



**Haweswater Aqueduct Resilience Programme - Proposed Marl Hill
Section**

Volume 6

Proposed Ribble Crossing

Chapter 6: Landscape and Arboriculture

June 2021



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Project No: B27070CT
Document Title: Volume 6 Proposed Ribble Crossing
Chapter 6: Landscape and Arboriculture
Document Ref.: RVBC-MH-RC-ES-006
Revision: 0
Date: June 2021
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6. Landscape and Arboriculture

6.1 Introduction

- 1) This chapter presents an assessment of the likely significant effects of the Proposed Ribble Crossing on landscape and visual receptors and arboricultural features.
- 2) The chapter begins by defining the scope of the topic and the assessment areas for the landscape and visual impact assessment (LVIA). The nature, value and sensitivity of the existing baseline environment are then identified before an assessment is made of the potential effects on the landscape and visual receptors and arboricultural features for the Proposed Ribble Crossing. Mitigation measures have been proposed to avoid, reduce or offset any potential effects and these embedded mitigation measures have been taken into account in the assessment, which are mentioned in Chapter 3: Design Evolution and Development Description and Chapter 20: Environmental Mitigation. Further good practice mitigation measures are set out in the Construction Code of Practice outlined in Appendix 3.2.
- 3) The arboricultural survey was conducted in accordance with BS 5837:2012¹. Full details of survey scope and methodology are detailed in Sections B.1 and B.2 of Appendix B within the Arboricultural Impact Assessment (AIA) report.
- 4) The topics of landscape and visual amenity have been considered individually. The European Landscape Convention defines landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*'. Landscape takes its character from a combination of elements, including landform, watercourses, land use and pattern, land cover / vegetation, open space and cultural heritage influences.
- 5) To a large extent, people experience the landscape visually, and the quality of views can affect the quality of life. This assessment addresses potential changes in the quality of existing views, taking into account the extent to which the Proposed Ribble Crossing would be visible from surrounding residential properties, settlements, farms, footpaths and a cycle route.
- 6) The assessment area includes the distance from the Proposed Ribble Crossing within which there may be significant effects upon the surrounding landscape or on people's views. These areas incorporate the application site and the wider landscape and visual context. The development of the assessment areas has been supported by computer-generated Zone of Theoretical visibility (ZTV) mapping, as illustrated on Figure 6.1, and described in Appendix 6.1.
- 7) The ZTV for the Proposed Ribble Crossing extends out to a distance of approximately 5 km from the indicative route alignment. This 5 km overarching assessment area (shown on Figure 6.1) has been further refined, as site appraisal has shown that significant effects are unlikely to be experienced as far as 3 km and, in many situations, visibility is limited by intervening topography, buildings and vegetation. Therefore, the baseline for landscape and visual effects has been focused on a smaller assessment area, described as the detailed assessment area extending to a distance of 2 km from the Proposed Ribble Crossing (shown on Figure 6.1).

6.2 Scoping and consultations

6.2.1 Scoping

- 8) A Landscape and Arboriculture chapter was included within the EIA Scoping Report Addendum which was submitted to the relevant planning authorities for comment in February 2021. A Scoping Decision was provided by Ribble Valley Borough Council and this has been reviewed and considered in the assessment. Scoping comments and responses are outlined in Volume 4, Appendix 4.1

¹ British Standards Institution (2012) *BS5837:2012 Trees in relation to design, demolition and construction. Recommendations*. London, BSI Standards Limited

6.2.2 Consultation

- 9) During the course of this assessment, consultation has taken place with relevant statutory consultees through email correspondence. This has been summarised in Appendix 4.1. The principal third parties consulted in relation to LVIA were Ribble Valley Borough Council, Lancashire County Council and Natural England.
- 10) The approach to the visual assessment, the locations of photomontages, and the smaller extent of the detailed assessment area (2 km from the Proposed Ribble Crossing centreline) have been guided by the consultation responses.

6.2.3 Photomontages

- 11) A series of photomontages for the Proposed Ribble Crossing has been developed to illustrate the visual changes arising at three publicly accessible locations. These are representative of the views experienced by various groups of people including residents, walkers on footpaths, including the Ribble Way, and travellers on local roads.
- 12) The selection of these photomontage viewpoints has been undertaken in consultation with Ribble Valley Borough Council, Lancashire County Council and Natural England. A methodology for the production of the photomontages is provided in Appendix 6.6 which supercedes the Photomontage Methodology set out in Appendix 6.1. Minor variations have included additions Section 6.2, Key Assumptions and Limitations. The methodology for the production of the photomontages has remained unaltered from that used for the construction compounds. The photomontages are shown on Figures 6.8 to 6.10 and their locations on Figure 6.2.
- 13) The locations for the photomontages are:
 - A view south-east from residential properties on West Bradford Road (near Waddington) towards the north compound on West Bradford Road and haul route. Representative viewpoint location RC/06 West Bradford Road
 - A view west from Clitheroe Road towards the River Ribble bridge and haul route. Representative viewpoint location RC/10 Clitheroe Road
 - A view north from the Ribble Way long-distance footpath and PRow 3-1-FP 2 towards the haul route. Representative viewpoint location RC/13 Ribble Way and local footpath).

6.3 Key Legislation and Guidance

- 14) The legislation and planning policies relevant to Landscape and Arboriculture are considered in Volume 2 Chapter 5.

6.4 Assessment Methodology and Criteria

- 15) The assessment followed the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)².
- 16) The methodology for this assessment used the same methodology and assessment criteria as previously outlined in Volume 4: Appendix 6.1. Due to the difference in scale of the proposed Ribble Crossing the LVIA focused on a slightly reduced 2 km detailed assessment area from the indicative route alignment shown in Figure 3.1. The 2 km detailed assessment area formed the baseline extents for considering the potential landscape effects and employed a representative viewpoint approach.

6.5 Baseline Conditions

- 17) This section details the landscape baseline for the detailed assessment area and identifies receptors where there is potential for significant effects to arise. The Proposed Ribble Crossing extends across an

² The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3). Abingdon, Routledge

area of land to the north of Clitheroe, Lancashire. Baseline data were collated from a variety of sources in compiling this assessment, including:

- Field surveys undertaken between November 2020 and February 2021
- Published landscape character assessments (described below)
- Aerial photography
- The definitive PRoW map for Lancashire County Council.

6.5.1 Information Sources

18) The assessment was undertaken with reference to the sources detailed in Table 6.1.

Table 6.1: Key Information Sources

Data Source	Reference
MAGIC web site. This data source provided information on sensitive national designations that fall within the compounds, construction access tracks.	https://magic.defra.gov.uk/MagicMap.aspx
The National Character Area (NCA) profiles, published in 2014 by Natural England. ³ NCAs divide England into 159 distinct natural areas. Each area is defined by a unique combination of landscape, biodiversity, geodiversity, history, and cultural and economic activity. Their boundaries follow natural lines in the landscape rather than administrative boundaries.	https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles
A Landscape Strategy for Lancashire ⁴ provides a county-level landscape character assessment for Lancashire, dividing the county into a series of Landscape Character Types (LCTs) and Landscape Character Areas (LCAs).	https://www.lancashire.gov.uk/council/strategies-policies-plans/environmental/landscape-strategy/
The Forest of Bowland AONB Landscape Character Assessment ⁵ provides a local-level assessment of the Forest of Bowland’s landscape. It divides the landscape into a series of LCTs and LCAs.	https://www.forestofbowland.com/Landscape-Character-Assessment
The Ribble Valley Borough Council web site provides maps of local Conservation Areas.	https://www.ribblevalley.gov.uk/info/200359/conservation_countryside_and_listed_buildings/908/conservation_areas
The Sustrans web site provides details of National Cycle Network (NCN) routes.	https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/?location=null&routetype=null&distance=null
The Long Distance Walkers Association web site provides details of long distance paths (LDP) including the Pendle Witches Way, Clitheroe 60k	https://ldwa.org.uk/ldp/public/ldp_public_home.php

³ Natural England (2014) *National Character Area profiles* – GOV.UK. [Online] Available from: <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles> [Accessed: January 2020]

⁴ Lancashire County Council (2000) *A Landscape Strategy for Lancashire*. [Online] Available from: <https://www.lancashire.gov.uk/council/strategies-policies-plans/environmental/landscape-strategy/> [Accessed: March 2020].

⁵ Lancashire County Council (2009) *Forest of Bowland AONB Landscape Character Assessment*. [Online] Available from: <https://www.forestofbowland.com/Landscape-Character-Assessment> [Accessed: March 2020].

Data Source	Reference
and Ribble Way Long Distance Paths within the overarching assessment area.	
CPRE Tranquillity mapping ⁶ and mapping of England's light pollution and dark skies. ⁷ CPRE has produced tranquillity mapping, which shows the intrusions into the countryside by features that have had an impact both visually and audibly, such as road, railways, and urban areas. CPRE has also mapped England's light pollution and dark skies noting the 'tranquillity' of dark skies and their importance ' <i>including limiting impacts on intrinsically dark landscapes and nature conservation</i> '.	https://www.cpre.org.uk/what-we-care-about/nature-and-landscapes/

6.5.2 Landscape Designations

- 19) The Proposed Ribble Crossing is located directly to the south of the Forest of Bowland Area of Outstanding Natural Beauty (AONB), forming part of its setting (refer to Figure 6.3: Landscape Context).
- 20) Other designations relevant to landscape are summarised below and described in more detail in subsequent baseline sections (Figure 6.3: Landscape Context).
- A Grade II Registered Park and Garden, Clitheroe Castle, located within the urban area of Clitheroe
 - Conservation Areas present at Clitheroe and Waddington
 - Scheduled monuments and Listed Buildings
 - Site of Special Scientific Interest present at Coplow Quarry and Salthill and Bellmanpark Quarries
 - Local Nature Reserves present at Cross Hill Quarry and Salt Hill Quarry
 - Ancient woodland along stream valleys between Easington Fell and Waddington, West Bradford and Grindleton within the River Ribble valley.
 - Small pockets of Registered Common Land and Access Land present at Waddington, West Bradford and Grindleton
 - A network of PRowS and permissive paths
 - NCN Route 90 aligned between the villages of Waddington, West Bradford and Grindleton
 - The LDPs of Pendle Witches Way, Clitheroe 60k and Ribble Way.
- 21) Further information on ecological designations such as Sites of Special Scientific Interest and Local National Nature Reserves can be found within Chapter 9:Ecology. Further information on heritage designations can be found within Chapter 10 Cultural Heritage. The LVIA considers ecological and heritage designations in terms of their contribution to the sensitivity / value of the landscape. In addition, heritage assets have influenced the selection of representative viewpoints in accordance with GLVIA3.⁸

6.5.3 Landscape Context

- 22) The detailed assessment area comprises a section of the River Ribble valley, the town of Clitheroe and include the nearby villages of Waddington and West Bradford. Its extent is defined by the steep lowland fringes of Easington Fell to the north; the urban settlement of Clitheroe to the south; and lowland

⁶ Campaign for the Protection of Rural England (2007) *Nature and Landscape, Tranquillity Places*. [Online] Available from: <https://www.cpre.org.uk/what-we-care-about/nature-and-landscapes/> [Accessed: February 2020]

⁷ Campaign for the Protection of Rural England (2016) *Nature and Landscape, Dark Skies*. [Online] Available from: <https://www.cpre.org.uk/what-we-care-about/nature-and-landscapes/> [Accessed: February 2020]

⁸ Landscape institute *Op.cit*.

agricultural farmland to the east and west. Topography ranges from approximately 100 m above Ordnance Datum (AOD) at Clitheroe Castle, 180 m at the steep valley sides to the north, and 50 m within the low-lying valley floor. The valley sides of Easington Fell and land at Clitheroe Castle, situated upon a limestone reef knoll, provide extensive views across the settled valley landscape. Clitheroe Castle and the Ribblesdale Cement works are also landmarks within views south-wards from the River Ribble valley and Easington Fell.

- 23) Over time, the River Ribble and its tributaries have contributed to the tranquil and settled character of the valley landscape. The meandering river and its surrounding open, flat floodplain are enclosed by steep wooded bluffs and terraces. This floodplain is flanked by the undulating lowland farmlands of the River Ribble valley, which are interspersed with settlements, occasional country halls and a number of large farms. There is a general absence of settlement within the floodplain itself, although historic stone bridges are notable landscape features over the River Ribble.
- 24) Settlements include the town of Clitheroe and the villages of Waddington, West Bradford and Grindleton, which are often located at the bottom of wooded cloughs within the valley bottom and along the lower valley slopes. The picturesque limestone villages have retained their vernacular character and are broadly untouched by modern development. Clitheroe is situated at the convergence of road and railway corridors, such as the A671, and contains a combination of commercial, industrial, and residential buildings. Key historic features include Listed Buildings, Scheduled Ancient Monuments and a Grade II Registered Park and Garden at Clitheroe Castle. Conservation Areas are also present at Waddington and Clitheroe.
- 25) The predominant land use outside of the settled areas is pastoral farmland, consisting mostly of semi-improved pasture grazed by sheep and cattle. These are arranged in a patchwork of fields bounded by a combination of hedgerows, wooden fencing, post and wire fencing or stone walls. Patches of woodland provide a sense of enclosure, including prominent ancient woodland cloughs that descend into the valley bottom alongside the neighbouring pastoral farmland to the north. This woodland, and the mature floodplain trees of ash and oak next to the River Ribble, are notable features within views across the area.
- 26) The network of PRowS within the area creates recreational links between the River Ribble, the rising fells and the surrounding settlements of Clitheroe and its nearby villages. Other recreational routes include the Sustrans NCN Route 90, which passes through the villages of Grindleton, West Bradford and Waddington; and the Long Distance Paths (LDP) of Pendle Witches Way, Clitheroe 60k and Ribble Way. There are small pockets of Registered Common Land and Open Access Land at Waddington, West Bradford and Grindleton, although these are located outside the development area and would not be affected.
- 27) Large-scale structures within Ribblesdale Cement Works exert a dominant human influence over the valley landscape. Along with local transport corridors and settlement development, this creates notable noise and visual disturbance that reduces the overall sense of tranquillity around the northern edge of Clitheroe. However, alongside the river corridor the landscape is more picturesque, remote, and tranquil. Disused quarries now form Local Nature Reserves at Cross Hill Quarry and Salt Hill Quarry.

6.5.4 Landscape Character

- 28) The following text summarises landscape character within the assessment area based on information from published national, county and district-level landscape character assessments. It should be read in conjunction with Appendix 6.1 Landscape Character Baseline and Figure 6.3 Landscape Character.
- 29) Landscapes that would experience a likely 'negligible' or 'no change' effect have been excluded from the baseline text below.

National Character Areas

- 30) The national-level landscape character assessment subdivides England into a series of 159 distinct National Character Areas (NCAs). A brief summary of the relevant NCAs to the assessment area is provided below. For full details of the key characteristics of the NCAs associated with the assessment area, refer to Appendix 6.1 Landscape Baseline Information.

- 31) The detailed assessment area is covered by NCA 33 Bowland Fringe and Pendle Hill⁹ which is a transitional landscape encircling the upland core of the Bowland Fells. Over half the area contributes to the Forest of Bowland AONB. It comprises herb-rich hay meadows, lush pastures, broadleaved woodland, parkland and waterbodies, with numerous river valleys and associated woodlands. Over time, the area has been changed by human habitation and activity, including its long farming history. It includes the urban areas of Clitheroe, Bentham and Longridge that contrast with the predominately rural feel of the area.

County and District-Level Landscape Character Assessments

- 32) At the county and district-level, the assessment area is covered by the published landscape character assessments listed below.
- 33) The extent to which the units of character (e.g. Landscape Character Types (LCTs)) described in the published documents are representative of the assessment areas has been considered as part of a desk study and field surveys conducted in 2020 and 2021. The published documents were deemed appropriate for the assessment of landscape effects.
- 34) LCTs are typically more uniform units of landscape with a distinct and recognisable pattern of elements that occur consistently throughout the type. They provide a spatial framework for landscape character and can occur in more than one geographical location. LCAs on the other hand are more place-specific and generally only occur in one distinct geographical location. LCTs often include a number of distinct LCAs.
- 35) The LCTs listed below have therefore been excluded from this LVIA due to their broader geographical extent and occurrence across multiple geographical locations. The LCAs listed below are the smallest unit of character within the published assessments and are more related to the scale and extent of the landscape character in the assessment area. They have therefore been included as landscape receptors to determine the effects on landscape character.
- 36) A list of the relevant LCTs and LCAs within the assessment areas is provided in the sections below. For full details of the relevant units of character associated with the assessment areas, refer to Appendix 6.1: Landscape Baseline Information.

A Landscape Strategy for Lancashire

- 37) A landscape Strategy for Lancashire¹⁰ provides a county-level landscape character assessment for Lancashire, dividing the county into a series of LCTs and LCAs.
- 38) The assessment area is covered by the following LCTs and LCAs:
- 05. Undulating Lowland Farmland LCT and 5b. Lower Hodder and Loud Valley LCA
 - 05. Undulating Lowland Farmland LCT and 5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA
 - 05. Undulating Lowland Farmland LCT and 5g. South Bowland Fringes LCA
 - 11. Valley Floodplains LCT and 11a. Lower Ribble Valley LCA.

Forest of Bowland AONB Landscape Character Assessment

- 39) The Forest of Bowland AONB Landscape Character Assessment¹¹ provides a local-level assessment of the Forest of Bowland's landscape. It divides the landscape into a series of LCTs and LCAs.
- 40) The assessment area is covered by the following LCTs and LCAs:

⁹Natural England (2013) *National Character Area Profile: 33. Bowland Fringe and Pendle Hill*. [Online] Available from: <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles>. [Accessed: March 2020].

¹⁰Lancashire County Council (2000) *A Landscape Strategy for Lancashire*. Preston, Lancashire County Council. [Online] Available from: <https://www.lancashire.gov.uk/council/strategies-policies-plans/environmental/landscape-strategy/>. [Accessed: March 2020].

¹¹Lancashire County Council (2009) *Forest of Bowland AONB Landscape Character Assessment*. Preston, Environment Directorate. [Online] Available from: <https://www.forestofbowland.com/Landscape-Character-Assessment>. [Accessed: March 2020].

- F. Undulating Lowland Farmland with Wooded Brooks LCT and F2. Bolton by Bowland to Waddington LCA
- H. Undulating Lowland Farmland with Settlement and Industry LCT and H1. Clitheroe to Chatburn LCA
- J. Valley Floodplain LCT and J2. Ribble LCA.

Landscape Sensitivity

- 41) To assess the significance of landscape effects on key landscape receptors, an evaluation has been made of their sensitivity to the changes that would be likely to arise from the Proposed Ribble Crossing. This has been determined by combining judgements on their susceptibility to change and the value attached to the landscape using the criteria outlined in Appendix 6.1: Landscape Methodology and Section 6.4 of the Volume 2, Chapter 6. The overall assessment of sensitivity of the landscape receptors is described in Appendix 6.2: Landscape Sensitivity Schedule and has been determined using professional judgement.
- 42) A summary of the sensitivity of landscape and townscape receptors is shown in Table 6.2 below.

Table 6.2: Evaluation of Landscape Sensitivity

Landscape / Townscape Receptor	Value	Susceptibility	Sensitivity
5b. Lower Hodder and Loud Valley LCA	High	High	High
5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA	High	Medium	High
5g. South Bowland Fringes LCA	High	High	High
11a. Lower Ribble Valley LCA	High	High	High
F2. Bolton by Bowland to Waddington LCA	High	Medium	High
H1. Clitheroe to Chatburn LCA	High	Medium	High
J2. Ribble LCA	High	High	High

6.5.5 Tranquillity

- 43) CPRE has undertaken a study of tranquillity in England and has mapped and published the results. Tranquillity is one of the most important qualities by which people judge their environment. Tranquil area maps show places that are 'disturbed' and 'undisturbed' by noise and visual intrusion from urban areas (towns and cities) and other major infrastructure such as traffic (road, rail and airports), power stations, pylons and power lines.
- 44) There are high levels of tranquillity within the Forest of Bowland AONB relative to many other parts of England, with slightly lower levels along minor roads due to associated traffic noise. The northern section of the detailed assessment area for the Proposed Ribble Crossing is located within this AONB, with limited detractions from the high levels of tranquillity. Lower levels of tranquillity are present in the remaining parts of the detailed assessment area, due to the presence of the settlements at Clitheroe, Waddington, and West Bradford.

6.5.6 Woodland

- 45) The potential impact on trees has been taken into account in the assessment of landscape character, informed by an arboricultural assessment. The British Standard 5837:2012 '*Trees in relation to design, demolition and construction. Recommendations*¹²') sets out the need to assess the effects of a

¹² British Standards Institution *Op. cit*

development on trees. The tree survey recorded information about trees within the Planning Application Boundary and up to 15 m beyond it. Notable trees are defined as prominent trees within the landscape and by nature will generally be the larger more mature specimens. Notable trees were assessed as Category A and B trees during the arboricultural survey, using the grading definitions within British Standard 5837:2012. A precautionary approach was taken to the identification of notable trees where surveyed as tree groups and woodlands, in that not every tree within the group may be notable.

- 46) Tree Preservation Orders (TPO) can either apply to individual trees, groups of trees, areas or woodland. Details of TPOs can be found in Appendix 6.5, the AIA.

6.5.7 Visual Context and Visual Receptors

- 47) Chapter 6 of GLVIA3¹³ sets out how the visual baseline should be established for the purposes of an LVIA. This includes determining:

- The area within which the Proposed Ribble Crossing may be visible
- People who may experience views of the development
- Viewpoints where people may be affected
- The nature of the view at the viewpoints.

6.5.8 Extent of Visibility

- 48) The potential extent of visibility of the Proposed Ribble Crossing has been determined through a combination of digital ZTV mapping, desk study and field survey.

- 49) Firstly, a ZTV was created using GIS software to determine theoretical visibility within a 5 km area. This was generated using target points along the indication route alignment at a chainage of every 50 m and a height of 4 m above the carriageway (to account for the height of Heavy Goods Vehicles (HGV) travelling along the proposed route). The ZTV is based on a 'bare earth' scenario, which represents the worst-case extent of visibility. Only limited reliance can therefore be placed on the ZTVs and further refinement was undertaken as described below. The ZTV is shown on Figure 6.1.

- 50) Further refinement of the ZTV was undertaken through desk study and field survey work to determine potential screening features such as vegetation and buildings. OS mapping, aerial photographs and Google Street View were used to locate these features, as well as the locations of people who may experience views of the development by identifying a series of representative viewpoints. Field survey work was then undertaken to review the potential screening features and to visit each representative viewpoint. This helped to more accurately confirm the extent of visibility and the potential for significant effects. As a result, it was determined that receptors up to 2 km from the Proposed Ribble Crossing were most likely to be significantly affected.

Representative Viewpoints

- 51) As described above, a series of representative viewpoints were identified using the ZTVs, OS mapping, aerial photographs and Google StreetView as a guide. These representative viewpoint locations, and the extent of the detailed 2 km detailed assessment area, were then agreed with local planning authority officers at Lancashire County Council and Ribble Valley Council.

- 52) Representative viewpoints are identified in Table 6.3 below and shown on Figure 6.2 and Figure 6.7 Representative Viewpoint Photosheets. Greater detail on the representative viewpoints and the nature of existing views is presented in Appendix 6.4: Schedule of Visual Effects with a summary of the nature of existing views provided in the section below. Changes in representative viewpoint locations as a result of field survey work, site constraints, local authority engagement and responses to the Scoping Report are described in Section 6.2.2 Consultation. The final representative viewpoint locations, following surveys and consultation, are listed below and form the visual assessment.

¹³ Landscape Institute *Op.cit.*

Table 6.3: Representative viewpoints for the Proposed Ribble Crossing

Representative Viewpoint Number	Location	Receptor Group	Sensitivity
RC/01	PRoW 3-43-FP 12.	Recreational	High
RC/02	Linton, Croft House, PRoW 3-43-FP 13, 3-44-FP 24	Residential and recreational	High
RC/03	West Bradford settlement western edge, PRoW 3-44-FP 21	Residential and recreational	High
RC/04	PRoW 3-44-FP 22	Recreational	High
RC/05	Healings Farm, PRoW 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road	Residential, recreational, transient and community,	High / medium
RC/06 Photomontage location	Residential properties on West Bradford Road, Waddington	Residential, and transient	High / medium
RC/07	Waddington Grove and Waddington settlement eastern edge	Residential	High
RC/08	Lillands Cottage, PRoW 3-43-FP 22	Residential and recreational	High
RC/09	PRoW 3-44-FP 21, 3-44-FP 22	Recreational	High
RC/10 Photomontage location	PRoW 3-44-FP 23, Clitheroe Road	Recreational and transient	High / medium
RC/11	Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road	Recreational and transient	High / medium
RC/12	PRoW 3-44-FP 23	Recreational	High
RC/13 Photomontage location	Ribble Way LDP, PRoW 3-1-FP 2	Recreational	High
RC/14	West Bradford Road	Transient	Medium
RC/15	PRoW 3-1-FP 26, Ribble Valley Sculpture Trail	Recreational	High
RC/16	Brungerley Farm, PRoW 3-43-FP 21	Residential and recreational	High
RC/17	PRoW 3-43-FP 19	Recreational	High

Nature of the Existing Views

- 53) Within the River Ribble floodplain, there is a mixture of open and enclosed views due to the presence of mature vegetation and scattered rural development. From the network of PRoWs, including the Ribble Way LDP, there are some long-distance, outward views towards the surrounding fells and settlements.

These include views towards central Bowland Moorland Hills and Plateaux to the north, Longridge Fell to the west, and Clitheroe and Pendle Hill to the south. The Ribblesdale Cement Works and Clitheroe Castle are dominant landmark features on the skyline to the south. Wooded cloughs on the lowland valley sides are notable features to the north.

- 54) To the north, the land rises steeply towards the southern fringes of the Bowland fells, comprising lowland farmland and linear wooded brooks. The lower slopes afford more open views across the valley landscape towards Clitheroe and the Ribblesdale Cement Works to the south. However, views are more contained around the wooded brooks of Grindleton Brook, West Bradford Brook and West Clough Brook, and around the smaller settlements of West Bradford, Waddington and Grindleton. There are some framed views southwards across the River Ribble valley from the higher elevations of the villages.
- 55) To the south, the land rises more gently towards the settlement, industry and undulating lowland farmland at Clitheroe. Views from within the settlement are largely enclosed by intervening woodland and buildings, which limits visibility from the lower elevations. Properties on the higher elevations, where vegetation is sparse, have more open views. There are also long-distance, panoramic views available across the wider valley landscape from Clitheroe Castle and its nearby grounds on a rocky outcrop. Views northwards, across the corridor of the River Ribble are dominated by the rising mass of the Central Moorland Hills and Plateau.

Dark Skies

- 56) CPRE has undertaken a study of dark skies in England and has mapped and published the results. They also organise an annual star count to analyse any changes in light pollution. CPRE's aim is to protect and improve existing dark skies. Light pollution reduces the visibility of starry skies, as well as interrupting the natural pattern of wildlife. Generally, urban areas are most affected by light pollution, with darker skies present in rural areas.
- 57) CPRE has mapped the majority of the sky within the Forest of Bowland AONB as the two darkest sky categories due to an absence of light sources, with the darkest areas across the moorland plateaux and upper fell slopes. Within the detailed assessment area, the night-time environment ranges from dark to bright in character. Much of the northern parts of the detailed assessment area are generally darker in character. However, the south-eastern edge is affected by light pollution from the villages of Waddington and West Bradford, and the town of Clitheroe.
- 58) The Forest of Bowland AONB web site describes the skies within the AONB as being among the darkest in England. They are recognised as being important for star gazing, with five designated 'Dark Sky Discovery Sites' within the AONB. None of these sites falls within the detailed assessment area.

6.6 Assessment of likely significant effects

- 59) The following section summarises the effects of the Proposed Ribble Crossing on Landscape and visual receptors.
- 60) The Proposed Ribble Crossing has the potential to generate significant effects on landscape and visual receptors identified in the baseline. As discussed above, the significance of effects is assessed by considering the sensitivity of receptors in relation to the predicted magnitude of effect after taking into consideration the mitigation measures embedded within the project design, as well as good practice mitigation.
- 61) The assessment considers the potentially significant landscape and visual effects likely to result from the following development phases:
- Enabling Works Phase
 - Construction Phase
 - Operation Phase
 - Decommissioning Phase
 - Post decommissioning Year 1

- Post decommissioning Year 15.

6.6.1 Enabling Works Phase

- 62) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Enabling Works Phase.
- 63) Effects during the Enabling Works have been described in Appendix 6.3: Schedule of Landscape Effects and Appendix 6.4: Schedule of Visual Effects.
- 64) The summary of enabling works effects is shown in Table 6.4 and 6.5 below.

Predicted Impacts

- 65) The enabling works activities described below are considered relevant to the assessment of landscape and visual effects:
- Installation of stock-proof fencing and PRow crossing points along the road corridor and around temporary compounds. Erection of Heras type fencing around the temporary compounds
 - Clearance of vegetation within the development envelope and at the access points with West Bradford Road (near Waddington) and also on the West Bradford Road near the existing stone bridge over the river
 - Clearance of vegetation at other locations along the construction easement (noting that the construction easement would be wider than the final paved surface)
 - Removal of existing site boundary features (e.g. stone walls along West Bradford Road at the eastern end of the proposed Ribble Crossing)
 - Stripping and storage of existing topsoil
 - Localised ground re-profiling and stone laying to temporary laydown areas and compounds
 - Installation of temporary construction features including access tracks, compounds, laydown areas, car parks and office accommodation
 - Formation of bridge construction working areas, including the crane platform.
- 66) The main effects on landscape character and people's views that would arise during the Enabling Works Phase are as follows:
- Loss of landscape features such as hedgerows, stone walls and trees, soil stripping and the stockpiling of materials
 - Localised levelling and re-profiling of landform
 - Visual effects and disruption from temporary soil storage
 - Visual effects from moving plant and construction equipment within the compounds and along access tracks
 - Disruption from creation of the temporary construction compounds, laydown areas and material storage areas for plant, machinery, equipment, construction materials and office accommodation.

Embedded Mitigation

- 67) The following embedded mitigation measures to address the potential landscape and visual effects have been incorporated into the design. These are taken into account in the assessment of landscape and visual effects during the Enabling Works Phase.
- Existing topography would be used where possible to limit cut and fill and limit topographical changes
 - Existing topography has been used to provide beneficial screening of the route
 - Vegetation on the boundaries would be retained and protected where practicable

- Positioning and seeding of soil storage mounds to reduce visual impact
- Advanced hedgerow and tree planting would be undertaken where practicable, along hedgerows within the development boundary. Refer to Figure 20.1: Environmental Masterplan.

Landscape Effects

- 68) LCAs 5b. Lower Hodder and Loud Valley, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington and J2. Ribble would be directly affected by the enabling works. This would include physical changes resulting from the temporary closure and diversion of the local PRoW network; soil stripping and storage; the establishment of compounds and temporary access roads; and construction of the bridge platform.
- 69) The removal of existing shrubs, trees and hedgerows would be limited to short sections along West Bradford Road and the Ribble River as well as small areas of the undulating lowland farmland within the valley basin landscape. The disruption of existing field boundaries, including short sections of hedgerows, fences and stone walls, would result in a slightly more open character and partially erode the existing small-scale field pattern in localised areas.
- 70) The movement of plant, machinery and construction traffic, along with the enabling works activities, would increase the perception of movement and disturbance. This would subsequently reduce the levels of tranquillity and remoteness and introduce uncharacteristic features into the rural landscape.
- 71) Due to the disturbance from the enabling works, there would be a noticeable and uncharacteristic change to a small proportion of the landscape, which would be experienced over the short term. These high sensitivity landscape receptors would therefore experience a minor magnitude of effect, resulting in a moderate adverse significance of effect.
- 72) LCAs 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes and H1. Clitheroe to Chatburn would be indirectly affected by the enabling works within their immediate landscape setting.
- 73) Due to the close proximity of the disturbance and vegetation loss from the enabling works, there would be a minor and uncharacteristic change to a small or very small proportion of the landscape, which would be experienced over the short term. These high sensitivity landscape receptors would therefore experience a minor or negligible magnitude of effect, resulting in a slight adverse significance of effect.
- 74) G7. Browsholme LCA would experience no discernible change to its landscape due to a combination of intervening topography, settlement and vegetation.

Visual Effects

- 75) Residential viewers and recreational users of the footpath (RC/05) would be in close proximity to the north compound near Waddington. Recreational users of footpaths and the Ribble Way long-distance path (RC/10, RC/11, RC/12) would be in close proximity to the south compound (near Clitheroe) and the formation of bridge construction working areas and crane platform. Short-distance views towards the compounds would also include site clearance of a small section of hedgerow and a small area of vegetation along the River Ribble, fencing installation and visual disturbance from the movement of plant and equipment for the soil stripping, and the forming of soil storage mounds. Enabling works would be a noticeable feature in the view and would result in a substantial change to the character of the view. These high sensitivity visual receptors would therefore experience a moderate magnitude of effect, resulting in a major adverse significance of effect.
- 76) Residential viewers, road travellers along short sections of West Bradford Road (RC/06, RC/07, RC/14) would have oblique or filtered views towards the establishing compounds. Community users viewing from the Primary School (RC/05) would have direct partially filtered views. Enabling works would result in a noticeable alteration to key characteristics in a moderate part of the view. These high and medium sensitivity visual receptors would therefore experience a moderate magnitude of effect, resulting in a moderate adverse significance of effect.
- 77) Due to distance, the screening effects from intervening topography and / or vegetation, the enabling works would be perceptible but would not alter the balance of features or element that comprise the existing view, for residential viewers and recreational users of footpaths (RC/01, RC/02, RC/08, RC/13,

RC/15). These high sensitivity visual receptors would therefore experience a minor magnitude of effect, resulting in a slight adverse significance of effect.

- 78) There would be no discernible change to views due to a combination of intervening topography, settlement and vegetation from the following viewpoints - RC/03, RC/04, RC/09, RC/16, RC/17.

Table 6.4: Summary of Enabling Works Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA	High	A noticeable and uncharacteristic change to a small proportion of the landscape.	Short-term / reversible	Minor	Moderate Adverse
5g. South Bowland Fringes LCA	High	A minor and uncharacteristic change to a small proportion of the landscape.	Short-term / reversible	Minor	Slight Adverse
5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA H1. Clitheroe to Chatburn LCA	High	A minor and uncharacteristic change to a very small proportion of the landscape.	Short-term / reversible	Negligible	Slight Adverse
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.5: Summary of Enabling Works Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/05 Healings Farm, PRoW 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road RC/10 PRoW 3-44-FP 23, Clitheroe Road	High / Medium	A noticeable and uncharacteristic change to across a large or moderate part of the view.	Short-term / reversible	Moderate	Major Adverse

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road RC/12 PRow 3-44-FP 23					
RC/06 Residential properties on West Bradford Road, Waddington RC/07 Waddington Grove and Waddington settlement edge RC/14 West Bradford Road	High / Medium	A noticeable and uncharacteristic change to a moderate part of the view.	Short-term / reversible	Moderate	Moderate Adverse
RC/01 PRow 3-43-FP 12. RC/02 Linton, Croft House, PRow 3-43-FP 13, 3-44-FP 24 RC/08 Lillands Cottage, PRow 3-43-FP 22 RC/13 Ribble Way LDP, PRow 3-1-FP 2 RC/15 PRow 3-1-FP 26, Ribble Valley Sculpture Trail	High	A minor and uncharacteristic change to a small part of the view.	Short-term / reversible	Minor	Slight Adverse
RC/03 West Bradford settlement edge, PRow 3-44-FP 21 RC/04 PRow 3-44-FP 22 RC/09 PRow 3-44-FP 21, 3-44-FP 22 RC/16 Brungerley Farm, PRow 3-43-FP 21 RC/17 PRow 3-43-FP 19	High	No perceptible deterioration or improvement in the existing view	Short-term / reversible	Negligible	Negligible

6.6.2 Construction Phase

- 79) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Construction Phase.
- 80) Effects during the Construction Phase have been described in Appendix 6.3 Schedule of Landscape Effects and Appendix 6.4 Schedule of Visual Effects.
- 81) The summaries of construction effects are shown in Table 6.6 and Table 6.7 below.

Predicted Impacts

- 82) The construction works activities described below are considered relevant to the assessment of landscape and visual effects:
- Stripping and storage of existing topsoil along the haul route corridor
 - Construction of the of the haulage road, including temporary drainage and fencing alongside the haul route corridor
 - Construction of earthworks and localised landform changes along the haul route corridor
 - Construction of the Bailey bridge over the River Ribble, including the piling and construction of concrete abutments and columns, and the installation of the modular bridge sections by crane
 - Construction of bridges for smaller watercourse crossings
 - Reinstatement of temporary compounds, laydowns areas and some other disturbed areas following the completion of the construction works
 - Topsoiling and grass seeding of reinstated areas, including the return of disturbed land to agricultural use where practicable
 - Partial reinstatement of site boundary features, including hedgerows, stock-proof fencing and stone walls.
- 83) The main effects on landscape character and people's views that would arise during the Construction Phase are as follows:
- Loss of landscape features such as hedgerows, stone walls and trees, soil stripping and the stockpiling of materials
 - Visual effects from moving plant and construction equipment within the compounds and along access tracks, including a tall mobile crane for the works at the Bailey bridge
 - Visual effects and disruption from temporary soil storage
 - Disruption from the presence of the temporary construction compounds, laydown areas and material storage areas for plant, machinery, equipment, construction materials and office accommodation
 - Disruption from the creation of the haul route corridor, including the Bailey bridge
 - Localised levelling and re-profiling of landform
 - Disruption from the reinstatement of graded areas, including topsoil spreading and seeding.

Embedded Mitigation

- 84) The following embedded mitigation measures to address the potential landscape and visual effects have been incorporated into the design. These are taken into account in the assessment of landscape and visual effects during the Construction Phase.
- Existing topography would be used where possible to limit cut and fill and limit topographical changes
 - Vegetation on the boundaries would be retained and protected where practicable

- Incremental reinstatement of grasslands, fences and other boundary features, which would be undertaken where possible following the completion of the construction activities. Grass seed mixes to be agreed with landowners
- Positioning and seeding of soil storage mounds to reduce visual impact
- Seeding of introduced earthworks to integrate the Proposed Ribble Crossing into the surrounding landscape.

Landscape Effects

- 85) LCAs 5b. Lower Hodder and Loud Valley, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington and J2. Ribble would be directly affected by the construction works. This would include physical changes resulting from haul route topsoil stripping and storage; and the construction of the haul route and River Ribble bridge, including columns and bridge sections.
- 86) The movement of plant, machinery and construction traffic, along with the introduced construction works activities, would increase the perception of disruption. Activities would contrast with the pastoral and generally undeveloped setting of the rural valley area, directly affecting the rural qualities of these LCAs. The overall impact would also be more evident due to works undertaken for the Enabling Works Phase, including continued use of temporary access roads, laydown areas and construction compounds, landform alterations, loss of existing vegetation and disruption to the existing field pattern. The temporary diversions to the PRow network would also remain. These initial construction works would then be followed by the removal of compounds and temporary access roads, and the partial reinstatement of areas disturbed during construction activities.
- 87) Due to the direct disturbance from the construction works, there would be a substantial and uncharacteristic change to a small proportion of the landscape, which would be experienced over the short term. These high sensitivity landscape receptors would therefore experience a moderate magnitude of effect, resulting in a major adverse significance of effect.
- 88) LCAs 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes and H1. Clitheroe to Chatburn would continue to be indirectly affected within their immediate landscape setting.
- 89) Due to the close proximity of the disturbance and vegetation loss from the enabling works, there would be a minor and uncharacteristic change to a small or very small proportion of the landscape, which would be experienced over the short term. These high sensitivity landscape receptors would therefore continue to experience a minor or negligible magnitude of effect, resulting in a slight adverse significance of effect.
- 90) G7. Browsholme LCA would continue to experience no discernible change to its landscape.

Visual Effects

- 91) Residential viewers and recreational users of the footpath (RC/05) would have open views to the north compound (near Waddington) and construction of the haul route. Recreational users of footpaths including and the Ribble Way long-distance path (RC/10, RC/11, RC/12) would be in close proximity to the south compound (near Clitheroe) and the Bailey bridge construction. Recreational users of footpaths including and the Ribble Way long-distance path (RC/08, RC/09, RC/13) would have open and short-distance views to the construction of the haulage road. These initial construction works would then be followed by the removal of compounds and temporary access roads, and the partial reinstatement of areas disturbed during construction activities. Construction activities would become the dominant feature or a noticeable feature in the view and would result in a substantial change to the character of the view. These high and medium sensitivity visual receptors would therefore experience a moderate or major magnitude of effect, resulting in a major adverse significance of effect.
- 92) Residential viewers within Waddington (RC/06, RC/07) and road travellers along short sections of West Bradford Road (RC/14), would have oblique or filtered views towards the compounds. Residential viewers and recreational users of footpaths (RC/15, RC/16, RC/17) would have short to middle-distance views to the construction of the haul route and establishment and operation of the compound near

Lillands Farm. Construction activities would result in a noticeable alteration to key characteristics in a moderate part of the view. These high and medium sensitivity visual receptors would therefore experience a moderate magnitude of effect, resulting in a moderate adverse significance of effect.

- 93) Due to distance, the screening effects from intervening topography and / or vegetation, residential viewers and recreational users of footpaths (RC/01, RC/02, RC/04), the construction activities would be perceptible but would not alter the balance of features or element that comprise the existing view. These high sensitivity visual receptors would therefore experience a minor magnitude of effect, resulting in a slight adverse significance of effect.
- 94) There would be no discernible change to views due to a combination of intervening topography, settlement and vegetation from the following viewpoint - RC/03.

Table 6.6: Summary of Construction Phase Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA	High	A substantial and uncharacteristic change to a small proportion of the landscape	Short-term / reversible	Moderate	Major Adverse
5g. South Bowland Fringes LCA	High	A minor and uncharacteristic change to a small proportion of the landscape.	Short-term / reversible	Minor	Slight Adverse
5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA H1. Clitheroe to Chatburn LCA	High	A minor and uncharacteristic change to a very small proportion of the landscape.	Short-term / reversible	Negligible	Slight Adverse
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.7: Summary of Construction Phase Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/05 Healings Farm, PRoW 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road RC/08 Lillands Cottage, PRoW 3-43-FP 22 RC/09 PRoW 3-44-FP 21, 3-44-FP 22	High / Medium	A dominant or noticeable and uncharacteristic change to across a large or moderate part of the view.	Short-term / reversible	Major / Moderate	Major Adverse

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/10 PRow 3-44-FP 23, Clitheroe Road RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road RC/12 PRow 3-44-FP 23 RC/13 Ribble Way LDP, PRow 3-1-FP 2					
RC/06 Residential properties on West Bradford Road, Waddington RC/07 Waddington Grove and Waddington settlement edge RC/14 West Bradford Road RC/15 PRow 3-1-FP 26, Ribble Valley Sculpture Trail RC/16 Brungerley Farm, PRow 3-43-FP 21 RC/17 PRow 3-43-FP 19	High / Medium	A noticeable or perceptible and uncharacteristic change across a moderate part of the view.	Short-term / reversible	Moderate / Minor	Moderate Adverse
RC/01 PRow 3-43-FP 12. RC/02 Linton, Croft House, PRow 3-43-FP 13, 3-44-FP 24 RC/04 PRow 3-44-FP 22	High	A perceptible and uncharacteristic change across a small part of the view	Short-term / reversible	Minor	Slight Adverse
RC/03 West Bradford settlement edge, PRow 3-44-FP 21	High	No perceptible deterioration or improvement in the existing view	Short-term / reversible	Negligible	Negligible

6.6.3 Operation Phase

- 95) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Operation Phase.
- 96) Effects during the Operation Phase have been described in Appendix 6.3 Schedule of Landscape Effects and Appendix 6.4 Schedule of Visual Effects.
- 97) The summary of operation effects are shown in Table 6.8 and Table 6.9 below.

Predicted Impacts

- 98) The operational activities described below are considered relevant to the assessment of landscape and visual effects:
- Operational use of the haul route corridor – HGV movements along the road
 - Presence of site security at either end of the haul route corridor.
- 99) The main effects on landscape character and people's views that would arise during the Operation Phase are as follows:
- Partial loss of landscape features such as hedgerows, stone walls and trees and the stockpiling of materials, included seeded soil storage mounds
 - Visual effects and / or disturbance from movement of HGVs along the haul route corridor
 - Visual effects from the presence of the Proposed Ribble Crossing, including the haul route corridor and Bailey bridge
 - Visual effects presence of site security at either end of the haul route corridor.

Embedded Mitigation

- 100) The following embedded mitigation measures to address the potential landscape and visual effects have been incorporated into the design. These are taken into account in the assessment of landscape and visual effects during the Operation Phase. Refer to Figure 20.1, the Environmental Masterplan.
- Vegetation on the boundaries would be retained and protected where practicable
 - Positioning and seeding of soil storage mounds to reduce visual impact
 - Seeding of introduced earthworks to integrate the Proposed Ribble Crossing into the surrounding landscape.

Landscape Effects

- 101) LCAs 5b. Lower Hodder and Loud Valley, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington and J2. Ribble would be directly affected by the operation of the Proposed Ribble Crossing. This would include the presence of the haul route and River Ribble bridge and seeded soil storage mounds and earthworks.
- 102) The movement of construction traffic along the haul route would continue to affect tranquillity. However, these impacts would be reduced when compared with the construction phase. Partial reinstatement of working areas during construction would help to moderate the level of impact of the proposed Ribble Crossing. The partially restored agricultural fields would offset some adverse effects on LCAs during this phase. However, the loss of vegetation and the disruption to PRoWs and field boundaries would remain.
- 103) Due to the direct disturbance from the operation of the Proposed Ribble Crossing, there would be a noticeable and uncharacteristic change to a small proportion of the landscape, which would be experienced over the short to medium term. These high sensitivity landscape receptors would therefore experience a minor magnitude of effect, resulting in a major adverse significance of effect
- 104) LCAs 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes and H1. Clitheroe to Chatburn would continue to be indirectly affected within their immediate landscape setting, although

partial reinstatement would help to integrate the proposed Ribble Crossing into the landscape. A minor and uncharacteristic change to a small or very small proportion of the landscape would remain, which would be experienced over the short to medium term. These high sensitivity landscape receptors would therefore continue to experience a minor or negligible magnitude of effect, resulting in a slight adverse significance of effect.

- 105) G7. Browsholme LCA would continue to experience no discernible change to its landscape character.

Visual Effects

- 106) Recreational users of footpaths, including and the Ribble Way long-distance path, (RC/10, RC/11, RC/12) would be in close proximity to the River Ribble bridge and the operational haul route and would also experience visual disturbance from the movement of construction traffic. During the operational phase there would be a substantial change to the character in a large part of the view. These high sensitivity visual receptors would therefore experience a major or moderate magnitude of effect, resulting in a major adverse significance of effect.
- 107) Residents, recreational users of footpaths, including and the Ribble Way long-distance path, travellers on the West Bradford Road (nr Waddington), and community users viewing from the Primary School (RC/05, RC/08, RC/09, RC/13) would have open and short-distance views to the haulage road and visual disturbance from the movement of construction traffic. Travellers on the West Bradford Road (near Clitheroe) (RC/14) would have views of the haul route, the River Ribble bridge and movement of vehicles along the route. During the operational phase there would be a noticeable alteration to key characteristics in a moderate part of the view. These high and medium sensitivity visual receptors would therefore experience a moderate magnitude of effect, resulting in a moderate adverse significance of effect.
- 108) Residential viewers and recreational users of footpaths (RC/01, RC/06, RC/07, RC/15, RC/16, RC/17). Due to distance, the screening effects from intervening topography and / or vegetation, the construction traffic and the haul route would be perceptible across a small part of the view but would not alter the balance of features or element that comprise the existing view. These high sensitivity visual receptors would therefore experience a minor magnitude of effect or a negligible effect, resulting in a slight adverse significance of effect.
- 109) There would be no discernible change to views due to a combination of intervening topography, settlement and vegetation from the following viewpoints -RC/02, RC/03, RC/04.

Table 6.8: Summary of Operation Phase Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA	High	A noticeable and uncharacteristic change to a small proportion of the landscape.	Short to medium-term / reversible	Minor	Moderate Adverse
5g. South Bowland Fringes LCA	High	A minor and uncharacteristic change to a small proportion of the landscape.	Short to medium-term / reversible	Minor	Slight Adverse
5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA H1. Clitheroe to Chatburn LCA	High	A minor and uncharacteristic change to a very small proportion of the landscape.	Short to medium-term / reversible	Negligible	Slight Adverse
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.9: Summary of Operation Phase Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/10 PRow 3-44-FP 23, Clitheroe Road RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road RC/12 PRow 3-44-FP 23	High / Medium	A dominant or noticeable and uncharacteristic change to across a large or moderate part of the view.	Short to medium-term / reversible	Major / Moderate	Major Adverse

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/05 Healings Farm, PRoW 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road RC/08 Lillands Cottage, PRoW 3-43-FP 22 RC/09 PRoW 3-44-FP 21, 3-44-FP 22 RC/13 Ribble Way LDP, PRoW 3-1-FP 2 RC/14 West Bradford Road	High / Medium	A noticeable and uncharacteristic change across a moderate part of the view.	Short to medium-term / reversible	Moderate	Moderate Adverse
RC/01 PRoW 3-43-FP 12. RC/06 Residential properties on West Bradford Road, Waddington RC/07 Waddington Grove and Waddington settlement edge RC/15 PRoW 3-1-FP 26, Ribble Valley Sculpture Trail RC/16 Brungerley Farm, PRoW 3-43-FP 21 RC/17 PRoW 3-43-FP 19	High	A perceptible or barely perceptible and uncharacteristic change across a small part of the view.	Short to medium-term / reversible	Minor or negligible	Slight Adverse
RC/02 Linton, Croft House, PRoW 3-43-FP 13, 3-44-FP 24 RC/03 West Bradford settlement edge, PRoW 3-44-FP 21 RC/04 PRoW 3-44-FP 22	High	No perceptible deterioration or improvement in the existing view.	Short-term / reversible	Negligible	Negligible

6.6.4 Decommissioning Phase

- 110) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Decommissioning Phase.
- 111) Effects during the Decommissioning Phase have been described in Appendix 6.3 Schedule of Landscape Effects and Appendix 6.4 Schedule of Visual Effects.
- 112) The summary of decommissioning effects are shown in Table 6.10 and Table 6.11 below.

Predicted Impacts

- 113) The enabling works activities described below are considered relevant to the assessment of landscape and visual effects:
- Installation of stock-proof fencing and PRoW crossing points along the temporary access track and around temporary compounds. Erection of Heras type fencing around the temporary compounds
 - Removal of partially reinstated site boundary features (e.g. stone walls along West Bradford Road)
 - Stripping and storage of the existing topsoil
 - Localised ground re-profiling and stone laying to temporary laydown areas and compounds
 - Re-installation of temporary access tracks, temporary compounds, temporary laydown areas, temporary car parks and temporary office accommodation
 - Removal of the road base and tarmac wearing course, including temporary highways drainage and fencing
 - Removal of the Bailey bridge and other crossings of smaller watercourses
 - Removal of temporary drainage, including culverts and drainage outfalls
 - Removal of all earthworks and the re-profiling of original landform
 - Reinstatement of any watercourses and original drainage features (e.g. culverts)
 - Reinstatement of temporary compounds, laydowns areas and all other disturbed areas following the completion of the decommissioning works
 - Topsoiling and grass seeding of all disturbed areas, including the return of all disturbed land to agricultural use where practicable
 - Complete reinstatement of removed vegetation and any other environmental works
 - Complete reinstatement of site boundary features, including hedgerows, stock-proof fencing and stone walls.
- 114) The main effects on landscape character and people's views that would arise during the Decommissioning Phase are as follows:
- Loss of landscape features such as hedgerows, stone walls and trees, soil stripping and the stockpiling of materials
 - Visual effects from moving plant and construction equipment within the compounds and along access tracks, including a tall mobile crane for the removal of the Bailey bridge
 - Visual effects and disruption from temporary soil storage
 - Disruption from the creation, presence and removal of the temporary construction compounds, laydown areas and material storage areas for plant, machinery, equipment, construction materials and office accommodation
 - Disruption from the removal of the haul route corridor, including the Bailey bridge
 - Localised levelling and re-profiling of landform

- Disruption from the reinstatement of re-graded areas, including topsoil spreading
- Disruption from the grass seeding, mitigation planting and boundary reinstatement.

Embedded Mitigation

- 115) The following embedded mitigation measures to address the potential landscape and visual effects have been incorporated into the design. These are taken into account in the assessment of landscape and visual effects during the Decommissioning Phase. Refer to Figure 20.1, the Environmental Masterplan.
- Final reinstatement of fences and other boundary features, and grass areas would be undertaken after the completion of the decommissioning activities
 - Final reinstatement of trees, shrubs and hedgerows after the completion of the decommissioning activities
 - Trees would be reinstated with a ratio of 3:1 for each tree lost
 - Agricultural land would be returned to the owner or tenant for their productive use as soon as practicable after reinstatement of the work.

Landscape Effects

- 116) LCAs 5b. Lower Hodder and Loud Valley, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington and J2. Ribble would be directly affected by the decommissioning works. This would include physical changes resulting from the establishment of decommissioning compounds and temporary access roads; and the removal of the haul route and the River Ribble bridge.
- 117) Decommissioning activities, along with the movement of construction traffic, plant and machinery, would affect tranquillity, which would continue to contrast with the of rural qualities of these LCAs. The loss of vegetation and the disruption to PRowS and field boundaries would also remain.
- 118) Due to the direct disturbance from the operation of the Proposed Ribble Crossing, there would be a noticeable and uncharacteristic change to a small proportion of the landscape, which would be experienced over the short to medium term. These high sensitivity landscape receptors would therefore experience a minor magnitude of effect, resulting in a major adverse significance of effect
- 119) LCAs 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes and H1. Clitheroe to Chatburn would continue to be indirectly affected within their immediate landscape setting, although the partial reinstatement during construction would help to integrate the proposed Ribble Crossing into the landscape. A minor and uncharacteristic change to a small or very small proportion of the landscape would therefore remain, which would be experienced over the short to medium term. These high sensitivity landscape receptors would therefore continue to experience a minor or negligible magnitude of effect, resulting in a slight adverse significance of effect.
- 120) G7. Browsholme LCA would continue to experience no discernible change to its landscape.

Visual Effects

- 121) Residential viewers and recreational users of the footpath (RC/05) would have open views to the decommissioning of the north compound (near Waddington) and of the haul route. Recreational users of footpaths including and the Ribble Way long-distance path (RC/10, RC/11, RC/12, RC/14) would be in close proximity to, and have open views of, the decommissioning of the south compound (near Clitheroe) and the dis-assembly of the River Ribble bridge. Recreational users of footpaths including and the Ribble Way long-distance path (RC/08, RC/09, RC/13) would have open and short-distance views to the decommissioning of the haul route. These decommissioning activities would then be followed by the removal of compounds and temporary access roads, and the reinstatement of areas disturbed by the proposed Ribble Crossing. Decommissioning activities would become the dominant feature or a noticeable feature in the view and would result in a substantial change to the character of the view. These high and medium sensitivity visual receptors would therefore experience a moderate or major magnitude of effect, resulting in a major adverse significance of effect.

- 122) Residential viewers within Waddington (RC/06, RC/07), would have oblique or filtered views towards the re-establishment of the compounds. Residential viewers and recreational users of footpaths (RC/15, RC/16, RC/17) would have short to middle-distance views to the decommissioning of the haul route and re-establishment of the compound near Lillands Farm. These decommissioning activities would then be followed by the removal of compounds and temporary access roads, and the reinstatement of areas disturbed by the proposed Ribble Crossing. Decommissioning activities would result in a noticeable alteration to key characteristics in a moderate part of the view. These high and medium sensitivity visual receptors would therefore experience a moderate magnitude of effect, resulting in a moderate adverse significance of effect.
- 123) Due to distance, the screening effects from intervening topography and / or vegetation, residential viewers and recreational users of footpaths (RC/01, RC/02, RC/04), the decommissioning activities would be perceptible but would not alter the balance of features or element that comprise the existing view. These high sensitivity visual receptors would therefore experience a minor magnitude of effect, resulting in a slight adverse significance of effect.
- 124) There would be no discernible change to views due to a combination of intervening topography, settlement and vegetation from the following viewpoint - RC/03.

Table 6.10: Summary of Decommissioning Phase Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA	High	A noticeable and uncharacteristic change to a small proportion of the landscape.	Short-term / reversible	Minor	Moderate Adverse
5g. South Bowland Fringes LCA	High	A minor and uncharacteristic change to a small proportion of the landscape.	Short-term / reversible	Minor	Slight Adverse
5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA H1. Clitheroe to Chatburn LCA	High	A minor and uncharacteristic change to a very small proportion of the landscape.	Short-term / reversible	Negligible	Slight Adverse
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.11: Summary of Decommissioning Phase Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/05 Healings Farm, PRoW 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road RC/08 Lillands Cottage, PRoW 3-43-FP 22 RC/09 PRoW 3-44-FP 21, 3-44-FP 22	High / Medium	A dominant or noticeable and uncharacteristic change to across a large or moderate part of the view.	Short-term / reversible	Major / Moderate	Major Adverse

Environmental / Community Asset	Range of Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/10 PRow 3-44-FP 23, Clitheroe Road RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road RC/12 PRow 3-44-FP 23 RC/13 Ribble Way LDP, PRow 3-1-FP 2 RC/14 West Bradford Road					
RC/06 Residential properties on West Bradford Road, Waddington RC/07 Waddington Grove and Waddington settlement edge RC/15 PRow 3-1-FP 26, Ribble Valley Sculpture Trail RC/16 Brungerley Farm, PRow 3-43-FP 21 RC/17 PRow 3-43-FP 19	High / Medium	A noticeable or perceptible and uncharacteristic change across a moderate part of the view.	Short-term / reversible	Moderate	Moderate Adverse
RC/01 PRow 3-43-FP 12. RC/02 Linton, Croft House, PRow 3-43-FP 13, 3-44-FP 24	High	A perceptible and uncharacteristic change across a small part of the view.	Short-term / reversible	Minor	Slight Adverse
RC/03 West Bradford settlement edge, PRow 3-44-FP 21 RC/04 PRow 3-44-FP 22	High	No perceptible deterioration or improvement in the existing view.	Short-term / reversible	Negligible	Negligible

6.6.5 Post decommissioning Year 1

- 125) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Post decommissioning Year 1.
- 126) Effects during the Post decommissioning Year 1 have been described in full in Appendix 6.3 Schedule of Landscape Effects and Appendix 6.4 Schedule of Visual Effects.
- 127) The summary of Post decommissioning Year 1 effects are shown in Table 6.12 and Table 6.13 below.
- 128) Due also to the circumstances there is no opportunity to provide additional mitigation that would be beneficial to the Proposed Ribble Crossing. As such, the level of residual effects assessed for all landscape and visual receptors are the same as those assessed prior to the application of additional mitigation. The residual effects would, therefore, be the same as those described and summarised in Section 6.6.

Predicted Impacts

- 129) The Post decommissioning Year 1 considers the residual effects from loss of landscape features such as hedgerows, trees and shrubs, and the effects of the maturing mitigation planting and re-seeded areas at Year 1.

Landscape Effects

- 130) LCAs 5b. Lower Hodder and Loud Valley, 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington, H1. Clitheroe to Chatburn and J2. Ribble would be directly or indirectly affected by the small areas of vegetation loss.
- 131) At Post decommissioning Year 1 decommissioning activities would have ceased and uncharacteristic elements would no longer be present in the landscape. Landscape features, including stone walls and fences, would be reinstated and new hedgerows would be establishing, restoring the original field pattern. Local landscape profiles would have been reinstated, with the grass sward established, restoring rural areas back to their original agricultural use. The affected PRoW network would also be reinstated to its original alignment.
- 132) Mitigation planting introduced during the preceding phases would have a limited contribution to integration at this stage. Direct impacts due to the loss of existing trees and shrub vegetation would remain; however, the extent of this loss would be limited and therefore barely perceptible.
- 133) Due to the barely perceptible loss of vegetation, there would be a minor and characteristic change to a very small proportion of the landscape, which would be experienced over the long term. These high sensitivity landscape receptors would therefore experience a negligible magnitude of effect, resulting in a slight adverse significance of effect.
- 134) G7. Browsholme LCA would continue to experience no discernible change to its landscape.

Visual Effects

- 135) At Post decommissioning Year 1 decommissioning activities would have ceased and the pastoral land would be re-established, restoring rural areas back to their original agricultural use. New hedgerows and trees within field boundaries would be establishing. The small areas of reinstatement planting would have a limited effect where previously removed. There would, therefore, continue to be a perceptible change for recreational users of footpaths and the Ribble Way long-distance footpath near the River Ribble, and travellers on West Bradford Road (RC/10, RC/11, RC/12). These high and medium sensitivity visual receptors would therefore experience a slight magnitude of effect, resulting in a minor adverse significance of effect.
- 136) There would be a barely perceptible change in view from the following viewpoint locations - RC/01, RC/02, RC/03, RC/04, RC/05, RC/06, RC/07, RC/08, RC/09, RC/13, RC/15, RC/16, RC/17

Table 6.12: Summary of Post decommissioning Year 1 Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA 5g. South Bowland Fringes LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA H1. Clitheroe to Chatburn LCA	High	A noticeable and uncharacteristic change to a very small proportion of the landscape.	Long-term / reversible	Negligible	Slight Adverse
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.13: Summary of Post decommissioning Year 1 Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/10 PRow 3-44-FP 23, Clitheroe Road RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road RC/12 PRow 3-44-FP 23 RC/14 West Bradford Road	High / Medium	A perceptible and uncharacteristic change across a small part of the view	Short-term / reversible	Minor	Slight Adverse
RC/O1 PRow 3-43-FP 12.	High / Medium	No perceptible deterioration or	Permanent	Negligible	Negligible

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/02 Linton, Croft House, PRow 3-43-FP 13, 3-44-FP 24 RC/03 West Bradford settlement edge, PRow 3-44-FP 21 RC/04 PRow 3-44-FP 22 RC/05 Healings Farm, PRow 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road RC/06 Residential properties on West Bradford Road, Waddington RC/07 Waddington Grove and Waddington settlement edge RC/08 Lillands Cottage, PRow 3-43-FP 22 RC/09 PRow 3-44-FP 21, 3-44-FP 22 RC/13 Ribble Way LDP, PRow 3-1-FP 2 RC/15 PRow 3-1-FP 26, Ribble Valley Sculpture Trail RC/16 Brungerley Farm, PRow 3-43-FP 21 RC/17 PRow 3-43-FP 19		improvement in the existing view			

6.6.6 Post decommissioning Year 15

- 137) The following section summarises the effects of the Proposed Ribble Crossing on landscape and visual receptors during the Post decommissioning Year 15.
- 138) Effects during the Post decommissioning Year 15 have been described in full in Appendix 6.3 Schedule of Landscape Effects and Appendix 6.4 Schedule of Visual Effects.
- 139) The summary of effects are shown in Table 6.14 and Table 6.15 below.

Predicted Impacts

- 140) The Post decommissioning Year 15 considers the effects of the maturing of mitigation planting and re-seeded areas at Year 15.

Landscape Effects

- 141) LCAs 5b. Lower Hodder and Loud Valley, 5e. Lower Ribblesdale (Clitheroe to Gisburn), 5g. South Bowland Fringes, 11a. Lower Ribble Valley, F2. Bolton by Bowland to Waddington, H1. Clitheroe to Chatburn and J2. Ribble would be directly or indirectly affected by introduced mitigation planting.
- 142) Maturing mitigation planting would help to replace existing vegetation removed and provide some integration into the surrounding landscape. These high sensitivity landscape receptors would therefore experience a negligible magnitude of effect, resulting in a negligible significance of effect.
- 143) G7. Browsholme LCA would continue to experience no discernible change to its landscape.

Visual Effects

- 144) By the summer of Year 15, mitigation planting and grassland would be sufficiently established and there would be no noticeable change to views resulting in a negligible effect for all viewpoint locations.

Table 6.14: Summary of Post decommissioning Year 15 Landscape Effects

Environmental / Community Asset	Sensitivity	Effect	Nature of Effect	Magnitude	Significance of Effect (Post Embedded Mitigation)
5b. Lower Hodder and Loud Valley LCA 5e. Lower Ribblesdale (Clitheroe to Gisburn) LCA 5g. South Bowland Fringes LCA 11a. Lower Ribble Valley LCA F2. Bolton by Bowland to Waddington LCA J2. Ribble LCA H1. Clitheroe to Chatburn LCA	High	A barely perceptible and characteristic change to a very small proportion of the landscape.	Permanent	Negligible	Negligible
G7. Browsholme LCA	High	No discernible change to the landscape.	N/A	No Change	No Change

Table 6.15: Summary of Year 15 Post decommissioning Visual Effects

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/01 PRow 3-43-FP 12. RC/02 Linton, Croft House, PRow 3-43-FP 13, 3-44-FP 24 RC/03 West Bradford settlement edge, PRow 3-44-FP 21 RC/04 PRow 3-44-FP 22 RC/05 Healings Farm, PRow 3-44-FP 22, Waddington and West Bradford C of E School, West Bradford Road	High / medium	No perceptible deterioration or improvement in the existing view.	Permanent	Negligible	Negligible

Environmental / Community Asset	Range of Sensitivity	Effect	Duration	Magnitude	Significance of Effect (Post Embedded Mitigation)
RC/06 Residential properties on West Bradford Road, Waddington					
RC/07 Waddington Grove and Waddington settlement edge					
RC/08 Lillands Cottage, PRoW 3-43-FP 22					
RC/09 PRoW 3-44-FP 21, 3-44-FP 22					
RC/10 PRoW 3-44-FP 23, Clitheroe Road					
RC/11 Ribble Way LDP, Prow 3-1-FP 2, West Bradford Road					
RC/12 PRoW 3-44-FP 23					
RC/13 Ribble Way LDP, PRoW 3-1-FP 2					
RC/14 West Bradford Road					
RC/15 PRoW 3-1-FP 26, Ribble Valley Sculpture Trail					
RC/16 Brungerley Farm, PRoW 3-43-FP 21					
RC/17 PRoW 3-43-FP 19					

6.7 Essential Mitigation and Residual Effects

- 145) Mitigation is most effective if considered as an integral part of the Proposed Ribble Crossing design in order to avoid, reduce or offset any adverse effects on the landscape or wider environment. A range of mitigation measures are proposed which have been identified through the iterative design process. These include the avoidance of hedgerows and trees within compound areas, and narrowing in working width at intersections with field boundaries and vegetation belts. This would maintain some benefits of screening by preserving existing features and increase opportunities for protection of root zones of trees to be retained.
- 146) Whilst all embedded mitigation and measures good practice measures described above would reduce or off-set landscape and visual effects, the reduction in effect would not in all cases be sufficient to alter the reported significance of effect. This is in part due to the location, scale, nature and short to medium term duration of the Proposed Ribble Crossing, which means it is only practicable to reduce rather than eliminate significant effects.
- 147) Those experiencing a major or moderate magnitude of effect would see a detectable loss of nearby vegetation; the presence of temporary construction compounds, construction access tracks and laydown areas; the movement of machinery required to construct the Bailey bridge foundations and assemble the Bailey bridge. Visual disturbance from moving traffic along the haul route and the presence of the Bailey bridge and haul route would give rise to major or moderate magnitude of effect for during the Operational Phase for nearby receptors. Landscape and visual receptors experiencing minor adverse effects to negligible effects would have views of the construction compounds, construction access tracks and laydown areas, and the haul route during the operational phase. However, these would not be their primary focus due to a combination of distance from the Proposed Ribble Crossing and the effect of intervening topography and filtering of vegetation and intervening settlement, and, therefore, the effects are typically considered to be less significant. Also, the activities during the Enabling Works Phase, Construction Phase, Operational Phase and Decommissioning Phase would typically result in a greater magnitude of change than during the Post Decommissioning Phases at Year 1 and Year 15, as many of the impacts and their effects would be temporary in nature.
- 148) Section 6.6 above provides a summary of the landscape and visual receptors that have been identified as likely to experience a significant effect or a non-significant effect during each phase of the Proposed Ribble Crossing followed by tables that summarise the significant and non-significant residual effects at each phase. The detailed assessment for each landscape receptor is presented in Appendix 6.3: Schedule of Landscape Effects and the detailed assessment for each representative viewpoint is presented in Appendix 6.4: Schedule of Visual Effects.

6.8 Cumulative Effects

- 149) The following section provides an overview of the potential cumulative effects from different proposed developments and land allocations, in combination with the Proposed Marl Hill Section (i.e. inter-project cumulative assessment). Data on proposed third party developments and land allocations contained in development plan documents were obtained from various sources, including local planning authority websites, online searches, and consultations with planning officers. Proposed development data were then reviewed with a view to identifying schemes or land allocations whose nature, scale and scope could potentially give rise to significant environmental effects when considered in combination with the likely effects arising from the Proposed Marl Hill Section.
- 150) Intra-project cumulative impacts, i.e. two or more types of impact acting in combination on a given environmental receptor, property or community resource, are considered in Chapter 14: Communities and Health.
- 151) The over-arching cumulative effects of the Proposed Programme of Works i.e. the five proposed replacement tunnel sections in combination, are considered in Chapter 19: Cumulative Effects. In addition, Chapter 19 examines the cumulative effects associated with the outcomes from Volume 2 (delivery and operation of the main construction compounds, tunnel, and construction traffic routes) and Volume 6 (Proposed Ribble Crossing).

- 152) Based on professional judgement, it was concluded that there are no proposed third party developments or land allocations in local development plan documents which could potentially give rise to likely significant cumulative effects. No cumulative assessment was therefore undertaken in connection with the landscape and visual topic.

6.9 Conclusion

- 153) This chapter of the ES considered the potential impacts on landscape character and visual amenity associated with construction and operation along the route of the Proposed Ribble Crossing.
- 154) The Proposed Ribble Crossing would have a direct or indirect effect on LCAs and alter people's views during all phases of the works. It is anticipated that due to the scale and nature of the Proposed Ribble Crossing, there would be significant impacts on landscape character and visual amenity during the construction, operation and decommissioning phases.
- 155) These effects would reduce once the Ribble Crossing is decommissioned and decommissioning activity ceases. There would be no residual significant effects by the Post decommissioning Year 1 phase. Reinstated vegetation would establish from Year 1 and by Year 15, it is anticipated that the reinstated vegetation and other landscape features would be sufficiently established to fully integrate within the landscape.
- 156) Due to the relatively short construction and operational timescales of the Ribble Crossing, establishing advanced planting would not significantly reduce visual impacts within the lifetime of the Ribble Crossing.

6.10 Glossary and Key Terms

- 157) Key phrases and terms used within this technical chapter relating to Landscape and Arboriculture are defined within Appendix 1.2: Glossary and Key Terms.