

Sustainability Appraisal and Strategic Environmental Assessment of the Rossendale Borough Council Local Plan

Regulation 19 Report

August 2018



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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LC-359	Document Control Box
Client	Rossendale Borough Council
Report Title	Sustainability Appraisal of the Rossendale Local Plan - Regulation 19
Filename	LC-359 Rossendale Reg19 SA_3_070818CW.docx
Date	August 2018
Author	CW & JE
Reviewed	JE
Approved	ND

Cover photo taken at Lee Quarry by Dave Haygarth

About this report & notes for the reader

Lepus Consulting Ltd (Lepus) has prepared this report for the use of Rossendale Borough Council. There are a number of limitations which should be borne in mind when considering the results and conclusions of this report.

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SEA and SA are tools for predicting potential significant effects. The actual effects may be different from those identified. Prediction of effects is made using an evidence based approach and incorporates a judgement.

The document was prepared during April – July 2018 and is subject to, and limited by, the information available during this time.

The assessments are based on the best available information, including that provided to Lepus by the Council and information that is publicly available. No attempt to verify secondary data sources have been made and they are assumed to be accurate as published.

Every attempt has been made to predict effects as accurately as possible using the available information. Many effects will depend on the size and location of development, building design, construction, proximity to sensitive receptors such as biodiversity sites, flood risk areas and landscapes and the range of uses that takes place.

The report has been produced to assess the sustainability effects of the emerging Local Plan. It is not intended to be a substitute for Environmental Impact Assessment or Habitat Regulations Assessment.



Lepus Consulting Ltd

1 Bath Street

Cheltenham

Gloucestershire

GL50 1YE

(01242) 525 222

enquiries@lepusconsulting.com

www.lepusconsulting.com

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Acronyms

A&E	Accident and Emergency
ALC	Agricultural Land Classification
ANS	Archaeological Notification Site
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAE	Built Area Extensions
FEMA	Functional Economic Market Assessment
GHG	Greenhouse Gas
GI	Green Infrastructure
GP	General Practitioner
GT	Gypsy and Traveller
GTAA	Gypsy and Traveller Accommodation Assessment
ha	Hectare
HEDNA	Housing and Economic Development Needs Assessment
HELAA	Housing and Economic Land Availability Assessment
HMA	Housing Market Area
HRA	Habitat Regulations Assessment
LCA	Landscape Character Assessment
LWS	Local Wildlife Site
MWCS	Minerals and Waste Core Strategy
NERC	Natural Environment and Rural Communities
NHS	National Health Service
NPPF	National Planning Policy Framework
NTS	Non-Technical Summary
OAHN	Objectively Assessed Housing Need
ONS	Office for National Statistics
PDL	Previously Developed Land
PPG	Planning Practice Guidance
PRoW	Public Right(s) of Way
RBC	Rossendale Borough Council
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SANG	Suitable Alternative Natural Greenspace
SEA	Strategic Environmental Assessment
SHLAA	Strategic Housing Land Availability Assessment
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Sites of Special Scientific Interest
WRMP	Water Resource Management Plan

Non-technical Summary

What is Sustainability Appraisal?

Lepus Consulting is conducting an appraisal process for Rossendale Borough Council to help them prepare their Local Plan. The appraisal process is known as Sustainability Appraisal (SA). This SA report also includes the requirements of an Environmental Report as part of the Strategic Environmental Assessment (SEA) Directive.

SA is the process of informing and influencing the preparation of a Local Plan to optimise its sustainability performance. SA considers the social, economic and environmental performance of the Local Plan.

This chapter is a Non-Technical Summary (NTS) of the full SA report which follows.

Purpose and content of the Sustainability Appraisal report

The purpose of this SA Report is to provide information in relation to:

- How reasonable alternatives have been identified and assessed, why the preferred alternatives have been chosen and why others were rejected;
- Changes that have been made to the Plan as a result of the SEA/SA;
- Comments the statutory consultees and the public have made on the scoping (and any assessment reports), and what changes have been made in response to these comments.

This SA Report contains:

- An outline of the contents and main objectives of the Local Plan and its relationship with other relevant plans, programmes and strategies;
- Relevant aspects of the current state of the environment and key sustainability issues for the Plan area (Rossendale Borough);
- The SA Framework of objectives and indicators against which the Local Plan has been assessed;
- The appraisal of reasonable alternatives identified during the plan making process to date, including an explanation about how they were identified, and either rejected or selected;
- The likely effects of the Local Plan on sustainability;
- Recommendations for measures to reduce and as fully as possible offset any significant adverse effects which may arise as a result of the Local Plan; and
- A description of relevant monitoring requirements.

The scoping stage

The first phase of preparation for the SA was the scoping stage. Scoping is the process of deciding the extent and level of detail of an SA, including the environmental effects and alternatives to be considered, the assessment methods to be used, and the structure and contents of the SA Report.

The purpose of the Scoping Report is to set the criteria for assessment (including the SA Objectives) and establish the baseline data and other information, including a review of relevant policies, programmes and plans (PPPs). The Scoping Report was prepared by Rossendale Borough Council (RBC) in 2012¹.

Issues, options and distribution

The RBC Plan seeks to deliver a total of 2,905 dwellings over the Plan period in order to satisfy the housing needs of the local population and economy. The Council needs to pursue a spatial strategy in the Local Plan which accommodates the anticipated level of growth in the Plan area whilst also permitting sustainable development.

The Council has considered the potential benefits and impacts of various spatial strategies, comprised of options such as focusing new development in existing urban areas, focusing more in rural areas, greater densities of development as well as more sparsely distributed development.

In addition to the quantity and distribution of development, the Local Plan allocates sites for specific types of development (either residential, employment or mixed use), as well as development management policies and site based policies. Each of these proposals, and their reasonable alternatives, have been assessed for their likely sustainability impacts during the SA. The findings of this process have helped to inform the Council's decision making process when determining which proposals they should take forward (i.e. their preferred approach presented in the Regulation 19 Publication, and the Regulation 22 Submission, version of the Local Plan).

¹ Rossendale Borough Council (2012) Scoping Report, Lives and Landscapes: Sustainability Appraisal, Strategic Environmental Assessment and Habitat Regulations Assessment

Summary of findings

Proposals in the Local Plan have been assessed for their sustainability impacts, the results of which are presented in **Appendices B, C and D** of this report. The assessment of the Local Plan, including reasonable alternatives, was undertaken using a combination of empirical evidence, and to a lesser extent, professional judgement. The findings are presented in matrix format and are accompanied by a commentary on identified effects. The matrix is not a conclusive tool. Its main function is to show visually whether or not the Local Plan proposals are likely to bring positive, adverse or uncertain effects in relation to the SA Objectives. The assessment commentary should be relied on to interpret the matrix findings.

Mitigation

The Council has also proposed many policies in the Local Plan which will be expected to help mitigate some of the adverse impacts of development on sustainability. As a result of this, there are a limited number of residual adverse impacts anticipated (see **Table N.2**).

Monitoring

The SA also discusses the importance of a monitoring programme to help ensure that adverse impacts of the Local Plan are identified, investigated and potentially avoided, mitigated or compensated. When opportunities for improving the sustainability performance of the Local Plan arise over time, monitoring helps ensure that these opportunities are recognised and taken advantage of.

Conclusions

The SA has identified a range of positive and adverse potential impacts of the Local Plan on the objectives of the SA Framework. Whilst mitigation has been proposed for some effects, where this is not possible or is not likely to mitigate the nature of effect such that it is nullified, the following residual significant and/or cumulative adverse effects remain and are drawn to the attention of the plan makers:

- Loss of natural soil resource;
- Loss of biodiversity;
- Contributions towards climate change;
- Air pollution; and
- Impacts on landscapes.

Table N.1: Anticipated positive sustainability impacts of the emerging Local Plan

Positive impacts	
1	<p>Fluvial flood Risk</p> <p>The Local Plan is anticipated to direct residential development away from areas at risk of fluvial flooding, which will help ensure the Plan area and its residents are well placed to adapt to the effect of climate change, such as extreme weather events.</p>
2	<p>Employment</p> <p>The Local Plan is anticipated to lead to a significant increase in employment opportunities and commercial floor space in the Plan area as a result of its allocation of 27ha of employment land for business, general industrial and storage or distribution. This will help ensure all residents have access to employment opportunities which help to enable them to live a higher quality life.</p>
3	<p>Housing</p> <p>The development proposed in the Local Plan would make a significant contribution towards meeting the various housing needs in the Plan area, including the quantity (the Plan will deliver 3,180 dwellings at 212 dwellings per annum), distribution and affordability.</p>
4	<p>Physical and mental health</p> <p>The Local Plan is anticipated to help ensure that residents in the Plan area have access to a range of health facilities, including GP surgeries, NHS hospitals and natural habitats. This will be likely to help ensure residents can pursue physically and mentally healthy lifestyles.</p>
5	<p>Transport</p> <p>The Local Plan is anticipated to help ensure that residents will have convenient access to frequent, affordable and sustainable modes of transport. Where this is currently not the case, it is likely that policies in the Local Plan will help ensure that the sustainable transport options are improved.</p>
6	<p>Efficient use of land</p> <p>The Local Plan seeks out opportunities for using previously developed and brownfield land. The efficient use of land proposed in the Local Plan will help to avoid unnecessary losses of natural resources such as soil whilst helping to avoid losses of open spaces and adverse impacts on Objectives such as biodiversity.</p>

Table N.2: Anticipated adverse sustainability impacts of the emerging Local Plan

Adverse impacts	
1	<p>Biodiversity, flora and fauna</p> <ul style="list-style-type: none"> A net loss in vegetation cover over the Plan period (Paragraph 107 of the NPPF includes 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures' as a component of 'pursuing sustainable development'). Minor adverse impacts on priority habitats throughout the Plan area. Increased fragmentation of defined ecological networks for heathland, woodland and grassland in Rossendale and Lancashire. <p>These effects will be likely to be long term and potentially permanent, with limited scope for mitigation.</p>
2	<p>Climate and water</p> <ul style="list-style-type: none"> A net increase in energy consumption and GHG emissions in the Plan area. A net reduction in the carbon sink capacity of vegetation in the Plan area due to a loss of vegetation. <p>These effects will be likely to be long term and potentially permanent, with limited scope for mitigation.</p>
3	<p>Soil and natural resources</p> <ul style="list-style-type: none"> The RBC Plan allocates 84 new sites for development. The total area of these sites is approximately 229ha. Of these sites, 22 of them are brownfield and previously developed. Of the total 229ha area, the brownfield sites constitute approximately 17ha. Currently mixed sites (i.e. sites with some brownfield and some greenfield land) comprise just over 15ha of the allocated land. This means under 200ha of the land allocated for development in the RBC Plan is currently previously undeveloped. A net loss of stable, functioning and fertile soils in the Plan area. No policy proposed in the Plan is designed to directly help protect or enhance soil stocks in the Borough. The majority of these soils fall within ALC Grade 4 and are likely more ecologically valuable than they are agriculturally. <p>This impact will be likely to be permanent, with very limited scope for mitigation.</p>
4	<p>Air pollution and transport</p> <ul style="list-style-type: none"> It is considered to be likely that over the Plan period, air quality will reduce in some areas of the Plan area due to local increases in road transport movements. There are currently concerns over capacity issues at some junctions in the Borough to handle the likely increase in transport. It is considered to be likely that the long-term health of residents and habitats within approximately 200m of a busy road, or other major air pollutants, will be adversely impacted by pollution (e.g. atmospheric nitrogen deposition and particulate matter). <p>This impact will be likely to be long term with limited scope for mitigation.</p>
5	<p>Waste</p> <ul style="list-style-type: none"> A net increase in waste generation is anticipated to some extent due to the construction and occupation of thousands of new homes. International and national waste reduction and recycling targets will limit this. <p>This impact will be likely to be short to medium term with some scope for mitigation.</p>

Health

6

- An uncertain proportion of new residents will be likely to be situated outside the target distance of several necessary health facilities.

This impact will be likely to be short to medium term with some scope for mitigation.

1 Introduction

1.1 Background

1.1.1 Lepus Consulting Ltd (Lepus) has been instructed by Rossendale Borough Council (RBC) to undertake a Sustainability Appraisal (SA) of the emerging Local Plan 2019 - 2034. This document presents an assessment of the likely sustainability impacts of proposals in the Local Plan as well as the potential impacts of reasonable alternatives for each proposal.

1.1.2 The Planning and Compulsory Purchase Act² requires a Sustainability Appraisal (SAs) to be carried out on Local Development Plan Documents or Local Development Documents. Additionally, the Environmental Assessment of Plans and Programmes Regulations³ (SEA Regulations) require Strategic Environmental Assessments (SEA) for a wide range of plans and programmes, including Local Plans. This SA report incorporates the requirements of SEA.

1.1.3 Planning Practice Guidance (PPG) Paragraph: 001 Reference ID: 11-001-20140306 (06 03 2014) states:

“Sustainability appraisals incorporate the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004 (commonly referred to as the ‘Strategic Environmental Assessment Regulations’), which implement the requirements of the European Directive 2001/42/EC (the ‘Strategic Environmental Assessment Directive’) on the assessment of the effects of certain plans and programmes on the environment. Sustainability appraisal ensures that potential environmental effects are given full consideration alongside social and economic issues.”

² Planning and Compulsory Purchase Act 2004. Available online at:
<https://www.legislation.gov.uk/ukpga/2004/5/contents> Accessed 27.10.17

³ The Environmental Assessment of Plans and Programmes Regulations 2004. Available online at:
<http://www.legislation.gov.uk/uksi/2004/1633/contents/made> Accessed 27.10.17

1.2 Purpose of this report

1.2.1 This report has been prepared to help inform the Council's preparation of their emerging Local Plan. It is not the role of the SA to decide which options should be pursued by the Council. Rather, it is an assessment of the options in order to inform the Council's decision-making process and identification of the best performing option.

1.2.2 A key purpose of this report is to demonstrate that the Council has considered reasonable alternatives for proposals in the Local Plan (see **Chapter 2**).

1.3 About the Rossendale Local Plan 2019 - 2034

1.3.1 The Local Plan sets out a description of the area and the current issues it is facing. It describes the kind of place Rossendale could be by 2034 and proposes a range of policies to help plan and manage growth and development.

1.3.2 The Local Plan will designate land and buildings for future uses to meet the Borough's needs and set out what developments should look like and how they should fit in with their surroundings.

1.3.3 The Council have prepared a detailed and varied evidence base to inform their decision making, including the following key documents:

- Strategic Housing Land Availability Assessment (SHLAA);
- Gypsies and Travellers Accommodation Assessment 2016;
- Employment Land Review 2017;
- Green Belt Review 2016;
- Environmental Network Study 2017;
- Playing Pitch Strategy 2016;
- Strategic Flood Risk Assessment (SFRA) 2016;
- Landscape Study 2015;
- Landscape capacity study for wind energy developments in the South Pennines 2014;
- Heritage Impact Risk Assessment;
- Conservation Areas Appraisal;
- Town Centre, Retail, Leisure and Tourism Study 2017; and

- Highway Capacity Study 2018.

1.4 Using this document

1.4.1 **Chapters 2 – 4** provide information on the SA process and methodology undertaken on behalf of the emerging Local Plan. **Chapter 5** provides an overview of the assessments in this report, which are presented in their entirety in **Appendices B, C and D**. **Chapters 6 – 13** address the potential cumulative impacts of Local Plan proposals, including the likely mitigating impact of Local Plan policies. The anticipated residual impacts, as well as the likely positive impacts of the Plan are presented in **Chapter 14**. Recommendations for monitoring are provided in **Chapter 15**.

1.5 Meeting the requirements of the SEA Directive

1.5.1 There are certain requirements that this report must satisfy in order for it to qualify as an 'environmental report', as set out in the SEA Directive. These requirements, and where in the report they have been met, are presented in **Table 1.1**.

1.6 Habitat Regulations Assessment

1.6.1 A likely significant effect (LSE) on a European site has been objectively ruled out in the latest version of the HRA appropriate assessment of the RBC Local Plan. This conclusion followed a careful analysis of the potential impacts of the Plan on European sites, particularly through recreational disturbances at South Pennine Moors Special Protection Area (SPA). The HRA is subject to consultation with Natural England and, should the conclusion of no LSE change, the SA report should be updated accordingly to ensure it is in line with the latest findings of the HRA.

Table 1.1: SEA requirements for an Environmental Report: Checklist

Requirements of an Environmental Report	Location
Include an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes.	Chapters 1 - 3
Include information on the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	SA Scoping Report ⁴ , Chapter 3, Appendix A and Appendix B
Describe the environmental characteristics of areas likely to be significantly affected.	SA Scoping Report, Chapter 3, Appendix A and Appendix B
Specify any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC (the birds directive) and 92/43/EEC (the habitats directive).	SA Scoping Report, Chapter 3, Appendix A and Appendix B
Consider the environmental protection objectives, established at international, community or member state level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	SA Scoping Report, Chapter 3, Appendix A and Appendix B
Assess the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, and cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Chapters 5 – 14, Appendix A and Appendix B
Give details of the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	Chapters 5 – 14
Give an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Chapter 2 and Chapter 4
Include a description of the measures envisaged concerning monitoring.	Chapter 15
Include a non-technical summary of the information provided	Non-Technical Summary

⁴ Rossendale Borough Council (2012) Scoping Report, Lives and Landscapes: Sustainability Appraisal, Strategic Environmental Assessment and Habitat Regulations Assessment

2 The SA process to date

2.1 Local Plan preparation

- 2.1.1 RBC are in the process of preparing a Local Plan to cover the period 2019 – 2034. The process of preparing a Local Plan requires various stages of gathering evidence base information and consulting the public, statutory bodies and other interested parties.
- 2.1.2 The emerging Local Plan will replace the Local Plan Part 1: Core Strategy DPD⁵ which was adopted in 2011. RBC subsequently began preparing a Site Allocations and Development Management Plan document, for which they also prepared an HRA Screening and SA Scoping report in March 2012. Following legal advice relating to housing numbers the Site Allocation and Development Management DPD was abandoned in early 2016. The Council then began the process of preparing a new Local Plan.
- 2.1.3 The first draft of the emerging Local Plan, the Regulation 18 draft, was prepared by the summer of 2017 and consulted on with the public between 24th July and 9th October 2017. This version of the Local Plan proposed a total of 50 development management and site based policies, as well as a large number of potential sites for development. Public consultation on this draft of the Local Plan resulted in a lot of comments and feedback which have been considered by the Council during the preparation of the next version, the Regulation 19 draft, of the Local Plan.
- 2.1.4 The Regulation 19 Publication draft of the Local Plan sets out the Council's preferred approach for delivering development in the Borough which satisfies local development needs in an economically, socially and environmentally sustainable manner. In order to help ensure this, proposals of each draft of the Local Plan have been assessed in an SA report to identify their likely sustainability impacts. Key stages of the Local Plan process and the relevant SA reports for each are listed in **Table 2.1**.

⁵ RBC (2011) The Way Forward 2011 - 2026

2.1.5 The Regulation 19 Publication version of the emerging Plan is scheduled to be consulted on during the summer of 2018. Following this, the Council hope to submit the Local Plan to the Planning Inspectorate in January 2019, with Examination in Public potentially in June 2019 with the target for adoption of the Plan set for March 2020.

Table 2.1: Key stages in the Local Plan process and associated SA Reports

Date	Local Plan stage	Relevant SA Report
March 2012	Site Allocations and Development Management Plan	SA Scoping Report, RBC, March 2012
July 2017	Regulation 18 draft Local Plan	SA of the Rossendale Local Plan, Reasonable Alternatives, Lepus Consulting, May 2017
July 2018	Regulation 19 publication Local Plan	SA of the Regulation 19 Local Plan, Lepus Consulting (this document)

2.2 Reasonable Alternatives

2.2.1 Article 5(1) of the SEA Directive states that:

'Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.'

2.2.2 Planning Practice Guidance (PPG) Paragraph: 018 Reference ID: 11-018-20140306 states:

'Reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in its plan. They must be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The alternatives must be realistic and deliverable.'

2.2.3 It is therefore necessary for the SA to show that the Council has considered reasonable alternatives for proposals in the Local Plan. Reasonable alternatives for the Local Plan have, to date, included **quanta** (i.e. housing numbers and employment floorspace) of development proposed, the **spatial strategy** for delivering this quanta, **strategic site** allocations, **non-strategic site** allocations and **policies**. The following sections of this report will demonstrate when and where the Council considered reasonable alternatives for each of their proposals.



2.3 Reasonable alternatives: Housing and employment quanta

Identification and description of reasonable alternatives – Housing and employment quanta

2.3.1 RBC have identified the objectively assessed housing need (OAHN) for the Plan area over the Plan period through a Strategic Housing Market Assessment⁶ (SHMA). The 2016 SHMA replaced the 2012 SHMA and identified a housing need of 265 – 335 dwelling per annum (DPA) based on demographic, market, employment and affordable housing needs and signals.

2.3.2 In Autumn 2017 the Government published the Housing White Paper which set out a new national methodology to the calculation of housing numbers. This methodology has been followed through into the July 2018 National Planning Policy Framework. The relevant housing number for Rossendale is 212 per year which equates to 3,180 dwellings over the Plan period.

⁶ Lichfields (2016) Rossendale SHMA Issue, Rosendale Borough Council, December 2016

2.3.3 RBC have considered four Strategy approaches to delivering development requirements and what this will mean in terms of the location and quanta of development. The following alternatives for quanta of development were assessed in **Appendix D** of this report for their likely impacts on sustainability, with an overview of the assessment findings presented below:

- 3,000 dwellings and 10ha of employment land;
- 7,000 dwellings and 24ha of employment land;
- 2,000 dwellings and 6ha of employment land; and
- 5,000 dwellings and 9ha of employment land.

Evaluation of reasonable alternatives - Housing and employment quanta

2.3.4 Greater quantities of development may make it increasingly difficult to avoid adverse impacts on natural SA objectives. With more houses to build, businesses to support and residents to accommodate it is more likely that the local carbon footprint would rise, there will be a net loss in vegetation cover and the setting of protected landscape and heritage assets impacted.

2.3.5 Lower quantities of development would enable greater scope to avoid adverse impacts through careful distribution of development. With less sites required to develop on the Council would have greater freedom in directing development away from some of the more sensitive locations in the Plan area, such as near sensitive biodiversity hotspots. The lower quantities of development would also be likely to result in more diminished cumulative impacts, such as increases in local congestion or over capacity issues at key services. However, development quantities which are too low may mean that local development needs are not satisfied, such as not enough new houses are built to support the local population growth, which would be economically and socially unsustainable.

2.4 **Reasonable alternatives: Spatial strategy**

Identification and description of reasonable alternatives – Spatial strategy

2.4.1 The Council has considered various spatial strategies for delivering development proposed in the Local Plan (see **Table 2.2**).

Table 2.2: Spatial strategy reasonable alternatives considered by the Council and assessed in Appendix D

	Spatial Option A	Spatial Option B	Spatial Option C	Spatial Option D
Quanta	3,000 dwellings 10ha employment	7,000 dwellings 24ha employment	2,000 dwellings 6ha employment	5,000 dwellings 9ha employment
Distribution	<ul style="list-style-type: none"> - Focus on land within urban boundaries, approximately 58ha, including 23ha in Rawtenstall, 23ha in Bacup and 9.5ha in Whitworth - < 20% brownfield sites - 5ha Green Belt sites 	<ul style="list-style-type: none"> - Excess of OAN and employment target - < 10% brownfield sites - High level of development at Edenfield - 25ha of greenfield sites in villages - approx. 11ha Green Belt release - Pattern of development focusses on land availability 	<ul style="list-style-type: none"> - Focus on urban areas - 35% brownfield sites - Increase density to 40-45 dwellings per ha in key locations - Does not meet OAN or employment targets - Maximises use of vacant mills for housing - More development in deprived locations - Development linked to existing services 	<ul style="list-style-type: none"> - Mix of development across Borough - Increase density to 40-45 dwellings per ha in key locations - 14ha Bacup - 10ha Rawtenstall - < 20% brownfield sites
Benefits	<ul style="list-style-type: none"> - Reduces urban sprawl by focusing development near urban boundaries - Opportunities for brownfield development 	<ul style="list-style-type: none"> - High availability of housing - No issues with housing deliverability - Maximises growth opportunities 	<ul style="list-style-type: none"> - Focus on brownfield development - Better related and maximises the use of current services - Limited disturbance to landscape 	<ul style="list-style-type: none"> - Combines strategies - Optimal use of brownfield land, including working with owners of sites - Retains key existing employment sites - Delivery of sufficient housing
Issues and Risks	<ul style="list-style-type: none"> - Release of Green Belt - Lack of availability at Haslingden - Potential infrastructure issues (road capacity) - Landscape impacts in terms of urban fringe 	<ul style="list-style-type: none"> - Large release of Green Belt - Development related to opportunity over need - High environmental and landscape impacts - Development poorly related to services - Potential infrastructure issues (road capacity) 	<ul style="list-style-type: none"> - Brownfield and high densities unlikely to deliver required housing numbers - Loss of open space in urban areas 	<ul style="list-style-type: none"> - Lack of availability at Haslingden - Development of brownfield challenging - Flood risk in some areas - Potential infrastructure issues (road capacity)

Evaluation of reasonable alternatives – Spatial strategy

- 2.4.2 Each of these spatial strategies has been assessed in detail for their likely sustainability impacts in **Appendix D**. The SA Scoring matrix for each strategy is presented in **Table 2.3**.
- 2.4.3 Many of the adverse impacts identified during the appraisal of spatial options are ‘worst-case scenarios’. This means major or minor adverse impacts cannot be ruled out based on the currently available information and, in accordance with the precautionary principle⁷, are assumed to occur. In reality, policies proposed in the Local Plan will mitigate many of the identified adverse impacts.
- 2.4.4 It is also important to note that in the absence of a Local Plan, the spatial characteristics of development within the borough would be largely uncertain. Many of the adverse impacts identified in the Options assessments will be likely to occur regardless of the overall spatial strategy because they are inherent impacts of construction, such as impacts on local views and increases in greenhouse gas emissions.
- 2.4.5 Overall, Option D was considered to be the best performing option. It would allow the Council to deliver a scale of development which satisfies the local needs whilst also providing scope for mitigating the potentially adverse impacts of development.

Table 2.3: SA Scoring matrices for each spatial option. See **Appendix D** for detailed assessment narratives and explanations.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Option	Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaptation	Human Health	Material Assets	Housing	Employment Locations	Employment Skills	Transport
A	-	-	-	-	-	-	-	+	-	+	+	+	+
B	-	-	-	-	-	-	-	-	-	++	++	+	-
C	-	-	-	-	-	-	-	+	-	-	+	+	+
D	-	-	-	-	-	-	-	+	-	++	+	+	-

⁷ The precautionary principle states that, in the absence of scientific evidence or consensus, the worst case scenario is assumed.

2.5 Reasonable alternatives: Sites

Identification and description of reasonable alternatives - Sites

2.5.1 Various sources were considered by the Council to identify potential sites for development, including:

- The 2015 Strategic Housing Land Availability Assessment (SHLAA);
- Sites proposed during public consultation on the draft 'Site Allocations and Development Management Policies DPD' in the summer of 2015;
- Call for Development Sites, Spring 2016;
- Council owned land identified for release;
- Sites proposed by housing associations;
- Planning history; and
- Sites identified in the pilot Brownfield Register.

2.5.2 In May 2017, RBC prepared a SHLAA⁸ in order to identify developable sites for the Plan period. Stage 1 of the SHLAA identifies 302 potential sites which were assessed by the Council for their availability, suitability and achievability (this assessment constituted Stage 2).

Evaluation of reasonable alternatives - Sites

2.5.3 The May 2017 SA Report⁹ assessed the likely sustainability impacts of Local Plan proposals (see **Table 2.4**). This included 50 development management and site based policies, as well as 228 potential sites for development. The likely impacts of each site proposal on each SA Objective varied greatly, predominantly determined by the location of the site as well as the scale and type of the proposed development. Positive impacts were generally identified for social and economic SA Objectives, whilst more adverse impacts were generally identified for environmental SA Objectives.

⁸ RBC, May 2017 SHLAA available online at:
https://www.rossendale.gov.uk/downloads/file/13592/shlaa_report_stages_1_and_2

⁹ Lepus (2017) SA of the Rossendale Local Plan, Reasonable Alternatives, Final SA Report, May 2017

2.5.4 The Council took into consideration the findings from the SHLAA process, public consultation responses, findings of SA appraisals as well as other evidence documents in order to identify their final selection of sites to be allocated for development in the Regulation 19 publication version of the Plan. Each of these sites were assessed as part of the cluster analyses conducted at the Regulation 18 stage. These assessments have been updated to provide more in-depth analyses of each Regulation 19 site proposal individually in **Appendix B** of this report, and also to assess additional sites that came forward as part of the consultation.

Table 2.4: Identification and evaluation of sites

Number of sites	Stage	Assessment work
302 potential sites	SHLAA	Assessed in Stage 2 of the SHLAA based on their availability, suitability and achievability (SHLAA was published in March 2017)
228 potential sites	Regulation 18	Assessed through a cluster analyses in the Lepus May 2017 SA of the Rossendale Local Plan Reasonable Alternatives report
92 site allocations	Regulation 19	Assessed on a site by site basis in Appendix B of this report

2.6 The Preferred Approach

2.6.1 RBC have considered appropriate reasonable alternative for the quanta of development proposed in the Plan (including for housing, employment land and gypsy and traveler sites), the spatial distribution of development and site allocations.

2.6.2 The Council are seeking to satisfy local development needs by delivering 27ha of employment land and 3,180 dwellings at 212 dwellings per annum. The Council's preferred spatial approach is Spatial Option D (see **Appendix D**), which seeks to meet the Borough's development requirements whilst protecting the natural and historic environment. Option D seeks to promote balanced housing growth by encouraging development in areas of the Borough that would benefit from regeneration as well as recognising high levels of market demand in the west of the Borough. This Option seeks to maximise use of brownfield land and higher densities on sites in accessible locations.

2.6.3 The sites allocated for development in the Plan have been selected by the Council after a thorough and robust assessment process, including assessments during Stage 2 of the SHLAA and assessments during the Regulation 18 SA report as well as **Appendix B** of this SA report. The Council have sought to allocate sites which are not only achievable and reasonable, but also economically, socially and environmentally sustainable.

2.6.4 The 2017 SA report¹⁰ assessed the 50 development management and site based policies. These results helped the Council to enhance and refine their policy selection where appropriate. The Regulation 19 version of the Local Plan proposes a total of 57 development management and site based policies, each of which is appraised in **Appendix C**.

2.7 How the SA has informed the Local Plan

2.7.1 Lepus has worked closely with RBC to ensure that outcomes and findings from the SA can inform the Council's preparation of the Local Plan. This has included working closely on the preparation and assessment of reasonable alternatives for quanta, distribution, sites and policies and as a result, the Council has been able to pursue and adopt strategies, sites and policies which are more environmentally, economically and socially sustainable.

¹⁰ Lepus (May 2017) SA of the Rossendale Local Plan Reasonable Alternatives report May 2017

3 Scoping

3.1 Introduction

3.1.1 The first phase of preparation for the SA was the scoping stage (see **Figure 4.1**). Scoping is the process of deciding the scope and level of detail of an SA, including the environmental effects and alternatives to be considered, the assessment methods to be used, and the structure and contents of the SA Report.

3.1.2 The purpose of the Scoping Report is to set the criteria for assessment (including the SA Objectives), and establish the baseline data and other information, including a review of relevant policies, programmes and plans (PPPs). The scoping process involves an overview of key issues, highlighting areas of potential conflict.

3.1.3 The Scoping Report is prepared during the early stages of the SA process and includes:

- Identification of other relevant policies, plans and programmes and their environmental objectives;
- Collecting baseline information;
- Identification of economic, social and environmental issues; and
- The SA Framework.

3.1.4 The SA Scoping Report for the emerging Rossendale Local Plan was prepared by RBC in March 2012¹¹. The Scoping Report was subject to a five week period of consultation with the statutory consultees (Natural England, Historic England and the Environment Agency). The comments received were given due consideration in the preparation of subsequent SA Reports. The SA Framework was updated in 2016 by Lepus to account for each of the topics in the SEA Directive (Annex 1 (f)). The environmental baseline has also been updated where relevant in **Chapters 6 – 14**.

¹¹ Rossendale Borough Council (2012) Scoping Report, Lives and Landscapes: Sustainability Appraisal, Strategic Environmental Assessment and Habitat Regulations Assessment

3.2 Policy, plan and programme review

3.2.1 Local Plans may be influenced in various ways by other plans or programmes, or by external environmental protection objectives such as those laid down in policies and/or legislation. The SA process takes advantage of potential synergies and addresses any inconsistencies and constraints.

3.2.2 The Scoping Report presented an analysis of the objectives of the key policies, plans and programmes (including legislation) that are relevant to the Local Plan and the SA process. These were presented by their geographic relevance, from international to local level.

3.3 Baseline data and information

3.3.1 A key part of the scoping process is the collection of baseline data. The purpose of this exercise is to help identify key issues and opportunities facing the area which might be addressed by the Local Plan, and to provide an evidence base for the assessment.

3.3.2 The Scoping Report provided a review of existing environmental conditions within the Plan area and their likely evolution in the absence of the Local Plan. During the preparation of subsequent SA documents, including this one, the latest and most up to date baseline data is used.

3.3.3 Lepus conducted site visits at the Regulation 18 stage of the Local Plan process to gain an understanding of the key environmental issues in the area and to better appreciate the nature and character of each site.

3.4 The SA Framework

3.4.1 The purpose of the SA Framework is to provide a way of ensuring that the Local Plan considers the environmental, social and economic impacts of the proposed site allocations and policies on the borough. The Framework offers a consistent and robust means of description, analysis and comparison for these impacts.

3.4.2 The SA Framework consists of 13 SA Objectives (see **Table 4.1**). The extent to which these objectives will be achieved can, in most cases, be measured using a range of indicators for decision making criteria. The SA Objectives are largely informed by topics identified in Annex I (f) of the SEA directive¹², the PPPs review, baseline data collection and local key issues. By taking into account each of these influences, the SA Framework allows for a robust, thorough and meaningful Sustainability Appraisal. The full SA framework is presented in **Appendix C**.

3.5 Consultation responses

3.5.1 Each SA report prepared by Lepus has undergone the relevant statutory consultation with Natural England, Historic England and the Environment Agency. In each case comments were received on the reports which were taken on board and appropriately addressed within the SA.

¹² Biodiversity flora and fauna; Population; Human health; Soil; Water; Air; Climatic factors; Material assets; Cultural heritage (including architectural and archaeological heritage); and Landscape.

4 Methodology

4.1 Introduction

4.1.1 The SA uses geographic information, the SA Framework and established standards (where available) to help make the assessment decisions transparent and robust.

4.1.2 Proposals in the Local Plan have been assessed against the SA Framework (see **Appendices B, C and D**). The SA Framework (see **Appendix A**) is comprised of SA Objectives and decision-making criteria. Acting as yardsticks of sustainability performance, the SA Objectives are designed to represent the topics identified in Annex 1(f)¹³ of the SEA Directive. Including the SEA topics in the SA Objectives helps ensure that all of the environmental criteria of the SEA Directive are included. Consequently, the 13 SA Objectives reflect all subject areas to ensure the assessment process is transparent, robust and thorough. The SA Objectives and the SEA topics to which they relate are set out in **Table 4.1**.

4.1.3 Each SA Objective is considered when appraising every Local Plan proposal and reasonable alternative. It is important to note that the order of SA Objectives in the SA Framework does not infer prioritisation. The SA Objectives are at a strategic level and can potentially be open-ended. In order to focus each objective, decision making criteria are presented in the SA Framework to be used during the appraisal of policies and sites.

¹³ Annex 1(f) identifies: 'the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors'.

Table 4.1: SA Objectives of the SA Framework (see **Appendix A**)

	SA Objective	Description	SEA Topic(s)
1	Landscape	Protect and enhance high quality landscapes and townscapes in the Borough, especially those that contribute to local distinctiveness.	Biodiversity, fauna, flora, soil and landscape
2	Cultural heritage	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	Cultural heritage including architectural and archaeological heritage
3	Biodiversity and geodiversity	Protect, enhance and manage biodiversity and geodiversity.	Biodiversity, fauna, flora and soil
4	Water and flooding	Protect, enhance and manage biodiversity and geodiversity in Rossendale	Water
5	Natural resources	To ensure the efficient use of natural resources in Rossendale.	Biodiversity, flora, fauna & soil
6	Climate change mitigation	To minimise the requirement for energy use, promote efficient energy use and increase the use of energy from renewable sources.	Climate change, material assets
7	Climate change adaptation	To promote adaptation to Rossendale's changing climate.	Climate change
8	Human health	To improve physical and mental health and well-being of people and reduce health inequalities in Rossendale.	Population & human health
9	Material assets	To ensure sustainable management of waste, minimise its production and increase re-use, recycling and recovery rates	Air, water & soil
10	Housing	Provide a range of affordable, environmentally sound and good quality housing which meets the needs of the community of Rossendale.	Population, human health and material assets
11	Employment: location	To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.	Population & material assets
12	Employment: skills	To improve education, skills and qualifications in the Borough and provide opportunities for lifelong learning.	Population & material assets
13	Transport	To improve the choice and use of sustainable transport in Rossendale and reduce the need to travel.	Population, human health, air & climate change

4.2 Integrated approach to SA and SEA

- 4.2.1 The SEA Directive applies to a wide range of public plans and programmes, including land use plans (see Article 3(2) of the SEA Directive). The Directive has been transposed into English law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations, SI no. 1633).
- 4.2.2 SEA is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision-making. The SEA Directive and SEA Regulations necessitate an environmental report in which the likely significant effects on the environment are identified for Local Plan proposals and reasonable alternatives.
- 4.2.3 SA is a UK-specific procedure used to appraise the impacts and effects of development plans in the UK. It is required by S19 (5) of the Planning and Compulsory Purchase Act 2004 and should be an appraisal of the economic, social and environmental sustainability of development plans. The present statutory requirement for SA lies in The Town and Country Planning (Local Planning) (England) Regulations 2012.

4.3 Best practice guidance

- 4.3.1 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both obligations using a single appraisal process. Government policy recommends that both SA and SEA are undertaken under a single SA process that incorporates the requirements of the SEA Directive, as per paragraph 32 of the July 2018 NPPF:
- 4.3.2 *“Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered).”*

4.3.3

This report has also been carried out in accordance with the latest SEA guidance from the Royal Town Planning Institute¹⁴. The approach for carrying out an integrated SA and SEA is based on the PPG, which states:

“This process is an opportunity to consider ways by which the plan can contribute to improvements in environmental, social and economic conditions, as well as a means of identifying and mitigating any potential adverse effects that the plan might otherwise have. By doing so, it can help make sure that the proposals in the plan are the most appropriate given the reasonable alternatives. It can be used to test the evidence underpinning the plan and help to demonstrate how the tests of soundness have been met. Sustainability appraisal should be applied as an iterative process informing the development of the Local Plan.

Sustainability appraisals incorporate the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004 (commonly referred to as the ‘Strategic Environmental Assessment Regulations’), which implement the requirements of the European Directive 2001/42/EC (the ‘Strategic Environmental Assessment Directive’) on the assessment of the effects of certain plans and programmes on the environment. Sustainability appraisal ensures that potential environmental effects are given full consideration alongside social and economic issues.”

¹⁴ RTPI (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans, January 2018, available online at: <http://www.rtpi.org.uk/media/2668152/sea-sapracticeadvicefull2018c.pdf>

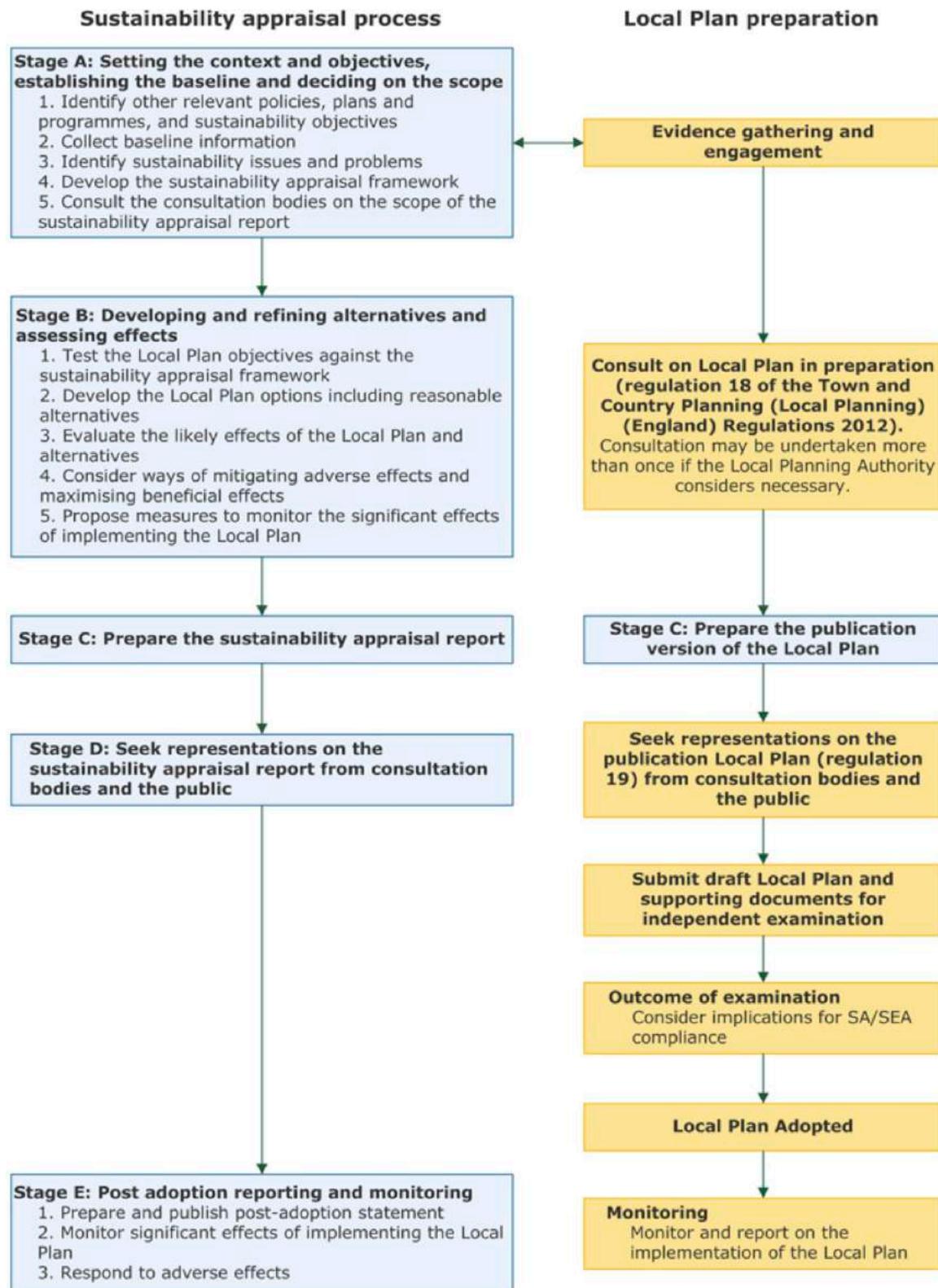


Figure 4.1: Stages of the SA process in relation to Local Plan Preparation¹⁵

¹⁵ DCLG (2015) National Planning Practice Guidance - Strategic Environmental Assessment and Sustainability Appraisal

4.4 Appraisal process

- 4.4.1 The appraisal process has used the SA Framework, the review of plans, programmes and policies and the baseline (including various mapped data sources), as presented in the SA Scoping Report¹⁶, to assess each option. Assessments have been undertaken using this empirical evidence and, to a lesser extent, expert judgement.
- 4.4.2 **The first stage of assessment** considers the questions in the SA Framework, answering each in turn with a yes (+), no (-), uncertain (+/-) or negligible/not applicable (0) for each proposed site allocation and policy. The results of this indicate whether the proposal is likely to bring positive, negative or uncertain effects in relation to each SA Objective. The precautionary principle is applied within these assessments.
- 4.4.3 **The second stage of assessment** considers the level of significance of the effects identified in the first stage. To do so, it draws on criteria for determining significance of effects in Annex II of the SEA Directive (see **Box 4.1**). Any assessment rated as negligible does not constitute a significant effect.
- 4.4.4 A single value from **Table 4.2** is allocated to each SA Objective for each site and policy proposal and discussed in the supporting text narrative. When selecting a single value to best represent the sustainability performance of the relevant SA Objective, the precautionary principle is used. This is a worst-case scenario approach. If a positive effect is identified in relation to one criteria within the SA Framework and a negative effect is identified in relation to another criteria within the same SA Objective, that proposal will be **given an overall negative value for that objective**.
- 4.4.5 Assessment results are presented in a single matrix format with accompanying narrative text to interpret the sustainability performance of each option.

¹⁶ Rossendale Borough Council (2012) Scoping Report, Lives and Landscapes: Sustainability Appraisal, Strategic Environmental Assessment and Habitat Regulations Assessment

Table 4.2: Guide to impact significance matrix

		Impact magnitude					
		Adverse		Neutral or Negligible	Positive		Uncertain
		High	Low		Low	High	
Scale & Sensitivity	International / National (Higher)	Major --	Minor -	0	Minor +	Major ++	+/-
	Regional / Local (Lower)	Major --	Minor -	0	Minor +	Major ++	+/-

Box 4.1 Annex II of the SEA Directive

Criteria for determining the likely significance of effects referred to in Article 3(5) of the SEA Directive

The characteristics of plans and programmes, having regard, in particular, to

- the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- environmental problems relevant to the plan or programme;
- the relevance of the plan or programme for the implementation of community legislation on the environment (e.g. plans and programmes linked to waste- management or water protection).

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to

- the probability, duration, frequency and reversibility of the effects;
- the cumulative nature of the effects;
- the transboundary nature of the effects;
- the risks to human health or the environment (e.g. due to accidents);
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- the value and vulnerability of the area likely to be affected due to:
 - special natural characteristics or cultural heritage;
 - exceeded environmental quality standards or limit values;
 - intensive land-use;
- the effects on areas or landscapes which have a recognised national, community or international protection status.

4.5 Significance

4.5.1 The nature of the effect can be either beneficial or adverse depending on the type of development and the design and mitigation measures proposed. Significance can be categorised as minor or major. **Table 4.2** combines **impact magnitude** with **receptor** sensitivity and **geographic scale**, in order to arrive at a judgement of the likely level of **significance**. Terms used in the table are explained in **Table 4.3**.

4.5.2 Each proposal assessed in the SA is awarded a score for each SA Objective in the Framework. Scores are not intended to be summed (i.e. scoring a '-' for two objectives is not equivalent to scoring '- -' for one objective). Each score is an indication of the overall sustainability performance against each SA Objective for the proposal being assessed.

4.5.3 By assessing impacts against each SA Objective for every proposal in this way, the environmental, social and economic sustainability of each site and policy can be understood and expressed. An adverse impact against one or more SA Objectives does not render that site or policy as unsustainable or unsuitable. All impacts should be taken together as a whole to truly understand the site's sustainability performance.

4.5.4 It is important to note that this method of scoring and presenting a site's sustainability performance is supported in every case with narrative text which details the key decision making criteria behind each awarded score. Assumptions and limitations in **Table 4.7** offer further insight into how each score was arrived at.

4.6 Geographic scale

4.6.1 Geographic scale relates primarily to the level of importance of the receptor, and hence its sensitivity, or the level at which it is designated - if applicable. Geographic scale may also refer to the physical area of the receptor, or the part of the receptor likely to be affected. A guide to the range of scales used in the impact significance matrix is presented in **Table 4.4**.

Table 4.3: Guide to terms used in the significance matrix

Significance	Definition (not necessarily exhaustive)
Strong adverse	The size, nature and location of a proposed scheme would be likely to: <ul style="list-style-type: none"> • Permanently degrade, diminish or destroy the integrity of a quality receptor; • Cause a very high quality receptor to be permanently diminished; • Be unable to be entirely mitigated; • Be discordant with the existing setting; and/or • Contribute to a cumulative significant effect.
Adverse	The size, nature and location of a proposed scheme would be likely to: <ul style="list-style-type: none"> • Not quite fit into the existing location or with existing receptor qualities; and/or • Affect undesignated yet recognised local receptors.
Negligible	Either no impacts are anticipated or any impacts are anticipated to be negligible.
Uncertain	It is entirely uncertain whether impacts would be positive or adverse.
Positive	The size, nature and location of a proposed scheme would be likely to: <ul style="list-style-type: none"> • Improve undesignated yet recognised receptor qualities at the local scale; • Fit into, or with, the existing location and existing receptor qualities; and/or • Enable the restoration of valued characteristic features.
Strong positive	The size, nature and location of a proposed scheme would be likely to: <ul style="list-style-type: none"> • Enhance and redefine the location in a positive manner, making a contribution at a national or international scale; • Restore valued receptors which were degraded through previous uses; and/or • Improve one or more key elements/features/ characteristics of a receptor with recognised quality such as a specific regional or national designation.

Table 4.4: Geographic scales and sensitivity of receptors

Scale and sensitivity	Typical criteria
International/national	Designations that have an international aspect or consideration of transboundary effects beyond national boundaries. This applies to effects and designations/receptors that have a national or international dimension.
Regional	This includes the regional and sub-regional scale, including county-wide level and regional areas.
Local	This is the borough and neighbourhood scale.

4.7 Impact magnitude

4.7.1 Impact magnitude relates to the degree of change the receptor will experience, including the probability, duration, frequency and reversibility of the effects (see **Box 4.1**). The magnitude of an impact, or the size of an effect, is determined based on the susceptibility of a receptor to the type of change that will arise, as well as the value of the affected receptor (see **Table 4.5**). On a strategic basis, the appraisal considers the degree to which a location can accommodate change without detrimental effects on known receptors (identified in the baseline).

Table 4.5: Impact magnitude

Impact magnitude	Typical criteria
High	<p>Likely total loss of or major alteration to the receptor in question;</p> <ul style="list-style-type: none"> • Provision of a new receptor/feature; or • The impact is permanent and frequent.
Medium	<p>Partial loss/alteration/improvement to one or more key features; or</p> <p>The impact is one of the following:</p> <ul style="list-style-type: none"> • Frequent and short-term; • Frequent and reversible; • Long-term (and frequent) and reversible; • Long-term and occasional; or • Permanent and occasional.
Low	<p>Minor loss/alteration/improvement to one or more key features of the receptor; or</p> <p>The impact is one of the following:</p> <ul style="list-style-type: none"> • Reversible and short-term; • Reversible and occasional; or • Short-term and occasional.

4.8 Time scale

4.8.1 The footnote for Annex I (f) of the SEA Directive states: *“These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects”*. Temporal considerations are factored into ‘Impact magnitude’ (see **Table 4.5**).

4.8.2 **Chapters 6 – 13** set out in detail the likely cumulative, secondary and synergistic effects. **Chapter 13** sets out the likely residual effects following the consideration of any mitigating effects provided by the Local Plan policies. **Table 14.1** details whether the anticipated residual effects will be short, medium or long term and permanent or temporary. Positive effects of the Plan are presented in **Table 14.3**.

4.9 **General assumptions and limitations**

4.9.1 There are a number of limitations which should be borne in mind when considering the results and conclusions of this assessment.

Predicting effects

4.9.2 SA/SEA is a tool for predicting potential significant effects. Prediction of effects is made using an evidence based approach and incorporates a judgement. It is often not possible to state with absolute certainty whether effects will occur, as many impacts are influenced by a range of factors such as the design of development and mitigation measures.

4.9.3 The assessments are based on the best available information, including that provided to us by the Council and information that is publicly available. Every attempt has been made to predict effects as accurately as possible using the available information.

4.9.4 SA operates at a strategic level which uses available secondary data for the relevant SA Objective. All reasonable alternatives and preferred options are assessed in the same way using the same method. Sometimes, in the absence of more detailed information, forecasting the potential impacts of development can therefore require making reasonable assumptions based on the best available data and trends. For example, some sites may be considered to have a relatively high biodiversity value based on site visits, previous survey reports, satellite imagery or nearby biodiversity hotspots. A detailed ecological survey conducted in the recent past could potentially find the ecological value of such a site to be relatively limited and subsequently the conclusions in the SA should be changed. However, all sites must be assessed in the same way and any introduction of site based detail should be made clear in the SA report as the new data could potentially introduce bias and skew the findings of the assessment process.

Distances

4.9.5 Distances have been measured from the closest boundary of the site to the closest boundary of the receptor unless otherwise stated. These have been measured as the crow flies. Distances to facilities and amenities have been considered sustainable if they are within the maximum recommended distances stated in Barton, Grant and Guise (2010) Shaping Neighbourhoods for Local Health and Global Sustainability¹⁷ (see **Table 4.6**). All distances and travel times are approximate and have been sourced from OS Data using GIS software or Google Maps¹⁸. Travel times are also based on the current accessibility of sites, which is liable to change depending on the layout and design of development.

Table 4.6: Sustainable distances to facilities and amenities¹⁹

Target and optimal distances to facilities and amenities		
Facilities & Amenities	Optimal Distance (m)	Target Distance (m)
GP Surgery	800	1,000
Hospital with A&E	6,000	8,000
Leisure Centre	1,500	2,000
Access to Green Network	600	800
Bus stop	400	400
Train Station	2,000	3,000
Primary School	800	1,000
Secondary School	1,500	2,000
Major Employment Centre	5,000	8,000

¹⁷ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

¹⁸ Google Maps (2017) available online at: maps.google.com

¹⁹ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

Accessible Natural Greenspace Standards

- 4.9.6 The Accessible Natural Greenspace Standards (ANGSt), developed in the 1990s²⁰ and updated in 2008, is based on the minimum distances people would travel to the natural environment. It is considered that, should new developments meet this standard, it would improve access to green spaces for residents, improve the naturalness of green spaces and improve the connectivity between green spaces. Good access to natural greenspaces improves the health and wellbeing of residents, whilst potentially also reducing visitor pressures on particularly hotspots of biodiversity²¹. ANGSt is presented in **Box 4.2**.

Box 4.2: Accessible Natural Greenspace Standard (ANGSt)

ANGSt recommends that everyone, wherever they live, should have an accessible natural greenspace of:

At least 2ha in size, no more than 300 metres (5 minute's walk) from home;

At least one accessible 20ha site within 2km of home;

One accessible 100ha site within 5km of home;

One accessible 500ha site within 10km of home; plus

A minimum of one hectare of statutory Local Nature Reserves per thousand population.

4.10 Specific assumptions and limitations

- 4.10.1 Different limitations and assumptions are present in the appraisal process for different SA Objectives. Some of these assumptions and limitations are presented in **Table 4.7**.

²⁰ Accessible Natural Greenspace Standards in Towns and Cities: A review and toolkit for their implementation, England Nature Research Report, No 526

²¹ Natural England (2010) 'Nature Nearby' Accessible Natural Greenspace Standard, March 2010

Table 4.7: Assumptions, uniformities and limitations of the appraisal process for each SA Objective

SA Objective	Assumptions, limitations and uniformities of assessments
1. Landscape	<ul style="list-style-type: none"> • Baseline data on landscape character types (LCTs) within the Plan area are derived from the 2014 Landscape study²². Features and the condition of each LCT have informed the appraisal of each Plan proposal on the Landscape objective. • The majority of site proposals are within the Settled Valleys LCT. This LCT is partially typified by a linear pattern of urban settlement along the valley floor and site proposals will be likely to be in-keeping with this. • Other LCTs, including the Reservoir Valleys, Moorland Fringes/Upland Pastures and Enclosed Uplands LCT are considered to have less capacity for new development which avoids adverse impacts on sensitive features and views. • Site proposals which may alter views of a predominantly rural or countryside landscape, for a variety of receptors including local residents, are assumed to have adverse impacts on the landscape objective. It is expected that the Council will require developers to prepare Landscape and Visual Impact Assessments (LVIAs) for site proposals where relevant. • No AONBs, National Parks, Regional Parks or Country Parks are within the Plan area and no such designation will be adversely impacted by the Plan proposal. • Lepus has completed site visits to understand the salient features and character of strategic sites as well as a limited number of smaller allocations.
2. Cultural Heritage	<ul style="list-style-type: none"> • Impacts on heritage assets will be largely determined by the specific layout and design of development proposals. These are currently unknown and therefore the likelihood, extent and permanence of effects on heritage assets is somewhat uncertain at this stage. In line with the precautionary principle, where adverse impacts cannot be ruled out and where there is no evidence that shows how the potential adverse effects will not arise, the adverse effects are assumed to occur. This is reflected in the scoring for each Plan proposal. • It is assumed that, where heritage assets coincide with a site proposal, the heritage asset will not be lost as a result of development (unless otherwise specified by the Council). This is assumed for all heritage assets, including Listed Buildings, Scheduled Ancient Monuments and Registered Parks and Gardens. • Where a Listed Building coincides with a site proposal, it is assumed that the setting of the Listed Building will be permanently altered and a strong adverse score is recorded. • In the absence of evidence which suggests otherwise, adverse impacts on the character of Conservation Areas are assumed to arise where development proposals coincide with, are adjacent to or are viewable from Conservation Areas. • Adverse impacts on Grade I and Grade II* Listed Buildings are considered to be more severe than adverse impacts on Grade II Listed Buildings. • Adverse impacts on heritage assets are predominantly associated with impacts on the existing setting of the asset and the character of the local area, as well as adverse impacts on views of, or from, the designation for receptors.

²² South Pennines Wind Energy Landscape Study, 2014. Available online at: https://www.rossendale.gov.uk/info/210148/local_plan/10635/

3. Biodiversity and Geodiversity

- Best available secondary data has been used to inform the assessments of Plan proposals. Lepus has not completed ecological surveys of site proposals.
- It is assumed that the loss of biodiversity assets, such as a stand of Ancient Woodland or an area of Priority Habitat, are permanent effects with limited scope for mitigation.
- Where a site proposal coincides with a biodiversity designation, such as a SSSI or a stand of Ancient Woodland, it is assumed that some or all of the biodiversity designation will be lost as a result of development.
- Strong adverse scores are recorded where site proposals coincide with biodiversity designations.
- Where a site proposal is adjacent to a biodiversity designation, it is assumed that adverse effects will arise to some extent. Adverse effects are commonly associated with the impacts of the construction phase (e.g. habitat fragmentation and noise, air and light pollution associated with the construction process and construction vehicles) as well as the operation/occupation phase (e.g. increases in public access associated disturbances, increases in local congestion resulting in a reduction in air quality at the designation and the increased risk of pet predation).
- Strong adverse scores are awarded where site proposals are adjacent to international and national designations (including SACs, SPAs, Ramsar sites, SSSIs and National Nature Reserves).
- Where a site proposal will have no impact on a biodiversity designation, a negligible score is awarded.
- During the assessment of cumulative impacts, it is assumed that construction and occupation of previously undeveloped greenfields will result in a net reduction in vegetation cover in the Plan area. Proposals which will result in the loss of a greenfield are therefore expected to contribute towards a cumulative loss in vegetation cover.
- It is assumed that detailed surveys to determine the presence of Priority Species or Priority Habitats protected under the NERC Act²³ will be undertaken prior to planning permission being granted for any site allocation currently without permission.

²³ Natural Environment and Rural Communities Act 2006. Available at:
<http://www.legislation.gov.uk/ukpga/2006/16/contents> Accessed 01.12.17

4. Water and Flooding

- The level of fluvial and pluvial (surface water) flood risk present at each site is based on the Environment Agency's flood risk data, such that:
 - Flood Zone 3: 1% - 3.3+% chance of flooding each year;
 - Flood Zone 2: 0.1% - 1% chance of flooding each year; and
 - Flood Zone 1: Less than 0.1% chance of flooding each year.
- It is assumed that development proposals will be in perpetuity and it is therefore likely that development will be subject to the impacts of flooding at some point in the future, should it be situated on land at risk of flooding.
- Where site proposals coincide with Flood Zone 2, a minor adverse score is awarded. Where site proposals coincide with Flood Zone 3, a strong adverse score is awarded.
- Surface water flood risk: Areas of high risk have more than a 3.3% chance of flooding each year, medium risk between 1% - 3.3%, low risk between 0.1% and 1% and very low risk less than a 0.1% chance.
- Narrow and steep sided valleys are typical of Rossendale, with the majority of existing development and site proposals in the Plan situated along the valley floors. The nature of surface water flooding is such that it is most likely to occur along the valley floors and flood events have occurred at these locations in the Borough in the recent past. Existing settlements, including Rawtenstall, Bacup and Waterfoot, are situated on land at risk of surface water flooding. The majority of site proposals, which are frequently situated near existing settlements, will also be exposed to surface water flood risk.
- It is assumed that proposals will at least be in accordance with the national mandatory water efficiency standard of 125 litres per person per day, as set out in the 2010 Building Regulations.
- It is assumed that all housing proposals in the Local Plan will be subject to appropriate approvals and licencing for sustainable water supply from the Environment Agency.
- The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (GSPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. No site proposals in the Plan are situated within a GSPZ.

5. Natural Resources	<ul style="list-style-type: none">• In accordance with the core planning principles of the NPPF²⁴, development on previously developed land (PDL) will be recognised as an efficient use of land. Development of previously undeveloped land and greenfields is not considered to be an efficient use of land.• Development proposals for previously undeveloped or green field sites are expected to pose a threat to soil within the site perimeter due to excavation, soil compaction, erosion and an increased risk of soil pollution and contamination during construction.• Site proposals which would result in the loss of greenfields, which as a proportion of the Plan area constitute less than 0.1%, are awarded with a minor adverse score.• Site proposals which would result in the loss of greenfields, which as a proportion of the Plan area constitute more than 0.1%, are awarded with a strong adverse score.• All soils in the Plan area are either Grade 4 or 5.• The Agricultural Land Classification (ALC) system classifies land into five categories according to versatility and suitability for growing crops. The top three grades, Grade 1, 2 and 3a, are referred to as 'Best and Most Versatile' land. However, only Grade 4 and 5, as well as Urban land, are present in the Plan area.
6. Climate Change Mitigation	<ul style="list-style-type: none">• Proposals which would be likely to increase greenhouse gas (GHG) emissions in the local area will make it more difficult for RBC to reduce the Plan area's contribution towards the causes of anthropogenic climate change.• The carbon footprint for the Plan area in 2015 was 400,400 tonnes CO₂/year. The carbon footprint per person per year was 5.8 tonnes²⁵.• It is assumed that development of previously undeveloped sites or greenfields will result in an increase in local GHG emissions due to the increase in the local population and the local number of operating businesses and occupied homes. It is assumed that new residents in the Borough will have an annual carbon footprint of 5.8 tonnes CO₂.• Plan proposals which may be likely to increase the Plan area's carbon footprint by 1% or more are awarded a strong adverse score for this objective.• Assessments are based on the assumption that dwellings in Rossendale have on average 2.3 residents per dwelling²⁶ and each resident will have a carbon footprint of 5.8 tonnes/year. 1% of 400,400 tonnes is 4,004 tonnes, which at 5.8 tonnes per person would require an additional 690 residents. At 2.3 residents per dwelling, proposals for 300 or more homes may be likely to increase the Plan area's carbon footprint by 1% or more.• The increase in GHG emissions caused by new residents and new employees is as a result of the impacts of the construction phase, the operation of homes and businesses, oil, gas and coal consumption and increases in local road transport with associated emissions. This impact is considered to be permanent and non-reversible with limited scope for mitigation.

²⁴ Ministry of Housing, Communities and Local Government (2018) National Planning Policy Framework.

Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf

²⁵ UK local authority and regional carbon dioxide emissions national statistics: 2005-2015, available online at:

<https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

²⁶ Based on 2011 census data, presented online at: <http://www.lancashire.gov.uk/media/897537/census-2011-household-size.pdf>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">7. Climate Change Adaption</p>	<ul style="list-style-type: none"> • Urban greenspaces help urban areas adapt to the impacts of climate change through the provision of cooler microclimates and by reducing surface water run-off. Trees are important for shade provision whilst water surfaces provide evaporative cooling. They thereby alleviate the 'urban heat island' effect. Vegetation (including trees, hedgerows and grasses) and soils also play a vital role in attenuating flood risk, particularly in Rossendale where steep sloping valley sides direct fluvial and pluvial flood risk down towards the valley floors and the majority of the Plan area's homes. • Plan proposals which are expected to result in a loss of greenspace will be assumed to be adversely impacting the ability of the Plan area to adapt to the impacts of climate change. • Development which would result in the loss of green fields, which as a proportion of the Plan area constitute 0.1% or more, will be awarded a strong adverse score for this objective. • Development which would result in the loss of green fields, which as a proportion of the Plan area constitute less than 0.1%, will be awarded a minor adverse score for this objective. • Rossendale is 13,800ha in size. Proposals which would result in the loss of 13.8ha of green fields or more (i.e. 1% or more of the Plan area) are awarded a strong adverse score.
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">8. Health</p>	<ul style="list-style-type: none"> • In order to facilitate healthy and active lifestyles for existing and new residents, it is expected that the Plan should seek to ensure that residents have access to NHS hospital, GP surgeries, leisure centres and a diverse range of natural habitats. Sustainable distances to each of these necessary services are listed in Table 4.6 and are derived from Barton et al²⁷. • It is assumed that sites in close proximity to major or busy roads will be exposed to road transport associated noise, air and light pollution. Approximately 3.6%²⁸ of deaths in Lancashire are currently associated with particulate air pollution. Road transport air pollution impacts are considered to be most severe within 200m of the source²⁹. A minor adverse impact on the long-term health of residents is anticipated where residents will be exposed to air pollution. Air Quality Management Areas (AQMAs) are also considered to be areas of dangerously poor air quality. • Site proposals which would direct residents to within the sustainable distance of at least two of the necessary health services are awarded positive scores, with a strong positive awarded for sites within the sustainable distance of four or more health services. • Site proposals which would direct residents to within the sustainable distance of at least two of the necessary health services are awarded adverse scores. Proposals which would direct new residents to a location outside the sustainable distance of all health services, or four of the health services whilst also being in an area of poor air quality, are awarded a strong adverse score. • Site proposals for employment development are awarded a negligible score for the health objective.

²⁷ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

²⁸ Public Health Framework Outcomes, available online at: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000043/pat/6/par/E12000002/ati/101/are/E10000017>

²⁹ Design Manual for Roads and Bridges (2013) DMRB Volume 11, Air Quality

<p>9. Material Assets</p>	<ul style="list-style-type: none"> • This objective primarily deals with the generation of waste and local rates of reducing, reusing and recycling waste. • For the purpose of assessments, it is assumed that new residents in Rossendale will have an annual waste production of 412kg per person, in line with the England average, and will recycle at the same rate as 2014-15 residents of the Borough (i.e. 32.85% of household waste was recycled in 2016³⁰). • A strong adverse score is awarded for Plan proposals which may increase waste generation in Rossendale, as a proportion of existing waste generation, by 1% or more. Rossendale generated 24,866 tonnes of waste in 2014-15, 1% of which is 248.66 tonnes/year. Assuming a rate of 412kg per person, proposals which accommodate 604 new residents could potentially increase waste generation by 1% or more. At 2.3 people per dwelling, this would account for proposals for 262 or more dwellings.
<p>10. Housing</p>	<ul style="list-style-type: none"> • Where site allocations are anticipated to deliver 0-100 dwellings, a minor positive score is awarded. Where site allocations are anticipated to deliver above 100 dwellings a strong positive score is awarded. • Proposals which would result in the loss of up to 10 dwellings are scored with a minor adverse score, whilst proposals which would result in the loss of more than 10 dwellings are scored with a strong adverse score.
<p>11. Employment: location</p>	<ul style="list-style-type: none"> • Proposals which would result in a net increase in employment floorspace in the Borough are awarded a strong positive score for this objective. • Proposals which would result in a net decrease in employment floorspace in the Borough are awarded a strong adverse score for this objective. • It is assumed that, in line with Barton et al's sustainable distances, new residents need to be situated within 5km of major employment areas to ensure they have access to a range of employment opportunities capable of meeting their needs. • Proposals which would situate new residents within 5km of major employment locations or major local employers are awarded a minor positive score for this objective. • Major employment areas are predominantly larger settlements in and outside the Borough. This includes the Rawtenstall Town Centre, Bacup and Haslingden District Centres as well as Rochdale, Burnley and Blackburn. All site proposals in the Plan are within 5km of at least one of these employment areas.
<p>12. Employment: skills</p>	<ul style="list-style-type: none"> • It is assumed that new residents in the Plan area require access to primary and secondary education services to help facilitate good levels of education, skills and qualifications of residents. • In line with Barton et al's sustainable distances, residential development proposals would ideally be within 800m of a primary school and 1.5km of a secondary school. • Residential development proposals which are outside both of these distances are awarded a strong adverse score. • Residential proposals score positively for this objective where they are within the sustainable distances of primary and secondary schools.

³⁰ Local authority waste generation and recycling statistics available online at:
https://data.gov.uk/dataset/local_authority_collected_waste_management_statistics

13. Transport

- Site proposals are assessed for the extent to which they would provide new residents with access to a range of transport modes which provide them with sustainable access to key services and amenities, including employment and retail locations.
- In line with Barton *et al*'s sustainable distances³¹ residents would ideally be situated within 2km of a railway station, 400m of a bus stop offering a frequent service and have access onto the cycle and PRow network.
- Sites which satisfy all of the above criteria are awarded a strong positive score. Proposals which would satisfy the majority of these criteria are awarded a minor positive score.
- Proposals which would not provide residents with access to a railway station, frequent bus service or the PRow network are awarded a strong adverse score.
- There are no in-use railway stations in Rossendale (which are not heritage and tourist centre) and subsequently no site proposal in the Plan is within 2km of a railway station.
- All site proposals in the Plan are considered to have access to the extensive local PRow network.
- Where residents have restricted access to sustainable transport modes, it is assumed that they will have a relatively high reliance on personal car usage. Increases in local road transport and congestion would be more likely, with secondary impacts on objectives such as human health due to increases in air pollution.
- It is assumed that, where residents are within the target distance of bus stops with frequent bus services and/or railway stations, they are less likely to have a high reliance on personal car use.

³¹ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability.

5 Overview of Assessments

5.1 Site assessments pre-mitigation

5.1.1 The Local Plan proposes strategic and non-strategic site allocations. Each of these sites has been assessed for the potential impacts on each SA Objective, the results of which are presented in their entirety in **Appendix B**. The SA Scoring matrix for each site, assessed 'pre-mitigation', is presented in **Table 5.1**. These scores are intended only as an indication of the assessment process.

Table 5.1: The SA Scoring matrix for each site proposal in the Regulation 19 Plan, assessed 'pre-mitigation'

Allocation ref	1 Landscape	2 Cultural heritage	3 Biodiversity	4 Flooding	5 Natural resources	6 C. C. Mitigation	7 C. C. Adaptation	8 Health	9 Material Assets	10 Housing	11 Employment: Location	12 Employment: Skills	13 Transport & Accessibility
H1	0	+	0	+	+	-	0	+	-	+	+	++	+
H10	-	-	0	+	-	-	-	+	-	+	+	++	+
H11	0	0	0	-	-	-	-	+	-	+	+	++	+
H12	0	-	0	-	-	-	-	++	-	+	+	++	+
H13	0	0	-	-	+	-	0	+	-	++	+	+	+
H14	-	-	0	+	+	-	0	-	-	+	+	-	+
H15	-	-	0	+	-	-	-	+	-	+	+	++	+
H16	0	-	0	+	-	-	-	++	-	+	+	++	+
H17	-	0	0	+	-	-	-	++	-	+	+	++	-
H18	-	0	0	+	-	-	-	-	-	+	+	+	+
H19	-	-	0	-	-	-	-	-	-	+	+	++	+
H2	0	-	0	+	+	0	0	+	-	+	+	++	+
H20	-	0	0	+	-	-	-	-	-	+	+	++	+
H21	0	+	0	+	+	-	0	+	-	+	+	+	+
H22	0	-	0	-	+	-	0	+	-	+	+	+	+
H23	0	-	0	-	+	0	0	+	-	+	+	+	+
H24	0	0	-	+	+	0	0	-	-	+	+	++	+
H25	0	-	-	+	+	0	0	-	-	+	+	++	+
H26	0	0	0	+	-	-	-	-	-	+	+	++	-
H27	0	-	0	+	-	-	-	-	-	+	+	+	+
H28	0	0	0	+	-	-	-	-	-	+	+	++	+
H29	-	0	0	-	-	-	-	+	-	+	+	++	+
H3	-	0	0	-	+	-	0	+	-	+	+	++	+
H30	0	0	0	+	-	-	-	+	-	+	+	+	+
H31	-	0	0	+	-	-	-	-	-	+	+	+	+
H32	0	0	0	+	-	-	-	-	-	+	+	+	+
H33	0	0	-	+	-	-	-	-	-	+	+	++	+
H34	0	0	0	-	-	-	-	-	-	+	+	+	+
H35	0	0	0	+	-	-	-	+	-	+	+	+	+
H36	0	0	-	-	+	-	0	-	-	+	+	++	+
H37	0	-	0	+	+	0	0	-	-	+	+	++	+
H38	0	-	0	+	-	-	-	-	-	+	+	+	+

H39	-	0	0	+	-	-	-	-	-	+	+	+	+
H4	-	0	0	+	-	-	-	+	-	+	+	+	+
H40	-	0	0	+	-	-	-	-	-	+	+	+	-
H41	-	-	0	+	-	-	-	-	-	+	+	+	+
H42	0	0	0	+	-	-	-	-	-	+	+	+	+
H43	-	0	0	+	-	-	-	-	-	+	+	+	+
H44	-	0	0	+	-	-	-	-	-	+	+	+	+
H45	-	0	0	+	-	-	-	--	-	+	+	-	-
H46	-	-	0	+	+	0	0	++	-	+	+	++	+
H47	0	0	0	+	+	0	0	++	-	+	+	++	+
H48	-	0	0	+	-	-	-	+	-	+	+	++	-
H49	-	0	0	+	-	-	-	++	-	+	+	++	+
H5	-	0	0	-	-	-	-	-	-	+	+	-	+
H50	0	0	0	+	-	-	-	++	-	+	+	++	+
H51	0	0	0	+	-	-	-	++	-	+	+	++	+
H52	0	-	0	+	+	-	0	++	-	+	+	++	+
H54	-	-	0	+	-	-	-	+	-	+	+	++	+
H55	0	0	0	--	+	0	0	+	-	+	+	++	+
H56	0	0	0	+	-	-	-	-	-	+	+	++	+
H57	0	0	0	+	+	-	0	+	-	+	+	++	+
H58	0	0	0	+	+	-	0	+	-	+	+	++	+
H59	-	0	0	+	-	-	-	-	-	+	+	++	+
H6	-	0	0	+	-	-	-	-	-	+	+	-	+
H60	0	0	-	+	-	-	-	+	-	+	+	++	+
H61	-	-	0	+	-	-	-	+	-	+	+	++	+
H62	-	-	0	-	-	-	-	+	-	++	+	++	+
H63	-	-	-	+	-	-	-	-	-	+	+	++	+
H64	-	-	0	+	-	-	-	+	-	+	+	++	+
H65	-	-	0	+	-	-	-	-	-	+	+	++	+
H66	-	-	0	+	-	-	-	-	-	+	+	+	+
H67	0	-	0	--	+	-	0	++	-	+	+	++	+
H68	-	-	0	-	-	-	-	+	-	+	+	++	+
H69	-	-	0	+	-	-	-	+	-	+	+	++	+
H7	-	-	0	+	-	-	-	-	-	+	+	+	+
H70	-	0	-	-	+	-	0	-	-	++	+	++	+
H71	-	-	0	--	-	-	-	++	-	+	+	++	-
H72	-	-	-	--	-	-	-	-	-	+	+	++	-
H73	0	-	0	+	+	-	0	-	-	+	+	+	+
H74	-	-	-	-	--	--	0	-	--	++	+	+	+
H75	0	0	0	--	-	-	-	-	-	+	+	+	+
H76	-	-	-	+	-	-	-	+	-	++	+	+	+
H8	0	0	0	+	-	-	-	-	-	+	+	++	+
M1	-	-	0	+	+	-	0	+	-	+	++	+	+
M2	0	-	0	-	+	0	0	+	-	+	+	++	+
M3	-	0	0	+	-	-	-	-	-	+	++	+	+
M4	-	-	-	--	-	-	-	-	-	+	++	+	+
M5	-	-	-	--	+	-	0	-	-	+	++	++	+
M6	-	-	0	+	-	-	-	-	-	+	++	++	+
NE1	-	-	-	--	-	-	-	-	-	+	++	++	+
NE2	-	0	0	+	-	-	-	0	-	0	++	0	+
NE3	-	-	-	-	-	-	-	0	-	0	++	0	-
NE4	-	-	0	+	-	-	-	0	-	0	++	0	-
NE5	-	-	0	-	-	-	-	0	-	0	++	0	+

5.2 Policy assessments

5.2.1 The Local Plan proposes a range of development management policies which are designed to help ensure development in the Plan area is sustainable and satisfies the local need. Each policy has been assessed for its likely impacts on each SA Objective, the results of which are presented in **Appendix C**. The SA scoring matrix for each policy is presented in **Table 5.2**. These scores should be read in conjunction with the detailed text narrative provided in **Appendix C**.

Table 5.2: SA Scoring matrices for policy assessments (see **Appendix D**)

Policy ref	1 Landscape	2 Cultural heritage	3 Biodiversity	4 Flooding	5 Natural resources	6 C. C. Mitigation	7 C. C. Adaptation	8 Health	9 Material Assets	10 Housing	11 Employment: Location	12 Employment: Skills	13 Transport & Accessibility
SD1	+	+	++	++	+	+	+	++	+	++	++	+	+
SD2	++	0	+	0	+	0	0	0	0	0	0	0	0
SD3	0	0	+	+	+	+	+	+	+	+	+	+	+
HS1	0	0	0	0	0	0	0	0	+	++	0	0	0
HS2	-	-	-	-	-	-	-	-	-	++	+	+	-
HS3	+	+	+	+	+	+	+	+	+	+	+	+	+
HS4	+	+	+	+	+	+	+	+	+	+	+	+	+
HS5	+	+	+	+	+	+	+	+	+	+	+	+	+
HS6	0	0	0	0	0	0	0	0	0	++	0	0	0
HS7	+	+	+	0	+	0	0	+	+	+	0	0	+
HS8	0	0	0	0	0	0	0	+	0	+	0	0	0
HS9	0	0	0	0	0	0	0	+	0	+	0	0	0
HS10	0	0	+	0	0	0	0	+	0	+	0	0	0
HS11	0	0	0	0	0	0	0	+	0	+	0	0	0
HS12	+	0	0	0	0	0	0	0	0	+	0	0	0
HS13	+	0	0	0	0	0	0	0	0	+	0	0	0
HS14	+	0	0	0	0	0	0	0	0	+	0	0	0
HS15	+	0	0	0	0	0	0	0	0	+	0	0	0
HS16	+	0	+	0	+	0	0	0	+	+	+	+	+
HS17	+	0	+	0	+	0	0	0	+	+	+	+	+
HS18	0	0	0	0	0	0	0	0	0	+	0	0	0
HS19	0	0	0	0	0	0	0	+	0	+	0	0	0
HS20	0	0	0	0	0	0	0	0	0	+	0	0	0
EMP1	0	0	0	0	0	0	0	0	0	0	++	0	0
EMP2	-	-	-	-	-	-	-	-	-	0	++	0	+
EMP3	0	0	0	0	0	0	0	0	0	+	+	0	0
EMP4	0	0	0	0	0	0	0	0	0	+	+	0	0
EMP5	0	0	0	0	0	0	0	0	0	0	+	0	0
EMP6	+	0	+	0	0	0	0	0	0	0	+	0	0
EMP7	+	0	+	0	0	0	0	0	0	0	+	0	0
R1	+	0	0	0	0	0	0	0	0	0	+	0	0
R2	+	0	0	0	0	0	0	0	0	0	+	0	0
R3	+	0	0	0	0	0	0	0	0	0	+	0	0
R4	0	0	0	0	0	0	0	0	0	+	+	0	0
R5	+	0	0	0	0	0	0	+	0	0	+	0	0
R6	+	+	0	0	0	0	0	0	0	0	+	0	0
ENV1	+	+	+	+	+	+	+	+	+	+	+	+	+
ENV2	+	++	0	0	0	0	0	0	0	0	0	0	0

ENV3	++	+	0	0	0	0	0	0	0	+	+	0	0
ENV4	+	0	++	0	+	0	0	+	0	0	0	0	0
ENV5	+	+	+	+	+	+	+	+	+	+	+	0	0
ENV6	+	+	+	0	+	+	0	+	+	+	0	0	+
ENV7	-	0	0	0	0	+	0	0	0	0	+	0	0
ENV8	0	0	0	0	0	+	0	0	0	0	+	0	0
ENV9	0	0	+	++	+	0	0	+	0	+	+	0	0
ENV10	+	+	++	+	+	+	+	+	+	+	+	0	0
LT1	+	+	+	+	+	+	+	+	+	+	+	0	0
LT2	0	+	0	0	0	0	0	+	+	+	+	0	0
LT3	+	+	0	0	0	0	0	0	+	+	+	0	+
LT4	0	0	0	0	0	0	0	0	0	0	+	0	0
LT5	+	0	0	0	0	0	0	+	0	0	+	0	0
LT6	+	+	+	0	+	0	0	0	+	0	+	0	0
TR1	0	0	0	0	0	0	0	0	0	+	+	0	++
TR2	0	0	0	0	0	0	0	+	0	+	+	0	++
TR3	0	0	0	0	0	0	0	0	0	0	0	0	+
TR4	0	0	0	0	0	0	0	0	0	0	0	0	+

5.3 Site assessments post-mitigation

5.3.1 It is clear from **Table 5.2** that policies in the Local Plan will enable the Council to manage development in the borough in a manner which mitigates many of the adverse impacts identified during the assessments of sites. The SA Scoring matrix for each site has been updated to reflect this 'post-mitigation' scenario (see **Table 5.3**).

Table 5.3: SA Scoring matrices for strategic site assessments, post-mitigation

Allocation ref	1 Landscape	2 Cultural heritage	3 Biodiversity	4 Flooding	5 Natural resources	6 C. C. Mitigation	7 C. C. Adaptation	8 Health	9 Material Assets	10 Housing	11 Employment: Location	12 Employment: Skills	13 Transport & Accessibility
H1	+	+	0	+	+	-	+	+	-	+	+	++	+
H10	-	-	0	+	-	-	-	+	-	+	+	++	+
H11	0	0	0	-	-	-	-	+	-	+	+	++	+
H12	0	-	0	-	-	-	-	++	-	+	+	++	+
H13	+	+	-	-	+	-	+	+	-	++	+	+	+
H14	0	0	0	+	+	-	+	-	-	+	+	0	+
H15	-	-	0	+	-	-	-	+	-	+	+	++	+
H16	0	-	0	+	-	-	-	++	-	+	+	++	+
H17	-	0	0	+	-	-	-	++	-	+	+	++	0
H18	-	0	0	+	-	-	-	-	-	+	+	+	+
H19	-	-	0	-	-	-	-	-	-	+	+	++	+
H2	+	0	0	+	+	+	+	+	-	+	+	++	+
H20	-	0	0	+	-	-	-	-	-	+	+	++	+
H21	+	+	0	+	+	-	+	+	-	+	+	+	+
H22	0	-	0	-	+	-	+	+	-	+	+	+	+
H23	+	0	0	-	+	+	+	+	-	+	+	+	+
H24	+	+	-	+	+	+	+	-	-	+	+	++	+
H25	+	0	-	+	+	+	+	-	-	+	+	++	+
H26	0	0	0	+	-	-	-	-	-	+	+	++	0
H27	0	-	0	+	-	-	-	-	-	+	+	+	+
H28	0	0	0	+	-	-	-	-	-	+	+	++	+
H29	-	0	0	-	-	-	-	+	-	+	+	++	+
H3	-	0	0	-	+	-	+	+	-	+	+	++	+
H30	0	0	0	+	-	-	-	+	-	+	+	+	+
H31	-	0	0	+	-	-	-	-	-	+	+	+	+
H32	0	0	0	+	-	-	-	-	-	+	+	+	+
H33	0	0	-	+	-	-	-	-	-	+	+	++	+
H34	0	0	0	-	-	-	-	-	-	+	+	+	+
H35	+	+	0	+	-	-	-	+	-	+	+	+	+
H36	+	+	-	-	+	-	+	-	-	+	+	++	+
H37	+	0	0	+	+	+	+	-	-	+	+	++	+
H38	+	0	0	+	-	-	-	-	-	+	+	+	+
H39	-	0	0	+	-	-	-	-	-	+	+	+	+
H4	0	+	0	+	-	-	-	+	-	+	+	+	+
H40	-	0	0	+	-	-	-	-	-	+	+	+	0
H41	-	-	0	+	-	-	-	-	-	+	+	+	+
H42	0	0	0	+	-	-	-	-	-	+	+	+	+
H43	-	0	0	+	-	-	-	-	-	+	+	+	+
H44	-	0	0	+	-	-	-	-	-	+	+	+	+
H45	-	0	0	+	-	-	-	-	-	+	+	0	0
H46	0	+	0	+	+	+	+	++	-	+	+	++	+
H47	+	+	0	+	+	+	+	++	-	+	+	++	+
H48	-	0	0	+	-	-	-	+	-	+	+	++	0
H49	0	+	0	+	-	-	-	++	-	+	+	++	+
H5	-	0	0	-	-	-	-	-	-	+	+	0	+
H50	0	0	0	+	-	-	-	++	-	+	+	++	+
H51	0	0	0	+	-	-	-	++	-	+	+	++	+
H52	+	0	0	+	+	-	+	++	-	+	+	++	+
H54	-	-	0	+	-	-	-	+	-	+	+	++	+
H55	+	+	0	-	+	+	+	+	-	+	+	++	+

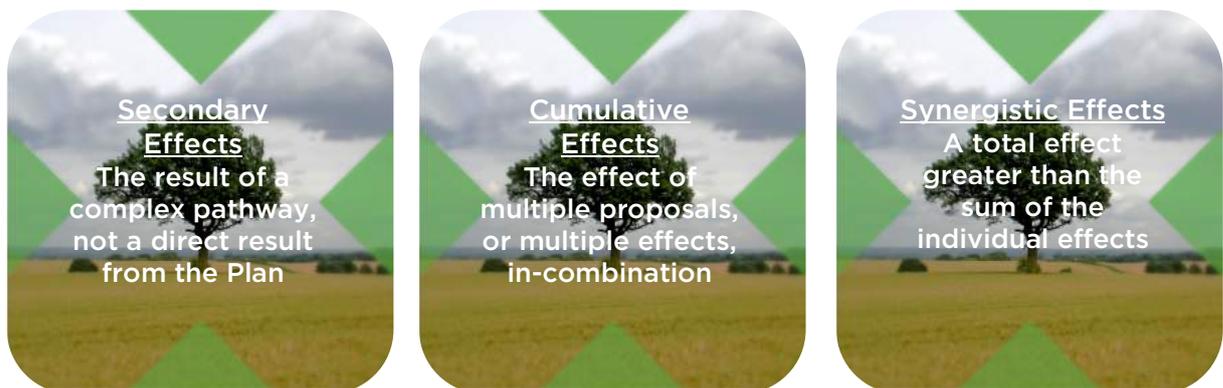
H56	0	0	0	+	-	-	-	-	-	+	+	++	+
H57	+	+	0	+	+	-	+	+	-	+	+	++	+
H58	+	+	0	+	+	-	+	+	-	+	+	++	+
H59	-	0	0	+	-	-	-	-	-	+	+	++	+
H6	-	0	0	+	-	-	-	-	-	+	+	0	+
H60	0	0	-	+	-	-	-	+	-	+	+	++	+
H61	-	-	0	+	-	-	-	+	-	+	+	++	+
H62	-	-	0	-	-	-	-	+	-	++	+	++	+
H63	-	-	-	+	-	-	-	-	-	+	+	++	+
H64	-	-	0	+	-	-	-	+	-	+	+	++	+
H65	-	-	0	+	-	-	-	-	-	+	+	++	+
H66	-	-	0	+	-	-	-	-	-	+	+	+	+
H67	0	-	0	-	+	-	+	++	-	+	+	++	+
H68	-	-	0	-	-	-	-	+	-	+	+	++	+
H69	-	-	0	+	-	-	-	+	-	+	+	++	+
H7	-	-	0	+	-	-	-	-	-	+	+	+	+
H70	0	+	-	-	+	-	+	-	-	++	+	++	+
H71	0	0	0	-	-	-	-	++	-	+	+	++	0
H72	0	0	0	-	-	-	-	-	-	+	+	++	0
H73	+	0	0	+	+	-	+	-	-	+	+	+	+
H74	0	0	-	-	--	--	+	-	--	++	+	+	+
H75	0	0	0	-	-	-	-	-	-	+	+	+	+
H76	0	0	-	+	-	-	-	+	-	++	+	+	+
H8	0	0	0	+	-	-	-	-	-	+	+	++	+
M1	0	-	0	+	+	-	+	+	-	+	++	+	+
M2	+	-	0	-	+	+	+	+	-	+	+	++	+
M3	-	0	0	+	-	-	-	-	-	+	++	+	+
M4	-	-	-	-	-	-	-	-	-	+	++	+	+
M5	-	-	-	-	+	-	+	-	-	+	++	++	+
M6	-	-	0	+	-	-	-	-	-	+	++	++	+
NE1	0	-	-	-	-	-	-	-	-	+	++	++	+
NE2	-	0	0	+	-	-	-	0	-	0	++	0	+
NE3	-	-	-	-	-	-	-	0	-	0	++	0	0
NE4	-	-	0	+	-	-	-	0	-	0	++	0	0
NE5	-	-	0	-	-	-	-	0	-	0	++	0	+

5.4 SEA requirements: Secondary, synergistic and cumulative effects

5.4.1 Annex I (f) of the SEA Directive states that the environmental report must include:

“The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.”

5.4.2 The footnote for Annex I (f) of the SEA Directive states: *“These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects”*.



5.4.3 The terms ‘synergistic’, ‘secondary’ and ‘cumulative’ are not considered to be mutually exclusive and in this report the term ‘cumulative effects’ is taken to include secondary and synergistic effects. Each is approximately defined as follows³²:

- **Secondary effects** - not a direct result of the Plan, but occur away from the original effect or as a result of a complex pathway;
- **Cumulative effects** - where several proposals in-combination have a significant effect, or where several individual effects of the Plan have a combined effect; and
- **Synergistic effects** - a total effect greater than the sum of the individual effects, so that the nature of the final impact is different to the nature of the individual impacts.

³² Scottish Government Strategic Environmental Assessment Tool Kit :
<http://www.gov.scot/Publications/2006/09/13104943/21>

5.4.4 The following chapters will identify in detail the cumulative, secondary and synergistic effects likely to be caused by the Local Plan site allocations in combination. Each chapter focusses on a particular SEA topic, and also accounts for the likely mitigating impact of Local Plan policies. Not all adverse sustainability impacts are entirely mitigatable and it is considered to be likely that there will be residual long term impacts to some extent (see **Chapter 14**).



6 Biodiversity, Flora and Fauna

SA Objective 1: To protect, enhance and manage biodiversity and geodiversity in Rossendale.

6.1 Background

6.1.1 Individually and collectively, 'ecosystem services' provide significant economic, environmental and social benefits that support sustainable development and prosperous communities³³. The range of ecosystem services provided by the natural environment can include crop production, water regulation, climate regulation, green energy and spaces for recreation and education. Paragraph 170 of the NPPF states that "*Planning policies and decision should contribute and enhance ... natural capital and ecosystem services*", with the supporting guidance³⁴ defining them as:

"...a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities".

6.1.2 The Local Plan area's natural capital (i.e. its natural resources and ecological processes that contribute to human welfare) yield the flow of valuable ecosystem services into the future. Flows of ecosystem services are diminished when natural capital is degraded.

6.1.3 The 2011 white paper 'The Natural Choice: securing the value of nature'³⁵ highlighted a continued loss of biodiversity in the UK, increasing fragmentation of habitats and a need for coordinated action across sectors to put the value of nature at the heart of decision making.

³³ UK National Ecosystem Assessment (2011) Synthesis of key findings. Available online at: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx> Accessed 15.10.17

³⁴ DCLG (2016) Guidance: Natural Environment. Available online at: <https://www.gov.uk/guidance/natural-environment> Accessed 15.10.17

³⁵ Defra (2011) The Natural Choice: Securing the value of nature, July 2016, available online at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

- 6.1.4 The 2016 State of Nature report found that of the 7,616 species monitored across the UK since 1970, 56% are in decline whilst 40% showed strong or moderate declines³⁶. This has largely been the result of climate change and land use change induced habitat loss³⁷, a phenomenon which leads to a reduction in total habitat area and increasingly fragmented habitats³⁸. The movement of species between fragmented habitats is restricted by barriers, such as roads, fences and buildings, which leads to populations of species being isolated in small gene pools³⁹. The consequences of this are local extinctions, which erodes the resilience of ecosystems and undermines their functions and service provision⁴⁰.
- 6.1.5 Situated between the West Pennine Moors and the eastern range of the Pennines is the Valley of Rossendale. It includes the steep sided valleys of the River Irwell and its tributaries which cut through moorland of the Rossendale Hills between Rawtenstall and Bacup. This area was once part of Rossendale Forest, a 7,900ha component of the 19,700ha 'Blackburnshire Forest', historically home to wild boar, wild cat, wild oxen, deer and wolves. In 1507, King Henry VII decreed that Rossendale Forest should be cut down to open up space for agriculture and new settlements and thus Haslingden, Rawtenstall and Bacup subsequently arose⁴¹.
- 6.1.6 The ecological network of the RBC Plan area comprises a range of designated statutory and non-statutory sites, many of which coincide with one another, including:
- Three stands of Ancient Woodland in the south near Edenfield. One of the woodlands is called Great Hey Wood, the other two are unnamed;
 - Four Sites of Special Scientific Interest (SSSIs), including Lee Quarry SSSI, which is designated for geological interest, as well as Hodge Clough SSSI, West Pennine Moors SSSI and Lower Red Lees Pasture SSSI which are designated for their biological interest;
 - Haley Dell Local Nature Reserve (LNR) in the south east of the Borough;
 - 51 Important Wildlife Sites (IWSs), predominantly found in the west and south of the Borough; and

³⁶ State of Nature (2016) State of Nature Report 2016

³⁷ UK National Ecosystem Assessment, The UK National Ecosystem Assessment: Synthesis of the Key Findings. UNEP-WCMC, Cambridge. 2011

³⁸ Landscape Institute (2016) Connectivity and Ecological Networks, Technical Information Note, April 2016

³⁹ Krosby, M., et al., Ecological connectivity for a changing climate. Conservation Biology, 2010, 24:1686-1689.

⁴⁰ Oliver et al (2015) Declining resilience of ecosystem functions under biodiversity loss, Nature Communications, 10122(2015)

⁴¹ Thomas Newbigging, 11th April 1867, Historical Sketch of the Forest of Rossendale

- 13,804ha of Biological Heritage Sites (BHSs), predominantly found in the west and south of the Borough.

6.1.7 The Plan area also supports a plethora of Priority Habitats protected under the NERC Act⁴², including but not necessarily limited to⁴³:

- Lowland heathland;
- Upland heathland;
- Good quality semi-improved grassland;
- Lowland meadows;
- Lowland acid grassland;
- Blanket bog;
- Lowland fens;
- Upland flushes, fens and swamps;
- Deciduous Woodland;
- Running waters (including Chalk Streams);
- Standing waters;
- Broad-leaved woodland;
- Hedgerows; and
- Field margins.

6.1.8 These priority habitats support a diverse range of Priority Species, including but not limited to:

- Water vole (*Arvicola amphibous*);
- Great crested newt (*Triturus cristatus*);
- White-clawed crayfish (*Austropotamobius pallipes*);
- Grass snake (*Natrix natrix*);
- Bats, including Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*), Brown Long-eared (*Plecotus auritus*), Daubenton's (*Myotis daubentonii*), Natterer's (*Myotis nattereri*), Noctule (*Nyctalus noctula*), Leislers (*Nyctalus leisleri*), Brandts (*Myotis brandtii*) and Whiskered (*Myotis mystacinus*);
- Brown hare (*Lepus europaeus*);

⁴² Natural Environment and Rural Communities Act, 2006 . Available online at: <https://www.legislation.gov.uk/ukpga/2006/16/contents> Accessed 10.10.17

⁴³ Based on Defra data, viewable online at: <http://magic.defra.gov.uk/MagicMap.aspx>

- Twite (*Carduelis flavirostris*);
- Farmland birds, including bullfinch (*Pyrrhula pyrrhula*), tree sparrow (*Passer montanus*), corn bunting (*Emberiza calandra*), grey partridge (*Perdix perdix*), linnet (*Carduelis cannabina*), skylark (*Alauda arvensis*), turtle dove (*Streptopelia turtur*), yellowhammer (*Emberiza citronella*) and lapwing (*Vanellus vanellus*).

6.1.9 Protected under the EU Habitats Directive and EU Birds Directive are Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which support and protect internationally and nationally important species and habitats.

6.1.10 There are no Special Areas of Conservation (SACs⁴⁴) or Special Protection Areas (SPAs⁴⁵) in the Borough, the nearest European site being just over 3km east of the Borough at South Pennine Moors Phase II SPA. Qualifying features of the SPA are vulnerable to the impacts of public access and recreational disturbances. A Natural England visitor survey from 2012 – 2014 identified 24 visits per capita to the SPA for residents of Rossendale.

6.1.11 Watercourses and their tributaries, including the River Irwell and several reservoirs such as Cwm Reservoir and Calf Hey Reservoir, as well as the riparian habitats, are important corridors for the movement of wildlife throughout the Plan area. They are each capable of supporting invertebrates, birds, mammals, crustaceans and amphibians such as water vole, great crested newt and white-clawed crayfish.

⁴⁴ European Union (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

Available online at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31992L0043> Accessed 10.10.17

⁴⁵ European Union (2009) DIRECTIVE 2009/147/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on the conservation of wild birds

Available online at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:EN:PDF> Accessed 10.10.17

- 6.1.12 The ecological network of Lancashire was established by the Lancashire Wildlife Trust (LWT) and the Lancashire Environment Record Network (LERN) on behalf of the Lancashire Local Nature Partnership⁴⁶. Ecological network maps were created for woodland, grassland and wetland habitats which identify Core Areas, Corridors and Stepping Stones. Approximately just 5,600ha, or 4.6%, of land in the county is wooded. Despite this low level, a significant portion of biodiversity in Lancashire is dependent on woodland. In contrast, approximately 200,000ha, or 65%, of the county's land is used for agriculture. Whilst agriculture takes up nearly two-thirds of the county's land, it accounts for just 2% of employment.
- 6.1.13 Careful consideration should be given to the cumulative impacts of development on woodland, grassland and wetland habitat networks. A significant portion of biodiversity in the Plan area likely relies heavily on wooded habitats, despite their reduced coverage, and the Plan should therefore seek to conserve and enhance woodland in the Plan area in all cases. The Plan area also supports important Core Areas, Corridors and Stepping Stones of wetland and heath and these habitats should also be conserved and enhanced in all cases.

6.2 Impacts on biodiversity, flora and fauna

- 6.2.1 The adverse impacts on the biodiversity and geodiversity objective vary in character and magnitude from site to site and **Appendix B** should be referred to for detailed site appraisals. Adverse impacts on biodiversity and geodiversity are predominantly related to the effects of construction, as well as the occupation of newly built homes, on previously undeveloped fields which are capable of supporting an array of Priority Habitats and Priority Species. Increases in public access associated disturbances at many locations in the countryside are likely.
- 6.2.2 No single site was anticipated to have a strong adverse impact on the Biodiversity Objective when considered alone. However, the effects of all (or some) sites in combination could potentially result in a cumulative impact on the Plan area's ecological network (see **Box 6.1**). In relation to ecological networks, Para 170 of the NPPF states:
- "...Minimising impacts on and providing net gains for biodiversity, including by **establishing coherent ecological networks that are more resilient to current and future pressures**".*

⁴⁶ Bloch, P., Bruce, N., Graham, T., Dunlop, D. (Ed). 2015. Lancashire Ecological Network Approach and Analysis (Version I). Lancashire Local Nature Partnership

- 6.2.3 The assessments of impacts refers to 'net gains' for biodiversity. For the purpose of this report, a 'biodiversity net gain' is defined as "development that leaves biodiversity in a better state than before"⁴⁷. Achieving a net gain requires an inclusive approach which strengthens links between biodiversity measures that developers implement and nature conservation work undertaken by local organisations.

Box 6.1: Cumulative impacts on biodiversity, flora and fauna

Important Wildlife Sites / Biological Heritage Sites

1 Eleven sites proposed for development in the Plan are previously undeveloped greenfield sites adjacent to an Important Wildlife Site or a Biological Heritage Site. This could potentially result in a reduction in the quality of local wildlife sites as a result of increase recreational disturbances, loss of supporting habitats and fragmentation.

This impact would be likely to be long term but with good scope for mitigation (see **Section 6.3**).

Previously undeveloped greenfield sites

2 The Plan proposes to deliver just over 2,500 new homes on previously undeveloped greenfield sites, which comprise approximately 70% of the sites proposed in the Plan. Whilst Lepus has not conducted ecological surveys of any sites, it is considered to be likely that many previously undeveloped greenfield sites are capable of supporting priority species and habitats. They also play an important part in the ecological network of the borough, acting as a stepping stone or corridor between important wildlife sites.

The net reduction in previously undeveloped greenfield land in the borough will be likely to result in a net reduction in the connectivity of ecology in Rossendale to some extent. This impact would be likely to be long term but with good scope for mitigation.

6.3 Local Plan mitigation

- 6.3.1 Several policies proposed in the Local Plan are designed to help protect and enhance the Plan area's biodiversity. It is expected that policies discussed in **Box 6.2** will provide effective and significant levels of protection for biodiversity assets in the Plan area, thereby mitigating some of the cumulative impacts identified in **Box 6.1** to some extent.

Box 6.2: Mitigating impact of Plan policies

Policy SD1 - Presumption in Favour of Sustainable Development

1 This policy places sustainable development in each of the environmental, social and economic spheres at the heart of RBC's plan making.

⁴⁷ CIEEM, CIRIA, IEMA (2016) Biodiversity Net Gain, Good Practice Principles for Development, Consultation Responses, 2016, Available online at: https://www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Good_Practice_Principles_Webinar_QA.pdf accessed 10.02.18

Policy ENV4 – Biodiversity, Geodiversity and Ecological Networks

2 This policy provides protection to biodiversity designations and assets throughout the Borough, as well as the local ecological network and the supporting processes on which it relies. In line with this policy, development which adversely affects a SSSI will not be supported in principle. The Policies map has identified key components of the Borough’s ecological network and this will help to prevent cumulatively adverse impacts on the network caused by minor impacts of several sites in-combination. Proposals will be required to retain and enhance existing biodiversity and geodiversity of sites whilst conserving, enhancing and expanding the ecological network.

This policy is not expected to prevent every single potential minor adverse impact on biodiversity that will be caused by development proposed in the RBC Plan. However, it will be likely to help prevent adverse impacts on biodiversity in many cases whilst also increasing the likelihood of a net gain for biodiversity in some locations.

Policy ENV10 – Trees and Hedgerows

3 Many of the sites allocated for development in the RBC Plan are previously undeveloped greenfield sites. Whilst adverse impacts on a sensitive biodiversity designation (such as a SSSI) may be unlikely, the proposed development may still adversely impact local biodiversity as a result of loss of, or harm to, trees and hedgerows.

Trees and hedgerows play an important role in the functioning of the borough’s local ecological network by acting as stepping stones, corridors and hotspots for species of flora and fauna. This policy provides protection for these essential biodiversity assets by requiring proposals to avoid the loss of, and minimise the risk of harm to, existing trees, woodland and hedgerows.

Policy ENV5 – Green infrastructure

4 In line with this policy, proposals will be expected to support the protection, management and enhancement and connection of the Borough’s GI network. This will help to conserve and potentially enhance many of the multifunctional green spaces in the Borough and the important biodiversity assets they support.

6.4 Residual impacts on biodiversity

- 6.4.1 Cumulative impacts on the biodiversity objective were established in **Box 6.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 6.2**. The residual impacts on the biodiversity objective, which are not expected to be mitigated by policies in the Plan, are set out in **Table 14.1** along with the residual impacts for all objectives.

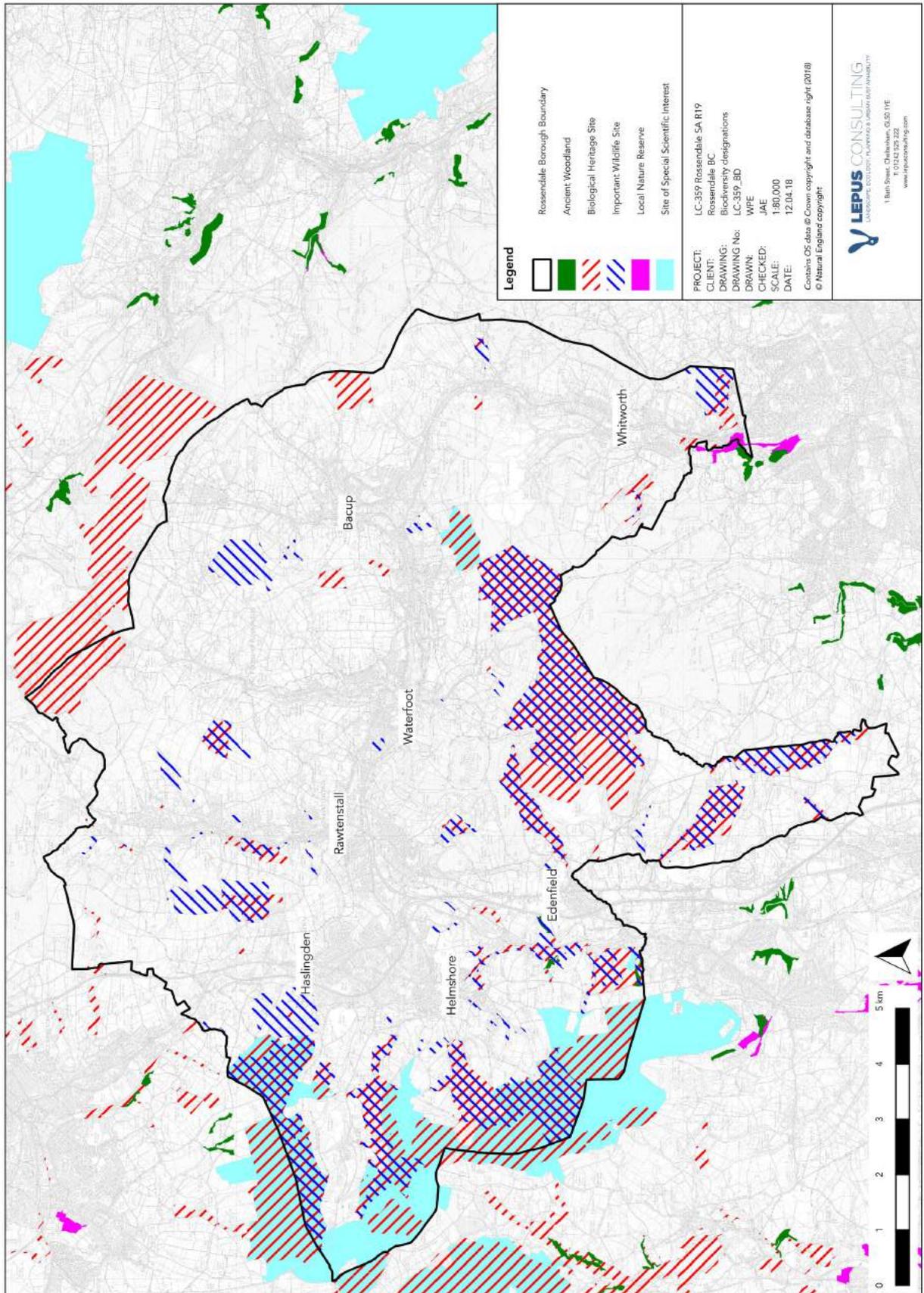


Figure 6.1: Biodiversity assets of Rossendale

7 Population and Health

SA Objective 8: To improve the physical and mental health and well-being of people and reduce health inequalities in Rossendale.

7.1 Background

7.1.1 In order to facilitate good health, safety and wellbeing of a sustainable community, it is necessary for residents to have good access to GP surgeries, hospitals, leisure centres, recreation facilities, greenspaces and natural habitats. These services are prevalent in the Borough (see **Figures 7.1** and **7.2**).

7.1.2 The health of residents in Rossendale is varied and generally worse than England averages (see **Table 7.1**). Male residents in the most deprived areas of Rossendale have a life expectancy 7.9 years lower than those in the least deprived areas. Improving mental health and wellbeing, premature mortality and encouraging healthier lifestyles are health priorities for the Borough.

Table 7.1: Health and population statistics Rossendale⁴⁸

	Rossendale	England
Population density (people per hectare)	5.03 ⁴⁹	4.06
Mortality attributable to particulate air pollution (%)	3.6 ⁵⁰	4.7
Percentage of physically active adults	52	57
Infant mortality per 1,000 births	4.1	3.9
Deprivation score (IMD, 2015)	23.2	21.8
Obese children, Year 6 (%)	19.1	19.8

⁴⁸ Public Health England (2017) Rossendale Health Profile 2017

⁴⁹ According to ONS data:

https://www.rossendale.gov.uk/download/downloads/.../rossendale_borough_profile.pdf

⁵⁰ Public Health Framework Outcomes, available online at: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000043/pat/6/par/E1200002/ati/101/are/E1000017>

- 7.1.3 High population densities can limit the accessibility of local key services and facilities such as hospitals and supermarkets and green and open spaces such as playgrounds and sports fields. High population densities also influence perceptions of safety, social interactions and community stability⁵¹. Residents are less likely to have access to green spaces in high population density areas, but are also less likely to use it than residents in lower density areas, partly because residents in high density areas over-estimate the risk of crime. Careful layout and design is often required in high density areas to help ensure new developments are environmentally sustainable, affordable for residents and well-supported by amenities⁵².
- 7.1.4 Exposure to a diverse range of natural habitats is significantly beneficial to physical and mental health and well-being. Good access to green and recreational areas can reduce stress, fatigue, anxiety and depression⁵³. Good access to greenspaces is associated with healthy fetal growth in pregnant women, higher birth weights, healthy microbiomes in babies and reduced rates of obesity and Type 2 diabetes. Positive impacts of access to the natural environment are particularly significant for lower socio-economic groups.
- 7.1.5 Air pollution is detrimental to long-term human health and is directly linked to mortality, such as through heart disease, lung disease and various cancers. Particulate matter (PM) are particles within the air that are invisible to the naked eye. The smaller the particles, the greater the threat they represent to human health. Particulate matter is predominantly associated with vehicular emissions, although agriculture, combustion from domestic heating and the construction industry are also significant sources. The fraction of mortality in the Plan area associated with air pollution is slightly less than that seen for all of South East England (see **Table 7.1**).

⁵¹ Dempsey. N., Brown. C. and Bramley. G. (2012) The key to sustainable urban development in UK cities? The influence of density on social sustainability . *Progress in Planning* 77 (2012) 89-141

⁵² Wong, K. W. (2010). Designing for high-density living: High rise, high amenity and high design. In E. Ng (Ed.), *Designing high density cities for social and environmental sustainability*. London: Earthscan.

⁵³ Houlden. V., Weich. S. and Jarvis. S. (2017) A cross-sectional analysis of green space prevalence and mental wellbeing in England

- 7.1.6 There are two Air Quality Management Areas (AQMAs) in the Borough, each designated due to high levels of nitrogen dioxide from vehicular emissions (see **Figure 7.3**). AQMA 1 is a 5km strip of road stretching from Park Avenue / Manchester Road junction to Manchester Road / Haslingdon Road roundabout. AQMA 2 is a 0.6km stretch of road between Kay street / Bacup Road and the junction of Bacup Road and St Mary's Way.
- 7.1.7 There have been no exceedances at AQMA 1 and the Council intend to revoke the AQMA in 2019 should levels continue to lie below the 10% threshold of 40 micrograms of nitrogen per metre³. There have been two NO₂ exceedances of this threshold at AQMA 2⁵⁴. Humans within AQMA 2 are therefore exposed to air pollution of a scale which is harmful to human health.
- 7.1.8 During the assessment of proposals against the transport objective, it was noted that a number of site proposals will be likely to result in a relatively high reliance on personal car use for residents at some locations. Such proposals could potentially contribute towards an increase in levels of traffic on nearby roads and a net increase in local congestion. In line with this, the Council commissioned a transport capacity study of key junctions in the Borough which has identified some junctions where the capacity will be likely to be exceeded before 2034 due to development proposed in the Local Plan⁵⁵.

7.2 Impacts on population and health

- 7.2.1 The adverse impacts vary in character and magnitude from site to site and **Appendix B** should be referred to for detailed site appraisals. It is considered to be likely that development proposed in the Local Plan will positively impact human health in the Plan area. The majority of new residents will be likely to have good access to most of the necessary health services (i.e. GP surgery and NHS hospital) as well as open spaces and a diverse range of natural habitats. The Local Plan facilitates active lifestyles for existing and prospective residents, in part because the local PRoW network provides excellent access into the countryside and a diverse range of natural habitats and landscapes, and will be likely to contribute towards an overall improvement in the health of local residents.

⁵⁴ RBC (2017) 2017 Air Quality Annual Status Report (ASR) November 2017

⁵⁵ Mott Macdonald, Highway Capacity Analysis, Rossendale Local Plan, 2018.

7.2.2 Potential adverse cumulative impacts on the health objective are presented in **Box 7.1**.

Box 7.1: Cumulative impacts on population and human health

Population density

1

The population density of Rossendale is greater than that for the whole of England. The Local Plan will be expected to increase population density in some locations in the Plan area. This will be more likely and more noticeable at smaller settlements where several sites have been allocated. Increased population densities could potentially place greater pressure on the capacity of services in some circumstances, such as GP surgeries, schools or open spaces.

Access to health services

2

Each site proposal was assessed for its accessibility of a GP surgery, NHS hospital, leisure centre and public open greenspaces whilst avoiding areas of potentially poor air quality. Sites outside larger settlements of the borough were found to have relatively limited access to the necessary healthcare facilities. This was particularly the case for site proposals towards Edenfield, north of Waterfoot along the B6238, those between Waterfoot and Bacup near the A681, north of Bacup along the A671 (essentially in the white spaces of **Figure 7.1**). Residents in these areas may find they have to travel relatively far, and potentially via personal car usage, to reach their necessary health services.

Air quality

3

It is anticipated that, to some extent, air quality will be adversely impacted by development proposed in the Local Plan in some locations. Currently, 3.6% of deaths in Rossendale are associated with particulate matter air pollution. Whilst this is lower than the England average, it remains important to the long term health of residents to protect them from potential sources of particulate matter, such as road transport.

The Plan proposes to allocate residential development at a number of locations which are within 200m of a major or busy road, such as the A671, A681 and A682. A cumulative impact of this could potentially be an increase in the proportion of residents exposed to long term health harming particulate matter pollution.

7.3 **Local Plan mitigation**

7.3.1 Several policies proposed in the Local Plan will be anticipated to positively impact on human health. It is expected that policies discussed in **Box 7.2** will prove to be effective at facilitating healthy and active lifestyles of local residents and at mitigating the cumulative impacts identified in **Box 7.1**.

Box 7.2: Mitigating impact of Plan policies

Policies HS7 - Housing Density, HS8 – Housing Standards, HS9 – Private Residential Garden Development and HS10 – Open Space Requirements in New Housing Developments

In accordance with these policies, proposals will be required to be of a density that is in keeping with the local area and which avoids adverse impacts on the local amenity, character and environmental quality.

- 1 Policy HS8 will help to ensure that 20% of new housing meets the needs of elderly and disabled residents. HS9 will help to ensure that proposals provide adequate space of private residential gardens whilst HS10 sets out open space requirements for new housing.

It is thought to be likely that these policies will cumulatively help to prevent high density development by ensuring new residents have enough indoor and outdoor space to reside comfortably.

Policy ENV6 – Environmental Protection

2 Development which results in unacceptable impacts on health, amenity, air quality or water quality will not be permitted unless the risk of pollution is effectively prevented, reduced or mitigated to an acceptable level. This will help to ensure that proposals in RBC do not result in strong adverse impacts on local environmental quality. It remains uncertain the extent to which this will help to prevent cumulative adverse impacts on air quality caused by several, or all, proposals in-combination.

7.4 Residual impacts on health

- 7.4.1 Cumulative impacts on the health objective were established in **Box 7.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 7.2**. The residual impacts on the health objective, which are not expected to be mitigated by policies in the Plan, are set out in **Table 14.1** along with the residual impacts for all objectives.

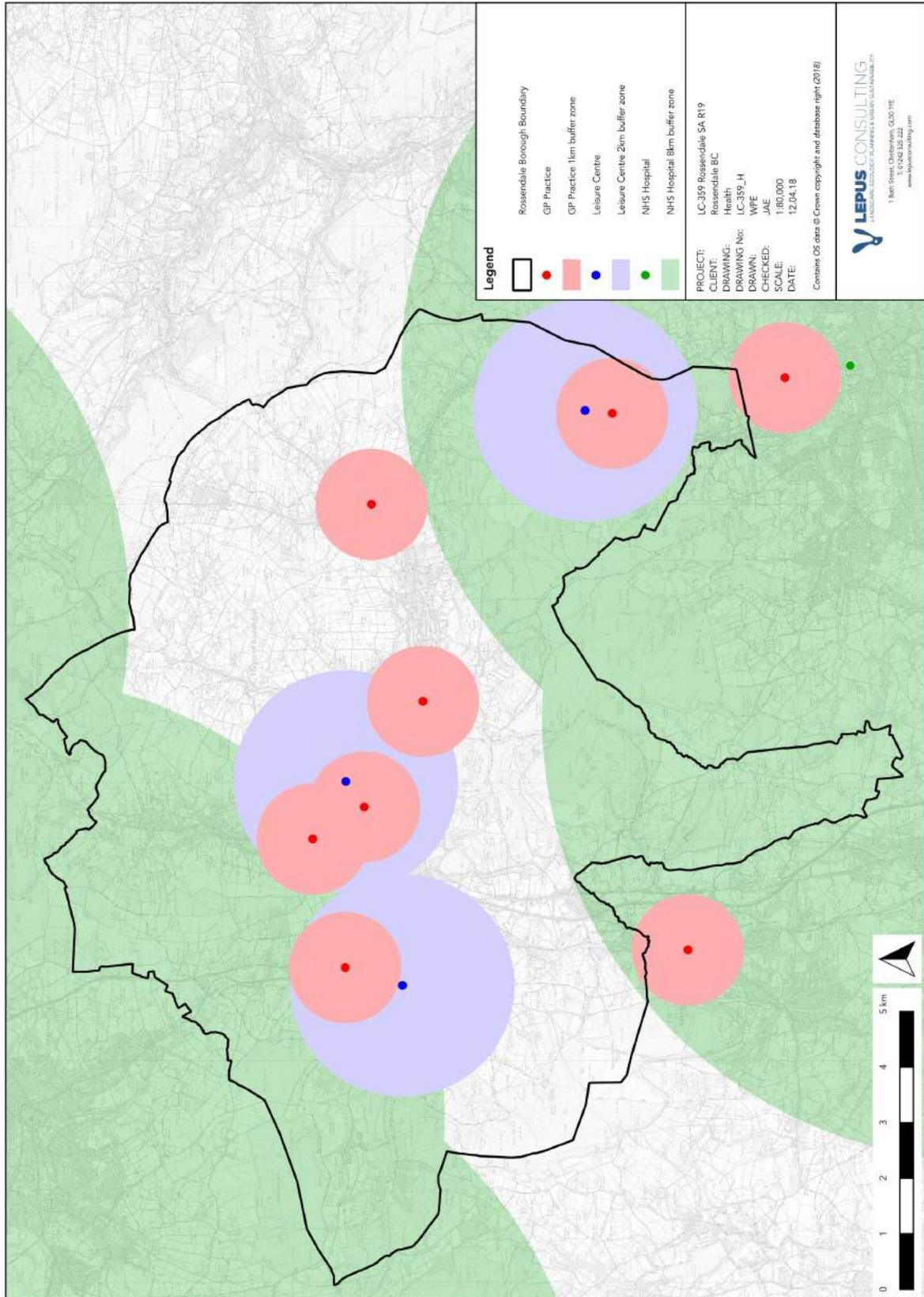


Figure 7.1: GP surgeries with an 800m buffer zone, Leisure Centres with a 2.5km buffer zone and NHS hospitals with an 8km buffer zone in relation to Rossendale

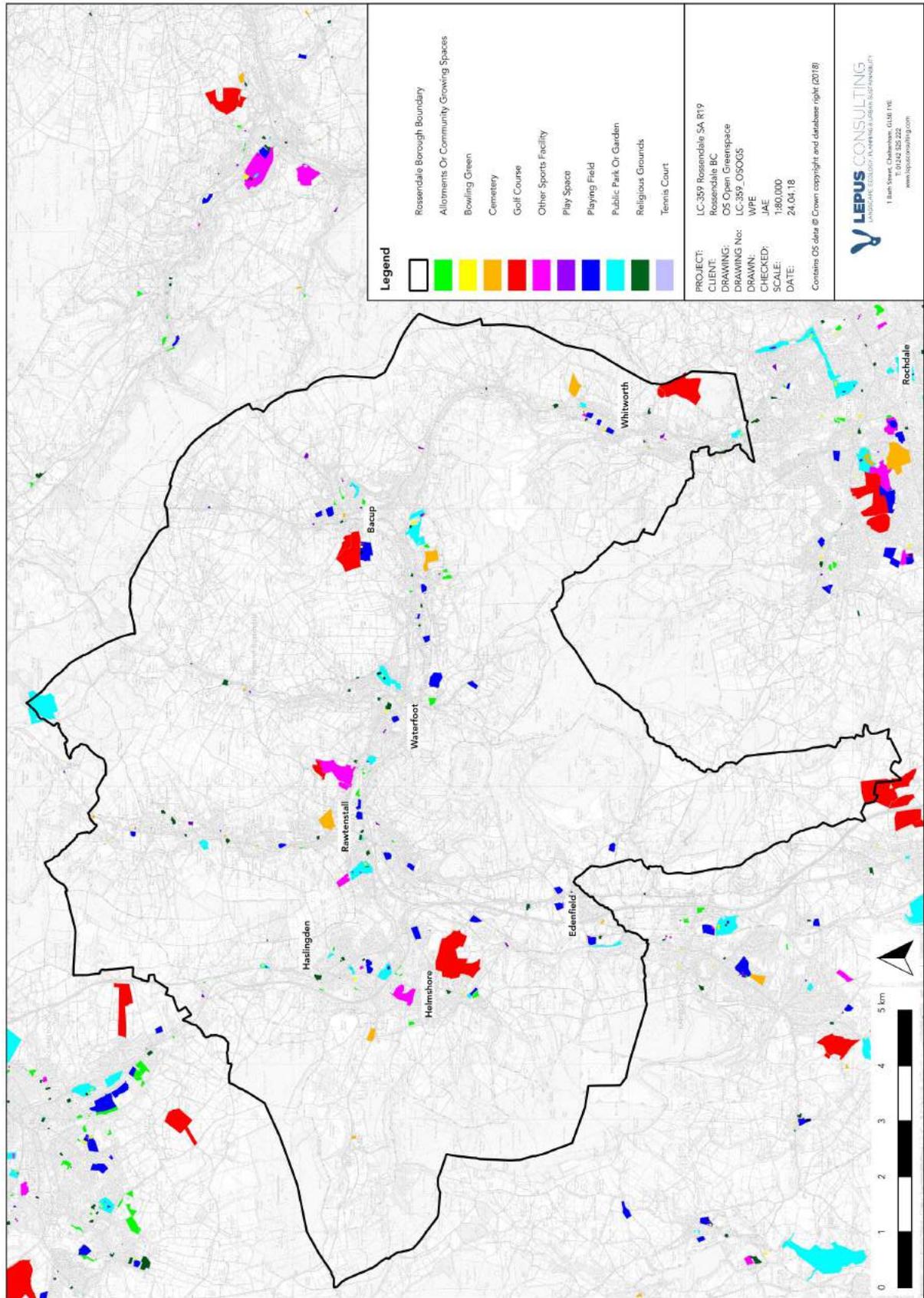


Figure 7.2: Public open greenspaces in Rossendale using OS data

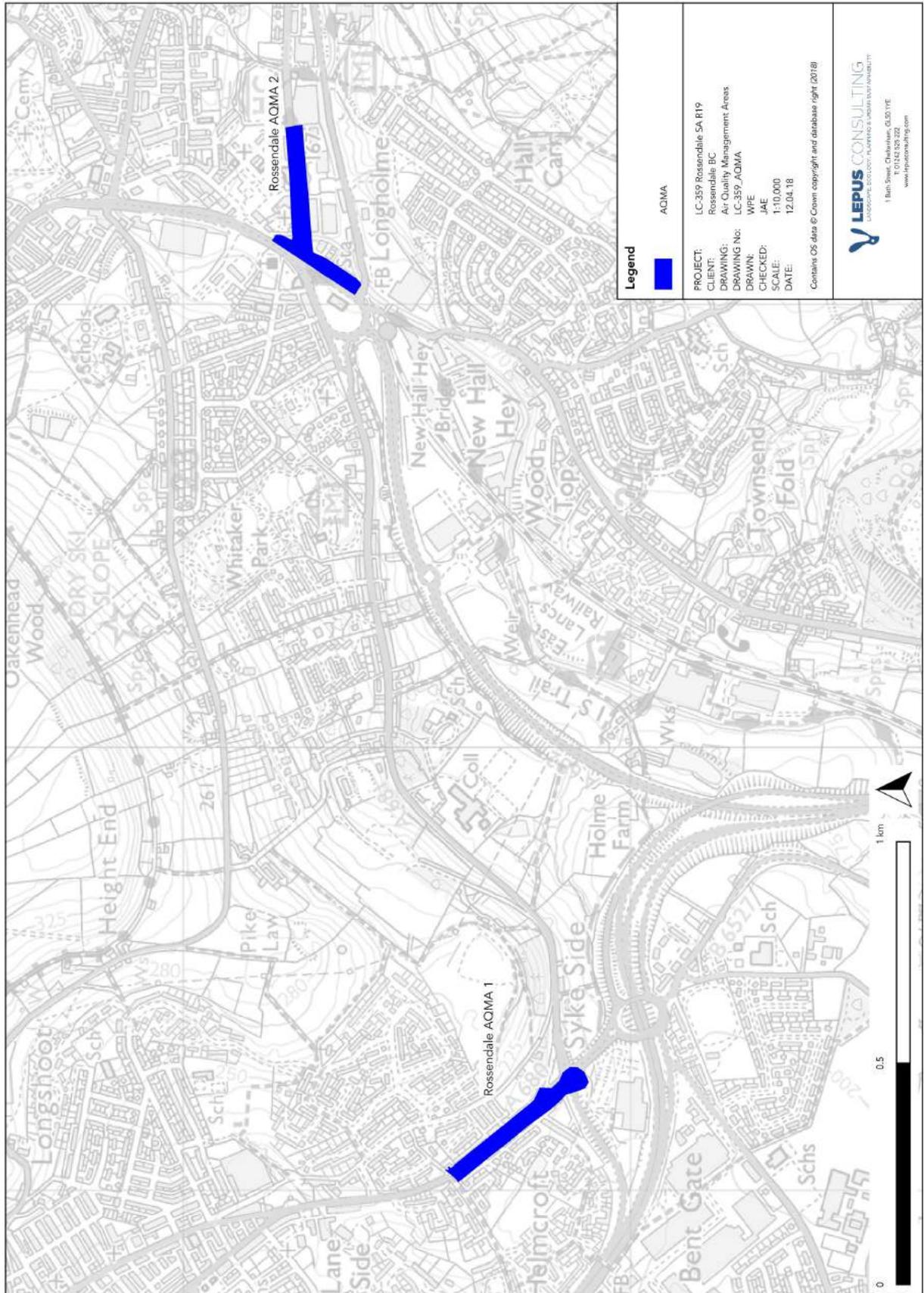


Figure 7.3: AQMAs in Rossendale, both of which are near Rawtenstall and are designated due to emissions associated with road transport

8 Natural Resources - Soil

SA Objective 5: To ensure the efficient use of natural resources in Rossendale.

8.1 Background

8.1.1 Soil is an essential and non-renewable resource that provides a wide range of ecosystem services. It filters air, stores and cycles water and nutrients, decomposes and cycles organic matter, supports plant growth and provides medicines⁵⁶. Soil is also one of the most important natural carbon sinks on Earth and is vital in efforts to mitigate anthropogenic climate change.

8.1.2 It is necessary for decision makers to make best efforts to conserve soil resources. Development such as that proposed in the Local Plan can potentially adversely impact on soil stocks, such as by direct loss of soil (e.g. excavation during construction), contamination, increased erosion, breakdown of structure and loss of nutrients. In late modernity soils in the UK have rapidly degraded, predominantly due to intensive agricultural production and industrial pollution. The UK's soil continues to face three main threats, each of which will be exacerbated by climate change⁵⁷:

- Soil erosion by wind and rain. It is estimated that the UK loses 2.2 million tonnes of topsoil every year due to wind and water erosion⁵⁸;
- Compaction; and
- Organic matter decline.

8.1.3 Construction on land has the potential to exacerbate compaction of soils and the decline in organic matter, whilst all three are expected to be exacerbated by climate change.

⁵⁶ Soil Science Society of America, Soil Ecosystem Services . Available online at: <https://www.soils.org/files/science-policy/issues/reports/sssa-soils-eco-serv.pdf>

⁵⁷ Department for Environment, Food and Rural Affairs (2009) Safeguarding our soils – A strategy for England. Defra, September 2009

8.1.4 Soils in the Borough are predominantly characterised by low fertility and large swathes of peaty soil and bog. The soils are suitable for a wide range of pasture and woodland habitats and can vary in permeability from freely draining to slowly permeable⁵⁹.

8.1.5 Approximately half the soil in the Borough, found predominantly at the foot of valleys, is Grade 4 Agricultural Land Classification (ALC) soil (see **Figure 8.1**). The remainder of the soil, generally on the slopes and peaks of valleys, is Grade 5 ALC. Soils in the Borough are therefore generally not particularly versatile or productive in agricultural terms.

8.2 **Impacts on soil**

8.2.1 The adverse impacts vary in character and magnitude from site to site and **Appendix B** should be referred to for detailed site appraisals. The adverse impacts are predominantly associated with the impacts of construction on soil within the site, as well as the impacts of the occupation or operation of the development.

⁵⁹ Cranfield Soil and Agrifood Institute, Soilscales . Available online at: <http://www.landis.org.uk/soilscales/>

Box 8.1: Cumulative impacts on soil

Net loss of soils

The RBC Plan allocates 84 new sites for development. The total area of these sites is approximately 229ha. Of these sites, 22 of them are brownfield and previously developed. Of the total 229ha area, the brownfield sites constitute approximately 17ha. Currently mixed sites (i.e. sites with some brownfield and some greenfield land) comprise just over 15ha of the allocated land. This means under 200ha of the land allocated for development in the RBC Plan is currently previously undeveloped.

Development at these locations will be likely to result in the loss of soils for reasons including, but not limited to:

- Excavation of soil and installation of construction materials;
- Concreting over soils leading to their gradual loss of structure and fertility;
- The compaction of soils and subsequent loss of structure and fertility due to the movement of construction vehicles and eventually residents;
- Removal of vegetation on site, thereby reducing local soil structure, increasing soil erosion rates and removing organic matter from the top layer of soils; and
- An increased risk of contamination and pollution of soils due to materials and methods used during construction.

Whilst soils may be of limited agricultural value in some places, they are still an essential component of the local ecosystem and its provision of ecosystem services (soils provide all four types of ecosystem services – regulatory, provisioning, supporting and cultural e.g. flood risk attenuation, carbon storage, creating life and supporting biomes). A cumulative impact of development delivered through the Plan will likely be a net loss of soils in Rossendale, and therefore a net reduction to some extent of the soils' ability to provide and support ecosystem services.

As soil is a non-renewable resource, this would be likely to be a permanent impact with limited scope for mitigation.

8.3 Local Plan mitigation

- 8.3.1 Policies proposed in the Local Plan will be likely to help mitigate adverse impacts on the Plan area's soil stocks to a limited extent. These policies are discussed in **Box 8.2**.

Box 8.2: Mitigating impact of Plan policies

Policy ENV6 – Environmental Protection

1

In line with this policy, proposals will be required to avoid unacceptable levels of water, air and ground pollution. This will help to protect soils throughout the borough from potential strong adverse impacts caused by contamination or pollution during the construction and operation phase of development proposals.

Policy ENV4 – Biodiversity, Geodiversity and Ecological Networks

Development proposals may potentially adversely impact soils within site perimeters by adversely impacting the organic matter content or the soil structure. The organic matter content and structure of soils is largely determined by above and below ground vegetation. Policy ENV4 will help to protect and potentially enhance flora assets and in so doing it is likely that soils in these locations will also be protected and enhanced.

8.4 Residual impacts on soil

- 8.4.1 Cumulative impacts on soils were established in **Box 8.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 8.2**. The residual impacts on soils, which are not expected to be mitigated by policies in the Plan, are set out in **Table 14.1** along with the residual impacts for all objectives.

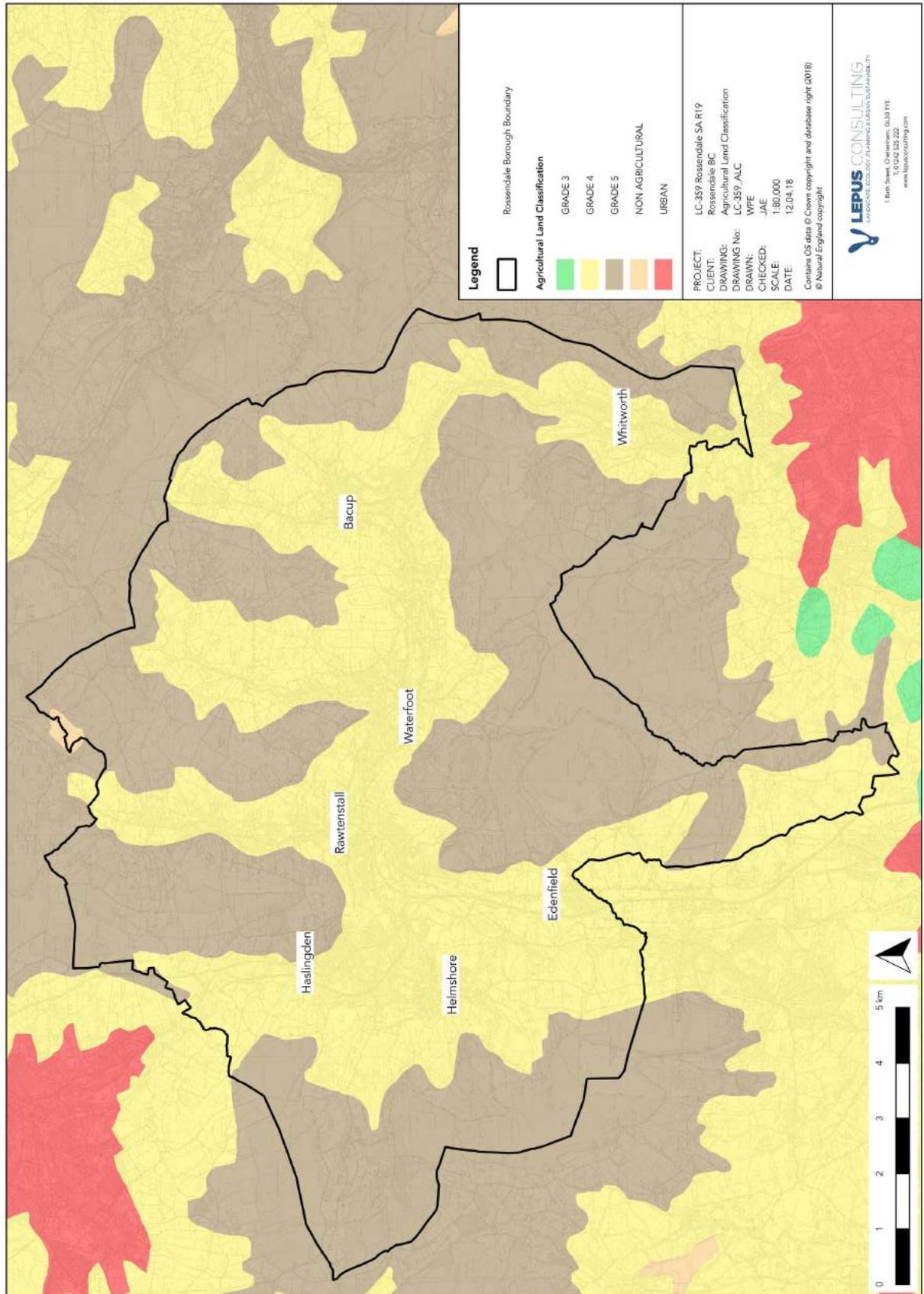


Figure 8.1: Agricultural Land Classification in Rossendale

9 Cultural Heritage

SA Objective 2: To conserve and enhance the historic environment, heritage assets and their settings.

9.1 Background

9.1.1 Heritage designations celebrate and conserve buildings and places that work for people. Rossendale has a rich heritage evidenced by an array of assets such as Listed Buildings, Scheduled Monuments, Conservation Areas and a Registered Parks and Garden (see **Figure 9.1**). These assets offer a sense of place and a distinct character to the Plan area.

9.1.2 New development brings threats as well as opportunities for the historic environment. New housing can put pressure on the local distinctiveness, character and sense of place. However, it can also provide new investment and potentially enhance the local townscape or improve the accessibility of heritage assets for local residents.

9.2 Impacts on cultural heritage

9.2.1 The adverse impacts vary in character and magnitude from proposal to proposal and **Appendix B** should be referred to for detailed site appraisals. The majority of site proposals are not expected to impact on the borough's cultural heritage in any way. A limited number of site proposals coincide with a Listed Building, although in most cases the development proposals are an opportunity to get these important heritage assets back into use and help to preserve their long term future.

9.2.2 Adverse impacts of site proposals on cultural heritage were primarily the result of development proposals being viewable from a heritage asset such as Listed Building, and thereby potentially altering their setting (see **Box 9.1**).

Box 9.1: Cumulative impacts on cultural heritage

Conservation Areas

1

A number of site proposals are within, adjacent to or viewable from Conservation Areas in Rawtenstall, Cloughfold and Bacup. Cumulatively, the proposed development could potentially alter the character of these conservation areas as a result of discordant layout, design or site uses.

Grade II Listed Buildings

2

Rossendale has a huge number of Grade II Listed Buildings throughout the borough. A lot of the development proposed in the Plan is on previously undeveloped greenfield sites, frequently on risen or sloping ground. Because of this, some sites will be likely to be viewable from a Grade II Listed Building, or will alter views of a Grade II Listed Building for local receptors such as residents. The cumulative impact of all development in-combination could potentially be an alteration to the character of some sensitive Listed Buildings due to discordant layout, design or site uses.

9.3 Local Plan mitigation

- 9.3.1 The Local Plan considers the cultural heritage of the Plan area closely and several policies assessed in this report will be likely to positively impact the cultural heritage objective. Policies which are anticipated to be particularly effective at protecting and enhancing local cultural heritage and mitigating the potential impacts identified in **Box 9.1** are discussed in **Box 9.2**.

Box 9.2: Mitigating impact of Plan policies

Policy ENV1 – High Quality Development in the Borough

1

In accordance with this policy proposals will be required to ensure that the appearance and character of the local area is preserved and potentially enhanced as a result of development. This will be likely to help ensure that the quality and distinctiveness of Conservation Areas throughout the Borough is carefully protected.

Policy ENV2 – Heritage Assets

2

This policy sets out protection in the RBC Plan for cultural heritage assets in the Borough. Development proposals will be required to show that heritage assets, which may be impacted by development, are conserved and enhanced. This will help to prevent adverse impacts on the setting or character of Grade II Listed Buildings in most cases.

9.4 Residual impacts on cultural heritage

- 9.4.1 Cumulative impacts on cultural heritage were established in **Box 9.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 9.2**. Residual adverse effects on cultural heritage are thought to be unlikely and are not expected.

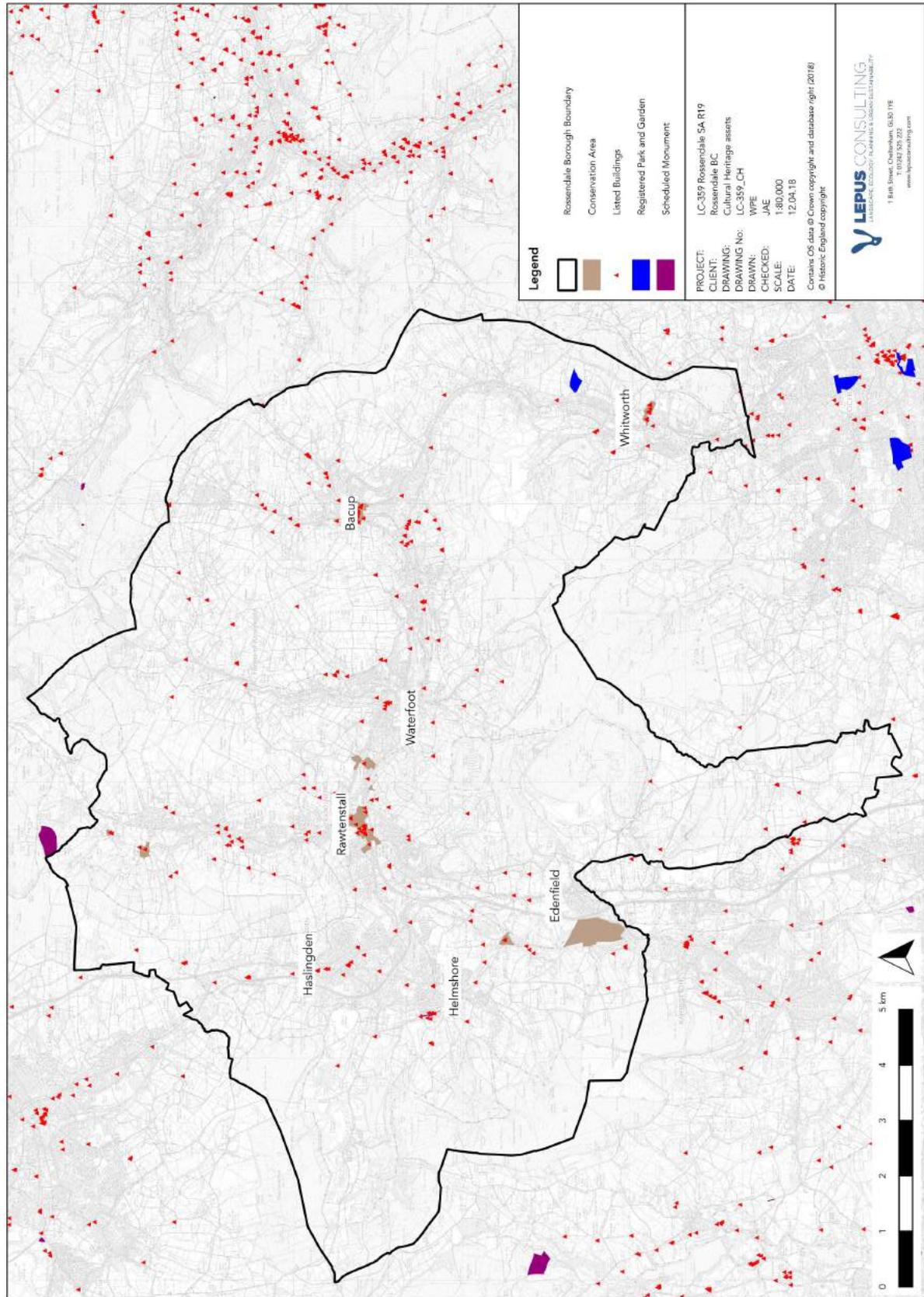


Figure 9.1: Heritage assets in Rossendale

10 Climate change

SA Objective 6: To minimise the requirement for energy use, promote efficient energy use and increase the use of energy from renewable sources.

SA Objective 7: To promote adaptation to Rossendale's changing climate.

10.1 Background

10.1.1 Mitigating climate change is a priority in the UK and it is necessary for local authorities to help minimise their contribution to its causes, such as by reducing greenhouse gas (GHG) emissions and enhancing natural carbon sinks such as by increasing tree cover. Sites in the Local Plan generally scored adversely under the Climate Change Mitigation SA Objective. This is predominantly because most sites propose development which would be likely to increase GHG emissions in relation to the sites' existing uses.

10.1.2 The consequences of climate change for residents of Rossendale are largely uncertain. The occurrence of extreme weather events are expected to become increasingly frequent, with the risk of flooding a primary concern. It is necessary for society to prepare to adapt to the impacts of a changing climate. Currently, blue and green infrastructure in Rossendale perform important climate change adaptation functions including attenuating the risk of flooding whilst preserving cooler microclimates that help to mitigate the urban heat island effect. The conservation and enhancement of blue and green infrastructure is therefore an effective means of preserving the local area's ability to adapt to the impacts of climate change.

10.1.3 Between 2005 and 2015, total carbon dioxide emissions and per capita carbon dioxide emissions in Rossendale reduced significantly (see **Table 10.1**)⁶⁰.

⁶⁰ Office for National Statistics (2014) UK local authority and regional carbon dioxide emissions
<https://www.gov.uk/government/statistics/local-authority-emissions-estimates>

Table 10.1: Carbon dioxide emissions in Rossendale

Year	Total CO2 emissions (tonnes)	Per capita CO2 emissions (tonnes)
2005	579,800	8.9
2015	400,400	5.8

10.2 Impacts on climate change

10.2.1 The significant majority of site proposals assessed in this SA are anticipated to have a minor adverse impact on the climate change mitigation objective as well as the climate change adaptation objective. This is because the site proposals involve the construction and occupation of new homes on predominantly previously undeveloped greenfields. The increase in local congestion and energy consumption in homes will be likely to increase GHG emissions in the local area in relation to existing levels. The loss of greenfields will contribute to a net reduction in flood risk attenuating service vegetation in the Plan area.

Box 10.1: Cumulative impacts on climate

Carbon footprint

1 The Local Plan will deliver thousands of new homes to support a growing population. The impact of more residents and buildings consuming energy will be expected to increase the Plan area’s carbon footprint to some extent. Currently, carbon emissions are at approximately 5.8 tonnes CO2 per capita.

The cumulative impact of all development in-combination will be likely to result in a net increase in Rossendale’s carbon footprint, thereby increasing its contribution towards the causes of anthropogenic climate change.

This impact would be considered to be long term and irreversible with limited scope for mitigation.

Climate change adaptation

2 Climate change will make extreme weather events increasingly frequent. For Rossendale, the primary concern is in relation to the increasing risk of flooding (both fluvial and pluvial) as well as higher temperatures. Green infrastructure (GI) plays an essential role in reducing both flood risk and the urban heat island (UHI) effect. A loss in GI would be expected to render the local area less able to adapt to the changing climate.

Approximately 88% of the sites allocated in the Rossendale Plan are previously undeveloped greenfields. A cumulative impact of all these sites in-combination could potentially be a net reduction in the capability of the borough’s GI to attenuate flood risk and reduce the UHI effect.

This impact would be considered to be a reversible but long term effect with good scope for mitigation.

10.3 Local Plan mitigation

- 10.3.1 Several policies proposed in the Local Plan will be likely to help reduce the Plan area's contributions towards the causes of climate change. Policies proposed in the Local Plan will also be likely to help protect and potentially enhance GI. Policies which are anticipated to help mitigate the cumulative impacts identified in **Box 10.1** are discussed in **Box 10.2**.

Box 10.2: Mitigating impact of Plan policies

1 Policies ENV7 – Wind Turbines and ENV8 – Other Forms of Energy Generation

RBC recognise the importance of reducing the Borough's carbon footprint and these policies are designed to help provide an opportunity for renewable and low carbon forms of electricity generation in the Borough. This will be likely to help increase the local generation and use of renewable energy sources, thereby limiting the local area's contribution to the causes of climate change.

2 Policies ENV4 – Biodiversity, Geodiversity and Ecological Networks, ENV5 – Green Infrastructure Networks and ENV10 – Trees and Hedgerows

The Green Infrastructure (GI) network in Rossendale provides an important climate change adaptation function by acting as a carbon sink (i.e. helping to reduce the local area's contribution to the causes of climate change) whilst attenuating the risk and severity of the Urban Heat Island effect. These policies will be likely to help protect, and in some locations enhance, the GI network and the climate change adaptation service it provides.

10.4 Residual impacts on climate change

- 10.4.1 Cumulative impacts on climate change were established in **Box 10.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 10.2**. The residual impacts on climate change, which are not expected to be mitigated by policies in the Plan, are set out in **Table 14.1** along with the residual impacts for all objectives.

11 Water and flooding

SA Objective 4: Protect, enhance and manage Rossendale's waterways and to sustainably manage water resources.

11.1 Background

- 11.1.1 The occurrence of extreme weather events is likely to increase in the near future due to the changing climate. In the UK, the rising risk of fluvial and pluvial (surface water) flooding is of primary concern. In 2009 the EA estimated 2.4 million properties in England were susceptible to fluvial and/or coastal flooding, whilst 3.8 million properties in England were susceptible to pluvial flooding.
- 11.1.2 A complex network of waterways course through the Plan area. Associated with these waterways are differing extents of fluvial and pluvial flood risk (see **Figures 11.1** and **11.2**). The presence of Flood Zones 2 and 3 is predominantly restricted to the valley floors, frequently running in close proximity to existing urban and residential areas in the Borough (see **Figure 11.1**). The risk of surface water flooding is more prevalent along the valley floors, although the majority of land in the Plan area has some degree of surface water flood risk (see **Figure 11.2**).
- 11.1.3 The uplands of Rossendale retain water and slow its flow due to infiltration and interception, thereby helping to alleviate flood risk. Appropriate management and restoration of uplands is therefore not only essential for the conservation and enhancement of sensitive and important landscape and biodiversity assets, but also for effective flood risk management and preparing the borough for the impacts of climate change. To this end, the conservation and enhancement of woodland and peatland in Rossendale's uplands should be recognised as a fundamental component of local sustainable development.
- 11.1.4 The Water Framework Directive requires all water bodies to achieve Good Ecological Status/Good Ecological Potential (GES/GEP) by 2027. Of the 75 waterbodies and tributaries in the Irwell Catchment, nearly all are failing to meet GES/GEP because of physical modification and poor water and biological quality⁶¹.

⁶¹ Irwell River Trust, 2018, <http://irwellriverstrust.com/about-us/achievements/irwell-gep-project/>

- 11.1.5 United Utilities, who provide water to Rossendale, prepared their Water Resources Management Plan (WRMP) in March 2015⁶². In most cases, for most of the time, there is adequate water available for abstraction in North West England. In 2013, total demand for water in the area was 1,715 million litres of water a day, down from 2,500 million litres a day in 1990. Total water demand has reduced in the region for 18 of the last 20 years and is anticipated to fall to 1,640 million litres by 2040. Despite the population of North West England increasing from 6.9 million in 2012 to 7.9 million by 2040, water use in industry and homes is increasingly efficient whilst pipe leak detection is improving.
- 11.1.6 Water supply and use is also guided by the Environment Agency's Catchment Abstraction Management Strategies (CAMS). The Plan area is covered by the Northern Manchester CAMS⁶³. Consumptive abstraction is available, for the majority of the Plan area, 95% of the time. A large amount of abstraction in the area is for industrial purposes, with numerous small sources used for agricultural and domestic purposes. Of the thirteen assessment points of surface water in the area, restricted water is available at eleven points, with no abstraction available at two of them. Restricted availability means water is only available during periods of medium to high flows.
- 11.1.7 It is thought to be likely that the construction of several thousand homes, as well as the provision of new employment floorspace, will increase water demand in the Plan area over the Plan period to some extent.

⁶² United Utilities (2015) Final Water Resources Management Plan, arch 2015, available online at: http://www.unitedutilities.com/globalassets/z_corporate-site/about-us-pdfs/water-resources/wrmpmainreport_acc17.pdf

⁶³ Environment Agency (2013 & 2014) Abstraction Licensing Strategies (CAMS Process) Available online at: <https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process>

11.2 Impacts on water and flooding

- 11.2.1 It is assumed that new residential properties built in the Borough will be there in perpetuity and it is therefore likely that development in flood risk zones will at some point be subject to the impacts of flooding. The significant majority of site proposals are situated within Flood Zone 1 and will be likely to make a positive contribution to the water and flooding objective. A limited number of sites are coincide with Flood Zone 3 although the Council's Sequential Flood Risk Assessment (SFRA)⁶⁴ has determined that the proposed development can be situated on land outside the flood zones for most of these sites.
- 11.2.2 The SA has identified the level of flood risk present at each site proposal as well the sites where surface water flooding is of a high risk.
- 11.2.3 It has been assumed that, in line with national planning law and Environment Agency guidance, the Council will ensure each proposal at risk of flooding has undergone the necessary sequential flood risk assessments, including the Exceptions Test.

Box 11.1: Cumulative impacts on water and flooding

1 Exacerbated flood risk

As stated elsewhere in this report, the majority of sites allocated for development in the Plan are previously undeveloped greenfield sites. Development of these sites will be expected to result in a net loss of GI to some extent, which would be likely to exacerbate the risk of flooding (particularly surface water flooding) at some locations in the borough. In particular, greenfield sites on the valley slopes play an essential role in helping to intercept and slow down the flow of surface water.

It is largely uncertain the extent to which flood risk may be altered by development in the Plan, but it is considered to be likely that where greenfield sites are replaced by built form and concrete with a loss of vegetation and permeable soils, surface water flood risk in the immediate area will be elevated.

This would be considered to be a reversible but long term impact with some scope for mitigation.

2 Surface water flood risk

The Local Plan would be expected to direct the significant majority of new residents away from land at the highest risk of flooding. However, surface water flood risk is extremely prevalent in the borough (see **Figure 11.2**) and there are subsequently a large number of sites situated on land considered to have some degree of surface water flood risk. A limited number of sites are situated on land at a 3.3% chance of surface water flooding each year and, considering residential development will be situated there in perpetuity and surface water flood risk will increase with climate change, the Plan will be expected to

⁶⁴ Available online at:

https://www.rossendale.gov.uk/downloads/download/10825/strategic_flood_risk_assessment_sfra_2016 .
Accessed: 10.05.18

increase the number of properties in the borough which can expect to be exposed to flood events in the future.

This would be recognised as a long term and non-reversible impact with limited scope for mitigation.

Water consumption

3

It is expected that the construction and occupation phases of development proposed in the Plan will result in a net increase in water consumption in the borough, in large part because of the increase in the local population. There is available capacity for further extraction of water to support a larger population but it remains to be seen the extent to which the efficiency of water consumption per person will be improved.

11.3 Local Plan mitigation

- 11.3.1 Several policies proposed in the Local Plan will be likely to help mitigate adverse impacts identified for the water and flooding objective. Policies proposed in the Local Plan will also be likely to help protect and potentially enhance water quality. Policies which are anticipated to help mitigate the cumulative impacts identified in **Box 11.1** are discussed in **Box 11.2**.

Box 11.2: Mitigating impact of Plan policies

Policy ENV9 – Surface Water Run-Off, Flood risk, Sustainable Drainage and Water Quality

1

RBC have closely considered the potential impacts of development on flood risk in the Borough. In line with this policy, proposals will be required to carefully assess the extent to which residents may be exposed to flood risk. Proposals will also be required to incorporate Sustainable Drainage Systems (where applicable), which will help to encourage sustainable water consumption whilst reducing the risk of water quality reductions.

Policy ENV5 – Green Infrastructure Networks

In line with this policy, proposals will need to carefully consider the potential impacts on the local GI network. Adverse impacts will need to be avoided whilst opportunities for enhancement are pursued. The protection and potential enhancement of the GI network will be likely to protect and enhance the flood risk attenuation service provided by the local GI network, particularly on the steep sided valley slopes of the Borough where this ecosystem service is particularly valuable.

11.4 Residual impacts on water and flooding

- 11.4.1 Cumulative impacts on water and flooding were established in **Box 11.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 11.2**. The residual impacts on water and flooding, which are not expected to be mitigated by policies in the Plan, are set out in **Table 14.1** along with the residual impacts for all objectives.

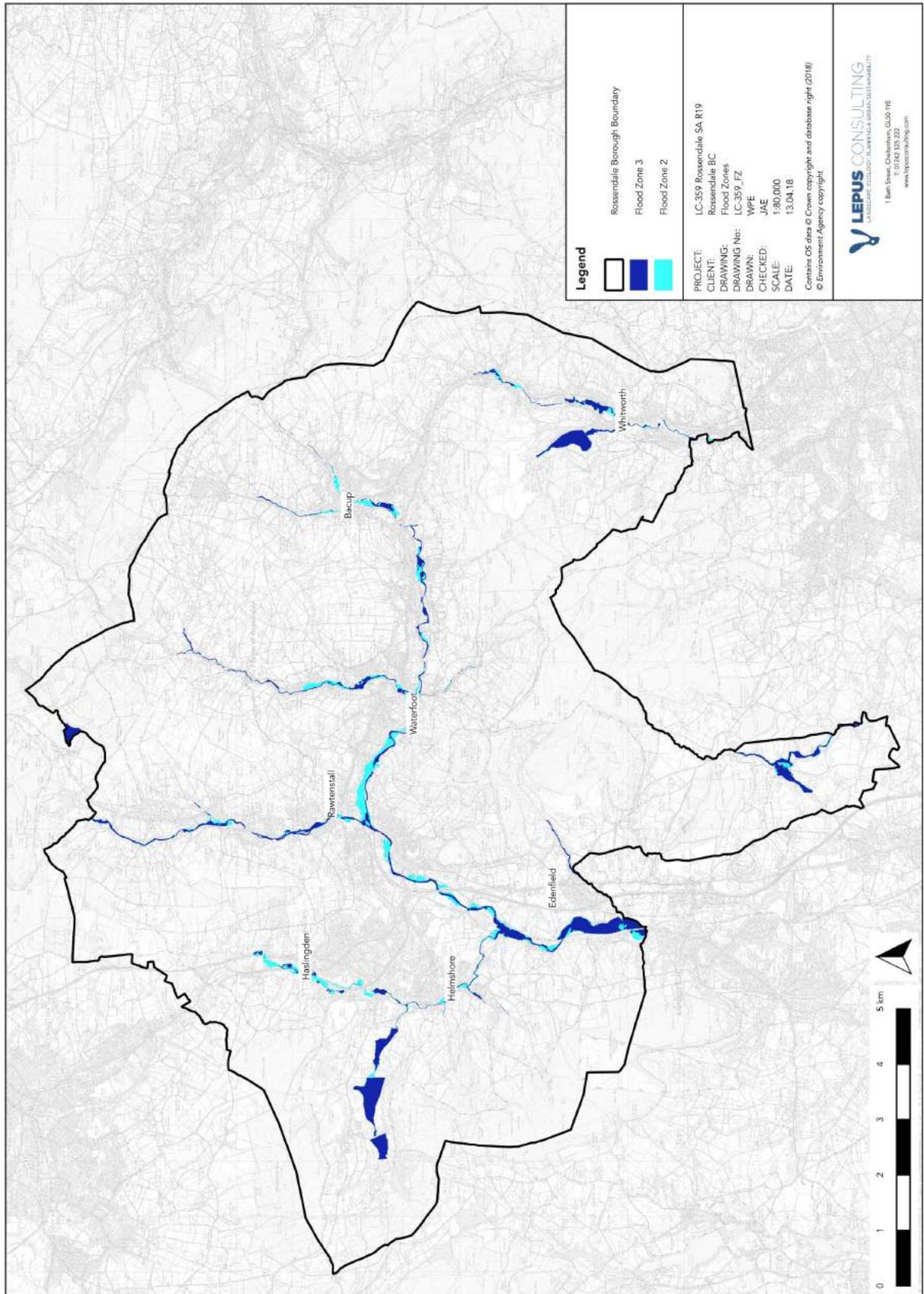


Figure 11.1: Environment Agency Flood Zones 2 and 3 in Rossendale

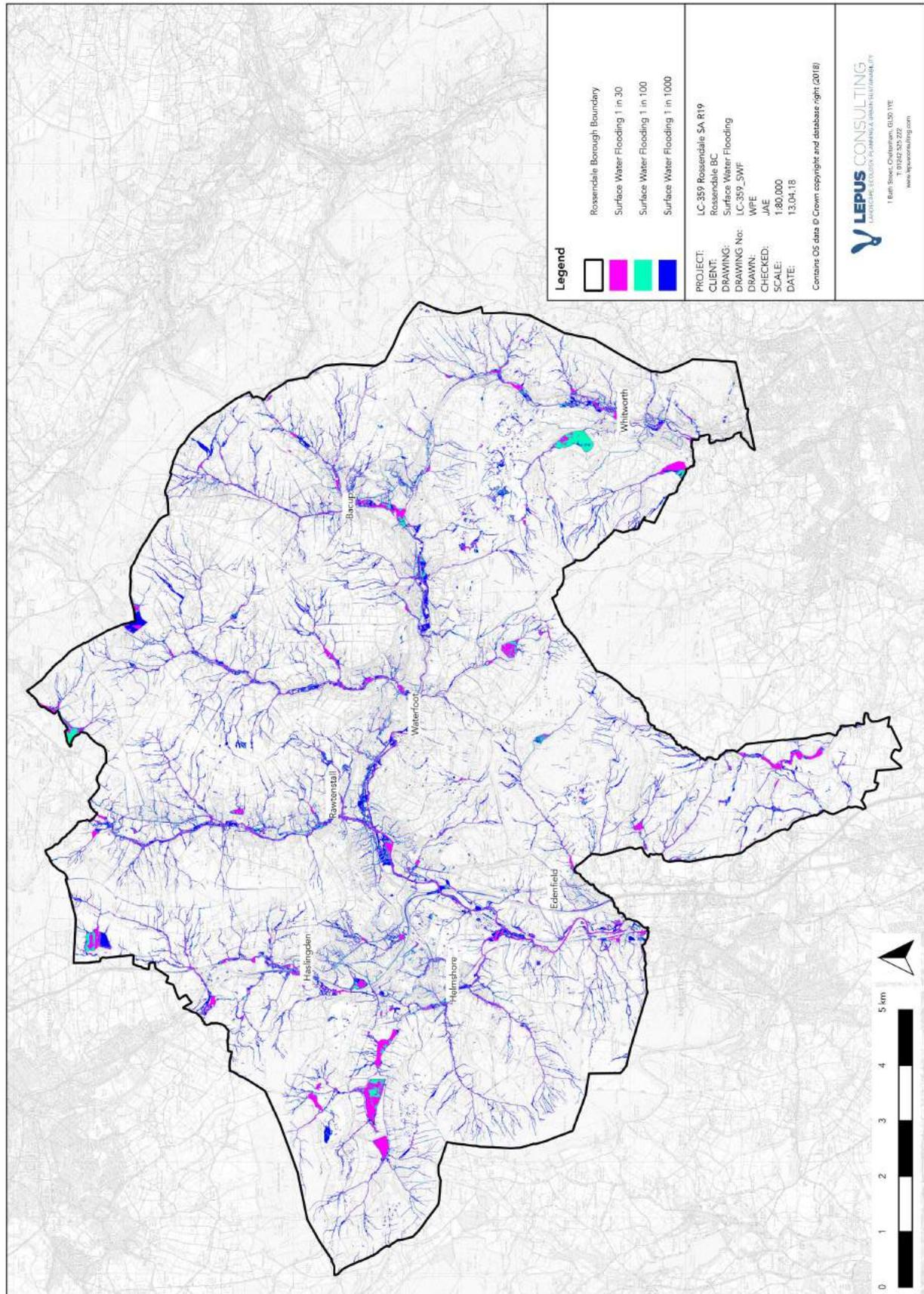


Figure 11.2: Surface water flood risk in the Plan area. Environment Agency data.

12 Landscape

SA Objective 4: Protect and enhance high quality landscapes and townscapes in the Borough, especially those that contribute to local distinctiveness.

12.1 Background

12.1.1 A landscape is comprised of natural, cultural, social, aesthetic and perceptual elements. This includes flora, fauna, soils, land use, settlement, sight, smells and sound⁶⁵.

12.1.2 There are no National Parks or AONBs partially or wholly within the Borough. In the west of Rossendale, the landscapes are predominantly moorland hills and upland pastures which extend into the south of the Borough where high moorland plateaus are also found. The north of the Borough is predominantly settled valleys with enclosed uplands.

12.1.3 A key component of valuable landscapes is their tranquility, sight and appearance. At night time, their tranquility can be impacted by light and noise pollution stemming from urban developments. Landscapes in Rossendale are generally less tranquil than landscapes in the north of Lancashire, primarily due to disturbances associated with the A681, A56 and their corridors⁶⁶. A 2010 landscape capacity study for wind energy developments in the South Pennines identified the following Landscape Character Types in Rossendale (see **Figure 12.1**)⁶⁷:

- Enclosed uplands;
- High Moorland Plateaux;
- Moorland Fringes / Upland Pastures;
- Moorland Hills;
- Reservoir Valleys;
- Rural Fringes;
- Settled Valleys;
- Urban; and

⁶⁵ Natural England (2014) An Approach to Landscape Character Assessment

⁶⁶ CPRE (2007) Tranquil landscapes, available online at: <http://www.cpre.org.uk/resources/countryside/tranquil-places>

⁶⁷ Julie Martin Associates (2010) Landscape Capacity Study for Wind Energy Developments in the South Pennines, Final Report, January 2010

- Wooded Rural Valleys.

12.2 Impacts on landscape

12.2.1 Every proposal in the Local Plan has been assessed for its potential impacts on the landscape objective. The findings of this process for site proposals are presented in detail in **Appendix B**. This section of the report provides an overview of the individual assessments, the potential cumulative impacts of all sites in-combination and the mitigating impact of Local Plan policy proposals.

12.2.2 There are no national or international landscape designations within the Plan area and no strong adverse impacts of the Plan on the landscape objective are anticipated. However, minor adverse impacts on the landscape objective have been identified for the majority of site proposals. The impact of all sites in-combination could potentially be an overall minor adverse impact on the landscape objective, primarily because of:

- Development within sensitive LCTs and the loss of LCT features;
- Development on the edge of settlements extending the built form into the countryside;
- Development on elevated ground altering some long distance countryside views for sensitive receptors including local residents and users of the local PRoW network.

12.2.3 The significant majority of these minor adverse impacts are due to the proposed development of previously undeveloped greenfield sites, frequently on a raised topography associated with the steep sided valleys prevalent in the Borough, which will be likely to alter rural, green and countryside views for sensitive receptors including local residents and users of the local PRoW network.

12.2.4 A limited number of sites are within the Moorland Fringes/Upland Pastures LCT, which is characterised by a patchwork of upland pastures, typically between 250m and 300m altitude, with long views and an absence of trees. It is considered to be likely that the proposed development of previously undeveloped green field sites within this LCT would have a minor adverse impact, and potentially result in the loss of, characteristics and features of this LCT. Given that an absence of trees is typical for the LCT, the scope for mitigating the impact of development on views in a way which would not discord with the LCT's existing character is limited.

- 12.2.5 The existing built form within Rossendale ribbons through the Borough along the valley floors, and it is here that the majority of development proposed in the Local Plan is situated. Site proposals in the Plan are unlikely to significantly alter the character of their local area (i.e. to change it from rural to urban). However, a number of site proposals are situated on the edge of settlements and they could potentially be considered to be extensions of the built form into the countryside. This is a minor but adverse impact on the landscape objective, with good scope for mitigation through careful layout and design of proposals as well as thoughtful application of screening vegetation comprised of local species.

Box 12.1: Cumulative impacts on landscape

1 Altered views for sensitive receptors

Where previously undeveloped greenfield sites are developed for residential or employment purposes, it is likely that countryside and rural views for some sensitive receptors, including local residents and users of the PRoW network, will be altered. A cumulative impact of all sites in-combination will likely be an alteration to the character of views in some locations, particularly where the greenfield sites are on elevated ground and viewable from a long distance.

This impact would be considered to be long term and potentially irreversible but with good scope for mitigation.

2 Loss of LCT features

Where development has been proposed in the Reservoir Valleys, Moorland Fringes/Upland Pastures and Enclosed Uplands LCTs, it is considered to be likely that a cumulative impact of all development in-combination will be a loss of landscape features which diminish the distinctiveness of these LCTs in some locations.

This impact would be considered to be long term and potentially irreversible but with some scope for mitigation.

3 Alteration to settlement scale and pattern

A number of site proposals site on the edge of existing settlements. A cumulative impact of all sites in combination could potentially be an alteration to the scale and pattern of existing settlements. In particular, the ribbon pattern of the built form winding through the borough could potentially be altered.

12.3 Local Plan mitigation

- 12.3.1 Several policies in the Local Plan will be likely to help protect and potentially enhance the character and distinctiveness of landscapes and townscapes throughout the Plan area. Policies which will help to mitigate the potential cumulative impacts identified in **Box 12.1** are discussed in **Box 12.2**.

Box 12.2: Mitigating impact of Plan policies

1 Policy SD2 – Urban Boundary and Green Belt

Development will be required to be within the Urban Boundary defined on the Policies Map accompanying the RBC Plan. This will help to prevent adverse impacts on distinctive and sensitive countryside landscapes in many locations.

2 Policy ENV5 – Green Infrastructure Networks

The GI network makes a significant contribution to the quality and character of landscapes and views throughout the borough, with GI features such as trees, hedgerows and woodland being key landscape features. The protection afforded to these features throughout policy ENV5 will help to protect and enhance landscape quality in many locations.

3 Policy ENV3 – Landscape Character and Quality

In accordance with this policy, proposals will be required to show how landscape character will be conserved and, if possible, enhanced. The policy sets out several requirements in relation to scale, design and use for proposals. This policy will help to ensure that adverse impacts on the local landscape are avoided in many cases, whilst positive impacts are more likely to arise.

12.4 Residual impacts on landscape

- 12.4.1 Cumulative impacts on landscapes and townscape were established in **Box 12.1**. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in **Box 12.2**. Residual adverse impacts on the landscape objective are thought to be unlikely and are not expected.

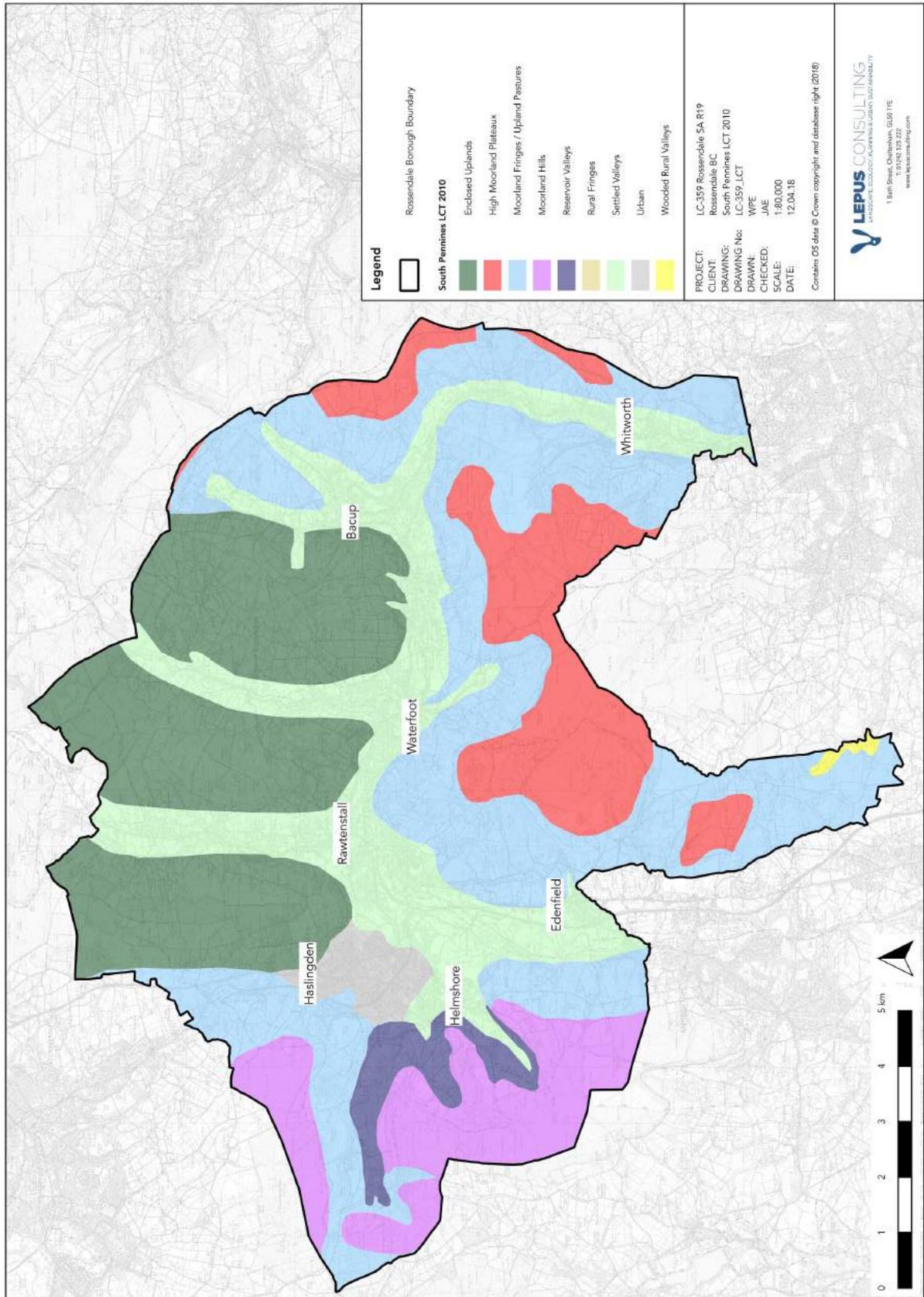


Figure 12.1: Landscape Character Types in the Plan area

Source: Julie Martin Associates (2010) Landscape Capacity Study for Wind Energy Developments in the South Pennines, Final Report, January 2010

13 Other SA Objectives

SA Objective 10: Provide a range of affordable, environmentally sound and good quality housing which meets the needs of the community of Rossendale.

SA Objective 11: To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.

SA Objective 12: To improve education, skills and qualifications in the Borough and provide opportunities for lifelong learning.

SA Objective 13: Improve the choice and use of sustainable transport in Rossendale and reduce the need to travel.

13.1 Background

13.1.1 **Chapter 6** to **Chapter 13** have considered closely the potential cumulative and synergistic impacts of the Local Plan on the SEA topics of biodiversity, landscape, soil, air, climate, water, cultural heritage, population and human health.

13.1.2 This chapter looks closely at the potential synergistic and cumulative impacts of the Local Plan on the SEA topic 'material assets', as well as SA Objectives not covered in **Chapters 6 – 13**. This includes the SA Objectives Material Assets, Housing, Employment (location), Employment (skills) and Transport. Each of these objectives could be considered to fall within the SEA Topic 'Material Assets'.

Housing

13.1.3 The Local Plan proposes to deliver a total of 3,180 new dwellings, and in so doing will help to ensure that there is enough housing in the local area for the anticipated increase in population. The types of dwellings being proposed are of a mix which will help to ensure that housing is available to meet the varied needs of residents, including affordable homes, special needs, self builds and elderly accommodation.

13.1.4 There are no adverse impacts anticipated for the housing objective.

Employment (location)

13.1.5 The Local Plan intends to deliver land for economic and employment purposes, including 27ha of new land for business, general industrial use, storage or distribution and in so doing will help to ensure that there are enough employment opportunities to satisfy the need of existing and new residents.

- 13.1.6 Overall, Rossendale offers residents excellent access to major employment areas within the borough, such as Rawtenstall and Bacup, as well as outside the borough, such as Manchester, Burnley and Leeds. The Plan will be expected to direct all new residents to within the target distance of 5km from a major employment area.
- 13.1.7 Not only do residents require access to business for employment purposes, but they need access to businesses and facilities to acquire services they require, such as retail and supermarkets. The Local Plan has adopted a strategy which directs the majority of new residents to existing urban areas and within sustainable distances of key services and amenities.
- 13.1.8 Adverse impacts on the employment (location) objective are not anticipated.
- Employment (skills)
- 13.1.9 Not only do residents need access to employment opportunities, they need the skills to ensure they can compete in the modern employment market. This objective was a measure of residents' access to primary and secondary schools and it was found that, overall, the Local Plan will facilitate good educational opportunities for new residents.
- 13.1.10 Rossendale offers its residents high quality education at a number of different schools (see **Figures 13.1** and **13.2**). Access to secondary schools is generally more limited than primary schools in Rossendale and new residents in the far north and the far east of the borough are likely to find they are outside the target distance of a secondary school. A very limited number of residential site proposals are considered to be outside the target distance of primary and secondary school facilities. Residents here may find they need to travel relatively far to take children to school each day. Adverse impacts on the employment (skills) objective are not anticipated).
- Material Assets
- 13.1.11 Material assets is an SEA Topic, but also an Objective in the SA Framework for the RBC Local Plan. The SA Objective is primarily concerned with the impacts of the RBC Local Plan on waste production. In 2014-15, a total of 24,866 tonnes of waste was produced in Rossendale. Of this, 23,727 tonnes was generated from households, which was recycled at a rate of 32.85%⁶⁸. A total of 16,697.51 tonnes of waste was therefore sent to landfill in 2014-15.

⁶⁸ Government data on local authority waste management statistics, available online at: https://data.gov.uk/dataset/local_authority_collected_waste_management_statistics

- 13.1.12 It is largely uncertain how the Local Plan will influence rates of reducing waste or recycling waste. The construction and occupation of several thousand new homes, as well as the operation of some new business, would be expected to increase waste generation in the Plan area to some extent.
- 13.1.13 England's 2016 waste production per capita was 412kg, up from 406kg in 2015. Each new resident in Rossendale that arrives as a result of the Local Plan may be expected to increase the Plan area's waste generation by around 400kg each year. The cumulative impact of all residents in-combination could potentially be a significant increase in local waste production.
- Transport
- 13.1.14 The Transport SA Objective is primarily concerned with the access existing and new residents have to sustainable modes of transport, including bus services, railway stations, the PRoW network and cycle paths. Not only do residents need access to these modes of transport, but these modes of transport should provide access to employment sites, town centres, residential areas and popular tourist spots.
- 13.1.15 There are no active railway stations in the Borough and residents would need to travel to nearby urban areas like Manchester, Todmorden (particularly for BAcup residents), Rochdale and Blackburn to catch a train. There are several frequent bus services providing access to these railway stations, although the bus journeys would be likely to take up to an hour for many residents.
- 13.1.16 Bus stops with frequent services are available along most of the main roads in the Borough, including the A56, A682 and A681. There are eleven bus services in Rossendale, carrying 47,352 passengers each month⁶⁹. However, many residents will not be within 400m of a stop, particularly those situated in more rural areas of the Borough, and it is likely that they will rely relatively heavily on personal car use.

⁶⁹ Lancashire County Council (2015) Environment Commissioning Plan for Rossendale 2015-16, April 2015. Available online at: <http://www.lancashire.gov.uk/media/675763/LCC-Rossendale-15-16-Environment-Commissioning-Plan.pdf>

13.1.17 2011 census data suggests that 51.2% of residents in urban areas drive, or are passengers in, a car when travelling to work. Approximately 78% of rural residents drive a car or are passengers. Rates of taking the train to work are significantly lower than the England average (see **Table 13.1**). If similar rates of new residents drive to work each day, the Local Plan could potentially result in an increase in local congestion. This would have adverse impact on air quality and subsequently human health in some locations.

Table 13.1: Methods of travelling to work in Rossendale based on 2011 census data

Method of travel to work	Rossendale – urban	England averages – urban	Rossendale – rural	England averages – rural
Train	0.34%	3.5%	0.5%	2.1%
Bus, minibus or coach	3.8%	4.9%	2%	1.6%
Driving car or van	47.2%	36.9%	58.6%	45.7%
Passenger - car / van	4%	3.3%	28.4%	3%

13.1.18 There is an extensive PRow network in the Plan area predominantly comprised of public footpaths with a limited number of bridleways, byways and restricted byways. These provide excellent pedestrian access to places throughout the local area and into the countryside.

13.1.19 The A56, A680, A682, B6238, A681, Newchurch Road and A671 connect settlements throughout the Borough. These roads are often hilly, narrow, bending and can experience high levels of traffic. There is also a distinct lack of cycle paths on these roads. Overall, these roads are not considered to facilitate cycling as a method of travelling or commuting in the Borough.

13.1.20 Recently, the prevalence of taxis in the Borough has come under scrutiny. Department for Transport figures suggests that the number of taxis in Rossendale has increased from 1,610 in March 2015 to 2,523 taxis in July 2018. This equates to one taxi for every 27 residents in the Borough, which is more taxis per resident than anywhere else in England (in contrast, there are 100 residents of London for every taxi). This might suggest a relatively high reliance of local residents on taxis for getting about the Borough. Taxis are an environmentally (air pollution) and economically unsustainable mode of transport for the Plan area’s residents.

13.1.21 The Lancashire County Council East Lancashire Highways and Transport Masterplan, which was approved in February 2014, proposed the creation of an East Lancashire Strategic Cycleway Network. Funding for the cycle network was granted in 2015 and rates of cycling may therefore be likely to increase.

13.1.22 Two portions of the cycle network go through Rossendale, including the Valley of Stone (Rossendale) cycleway and National Cycle Route 6. The 16.5km Valley of Stone connects Rawtenstall in the west with Waterfoot, Bacup and Whitworth whilst also connecting Rochdale with Healey Dell and providing access to many employment sites. The 12km National Cycle Route 6 follows an old railway line and is mostly off road running in a north-south direction from Accrington to the Lancashire border at Stubbins near Ramsbottom. It has good commuter use potential, particularly to employment sites west of Haslingden near the A56.

13.1.23 Additionally, the Spinning Point project development in Rawtenstall⁷⁰ includes the provision of a new bus station. Furthermore, new electric vehicle charging points are planned for Rossendale⁷¹ which will facilitate the increasing uptake of electric vehicles seen in the UK.

13.2 Impacts on other SA Objectives

13.2.1 The adverse impacts vary in character and magnitude from site to site and **Appendix B** should be referred to for detailed site appraisals. **Box 13.1** presents the potential cumulative adverse impacts of the RBC Plan on transport and material assets.

13.2.2 The RBC Plan is expected to result in only positive impacts (when considered cumulatively) on the economy (location), economy (skills) and housing objectives.

Box 13.1: Cumulative impacts on transport and material assets

1 Reliance on car usage

Where residential development is outside the target distance of a railway station or a bus stop with frequent services, the reliance on personal car usage for residents is likely to be relatively high. In such circumstances, congestion on roads in the local area could potentially be exacerbated.

Overall, development in the Local Plan could potentially result in a net increase in congestion in the Plan area to some extent.

This impact will be likely to be non-reversible and medium – long term with some scope for mitigation.

2 Waste generation

It is considered to be likely that all sites in-combination will cumulatively increase waste generation in the Plan area. It is uncertain the extent to which development will reuse materials or the rates of recycling that can be expected at new homes and businesses.

This impact would be likely to be non-reversible and long term with limited scope for mitigation.

⁷⁰ Additional information available online at: www.spinningpoint.com

⁷¹ RBC (2017) 2017 Air Quality Annual Status Report (ASR) November 2017

13.3 Local Plan mitigation

- 13.3.1 There are several policies in the Local Plan which will be likely to help to minimise the generation of waste and increase recycling rates, as well as to help enhance the uptake of sustainable transport modes in the borough. Local Plan policies which will be likely to help mitigate the cumulative impacts identified in **Box 13.1** are discussed in **Box 13.2**.
- 13.3.2 Whilst the RBC Plan will be likely to result in a net increase in waste generation in the Borough, policies are not put forward to mitigate this impact as waste planning is the responsibility of Lancashire County Council through the adopted Joint Lancashire Minerals and Waste Local Plan.

Box 13.2: Mitigating impact of Plan policies

1 Policy TR1 – Strategic Transport

RBC are seeking out opportunities for enhancing the Borough’s connectivity and ways in which to reduce the needs of residents to travel. This will help to ensure that over the Plan period residents are able to access homes, places of employment, key services and recreational hotspots quickly and efficiently whilst the uptake of sustainable transport modes will be likely to increase.

2 Policy TR2 – Footpaths, Cycleways and Bridleways

RBC intend to support the development and enhancement of the strategic PRoW network in the Borough. This will include enhancements to surfacing, signage and feeder routes. It is expected that this policy will encourage greater rates of walking and cycling in the borough, which will not only help to make transport more sustainable but will be likely to benefit the physical well-being of residents.

13.4 Residual impacts on Material Assets

- 13.4.1 Cumulative impacts on landscapes and townscapes were established in Box 13.1. The policies proposed in the Local Plan which will help to mitigate these impacts are presented in Box 13.2. The residual impacts on landscapes and townscapes, which are not expected to be mitigated by policies in the Plan, are set out in Table 14.1 along with the residual impacts for all objectives.

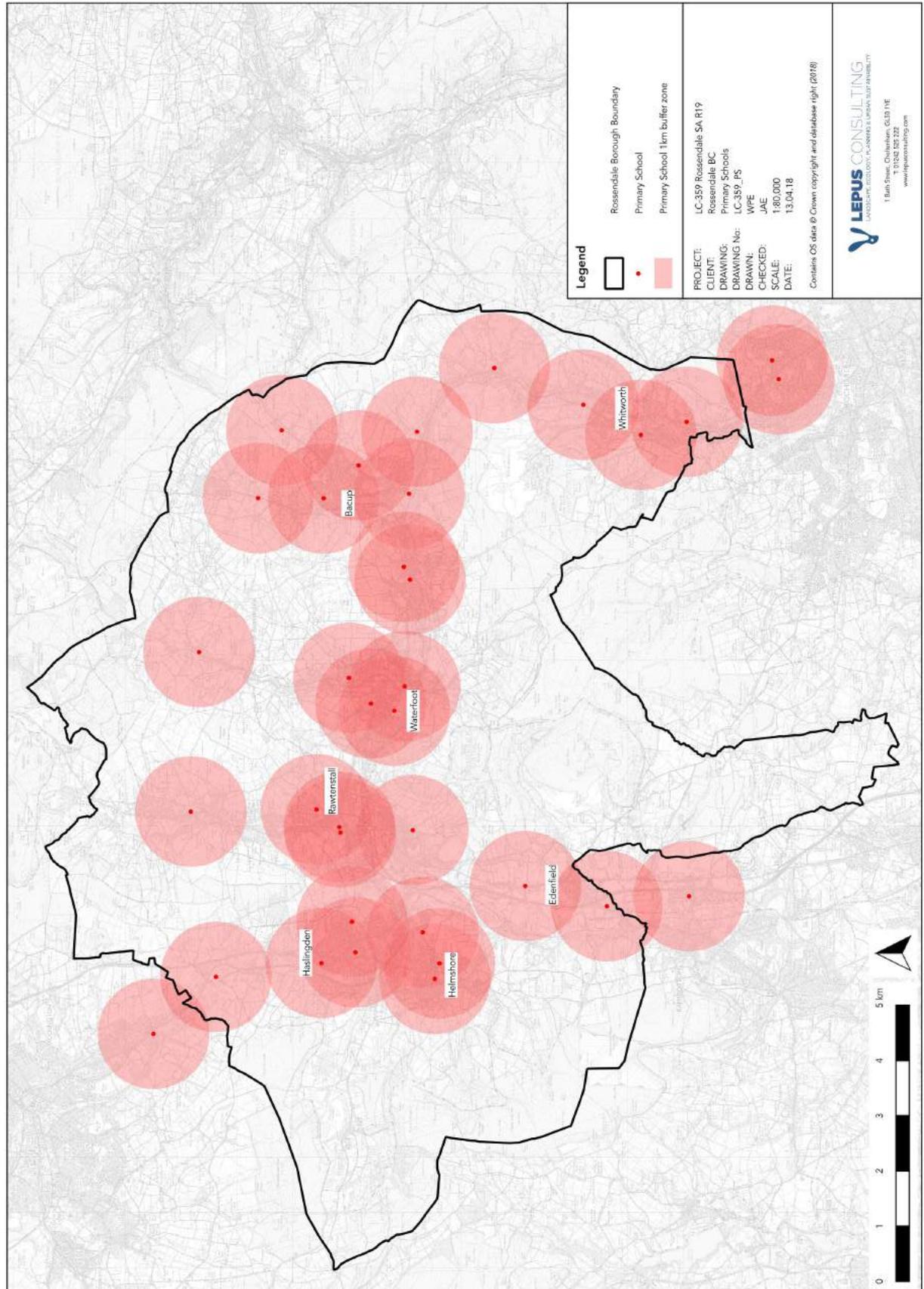


Figure 13.1: Primary schools with a 1km buffer zone in relation to Rossendale

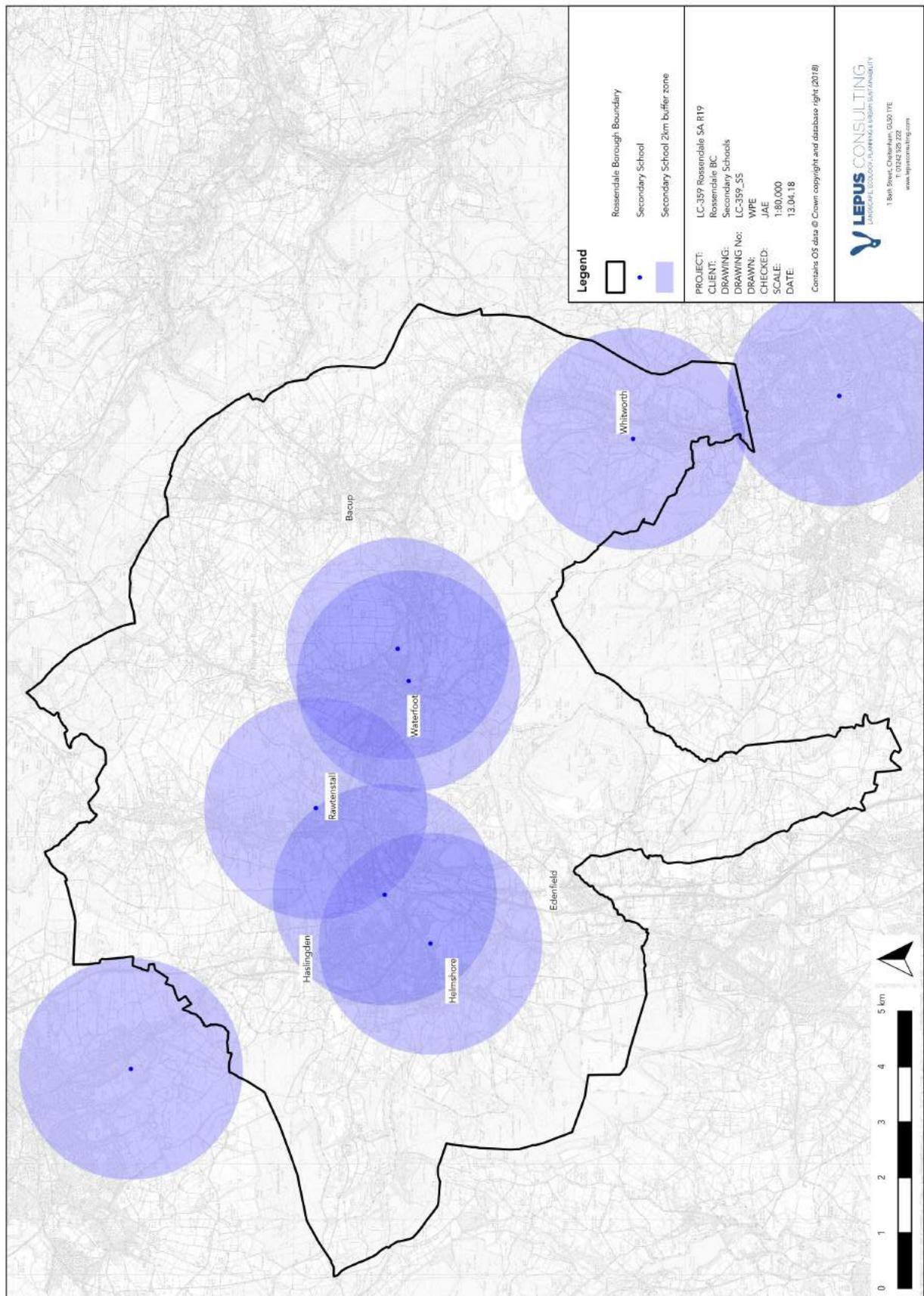


Figure 13.2: Secondary schools and a 2km buffer zone in relation to Rossendale

14 Residual impacts

14.1 Residual effects following mitigation

14.1.1 The SA has assessed the strategic sites, non-strategic sites and policies proposed in the Local Plan. Potential impacts were identified for each SA Objective, with the potential cumulative impacts addressed in **Chapter 6 – Chapter 14**. Consideration was given to the likely mitigating impact of Local Plan policies on the potential impact of site allocations. Whilst Local Plan policies will be likely to prevent or mitigate to a large extent some of the potential adverse impacts identified, it is considered to be likely that there will be a limited number of residual impacts which are difficult to mitigate. These are identified in **Table 14.1**.

Table 14.1: Adverse residual impacts which could potentially be caused by the Local Plan

Adverse impacts	
1	<p>Biodiversity, flora and fauna</p> <ul style="list-style-type: none"> A net loss in vegetation cover over the Plan period (Paragraph 107 of the NPPF includes 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures' as a component of 'pursuing sustainable development'). Minor adverse impacts on priority habitats throughout the Plan area. Increased fragmentation of defined ecological networks for heathland, woodland and grassland in Rossendale and Lancashire. <p>These effects will be likely to be long term and potentially permanent, with limited scope for mitigation.</p>
2	<p>Climate and water</p> <ul style="list-style-type: none"> A net increase in energy consumption and GHG emissions in the Plan area. A net reduction in the carbon sink capacity of vegetation in the Plan area due to a loss of vegetation. <p>These effects will be likely to be long term and potentially permanent, with limited scope for mitigation.</p>
3	<p>Soil</p> <ul style="list-style-type: none"> The RBC Plan allocates 84 new sites for development. The total area of these sites is approximately 229ha. Of these sites, 22 of them are brownfield and previously developed. Of the total 229ha area, the brownfield sites constitute approximately 17ha. Currently mixed sites (i.e. sites with some brownfield and some greenfield land) comprise just over 15ha of the allocated land. This means under 200ha of the land allocated for development in the RBC Plan is currently previously undeveloped. A net loss of stable, functioning and fertile soils in the Plan area. No policy proposed in the Plan is designed to directly help protect or enhance soil stocks in the Borough. The majority of these soils fall within ALC Grade 4 and are likely more ecologically valuable than they are agriculturally. <p>This impact will be likely to be permanent, with very limited scope for mitigation.</p>
4	<p>Air pollution and transport</p> <ul style="list-style-type: none"> It is considered to be likely that over the Plan period, air quality will reduce in some areas of the Plan area due to local increases in road transport movements. There are currently concerns over capacity issues at some junctions in the Borough to handle the likely increase in transport. It is considered to be likely that the long-term health of residents and habitats within approximately 200m of a busy road, or other major air pollutants, will be adversely impacted by pollution (e.g. atmospheric nitrogen deposition and particulate matter). <p>This impact will be likely to be long term with limited scope for mitigation.</p>
5	<p>Waste</p> <ul style="list-style-type: none"> A net increase in waste generation is anticipated to some extent due to the construction and occupation of thousands of new homes. International and national waste reduction and recycling targets will limit this. <p>This impact will be likely to be short to medium term with some scope for mitigation.</p>
6	<p>Health</p> <ul style="list-style-type: none"> An uncertain proportion of new residents will be likely to be situated outside the target distance of several necessary health facilities. <p>This impact will be likely to be short to medium term with some scope for mitigation.</p>

14.2 Additional mitigation recommendations

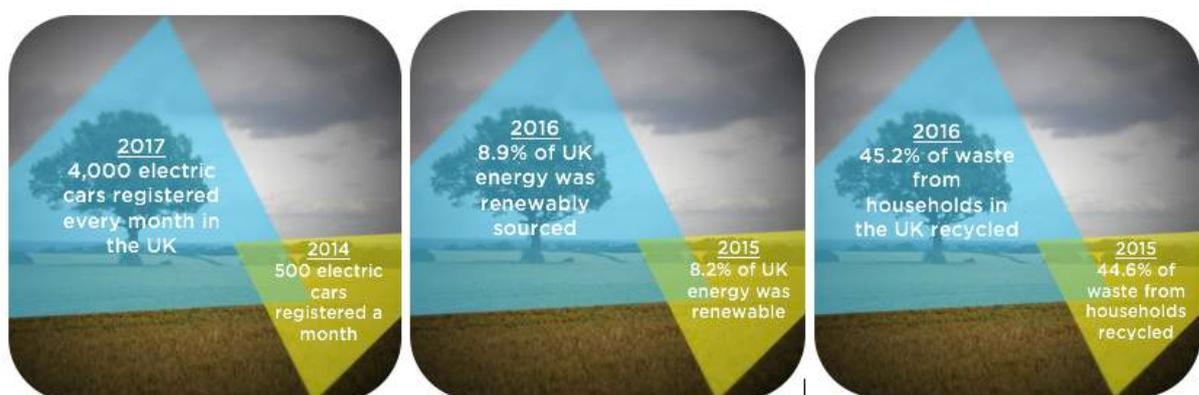
14.2.1 In order to help mitigate the potential residual adverse impacts of development proposed in the Local Plan (see **Table 14.1**), it is recommended that the Council seek and maximise all opportunities to require or encourage proposals and developers to conserve and enhance native vegetation cover. Vegetation should be comprised of native species and connected via corridors and stepping stones and protected with buffer zones.

14.2.2 Achieving a net increase in vegetation cover will be likely to provide significantly positive impacts for various aspects of sustainability, including landscape, cultural heritage, climate change mitigation, flood risk attenuation, air pollution, biodiversity, physical and mental health of residents and the local economy.

14.2.3 The Local Plan will help to ensure that development in the Plan area is in accordance with the existing local townscape character and setting. It is recommended that development is also encouraged to be in accordance with the local ecological network. Developers, residents, landowners and managers of open spaces should be encouraged to adopt a cooperative approach that connects buildings, gardens and public spaces to create a vibrant and diverse network of interconnected species and habitats. Such a network would enhance the quality of life for local residents as well as the overall sustainability of the local community whilst also providing significant benefits to Priority Species in the Plan area.

14.3 Trends in Rossendale and the UK

14.3.1 The Local Plan will not be adopted in a 'vacuum' and the potential residual impacts should be considered within the wider context of national and local trends including:



- **Electric vehicles;** In 2014 around 500 electric cars were registered per month in the UK. In 2017, just under 4,000 electric cars were registered per

month. In January 2018, electric cars constituted 2.9% of all new cars sold in the UK, up from 1.3% in January 2016⁷². The sale of diesel cars will be banned in the UK by 2040. Road transport associated air pollution may therefore be expected to decrease over time;

- **Renewable energy;** In line with the Renewable Energy Directive⁷³, the UK is aiming to meet 20% of its total energy demand using renewables. The UK is on course to achieve this, with renewable energy accounting for 8.9% of energy in 2016, up by 0.7% from 2015⁷⁴;
- **Biodiversity loss;** 56% of monitored species are in decline whilst 40% are showing strong or moderate declines⁷⁵;
- **Recycling rates;** Rates of recycling of waste from households is steadily increasing in the UK, rising from 44.6% in 2015 to 45.2% in 2016. In line with EU targets, the UK is aiming for 50% by 2020; and
- **Climate change;** Flood risk, soil erosion and sensitivity of biodiversity assets will be exacerbated by climate change.

14.4 Evolution without the Plan

14.4.1 The SEA Directive requires “*information on the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme*”.

14.4.2 The SA Scoping⁷⁶ report considered the likely evolution of the environmental baseline in the absence of the Local Plan (see **Table 14.2**). This section of the report will consider the likely evolution of the environmental baseline in the absence of the Local Plan in light of the residual impacts identified in **Table 14.1**.

⁷² <http://www.nextgreencar.com/electric-cars/statistics/>

⁷³ Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources

⁷⁴ ONS (2016) Renewable energy, national statistics 2016

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/622815/Renewable_energy_in_2016.pdf

⁷⁵ State of Nature (2016) State of Nature Report 2016

⁷⁶ Rossendale Borough Council (2012) Scoping Report, Lives and Landscapes: Sustainability Appraisal, Strategic Environmental Assessment and Habitat Regulations Assessment

- 14.4.3 Without the Plan, development would still occur within the Plan area. It is uncertain the extent to which development may occur, what its spatial characteristics may be and whether it meets the needs of local residents. Without the Local Plan, the range of policies the Plan proposes would not be adopted. Given the significantly positive impact these policies will have on sustainability in the Plan area (see **Table 5.3**), it is likely that development in the Plan area would result in adverse impacts not expected to arise should the Plan be adopted.

Table 14.2: Likely evolution without the Plan

SEA Topic	Likely evolution without the Plan
Biodiversity, flora and fauna	<ul style="list-style-type: none"> • There would be a net reduction in vegetation to some extent, potentially interrupting the Ancient Woodland network and increasing habitat fragmentation. • Site developments would be unlikely to voluntarily adopt avoidance and mitigation measures.
Climate	<ul style="list-style-type: none"> • International and national GHG emissions reductions targets will be likely to help promote a reduced carbon footprint in the Plan area. Technological advances, such as renewable energy, electric vehicles and more efficient power grid infrastructure will occur with or without the Plan and these will be likely to significant reduce GHG emissions in the Plan area. • The population in the Plan area will rise, with or without the Plan, and these new residents will be responsible for GHG emissions to some extent.
Water	<ul style="list-style-type: none"> • The risk of flooding will likely be exacerbated in the Plan area as a result of climate change. • The Plan area’s population will rise, with or without the Plan, and net water demand in the Plan area will therefore also be likely to rise. • It is uncertain how water efficiency per capita may change. Given the Plan promotes improved water efficiency at homes, without the Plan water demand per capita may be significantly greater.
Soil	<ul style="list-style-type: none"> • Soil erosion and soil loss are occurring at significant rates throughout the country due to agriculture, climate change and urbanisation. Without the Plan, there could potentially be less development of previously undeveloped greenfields. However, climate change and agriculture, which are primary causes of soil loss, will continue to adversely impact soil in the Plan area.
Air pollution & transport	<ul style="list-style-type: none"> • Primary sources of air pollution in the UK are road transport, industry and European imports. There is therefore limited scope for the Plan to control air quality and it will be likely to worsen over time in line with national trends. • The Local Plan proposes several policies which will help to increase the rate of sustainable transport uptake amongst residents. Without the Plan, it is uncertain the extent to which residents may opt for low emission or sustainable transport modes.
Waste	<ul style="list-style-type: none"> • It is thought to be likely that, with or without the Plan, rates of reducing, reusing and recycling waste per capita will rise in the Plan area in line with national and international trends and targets. • It is uncertain the extent to which development may arise in the Plan area without the Plan. However, an increase in the local population would be expected and it is therefore thought to be likely that without the Plan net waste generation in the Plan area will rise to some extent.

14.5 Positive sustainability impacts of the Local Plan

14.5.1 The Local Plan is an opportunity for the Council to pursue sustainable development in the Plan area. In most cases, adverse sustainability impacts could be avoided or converted into a positive impact by adopting an appropriate and early avoidance or mitigation strategy. The Local Plan is anticipated to result in a range of positive impacts on sustainability, which are highlighted throughout the site and policy assessments in the appendices and summarised in **Table 14.3**.

Table 14.3: Likely positive sustainability impacts of the joint Local Plan

Positive impacts	
	Fluvial flood risk
1	The Local Plan is anticipated to direct residential development away from areas at risk of fluvial flooding, which will help ensure the Plan area and its residents are well placed to adapt to climate change associated extreme weather.
	Employment
2	The Local Plan is anticipated to lead to a significant increase in employment opportunities and commercial floor space in the Plan area. This will help ensure all residents have access to employment opportunities which help to enable them to live a higher quality life.
	Housing
3	The development proposed in the Local Plan would make a significant contribution towards meeting the various housing needs in the Plan area, including the quantity, distribution and affordability.
	Physical and mental health
4	The Local Plan is anticipated to help ensure that residents in the Plan area have access to a range of health facilities, including GP surgeries, hospitals and natural habitats. This will be likely to help ensure residents can pursue physically and mentally healthy lifestyles.
	Transport
5	The Local Plan is anticipated to help ensure that residents will have convenient access to frequent, affordable and sustainable modes of transport. Where this is currently not the case, it is likely that policies in the Local Plan will help ensure that the sustainable transport options are improved.
	Efficient use of land
6	The Local Plan seeks out opportunities for using previously developed and brownfield land. The efficient use of land proposed in the Local Plan will help to avoid unnecessary losses of natural resources such as soil whilst helping to avoid losses of open spaces and adverse impacts on Objectives such as biodiversity.

15 Conclusions and next steps

15.1 Conclusions

15.1.1 This Environmental Report has identified the positive and adverse environmental effects of the Regulation 19 version of the Rossendale Local Plan, and has incorporated the requirements of Sustainability Appraisal and Strategic Environmental Assessment.

15.1.2 This report is subject to consultation with the statutory bodies as well as the public.

15.2 Monitoring

15.2.1 Article 10 (1) of the SEA Directive states:

“Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.”

15.2.2 The purpose of monitoring is to measure the environmental effects of the Plan as well as its success against its objectives. However, monitoring can place heavy a burden on financial and human resources and it may therefore be practical to focus on monitoring significant adverse effects and to build on existing monitoring systems.

15.2.3 Monitoring the impacts of the Local Plan should seek to answer:

- Were the likelihood of sustainability impacts identified in the SA process accurate?
- Is the Local Plan successful in achieving its desired sustainability objectives?
- Are mitigation measures performing as expected?
- Are there any unforeseen adverse impacts of the Local Plan, and are these within acceptable limits or is remedial action required?

15.2.4 Monitoring proposals are set out in **Table 15.4**.

15.3 Next steps

15.3.1 This report represents the latest stage of the SA process. A six week period of consultation under the Town and Country Planning Act will offer individuals, businesses and other organisations to submit representations regarding the pre-submission Local Plan.

15.4 Commenting on the SA

15.4.1 Any comments on this SA report should be directed towards the Planning Policy teams at forwardplanning@rossendalebc.gov.uk.

Table 15.1: Proposals for monitoring adverse sustainability impacts of the Local Plan

Adverse effect	Indicator	Scale and frequency	Trigger
Heavy reliance on personal car use	Traffic flows on A roads and motorways	Annually, along key routes	Traffic flow increases year on year e.g. DfT AADT counts ⁷⁷
	Rates of public transport uptake	Annually, Plan-area wide	Rates of uptake declining or showing no signs of improvement
Increase in GHG emissions and energy consumption	Proportion of energy from renewable sources and carbon footprint of the borough	Annually, Plan-area wide	Year on year increases in the use of coal and oil sourced energy e.g. DBEIS statistics on local authority energy consumption ⁷⁸
Degradation of sensitive landscapes	Loss of key landscape features due to development	Annually, Plan-area wide	Year on year increases in quantity of development approved in sensitive LCTs
Degradation and loss of biodiversity and habitats	Quality, connectivity and species richness of habitats	Important biodiversity sites of the borough	Year on year loss of important habitats or species e.g. Condition of SSSIs ⁷⁹ and IWSs

⁷⁷ <https://www.dft.gov.uk/traffic-counts/index.php>

⁷⁸ <https://www.gov.uk/government/statistical-data-sets/total-final-energy-consumption-at-regional-and-local-authority-level>

⁷⁹ <https://designatedsites.naturalengland.org.uk/>

Appendix A: SA Framework

SA Objective		Decision making criteria: Will the option/proposal...		Indicators (this list is not exhaustive)
1	Landscape: Protect and enhance high quality landscapes and townscapes in the Borough, especially those that contribute to local distinctiveness.	Q1a	Will it safeguard and enhance character and local distinctiveness?	<ul style="list-style-type: none"> • Landscape Character Assessment - key characteristics • Number of planning refusals due to impact on landscape • Impact of development on areas within the Green Belt • ANGST standards for green space
		Q1b	Will it compromise the purpose of the Green Belt e.g. will it lead to coalescence of settlements and/or urban sprawl?	
		Q1c	Will it improve access for high quality public open space, natural green space and the open countryside?	
2	Cultural heritage: To conserve and enhance the historic environment, heritage assets and their settings.	Q2a	Protect and enhance the historic environment. This includes assets of historical and archaeological importance and their setting, contributing to the cultural and tourism offer of the borough.	<ul style="list-style-type: none"> • Number of Listed Buildings in Rossendale • Number of demolitions of listed buildings • % of assets on Heritage at Risk Register • % of conservation areas at risk • Tourism expenditure in the borough
		Q2b	Ensure that new development relates well to the character of the existing landscape and townscape, maintaining and strengthening local distinctiveness and sense of place.	
		Q2c	Encourage the use of the borough's historic and cultural features for tourism, development and recreation.	
		Q2d	Improve the provision of leisure, tourist and cultural facilities to increase local spend and increase employment opportunities.	
3	Biodiversity and geodiversity: To protect, enhance and	Q3a	To ensure that new development does not impact upon the condition of sites of biodiversity interest including SSSIs and other local designations.	<ul style="list-style-type: none"> • Change in priority habitats and change in priority species • Change in areas designated for their

	manage biodiversity and geodiversity in Rossendale.	Q3b	To protect Natura 2000 sites from the adverse effect of human activity, pollution and climate change.	biodiversity value <ul style="list-style-type: none"> • Area of new habitat created • Condition of SSSIs (favourable / unfavourable / destroyed (wholly or in part)) • Number of developments including schemes to benefit biodiversity • Biodiversity Action Plan targets
		Q3c	To promote habitat provision and enhancement within new developments and existing habitats.	
4	Water and flooding: Protect, enhance and manage Rossendale's waterways and to sustainably manage water resources	Q4a	To promote sustainable design and construction measures which reduce water consumption and result in decreased run-off of polluted water (including during construction phase).	<ul style="list-style-type: none"> • Number of planning permissions granted contrary to the advice of the EA on water quality grounds • Area of new greenspace per capita • Length of watercourses of good biological and chemical quality • Daily Domestic Water Use (per capita consumption) • Number of applications including SUDS • Number of properties at risk of flooding
		Q4b	Reduce risk of fluvial flooding.	
		Q4c	Ensure efficient use and management of water resources addressing a potential increase in demand.	
		Q4d	Reduce unsustainable practice agricultural practices, particularly in Nitrate Vulnerable Zones to reduce diffuse pollution or poor quality effluent returns.	
		Q4e	Reduce risk of localised flooding, including surface water flooding.	
		Q4f	Maintain and improve the qualitative status of groundwater in the borough, particularly the chemical status of groundwater.	
		Q4g	Ensure new development incorporates SUDS where appropriate.	
5	Natural Resources (air quality, soil and	Q5a	Ensure safeguarding of mineral resources and the efficient use of primary natural resources.	<ul style="list-style-type: none"> • Condition of geological SSSIs (favourable / unfavourable / destroyed (wholly or in part))

	<p>minerals): To ensure the efficient use of natural resources in Rosendale.</p>	Q5b	To ensure that new development does not impact upon the condition of sites of geological interest, including geological SSSI and RIGS.	<ul style="list-style-type: none"> • Area of contaminated land in the borough • Number of developments on previously developed land
		Q5c	To protect and enhance soil quality in Rosendale.	
		Q5d	Develop brownfield sites where these can support wider Sustainability Objectives (e.g. reduce travel by car, improve the public realm, avoid loss of biodiversity, gardens, etc.). Re-use vacant buildings.	
		Q5e	Ensure new development will not result in contamination of land and promote the remediation and regeneration of the large areas of existing contaminated land.	
6	<p>Climate change mitigation: To minimise the requirement for energy use, promote efficient energy use and increase the use of energy from renewable sources.</p>	Q6a	Promote high sustainable construction standards for housing and non-housing development, in order to ensure that Rosendale meets the Governmental target of all new residential buildings being zero carbon by 2016 and the relevant targets for non-residential development.	<ul style="list-style-type: none"> • Amount of energy produced by renewable energy sources • Provision of renewable energy in development • Areas of new greenspace created per capita • CO2 emissions by sector and per capita
		Q6b	Clear guidelines and support of the renewable energy courses in new and existing developments to increase renewable energy production in the borough.	
		Q6c	Support the use of GI to provide flood storage and urban cooling to support climate change mitigation.	
		Q6d	Reduce domestic, industrial and commercial consumption of gas and electricity.	
		Q6e	Maintain trend of lowest emitter of CO2 in Lancashire and seek to further reduce the volume of CO2 emissions.	

7	Climate change adaptation: To promote adaptation to Rossendale's changing climate.	Q7a	Seek to provide a built environment that is appropriate for the predicted changes in local weather conditions and that is resilient to extreme weather events.	<ul style="list-style-type: none"> • Number of applications incorporating improvements to the living network of GI - both rural and urban • Connectivity of GI • Change in habitat connectivity • Number of planning permissions granted contrary to the advice of the EA on flood risk grounds
		Q7b	Avoid further seeking development in location at risk from flooding and mitigate any residual flood risk through appropriate measures including design.	
		Q7c	Increase the quantity and quality of GI in both urban and rural areas of the borough.	
8	Human health: To improve physical and mental health and well-being of people and reduce health inequalities in Rossendale	Q8a	Provide improved access to education, skills and training facilities, health, recreation and leisure facilities, cultural and tourist attractions on food, cycle and public transport.	<ul style="list-style-type: none"> • Life expectancy • Adult participation in sport and active recreation • Amount of new residents within 30 minutes public transport of a GP and a hospital
		Q8b	Promote healthy and active lifestyles through encouraging walking and cycling.	
		Q8c	Encourage people to access and enjoy the natural environment: including amenity green space and outdoor sports provision in Rossendale.	
9	Material assets: To ensure sustainable management of waste, minimise its production and increase re-use, recycling and recovery rates	Q9a	Encourage recycling of waste, reducing the proportion that goes to landfill in the borough.	<ul style="list-style-type: none"> • Number and capacity of waste management facilities • Reuse of recycled materials
		Q9b	Will it minimise and where possible eliminate production of waste?	
10	Housing: Provide a range of affordable,	Q10a	Provide a mix of good-quality housing, including homes that are suitable for first-time buyers.	<ul style="list-style-type: none"> • Varied housing mix • Percentage of dwellings delivered as

	environmentally sound and good quality housing which meet the needs of the community of Rossendale.	Q10b	Provide supported housing and sheltered housing options in order to meet the needs of an ageing population the borough.	affordable housing <ul style="list-style-type: none"> • Number of extra care homes • Number of people on housing waiting list
		Q10c	Coordinate housing provision with investment in employment and community services to ensure that settlements meet the needs of their communities.	
		Q10d	Provide decent, good quality, affordable homes	
11	Employment: Location in the borough: To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.	Q11a	Reduce number of vacant retail properties across the borough.	<ul style="list-style-type: none"> • Amount of floor space developed for employment • Amount of employment land lost to residential development • Number of residents claiming jobseekers allowance • Average household income
		Q11b	Promote employment opportunities that more closely match the skills of local people.	
		Q11c	Reduce dependency on manufacturing industries and promote development that diversifies the economic base.	
		Q11d	Provide support for economic development that reduces out commuting by developing strategic economic infrastructure and identifying sites for development.	
12	Employment: Skills: To improve education, skills and qualifications in the Borough and provide opportunities for lifelong learning.	Q12a	Promote good access to educational and training opportunities for all sectors of the population, particularly amongst deprived communities.	<ul style="list-style-type: none"> • % of Year 11 pupils educated to NVQ levels 2, 3 or 4 • % of the population with no or low qualifications
		Q12b	Improve the number of residents achieving NVQ3 or NVQ4.	
13	Transport: Improve the choice and use of sustainable transport in	Q13a	To improve the provision and quality of bus services and public rights of way in Rossendale to reduce dependence on the private vehicle, especially for journeys to work.	<ul style="list-style-type: none"> • Vehicle ownership • Distance travelled to work • Amount of new residential development

	Rossendale and reduce the need to travel.	Q13b	Develop and maintain safe, efficient and integrated transport networks within Rossendale, with good internal and external links.	within 30 minutes public transport time of a GP, a hospital, a primary school, areas of employment and a major retail centre
		Q13c	Promote healthy and active lifestyles through encouraging walking and cycling.	

Appendix B

Sites Assessments

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1.1 Background

1.1.1 Each site proposal in the Rossendale Local Plan has been assessed for its likely impacts on each objective of the SA Framework (see **Appendix A**). **Chapter 4** of this report explains the methodology behind the assessment process. The Framework includes thirteen objectives (see **Table B.1**).

1.1.2 The assessments in this chapter identify the potential impact of each site proposal when considered alone. **Chapters 6 – 13** of this report identify the potential cumulative impacts of all site proposals in-combination. The mitigating impact of the development management policies proposed in the Local Plan are also accounted for in **Chapters 6 – 13**, with the residual impacts (i.e. those adverse impacts of the Local Plan which are unlikely to be entirely mitigated by policies in the Local Plan) discussed in **Chapter 15**.

1.2 Overview of assessments

1.2.1 This report has identified the potential impacts of each site proposal on each SA Objective. This is summarised in the form of an SA Scoring Matrix, which provides an indication of whether the proposal will be likely to have a positive or adverse impact on each objective and the extent to which it may do so. **Chapter 4** provides a guide to the SA Scoring system, which is repeated in **Table B.2** below for ease of reading.

1.2.2 The SA Scoring Matrix for each site proposal has been brought together in **Table B.3**. This provides a brief overview of the results of the assessment process and the extent to which positive or adverse impacts, and whether these might be major or minor, are anticipated for each objective. The sections of this chapter following **Table B.3** provide a detailed overview of the adverse impacts anticipated for each SA Objective.

Table B.1: Objectives of the SA Framework

SA Objective 1: Landscape	Protect and enhance high quality landscapes and townscapes in the Borough, especially those that contribute to local distinctiveness
SA Objective 2: Cultural Heritage	To conserve and enhance the historic environment, heritage assets and their settings
SA Objective 3: Biodiversity and Geodiversity	To protect, enhance and manage biodiversity and geodiversity in Rossendale
SA Objective 4: Water and Flooding	Protect, enhance and manage Rossendale's waterways and to sustainably manage water resources
SA Objective 5: Natural Resources	To ensure the efficient use of natural resources in Rossendale (air quality, soil and minerals)
SA Objective 6: Climate change mitigation	To minimise the requirement for energy use, promote efficient energy use and increase the use of energy from renewable sources
SA Objective 7: Climate change adaptation	To promote adaptation to Rossendale's changing climate
SA Objective 8: Human health	To improve physical and mental health and well-being of people and reduce health inequalities in Rossendale
SA Objective 9: Material assets	To ensure sustainable management of waste, minimise its production and increase re-use, recycling and recovery rates
SA Objective 10: Housing	Provide a range of affordable, environmentally sound and good quality housing which meet the needs of the community of Rossendale
SA Objective 11: Employment: Location in the borough	To support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth
SA Objective 12: Employment: Skills	To improve education, skills and qualifications in the Borough and provide opportunities for lifelong learning
SA Objective 13: Transport	Improve the choice and use of sustainable transport in Rossendale and reduce the need to travel

Table B.2: Guide to impact significance

		Impact magnitude					
		Adverse		Neutral or Negligible	Positive		Uncertain
		High	Low		Low	High	
Scale & Sensitivity	International / National (Higher)	Major --	Minor -	0	Minor +	Major ++	+/-
	Regional / Local (Lower)	Major --	Minor -	0	Minor +	Major ++	+/-

Table B.3: SA Scoring Matrix for all 96 site proposals in the Regulation 19 Plan

Allocation ref	Landscape	Cultural heritage	Biodiversity	Flooding	Natural resources	C. C. Mitigation	C. C. Adaptation	Health	Material Assets	Housing	Employment: Location	Employment: Skills	Transport & Accessibility
H1	0	+	0	+	+	-	0	+	-	+	+	++	+
H10	-	-	0	+	-	-	-	+	-	+	+	++	+
H11	0	0	0	-	-	-	-	+	-	+	+	++	+
H12	0	-	0	-	-	-	-	++	-	+	+	++	+
H13	0	0	-	-	+	-	0	+	-	++	+	+	+
H14	-	-	0	+	+	-	-	-	-	+	+	-	+
H15	-	-	0	+	-	-	-	+	-	+	+	++	+
H16	0	-	0	+	-	-	-	++	-	+	+	++	+
H17	-	0	0	+	-	-	-	++	-	+	+	++	-
H18	-	0	0	+	-	-	-	-	-	+	+	+	+
H19	-	-	0	-	-	-	-	-	-	+	+	++	+
H2	0	-	0	+	+	0	+	+	-	+	+	++	+
H20	-	0	0	+	-	-	-	-	-	+	+	++	+
H21	0	+	0	+	+	-	0	+	-	+	+	+	+
H22	0	-	0	-	+	-	-	+	-	+	+	+	+
H23	0	-	0	-	+	0	+	+	-	+	+	+	+
H24	0	0	-	+	+	0	+	-	-	+	+	++	+
H25	0	-	-	+	+	0	+	-	-	+	+	++	+
H26	0	0	0	+	-	-	-	-	-	+	+	++	-
H27	0	-	0	+	-	-	-	-	-	+	+	+	+
H28	0	0	0	+	-	-	-	-	-	+	+	++	+
H29	-	0	0	-	-	-	-	+	-	+	+	++	+
H3	-	0	0	-	+	-	-	+	-	+	+	++	+
H30	0	0	0	+	-	-	-	+	-	+	+	+	+
H31	-	0	0	+	-	-	-	-	-	+	+	+	+
H32	0	0	0	+	-	-	-	-	-	+	+	+	+
H33	0	0	-	+	-	-	-	-	-	+	+	++	+
H34	0	0	0	-	-	-	-	-	-	+	+	+	+
H35	0	0	0	+	-	-	0	+	-	+	+	+	+
H36	0	0	-	-	+	-	0	-	-	+	+	++	+
H37	0	-	0	+	+	0	+	-	-	+	+	++	+
H38	0	-	0	+	-	-	-	-	-	+	+	+	+
H39	-	0	0	+	-	-	-	-	-	+	+	+	+
H4	-	0	0	+	-	-	-	+	-	+	+	+	+
H40	-	0	0	+	-	-	-	-	-	+	+	+	-
H41	-	-	0	+	-	-	-	-	-	+	+	+	+
H42	0	0	0	+	-	-	-	-	-	+	+	+	+
H43	-	0	0	+	-	-	-	-	-	+	+	+	+
H44	-	0	0	+	-	-	-	-	-	+	+	+	+
H45	-	0	0	+	-	-	-	-	-	+	+	-	-
H46	-	-	0	+	+	0	+	++	-	+	+	++	+
H47	0	0	0	+	+	0	+	++	-	+	+	++	+
H48	-	0	0	+	-	-	-	+	-	+	+	++	-
H49	-	0	0	+	-	-	-	++	-	+	+	++	+
H5	-	0	0	-	-	-	-	-	-	+	+	-	+
H50	0	0	0	+	-	-	-	++	-	+	+	++	+
H51	0	0	0	+	-	-	-	++	-	+	+	++	+
H52	0	-	0	+	+	-	-	++	-	+	+	++	+
H54	-	-	0	+	-	-	-	+	-	+	+	++	+
H55	0	0	0	-	+	0	+	+	-	+	+	++	+
H56	0	0	0	+	-	-	-	-	-	+	+	++	+
H57	0	0	0	+	+	-	0	+	-	+	+	++	+

H58	0	0	0	+	+	-	0	+	-	+	+	++	+
H59	-	0	0	+	-	-	-	-	-	+	+	++	+
H6	-	0	0	+	-	-	-	-	-	+	+	-	+
H60	0	0	-	+	-	-	-	+	-	+	+	++	+
H61	-	-	0	+	-	-	-	+	-	+	+	++	+
H62	-	-	0	-	-	-	-	+	-	++	+	++	+
H63	-	-	-	+	-	-	-	-	-	+	+	++	+
H64	-	-	0	+	-	-	-	+	-	+	+	++	+
H65	-	-	0	+	-	-	-	-	-	+	+	++	+
H66	-	-	0	+	-	-	-	-	-	+	+	+	+
H67	0	-	0	--	+	-	-	++	-	+	+	++	+
H68	-	-	0	-	-	-	-	+	-	+	+	++	+
H69	-	-	0	+	-	-	-	-	-	+	+	++	+
H7	-	-	0	+	-	-	-	-	-	+	+	+	+
H70	-	0	-	-	+	-	0	-	-	++	+	++	+
H71	-	-	0	--	+	-	-	++	-	+	+	++	-
H72	-	-	-	--	-	-	-	-	-	+	+	++	-
H73	0	-	0	+	+	-	0	-	-	+	+	+	+
H74	-	-	-	-	--	--	0	-	--	++	+	+	+
H75	0	0	0	--	-	-	-	-	-	+	+	+	+
H76	-	-	-	+	-	-	-	+	-	++	+	+	+
H8	0	0	0	+	-	-	-	-	-	+	+	++	+
M1	-	-	0	+	+	-	0	+	-	+	++	+	+
M2	0	-	0	-	+	0	+	+	-	+	+	++	+
M3	-	0	0	+	-	-	-	-	-	+	++	+	+
M4	-	-	-	--	-	-	-	-	-	+	++	+	+
M5	-	-	-	--	+	-	0	-	-	+	++	++	+
M6	-	-	0	+	-	-	-	-	-	+	++	++	+
NE1	-	-	-	--	-	-	0	-	-	+	++	++	+
NE2	-	0	0	+	-	-	-	0	-	0	++	0	+
NE3	-	-	-	-	-	-	-	0	-	0	++	0	-
NE4	-	-	0	+	-	-	-	0	-	0	++	0	-
NE5	-	-	0	-	-	-	-	0	-	0	++	0	+

1.3 SA Objective 1: Landscape

1.3.1 Each site proposal has been assessed for the extent to which it may be likely to help protect and enhance high quality landscapes and townscapes in the Borough, especially those that contribute to local distinctiveness. In particular, each site proposal has been assessed for its potential impacts on landscape designations as well as the potential impacts on the local landscape and townscape character and sensitive views.

1.3.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Landscape objective include:

- Baseline data on Landscape Character Types (LCTs) within the Plan area are derived from the 2014 Landscape study¹. Features and the condition of each LCT have informed the appraisal of each Plan proposal on the Landscape objective;
- The majority of site proposals are within the Settled Valleys LCT. This LCT is partially typified by a linear pattern of urban settlement along the valley floor and site proposals will be likely to be in-keeping with this;
- Other LCTs, including the Reservoir Valleys, Moorland Fringes/Upland Pastures and Enclosed Uplands LCT are considered to have less capacity for new development which avoids adverse impacts on sensitive features and views;
- Site proposals which may alter views of a predominantly rural or countryside landscape, for a variety of receptors including local residents, are assumed to have adverse impacts on the landscape objective;
- It is expected that the Council will require developers to prepare Landscape and Visual Impact Assessments (LVIAs) for site proposals where relevant;
- No AONBs, National Parks, Regional Parks or Country Parks are within the Plan area and no such a designation will be adversely impacted by the Plan proposal; and
- Lepus has completed site visits to understand the salient features and character of strategic sites as well as a limited number of smaller allocations.

1.3.3 No major adverse impacts of any site proposal are anticipated for the landscape objective. All minor adverse impacts identified during the assessments are presented and explained in **Table B.4**, along with their likely magnitude and permanence as well as the site proposals which could potentially cause them.

¹ Available online at: https://www.rossendale.gov.uk/info/210148/local_plan/10635/

Table B.4: Potential minor adverse impacts of site proposals on the landscape objective

Landscape Objective - Minor Adverse Impact L1	
Potential impact	The proposed development could potentially result in the loss of important features of the Enclosed Uplands Landscape Character Type, including abandoned fields and crumbling walls.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the landscape objective. It would be likely to be long term but with good scope for effective mitigation through careful layout and design.
Landscape Objective - Minor Adverse Impact L2	
Potential impact	The proposed development could potentially result in the loss of important features of the Reservoir Valleys Landscape Character Type, including woodland, wetland, gently sloping sides and an absence of settlement.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the landscape objective. It would be likely to be long term but with good scope for effective mitigation through careful layout and design.
Landscape Objective - Minor Adverse Impact L3	
Potential impact	The proposed development could potentially result in the loss of important features of the Moorland Fringes/Upland Pastures Landscape Character Type, including a sense of openness, long views, irregular fields and a dispersed settlement pattern.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the landscape objective. It would be likely to be long term but with good scope for effective mitigation through careful layout and design.
Landscape Objective - Minor Adverse Impact L4	
Potential impact	The proposed development is of a greenfield site and would be likely to diminish views of a countryside and rural nature for sensitive receptors including local residents and/or users of the local PRoW network.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the landscape objective. It would be likely to be long term but with good scope for effective mitigation through careful layout and design as well as the application of native vegetation for screening.
Landscape Objective - Minor Adverse Impact L5	
Potential impact	The proposed development could potentially constitute a minor extension of the urban built form into the countryside , thereby altering the local landscape and townscape character.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the landscape objective. It would be likely to be a permanent impact with limited scope for mitigation.

1.4 SA Objective 2: Cultural heritage

1.4.1 Each site proposal has been assessed for the extent to which it may be likely to help conserve and enhance the historic environment, heritage assets and their settings. In particular, each site proposal has been assessed for its potential impacts on heritage assets in the Borough, including Grade I, Grade II* and Grade II Listed Buildings.

1.4.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Cultural Heritage objective include:

- Impacts on heritage assets will be largely determined by the specific layout and design of development proposals. These are currently unknown and therefore the likelihood, extent and permanence of effects on heritage assets is somewhat uncertain at this stage. In line with the precautionary principle², where adverse impacts cannot be ruled out and where there is no evidence that shows how the potential adverse effects will not arise, the adverse effects are assumed to occur. This is reflected in the scoring for each Plan proposal;
- It is assumed that, where heritage assets coincide with a site proposal, the heritage asset will not be lost as a result of development (unless otherwise specified by the Council). This is assumed for all heritage assets, including Listed Buildings, Scheduled Ancient Monuments and Registered Parks and Gardens;
- Where a Listed Building coincides with a site proposal, it is assumed that the setting of the Listed Building will be permanently altered and a major adverse score is awarded unless evidence is available to prove otherwise;
- In the absence of evidence which suggests otherwise, adverse impacts on the character of Conservation Areas are assumed to arise where development proposals coincide with, are adjacent to or are viewable from Conservation Areas;
- Adverse impacts on Grade I and Grade II* Listed Buildings are considered to be more severe than adverse impacts on Grade II Listed Buildings; and
- Adverse impacts on heritage assets are predominantly associated with impacts on the existing setting of the asset and the character of the local area, as well as adverse impacts on views of, or from, the designation for receptors.

² The **precautionary principle** has four central components: taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making.

1.4.3 No site proposal is anticipated to have a major adverse impact on the cultural heritage objective (see **Table B.5**).

Table B.5: Minor adverse impacts on the cultural heritage objective

Cultural Heritage Objective - Minor Adverse Impact CH1	
Potential impact	The proposed development is expected to be viewable from a Grade II* Listed Building . It is uncertain whether the development layout and design will adversely impact these views or potentially enhance them. Where the site proposals are brownfield or previously developed, adverse impacts on views are likely to be less severe. A minor adverse impact on views from a Grade II* Listed Building cannot be ruled out for each site.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the cultural heritage objective. It would be likely to be long term but with good scope for effective mitigation by incorporating high quality design, local materials and native screening vegetation into the proposal.
Cultural Heritage Objective - Minor Adverse Impact CH2	
Potential impact	The site proposal is adjacent to a Grade II Listed Building and it is thought to be likely that the development will result in a minor alteration to the setting, or character of the local area, for the Listed Building. Each site is at least partially brownfield and adverse impacts are therefore likely to be less severe with the development potentially enhancing the site's contribution to the local character. It is currently uncertain the extent to which this may be the case and a minor adverse impact on the setting of these assets, during both the construction and occupation phases, cannot be ruled out.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the cultural heritage objective. It would be likely to be long term but with good scope for effective mitigation by incorporating high quality design, local materials and native screening vegetation into the proposal.
Cultural Heritage Objective - Minor Adverse Impact CH3	
Potential impact	The proposed development is expected to be viewable from a Grade II Listed Building . It is uncertain whether the development layout and design will adversely impact these views or potentially enhance them. Where the site proposals are brownfield or previously developed, adverse impacts on views are likely to be less severe and the development could potentially enhance the site's contribution towards the local character. Development of greenfield sites is unlikely to enhance views. A minor adverse impact on views from a Grade II Listed Building cannot be ruled out for each site.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the cultural heritage objective. It would be likely to be long term but with good scope for effective mitigation by incorporating high quality design, local materials and native screening vegetation into the proposal.
Cultural Heritage Objective - Minor Adverse Impact CH4	
Potential impact	The proposed development could potentially alter the character of a Conservation Area . This is because it is within, adjacent to or viewable from the Conservation Area. Where the site proposals are brownfield or previously developed, adverse impacts on views are likely to be less severe and the development could potentially enhance the site's contribution towards the local character. Development of greenfield sites is unlikely to enhance character.

Magnitude
and
permanence

This impact would be considered to be a minor adverse impact on the cultural heritage objective. It would be likely to be long term but with good scope for effective mitigation by incorporating high quality design, local materials and native screening vegetation into the proposal.

1.5 SA Objective 3: Biodiversity and Geodiversity

1.5.1 Each site proposal has been assessed for the extent to which it may be likely to help protect, enhance and manage biodiversity and geodiversity in Rossendale. In particular, site proposals have been assessed for their potential impacts on designations including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Information (SSSIs), Ancient Woodland, nature reserves (national and local), Important Wildlife Sites as well as priority habitats and species. Where negligible impacts are identified, the site could potentially still be contributing towards a cumulative adverse impact on this objective. Cumulative effects are assessed in **Chapters 6 – 12**.

1.5.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Biodiversity and Geodiversity objective include:

- Best available secondary data has been used to inform the assessments of Plan proposals. Lepus has not completed ecological surveys of site proposals;
- It is assumed that the loss of biodiversity assets, such as a stand of Ancient Woodland or an area of Priority Habitat, are permanent effects with limited scope for mitigation;
- Where a site proposal coincides with a biodiversity designation, such as a SSSI or a stand of Ancient Woodland, it is assumed that some or all of the biodiversity designation will be lost as a result of development;
- Major adverse scores are awarded where site proposals coincide with biodiversity designations;
- Where a site proposal is adjacent to a biodiversity designation, it is assumed that adverse effects will arise to some extent. Adverse effects are commonly associated with the impacts of the construction phase (e.g. habitat fragmentation and noise, air and light pollution associated with the construction process and construction vehicles) as well as the operation/occupation phase (e.g. increases in public access associated disturbances, increases in local congestion resulting in a reduction in air quality at the designation and the increased risk of pet predation);

- Major adverse scores are awarded where site proposals are adjacent to international and national designations (including SACs, SPAs, Ramsar sites, SSSIs and National Nature Reserves);
- Where a site proposal will have no impact on a biodiversity designation, a negligible score is awarded;
- During the assessment of cumulative impacts, it is assumed that construction and occupation of previously undeveloped green fields will result in a net reduction in vegetation cover in the Plan area. Proposals which will result in the loss of a green field are therefore expected to contribute towards a cumulative loss in vegetation cover; and
- It is assumed that detailed surveys to determine the presence of Priority Species or Priority Habitats protected under the NERC Act³ will be undertaken prior to planning permission being granted for any site allocation currently without permission.

1.5.3 Although some site proposals are assessed as having a negligible impact on the biodiversity and geodiversity objective, it is important to note that these site proposals may still be contributing towards a cumulative adverse impact. Cumulative impacts on the biodiversity objective are addressed in the main body of this report. No site proposal is anticipated to have a major adverse impact on the biodiversity and geodiversity objective. Overall, four different types of minor adverse impact have been identified at a range of site proposals (see **Table B.6**).

³ Natural Environment and Rural Communities Act 2006. Available at:
<http://www.legislation.gov.uk/ukpga/2006/16/contents> Accessed 01.12.17

Table B.6: Minor adverse impacts on the biodiversity and geodiversity objective

Biodiversity and Geodiversity Objective - Minor Adverse Impact BG1	
Potential impact	The site proposal is within the Impact Risk Zone of a SSSI . The quantity and type of the proposed development indicates that Natural England should be consulted on for the potential impacts of the development proposal on the SSSI.
Magnitude and permanence	Natural England should be consulted on each site proposal in relation to the potential impacts of the development on the relevant SSSI. It is thought to be likely that adverse impacts will be minor due as the development proposals do not coincide, and are not adjacent, with the SSSI. Adverse impacts would be likely to come in the form of increased recreational pressures, loss of supporting habitat and potentially a minor reduction in air quality.
Biodiversity and Geodiversity Objective - Minor Adverse Impact BG2	
Potential impact	The site proposal is in close proximity to a stand of Ancient Woodland . A minor adverse impact on the woodland, as a result of; increased recreational pressures, loss of supporting habitat, fragmentation and a minor reduction in air quality, cannot be ruled out.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the biodiversity and geodiversity objective. There is considered to be very limited scope for mitigation due to the sensitivity of Ancient Woodland and the time it takes to reach a natural or semi-natural state.
Biodiversity and Geodiversity Objective - Minor Adverse Impact BG3	
Potential impact	A minor adverse impact on Healey Dell local nature reserve cannot be ruled out for each site. This is due to the impacts of construction (i.e. potential loss of supporting habitat, fragmentation and a minor reduction in air quality) as well as occupation of new homes and operation of new businesses (i.e. increase recreational pressures and a minor reduction in air quality).
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the biodiversity and geodiversity objective. There is considered to be good scope for mitigation through the conservation and enhancement of native vegetation within the site perimeters and by ensuring new residents have good access to a range of green spaces.
Biodiversity and Geodiversity Objective - Minor Adverse Impact BG4	
Potential impact	The proposed development is adjacent to an Important Wildlife Site or a Biological Heritage Site . It is thought to be likely that the construction and occupation of the proposed development will have a minor adverse impact on these biodiversity designations due to increased recreational pressures, a loss of supporting habitat and a minor reduction in air quality.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the biodiversity objective. It would be likely to be long term but with good scope for effective mitigation by conserving and enhancing wildlife within the site perimeters and ensuring residents have access to a range of greenspace alternatives.
Biodiversity and Geodiversity Objective - Minor Adverse Impact BG5	
Potential impact	The site proposal coincides with Stacksteads Gorge Local Geodiversity Site . A large quantity of development already exists within the gorge and any further impacts on geodiversity caused by development at this location are expected to be minor.
Magnitude and permanence	This impact would be considered to be a minor adverse impact on the biodiversity and geodiversity objective. It would be likely to be long term with no scope for mitigation.

1.6 SA Objective 4: Water and Flooding

1.6.1 Each site proposal has been assessed for the extent to which it may be likely to help protect, enhance and manage Rossendale's waterways and to sustainably manage water resources. In particular, individual site proposals were assessed for the extent to which it could potentially expose residents to flood risk. The impact of the Local Plan on water resources is assessed in the cumulative effects section in Chapters 6 – 12.

1.6.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Water and Flooding objective include:

- The level of fluvial and pluvial (surface water) flood risk present at each site is based on the Environment Agency's flood risk data, such that:
 - Flood Zone 3: 1% - 3.3+ % chance of flooding each year;
 - Flood Zone 2: 0.1% - 1% chance of flooding each year; and
 - Flood Zone 1: Less than 0.1% chance of flooding each year.
- It is assumed that development proposals will be in perpetuity and it is therefore likely that development will be subject to the impacts of flooding at some point in the future, should it be situated on land at risk of flooding;
- Where site proposals coincide with Flood Zone 2, a minor adverse score is awarded. Where site proposals coincide with Flood Zone 3, a major adverse score is awarded;
- Surface water flood risk: Areas of high risk have more than a 3.3% chance of flooding each year, medium risk between 1% - 3.3%, low risk between 0.1% and 1% and very low risk less than a 0.1% chance. Surface water flood risk is predominantly addressed in the cumulative effects assessment of the main body of this report. Where site proposals coincide with Surface Water Flood Risk (SWFR) of 1/30 year, this is identified on a site by site basis. Coinciding with SWFR will result in an adverse score for the flooding objective;
- Narrow and steep sided valleys are typical of Rossendale, with the majority of existing development and site proposals in the Plan situated along the valley floors. The nature of surface water flooding is such that it is most likely to occur along the valley floors and flood events have occurred at these locations of Rossendale in late modernity. Existing settlements, including Rawtenstall, Bacup and Waterfoot, are situated on land at risk of surface water flooding. The majority of site proposals, which are frequently situated near existing settlements, will also be exposed to surface water flood risk.

- It is assumed that proposals will at least be in accordance with the national mandatory water efficiency standard of 125 litres per person per day, as set out in the 2010 Building Regulations.
- It is assumed that all housing proposals in the Local Plan will be subject to appropriate approvals and licensing for sustainable water supply from the Environment Agency.
- The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (GSPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. No site proposals in the Plan are situated within a GSPZ.

1.6.3 Overall, one type of major adverse impact and two types of minor adverse impact has been identified for the water and flooding objective (see **Table B.7**).

Table B.7: Adverse impacts on the water flooding objective

Water and Flooding Objective - Major Adverse Impact WF1	
Potential impact	The site proposal coincides with Flood Zone 3 where there is an annual 1% - 3.3% risk of flooding.
Magnitude and permanence	Whilst the site’s perimeter coincides with Flood Zone 3, it is expected that the development will be directed towards land within the site where there is the lowest risk of flooding. In line with planning law and the NPPF, new development which is vulnerable to the impacts of flooding, such as new homes, will not occur on land where it is incompatible with the level of flood risk present ⁴ .
Water and Flooding Objective - Minor Adverse Impact WF1	
Potential impact	The site coincides with Flood Zone 2 (and not Flood Zone 3), where there is an annual 0.1% - 1% risk of flooding.
Magnitude and permanence	Whilst the site’s perimeter coincides with Flood Zone 3, it is expected that the development will be directed towards land within the site where there is the lowest risk of flooding. In line with planning law and the NPPF, new development which is vulnerable to the impacts of flooding, such as new homes, will not occur on land where it is incompatible with the level of flood risk present ⁵ .
Water and Flooding Objective - Minor Adverse Impact WF2	

⁴ Flood risk vulnerability and compatibility of development e.g. <https://www.leeds.gov.uk/docs/PLN%2075%20Flood%20risk%20Vulnerability,%20Flood%20Zone%20and%20Exception%20Test.pdf>

⁵ Flood risk vulnerability and compatibility of development e.g. <https://www.leeds.gov.uk/docs/PLN%2075%20Flood%20risk%20Vulnerability,%20Flood%20Zone%20and%20Exception%20Test.pdf>

Potential impact	The site coincides with Surface Water Flood Risk 1/30 years, i.e. there is a 3.3% chance of surface water flooding each year at this location.
Magnitude and permanence	Surface water flood risk is prevalent in the Borough. At many sites, there is a relatively minor extent of land which is at a high risk of surface water flooding in relation to the site size. It is considered to be likely that developers would be able to situate development away from the area of flood risk. However, given the high risk of flooding an adverse impact cannot be ruled out. This would be considered to be a permanent impact with limited scope for mitigation. The impact could potentially become increasingly severe should climate change exacerbate the risk and severity of flooding.

1.7 SA Objective 5: Natural Resources

1.7.1 Each site proposal has been assessed for the extent to which it may be likely to help ensure the efficient use of natural resources in Rossendale, including air, soil and minerals. In particular, site proposals were assessed for the extent to which they would result in the loss of previously undeveloped land or greenfields, which would subsequently result in a loss of non-renewable soils and minerals.

1.7.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Natural Resources objective include:

- In accordance with the core planning principles of the NPPF⁶, development on previously developed land (PDL) will be recognised as an efficient use of land. Development of previously undeveloped land and greenfields is not considered to be an efficient use of land;
- Development proposals for previously undeveloped or greenfield sites are expected to pose a threat to soil within the site perimeter due to excavation, soil compaction, erosion and an increased risk of soil pollution and contamination during construction;
- Site proposals which would result in the loss of greenfields, which as a proportion of the total Plan area (i.e. the total area of Rossendale) constitute *less* than 0.1%, are awarded with a minor adverse score;
- Site proposals which would result in the loss of greenfields, which as a proportion of the Plan area constitute *more* than 0.1%, are awarded with a major adverse score;
- Where the site proposal is of a previously developed brownfield, it is assumed that the site use will be intensified; and

⁶ Ministry of Housing, Communities and Local Government (2018) National Planning Policy Framework. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf

- The Agricultural Land Classification (ALC) system classifies land into five categories according to versatility and suitability for growing crops. The top three grades, Grade 1, 2 and 3a, are referred to as 'Best and Most Versatile' land. However, only Grade 4 and 5, as well as Urban land, are present in the Plan area.

1.7.3 Overall, two types of adverse impact were identified for the natural resources objective (see **Table B.8**).

Table B.8: Adverse impacts on the Natural Resources Objective

Natural Resources Objective - Major Adverse Impact NR1	
Potential impact	As a proportion of the Plan area's total size (i.e. the total area of Rossendale, 13,800ha) , the proposed development could potentially result in the loss of more than 0.1% (i.e. 13.8ha or more of greenfield). This calculation incorporates the assumptions listed above.
Magnitude and permanence	The adverse impact on the natural resources objective would be likely to be a permanent and non-reversible impact. There is some scope for mitigation through preserving and enhancing as much green infrastructure within site proposals as possible.
Natural Resources Objective - Minor Adverse Impact NR1	
Potential impact	The site proposal would be likely to result in a loss of green infrastructure. The proposed development could potentially result in the loss of greenfield land, as a proportion of the Plan area's total size (i.e. the total area of Rossendale, 13,800ha), of less than 0.1% (i.e. less than 13.8ha of greenfield).
Magnitude and permanence	This would be considered to be a minor adverse impact on the natural resources objective that is permanent and non-reversible. There is some scope for mitigation through preserving and enhancing as much green infrastructure within site proposals as possible.

1.8 SA Objective 6: Climate Change Mitigation

1.8.1 Each site proposal has been assessed for the extent to which it may be likely to help minimise the requirement for energy use, promote efficient energy use and increase the use of energy from renewable sources. In particular, proposals have been assessed for the extent to which they may be likely to increase greenhouse gas emissions in the local area in relation to existing levels.

1.8.2 A range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Climate Change Mitigation objective include:

- Proposals which would be likely to increase greenhouse gas (GHG) emissions in the local area will make it more difficult for RBC to reduce the Plan area's contribution towards the causes of anthropogenic climate change.

- The carbon footprint for the Plan area in 2015 was 400,400 tonnes CO₂/year. The carbon footprint per person per year was 5.8 tonnes⁷.
- It is assumed that development of previously undeveloped sites or greenfields will result in an increase in local GHG emissions due to the increase in the local population and the local number of operating businesses and occupied homes. It is assumed that new residents in the Borough will have an annual carbon footprint of 5.8 tonnes CO₂.
- Plan proposals which may be likely to increase the Plan area’s carbon footprint by 1% or more are awarded a major adverse score for this objective.
- Assessments are based on the assumption that dwellings in Rossendale have on average 2.3 residents per dwelling⁸ and each resident will have a carbon footprint of 5.8 tonnes/year.
- As an example, based on the assumption of 2.3 residents per dwellings and 5.8 tonnes CO₂ per resident per year, it would take 300 new homes (housing 690 residents) to increase the annual carbon footprint by 4,004 tonnes (4,004 tonnes is 1% of 400,400 tonnes i.e. the current annual carbon footprint of Rossendale). It may therefore be expected that a development proposal which will home 690 residents or more will increase the carbon footprint of Rossendale by 1% or more.
- The increase in GHG emissions caused by new residents and new employees is as a result of the impacts of the construction phase, the operation of homes and businesses, oil, gas and coal consumption and increases in local road transport with associated emissions. This impact is considered to be permanent and non-reversible with limited scope for mitigation.

1.8.3 One type of major adverse impact, and one type of minor adverse impact, have been identified for the Climate Change Mitigation Objective (see **Table B.9**).

Table B.9: Adverse impacts on the Climate Change Mitigation objective

Climate Change Mitigation Objective - Major Adverse Impact CCM1	
Potential impact	The proposed development would be likely to increase greenhouse gas emissions in the local area in relation to existing levels. As a proportion of the Plan area’s annual carbon footprint, this increase could potentially be more than 1%. It is primarily in relation to the construction and occupation of new homes where previously there were none, or at a more intense scale than is currently there, and the consumption of natural resources and energy that is inherent to this process.
Magnitude and permanence	This would be considered to a be a major adverse impact on the climate change mitigation objective that is permanent and non-reversible. The scope for mitigation is limited.

⁷ UK local authority and regional carbon dioxide emissions national statistics: 2005-2015, available online at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

⁸ Based on 2011 census data, presented online at: <http://www.lancashire.gov.uk/media/897537/census-2011-household-size.pdf>

Climate Change Mitigation Objective - Minor Adverse Impact CCM1

Potential impact	The proposed development would be likely to increase greenhouse gas emissions in the local area in relation to existing levels. As a proportion of the Plan area's annual carbon footprint, this increase would be expected to be less than 1%. It is primarily in relation to the construction and occupation of new homes where previously there were none, or at a more intense scale than is currently there, and the consumption of natural resources and energy that is inherent to this process.
Magnitude and permanence	This would be considered to be a minor adverse impact on the climate change mitigation objective that is permanent and non-reversible. The scope for mitigation is limited.

1.9 SA Objective 7: Climate Change Adaptation

1.9.1 Each site proposal has been assessed for the extent to which it may be likely to help promote adaptation to Rossendale's changing climate. In particular, site proposals were assessed for their potential impacts on green infrastructure in the Plan area. Urban greenspace has potential to help adapt cities for climate change, through the provision of cooler microclimates and reducing surface water run-off. This is a particularly important ecosystem service in Rossendale where steep sided slopes and surface water run off risk zones are prevalent. Greenspaces also help to alleviate the urban heat island effect due to the evaporative cooling function of vegetation and the provision of shade.

1.9.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Climate Change Adaptation Objective include:

- Urban greenspaces help urban areas adapt to the impacts of climate change through the provision of cooler microclimates and by reducing surface water run-off. Trees are important for shade provision whilst water surfaces provide evaporative cooling. They thereby alleviate the 'urban heat island' effect. Vegetation (including trees, hedgerows and grasses) and soils also play a vital role in attenuating flood risk, particularly in Rossendale where steep sloping valley sides direct fluvial and pluvial flood risk down towards the valley floors and the majority of the Plan area's homes;
- Plan proposals which are expected to result in a loss of greenspace will be assumed to be adversely impacting the ability of the Plan area to adapt to the impacts of climate change;
- Development which would result in the loss of green fields, which as a proportion of the Plan area constitute 0.1% or more, will be awarded a major adverse score for this objective;

- Development which would result in the loss of green fields, which as a proportion of the Plan area constitute less than 0.1%, will be awarded a minor adverse score for this objective; and
- Rossendale is 13,800ha in size. Proposals which would result in the loss of 13.8ha of green fields or more (i.e. 1% or more of the Plan area) are awarded a major adverse score.

1.9.3 One minor adverse impact, and one major adverse impact, have been identified for the Climate Change Adaptation Objective (see **Table B.10**).

Table B.10: Adverse impacts on the Climate Change Adaptation objective

Climate Change Adaptation Objective - Major Adverse Impact CCA1	
Potential impact	The site proposal would be likely to result in a loss of green infrastructure. The proposed development could potentially result in the loss of greenfield land, as a proportion of the Plan area's total size, of more than 0.1%.
Magnitude and permanence	The adverse impact on the climate change adaptation objective would be likely to be a permanent and non-reversible impact. There is some scope for mitigation through preserving and enhancing as much green infrastructure within site proposals as possible.
Climate Change Adaptation Objective - Minor Adverse Impact CCA1	
Potential impact	The site proposal would be likely to result in a loss of green infrastructure. The proposed development would be expected to result in the loss of greenfield land, as a proportion of the Plan area's total size, of less than 0.1%.
Magnitude and permanence	This would be considered to be a minor adverse impact on the climate change adaptation objective that is permanent and non-reversible. There is some scope for mitigation through preserving and enhancing as much green infrastructure within site proposals as possible.

1.10 SA Objective 8: Health

1.10.1 Each site proposal has been assessed for the extent to which it may be likely to help improve physical and mental health and well-being of people and reduce health inequalities in Rossendale.

1.10.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Health objective include:

- In order to facilitate healthy and active lifestyles for existing and new residents, it is expected that the Plan should seek to ensure that residents have access to NHS hospitals, GP surgeries, leisure centres and a diverse

range of natural habitats. Sustainable distances to each of these necessary services are listed in **Table 4.6** and are derived from Barton et al⁹;

- It is assumed that sites in close proximity to major or busy roads will be exposed to road transport associated noise, air and light pollution. Approximately 3.6% of deaths in Lancashire are currently associated with particulate air pollution¹⁰. Road transport air pollution impacts are considered to be most severe within 200m of the source¹¹. A minor adverse impact on the long-term health of residents is anticipated where residents will be exposed to air pollution. Air Quality Management Areas (AQMAs) are also considered to be areas of dangerously poor air quality;
- Site proposals which would direct residents to within the sustainable distance of at least two of the necessary health services are awarded positive scores, with a major positive awarded for sites within the sustainable distance of four or more health services;
- Site proposals which would direct residents to locations outside the sustainable distance of at least two of the necessary health services are awarded adverse scores. Proposals which would direct new residents to a location outside the sustainable distance of all health services, or four of the health services whilst also being in an area of poor air quality, are awarded a major adverse score; and
- Site proposals for employment development are awarded a negligible score for the health objective.

1.10.3 Overall, one type of adverse impact on the Health Objective was identified (see **Table B.11**).

Table B.11: Adverse impacts on the Health objective

Health Objective - Minor Adverse Impact H1	
Potential impact	Each site proposal has been assessed against five criteria i.e. does the site ensure residents' access to a GP, an NHS hospital, public greenspace and a leisure centre whilst also directing new residents away from air pollution sources? Where sites are unable to satisfy three or four of these criteria, a minor adverse impact on the health objective is awarded.
Magnitude and permanence	This minor adverse impact would be likely to be long term but is reversible should new facilities or services arise in the Plan area.

⁹ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability, January 2010

¹⁰ Public Health Framework Outcomes, available online at: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000043/pat/6/par/E12000002/ati/101/are/E10000017>

¹¹ Design Manual for Roads and Bridges (2013) DMRB Volume 11, Air Quality

1.11 SA Objective 9: Material Assets

1.11.1 Each site proposal has been assessed for the extent to which it may be likely to help to ensure sustainable management of waste, minimise its production and increase re-use, recycling and recovery rates. Specifically, site proposals were assessed for the extent to which they may increase waste generation at that location in relation to existing levels.

1.11.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Material Assets objective include:

- This objective primarily deals with the generation of waste and local rates of reducing, reusing and recycling waste;
- For the purpose of assessments, it is assumed that new residents in Rossendale will have an annual waste production of 412kg per person, in line with the England average, and will recycle at the same rate as 2014-15 residents of the Borough (i.e. 32.85% of household waste was recycled in 2016¹²); and
- A major adverse score is awarded for Plan proposals which may increase waste generation in Rossendale, as a proportion of existing waste generation, by 1% or more. Rossendale generated 24,866 tonnes of waste in 2014-15, 1% of which is 248.66 tonnes/year. Assuming a rate of 412kg per person, proposals which accommodate 604 new residents could potentially increase waste generation by 1% or more. At 2.3 people per dwelling, this would account for proposals for 262 or more dwellings.

1.11.3 Overall, one type of minor adverse impact and one type of major adverse impact have been identified for the Material Assets objective (see **Table B.12**).

Table B.12: Adverse impacts on the Material Assets objective

Material Assets Objective - Major Adverse Impact MA1	
Potential impact	The site proposal could potentially lead to an increase in waste generation, as a proportion of the Plan area's total waste generation, by 1% or more.
Magnitude and permanence	The increase in waste generation will be likely to be a long term but reversible impact. There is limited scope for mitigation in the form of reusing construction materials and promoting greater recycling rates amongst residents.

¹² Local authority waste generation and recycling statistics available online at: https://data.gov.uk/dataset/local_authority_collected_waste_management_statistics

Material Assets Objective - Minor Adverse Impact MA1

Potential impact

The site proposal could potentially lead to an increase in waste generation, as a proportion of the Plan area's total waste generation, by under 1%.

Magnitude and permanence

The increase in waste generation will be likely to be a long term but reversible impact. There is limited scope for mitigation in the form of reusing construction materials and promoting greater recycling rates amongst residents.

1.12 SA Objective 10: Housing

1.12.1 Each site proposal has been assessed for the extent to which it may be likely to help to provide a range of affordable, environmentally sound and good quality housing which meet the needs of the community of Rossendale. Specifically, site proposals were assessed for the extent to which they may increase or decrease housing provision in the Plan area.

1.12.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Housing objective include:

- Where site allocations are anticipated to deliver 0-100 dwellings, a minor positive score is awarded. Where site allocations are anticipated to deliver above 100 dwellings a major positive score is awarded; and
- Proposals which would result in the loss of up to 10 dwellings are scored with a minor adverse score, whilst proposals which would result in the loss of more than 10 dwellings are scored with a major adverse score.

1.12.3 No adverse impacts for any single site proposal were identified for the Housing objective.

1.13 SA Objective 11: Employment - Location

1.13.1 Each site proposal has been assessed for the extent to which it may be likely to support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth. In particular, site proposals were assessed for the extent to which they may increase or decrease employment floorspace provision in the Plan area, as well as for the extent to which they would ensure new residents have access to employment opportunities.

1.13.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Employment - Location objective include:

- Proposals which would result in a net increase in employment floorspace in the Borough are awarded a major positive score for this objective;
- Proposals which would result in a net decrease in employment floorspace in the Borough are awarded a major adverse score for this objective;
- It is assumed that, in line with Barton *et al*'s sustainable distances, new residents need to be situated within 5km of major employment areas to ensure they have access to a range of employment opportunities capable of meeting their needs;
- Proposals which would situate new residents within 5km of major employment locations or major local employers are awarded a minor positive score for this objective; and
- Major employment areas are predominantly larger settlements in and outside the Borough. This includes the Rawtenstall Town Centre, Bacup and Haslingden District Centres as well as Rochdale, Burnley and Blackburn. All site proposals in the Plan are within 5km of at least one of these employment areas.

1.13.3 No adverse impacts for any single site proposal were identified for the Employment - Location objective.

1.14 SA Objective 12: Employment - Skills

1.14.1 Each site proposal has been assessed for the extent to which it may be likely to improve education, skills and qualifications in the Borough and provide opportunities for lifelong learning. In particular, site proposals were assessed for the extent to which they would provide new residents with access to primary and secondary schools.

1.14.2 Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the Employment - Skills objective include:

- It is assumed that new residents in the Plan area require access to primary and secondary education services to help facilitate good levels of education, skills and qualifications of residents;

- In line with Barton *et al*'s sustainable distances, residential development proposals would ideally be within 800m of a primary school and 1.5km of a secondary school;
- Residential development proposals which are outside both of these distances are awarded a major adverse score; and
- Residential proposals score positively for this objective where they are within the sustainable distances of primary and secondary schools.

1.14.3 Overall, one minor adverse impact has been identified for the Employment – Skills Objective (see **Table B.13**).

Table B.13: Adverse impacts on the Employment - Skills Objective

Employment - Skills Objective - Minor Adverse Impact ES1	
Potential impact	The site proposal would be expected to situate new residents outside of the target distance of both a primary and a secondary school. Whilst these residents would still be able to access education facilities, the relatively longer distances may discourage local parents from walking their children to school and they could potentially rely more on personal car usage. This would increase local congestion and road transport associated emissions as well as
Magnitude and permanence	This would be likely to be a long term but reversible impact depending on the provision of new schools in the Plan area in the future.

1.15 SA Objective 13: Transport

1.15.1 Each site proposal has been assessed for the extent to which it may be likely to improve the choice and use of sustainable transport in Rossendale and reduce the need to travel. Overall, a range of assumptions, uniformities and limitations are inherent to the appraisal process. Those relevant to assessments made against the transport objective include:

- Site proposals are assessed for the extent to which they would provide new residents with access to a range of transport modes which provide them with sustainable access to key services and amenities, including employment and retail locations;
- In line with Barton *et al*'s sustainable distances¹³ residents would ideally be situated within 2km of a railway station, 400m of a bus stop offering a frequent service and have access onto the cycle and PRow network;
- Sites which satisfy all of the above criteria are awarded a major positive score. Proposals which would satisfy the majority of these criteria are awarded a minor positive score;

¹³ Barton, H., Grant. M. & Guise. R. (2010) Shaping Neighbourhoods: For local health and global sustainability.

- Proposals which would not provide residents with access to a railway station, frequent bus service or the PRow network are awarded a major adverse score;
- There are no in-use railway stations in Rossendale (which are not heritage and tourist focused) and subsequently no site proposal in the Plan is within 2km of a railway station and can therefore not achieve a major positive score;
- All site proposals in the Plan are considered to have access to the extensive local PRow network;
- Where residents have restricted access to sustainable transport modes, it is assumed that they will have a relatively high reliance on personal car usage. Increases in local road transport and congestion would be more likely, with secondary impacts on objectives such as human health due to increases in air pollution; and
- It is assumed that, where residents are within the target distance of bus stops with frequent bus services and/or railway stations, they are less likely to have a high reliance on personal car use.

1.15.2 Overall, one type of minor adverse impact has been identified for the Transport objective (see **Table B.14**).

Table B.14: Adverse impacts on the Transport Objective

Transport Objective – Minor Adverse Impact T1	
Potential impact	The site proposal would be expected to situate new residents outside of the target distance of both a railway station and a bus stop which offers frequent services. These residents may find it difficult to access services, amenities and employment areas via sustainable transport modes and could potentially have a relatively high reliance on personal car usage.
Magnitude and permanence	This would be likely to be a long term but reversible impact depending on the provision of services in the Plan area in the future.

1.16 Overview of each site proposal

1.16.1 An overview of each site proposal is presented in the following sections.

H1: Greenbridge Mill (Hall Carr Mill) Lambert Haworth

1: Landscape	Negligible.
2: Cultural Heritage	The site coincides with the Grade II Listed Building Greenbridge Works. The development proposal is an opportunity to bring this disused heritage asset back into new use, thereby helping to prevent its deterioration and decay. This site proposal is therefore an opportunity to positively impact the local cultural heritage.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H2: Magistrates Court, Rawtenstall

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impacts CH2 and CH5.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H3: Land at Former Oakenhead Resource Centre

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.

13. Transport	Good access to bus services and PRow.
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H4: Turton Hollow

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13. Transport	Good access to bus services and PRow.

H5: Swinshaw Hall Loveclough

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Minor adverse impact ES1.
13. Transport	Good access to bus services and PRow.

H6: Land South for 1293 Burnley Road, Loveclough

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Minor adverse impact ES1.
13. Transport	Good access to bus services and PRow.

H7: Land Adjacent Laburnum Cottages

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRoW.

H8: Oak Mount Garden

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRoW.

H10: Land off Oaklands and Lower Cribden Avenue

1: Landscape	Minor Adverse Impact L4.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRoW.

H11: Land at Bury Road, Rawtenstall

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 3.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H12: The Hollins, Hollin Way

1: Landscape	Negligible.
2: Cultural Heritage	Minor adverse impact CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H13: Reedsholme Works, Rawtenstall

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	Major adverse impact WF1 and minor adverse impact WF2.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Major net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a secondary school.
13: Transport	Good access to bus services and PRow.

H14: Loveclough Working Mens club

1: Landscape	Minor Adverse Impact L5.
2: Cultural Heritage	Minor Adverse Impact CH2
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Minor Adverse Impact H1
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Minor Adverse Impact ES1
13: Transport	Good access to bus services and PRow.

H15: Hall Carr Farm

1: Landscape	Minor adverse impacts L3 and L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H16: Willow Avenue off Lime Tree Grove

1: Landscape	Negligible.
2: Cultural Heritage	Adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H17: Land East of Acrefield Drive (Hollin Way)

1: Landscape	Adverse impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13. Transport	Minor adverse impact T1.

H18: Land South of Goodshaw Fold Road, Loveclough

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13. Transport	Good access to bus services and PRow.

H19: Carr Farm, Lomas Lane

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H20: Land off Lower Clowes Road

1: Landscape	Minor Adverse Impact L4
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H21: Old Market Hall

1: Landscape	Negligible.
2: Cultural Heritage	Site proposal will be likely to enhance the Grade II Listed Building Old Market Hall, which has fallen into disrepair ¹⁴ .
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H22: Reed Street, Bacup

1: Landscape	Negligible.
2: Cultural Heritage	Minor adverse impacts CH3 and CH4
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 2 as well as SWFR 1/30.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

¹⁴ Bacup Conservation Area Appraisal available online at:
https://www.rossendale.gov.uk/downloads/file/13764/bacup_conservation_area_appraisal

H23: Former Bacup Health Centre

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impacts CH2 and CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 3.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H24: Glen Mill

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor Adverse Impact BG5.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H25: The Former Commercial Hotel

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Minor Adverse Impact BG5.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H26: Land at Blackwood Road, Stacksteads

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Minor adverse impact T1.

H27: Land off Greensnook Lane

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H28: Off Fernhill Drive

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H29: Sheephouse Reservoir, Britannia

1: Landscape	Minor adverse impacts L4 and L5
2: Cultural Heritage	Negligible
3: Biodiversity & Geodiversity	Negligible
4: Water & Flooding	In Flood Zone 1
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H30: Land off Pennine Road, Bacup

1: Landscape	Negligible
2: Cultural Heritage	Negligible
3: Biodiversity & Geodiversity	Negligible
4: Water & Flooding	In Flood Zone 1
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H31: Tong Farm

1: Landscape	Minor adverse impact L4
2: Cultural Heritage	Negligible
3: Biodiversity & Geodiversity	Negligible
4: Water & Flooding	In Flood Zone 1
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H32: Lower Stack Farm

1: Landscape	Negligible
2: Cultural Heritage	Negligible
3: Biodiversity & Geodiversity	Negligible
4: Water & Flooding	In Flood Zone 1
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H33: Booth Road/Woodland Mount, Brandwood

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor adverse impact BG5.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H34: Land off Rockcliffe Road

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1 but SWFR 1/30 is present within the site (minor adverse impact WF2).
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H35: Land at Higher Cross Row

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H36: Shadlock Skip

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor adverse impact BG5.
4: Water & Flooding	Coincides with Flood Zone 3. SWFR 1/30 is also present within the site (minor adverse impact 2).
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H37: Hare and Hounds Garage

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impact CH2.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H38: Land off Gladstone Street

1: Landscape	Negligible.
2: Cultural Heritage	
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H39: Land off Burnley Road and Meadows Avenue

1: Landscape	Minor Adverse Impacts L3 and L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H40: Land off Cowtoot Lane

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Minor adverse impact T1.

H41: Land off Todmorden Road, Bacup

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H42: Thorn Bank

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H43: Land south of the Weir Public House

1: Landscape	Minor adverse impacts L1, L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

H44: Land west of Burnley Road, Weir

1: Landscape	Minor adverse impacts L1 and L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

H45: Irwell Springs, Weir

1: Landscape	Minor Adverse Impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

H46: Former Haslingden Police Station

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site, efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H47: 1 Laburnum Street

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site, efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRoW.

H48: Land at Kirkhill Avenue, Halsingden

1: Landscape	Minor adverse impacts L1 and L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Minor adverse impact T1.

H49: Land off Highfield Street

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRoW.

H50: Land adjacent 53 Grane Road

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H51: Land Adjacent Park Avenue/Cricceth Close

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H52: Land To Side And Rear Of Petrol Station, Manchester Rd

1: Landscape	Negligible.
2: Cultural Heritage	Minor adverse impacts CH1 and CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8. Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H54: Land Rear Of Haslingden Cricket Club

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H55: Waterfoot Primary School

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 3.
5: Natural Resources	Brownfield site, efficient use of land.
6: Climate Change Mitigation	Negligible.
7. Climate Change Adaptation	Negligible.
8. Health	Location will be likely to help facilitate healthy and active lifestyles.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H56: Land at Ashworth Road, Water

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7. Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H57: Carr Mill and Bolton Mill

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H58: Knott Mill works, Pilling Street and Orchard Works, Miller Barn Lane

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H59: Foxhill Drive

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H60: Land off Lea Bank

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRoW.

H61: Land Adjacent Dark Lane Football ground

1: Landscape	Minor Adverse Impact L4.
2: Cultural Heritage	Minor Adverse Impacts CH1 and CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRoW.

H62: Johnny Barn Farm, Cloughfold

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Major net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRoW.

H63: Hareholme

1: Landscape	Minor adverse impacts L3 and L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H64: Land off Peel Street, Cloughfold

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H65: Hollin Farm, Waterfoot

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H66: Hargreaves Fold Lane, Chapel Bridge, Lumb

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	In Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school.
13: Transport	Good access to bus services and PRow.

H67: Albert Mill, Whitworth

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 3.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13: Transport	Good access to bus services and PRow.

H68: Barlow Bottom (east of river)

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

H69: Land behind Buxton Street

1: Landscape	Minor Adverse Impact L4.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of a primary school and a secondary school.
13. Transport	Good access to bus services and PRow.

H70: Former Spring Mill (land off eastgate and westgate)

1: Landscape	Minor adverse impact L3.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Minor adverse impacts BG3 and BG4.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Brownfield site – efficient use of natural resources.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7. Climate Change Adaptation	Negligible.
8. Health	Minor adverse impact H1.
9. Material Assets	Minor adverse impact MA1.
10. Housing	Major net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRow.

H71: Cowm water treatment works, Whitworth

1: Landscape	Minor adverse impact L3
2: Cultural Heritage	Minor adverse impacts CH2 and CH3
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Major adverse impact WF1 and minor adverse impact WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7. Climate Change Adaptation	Minor adverse impact CCA1.
8. Health	Location will be likely to help facilitate healthy and active lifestyles, with good access to all the necessary health facilities.
9. Material Assets	Minor adverse impact 1.
10. Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Minor adverse impact 1.

H72: Irwell Vale Mill

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH4.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	Coincides with Flood Zone 3. The 2016 SFRA states that the site proposal should undergo the Exception Test before permission is granted as the northern third of the site may be deliverable. Site also coincides with SWFR 1/30.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Minor adverse impact T1.

H73: Land east of Market Street, Edenfield

1: Landscape	Negligible.
2: Cultural Heritage	Minor adverse impact CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and P _{RoW} .

H74: Land west of Market Street

1: Landscape	Minor adverse impacts L1 and L4.
2: Cultural Heritage	Minor adverse impact CH1.
3: Biodiversity & Geodiversity	Minor adverse impacts BG4 and BG5.
4: Water & Flooding	Minor adverse impact WF2.
5: Natural Resources	Major adverse impact NR1.
6: Climate Change Mitigation	Major adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA.
8: Health	Minor adverse impact H1.
9: Material Assets	Major adverse impact MA1.
10: Housing	Major net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and P _{RoW} .

H75: Edenwood Mill

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Coincides with Flood Zone 3. The 2016 SFRA states that, as only a relatively minor portion of the site is in Flood Zone 3, it would be possible to situate the proposed development at this location whilst avoiding Flood Zone 3.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

H76: Grane Village

1: Landscape	Minor adverse impacts L2, L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Minor adverse impacts BG1 and BG4.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Major net increase in housing.
11: Employment (location)	Good access to employment opportunities for new residents.
12: Employment (skills)	Within the target distance of secondary schools.
13: Transport	Good access to bus services and PRow.

M1: Waterside Mill Burnley Road Bacup OL13 8AW

1: Landscape	Negligible.
2: Cultural Heritage	The site coincides with the Grade II Listed Building Waterside Mill. Development here would be acceptable should the highest standard of works are undertaken with careful consideration given to the setting of the Listed Building and the Conservation Area.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.

12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

M2: Spinning Point, Rawtenstall

1: Landscape	Negligible.
2: Cultural Heritage	Minor Adverse Impacts CH2 and CH4.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 2.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Location will be likely to help facilitate healthy and active lifestyles.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13: Transport	Good access to bus services and PRow.

M3: Isle of Man Mill and Garage

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary schools.
13: Transport	Good access to bus services and PRow.

M4: Futures Park

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	Coincides with Flood Zone 3. The 2016 SFRA assessed this site when it was smaller. The site is now larger and there is likely space within the site perimeter to direct development away from Flood Zone 3. SWFR 1/30 is also present within the site (minor adverse impact 2).
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary schools.

13. Transport	Good access to bus services and PRoW.
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M5: Park Mill

1: Landscape	Minor adverse impact L2.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Minor adverse impact BG1.
4: Water & Flooding	Major adverse impact 1 and minor adverse impact 2.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Negligible.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRoW.

M6: Barlow Bottoms, Facit

1: Landscape	Minor Adverse Impact L4.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRoW.

NE1: Extension to Mayfield Chicks

1: Landscape	Minor adverse impacts L4 and L5.
2: Cultural Heritage	Minor adverse impacts CH1 and CH3.
3: Biodiversity & Geodiversity	Minor adverse impact BG4.
4: Water & Flooding	Coincides with Flood Zone 3.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Minor adverse impact H1.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Minor net increase in housing.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Within the target distance of primary and secondary schools.
13. Transport	Good access to bus services and PRoW.

NE2: Land North of Hud Hey

1: Landscape	Minor adverse impacts L3 and L4.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRoW.

NE3: Land North of Carr Industrial Estate

1: Landscape	Minor adverse impacts L3, L4 and L5.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Minor adverse impacts BG1 and BG4.
4: Water & Flooding	Minor adverse impacts WF1 and WF2.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Minor adverse impact T1.

NE4: Extension of New Hall Hey

1: Landscape	Minor adverse impact L4.
2: Cultural Heritage	Minor adverse impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Minor adverse impact T1.

NE5: Baxenden Chemicals Ltd, Rising Bridge

1: Landscape	Minor Adverse Impacts L3 and L4.
2: Cultural Heritage	Minor Adverse Impact CH3.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor Adverse Impact WF2
5: Natural Resources	Minor adverse impact NR1.
6: Climate Change Mitigation	Minor adverse impact CCM1.
7: Climate Change Adaptation	Minor adverse impact CCA1.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRoW network.

EE2: Henrietta Street (0.58ha developable area)

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor Adverse Impact WF2 and major Adverse Impact WF1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Not applicable – site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRoW network.

EE12: Large Site at Hud Hey (1.70ha developable area)

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor Adverse Impact WF2 and major Adverse Impact WF1
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Not applicable – site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRoW network.

EE13: Land off Manchester Road (Solomons) (1.36ha developable area)

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Not applicable – site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRow network.

EE19: Solomon's Site (0.80ha developable area)

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Minor Adverse Impact WF2.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Not applicable – site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRow network.

EE23: Rossendale Motor Sales, Bury Road (0.29ha developable area)

1: Landscape	Negligible.
2: Cultural Heritage	Negligible.
3: Biodiversity & Geodiversity	Negligible.
4: Water & Flooding	Flood Zone 1.
5: Natural Resources	Brownfield site – efficient use of land.
6: Climate Change Mitigation	Negligible.
7: Climate Change Adaptation	Negligible.
8: Health	Not applicable – site is proposed for employment purposes.
9: Material Assets	Minor adverse impact MA1.
10: Housing	Not applicable – site is proposed for employment purposes.
11: Employment (location)	Net increase in local employment opportunities due to site proposal.
12: Employment (skills)	Not applicable – site is proposed for employment purposes.
13: Transport	Good access to bus services and PRow network.

Appendix C

Policies Assessments

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1.1 Overview of assessments

- 1.1.1 Each objective and policy proposed in the Rossendale Local Plan has been assessed for its likely impacts on each objective of the SA Framework. **Chapter 4** of this report explains the methodology behind the assessment process. Results are summarised in the form of an SA Scoring Matrix, which provides an indication of whether the proposal will be likely to have a positive or adverse impact on each objective and the extent to which it may do so.
- 1.1.2 The SA Scoring Matrix for each policy has been brought together in **Table C.1**. It is expected that the array of policies proposed in the RBC Plan will help the Council to pursue sustainable development in the Borough which satisfies the housing and economic needs of local residents. Potential minor adverse impacts were identified for four policies, two of which allocate the sites proposed in the RBC Plan and are therefore responsible for the adverse impacts of the sites proposals, and two of which permit the development of wind turbines in locations which could potentially alter long distance rural views.

Table B.3: SA Scoring Matrix for policies proposed in the Regulation 19 Plan

Policy ref	1 Landscape	2 Cultural heritage	3 Biodiversity	4 Flooding	5 Natural resources	6 C. C. Mitigation	7 C. C. Adaptation	8 Health	9 Material Assets	10 Housing	11 Employment: Location	12 Employment: Skills	13 Transport & Accessibility
SD1	+	+	++	++	+	+	+	++	+	++	++	+	+
SD2	++	0	+	0	+	0	0	0	0	0	0	0	0
SD3	0	0	+	+	+	+	+	+	+	+	+	+	+
HS1	0	0	0	0	0	0	0	0	+	++	0	0	0
HS2	-	-	-	-	-	-	-	-	-	++	+	+	-
HS3	+	+	+	+	+	+	+	+	+	+	+	+	+
HS4	+	+	+	+	+	+	+	+	+	+	+	+	+
HS5	+	+	+	+	+	+	+	+	+	+	+	+	+
HS6	0	0	0	0	0	0	0	0	0	++	0	0	0
HS7	+	+	+	0	+	0	0	+	+	+	0	0	+
HS8	0	0	0	0	0	0	0	+	0	+	0	0	0
HS9	0	0	0	0	0	0	0	+	0	+	0	0	0
HS10	0	0	+	0	0	0	0	+	0	+	0	0	0
HS11	0	0	0	0	0	0	0	+	0	+	0	0	0
HS12	+	0	0	0	0	0	0	0	0	+	0	0	0
HS13	+	0	0	0	0	0	0	0	0	+	0	0	0
HS14	+	0	0	0	0	0	0	0	0	+	0	0	0
HS15	+	0	0	0	0	0	0	0	0	+	0	0	0
HS16	+	0	+	0	+	0	0	0	+	+	+	+	+
HS17	+	0	+	0	+	0	0	0	+	+	+	+	+
HS18	0	0	0	0	0	0	0	0	0	+	0	0	0
HS19	0	0	0	0	0	0	0	+	0	+	0	0	0
HS20	0	0	0	0	0	0	0	0	0	+	0	0	0
EMP1	0	0	0	0	0	0	0	0	0	0	++	0	0
EMP2	-	-	-	-	-	-	-	-	-	0	++	0	+
EMP3	0	0	0	0	0	0	0	0	0	+	+	0	0
EMP4	0	0	0	0	0	0	0	0	0	+	+	0	0
EMP5	0	0	0	0	0	0	0	0	0	0	+	0	0
EMP6	+	0	+	0	0	0	0	0	0	0	+	0	0
EMP7	+	0	+	0	0	0	0	0	0	0	+	0	0
R1	+	0	0	0	0	0	0	0	0	0	+	0	0
R2	+	0	0	0	0	0	0	0	0	0	+	0	0
R3	+	0	0	0	0	0	0	0	0	0	+	0	0
R4	0	0	0	0	0	0	0	0	0	+	+	0	0
R5	+	0	0	0	0	0	0	+	0	0	+	0	0
R6	+	+	0	0	0	0	0	0	0	0	+	0	0
ENV1	+	+	+	+	+	+	+	+	+	+	+	+	+
ENV2	+	++	0	0	0	0	0	0	0	0	0	0	0
ENV3	++	+	0	0	0	0	0	0	0	+	+	0	0
ENV4	+	0	++	0	+	0	0	+	0	0	0	0	0
ENV5	+	+	+	+	+	+	+	+	+	+	+	0	0
ENV6	+	+	+	0	+	+	0	+	+	+	0	0	+
ENV7	-	0	0	0	0	+	0	0	0	0	+	0	0
ENV8	0	0	0	0	0	+	0	0	0	0	+	0	0
ENV9	0	0	+	++	+	0	0	+	0	+	+	0	0
ENV10	+	+	++	+	+	+	+	+	+	+	0	0	0
LT1	+	+	+	+	+	+	+	+	+	+	0	0	0
LT2	0	+	0	0	0	0	0	+	+	+	+	0	0
LT3	+	+	0	0	0	0	0	0	+	+	+	0	+
LT4	0	0	0	0	0	0	0	0	0	0	+	0	0

LT5	+	0	0	0	0	0	0	0	+	0	0	+	0	0
LT6	+	+	+	0	+	0	0	0	+	0	+	+	0	0
TR1	0	0	0	0	0	0	0	0	0	+	+	+	0	++
TR2	0	0	0	0	0	0	0	+	0	+	+	+	0	++
TR3	0	0	0	0	0	0	0	0	0	0	0	0	0	+
TR4	0	0	0	0	0	0	0	0	0	0	0	0	0	+

1.2 Policy SD1: Presumption in Favour of Sustainable Development

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	++	++	+	+	+	++	+	++	++	+	+

1.2.1 This policy sets out the Council’s overall approach to development in the Plan area. By pursuing development which satisfies the local needs, whilst also providing environmental, social and economic benefits, RBC have placed sustainable development at the heart of their Plan making process.

1.3 Policy SD2: Urban Boundary and Green Belt

1	2	3	4	5	6	7	8	9	10	11	12	13
++	0	+	0	+	0	0	0	0	0	0	0	0

1.3.1 In accordance with this policy, development will be required to be within the Urban Boundaries defined on the Policies map – except where development specifically needs to be located in the countryside. This will help to protect the array of distinctive and high quality countryside landscapes prevalent in the Plan area, as well the as the sensitive biodiversity assets they support (SA Objectives 1 and 3). It would also be likely to increase the quantity of development situated in existing urban areas and on previously developed land (SA Objective 5).

1.4 Policy SD3: Planning Obligations

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	+	+	+	+	+	+	+	+	+	+	+

1.4.1 In accordance with this policy, where developments create demands for additional services, facilities or infrastructure the Council may seek contributions or legal agreements to address this issue. This will help RBC to manage demands on infrastructure and deliver enhancements where needed, thereby protecting the quantity and quality of open spaces, green infrastructure, transport infrastructure, educational facilities, recreational facilities and health infrastructure.

1.5 Policy HS1: Meeting Rossendale's Housing Requirement

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	+	++	0	0	0

1.5.1 This policy sets out the housing needs of the borough and RBC's intentions to satisfy these needs by delivering at least 3,180 dwellings over the plan period (212dpa), of which 30% will be on previously developed land.

1.6 Policy HS2: Housing Site Allocations

1	2	3	4	5	6	7	8	9	10	11	12	13
-	-	-	-	-	-	-	-	-	++	+	+	-

1.6.1 This policy allocates sites for residential development. Each of these site allocations have been assessed for their likely impacts on each SA Objective (see **Appendix B**). Because it is this policy which allocates each of the sites for development, in line with the precautionary principle this policy can be seen to be the cause of the worst sustainability impacts from each site.

1.7 Policy HS3: Edenfield

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	+	+	+

1.7.1 The Policies Map accompanying the RBC Plan defines a 15.25ha developable area as 'Edenfield', within which a comprehensive site development will be permitted so long as it is in accordance with an agreed Design Code and demonstrated through a masterplan. The Design Code will be likely to help ensure that the major site development makes a positive contribution to its surroundings, avoids adverse impacts on the natural environment and allows residents of the site to pursue high quality, social and healthy lifestyles.

1.8 Policy HS4: Loveclough

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	+	+	+

1.8.1 The Policies Map accompanying the Plan identifies a 3.2ha area as developable 'Loveclough', within which a new residential development will be permitted where it is demonstrated by a masterplan and which implements an agreed Design Code. This policy will help to ensure that development at this location makes a positive contribution to its surroundings, avoids adverse impacts on the natural environment and allows residents of the site to pursue high quality, social and healthy lifestyles.

1.9 Policy HS5: Swinshaw Hall

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	+	+	+

1.9.1 The Policies Map accompanying the Plan identifies a 1.72ha developable area as 'Swinshaw Hall', within which a new residential development will be permitted where it is demonstrated by a masterplan and which implements an agreed Design Code. This policy will help to ensure that development at this location makes a positive contribution to its surroundings, avoids adverse impacts on the natural environment and allows residents of the site to pursue high quality, social and healthy lifestyles.

1.10 Policy HS6: Affordable Housing

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	++	0	0	0

1.10.1 This policy sets out RBC's requirements for developments of ten or more dwellings to be at least 30% affordable housing and 10% available for affordable home ownership, with limited exceptions applying. This will help to ensure that new housing in the Plan area satisfies the diverse needs of new and existing residents.

1.11 Policy HS7: Housing Density

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	0	+	0	0	+	+	+	0	0	+

1.11.1 This policy requires new developments to be of a density that is in keeping with local areas and which avoids adverse impacts on the amenity, character, appearance, distinctiveness and environmental quality of an area. Higher densities may be permitted in sustainable locations.

1.12 Policy HS8: Housing Standards

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	+	0	+	0	0	0

1.12.1 RBC has adopted housing standards in line with national planning policy guidance. This includes at least 20% of houses meeting the tailored needs of elderly and disabled residents as well as internal space standards.

1.13 Policy HS9: Private Residential Garden Development

1	2	3	4	5	6	7	8	9	10	11	12	13

0	0	0	0	0	0	0	0	+	0	+	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---

1.13.1 This policy sets out the requirements for housing proposals which are within residential gardens and are not on sites allocated for housing. This policy will help to maintain the high quality lifestyles of existing residents whilst offering scope for additional housing delivery in the future.

1.14 Policy HS10: Open Space Requirements in New Housing Developments

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	+	0	0	0	0	+	0	+	0	0	0

1.14.1 This policy sets out the requirement for new developments of ten or more dwellings to make provision for open spaces. This will help to ensure new residents can pursue high quality and active lifestyles whilst protecting sensitive habitats from the impacts of recreational disturbances. Developments in Bacup and Whitworth in particular will need to contribute towards the cost and provision of Suitable Alternative Natural Greenspaces (SANGs).

1.15 Policy HS11: Playing Pitch Requirements in New Housing Developments

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	+	0	+	0	0	0

1.15.1 Housing developments of ten or more dwellings will be required to contribute to the cost of improving playing pitches in the Borough where there is an identified need. This will help to ensure that new development in the borough also positively impacts the lifestyles of existing residents by enhancing local outdoor recreational opportunities.

1.16 Policy HS12: Private Outdoor Amenity Space

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	+	0	0	0

1.16.1 All new residential developments will be required to provide private outdoor amenity space (gardens) which is appropriate for the size, type and character of the development and local area. This will help to ensure new residents can enjoy high quality lifestyles at home whilst preserving the character of the local area.

1.17 Policy HS13: House Extensions

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	+	0	0	0

1.17.1 This policy sets out the requirements for proposals to extend existing dwellings. This will help to ensure that extensions to existing homes do not alter or adversely impact the local character or the amenity of neighbouring properties.

1.18 Policy HS14: Replacement Dwellings

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	+	0	0	0

1.18.1 This policy will help to ensure that proposals for replacing existing dwellings maintain or potentially enhance the local area by respecting the scale, size, design and facing materials of surrounding buildings any by avoiding adverse impacts on the amenity of neighbouring properties.

1.19 Policy HS15: Rural Affordable Housing – Rural Exception Sites

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	+	0	0	0

1.19.1 In order to help meet the affordable housing needs of rural communities, in line with this policy a limited number of affordable homes may be permitted for development on rural sites. This policy sets out the requirements for such sites, ensuring that adverse impacts on the surrounding area are avoided.

1.20 Policy HS16: Conversion and Re-Use of Rural Buildings in the Countryside

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	+	0	+	0	0	0	+	+	+	+	+

1.20.1 This policy sets out the requirements for proposals which would convert the use of existing buildings in the countryside. This policy will allow such conversions to occur, which will be likely to benefit local housing and economic needs, whilst the list of requirements will help to protect the local character, amenity and natural environment.

1.21 Policy HS17: Rural Workers Dwellings

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	+	0	+	0	0	0	+	+	+	+	+

1.21.1 This policy sets out requirements for proposals to deliver permanent residential accommodation to rural workers on areas outside of the urban boundary. These requirements will help to ensure that rural workers are able to reside in locations which suit their tailored needs whilst the local character, amenity and natural environment is protected.

1.22 Policy HS18: Gypsies, Travellers and Travelling Showpeople

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	0	0	0

1.22.1 This policy allocates a Transit site for four pitches at Barlow Bottoms, Facit. This allocation has been assessed in in Appendix B. The allocation will help to ensure the RBC Plan meets the needs of the local Gypsy, Traveller and Travelling Showpeople community, particularly as provision will potentially be made towards the end of the Plan period for two additional pitches.

1.23 Policy HS19: Specialist Housing

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	+	0	+	0	0	0

1.23.1 In line with this policy, RBC intend to support development proposals for specialist forms of housing (including retirement, extra care and supported accommodation) which satisfies several criteria. This criteria will help to ensure that the needs of the local community are satisfied whilst the local character, amenity and quality of open space are protected. The provision of care homes will be likely to help to facilitate healthier lifestyles for many local residents.

1.24 Policy HS20: Self-Build and Custom Built Houses

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	0	0	0

1.24.1 In line with this policy, RBC intend to support individuals who wish to commission or build their own dwelling and to encourage developers of 50+ dwellings to make at least 10% of plots available for sale to individuals wishing to build their own homes. This will help to ensure that new housing in the borough is diverse, of a high quality and meets the varied and specific needs of local residents.

1.25 Policy EMP1: Provision for Employment

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	++	0	0

1.25.1 This policy sets out RBC’s intentions to provide new employment land which satisfies the local economic needs of residents. This includes 27ha of land for business, general industrial or storage and distribution for the period up to 2034.

1.26 Policy EMP2: Employment Site Allocations

1	2	3	4	5	6	7	8	9	10	11	12	13
-	-	-	-	-	-	-	-	-	0	++	0	+

1.26.1 This policy sets out the various sites allocated for employment development in the Plan area. Each of these site allocations have been assessed for their likely impacts on each SA Objective (see **Appendix B**). Because it is this policy which allocates each of the sites for development, in line with the precautionary principle this policy can be seen to be the cause of the worst sustainability impacts from each site.

1.27 Policy EMP3: Employment Site and Premises

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	+	0	0

1.27.1 In line with this policy, sites currently in use for employment which were not allocated for other purposes in the RBC Plan will be protect for employment use unless there is clear justification for a change in use. This policy will therefore be expected to help ensure that there is an adequate supply of employment floorspace in the borough to satisfy the needs of local residents.

1.28 Policy EMP4: Development Criteria for Employment Generating Development

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	+	0	0

1.28.1 Employment levels in Rossendale have been declining since 1997. This policy sets out the criteria which, if met, will lead to RBC supporting development which generates further employment in the borough. This policy will help RBC to maximise opportunities in the borough for improving employment rates.

1.29 Policy EMP5: Employment Development in Non-allocated Employment Areas

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	+	0	0

1.29.1 In line with this policy, RBC intend to support proposals for new employment land where the development would not result in adverse impacts to the local amenity, character or environmental quality. This will assist RBC in maximizing opportunities for improving employment rates during the Plan period.

1.30 Policy EMP6: Futures Park

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	+	0	0	0	0	0	0	0	+	0	0

1.30.1 The Policies Map accompanying the RBC Plan identifies a 4.6ha area named 'Futures Park', within which a new high quality employment development will be permitted subject to several criteria. This development will help to provide a positive boost to the local economy and employment rates whilst preserving and potentially enhancing the local character, amenity and environmental quality.

1.31 Policy EMP7: New Hall Hey

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	+	0	0	0	0	0	0	0	+	0	0

1.31.1 The Policies Map accompanying the RBC Plan identifies a 6ha area named 'New Hall Hey', within which a new high quality employment development will be permitted subject to several criteria. This development will help to provide a positive boost to the local economy and employment rates whilst preserving and potentially enhancing the local character, amenity and environmental quality.

1.32 Policy R1: Retail and Other Town Centre Uses

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	0	+	0	0

1.32.1 The Policies Map accompanying the RBC Plan identifies defined centres in the borough, within which retail development and other town centre uses will be focused. This policy will help to provide a boost to the vitality and economic functioning on centres in the Plan area whilst also ensuring new development is suitable for the local area.

1.33 Policy R2: Rawtenstall Town Centre Extension

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	0	+	0	0

1.33.1 The Policies Map accompanying the RBC Plan identifies a defined area within Rawtenstall Town Centre within which a redevelopment which extends the Primary Shopping Area will be permitted subject to meeting various criteria. These criteria will ensure the development here is of an appropriate use and design and implemented through an appropriate timetable, thereby preserving the local character, economy and amenity of local centres.

1.34 Policy R3: Development and Change of Use in District and Local Centres

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	0	0	0	+	0	0

1.34.1 The Policies Map identifies District and Local Centres in the borough. This policy sets out the criteria for proposals to meet should they seek to change a use or develop within a District or Local Centre. This policy will help to ensure that development only occurs within these centres when it is of an appropriate use and design, thereby preserving and enhancing the local character, economy and amenity of centres.

1.35 Policy R4: Existing Local Shops

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	+	0	0

1.35.1 Changing the use of a premise which was last, or is currently, a shop will only be permitted if the shop was not financially viable or there is sufficient provision in the local area. This will help to ensure that shops making a positive contribution to the local area are preserved, whilst those that are no longer financially viable could potentially be redeveloped to make a positive contribution to local housing needs.

1.36 Policy R5: Hot Food Takeaways

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	+	0	0	+	0	0

1.36.1 This policy sets out the various criteria that will need to be met for hot food takeaway development. The policy will be expected to help ensure that adverse impacts on the vitality, amenity or character of Centres will not arise as a result of new takeaways, whilst RBC's attempts to tackle obesity and improve the physical well-being of local residents are also not undermined.

1.37 Policy R6: Shopfronts

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	0	0	0	0	0	0	0	0	+	0	0

1.37.1 Where shopfronts or commercial frontages are of historic interest, RBC will seek their retention. New shopfronts and commercial frontages will be required to reflect the character of the local area.

1.38 Policy ENV1: High Quality Development in the Borough

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	+	+	+

1.38.1 In accordance with this policy, all development in the borough will be required to make a positive contribution to the character and appearance of the local area. The policy sets out a range of criteria with which development will need to accord. These criteria will be expected to help ensure that new development in Rossendale will benefit local housing and economic needs whilst protecting and enhancing the local character, amenity and natural environment.

1.39 Policy ENV2: Heritage Assets

1	2	3	4	5	6	7	8	9	10	11	12	13
+	++	0	0	0	0	0	0	0	0	0	0	0

1.39.1 This policy is focused on the cultural heritage assets of the Borough, as well as elements of the historic environment which contribute to the Borough's distinct identity. Development will be required to conserve or enhance heritage assets whilst proposals which would result in harm to, or the loss of, a heritage asset will only be permitted in exceptional circumstances. This will be likely to also help preserve the character and distinctiveness of townscapes in some locations.

1.39.2 This policy also gives close consideration to locally listed heritage assets in the Borough. New development will be required to preserve and enhance local heritage assets whilst harm to, or loss of, a locally listed asset as a result of a proposed development will only be permitted in the described exceptional circumstances. This will be likely to also help preserve the character and distinctiveness of townscapes in some locations.

1.40 Policy ENV3: Landscape Character and Quality

1	2	3	4	5	6	7	8	9	10	11	12	13
++	+	0	0	0	0	0	0	0	+	+	0	0

1.40.1 This policy is primarily concerned with the potential impacts of development on the distinctive natural landscapes prevalent in Rossendale. In accordance with this policy, development proposals will be required to show how the natural environment and landscape character will be conserved and, if possible, enhanced. The policy sets out various requirements for proposals to ensure they are of an appropriate use, scale and design to preserve and enhance the local character, amenity and environmental quality.

1.41 Policy ENV4: Biodiversity, Geodiversity and Ecological Networks

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	++	0	+	0	0	+	0	0	0	0	0

1.41.1 This policy is primarily concerned with the potential impacts of development proposals on the internationally important biodiversity, geodiversity and Ecological Networks prevalent in Rossendale. Development proposals will be required to show how local biodiversity and geodiversity will be conserved and enhanced following development. The Policies Map displays key components of the borough’s ecological networks and designates core areas, stepping stones and corridors. RBC intend to pursue opportunities for enhancing the Ecological Networks and its core areas and stepping stones. This policy will be expected to help ensure that designation and non-designated assets in the borough are protected. If opportunities for enhancement of local biodiversity and Ecological Networks during development are pursued, there could potentially be a net gain for biodiversity in the borough over the Plan period. The protection and enhancement of biodiversity assets will be likely to protect and enhance natural landscapes in some locations, as well as outdoor recreational opportunities for local residents.

1.42 Policy ENV5: Green Infrastructure Networks

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	+	0	0

1.42.1 The Policies Map identifies the Green Infrastructure (GI) network in the borough. Development will be required to support the protection, management, enhancement and connectivity of the GI network in the borough. GI is an essential component of local natural landscapes as well as local ecological networks. The local GI network also plays important roles in the provision of outdoor recreational activities for residents, carbon storage, reducing the Urban Heat Island effect, flood risk attenuation and contributing to the character and amenity of a local area (such as mature trees along residential streets).

1.43 Policy ENV6: Environmental Protection

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	0	+	+	0	+	+	+	0	0	+

1.43.1 In accordance with this policy, development which has unacceptable impacts on health, amenity, biodiversity, air quality or water quality will not be permitted unless the risk of pollution is effectively prevented, reduced and mitigated to an acceptable level.

1.44 Policy ENV7: Wind Turbines

1	2	3	4	5	6	7	8	9	10	11	12	13
-	0	0	0	0	+	0	0	0	0	+	0	0

1.44.1 The Policies Map has identified areas of the borough which are suitable for different types of wind turbine. Overall, this policy will help to ensure that wind turbines of various sizes can be utilized in the borough to provide a boost to the local economy as well as to help increase the supply of renewable electricity over the Plan period. There could potentially be some minor adverse impacts on natural landscapes and distinctive views in a limited number of locations depending on the precise distribution of turbines.

1.44.2 RBC intend to support community led turbines where they satisfy the listed technical criteria. Commercial wind farms will also be supported for outside the designated areas of search where the required criteria have clearly been met. This policy will help to encourage the wind turbine industry in the Plan area, providing a boost to the local economy whilst increase the Borough's generation of renewable electricity. There could potentially be a minor adverse impact on distinct natural landscapes and countryside views in a limited number of locations, depending on the distribution of turbines.

1.45 Policy ENV8: Other Forms of Energy Generation

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	+	0	0	0	0	+	0	0

1.45.1 RBC have adopted a proactive and positive approach to renewable energy generation in the Borough and this policy will see them support other forms of renewable energy generation beyond wind, including solar, hydro-electric and community led schemes. This will be likely to benefit the local economy whilst also helping the Council to reduce the Plan area's contributions towards the causes of climate change.

1.46 Policy ENV9: Surface Water Run-Off, Flood Risk, Sustainable Drainage and Water Quality

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	+	++	+	0	0	+	0	+	+	0	0

1.46.1 RBC have given close consideration to the potential impacts of development on flood risk, water quality and sustainable drainage. In addition to appropriate management of flood risk, this policy will require developments to incorporate Sustainable Drainage Systems (where applicable) whilst proposals which discharge surface water runoff to foul drainage connections will only be permitted in specific circumstances.

1.47 Policy ENV10: Trees and Hedgerows

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	++	+	+	+	+	+	+	+	0	0	0

1.47.1 Trees and hedgerows play a vital role in the Borough for their biodiversity value, their role in connecting GI and ecological networks as well as their contribution towards distinct landscapes and townscapes, the amenity value of residential areas and air quality. This policy offers existing trees, woodland and hedgerows further protection from adverse impacts of development.

1.48 Policy LT1: Protection of Playing Pitches, Existing Open Space, Sport and Recreation Facilities

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	+	+	+	+	+	+	+	0	0	0

1.48.1 RBC recognise the importance of outdoor recreational opportunities for local residents and this policy is designed to help ensure that development proposals result in the protection of, and potentially enhancement of, playing pitches, open spaces and other sport and recreational facilities. This will be likely to help protect the character, amenity and environmental quality of communities throughout the Borough.

1.49 Policy LT2: Community Facilities

1	2	3	4	5	6	7	8	9	10	11	12	13
0	+	0	0	0	0	0	+	+	+	+	0	0

1.49.1 Community facilities such as public houses, post offices and community centres make a vital contribution to the sense of place, quality of life and amenity of neighbourhoods throughout the Borough. This policy will help to ensure that these facilities are only lost to development in specific circumstances with various criteria satisfied. The creation of new such facilities will be encouraged by RBC, where appropriate.

1.50 Policy LT3: Tourism

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	0	0	0	0	0	0	+	+	+	0	+

1.50.1 Tourism makes an important contribution to the Borough's economy. This policy has been designed to allow RBC to promote local tourism, such as by supporting the 'Adrenaline Valley' as well as the development, extension and upgrading of the local PRoW network. In so doing, this policy will be likely to help improve the economic value of tourism in the Plan area whilst enhancing amenity and environmental quality in some locations.

1.51 Policy LT4: Overnight Visitor Accommodation

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	+	0	0

1.51.1 Visitor accommodation is an essential component of a successful local tourism industry and through this policy RBC set out their intention to supporting proposals at appropriate locations for new high quality visitor accommodation, such as hotels, bed and breakfasts and self-catering establishments. This policy will be expected to help contribute to a growing tourism industry in the Borough with positive impacts for the economy and local employment needs.

1.52 Policy LT5: Equestrian Development

1	2	3	4	5	6	7	8	9	10	11	12	13
+	0	0	0	0	0	0	+	0	0	+	0	0

1.52.1 RBC intend to support new, extension or alterations for existing, private or commercial equestrian facilities where the proposals fulfill a set of criteria. These criteria will help to ensure that such development does not occur where it will adversely impact the amenity, character or environmental quality of the local area. This will be likely to help preserve natural landscapes in rural settings.

1.53 Policy LT6: Farm Diversification

1	2	3	4	5	6	7	8	9	10	11	12	13
+	+	+	0	+	0	0	0	+	0	+	0	0

1.53.1 This policy sets out the range of criteria that will need to be fulfilled for proposals for farm diversification that require planning permission. This policy will be expected to help ensure that such proposals do not adversely impact the local economy, environmental quality, character or amenity.

1.54 Policy TR1: Strategic Transport

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	+	+	0	++

1.54.1 RBC are seeking opportunities to enhance the Borough's connectivity and proposals which would contribute to this, or towards a reduce need to travel, will be supported in principle. This policy will be expected to help ensure that accessibility of homes, places of work and recreational hotspots improves over the Plan period whilst the uptake of sustainable transport modes increases.

1.55 Policy TR2: Footpaths, Cycleways and Bridleways

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	+	0	+	+	0	++

1.55.1 The Council intend to support the development and enhancement of a strategic PRoW network in the Borough, including enhancements to surfacing, signage and feeder routes. Proposals to improve, extend or add to the existing PRoW network will be supported in principle, should they accord with certain criteria. As a result of this, pedestrian access to homes, places of work, key services and recreational hotspots will be likely to improve over the Plan period. Enhancements to the PRoW will be likely to encourage higher rates of walking and cycling, contributing to more active lifestyles for local residents.

1.56 Policy TR3: Road schemes and Development Access

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	0	0	+

1.56.1 In line with this policy, RBC will not permit development which is required to allow road access to a site allocation on the Policies Map or which prejudices the construction of identified road schemes. This policy will help to ensure that the accessibility of sites allocated in the Plan is maintained.

1.57 Policy TR4: Parking

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	0	0	+

- 1.57.1 Appendix 1 of the RBC Plan sets out parking standards with which new development proposals will be required to accord with. These standards will help to ensure that parking in the Borough continues to be safe whilst not dominating the street scene in a way which detracts from the area and which is of adequate supply to satisfy the needs of the local residents.

Appendix D

Strategic Spatial Options

1.1 Background

- 1.1.1 It is necessary for the SA/SEA to demonstrate that the Council has considered reasonable alternatives for proposals in the Local Plan. This includes reasonable alternatives for the quanta, as well as the spatial distribution, of the development proposed.
- 1.1.2 The following sections provide SA appraisals of quanta and spatial alternatives considered for the Local Plan. The various options considered by RBC are presented in **Table D.1**.
- 1.1.3 The Employment Land Review of the Borough identified a range of 22ha – 32ha in the overall need of employment land for Rossendale, ranging from 22ha to 32ha. In line with Policy EMP1 in the Local Plan, RBC therefore consider there to be a need for 27ha of employment land over the Plan period.
- 1.1.4 The Council's Strategic Housing Market Area Assessment (SHMA) (2016) examined economic and demographic evidence to assess the housing needs in the borough for the Plan period. Since then, the Government implemented a new standard methodology for calculating housing figures. Using this approach, the annual housing need for Rossendale is 212dpa. Over the Plan period (2019 – 2034) this would equate to a total of 3,180 dwellings. The Council therefore consider there to be a need for a total of 3,180 dwellings over the Plan period (in addition to 27ha of employment land).

Table D.1: Spatial Options and Quanta reasonable alternatives assessed in this report

	Spatial Option A	Spatial Option B	Spatial Option C	Spatial Option D
Quanta	3,000 dwellings 10ha employment	7,000 dwellings 24ha employment	2,000 dwellings 6ha employment	5,000 dwellings 9ha employment
Distribution	<ul style="list-style-type: none"> - 58ha on urban boundaries - 23ha Rawtenstall - 23ha Bacup - 9.5ha Whitworth - 5ha Green Belt sites - < 20% brownfield sites 	<ul style="list-style-type: none"> - Significant development at Edenfield - 25ha of greenfield sites in villages - 11ha Green Belt sites - < 10% brownfield sites 	<ul style="list-style-type: none"> - Focus on urban areas - Increase density to 40-45dph - Maximise reuse of vacant mills - More development in deprived locations - Development linked to existing services - 35% brownfield sites 	<ul style="list-style-type: none"> - Mix of development across Borough - Increase density to 40-45 dph - 14ha Bacup - 10 ha Rawtenstall - < 20% brownfield sites
Benefits	<ul style="list-style-type: none"> - Reduces urban sprawl by focusing development near urban boundaries - Opportunities for brownfield development 	<ul style="list-style-type: none"> - More than double the housing need - No issues with housing deliverability - Maximises growth opportunities 	<ul style="list-style-type: none"> - Focus on brownfield development - Better related and maximises the use of current services - Limited disturbance to landscape 	<ul style="list-style-type: none"> - Exceeds the housing need - Combines strategies - Optimal use of brownfield land - Retains key existing employment sites
Potential issues and Risks	<ul style="list-style-type: none"> - Just short of the housing need - Short of employment land need - Release of Green Belt - Limited availability at Haslingden - Road capacity issues - Landscape impacts 	<ul style="list-style-type: none"> - Large release of Green Belt - Development related to opportunity – not need or services - Strong environmental and landscape impacts - Road capacity issues 	<ul style="list-style-type: none"> - Falls short of housing and employment land need - Loss of employment sites for housing - Loss of open space in urban areas 	<ul style="list-style-type: none"> - Short of employment land need - Limited availability at Haslingden - Flood risk - Road capacity issues

1.2 Overview of assessments

1.2.1 The SA scoring matrices for all spatial strategies assessed in this report are brought together below. These scores should be read in conjunction with the explanatory text narratives in the subsequent sections.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Option	Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaptation	Human Health	Material Assets	Housing	Employment Locations	Employment Skills	Transport
A	-	-	-	-	-	-	-	+	-	+	+	+	+
B	-	-	-	-	-	-	-	-	-	++	++	+	-
C	-	-	-	-	-	-	-	+	-	-	+	+	+
D	-	-	-	-	-	-	-	+	-	++	+	+	-

1.2.2 Many of the adverse impacts identified during the appraisal of spatial options are ‘worst-case scenarios’. This means major or minor adverse impacts cannot be ruled out based on the currently available information and, in accordance with the precautionary principle, are assumed to occur. In reality, policies proposed in the Local Plan will mitigate many of the identified adverse impacts. It is currently unknown the extent to which policies may do so and which Objectives may benefit more than others. For example, it is likely that the Plan will not permit development to arise in Flood Zones 3a or 3b, and as such adverse impacts on the Water and Flooding Objective will be avoided in many cases. It is also likely that the Plan will encourage the uptake of screening vegetation and the conservation and enhancement of mature trees and hedgerow. This will help to mitigate adverse impacts on the landscape objective in many cases. Specific mitigation measures are not discussed for each objective or Option, rather the likely overall scope for mitigating adverse impacts is addressed in the assessment text of each Option.

1.2.3 It is also important to note that in the absence of a Local Plan, the spatial characteristics of development within the borough are largely uncertain but it is likely that without the Plan development would not be in accordance with a borough-wide coherent spatial strategy. Many of the adverse impacts identified in the Options assessments will be likely to occur regardless of the overall spatial strategy because they are inherent impacts of construction, such as impacts on local views and increases in greenhouse gas emissions.

- 1.2.4 All Options have been given the same score for SA Objectives 1 - 7 as major or minor adverse impacts could not be ruled out in each case. However, the magnitude of these impacts, and the likely scope for mitigating them, varies significantly between each Option and the SA scores are not an effective tool for demonstrating this. For example, a major adverse score was awarded for all Options for SA Objective 5 Natural Resources. Option B proposes the greatest quanta of development, as well as the greatest proportion of development on previously undeveloped greenfield sites, and in that sense will be likely to result in the greatest forfeitures of land resources. Option B would therefore be likely to have a more severe impact on the Natural Resources objective than Options A, C and D, whilst also having very limited scope for mitigation.
- 1.2.5 An adverse impact on the Housing Objective was anticipated for Options A and C because the quanta of development they propose falls short of the local OAN. However, adverse impacts of Option C on other Objectives, particularly natural environment Objectives such as Biodiversity and Landscape, will be likely to have greater scope for mitigation than the adverse impacts identified for other Options.
- 1.2.6 Options B exceeds the OAN for the Borough. The magnitude of development under Option B would be likely to result in the loss of significant quantities of greenfield land, with adverse impacts on biodiversity and landscape objectives likely. Option D meets the specified OAN for the District and it is considered to be likely that the adverse impacts under this Option would be to a lesser extent and more easily mitigated, making Option D more sustainable.
- 1.2.7 Option D combines some of the key elements of Options A, B and C. There is considered to be greater scope for avoiding and mitigating adverse sustainability impacts under Option D because of the proposed quanta and distribution of development. As such, it is likely that the adverse impacts currently anticipated under a worst-case scenario for Option D will be less severe and in some cases avoided. Option D would deliver development which satisfies the local OAN and overall is considered to be the best performing spatial option.

1.3 Spatial Option A

1	2	3	4	5	6	7	8	9	10	11	12	13
Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaption	Human Health	Material Assets	Housing	Employment Location	Employment Skills	Transport
-	-	-	-	-	-	-	+	-	-	+	+	+

1.3.1 This spatial option would deliver approximately 3,000 dwellings through development directed towards land within or adjacent to urban boundaries, approximately 58ha split between the four main towns:

- Rawtenstall – 23ha
- Bacup – 23ha
- Haslingden – 3ha
- Whitworth – 9.5ha

1.3.2 Development would be primarily greenfield sites adjacent to urban boundaries, with less than 20% of allocations being opportunities for brownfield development. There would be some development in the Green Belt (approximately 5ha), particularly in Whitworth and Rawtenstall. Smaller scale developments would be in proportion to settlement size.

1.3.3 The development would include approximately 10ha of employment land in addition to existing allocations. New sites would be proposed in Haslingden, Rawtenstall, Bacup and Whitworth. Retail and leisure expansions would be proposed within town centres, such as the extension of Bacup Town Centre.

Spatial Option A

SA1	<p>Option A would direct housing within or adjacent to urban boundaries and so there is a greater scope that the proposed development would be in-keeping with the existing settlement. Development on the boundaries of existing settlements could potentially adversely impact on countryside views for local residents, particularly as the significant majority of the proposed developments will be on previously undeveloped greenfield sites. By focusing on urban boundaries, and extending areas of built form into the surrounding countryside, it is likely development will alter the rural urban fringe.</p> <p>Spatial option A will also see approximately 5 ha of development in the Green Belt. This could adversely impact the landscape as it is more likely to be a rural and the development not in-keeping with the countryside’s natural features.</p>
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	<p>Development in smaller towns and villages will be limited, appropriate to their size, to ensure that excessive development does not detract from the local character and distinctiveness.</p> <p>Under Option A, Bacup and Rawtenstall have been proposed to receive high levels of development, approximately 45 ha between them. With this high volume of development, it may be difficult to avoid adverse impacts on the local townscapes, such as altering the landscaper character. Within Bacup, the proposed development adjacent to the current boundary is likely to have a significant change to the scale of the existing settlement because the extent of development within Bacup could be incoherent with its existing scale.</p> <p>The majority of the proposed development under Option A are within the LCT 'Settled Valleys'¹. This LCT has a moderate to high sensitivity, particularly in relation to scale and heritage. The magnitude of development could make it difficult to avoid impacts on heritage restraints, in particular the Bacup Town Centre Conservation Area.</p> <p>It is considered to be likely that Spatial Option A would be likely to cause permanent, non-reversible impacts on the high quality landscapes and townscapes of the Borough in some locations.</p>
SA2	<p>Whitworth Cemetery is a Grade II Registered Park and Garden, designated partially because of views from and into the Cemetery². The cemetery is on ground rising to the Southeast. Development to the south of the site is therefore likely to have an adverse impact on the views from and into the Cemetery.</p> <p>Option A directs the majority of development towards previously undeveloped land, and given the magnitude of development, it may be likely to affect the character of Rawtenstall Town Centre, Cloughfield, Falbarn, Bacup Town Centre and Whitworth Square Conservation Areas.</p>
SA3	<p>Lee Quarry SSSI, which displays one of the best available exposures in the Upper Carboniferous Haslingden Flags Formation³, is a popular mountain biking centre which is in a 'favourable' condition. Option A could potentially result in additional public access associated disturbances at the SSSI, although there is currently no evidence of adverse impacts resulting from public access.</p> <p>The Borough has a wide and diverse array of Biological Heritage Sites, Important Wildlife Sites and priority habitats. It is considered to be likely that development proposed under this option would increase public access associated disturbances at these sensitive wildlife spots to some extent.</p> <p>In some circumstances, it is considered to be likely that the Borough's woodland and grassland ecological networks will be disrupted by development proposed under Option A, particularly near Rawtenstall.</p> <p>Where development is proposed in greenfield sites, it is considered to be more likely that there would be a net reduction in the quantity and quality of priority habitats to some extent due to the</p>

¹ <https://www.burnley.gov.uk/sites/default/files/South%20Pennines%20Final%20Report%20CD%20version.pdf>

² Historic England (2002) Whitworth Cemetery <https://historicengland.org.uk/listing/the-list/list-entry/1000475> [Date Accessed: 14/03/18]

³ Natural England (1997) Designated Sites View: Lee Quarry SSSI <https://designatedsites.naturalengland.org.uk/> [Date Accessed: 20/03/18]

	<p>prevalence of habitats such as hedgerow, field boundaries and mature trees throughout the Borough.</p> <p>Redevelopment of brownfield sites can provide opportunities to protect and enhance biodiversity, such as through the creation of wildlife-rich residential gardens.</p>
SA4 & SA7	<p>Under Option A, development is predominantly directed towards valleys in the Borough where fluvial and surface water Flood Zones are prevalent. Residents could potentially be exposed to flood risk in some circumstances.</p> <p>The proposed development of greenfield sites on valley slopes, and the loss of GI this would cause, could potentially exasperate flood risk in the valley below.</p> <p>The 3,000 dwellings proposed under this Option would be likely to increase the Borough’s water consumption to some extent.</p>
SA5	<p>The significant majority of development proposed under Option A would be situated on Grade 4 ALC land. As over 80% of the development would be on previously undeveloped greenfield sites, this option would be likely to result in the loss of, or harm to, a significant quantity of soils.</p> <p>A large proportion of new residents under this option would be situated in pollutant trapping valleys and in close proximity to a major road or, for those in Rawtenstall, an AQMA. This could potentially make achieving air quality improvements at each AQMA more difficult, such as due to local traffic increases, whilst also exposing new residents to emissions which are harmful to human health.</p>
SA6	<p>Under Option A, 80% of development is directed towards previously undeveloped greenfield sites and is considered to be likely to lead to a loss in GI. This could potentially diminish the carbon sink function of local vegetation as well as exacerbate the UHI effect.</p> <p>The construction and occupation of over 3,000 dwellings in the Borough would be likely to significantly increase GHG emissions in the Plan area in relation to existing levels, particularly as new residents would be likely to rely heavily on personal car use due to limited public transport options.</p>
SA8	<p>Access to GP surgeries is generally good within the Plan area, though some residents west of Rawtenstall have more restricted access. There are no NHS hospitals within the Borough and residents in Rawtenstall and Bacup will be outside the 8km target distance of an NHS hospital. With limited public transport options, many residents may need to rely on personal car use to reach health facilities.</p> <p>The occupation of 3,000 dwellings could potentially place extra pressure on these existing facilities.</p> <p>The allocation of greenfields for residential and economic development proposed under this option could potentially reduce the quantity of suitable and accessible open space for residents in some locations.</p> <p>The majority of the proposed development would be within the 2km target distance of a local leisure centre and prospective residents would be expected to have good access into the countryside and a diverse range of natural habitats.</p>

	Overall this spatial option would be expected to help facilitate active and healthy lifestyles for existing and new residents.
SA9	The construction and occupation of 3,000 dwellings, as well as the construction and operation of 10ha of employment land under Option A would be expected to significantly increase waste production in the Plan area.
SA10	This strategy would make a positive contribution towards meeting the housing needs of the Borough over the Plan period, although a total of 3,000 dwellings would feel just short (approximately 180) of the OAN.
SA11	<p>Option A would deliver approximately 10ha of new employment land. Whilst this would fall far short of the total employment land needs in Rossendale, Option A would make a minor positive contribution towards meeting the employment needs of the borough.</p> <p>It is considered to be likely that new residents would have good access to employment opportunities in Level 1 settlements such as Rawtenstall, Bacup and Haslingden as well as cities outside the Borough, including Manchester, Rochdale and Blackburn.</p>
SA12	All development under Option A would be within the 1km target distance from primary schools, and the majority of development within the 2km target distance of a secondary school. Residents situated in Bacup would be likely to need to travel to Waterfoot to access secondary education.
SA13	<p>Public transport options are currently limited within the Borough, with no active railway station.</p> <p>Bus services are very limited in the more rural areas of the Borough, although under this spatial option the majority of new residents would be expected to be within 30 minutes travel time of key facilities by bus.</p> <p>Under Option A, development would be directed to the outskirts of urban areas as well as Green Belt locations. Where new public transport links are not provided, residents here could potentially be relatively distant from existing transport routes in some circumstances.</p> <p>Under Option A, new residents in Level 1 settlements would be expected to have good walking and cycling access to nearby amenities and through the PRow network.</p> <p>The A56 dual carriageway in the west leads on to the only motorway in the Borough, which is a small stretch of the M66 up to Junction 0 at Edenfield in the south of Rossendale. The A56 also leads onto the M65 towards cities in the north.</p> <p>Development proposed under this option is considered to be likely to increase pressures on existing transport links, including public bus services and road networks.</p>

1.4 Spatial Option B

1	2	3	4	5	6	7	8	9	10	11	12	13
Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaption	Human Health	Material Assets	Housing	Employment Location	Employment Skills	Transport
-	-	-	-	-	-	-	-	-	++	++	+	-

- 1.4.1 Option B is an extension of Option A, with an addition of approximately 4,000 dwellings and 24ha of employment land. This spatial option would deliver approximately 7,000 dwellings, directing development on greenfield and Green Belt sites, with less than 10% of allocated land being on brownfield sites. Development under Option B would be focussed further to the West of the Borough. Edenfield would be proposed to be expanded by approximately 15ha. Further Green Belt is proposed to be released at Whitworth (6ha) and Rising Bridge (5ha). Development would be allocated primarily on availability rather than infrastructure constraints.
- 1.4.2 Development of 15ha for employment would be directed towards Green Belt and greenfield sites near Rawtenstall and Haslingden.
- 1.4.3 Retail expansion would be proposed at Futures Park near Bacup and at Winfields of approximately 7.5ha. A further 5ha would be proposed on Green Belt sites at water, near Helmsford.

Spatial Option B

SA1

A majority of the land for housing is allocated within or adjacent to urban boundaries and so the proposed development is likely to be in-keeping with the existing built form in some circumstances. Development on the boundaries of existing settlements could potentially adversely impact on countryside views for local residents, particularly as the significant majority of the proposed development will be on previously undeveloped greenfield sites. By focusing on urban boundaries, and extending areas of built form into the surrounding countryside, it is likely development will alter the rural urban fringe.

The magnitude of development under Option B is likely to fragment the current landscape form or alter townscape character and local distinctiveness in some circumstances.

With the majority of development being directed towards greenfield and Green Belt sites adverse impacts on natural landscape features, such as hedgerows and mature trees, may be more likely. Development of Green Belt sites could also potentially increase the risk of merging of urban areas and urban sprawl into the countryside.

This Option would be likely to significantly alter the scale of Edenfield.

	<p>The majority of the proposed development under Option B are within the LCT ‘Settled Valleys’⁴. This LCT has a moderate to high sensitivity, particularly in relation to scale and heritage. The magnitude of development could make it difficult to avoid impacts on heritage restraints, in particular the Bacup Town Centre and the Chatterton/ Strongstry Conservation Areas.</p> <p>It is considered to be likely that Spatial Option B would be likely to cause permanent, non-reversible impacts on the high quality landscapes and townscapes of the Borough in various locations.</p>
SA2	<p>Whitworth Cemetery is a Grade II Registered Park and Garden, designated partially because of views from and into the Cemetery⁵. The cemetery is on ground rising to the Southeast. Development to the south of the site is therefore likely to have an adverse impact on the views from and into the Cemetery.</p> <p>Option B directs the majority of development towards previously undeveloped land, and given the magnitude of development and that approximately 25ha of greenfield sites in villages would be developed, it may be likely to affect the character of some Conservation Areas, such as in Rawtenstall.</p>
SA3	<p>Lee Quarry SSSI, which displays one of the best available exposures in the Upper Carboniferous Haslingden Flags Formation⁶, is a popular mountain biking centre which is in a ‘favourable’ condition. Option B could potentially result in additional public access associated disturbances at the SSSI, although there is currently no evidence of adverse impacts resulting from public access.</p> <p>The Borough has a wide and diverse array of Biological Heritage Sites, Important Wildlife Sites and priority habitats. Increased public access associated disturbances at these sensitive wildlife spots would be expected, to some extent, under Option B.</p> <p>In some circumstances, it is expected that the Borough’s woodland and grassland ecological networks will be disrupted by development proposed under Option B, such as Rawtenstall and Edenfield.</p> <p>Where development is proposed in greenfield sites, it is considered to be likely that there would be a net reduction in the quantity and quality of priority habitats due to the prevalence of habitats such as hedgerow, field boundaries and mature trees throughout the Borough.</p> <p>Under this Option, there is restricted potential for redevelopment of brownfield sites, and therefore limited opportunities to protect and enhance biodiversity, such as through the creation of wildlife-rich residential gardens.</p>
SA4 & SA7	<p>Under Option B, development is predominantly directed towards valleys in the Borough where fluvial and surface water Flood Zones are prevalent. Residents are considered to be likely to be exposed to flood risk.</p> <p>The proposed development of greenfield sites on valley slopes, and the loss of GI this would cause, is considered to be likely to exasperate flood risk in the valley below.</p> <p>The 7,000 dwellings proposed under this Option will increase the Borough’s water consumption.</p>

⁴ <https://www.burnley.gov.uk/sites/default/files/South%20Pennines%20Final%20Report%20CD%20version.pdf>

⁵ Historic England (2002) Whitworth Cemetery <https://historicengland.org.uk/listing/the-list/list-entry/1000475> [Date Accessed: 14/03/18]

⁶ Natural England (1997) Designated Sites View: Lee Quarry SSSI <https://designatedsites.naturalengland.org.uk/> [Date Accessed: 20/03/18]

SA5	<p>The significant majority of development proposed under Option B would be situated on Grade 4 ALC land. As over 90% of the development would be on previously undeveloped greenfield sites, this option would be likely to result in the loss of, or harm to, a significant quantity of soils.</p> <p>A large proportion of new residents under this option would be situated in pollutant trapping valleys and in close proximity to a major road or, for those in Rawtenstall, an AQMA. This would be expected to make achieving air quality improvements at each AQMA more difficult, such as due to local traffic increases, whilst also exposing new residents to emissions which are harmful to human health.</p>
SA6	<p>Under Option B, 90% of development is directed towards previously undeveloped greenfield sites and is likely to lead to a loss in GI. This is considered to be likely to diminish the carbon sink function of local vegetation as well as exacerbate the UHI effect.</p> <p>The construction and occupation of over 7,000 dwellings in the Borough would be expected to significantly increase GHG emissions in the Plan area in relation to existing levels, particularly as new residents would be likely to rely heavily on personal car use due to limited public transport options.</p>
SA8	<p>Access to GP surgeries is restricted within the majority of the Plan area. There are no NHS hospitals within the Borough and residents in Edenfield, Rawtenstall and Bacup will be outside the 8km target distance of an NHS hospital. With limited public transport options, many residents may need to rely on personal car use to reach health facilities.</p> <p>The allocation of greenfield sites for residential and economic development proposed under this option is considered likely to reduce the quantity of suitable and accessible open space for residents in some locations.</p> <p>The majority of the proposed development is outside the 2km target distance of a local leisure centre but prospective residents would be expected to have good access into the countryside and a diverse range of natural habitats.</p> <p>The occupation of 7,000 dwellings is expected to place extra pressure on these existing facilities.</p>
SA9	<p>The construction and occupation of 7,000 dwellings, as well the construction and operation of 24ha of employment land under Option B would be expected to significantly increase waste production in the Plan area.</p>
SA10	<p>The delivery of 7,000 dwellings would exceed the OAN for the Plan area.</p>
SA11	<p>Option B would deliver approximately 24ha of new employment land. This would make a significant contribution towards satisfying the employment floorspace needs of the Borough.</p> <p>It is considered to be likely that new residents would have good access to employment opportunities in Level 1 settlements such as Rawtenstall, Bacup and Haslingden as well as cities outside the Borough, including Manchester, Rochdale and Blackburn.</p>
SA12	<p>All development under Option B would be within the 1km target distance from primary schools, and the majority of development within the 2km target distance of a secondary school. Residents situated in Bacup would be likely to need to travel to Waterfoot to access secondary education. the occupation</p>

	<p>of over 7,000 dwellings under this option is expected to place extra pressure on existing secondary schools.</p>
SA13	<p>Public transport options are currently limited within the Borough, with no active railway station.</p> <p>Bus services are very limited in the more rural areas of the Borough and many new residents under this spatial option would be directed to rural areas and not expected to be within 30 minutes travel time of key facilities by bus.</p> <p>Under Option B, development would be directed to the outskirts of urban areas as well as Green Belt locations. Where new public transport links are not provided, residents here would be likely to be relatively distant from existing transport routes in some circumstances.</p> <p>Under Option B, new residents in Level 1 settlements would be expected to have good walking and cycling access to nearby amenities and through the PRoW network. In rural areas, new residents would not be expected to be able to walk or cycle to employment opportunities.</p> <p>The A56 dual carriageway in the west leads on to the only motorway in the Borough, which is a small stretch of the M66 up to Junction 0 at Edenfield in the south of Rossendale. The A56 also leads onto the M65 towards cities in the north.</p> <p>Development proposed under this option expected to increase pressures on existing transport links, including public bus services and road networks.</p>

1.5 Spatial Option C

1	2	3	4	5	6	7	8	9	10	11	12	13
Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaption	Human Health	Material Assets	Housing	Employment Location	Employment Skills	Transport
-	-	-	-	-	-	-	+	-	-	+	+	+

- 1.5.1 This spatial option would deliver approximately 2,000 dwellings through the development within existing urban areas and brownfield land but at higher densities. Focus would be on urban areas, regardless of their positions within the settlement hierarchy. This option would aim for approximately 35% of allocations to be on brownfield sites and more development on non-allocated brownfield sites of under five dwellings. More development would be directed in urban and deprived areas of the Borough. Option D would maximise the use of vacant mills for housing, particularly along the Irwell corridor.
- 1.5.2 Housing density would be proposed to increase within the Borough, a minimum of 30 dwelling per ha, up to 45 dwellings per ha near transport hubs. This Option plans to maximise the use of existing services.
- 1.5.3 Option C would propose less than 6ha of employment land at Barlow Bottoms and Baxenden Chemicals, where the current Borough target is 23ha. This option proposes the development of old employment sites into residential, affecting the Employment Land Supply, decreasing the current supply by approximately 15%.

Spatial Option C

SA1

Option C would focus on development within urban areas and so there is a greater scope that the proposed development would be in-keeping with the existing settlement. Development on the boundaries of existing settlements could potentially have adverse impacts on countryside views for local residents, particularly if the proposed developments are located on previously undeveloped greenfield sites. By focusing on urban areas, and limiting the extension of built form into the surrounding countryside, it is likely development will limit the loss of countryside and landscape features.

Option C proposes an increase in housing density throughout the Borough, potentially up to 45 dwellings per hectare near Transport Hubs. Mitigating the impact of higher density development on the character of the local area can be difficult, with less scope for spacious layout and the use of green buffers. Higher density developments may also require the use of taller buildings in some circumstances. Taller buildings can have adverse impacts on long distance views, as well as the character of their local area, which are permanent and also very difficult to mitigate.

	<p>The majority of the proposed development under Option C are within the LCT 'Settled Valleys'⁷. This LCT has a moderate to high sensitivity, particularly in relation to scale and heritage. The increased density of development, in particular the potential addition of taller buildings, could make it difficult to avoid impacts on visual restraints.</p> <p>By focusing on urban areas and brownfield sites, it is considered to be likely that Spatial Option C would be likely to cause permanent, non-reversible impacts on the high quality landscapes and townscapes of the Borough in various locations.</p>
SA2	<p>Whitworth Cemetery is a Grade II Registered Park and Garden, designated partially because of views from and into the Cemetery⁸. The cemetery is on ground rising to the Southeast. Development to the south of the site is therefore likely to have an adverse impact on the views from and into the Cemetery.</p> <p>Option C directs the majority of development towards urban areas, and given the magnitude of development, it may be likely to affect the character of the Conservation Areas, such as Bacup Town Centre and Whitworth Square.</p>
SA3	<p>Lee Quarry SSSI, which displays one of the best available exposures in the Upper Carboniferous Haslingden Flags Formation⁹, is a popular mountain biking centre which is in a 'favourable' condition. Option C could potentially result in additional public access associated disturbances at the SSSI, although there is currently no evidence of adverse impacts resulting from public access.</p> <p>The Borough has a wide and diverse array of Biological Heritage Sites, Important Wildlife Sites and priority habitats. It is considered to be likely that development proposed under this option would increase public access associated disturbances at these sensitive wildlife spots to some extent.</p> <p>In some circumstances, it is considered to be likely that the Borough's woodland and grassland ecological networks will be disrupted by development proposed under Option C, particularly near Rawtenstall.</p> <p>Where development is proposed in greenfield sites, it is considered to be more likely that there would be a net reduction in the quantity and quality of priority habitats to some extent due to the prevalence of habitats such as hedgerow, field boundaries and mature trees throughout the Borough.</p> <p>Option C directs 35% of development towards the redevelopment of brownfield sites, which can provide opportunities to protect and enhance biodiversity, such as through the creation of wildlife-rich residential gardens.</p>

⁷ <https://www.burnley.gov.uk/sites/default/files/South%20Pennines%20Final%20Report%20CD%20version.pdf>

⁸ Historic England (2002) Whitworth Cemetery <https://historicengland.org.uk/listing/the-list/list-entry/1000475> [Date Accessed: 14/03/18]

⁹ Natural England (1997) Designated Sites View: Lee Quarry SSSI <https://designatedsites.naturalengland.org.uk/> [Date Accessed: 20/03/18]

SA4 & SA7	<p>Under Option C, development is predominantly directed towards valleys in the Borough where fluvial and surface water Flood Zones are prevalent. Residents could potentially be exposed to flood risk in some circumstances.</p> <p>The proposal of some development of greenfield sites on valley slopes, and the loss of GI this could cause, could potentially exasperate flood risk in the valley below.</p> <p>The 1.904 dwellings proposed under this Option could potentially increase the Borough’s water consumption to some extent.</p>
SA5	<p>The significant majority of development proposed under Option C would be situated on Grade 4 ALC land. As over 65% of the development would be on previously undeveloped greenfield sites, this option would be likely to result in the loss of, or harm to, a significant quantity of soils.</p> <p>A large proportion of new residents under this option would be situated in pollutant trapping valleys and in close proximity to a major road or, for those in Rawtenstall, an AQMA. This could potentially make achieving air quality improvements at each AQMA more difficult, such as due to local traffic increases, whilst also exposing new residents to emissions which are harmful to human health.</p>
SA6	<p>Under Option C, 65% of development is directed towards previously undeveloped greenfield sites and could potentially to lead to a loss in GI. This would potentially diminish the carbon sink function of local vegetation as well as exacerbate the UHI effect.</p> <p>The construction and occupation of approximately 2,000 dwellings in the Borough would be likely to significantly increase GHG emissions in the Plan area in relation to existing levels, particularly as new residents would be likely to rely heavily on personal car use due to limited public transport options.</p>
SA8	<p>Access to GP surgeries is generally good within the Plan area. There are no NHS hospitals within the Borough and residents in Rawtenstall and Bacup will be outside the 8km target distance of an NHS hospital. With limited public transport options, many residents may need to rely on personal car use to reach health facilities.</p> <p>The occupation of 2,000 dwellings could potentially place extra pressure on these existing facilities.</p> <p>The allocation of greenfield sites for residential and economic development proposed under this option could potentially reduce the quantity of suitable and accessible open space for residents in some locations.</p> <p>The majority of the proposed development is within the 2km target distance of a local leisure centre and prospective residents would be expected to have good access into the countryside and a diverse range of natural habitats.</p> <p>Overall this spatial option would be expected to help facilitate active and healthy lifestyles for existing and new residents.</p>
SA9	<p>The construction and occupation of 2,000 dwellings, as well as construction and operation of 6ha of employment land under Option C would be expected to increase waste production in the Plan area.</p>

SA10	The delivery of 2,000 dwellings would significantly fall short of the OAN for the Plan area.
SA11	<p>Option C would deliver approximately 6ha of new employment land. Whilst this would fall significantly short of the total employment needs in the Borough, Option C would make a minor positive contribution towards meeting these needs.</p> <p>It is considered to be likely that new residents would have good access to employment opportunities in Level 1 settlements such as Rawtenstall, Bacup and Haslingden as well as cities outside the Borough, including Manchester, Rochdale and Blackburn.</p>
SA12	All development under Option C would be within the 1km target distance from primary schools, and the majority of development within the 2km target distance of a secondary school. Residents situated in Bacup would be likely to need to travel to Waterfoot to access secondary education.
SA13	<p>Public transport options are currently limited within the Borough, with no active railway station.</p> <p>Bus services are very limited in the more rural areas of the Borough, although under this spatial option the majority of new residents would be expected to be within 30 minutes travel time of key facilities by bus.</p> <p>Under Option C, development could be directed to the outskirts of urban areas as well as Green Belt locations. Where new public transport links are not provided, residents here could potentially be relatively distant from existing transport routes in some circumstances.</p> <p>Under Option C, new residents in Level 1 settlements would be expected to have good walking and cycling access to nearby amenities and through the PRow network.</p> <p>The A56 dual carriageway in the west leads on to the only motorway in the Borough, which is a small stretch of the M66 up to Junction 0 at Edenfield in the south of Rossendale. The A56 also leads onto the M65 towards cities in the north.</p> <p>Development proposed under this option could potentially increase pressures on existing transport links, including public bus services and road networks.</p>

1.6 Spatial Option D

1	2	3	4	5	6	7	8	9	10	11	12	13
Landscape	Cultural Heritage	Biodiversity and Geodiversity	Water and Flooding	Natural Resources	Climate Change Mitigation	Climate Change Adaption	Human Health	Material Assets	Housing	Employment Location	Employment Skills	Transport
-	-	-	-	-	-	-	+	-	++	+	+	-

- 1.6.1 This spatial option would deliver approximately 4,500 dwellings through the development across the Borough including making optimal use of brownfield land, along with an increased density to 45 dwellings per ha in some town centres. There would be a greater emphasis on development on brownfield sites with current infrastructure issues to develop former mill sites into dwellings, particularly between Water and Waterfoot.
- 1.6.2 Some development would be directed towards greenfield land on urban fringes in proportion to the size of settlements in order to meet the OAN. The majority of the development would be directed towards the north and east of Rawtenstall (approximately 10.2ha) and Bacup (approximately 14ha), most of which would be greenfield sites.
- 1.6.3 This option proposes the exceptional case for release of Green Belt for development at Edenfield and Whitworth due to the lack of alternative sites within the proximity of the settlement.
- 1.6.4 Option D proposes the retention of many key existing employment sites. This option would seek to develop additional land near Haslingden (5ha), at Barlow Bottom (1.2ha) and Green Belt land south of New Hall Hey (3ha).
- 1.6.5 The development would focus retail and leisure expansion on existing town centres with the addition of a small extension near Bacup. There would also be the opportunity for development at Futures Park, with approximately 7ha being brownfield sites.

Spatial Option D	
SA1	Option D would provide a mix of development, including the use of brownfield sites at high densities (approximately 40-45 dwellings per hectare). Mitigating the impact of higher density development on the character of the local area can be difficult, with less scope for spacious layout and the use of green buffers. Higher density developments may also require the use of taller buildings in some circumstances. Taller buildings can have adverse impacts on long distance views, as well as the character of their local area, which are permanent and also very difficult to mitigate.

	<p>The majority of the proposed development under Option D are within the LCT ‘Settled Valleys’¹⁰. This LCT has a moderate to high sensitivity, particularly in relation to scale and heritage. The increased density of development, in particular the potential addition of taller buildings, could make it difficult to avoid impacts on visual restraints.</p> <p>Option D proposes the use of greenfield sites on the urban fringe. Development will be proportional to settlement size to ensure that excessive development does not detract from the local character and distinctiveness and limits the extent of urban sprawl. Approximately 18ha of greenfield land is allocated from urban expansions. The use of Green Belt release is also proposed under exceptional circumstances due to lack of alternative sites at Edenfield and Whitworth. The development on greenfield and Green Belt sites could adversely impact the landscape as it is more likely to be a rural and the development not in-keeping with the countryside’s natural features.</p> <p>It is considered to be likely that Spatial Option D would be likely to cause permanent, non-reversible impacts on the high quality landscapes and townscapes of the Borough in various locations.</p>
SA2	<p>Whitworth Cemetery is a Grade II Registered Park and Garden, designated partially because of views from and into the Cemetery¹¹. The cemetery is on ground rising to the Southeast. Development to the south of the site is therefore likely to have an adverse impact on the views from and into the Cemetery.</p> <p>Option D directs the majority of development towards previously undeveloped land, and given the magnitude of development, it may be likely to affect the character of the Conservation Areas, such as Rawtenstall Town Centre.</p>
SA3	<p>Lee Quarry SSSI, which displays one of the best available exposures in the Upper Carboniferous Haslingden Flags Formation¹², is a popular mountain biking centre which is in a ‘favourable’ condition. Option D could potentially result in additional public access associated disturbances at the SSSI, although there is currently no evidence of adverse impacts resulting from public access.</p> <p>The Borough has a wide and diverse array of Biological Heritage Sites, Important Wildlife Sites and priority habitats. Increased public access associated disturbances at these sensitive wildlife spots would be expected, to some extent, under Option D.</p> <p>In some circumstances, it is expected that the Borough’s woodland and grassland ecological networks will be disrupted by development proposed under Option D, such as Rawtenstall and Edenfield.</p> <p>Where development is proposed in greenfield sites, it is considered to be more likely that there would be a net reduction in the quantity and quality of priority habitats to some extent due to the prevalence of habitats such as hedgerow, field boundaries and mature trees throughout the Borough.</p>

¹⁰ <https://www.burnley.gov.uk/sites/default/files/South%20Pennines%20Final%20Report%20CD%20version.pdf>

¹¹ Historic England (2002) Whitworth Cemetery <https://historicengland.org.uk/listing/the-list/list-entry/1000475> [Date Accessed: 14/03/18]

¹² Natural England (1997) Designated Sites View: Lee Quarry SSSI <https://designatedsites.naturalengland.org.uk/> [Date Accessed: 20/03/18]

	<p>Redevelopment of brownfield sites can provide opportunities to protect and enhance biodiversity, such as through the creation of wildlife-rich residential gardens.</p>
<p>SA4 & SA7</p>	<p>Under Option A, development is predominantly directed towards valleys in the Borough where fluvial and surface water Flood Zones are prevalent. Residents would be likely to be exposed to flood risk in some circumstances.</p> <p>The proposed development of greenfield sites on valley slopes, and the loss of GI this would cause, could exasperate flood risk in the valley below.</p> <p>The 4,500 dwellings proposed under this Option I considered to be likely to increase the Borough’s water consumption to some extent.</p>
<p>SA5</p>	<p>The significant majority of development proposed under Option D would be situated on Grade 4 ALC land. As over 80% of the development would be on previously undeveloped greenfield sites, this option would be likely to result in the loss of, or harm to, a significant quantity of soils.</p> <p>A large proportion of new residents under this option would be situated in pollutant trapping valleys and in close proximity to a major road or, for those in Rawtenstall, an AQMA. This is considered to be likely to make achieving air quality improvements at each AQMA more difficult, such as due to local traffic increases, whilst also exposing new residents to emissions which are harmful to human health.</p>
<p>SA6</p>	<p>Under Option D, over 80% of development is directed towards previously undeveloped greenfield sites and would be likely to lead to a loss in GI. This is considered to be likely to diminish the carbon sink function of local vegetation as well as exacerbate the UHI effect.</p> <p>The construction and occupation of over 4,000 dwellings in the Borough would be likely to significantly increase GHG emissions in the Plan area in relation to existing levels, particularly as new residents would be likely to rely heavily on personal car use due to limited public transport options.</p>
<p>SA8</p>	<p>Access to GP surgeries is generally good within the Plan area, though some residents near Edenfield would have more restricted access. There are no NHS hospitals within the Borough and residents in Rawtenstall and Bacup will be outside the 8km target distance of an NHS hospital. With limited public transport options, many residents may need to rely on personal car use to reach health facilities.</p> <p>The occupation of 4,500 dwellings is considered to be likely to place extra pressure on these existing facilities.</p> <p>The allocation of greenfield sites for residential and economic development proposed under this option could potentially reduce the quantity of suitable and accessible open space for residents in some locations.</p> <p>Some of the proposed development is within the 2km target distance of a local leisure centre but all prospective residents would be expected to have good access into the countryside and a diverse range of natural habitats.</p>

	Overall this spatial option would be expected to help facilitate active and healthy lifestyles for existing and new residents.
SA9	The construction and occupation of 4,500 dwellings, as well as construction and operation of 9ha of employment land under Option D would be expected to significantly increase waste production in the Plan area.
SA10	The delivery of 4,500 dwellings would meet the OAN for the Plan area.
SA11	<p>Option D would deliver approximately 10ha of new employment land. This would fall far short of the total employment land needs of the borough but would still be recognised as a minor positive contribution towards meeting this need.</p> <p>It is considered to be likely that new residents would have good access to employment opportunities in Level 1 settlements such as Rawtenstall, Bacup and Haslingden as well as cities outside the Borough, including Manchester, Rochdale and Blackburn.</p>
SA12	All development under Option D would be within the 1km target distance from primary schools, and the majority of development within the 2km target distance of a secondary school. Residents situated in Bacup would be likely to need to travel to Waterfoot to access secondary education.
SA13	<p>Public transport options are currently limited within the Borough, with no active railway station.</p> <p>Bus services are very limited in the more rural areas of the Borough and many new residents under this spatial option would be directed to rural areas and not expected to be within 30 minutes travel time of key facilities by bus.</p> <p>Under Option D, development would be directed to the outskirts of urban areas as well as Green Belt locations. Where new public transport links are not provided, residents here would be likely to be relatively distant from existing transport routes in some circumstances.</p> <p>Under Option D, new residents in Level 1 settlements would be expected to have good walking and cycling access to nearby amenities and through the PRow network. In rural areas, new residents would not be expected to be able to walk or cycle to employment opportunities.</p> <p>The A56 dual carriageway in the west leads on to the only motorway in the Borough, which is a small stretch of the M66 up to Junction 0 at Edenfield in the south of Rossendale. The A56 also leads onto the M65 towards cities in the north.</p> <p>Development proposed under this option is considered to be likely to increase pressures on existing transport links, including public bus services and road networks.</p>



Lepus Consulting
1 Bath Street
Cheltenham
Gloucestershire GL50 1YE

t: 01242 525222
w: www.lepusconsulting.com
e: enquiries@lepusconsulting.com