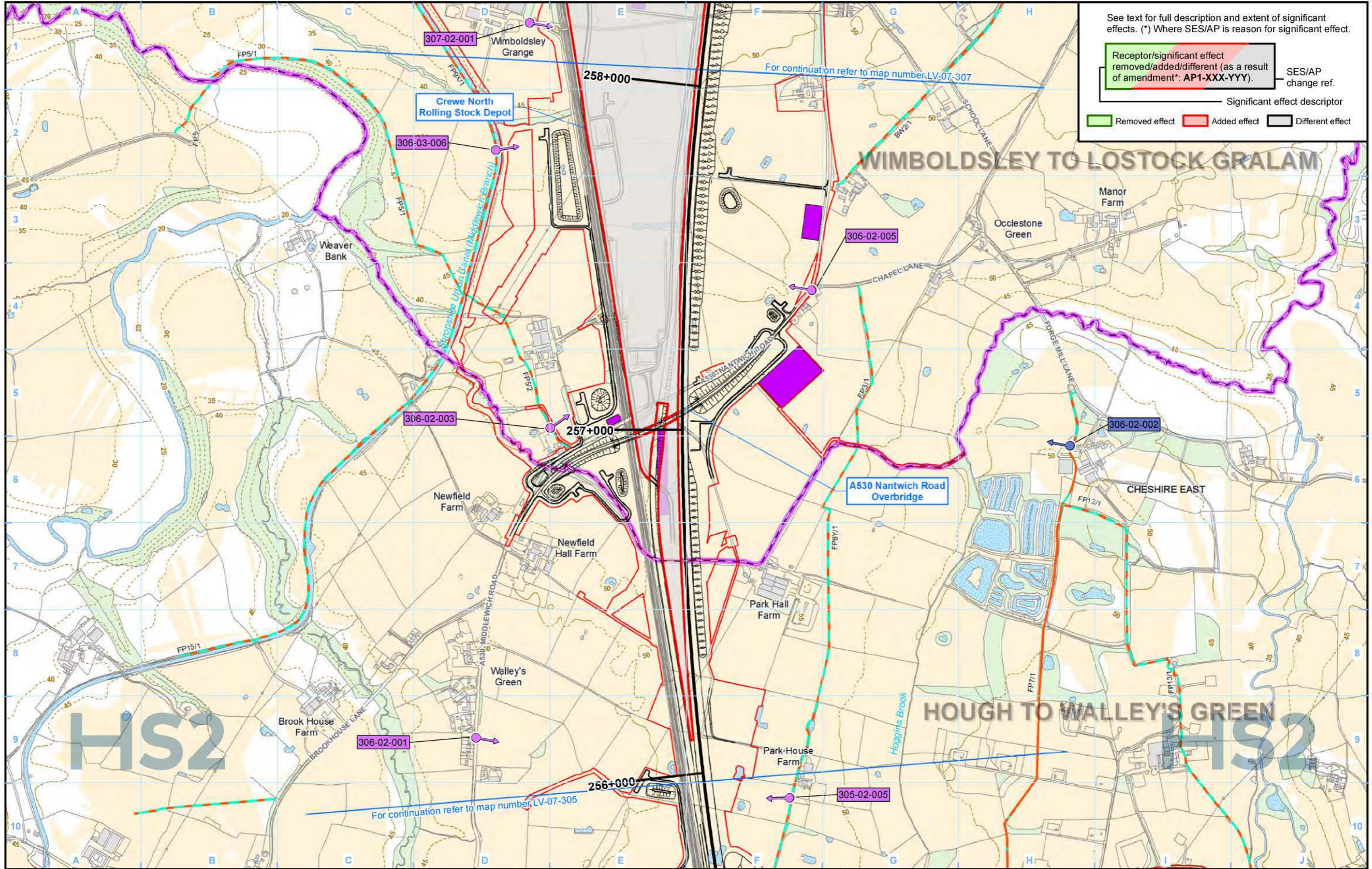
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Note: Not all data layers in the legend are represented on every map.



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

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

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-306b

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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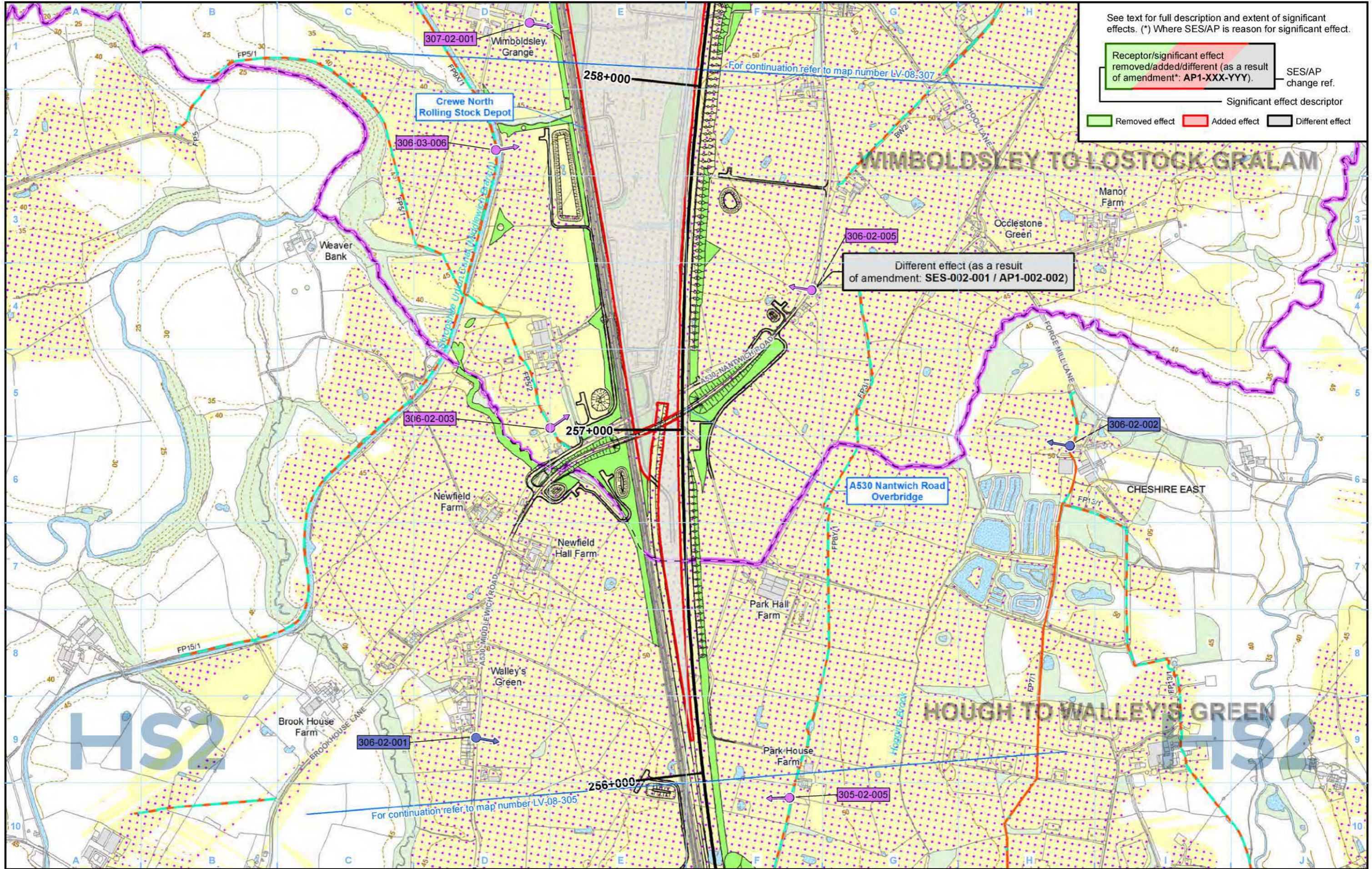
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-306b

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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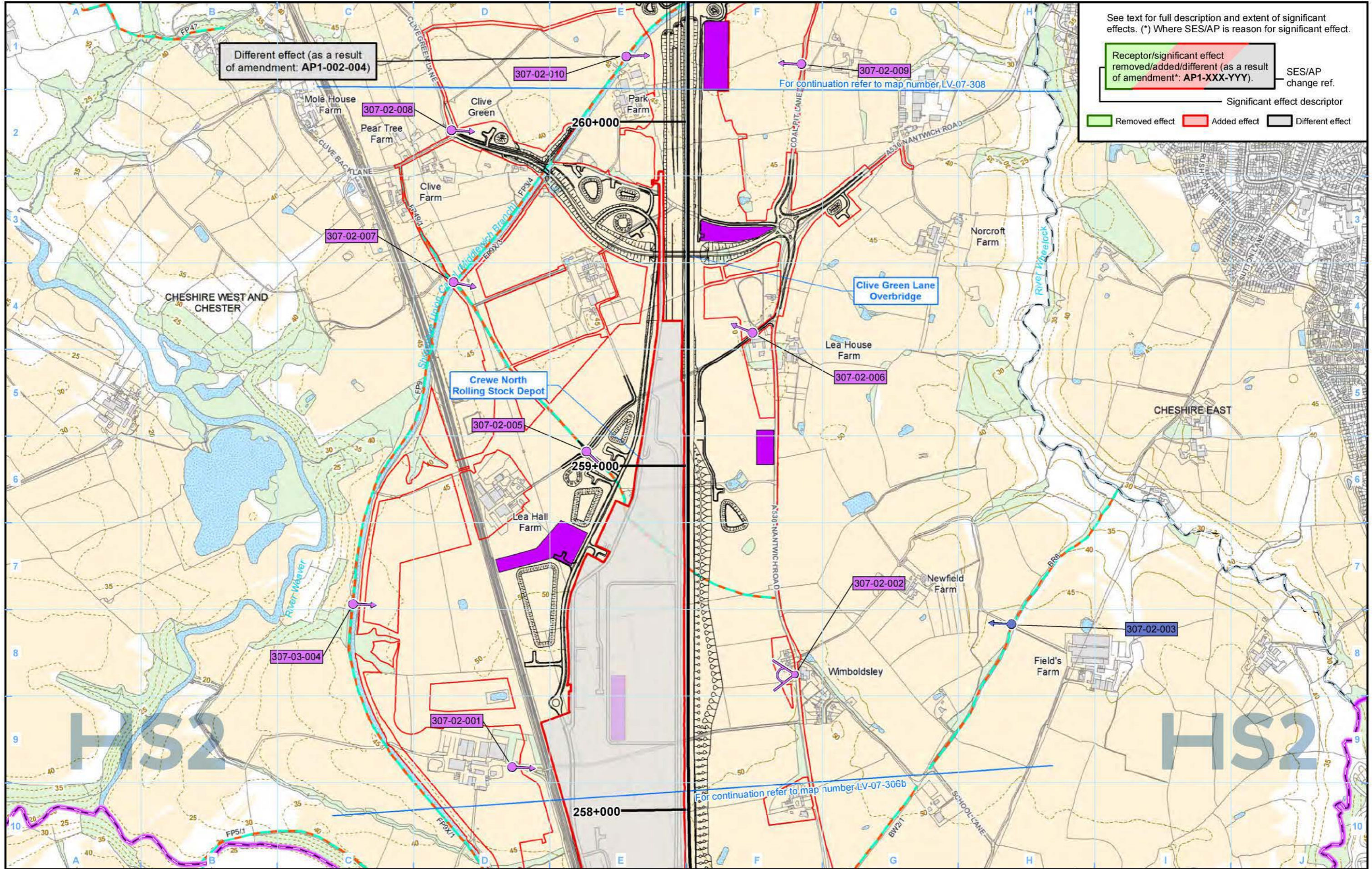
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Different effect (as a result of amendment: AP1-002-004)

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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-307

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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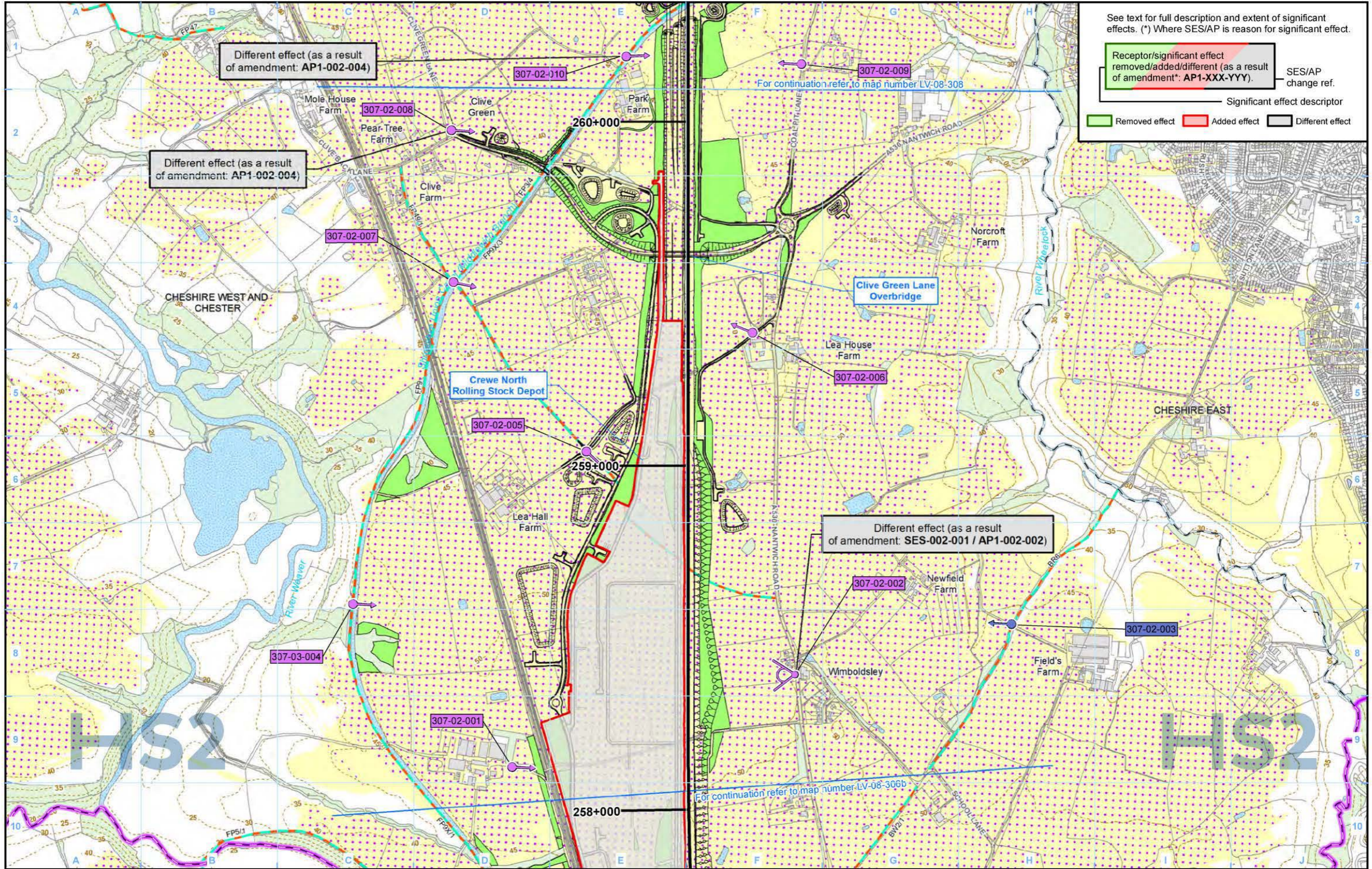
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Grey)

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
County boundary	Proposed tree planting			Cutting
District/Borough boundary				

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-307

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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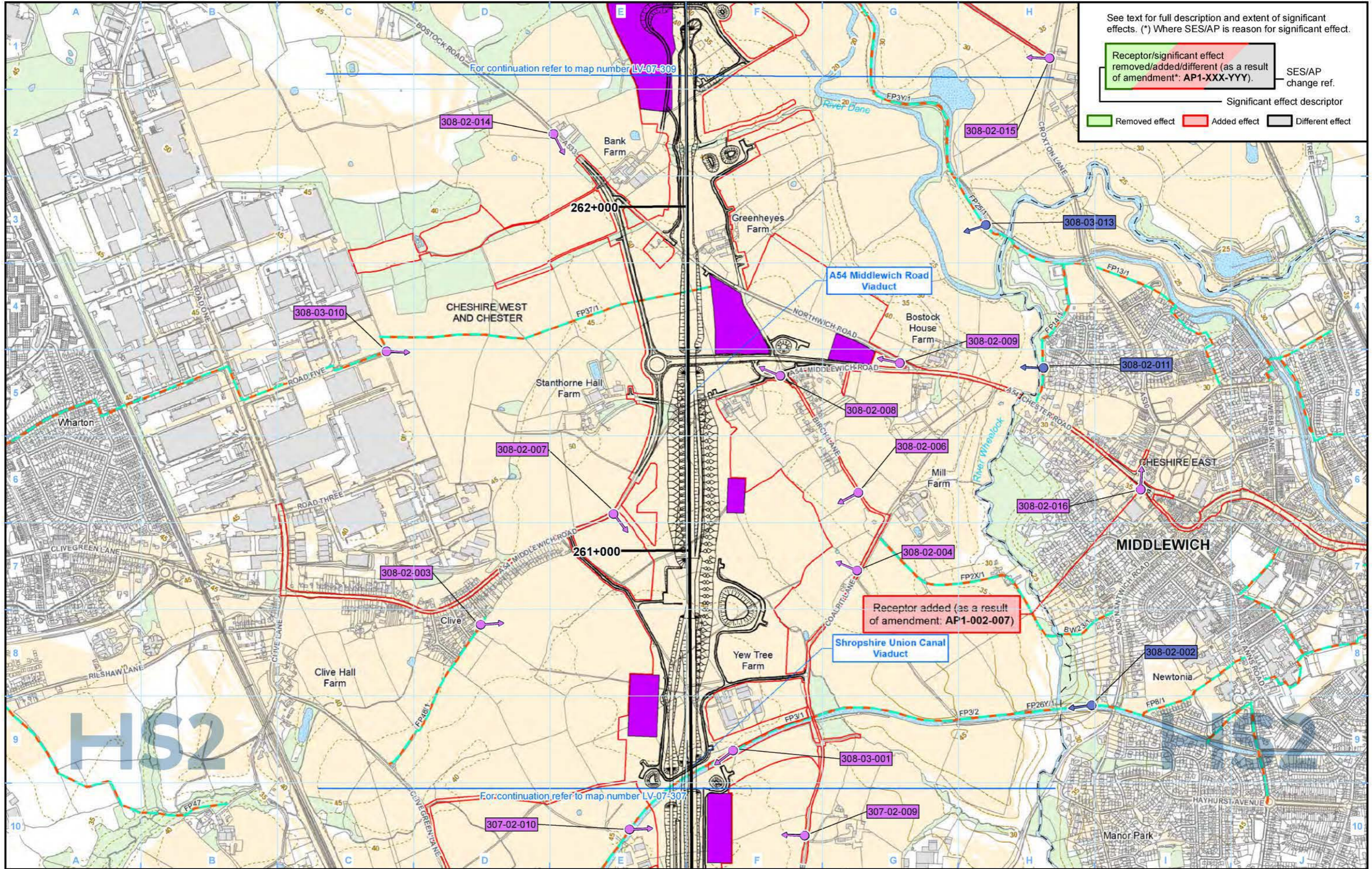
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-308

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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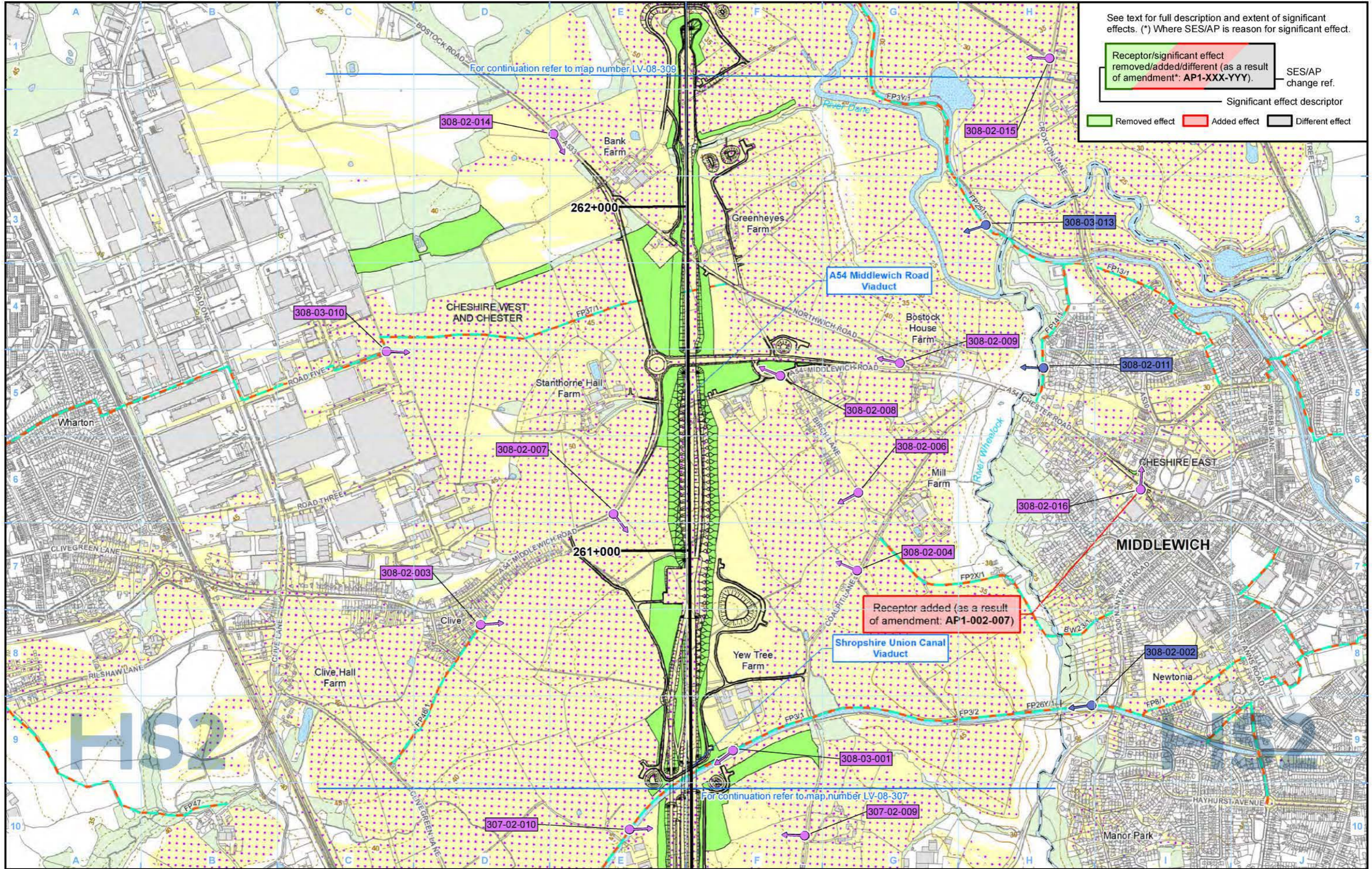
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-308

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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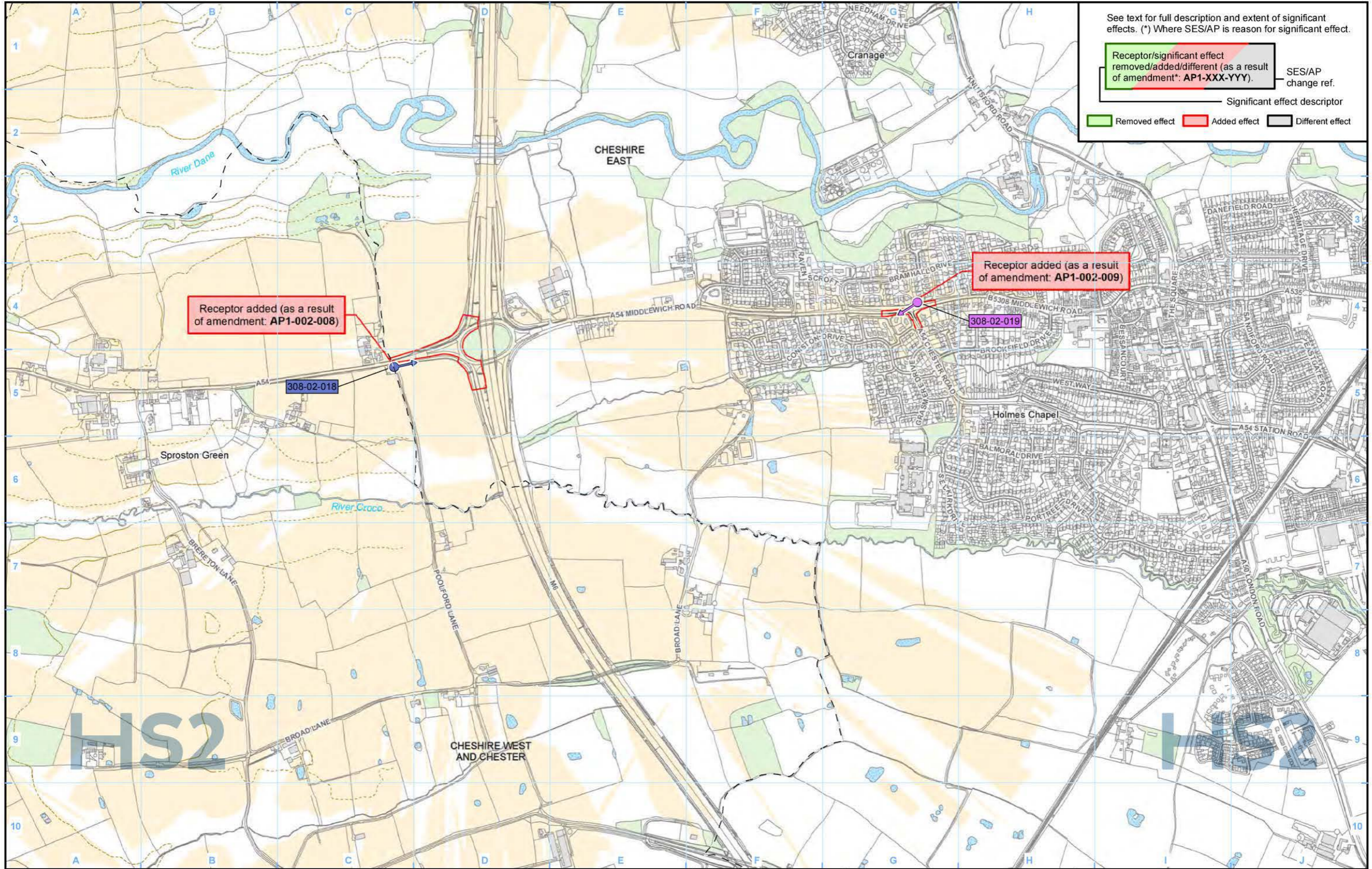
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.	
Significant effect descriptor		
Removed effect	Added effect	Different effect

Legend

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

- District/Borough boundary
- Public Rights of Way (PROW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Construction compounds

- ZTV construction
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number

- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location

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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-308-R1

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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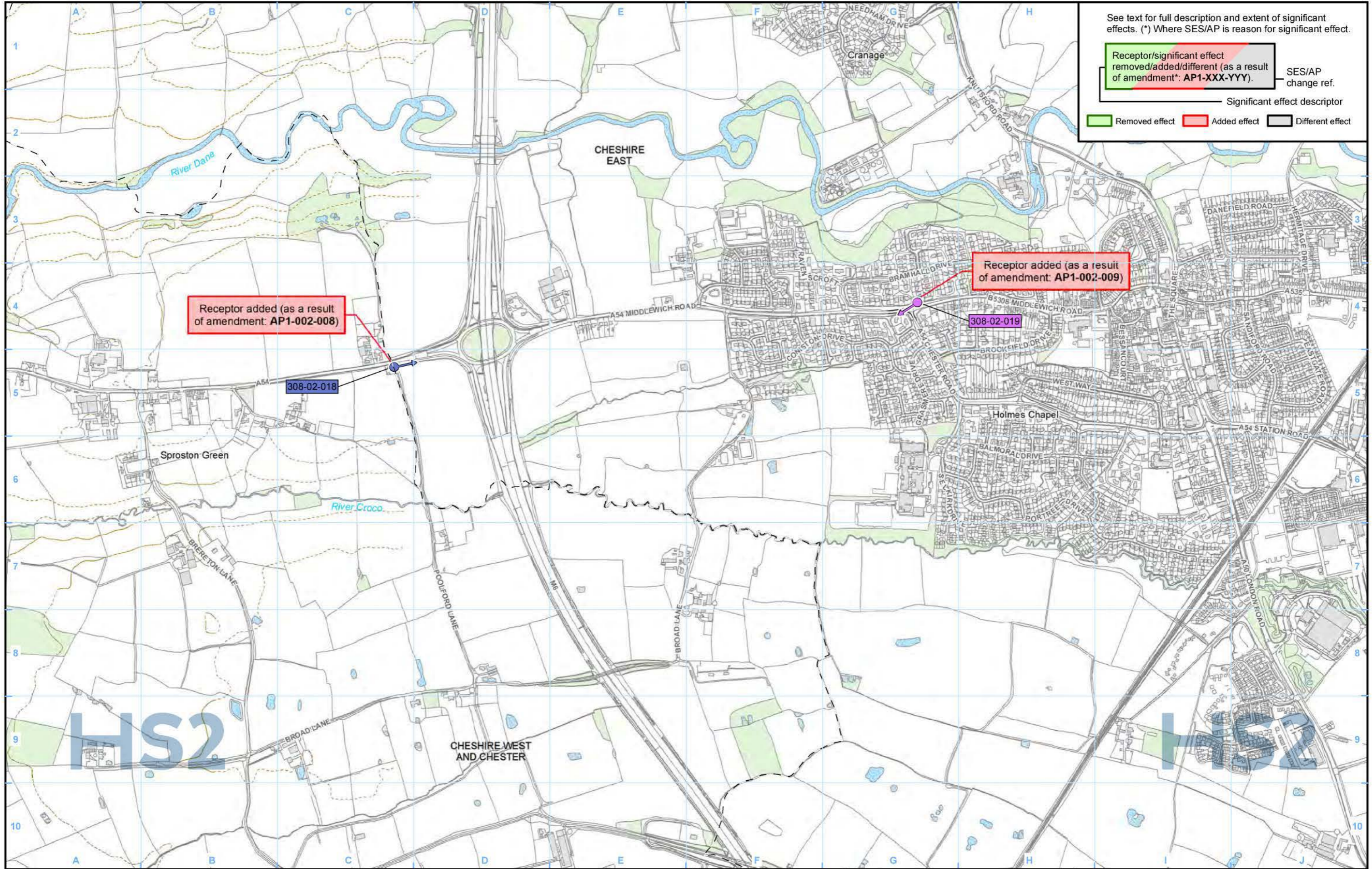
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Meters



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number	LV-08-308-R1
Map Name	Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES
Community Area MA02: Wimboldsley to Lostock Gralam	

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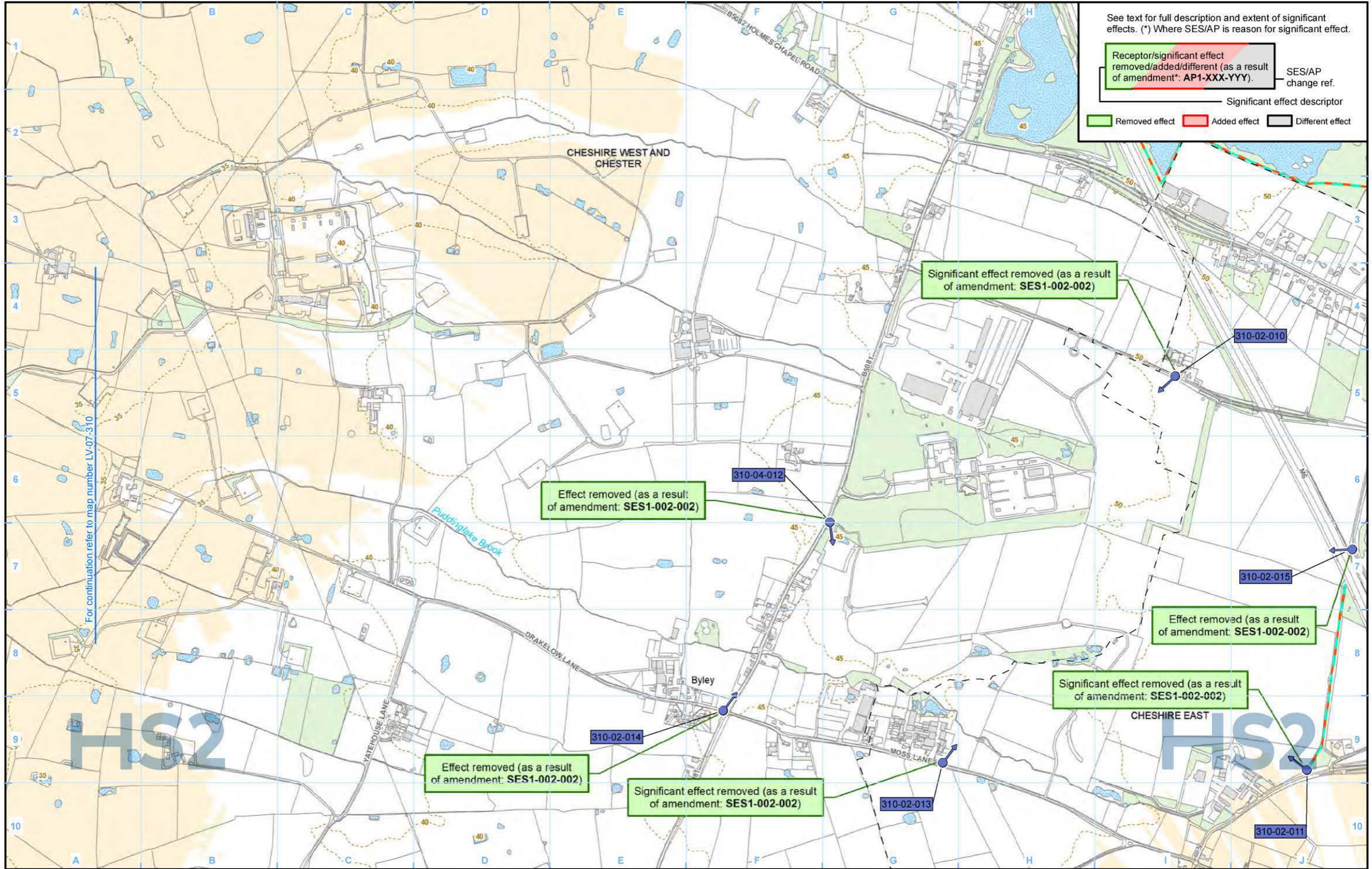
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Date: 22/04/22

Scale at A3: 1:10,000

Metres



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

For continuation refer to map number LV-07-310

- Legend**
- Route in tunnel
 - Route on surface
 - Depot, station, headhouse or portal building
 - Land potentially required during construction
 - Community area boundary
 - County boundary
 - District/Borough boundary
 - Public Rights of Way (PRoW)
 - 5m contours
 - Water body
 - Existing woodland and tree belts
 - Construction compounds
 - ZTV construction
 - 001-01-001 Non significantly affected viewpoint or photomontage number
 - 001-01-001 Significantly affected viewpoint or photomontage number
 - Non significantly affected viewpoint
 - Significantly affected viewpoint
 - Non significantly affected photomontage location
 - Significantly affected photomontage location
 - 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-310-R1

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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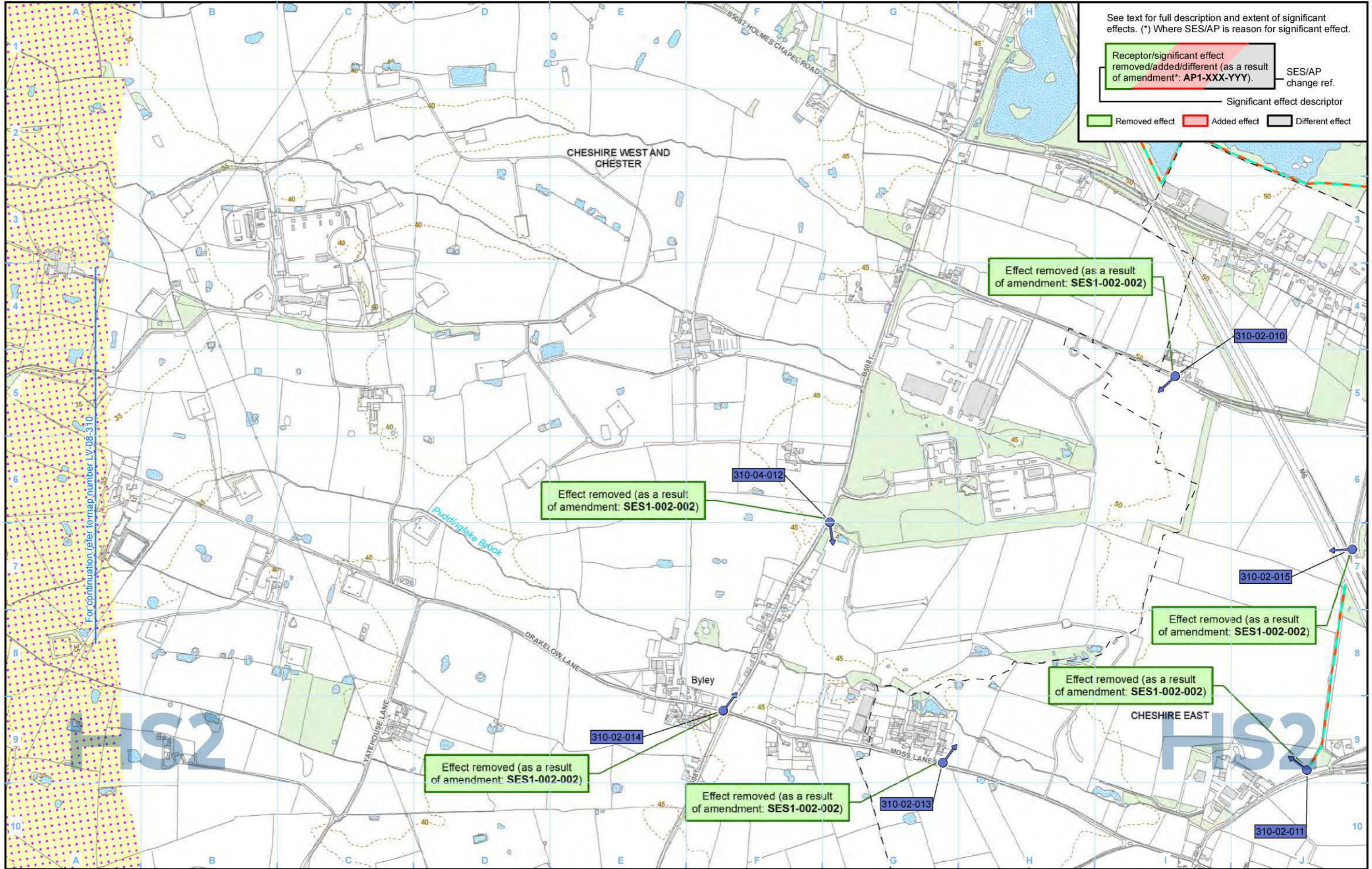
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See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect



Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PROW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-310-R1

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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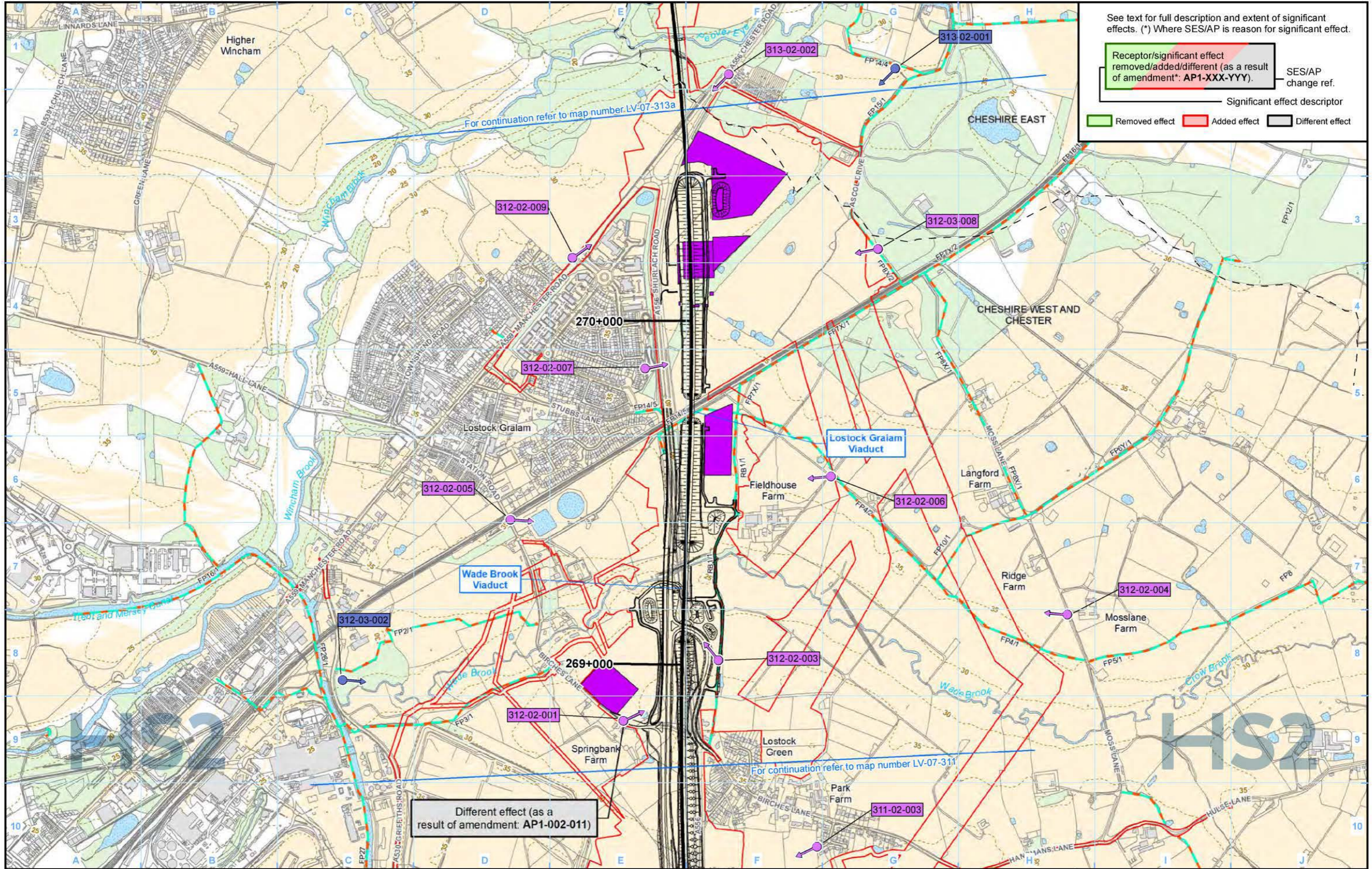
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-312

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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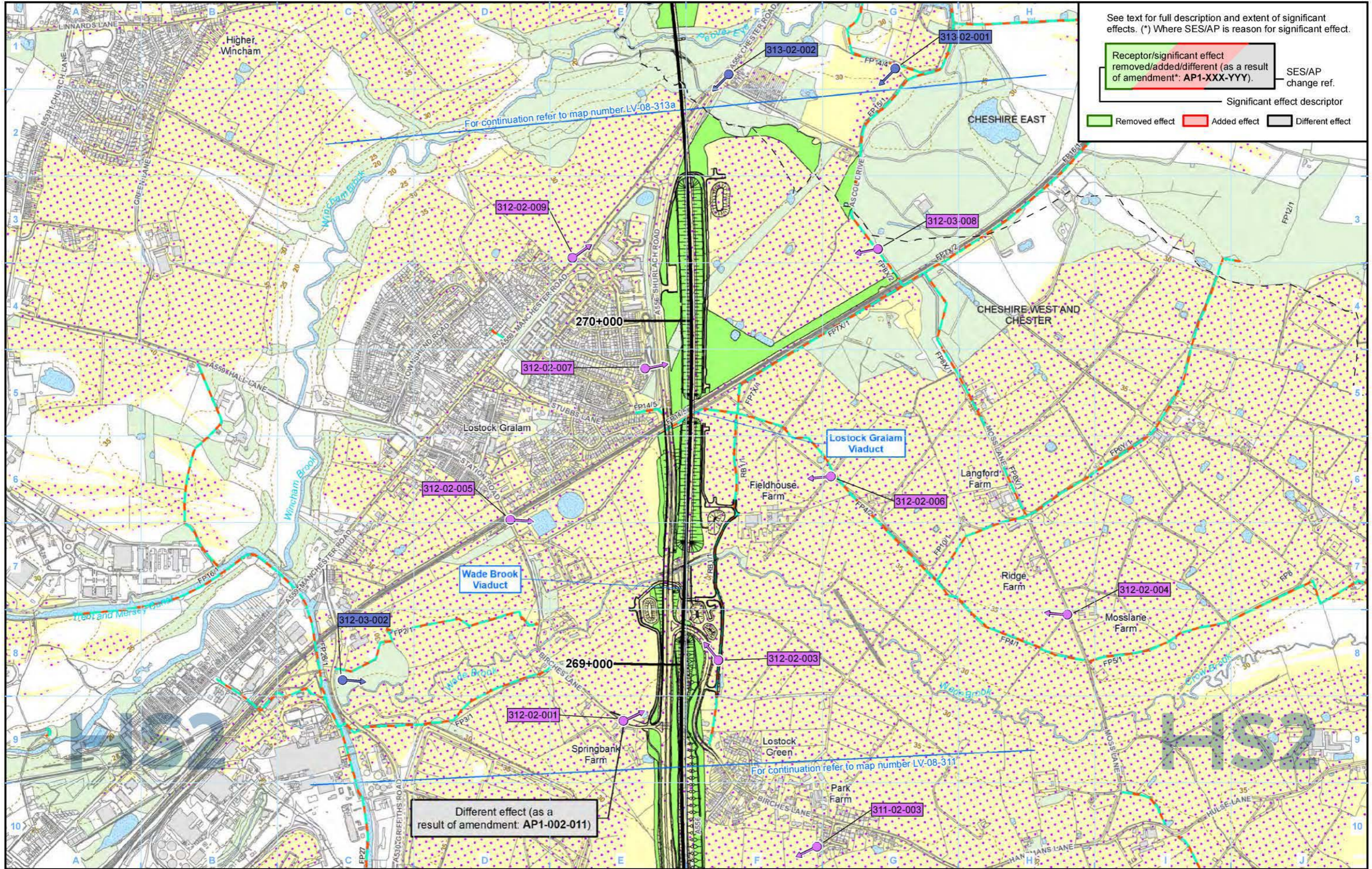
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Date: 22/04/22



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-312

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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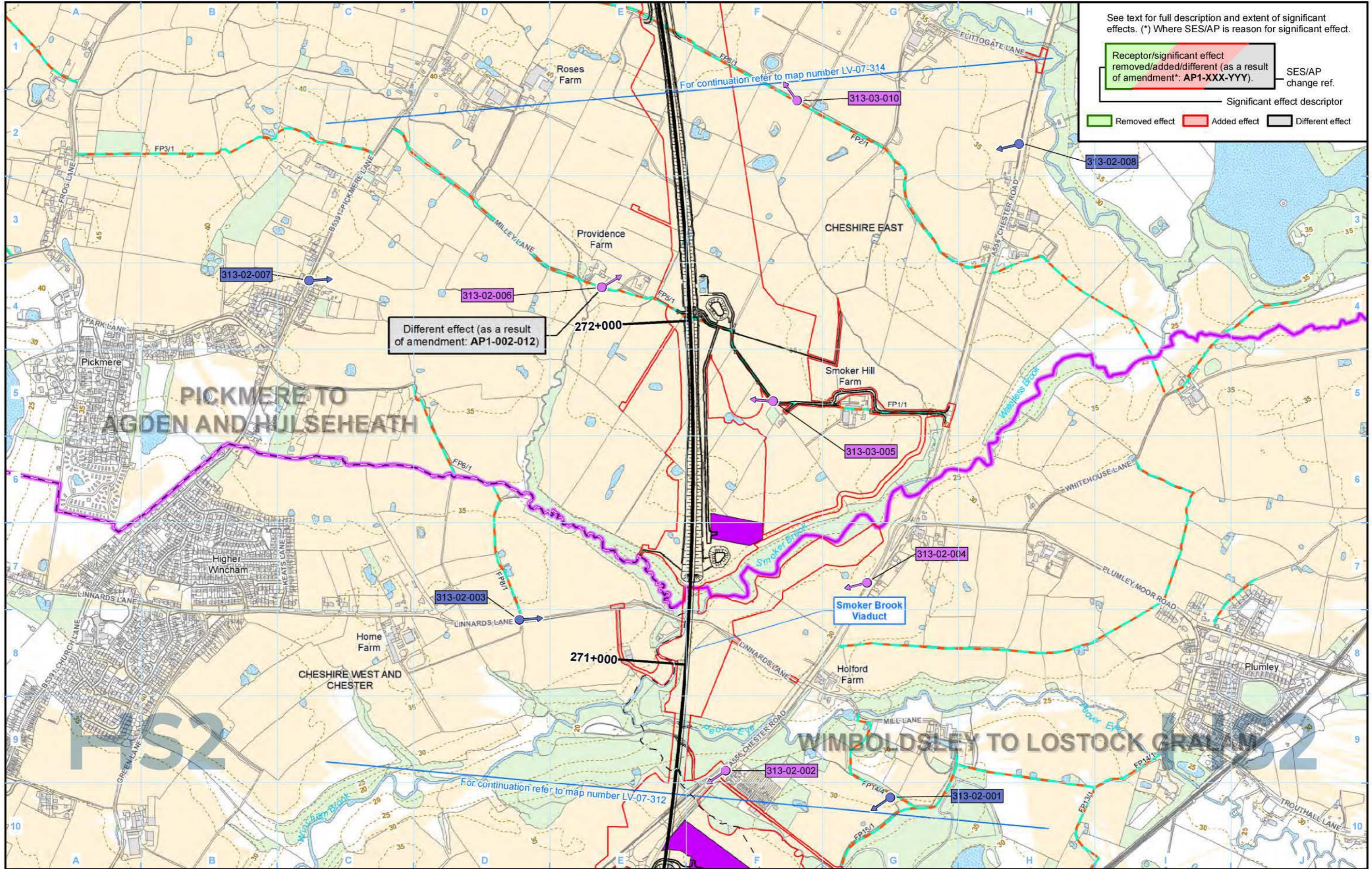
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Date: 22/04/22



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-313a

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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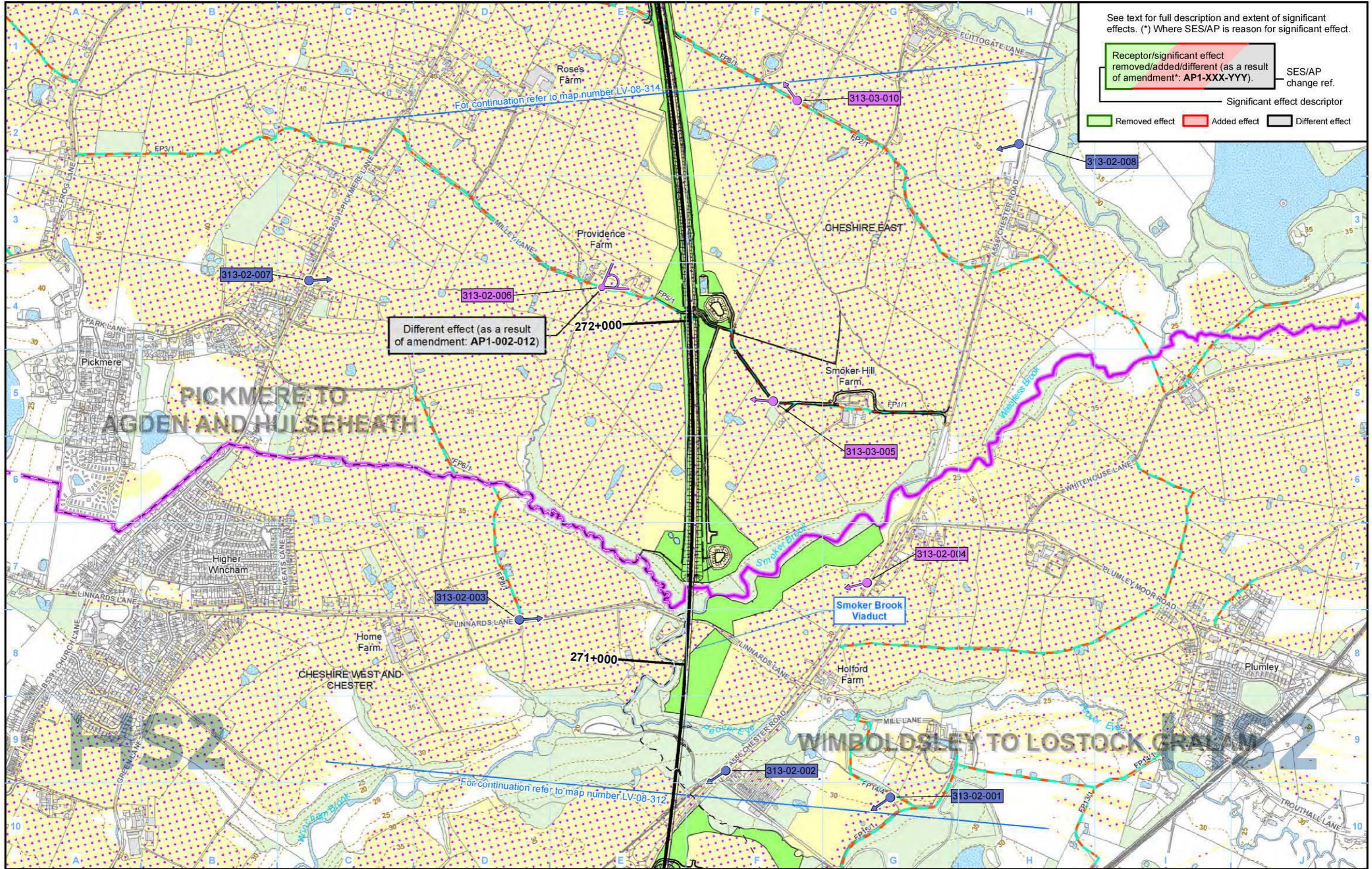
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See text for full description and extent of significant effects. (*) Where SES/AP is reason for significant effect.

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PROW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location
- 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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-313a

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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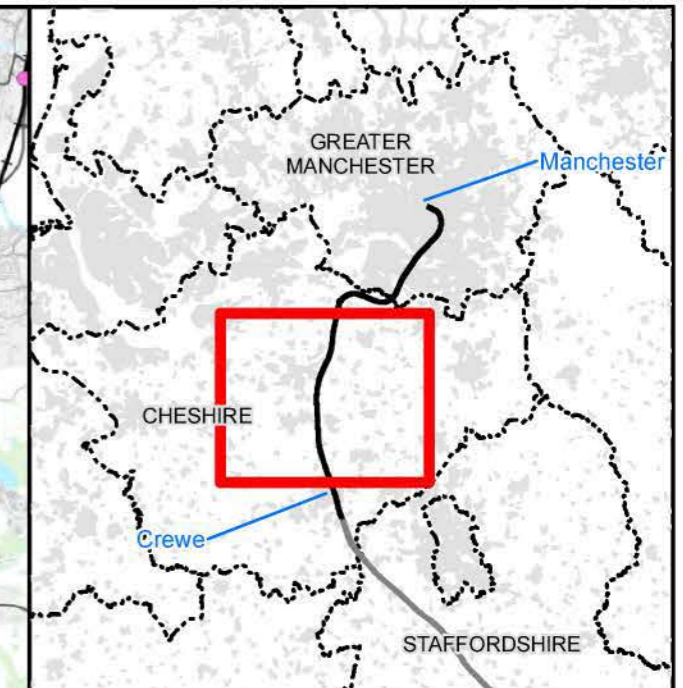
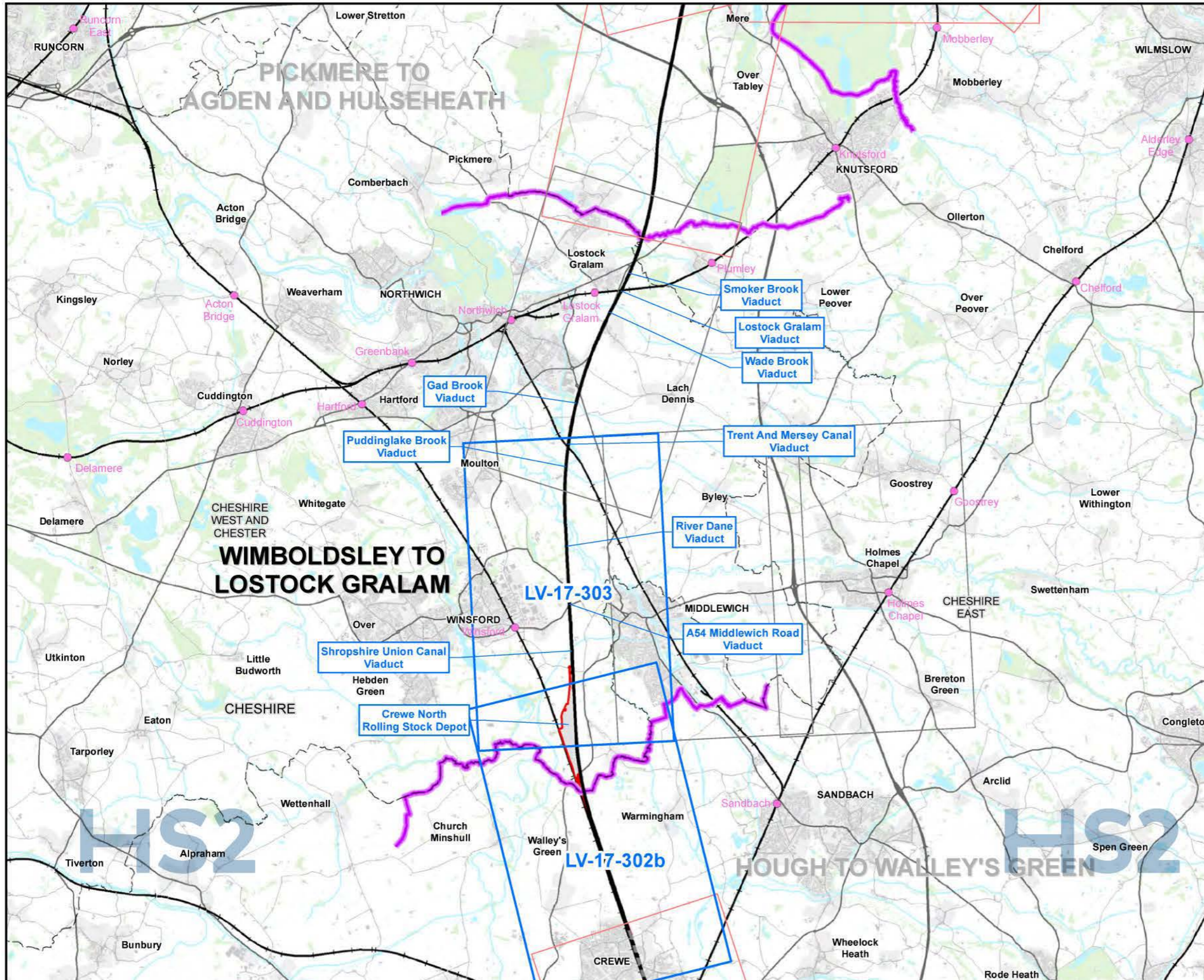
Metres

Date: 22/04/22

Scale at A3: 1:10,000

Metres

Date: 22/04/22



Map Series Information:

Maps showing the AP1 revised scheme and planting in context with the wider landscape.

Main Map Legend

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

Map Number: LV-17-INDEX-MA02

Map Name: Index Map of:
Route wide Landscape Context
SES1 and AP1 ES
Community Area MA02:
Wimboldsley to Lostock Gralam

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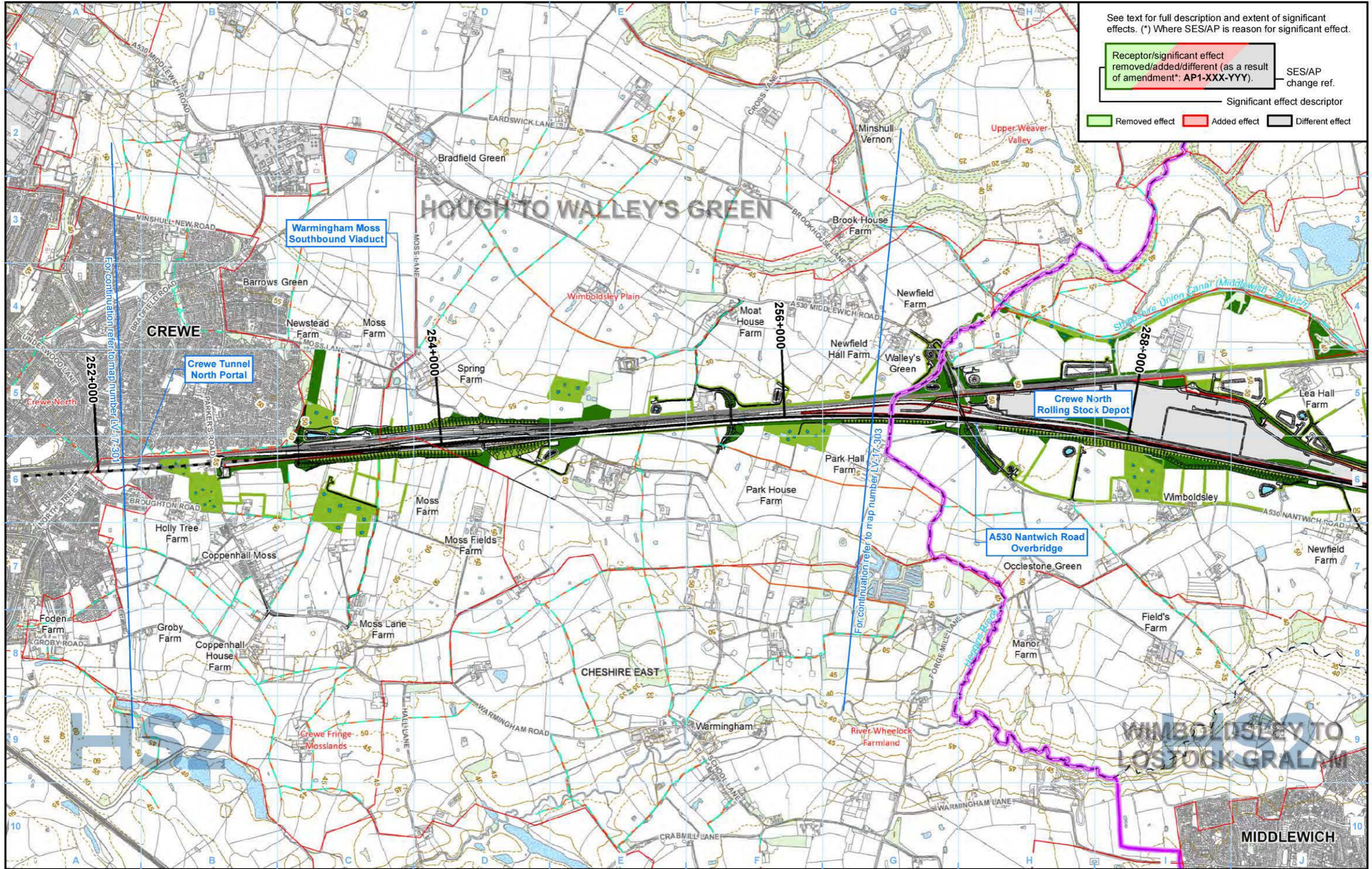
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Legend

Route in tunnel	Landscape Character Area boundary	Tree planting
Route on surface	Public Rights of Way (PRoW)	Other planting and hedgerows
Depot, station, headhouse or portal building	5m contours	Ecological mitigation pond
Community area boundary	Water body	Balancing Pond
County boundary	Existing woodland and tree belts	
District/Borough boundary		

Engineering earthworks:

Embankment
Cutting

Non engineering earthworks:

Embankment
Cutting

Map Number: LV-17-302b

Map Name: Route wide Landscape Context SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

HS2

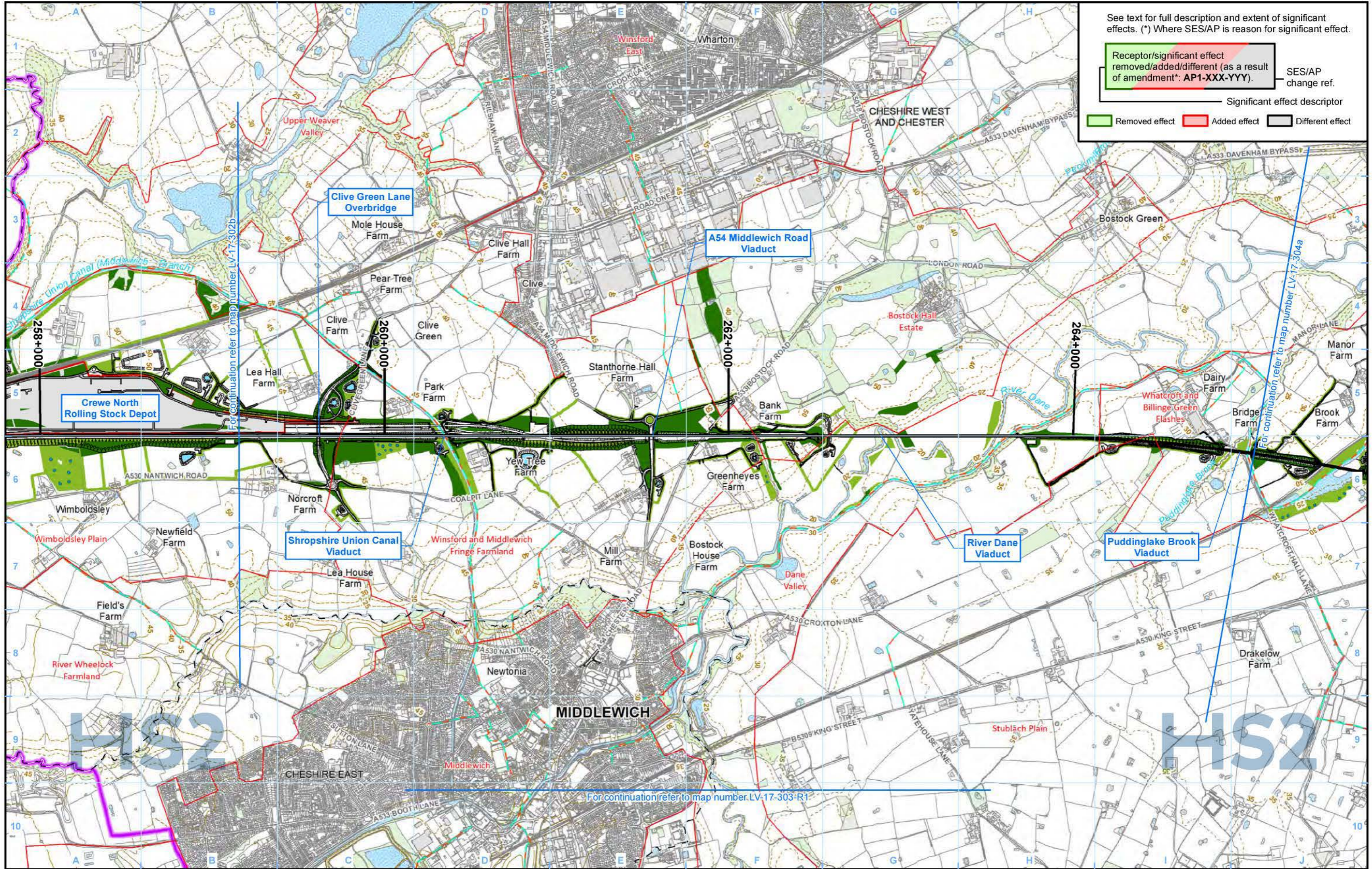
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Legend

Route in tunnel	Landscape Character Area boundary	Tree planting	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)	Other planting and hedgerows	Embankment
Depot, station, headhouse or portal building	5m contours	Ecological mitigation pond	Cutting
Community area boundary	Water body	Balancing Pond	Non engineering earthworks:
County boundary	Existing woodland and tree belts		Embankment
District/Borough boundary			Cutting

Map Number: LV-17-303

Map Name: Route wide Landscape Context SES1 and AP1 ES

Community Area MA02: Wimboldsley to Lostock Gralam

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Date: 13/04/22

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

MA03: Pickmere to Agden and Hulseheath

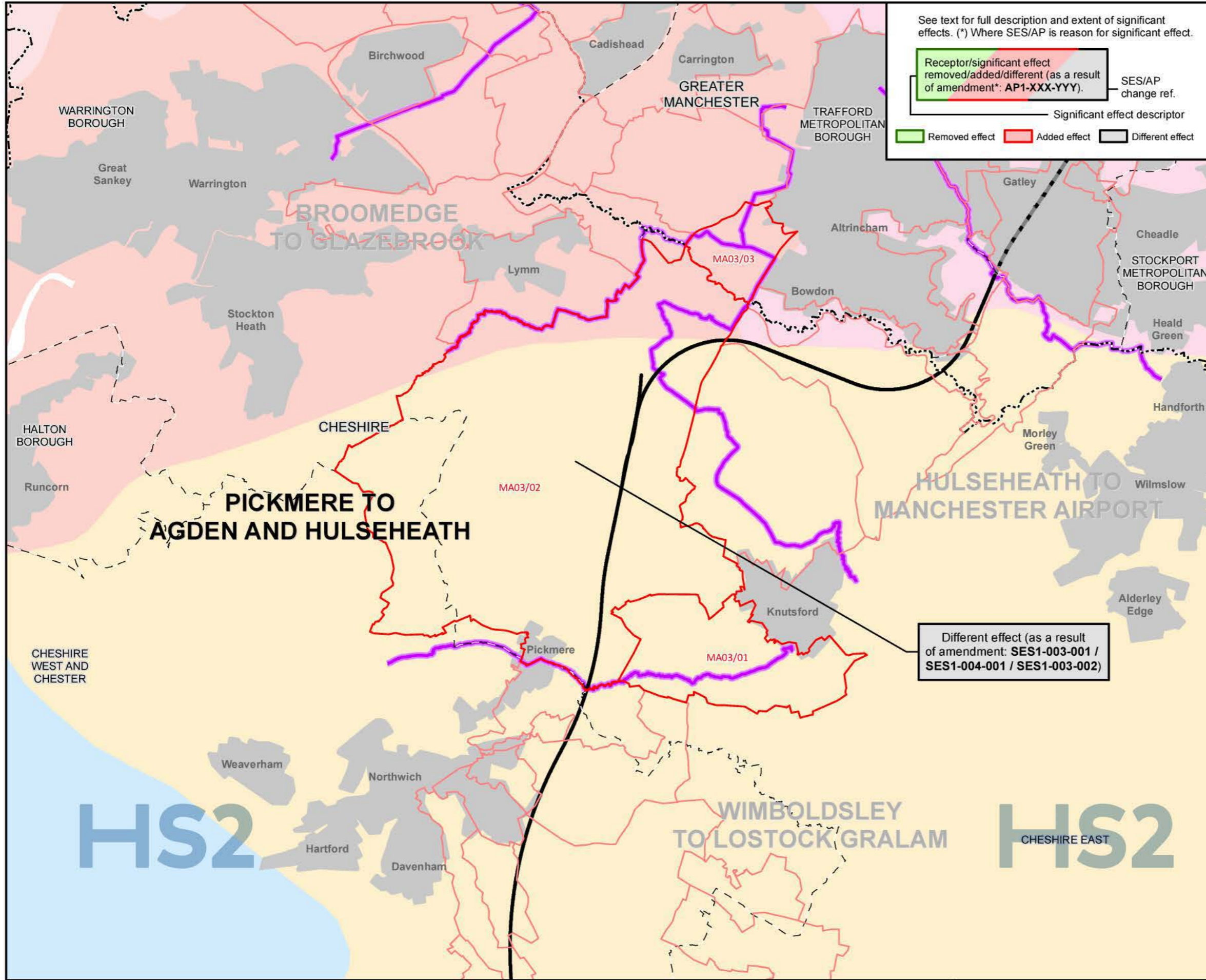
LV-00 – Route-wide Landscape Character Areas and National Character Areas

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

LV-17 – Route-wide Landscape Context



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Landscape Character Areas

MA03/01 - Tabley Wooded Estates and Meres
 MA03/02 - Arley Lower Wooded Farmland
 MA03/03 - Dunham Massey Wooded Estate

Different effect (as a result of amendment: SES1-003-001 / SES1-004-001 / SES1-003-002)

- Legend**
- Route in tunnel
 - Route on surface
 - Community area boundary
 - County boundary
 - District/Borough boundary
 - Large urban area
 - Landscape Character Area boundary (included in this community area)
 - Landscape Character Area boundary (not included in this community area)
 - Cheshire Sandstone Ridge
 - Lancashire Coal Measures
 - Manchester Conurbation
 - Mersey Valley
 - Shropshire, Cheshire and Staffordshire Plain

Map Number: LV-00-MA03

Map Name: Route Wide Landscape Character Areas and National Character Areas SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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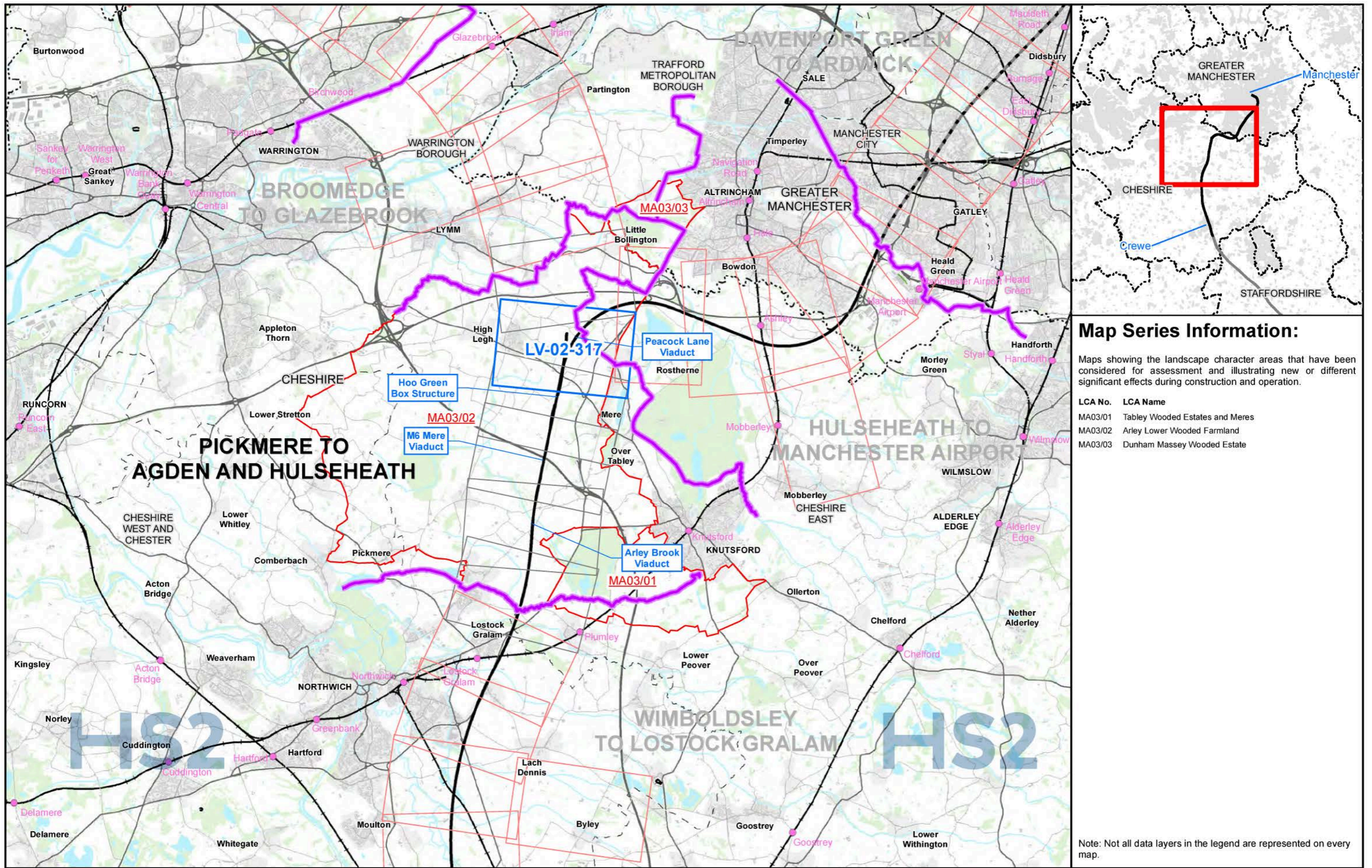
Doc Number: 2PT24-MWJ-EV-MAP-M000-000320-P01

Date: 22/04/22

Scale at A3: 1:100,000

0 1,000 2,000 3,000 4,000 Metres

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Map Series Information:

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

LCA No.	LCA Name
MA03/01	Tabley Wooded Estates and Meres
MA03/02	Arley Lower Wooded Farmland
MA03/03	Dunham Massey Wooded Estate

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 area boundary
 - Existing railway station
 - County boundary
 - District/Borough boundary

- Landscape Character Area boundary
- Map sheets included in this community area
- Map sheets included in this community area with no amendment
- Map sheets not included in this community area
- Landscape Character Area Number

Map Number	LV-02-INDEX-MA03
Map Name	Index Map of: Landscape Character Areas SES1 and AP1 ES
	Community Area MA03: Pickmere to Agden and Hulseheath

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Date: 21/04/22



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Black)

Arley Lower Wooded Farm and LCA
 Different effect (as a result of a combination of AP1 and SES changes)
 Significantly affected during -
 Construction: Yes
 Operation year 1: Yes
 Operation year 15: Yes

Tatton and Rostherne Wooded Estates and Meres LCA
 Significantly affected during -
 Construction: No
 Operation year 1: No
 Operation year 15: No

- Legend**
- Route in tunnel
 - Route on surface
 - Community area boundary
 - Depot, station, headhouse or portal building
 - Land potentially required during construction
 - County boundary
 - District/Borough boundary

Landscape character areas (LCA)

- Engineering earthworks:**
- Embankment
 - Cutting
- Non engineering earthworks:**
- Embankment
 - Cutting

Map Number: LV-02-317

Map Name: Landscape Character Areas SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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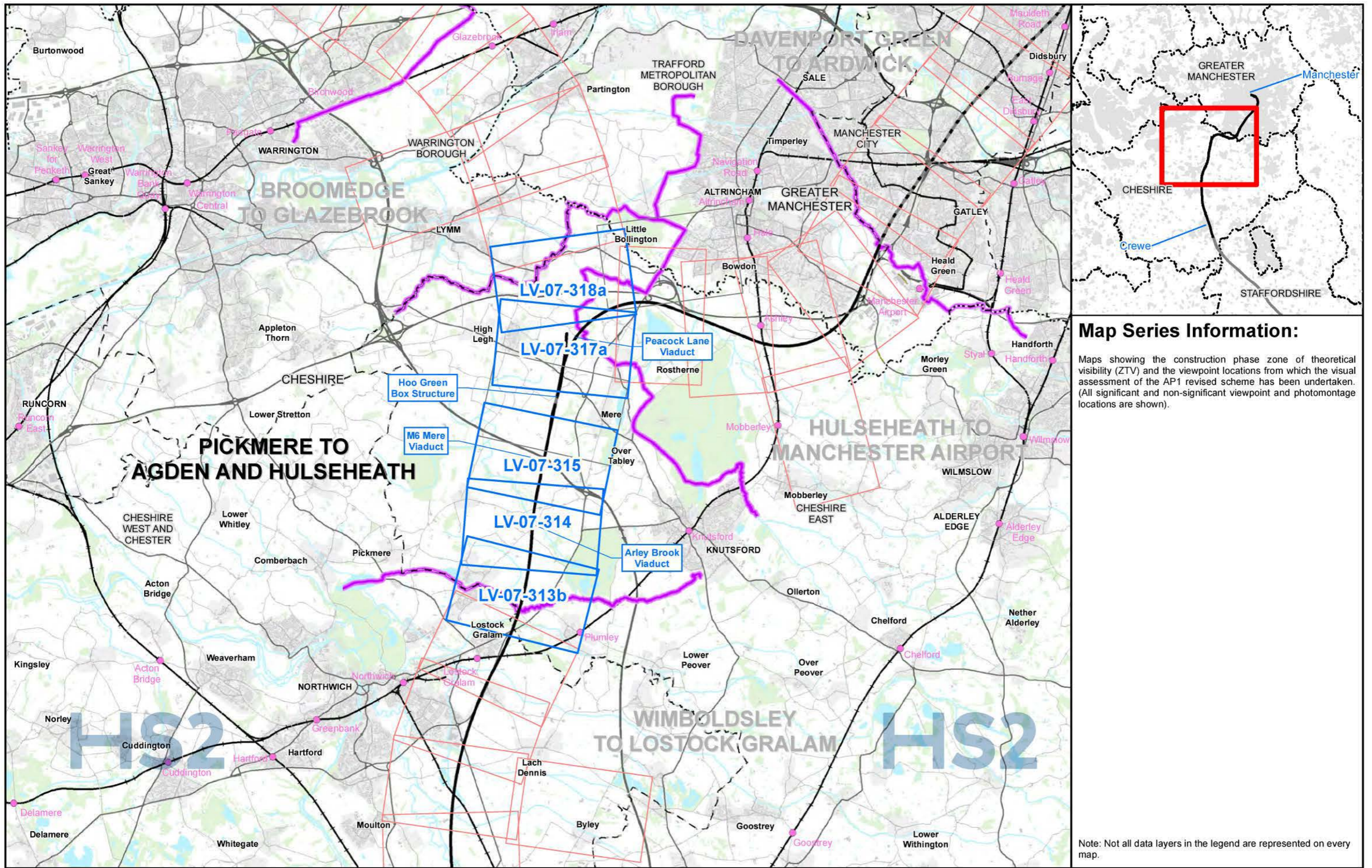
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Date: 22/04/22

Scale at A3: 1:10,000

Metres

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Map Series Information:

Maps showing the construction phase zone of theoretical visibility (ZTV) and the viewpoint locations from which the visual assessment of the AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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 area boundary
 - Existing railway station
 - County boundary
 - District/Borough boundary
 - Map sheets included in this community area
 - Map sheets included in this community area with no amendment
 - Map sheets not included in this community area

Map Number: LV-07-INDEX-MA03

Map Name: Index Map of: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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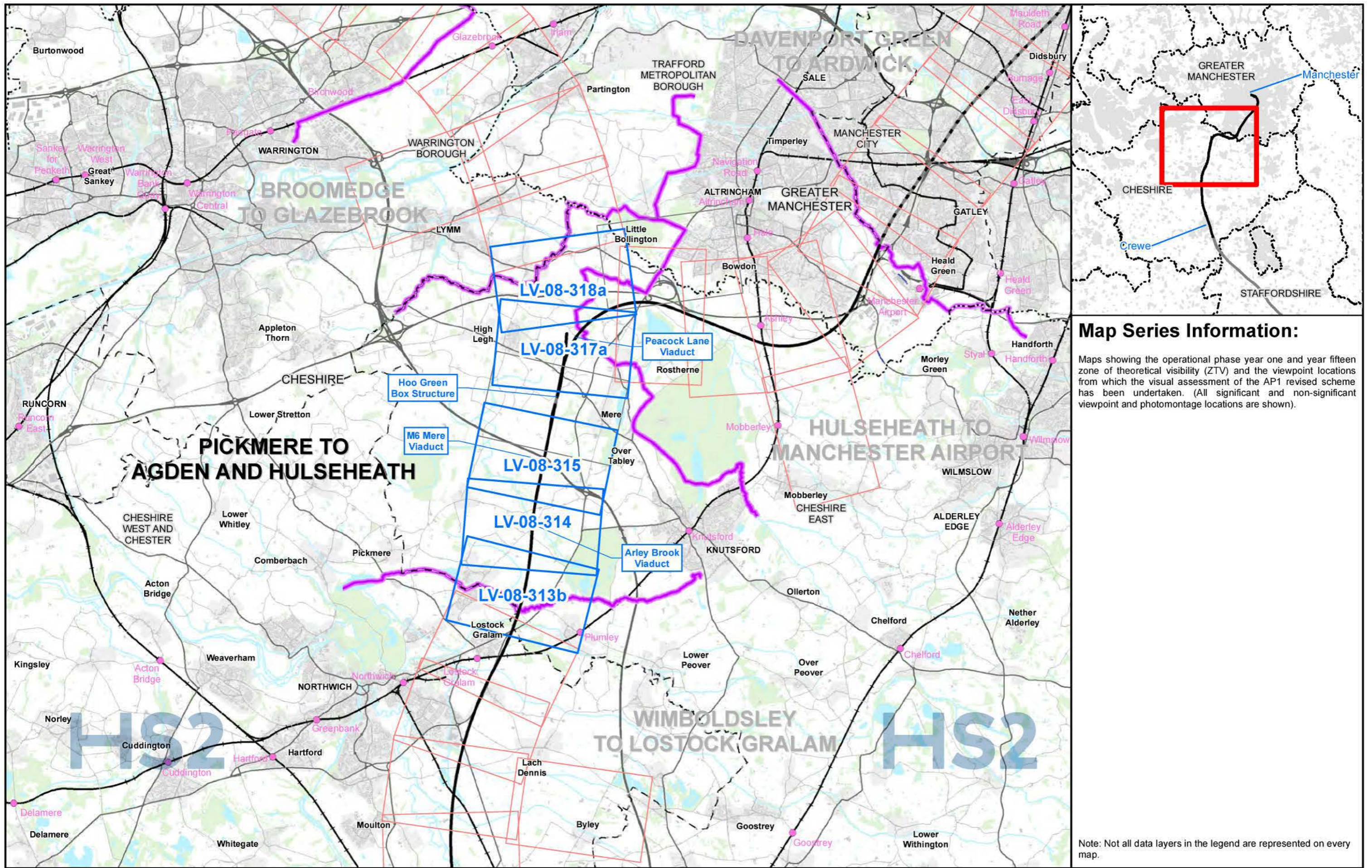
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Date: 21/04/22



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 AP1 revised scheme has been undertaken. (All significant and non-significant viewpoint and photomontage locations are shown).

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 area boundary
 - Existing railway station
 - County boundary
 - District/Borough boundary
 - Map sheets included in this community area
 - Map sheets included in this community area with no amendment
 - Map sheets not included in this community area

Map Number: LV-08-INDEX-MA03
 Map Name: Index Map of:
 Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES
 Community Area MA03:
 Pickmere to Agden and Hulseheath

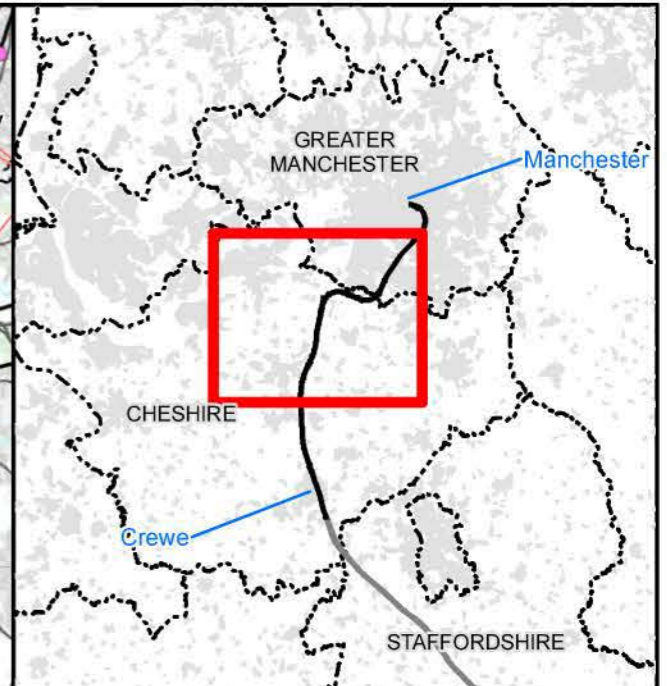
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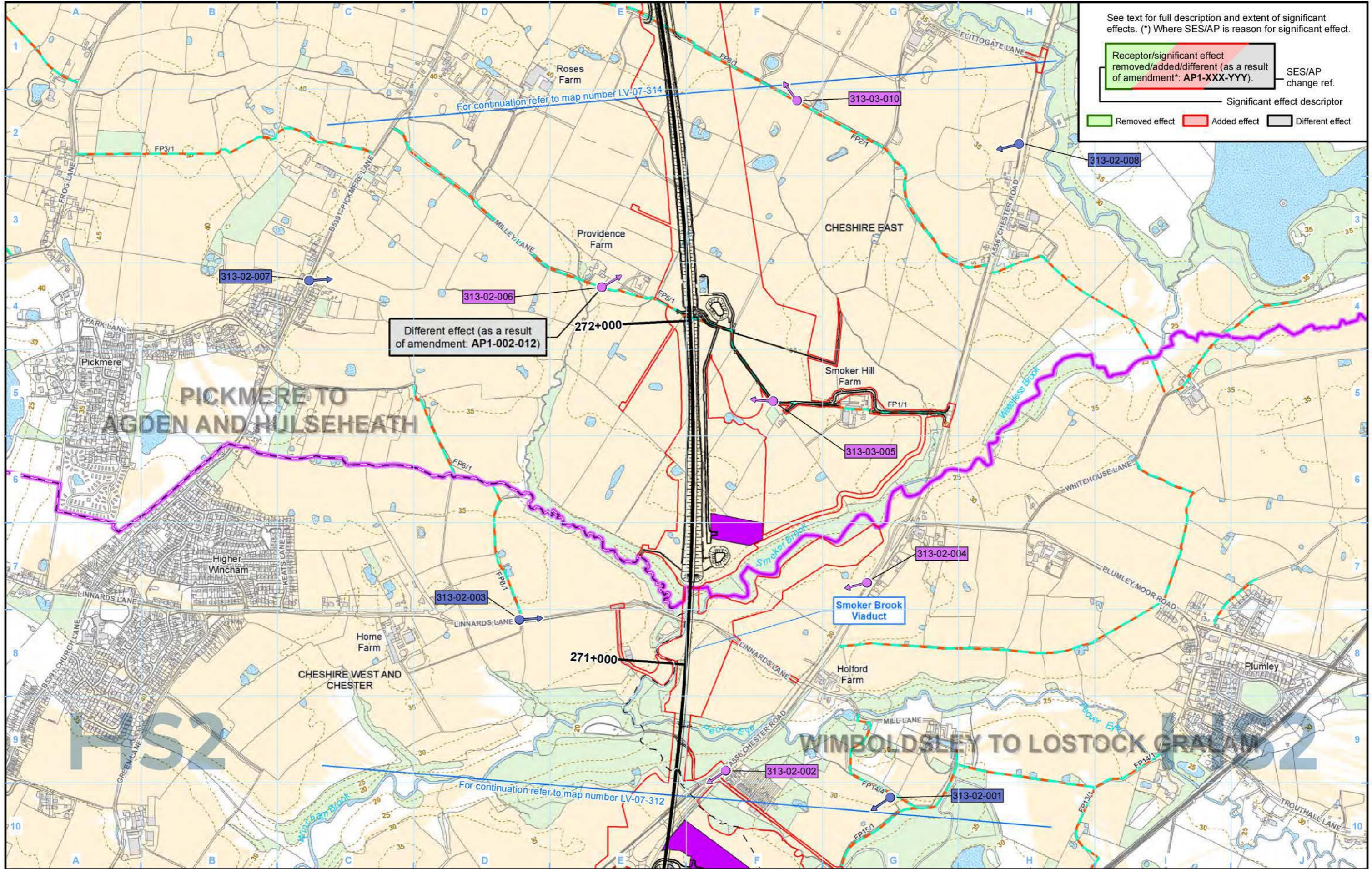
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-313b

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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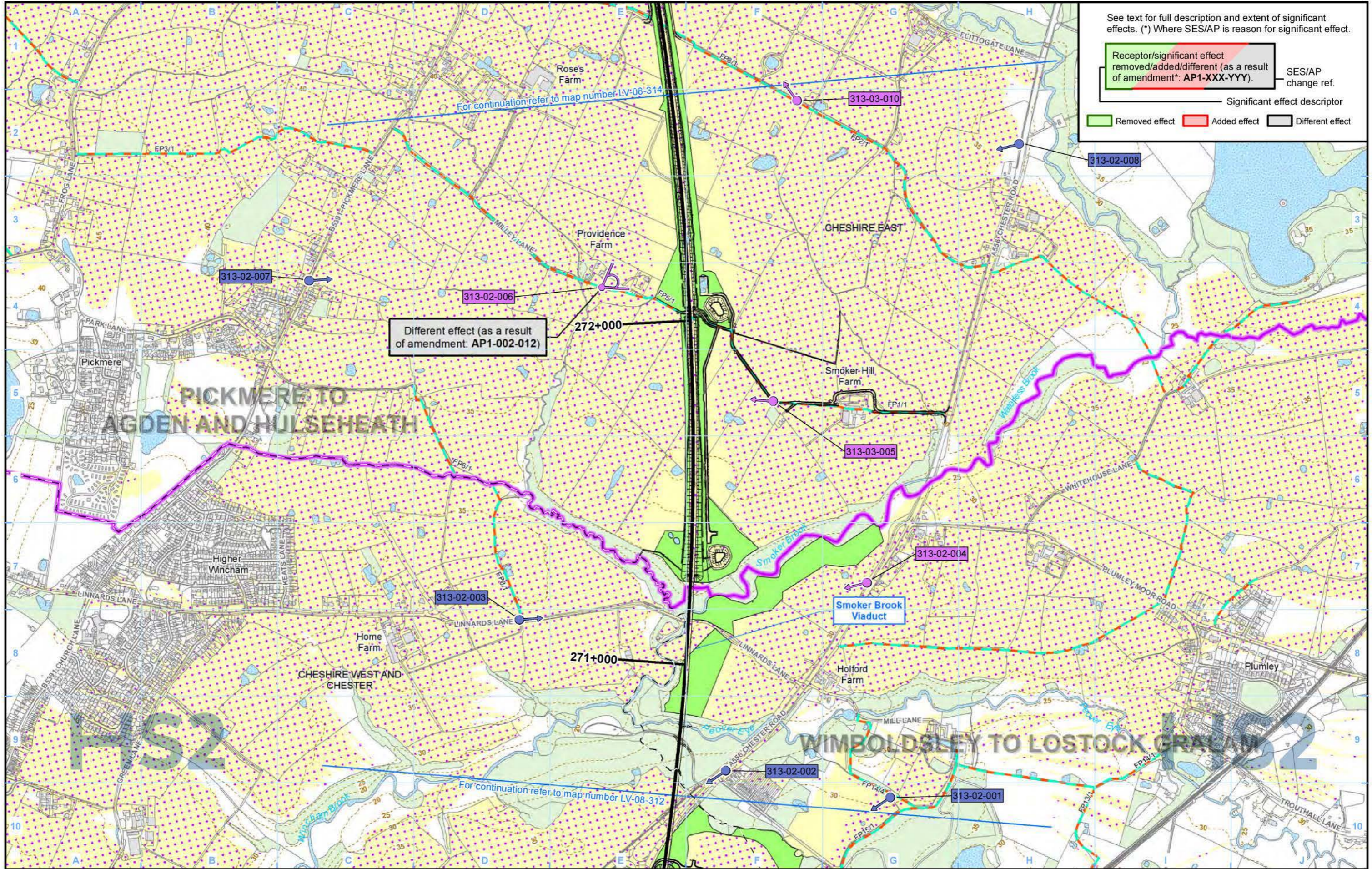
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Doc Number: 2PT24-MWJ-EV-MAP-M000-001803-P01

Date: 22/04/22

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Metres



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location

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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-313b

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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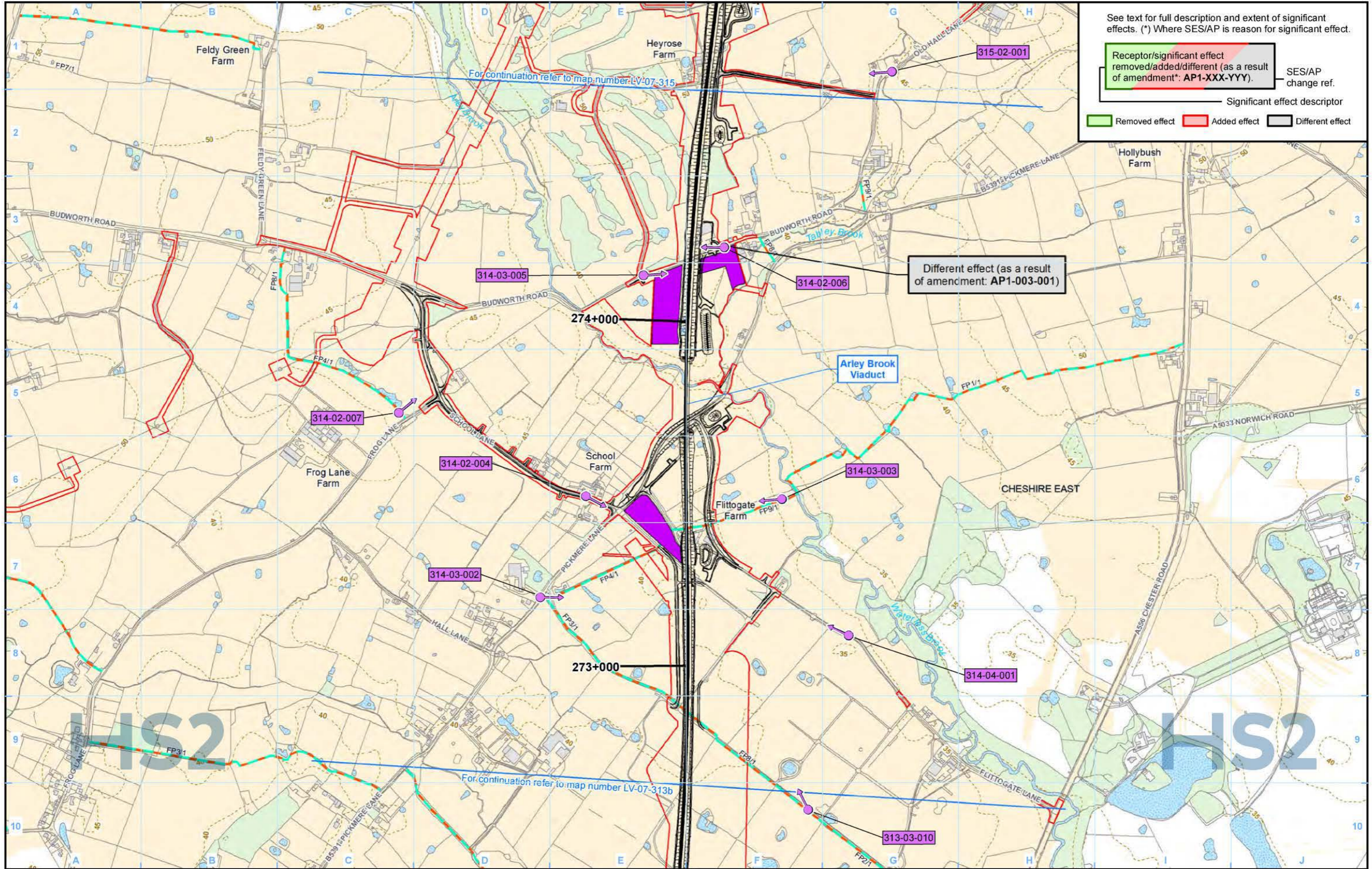
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-314

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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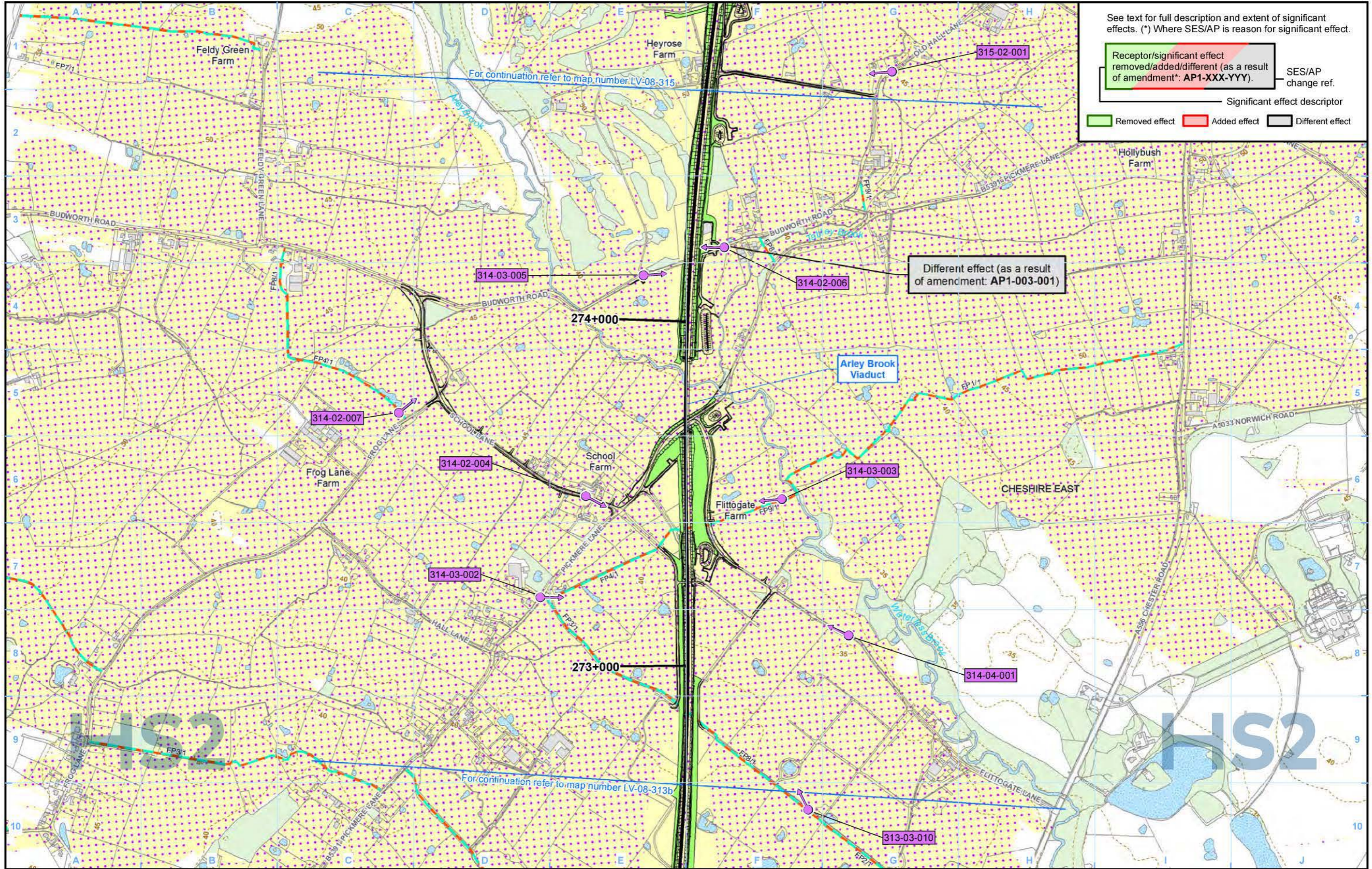
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Date: 22/04/22

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Metres



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

Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Grey)

Different effect (as a result of amendment: AP1-003-001)

Legend

- Route in tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary
- Public Rights of Way (PRoW)
- 5m contours
- Water body
- Existing woodland and tree belts
- Proposed tree planting
- ZTV operation year 1
- ZTV operation year 15
- Non significantly affected viewpoint or photomontage number
- Significantly affected viewpoint or photomontage number
- Non significantly affected viewpoint
- Significantly affected viewpoint
- Non significantly affected photomontage location
- Significantly affected photomontage location

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. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-314

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

HS2

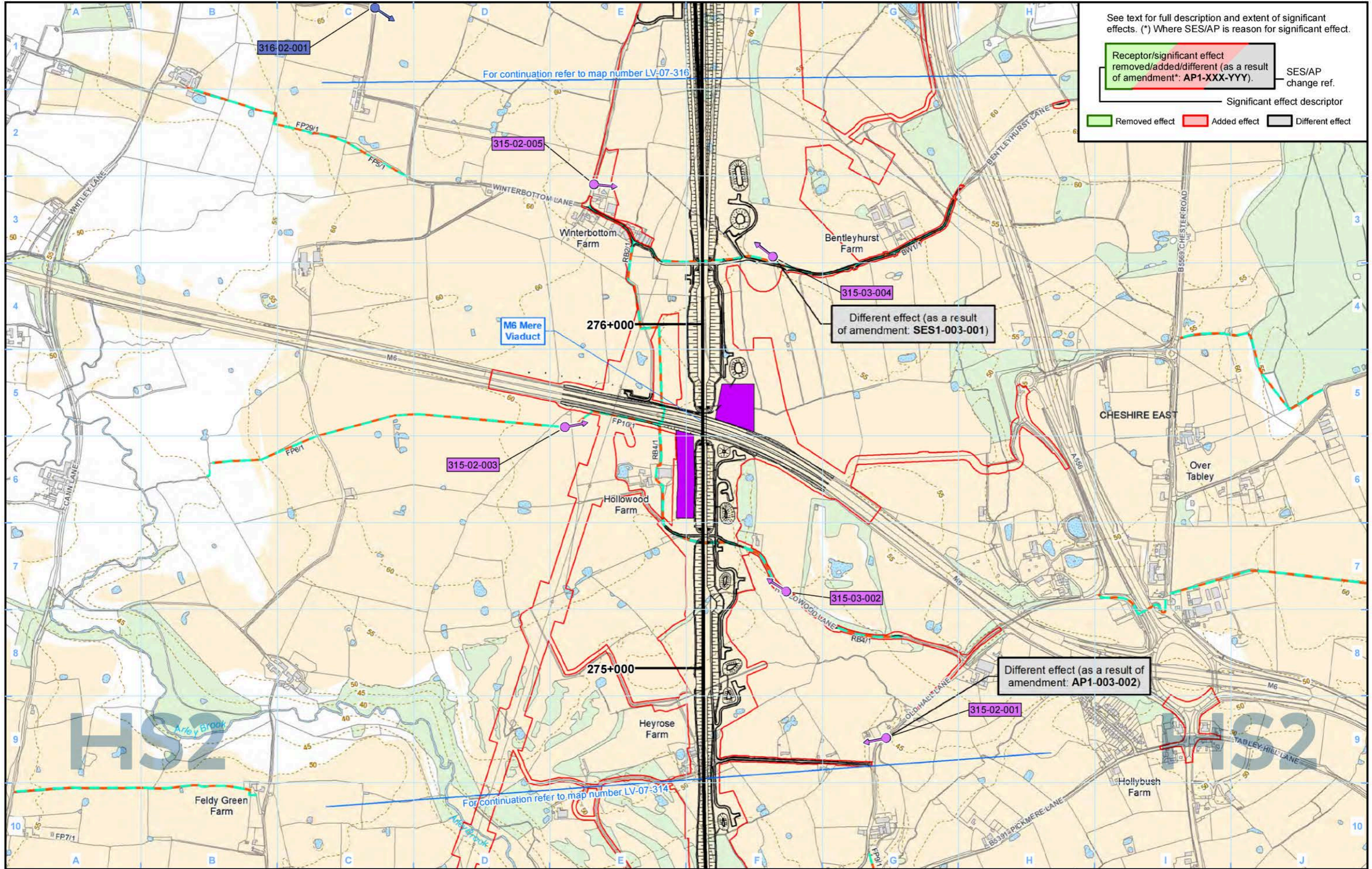
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
Community area boundary	Existing woodland and tree belts			Embankment
County boundary	Construction compounds			Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-315

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseath

HS2

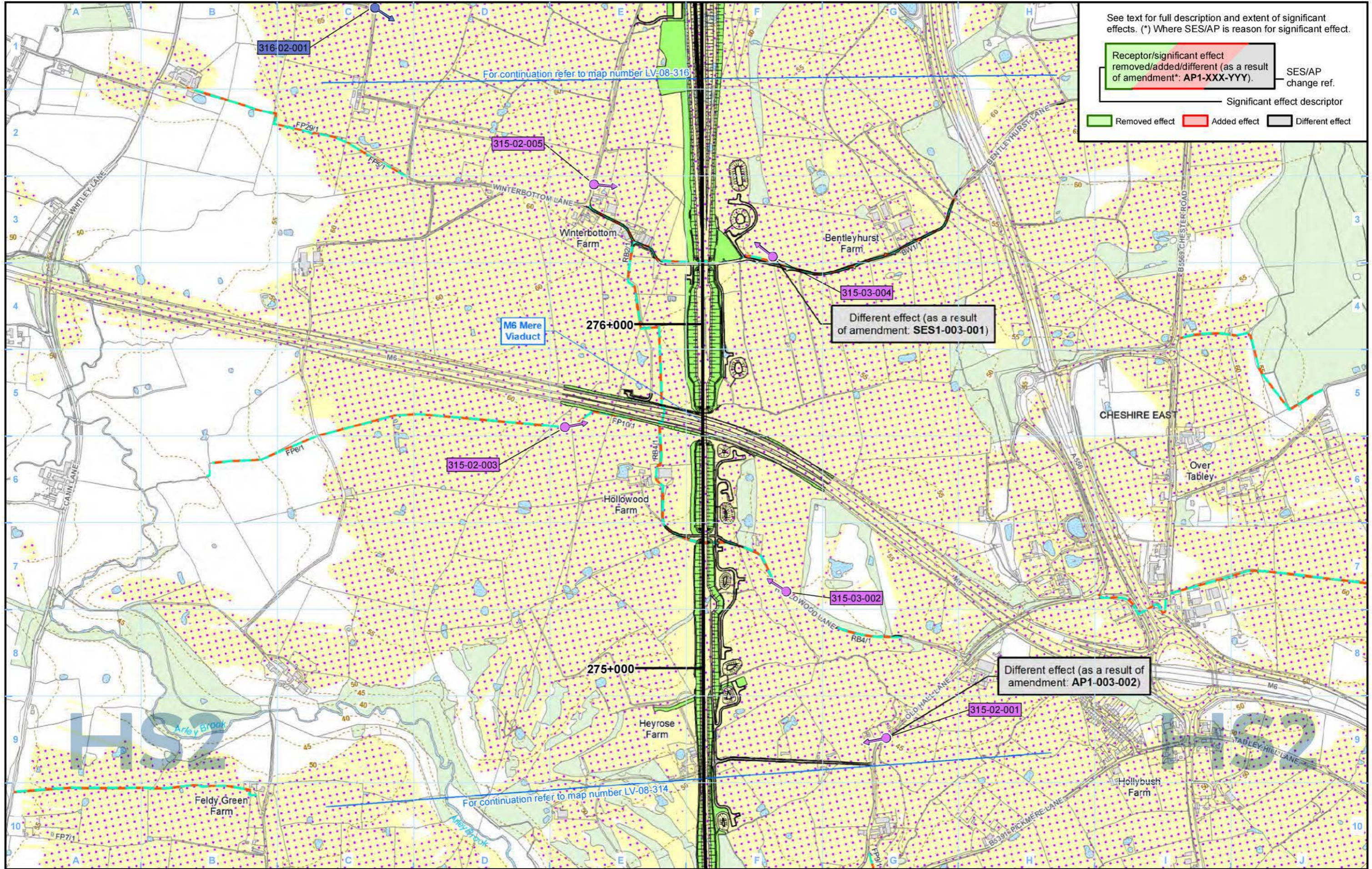
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Date: 22/04/22



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Non engineering earthworks:
County boundary	Proposed tree planting			Embankment
District/Borough boundary				Cutting

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-315

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulsehead

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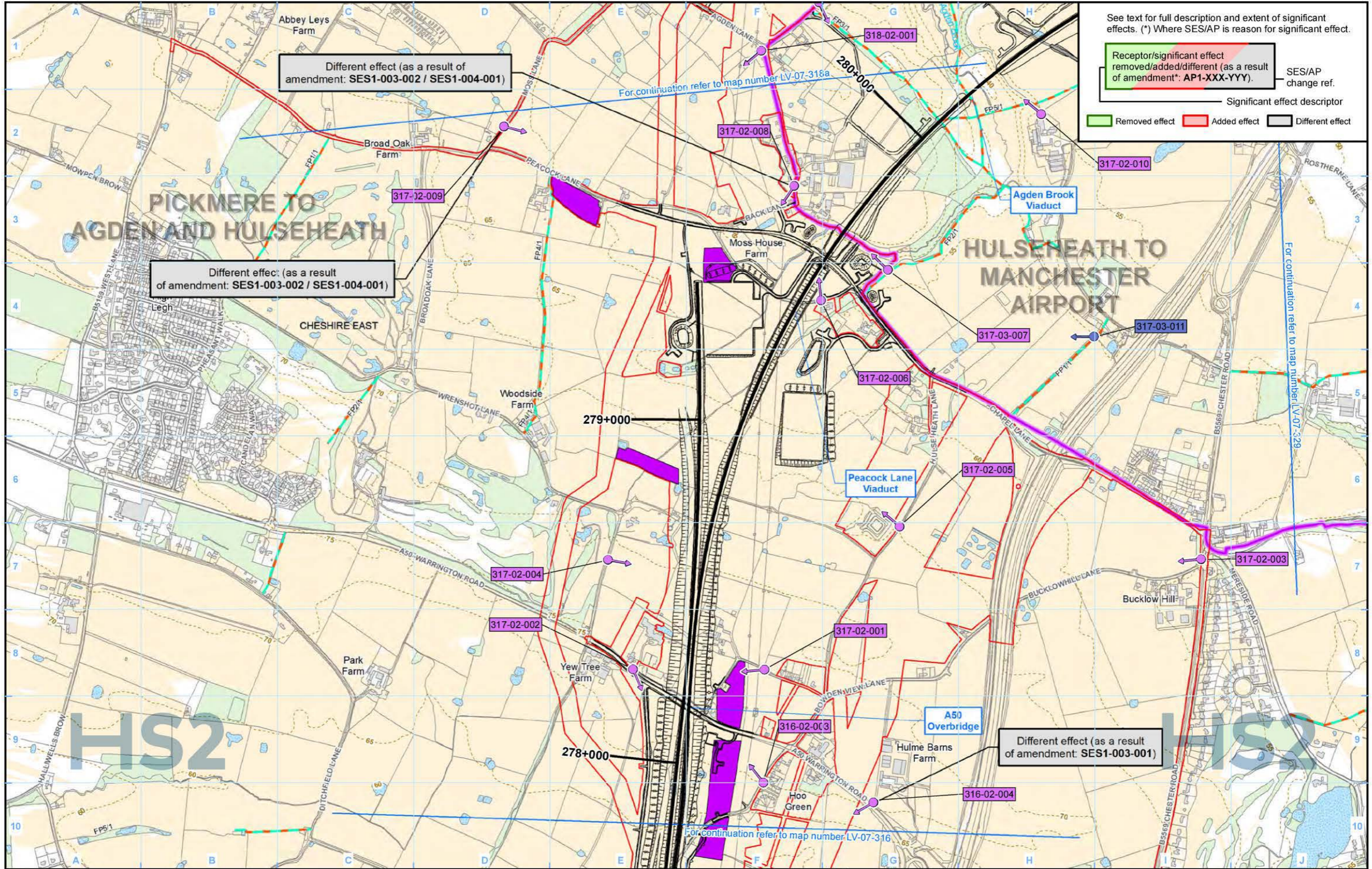
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Metres



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-317a

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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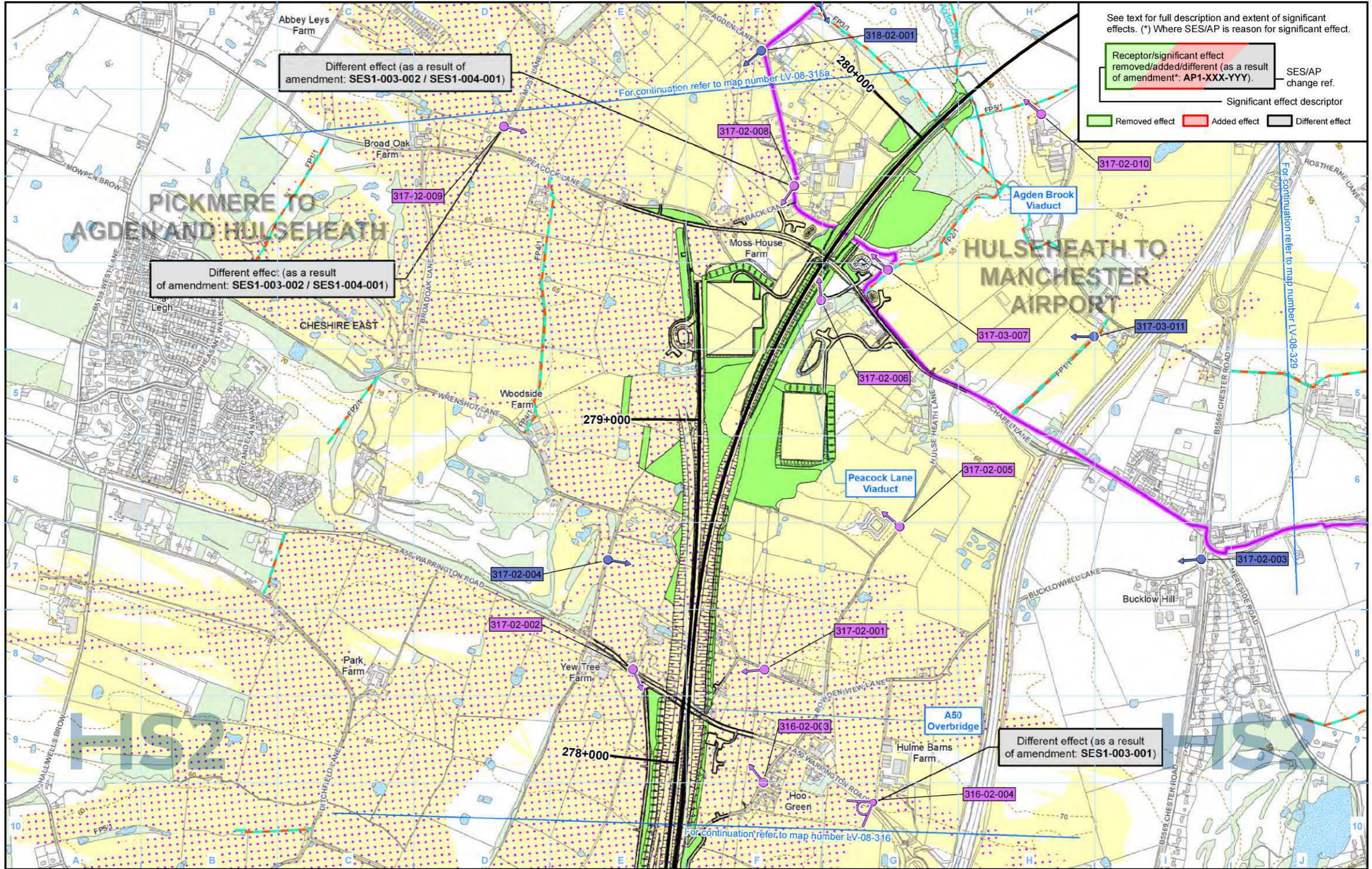
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Date: 22/04/22

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Meters



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). SES/AP change ref.

Significant effect descriptor

Removed effect Added effect Different effect

Legend

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

001-01-001 Non significantly affected viewpoint or photomontage number

001-01-001 Significantly affected viewpoint or photomontage number

278+000

279+000

280+000

For continuation refer to map number LV-08-316

For continuation refer to map number LV-08-317a

For continuation refer to map number LV-08-329

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-317a

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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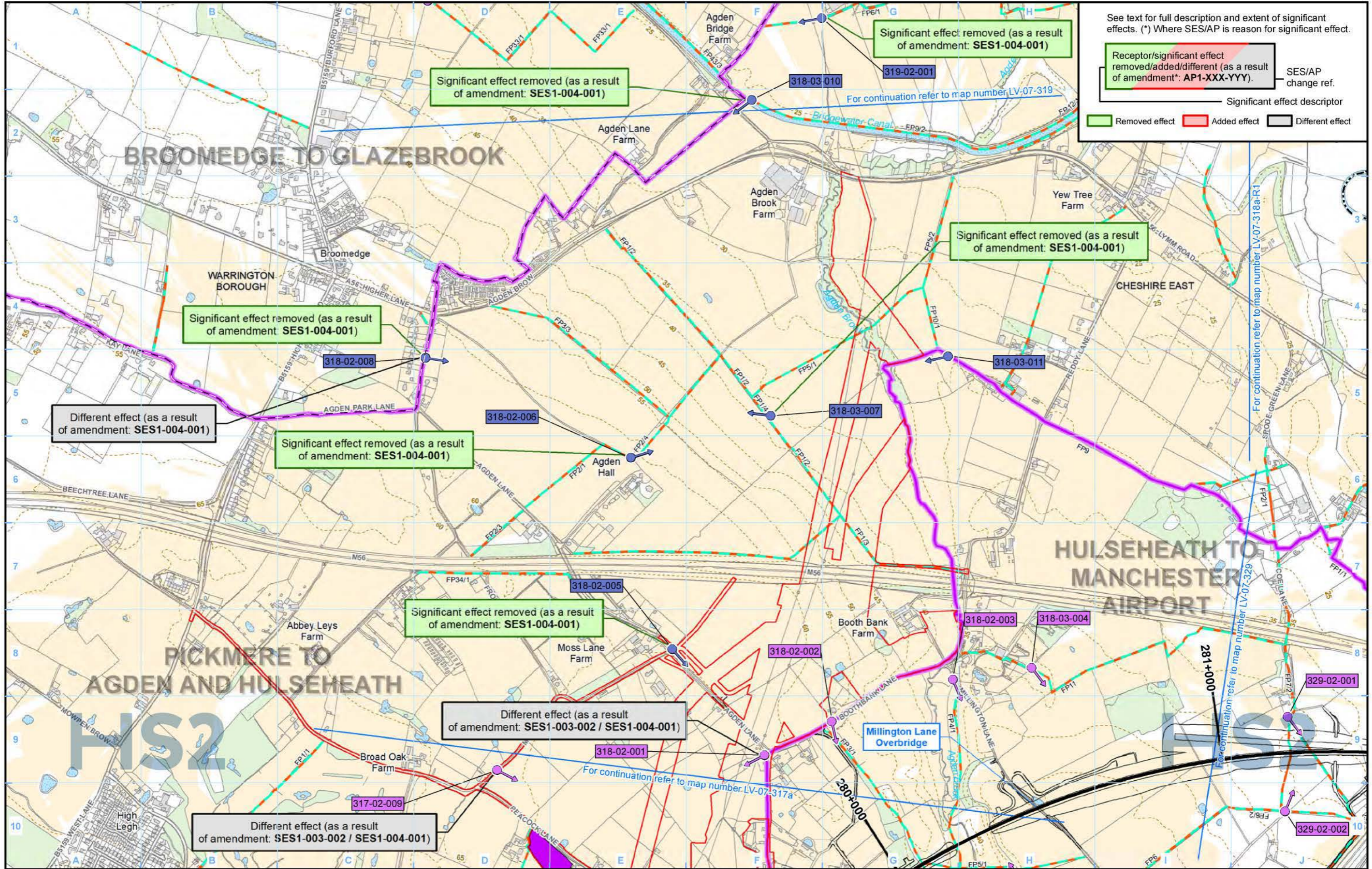
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).

SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Grey)

Legend

Route in tunnel	District/Borough boundary	ZTV construction	Non significantly affected viewpoint	Engineering earthworks:
Route on surface	Public Rights of Way (PRoW)		Significantly affected viewpoint	Embankment
Depot, station, headhouse or portal building	5m contours	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Land potentially required during construction	Water body	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
Community area boundary	Existing woodland and tree belts			Cutting
County boundary	Construction compounds			

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-07-318a

Map Name: Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

HS2

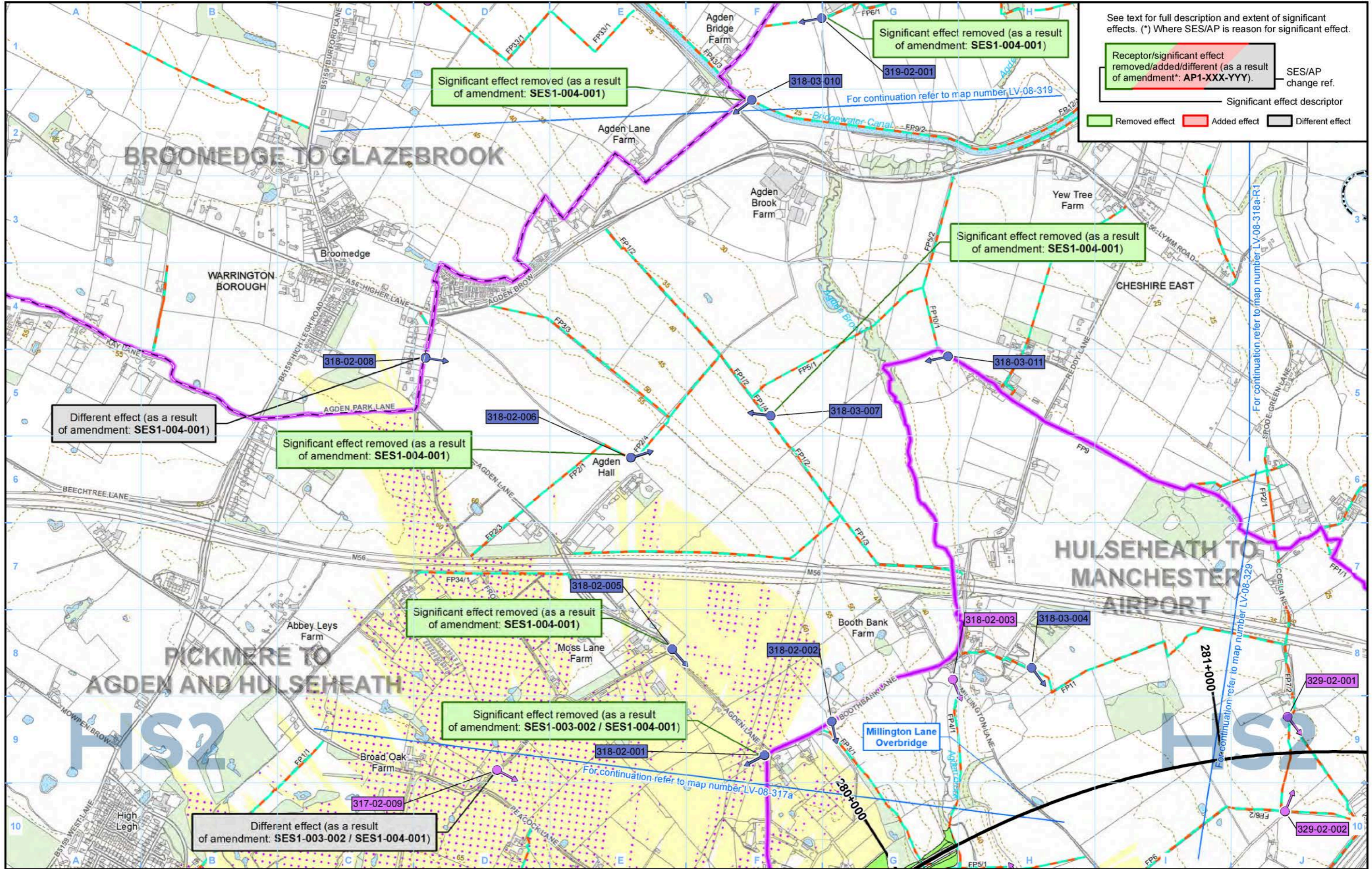
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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY). — SES/AP change ref.

Significant effect descriptor

Removed effect (Green) Added effect (Red) Different effect (Grey)

Legend

Route in tunnel	Public Rights of Way (PRoW)	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	001-01-001 Non significantly affected viewpoint or photomontage number	Non significantly affected photomontage location	Cutting
Community area boundary	Existing woodland and tree belts	001-01-001 Significantly affected viewpoint or photomontage number	Significantly affected photomontage location	Embankment
County boundary	Proposed tree planting			Cutting
District/Borough boundary				

The zone of theoretical visibility (ZTV) is a computer generated model that indicates the theoretical visibility of the construction works. 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 the SMR Addendum (see Volume 5: Appendix CT-001-002).

Map Number: LV-08-318a

Map Name: Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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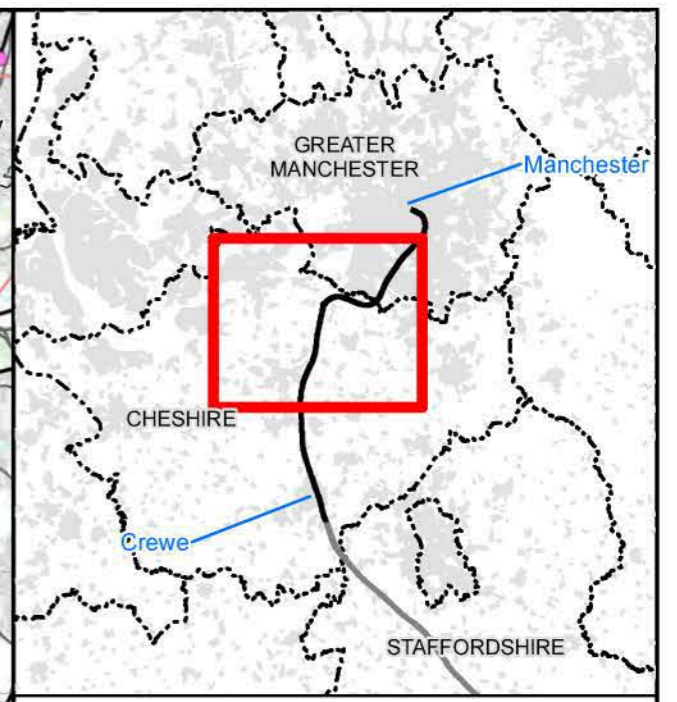
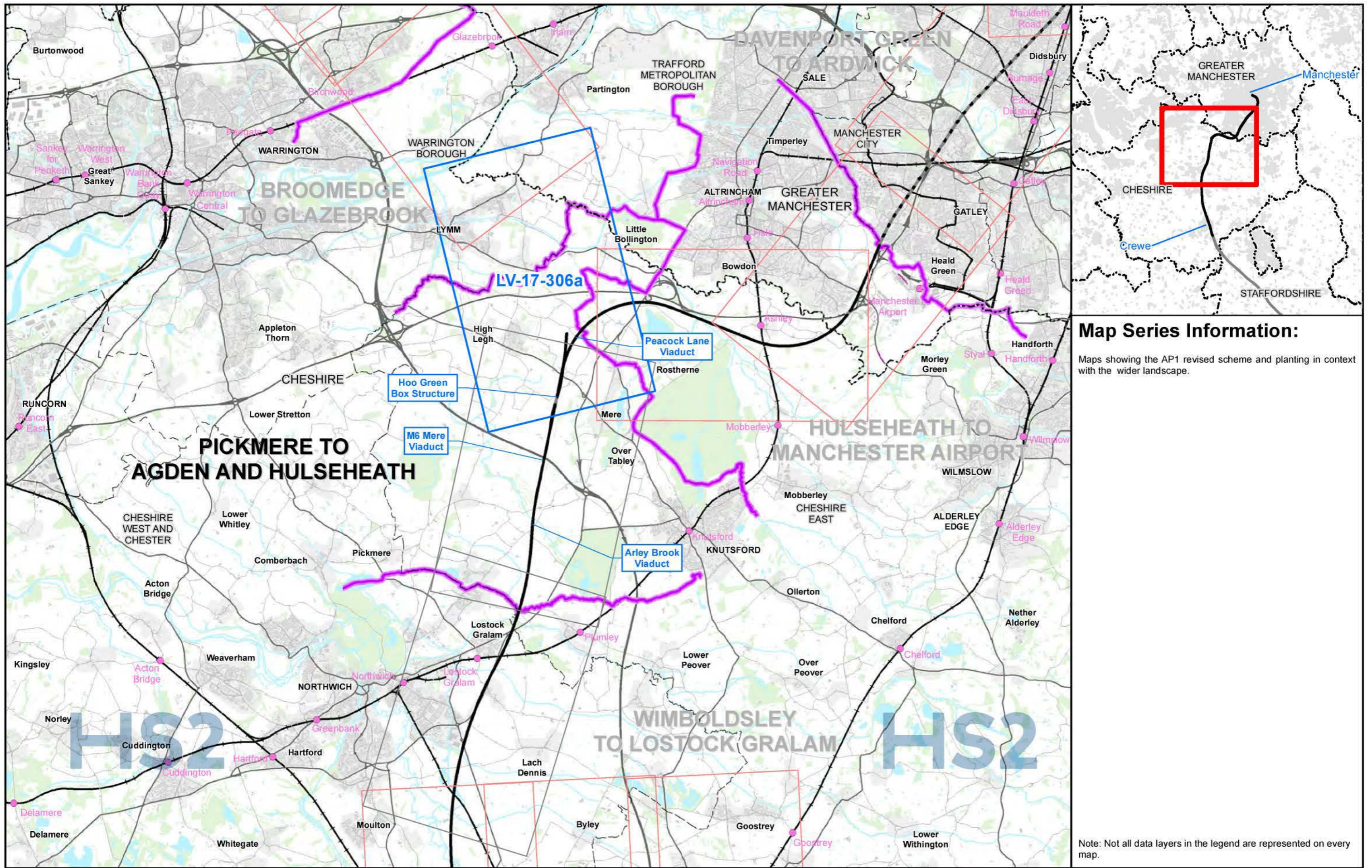
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Date: 22/04/22

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Metres



Map Series Information:

Maps showing the AP1 revised scheme and planting in context with the wider landscape.

Main Map Legend

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

Map Number	LV-17-INDEX-MA03
Map Name	Index Map of: Route wide Landscape Context SES1 and AP1 ES Community Area MA03: Pickmere to Agden and Hulseheath

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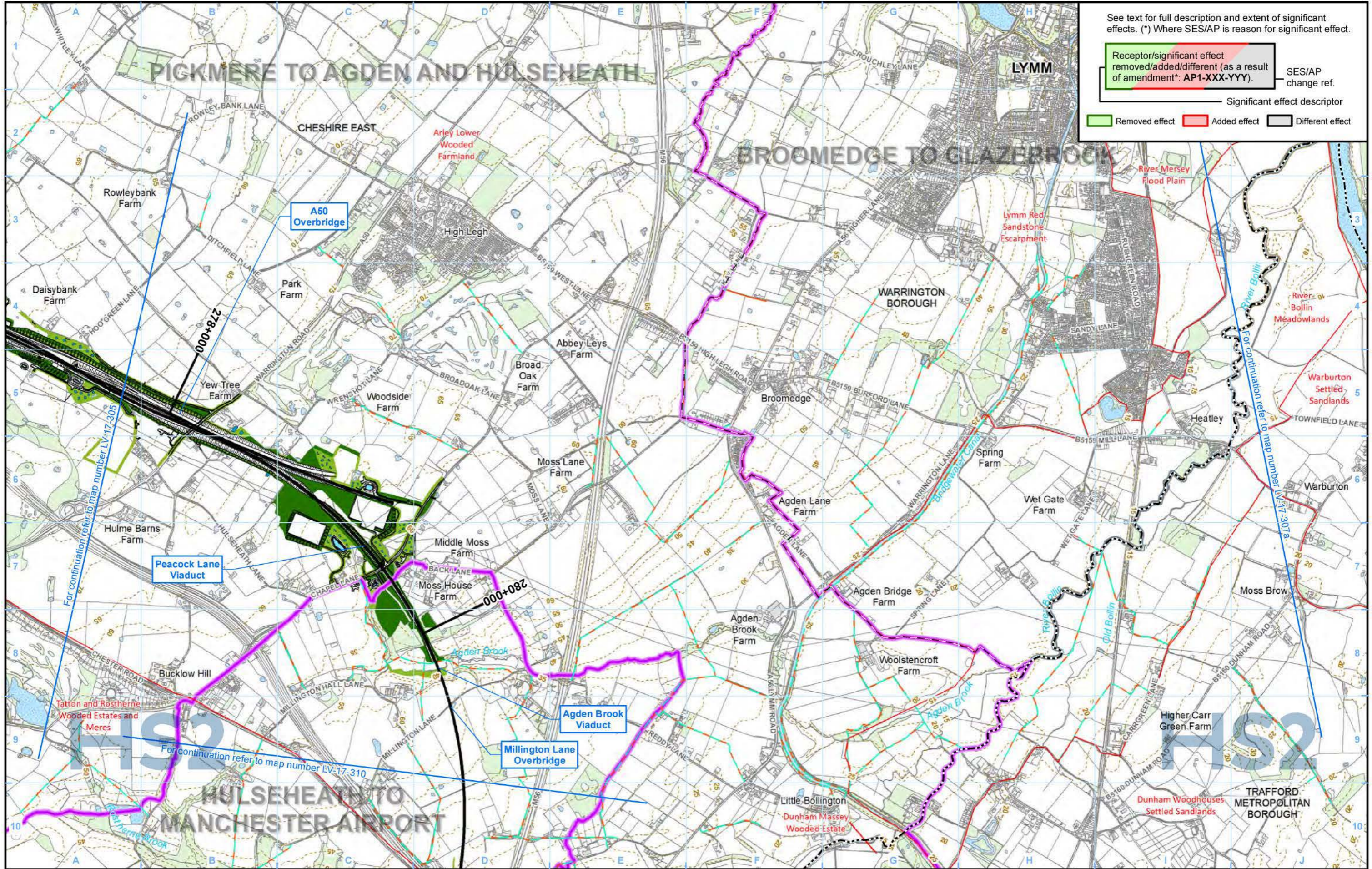
Doc Number: 2PT24-MWJ-EV-MAP-M000-001939-P01

Date: 13/04/22

Scale at A3: 1:100,000

0 1,000 2,000 3,000 4,000 Metres

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



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Receptor/significant effect removed/added/different (as a result of amendment*: AP1-XXX-YYY).	SES/AP change ref.
Significant effect descriptor	
Removed effect	Added effect
Different effect	

Legend

Route in tunnel	Landscape Character Area boundary	Tree planting
Route on surface	Public Rights of Way (PRoW)	Other planting and hedgerows
Depot, station, headhouse or portal building	5m contours	Ecological mitigation pond
Community area boundary	Water body	Balancing Pond
County boundary	Existing woodland and tree belts	
District/Borough boundary		

Engineering earthworks:

Embankment
Cutting

Non engineering earthworks:

Embankment
Cutting

Map Number: LV-17-306a

Map Name: Route wide Landscape Context SES1 and AP1 ES

Community Area MA03: Pickmere to Agden and Hulseheath

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