

High Speed Rail (Crewe – Manchester)

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement

Volume 5: Appendix LV-001-0MA01

Landscape and visual

Landscape and visual impact assessment and photomontages

MA01: Hough to Walley's Green

High Speed Rail (Crewe – Manchester)

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Volume 5: Appendix LV-001-0MA01

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MA01: Hough to Walley's Green



Department
for Transport

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- Table 4: AP1 revised scheme landscape assessment matrix summarising the assessment of significance for all of the LCA identified in the Hough to Walley's Green area
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Part 1: Introduction

1.1 Structure of this appendix

- 1.1.1 This document is an appendix to the landscape and visual impact assessment (LVIA) which forms part of Volume 5 of the Supplementary Environmental Statement 1 (SES1) and Additional Provision 1 Environmental Statement (AP1 ES) for the Hough to Walley's Green community area (MA01).
- 1.1.2 This appendix provides details of changes to the landscape and visual impact assessment since the production of the High Speed Two (HS2) High Speed Rail (Crewe – Manchester) Environmental Statement (ES)¹ published in 2022 (the main ES).
- 1.1.3 This document comprises of four parts:
- Part 1: introduction
 - Part 2: a summary of engagement with technical stakeholders;
 - Part 3: the Supplementary Environmental Statement 1; and
 - Part 4: the Additional Provision 1 Environmental Statement.
- 1.1.4 This report should be read in conjunction with the main ES Volume 5, Appendix: LV-001-0MA01.
- 1.1.5 Maps referred to in this appendix are contained in the SES1 and AP1 Volume 5, Landscape and visual Map Book.
- 1.1.6 In order to differentiate between the original proposals assessed as part of the main ES and subsequent changes, the following terms are used:
- 'the original scheme' – the Bill scheme submitted to Parliament in January 2022, which was assessed in the main ES;
 - 'the SES1 scheme' – the original scheme with the changes described in SES1 that are within the existing powers of the Bill; and
 - 'the AP1 revised scheme' – the original scheme as amended by the SES1 changes and AP1 amendments.

¹ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

1.2 Landscape character assessment

1.2.1 This section describes the landscape baseline and assesses the effects on landscape, with reference to the landscape character areas (LCA) defined for the Hough to Walley's Green area. A summary of the landscape baseline and significant landscape effects is provided in the SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01). The SES1 and AP1 ES Volume 5 Map Book: Map Series LV-02, should also be read in conjunction with this section. Elements of landscape are shown in the diagram on the right.

1.2.2 This section is organised as follows:

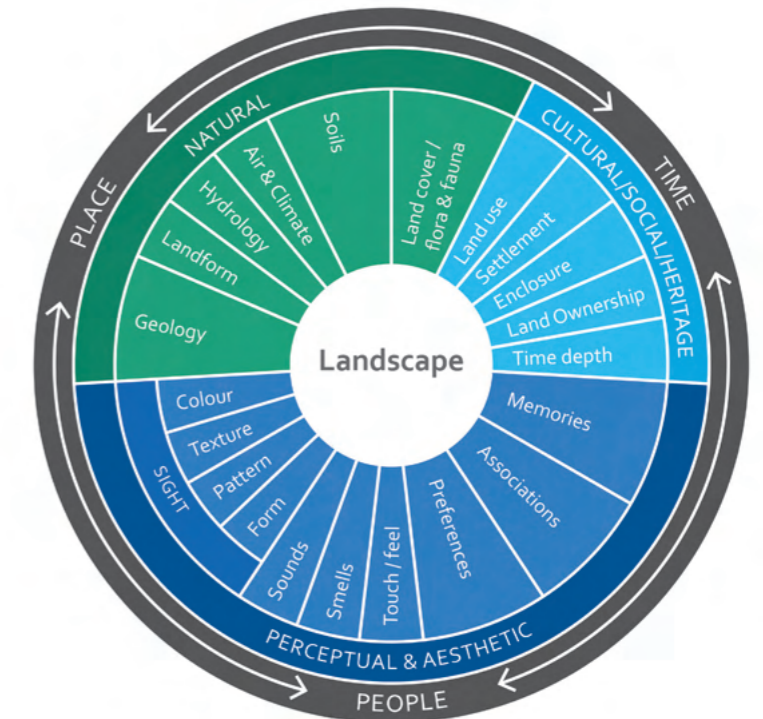
- information on each LCA within the area including a description of the landscape (with Ordnance Survey (OS) maps and photography to help illustrate character and patterns of land uses and vegetation of the area), as well as an analysis of the value, susceptibility and sensitivity of each LCA. These are ordered from south to north along the route of the AP1 revised scheme;
- description of future baseline conditions, where relevant; and
- assessment of the effects of the SES1 scheme and/or AP1 revised scheme on the landscape at construction, and at year 1, year 15 and year 30 of operation.

1.3 Approach to landscape characterisation

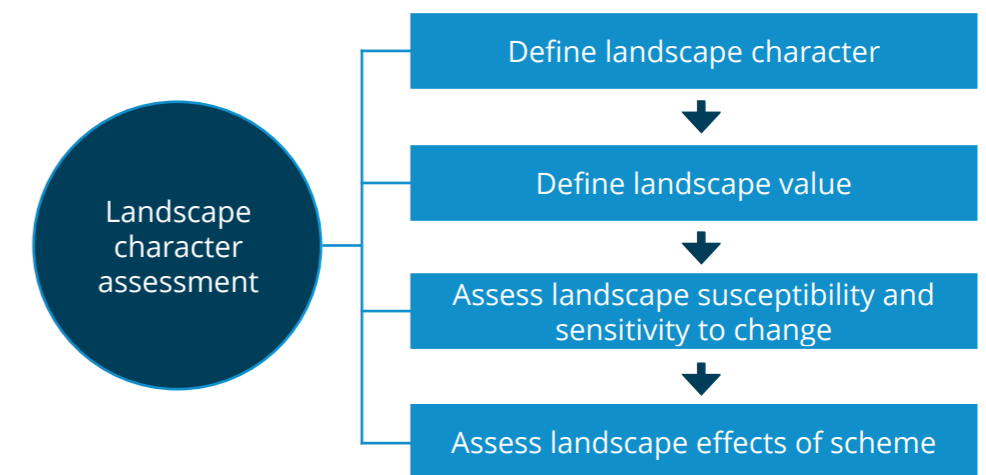
1.3.1 The LCA have been determined as part of an integrated approach to environmental characterisation in collaboration with other environmental topics including Historic environment and Ecology and biodiversity, with reference to a number of published studies at the national, county and district level. A wide variety of spatially referenced data were also reviewed in developing the landscape characterisation, including existing landscape/townscape characterisations, historic landscape characterisation (HLC), Phase 1 Habitat Survey, geological and hydrological data and aerial photography. Such data have also been used, along with field survey, to consider sub-divisions to existing published LCA, where appropriate. These sub-divisions have been made on the basis of scale and for appropriate recording of specific landscape variations and susceptibilities to change resulting from the SES1 scheme and/or AP1 revised scheme.

1.3.2 The national landscape character context is illustrated on SES1 and AP1 ES Volume 5, Landscape and visual Map Book, Map LV-00. The county LCA of relevance to the Hough to Walley's Green area (MA01) are summarised below:

- 4d Wimboldsley LCA (Cheshire Plain East LCT): flat topography, over mudstone bedrock, is characterised by small and medium sized fields, commonly used for dairying. Low levels of woodland however frequent hedgerow trees created a treed appearance. Field ponds are a frequent feature. Man-made features form distinctive features crossing the landscape, including canals, roads, and railway lines;
- 7a Arley LCA (Lower Wooded Farmland LCT) : low lying, gently rolling topography, over rock salt and mudstone bedrock. Mixed woodland and covets, that link with hedgerows and frequent hedgerow trees including the designed landscape around Arley Hall. Field ponds are common, combined with a large number of mosses and meres. Man-made features form distinctive features crossing the landscape, including arterial and local roads, including the M6 and M56;
- 7d Marthall LCA (Lower Wooded Farmland LCT): low lying, gently rolling topography, over rock salt and mudstone bedrock. Mixed woodland, including along wooded stream, covets, that link with hedgerows and frequent hedgerow trees. Field ponds are frequent. Man-made features form distinctive features crossing the landscape, including numerous local roads, and railway line. Joderell Bank telescope is one of the key features within the landscape visible over a substantial distance;
- 7f Barthomley LCA (Lower Wooded Farmland LCT): low lying, gently rolling topography, over rock salt and mudstone bedrock. Mixed woodland, including along wooded stream, covets, that link with hedgerows and frequent hedgerow trees. Field ponds are frequent. Man-made features form distinctive features crossing the landscape, including strategic roads (M6 and A500 Shavington Bypass) and several railway lines;
- 7g Audlem LCA (Lower Wooded Farmland LCT): low lying, gently rolling topography, over rock salt and mudstone bedrock. Mixed woodland, including along wooded stream, covets, that link with hedgerows and frequent hedgerow trees. Field ponds are frequent. Man-made features form distinctive features crossing the landscape, including numerous local roads, and overhead power lines;



Above: The elements of landscape. Diagram is based on 'An Approach to Landscape Character Assessment' Natural England, 2014



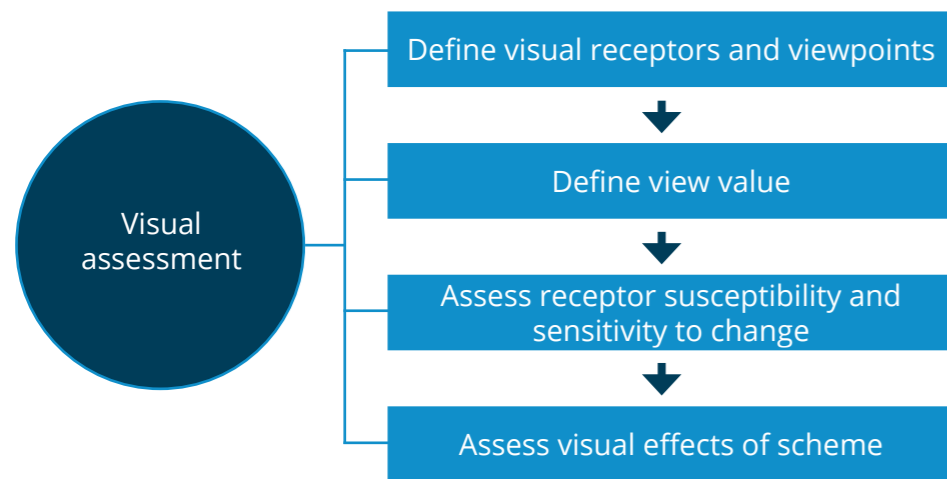
Above: The landscape assessment process

- 8a Sandbach Flashes LCA (Salt Flashes LCT): low lying landform that features a series of elongated pools (flashes) arising as a result of salt extraction. Tree lined watercourses combine with the broadleaved woodland to give a wooded appearance. Relatively enclosed field pattern defined by hedgerows and predominantly given over to dairying; and
- 10f Upper Weaver LCA (River Valleys LCT): linear LCA defined by steep sided wooded valleys associated with the meandering River Weaver and tributaries. Low lying pasture with outlying hamlets on the slightly elevated landform, limited access by footpaths or road, however crossed laterally by a canal and railway line.

1.3.3 Descriptions of the LCA affected by the SES1 scheme and/or AP1 revised scheme identified in the Hough to Walley's Green area are provided in Part 3 and Part 4. The LCA are shown on the SES1 and AP1 ES Volume 5 Landscape and visual Map Book: Map Series LV-02. A summary description of the LCA most likely to be affected is included in the SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01). The routewide landscape context is presented on SES1 and AP1 ES Landscape and visual Map Book: Map Series LV-17, providing an overview of the SES1 scheme/AP1 revised scheme in the context of the LCA.

1.4 Visual assessment

- 1.4.1 Descriptions of the identified viewpoints are provided in this section. The viewpoints are shown on SES1 and AP1 ES Volume 5, Landscape and visual Map Book, Map Series LV-07 (construction) and Map Series LV-08 (operation). For each viewpoint, the first part of the baseline description relates to the view during the winter and the second part relates to the summer view. Where relevant the third part relates to the view at night time and the fourth part to the future baseline.
- 1.4.2 The assessment considers the value of the view and the susceptibility of the viewer to the SES1 scheme and/or AP1 revised scheme, and the overall sensitivity of the visual receptors.

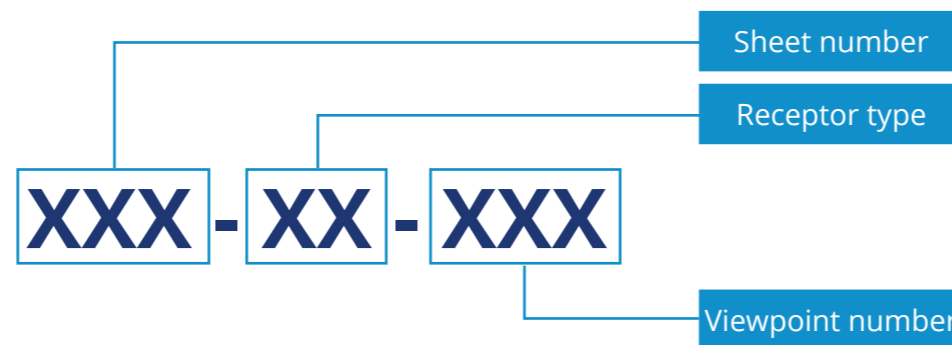


Above: The visual assessment process

- 1.4.3 Effects have been assessed where relevant for construction, operation year 1, year 15 and year 30. A summary of all significant visual effects is given in the SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Sections 3 and 4.
- 1.4.4 Photographs have been included to represent the view from visual receptors during winter and, where relevant, summer. For some visual receptors no appropriate or accessible location from which to capture representative photographs of the view was available, therefore no photograph has been included and the assessment has been undertaken based on professional judgement.
- 1.4.5 All photography included within this document has been taken in accordance with the methodology set out within the Technical Note - Approach to photography contained within the Environmental Impact Assessment Scope and Methodology Report (SMR)² (Volume 5, Appendix: CT-001-00001) of the main ES.
- 1.4.6 Photomontages have also been included for relevant viewpoints. All photography associated with photomontages is verifiable and has been taken in accordance with the Technical Note - Approach to verifiable photomontages, contained within the SMR, Volume 5, Appendix: CT-001-00001. All verifiable photography includes additional image specification and data information.

1.5 Visual receptors

- 1.5.1 The number on each viewpoint identifies the viewpoint locations which are shown on SES1 and AP1 ES Volume 5, Landscape and visual Map Book: Map Series LV-07 (construction) and Map Series LV-08 (operation). The following numbering convention is used:



Above: Viewpoint numbering convention used

- 1.5.2 In each case, the middle number (xxx.xx.xxx) identifies the type of receptor represented, as described below (with more detail in the SMR of the main ES):
01. Protected views – these relate to those viewpoints, panoramas and viewing corridors that have been designated by local authorities, county councils or other relevant stakeholders. People enjoying protected views have a high susceptibility to change;
02. Residential views – residents have a high susceptibility to changes in their views, as attention is often focused on the landscape surrounding the property, rather than on another focused activity (as will be the case in predominantly employment or industrial areas);
03. Recreational views – these receptors generally have a high susceptibility to changes in their views, as attention is focused on the enjoyment of the landscape. Receptors engaged in activities whereby attention is focused on the surrounding landscape also have a high susceptibility to changes in their views;
04. Transport views – travel through an area is often the means by which the greatest number of people view the landscape. Because of the glimpsed nature of the view from trains or vehicles, people traveling through an area on main roads have a low susceptibility to changes in their views, while those on scenic routes have a medium susceptibility. People travelling through urban areas in vehicles have a low susceptibility to changes in their views although in residential areas this increases to medium;
05. Hotels and healthcare institutions – people staying in hotels or healthcare institutions and schools have periods of time where their attention may be focused on the landscape, whilst at other times attention is more likely to be focused on other activities. Based on the level of interaction with the surrounding landscape, these receptors have a medium susceptibility to changes in their views; and
06. Employment – people at work and within educational institutions (other than residential educational facilities) are the least susceptible receptors, as their attention is likely to be focused on their work activity. These receptors have a low susceptibility to changes in their views.
- 1.5.3 Night time visual survey and assessments have only been undertaken where continuous working during construction or additional lighting in operation has the potential to result in significant effects on residential and certain recreational receptors. Further detail is set out within the Technical Note - Approach to night time assessment, contained within the SMR of the main ES.

² High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), Environmental Statement, Environmental Impact Assessment Scope and Methodology Report, Volume 5, Appendix: CT-001-00001. Available online at: <https://www.gov.uk/government/collections/hs2-phase2b-crewe-manchester-environmental-statement>.

Part 2: Engagement with technical stakeholders

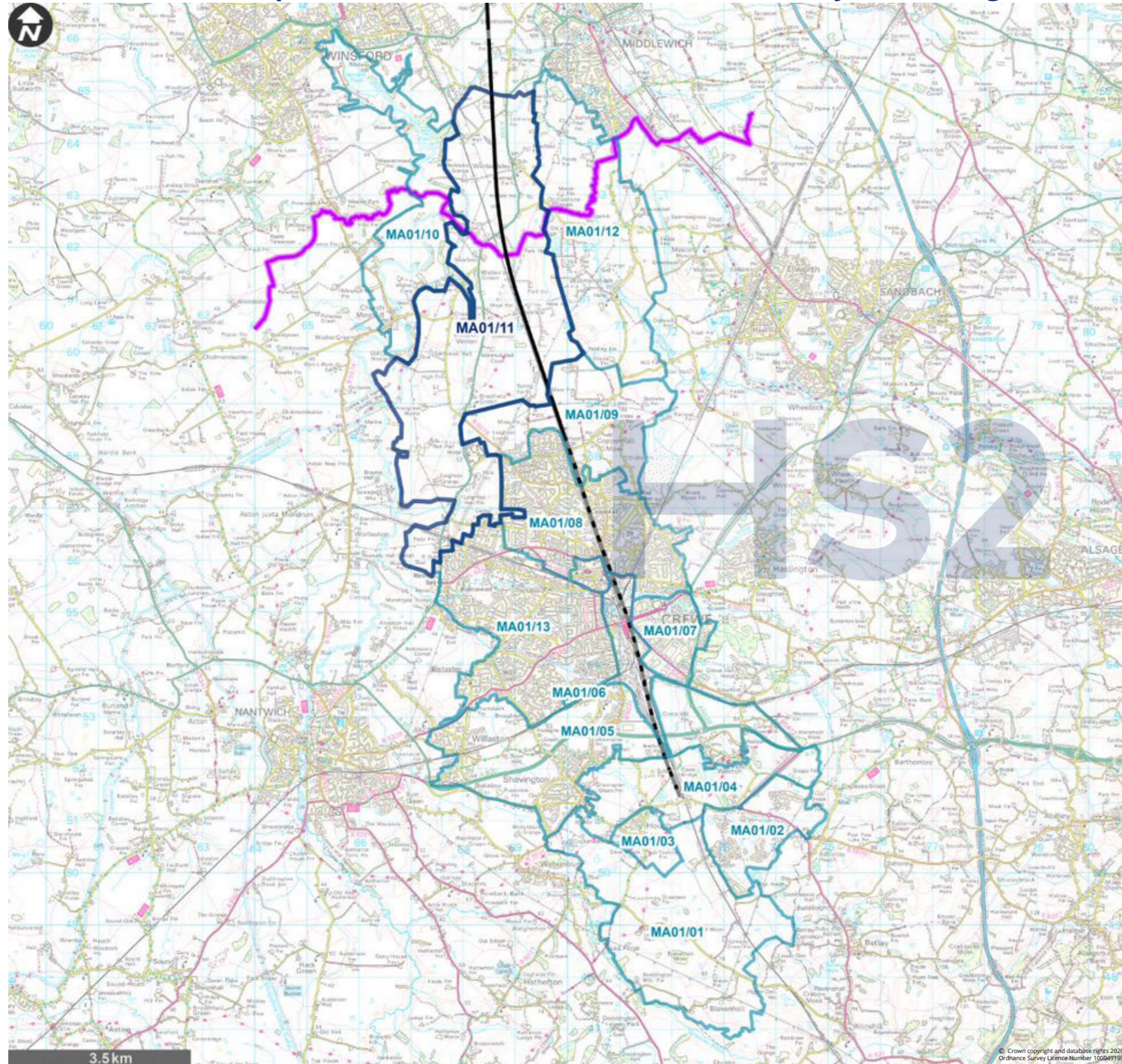
2.1 Introduction

- 2.1.1 It has not been possible to discuss relevant LCA and viewpoints with local authorities. However, there will be further engagement with local authorities regarding this matter during the passage of the Bill.

Part 3: Supplementary Environmental Statement 1

3.1 Landscape character assessment

Overview of landscape character areas within MA01 affected by SES1 changes



Landscape character areas assessed as part of SES and in the main ES

MA01/11 - Wimboldsley Plain

Landscape character areas assessed in the main ES only

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

MA01/12 - River Wheelock Farmland

MA01/13 - Crewe West

Route in tunnel

Community area boundary

Route on surface

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Wimboldsley Plain LCA

Landscape character baseline description

This LCA is a predominantly flat agricultural landscape, situated between the rivers Weaver and Wheelock.

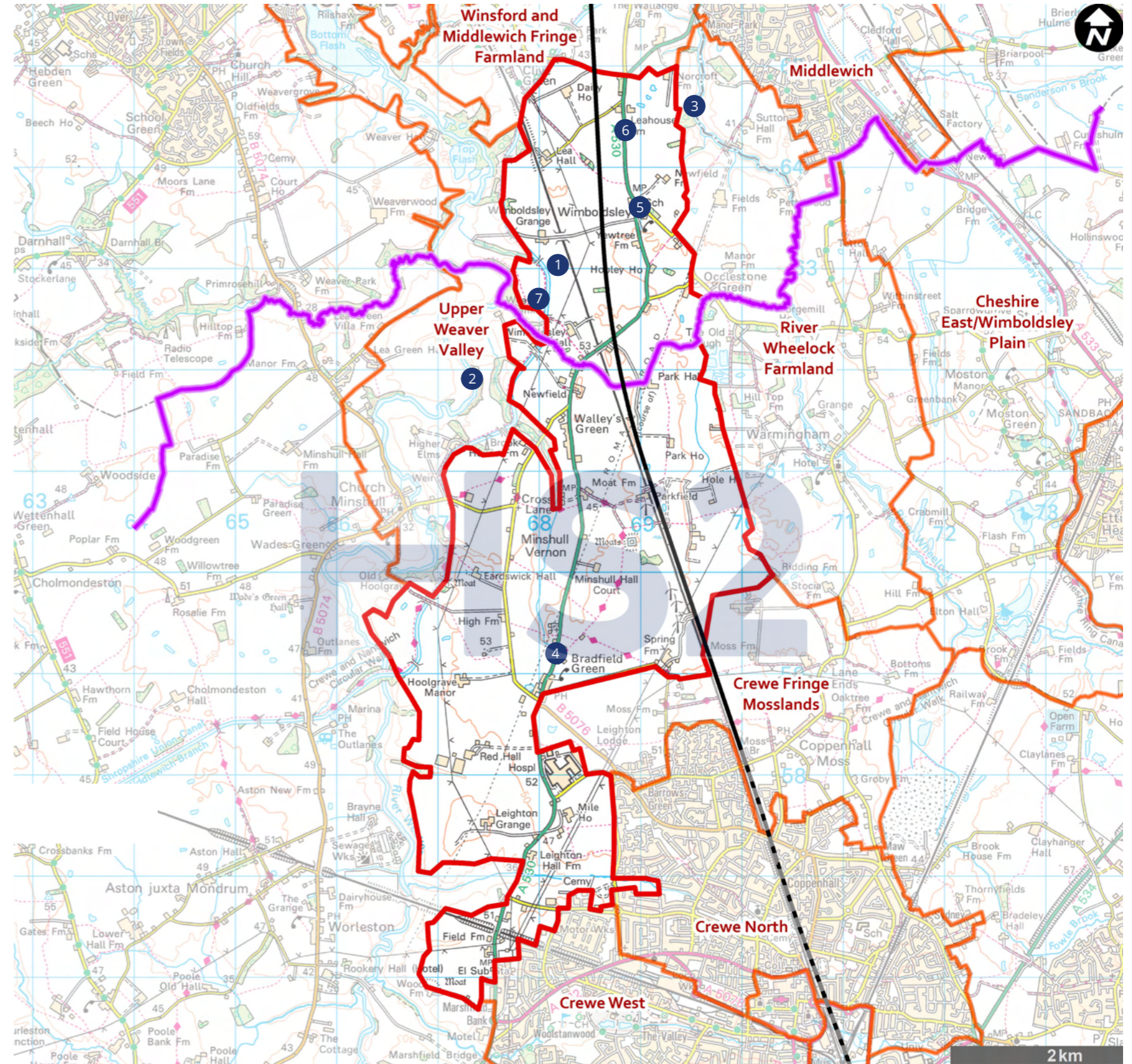
This is an area of landscape that straddles both the Hough to Walley's Green area (MA01) and Wimboldsley to Lostock Gralam area (MA02). The Wimboldsley plain is characterised by medium and large fields of a semi-regular pattern, typically bounded by well-maintained hedges with mature trees dating from the post-medieval period. Some of the larger fields have resulted from the agglomeration of several smaller fields. Large, isolated field trees and occasional small coppices punctuate the open farmland, often coinciding with marl pits or ponds. The incised valley of the River Weaver to the west is well-wooded and distinctively different in character to the Wimboldsley plain. Eastwards, towards the River Wheelock, the landform becomes undulating, with a tighter and more irregular pattern of hedged fields and frequent mature trees.

The settlement pattern is one of scattered properties and hamlets, the latter including Bradfield Green, Walley's Green and Wimboldsley, all located along the A530 Middlewich Road/Nantwich Road. Large, individual estate houses and farms are characteristic. The Shropshire Union Canal (Middlewich Branch) located along the margins of the Weaver Valley, is a historic feature now valued for its recreational use. Locally prominent infrastructure includes the West Coast Main Line (WCML) on embankment, the A530 Nantwich Road and several overhead power lines, broadly orientated south-north. Such infrastructure detracts locally from an otherwise rural, tranquil landscape. The flat terrain combines with a succession of field hedgerows and trees to limit wider visibility at eye level, while the hills of the Peak District and ridge of the Peckforton Hills form distant backdrops.



Key landscape characteristics

A coherent, agricultural landscape of broad and flat hedge-lined fields and large farms, regularly intersected by transport corridors and overhead power lines which interrupt an otherwise tranquil, sparsely populated area of countryside. There is a sense of historic continuity derived from local architecture and land use, although eroded somewhat by the intensification of farming practices.



- Route on surface
- LCA boundary
- Community area
- Route in tunnel
- 1 WCML
- 2 River Weaver
- 3 River Wheelock
- 4 Bradfield Green
- 5 Wimboldsley
- 6 A530 Nantwich Road
- 7 Shropshire Union Canal Middlewich Branch

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Key landscape value attributes

Key landscape value attributes of the Wimboldsley Plain LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

This is an open agricultural landscape where well-maintained hedgerows and mature trees often combine to limit wider visibility at eye level but where distantly seen hills give a more expansive quality. The Shropshire Union Canal (Middlewich Branch) is a distinctive, embedded feature of the landscape along with large farm properties that convey the local vernacular. Detracting elements include the WMCL, the A530 Nantwich/Middlewich Road and overhead power lines.



Cultural, social and historic

The Shropshire Union Canal (Middlewich Branch) has a sense of historic continuity and is now a highly valued recreational resource. The promoted Crewe and Nantwich Circular Walk follows the canal towpath in part and connects with a network of local footpaths throughout the area.

Key landscape characteristics susceptible to the SES1 scheme



Cultural, social and heritage: The Shropshire Union Canal Middlewich Branch and distinctive farm properties provide a sense of historic continuity.

Landcover, flora and fauna: Extensive grazing pasture, bounded by hedgerows and frequent field trees create a cohesive landscape pattern.

Overall landscape value

This is a flat agricultural plain between two river valleys with well-maintained hedgerows and some small pockets of woodland. Occasional views to a low skyline of surrounding hills emphasise the low-lying terrain. There is some sense of localised seclusion and enclosure where hedgerows form visual screens. The tranquillity of the area is disturbed by WMCL, the A530 Nantwich/Middlewich Road and overhead power lines.

The presence of the canal and a series of listed buildings provides a sense of historic continuity within this generally scenic landscape, which also exhibits some detracting infrastructure. The value of this LCA is therefore **medium**.

Overall landscape susceptibility

The terrain is flat, although the largely agricultural land pattern with its succession of field boundary hedges creates a sense of enclosure and a screening of built features. The cultural associations and recreational use increase the vulnerability of the landscape to change of the type proposed. The landscape therefore has a **medium** susceptibility to change resulting from the SES1 scheme.

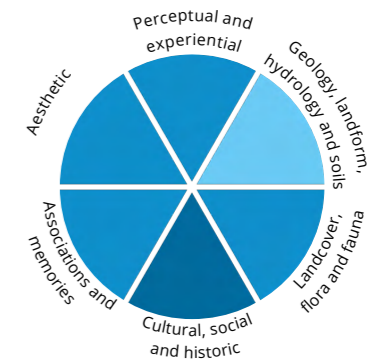
Future baseline

There are no committed developments that will affect the landscape susceptibility to the SES1 scheme.

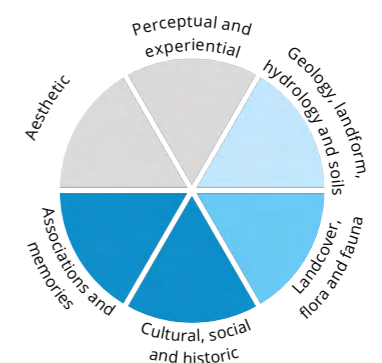
Overall landscape sensitivity

The scenic quality, sense of historic continuity and recreational value of the plain is partially eroded by the presence of transport and energy infrastructure which results in the sensitivity of this LCA being **medium**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **major** adverse (significant) effect within the Wimboldsley Plain LCA which spans both the Hough to Walley's Green area (MA01) and Wimboldsley to Lostock Gralam area (MA02). This LCA would be directly affected by large-scale construction works, including Warmingham Moss viaducts (part of the Crewe Northern Connection) Parkfield access realignment, major utility diversions, Crewe North RSD, A530 Nantwich Road and Clive Green Lane realignments. During construction, the SES1 design change, enhancement of landscape mitigation at Walley's Green embankment (SES1-002-001) will not change landscape effects for this LCA. This is due to the increased footprint of the earthworks which will only slightly increase the area of the LCA affected by construction activities. A large proportion of the LCA will remain substantially affected by the construction of the SES1 scheme. Therefore the SES1 design change will not give rise to a different significant effect for this LCA and will not change the level of significance of the effect reported in the main ES.

Effects will be **major adverse (significant)**.

Operation year 1

The main ES reported a **major** adverse (significant) effect. This would be due to the introduction of large-scale infrastructure including Warmingham Moss northbound and southbound viaducts (part of the Crewe Northern Connection) located in Hough to Walley's Green area (MA01). Additionally, the presence of Crewe North RSD Warmingham Moss southbound and northbound viaducts, A530 Nantwich Road realignment and Clive Green Lane realignment (located in the Wimboldsley to Lostock Gralam area (MA02)) which introduced noticeable alterations to the character of this LCA. At year 1, the SES1 design change will result in a gentler and more natural profile but will slightly increase the footprint of the earthworks. The SES1 change will be largely inconspicuous in the context of the large-scale structures of the SES1 scheme. Therefore, the SES1 design change will not give rise to a different significant effect for this LCA and will not change the level of significance of the effect reported in the main ES.

Effects will be **major adverse (significant)**.

Operation year 15

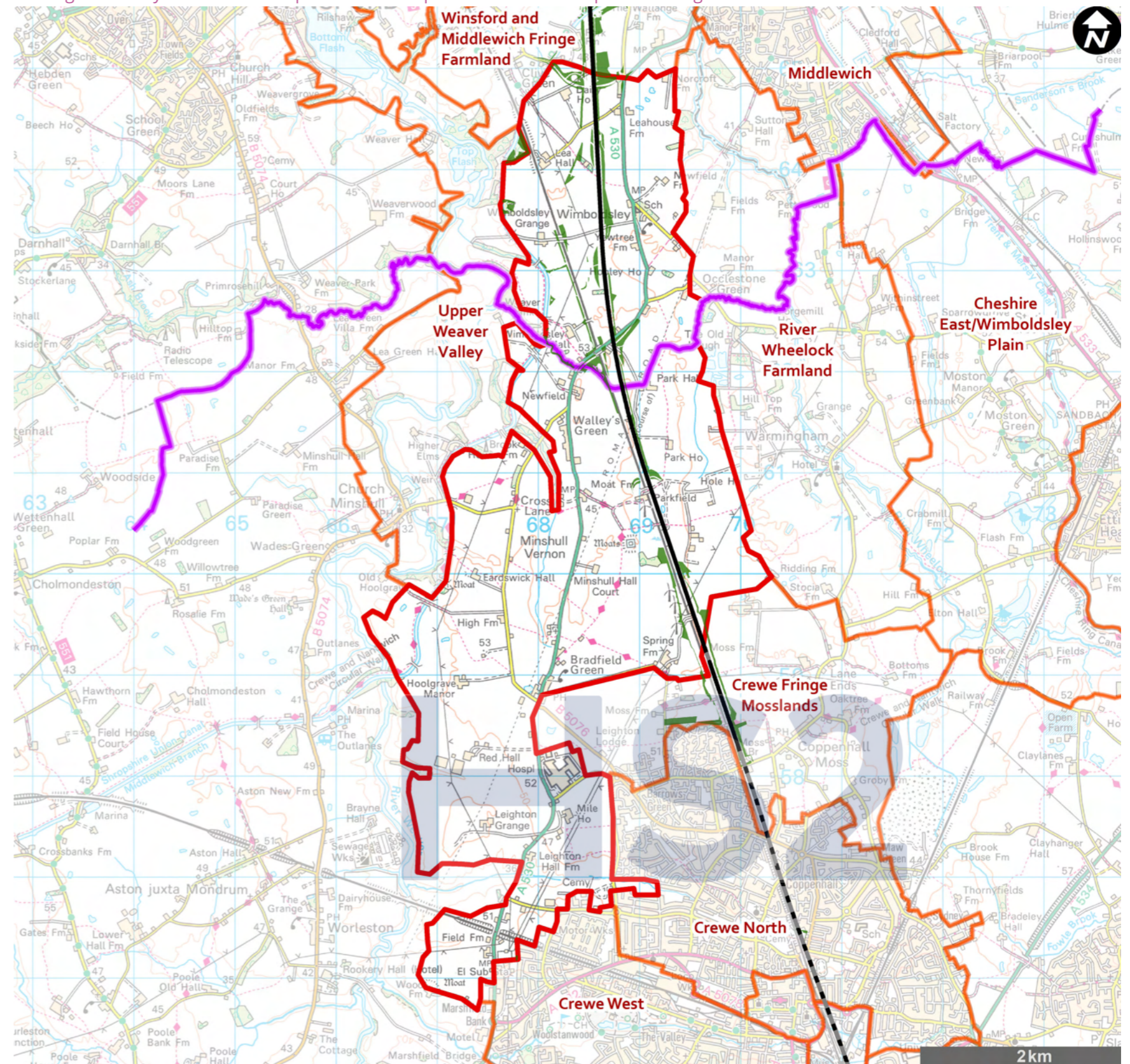
The main ES reported a **major** adverse (significant) effect. Despite the maturing of mitigation planting, assisting the integration of elements of the original scheme, the presence of large-scale infrastructure remained at variance with the character of the landscape. At year 15, the SES1 design change will be barely perceptible in relation to the large-scale structures of the original scheme and still present in the SES1 scheme. Therefore, the SES1 design change will not give rise to a different significant effect for this LCA and will not change the level of significance of the effect reported in the main ES.

Effects will be **major adverse (significant)**.

Operation year 30

The main ES reported a **major** adverse (significant) effect. Despite the further maturation of mitigation planting, assisting the integration of elements of the original scheme, the presence of large-scale infrastructure remained at variance with the character of the landscape. At year 30, the SES1 design change will be barely perceptible in relation to the large-scale structures originally proposed and still present in the SES1 scheme. Therefore, the SES1 design change will not give rise to a different significant effect for this LCA and will not change the level of significance of the effect reported in the main ES.

Effects will be **major adverse (significant)**.



Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

Operation: There are no developments which will result in cumulative operation effects.

No cumulative effects during construction and operation.

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3.2 SES1 revised scheme assessment matrices

SES1 revised scheme landscape assessment matrix

3.2.1 Table 1 below summarises the assessment of significance for all of the LCA identified in the Hough to Walley's Green area. These are ordered from south to north along the route of the SES1 revised scheme. The assessment of significant effects is presented in SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Section 3.

Table 1: SES1 revised scheme landscape assessment matrix summarising the assessment of significance for all of the LCA affected by the SES1 revised scheme identified in the Hough to Walley's Green area

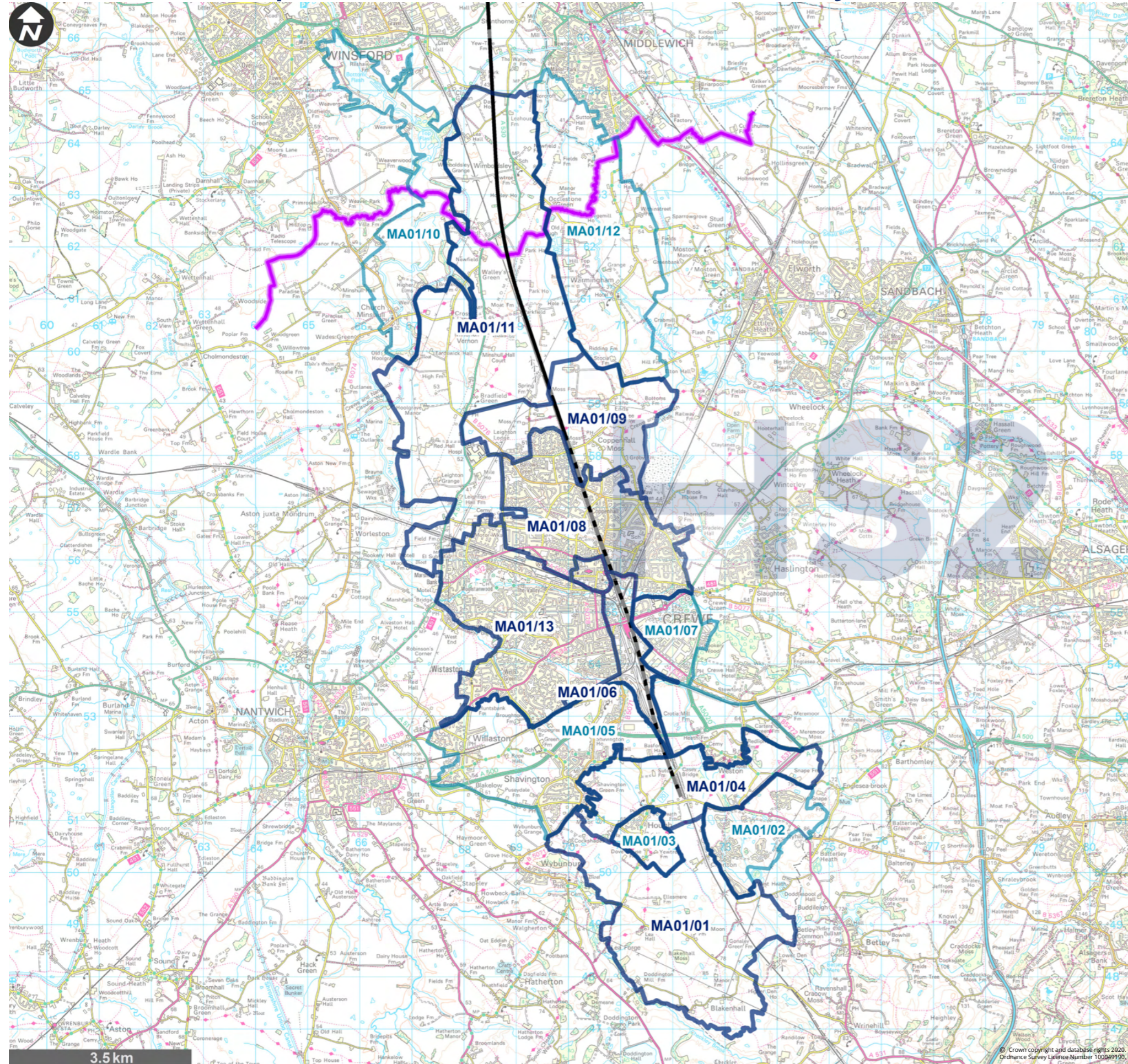
LCA	Construction	Construction cumulative	Operation year 1 (2038)	Operation year 15 (2053)	Operation year 30 (2068)	Operation cumulative
Wimboldsley Plain	Major adverse	No cumulative effect	Major adverse	Major adverse	Major adverse	No cumulative effect

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Part 4: Additional Provision 1 Environmental Statement

4.1 Landscape character assessment

Overview of landscape character areas within MA01 affected by AP1 amendments



Landscape character areas assessed as part of AP1 and in the main ES

- MA01/01 - Blakenhall Lower Farms and Woods
- MA01/04 - Shavington/Crewe Outer Fringe Lower Farms and Woods
- MA01/06 - Crewe Station Area and Sidings
- MA01/08 - Crewe North
- MA01/09 - Crewe Fringe Mosslands
- MA01/11 - Wimboldsley Plain

Landscape character areas assessed as part of AP1 only

- MA01/13 - Crewe West

Landscape character areas assessed in the main ES only

- MA01/02 - Wychwood Park
- MA01/03 - Hough Common
- MA01/05 - Crewe Urban Fringe
- MA01/07 - Crewe East Commercial and Industrial
- MA01/10 - Upper Weaver Valley
- MA01/12 - River Wheelock Farmland

--- Route in tunnel — Community area boundary
 — Route on surface

Blakenhall Lower Farms and Woods LCA

Landscape character baseline description

A generally flat and open landscape with several recreational routes and some areas of scenic quality and tranquillity away from the railway line.

An area of open, rural farmland with dispersed farmhouses and small nucleated villages and hamlets set within gently undulating landform.

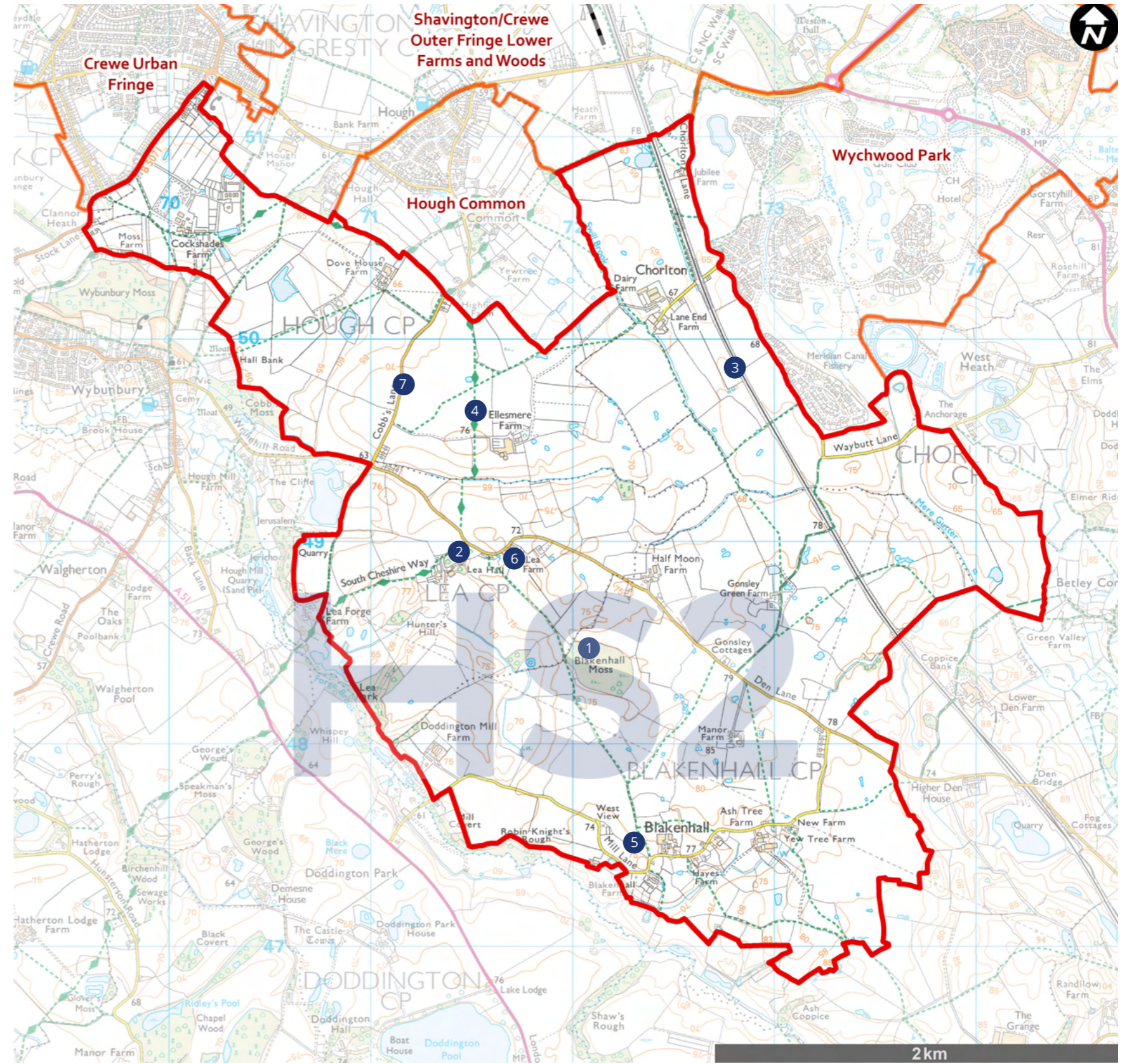
The field pattern is of a small to medium-scale with a mix of arable and pasture, with numerous field ponds as a consequence of marl extraction. Field boundaries are defined by intact hedgerows with mature trees, with occasional small areas of woodland and a prominent large woodland at Blakenhall Moss, this being a restored raised lowland bog. The area is well served by local footpaths and the promoted South Cheshire Way long distance footpath runs north-south through the west of the area, passing close to the 16th century timber framed private dwelling of Lea Hall. Buildings throughout the area are typically traditional red brick with steep pitched roofs or later development which utilise render and tile.

The landscape has an open character, allowing for wide reaching views from footpaths and local lanes, including Cobb's Lane which is part of Regional Cycle Route 70. The skyline is defined by vegetation and other natural features outside of the area, with pylons and wind turbines being visible features. The WCML runs through the eastern edge of the area and is generally well integrated into the landscape, although there is some interruption of an otherwise tranquil landscape from passing trains.



Key landscape characteristics

A generally flat and open landscape with several recreational routes and some areas of scenic quality and tranquillity away from the WCML railway.



- Route on surface
- LCA boundary
- Route in tunnel
- 1 Blakenhall Moss
- 2 Lea Hall
- 3 WCML
- 4 South Cheshire Way
- 5 Beech farm
- 6 Lea Farm
- 7 Cobb's Lane

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Key landscape value attributes

The key landscape value attributes of the Blakenhall Lower Farms and Woods LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

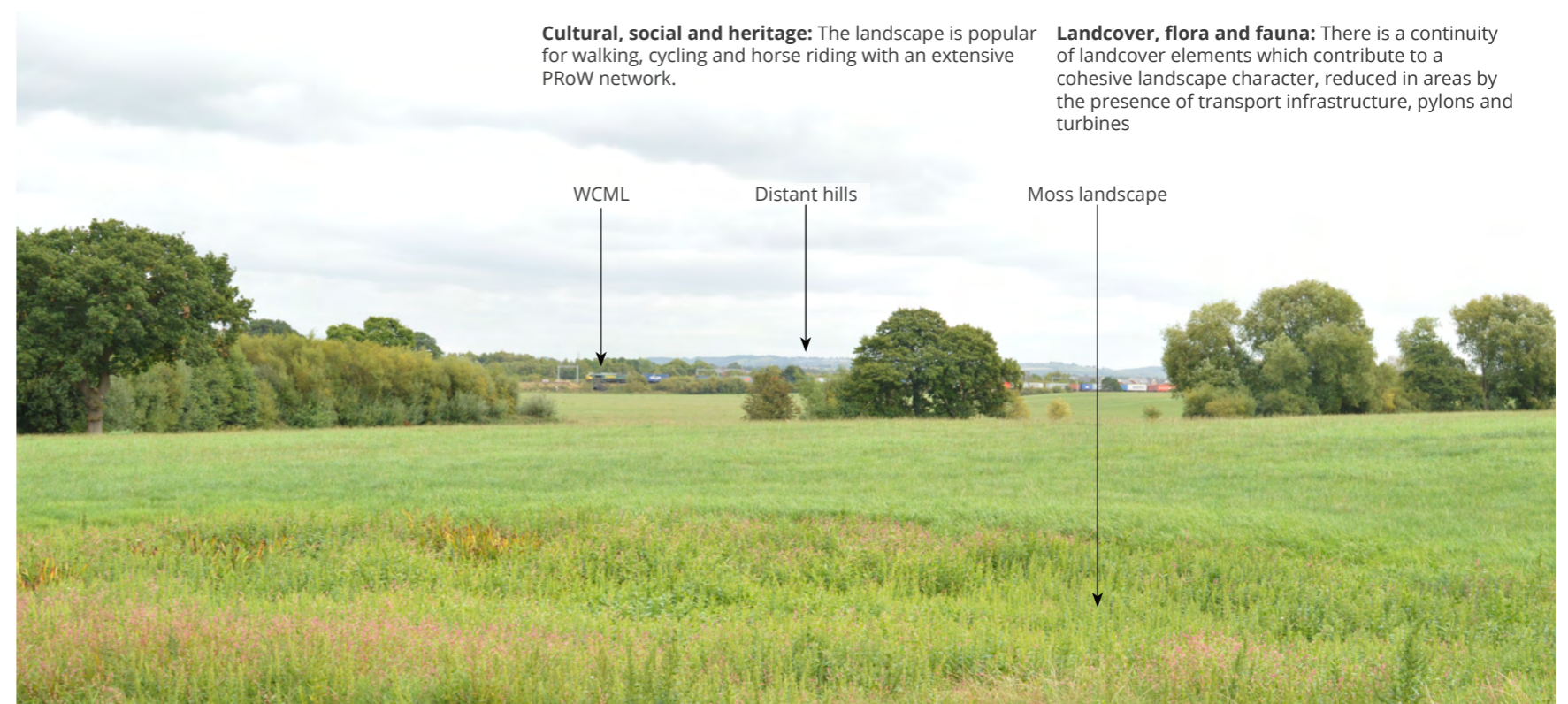
This is a mostly scenic landscape of open fields defined by intact field boundary hedgerows with mature hedgerow and field trees. The former country house Lea Hall and traditional farmhouses, such as the nearby Lea Farm, are set within the rural farmland and create a scenic composition which is partially disturbed by the presence of pylons and the WCML.



Cultural, social and historic

The presence of the Grade II* listed Lea Hall (and its surrounding landscape) is an example of the typical historic arrangement of country houses surrounded by associated estate farmland. Due to the proximity of Crewe and Nantwich the area is popular for walking, cycling and horse riding, with an extensive Public Right of Way (PRoW) network including the regionally promoted South Cheshire Way.

Key landscape characteristics susceptible to the AP1 revised scheme



Cultural, social and heritage: The landscape is popular for walking, cycling and horse riding with an extensive PRoW network.

Landcover, flora and fauna: There is a continuity of landcover elements which contribute to a cohesive landscape character, reduced in areas by the presence of transport infrastructure, pylons and turbines

Overall landscape value

This is a scenic, rural landscape of hedged fields with hedgerow trees and occasional small woodlands and coppices. Lea Hall represents the historic pattern of country houses set within estate farmland and there is some intact small-scale field pattern evident at Blakenhall. The extensive woodland at Blakenhall Moss is a prominent natural landscape feature. An extensive network of PRoW, particularly in the north of the LCA provides a valuable recreational resource for cycling, walking and horse riding; including the South Cheshire Way. The WCML, running broadly parallel to the course of Swill Brook is generally well integrated into the landscape although there is intermittent noise disturbance. Skyline features including pylons and wind turbines further reduce the sense of tranquillity and remoteness. The value of this LCA is therefore **medium**.

Overall landscape susceptibility

There are few distinctive or prominent landscape features which are susceptible to the original scheme other than the mature trees and the raised lowland bog at Blakenhall Moss. Traditional land management practices appear to have declined in the late 20th century, with some field amalgamation and loss of hedgerows. The landscape therefore has a **medium** susceptibility to change resulting from the AP1 revised scheme.

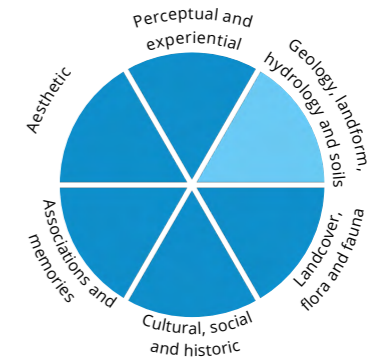
Future baseline

At the commencement of HS2 Phase 2b construction works (2025) Phase 2a of the HS2 mainline will have been substantially constructed. The works for both Phase 2a and Phase 2b of HS2 will overlap but works associated with the original scheme will not directly affect this LCA. At the commencement of HS2 Phase 2b operation (2038) the mitigation planting for HS2 Phase 2a will provide some integration of the HS2 Phase 2a and existing WCML infrastructure into the wider landscape south of Crewe. The presence of HS2 Phase 2a will not affect the susceptibility of the LCA to the AP1 revised scheme.

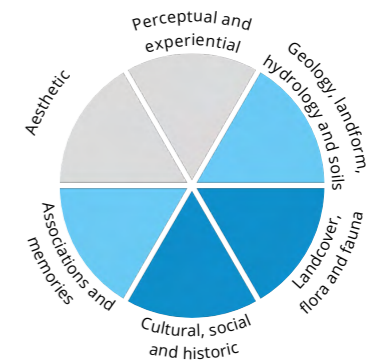
Overall landscape sensitivity

This is a rural landscape with historic field patterns, but which displays some evidence of field amalgamation and loss of hedgerows but is otherwise largely intact. The landscape has local recreational value enhanced by proximity to the edge of Crewe and an extensive PRoW network that includes the South Cheshire Way. The sensitivity of this LCA is **medium**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **negligible** (non-significant) effect. This would be because the LCA would not be directly affected by construction of the original scheme as the Crewe south portal satellite compound was located to the north of the realigned Newcastle Road, within the neighbouring Shavington/Crewe Outer Fringe Lower Farms and Woods LCA. Furthermore, construction activity would be largely screened by intervening road embankments and the earthworks associated with HS2 Phase 2a. During construction, the additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will not change landscape effects for this LCA. This is because, the minor alterations proposed to the Crewe Tunnel South Portal, associated structures and cutting, will take place in the neighbouring Shavington/Crewe Outer Fringe Lower Farms and Woods LCA and will remain imperceptible in Blakenhall Lower Farms and Woods LCA due to the presence of intervening landform and vegetation. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 1

The main ES reported a **negligible** (non-significant) effect. This would be a result of the original scheme including the Crewe tunnel south porous portal, portal building and telecommunications mast being located to the north of the realigned Newcastle Road within the neighbouring Shavington/Crewe Outer Fringe Lower Farms and Woods LCA. Therefore, this LCA would not be directly affected, and indirect landscape effects were limited by the screening effects of intervening road embankments, earthworks and mitigation planting associated with HS2 Phase 2a. At year 1, the AP1 amendment will not change landscape effects for this LCA. This is because minor changes to Crewe Tunnel South Portal, associated structures and cutting, in the neighbouring Shavington/Crewe Outer Fringe Lower Farms and Woods LCA, will be contained by the presence of intervening landform and vegetation. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 15

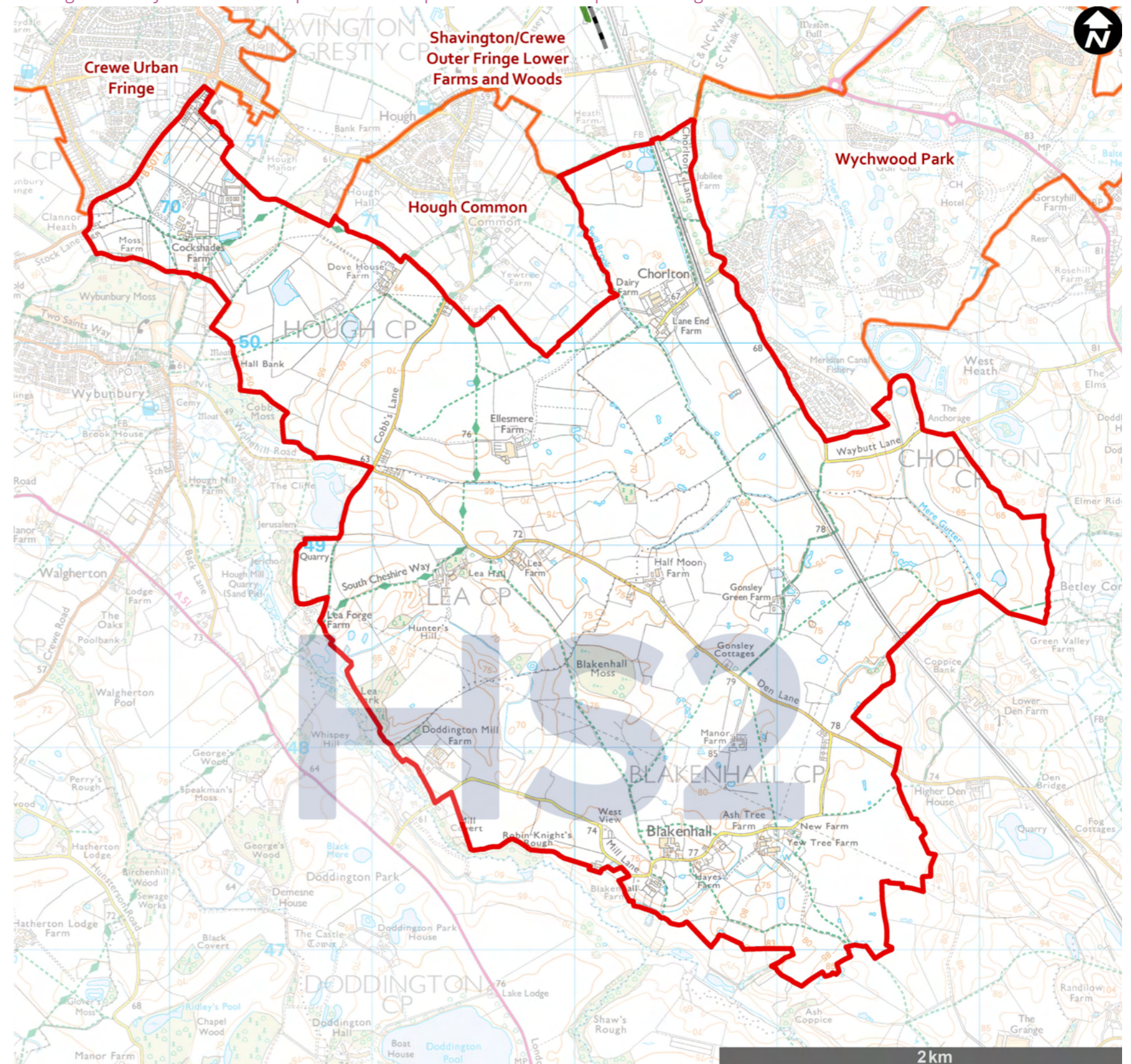
The main ES reported a **negligible** (non-significant) effect. This would be because indirect landscape effects were limited to the northernmost extents of the LCA where Crewe tunnel south porous portal, portal building and telecommunications mast were further screened by maturing mitigation planting associated with HS2 Phase 2a. At year 15, the AP1 amendment incorporating minor alterations to the Crewe Tunnel South Portal, associated structures and cutting in the neighbouring LCA, will remain imperceptible due to the presence of intervening landform and vegetation. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 30

The main ES reported a **negligible** (non-significant) effect, as indirect effects would be limited to the northernmost extents of the LCA, where Crewe tunnel south porous portal, portal building and telecommunications mast would be further screened by maturing mitigation planting associated with HS2 Phase 2a. The structures and cutting in the neighbouring LCA associated with the AP1 amendment will remain imperceptible in Blakenhall Lower Farms and Woods LCA due to the presence of intervening landform and vegetation. Therefore, the AP1 amendment will not give rise to a different significant effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.



Cumulative assessment (construction)

Construction: The main ES reported a **major** adverse (significant) cumulative effect resulting from the combination of HS2 Phase 2a and the original scheme. The presence of construction activity associated with HS2 Phase 2a would directly affect the Blakenhall Lower Farms and Woods LCA resulting in a major adverse (significant) effect (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The effects reported resulting from the original scheme would be negligible (non-significant). The AP1 amendment will not give rise to a different significant effect. Therefore the level of significance of the effect will remain as reported in the main ES.

Effects will be **major adverse (significant)** at construction.

Cumulative assessment (operation)

Operation: The main ES reported a **moderate** adverse (significant) cumulative effect at year 1 resulting from the combination of HS2 Phase 2a and the original scheme. This effect reduced to minor adverse (non-significant) in year 15 onwards. The presence of new infrastructure and localised intensification of the effects of the WCML in proximity to HS2 Phase 2a would directly affect the Blakenhall Lower Farms and Woods LCA and would result in moderate adverse (significant) effects in year 1, reducing to minor adverse (non-significant) in year 15 and year 60 (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The original scheme was not anticipated to give rise to an additional significant effect on this LCA. The AP1 amendment will not give rise to a different significant effect. Therefore, the level of significance of the effect will remain as reported in the main ES.

Effects will be **moderate adverse (significant)** at operation.

Shavington/Crewe Outer Fringe Lower Farms and Woods LCA

Landscape character baseline description

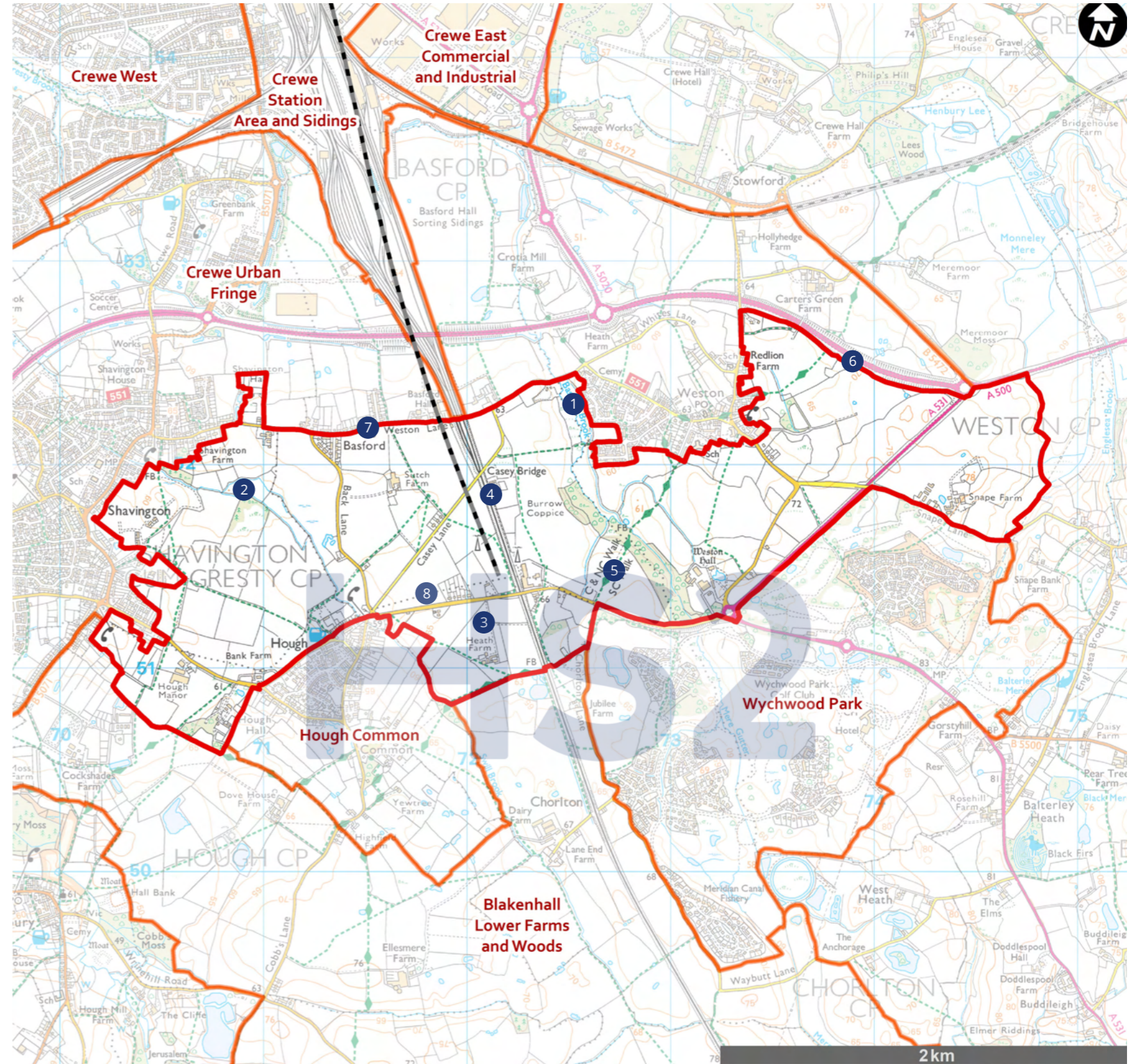
The land use is predominantly arable and pastoral farmland, which retains some signs of remnant coaxial (Bronze Age to early medieval) field systems near Basford Brook. The historical field pattern elsewhere is starting to degrade due to modern agricultural intensification, evidenced by field amalgamation and hedgerow loss.

Dispersed settlement, individual halls and farmhouses are prominent on the local skyline. Tree cover typically comprises occasional small woodlands and tree-lined minor watercourses, such as Basford Brook and Swill Brook, with frequent mature hedgerow trees bordering the rural lanes between Shavington, Hough and Weston. Several footpaths, including the promoted South Cheshire Way, Crewe and Nantwich Circular Walk, National Cycle Route 551 and Regional Cycle Route 70 form an established network of routes connecting with local settlements. WCML cuts across the eastern part of the LCA in a broadly south to north orientation, an embedded feature of the landscape which interrupts the agricultural field pattern. The landscape has a sense of tranquillity in some parts, although disturbed by the presence of WCML, pylons and traffic movement towards the A500 Shavington Bypass.



Key landscape characteristics

A generally flat and treed agricultural landscape connected by recreational routes and with some areas of scenic quality and tranquillity associated with its tree-lined brooks.



- Route on surface
- LCA boundary
- Route in tunnel
- 1 Basford Brook
- 2 Swill Brook
- 3 Heath Farm
- 4 WCML
- 5 South Cheshire Way and Crewe and Nantwich Circular Walk
- 6 A500 Shavington Bypass
- 7 National Cycle route 551
- 8 Regional Cycle route 70

Key landscape value attributes

Key landscape value attributes of the Shavington/Crewe Outer Fringe Lower Farms and Woods LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

Intensive farming practice leading to the amalgamation of fields and loss of hedgerows has created an open agricultural landscape, punctuated by scattered farmsteads and settlement. Distant hill crests form a skyline to the east, while wooded stream courses interrupt the irregular field pattern. Basford Brook is a particularly scenic and secluded feature created by the mosaic of wetland habitats and extensive woodland cover.



Cultural, social and historic

This is a popular area for informal recreation, with a network of cycle routes and local footpaths including the promoted Crewe and Nantwich Circular Walk and the South Cheshire Way. The latter crosses over Basford Brook and through its surrounding woodland on new boardwalks and bridges.

Key landscape characteristics susceptible to the AP1 revised scheme



Overall landscape value

The open and shallow undulating farmland has been influenced by modern farming practice involving the loss of trees and hedgerows. Fields are typically medium to large in scale, occasionally interrupted by tree-lined watercourses. The scenic value of the landscape is negatively influenced by the visibility of pylons, WCML and traffic movement along main roads. Village settlements, isolated farmsteads and houses are visible features across this open farmland, while an established network of footpaths and cycle routes contributes to the cultural value of the landscape. The LCA is of **medium** value.

Overall landscape susceptibility

The open agricultural character of the farmland is already influenced to some degree by traffic movement towards the A500 Shavington Bypass and train movement along WCML. The landscape is also interrupted by overhead power lines. The wooded and tree-lined watercourses are more susceptible to changes of the type proposed, due to their local sense of tranquillity. The landscape has a **medium-low** susceptibility to change resulting from the AP1 revised scheme.

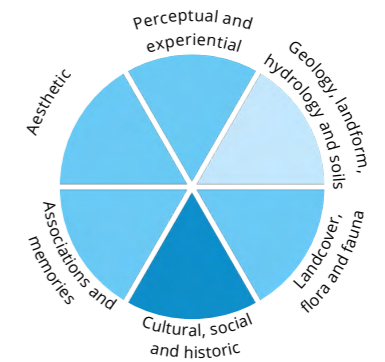
Future baseline

At the commencement of original scheme construction works (2025) Phase 2a of the HS2 mainline will have been substantially constructed introducing new large-scale structures and earthworks into the local landscape of the Shavington/Crewe Outer Fringe Lower Farms and Woods LCA. The main civils work for both Phase 2a and the original scheme will overlap and the LCA will be directly affected. The HS2 Phase 2a elements largely align with the existing WCML and Newcastle Road and will not affect the susceptibility of the LCA to the AP1 revised scheme.

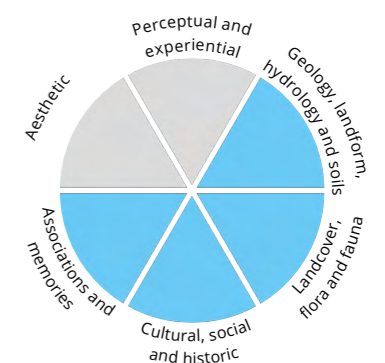
Overall landscape sensitivity

The open agricultural character of the landscape, influenced through modern farming practices and the presence of transport and energy infrastructure corridors, results in the sensitivity of the LCA being **medium-low**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the presence of construction works including Crewe south portal satellite compound located to the north of the realigned Newcastle Road and south of Casey Lane, alongside HS2 Phase 2a and the existing railway corridor of WCML. Construction activity would be partially screened by road embankments and earthworks associated with HS2 Phase 2a. During construction, the additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change the landscape effect for this LCA. This is because the minor alterations to the Crewe Tunnel South Portal, associated structures and cutting, will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.

Effects will remain **minor adverse (non-significant)**.

Operation year 1

The main ES reported a **negligible** (non-significant) effect. This would be a result of the introduction of the Crewe tunnel south porous portal, portal building and telecommunications mast, alongside HS2 Phase 2a and the existing WCML rail corridor. The original scheme would be a new element in the landscape but not uncharacteristic of the existing rail corridor. At year 1, the AP1 amendment will not change landscape effects for this LCA. This is due to minor alterations to the Crewe Tunnel South Portal, associated structures and cutting, will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will remain **negligible (non-significant)**.

Operation year 15

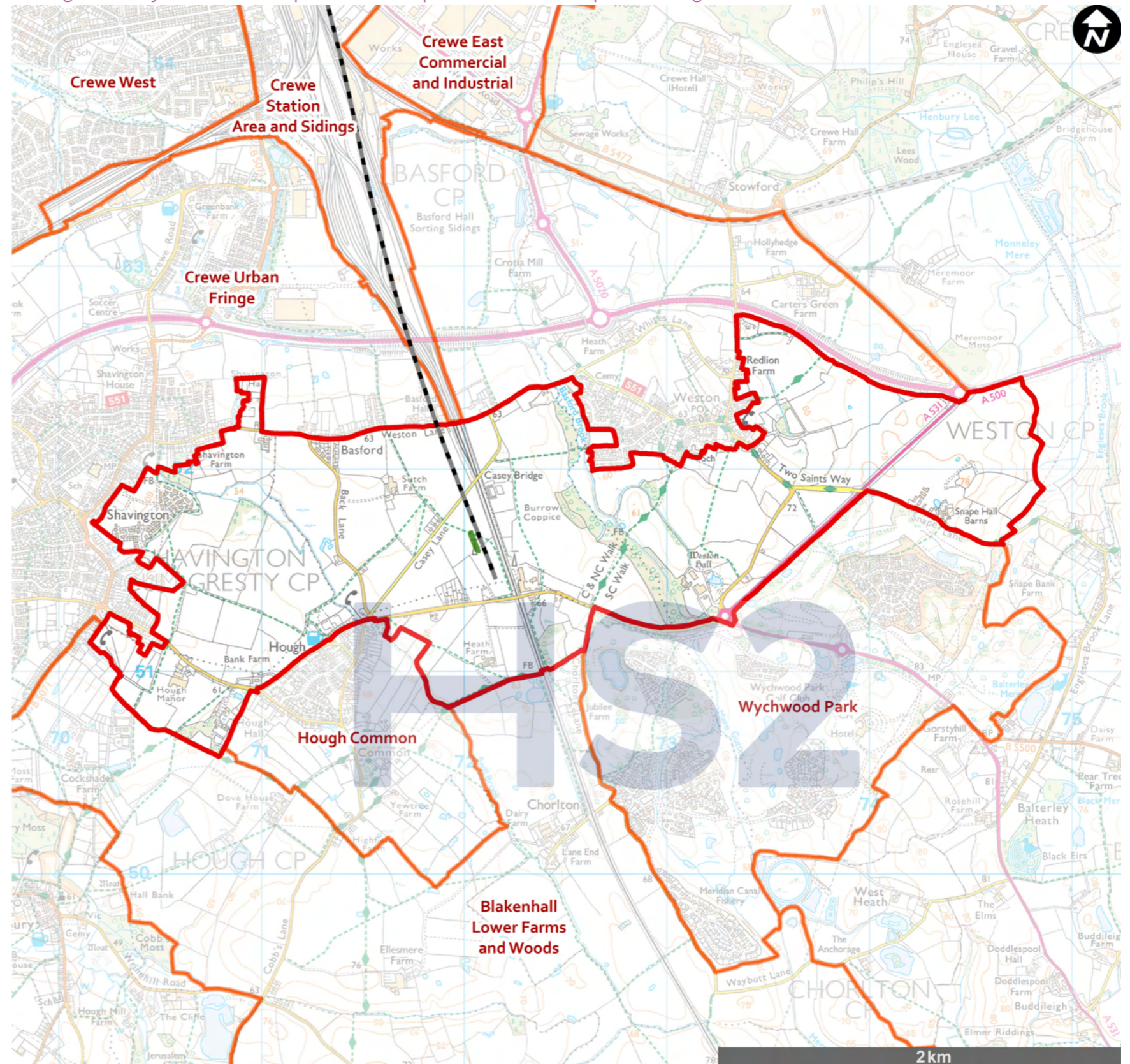
The main ES reported a **negligible** (non-significant) effect. This would be a result of the integration of the original scheme into its landscape context by maturing mitigation planting. At year 15, the AP1 amendment will not change landscape effects for this LCA. This is because minor alterations to the Crewe Tunnel South Portal, associated structures and cutting, will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will remain **negligible (non-significant)**.

Operation year 30

The main ES reported a **negligible** (non-significant) effect. This would be a result of further integration of the original scheme into its landscape context by mature mitigation planting. At year 30, the AP1 amendment will not change landscape effects for this LCA. This is because the AP1 amendment will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will remain **negligible (non-significant)**.



Cumulative assessment (construction)

Construction: The main ES reported a **major** adverse (significant) cumulative effect on this LCA resulting from the combination of HS2 Phase 2a and the original scheme. The presence of construction activity associated with HS2 Phase 2a which would directly affect the Shavington/Crewe Outer Fringe Lower Farms and Woods LCA resulting in a major adverse (significant) effect (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The construction of HS2 Phase 2a and the original scheme would overlap, with the majority of the original scheme activities relating to tunnelling works resulting in a minor adverse (non-significant) effect. The AP1 amendment will not give rise to a different significant effect on this LCA. Therefore, the level of significance of the effect will remain as reported in the main ES.

Effects will be **major adverse (significant)** at construction.

Cumulative assessment (operation)

Operation: The main ES reported a **moderate** adverse (significant) cumulative effect at year 1, resulting from the combination of HS2 Phase 2a and the original scheme. This effect reduced to minor adverse in year 15 onwards due to the effectiveness of the mitigation planting. The scale and prominence of new infrastructure of HS2 Phase 2a would directly affect the Shavington/Crewe Outer Fringe Lower Farms and Woods LCA and would result in moderate adverse (significant) effects in year 1, reducing to minor adverse in year 15 and year 60 (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The original scheme would not be anticipated to give rise to an additional significant effect on this LCA. The AP1 amendment, tunnel realignment and extension (AP1-001-001) will not give rise to a different significant effect on this LCA. The level of significance of the effect will remain, as reported in the main ES.

Effects will be **moderate adverse (significant)** at operation.

Crewe Station Area and Sidings LCA

Landscape character baseline description

This LCA is defined by the railway junction in the centre of Crewe and its relationship with surrounding, often rail-related, built development.

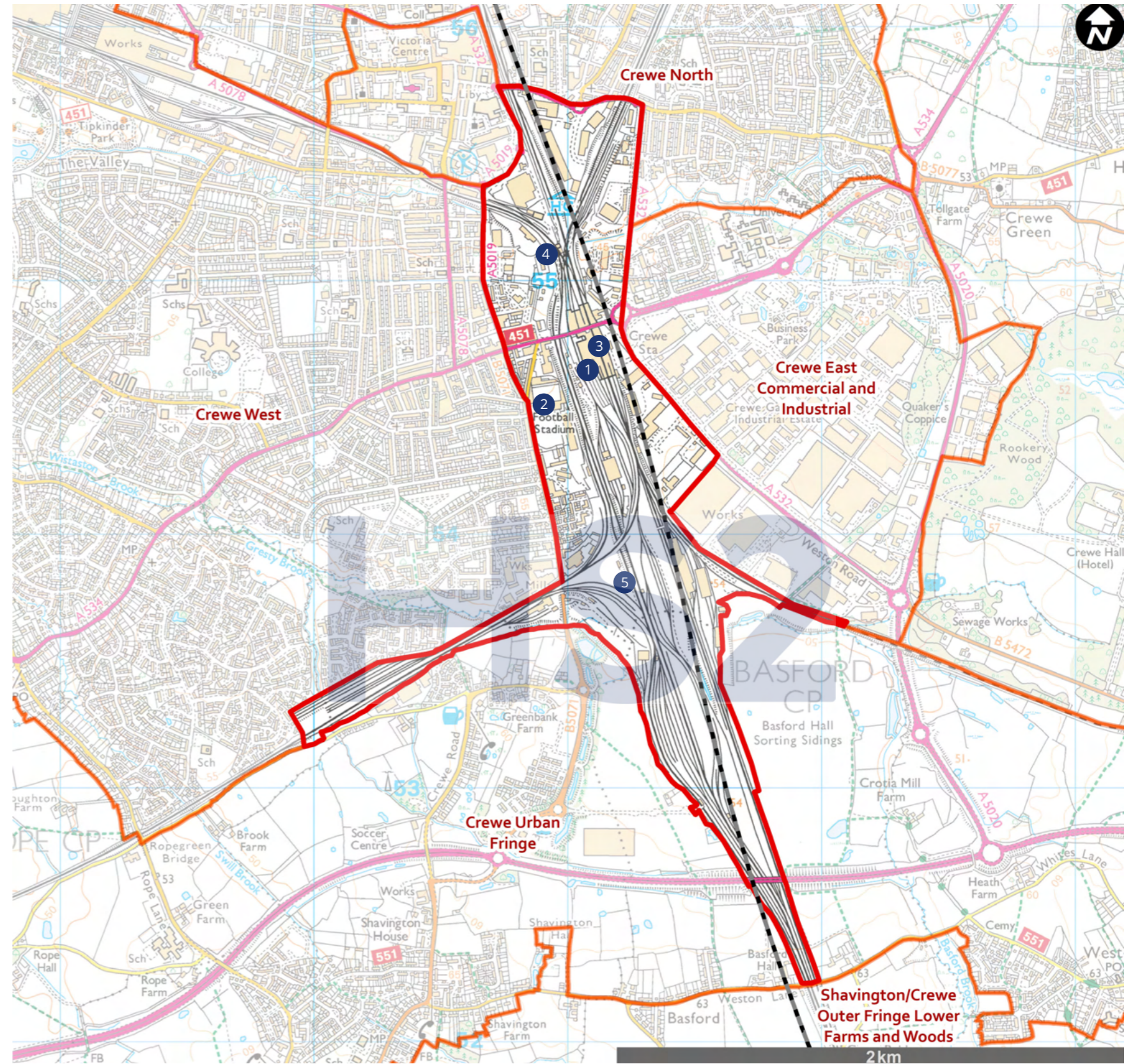
Crewe was transformed during the 19th century when the settlement became a pivotal location for the development of the Grand Junction Railway. The Grade II listed station buildings, dating from 1867 continue to form a part of the town's identity although large areas of the historic Crewe Works have now been replaced by commercial use. Crewe Heritage Centre is located near the railway junction, exhibiting historic locomotives and railway equipment.

The land bordering the railway junction comprises a mix of uses, including large retail units at Grand Junction Retail Park and industrial sheds and offices along Macon Way, to the east of the junction. The busy A530 Nantwich Road crosses the station area, flanked by shops and restaurants while the town's civic core is located a short distance to the north. Landmark buildings include Crewe Alexandra football stadium, the 19th century railway hotels and Rail House, a 13-storey tower constructed in the 1960s. Residential properties flank the railway sidings to the west, comprising late 20th century and terraced Victorian properties along Gresty Road, with modern development to the south of the football stadium.



Key landscape characteristics

The railway heritage forms a major part of Crewe's identity. The townscape of this part of Crewe is fragmented by a pattern of incohesive modern retail and commercial development, accompanied by large swathes of land allocated to car parking.



- Route on surface
- LCA boundary
- Route in tunnel
- 1 Crewe Station
- 2 Crewe Alexandra football stadium
- 3 Crewe Arms Hotel
- 4 Crewe Heritage Centre
- 5 WCML

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Key landscape value attributes

Key landscape value attributes of the Crewe Station Area and Sidings LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

The area is a discordant mix of railway infrastructure, historic buildings, commercial and retail development, small-scale housing and shops. Crewe Alexandra football stadium and Rail House are prominent landmarks, while the 19th century railway buildings and related hotels (the Royal and Crewe Arms) contribute a historic quality to the townscape.



Cultural, social and historic

The Grade II listed station buildings and historic railway hotels are the main surviving elements of the 19th century transformation of Crewe, while rail travel continues to be a major aspect of Crewe's identity and prosperity. Crewe Heritage Centre sits within the modern sidings and is valued as a cultural heritage attraction.

Key landscape characteristics susceptible to the AP1 revised scheme



Associations and memories: Railway infrastructure forms a key part of the town's identity. The railway heritage associated with the town increases the susceptibility of valued landmark buildings that link to this aspect of its urban character.

Landcover, flora and fauna: An absence of a cohesive pattern and tracts of scrub and waste ground associated with the existing rail corridor, is associated with low levels of diversity.

Overall landscape value

The cultural importance of the railway to the town is reflected in part by its associated buildings including the railway hotels, the original (now Grade II listed) Crewe Station and features preserved by the Crewe Heritage Centre. The area around the station has a relatively poor quality and fragmented urban form, characterised by open expanses of surface level car parks, road and rail infrastructure and vacant or underutilised buildings. There is a discordant scale of commercial, retail and residential development. The value of this LCA is therefore **low** given the above.

Overall landscape susceptibility

The Grade II listed station buildings and locally listed hotels are irreplaceable and therefore highly susceptible to change arising from the original scheme. The remainder of the station complex and surrounding townscape lacks coherence or positive sense of place and therefore is less susceptible to change of the type proposed. Overall, the landscape has a **low** susceptibility to change resulting from the AP1 revised scheme.

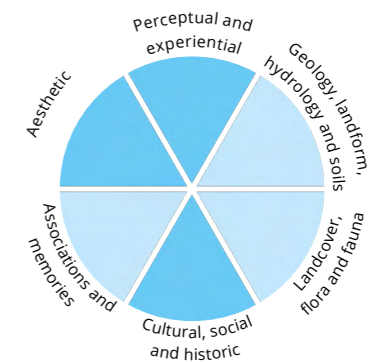
Future baseline

There are no committed developments that will affect the landscape susceptibility to the AP1 revised scheme.

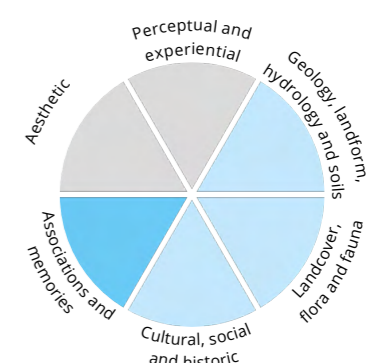
Overall landscape sensitivity

The station complex and surrounding area is heavily influenced by road and rail infrastructure. With the exception of the Grade II listed station buildings, the Crewe Arms Hotel and the Royal Hotel there are few buildings of architectural merit. The overall sensitivity is **low**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the presence of construction activity including Cowley Way ventilation and intervention shaft (vent shaft) satellite compound, located in an area of industrial land bordering WCML and sidings, and construction traffic using the main roads. During construction, the additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will not change landscape effects for this LCA. This is because, the AP1 amendment will not introduce additional construction activity that would be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **minor adverse (non-significant)**.

Operation year 1

The main ES reported a **negligible** (non-significant) effect. This would be a result of the presence of Cowley Way ventilation and intervention shaft (vent shaft) and autotransformer station which were in-keeping with the existing industrial character of the LCA. At year 1, the AP1 amendment will not change landscape effects for this LCA. This is due to the AP1 amendment representing a small-scale change to the original scheme that will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 15

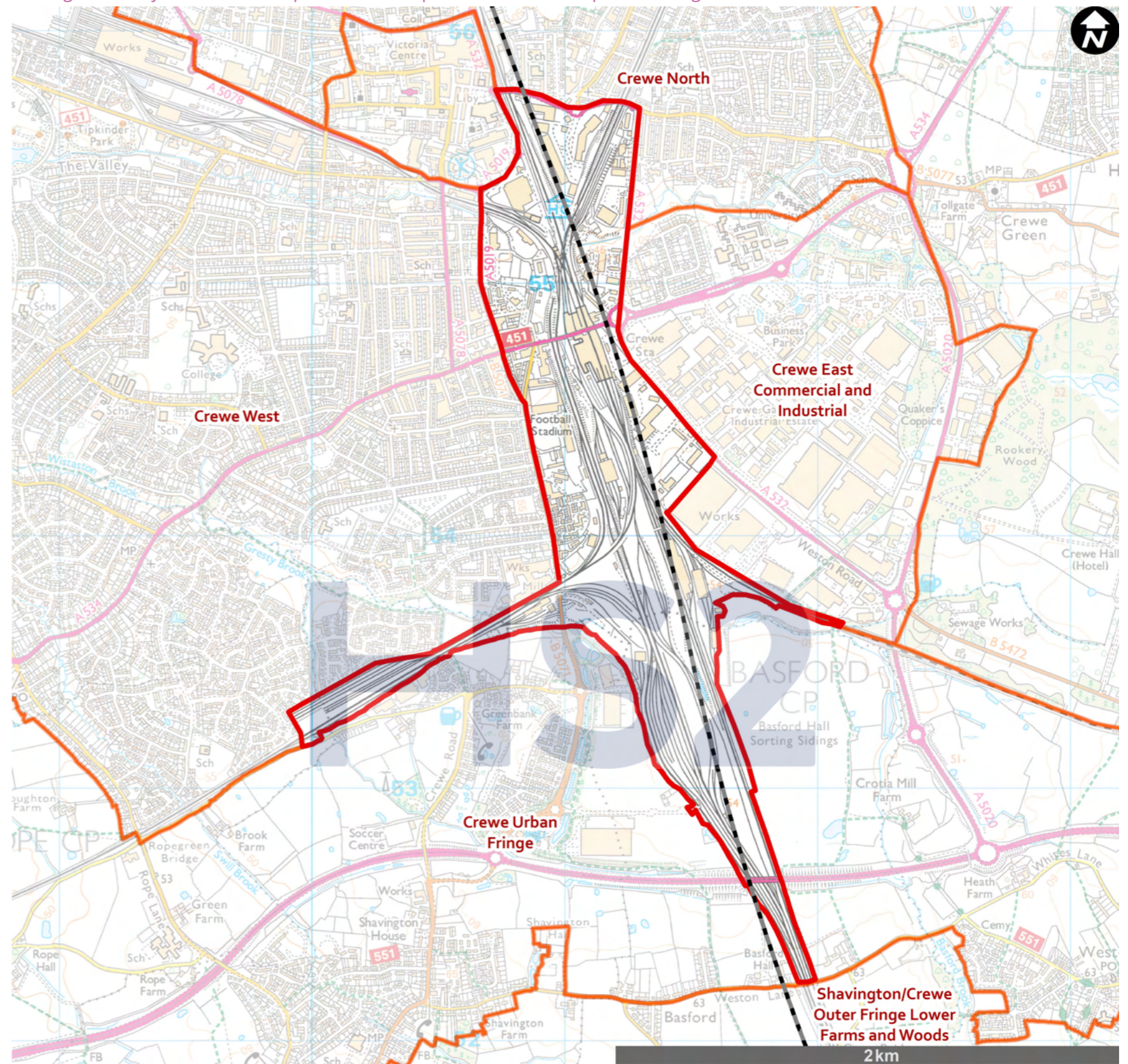
The main ES reported a **negligible** (non-significant) effect. This would be a result of the continued integration of Cowley Way ventilation and intervention shaft (vent shaft) and auto transformer station into the area of industrial land bordering WCML and sidings. At year 15, the AP1 amendment will not change landscape effects for this LCA. This is because the AP1 amendment will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 30

The main ES reported a **negligible** (non-significant) effect. This would be a result of the presence of Cowley Way vent shaft and Cowley Way vent shaft auto-transformer station which were similar in terms of form and scale to existing buildings in the vicinity. At year 30, the AP1 amendment will not change landscape effects for this LCA. This is because the AP1 amendment, will not be discernible or affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.



Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

Operation: There are no developments which will result in cumulative operation effects.

No cumulative effects during construction and operation.

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Crewe West LCA

Landscape character baseline description

This LCA lies to the west of Crewe town centre. The area is predominantly residential in character but influenced by the railway lines and extensive railway infrastructure within or close to the LCA.

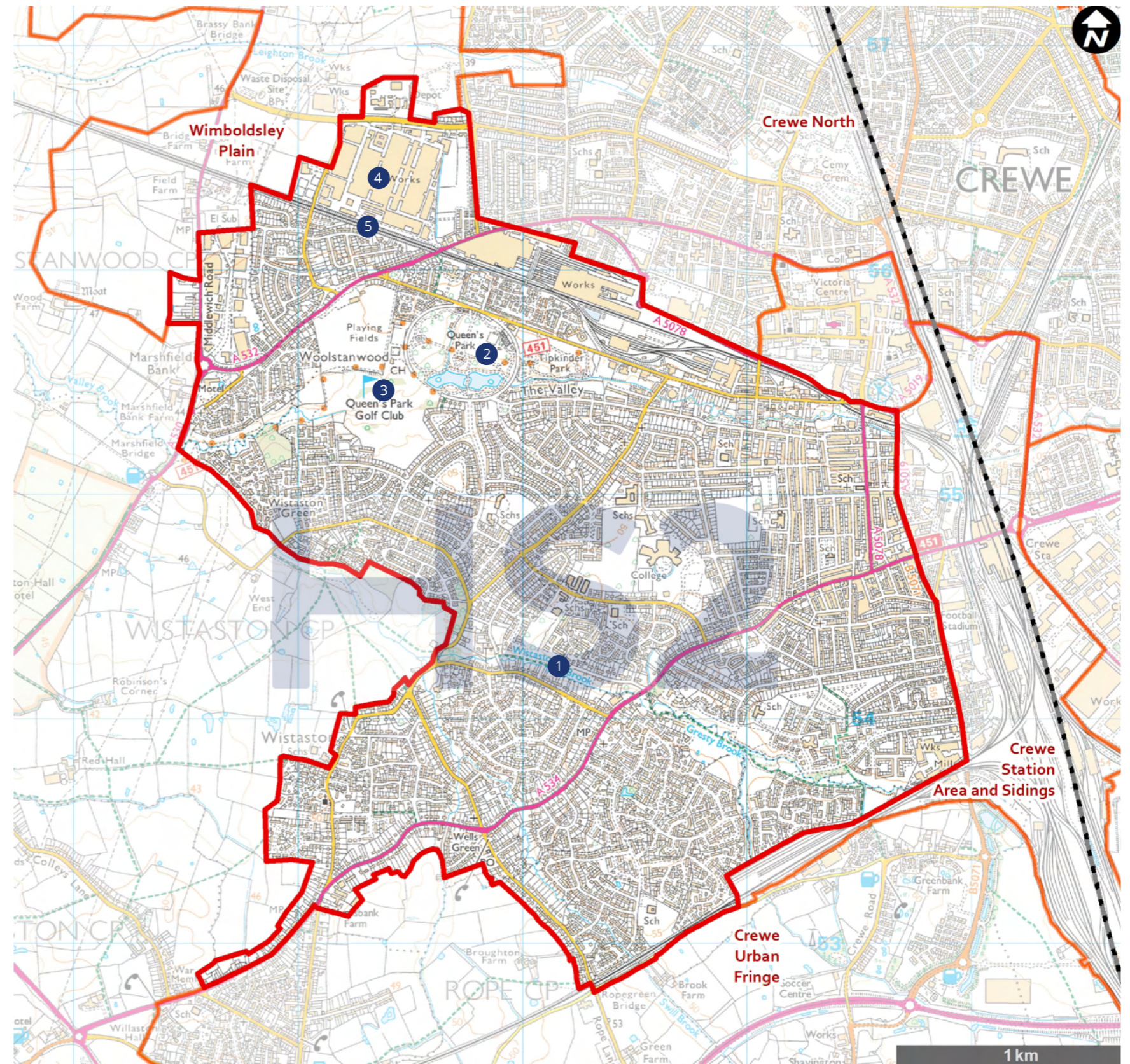
Suburban growth has extended westwards from the town centre, forming several distinct residential areas of varying age, pattern and style. A regular grid pattern of terraced housing close to the town centre, in the east of the LCA, demonstrates the town's initial growth during the Victorian era. Further expansion of the suburbs in the inter-war period saw the town grow with extensive suburbs, laid out as a network of avenues and crescents. Front gardens, broad verges and street trees are a regular feature of this part of the LCA. Further expansion of the town in the 20th century saw housing extend to the south and west. Informal open spaces associated with the tree-lined Wistaston Brook and more formal open space including Queens Park and the Queens Park golf course, provide locally important green spaces within the suburbs, along with playing fields and small greens within areas of housing. With the exception of narrow tracts of woodland such as that along Wistaston Brook and a small block of woodland to the north-west of the LCA, there are no substantial areas of woodland. Nevertheless, the frequent mature street trees and vegetation in the informal open spaces gives the LCA a verdant character in places.

Farmland on the western edge of the LCA provides a rural setting to this side of the LCA and there is good access to the countryside along a network of PRow that extend from the residential area. In the northern part of the LCA, industrial buildings, including the Bentley Motor Works and the Bombardier factory, along with areas of railway sidings associated with the North Wales Coast Line railway give this area an industrial character.



Key landscape characteristics

A densely developed Victorian residential core built around the nucleus of the railway, with the expansion in the 20th century of extensive areas of suburban housing.



- Route on surface
- LCA boundary
- Community area
- Route in tunnel
- 1 Wistaston Brook
- 2 Queens Park
- 3 Queens Park golf course
- 4 Bentley Motor Works and the Bombardier factory
- 5 North Wales Coast Line railway

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Key landscape value attributes

Key landscape value attributes of the Crewe West LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

Areas of aesthetic value, towards the town's historic core, comprise red brick Victorian terraces. Queens Park, which was opened in 1888, with mature trees and formal avenues, and the tree-lined Wistaston Brook and Valley Brook that pass through the LCA provide an attractive, verdant setting for the area.



Cultural, social and historic

The northern part of the LCA demonstrates Crewe's long history of engineering, predominantly associated with the rail industry, manufacturing locomotives and running stock at the former Crewe Works but also with the Bentley Motor Works originally producing aero-engines and subsequently motor cars.

Key landscape characteristics susceptible to the AP1 revised scheme



Overall landscape value

Whilst there is some value associated with the historical development of Crewe, evident in the brick sheds of the Bombardier works in the north of the LCA and Victorian terraces near the centre of the town, much of the remainder of the LCA is characterised by extensive suburban housing, which lacks a distinctive character. Queens Park, along with smaller recreational areas, wooded brooks and PRoW leading into the countryside have value at a local scale, in providing recreational spaces and tree cover. Detracting elements include the railway lines, sidings and industrial zone. The value of this LCA is **medium-low** given the above.

Overall landscape susceptibility

Away from Queens Park, the informal open spaces and tree-lined watercourses, the predominance of suburban housing and the presence of railway and industrial infrastructure has diminished the area's susceptibility to change. The landscape has a **medium-low** susceptibility to change resulting from the AP1 revised scheme.

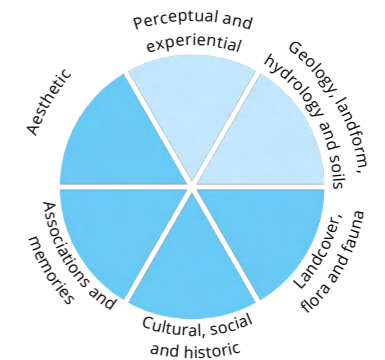
Future baseline

There are no committed developments that will affect the landscape susceptibility to the AP1 revised scheme.

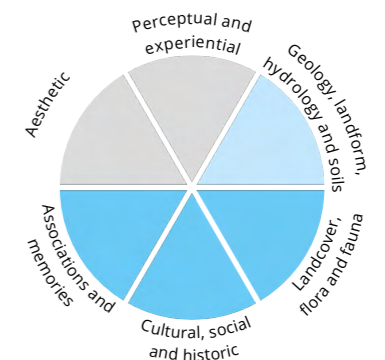
Overall landscape sensitivity

The LCA has some areas of aesthetic and historic interest, mainly associated with the Victorian terraced housing and historic industrial structures but the majority of the LCA is characterised by suburban housing and transport infrastructure. The sensitivity of this LCA is **medium-low**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

This AP1 amendment arises in an area not previously affected by the Proposed Scheme. The additional land permanently required for the provision of a power supply to Crewe tunnel (AP1-001-002) will comprise works within the existing sub-station site off the A530 Middlewich Road and construction associated with new cabling along Halton Drive, Sunnybank Road and A532 West Street. Vegetation will be removed at the western end of Halton Drive to facilitate access to the sub-station. Construction traffic will use existing roads, which will introduce additional traffic movements into residential areas. Views of construction activity will be limited by existing built form, along existing roads. The magnitude of change will be **negligible**.

Effects will be **negligible (non-significant)**.

Operation year 1

The removal of vegetation at the western end of Halton Drive during construction will represent a barely perceptible change within the wider LCA. Cabling works along local roads, including Halton Drive, Sunnybank Road and A532 West Street will be buried below ground and will not give rise to changes in the perception of the local townscape. Mitigation planting will be immature and will not replace the existing local framework of planting to the west removed during construction. The magnitude of change will be **negligible**.

Effects will be **negligible (non-significant)**.

Operation year 15

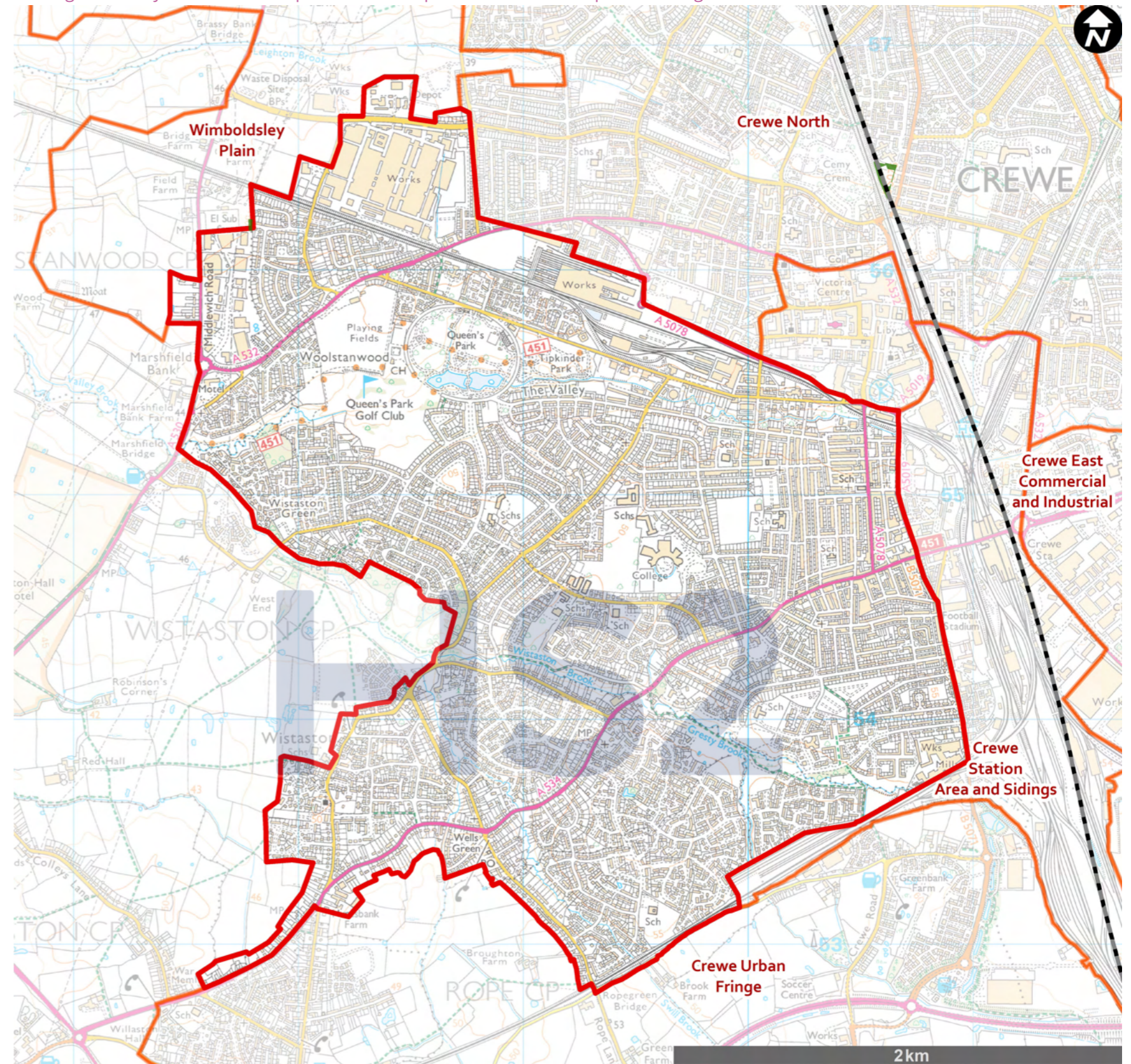
Mitigation planting will have matured sufficiently to restore the linear belt of vegetation that delineates the area of housing to the east and infrastructure to the west. The gap in vegetation at the western end of Halton Drive will be closed by mitigation planting. The magnitude of change will be **negligible**.

Effects will be **negligible (non-significant)**.

Operation year 30

The maturity of planting to the western end of Halton Drive will further restore the local townscape character. The magnitude of change will be **negligible**.

Effects will be **negligible (non-significant)**.



Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

Operation: There are no developments which will result in cumulative operation effects

No cumulative effects during construction and operation.

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Crewe North LCA

Landscape character baseline description

This LCA is a predominantly residential area to the north of Crewe town centre, subdivided by railway corridors converging towards Crewe Station and sidings (in the adjacent Crewe Station Area and Sidings LCA to the south).

The town is centred around Crewe Station (beyond the boundary of the LCA to the south) and the WCML rail corridor running south-east to north-west through this LCA. A section of the railway, branching north-east towards Stockport, crosses this LCA to the east.

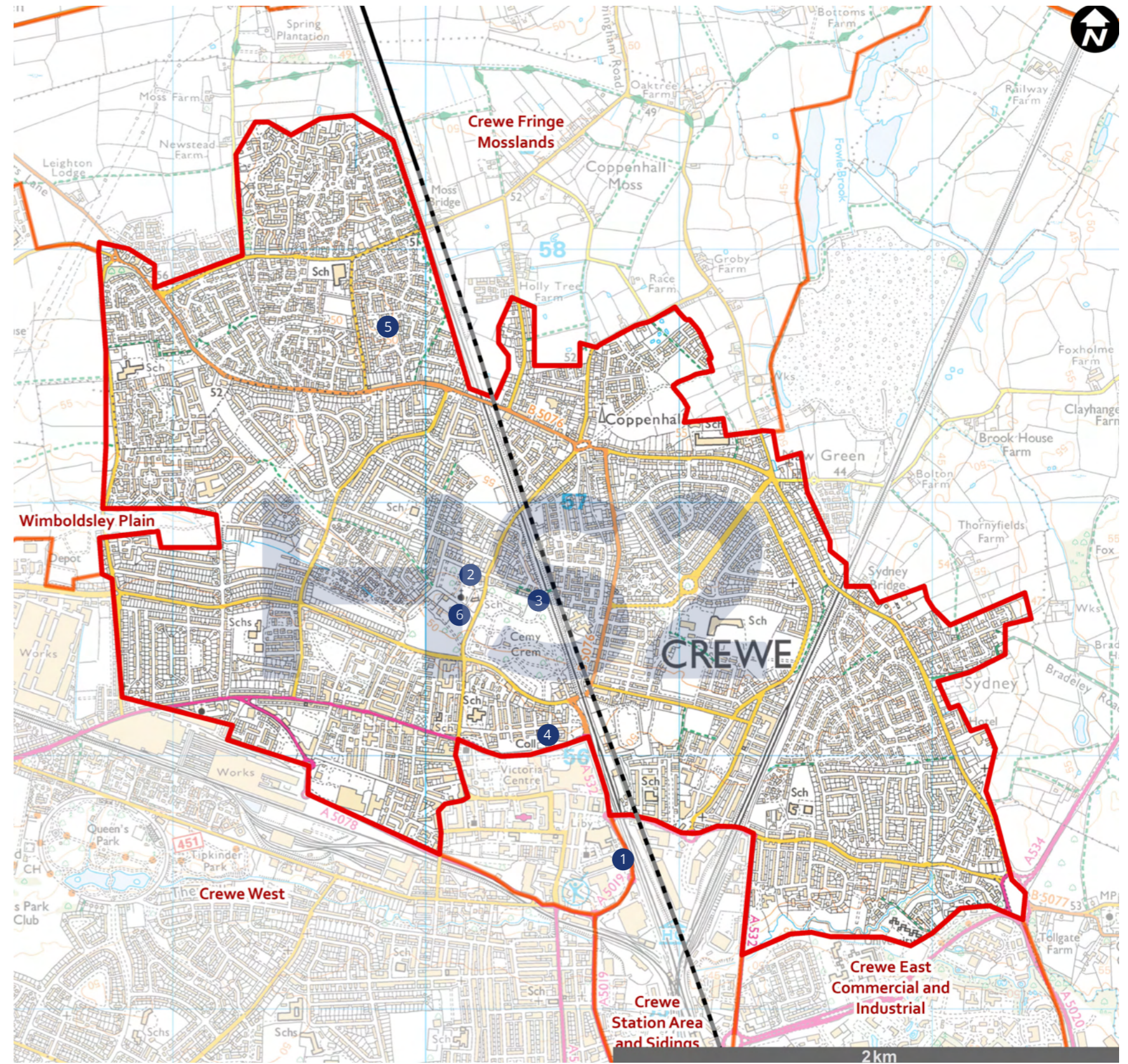
Suburban growth has extended outwards from the Crewe Station and junction (in the adjacent Crewe Station Area and Sidings LCA to the south) with a regular and legible grid pattern of post-medieval railway terraced housing around the junction approach and evident across the southernmost extents of the LCA bordering the town's civic centre. The grounds of the Grade II listed Church of St Michael, alongside Crewe cemetery and crematorium and Badger Park create a large area of open green space to the north of the town centre. A wider network of green space permeates the residential landscape, some linked to formal recreational activity but otherwise fragmented as pockets of open grassed space between residential development. Progressive residential expansion to the north of the town, including the suburb of Leighton, are more recent and continues to encroach on the fringe landscape and historic settlement pattern associated with the northernmost fringes of the town.



Church of St Michael

Key landscape characteristics

A legible Victorian residential core built around the nucleus of the railway, with modern residential expansion that has merged surrounding post-medieval settlement into a single urban entity.



- Route on surface
- LCA boundary
- Route in tunnel
- 1 WCML
- 2 Church of St Michael
- 3 Crewe Crematorium
- 4 Crewe town centre
- 5 Leighton
- 6 Badger Park

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Key landscape value attributes

Key landscape value attributes of the Crewe North LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

There are some areas of aesthetic value, generally towards the town's historic core comprising red brick Victorian terraces and the large landscaped park, cemetery and crematorium. Elsewhere 20th century residential expansion has created a generally unremarkable urban landscape.



Cultural, social and historic

The 19th century historic core associated with the railways has a recognisable identity, evidenced by the presence of railway terraced housing and the Grade II listed St Michael's Church. Northwards of the town core, the urban landscape has a predominantly residential focus with associated community facilities.

Key landscape characteristics susceptible to the AP1 revised scheme



Cultural, social and heritage: The railway corridors are an established component of the townscape of Crewe.

Landcover, flora and fauna: With the exception of narrow woodland belts or municipal spaces, there is limited tree cover to contrast with the predominantly built form associated with the townscape.

Overall landscape value

The area's shallow landform and underlying geology, which historically facilitated the arrival of the railways has provided also for largely uninterrupted residential expansion. There is little variation by way of landform or urban settlement pattern and skyline across the north of Crewe. Higher aesthetic and cultural values are focussed more on the 19th century town core, of which the Victorian railway terraces to the south of this LCA form a part. The broader residential landscape has an unremarkable townscape composition, with a local level of cultural association. The value of this LCA is therefore **medium-low**.

Overall landscape susceptibility

The development of Crewe as a settlement has been closely associated with railways. The residential areas to the north of the town are often shaped and characterised by the railway corridors, and the AP1 revised scheme will not be uncharacteristic of the existing urban landscape. The landscape therefore has a **medium-low** susceptibility to change resulting from the AP1 revised scheme.

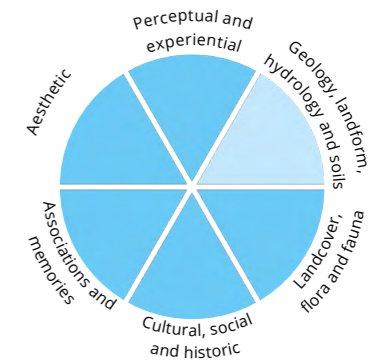
Future baseline

There are no committed developments that will affect the landscape susceptibility to the SES1 scheme.

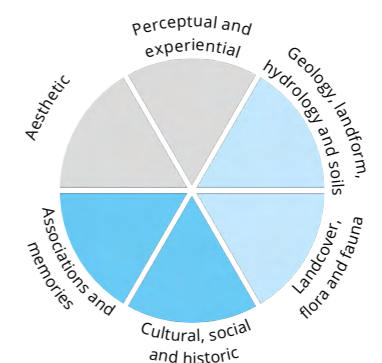
Overall landscape sensitivity

There are some aesthetic and cultural qualities, mainly associated within the southern extent of the LCA in association with the town core, while the predominantly residential landscape has an embedded relationship with rail infrastructure. The sensitivity of this LCA is **medium-low**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the limited influence of construction activity by the surrounding density of built form associated with the Middlewich Street vent shaft satellite compound off the A530 Middlewich Road and bordering the LCA to the north, the Crewe tunnel north main compound. During construction, the additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change landscape effects for this LCA. This is because, construction of the Middlewich Street vent shaft, rescue area and parking that forms part of it, will result in only a slight change to the overall extent of the construction activity. Changes to the location of the Crewe tunnel north main compound further north will still border the LCA and not affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for this LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **minor adverse (non-significant)**.

Operation year 1

The main ES reported a **negligible** (non-significant) effect. This would be a result of the introduction of the headhouse for Middlewich Street vent shaft, surrounded by an area of grassland and tree planting and the Crewe tunnel north portal adjacent with the existing WCML, which influenced the townscape at a local level. At year 1, the AP1 amendment will not change landscape effects for this LCA. This is because the change in design of the Middlewich Street vent shaft, rescue area and parking will be perceived in relation to other built elements across a small area and will not affect key landscape characteristics. The Crewe tunnel north portal, although moved further north, would still be adjacent to the existing WCML. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 15

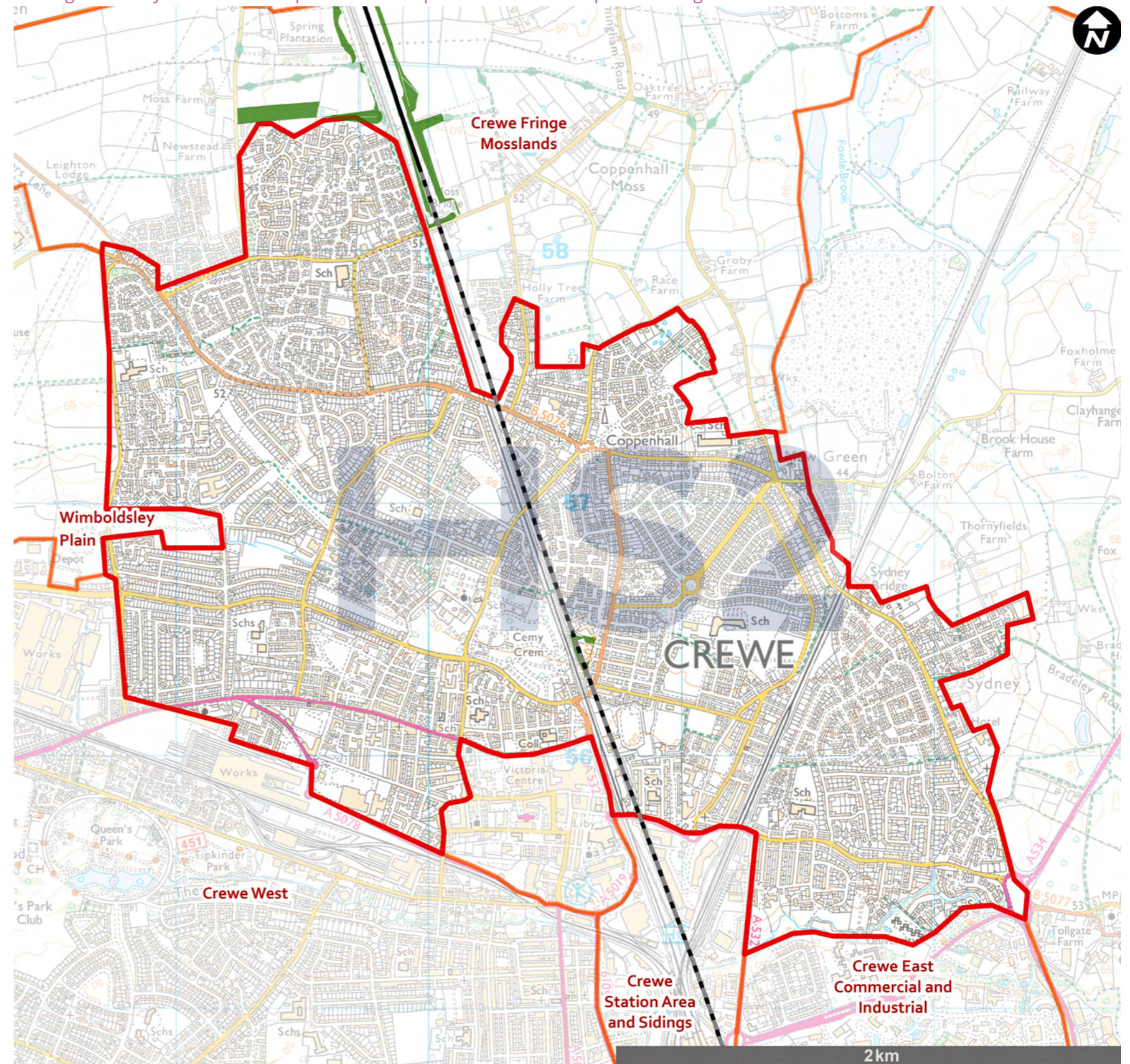
The main ES reported a **negligible** (non-significant) effect. This would be a result of the presence of maturing mitigation planting in the public realm surrounding Middlewich Street vent shaft and surrounding Crewe tunnel north portal integrating the original scheme into the surrounding landscape. At year 15, the AP1 amendment will not change landscape effects for this LCA. This is because, changes to the Middlewich Street vent shaft, rescue area and parking and relocation of the Crewe tunnel north portal will be perceived in relation to other built elements across a small area and will not affect key landscape characteristics. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.

Operation year 30

The main ES reported a **negligible** (non-significant) effect. This would be a result of the further maturity of mitigation planting in the public realm surrounding Middlewich Street vent shaft and along the maintenance access for the Crewe tunnel north portal, further integrating the original scheme into the surrounding landscape. At year 30, the AP1 amendment will not affect key landscape characteristics of the LCA. Therefore, the AP1 amendment will not give rise to a different effect for the LCA and the level of significance of the effect will remain as reported in the main ES.

Effects will be **negligible (non-significant)**.



Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

Operation: There are no developments which will result in cumulative operation effects.

No cumulative effects during construction and operation.

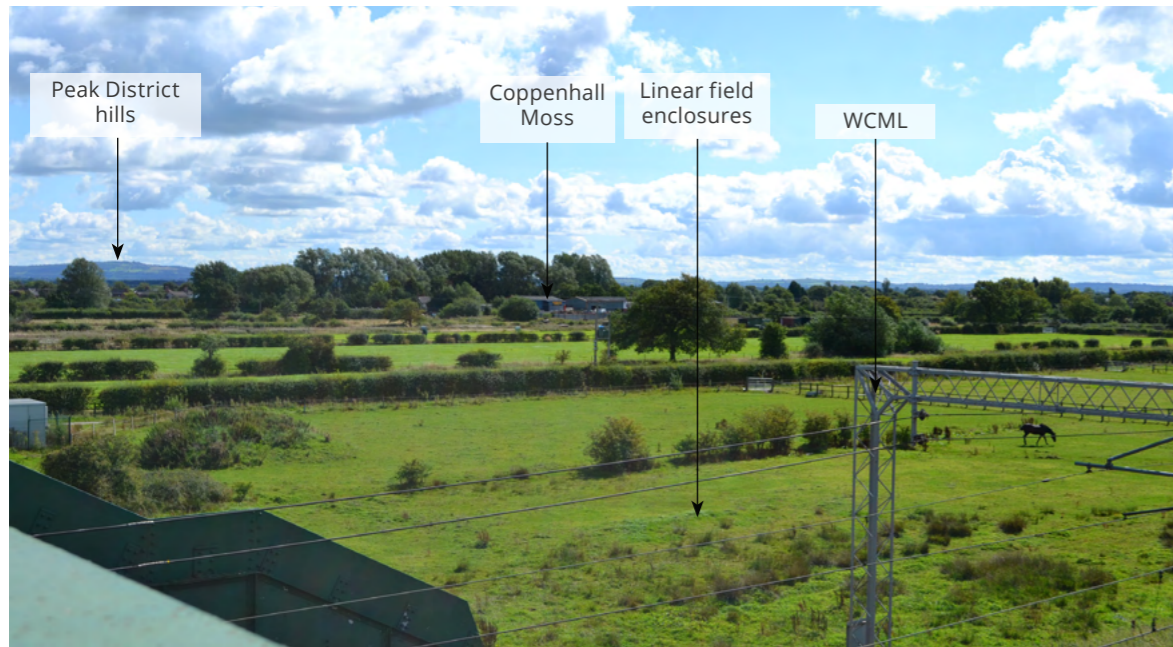
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Crewe Fringe Mosslands LCA

Landscape character baseline description

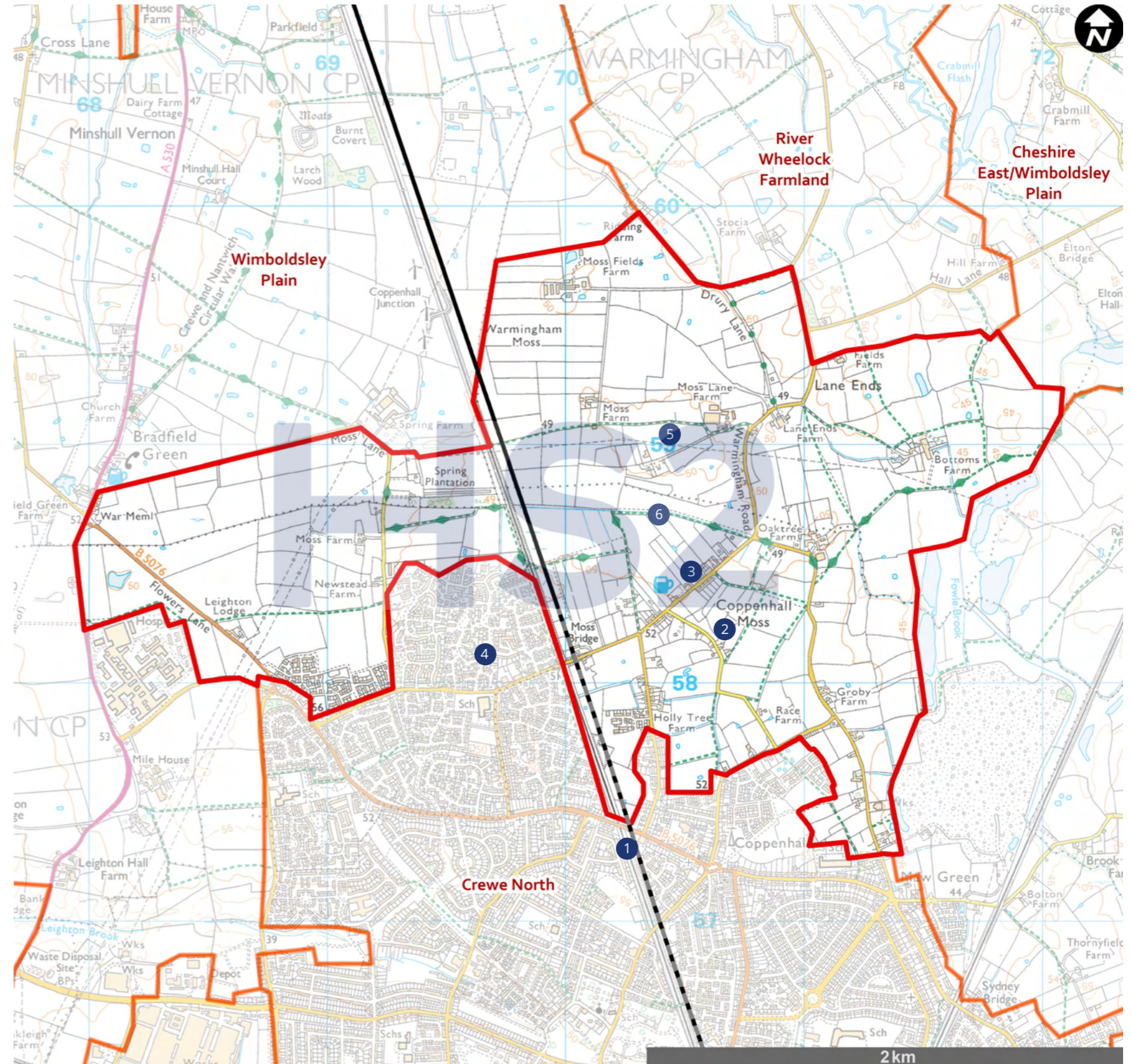
The Crewe Fringe Mosslands LCA is a predominantly flat, agricultural landscape of arable and pastoral farmland forming the northern hinterland of Crewe. It is an area of former mosslands, covered by five separately identified mosses of Warmingham, Minshull, Leighton, Coppenhall and Maplin's. The field pattern ranges from distinct, east-west linear arrangements of enclosure at Warmingham, to a mix of linear enclosure and medieval field pattern around Coppenhall Moss. Field boundaries vary from well-maintained to poorly managed and gapped hedges with frequent mature trees, creating a less well defined sense of enclosure.

The WCML is orientated south-north across the open farmland to the north of Crewe. Historic built development at Coppenhall Moss broadly follows the line of Warmingham Road, including properties of varying age constructed of red brick and white painted render. Traditional red brick farmhouses with brick and steel farm buildings are scattered across the area. In contrast, the residential expansion of Crewe has replaced areas of former mossland at Leighton, with defined woodland buffers that create a distinct settlement edge. Residential expansion continues to encroach on the mossland bordering Crewe, with new housing developments occupying former agricultural land near Moss Lane, Broughton Road and Stoneley Road. The area is well served by local footpaths and the promoted Crewe and Nantwich Circular Walk runs east-west across the area.



Key landscape characteristics

A flat mossland landscape, comprising a mix of rectilinear and medieval field patterns, with distinct differences to the Cheshire Plain landscape to the north. The area is severed by linear transport features and crossed by power lines. Views across the landscape are interrupted and enclosed by a succession of managed and sometimes poorly maintained hedgerows.



- Route on surface
- LCA boundary
- - - Route in tunnel
- 1** WCML
- 2** Coppenhall Moss
- 3** Warmingham Road
- 4** Leighton
- 5** Moss Lane
- 6** Crewe and Nantwich Circular Walk

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Key landscape value attributes

Key landscape value attributes of the Crewe Fringe Mosslands LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

The aesthetic value of this urban fringe farmland is variable. It is an agricultural landscape noticeably interrupted by the presence of transport corridors and overhead power lines, with an encroaching urban fringe that is gradually redefining the urban and rural landscape interface. It often has a degraded character, where mossland is typically bounded by scrub vegetation and overgrown hedgerow.



Cultural, social and historic

Some of the enclosed mosslands remain visible as linear fields to the east of Moss Bridge. Although the area is severed by WCML, this urban fringe landscape is well served by local footpaths, including the promoted Crewe and Nantwich Circular Walk.

Key landscape characteristics susceptible to the AP1 revised scheme



Overall landscape value

The surviving rectilinear mossland plots enclosure by hedges provide a cultural link to the former extent of the mosses, retaining a limited sense of place around Coppenhall. However, the appearance of these urban fringe farmlands varies in terms of their land quality and maintenance, the proximity of the railway corridor and encroachment from residential expansion. All of these modern influences serve to erode the overall sense of landscape quality and past associations. The urban fringe farmland is locally accessible from the town and a network of interconnected public rights of way (PROW) including the promoted Crewe and Nantwich Circular Walk. Public open space surrounding residential development provides links with this wider network, although there are no additional facilities or recreational opportunities. The value of this LCA is therefore **medium-low**.

Overall landscape susceptibility

The area already incorporates a length of WCML that runs south to north across the plain. The distinctive linear field enclosures contribute to a sense of place and historic continuity. The succession of hedges and overgrown field vegetation reduces some of the perceived openness of the landscape across this flat terrain. The landscape therefore has a **medium-low** susceptibility to change resulting from the AP1 revised scheme.

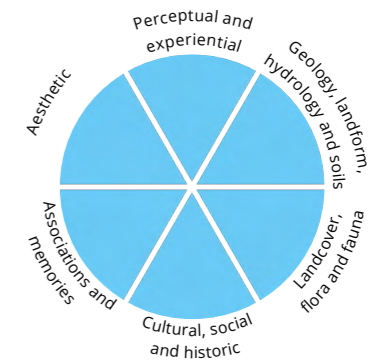
Future baseline

There are two committed development (15/1552N and 16/2373N) for the construction of up to 99 and 400 dwellings respectively, both to the north of Crewe which will change the character of small parts of this LCA from rural farmland to residential. However, this will not affect the susceptibility of the LCA to the AP1 revised scheme.

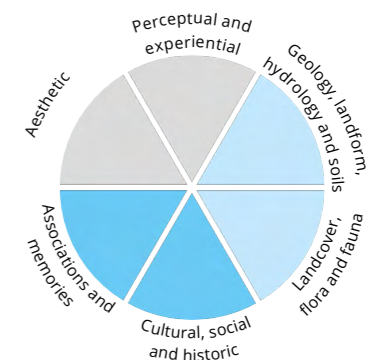
Overall landscape sensitivity

The scenic quality of the area is diminished by the presence of WCML, the often overgrown and intermittent nature of hedges, scrub vegetation and by its proximity to the expanding residential edge of Crewe. The resulting sensitivity of this LCA is **medium-low**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The main ES reported a **moderate** adverse (significant) effect. This would be due to construction activity associated with Crewe tunnel north porous portal, Crewe tunnel north portal building, Crewe north portal (retained cutting) and major utility diversion works. During construction, the AP1 revised scheme will not alter the magnitude of change for Crewe Fringe Mosslands LCA. The AP1 amendment additional land temporarily required for modifications to Warmingham Road and Groby Road junction (AP1-001-005) will slightly change landscape effects for this LCA. This is because the alterations will result in perceptible but localised changes due to the removal of roadside trees. The AP1 amendment extension of Crewe tunnel (AP1-001-001) will affect landscape character during construction. Although the location of Crewe tunnel north and the railway systems compound will be made larger and will be moved to an area north of Parkers Road, the nature of the effects on the parts of the LCA affected by the AP1 revised scheme will be comparable to those described within the main ES. Warmingham Moss satellite compound will be unchanged. The AP1 amendment AP1-001-001, will therefore give rise to a different significant effect for Crewe Fringe Mossland LCA. However, the level of significance of the effect will remain as reported in the main ES.

Effects will remain **moderate adverse (significant)**.

Operation year 1

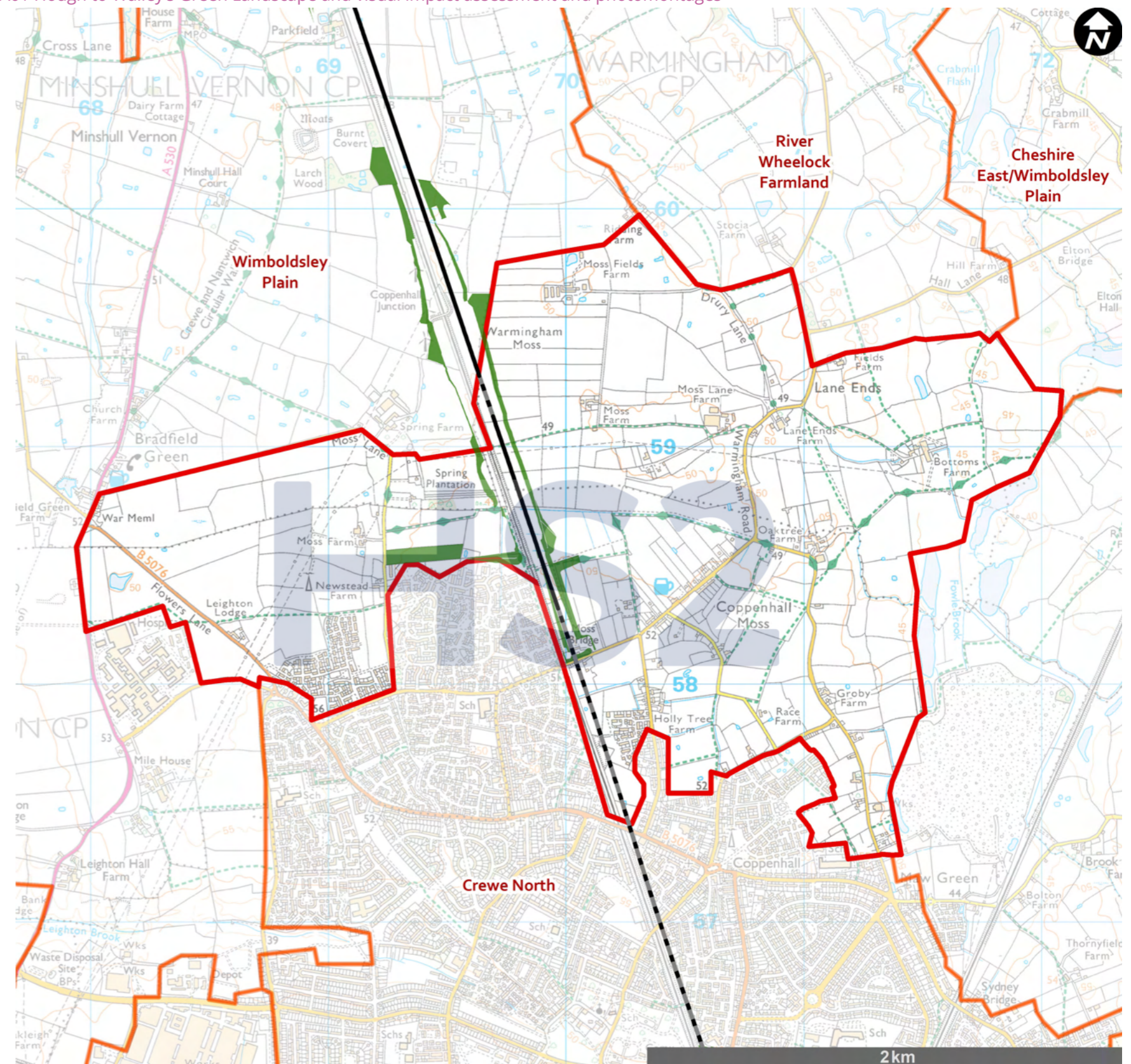
The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the presence of the Crewe tunnel north portal, Copenhall Moss cutting and WCML spur (northbound and southbound) which were largely in keeping with the character of the LCA due to the proximity to the WCML. At year 1, the AP1 amendments change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-004) and additional land temporarily required for modifications to Warmingham Road and Groby Road junction (AP1-001-005), will slightly change landscape effects for this LCA. This is because the alterations will result in perceptible but localised changes. The additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will relocate the Crewe tunnel north portal, headhouse and parking infrastructure north of Parkers Road but the scale and nature of the effects will be comparable to those described in the main ES. Therefore, the AP1 amendments will give rise to a different effect for this LCA. However, the level of significance of the effect will remain as reported in the main ES.

Effects will remain **minor adverse (non-significant)**.

Operation year 15

The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the presence of new structures and landform associated with the original scheme becoming softened and more integrated into the landscape as mitigation planting matured. At year 15, the AP1 amendments AP1-001-001, AP1-001-004 and AP1-001-005 will slightly change the landscape effects for this LCA. This is because maturing mitigation planting associated with the AP1 amendments will result in perceptible but localised changes. The scale and nature of the effects will be comparable to that described within the main ES. Therefore, the AP1 amendments will give rise to a different effect for this LCA. However, the level of significance of the effect will remain as reported in the main ES.

Effects will remain **minor adverse (non-significant)**.



Operation year 30

The main ES reported a **minor** adverse (non-significant) effect. This would be a result of the further integration of the original scheme into its landscape context by maturing mitigation planting. At year 30, the AP1 amendments AP1-001-001, AP1-001-004 and AP1-001-005 will slightly change landscape effects for this LCA. This is because the AP1 amendments will be further integrated into the landscape by maturing mitigation planting. The changes to the location of the Crewe north portal and headhouse will result in perceptible but localised changes. The scale and nature of the effects will be comparable to that described within the main ES. Therefore, the AP1 amendments will give rise to a different effect for this LCA. However, the level of significance of the effect will remain as reported in the main ES.

Effects will remain **minor adverse (non-significant)**.

Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

Operation: There are no developments which will result in cumulative operation effects.

No cumulative effects during construction and operation.

Wimboldsley Plain LCA

Landscape character baseline description

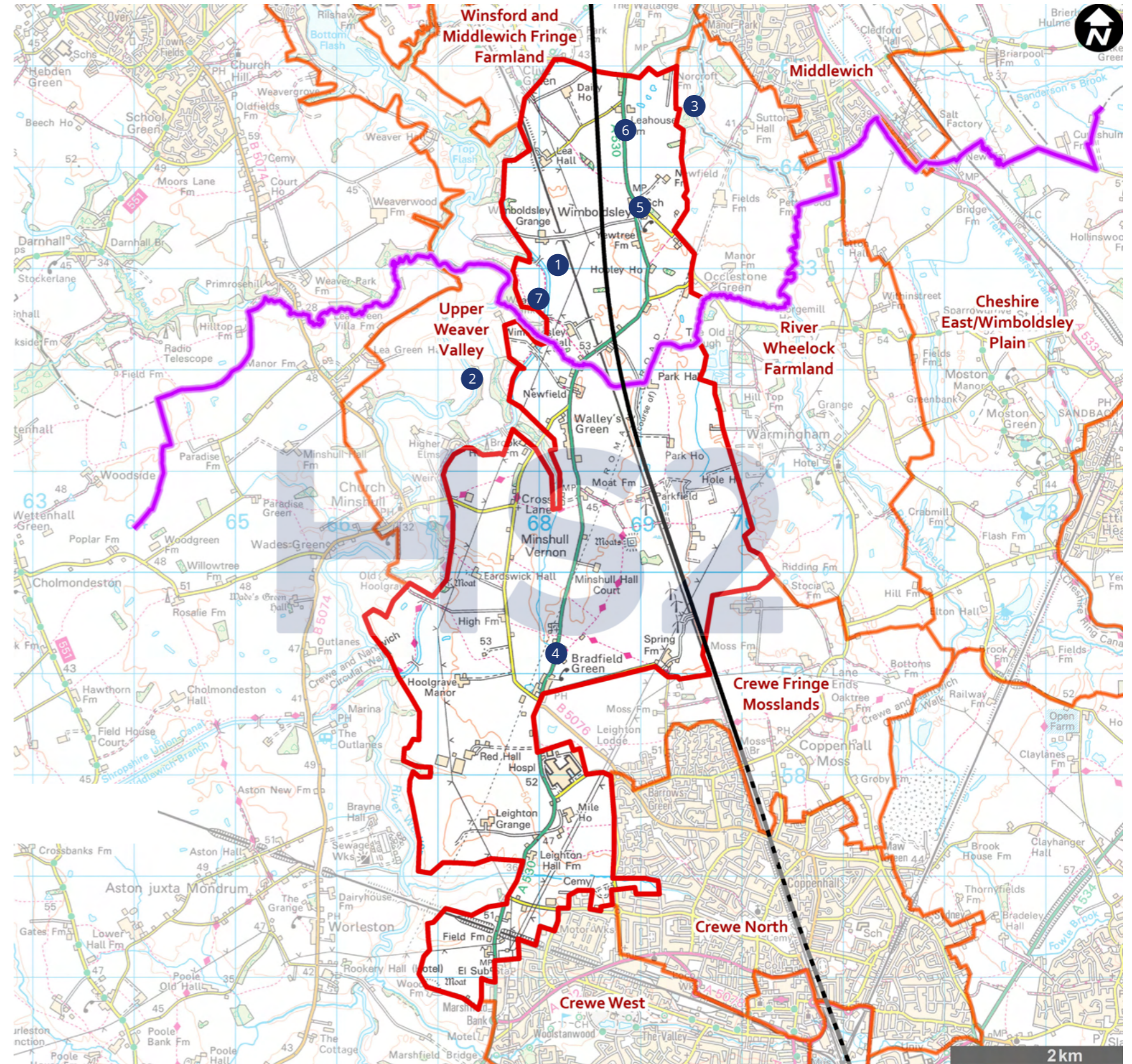
This is an area of landscape that straddles both the Hough to Walley's Green area (MA01) and Wimboldsley to Lostock Gralam area (MA02). The Wimboldsley plain is characterised by medium and large fields of a semi-regular pattern, typically bounded by well-maintained hedges with mature trees dating from the post-medieval period. Some of the larger fields have resulted from the agglomeration of several smaller fields. Large, isolated field trees and occasional small coppices punctuate the open farmland, often coinciding with marl pits or ponds. The incised valley of the River Weaver to the west is well-wooded and distinctively different in character to the Wimboldsley plain. Eastwards, towards the River Wheelock, the landform becomes undulating, with a tighter and more irregular pattern of hedged fields and frequent mature trees.

The settlement pattern is one of scattered properties and hamlets, the latter including Bradfield Green, Walley's Green and Wimboldsley, all located along the A530 Middlewich Road/Nantwich Road. Large, individual estate houses and farms are characteristic. The Shropshire Union Canal (Middlewich Branch), located along the margins of the Weaver Valley, is a historic feature now valued for its recreational use. Locally prominent infrastructure includes WCML on embankment, the A530 Nantwich Road and several overhead power lines, broadly orientated south-north. Such infrastructure detracts locally from an otherwise rural, tranquil landscape. The flat terrain combines with a succession of field hedgerows and trees to limit wider visibility at eye level, while the hills of the Peak District and ridge of the Peckforton Hills form distant backdrops.



Key landscape characteristics

A coherent, agricultural landscape of broad and flat hedge-lined fields and large farms, regularly intersected by transport corridors and overhead power lines which interrupt an otherwise tranquil, sparsely populated area of countryside. There is a sense of historic continuity derived from local architecture and land use, although eroded somewhat by the intensification of farming practices.



- Route on surface
- LCA boundary
- Community area
- Route in tunnel
- 1 WCML
- 2 River Weaver
- 3 River Wheelock
- 4 Bradfield Green
- 5 Wimboldsley
- 6 A530 Nantwich Road
- 7 Shropshire Union Canal Middlewich Branch

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Key landscape value attributes

Key landscape value attributes of the Wimboldsley Plain LCA are set out below, interpreting landscape baseline information on the previous page and drawing on findings from field surveys.



Aesthetic

This is an open agricultural landscape where well-maintained hedgerows and mature trees often combine to limit wider visibility at eye level but where distantly seen hills give a more expansive quality. The Shropshire Union Canal (Middlewich Branch) is a distinctive, embedded feature of the landscape along with large farm properties that convey the local vernacular. Detracting elements include the WMCL, the A530 Nantwich/Middlewich Road and overhead power lines.



Cultural, social and historic

The Shropshire Union Canal (Middlewich Branch) has a sense of historic continuity and is now a highly valued recreational resource. The promoted Crewe and Nantwich Circular Walk follows the canal towpath in part and connects with a network of local footpaths throughout the area.

Key landscape characteristics susceptible to the AP1 revised scheme



Overall landscape value

This is a flat agricultural plain between two river valleys with well-maintained hedgerows and some small pockets of woodland. Occasional views to a low skyline of surrounding hills emphasise the low-lying terrain. There is some sense of localised seclusion and enclosure where hedgerows form visual screens. The tranquillity of the area is disturbed by WMCL, the A530 Nantwich/Middlewich Road and overhead power lines.

The presence of the canal and a series of listed buildings provides a sense of historic continuity within this generally scenic landscape, which also exhibits some detracting infrastructure. The value of this LCA is therefore **medium**.

Overall landscape susceptibility

The terrain is flat, although the largely agricultural land pattern with its succession of field boundary hedges creates a sense of enclosure and a screening of built features. The cultural associations and recreational use increase the vulnerability of the landscape to change of the type proposed. The landscape therefore has a **medium** susceptibility to change resulting from the AP1 revised scheme.

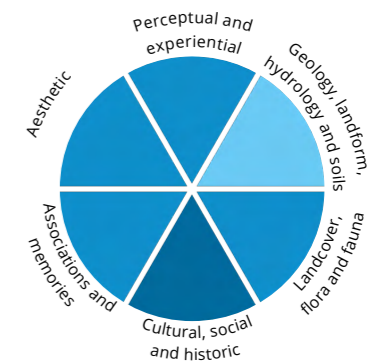
Future baseline

There are no committed developments that will affect the landscape susceptibility to the original scheme.

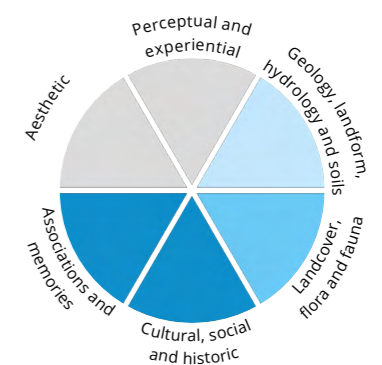
Overall landscape sensitivity

The scenic quality, sense of historic continuity and recreational value of the plain is partially eroded by the presence of transport and energy infrastructure which results in the sensitivity of this LCA being **medium**.

Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction

The SES1 reported a **major** adverse (significant) effect within the Wimboldsley Plain LCA which spans both the Hough to Walley's Green area (MA01) and Wimboldsley to Lostock Gram area (MA02). This LCA would be directly affected by large-scale construction works, including Warmingham Moss viaducts (part of the Crewe Northern Connection) Parkfield access realignment, major utility diversions, Crewe North RSD and A530 Nantwich Road and Clive Green Lane realignments. During construction, the AP1 amendments, additional land permanently required for the provision of landscape mitigation planting at Wimboldsley (AP1-002-002) and additional land permanently required for the provision of landscape earthworks adjacent to Coppenthal Moss north embankment (AP1-001-007) and minor earthwork changes associated with the change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005) will not change landscape effects for this LCA. This is because the AP1 amendments will be barely discernible in the context of the SES1 scheme as reported in the SES1. Therefore, the AP1 amendments will not give rise to a different significant effect for this LCA and the level of significance of the effect will remain as reported in the SES1.

Effects will be **major adverse (significant)**.

Operation year 1

The SES1 reported a **major** adverse (significant) effect. This would be a result of the introduction of large-scale infrastructure including Warmingham Moss northbound and southbound viaducts (part of the Crewe Northern Connection). Elements of the scheme located in the Wimboldsley to Lostock Gram area (MA02) included A530 Nantwich Road Overbridge and Wimboldsley Hall accommodation Overbridge as well as Crewe North RSD which introduced noticeable alterations landscape character. At year 1, the AP1 amendments will not change landscape effects for this LCA. This is because the AP1 amendments including modifications to earthworks and hedgerow planting will be barely discernible in the context of the SES1 scheme. Therefore, the AP1 amendments will not give rise to a different significant effect for this LCA and the level of significance of the effect will remain, as reported in the SES1.

Effects will be **major adverse (significant)**.

Operation year 15

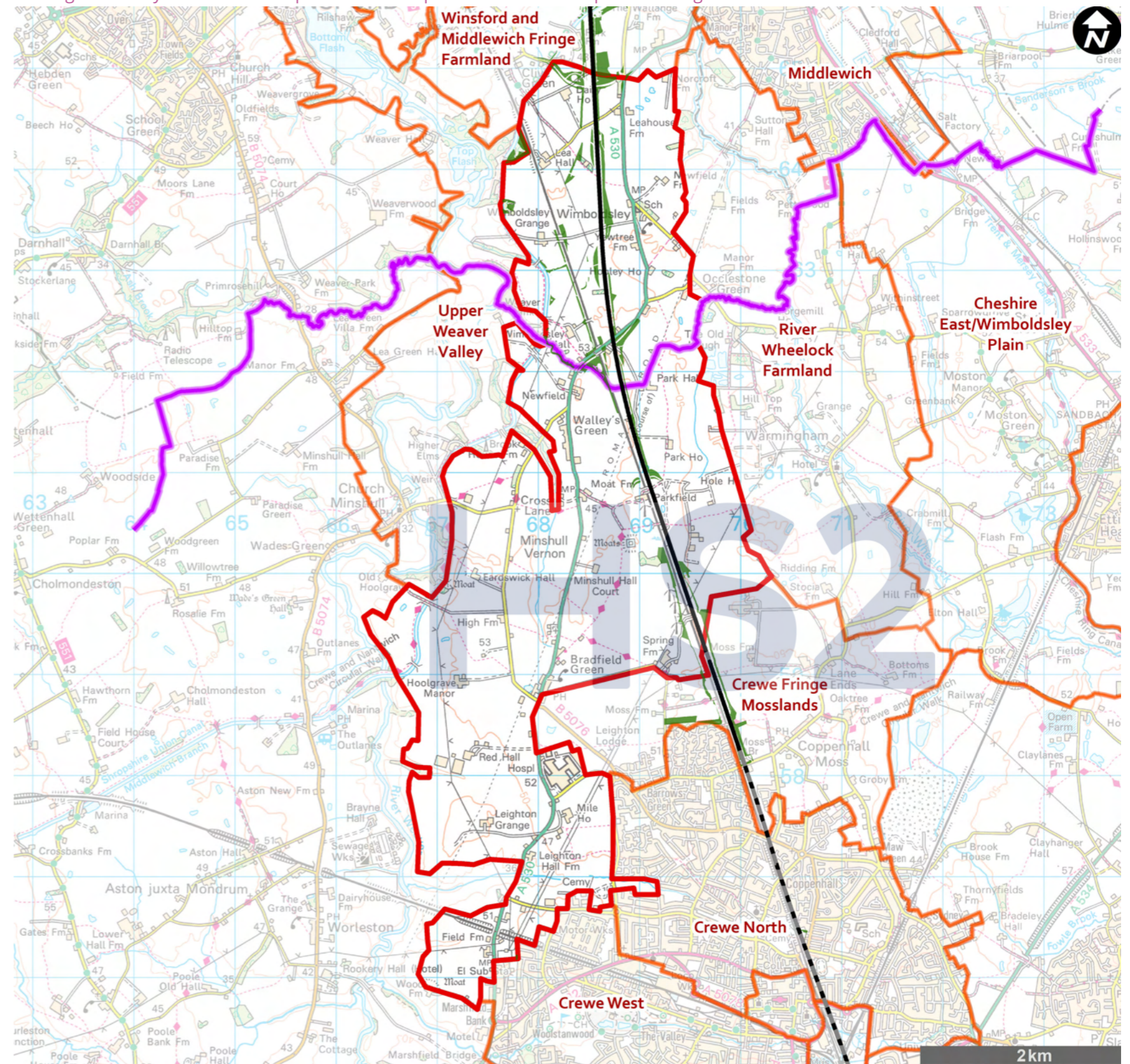
The SES1 reported a **major** adverse (significant) effect. This is a result of the presence of large-scale infrastructure remaining at variance with the character of the landscape, despite the maturing mitigation planting, assisting the integration of elements of the original scheme. At year 15, the AP1 amendments will not change landscape effects for this LCA. This is because, the modifications to earthworks and hedgerow planting, will be barely discernible in the context of the SES1 scheme. Therefore, the AP1 amendments will not give rise to a different significant effect for this LCA and the level of significance of the effect will remain, as reported in the SES1.

Effects will be **major adverse (significant)**.

Operation year 30

The SES1 reported a **major** adverse (significant) effect. This is a result of the presence of large-scale infrastructure remaining at variance with the character of the landscape, despite the maturing mitigation planting, assisting the integration of elements of the original scheme. At year 30, the AP1 amendments will not change landscape effects for this LCA. This is because the AP1 amendments including modifications to earthworks and hedgerow planting will be barely discernible in the wider context of the SES1 scheme. Therefore, the AP1 amendments will not give rise to a different significant effect for this LCA and will not change the level of significance of the effect will remain, as reported in the SES1.

Effects will be **major adverse (significant)**.



Cumulative assessment (construction and operation)

Construction: There are no developments which will result in cumulative construction effects.

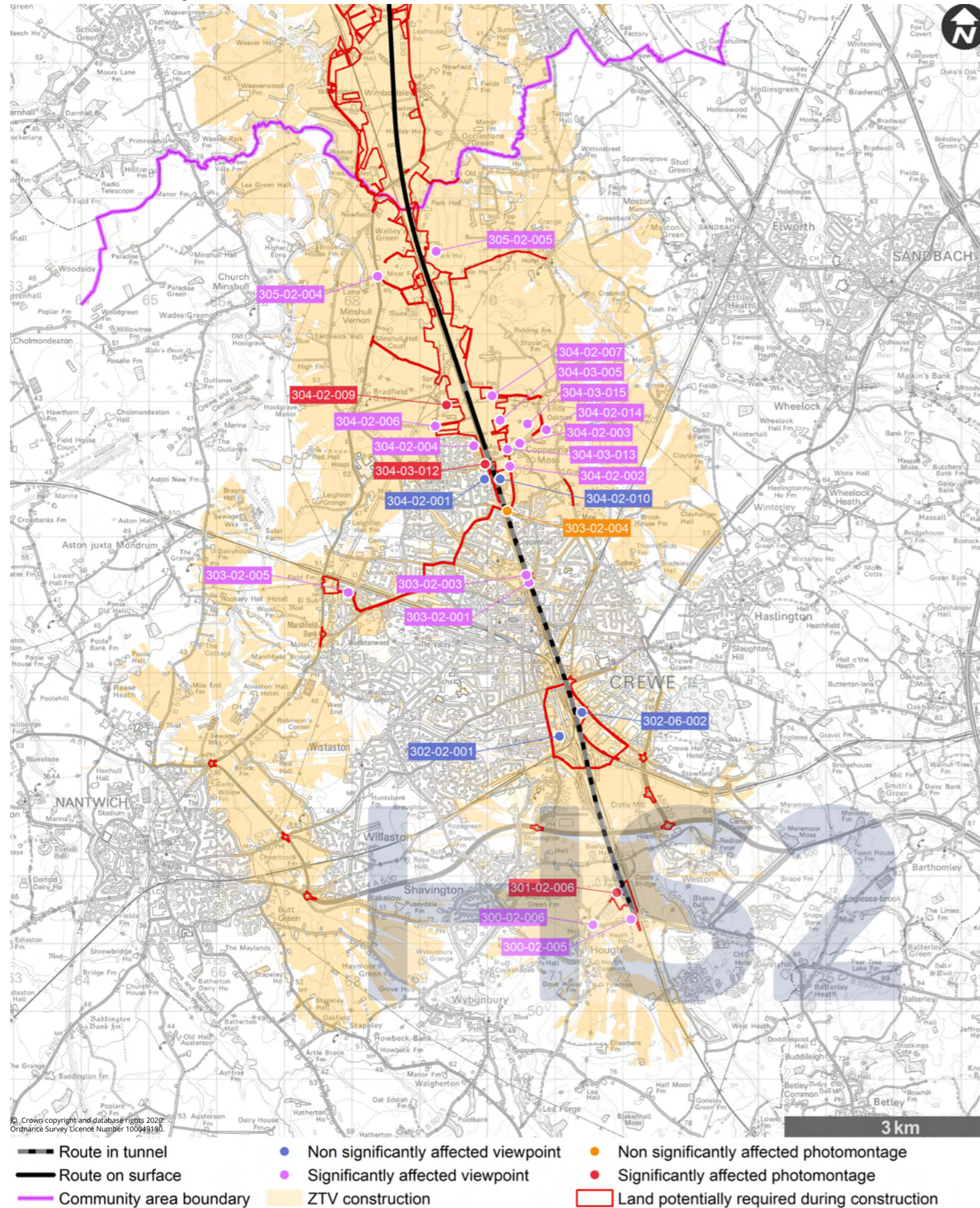
Operation: There are no developments which will result in cumulative operation effects.

No cumulative effects during construction and operation.

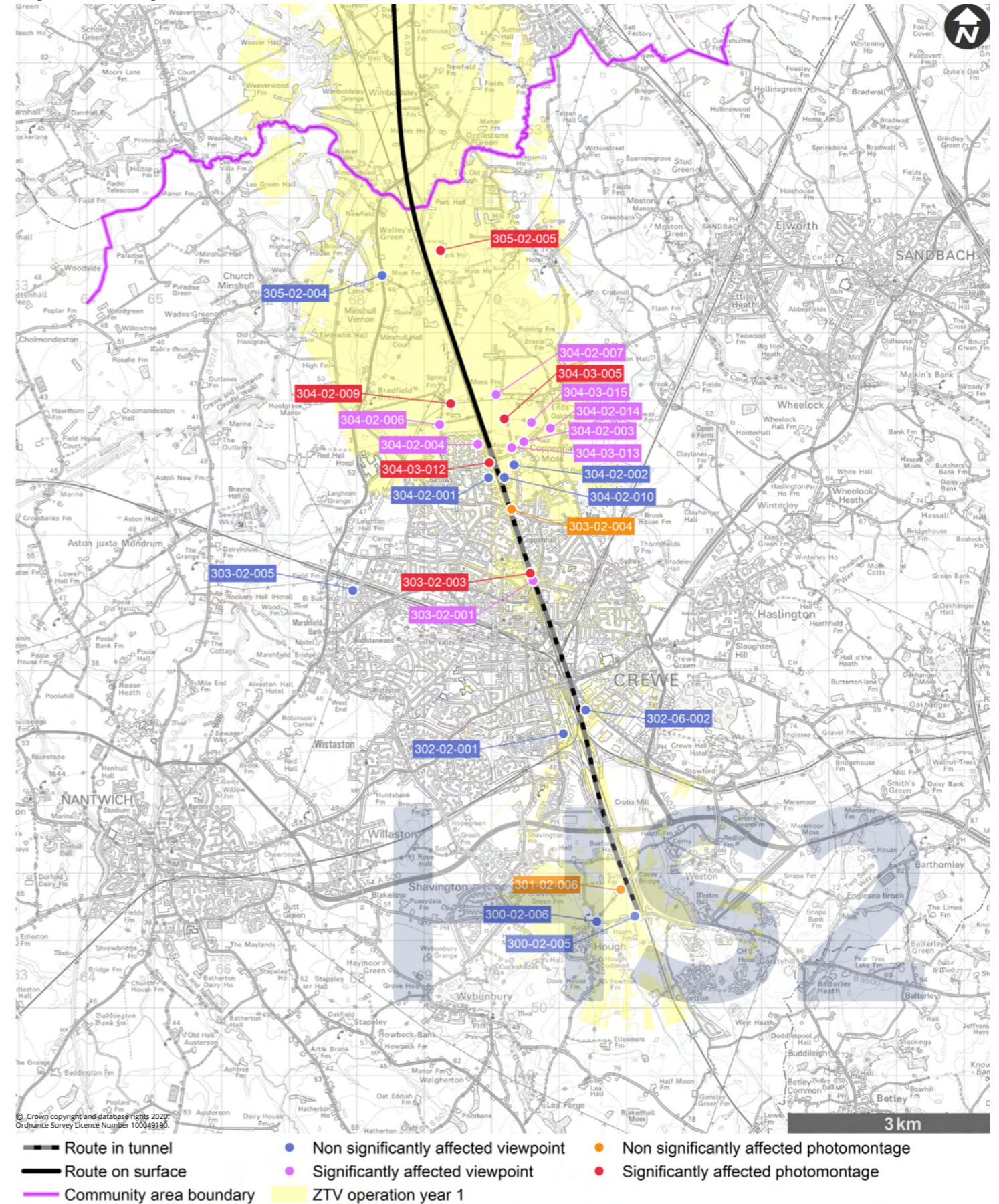
4.2 Visual assessment

Overview of viewpoints and photomontages in the community area affected by AP1 amendments

Construction phase



Operation phase



Viewpoint 300-02-005: view north from Newcastle Road

This viewpoint is representative of views experienced by residents of Newcastle Road.

Winter view (baseline)

Date taken: 30/11/2020 (stitched panorama)



Summer view (baseline)

Date taken: 28/09/2020 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	372105, 351353	
Value of the viewpoint:	This viewpoint has a medium value, being typical of views of the treed landscape to the south of Crewe.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme. There is a high susceptibility to visual change arising from the construction and operation of the AP1 revised scheme.	Medium-High



Viewpoint 300-02-005: view north from Newcastle Road

Visual baseline description

Winter	This viewpoint is located on Newcastle Road, west of WCML. In the near distance the view is partially obstructed for some residents by intervening garden vegetation and field boundary trees north of the road. From properties to the south of Newcastle Road, lighting columns as well as wooden poles carrying an electricity line and signage are notable in some views.
	In the middle distance are large arable fields and disused farm buildings. WCML overhead line equipment and existing train movements are prominent features.
Summer	The far distance is formed by mature trees along field boundaries extending roadside vegetation along Casey Lane.
Night-time	In summer, garden vegetation partially screens visibility north for some residents, although open views remain across the large arable fields with managed hedgerows. WCML overhead line equipment and existing train movements are noticeable to the north and east.
Construction	Newcastle Road comprises street lighting in the near distance, however other rural roads within the field of view are unlit. Other night-time lighting within the view is limited to individual or isolated properties. The town of Crewe, approximately 2.5km to the north, contributes to a distant far distance skyglow.

Future baseline description

Construction (2025)	At the commencement of construction works for the AP1 revised scheme (2025) HS2 Phase 2a will have been substantially constructed. The main civils work for both Phase 2a and Phase 2b of HS2 will overlap. HS2 Phase 2a elements include Newcastle Road overbridge realignment and landscape mitigation, including earthworks west of the WCML. The presence of the Newcastle Road overbridge will be prominent in the near to middle distance, foreshortening and partly screening views north and forming a new skyline as it rises to cross the WCML and line of the HS2 Phase 2a route. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.
Operation (2038)	In operation (2038) the growth of mitigation planting for HS2 Phase 2a will provide some screening to lower elements of the HS2 Phase 2a. However, the Newcastle Road overbridge will remain prominent in the near to middle distance, foreshortening views and partly screening views north. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a moderate adverse (significant) effect. This would be due to construction activity associated with HS2 Phase 2b and consequently residents of Newcastle Road experienced a noticeable change to the composition of near distance and middle-distance views, although the works would be partially screened by intervening vegetation and a combination of earthworks and the realigned Newcastle Road. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change the visual effect at this viewpoint. Construction activity associated with the increase in length of the Crewe tunnel south porous portal will be screened by existing landscape features. The AP1 amendment will not be readily perceptible for residents on Newcastle Road in the context of the construction activity associated with the original scheme, visible in the middle-distance and beyond intervening garden vegetation and the realigned Newcastle Road. The AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Construction night-time	The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of night-time lighting associated with Crewe tunnel south portal satellite compound which introduced new lighting elements visible above existing intervening vegetation within views experienced by residents of Newcastle Road. During construction, the AP1 amendment will not change the visual effect at this viewpoint, because the night-time lighting requirements associated with the compound, will not change and will remain perceptible in the middle distance. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Construction cumulative	The main ES reported a major adverse significant cumulative effect. This would be due to the construction of HS2 Phase 2a, including Newcastle Road realignment, overbridge and associated earthworks, the presence and use of satellite compounds and movement of construction vehicles (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The combination of HS2 Phase 2a and the AP1 revised scheme during construction resulted in a major adverse cumulative effect for residents of Newcastle Road. The AP1 amendment will not change visual effects at the viewpoint because construction activity will be screened by existing landscape features in the near distance. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a minor adverse (non-significant) effect. This would be due to the introduction of infrastructure elements including additional overhead line equipment and train movement viewed in the context of the WCML and the presence of intervening vegetation and the realigned Newcastle Road partially screening views of Crewe tunnel south portal building. At year 1, the AP1 amendment will not change the visual effect at his viewpoint, because the increased length of the Crewe tunnel south porous portal will not be discernible within views experienced by residents of Newcastle Road and within the context of substantially screened or filtered views of Crewe tunnel south portal, associated train movements and overhead equipment. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the growth of mitigation planting which combined with landscape earthworks would successfully screen views of train movements, parts of the overhead line equipment and Crewe tunnel south portal building in the middle-distance for residents of Newcastle Road. At year 15, the AP1 amendment will not change the visual effect at this viewpoint because the increased length of the Crewe tunnel south porous portal will not be discernible within middle-distance views. Therefore, the AP1 amendment will not give rise to a different effect and will not change the level of significance of the effect reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the greater maturity of mitigation planting which combined with landscape earthworks would provide denser screening to views of train movements, parts of the overhead line equipment and Crewe tunnel south portal building in the middle-distance for residents of Newcastle Road. At year 30, the AP1 amendment will not change the visual effect at this viewpoint because the AP1 amendment will not be perceptible in middle distance views. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		At year 1, the main ES reported a major adverse significant cumulative effect. This would be due to the presence and operation of HS2 Phase 2a being visible across a large proportion of the view (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005) and the combination of the SES1 scheme during operation for residents of Newcastle Road. From year 15 onwards, the cumulative effect of operation of HS2 Phase 2a and the SES1 scheme would reduce to minor adverse (non-significant) at year 15 and negligible at year 60 due to the effectiveness of the mitigation planting. The AP1 amendment will not change the visual effect at this viewpoint. Therefore, the AP1 amendment will not give rise to a different significant cumulative effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)

Viewpoint 300-02-006: view north-east from Newcastle Road, Hough

This viewpoint is representative of views experienced by residents of Newcastle Road and Back Lane and recreational users of Footpath Chorlton 8/1 and Regional Cycle Route 70.

Winter view (baseline)

Date taken: 30/11/2020 (stitched panorama)



Summer view (baseline)

Date taken: 28/09/2020 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	371621, 351262	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative and typical of the Cheshire Plain landscape to the south of Crewe.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 300-02-006: view north-east from Newcastle Road, Hough

Visual baseline description

Winter	<p>The near distance comprises Newcastle Road with a mown verge and street lighting columns. Beyond the road are large arable fields bounded by low managed hedgerows including mature trees. In the middle distance, the route of Casey Lane is marked by low, managed hedgerows with mature hedgerow trees.</p> <p>The far distance is formed by the network of field boundary vegetation with mature deciduous trees seen against the skyline.</p>
Summer	<p>Visibility across the fields is relatively open apart from mature hedgerow trees which filter views north. Individual field trees are more distinctive in summer.</p>
Night-time	<p>Street lighting on the rural section of Newcastle Road is visible to the east. Other night-time lighting is limited to individual properties and filtered through intervening vegetation. Lighting within Hough to the west, contributes to a far distance skyglow.</p>

Future baseline description

Construction (2025)	<p>At the commencement of construction works for the AP1 revised (2025) HS2 Phase 2a will have been substantially constructed. The main civils work for both Phase 2a and Phase 2b of HS2 will overlap. HS2 Phase 2a elements include Newcastle Road overbridge realignment and landscape mitigation, including earthworks west of the WCML. The presence of the Newcastle Road overbridge will be prominent in the near to middle-distance, foreshortening and partly screening views north and forming a new skyline as it rises to cross the WCML and line of the HS2 Phase 2a route. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.</p>
Operation (2038)	<p>In operation (2038) the growth of mitigation planting for HS2 Phase 2a will provide some screening to lower elements of the HS2 Phase 2a. However, the Newcastle Road overbridge will remain prominent in the near to middle distance, foreshortening views and partly screening views north. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.</p>

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	<p>The main ES reported a moderate adverse (significant) effect. This would be due to the presence of construction activity including construction traffic, taller elements within Crewe tunnel south portal satellite compound and construction activities for Crewe tunnel south portal and portal building. These would be visible in the far distance, partially filtered and screened by intervening natural and man-made landform and vegetation. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change visual effects at this viewpoint, because views of the construction activity in the far distance, associated with the increase in length of the Crewe tunnel south porous portal, will be partially screened by existing landscape features. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.</p>	Moderate adverse (significant)
	Construction night-time	<p>adverse (non-significant) effect. This would be due to the presence of lighting associated with construction traffic and taller lit elements within the Crewe tunnel south portal satellite compound. These elements would be visible in middle-distance views. During construction, the AP1 amendment will not change the visual effect at this viewpoint, because no new construction phase light sources will be introduced into views. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.</p>	Minor adverse (non-significant)
	Construction cumulative	<p>The main ES reported a major adverse (significant) cumulative effect. Construction of HS2 Phase 2a, including Newcastle Road realignment, overbridge and associated earthworks, the presence and use of satellite compounds and movement of construction vehicles resulted in a major adverse significant effect on residents (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005). The combination of HS2 Phase 2a and the AP1 revised scheme during construction resulted in a major adverse cumulative effect on views. During construction the AP1 amendment will not change the cumulative visual effect at this viewpoint because the AP1 amendment will be barely perceptible in the far distance, as it will be partially filtered and screened by intervening natural and man-made landform and vegetation. Therefore, the AP1 amendment will not give rise to a different significant cumulative effect and the level of significance of the effect will remain as reported in the main ES.</p>	Major adverse (significant)
		Permanent effects during operation	Significance of effect
Year 1	Winter	<p>The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of taller elements of the Crewe tunnel south portal building and telecommunications mast within views along with the Crewe tunnel south porous portal partially screened by intervening landform and vegetation. At year 1, the AP1 amendment will not change the visual effect at this viewpoint because views of the alterations to the Crewe Tunnel South Portal, associated structures and cutting will be largely filtered and screened by intervening hedgerows, the realigned Newcastle Road and the slight rise in the existing landform from Newcastle Road. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.</p>	Minor adverse (non-significant)
	Night-time	<p>The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.</p>	Not assessed
Year 15	Summer	<p>The main ES reported a negligible (non-significant) effect. This would be due to the presence of maturing mitigation planting alongside the realigned Newcastle Road and hedgerows associated with HS2 Phase 2a which would filter near and middle-distance views for receptors, together with mitigation planting on landscape earthworks west of the Crewe tunnel south portal building in the far distance. At year 15, the AP1 amendment will not change the visual effect at this viewpoint, because the AP1 amendment will not be readily perceptible beyond existing vegetation and the establishing mitigation planting associated with the original scheme. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.</p>	Negligible (non-significant)
	Night-time	<p>The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.</p>	Not assessed
Year 30	Summer	<p>The main ES reported a negligible (non-significant) effect. This would be due to the screening effect of maturing mitigation planting alongside the realigned Newcastle Road and west of the Crewe tunnel south portal building and rescue area in the far distance. At year 30, the AP1 amendment will not change the visual effect at this viewpoint because the AP1 amendment will not be discernible beyond the maturing mitigation planting and existing vegetation. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.</p>	Negligible (non-significant)
	Night-time	<p>The night-time view in operation is not assessed as there is no requirement for continuous operational lighting in this location.</p>	Not assessed
	Operation cumulative	<p>At year 1, the main ES reported a moderate adverse (significant) cumulative effect. This would be due to the presence and operation of HS2 Phase 2a and the new landforms appearing as uncharacteristic features visible across a large proportion of the view (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005) together with the additional elements introduced in the original scheme. In year 1, the combination of HS2 Phase 2a and the original scheme during operation resulted in moderate adverse significant cumulative effects. Effects reduced to minor adverse (non-significant) at year 15 and year 30 due to the effectiveness of the mitigation planting. During operation, the AP1 amendment, tunnel realignment and extension (AP1-001-001) will not change the visual effect at this viewpoint. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.</p>	Moderate adverse (significant)

Viewpoint 301-02-006: view south-east from Casey Lane

This viewpoint is representative of views experienced by residents of Casey Lane and Sutch Farm and users of Footpath Basford 10/2, 8/1 and 7/1.

Winter view (baseline)

Date taken: 14/01/2019 Time taken: 14:00



Summer view (baseline)

Date taken: 13/08/2018 Time taken: 14:33



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	371911, 351752	
Elevation:	63.352m AOD.	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative and typical of the Cheshire Plain landscape to the south of Crewe.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 301-02-006: view south-east from Casey Lane

Visual baseline description

Winter	The near distance comprises Casey Lane, with low, managed hedgerows and mature hedgerow trees bordering flat arable fields beyond. In the middle-distance are fields with managed hedgerows and occasional hedgerow trees. Footpath Basford 5/1 crosses the fields from near to middle-distance. The residential properties have limited garden vegetation filtering views south. To the east, in the middle-distance, the presence of the WCML is marked by the top of existing overhead line equipment and train movements, whilst east of WCML and north of Newcastle Road, large commercial buildings and masts are visible. A short belt of conifer woodland east of WCML, together with a line of mature poplars on the Heath Farm access track are distinctive features. The far distance is formed by the network of field vegetation seen against the skyline and distant hills are perceptible in between short gaps in the vegetation. Views south from Sutch Farm are partially filtered by garden vegetation.
Summer	In summer, roadside hedgerow and crop growth in the fields limit the extent of visibility beyond, dependant on crop type and stage of growth. Individual field trees are more distinctive in summer. The tops of mature hedgerow trees east of WCML and of the distinctive poplars along Heath Farm access track remain visible, as existing train movements and the tops of overhead line equipment along the WCML become screened by crop growth.
Night-time	Street lighting on the rural section of Newcastle Road is visible to the south. Casey Lane is unlit. Other night-time lighting within the view is limited to individual or isolated properties and views are filtered through intervening vegetation. The settlement of Chorlton approximately 1km to the south, contributes to a far distance skyglow.

Future baseline description

Construction (2025)	At the commencement of construction works for the AP1 revised scheme (2025) HS2 Phase 2a will have been substantially constructed. The main civils work for both Phase 2a and Phase 2b of HS2 will overlap. HS2 Phase 2a elements include Newcastle Road overbridge realignment and landscape mitigation, including earthworks west of the WCML. The presence of the Newcastle Road overbridge will be prominent in the near to middle-distance, foreshortening and partly screening views north and forming a new skyline as it rises to cross the WCML and line of the HS2 Phase 2a route. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.
Operation (2038)	In operation (2038) the growth of mitigation planting for HS2 Phase 2a will provide some screening to lower elements of the HS2 Phase 2a. However, the Newcastle Road overbridge will remain prominent in the near to middle-distance, foreshortening views and partly screening views north. The presence of HS2 Phase 2a will not affect the susceptibility of the receptors to the AP1 revised scheme.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the introduction of large-scale construction works, across the majority of near and middle-distance views including construction of Crewe tunnel portal building and rescue area and construction activity within Crewe tunnel south portal satellite compound. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change the visual effect at this viewpoint because the AP1 amendment and associated construction activity will be screened from view by hoardings and taller elements within the Crewe tunnel south portal satellite compound in the middle-distance which will limit the perception of construction activity beyond. Therefore, the AP1 amendment will not give rise to a different significant effect and will not change the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The main ES reported a major adverse (significant) effect. This would be due to the presence of night-time lighting for Crewe tunnel south portal satellite compound and construction of Crewe tunnel south portal building which would introduce localised areas of lighting into near distance views. During construction the AP1 amendment will not change the visual effect at this viewpoint, because lighting requirements will remain as assessed in the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
	Construction cumulative	The main ES reported that the construction of HS2 Phase 2a, would result in a major adverse significant effect on residents (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005) due to the introduction of construction activity into near and middle-distance views in association with Newcastle Road realignment, overbridge and associated earthworks, the presence and use of satellite compound and movement of construction vehicles. The combination of HS2 Phase 2a and the AP1 revised scheme would result in a major adverse (significant) cumulative effect during daytime and a moderate adverse (significant) cumulative effect during night-time. During construction, the AP1 amendment will not change visual effects at this viewpoint because the AP1 amendment will not be discernible within the context of the AP1 revised scheme. Therefore, the AP1 amendment will not give rise to a different significant cumulative effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a minor adverse (non-significant) effect. This would be due to the Crewe portal building and rescue area and Crewe tunnel south porous portal, being introduced into views but where the views would be partially filtered by intervening vegetation. At year 1, the AP1 amendment will not change visual effects at this viewpoint because the increased length of the Crewe tunnel south porous portal will be barely perceptible beyond the landscape mitigation earthworks. Therefore, the AP1 amendment will not give rise to a different effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation is not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to maturing mitigation planting alongside Casey Lane which formed a near distance screen to views. Mitigation planting near the tunnel portal building and rescue area added a further, middle-distance screening element within views. At year 15, the AP1 amendment will not change visual effects at this viewpoint because the AP1 amendment will not be discernible beyond the maturing HS2 Phase 2a mitigation planting in the near distance and the earthworks and associated mitigation planting adjacent to the Crewe portal building and rescue area in the middle distance. Therefore, the AP1 amendment will not give rise to a different effect and will not change the level of significance of the effect reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to mature mitigation planting providing a denser screen to views in summer months, including mitigation planting alongside Casey Lane and adjacent to the tunnel portal building and rescue area. At year 30, the AP1 amendment will not change visual effects at this viewpoint, because the AP1 amendment will be screened from view by a combination of maturing mitigation planting in the near distance combined with the earthworks and maturing planting in the middle distance. Therefore, the AP1 amendment will not give rise to a different effect and will not change the level of significance of the effect reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	At year 1, the main ES reported a moderate adverse (significant) cumulative effect. This would be due to the presence and operation of HS2 Phase 2a and the new landforms appearing as uncharacteristic features visible across a large proportion of the view (as reported in HS2 Phase 2a ES Volume 5, CA5 South Cheshire, LV-001-005) together with the additional elements introduced in the AP1 revised scheme. At year 1 of operation, the combination of HS2 Phase 2a and the AP1 revised scheme resulted in a moderate adverse (significant) cumulative effect on receptors at this viewpoint. Effects reduced to minor adverse (non-significant) at year 15 and year 30 due to the effectiveness of the mitigation planting. During operation, the AP1 amendment will not change the visual effect at this viewpoint. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)

Viewpoint 302-02-001: view north-east from Ivatt Drive, Crewe

This viewpoint is representative of views experienced by residents of Goode Way, Ivatt Drive and Worsdell Close.

Winter view (baseline)

Date taken: 25/03/2019 (stitched panorama)



Summer view (baseline)

Date taken: 29/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	371066, 354094	
Value of the viewpoint:	This viewpoint has a medium value, unremarkable in composition with existing detracting elements of the railway and rear property boundaries being clearly apparent.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	Medium-high



Viewpoint 302-02-001: view north-east from Ivatt Drive, Crewe

Visual baseline description

Winter	The viewpoint is located on Ivatt Drive, to the south of Crewe Alexandra football stadium and WCML station. The near distance comprises a residential cul-de-sac with parking bays and vehicles, street light columns and grass verges with intermittent immature trees and shrubs fronting a boundary fence. In the middle distance there are buildings and railway infrastructure within Crewe railway depot, together with tall lighting columns and masts. In the far distance are railway depot features including buildings, carriages and gantries. Intermittent narrow belts of trees and scrubby vegetation heavily filter views east to the industrial estate beyond WCML.
Summer	In summer, trees and shrubs on the boundary fence of the residential area filter views towards the railway depot but for some residents' views of the railway buildings and infrastructure remain. Vegetation in the depot is limited, although narrow belts of trees and scrubby vegetation screen views of the industrial estate beyond the depot.
Night-time	The existing artificial lighting within the surrounding urban area of Crewe is visible within the full field of view. Residential local roads and the car park adjacent to the Welsh Marches Line are well lit at night.

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

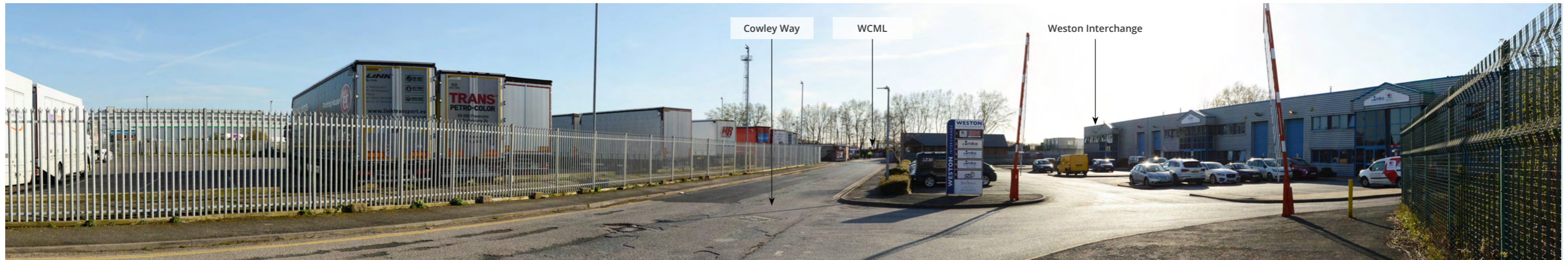
		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of the Cowley Way vent shaft satellite compound visible in the near and middle-distance which replaced views of an area of HGV parking and a storage yard. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will not change the visual effect at this viewpoint, because the AP1 amendment will not change the extent of or activity associated with the compound. As such, views beyond the Welsh Marches Line and WCML, of hoardings and taller elements within the compound will be unchanged. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Construction night-time	The main ES reported a negligible (non-significant) effect. This would be due to the presence of night-time lighting for Cowley Way vent shaft satellite compound which introduced new lighting elements resulting in a slight increase in the prominence of artificial lighting within the already lit view for residents of Goode Way, Ivatt Drive and Worsdell Close. During construction, the AP1 amendment will not change the visual effect at this viewpoint, because no additional lighting will be introduced. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Construction cumulative	There are no developments which will result in construction cumulative effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a negligible (non-significant) effect. This would be due to the introduction of Cowley Way vent shaft headhouse, its associated rescue area, parking and perimeter security fencing into views for residents of Goode Way, Ivatt Drive and Worsdell Close. At year 1, the AP1 amendment will not change the visual effect at this viewpoint, because changes to the layout of the Cowley Way vent shaft compound and the increase in the height of the Cowley Way vent shaft headhouse will be barely perceptible in the context of WCML overhead line equipment, warehouses and sheds beyond and in the middle-distance. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to maturing of existing vegetation on the eastern boundary of the housing area screening elements of the AP1 revised scheme in middle-distance. At year 15, the AP1 amendment will not change the visual effect at this viewpoint because changes to the layout of the Cowley Way vent shaft compound and increase in the height of the Cowley Way vent shaft headhouse will be barely perceptible in the context of the WCML overhead line equipment, warehouses and sheds. Views will be further filtered by intervening, maturing planting. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to maturing vegetation on the eastern boundary of the housing area, further screening views of the original scheme. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because middle-distance views towards the AP1 amendment will be further filtered by mature mitigation planting. Therefore, the AP1 amendment will not give rise to a different effect and will not change the level of significance of the effect reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation is not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in construction cumulative effects.	No cumulative effect

Viewpoint 302-06-002: view south-west from Cowley Way, Crewe

This viewpoint is representative of views experienced by workers at commercial and industrial properties.

Winter view (baseline)

Date taken: 25/03/2019 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	371393, 354414	
Value of the viewpoint:	This viewpoint has a low value, unremarkable in composition with existing adverse elements of the industrial estate, railway and railway depot being clearly apparent.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The susceptibility of these receptors is low . The attention of people at work is likely to be focused on their work activity. They therefore have low susceptibility to visual change arising from the construction and operation of the AP1 revised scheme.	Low



Viewpoint 302-06-002: view south-west from Cowley Way, Crewe

Visual baseline description

Winter	<p>The near distance comprises access roads, hardstandings, car and HGV parking and fenced compounds with lighting masts and signage. There are also large commercial and industrial buildings. In the middle distance are large-scale commercial and industrial buildings with further areas of car and HGV parking and mast lighting. Intermittent short belts of deciduous trees slightly limit visibility to the railway and gantries. Train movements are visible between buildings and trees.</p> <p>In the far distance is the eastern boundary of Crewe Station. Railway infrastructure including buildings, carriages, gantries and train movements are visible, partially screened by a narrow belt of mature deciduous trees seen against the skyline.</p>
Summer	<p>In summer, the narrow belts of trees and scrubby vegetation on the eastern boundary of the railway depot are seen against the skyline and provide some screening of railway infrastructure, gantries and train movements. However, due to the limited extents of the vegetation interspersed between roads and parking in the commercial estate, near and middle-distance views are similar to those in winter.</p>
Night-time	<p>The night-time visual baseline is not described for this viewpoint as night-time effects have only been considered for occupiers of residential properties and people staying in hotel and healthcare institutions.</p>

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a minor adverse (non-significant) effect. This would be due to the introduction of the Cowley Way vent shaft satellite compound, into near and middle-distance views, replacing existing views of an area of HGV parking and a storage yard. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change the visual effect at this viewpoint, because the AP1 amendment will not perceptibly change the scale and nature of construction activity within the compound area. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Construction night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
	Construction cumulative	There are no developments which will result in construction cumulative effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a negligible (non-significant) effect. This would be due to the introduction of Cowley Way vent shaft headhouse, its associated rescue area, parking and perimeter security fencing, into views. These new elements would not be uncharacteristic within views of the urban setting. At year 1, the AP1 amendment will not change the visual effect at this viewpoint because although the reorientation of buildings including the Cowley Way vent shaft headhouse and the increase in its height, will represent a perceptible change to views, the nature and scale of the effects will be comparable with the original scheme and viewed in the context of an industrial setting. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the presence of Cowley Way vent shaft headhouse, its associated rescue area, parking and perimeter security fencing which would not be uncharacteristic of the urban setting. At year 15, the AP1 amendment will not change the visual effect at this viewpoint, because although the AP1 amendment will continue to represent a perceptible change to views, the nature and scale of the effects will be comparable with the original scheme and viewed in the context of an industrial setting. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	Night-time effects have only considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the presence of Cowley Way vent shaft headhouse, its associated rescue area, parking and perimeter security fencing which would be characteristic of the urban setting. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because the AP1 amendment will continue to represent a perceptible change to views, the nature and scale of the effects will be comparable with the original scheme and viewed in the context of an industrial setting. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	Night-time effects have only considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Operation cumulative		There are no developments which will result in construction cumulative effects.	No cumulative effect

Viewpoint 303-02-001: view north from public open space bordering the B5076 Middlewich Street

This viewpoint is representative of views experienced by residents on Middlewich Street and Audley Street West.

Winter view (baseline)

Date taken: 16/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	370612, 356326	
Value of the viewpoint:	This viewpoint has a medium value, unremarkable in composition with some detracting elements associated with the WCML and rear property boundaries visible.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The susceptibility of these receptors is high . Residents have a strong interest in their visual urban environment and are therefore have a high susceptibility to visual change arising from the construction and operation of the AP1 revised scheme.	Medium-high



Viewpoint 303-02-001: view north from public open space bordering the B5076 Middlewich Street

Visual baseline description

Winter	The viewpoint is located within a public open space immediately east of WCML, to the west of Middlewich Street close to the centre of Crewe. The near distance is an area of open, mainly grassed public open green space, framed by scrub vegetation and palisade boundary fencing bordering WCML to the west, and trees to the rear of red brick, terraced properties bordering Middlewich Street to the east. The view extends north to a contained middle distance, comprising the low skyline profile of Bentley Manor Care Home.
Summer	In summer, the scrub vegetation along the boundary of WCML heavily filters views of the existing railway across the open grassed area. In the middle distance, a large area of scrub vegetation, boundary tree and shrub planting screens views towards the care home and softens the middle-distance skyline.
Night-time	Artificial lighting within the immediate urban area of Crewe is evident. Local residential roads are illuminated, although the adjacent recreational area and WCML are unlit in the near distance. The wider urban extent of Crewe creates a far distance skyglow.

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the introduction of Middlewich Street vent shaft satellite compound and associated construction activity into near and middle-distance views. The compound would be visible across the majority of the view and construction activity for the shaft and headhouse would be partially visible above site hoardings. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will marginally increase the extent of land take to the rear of properties on Middlewich Street and to the rear of Bentley Manor Care Home, increasing the removal of existing vegetation to the north. The construction compound will not perceptibly increase in extent and construction activity will be comparable with the original scheme. The AP1 amendment will therefore not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The main ES reported a moderate adverse (significant) effect. This would be due to night-time lighting for Middlewich Street vent shaft satellite compound being noticeable within views for residents on Middlewich Street and Audley Street West. The AP1 amendment will not increase the requirement for night-time lighting and visual effects will be comparable with the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Construction cumulative	There are no developments which will result in cumulative effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a moderate adverse (significant) effect. This would be due to the introduction of Middlewich Street vent shaft and headhouse into views for residents on Middlewich Street and Audley Street West, together with the re-instatement of grass, tree and shrub planting which would help integrate the building into the urban fabric and define pedestrian circulation routes. At year 1, the AP1 amendment will change the visual effect at this viewpoint because the height of the Middlewich Street vent shaft headhouse will reduce but the building footprint and overall size of the compound will increase. An additional above ground building will be introduced and the compound area will be reinstated with grass. The headhouse design will change from circular to a rectangular building. The AP1 amendment will result in a noticeable change to the composition of the view. The AP1 amendment will therefore give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the growth of mitigation planting which would provide further visual screening and integration of Middlewich Street vent shaft headhouse. The headhouse would be partially screened from the footpath and from the curtilage of properties although the headhouse profile would be part of the local urban skyline. At year 15, the AP1 amendment will change the visual effect at this viewpoint. The headhouse will be lower in height, reducing its prominence on the skyline. The area of mitigation planting will be narrower and therefore less effective as a visual screen. The AP1 amendment will result in a noticeable change to the composition of the view and will therefore give rise to a different significant effect. However, the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to maturing mitigation planting which would provide further visual screening and integration of Middlewich Street vent shaft headhouse. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because the reduced height of the headhouse and the presence of maturing mitigation planting that will further screen views of the adjacent buildings. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative effects.	No cumulative effect

Viewpoint 303-02-003: view south-east from public open space bordering the B5076 Middlewich Street

This viewpoint is representative of views experienced by residents of Middlewich Street and Bentley Manor Care Home, and users of public footpaths and of the public open space and by rail users.

Winter view (baseline)

Date taken: 26/03/2018 Time taken: 14:01



Summer view (baseline)

Date taken: 17/09/2019 Time taken: 13:11



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	370571.543, 356433.011	
Elevation:	52.243m AOD	
Value of the viewpoint:	This viewpoint has a medium value, unremarkable in composition with existing adverse elements of the railway and rear property boundaries being clearly apparent.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme. Rail users are of lower susceptibility.	Medium-high



Viewpoint 303-02-003: view south-east from public open space bordering the B5076 Middlewich Street

Visual baseline description

Winter	The viewpoint is located within a public open space to the west of Middlewich Street, near the centre of Crewe. The near-distance view looks across an area of public open green space, framed by scrub vegetation to the west and rear boundary walls and out-buildings of residential properties to the east. The view extends to a middle distance comprising existing overhead line equipment and train movements along WCML. Dense and mature planting along the boundary of Crewe Cemetery, to the west of the railway is visible on the skyline in the background of the view. Views from adjacent properties and Bentley Manor Care Home are largely screened by boundary walls and vegetation. The care home and terraced houses along Middlewich Street are two storeys in height. Rail users have partially filtered views to the east and west.
Summer	In summer, there is limited garden vegetation to screen views from properties, although scrub vegetation along the eastern boundary of WCML partially filters views of existing train movements and line equipment. Views from the care home are filtered by tree planting and scrub vegetation surrounding the property.
Night-time	Artificial lighting within the town of Crewe is evident. Local residential roads are illuminated, although the adjacent recreational area and WCML are unlit in the near distance and to the west. The wider urban extent of Crewe creates a far distance skyglow.

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the introduction of Middlewich Street vent shaft satellite compound and associated construction activity into near and middle-distance views. The compound would be visible across the majority of the view and construction activity for the shaft and headhouse would be partially visible above site hoardings. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will not change the visual effect at this viewpoint, because although the AP1 amendment will marginally increase the extent of land take to the rear of properties on Middlewich Street and to the rear of Bentley Manor Care Home resulting in the removal of additional vegetation in the near distance. The construction compound will not perceptibly increase in extent and associated activity will be comparable with the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The main ES reported a moderate adverse (significant) effect. This would be a result of night-time lighting for Middlewich Street vent shaft satellite compound that would be visible to residents of Middlewich Street and Bentley Manor Care Home. During construction, the AP1 amendment will not increase the requirement for night-time lighting and effects will be comparable with the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Construction cumulative	There are no developments which would result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a moderate adverse (significant) effect. This would be due to the introduction of Middlewich Street vent shaft and headhouse into views, along with its associated rescue area, parking and perimeter security fencing and a reduced area of greenspace. At year 1, the AP1 amendment will change the visual effect at this viewpoint, because the height of the Middlewich Street vent shaft headhouse will reduce but the building footprint and overall size of the compound will increase. An additional above ground building will be introduced, and the compound area will be reinstated with grass. The headhouse design will change from circular to a rectangular building. The removal of vegetation, during construction, along the southern boundary of the rear of Bentley Manor Care Home will not be apparent. The AP1 amendment will result in a noticeable change to the composition of the view. The AP1 amendment will therefore give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the growth of mitigation planting which would provide visual screening and integration of Middlewich Street vent shaft and headhouse, although the vent shaft building profile would be visible above the establishing mitigation planting. At year 15, the AP1 amendment will change the visual effect at this viewpoint, because the reduction in the width of mitigation planting at the compound boundary, will mean it is less effective as a visual screen. However, the reduction in height of the headhouse will reduce the prominence of the headhouse profile. The AP1 amendment will result in a noticeable change to the composition of the view. The AP1 amendment will therefore give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to mature mitigation planting which would provide further visual screening and integration of Middlewich Street vent shaft headhouse and associated fencing, parking and rescue areas, into views. At year 30, the AP1 amendment will not change visual effects at this viewpoint, due to the reduced height of the headhouse and the presence of maturing mitigation planting that will further screen views of the adjacent buildings. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative effects.	No cumulative effect

Viewpoint 303-02-003: view south-east from public open space bordering the B5076 Middlewich Street

This viewpoint is representative of views experienced by residents of the B5076 Middlewich Street and Bentley Manor Care home, and users of public footpaths and of the public open space, and by rail users.

Current baseline - winter view

Date taken: 26/03/2018 Time taken: 14:01



Winter verifiable photomontage - operation year 1



The viewpoint has been taken approximately 29.9m away from the AP1 revised scheme. Viewpoint location shown on Map LV-08-303. For full details of the visual assessment at viewpoint 303-02-003 refer to SES1 and AP1 ES Volume 5, Appendix: LV-001-0MA01, Part 4.

This verifiable photomontage (Type 4 as described in Visual Representation of Development Proposals LI TGN 06/19) provides an illustration of how the AP1 revised scheme may look in 2038 (opening year) to help inform the visual impact assessment. The design of the AP1 revised scheme may be subject to design development in response to consultation. Development of detail design after AP1 submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the AP1 revised scheme into the landscape.

Each individual image represents a 39.6° horizontal field of view with planar projection. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet (image size 390mm x 260mm) to be viewed at a comfortable arms length. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (SMR Volume 5, Appendix: CT-001-00001) of the main ES.

Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens		
Approximate GPS co-ordinates ref.	370571.543, 356433.011	Direction of View:	86.8°
Elevation:	52.243m AOD	Height of Camera:	1.7m



Map Number	LV-01-703
Map Name	Verifiable Photomontage Operation Year 1 (2038) - Winter Viewpoint 303-02-003
	Community area MA01: Hough to Walley's Green

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Viewpoint 303-02-004: view north-west from Bradfield Road, Crewe

This viewpoint is representative of views experienced by residents of situated on Broughton Road between Bradfield Road and Maplins Moss Place.

Winter view (baseline)

Date taken: 25/02/2019 Time taken: 13:48



Summer view (baseline)

Date taken: 29/07/2019 Time taken: 14:03



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	370293, 357383	
Elevation:	53.81m AOD.	
Value of the viewpoint:	This viewpoint has a medium value, typical of the urban fringe landscape of northern Crewe, with existing WCML forming a noticeable far distance feature of the view.	Sensitivity of the receptor: High
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	



Viewpoint 303-02-004: view north-west from Bradfield Road, Crewe

Visual baseline description

Winter	The near distance of the view comprises garden boundary vegetation with direct views onto narrow fields between properties on Broughton Road and the existing WCML. Bradfield Road crosses over WCML, forming a skyline feature to the west of the view. In the middle distance there are intermittent trees and isolated woodland copses, however the clear verge alongside the existing WCML allows for open views of train movements and overhead line equipment. Residential development to the western side of WCML forms the far distance of the view, filtered by intervening trees and a linear belt of woodland along the western boundary of WCML.
Summer	In summer, garden vegetation and field trees in foliage provide further screening between properties situated along Broughton Road and WCML. The middle distance however is still largely occupied by WCML, train movements and overhead line equipment.
Night-time	Artificial lighting within the town of Crewe is evident. Local residential roads are illuminated, although the adjacent field and WCML are unlit in the near distance. The wider urban extent of Crewe and housing area to the north create a far distance skyglow.

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a high magnitude of change and a major adverse (significant) effect. This would be due to the presence of large-scale construction works, including construction of Crewe tunnel north portal and Crewe north portal (retained cutting) and the siting of Crewe tunnel north main compound, visible across the majority of view in the near distance. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001) will substantially decrease the visual effect at this viewpoint as it will remove construction of the Crewe tunnel north portal building, Crewe tunnel north portal from views to the north-west, as a result of their relocation north of Parkers Road. Nevertheless, construction traffic will be perceptible. The magnitude of change will be reduce the magnitude of change from high to negligible and give rise to a different significant effect. The level of significance of the effect reported in the main ES will reduce from major adverse (significant) to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Construction night-time	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the presence of the Crewe tunnel north main compound and construction activity in relation to Crewe tunnel north porous portal which introduced localised new lighting elements into views. The AP1 amendment will substantially decrease the visual effect of night-time lighting as a result of the relocation of the Crewe tunnel north main compound to a location north of Parkers Road.. However, lighting from construction traffic will remain perceptible. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Construction cumulative	There are no developments which will result in cumulative effects.	No cumulative effect

		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the introduction of the Crewe north portal cutting (retained cutting), Crewe tunnel north portal building and rescue area and Crewe tunnel portal auto-transformer station which would noticeably change near-distance views. At year 1, the AP1 amendment will substantially decrease the visual effect as a result of the relocation of the Crewe tunnel north portal building, Crewe tunnel north portal to a location north of Parkers Road and will not be visible from this viewpoint. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to maturing mitigation planting alongside Crewe north cutting, the tunnel portal building and auto transformer station, which would assist in the visual integration of the original scheme and reduced the visibility of the existing WCML caused by the loss of vegetation during. At year 15, the AP1 amendment will decrease the visual effect at this viewpoint, because the AP1 amendment will have removed the Crewe tunnel north portal building, north portal and porous portal from views north-west, a result of their relocation north of Parkers Road. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the presence of mature mitigation planting which would provide a dense screen around the tunnel portal building and auto-transformer station. The WCML would be further screened by the maturity of the intervening mitigation planting. At year 30, the AP1 amendment will not change visual effects at this viewpoint. The AP1 amendment will have removed the Crewe tunnel north portal building, north portal and porous portal from views north-west, a result of their relocation north of Parkers Road. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in a cumulative operation effect.	No cumulative effect

Viewpoint 303-02-005: view west from Halton Drive, Walley's Green

Visual baseline description

Winter	The foreground comprises Halton Drive, with a tarmac road, footpaths and vehicular accesses to properties. The grass verges are close mown and there are a number of pole mounted streetlights and a telegraph pole in the view. A mix of low boundary fences, walls and railings enclose property boundaries. The red-brick, two-storey residential properties on both sides of the road partially screen views of the pylons in the middle distance. Halton Drive is truncated by a steel palisade fence, partially covered by vegetation. There is a linear belt of mature, predominantly deciduous woodland beyond the palisade fence along the western boundary of the residential development. Industrial buildings and structures associated with an electricity substation are partially visible through gaps in the woodland.
Summer	In summer, leaf cover associated with the mature woodland belt west of the residential area provides a dense visual barrier and further screens views of the electricity substation beyond.
Night-time	The area is brightly lit by street lighting and lighting on residential properties. The lighting on the industrial units to the south-west of the viewpoint contributes to skyglow.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	This new viewpoint is located in a residential area which would not be affected by the original scheme. Residents will experience near-distance views of construction works associated with the AP1 amendment, additional land permanently required for the provision of a power supply to Crewe tunnel (AP1-001-002), including vegetation clearance at the western end of Halton Drive to facilitate utilities works. There will be temporary disruption to the existing residential roads as part of construction works to lay cabling along Halton Drive and adjacent streets. As a result, residents will experience direct views of these small-scale works within the immediate streetscape. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction night-time	The night-time view in operation was not assessed as there is no requirement for continuous construction lighting in this location.	Not assessed
	Construction cumulative	There are no developments which will result in a cumulative construction effect.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The AP1 amendment will result in a change to the composition of views for residents as a result of the loss of trees and vegetation bordering the electricity distribution site removed during construction. Replacement vegetation will be present in year 1, however this will be immature and will not be of a stature comparable to those removed during construction. At the western end of Halton Drive, residents will have oblique views of the electricity distribution site as a result of the removal of vegetation, which will be partially replaced but immature. The AP1 amendment will give rise to a low magnitude of change and a minor adverse (non-significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new non-significant effect.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The loss of existing street trees and vegetation bordering the electricity distribution site, removed during construction, will be partially mitigated by maturing replacement vegetation. At the western end of Halton Drive, the maturing landscape mitigation planting will partially screen views of the electricity distribution site. The AP1 amendment will give rise to a negligible magnitude of change a negligible (non-significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new non-significant effect.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The greater maturity of mitigation planting, at the western end of Halton Drive, will largely screen views of the electricity distribution site. The AP1 amendment will give rise to a negligible magnitude of change a negligible (non-significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new non-significant effect.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in a cumulative operation effect.	No cumulative effect

Viewpoint 304-02-001: view east from Somerley Close, Leighton, Crewe

This viewpoint is representative of views experienced by residents in properties bordering WCML between Bradfield Road and Parkers Road, and by users of Footpath Crewe 13/1.

Winter view (baseline)

Date taken: 13/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	369956, 357853	
Value of the viewpoint:	This viewpoint has a medium value, with WCML forming a noticeable feature across much of the view.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape and recreational users of footpaths. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 304-02-001: view east from Somerley Close, Leighton, Crewe

Visual baseline description

Winter	The near distance of the view comprises roads, driveways and footpaths within a residential estate of single and two-storey properties. Front garden vegetation is typically limited, allowing for open visibility from property curtilages.
	Middle-distance views of WCML are framed by properties. Footpath Crewe 13/1 runs along the railways western boundary. A continuous belt of tree planting filters views of overhead line equipment and passing trains. Beyond WCML views of pastoral fields and residential properties on Broughton Road and a new residential development between Broughton Road and WCML, are heavily filtered through intervening vegetation. The residential properties front onto a series of 'cul de sac' and the layout results in either oblique or direct views east towards the WCML. Properties on the eastern end of Conway Close are located closer to the WCML than the remaining dwellings in the wider estate. The tree belt, where present, filters views for the residents and users of the footpath.
Summer	In summer, the view east is mostly screened by the continuous belt of tree planting alongside the railway, although overhead line equipment and train movements remain partially visible.
Night-time	The residential area comprises street lighting and is well-lit, generating a far distance skyglow within the near distance of the view. Middle-distance views to the east comprise the unlit elements of the adjacent green space and WCML. In the far distance further residential areas and street lighting along Broughton Road contribute to a far distance skyglow.
Future baseline description	
Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the introduction of large-scale construction works into middle-distance views beyond WCML, including the construction of Crewe tunnel north portal, Crewe north portal cutting (retained cutting), and Crewe tunnel north main compound. The presence of existing mature vegetation along the western boundary of the WCML would filter views. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will substantially reduce the visual effect as a result of the Crewe tunnel north main compound being located in an area immediately north of Parkers Road removing construction activity from middle-distance views, beyond the WCML. Existing vegetation within the area formerly allocated for Crewe tunnel north main compound and some of the existing planting close to Parkers Road will be retained. The magnitude of change will be low and the level of significance of the effect reported in the main ES will reduce from moderate adverse (significant) to minor adverse (non-significant). The AP1 amendment will therefore remove a significant effect.	Minor adverse (non-significant)
	Construction night-time	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of lighting associated with Crewe tunnel north main compound in views for residents in properties bordering WCML between Bradfield Road and Parkers Road. During construction, the AP1 amendment will reduce the visual effect at this viewpoint, because the extent of visible construction phase lighting will be reduced, as a result of the relocation of the Crewe tunnel north main compound to an area immediately north of Parkers Road. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of Crewe north cutting, Crewe tunnel north portal building and rescue area, auto-transformer station and modification of Parkers Road overbridge in views beyond the WCML and partly filtered by existing mature vegetation. At year 1, the AP1 amendment will reduce the visual effect at this viewpoint, because the Crewe north cutting, Crewe tunnel north portal building and auto-transformer station will have been relocated in an area immediately north of Parkers Road which is less visible from this viewpoint. The reduction in the area of existing planting, south of Parkers Road, that will be removed during construction will also help to further filter views. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed in the main ES as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of the screening effect of maturing mitigation planting around Crewe north cutting, Crewe tunnel north portal building, auto-transformer station and modification of Parkers Road overbridge which would add a further, middle-distance screening elements and assist in the visual integration of these scheme elements. At year 15, the AP1 amendment will reduce the visual effect at this viewpoint, because the scheme elements will have been relocated in an area immediately north of Parkers Road which is less visible from this viewpoint. The greater maturity of retained planting south of Parkers Road, and maturing replacement planting, will further filter views. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed in the main ES as there was no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be the result of maturing mitigation planting further screening views of the Crewe north cutting, Crewe tunnel north portal building and rescue area, auto-transformer station and modification of Parkers Road overbridge. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because views of the scheme elements, will be further filtered through maturing replacement and retained vegetation south of Parkers Road. However, the perceived change will be minimal. Therefore the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-02-002: view west from Broughton Road, Coppenhall, Crewe

This viewpoint is representative of views experienced by residents of Broughton Road and of north facing properties at Maplins Moss Place.

Winter view (baseline)

Date taken: 16/02/2018 (stitched panorama)

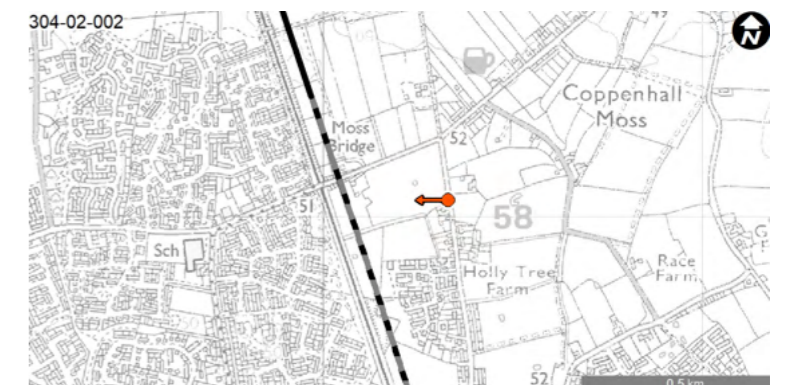


Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370330, 358043	
Value of the viewpoint:	This viewpoint has a medium value, typical of the urban fringe landscape of northern Crewe, with WCML forming a noticeable far distance component of the view.	Sensitivity of the receptor: High
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	



Viewpoint 304-02-002: view west from Broughton Road, Coppenhall, Crewe

Visual baseline description

Winter	<p>Near-distance views from the rear of properties along Broughton Road comprise garden boundary fences and vegetation, towards pastoral fields with overgrown hedgerows and mature hedgerow trees, with small stands of mature field trees. Some properties are relatively well screened by garden boundary vegetation, while houses and apartments along the northern boundary of Maplins Moss Place have less established garden vegetation and more open views.</p> <p>WCML overhead line equipment is clearly visible in the middle distance, along with train movements. A linear belt of trees and shrubs alongside the railway partially screens visibility through to residential development beyond WCML. To the north, vegetation alongside Parkers Road forms a low far distance skyline, with Bridge Farm a noticeable feature of the view.</p>
Summer	<p>In summer months, views are largely screened by boundary vegetation, hedgerows and field trees. Views from Maplins Moss Place will be across fields, to a well vegetated far distance skyline that partially filters WCML and train movements, and screens residential development beyond.</p>
Night-time	<p>The urban section of Broughton Road comprises street lighting to the south, while local roads are unlit with lighting limited to groups of properties to the south and beyond WCML to the west. There is a far distance skyglow from Crewe immediately to the west.</p>

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a high magnitude of change and a major adverse (significant) effect. This would be due to the presence of large-scale construction works, including the construction of Crewe tunnel north portal building and Crewe north portal cutting (retained cutting). The Crewe tunnel north main compound and associated construction activities would be visible in the near distance and across the majority of the view. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will reduce visibility of construction works in the middle distance, with the focus of activity located north of Parkers Road. The linear belt of trees and shrubs alongside the railway will be retained, but trees along Parkers Road and forming the far-distance skyline will be removed. The AP1 amendment will therefore give rise to a different significant effect. The magnitude of change will be medium and the level of significance of the effect reported in the main ES will reduce to moderate adverse (significant).	Moderate adverse (significant)
	Construction night-time	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the presence of lighting associated with Crewe tunnel north main compound. The AP1 amendment will reduce the visibility of lighting associated with the compound because the light sources will be located to the north of Parkers Road, further from the viewpoint, and the compound will be less visible. However, skyglow associated with the compound will remain apparent. The AP1 amendment will therefore remove a significant effect. The magnitude of change will be low and the level of significance of the effect reported in the main ES will reduce to minor adverse (non-significant).	Minor adverse (non-significant)
	Construction cumulative	There are no developments which will result in cumulative effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of Crewe north portal cutting (retained cutting) and modification of Parkers Road overbridge within views for residents of Broughton Road and of north facing properties at Maplins Moss Place. However, elements of the original scheme would be largely contained within the cutting, limiting visibility. At year 1, the AP1 amendment will slightly reduce the visual effect as a result of the Crewe north portal cutting (retained cutting) being located to the north of Parkers Road. Crewe tunnel north portal building will be partially screened by Parkers Road bridge and embankment, although trees on Parkers Road embankment will be removed during construction, altering the skyline. An area of created ecological mitigation, comprising grassland habitat and mitigation ponds, will be visible in the near distance. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the establishment of mitigation planting alongside Crewe north portal cutting (retained cutting) and at Parkers Road overbridge which would add a middle-distance and far-distance linear tree belt within views. At year 15, the AP1 amendment will further reduce the visual effect as a result of the Crewe tunnel north portal building being further screened by maturing landscape mitigation planting. Planting on the Parkers Road Bridge embankments and maturing roadside hedgerow will be visible in the middle-distance to the north. An area of established ecological mitigation, comprising hedgerows, grassland habitat and mitigation ponds, will be present in the near distance. Therefore the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a low magnitude of change and a minor beneficial (non-significant) effect. This would be due to the greater maturity of mitigation planting alongside Crewe north portal cutting (retained cutting) and at Parkers Road overbridge. This would add linear tree belts into the middle and far distance views. At year 30, the AP1 amendment will further reduce the visual effect as a result of the Crewe tunnel north portal building being substantially screened by mature mitigation planting, and Parkers Road which will be screened by a mature hedgerow, in the middle-distance to the north. An area of established ecological mitigation, comprising hedgerows, grassland habitat and mitigation ponds, will be present in the near distance. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative effects.	No cumulative effect

Viewpoint 304-02-003: view north-west from the White Lion Public House, Coppenhall Moss

This viewpoint is representative of views experienced by residents of Warmingham Road and residents and visitors of the White Lion Public House and garden.

Winter view (baseline)

Date taken: 16/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370476, 358383	
Value of the viewpoint:	This viewpoint has a medium value, its wider composition beyond the limit of build development being representative of the open Cheshire Plain landscape to the north of Crewe.	Sensitivity of the receptor: High
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The susceptibility of these receptors is high . Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme. Visitors to the public house have lower susceptibility as their attention is not always focused on the landscape.	



Viewpoint 304-02-003: view north-west from the White Lion Public House, Coppenhall Moss

Visual baseline description

Winter	The near distance of the view for residential properties on Warmingham Road comprises garden vegetation including mature trees, and boundary fences or hedgerows. From the public house, the near distance is more open with a small area of grass with play equipment and outdoor seating. A post and wire fence and limited shrub planting form the boundary.
	In the middle distance are gently sloping rectilinear pastoral hedged fields. Field boundaries are hedgerows with occasional mature trees and narrow tree belts.
	In the far distance is a network of field hedgerows and hedgerow trees, beyond which is the WCML, seen against the skyline with a belt of mature trees to the west screening visibility beyond Kent's Lane. An overhead power line is visible to the north against the skyline, beyond the field boundary hedgerows.
Summer	With summer foliage, views from residential properties on Warmingham Road are framed and heavily filtered by surrounding garden and boundary vegetation. Garden and field boundary vegetation also increase the sense of enclosure to the north and west. The more open near-distance views north and west from the public house garden extend beyond Kent's Lane in the middle distance.
Night-time	Warmingham Road is well lit by street lighting, whilst local roads within the view are unlit with night-time lighting limited to individual properties. The area is predominantly unlit with the wider skyglow generated by the town of Crewe.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of upper elements of construction on Coppenhall Moss embankment, and the presence of Warmingham Moss satellite compound, which would be visible over existing, intervening field boundary vegetation. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will increase the visual effect at this viewpoint, because Crewe tunnel north main compound will move closer to the viewpoint and combined with some removal of hedgerows, will be visible immediately beyond Kent's Lane in near and middle-distance views. The AP1 amendment will therefore give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction night-time	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of construction activity associated with Coppenhall Moss cutting, Warmingham Moss northbound WCML embankment, Coppenhall Moss north embankment, Footpath Crewe 29/1 accommodation overbridge and works to the existing Parkers Road Overbridge. The AP1 amendment will increase the visual effect at this viewpoint as a result of additional vegetation clearance west of the WCML in the near distance which will open up views of the Crewe tunnel north main compound immediately beyond the WCML. The AP1 amendment will therefore give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the introduction of additional infrastructure elements including overhead line equipment and train movements along a section of route on Coppenhall Moss embankment in the middle and far distance views, partially filtered by intervening vegetation. At year 1, the AP1 amendment will increase the visual effect at this viewpoint, because the Crewe tunnel north portal building will be visible in the middle distance and overhead line equipment and train movements will be slightly more visible in views to the west, as a result of the loss of vegetation during construction. Mitigation planting will not be sufficiently mature to provide any screening or visual integration of these elements. The AP1 amendment will therefore give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a negligible (non-significant) effect. This would be due to the growth of mitigation planting on Coppenhall Moss embankment which would add a further far distance screening element in combination with the existing intervening field boundaries, hedgerow trees and garden vegetation within views. At year 15, the AP1 amendment will not change visual effects at this viewpoint, because maturing mitigation planting and hedgerows will partially screen the Crewe tunnel north portal building and porous portal which as a result, will be barely perceptible in the view. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to mature mitigation planting including tree and woodland planting on the landscape earthworks east of the original scheme, which would largely filter views within views for residents and visitors to the public house. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because maturing mitigation planting will largely screen views of the Crewe tunnel north portal building and porous portal to the west. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative effects.	No cumulative effect

Viewpoint 304-02-004: view east from Bleasdale Road, Leighton, Crewe

This viewpoint is representative of views experienced by residents in properties bordering WCML between Bleasdale Road, Parkers Road and Thornfields, users of Footpath Crewe 12/2 and 12/1, and users of the public open space linking Footpath Crewe 12/2 and 12/1.

Winter view (baseline)

Date taken: 13/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	369796, 358344	
Value of the viewpoint:	This viewpoint has a medium value, with WCML forming a noticeable feature within associated views.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	Medium-high



Viewpoint 304-02-004: view east from Bleasdale Road, Leighton, Crewe

Visual baseline description

Winter	The near distance comprises roads, driveways and footpaths within a residential estate of detached two-storey residential properties. Front garden vegetation is typically limited, allowing for open visibility from property curtilages.
	WCML is intermittently visible in the middle-distance of the view between properties, bordered by low mounded earthworks along the railway's western boundary. A belt of tree planting forms a partial screen to overhead line equipment and train movements. Beyond WCML views are heavily filtered towards a far distance of pastoral fields, field trees and hedges.
Summer	In summer, WCML is largely obscured by shrub and tree planting in foliage alongside the railway and on the low screen bund, although overhead line equipment is visible above intervening vegetation. Visibility is limited to the middle distance and there is a sense of enclosure from a combination of buildings and surrounding vegetation.
Night-time	The residential area is well-lit at night. However, in the middle distance to the east, the adjacent recreational space and WCML are unlit. Well-lit residential areas and street lighting in the far distance, contribute to skyglow.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the presence of construction activity associated with Coppenhall Moss cutting, Warmingham Moss northbound WCML embankment and Coppenhall Moss north embankment, Footpath Crewe 29/1 accommodation overbridge and Parkers Road overbridge within views. The additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will increase the visual effect at this viewpoint, as additional vegetation will be removed in the near-distance, west of WCML, which will open up views of the Crewe tunnel north main compound immediately beyond. There will be views of construction activity associated with the compound, construction of Crewe tunnel north portal building and porous portal beyond the WCML. In addition, the compound will be closer in the view compared with the original scheme. The AP1 amendment will therefore give rise to a different significant effect. The magnitude of change will be high and the level of significance of the effect reported in the main ES will increase to major adverse (significant).	Major adverse (significant)
	Construction night-time	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of lighting at the Crewe tunnel north main compound, visible above existing intervening vegetation and WCML. During construction, the AP1 amendment will increase the visual effect at this viewpoint, because the compound will be moved north of Parkers Road and lighting will be brought closer to the viewpoint, into near and middle-distance views. The magnitude of change will be medium and the level of significance of the effect reported in the main ES will increase to moderate adverse (significant). The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of Coppenhall Moss cutting, Warmingham Moss northbound and southbound spurs and Footpath Crewe 29/1 accommodation overbridge in the near and middle distance, partially filtered by intervening vegetation. At year 1, the AP1 amendment will increase the visual effect at this viewpoint, because loss of near distance vegetation during construction will open up views of the Crewe tunnel north portal, building, rescue area and car parking, the existing Parkers Road overbridge and Footpath Crewe 29/1 accommodation overbridge in the middle-distance. Train movements and overhead line equipment will be partially screened by Coppenhall Moss cutting. The magnitude of change will be medium and the level of significance of the effect reported in the main ES will increase to moderate adverse (significant). The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to maturing mitigation planting along the eastern boundary of Coppenhall Moss cutting and footpath Crewe 29/1 accommodation overbridge embankment which would assist in the visual integration of the original scheme within views. At year 15, the AP1 amendment will not change the visual effect at this viewpoint, because maturing mitigation planting between the WCML and the AP1 revised scheme will largely filter views towards the Crewe tunnel north portal, building, rescue area and car parking, Parkers Road overbridge and Footpath Crewe 29/1 accommodation overbridge in the middle-distance. Train movements and overhead line equipment will be partially screened by Coppenhall Moss cutting and maturing mitigation planting. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to mature mitigation planting, further screening views of the original scheme. At year 30, the AP1 amendment will not change visual effects at this viewpoint, because views of the Crewe tunnel north portal, building, rescue area and car parking, modified Parkers Road overbridge, Footpath Crewe 29/1 accommodation overbridge and train movements will be further filtered through mature mitigation planting between the WCML and the AP1 revised scheme. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-03-005: view west from Footpath Crewe 28/1 (Crewe and Nantwich Circular Walk), Coppenhall Moss

This viewpoint is representative of sequential views experienced by users of Footpaths Crewe 28/1, 29/1 and 30/1, part of the promoted Crewe and Nantwich Circular Walk, Crewe.

Winter view (baseline)

Date taken: 26/03/2018 Time taken: 16:05



Summer view (baseline)

Date taken: 10/08/2018 Time taken: 10:38



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	370188, 358722	
Elevation:	49.135m AOD.	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative and typical of the Cheshire Plain landscape to the north of Crewe, with WCML a noticeable component of view.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The attention of recreational users of the PRoW is focused on the surrounding landscape and canal. They are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 304-03-005: view west from Footpath Crewe 28/1 (Crewe and Nantwich Circular Walk), Coppenhall Moss

Visual baseline description

Winter	The near distance comprises overgrown grassland with tall ruderal grasses and field boundary vegetation of hedgerows and broken belts of shrubs and trees. Post and wire fences separate the footpath from an area of rough pasture and semi-improved pastoral fields in the middle-distance of view. Gaps in the vegetation alongside the footpath allow views towards WCML, its overhead line equipment and train movements, while overhead pylons and wind turbines are evident along the skyline.
	The far distance to the west of WCML comprises belts of field boundary vegetation limiting more distant views. Buildings associated with Moss Farm are visible to the north of the view, between mixed shelter belt planting. A footbridge over the railway to the west and the rooflines of new residential development on the western side of the railway are visible above intervening field vegetation.
Summer	In summer, views from the footpath are limited by intervening field boundary vegetation and tall ruderal grasses although the overhead line equipment and train movement associated with WCML remains partially visible, along with pylons and wind turbines on the skyline.
Night-time	The night-time visual baseline is not described for this viewpoint as night-time effects have only been considered for occupiers of residential properties and people staying in hotel and healthcare institutions.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the presence of large-scale construction works which would be viewed widely across the skyline. This would include the construction of Footpath Crewe 29/1 accommodation overbridge, Warmingham Moss southbound Viaduct and Warmingham Moss northbound Viaduct, Coppenhall Moss north embankment, Warmingham Moss southbound embankments 1 and 2. The AP1 amendment, Additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will change the visual effect at this viewpoint, because additional construction activity and the presence of the Crewe tunnel north main compound in a location to the north of Parkers Road, will be closer in the view for footpath users. Therefore, the AP1 amendment will give rise to a different significant effect, however, the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The night-time view in construction was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a major adverse (significant) effect. This would be due to the substantial change to the composition of near and middle-distance views through the presence of Warmingham Moss southbound Viaduct, Warmingham Moss northbound Viaduct, Warmingham Moss southbound embankment No. 2 and Footpath Crewe 29/1 accommodation overbridge. At year 1, the AP1 amendment will slightly change the visual effect at this viewpoint, because vegetation lost during construction will open up views to the west towards the AP1 revised scheme but viewed obliquely and across a small proportion of the view. The Crewe north portal headhouse and ATS will be visible in the far distance. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the maturing mitigation planting in association with landscape earthworks which would assist in the visual integration of Warmingham Moss northbound and southbound Viaducts and Warmingham Moss southbound spur embankment No.2. The mitigation planting would also screen train movements and overhead line equipment within views. At year 15, the AP1 amendment will slightly change the visual effect at this viewpoint, because maturing mitigation planting in association with landscape earthworks will assist in the visual integration of the AP1 revised scheme, replacement mitigation planting to restore field boundaries will improve visual connectivity to existing woodland blocks and provide a filtering of views to the south and west. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to only the upper parts of Warmingham Moss northbound and southbound Viaducts being visible in the near and middle distance, as mature landscape planting would partially filter views. At year 30, mature mitigation planting to restore field boundaries and improve visual connectivity to existing woodland blocks will further filter views to the south and west. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative construction effects.	No cumulative effect

Viewpoint 304-02-006: view east from Moss Lane, Crewe and Nantwich Circular Walk

This viewpoint is representative of views experienced by residents of Moss Lane and users of Footpath Leighton 7/1 and Crewe Footpath 12/1 (part of Crewe and Nantwich Circular Walk).

Winter view (baseline)

Date taken: 13/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	369230, 358637	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative of the Cheshire Plain landscape to the north of Crewe.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 304-02-006: view east from Moss Lane, Crewe and Nantwich Circular Walk

Visual baseline description

Winter	In the near distance are managed roadside and trackside hedges, with occasional breaks and field accesses. Views from Moss Lane properties have interrupted or filtered views through garden boundary vegetation and roadside hedges.
	In the middle distance and beyond Moss Lane are long, rectilinear fields of semi-improved pasture, bordered by managed hedgerows with occasional hedgerow trees. A mature woodland belt screens properties in Leighton to the south, while intermittent overgrown hedges and small woodlands including Spring Plantation break up views to the north. Established gardens and hedgerows are typical for residential properties. An overhead power line and a wind turbine are noticeable. WCML is intermittently visible, with existing train movements and overhead line equipment partially screened by intervening vegetation and buildings. Peak District hills are visible in the far distance and form the skyline to the east.
Summer	There is an increased sense of enclosure a result of foliage on roadside hedges and woodland to the north and south. Views from properties off Moss Lane will be further filtered or interrupted by intervening boundary vegetation. Views for footpath users are contained by hedges that border Moss Lane and the adjoining lane.
Night-time	Rural roads within the field of view are predominantly unlit and other night-time lighting within the view is limited to individual or isolated properties and the residential estate which lies beyond a belt of woodland to the south. There is a far distance skyglow from the town of Crewe to the south.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the presence of large-scale construction works within the view, including the construction of Footpath Crewe 29/1 accommodation overbridge, Warmingham Moss southbound WCML embankment, Warmingham Moss northbound WCML embankment, Coppenhall Moss south embankment landscape earthworks and box structures, along with major utility works, site haul routes and movements. Warmingham Moss satellite compound, temporary material stockpiles and the conveyor route together with vehicular movements would be visible in the middle-distance. During construction, the AP1 amendment, Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005) will not change the visual effect at this viewpoint, because the extent of vegetation removal will be comparable to that reported in the main ES. The AP1 revised scheme will remain visible in the middle-distance. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The main ES reported a moderate adverse (significant) effect. This would be because the Moss Lane satellite compound, Warmingham Moss satellite compound and construction activity in relation to Warmingham Moss north and southbound Viaducts and scheme-related required works on WCML would introduce new lighting elements within a predominantly rural and unlit area. During construction, the AP1 amendment, Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005) will not increase the visual effect on residents represented by this viewpoint, because the proposed AP1 amendment will not require additional night-time lighting over and above that previously assessed and reported within the main ES. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Construction cumulative	There are no developments which will result in construction cumulative effects.	No cumulative effect

			Permanent effects during operation	Significance of effect
Year 1	Winter		The main ES reported a major adverse (significant) effect. This would be due to the presence of Warmingham Moss southbound and northbound Viaducts, associated train movements and overhead line equipment which would interrupt the skyline across much of the view. The AP1 amendment, Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005), will change the visual effect at this viewpoint. This is because the nature and scale of the AP1 amendment will result in a small reduction in the extent of the landscape mitigation earthworks, increasing the visibility of the moving trains on the embankments and viaducts in a small proportion of near-distance views for users of Footpath Leighton 7/1 and Footpath Crewe 12/1. The change will not be readily discernible for residents of properties along Moss Lane. Therefore, the AP1 amendment will give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Night-time		The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer		The main ES reported a moderate adverse (significant) effect. This would be due to maturing mitigation planting on landscape earthworks which would assist in the visual integration and screening of Warmingham Moss southbound and northbound Viaducts and partially filtering views of train movements and overhead line equipment. At year 15, the AP1 amendment will not change the visual effect at this viewpoint. The combination of landscape mitigation earthworks and maturing mitigation planting will provide comparable screening to the original scheme for views from the footpaths and for residents of properties along Moss Lane. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time		The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer		The main ES reported a moderate adverse (significant) effect. This would be due to the presence of mature mitigation planting on landscape earthworks which would assist in the visual integration and screening of Warmingham Moss southbound and northbound Viaducts and substantially filter views of train movements and overhead line equipment. At year 30, the AP1 amendment, will not change the visual effect at this viewpoint due to the combination of earthworks and mature mitigation planting which will provide comparable screening to the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time		The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative			There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-02-007: view west from Footpath Warmingham 16/2 at Moss Farm, Coppenhall Moss

This viewpoint is representative of views experienced by residents of Moss Farm and Moss Fields Farm, from residential properties along Moss Lane and by users of Footpath Warmingham 16/2.

Winter view (baseline)

Date taken: 16/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370068, 359085	
Value of the viewpoint:	This viewpoint has a medium value, its composition of treed countryside being representative of the Cheshire Plain landscape to the north of Crewe, with the existing WCML a noticeable component of the view.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of footpath users is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme	High



Viewpoint 304-02-007: view west from Footpath Warmingham 16/2 at Moss Farm, Coppenhall Moss

Visual baseline description

Winter	Near-distance views comprise medium sized semi-improved pastoral fields visible beyond overgrown field boundary vegetation. Nearby residential properties have views screened by near distance garden trees and boundary hedges. Middle-distance views comprise overgrown field boundary hedgerows, beyond which overhead line equipment and a pedestrian footbridge over WCML are visible structures. Train movements are intermittently evident in the middle-distance of the view. Views west from residential properties are partially screened and filtered by farm outbuildings and garden vegetation. Hedgerows and groups of trees line the footpath and partially filter views.
	The far distance of the view is defined by an overlapping of distant field hedgerows and woodland copses beyond WCML. Spring Farm is partially visible to the west, along with overhead power lines, wooden telegraph poles and wind turbines at Coppenhall Junction which are visible on the skyline.
Summer	The extent of view is reduced a result of the presence of summer foliage on field boundary hedgerows and trees, with additional screening of overhead line equipment and train movement on WCML. Pylons and wind turbines remain visible above field boundaries and tree canopies.
Night-time	Local roads in the area are unlit, with views to night-time lighting limited to individual or isolated properties. There is a prominent far distance skyglow from the town of Crewe to the south.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	Viewpoint not assessed at AP1 during construction.	Not assessed
	Construction night-time	Viewpoint not assessed at AP1 during construction.	Not assessed
	Construction cumulative	There are no developments which will result in cumulative construction effects.	Not assessed
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a major adverse (significant) effect. This would be due to the introduction of Warmingham Moss southbound Viaduct, Warmingham Moss northbound Viaduct, Warmingham Moss southbound embankment No.2 and Footpath Crewe 29/1 accommodation overbridge into near and middle-distance views. The AP1 amendment, Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005), will not change the visual effect at this viewpoint, because changes will be screened by elements of the original scheme. The scale, nature and extent of the AP1 amendment will be comparable with that previously assessed and reported within the main ES. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the maturing mitigation planting in association with mitigation earthworks assisting in the visual integration and screening of Warmingham Moss southbound Viaduct, Warmingham Moss northbound Viaduct and Warmingham Moss southbound embankment No.2. At year 15, the AP1 amendment will not change the visual effect at this viewpoint, because changes will be screened by the maturing mitigation planting associated with the original scheme. As such, the AP1 amendment will be comparable with that assessed in the main ES. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to mature mitigation planting substantially screening the original scheme with the exception of the uppermost sections of Warmingham Moss northbound and southbound Viaducts which would be visible in near and middle-distance views. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because the changes will be largely screened by the elements of the original scheme. As such, the AP1 amendment will be comparable with that previously assessed and reported within the main ES. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-02-009: view east from Footpath Minshull Vernon 2/1, east of Moss Lane

This viewpoint is representative of views experienced by residents of Spring Farm, properties east of Moss Lane and by users of Minshull Vernon Footpath 2/1

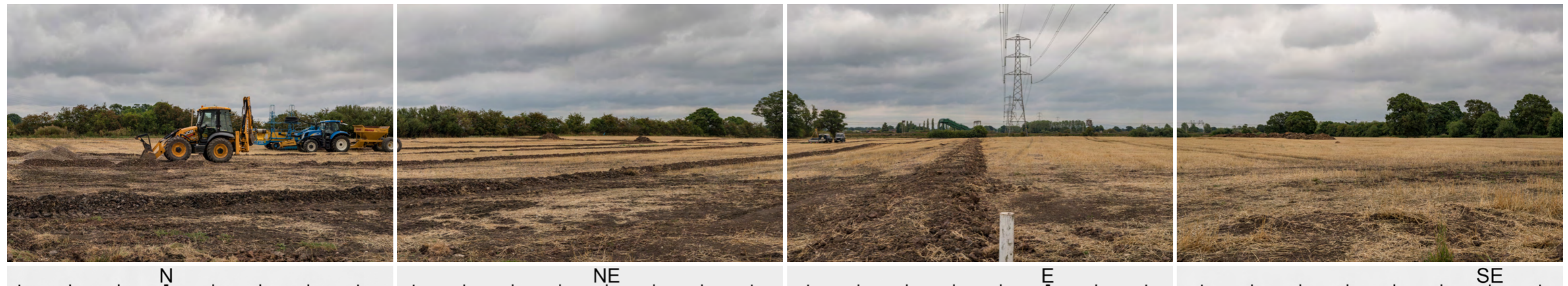
Winter view (baseline)

Date taken: 13/01/2019 Time taken: 15:32



Summer view (baseline)

Date taken: 13/08/2018 Time taken: 16:14



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	369395, 358948	
Elevation:	50.636m AOD	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative of the Cheshire Plain landscape to the north of Crewe, with an overhead power line a prominent component of the view and the route of WCML noticeable.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of footpath users is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 304-02-009: view east from Footpath Minshull Vernon 2/1, east of Moss Lane

Visual baseline description

Winter	Near and middle-distance views are of a broad and shallow arable field, with the view limited by boundary vegetation for residents of properties located east of Moss Lane. WCML crosses the view in the middle distance, with partial views to train movements, overhead line equipment and a pedestrian footbridge crossing. An overhead power lines extend from near distance to far distance and form a prominent skyline feature. A line of poplar trees, east of WCML, close to Moss Lane, are noticeable on the far distance against the skyline. Boundary vegetation associated with WCML, overgrown and unmanaged hedgerows and Spring Plantation combine to form a consistent low skyline.
Summer	Despite dense foliage on the field boundary hedges framing views to the north and south, train movements on WCML and the overhead power lines remain prominent. The poplar trees, east of WCML, close to Moss Lane, remain noticeable against the skyline. Views east from Spring Farm Business Centre are heavily filtered by intervening mature boundary hedges and field trees.
Night-time	Rural roads within the field of view are predominantly unlit and other night-time lighting within the view is limited to individual or isolated properties. There is a far distance skyglow from the urban fringe of Crewe, across residential development within Leighton and beyond woodland to the south.

Future baseline description

Construction (2025)	There are no developments which will result in construction cumulative effects.
Operation (2038)	There are no developments which will result in construction cumulative effects.

Visual impact assessment

		Temporary effects during construction	Significance of effect
Construction		Viewpoint not assessed at AP1 during construction.	Not assessed
Construction night-time		Viewpoint not assessed at AP1 during construction.	Not assessed
Construction cumulative		There are no developments which will result in cumulative construction effects.	Not assessed
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a major adverse (significant) effect. This would be due to the presence of Warmingham Moss southbound Viaduct and Warmingham Moss northbound Viaduct, associated train movements and overhead line equipment which would be visible to residents of Spring Farm, properties east of Moss Lane and by users of Minshull Vernon Footpath 2/1 and would interrupt the skyline across much of the view. The AP1 amendment, Change to Bill powers required for the relocation of an access point and realignment of Hoggins Brook at Moss Lane (AP1-001-005), will result in a small reduction in the extent of the landscape mitigation earthworks, increasing the visibility of the moving trains on the embankments and viaducts in a small proportion of middle-distance views for users of Footpath Minshull Vernon 2/1. The change will not be readily discernible for residents of residents of Spring Farm, properties east of Moss Lane. Therefore, the AP1 amendment will give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the maturing of landscape mitigation planting on mitigation earthworks which would screen the appearance of Warmingham Moss southbound Viaduct and Warmingham Moss northbound Viaduct. At year 15, the AP1 amendment will not change the visual effect at this viewpoint. The combination of landscape mitigation earthworks and maturing mitigation planting will provide comparable screening to the original scheme for views from the footpaths and for residents of properties east of Moss Lane. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a moderate adverse (significant) effect. This would be due to the presence of mature mitigation planting which would partially filter the lower sections of Warmingham Moss northbound Viaduct, and those sections at grade, however there would continue to be views to upper parts of Warmingham Moss northbound Viaduct and Warmingham Moss southbound Viaduct in the middle-distance. At year 30, the AP1 amendment will not change the visual effect on residents of Spring Farm, properties east of Moss Lane and users of Minshull Vernon Footpath 2/1, because the establishing mitigation planting will provide comparable screening to the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect, and the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-02-009: view east from Footpath Minshull Vernon 2/1, east of Moss Lane

This viewpoint is representative of views experienced by residents of Spring Farm, properties east of Moss Lane and by users of Minshull Vernon Footpath 2/1.

Current baseline - winter view

Date taken: 13/01/2019 Time taken: 15:32



Winter verifiable photomontage - operation year 1



The viewpoint has been taken approximately 338.5m away from the AP1 revised scheme. Viewpoint location shown on Map LV-08-304. For full details of the visual assessment at viewpoint 304-02-009 refer to SES1 and AP1 ES Volume 5, Appendix: LV-001-0MA01, Part 4.

This verifiable photomontage (Type 4 as described in Visual Representation of Development Proposals LI TGN 06/19) provides an illustration of how the AP1 revised scheme may look in 2038 (opening year) to help inform the visual impact assessment. The design of the AP1 revised scheme may be subject to design development in response to consultation. Development of detail design after AP1 submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the AP1 revised scheme into the landscape.

Each individual image represents a 39.6° horizontal field of view with planar projection. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet (image size 390mm x 260mm) to be viewed at a comfortable arms length. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (SMR Volume 5, Appendix: CT-001-00001) of the main ES.

Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens		
Approximate GPS co-ordinates ref.	369395, 358948	Direction of View:	62°
Elevation:	50.636m AOD	Height of Camera:	1.65m

	Map Number LV-01-707	<p>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it issued in part or issued incomplete in any way.</p> <p>Registered in England. Registration number 06791686. Registered office: Two Snowhill, Snow Hill, Queensway, Birmingham B4 6GA. © Crown copyright and database rights 2022. Ordnance Survey Licence Number 100049190.</p>
	Map Name Verifiable Photomontage Operation Year 1 (2038) - Winter Viewpoint 304-02-009	
	Community area MA01: Hough to Walley's Green	
Doc Number: 2PT24-MWJ-EV-MAP-M000-004143-P01		Date: Jan 2022

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Viewpoint 304-02-010: view south-west from Maplins Moss Place, Coppenhall, Crewe

This viewpoint is representative of views experienced by residents of the westernmost properties at Maplins Moss Place, Coppenhall.

Winter view (baseline)

Date taken: 22/03/2019 (stitched panorama)



Summer view (baseline)

Date taken: 30/08/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370188, 357858	
Value of the viewpoint:	This viewpoint has a medium value, typical of the urban fringe landscape of northern Crewe, with WCML forming a noticeable far distance component of the view.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 304-02-010: view south-west from Maplins Moss Place, Coppenhall, Crewe

Visual baseline description

Winter	The near distance comprises the local road, street lighting and a wide grass verge with immature tree planting bordered by a field boundary hedge with mature hedgerow trees. Visibility beyond is filtered by this vegetation, towards a palisade fence in the middle distance denoting the boundary of WCML. Overhead line equipment and train movements are a noticeable component over a large proportion of the view. In the far distance a mature belt of trees and shrubs along the western boundary of WCML filter visibility of established residential development.
Summer	In summer, the intervening field boundary hedge and mature trees in foliage provide additional screening of WCML, overhead line equipment and train movement. New tree planting along the residential development boundary verge currently affords no screening benefit.
Night-time	Maplins Moss Place includes street lighting and the residential area west of the WCML in Crewe generate far distance skyglow above WCML and intervening vegetation. Adjacent fields in the near distance of the view between the viewpoint and WCML are unlit.

Future baseline description

Construction (2025)	There are no committed developments that will change the baseline.
Operation (2038)	There are no committed developments that will change the baseline.

Visual impact assessment

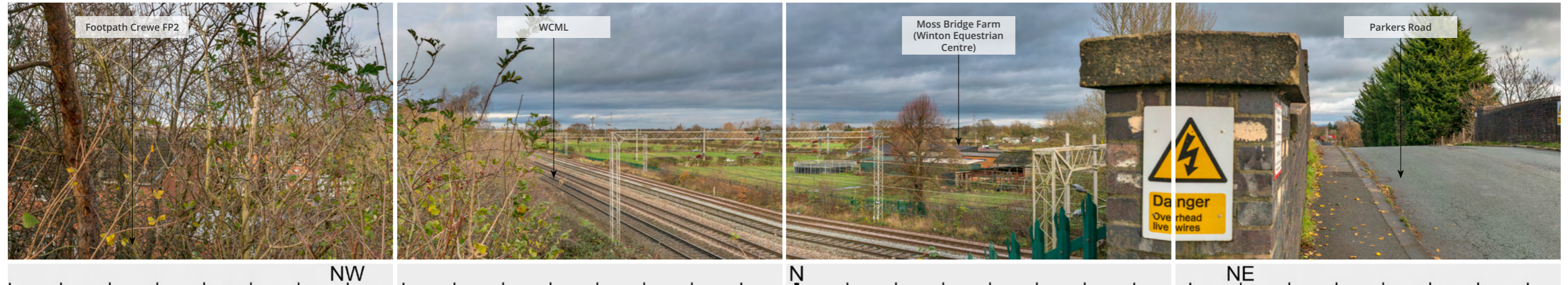
		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a high magnitude of change and a major adverse (significant) effect. This would be due to the presence of large-scale construction works, including the construction of Crewe tunnel north portal building and Crewe north portal cutting (retained cutting) which would be visible in the near distance and across the majority of the view. The AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), will substantially decrease the visual effects at this viewpoint. This is because the construction of the Crewe tunnel north portal building, porous portal and Crewe retained cutting will be moved to an area north of Parkers Road, with construction activity associated with the Crewe tunnel main compound removed from near distance views. Some construction works associated with the establishment of ecological mitigation measures will remain partially visible in views west, heavily filtered by existing intervening vegetation. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Construction night-time	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the presence of night-time lighting for Crewe tunnel north main compound and construction activity in relation to Crewe tunnel north porous portal and portal building which introduced new lighting elements into views. The AP1 amendment will decrease the visual effect at this viewpoint, because the lighting associated with Crewe tunnel north main compound will be moved to an area north of Parkers Road and further from the viewpoint. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a medium magnitude of change and a moderate adverse (significant) effect. This would be due to the presence of Crewe north portal cutting (retained cutting) which would be visible in the near distance to the west and Crewe tunnel north portal building in the middle distance to the south within views. At year 1, the AP1 amendment will decrease the visual effect, because Crewe tunnel north portal, building, associated rescue area and car park, and Crewe retained cutting will be relocated to an area north of Parkers Road and will no longer be within the direct line of view. Existing boundary vegetation retained in construction, will partially filter views towards the WCML. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant). The AP1 amendment will therefore remove a significant effect.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a low magnitude of change and a minor adverse (non-significant) effect. This would be due to the presence of establishing mitigation planting alongside Crewe north cutting and around the tunnel portal building and auto-transformer station, which would add a near distance and middle-distance screening element to views. At year 15, the AP1 amendment will change the visual effect at this viewpoint, because the Crewe tunnel north portal, building and Crewe retained cutting and associated mitigation planting will be relocated to an area north of Parkers Road. Hedgerow planting will be perceptible in the near distance and will further filter views towards the WCML. The AP1 amendment will therefore give rise to a different effect. The magnitude of change will be negligible and the level of significance of the effect reported in the main ES will reduce to negligible (non-significant).	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a negligible (non-significant) effect. This would be due to mature mitigation planting which would provide denser screening in summer months and would further filter views of the original scheme elements. At year 30, the AP1 amendment will change the visual effect at this viewpoint, because the relocated Crewe tunnel north portal, building, Crewe retained cutting and associated mitigation planting will not be in the direct line of view. Hedgerow planting will be perceptible in the near distance and will further filter views towards the WCML. Therefore, the AP1 amendment will not give rise to a different effect and the level of significance of the effect will remain as reported in the main ES.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 304-03-012: view north from Parkers Road

This new viewpoint is located in an area where there will be changes to the original scheme. It is located on Parkers Road and is representative of views experienced by users of Footpath Crewe 12/2 and road users on Parkers Road.

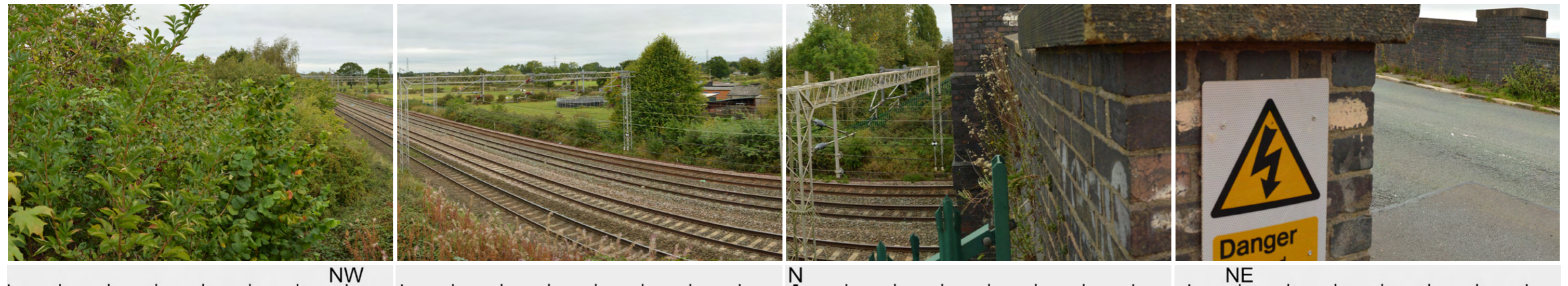
Winter view (baseline)

Date taken: 12/01/2022 Time taken: 12:21

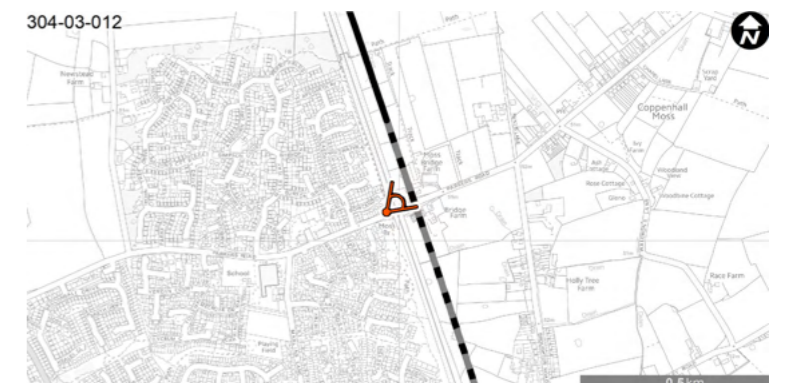


Summer view (baseline)

Date taken: 24/09/21 Time taken: 12.20



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	369975 , 358081	
Elevation:	56.679m AOD.	
Value of the viewpoint:	This viewpoint has a medium value. The WCML, including tracks, moving trains, overhead line equipment and steel fencing are prominent and detracting elements in the view but the vegetation growing along the railway line and in the open countryside visible in the distance contribute to the green setting of the view.	Sensitivity of the receptor: High
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The attention of recreational users is likely to be focused on the surrounding landscape. There is a high susceptibility to visual change arising from the construction and operation of the AP1 revised scheme.	



Viewpoint 304-03-012: view north from Parkers Road

Visual baseline description

Winter	This new viewpoint is located in an area that was not affected by the original scheme. The viewpoint is situated on Parkers Road, immediately west of the Parkers Road overbridge that crosses the WCML and at the access point to Footpath Crewe 12/2. The foreground view comprises the tracks and overhead line equipment along the WCML corridor, with the road, the brick parapets of the overbridge and established vegetation on the bridge embankments. Steps down from Parkers Road provide access to the PRoW which is routed parallel to the WCML. The footpath is bordered to the east by steel palisade fencing and scrub vegetation along the WCML. To the west of the footpath is a linear woodland belt of mature, predominantly deciduous trees and shrubs that mark the edge of Leighton. Beyond the WCML, the paddocks and agricultural buildings of the Winton Equestrian Centre area visible, partially screened by trees growing along the railway corridor.
Summer	The dense leaf cover provided by the deciduous vegetation on the bridge embankments and to the west of Footpath Crewe 12/2 screens the residential area on the northern boundary of Crewe (north-west of the viewpoint). Mature deciduous trees within the Winton Equestrian Centre and the wider landscape beyond partially screen the agricultural buildings.
Night-time	The night-time baseline is not described for this viewpoint as night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	This new viewpoint is located in an area that would not be affected by the original scheme. As a result of the AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), footpath and road users will experience a substantial change to the composition of near and middle-distance views as a result of the AP1 amendment. Vegetation clearance in the near distance will increase the availability of views of the adjacent housing and of the WCML whereas the original scheme retained this screening. The demolition of buildings at Winton Equestrian Centre and the removal of associated mature vegetation will be noticeable in the view beyond the WCML. The presence of large-scale construction activity associated with Crewe tunnel north main compound, railway systems compound and construction of Crewe tunnel north portal building, Crewe tunnel north porous portal, associated rescue areas and car parking will be visible in the near and middle-distance. The existing WCML and construction activity associated with the construction of Footpath Crewe 29/1 accommodation overbridge, Warmingham Moss southbound embankment No. 1a and Warmingham Moss southbound WCML embankment will be visible within views to the north. The AP1 amendment will give rise to a high magnitude of change and a major adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Major adverse (significant)
	Construction night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	Users of Footpath Crewe 12/2 and Parkers Road will experience a substantial change to the composition of near and middle-distance views as a result of the AP1 amendment. Vegetation removed during construction will open up views to the east of the WCML. Crewe tunnel north portal building, rescue area and car parking will be prominent in the near distance, beyond which, to the north, will be the Crewe tunnel north porous portal, overhead line equipment and train movements running parallel with the WCML. Footpath Crewe 29/1 accommodation overbridge, Warmingham Moss southbound embankment no. 1a and Warmingham Moss southbound WCML embankment will be noticeable within views to the north. Mitigation planting around the buildings and car parking will be visible but will not have a screening effect, as a result of its immaturity. The AP1 amendment will give rise to a high magnitude of change and a major adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Major adverse (significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 15	Summer	Views of the AP1 amendment will remain noticeable in the near and middle distance, beyond the WCML. Establishing replacement vegetation adjacent to the WCML and mitigation planting around the Crewe tunnel north portal will partially screen the Crewe tunnel north portal building. Footpath Crewe 29/1 accommodation overbridge, Warmingham Moss southbound embankment No. 1a and Warmingham Moss southbound WCML embankment to the north will remain visible in the far distance to the north. Overhead line equipment and train movements will be visible running parallel with the existing WCML. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 30	Summer	Further establishment of mitigation planting around the Crewe tunnel north portal will partially screen the Crewe tunnel north portal building. However, the AP1 amendment will remain visible in the middle to far-distance, viewed in the context of the WCML. Footpath Crewe 29/1 accommodation overbridge will reduce awareness of the Crewe tunnel north portal and of Warmingham Moss southbound embankment No.1a and Warmingham Moss southbound WCML embankment beyond. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operational effects.	No cumulative effect

Viewpoint 304-03-012: view north from Parkers Road

This new viewpoint is located in an area where there will be changes to the original scheme. It is located in on Parkers Road and is representative of views experienced by users of Footpath Crewe 12/2 and road users on Parkers Road.

Current baseline - winter view

Date taken: 12/01/2022 Time taken: 12:21



Winter verifiable photomontage - construction



The viewpoint has been taken approximately 56.679 metres away from the AP1 revised scheme. Viewpoint location shown on Map LV-08-304. For full details of the visual assessment at viewpoint 304-03-012 refer to SES1 and AP1 ES Volume 5, Appendix: LV-001-0MA01, Part 4.

This verifiable photomontage (Type 4 as described in Visual Representation of Development Proposals LI TGN 06/19) provides an illustration of how the AP1 revised scheme may look during the peak construction to help inform the visual impact assessment. The construction methods and siting of construction activities of the AP1 revised scheme may be subject to change in response to consultation and ongoing design. The extent of land required temporarily to construct the AP1 revised scheme will not extend beyond that shown in the photomontage. Changes in the construction of the AP1 revised scheme will not result in any significant adverse change in the environmental effects reported in the assessment.

Each individual image represents a 39.6° horizontal field of view with planar projection. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet (image size 390mm x 260mm) to be viewed at a comfortable arms length. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (SMR Volume 5, Appendix: CT-001-00001) of the main ES.

Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens		
Approximate GPS co-ordinates ref.	369881.7, 358114	Direction of View:	344.55°
Elevation:	56.679m AOD	Height of Camera:	1.474m

	Map Number LV-01-789	<p>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it issued in part or issued incomplete in any way.</p> <p>Registered in England. Registration number 06791686. Registered office: Two Snowhill, Snow Hill, Queensway, Birmingham B4 6GA. © Crown copyright and database rights 2022. Ordnance Survey Licence Number 100049190.</p>
	Map Name Verifiable Photomontage Peak Construction Phase - Winter Viewpoint 304-03-012	
	Community area MA01: Hough to Walley's Green	
Doc Number: 2PT24-MWJ-EV-MAP-M000-004140-P01		Date: Jan 2022

Viewpoint 304-03-012: view north from Parkers Road

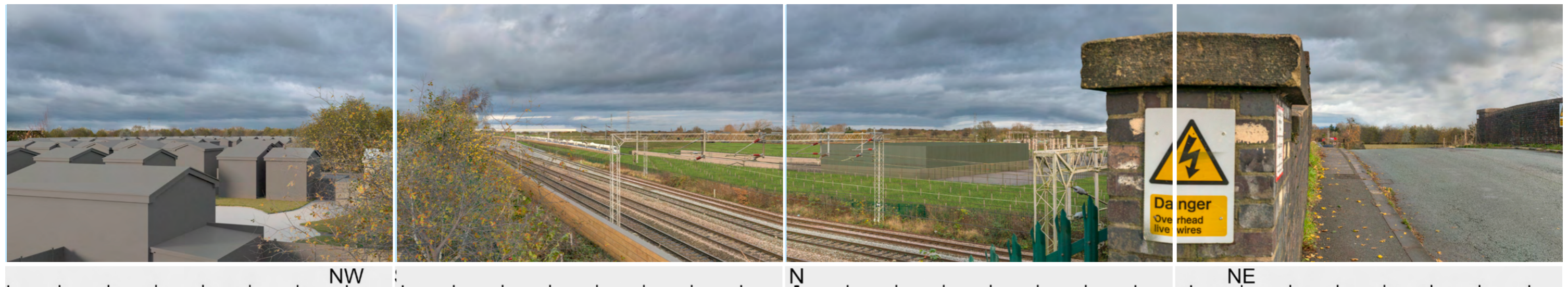
This new viewpoint is located in an area where there will be changes to the original scheme. It is located in on Parkers Road and is representative of views experienced by users of Footpath Crewe 12/2 and road users on Parkers Road.

Current baseline - winter view

Date taken: 12/01/2022 Time taken: 12:21



Winter verifiable photomontage - operation year 1



The viewpoint has been taken approximately 56.679 metres away from the AP1 revised scheme. Viewpoint location shown on Map LV-08-304. For full details of the visual assessment at viewpoint 304-03-012 refer to SES1 and AP1 ES Volume 5, Appendix: LV-001-0MA01, Part 4.

This verifiable photomontage (Type 4 as described in Visual Representation of Development Proposals LI TGN 06/19) provides an illustration of how the AP1 revised scheme may look in 2038 (opening year) to help inform the visual impact assessment. The design of the AP1 revised scheme may be subject to design development in response to consultation. Development of detail design after AP1 submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the AP1 revised scheme into the landscape.

Each individual image represents a 39.6° horizontal field of view with planar projection. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet (image size 390mm x 260mm) to be viewed at a comfortable arms length. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (SMR Volume 5, Appendix: CT-001-00001) of the main ES.

Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens		
Approximate GPS co-ordinates ref.	369881.7, 358114	Direction of View:	344.55°
Elevation:	56.679m AOD	Height of Camera:	1.474m

	Map Number LV-01-790	<p>Registered in England. Registration number 06791686. Registered office: Two Snowhill, Snow Hill, Queensway, Birmingham B4 6GA. © Crown copyright and database rights 2022. Ordnance Survey Licence Number 100049190.</p>
	Map Name Verifiable Photomontage Operation Year 1 (2038) - Winter Viewpoint 304-03-012	
	Community area MA01: Hough to Walley's Green	
Doc Number: 2PT24-MWJ-EV-MAP-M000-004141-P01		Date: Jan 2022

Viewpoint 304-02-013: view west from Kent's Lane

This new viewpoint is located in an area where there will be changes to the original scheme and is located on Kent's Lane and is representative of views experienced by users of Footpath Crewe 30/1, residents and road users travelling on Kent's Lane.

Winter view (baseline)

Date taken: 12/01/2022 (stitched panorama)



Summer view (baseline)

Date taken: 24/09/2021 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370294 , 358278	
Value of the viewpoint:	This viewpoint has a medium value as the view includes typical components of the landscape on the rural-urban fringe with power lines, fragmented agricultural land and isolated industrial uses. Mature trees and hedgerows contribute to the verdant setting of the view.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The attention of recreational users and residents is likely to be focused on the surrounding landscape. There is a high susceptibility to visual change arising from the construction and operation of the AP1 revised scheme. Road users of rural roads have a lower susceptibility as their attention is less focused on their surroundings.	High



Viewpoint 304-02-013: view west from Kent's Lane

Visual baseline description

Winter	This new viewpoint is located in an area where there will be changes from the original scheme. The view comprises Kent's Lane is a single-track, rural road bordered by grass verges, hedgerows and a wood pole overhead line. This is seen adjacent to an area of pasture contained by hedgerows and a light industrial development to the north-west, where brick and fabricated steel structures are seen alongside areas of parking. Views are largely screened by intervening vegetation. The small fields (under pasture, but not recently grazed) are defined by a mix of deciduous hedges and mature trees which punctuate the skyline. Skyline views are comprised of distant wood pole overhead power lines seen above mature tree cover. Industrial buildings, comprising a mix of brick and fabricated steel structures, and parked vehicles associated with a car repair facility are visible to the north-west of the view. Views from residential properties are typically filtered by intervening vegetation and outbuildings.
Summer	Deciduous trees and hedgerows in leaf further screen the overhead power lines and industrial buildings to the north-west.
Night-time	Close views are unlit with night-time lighting limited to individual properties. Warmingham Road to the south of the viewpoint is well lit by street lighting, with wider skyglow generated by the town of Crewe.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	This new viewpoint is located in an area where there will be changes to the original scheme. Residents and users of Kent's Lane will experience a substantial change to near and middle-distance views as a result of the AP1 amendment, additional land permanently required for the realignment and extension of Crewe tunnel (AP1-001-001), including large-scale construction activity at Crewe tunnel north main compound, railway systems compound and the construction of Crewe tunnel north portal building, Crewe tunnel north porous portal, rescue areas and car parking and ATS. The buildings and mature vegetation within Winton Equestrian Centre, Parkers Road Bridge will be removed. Hedgerows along Kent's Lane will be removed to facilitate utilities works related to the AP1 amendment. Structures and activity within the construction compound and railway systems compounds including plant movements, temporary buildings and ancillary structures and will be prominent elements within direct views. Views to the north will include temporary stockpiles of materials. Construction activity associated with the AP1 revised scheme for Footpath Crewe 29/1 accommodation overbridge, Coppenhall Moss embankment and Warmingham Moss embankments, will be visible in the middle and far distance of the view. The AP1 amendment will give rise to a high magnitude of change and a major adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Major adverse (significant)
	Construction night-time	The presence of night-time lighting for Crewe tunnel north main compound will introduce localised lighting elements in the near and middle-distance views. Lighting within Warmingham Moss satellite compound to the north will contribute to the visibility of skyglow in the distance. The controls on light spill set out in the draft CoCP will limit the change these new light sources introduce to the wider view. However, there will be an increase in the prominence of artificial lighting in the view for properties along Kent's Lane. The AP1 amendment will give rise to a high magnitude of change and a major adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Major adverse (significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	Residents and users of Kent's Lane will experience a substantial change to the composition of middle-distance views as a result of the AP1 amendment. The absence of intervening hedgerows and vegetation adjacent to the WCML, removed during construction, will open up views to the west, and views of housing on the edge of Leighton, although the presence of existing built elements will partially screen views from residential properties. The AP1 amendment comprising Crewe tunnel north portal building and ATS will be visible in front of the WCML, as will overhead line equipment and train movements as they enter and emerge from the Crewe tunnel north porous portal. Footpath Crewe 29/1 accommodation overbridge, Coppenhall Moss embankment and Warmingham Moss southbound embankments will be visible to the north.. Mitigation planting around the buildings, ATS and Parkers Road and hedgerow planting will not contribute towards screening a result of its immaturity at year 1. The AP1 amendment will therefore give rise to a high magnitude of change and a major adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Major adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	Although still noticeable in the view, establishing mitigation planting in the near and middle-distance will filter and partially screen views of the AP1 amendment including the Crewe tunnel north portal building and ATS as well as the overhead line equipment and train movements as they emerge from the Crewe tunnel north porous portal in the middle-distance. The AP1 amendment will give rise to a medium magnitude of change and a new moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	Mitigation planting in the near and middle-distance will have matured sufficiently to substantially screen views of the AP1 amendment including the Crewe tunnel north portal building and ATS as well as the overhead line equipment and train movements as they emerge from the Crewe tunnel north porous portal in the middle-distance. Mitigation planting associated with Parkers Road and Bridge as well as the Footpath Crewe 29/1 accommodation overbridge, included in the AP1 revised scheme, will filter views of these raised elements and integrate them into the views. The AP1 amendment will give rise to a low magnitude of change and a minor adverse (non-significant) effect not reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in cumulative operational effects.	No cumulative effect

Viewpoint 304-02-014: view north-west from Groby Road

This new viewpoint is located in an area where there will be changes to the original scheme and is representative of views experienced by residents in properties on Groby Road and road users.

Winter view (baseline)

Date taken: 12/01/2022 (stitched panorama)



Summer view (baseline)

Date taken: 24/09/2021 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370879 , 358582	
Value of the viewpoint:	This viewpoint has a medium value. The view includes typical features of the rural landscape including the road lined by mature trees and hedgerows. Detracting features include overhead power lines and commercial property on the southern side of the road.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The susceptibility of these receptors is high . Residents have a strong interest in their visual environment. They are therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme. Road users on main roads have a lower susceptibility as their attention is less focused on their surroundings.	High



Viewpoint 304-02-014: view north-west from Groby Road

Visual baseline description

Winter	The tree lined Groby Road is prominent in the foreground with associated red-brick terraced housing and gardens. The south side of the road is bordered by vegetation in the front gardens of residential properties, alongside the steel palisade boundary fencing to a small bus maintenance depot. Established hedgerow trees and hedgerow on the northern side of the road filter views to the farmland beyond. Trees around the junction of Groby Road and Warmingham Road are visible in the background. A telegraph pole and phone lines are detracting elements in the view.
Summer	In summer, trees in leaf further screen views over the rural landscape.
Night-time	The rural roads are not lit. Local light sources include residential properties and skyglow from the town of Crewe is apparent to the west.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	This new viewpoint is located in an area where there will be changes to the original scheme. Residents and road users will experience a noticeable change to near and middle-distance views as a result of construction activity associated with the AP1 amendment, additional land temporarily required for modifications to Warmingham Road and Groby Road junction (AP1-001-004). The removal of existing mature roadside trees and hedgerows will open up views of fields to the north and of traffic, including construction traffic, using the Warmingham Road. Construction activities will be visible in the near and middle-distance associated with the road modifications. Construction traffic using Groby and Warmingham Roads will be apparent. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction night-time	The night-time view in operation was not assessed as there is no requirement for continuous construction lighting in this location.	Not assessed
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	As a result of the vegetation clearance and changes to the highway design associated with the AP1 amendment, there will be open views to the north and north west affording greater visibility of traffic movements along Warmingham Road in the middle distance. Residents and users of Groby Road will experience a noticeable change to views. Mature roadside trees and hedges, removed during construction, will have been replaced, however, these will not contribute towards the integration of the highway infrastructure or provide screening in year 1 as a result of their immaturity. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	Establishing roadside hedgerows will in part replicate the roadside trees and hedges removed during construction of the AP1 amendment, restoring field boundaries and contributing to the integration of the highway changes and providing some filtering of views in year 15. Replacement hedgerow trees will not have reached the same stature as the existing trees by year 15. The AP1 amendment will give rise to a low magnitude of change and a new non-significant effect.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	Established roadside hedgerows will substantially replicate the roadside trees and hedges removed during construction, restoring field boundaries and contributing to the integration of the highway changes and providing filtering of views in year 30. Residents and users of Groby Road will experience a barely perceptible change to views along Groby Road. The AP1 amendment will give rise to a negligible magnitude of change and a new non-significant effect.	Negligible (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
	Operation cumulative	There are no developments which will result in cumulative operational effects.	No cumulative effect

Viewpoint 304-03-015: View east from Footpath Crewe 28/1

This new viewpoint is located in an area where there will be changes to the original scheme and is representative of views experienced by users of Footpath Crewe 28/1 and Oakfield Lodge School.

Winter view (baseline)

Date taken: 12/01/2022 (stitched panorama)



Summer view (baseline)

Date taken: 04/09/2021 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	370685 , 358638	
Value of the viewpoint:	This viewpoint has a medium value. The view includes features typical of the rural landscape that comprise improved pasture, hedgerows and established fields trees. Local roads and roadside vegetation will be perceptible. Detracting features include overhead power lines and commercial property to the north-east.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	The attention of recreational receptors is focused on the landscape. They are therefore highly susceptible to visual change. Pupils, teachers and visitors to schools are less focussed on the landscape.	High



Viewpoint 304-03-015: View east from Footpath Crewe 28/1

Visual baseline description

Winter	There are interrupted views in the near-distance of pasture, hedgerows and scattered field trees. Views are limited by trimmed hedgerows in the middle-distance which filter views of Warmingham Road, its junction with Groby Road and associated traffic. Roadside trees, aligned with the hedgerows, restrict longer distance views. Overhead power lines and pylons are visible above the vegetation in the middle-distance, which along with the rooflines of commercial units to the north, are visual detractors within views. Views from Oakfield Lodge School are screened by intervening vegetation.
Summer	In summer, trees and hedgerows in leaf further screen views over the rural landscape, as a result, views of vehicles on Warmingham Road/Groby Road are more heavily filtered.
Night-time	The rural roads are not lit. Local light sources are from a limited number of residential properties and do not contribute to local skyglow.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	This new viewpoint is located in an area which was not affected by the original scheme. Users of Footpath Crewe 28/1 will experience a noticeable change to views as a result of the AP1 amendment, additional land temporarily required for modifications to Warmingham Road and Groby Road junction (AP1-001-004), including removal of existing mature roadside trees and roadside hedgerows. This would open up views towards Warmingham Road and construction activity, comprising plant movements associated with the road modifications, will be visible in the near and middle-distance to the east. As a result, there will be uninterrupted views of traffic, including construction traffic moving along Warmingham Road, and the junction with Groby Road. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Construction night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	Mature roadside trees and hedges removed during construction will have been replaced. However, these will not contribute towards the integration of the changes to the highway infrastructure or provide screening in year 1 due to their immaturity. As a result of the vegetation clearance and changes to the highway design, traffic movements along Warmingham Road, and its junction with Groby Road in the middle-distance for users of Footpath Crewe 28/1 in views to the east, will be perceptible. The AP1 amendment will give rise to a medium magnitude of change and a moderate adverse (significant) effect not reported in the main ES. The AP1 amendment will therefore give rise to a new significant effect.	Moderate adverse (significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 15	Summer	Establishing roadside hedgerows will partially replicate the roadside trees and hedges removed during construction, restoring field boundaries, contributing to the integration of the highway changes and providing some filtering of views in year 15. Replacement hedgerow trees will not have reached the same stature as the existing trees by year 15. Traffic movements along Warmingham Road, and its junction with Groby Road in the middle-distance will remain perceptible, however will be partially screened by roadside hedgerows. The AP1 amendment will give rise to a low magnitude of change and a new non-significant effect.	Minor adverse (non-significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
Year 30	Summer	Established roadside hedgerows will substantially replicate the roadside trees and hedges removed during construction, restoring field boundaries, contributing to the integration of the highway changes and substantially screening views for footpath users in year 30. Therefore, footpath users will experience a barely perceptible change to views to the east. The AP1 amendment will give rise to a negligible magnitude of change and a new non-significant effect.	Negligible (non-significant)
	Night-time	Night-time effects have only been considered for occupiers of residential properties and residents staying in hotels and healthcare institutions.	Not assessed
	Operation cumulative	There are no developments which will result in cumulative operational effects.	No cumulative effect

Viewpoint 305-02-004: view east from Moat House Farm, A530 Middlewich Road

This viewpoint is representative of views experienced by residents of Moat House Farm, properties on A530 Middlewich Road at Walley's Green and by users of Footpath Minshull Vernon 12/2 and 12/3 (Crewe and Nantwich Circular Walk) and Footpath Minshull Vernon 13/1.

Winter view (baseline)

Date taken: 15/02/2018 (stitched panorama)



Summer view (baseline)

Date taken: 28/09/2018 (stitched panorama)



Camera:	Nikon D3200 SLR 50mm (equivalent) focal length	
Approximate GPS co-ordinates ref.	368378, 360847	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative and typical of the Cheshire Plain landscape to the east of Walley's Green.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of recreational receptors is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 305-02-004: view east from Moat House Farm, A530 Middlewich Road

Visual baseline description

Winter	<p>The viewpoint is on A530 Middlewich Road at the access lane to Moat House Farm, south of Walley's Green. The near distance comprises buildings at Moat House Farm, a mature field boundary hedge along A530 Middlewich Road and a post and rail fence boundary fence to the farm access. A line of wooden poles follows the lane, visible as a skyline element. Visibility from the A530 Middlewich Road and adjoining properties is partially screened by roadside hedges, farm buildings and garden trees.</p> <p>In the middle-ground, large pastoral fields extend to a skyline of overgrown boundary hedges with occasional mature trees. To the north, 'The Woodlands' and properties south of Walley's Green are in the middle-ground and far distance. Mature field vegetation around intervening fields forms the far distance, with Parkfield Farm located beyond Moat House Farm, and adjacent to the existing WCML, along which overhead line equipment and train movements are visible through boundary vegetation.</p>
Summer	<p>With summer foliage, views are framed by surrounding field vegetation and far distance visibility is reduced. Individual deciduous hedgerow trees appear more distinctive. Visibility from properties bordering the A530 Middlewich Road is heavily restricted by roadside hedges and garden vegetation, whilst property within the open countryside east of the A530 Middlewich Road have more direct views to the east including the WCML.</p>
Night-time	<p>The A530 Middlewich Road and rural roads within the field of view are unlit. Night-time lighting is limited to views of individual or isolated properties, with a distant far distance sky glow generated by the town of Crewe approximately 3km to the south.</p>

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
Construction		Viewpoint not assessed at AP1 during construction.	Not assessed
Construction night-time		Viewpoint not assessed at AP1 during construction.	Not assessed
Construction cumulative		There are no developments which will result in cumulative construction effects.	Not assessed
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a minor adverse (non-significant) effect. This would be due to the introduction of infrastructure elements including overhead line equipment, train movements and Footpath Minshull Vernon 8/1 accommodation overbridge next to Parkfield Farm within views. The AP1 amendment, additional land permanently required for the provision of landscape earthworks adjacent to Footpath Minshull Vernon 8/1 accommodation overbridge (AP1-001-006), will not change the visual effect at this viewpoint, because views of the Landscape Mitigation Earthwork (LME) will be largely screened by Parkfield Farm and viewed in the context of the Minshull Vernon 8/1 accommodation overbridge, overhead line equipment and train movements. Therefore, the AP1 amendment will not give rise to a different effect at this viewpoint and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to maturing mitigation hedge planting alongside the original scheme which would add a further, middle-distance screening element in combination with the existing intervening field boundaries, hedgerow trees and field trees within views. At year 15, the AP1 amendment will not change the visual effect at this viewpoint, because the LME will not be perceptible, as views would be largely screened by Parkfield Farm and viewed in the context of the Minshull Vernon 8/1 accommodation overbridge, overhead line equipment and train movements. Therefore, the AP1 amendment will not give rise to a different effect at this viewpoint and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to mature mitigation planting which would provide a denser screen to views of the original scheme. At year 30, the AP1 amendment will not change the visual effect at this viewpoint, because the LME will continue to be screened by Parkfield Farm and seen in the context of the Minshull Vernon 8/1 accommodation overbridge, overhead line equipment and train movements. Therefore, the AP1 amendment will not give rise to a different effect at this viewpoint and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	The night-time view in operation was not assessed as there is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 305-02-005: View west from Footpath Minshull Vernon 8/1 at Park House Farm

This viewpoint is representative of views experienced by residents of Park House Farm, Park Hall Farm, Parkfield Farm and by users of Footpath Minshull Vernon 8/1.

Winter view (baseline)

Date taken: 26/02/2019 Time taken: 10:52



Summer view (baseline)

Date taken: 17/09/2019 Time taken: 14:23



Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens	
Approximate GPS co-ordinates ref.	369243, 361217	
Elevation:	52.326m AOD	
Value of the viewpoint:	This viewpoint has a medium value, its composition being representative and typical of the views of the WCML within the treed landscape associated with the Cheshire Plain landscape to the north of Crewe.	Sensitivity of the receptor:
Susceptibility of the receptor to the change arising from the AP1 revised scheme:	Residents have a strong interest in their visual environment and the attention of footpath users is focused on the landscape. They are both therefore highly susceptible to visual change arising from the construction and operation of the AP1 revised scheme.	High



Viewpoint 305-02-005: View west from Footpath Minshull Vernon 8/1 at Park House Farm

Visual baseline description

Winter	The viewpoint is located on Footpath Minshull Vernon 8/1 east of WCML between Wimboldsley and Minshull Vernon. In the near distance is a farm access track crossing pastoral farmland bounded by post and rail fencing.
	In the middle distance land rises gently to the north-west, with hedged fields and numerous field and hedgerow trees. To the north-west, a small copse partially screens a pond next to Park House Farm. The house and farm buildings are partially screened by boundary vegetation closing the view beyond. The property at Parkfield Farm, immediately to the west of the WCML has close and direct views east over the railway.
	In the far distance a network of field boundary hedges forms the skyline with filtered views of gantries and overhead line equipment on WCML.
Summer	In summer, foliage on trees and scrubby vegetation around Park Farm pond further filter views west from the property and although there are views towards WCML, the overhead lines and gantries are less visible. Deciduous hedgerows and field trees appear more distinctive against the skyline.
Night-time	Local roads in the area are unlit, with other night-time lighting within the view limited to individual or isolated properties. There is a far distance skyglow from the town of Crewe approximately 3km to the south.

Future baseline description

Construction (2025)	There are no committed developments which will change the baseline.
Operation (2038)	There are no committed developments which will change the baseline.

Visual impact assessment

		Temporary effects during construction	Significance of effect
	Construction	The main ES reported a major adverse (significant) effect. This would be due to the presence of large-scale construction works which would be visible by residents of Park House Farm, Park Hall Farm, Parkfield Farm and by users of Footpath Minshull Vernon 8/1, including the construction of Footpath Minshull Vernon 8/1 accommodation overbridge and Crewe North IMB-R. Views north would be towards construction works for the A530 Nantwich Road realignment and overbridge with Crewe North RSD beyond from Park Hall Farm. The AP1 amendments, additional land permanently required for the provision of landscape earthworks adjacent to Coppenhall Moss north embankment (AP1-001-007) and additional land permanently required for the provision of landscape earthworks adjacent to Footpath Minshull Vernon 8/1 accommodation overbridge (AP1-001-006), will slightly change the visual effect at this viewpoint. AP1 amendment AP1-001-006 will increase the footprint of the north-east embankment slope of Footpath Minshull Vernon 8/1 accommodation overbridge and AP1 amendment AP1-001-007 will bring construction activity slightly closer to Park Hall Farm. However, the changes will be barely perceptible given the scale and extent of the construction activities associated with the AP1 revised scheme. Therefore, the AP1 amendments will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Major adverse (significant)
	Construction night-time	The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of night-time lighting for the construction activity in relation to Crewe RSD South satellite compound and Crewe North RSD. This would introduce new lighting elements in the middle and far-distance views to the north resulting in an increase in the extent of artificial lighting in the rural setting. During construction, the AP1 amendments, will not change the visual effect at this viewpoint, because the visibility of lighting associated with the AP1 amendments will be comparable in scale and intensity to that of the original scheme. Therefore, the AP1 amendment will not give rise to a different significant effect and the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Construction cumulative	There are no developments which will result in cumulative construction effects.	No cumulative effect
		Permanent effects during operation	Significance of effect
Year 1	Winter	The main ES reported a moderate adverse (significant) effect. This would be due to the presence of Footpath Minshull Vernon 8/1 accommodation overbridge and A530 Nantwich Road overbridge which would be visible in near and middle-distance views. At year 1, the AP1 amendment (AP1-001-006) will change the visual effect at this viewpoint. The footprint of the north-east embankment slope of the Footpath Minshull Vernon 8/1 accommodation overbridge will be increased reducing the local slope profile which will be perceptible for users of the footpath, locally improving the visual integration of the overbridge earthworks. At year 1 mitigation planting will not provide any screening. The localised nature of the AP1 amendments, viewed in the context of the large-scale structures of the AP1 revised scheme, will result in a slight change in the view. Therefore, the AP1 amendment will give rise to a different significant effect, however the level of significance of the effect will remain as reported in the main ES.	Moderate adverse (significant)
	Night-time	There is no requirement for continuous operational lighting in this location.	Not assessed
Year 15	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of maturing mitigation planting, which in combination with existing intervening field boundary hedges and field trees would further reduce visibility of the original scheme, including Crewe North IMB-R and A530 Nantwich Road overbridge (this being located within the adjacent Wimboldsley to Lostock Gralam area (MA02)). At year 15, the AP1 amendments will change the visual effect at this viewpoint, because AP1-001-006 will locally reduce earthwork slope profile and the earthworks will also support maturing woodland planting. Both elements will be perceptible for users of Footpath Minshull Vernon 8/1, improving the visual integration of the overbridge earthworks. AP1 amendment, AP1-001-007, will include an embankment which in year 15 will support maturing woodland, improving the integration of the Coppenhall Moss north embankment and provide additional screening for receptors in proximity to the AP1 revised scheme, notably Park Hall Farm. The localised nature of the AP1 amendments, viewed in the context of the large-scale structures of the AP1 revised scheme, will result in a minimal change in the view. Therefore, the AP1 amendment will give rise to a different effect, however the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	There is no requirement for continuous operational lighting in this location.	Not assessed
Year 30	Summer	The main ES reported a minor adverse (non-significant) effect. This would be due to the presence of mature mitigation planting which would provide denser screening to views in summer months. At year 30, the AP1 amendments will change the visual effect at this viewpoint. However, because of the localised scale of the changes associated with the AP1 amendments together with the establishment of mitigation planting will result in a minimal change in the view. Therefore, the AP1 amendment will give rise to a different effect, however the level of significance of the effect will remain as reported in the main ES.	Minor adverse (non-significant)
	Night-time	There is no requirement for continuous operational lighting in this location.	Not assessed
Operation cumulative		There are no developments which will result in cumulative operation effects.	No cumulative effect

Viewpoint 305-02-005: View west from Footpath Minshull Vernon 8/1 at Park House Farm

This viewpoint is representative of views experienced by residents of Park House Farm, Park Hall Farm, Parkfield Farm and by users of Footpath Minshull Vernon 8/1.

Current baseline - winter view

Date taken: 26/02/2019 Time taken: 10:52



Winter verifiable photomontage - operation year 1



The viewpoint has been taken approximately 241.2m away from the AP1 revised scheme. Viewpoint location shown on Map LV-08-305 and LV-08-306b. For full details of the visual assessment at viewpoint 305-02-005 refer to SES1 and AP1 ES Volume 5, Appendix: LV-001-0MA01, Part 4.

This verifiable photomontage (Type 4 as described in Visual Representation of Development Proposals LI TGN 06/19) provides an illustration of how the AP1 revised scheme may look in 2038 (opening year) to help inform the visual impact assessment. The design of the AP1 revised scheme may be subject to design development in response to consultation. Development of detail design after AP1 submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the AP1 revised scheme into the landscape.

Each individual image represents a 39.6° horizontal field of view with planar projection. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet (image size 390mm x 260mm) to be viewed at a comfortable arms length. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (SMR Volume 5, Appendix: CT-001-00001) of the main ES.

Camera:	Sony a7RII, FFS, Zeiss Loxia 50mm f/2.0 lens		
Approximate GPS co-ordinates ref.	369243, 361217	Direction of View:	258°
Elevation:	52.326m AOD	Height of Camera:	1.64m

	Map Number LV-01-708	<p>HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it issued in part or issued incomplete in any way.</p> <p>Registered in England. Registration number 06791686. Registered office: Two Snowhill, Snow Hill, Queensway, Birmingham B4 6GA. © Crown copyright and database rights 2022. Ordnance Survey Licence Number 100049190.</p>
	Map Name Verifiable Photomontage Operation Year 1 (2038) - Winter Viewpoint 305-02-005	
	Community area MA01: Hough to Walley's Green	
Doc Number: 2PT24-MWJ-EV-MAP-M000-004144-P01		Date: Jan 2022

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AP1 revised scheme: non-significantly affected viewpoints: construction phase

Table 2: AP1 revised scheme schedule of non-significantly affected viewpoints, with justification, construction

Viewpoint number	Construction	Construction night-time	Construction cumulative	Justification
302-02-001	Minor adverse	Negligible	No cumulative effect	The amendment will not perceptibly change the scale and nature of construction activity in the compound area, within the view.
302-06-002	Minor adverse	Not assessed	No cumulative effect	The amendment will not perceptibly change the scale and nature of construction activity in the compound area, within the view.
303-02-004	Negligible	Negligible	No cumulative effect	The amendment will remove construction of the Crewe tunnel north portal building, north portal and porous portal from views to the north-west.
304-02-001	Minor adverse	Negligible	No cumulative effect	The amendment, will relocate the Crewe tunnel north main compound further from the viewpoint allowing a greater amount of existing intervening vegetation to be retained.
304-02-010	Negligible	Negligible	No cumulative effect	The amendment, will relocate the Crewe tunnel north main compound further from the viewpoint.

AP1 revised scheme: non-significantly affected viewpoints: operation phases

Table 3: AP1 revised scheme schedule of non-significantly affected viewpoints, with justification, operation

Viewpoint number	Operation year 1 (2038)		Operation year 15 (2053)		Operation year 30 (2068)		Operation cumulative	Justification
	Winter	Night-time	Summer	Night-time	Summer	Night-time		
300-02-005	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will not be visible beyond intervening buildings and vegetation.
300-02-006	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will not be visible beyond intervening landform and vegetation.
301-02-006	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will be largely screened by the realignment of Newcastle Road.
302-02-001	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will be barely perceptible in the context of views of WCML overhead line equipment, warehouses and sheds beyond and in the middle-distance.
302-06-002	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will be comparable to views of the original scheme and the existing the industrial setting.
303-02-004	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The Crewe tunnel north portal building, north portal and porous portal will not be visible in views to the north-west as a result of the amendment.
303-02-005	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	Over time, oblique views of the amendment will be filtered through maturing mitigation planting.
304-02-001	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will be located further from the viewpoint and views will be filtered through intervening vegetation.
304-02-002	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will be screened by intervening structures and maturing mitigation planting.
304-02-010	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect	The amendment will not be in the direct line of view and views will be filtered through intervening vegetation.
305-02-004	Minor adverse	Not assessed	Minor adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect	Views of the amendment will be largely screened by Parkfield Farm.

4.3 AP1 revised scheme assessment matrices

AP1 revised scheme landscape assessment matrix

4.3.1 Table 4 below summarises the assessment of significance for all of the LCA assessed in the Hough to Walley's Green area (MA01). These are ordered from south to north along the route of the AP1 revised scheme. The assessment of significant effects is presented in SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Sections 3 and 4.

Table 4: AP1 revised scheme landscape assessment matrix summarising the assessment of significance for all of the LCA affected by AP1 revised scheme identified in the Hough to Walley's Green area

LCA	Construction	Construction cumulative	Operation year 1 (2038)	Operation year 15 (2053)	Operation year 30 (2068)	Operation cumulative
Blakenhall Lower Farms and Woods	Negligible	Major adverse	Negligible	Negligible	Negligible	Moderate adverse
Shavington/Crewe Outer Fringe Lower Farms and Woods	Minor adverse	Major adverse	Negligible	Negligible	Negligible	Moderate adverse
Crewe Station Area and Sidings	Minor adverse	No cumulative effect	Negligible	Negligible	Negligible	No cumulative effect
Crewe West	Negligible	No cumulative effect	Negligible	Negligible	Negligible	No cumulative effect
Crewe North	Minor adverse	No cumulative effect	Negligible	Negligible	Negligible	No cumulative effect
Crewe Fringe Mosslands	Moderate adverse	No cumulative effect	Minor adverse	Minor adverse	Minor adverse	No cumulative effect
Wimboldsley Plain	Major adverse	No cumulative effect	Major adverse	Major adverse	Major adverse	No cumulative effect

AP1 revised scheme visual assessment matrix

4.3.2 Table 5 below summarises the assessment of significance for all the representative viewpoints assessed as part of AP1 revised scheme in the Hough to Walley's Green area (MA01). These are ordered from south to north along the route of the AP1 revised scheme. The assessment of significant effects is presented in SES1 and AP1 ES Volume 2, Community Area report: Hough to Walley's Green (MA01), Sections 3 and 4. The night-time assessment (reported in Part 4 of this document, as appropriate) has only been undertaken for certain receptors with a view of proposed continuous lighting during either construction or operation. Further detail on this is provided within the Technical Note: Approach to night-time assessment, contained within the SMR. In most cases, in urban areas, additional lighting is not considered to give rise to significant effects due to the widespread presence of street lighting, lightspill from adjacent buildings and skyglow. Where there is no direct foreground visibility of additional lighting, no further assessment has been undertaken.

Table 5: AP1 revised scheme visual assessment matrix summarising the assessment of significance for all of the viewpoints affected by the AP1 revised scheme identified in the Hough to Walley's Green area

Viewpoints		Construction			Operation year 1 (2038)		Operation year 15 (2053)		Operation year 30 (2068)		Operation cumulative
		Winter	Night-time	Cumulative	Winter	Night-time	Summer	Night-time	Summer	Night-time	
300-02-005	View north from Newcastle Road	Moderate adverse	Minor adverse	Major adverse	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	Major adverse
300-02-006	View north-east from Newcastle Road, Hough	Moderate adverse	Minor adverse	Major adverse	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	Moderate adverse
301-02-006	View south-east from Casey Lane	Major adverse	Major adverse	Major adverse	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	Moderate adverse
302-02-001	View north-east from Ivatt Drive, Crewe	Minor adverse	Negligible	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
302-06-002	View south-west from Cowley Way, Crewe	Minor adverse	Not assessed	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
303-02-001	View north from public open space bordering B5076 Middlewich Street	Major adverse	Moderate adverse	No cumulative effect	Moderate adverse	Not assessed	Moderate adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect
303-02-003	View south-east from public open space bordering B5076 Middlewich Street	Major adverse	Moderate adverse	No cumulative effect	Moderate adverse	Not assessed	Moderate adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect
303-02-004	View north-west from Bradfield Road, Crewe	Negligible	Negligible	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
303-02-005	View west from Halton Drive, Walley's Green	Moderate adverse	Not assessed	No cumulative effect	Minor adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
304-02-001	View east from Somerley Close, Leighton, Crewe	Minor adverse	Negligible	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect

Supplementary Environmental Statement 1 and Additional Provision 1 Environmental Statement
 SES1 and AP1 ES Volume 5: Appendix LV-001-0MA01 Hough to Walley's Green Landscape and visual impact assessment and photomontages

Viewpoints		Construction			Operation year 1 (2038)		Operation year 15 (2053)		Operation year 30 (2068)		Operation cumulative
		Winter	Night-time	Cumulative	Winter	Night-time	Summer	Night-time	Summer	Night-time	
304-02-002	View west from Broughton Road, Coppenhall, Crewe	Moderate adverse	Minor adverse	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
304-02-003	View north-west from the White Lion Public House, Coppenhall Moss	Moderate adverse	Moderate adverse	No cumulative effect	Moderate adverse	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
304-02-004	View east from Bleasdale Road, Leighton, Crewe	Major adverse	Moderate adverse	No cumulative effect	Moderate adverse	Not assessed	Minor adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect
304-03-005	View west from Footpath Crewe 28/1 (Crewe and Nantwich Circular Walk), Coppenhall Moss	Major adverse	Not assessed	No cumulative effect	Major adverse	Not assessed	Moderate adverse	Not assessed	Moderate adverse	Not assessed	No cumulative effect
304-02-006	View east from Moss Lane, Crewe and Nantwich Circular Walk	Major adverse	Moderate adverse	No cumulative effect	Major adverse	Not assessed	Moderate adverse	Not assessed	Moderate adverse	Not assessed	No cumulative effect
304-02-007	View west from Footpath Warmingham 16/2 at Moss Farm, Coppenhall Moss	Not assessed at AP1	Not assessed at AP1	Not assessed at AP1	Major adverse	Not assessed	Moderate adverse	Not assessed	Moderate adverse	Not assessed	No cumulative effect
304-02-009	View east from Footpath Minshull Vernon 2/1, east of Moss Lane	Not assessed at AP1	Not assessed at AP1	Not assessed at AP1	Major adverse	Not assessed	Moderate adverse	Not assessed	Moderate adverse	Not assessed	No cumulative effect
304-02-010	View south-west from Maplins Moss Place, Coppenhall, Crewe	Negligible	Negligible	No cumulative effect	Negligible	Not assessed	Negligible	Not assessed	Negligible	Not assessed	No cumulative effect
304-03-012	View north-east from Parkers Road	Major adverse	Not assessed	No cumulative effect	Major adverse	Not assessed	Major adverse	Not assessed	Moderate adverse	Not assessed	No cumulative effect
304-03-013	View west from Kent's Lane	Major adverse	Major adverse	No cumulative effect	Major adverse	Not assessed	Moderate adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect
304-02-014	View north-west from Groby Road	Moderate adverse	Not assessed	No cumulative effect	Moderate adverse	Not assessed	Minor adverse	Not assessed	Negligible	Not assessed	No cumulative effect
304-03-015	View east from Footpath Crewe 28/1	Moderate adverse	Not assessed	No cumulative effect	Moderate adverse	Not assessed	Minor adverse	Not assessed	Negligible	Not assessed	No cumulative effect
305-02-004	View east from Moat House Farm, A530 Middlewich Road	Not assessed at AP1	Not assessed at AP1	Not assessed at AP1	Minor adverse	Not assessed	Minor adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect
305-02-005	View west from Footpath Minshull Vernon 8/1 at Park House Farm	Not assessed at AP1	Not assessed at AP1	Not assessed at AP1	Moderate adverse	Not assessed	Minor adverse	Not assessed	Minor adverse	Not assessed	No cumulative effect