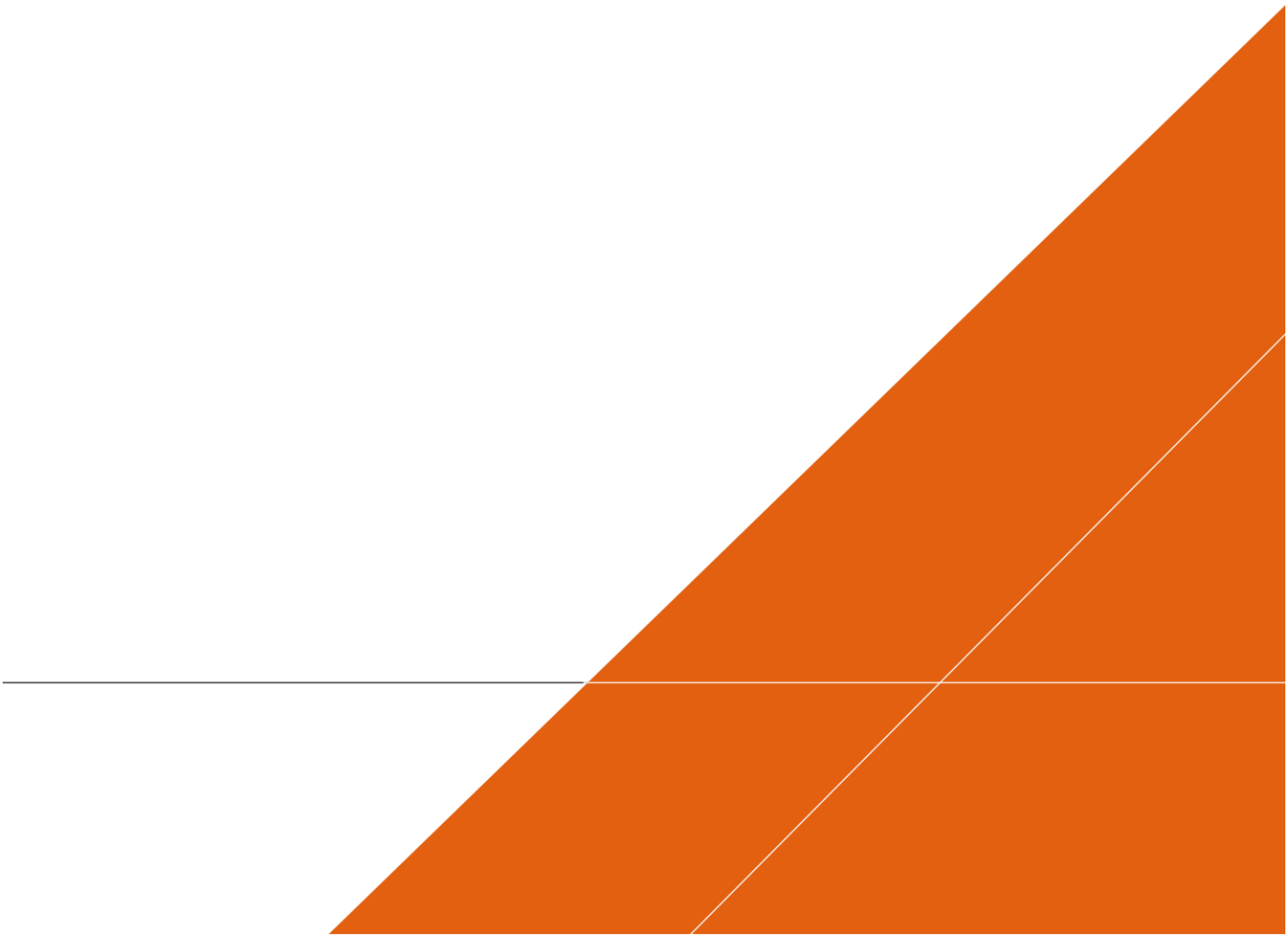
ARCADIS Design & Consultancy for natural and built assets

SUSTAINABILITY APPRISAL – SCOPING REPORT UPDATE (FINAL)

Lancaster South Area Action Plan

JULY 2021



CONTACTS

SARAH TOOBY
Principal Planner

e sarah.tooby@arcadis.com

Arcadis.
Arcadis Cymru House
St Mellons Business Park
Fortran Road
Cardiff
CF3 0EY
United Kingdom

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2	April 2021	CW	ST	FH	Update following client review
3	June 2021	CW	ST	ST	Final following consultation
4	July 2021	CW	ST	ST	Final following client comments

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1 Introduction

1.1 Purpose of this Scoping Report

This Scoping Report has been prepared by Lancaster City Council (LCC) as part of the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Lancaster South Area Action Plan (AAP). LCC have identified a broad location for growth which includes Bailrigg Garden Village, identified in Policies SG1 and SG3 of the Lancaster City Council Local Plan[1]. The Garden Village is to comprise a major mixed-use development which focuses on the delivery of at least 3,500 new houses, with a number of opportunities for employment and economic growth. The AAP's purpose is to set the full planning framework for the broad area of growth, including Bailrigg Garden Village. Section 1.3 of this report provides further information about the background to and the development of the AAP.

SA is a legally required process for assessing the social, economic and environmental impacts of a plan and aims to ensure that sustainable development is at the heart of the plan-making process. This SA Scoping Report represents the initial stage in the SA process for the emerging AAP and sets the scope for the remainder of the process. Its purpose is to:

- Set the scope and level of detail of the SA;
- Identify relevant plans, policies, programmes and initiatives that will inform the SA process and theAAP;
- Identify relevant baseline information;
- Identify key sustainability issues and problems; and
- Present a SA Framework, consisting of sustainability objectives and indicators, against which the emerging AAP can be assessed.

The SA is being produced in accordance with the SEA Directive[2] which is transposed directly into UK law through the SEA Regulations[3]. This requires the authority preparing the plan to consult the consultation bodies[4] on the scope and level of detail of the SA. The preparation of an SA Scoping Report provides the most effective means of undertaking this consultation by providing the consultees with a document upon which they can make comments.

1.2 Background to the Broad Area of Growth

The Lancaster South Broad Location for Growth, which will include Bailrigg Garden Village, is situated south of Lancaster City with the general area being predominantly rural. The area of growth is intersected by the M6 motorway and the A6 both running north-south through the site. The West Coast Main Line (WCML) rail link also transects the area of growth north-south running parallel to the A6 with the closest train station being Lancaster Station in the city centre. The suburb of Scotforth is located to the north of the area of growth with the village of Galgate to the south.

The area of growth in general comprises large amounts of agricultural land plus Bailrigg, and the campus for Lancaster University; occupying the area of space between the M6 and A6 corridors. The Lancaster Canal falls in the north west area of the site and forms the south western boundary of the site. The Forest of Bowland Area of Outstanding Natural Beauty (AONB) is also close by to the east of the site boundary.

Figure 1-1 shows the location of the boundary of the site that is referred to in this SA Scoping Report.

[1] Lancaster City Council (2020) A Local Plan for Lancaster District 2011 – 2031. Part One: Strategic Policies and Local Plan Allocation DPD. Available at: http://www.lancaster.gov.uk/assets/attach/6159/Strategic%20Policies%20Land%20Allocations%20DPD%20Adoption%20Version%202020.pdf [Accessed: 19.02.21]

[2] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042 [Accessed: 19.02.21]

[3] The Environmental Assessment of Plans and Programmes Regulations 2004. Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents/made [Accessed: 19.02.21]

[4] Natural England, Environment Agency, Historic England

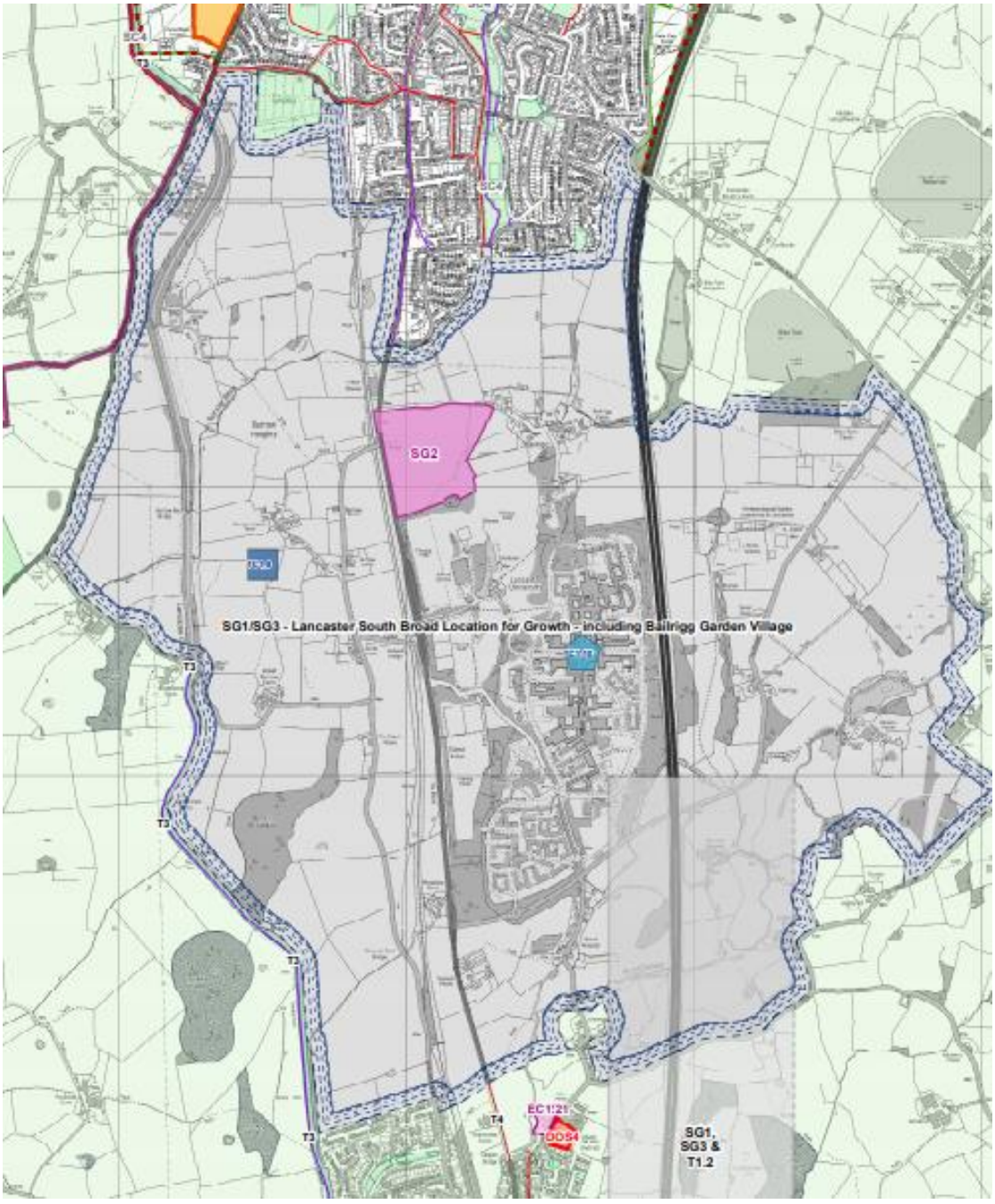


Figure 1-1: Location of the Lancaster South broad location for growth, including Bailrigg Garden Village (Source: Lancaster City Council)

1.3 Background to the Local Plan and the AAP

In July 2020, Lancaster City Council formally adopted its Local Plan: Strategic Policies and Land Allocations DPD and Review of the Development Management DPD. The Adopted Lancaster Local Plan will guide development in the Lancaster District for the next 10 years. It will include the need to plan for the new housing, employment, open spaces, shops and community facilities necessary to create places people want to live, work and do business.

The Broad Location for Growth has been brought forward as part of the Strategic Policies & Land Allocations DPD through Policy SG1. Policy SG1 identifies a Broad Location for Growth in South Lancaster (see Box 1:

Policy SG1). Policy SG1 sets out a general plan for the Location for Growth and how it is to be delivered in a further DPD – the Lancaster South AAP. This AAP is the subject of this SA Scoping Report.

Box 1: Policy SG1 from the Adopted Lancaster Local Plan

POLICY SG1: LANCASTER SOUTH BROAD LOCATION FOR GROWTH (INCLUDING BAILRIGG GARDEN VILLAGE)

The Council has identified a broad location for growth in South Lancaster, including for the development of the Bailrigg Garden Village, on the Local Plan Policies Maps. This will be a major mixed-use development which focuses on the delivery of at least 3,500 new houses, a number of opportunities for employment and economic opportunities including the delivery of Lancaster University Health Innovation Campus and wider University related expansion.

Key Growth Principles for Development in the Broad Location for Growth

The Council has defined a range of principles which will be at the very core of the planning and development in South Lancaster and for the Garden Village. These will be explored in more detail via the forthcoming Lancaster South Area Action Plan DPD for this area. These principles include:

1. Involving local communities in pro-active consultation about the creation of new development.
2. Securing high-quality urban design which promotes sustainable, attractive places to live, defining a sense of place and creates a sense of community for its new residents.
3. Seeking a modal shift in local transport movements between South Lancaster, the Garden Village, Lancaster University Campus and Lancaster City Centre and beyond into the employment areas of Morecambe and Heysham through the delivery of a Bus Rapid Transit System and Cycling and Walking Superhighway network.
4. Delivering a wide range of market and affordable housing, in terms of type and tenure to ensure that opportunities to live in the Garden Village are available to all sections of the community and contribute significantly to the creation of cohesive, balanced communities and thereby assist the district in meeting its evidenced housing needs within the Local Plan period.
5. Ensuring that the necessary infrastructure to achieve sustainable growth is delivered in the right place, at the right time, to address strategic constraints to the delivery of future development in the South Lancaster area.
6. The creation of sufficient areas of high quality open spaces to provide a distinct sense of place and deliver a network of green corridors and walking and cycling routes across the South Lancaster area to the benefit of the local environment and residents. The delivery of such spaces and routes should make for distinct areas of separation between the new development and the urban edge of Lancaster, Bailrigg Village and Galgate and give potential to bring forward a new country park.
7. Development proposals will need to take account of the recommendations for mitigating harm and/or maximising enhancements as set out in the Council's Heritage Impact Assessment for this area.
8. The creation of healthy and cohesive communities through the delivery of high quality development and the correct levels of services, open space and infrastructure which is provided in safe and accessible locations.
9. The sympathetic masterplanning of new facilities and growth within the campus of Lancaster University for a range of educational facilities, student accommodation, visitor accommodation and ancillary uses located primarily at the Bailrigg Campus, the Lancaster University Health Innovation Campus and in appropriate locations within the wider University estate in the context of its sensitive landscape setting.

10. Safeguarding Lancaster University's Bailrigg Campus, by ensuring that development in South Lancaster and for the Bailrigg Garden Village is well planned and does not have an adverse impact on the University Campus and its setting.

11. Taking proper account of the need to design new development to minimise its contribution to, and the impacts of, Climate Change and to ensure that new development is resilient and adaptable to the effects of Climate Change.

12. Managing water and run-off to safeguard development, assuring public safety and amenity with active measures within new development to reduce flood risk downstream for both existing and new residents and businesses.

13. Offering opportunities for national housebuilders to work alongside local construction firms and encourage training opportunities for local people, particularly through the construction phases of the development. The Garden Village should also include opportunity for the provision of self-build and custom-build properties.

14. To ensure innovative urban design both in terms of the layout and density of new development and the specific design of new buildings. This should include the application of appropriate new technologies for buildings and transport where possible. Proposals should investigate opportunities for localised heating systems in the South Lancaster area.

15. Addressing longstanding constraints and capacity issues in the strategic and local road network through improvements to traffic management and physical interventions to increase network capacity and advantage sustainable travel. This will involve the re-configuration of Junction 33 of the M6 to afford direct motorway access into the South Lancaster area and remove traffic from Galgate which is currently designated as an Air Quality Management Area (AQMA).

To support the delivery of growth in the South Lancaster area, including development of the Bailrigg Garden Village, there will be a requirement for a wide range of both locally important and strategically important infrastructure, including new highways, public transport network, education provision, new local centre(s), open spaces and green network. These are set out in Policy SG3 of this DPD and will be addressed in more detail through the preparation of the Lancaster South Area Action Plan DPD.

Proposals will need to demonstrate that no Internationally designated sites would be adversely affected by development either alone or in combination with other proposals, as per the requirements of Policy EN7 of this DPD. In view of the potential for likely significant effects as a result of this allocation, development proposals must accord with the requirements of Appendix D of this DPD.

Mechanism for Delivery of Growth in South Lancaster, including Bailrigg Garden Village

The Council will prepare and implement a specific Development Plan Document (DPD) for this broad location for growth, entitled the 'Lancaster South Area Action Plan DPD'. The purpose of the forthcoming DPD will be as follows:

A. To provide additional detail on how the Key Growth Principles set in this policy will be delivered;

B. To set out a Spatial Development Framework as a basis for further masterplanning, to help guide the preparation of future planning applications and against which future development proposals and planning applications will be assessed; and

C. To facilitate and support the co-ordination and timely delivery of the infrastructure necessary to facilitate growth in this location.

Development within the broad location for growth in advance of the Lancaster South Area Action Plan DPD will be permitted provided that:

1. There would be no prejudice to the delivery of the wider Bailrigg Garden Village (including its infrastructure requirements) and would not undermine the integrated and co-ordinated approach to the wider Bailrigg Garden Village development; and

2. That the development would conform with and further the Key Growth Principles described in Policy SG1; and

3. That the opportunities for sustainable transport modes have been fully considered and that the residual impacts upon the transport network will not be severe.

The potential for the future re-configuration of Junction 33 of the M6 and highway network improvements in South Lancaster will be an integral part of this forthcoming DPD.

To ensure the timely delivery of the Bailrigg Garden Village, work on the wider DPD has already commenced and is anticipated to be ready for adoption within the first five years of the plan (i.e. before 2022).

In January 2019, Lancaster City Council declared a climate emergency. Whilst the adopted Local Plan does seek to address climate change, it was too far advanced in the plan preparation process to incorporate some of the actions and directions of the climate emergency declaration. The Council are therefore entering into an immediate Local Plan review to ensure that the aspects of this important agenda are adequately considered and include the necessary mitigation and adaption measures to address the climate emergency. The Local Plan Review is at the second stage, after completing a scoping consultation between September and November 2020. The Council are now considering the responses received during this consultation to help shape the Local Plan Review.

1.4 Sustainability Appraisal and Strategic Environmental Assessment

SA is a process for assessing the social, economic and environmental impacts of a plan and aims to ensure that sustainable development is at the heart of the plan-making process. SEA is a systemic process for evaluating the environmental consequences of plans and programmes to ensure that environmental issues are integrated and assessed at the earliest opportunity in the decision- making process.

It is a legal requirement that all AAPs are subject to SA, under the Planning and Compulsory Purchase Act 2004[5]. This Act stipulates that the SA must comply with the requirements of the SEA Directive which was transposed directly into UK law through the SEA Regulations.

It is possible to combine the processes of SEA and SA, as they share a number of similarities. Guidance promotes a combined process (i.e., a process which assesses social, economic and environmental effects) and this is the approach that has been adopted here. Whilst there are formalised approaches for both SA and SEA, only SEA has a legal obligation to perform certain activities. These legal obligations have been and will continue to be adhered to throughout the combined SA and SEA for the Local Plan. The combined SEA and SA is referred to as SA throughout the remaining sections of this Scoping Report. This Scoping Report includes a series of boxes which clearly identify the specific requirements of the SEA Directive that need to be fulfilled.

1.5 Consultation

This Scoping Report will be consulted upon in accordance with the requirements of Regulation 12 (5) of the SEA Regulations. The SA Scoping Report will, therefore, be issued to the statutory consultation bodies for a mandatory five week period. Further details about consultation linked to the development of the AAP are provided in Section 2 of this Scoping Report.

[5] Planning and Compulsory Purchase Act 2004. Available at: https://www.legislation.gov.uk/ukpga/2004/5/contents [Accessed: 19.02.21]

1.6 Habitats Regulations Assessment

Under Article 6 of the European Council Directive 92/43/EEC on the Conservation of natural habitats and of wild flora and fauna (the 'Habitats Directive')[6], transposed into English law by means of the Conservation of Habitats and Species (Amendment) Regulations 2017[7], an assessment is required where a land use plan may give rise to significant effects upon a site which is part of the National Site Network, previously known as a 'European site' in the UK or a 'Natura 2000 site' in Europe. These designated sites form part of the National Site Network, which is a network of areas designated to conserve natural habitats and species that are rare, endangered, vulnerable or endemic within the European Community. This includes Special Areas of Conservation (SACs), designated under the Habitats Directive for their habitats and/or species of European importance, and Special Protection Areas (SPAs), classified under Directive 2009/147/EC on the Conservation of Wild Birds (the codified version of Directive 79/409/EEC as amended) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands.

In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process; furthermore, it is Government policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPAs (pSPAs) are also considered.

A separate HRA screening exercise will consider the options which are developed for the AAP to determine whether the AAP, either in isolation and/or in combination with other plans or projects, would generate an adverse impact upon the integrity of a site which is part of National Site Network, in terms of its conservation objectives and qualifying interests. This process will be documented in an HRA Screening Report that will be submitted to Natural England. If the Screening Report identifies that significant effects are likely then the AAP must be subject to Appropriate Assessment. The SA will integrate the findings of the parallel HRA process, where relevant.

[6] Habitats Directive. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31992L0043 [Accessed: 02.03.21]
[7] The Conservation of Habitats and Species Regulations 2017. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made [Accessed: 02.03.21]

2 The SA Process

2.1 Stages in the SA Process

Planning Practice Guidance (PPG)[8] subdivides the SA process into a series of stages. While each stage consists of specific tasks, the intention should be that the process is iterative. Figure 2-1 presents the key stages in the SA process as they correspond with the stages of the Local Plan plan-making process.

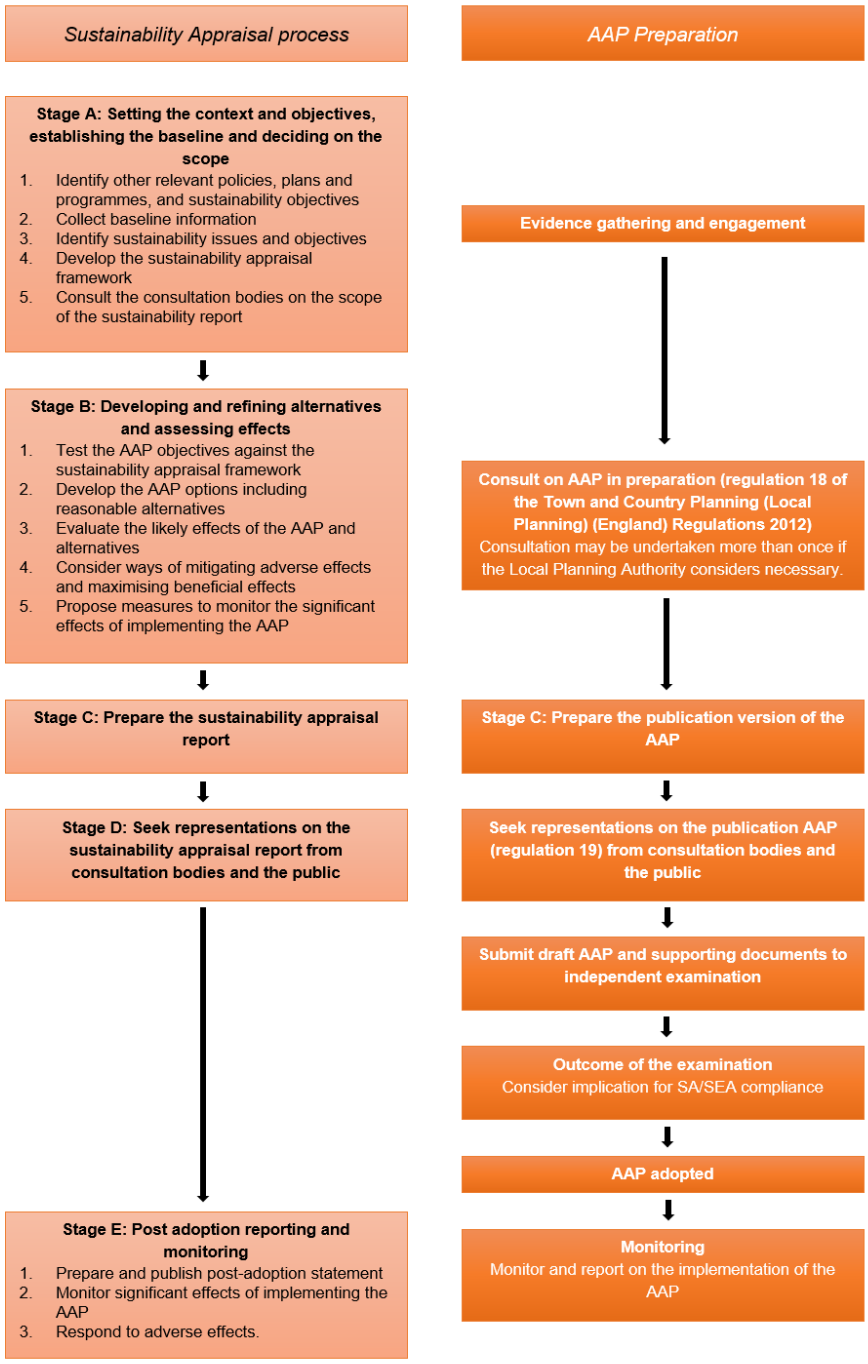


Figure 2-1: Stages in the SA Process

[8] MHCLG. Planning Practice Guidance. Strategic environmental assessment and sustainability appraisal. Available at: https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal [Accessed: 19.02.21]

The SA Scoping stage (this stage) corresponds with Stage A of Figure 2-1. Table 2-1 demonstrates how each of the tasks within Stage A are linked to the preparation and development of the AAP and where that information can be found in this report.

Table 2-1: Tasks within Stage A – SA Scoping

SA Stage	Section of the Report (where applicable)	Application to the AAP
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope		
A1: Identifying other relevant policies, plans and programmes and sustainability objectives	Section 3 and Appendix A	Stage A corresponds to the scoping stage ofthe SA and the findings of this stage are presented in this Scoping Report. During this stage the scope of the AAP willalso be defined. This scoping report will be consulted upon for five weeks with the statutory consultationbodies.
A2: Collecting baseline information	Section 4 and Appendix B	
A3: Identifying sustainability issues and problems	Section 4	
A4: Developing the SA Framework	Section 5	
A5: Consulting on the scope of the SA	Purpose of this Scoping Report is to seek feedback on the scope of the SA.	

The AAP process began in 2017 with community engagement and expression of interest for a locally-led Garden Village. In May 2018, the Initial SA Scoping Report[9] and the SA of the Spatial Options[10] were published. The SA Scoping Report was subject to a separate five week consultation period, and the May report sets out an update of the scoping following the receipt of the consultation responses. Between May and July 2018 and Issues and Options consultation was held. Responses received from these consultations have been considered as work on the AAP progressed.

The previous work on the AAP was paused to allow for the adoption of the Lancaster Local Plan, in which detail on the South Lancaster broad area of growth is delivered through Policy SG1, and to allow decisions to be made on strategic infrastructure delivery.

Following the adoption of the Local Plan, work on the AAP began again, and in late 2019 architects JTP were appointed to lead on the masterplanning work. JTP are engaging with the local community to prepare a masterplan and design code for future development. The final masterplan prepared by JTP will inform formal stages of work to prepare the AAP.

This SA Scoping Report presents an update of the initial SA Scoping Report, carried out in May 2018. This report will be subject to a five-week consultation. Following the SA Scoping consultation, the SA will move to Stage B as shown in Figure 2-1, SA of the AAP Issues and Options (see Figure 2-2). This will be reported in the Environmental Report which will be consulted on, alongside the Publication AAP.

[9] Arcadis (2018) Sustainability Appraisal Scoping Report Bailrigg Garden Village Area Action Plan. Available at: https://www.lancaster.gov.uk/assets/attach/3725/031-UA001453-EEX-04-F%20Bailrigg%20Scoping%20Report%20Post%20Consultation.pdf [Accessed: 02.03.21]
[10] Arcadis (2018) Bailrigg Garden Village Area Action Plan. Sustainability Appraisal of Spatial Options. Available at: https://www.lancaster.gov.uk/assets/attach/3805/031-UA001453-EEX-01-F%20Bailrigg%20Garden%20Village%20SA%20Spatial%20Options%20Report%20DRAFT.pdf [Accessed: 02.03.21]

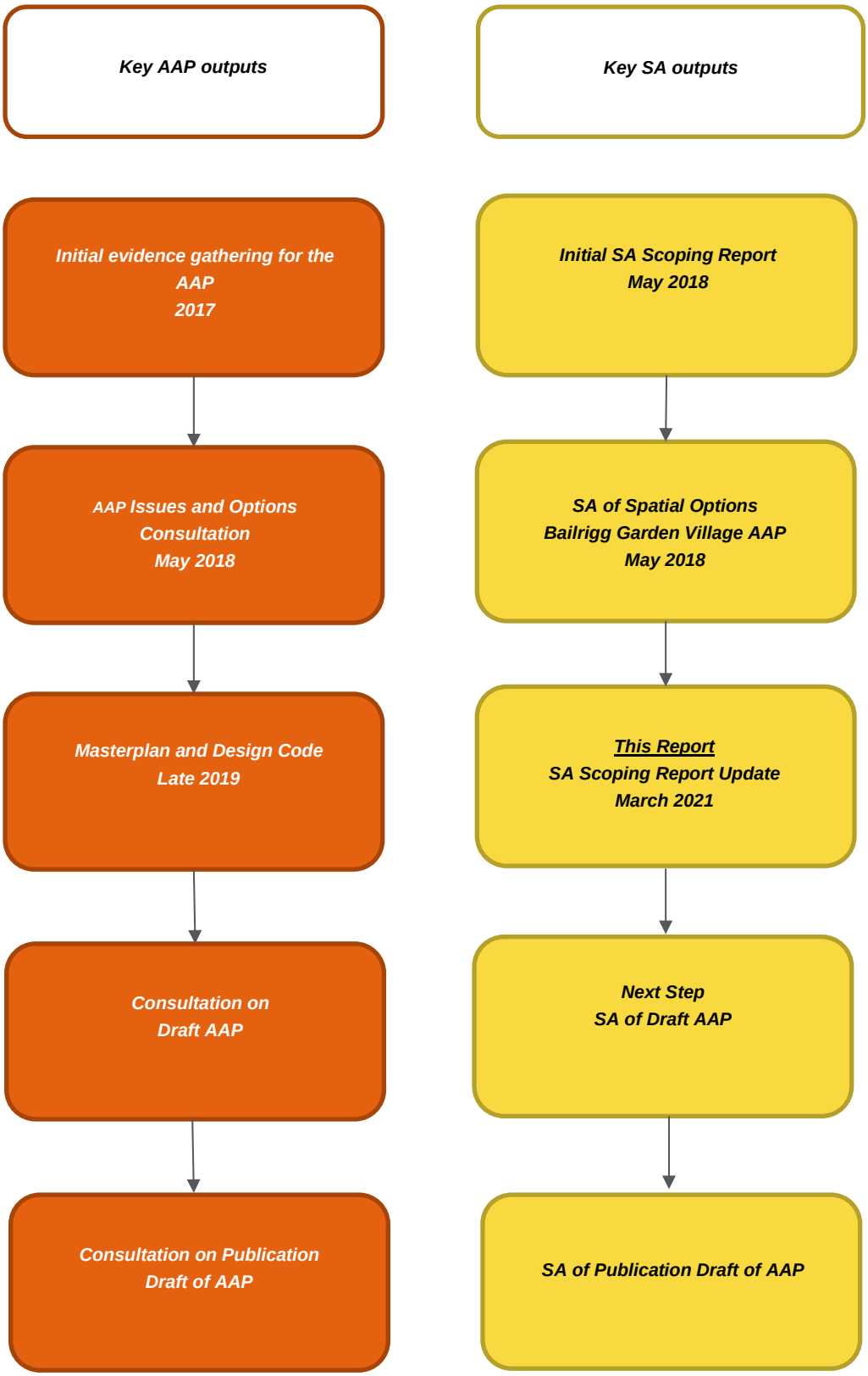


Figure 2-2: Key AAP and SA outputs

3 Review of Relevant Plans, Programmes and Environmental Objectives

3.1 Introduction

The box below stipulates the SEA Regulations requirements for this stage of the process.

Box 1: SEA Regulations requirements for the review of plans programmes and environmental protection objectives

> *"…an outline of the contents, main objectives of the plan or programme and relationship with otherrelevant plans and programmers" (Schedule 2 (1))*
>
> *"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" (Schedule 2 (4))*

A review of other plans and programmes that may affect the preparation of the AAP was undertaken in order to contribute to the development of both the SA and the DPD. This included:

- Identification of any external social, environmental or economic objectives, indicators or targets thatshould be reflected in the SA process.
- Identification of any baseline data relevant to the SA.
- Identification of any external factors that might influence the preparation of the document, forexample sustainability issues.
- Identification of any external objectives or aims that would contribute positively to the developmentof the AAP.
- Determining whether there are clear potential conflicts or challenges between other identifiedplans, programmes or sustainability objectives and the emerging AAP.

The review included documents prepared at international, national, regional (sub-regional) and local scale. A brief summary of the documents reviewed, and the main findings are summarised in Table 3-1 and section 3.2. Further details presented in Appendix A which identifies key themes from the review. These key themes were collated following review of the individual documents in order to identify their common messages and objectives. These later formed an important stage in developing the SA Framework – See section 5 of the Scoping Report.

Table 3-1: Summary of main findings of the Plans and Policy Review

Level	Summary
International Plans and Programmes	A review was undertaken of key International Conventions and European Directives that could potentially influence the development of the AAP and the SA. European Directives are transposed into national legislation in each individual Member State and, therefore, there should be a trickle-down effect of the key principles and an application to the relevant national, regional and local circumstances in other planning documents.
National Plans and Programmes	Central Government establishes their guidelines and policies for a variety of different topics within the NPPF and PPG. The Framework sets out planning policies for England and how they are expected to be applied. It provides guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications. The Framework was reviewed to ensure that the SA process aligned with its aims and objectives.

Level	Summary
	A review was also undertaken of relevant White Papers, plans and strategies including the Sustainable Development Strategy which outlines the over-arching Government objective to raise the quality of life in our communities.
Regional and County Level Plans	Where appropriate, county and sub-regional level plans have been considered. The objectives of these plans as well as some of the challenges they raise need to be taken on board as appropriate. However, it must be noted that the overarching goals of these plans and strategies may be outside the remit of the AAP which forms only individual parts of a number of different vehicles trying to deliver the county level targets.
Local Policy	Plans produced at the local level specifically address issues relating to the economy; health; safety; sustainable communities; housing and employment. The AAP and the SA should draw from these documents and transpose their aims in their policies and proposals where appropriate. These plans, should in theory, have included the main influences of international, national, regional and county level plans through the 'trickle-down effect'. They should also provide more of a local focus for the AAP area. It is, through identifying these themes and incorporating them into the AAP that synergies can be achieved with other relevant documents.

3.2 Key Results from the Review

There were many common themes identified in the review of plans, programmes and environmental protection objectives. Whilst specific results relating to each document are presented in Appendix A, the list below provides a summary of the main themes and issues identified:

- The need to address the causes of climate change and promote the reduction of greenhouse gas emissions.
- The need to improve access to good quality affordable housing to ensure that everyone has the opportunity to live in a decent affordable home.
- The need to create sustainable and balanced communities.
- The need to improve the vitality and vibrancy of town centres.
- The need for the protection and enhancement of the quality and character of urban and rural areas.
- Recognising the need for development to be appropriate to the landscape setting and context.
- The need to protect and enhance biodiversity, habitats and species which are internationally, nationally and locally important.
- The need to conserve soil resources and maintain their quality.
- The need to protect and enhance the local distinctiveness and the historic environment and its setting.
- The need to minimise waste generation and landfill and increase levels of reuse and recycling to achieve more sustainable waste management.
- Encourage the use of more sustainable forms of transport and development locations.
- The need to reduce dependency on the private car.
- The need to increase energy efficiency and require the use of renewable energy resources.
- The need to establish a strong tourist economy, sensitively capitalising on environmental, heritage, and leisure assets and ensuring the benefits are experienced locally.
- The need to ensure sustainable use of natural resources and promote sustainable design in new development.
- The need to promote and protect the water environment including issues such as quality and resource use.
- The need to reduce the risk of flooding and/or coastal erosion and promote protection of floodplains or areas of managed realignment from inappropriate development.

- The need to protect and enhance air quality.
- The need to improve accessibility and transport links to basic goods and services from residentialareas.
- The need to promote sustainable economic growth, diversity and business competitiveness.
- The need to reduce levels of crime and fear of crime and promote safer neighbourhoods.
- The need to improve the health and wellbeing of the population and reduce health inequalities.
- The need to promote quality employment opportunities.
- The need to raise educational attainment to help improve opportunities for life.

The European Spatial Development Perspective[11] identified a potential conflict that is likely to prevail in all countries, irrespective of their location. This concerns balancing the social and economic claims for spatial development with an area's ecological and cultural functions to ensure that the most sustainable patterns of development are achieved. Through the SA process and the inclusion of suitable SA Objectives, indicators and targets, it should be possible to identify where potential issues and conflicts may arise and to develop suitable policy modifications and mitigation measures.

[11] European Commission (1999) European Spatial Development Perspective (ESDP). Towards Balanced and Sustainable Development of the Territory of the European Union. Available at: https://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/sum_en.pdf [Accessed: 19.02.21]

4 The Sustainability Baseline and Key Issues

4.1 Introduction

Box 2 defines the SEA Regulations requirements for this element of the process.

Box 2: SEA Regulations requirements for baseline data collation

> *"…the environmental characteristics of areas likely to be significantly affected" (Schedule 2 (3))*
>
> *"…any existing environmental problems which are relevant to the plan or programme, including,in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EC" (Schedule 2 (4))*

4.2 Methodology

Characterising the environmental and sustainability baseline, issues and context is an essential part of developing the SA Framework. It comprises the following key elements:

- Characterising the current state of the environment of the site and the surrounding areas including social and economic aspects; and
- Using this information to identify existing problems and opportunities that could be considered in the AAP.

The environmental, social and economic baseline was characterised through the following methods:

- Review of relevant local, regional and national plans, strategies and programmes; and
- Data research based around a series of baseline indicators developed from the SEA Regulations topics and previous consultation recommendations from the SA of the Lancaster Local Plan. Data was also collated for additional socio-economic topic areas including deprivation, housing and the economy to ensure that a broad range of environmental, social and economic issues were considered.

The collation of baseline data also enabled the identification of key sustainability issues and opportunities affecting the Lancaster South Broad Location for Growth.

Appendix B summarises the key baseline trends identified for the Lancaster South Broad Location for Growth and the surrounding areas. Each section is subdivided to present the following:

- The baseline indicators that have been used (some are also contextual indicators and may not specifically form part of the SA Framework).
- Descriptive text, graphs and statistics about the site.
- Key data gaps and uncertainties to be filled at the next stage of the SA.

Sustainability issues and opportunities identified from the baseline review are detailed in Table 4-1.

The SEA Regulations require 'material assets' to be considered within the SA. Material assets refer to the stock of valuable assets within a study area and can include many things from valuable landscapes, natural and cultural heritage through to housing stock, schools, hospitals and quality agricultural land. It is considered that the material assets of the AAP area and surrounding areas are appropriately covered in the following baseline sections, and consequently will not be repeated as a separate section:

- Population;
- Education and qualifications;
- Human health;
- Water;

- Soil and land quality;
- Air quality;
- Climatic factors and energy;
- Biodiversity, flora and fauna;
- Cultural heritage;
- Landscape;
- Waste and minerals;
- Transportation;
- Economy;
- Deprivation; and
- Housing.

4.3 Key Sustainability Issues and Opportunities

The table that follows presents the key sustainability issues and opportunities identified for the Lancaster South AAP.

Table 4-1: Key sustainability issues and opportunities for Lancaster South AAP

Baseline Topic	Key Issues / Opportunities
Population	The general AAP area and surrounding area has a relatively large and young population which could offer a strong and diverse workforce to any employment provisions included within the masterplan. The permanent residential population within the AAP area is very low due to it being largely greenfield in nature. The main population of the AAP area are students at the University of Lancaster outside of small villages/hamlets and individual houses. This is dominated by temporary residents. The development of the AAP area will dramatically alter the population characteristics of the area, so it will be important to consider how this links with the existing population within the AAP boundary and its neighbouring settlements, notably Galgate and Scotforth.
Education and Qualifications	Currently there are no schools within the AAP boundary as it is largely greenfield. New school provision is likely to be required for the new population and to avoid oversubscription in the existing neighbouring areas of Scotforth and Galgate. Educational attainment in the area is largely good (although note these statistics are based on ward boundaries which stretch beyond the AAP boundary). However, there is a pocket of higher educational deprivation north of the site in Scotforth East. Work based learning opportunities should be developed further to minimise the number of 16-18 year olds not in education or employment training and increase levels of attainment of qualifications. Lancaster University should be promoted as an important asset to continue to raise educational attainment levels and to attract inward investment into the AAP area.
Human Health	Health in the AAP area is generally good in comparison to the Lancaster District average with the poorest levels recorded to the north in the ward of Scotforth East. Access to doctor's surgeries is relatively good which is particularly important for the area's elderly population. However, the introduction of more homes in the area may put existing facilities under pressure. New health care facilities will therefore be required as part of the development of the AAP area. There are opportunities to further promote access to outdoor recreational pursuits in open areas of the AAP area to benefit the health of the local population.

Baseline Topic	Key Issues / Opportunities
	There are also opportunities to further promote walking and cycling in the AAP area and also improve walking and cycling opportunities to the nearby Forest of Bowland AONB. Public Rights of Way links across/under the M6 to the east of the AAP area are limited. There are significant opportunities for a network of sustainable transport links to be developed and combined with green infrastructure. There are issues surrounding the high noise level outputs originating from the strategic road and rail network that runs through the AAP area. This will need to be considered in the design of the AAP area and it will also need to be ensured that noise levels are not exacerbated in the current Noise Important Areas12.
Crime	Crime rates per 1,000 population for 2017/2018 for the four wards that make up the AAP area were significantly below the Lancaster District average, however, there was a significant rise in crime in Scotforth East and Scotforth West in comparison to the previous year. Violent crime and anti-social behaviour are the biggest proportion of offences within the four areas. None of the LSOAs that make up the AAP area fall within the 50% most deprived for crime deprivation. Crime statistics for the area are skewed by the presence of the University of Lancaster with few other targets for crime in within the AAP boundary. The introduction of a new population with the AAP area would provide new targets for crime so it will be important to design the masterplan with crime and security in mind.
Water	Water quality of the watercourses and open water within the allocation is currently an issue. Overall, water quality of the River Conder is currently 'Moderate' which offers an opportunity to improve this and other watercourses through the AAP. New developments and households within the AAP area should be encouraged to minimise water use and to re-use rainwater where possible i.e. grey water recycling systems. Areas identified as providing the opportunity for flood risk management should be protected from development and set aside for the protection of people and property both on-site and further downstream. New developments should seek to use SUDs to manage surface water runoff sustainably and protect water quality by reducing sediments and pollutants and provide opportunity to improve the landscape and biodiversity value of the development. There are opportunities for the proposed development to aid flood management and reduce flood risk in Galgate and South Lancaster. Appropriate construction related pollution control measures will be required through the development management at the consenting stage, to prevent water pollution.
Soil and Land Quality	There is no Agricultural Land Classification Grade 1 or 2 land within the AAP area, although whether or not there is Grade 3a land is not known. Where previously developed sites exist, the aim should be to continue to remediate and re-use them, although this decision should be made on a site-by- site basis as some brownfield sites may now have developed biodiversity interests. Appropriate construction related pollution control measures will be required through the development management at the consenting stage to prevent soil pollution.

[12] Noise Important Areas capture the 1% of the population affected by the highest noise levels from major roads,according to Highways England's strategic noise mapping (Highway's England 2017)

Baseline Topic	Key Issues / Opportunities
Air Quality	In general terms air quality in the District is good although three Air Quality Management Areas (AQMAs) are identified in Lancaster District, two of which have potential to be influenced by the AAP proposals if significant traffic flows are generated on the A6. Opportunities should be sought to reduce road traffic and promote sustainable transport use to ensure against this. Opportunities should also be sought to improve air quality within the AQMAs in particular where possible. There may be opportunities to reduce travel and distances between homes and employment sites through design of the AAP.
Energy & Climatic Factors	Achieving a low carbon footprint through energy conservation and efficiency and the promotion of renewable energy sources should be a priority for the AAP. New developments should be encouraged to include sustainable design principles. Reducing transport on local roads and encouraging more sustainable modes of transport would contribute to reducing the effects of climate change. Emissions of CO_2 are generally low in the District and opportunities should be sought to maintain the these comparatively low levels. Opportunities exist to increase the production of energy from renewable sources; in particular by capitalising on the progress made by Lancaster University. Note such measures should be compatible with wider ecological and landscape aims.
Biodiversity, Flora andFauna	There are no Internationally or Nationally designated sites within the AAP area, however, there are three BHSs present on the site which should be retained, protected and enhanced where possible. The Morecambe Bay and Duddon Estuary SPA and Ramsar is located approximately 850m to the west. Enhancement of parts of the site to achieve net biodiversity gain should be included within the AAP masterplan including new tree planting and the establishment of an enhanced pond network. The woodland blocks, hedgerows, open water and the river course within the AAP area are all of high ecological value and should be retained as part of any development proposals. The land and habitats around the Forest Hills Golf and Country Club are diverse; further developments in this area will need to be supported by more involved ecology surveys and assessments. Park Coppice ancient woodland should be retained and enhanced where possible.
Cultural Heritage	The historic environment, heritage assets and their setting should be appropriately conserved and enhanced. A number of listed buildings exist within the study area, which also has a historic landscape character.
Landscape	The AAP area is relatively close to the Forest of Bowland AONB. Key views are also afforded to the Lake District and across to the Williamson Monument which should be retained. Development of this area would greatly change the local and surrounding landscape due to the local topography and visibility. The topography of this site would likely present any development as a distinct change in views from the Forest of Bowland AONB out to the west towards the coast. It is important for landscape character and quality to be maintained and where possible restored and enhanced by maintaining certain landscape features and proposing a density and layout that will meet the requirements of a Garden Village ethos. Opportunities should be sought to enhance design and landscaping at the local level to improve the quality of the local environment.

Baseline Topic	Key Issues / Opportunities
	Parts of the site are elevated and prominent (e.g. Burrow Heights) and would be less suited for development. Opportunities could be sought to minimise light spillage as a result of development facilitated through the AAP as lighting levels in this area are already relatively high due to the presence of Lancaster University. Improving the quality of the public realm is viewed as very important as it contributes to an experience of a place or location. A high quality public realm can attract inward investment, benefit tourism and increase quality of life for the resident population.
Waste and Minerals	The major strategic landfill site for the District is located in a neighbouring authority, therefore Lancaster District is an exporter of waste. New development will increase waste production in the area. Opportunities should be sought to minimise this and further improve composting and recycling performance where this is possible. Sustainable sourcing and waste management principles should be promoted for all new development. Although Lancaster District has exceeded recycling levels overall there is still room for improvement. Lancaster University, the single largest waste producer in the AAP area, has reached a recycling rate of 72% providing opportunities to continue this success through adopting the University's waste disposal mechanisms. The AAP area includes a number of minerals safeguarding areas. It will be important to demonstrate that new development would not result in the sterilisation of important resources.
Transportation	Opportunities should be sought to reduce the growing dependence on the private car and increase public transport use and other sustainable modes of transport such as walking and cycling. It will be important to ensure that any new sites can be easily accessed by public transport. Such proposals would need to be safe and secure and should benefit levels of activity and health. North-south public transport links are strong however, these could be improved with the introduction of east-west routes linking up the network. The M6 is currently a barrier to development to the east with only one crossing point within the AAP area. Traffic is currently routed from the M6 via Galgate which causes congestion in the village. New development at Lancaster South Broad Location for Growth has potential to exacerbate this, and a new motorway junction is being considered. The good road connections to other parts of Lancaster District and proximity to the M6 motorway network are both an opportunity and a threat to the AAP as they could help to encourage inward investment, but they also could enable the AAP areas residents to easily commute to neighbouring authorities for employment purposes leading to a leakage of skills and also daily spending from the local area and the District in general.
Economy	Economic activity levels are particularly low in the Ellel and the University area of the AAP area with unemployment levels also being relatively high and significantly higher than the District level. However, note that these figures are averaged across the wards so may not be directly relevant to the AAP boundary. None of the four LSOAs within the AAP area are amongst the bottom 30% for employment deprivation or income deprivation. However, LSOA 018C to the north of the area does show elevated levels of deprivation. The AAP area is dominated by agriculture and the University. Agricultural holdings are likely to be affected by new development in the area. The University could be a key catalyst in the area for new high-tech or science businesses within the AAP.

Baseline Topic	Key Issues / Opportunities
	The strong strategic transport links (M6, A6, West Coast Main Line rail link) and direct access to the City Centre employment sites could benefit business growth in the area subject to appropriate transport and access improvements. There are potential opportunities to capitalise upon the AAP area's environmental and cultural assets and to develop the tourist industry.
Deprivation and Living Environment	Two of the LSOAs that make up the majority of the AAP area fall within the 20% most deprived areas for Barriers to Housing and Services Deprivation. Owing to its rural nature, there are issues associated with access to services and facilities. There are opportunities to amend this as part of the AAP proposals. Two of the LSOAs that make up the majority of the AAP area fall within the 10% most deprived areas for Living Environment Deprivation. There are opportunities to amend this as part of the AAP proposals. Although no LSOAs within the AAP area fall within the 30% most deprived in the Index of Multiple Deprivation, LSOA 018C, slightly to the north of the boundary, does fall within the 30% most deprived areas for the Index of Multiple Deprivation.
Housing	Currently, due to its largely greenfield nature, there are very few residential dwellings within the AAP area. Student accommodation at the University accounts for the majority of dwellings. House prices in Bailrigg are higher than those in the surrounding settlements of Ellel, Galgate and Scotforth. The number of social housing rented from the Council or other social landlords is relatively low within the four wards of the AAP area with a high number of houses being owned or owned with a mortgage or loan. The new housing proposed on site should meet a range of housing needs including affordable housing.

5 The SA Framework

5.1 Background to the SA Framework

The SA Framework underpins the assessment methodology and comprises a series of Sustainability Objectives (covering social, economic and environmental issues) that are used to test the performance of the plan being assessed. Whilst the SEA Regulations do not require the use of Sustainability Objectives, they are a recognised tool for undertaking the assessment and are aspirations/goals that the AAP should work towards achieving.

The Sustainability Objectives are separate from the AAP Objectives, although there may be some overlaps between them. Baseline data should be collated to support each of the Objectives, as this provides a means of determining current performance for the AAP and gauging how much intervention or the extent of work needed to achieve the targets that have been identified. The following sections provide further details about the development of the SA Framework.

5.2 Development of the Sustainability Objectives

The Sustainability Objectives previously developed for the SA of the Lancaster Local Plan have been modified where necessary to suit the assessment approach taken for the AAP. The original SA Objectives and Sub- Objectives were generated by using the review of other relevant plans, programmes and environmental objectives, the baseline data and the key issue and opportunities of the Local Plan SA.

The SA Objectives have been reviewed to ensure they are relevant to other relevant plans, programmes and environmental objectives, the baseline data and the key issues and opportunities of the AAP and what the AAP can achieve. The modifications are only relatively minor to ensure consistency with the SA for the Local Plan as a whole. On the whole, the headline SA Objectives have remained largely unchanged although the sub-objectives have been amended to better reflect the AAP.

Table 5-1 presents the proposed SA Objectives that will be used in the assessment of the AAP. Each of the Sustainability Objectives is supported by a series of sub-objectives to add further clarity and to assist the assessment process.

Table 5-1: SA Objectives and sub-objectives

SA Objective	Sub-Objectives
1. To ensure there is housing to meet all needs	• To provide new housing to contribute towards the District's housing targets. • To ensure a wide range of decent housing is provided to meet housing needs including affordable housing.
2. To improve physical and mental health for all, encourage community cohesion, reduce health inequalities and reduce exposure to hazards	• To ensure the health and wellbeing needs of all sectors of society are addressed. • To improve access to health and social care services. • To promote healthy lifestyles. • To ensure there is access to greenspace, public spaces, rights of way and play areas. • To ensure there are cultural /social/ community facilities and activities for people to enjoy / participate in. • To encourage the development of strong and cohesive communities. • To reduce exposure to noise disturbance and limit impacts upon Noise Important Areas. • To ensure instances of crime and fear of crime are minimised. • To help reduce/avoid levels of anti-social behaviour and violent crime.

SA Objective	Sub-Objectives
	• To encourage safety by design. • To improve the provision of natural greenspace within the AAP area. • To protect and enhance green infrastructure.
3. To encourage lifelong learning	• To ensure there is access to primary, secondary and further educational opportunities for new residents.
4. To improve sustainable access to basic goods, services and amenities for all groups	• To ensure public transport services (bus and train) meet peoples' needs. • To ensure highways infrastructure serves peoples' transportation needs (including for private vehicular travel, walking and cycling). • To ensure buildings and public spaces are readily accessible. • To promote the use of more sustainable modes of transport and reduce dependence on the private car. • To improve access to cultural and leisure facilities. • To maintain and improve access to essential services and facilities. • To improve access to basic goods, services and amenities.
5. To encourage thriving local economies, ensure key economic drivers are strong, and encourage economic inclusion	• To create new and diverse employment opportunities. • To encourage economic growth. • To encourage inward investment. • To ensure sufficient land, buildings and premises are available to accommodate for businesses. • To ensure Infrastructure (including transportation) meets the needs of business. • To ensure local centres are strong and vibrant. • To ensure higher education sector remains vibrant. • To ensure the knowledge economy is strengthened. • Ensure the labour supply meets local economic needs. • To improve physical accessibility to jobs for those in greatest need. • To contribute to self-containment and a reduction in commuting.
6. To limit and adapt to climate change and increase energy efficiency	• To ensure greenhouse gas emissions are minimised. • To ensure new development is low carbon and energy efficient. • To promote the use of more sustainable modes of transport and reduce dependence on the private car. • To ensure new developments are able to withstand extreme weather events and are resilient to the future long-term changes in climate. • To encourage energy efficiency measures. • To increase the use of renewable energy.
7. To ensure the sustainable use of natural resources, minimise waste and increase recycling	• To ensure the use of best and most versatile agricultural land is avoided. • To ensure that contaminated land will be guarded against. • To encourage development of brownfield land where appropriate.

SA Objective	Sub-Objectives
	• To encourage sustainable use of water resources. • To ensure important mineral resources are not sterilised. • To encourage waste recycling and re-use and other forms of sustainable waste management. • To promote the use of recycled and secondary materials.
8. To protect and enhance biodiversity	• To protect and enhance designated sites of nature conservation importance. • To protect and enhance wildlife especially rare and endangered species. • To protect and enhance habitats and wildlife corridors. • To provide opportunities for people to access wildlife and open green spaces.
9. To protect and enhance landscape and townscape character and quality	• To ensure places and views, whether urban or rural, are of distinctive character and quality. • To ensure light pollution is minimised. • To promote sensitive design in development • To ensure strategic views are maintained. • To ensure views from the AONBs are not significantly harmed.
10. To protect and enhance the historic environment and heritage assets	• To protect and enhance heritage assets and their settings. • To protect and enhance the historic environment. • To protect and enhance the historic character of the local landscape/ townscape through maintaining and strengthening local distinctiveness and sense of place.
11. To protect and improve air quality	• To protect and improve local air quality. • To avoid worsening of AQMAs.
12. To reduce or manage flooding and enhance the quality of water resources	• To ensure the management of flood risk to people and property. • To seek to reduce flood risk overall, either on the development site or elsewhere. • To ensure watercourses and impounded waters (including canals) are clean and unpolluted. • To ensure groundwater is clean and unpolluted. • To protect and enhance the river corridor environment. • To improve existing water quality.

6 The Appraisal Process

6.1 Geographical Scope of the SA

The geographical scope of the SA will be driven by the geographical scope of the AAP. The AAP must be in general conformity with the Local Plan and so policies should be aligned. Regarding the allocation element of the AAP the SA will consider the spatial extent of its likely impacts. In some cases, this may be only local to the site whereas in other cases the impacts of the allocation may be felt over a wider area. Similarly, the cumulative effects brought about by the allocations of the Strategic Policies and Land Allocation DPD may result in impacts occurring over a wider area of the District. These will also be considered in the SA.

6.2 Temporal Scope of the SA

The AAP is intended to apply until 2031 (in line with the Lancaster Local Plan). This timescale will be reflected in the SA of the AAP. If there are likely to be any sustainability effects of the AAP that would last longer than this, these would also be considered.

6.3 Aspects of the AAP to be assessed and how

Individual components of the AAP will be assessed to determine their sustainability performance and to provide recommendations for sustainability improvements. At this stage in the AAP's development, it is anticipated that the AAP preferred spatial option, along with the alternative options considered, and supporting policies will need to be assessed:

The intention will be to ensure that the process is iterative with regular feedback occurring between the plan-makers and the SA team as options are developed. A number of spatial options will be presented during the Issues and Options phase of the SA which will determine how well each spatial option performs against the SA Framework Objectives. The assessors will consider each of the sub-objectives whilst drawing a conclusion on the performance against the headline objective.

The appraisal will be presented in an appraisal matrix. The matrix is an established method for clearly analysing the performance of the policies or sites and helps meet the requirements of the SEA Regulations by ensuring that the following elements are considered. This will enable significant effects to be identified:

- Impact – whether the impact will be positive, negative or neutral when assessed against the SA Objectives.
- Temporal scale – whether the impact will be short-term (within 5 years), occur in the medium term (5 – 10 years) or occur in the long-term (10 years +).
- Spatial scale – where the impacts will occur within the area. Any transboundary effects outside of the study area would also be considered.
- Permanency – whether effects will be permanent or temporary.
- Level of certainty – the level of certainty in the prediction will be classified as low, medium or high.
- Cumulative and synergistic effects.

Where negative impacts are identified, measures will be proposed to offset, avoid or otherwise mitigate for the impact. In addition, measures which may further enhance benefits will also be identified as appropriate.

The scoring used for the appraisal of the policy/allocation is defined below:

Table 6-1: Notations used in the SA assessment

Impact	Description	Symbol
Major Positive Impact	The proposal contributes strongly to the achievement of the SA Objective.	++
Positive Impact	The proposal contributes partially to the achievement of the SA Objective.	+
No Impact/ Neutral	There is no clear relationship between the proposal and/or the achievement of the SA Objective or the relationship is negligible.	0
Negative Impact	The proposal partially detracts from the achievement of some elements of the SA Objective.	-
Major Negative Impact	The proposal strongly detracts from the achievement of all elements of the SA Objective.	--
Uncertain impact – more information required	It is not possible to determine the nature of the impact as there may be too many external factors that would influence the appraisal, or the impact may depend heavily upon implementation at the local level.	?
Positive and Negative Impacts	The proposal has a combination of both positive and negative contributions to the achievement of the SA Objective.	+/-

The assessment will also make use of Geographical Information Systems (GIS) to identify the relationship between the allocations and existing environmental and sustainability features, for example designated sites. Maps will be prepared that zoom into the areas where allocations are proposed to provide more detail at the assessment stage. Socio-economic factors cannot so easily be mapped using GIS although as a minimum, spatial data can be obtained pertaining to the different facets of deprivation and access to services. It will be important to consider the immediate local impacts of the proposals as well as the wider District and regional implications. Where appropriate, the assessment will consider existing evidence and research when making linkages between new development and the types of impact this could have on different strands of the community, for example, community cohesion, equality, health etc.

In all cases, the assessment of allocations will make good use of the baseline data collated which will be supplemented with further detail as appropriate at the assessment stage. When assessing each element, the questions will be asked:

- To what extent does the proposal meet the SA Objectives?
- To what extent will the proposal seek to address key sustainability issues?
- To what extent will the proposal affect the current baseline conditions?

It should also be remembered that this is a strategic assessment, and it is not the intention to enter into the level of detail reserved for project-level Environmental Impact Assessment. All assessment will be desk-based.

The assessment of cumulative effects will consider other strategic proposals in the area and will draw upon the work undertaken for the SA for the Local Plan.

6.4 Assessment of Alternatives

It is a requirement of the SEA Regulations that alternatives are assessed and, therefore, alternative options will be assessed using the SA Framework. The purpose of the assessment will be to determine the sustainability strengths and weaknesses of each option such that this information can be used by the plan-makers to inform their decision to select the preferred options.

It is anticipated that there may be three or four alternative, high-level, spatial option layouts that will need to be considered.

Each alternative option will be appraised using the same appraisal matrix identified above. The table will also identify whether the site is being taken forward as a preferred option and why, or whether it is a rejected alternative and why.

7 Next Steps

This is the Final Scoping Report, which has been consulted upon in accordance with the requirements of Regulation 12 (5) of the SEA Regulations. This SA Scoping Report was subject to a five week consultation with Natural England, the Environment Agency and Historic England, and reflects the consultation responses received as a result of this process (see Appendix C).

Stage B of the SA process comprising the appraisal of the AAP is the next stage of the SA process, to be completed Summer 2021.

APPENDIX A

Review of Other Relevant Plans, Programmes and Policies

Table A-1: List of Relevant Plan, Policies and Programmes

International and European Level
World Summit on Sustainable Development, Johannesburg (2002)
Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) (1998)
UN Framework Convention on Climate Change (1994)
Kyoto Protocol to the UN Framework Convention on Climate Change (1997)
Convention on Biological Diversity (1992)
Rio Declaration on Environment and Development, Statement of Principles for the Sustainable Management of Forests and Agenda 21 (1992)
Renewable Energy Coalition (2002)
Intelligent Energy Europe (2007-2013)
Valletta Convention (1992)
Granada Convention (1985)
World Heritage Convention (1972)
Paris Convention of (1954)
Hague Convention (1954)

Regional and National Level
UK Sustainable Development Strategy – 'Securing the Future' 2005
Sustainable Communities: Building for the Future (2003)
Planning Act 2008
Environmental Quality in Spatial Planning (2005)
World Class Places: The Government's Strategy for Improving Quality of Place (2009)
Rural Strategy (2004)
The Countryside in and Around Towns: A vision for connecting town and country in the pursuit of sustainable development (2005)
Sustainable Communities, Settled Homes, Changing Lives – A Strategy for Tackling Homelessness (ODPM) (2005)
Climate Change Act (2008)
Stern Review of the Economics of Climate Change (2006)
UK Carbon Plan (2011)
Climate change and biodiversity adaptation: the role of the spatial planning system – a Natural England commissioned report (2009)
Planning for Climate Change – Guidance and Model Policies for Local Authorities (2010)
UK Climate Change Risk Assessment 2017
Energy Act 2011
Delivering a Sustainable Transport System (2008)
The Future of Transport White Paper – A Network for 2030 (2004)

Regional and National Level
Low Carbon Transport: A Greener Future - A Carbon Reduction Strategy for Transport (2009)
Wildlife and Countryside Act (1981) (as amended)
The Conservation of Habitats and Species Regulations 2017
The Countryside and Rights of Way (CRoW) Act (2000)
UK Biodiversity Action Plan 1992 - 2012
The Natural Environment and Rural Communities Act (2006)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services
The Guidance for Local Authorities on Implementing the Biodiversity Duty (2007)
Conserving Biodiversity – The UK Approach (2007)
Working with the Grain of Nature: a Biodiversity Strategy for England (2002)
A Strategy for England's Trees, Woodlands and Forests (2007)
Public Health Act 1936
Water Resources Act 1991
Water Industry Act 1991
Land Drainage Act 1991
Environment Act 1995
Environment Bill 2020
Agriculture Bill 2019 - 2021
The Public Service Vehicles (Open Data) (England) Regulations 2020
Education and Employment Strategy 2018
National Renewable Energy Action Plan for the United Kingdom (2010)
The Energy Performance of Buildings (England and Wales) Regulations 2012
The Groundwater (England and Wales) Regulation 2009
The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017
Pennine Lancashire Housing Strategy 2009-2029
Arnside and Silverdale AONB DPD (2019)
The Environmental Damage (Prevention and Remediation) (England) Regulations 2015
Open Space Strategies: Best Practice Guidance (CABE and the Greater London Authority, 2009)
A Strategy for England's Trees, Woodlands and Forests (2007)
Ministry of Housing, Communities and Local Government (MHCLG) 'New Green Standard' 2019
Ministry of Housing, Communities and Local Government (MHCLG) 'Planning for the future' 2020
Landscape Character Assessment Guidance for England and Scotland (2002)
Open Space Strategies: Best Practice Guidance (CABE and the Greater London Authority, 2009)
Safeguarding our Soils: A Strategy for England (2009)
Natural England's Green Infrastructure Guidance (2009)
Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation (2003) and Nature Nearby: Accessible Green Space Guidance (2010)
Historic Environment: A Force for the Future (2001)

Regional and National Level
Planning (Listed Buildings & Conservation Areas) Act 1990
Ancient Monuments and Archaeological Areas Act (1979)
Biological Heritage Sites Guidelines for Site Selection – Lancashire County Council (2018)
Lancashire County Council 'Built Heritage in Lancashire 2018'
The Historic Environment and Site Allocations in Local Plans: Historic England Advice Note 3 (2015)
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)
Air Quality (Standards) Regulations 2010
Air Quality (England) Regulation 2000
National Emission Ceilings Regulations 2002
UK plan for tackling roadside nitrogen dioxide concentrations (2017)
Department for Environment, Food and Rural Affairs: 25 Year Environment Plan (2019)
Department for Environment, Food and Rural Affairs: Clean Air Strategy (2019)
Energy Strategy for the Lancashire Local Enterprise Partnership (LEP) (2018)
Water Resources Strategy for England and Wales (2009)
Future Water: The Government's Water Strategy for England (2008)
Lancashire Public Health Annual Report 2019/20
North West's 'Green Infrastructure Guide' (2008)
Lancashire Local Economic Partnership's 'Green Infrastructure Strategy' (2009)
Flood and Water Management Act (2010)
Making Space for Water: Taking Forward a New Government Strategy for Flood and Coastal Erosion Risk Management (2005)
Flood Risk Regulation 2009
The Water Supply (Water Quality) Regulations 2018
Waste Strategy for England (2007)
The Waste (England and Wales) Regulations 2011
The Waste (Circular Economy) (Amendment) Regulations 2020
Minerals and Waste Development Plan for Lancashire – Lancashire County Council (2009)
Joint Lancashire Local Waste Assessment 2017
Municipal Waste Management Strategy 2009
Waste and Emissions Trading Act 2003
The Hazardous Waste (England and Wales) Regulations 2005
Environmental Permitting (England and Wales) Regulations 2007
The Landfill (England and Wales) Regulations 2002
Salmon and Freshwater Fisheries Act 1975
Agricultural Land (Removal of Surface Soil) Act 1953
The Rural Development (Amendment) (EU Exit) Regulation 2019
The Nitrate Pollution Prevention (Amendment) 2016
The Egan Review – Skills for Sustainable Communities (2004)

Regional and National Level
Lancashire Community Safety Agreement 2019-2022
Lancashire County Council 'Local Transport Plan 2011-2021
Working for a Healthier Tomorrow – Dame Carol Black's Review of the health of Britain's working age population (2008)
Health Effects of Climate Change in the UK 2008 – An update of the Department of Health Report 2001/2002
Tackling Health Inequalities – A Programme for Action (2003, including the 2007 Status Report on the Programme for Action)
By All Reasonable Means: Inclusive Access To The Outdoors For Disabled People (Countryside Agency, 2005)
National Planning Policy Framework (2019)
National Planning Practice Guidance (2019)
Localism Act (2011)
Guidance Notes for the Reduction of Light Pollution (2000)
Good Practice Guide on Planning for Tourism (2006)
The Town and Country Planning (Environmental Impact Assessment) Regulations 2017
North West River Basin Management Plan: Part 1 and Part 2 (2015)

Local Level
Lancaster City Council: Strategic Policies and Land Allocations Development Plan Document (2020)
Lancaster City Council: Development Management DPD (2020)
Lancaster District Community Safety Plan (2011/2012)
'Cleaning the Air' The Air Quality Strategy for Lancaster District (2013)
Lancaster City Council: Sustainable Community Strategy (2008 – 2011)
Lancaster Heritage Strategy (2018)
Lancaster District Play Strategy (2012)
Housing Strategy and Action Plan (2012-2017)
Lancaster District Homelessness Strategy (2008-2013)
Lancaster City Council Inspection Strategy for Contaminated Land (2010)
Lancaster District Local Brownfield Strategy (2009)
Lancaster City Council Strategic Flood Risk Assessment (2007)
Lancaster District PPG17 Study - Open Space, Sport and Recreation Facilities (2010 refresh)
Children and Young People Strategic Plan (2014-2017)
District of Lancaster, Highways and Transport Masterplan – Lancashire County Council (2016)
Lancaster City Centre Movement and Public Realm Strategy – Lancashire County Council (2020)
Identified Sites Landscape & Visual Assessment (2018)
Concept Flood Risk and Drainage Strategy Bailrigg Garden Village, Lancaster (2018)
Lancaster District draft Homes Strategy (2020-2025)
Lancaster Green Infrastructure Strategy (due to be published July 2021)

Table A-2: Sustainability Themes linked to SA Objectives

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
Environmental							
Protect and enhance biodiversity, habitats and species which are internationally, nationally and locally important	Convention on Biological Diversity (1992), World Summit on Sustainable Development (2002), Rio Declaration on Environment and Development, Statement of Principles for the Sustainable Management of Forests and Agenda 21 (1992)	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), Climate change and biodiversity adaptation: the role of the spatial planning system – a Natural England commissioned report (2009), Wildlife and Countryside Act (1981) (as amended), The Conservation of Habitats and Species Regulations 2017, The Natural Environment and Rural Communities Act (2006), Conserving Biodiversity – The UK Approach (2007), Working with the Grain of Nature: a Biodiversity Strategy for England (2002), The UK Post-2010 Biodiversity Framework (2012), A Strategy for England's Trees, Woodlands and Forests (2007), UK Biodiversity Action Plan 1992 – 2012,	Lancaster City Council Local Plan	The AAP should contribute positively to biodiversity and sites of local and national importance. Development should not adversely affect biodiversity sites, designated sites and important habitats or species. Conservation and enhancement of designated areas should be promoted.	The SA Framework should include objectives, indicators and targets that address biodiversity, species and habitats.	Biodiversity, Flora and Fauna	EN3

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		The Environmental Bill 2020, Department for Environment, Food and Rural Affairs: 25 Year Environment Plan (2019), Biodiversity 2020: A strategy for England's wildlife and ecosystem services, North West River Basin Management Plan: Part 1 and Part 2 (2015)					
Reduce air pollution and ensure improvements in air quality	Kyoto Protocol to the UN Framework Convention on Climate Change (1997)	The Future of Transport White Paper – A Network for 2030 (2004), The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007), Environment Act 1995, National Planning Practice Guidance (2019), Guidance Notes for the Reduction of Light Pollution (2000), Air Quality (Standards) Regulations 2010, Air Quality (England) Regulations 2000, UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations (2017), Department for Environment, Food and Rural Affairs: 25 Year Environment Plan (2019),	Lancaster City Council Local Plan, 'Cleaning the Air' The Air Quality Strategy for Lancaster District (2013)	The AAP should seek to incorporate measures to improve air quality such as increasing accessibility of public transport and encouraging the use of sustainable transport modes.	The SA framework should include objectives that encourage the improvement of air quality.	Air Quality and Climate Change	EN8, EN1

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		Department for Environment, Food and Rural Affairs: Clean Air Strategy (2019)					
Ensure development does not increase flood risk, and where possible reduces flood risk and incorporate climate change adaptation measures such as natural flood risk management, providing space for future flood risk management measures and SUDs	UN Framework Convention on Climate Change (1994)	Lancashire and Blackpool Local Flood Risk Management Strategy (2013), North West River Basin District Flood Risk Management Plan 2015-2021 (2016), North West River Basin Management Plan: Part 1 and Part 2 (2015), National Planning Practice Guidance (2019), Health Effects of Climate Change in the UK 2008 – An update of the Department of Health Report 2001/2002, Flood and Water Management Act (2010), The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, Future Water: The Government's Water Strategy for England (2008), Water Resources Strategy for England and Wales (2009), Flood Risk Regulations 2009, Department for Environment, Food and Rural Affairs: 25 Year Environment Plan (2019), Climate Change Act (2008),	Lancaster City Council Strategic Flood Risk Assessment (2007)	The AAP should take flood risk into consideration when determining the location and design of new development. The AAP should ensure that new development does not increase flood risk and should seek to ensure development incorporates climate change adaptation measures such as the use of sustainable drainage features.	The SA framework needs to include objectives, targets and indicators that address flooding risk.	Water Human Health and Climate Change	EN2, S3 and EN10

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		Working with the Grain of Nature: a Biodiversity Strategy for England (2002)					
Encourage the use of more sustainable forms of transport and development locations, reducing the need to travel by car	World Summit on Sustainable Development, Johannesburg (2002)	Delivering a Sustainable Transport System (2008), The Future of Transport White Paper – A Network for 2030 (2004), Lancashire's Local Transport Plan 2011 – 2021, The Countryside in and Around Towns: A vision for connecting town and country in the pursuit of sustainable development (2005), Low Carbon Transport: A Greener Future - A Carbon Reduction Strategy for Transport (2009), The Countryside and Rights of Way (CRoW) Act (2000), National Planning Practice Guidance (2019), Lancashire County Council Rights of Way Improvement Plan 2015-2025 Consultation Draft		The AAP should provide opportunities to access new and existing development and services by a range of travel modes. Development should encourage efficient and sustainable patterns of movement.	The SA should include objectives, indicators and targets that relate to sustainable transport.	Population, Human Health, Air Quality, Transport and Climate Change	S3, EN8, S5 and EN1
Address the causes of climate change and promote the reduction of greenhouse gas emissions	Kyoto Protocol to the UN Framework Convention on Climate Change (1997), World Summit on Sustainable	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), Climate Change Act 2008,	Lancaster City Council Local Plan	The AAP should aim to reduce the causes of climate change by reducing greenhouse gas emissions associated with all aspects of new developments,	The SA framework should include objectives, indicators and targets addressing climate change.	Air Quality, Energy and Climate Change	EN8, EN6 and EN1

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
	Development, Johannesburg (2002) UN Framework Convention on Climate Change (1997), Renewable Energy Coalition (2002), Intelligent Energy Europe (2007-2013)	UK Carbon Plan 2011, Energy Act 2011, Planning for Climate Change – Guidance and Model Policies for Local Authorities (2010), Delivering a Sustainable Transport System (2008), Low Carbon Transport: A Greener Future - A Carbon Reduction Strategy for Transport (2009), A Strategy for England's Trees, Woodlands and Forests (2007), Water Resources Strategy for England and Wales (2009), Health Effects of Climate Change in the UK 2008 – An update of the Department of Health Report 2001/2002, Lancashire Climate Change Strategy 2009 - 2020, Climate change and biodiversity adaptation: the role of the spatial planning system – a Natural England commissioned report (2009), UK Climate Change Risk Assessment 2017, National Renewable Energy Action Plan for the United Kingdom (2010), The Energy Performance of Buildings (England and Wales) Regulations 2012		transportation and utilities infrastructure.			

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
Minimise waste generation and landfill, and increase levels of reuse and recycling to achieve more sustainable waste management	World Summit on Sustainable Development, Johannesburg (2002)	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), Environmental Quality in Spatial Planning (2005), Climate Change Act (2008), Waste Strategy for England (2007), The Waste (England and Wales) Regulations 2011, Municipal Waste Management Strategy 2009, The Landfill (England and Wales) Regulations 2002, The Hazardous Waste (England and Wales) Regulations 2005, Environmental Permitting (England and Wales) Regulations 2007, The Egan Review – Skills for Sustainable Communities (2004), Minerals and Waste Development Plan for Lancashire – Lancashire County Council (2009), National Planning Policy (2019),Joint Lancashire Local Waste Assessment 2017	Lancaster City Council Local Plan	The AAP should promote the reduction of waste in new developments. Opportunities for recycling and reuse should be encouraged.	The SA framework should include objectives, indicators and targets addressing sustainable waste management.	Air Quality, Climate Change, Waste and Natural Resource Use	EN8, EN1, EN9 and EN5

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
Increase energy efficiency and require the use of renewable energy resources	Renewable Energy Coalition (2002), Intelligent Energy Europe (2007-2013)	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), Energy Act 2011, The Future of Transport White Paper – A Network for 2030 (2004), Lancashire Climate Change Strategy 2009 - 2020, Climate Change Act (2008), National Renewable Energy Action Plan for the United Kingdom (2010), Department for Environment, Food and Rural Affairs: 25 Year Environment Plan (2019), Energy Strategy for the Lancashire Local Enterprise Partnership (LEP) (2018)	Lancaster City Council Local Plan,	The AAP should promote reduced energy usage, energy efficiency in new developments and the creation of energy from renewable sources.	The SA framework should include objectives to cover the action areas and encourage energy efficiency.	Air Quality, Energy and Climate Change	EN8, EN6 and EN1
Ensure sustainable use of natural resources and promote sustainable design in new development	Kyoto Protocol to the UN Framework Convention on Climate Change (1997), UN Framework Convention on Climate Change (1994), Intelligent Energy Europe (2007-2013), World Summit on Sustainable	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), The Natural Environment and Rural Communities Act (2006), A Strategy for England's Trees, Woodlands and Forests (2007), Waste Strategy for England (2007),	Lancaster City Council Local Plan,	The use of renewable resources and of sustainably produced materials from local sources should be encouraged. Minerals and other non-renewable resources should be safeguarded. The AAP should ensure good design which complements the area	The SA framework should include sustainable use of resources and the promotion of sustainable development.	Human Health, Climate Change, Energy, Natural Resources, Cultural Heritage, Landscape	S3, EN1, EN6, EN5, EN7 and EN4

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
	Development, Johannesburg (2002), Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) (1998)	The Egan Review – Skills for Sustainable Communities (2004), National Planning Policy Framework (2019), The Countryside in and Around Towns: A vision for connecting town and country in the pursuit of sustainable development (2005), Sustainable Communities: Building for the Future (2003), Safeguarding our Soils: A Strategy for England (Defra, 2009), Water Resources Strategy for England and Wales (2009), Future Water: The Government's Water Strategy for England (2008), Lancashire Climate Change Strategy 2009 - 2020, Climate Change Act (2008), Stern Review of the Economics of Climate Change (2006)		in which they are located.			
To conserve soil resources and maintain their quality	Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) (1998)	Agricultural Land (Removal of Surface Soil) Act 1953, Environment Strategy – A Strategy for England's Trees, Woodlands and Forests (2007), Safeguarding our Soils: A Strategy for England (2009)	Lancaster City Council Local Plan, Inspection Strategy for Contaminated Land (2010), Lancaster District Local Brownfield Strategy (2009)	The AAP should ensure soil resources are not adversely affected by development. Appropriate remediation of contaminated land should be carried out where necessary and should not increase the	The SA Framework should include an objective addressing the need to protect soil quality and function.	Soils and Geology Landscape Water	EN5, EN6 and EN2

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
				potential for groundwater pollution.			
Protect and enhance the local distinctiveness and the historic environment and its setting	Valletta Convention 1992, Granada Convention 1985, World Heritage Convention 1972, Paris Convention of 1954, Hague Convention 1954	National Planning Practice Guidance (2019), National Planning Policy Framework (2019), Historic Environment: A Force for the Future (2001), The Historic Environment and Site Allocations in Local Plans: Historic England Advice Note 3 (2015), Environmental Quality in Spatial Planning (2005), Lancashire County Council 'Built Heritage in Lancashire 2018', Ancient Monuments and Archaeological Areas Act (1979), Lancashire Historic Environment Record – Lancashire County Council, Planning (Listed Buildings & Conservation Areas) Act 1990	Lancaster City Council Local Plan, Lancaster Heritage Strategy 2018	The AAP should protect and enhance local distinctiveness, valued historic environment and cultural heritage and its setting.	The SA framework should include objectives that consider local distinctiveness and the historic environment.	Cultural Heritage Landscape	EN7 and EN6
Social							
Improve accessibility and transport links to basic goods and services from residential areas		Delivering a Sustainable Transport System (2008), The Future of Transport White Paper – A Network for 2030 (2004), The Egan Review – Skills for Sustainable Communities (2004),	Lancaster City Council Local Plan	The AAP should ensure developments and key services are served by a range of transport options to improve accessibility	The SA framework must include objectives, indicators and targets relating to public transport use	Population, Human Health and Transport	S3 and S5

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		National Planning Policy Framework (2019), Lancashire's Local Transport Plan 2011 - 2021			and accessibility to meet local needs.		
Improve the health and wellbeing of the population and reduce health inequalities		Lancaster Health Profile 2016, Delivering a Sustainable Transport System (2008), National Planning Practice Guidance (2019), Lancashire Sport Partnership Strategy 2013-2017, Open Space Strategies: Best Practice Guidance (CABE and the Greater London Authority, 2009), Working for a Healthier Tomorrow – Dame Carol Black's Review of the health of Britain's working age population (2008), Biodiversity by Design: A Guide for Sustainable Communities (Town and Country Planning Association) (2004), By All Reasonable Means: Inclusive Access To The Outdoors For Disabled People (Countryside Agency, 2005), Lancashire Health and Wellbeing Strategy 2012, Lancashire Public Health Annual Report 2019/20, North West's 'Green Infrastructure Guide' (2008)	Lancaster City Council Local Plan, Lancashire County Council - Lancashire Rights of Way Improvement Plan, Lancaster City Council Sustainable Community Strategy 2008 – 2011, Lancaster District Play Strategy, Children and Young People Strategic Plan (2014-2017), Lancaster District PPG17 Study - Open Space, Sport and Recreation Facilities (2010 Refresh), Lancaster City Council's Local Green Spaces Assessment	The AAP should promote healthy and active lifestyles. Health facilities should be located to maximise accessibility. Accessibility to and linkages between areas of open space providing both formal and informal recreational opportunities should be considered as health benefits and wellbeing benefits can be achieved from green space.	The SA framework should include a variety of social objectives, indicators and targets addressing health and community.	Air Quality and Human Health	EN8 and S3

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		Lancashire Local Economic Partnership's 'Green Infrastructure Strategy' (2009), Health Effects of Climate Change in the UK 2008 – An update of the Department of Health Report 2001/2002					
Raise educational attainment to help improve opportunities for life	Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) (1998)	Sustainable Communities: Building for the Future (2003), Education and Employment Strategy 2018, Lancashire's Local Transport Plan 2011 – 2021	Lancaster City Council Local Plan, Lancaster City Council Sustainable Community Strategy 2008 – 2011	The AAP should promote educational attainment through accessibility and educational facilities should be located to maximise attainment.	The SA framework should include objectives, indicators and targets relating to skills and education.	Population, Human Health	S4
Improve access to good quality affordable housing to ensure that everyone has the opportunity to live in a decent affordable home		Localism Act 2011, National Planning Practice Guidance (2019), Sustainable Communities, Settled Homes, Changing Lives – A Strategy for Tackling Homelessness (ODPM) (2005), Sustainable Communities: Building for the Future (2003), Housing Strategy and Action Plan 2012-2017, Strategic Housing Land Availability Assessment Report (2015) Ministry of Housing, Communities and Local Government (MHCLG) 'New Green Standard' 2019	Lancaster City Council Local Plan, Housing Strategy and Action Plan 2012-2017, Lancaster District PPG17 Study - Open Space, Sport and Recreation Facilities (2010 Refresh)	The AAP should promote safe and sustainable communities and should include a range of housing to meet the District's needs including affordable housing.	The SA framework must include objectives, indicators and targets that address housing issues.	Housing and Human Health	S2 and S3

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
		Ministry of Housing, Communities and Local Government (MHCLG) 'Planning for the future' (2020), Pennine Lancashire 'Housing Strategy 2009-2029'					
Reduce levels of crime and fear of crime and promote safer Neighbourhoods		Sustainable Communities: Building for the Future (2003), Lancashire's Local Transport Plan 2011 – 2021, Lancashire Community Safety Agreement 2019-2022	Lancaster City Council Local Plan, Lancaster District Community Safety Plan 2011/12, Lancaster City Council Sustainable Community Strategy 2008 – 2011, Housing Strategy and Action Plan 2012-2017, Lancaster District Homelessness Strategy (2008-2013)	Policies should promote safe and sustainable communities.	The SA framework must include objectives, indicators and targets that address crime.	Population and Human Health	S1 and S3
Create sustainable and balanced communities	World Summit on Sustainable Development, Johannesburg (2002), Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in	UK Sustainable Development Strategy: Securing the Future (2005) and the UK's Shared Framework for Sustainable Development, One Future – Different Paths (2005), Sustainable Communities: Building for the Future (2003), Sustainable Communities, Settled Homes, Changing Lives – A Strategy	Lancaster City Council Local Plan, Lancaster City Council Sustainable Community Strategy 2008 – 2011,	The AAP should provide for a range of housing, employment and other opportunities to enable people to realise their individual aspirations.	The SA framework should include objective, targets and indicators that address community needs.	All	All Objectives

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
	Environmental Matters) (1998)	for Tackling Homelessness (ODPM) (2005), National Planning Policy Framework (2019), Biodiversity by Design: A Guide for Sustainable Communities (Town and Country Planning Association) (2004), The Egan Review – Skills for Sustainable Communities (2004), The Countryside in and Around Towns: A vision for connecting town and country in the pursuit of sustainable development (2005), By All Reasonable Means: Inclusive Access To The Outdoors For Disabled People (Countryside Agency, 2005), Strategic Housing Land Availability Assessment Report (2015), Ministry of Housing, Communities and Local Government (MHCLG) 'Planning for the future' 2020, The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, Localism Act (2011)					

Themes/ Messages Relevant to SA of Lancaster South AAP	Source					Main SA Topics	Relevant SA Objective
	International	National / Regional	Local	Implications For the AAP	Implicationsfor the SA		
Economic							
Promote quality employment opportunities	World Summit on Sustainable Development, Johannesburg (2002)	Lancashire's Local Transport Plan 2011 – 2021, Lancashire Strategic Economic Plan (2014), The Egan Review – Skills for Sustainable Communities (2004), Education and Employment Strategy 2018, Ministry of Housing, Communities and Local Government (MHCLG) 'Planning for the future' 2020	Lancaster City Council Local Plan	The AAP should ensure adequate provision of local employment opportunities.	The SA framework should address employment provision.	Population	EC1, EC3 and EC4
Promote sustainable economic growth, diversity and business competitive- ness		Lancashire's Local Transport Plan 2011 – 2021, Lancashire Strategic Economic Plan (2014), Stern Review of the Economics of Climate Change (2006), National Planning Policy Framework (2019), Rural Strategy (2004), Environmental Quality in Spatial Planning (2005) Good Practice Guide on Planning for Tourism (2006)	Lancaster City Council Local Plan	The AAP should encourage the creation of infrastructure and networks which enable business innovation and stimulates business growth.	The SA should include objectives, indicators and targets relating to economic growth and development.	Population	EC1, EC2, EC3 and EC4

APPENDIX B

Key Sustainability Issues and Opportunities Baseline

POPULATION

The following baseline population data presented below has been taken from the four wards that fall within the AAP area (as shown in Figure B-1) to form a mosaic of the baseline within and surrounding the site. These four wards include Ellel, Scotforth East, Scotforth West and University &Rural Scotforth. In some cases, the baseline data can be skewed due to the overall area of a ward, for example, Ellel ward is large and particularly rural, and makes up only a small area of the proposed site. Nevertheless, as part of the site falls within this ward, it has been included within the baseline to form as comprehensive picture as possible.

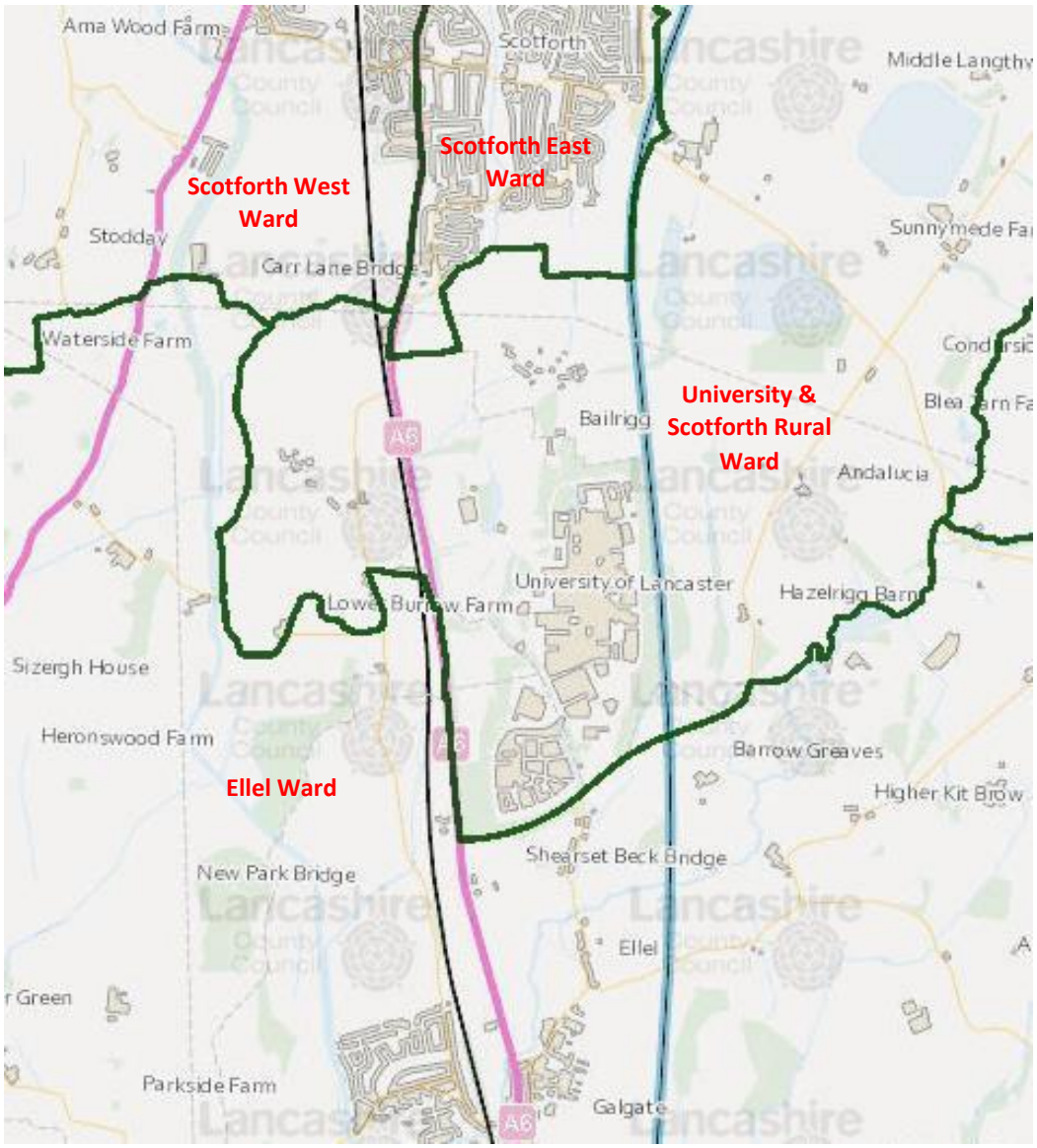


Figure B-1: Ward boundaries (Green) for wards comprising the AAP area

Figure B-2 below, shows the existing land uses of the AAP area which is comprised mostly of undeveloped land occasionally interrupted by sporadic residential dwellings such as farmhouses. The centre of the AAP area is dominated by the existing Lancaster University. The settlement of Scotforth is adjacent to the AAP area to the north of the site with Galgate adjacent to the south. Both settlements represent the highest concentrations of population around the AAP area.

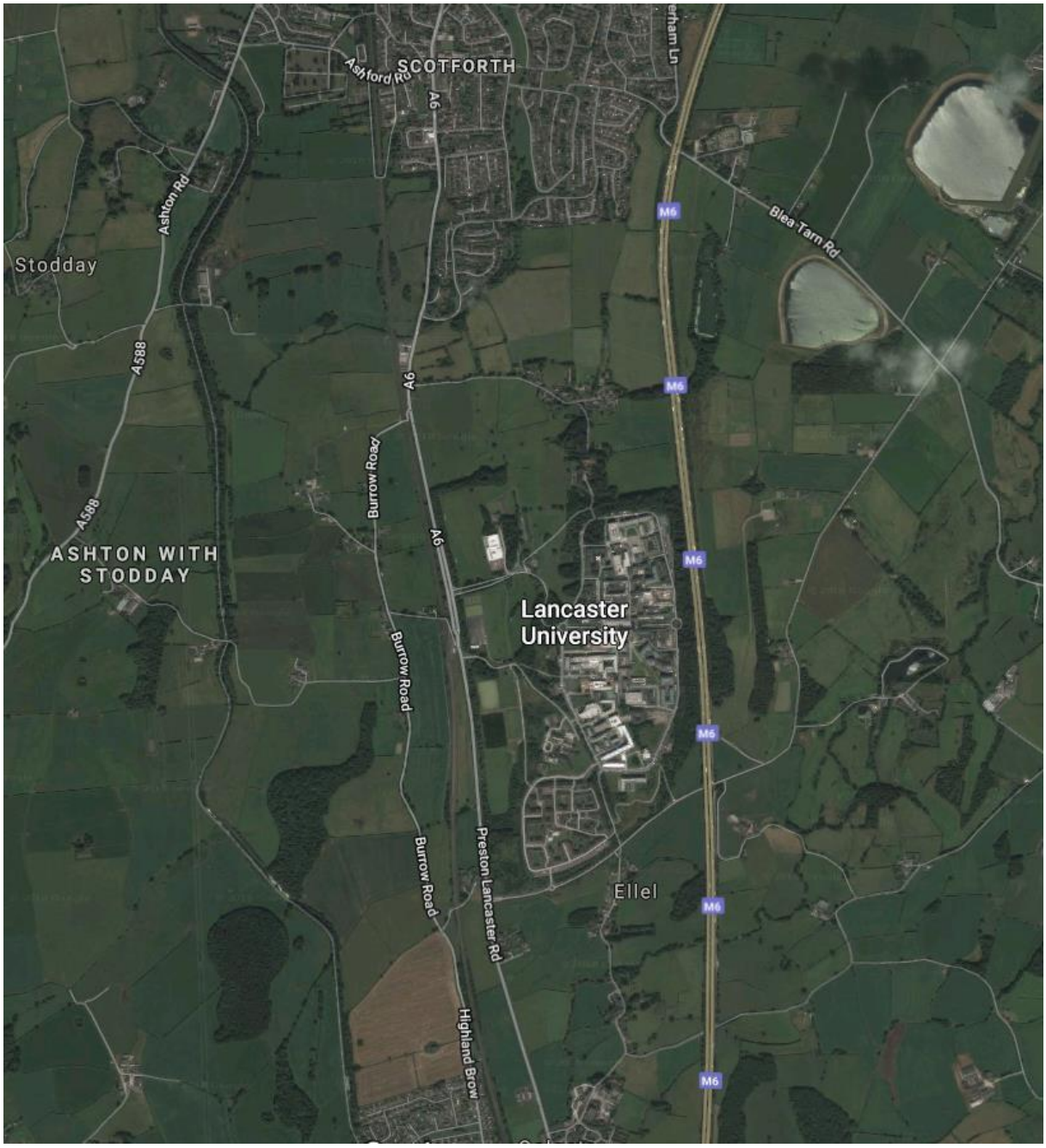


Figure B-2: Aerial satellite image of the AAP area (Google)

As of 2019, the population of the Lancaster District stood at 146,038[13]. Scotforth West has the largest population of the four wards at 7,581 persons[14]. The lowest population is held by Ellel at 4,126 persons despite being the largest ward. In the University and Scotforth Rural ward the majority of the

[13] Lancashire County Council. Mid-year population estimates. Available at: https://www.lancashire.gov.uk/lancashire-insight/population-and-households/population/mid-year-population-estimates/ [Accessed: 19.02.21]
[14] Office for National Statistics. Ward-level population estimates. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/wardlevelmidyearpopulationestimatesexperimental [Accessed: 18.02.21]

population is made up of the age groups 15-19 and 20-24[15], likely to be made up of students as the Lancaster University being within this ward. The population estimate in Ellel has more than halved, with the population in 2015 estimated at 8,691. Populations in Scotforth West and University & Scotforth Rural have both increased in 2015. The population of Scotforth East has decreased by over 2,000.

Table B-1: Population estimates of the four wards in mid-2019

Population Estimates by ward (Mid-2019)	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural
	4,126	4,346	7,581	6,383

As mentioned earlier, Ellel is a particularly large and rural ward which is reflected in a population density of just 29 people per km^2, which is less than half of the population density in 2015. In contrast, Scotforth East has the highest population density at 3,351 per km^2 given that it is a much smaller and highly urbanised ward.

Table B-2: Population density of each of the four wards

Population Density per km2 (2019)	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural
	29	3,351	1,227	836

The large majority of the populations of all four wards identified in Table B-3, below, are between the ages of 18-64. Most notably, nearly 95% of the population of University and Rural Scotforth ward is made up of 18-64 year olds[16]. As of 2020/2021, there were 16,595 students studying at the University, with 12,563 students from either the UK or the European Union and a further 4,032 overseas students[17]. The largest change of population age range between 2011 and 2019 was for between 18 and 64 in Ellel, which was estimated at 8,217 in 2011.

Table B-3: Population age range of the four wards in mid-2019

Population Estimates Age Range (Mid-2019)	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural
0-17	797	821	1,541	177
18-64	2,429	2,497	4,884	6,057
65+	900	1,028	1,156	149

Table B-4 identifies that as of 2011, all four wards are predominantly of white ethnicity, with the second largest ethnicity by population being Asian/Asian British[18].

[15] Lancashire County Council. Mid-year population estimates. Available at: https://www.lancashire.gov.uk/lancashire-insight/population-and-households/population/mid-year-population-estimates/ [Accessed: 19.02.21]
[16] Office for National Statistics. Ward-level population estimates. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/wardlevelmidyearpopulationestimatesexperimental [Accessed: 18.02.21]
[17] Lancaster University. Student Statistics – Total Student Population Available at: https://www.lancaster.ac.uk/data-analytics/studentstatistics.html [Accessed: 19.02.21]
[18] Office for National Statistics. 2011 Census: QS211EW Ethnic group (detailed), Middle Layer Super Output Areas (MSOAs) and Lower Layer Super Output Areas (LSOAs) in England and Wales. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/2011censuskeystatisticsandquickstatisticsforwardsandoutputareasinenglandandwales [Accessed: 26.02.21]

Table B-4: Ethnicity by ward

Ethnicity (2011)	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural
White	8,477	4,158	7,151	4,191
Mixed/ multiple ethnic groups	141	44	108	88
Asian/ Asian British	1,158	93	600	1,047
Black/ African/ Caribbean/ Black British	88	27	68	65
Other ethnic group	53	21	50	40

Source: Local Government Association

Data Gaps and Uncertainties

- As desk-study data can only be obtained for the four wards that make up the AAP area, there is a level of uncertainty that should be applied to the baseline population data presented above.

Key Issues and Opportunities

- The general AAP area and surrounding area has a relatively large and young population which could offer a strong and diverse workforce to any employment provisions included within the masterplan.
- The permanent residential population within the AAP area is very low due to it being largely greenfield in nature.
- The main population of the AAP area are students at the University of Lancaster outside of small villages/hamlets and individual houses. This is dominated by temporary residents.
- The development of the AAP area will dramatically alter the population characteristics of the area, so it will be important to consider how this links with the existing population within the AAP boundary and its neighbouring settlements, notably Galgate and Scotforth.

EDUCATION AND QUALIFICATIONS

There is a total of five educational facilities within 1km of the AAP area[19]. Four of these are primary schools, three in the settlement of Scotforth and one to the south of the site in Galgate. There are no Secondary schools within 1km of the AAP area however, the Ripley St. Thomas Church of England Academy is within 2km of the AAP area.

Table B-5: Type and quantity of educational facilities within 1km and 2km of the AAP area

Type of Educational Facility	No. of Facilities within 1km	No. of Facilities within 2km
Primary	4	0
Secondary	0	1
Further	1	1

Lancaster University is also located within the APP area providing extensive further educational opportunities. As of 2020/2021, there were 16,595 students studying at the University[20], nearly 4,000 more than in 2016. 15,005 studying full time at the university and 1,590 studying part-time (Lancaster University). The University of Cumbria is also within 2km of the AAP area with 8,790 students

[19] MARIO. Available at: http://mario.lancashire.gov.uk/agsmario/default.aspx [Accessed: 26.02.21]
[20] Lancaster University Total Student Population. Available at: https://www.lancaster.ac.uk/data-analytics/studentstatistics.html [Accessed: 26.02.21]

studying here between 2015 and 2016 (University of Cumbria). The locations of all seven educational facilities within 2km of the AAP area are present in Figure B-3 below.

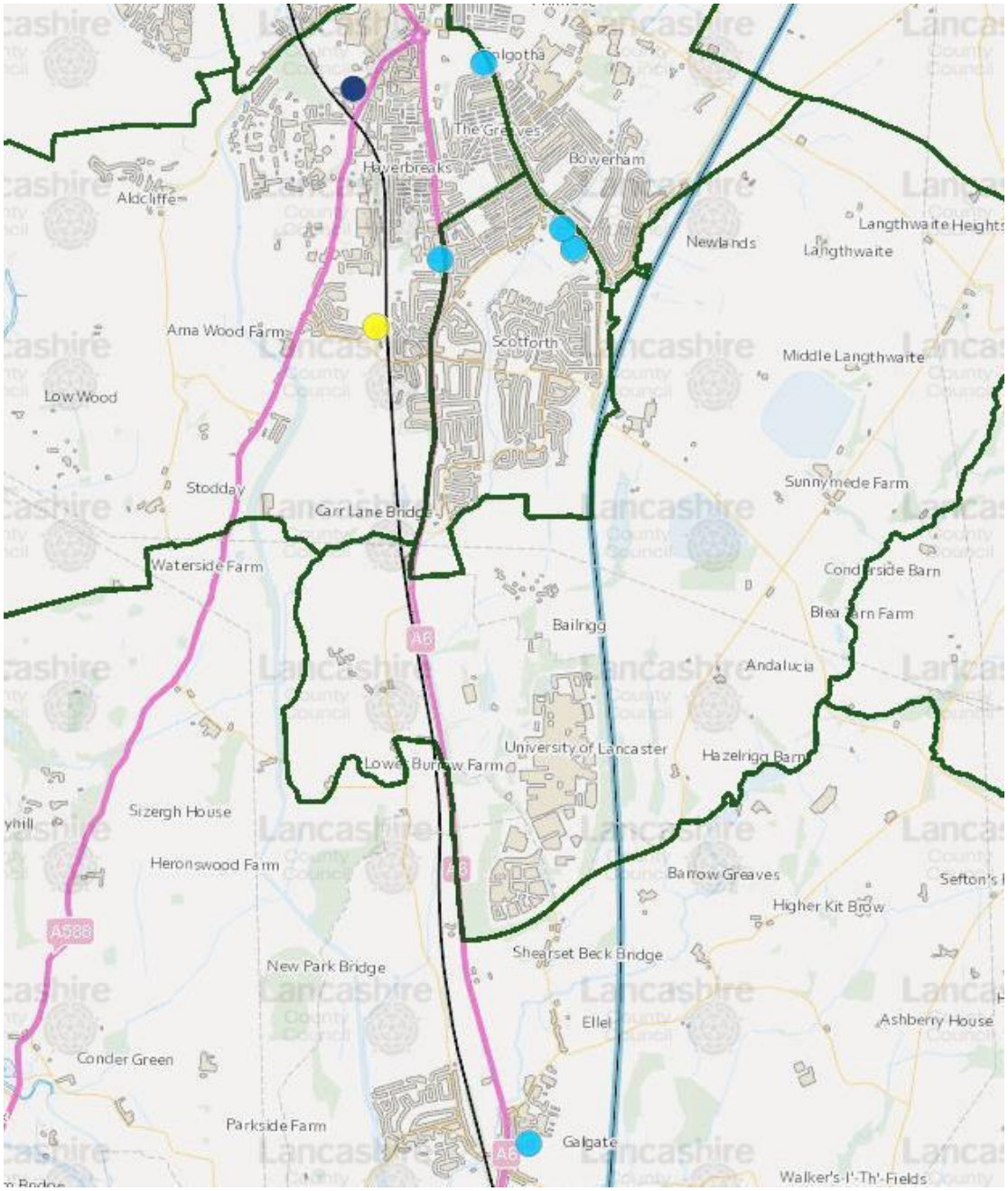


Figure B-3: Locations of primary (turquoise) and secondary (navy blue) and short stay (yellow) educational facilities within 2km of the AAP area (MARIO, Lancashire County Council)

Lower Super Output Areas (LSOA) 019C and 019D are in the least 20% deprived areas Educations, Skills and Training Domain and 017F and 019A LSOAs all within the least 10% deprived areas for Educations, Skills and Training Domain as presented in Figure B-4. Although just outside the AAP area 018C LSOA is within the 30% most deprived areas for Educations, Skills and Training.

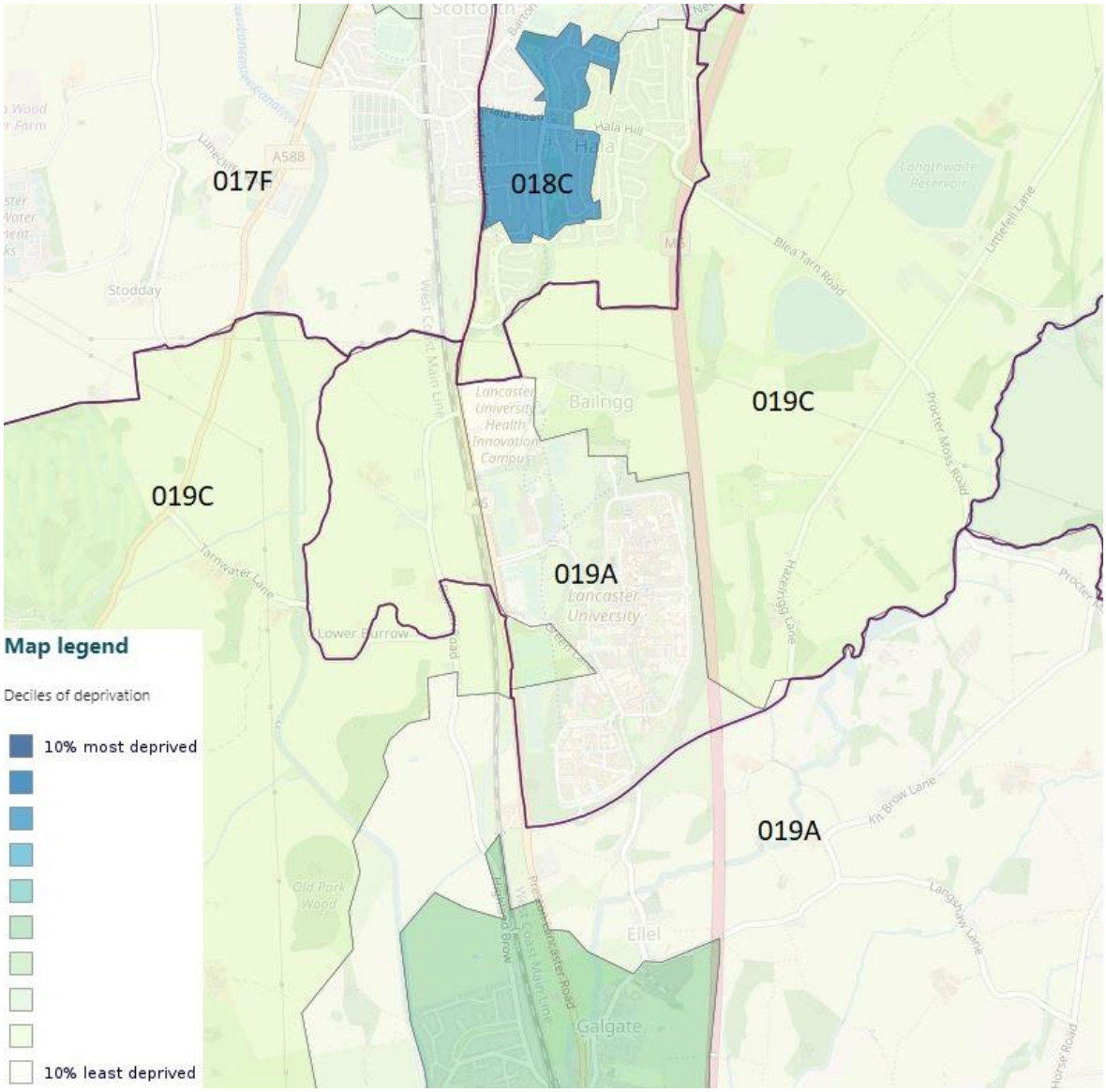


Figure B-4: Education, Skills and Training (IMD, 2019)

The majority of people within the Ellel, University area hold Level 3 qualifications (48%) with only 4.3% of people having no qualifications, the lowest in comparison to Scotforth East and Scotforth West[21]. However, Scotforth East and Scotforth West both have significantly higher rates of people holding Level 4 qualifications or above with Scotforth West having the highest rate of 42.1% in comparison to the 35.7% in Scotforth East. Table B-6 presents the percentage figures for all qualification levels, below.

Table B-6: Highest qualification held by ward percentage in 2011

Qualification Level	Ellel, University (%)	Scotforth East (%)	Scotforth West (%)
Level 4 qualifications and above	22.7	35.7	42.1
Level 3 qualifications	48.0	18.4	21.3
Level 2 qualifications	10.1	16.4	15.5
Level 1 qualifications	6.7	11.8	9.8

[21] NOMIS. Ward Labour Market Profile. Available at: https://www.nomisweb.co.uk/reports/lmp/ward2011/1140854529/report.aspx?town=ellel [Accessed: 18.02.21]

Qualification Level	Ellel, University (%)	Scotforth East (%)	Scotforth West (%)
Apprenticeships and other qualifications	8.2	6.3	4.6
No qualifications	4.3	11.4	6.7

Scotforth West has the highest GCSE achievement levels (5 A*-C) of the four wards within the AAP area and the second highest in the District at 79.9% with Scotforth East having the lowest achievement levels of 66.3% (see Figure B-5). Both Ellel and University and Scotforth Rural wards had a comparably low level of achievement both scoring 69.6%. However, all scores are higher than the average for Lancaster District which is as low as 61.1%.

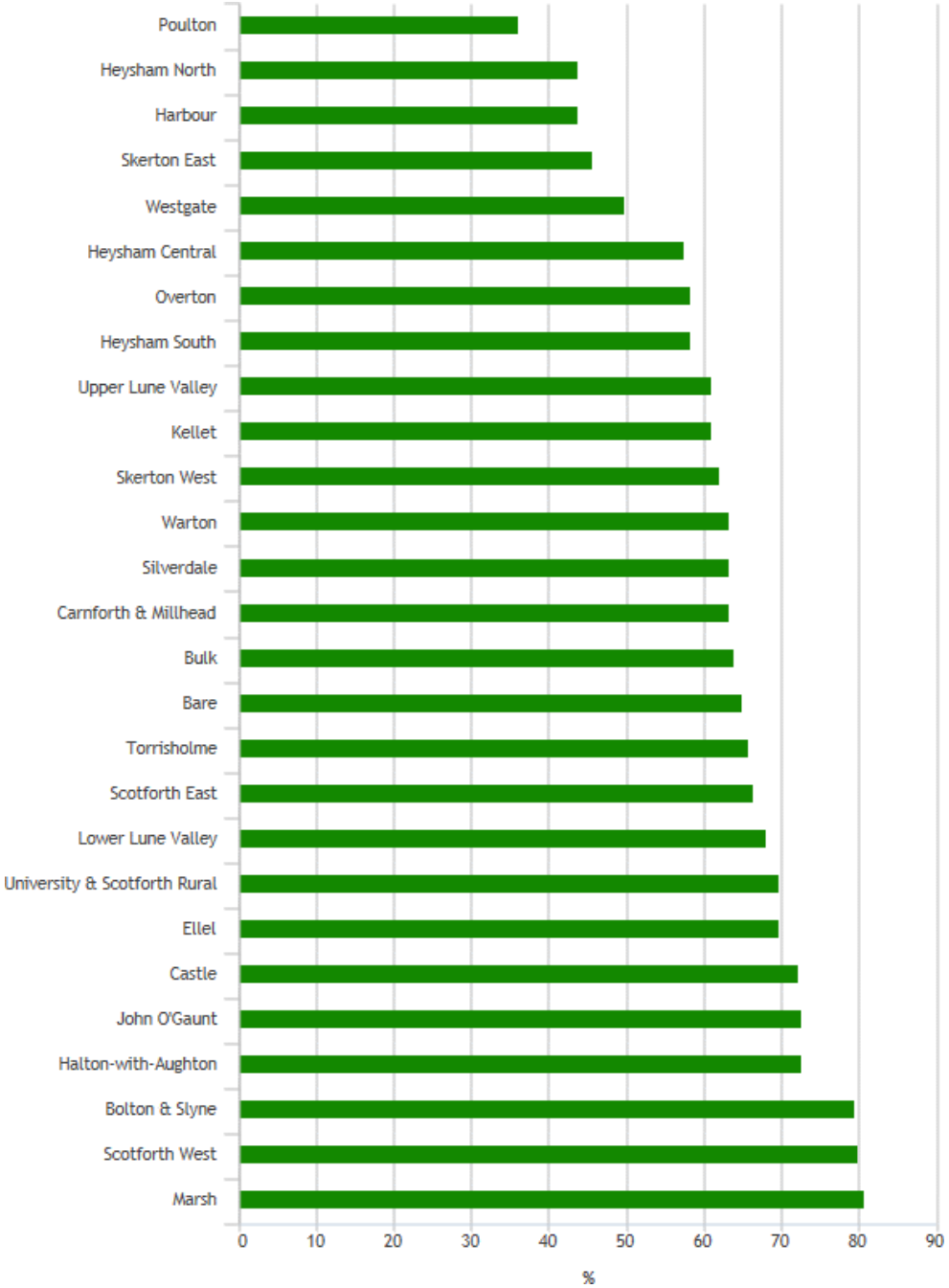


Figure B-5: Percentage of children gaining 5 or more A - C grades at GCSE (including English and Maths (Local Government Association)*

Data Gaps and Uncertainties

- Percentage 16-18 year olds not in education or employment training.
- Number and location of establishments offering life-long learning opportunities.

Key Issues and Opportunities

- Currently there are no schools within the AAP boundary as it is largely greenfield. New school provision is likely to be required for the new population and to avoid oversubscription in the existing neighbouring areas of Scotforth and Galgate.
- Educational attainment in the area is largely good (although note these statistics are based on ward boundaries which stretch beyond the AAP boundary). However, there is a pocket of higher educational deprivation north of the site in Scotforth East.
- Work based learning opportunities should be developed further to minimise the number of 16-18 year olds not in education or employment training and increase levels of attainment of qualifications.
- Lancaster University should be promoted as an important asset to continue to raise educational attainment levels and to attract inward investment into the AAP area.

HEALTH

LSOA 018C falls within the 20% most deprived areas for health deprivation and disability as shown on Figure B-6 below. LSOA 019A is within the 10% least deprived areas, LSOA 107F is within the 20& least deprived, and LSOA 019C is in the 50% most deprived for health deprivation and disability.

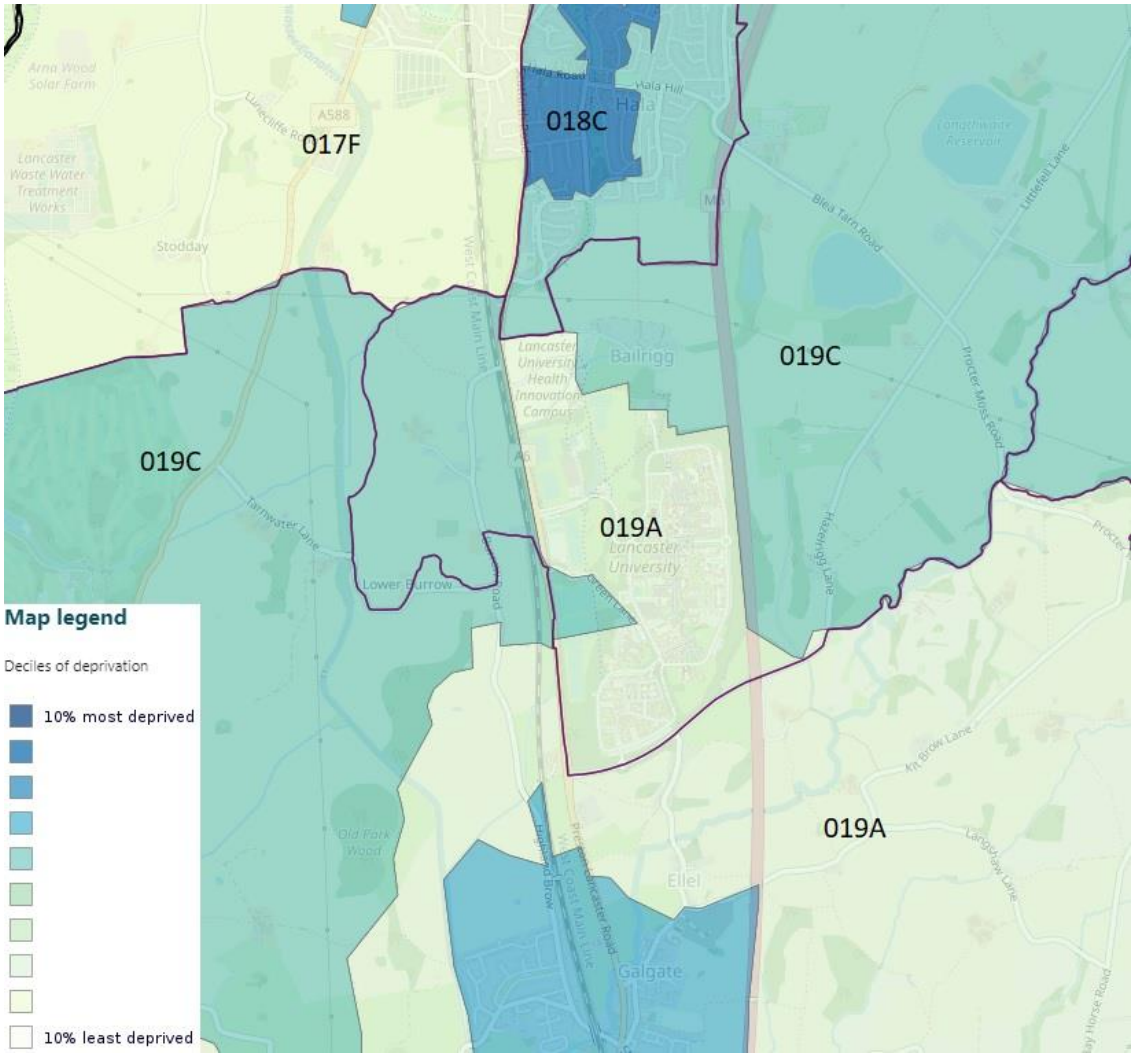


Figure B-6: Health and Disability Deprivation (IMD, 2019)

There are three General Practitioner (GP) surgeries within 2km of the AAP area, displayed on Figure B-7 below, the closest GP being the Lancaster University Medical Centre (Bubble B on Figure B-7) within the AAP area connected to Lancaster University[22]. Immediately south of the AAP area is the Galgate Health Centre (Bubble A) in the settlement of Galgate and to the north of the AAP area in the settlement of Scotforth is the Rosebank Surgery (Bubble C).

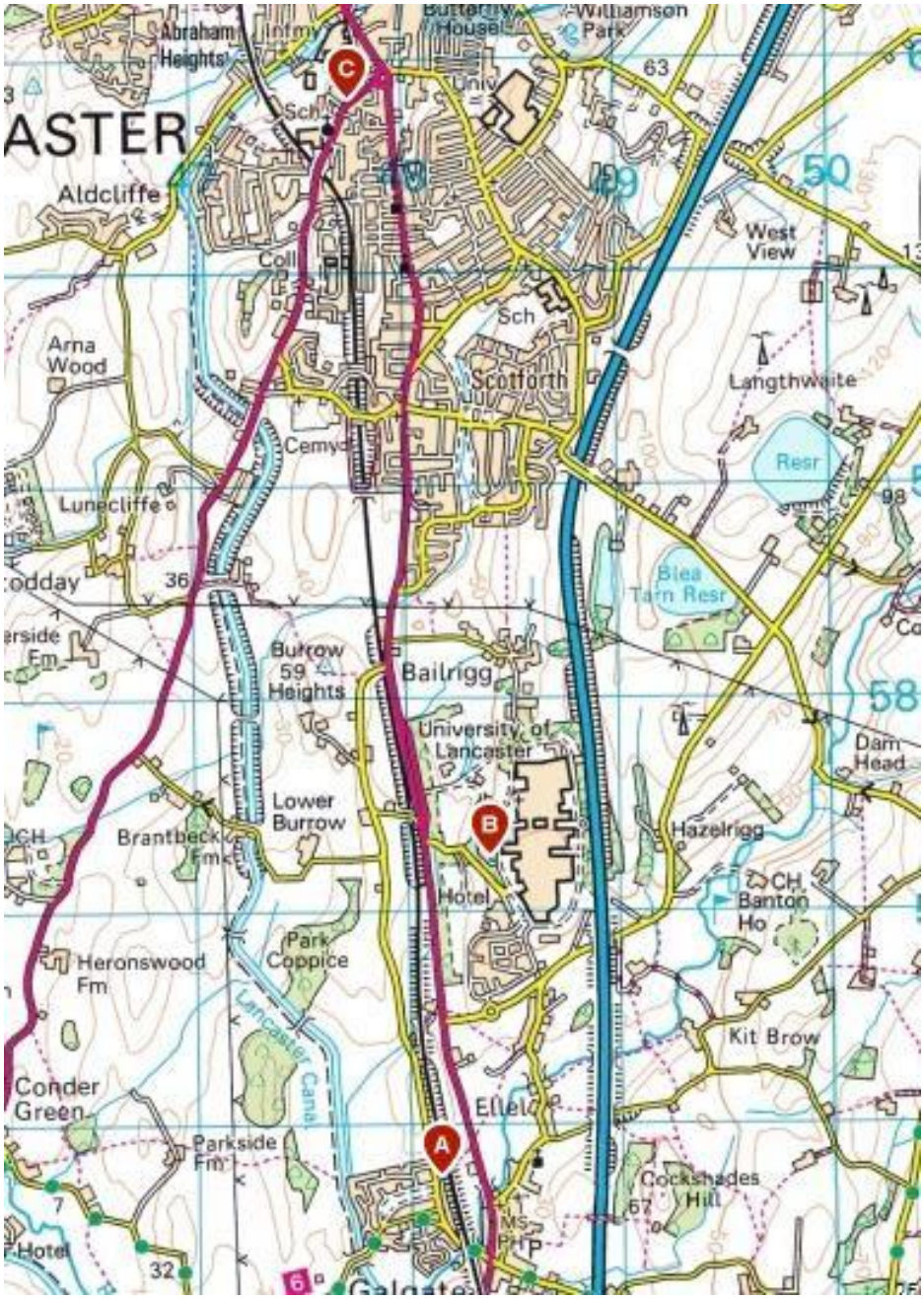


Figure B-7: Locations of GPs within 2km of the AAP area (NHS Choices)

There are several sports and leisure facilities in and around the AAP area, three of which are situated within the AAP area in conjunction with Lancaster University. There are five sports and leisure facilities to the north of the AAP area located in the settlement of Scotforth. Lancaster Golf Club and Galgate Football Club are also located within 1km from the AAP area to the west and south respectively.

[22] NHS. GPs near Bailrigg. Available at: https://www.nhs.uk/service-search/find-a-GP/results/Bailrigg?latitude=54.0164552327086&longitude=-2.78702263434045 [Accessed:26.02.21]

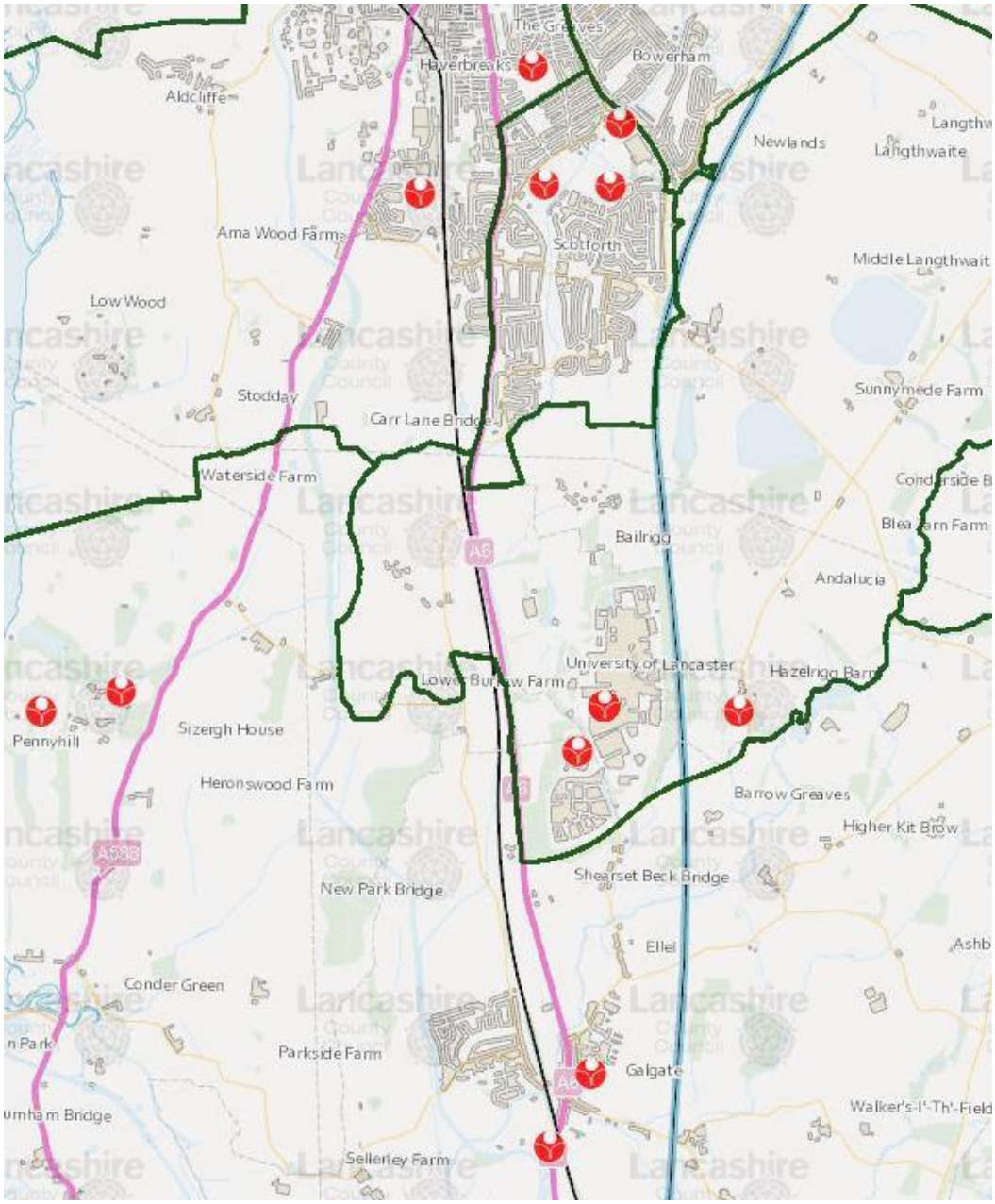


Figure B-8: Locations of sports and leisure facilities within 2km of the AAP area (MARIO, Lancashire County Council)

The AAP area is relatively well served by existing PRoWs particularly around the periphery of the site. There are a number of PRoWs that are within the AAP area boundary including: PRoW 1, 3, 14, 15, 23, 24, 25, 49, 54, 55 and 57. Bridleway 1 also falls within the AAP area. There are no National Cycle Network (NCN) routes within the AAP area (Sustrans), however, there are a number of local cycle routes that fall within the AAP boundary mainly serving Lancaster University, as shown on Figure B-9. The Lancaster Canal towpath walk also follows the south western boundary of the AAP area and transects the north west area of the AAP area stretching from Ribble across the Fylde and through Lancaster and Carnforth to the Lake District.

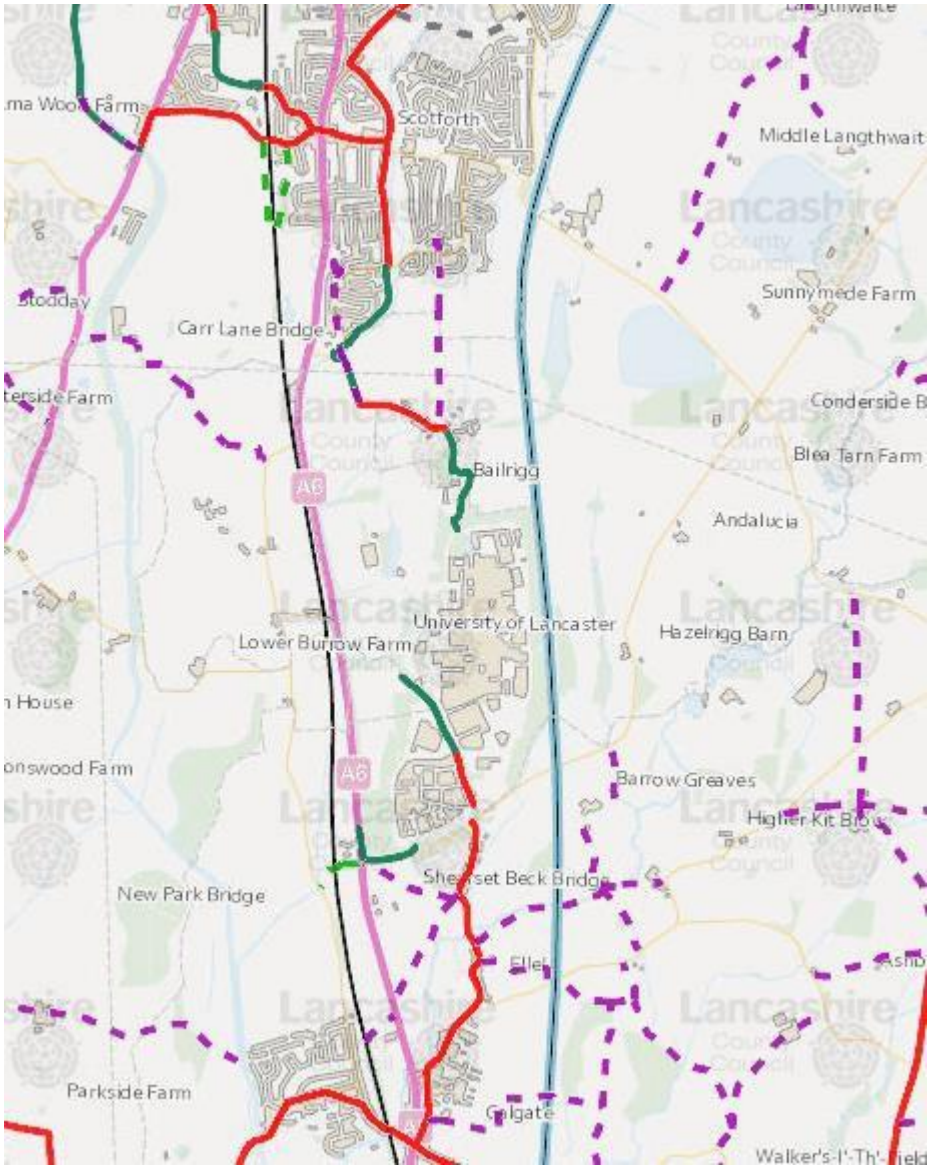


Figure B-9: PRoW (purple), Bridleway (bright green) and local cycle route (dark green and red) network within the AAP general area (MARIO, Lancashire County Council)

Scotforth West has the highest life expectancy at birth for males in the Lancaster District overall at 82.2 years. University and Scotforth Rural has the highest life expectancy at birth for females out of the four wards within the AAP area at 87.4 years[23]. The lowest rates of the four wards are in Scotforth East for males at 79.8 and Ellel for females at 82.9. Life expectancy has increased slightly for all wards between 2010-2014 and 2013-2017.

Table B-7: Life expectancy at birth by ward

Life Expectancy at Birth (Years) (2013 - 2017)	Ellel	Scotforth East	Scotforth West	University and Scotforth Rural
Female (%)	82.9	83.3	83.5	87.4
Male (%)	81.3	79.8	82.2	81.7

[23] Public Health England. Local Health. Available at: https://www.localhealth.org.uk/#bbox=339780,465340,20757,12937&c=indicator&i=t4.le_nm_m&view=map15 [Accessed: 19.02.21]

As of 2011, levels of good health are generally good within the four wards that fall within the AAP area as shown in Table B-8[24]. University and Scotforth Rural have the lowest levels of the four wards with levels of 'bad health' at 0.7% and levels of 'very bad health' at 0.2%. The worst health levels of the four wards were recorded in Scotforth East where levels of 'bad health' were 4.8% and levels of 'very bad health' were 1.2%. However, all four wards within the AAP area hold lower levels of both 'bad health' and 'very bad health' than the Lancaster District average.

Table B-8: Health of the population (bad health/very bad health (%))

Health of the Population (2011)	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural	Lancaster District
Bad Health (%)	1.4	4.8	2.6	0.7	5.8
Very Bad Health (%)	0.4	1.2	1.2	0.2	

Along the M6 motorway A6 road corridors of the AAP area 24-hour average road noise levels can reach over 75 decibels as demonstrated in blue in Figure B-10. The surrounding areas of these corridors can also typically hit 24-hour averages of between 55 decibels anywhere up to 74.9 decibels moving closer in proximity to the aforementioned routes.

[24] Local Government Association. General health bad or very bad - %. Available at: https://lginform.local.gov.uk/dataAndReports/explorer?areaType=District&category=200065 [Accessed: 26.02.21]

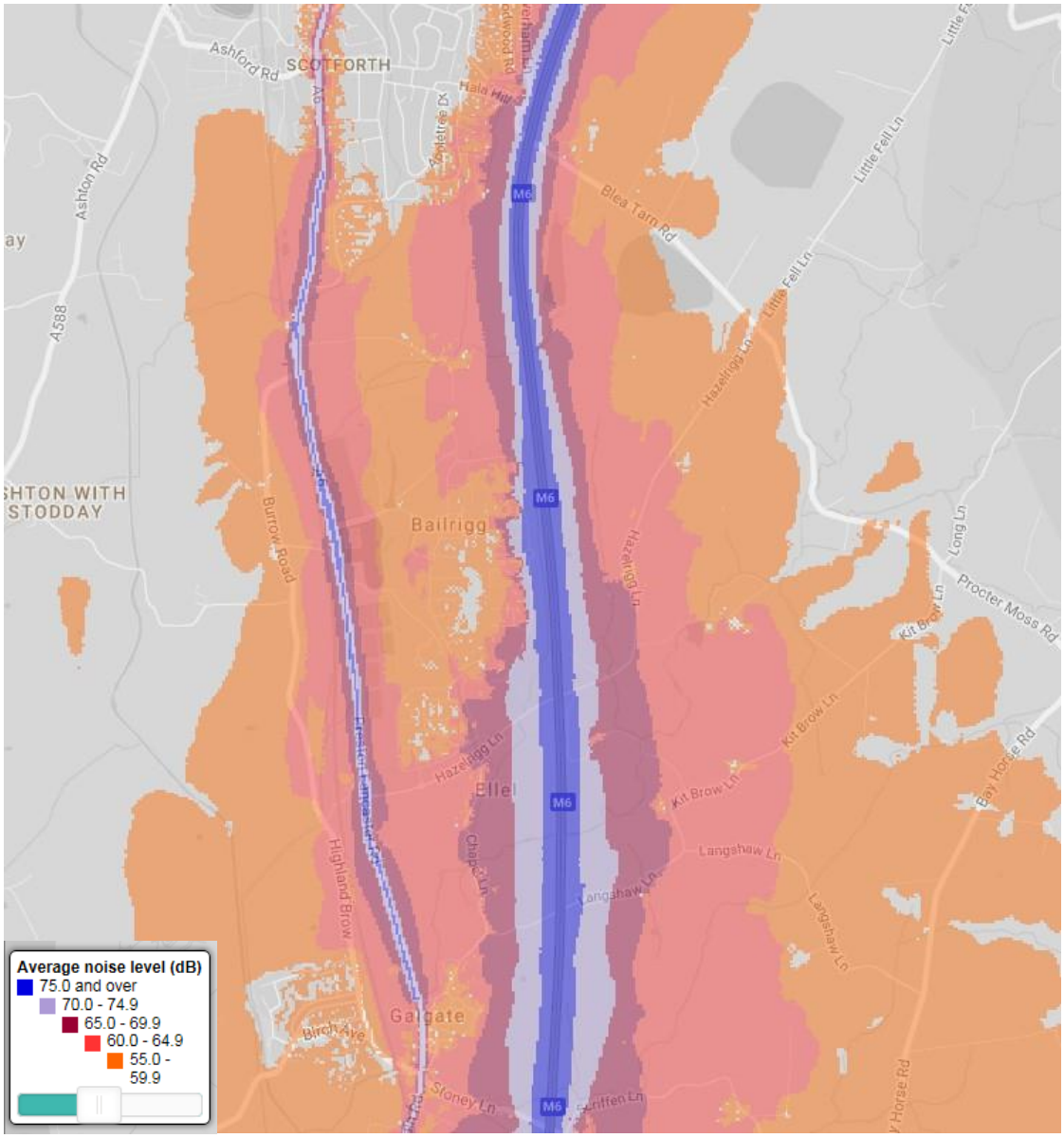


Figure B-10: 24-hour annual average road noise level in decibels within the AAP area

In a similar scenario to road noise levels, 24 hour average rail noise can reach levels above 75 decibels along the West Coast Main Line (WCML) with the areas immediately surrounding the WCML experiencing 24-hour average noise levels of between 55 decibels up to 74.9 decibels (as shown in Figure B-11 below).

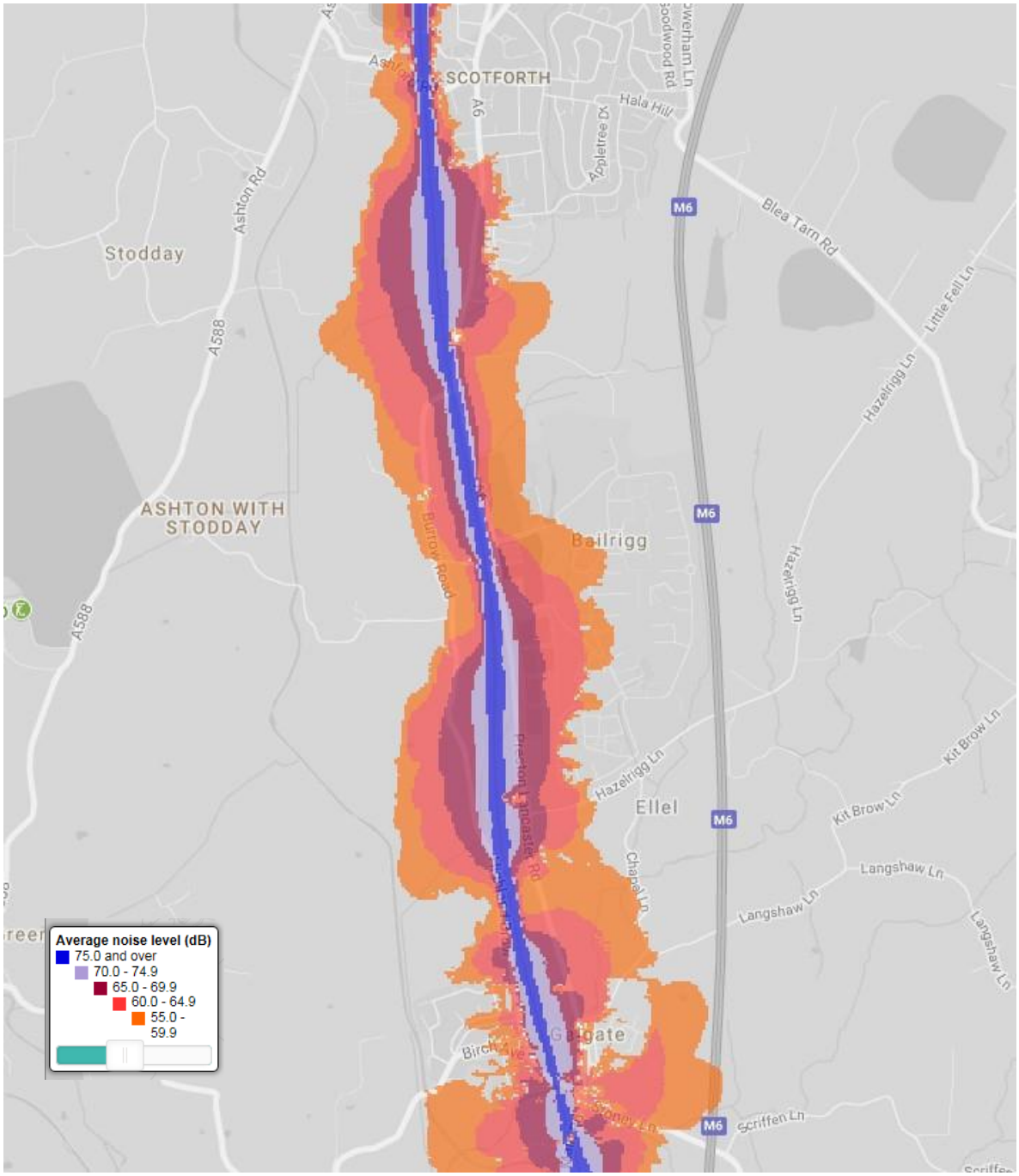


Figure B-11: 24-hour annual average rail noise level in decibels within the AAP area (Extrium.co.uk)

There are two road-related Noise Important Areas (NIAs) within the AAP area shown in red in Figure B-12. The largest of the two NIAs is located to the north east of the AAP boundary and is designated as a result of the M6 motorway. There is also a small road NIA located along the A6 to the west of Lancaster University. There is also a stretch of NIA on the southern approach of the A6 entering the settlement of Galgate however this falls outside of the AAP area to the south.

There is one rail-related NIA within the AAP area in the same location road-related NIA on the A6 adjacent to Lancaster University. Another rail-related NIA is situated to the south west of the settlement of Galgate, however, this falls outside of the AAP area to the south.

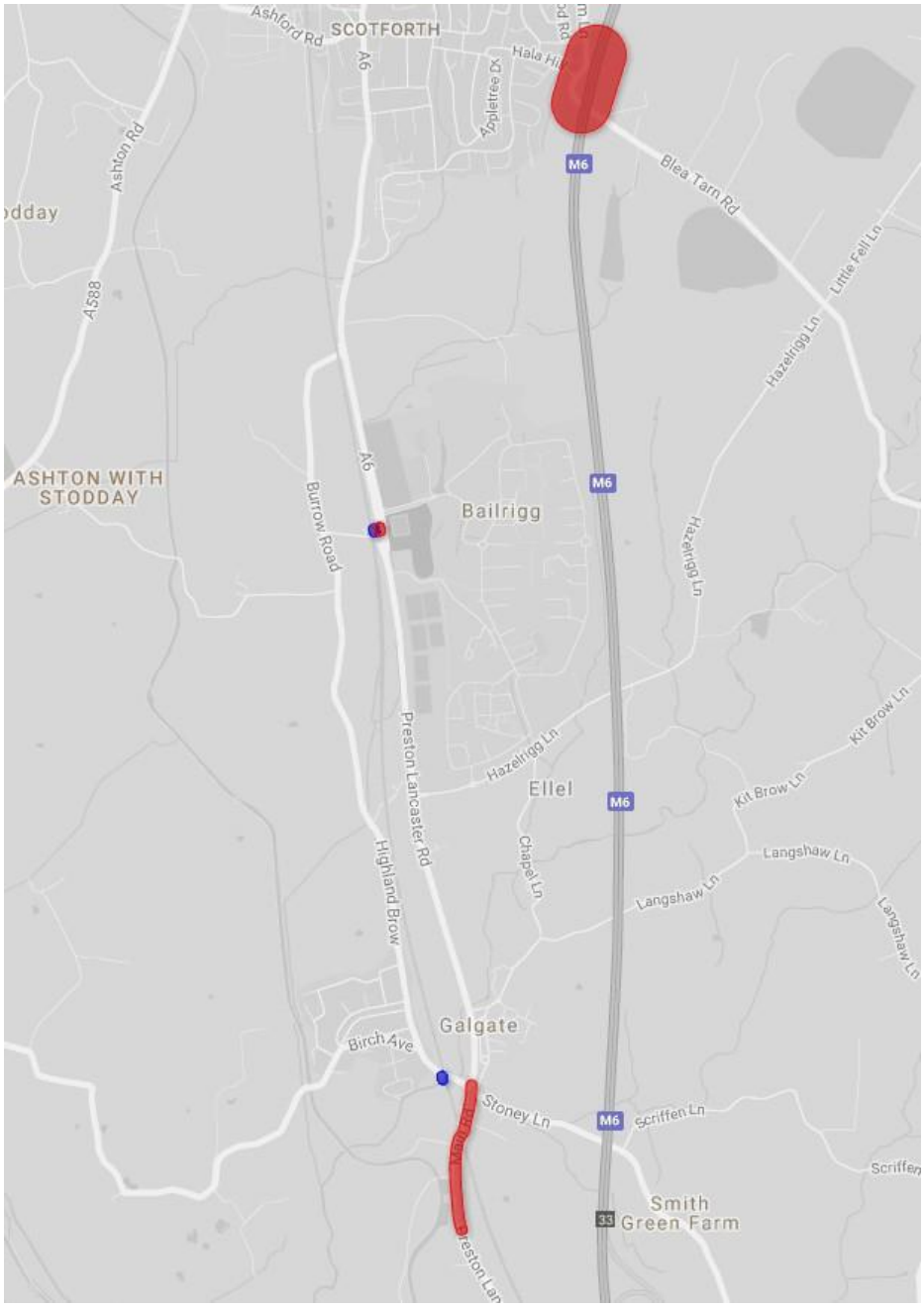


Figure B-12: Noise Important Areas (NIAs) within the AAP area (Road NIAs in red, Rail NIAs in blue) (Extrium.co.uk)

Data Gaps and Uncertainties:

- Latest figures for the percentage of the working-age population with a long-term limiting illness.
- Standardised mortality ratio and mortality rates for circulatory disease and cancer.
- Percentage of people participating in regular sport or exercise (defined as taking part on at least 3 days a week in moderate intensity sport and active recreation for at least 30 minutes continuously in any one session).
- Prevalence of overweight (including obese children in Reception year in Lancaster District compared to England).

Key Sustainability Issues and Opportunities:

- Health in the AAP area is generally good in comparison to the Lancaster District average with the poorest levels recorded to the north in the ward of Scotforth East.

- Access to doctor's surgeries is relatively good, however, the introduction of more homes in the area may put existing facilities under pressure. New health care facilities will therefore be required as part of the AAP.
- There are opportunities to further promote access to outdoor recreational pursuits in open areas of the AAP area to benefit the health of the local population.
- There are also opportunities to further promote walking and cycling in the AAP area and also improve walking and cycling opportunities to the nearby Forest of Bowland AONB.
- PRoW links across/under the M6 to the east of the AAP area are limited.
- There are significant opportunities for a network of sustainable transport links to be developed and combined with green infrastructure.
- There are issues surrounding the high noise level outputs originating from the strategic road and rail network that runs through the AAP area. This will need to be considered in the design of development and it will also need to be ensured that noise levels are not exacerbated in the current NIAs.

CRIME

Given that the AAP area is mostly greenfield land with only small pockets of residential properties the crime statistics for the AAP carry a level of uncertainty particularly when considering that Lancaster University is at the heart of the area and could be considered a hot spot for crime. With this in mind, the baseline has considered crime statistics with regards to Lancaster University and surrounding areas such as Galgate and Scotforth given that these two settlements are immediately to the south and north respectively.

Table B-9 presents crime committed per 1,000 population along with the percentage change from the previous year equivalent[25]. Scotforth East and Scotforth West had the highest crime rate per 1,000 at 49.7 and 45.6 respectively and also experienced the highest increase in crime with 36.9% and 29.5% increases respectively. Crime per 1,000 population was particularly low in University and Scotforth Rural standing at 11.6 with a small increase of 3.5%. However, all crime rates per 1,000 still remain significantly lower than the Lancaster District average of 76.0.

Table B- 9: Total crime per 1,000 population between February 2017 and January 2018

	Ellel	Scotforth East	Scotforth West	University & Scotforth Rural	Lancaster District Average
Crime per 1,000 population between February 2017 and January 2018	37.6	49.7	45.6	11.6	76.0
Change (%)	4.9	36.9	29.5	3.5	-

As of 2019, none of the LSOAs that fall within the AAP area are within the 50% most deprived for crime in the UK (see Figure B-13). This could be due to the rurality of the AAP area and surrounding wards and LSOA.

[25] Safer Lancashire. Statistics. Available at: http://www.saferlancashire.co.uk/2011/offline.asp [Accessed: 02.03.21]

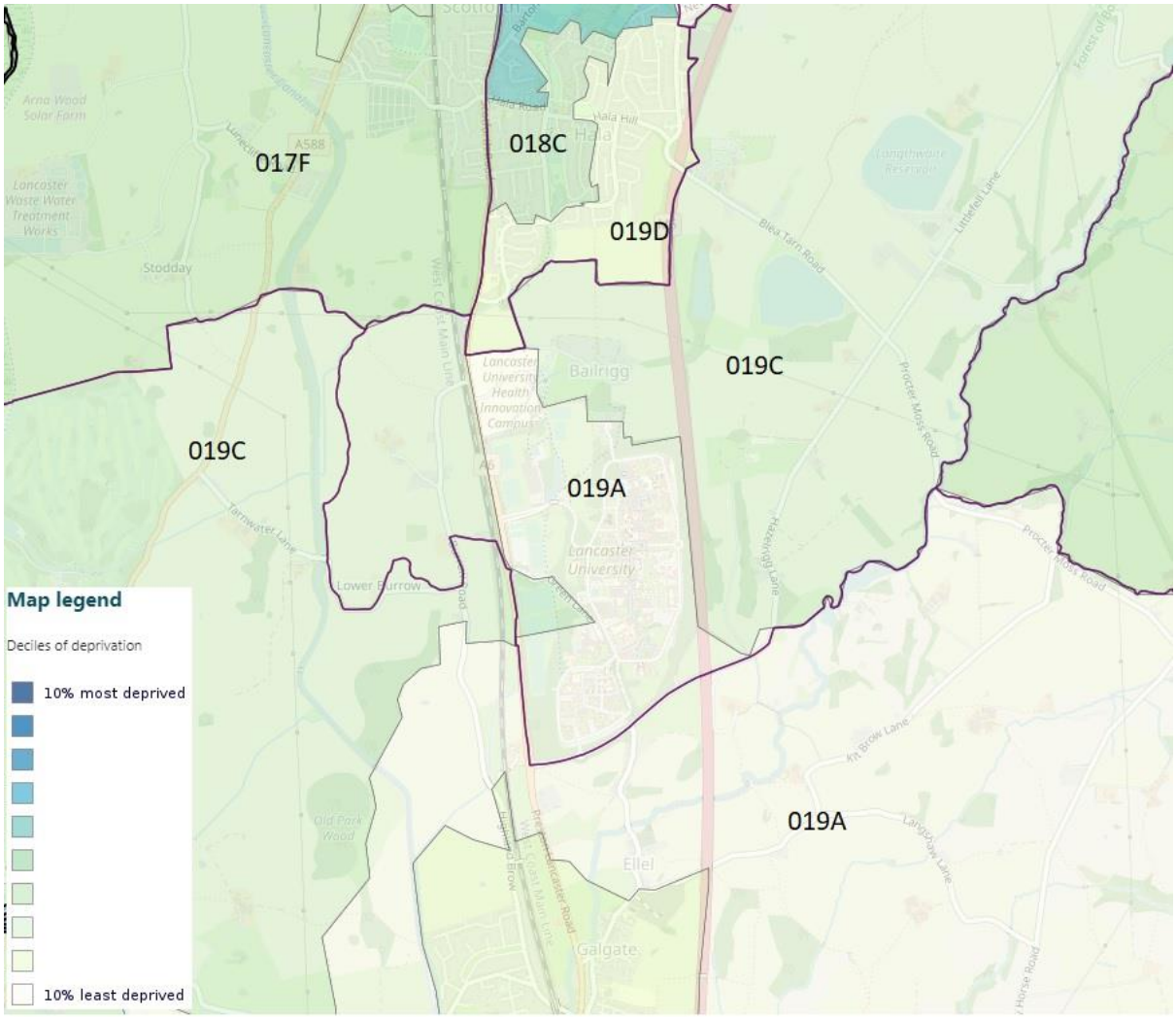
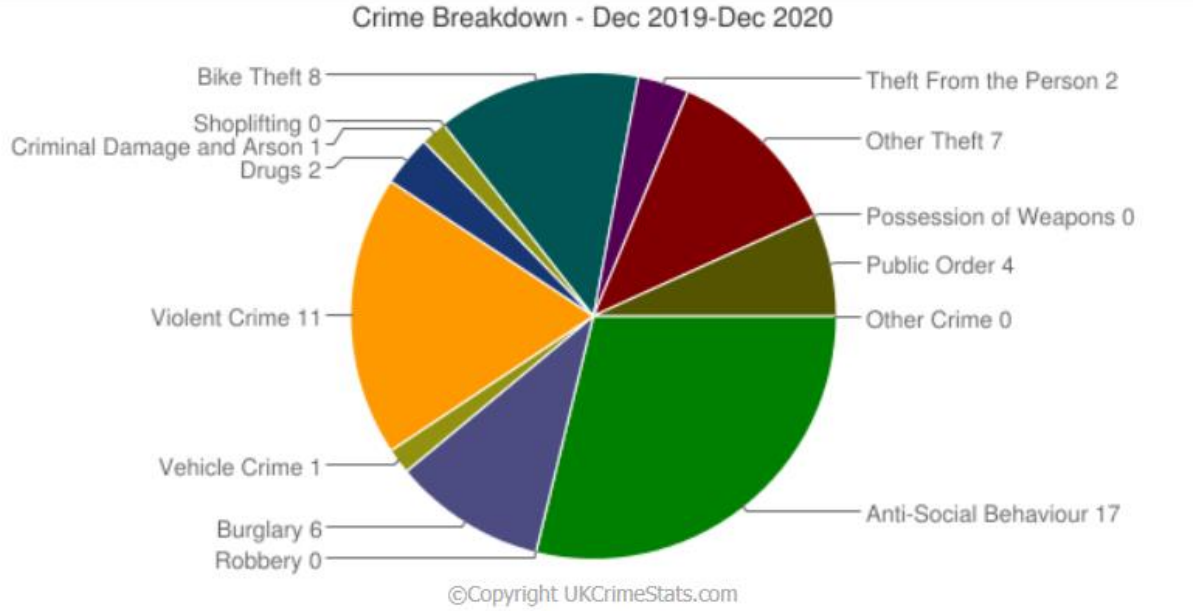


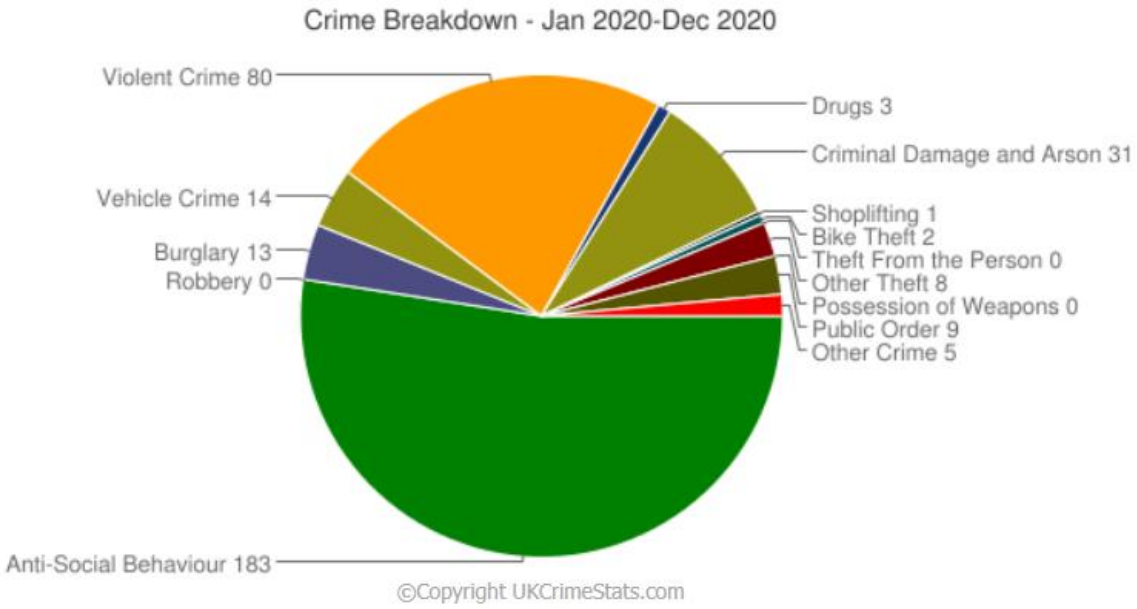
Figure B-13: Crime Deprivation (IMD, 2019)

The most prevalent crimes committed in the four larger areas that fall within the AAP area in 2020 are violent crime and anti-social behaviour. These types of crimes appear to be common for all four areas as shown in Figure B-14, with a total of 622 counts of anti-social behaviour and 281 counts of violent crime across the four areas. There has been an increase of 246 counts of anti-social behaviour from 2017 to 2020.

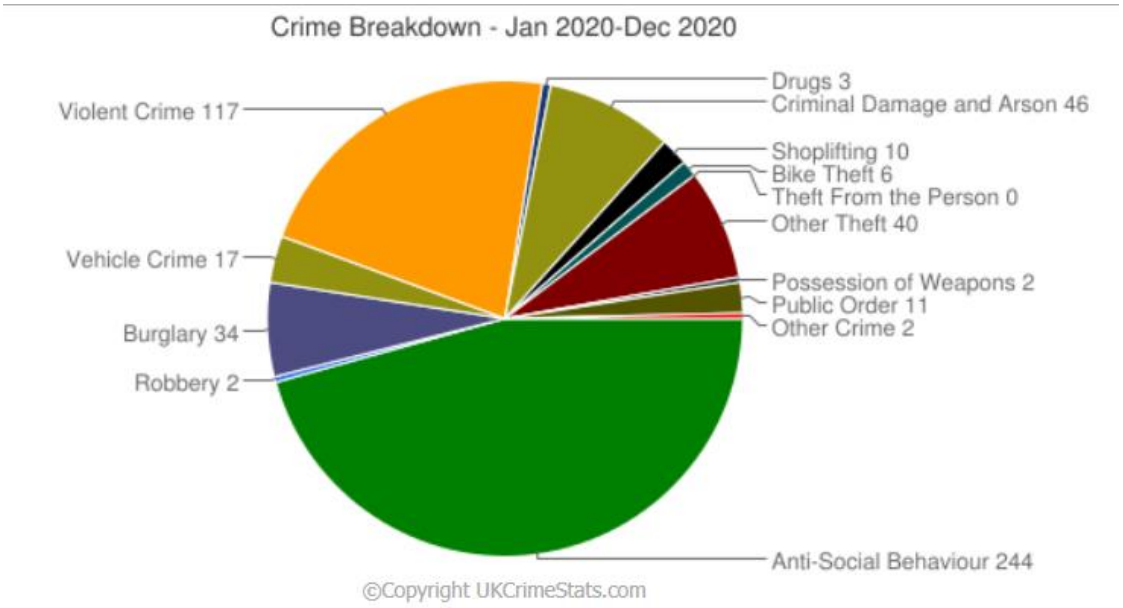
a. Lancaster University



b. Scotforth East and Hala



c. Scotforth West



d. Ellel, Galgate Cockerham

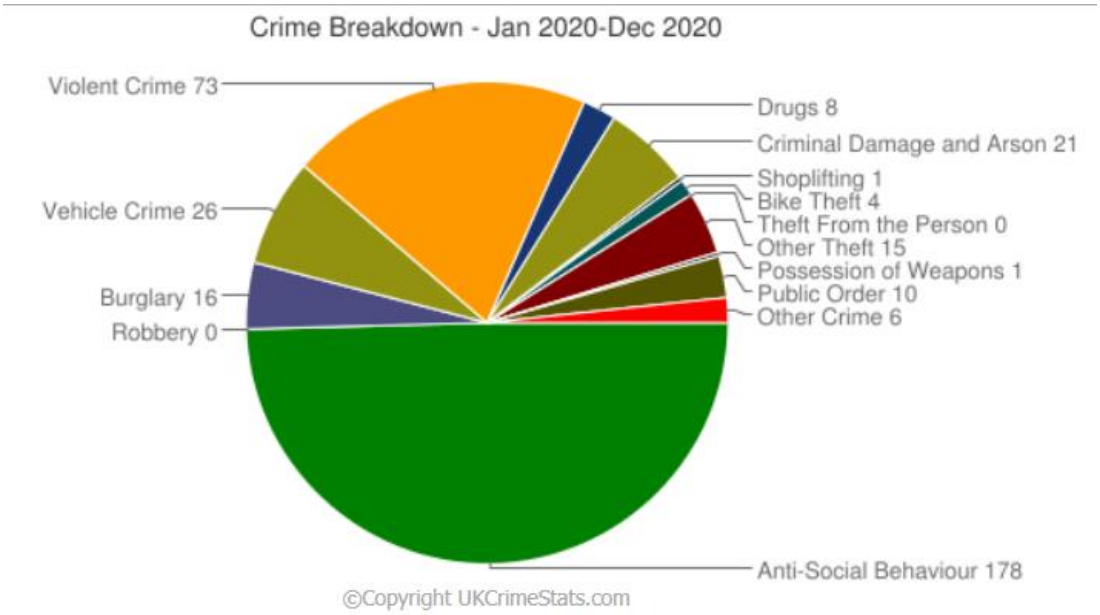


Figure B-14: Crime committed by type between January 2020 and December 2020 for a) Lancaster University, b) Scotforth East and Hala, c) Scotforth West and d) Ellel, Galgate Cockerham (ukcrimestats.com)

Data Gaps and Uncertainties

- The AAP area itself is particularly rural and the wards/LSOA extend much further than the AAP boundary resulting in relevant and accurate statistics being hard to obtain.
- Cases of fly tipping
- Percentage of residents feeling safe after dark

Key Sustainability Issues and Opportunities

- Crime rates per 1,000 population for 2017/2018 for the four wards that make up the AAP area were significantly below the Lancaster District average, however, there was a significant rise in crime in Scotforth East and Scotforth West in comparison to the previous year.
- Violent crime and anti-social behaviour are the biggest proportion of offences within the fourareas.

- None of the LSOAs that make up the AAP area fall within the 50% most deprived for crime deprivation.
- Crime statistics for the area are skewed by the presence of the University of Lancaster with few other targets for crime in within the AAP boundary.
- The introduction of a new population with the AAP area would provide new targets for crime so it will be important to design the masterplan with crime and security in mind.

WATER

Water is an essential resource required for domestic and industrial use. The AAP area lies within the catchment areas of the River Lune and River Conder. The AAP area has two large watercourses running through it including the River Conder and the man-made Lancaster Canal. Smaller tributaries run through the AAP area including Burrow Beck a tributary to the River Lune and Ou Beck a tributary to the River Conder each running from north to south across the AAP area. Langthwaite Reservoir and Blea Tarn Reservoir are also located close to the north east boundary of the AAP area there are also some smaller isolated unknown waterbodies.

The ecological water quality of the River Conder was assessed as 'Moderate' in 2019 with the objective of reaching 'Good by 2027' with the chemical water quality being assessed as 'Fail' as of 2019 Cycle as shown in Figure B-15 below[26]. The river water quality was classified as 'Good' in 2016.

Classification Item	2013	2014	2015	2016	2019
Overall Water Body	Moderate	Moderate	Moderate	Moderate	Moderate
Ecological	Moderate	Moderate	Moderate	Moderate	Moderate
Chemical	Good	Good	Good	Good	Fail

Figure B-15: Ecological and chemical water quality of the River Conder from 2013 to 2019 (Environment Agency)

The AAP area has a number of areas that fall within Flood Zone 2[27] (medium flood risk) and Flood Zone 3[28] (high flood risk) areas. There are two main areas at high risk of flooding within the AAP area including the land around Burrow Beck to the north west of the site and the land around the River Conder to the south east of the site as presented in Figure B-16 below[29].

[26] Environment Agency. Catchment Data Explorer. River Conder Overview. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB112072065900 [Accessed: 18.02.21]
[27] Flood Zone 2 - land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding(1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year(Environment Agency).
[28] Flood Zone 3 - land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in200 or greater annual probability of flooding from the sea (>0.5%) in any year (Environment Agency).
[29] Environment Agency. Flood map for planning. Available at: https://flood-map-for-planning.service.gov.uk/confirm-location?easting=348529&northing=458209&placeOrPostcode=bailrigg [Accessed: 18.02.21]

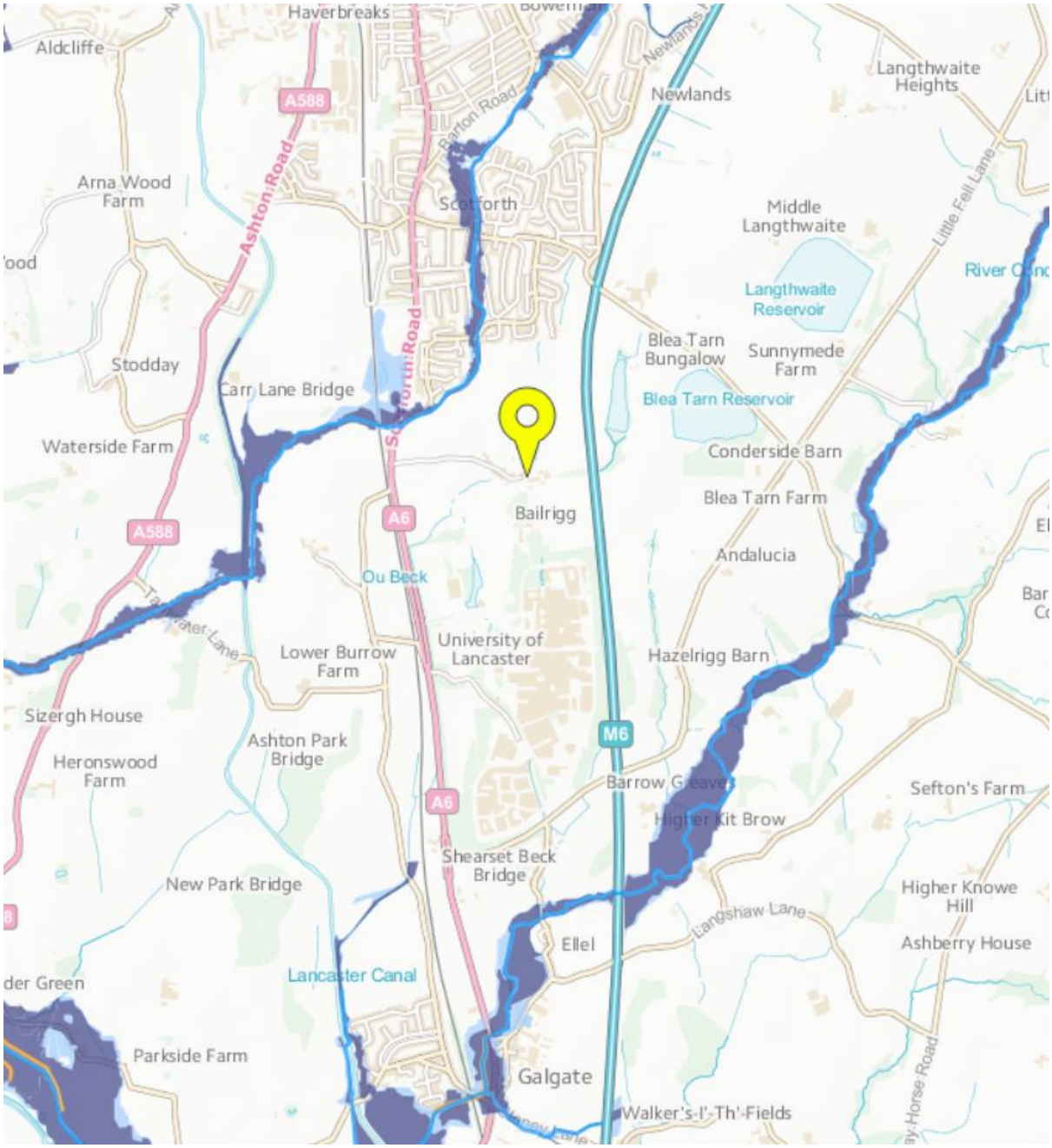


Figure B-16: Distribution and location of area of medium and high fluvial flood risk within the AAP area (environment Agency)

The majority of the AAP is at relatively low risk of surface flooding, with areas of medium and high risk focused around the Burrow Beck and River Condor (see Figure B-17)[30].

[30] Environment Agency. Long term flood risk. Flood risk from surface water – extent of flooding. Available at: https://flood-warning-information.service.gov.uk/long-term-flood-risk/map [Accessed: 18.02.21]

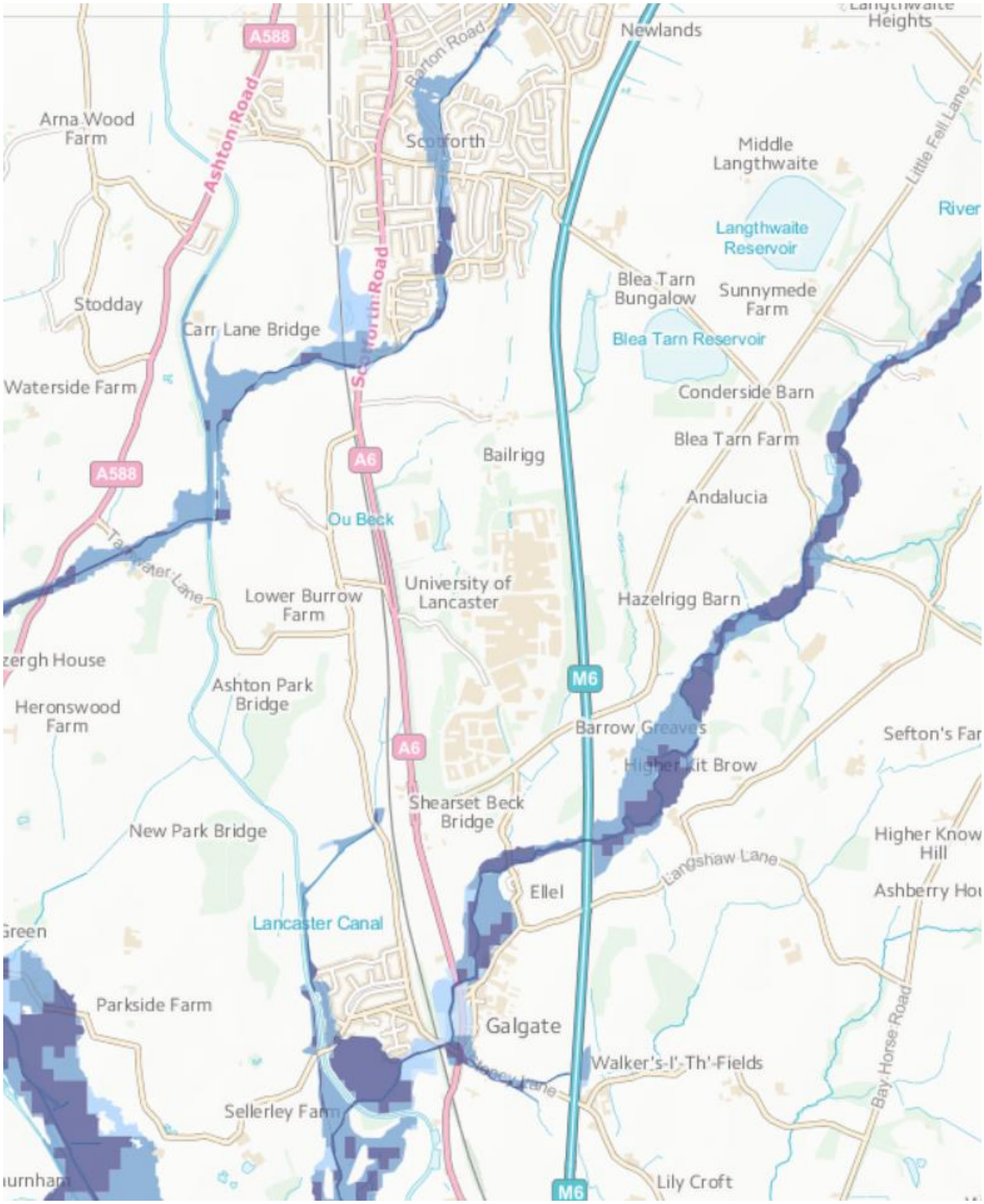


Figure B-17: Extent of flooding from low, medium and high surface water flood risk within the AAP area (Environment Agency)

Figure B-18 presents the extent of the flood risk posed by the two reservoirs to the north east of the AAP area[31]. The risk of flooding generally follows the River Conder to the south and covers a relatively large area of the east and south eastern area of the AAP area.

[31] Environment Agency. Long term flood risk. Flood risk from reservoirs – extent of flooding. Available at: https://flood-warning-information.service.gov.uk/long-term-flood-risk/map [Accessed; 18.02.21]

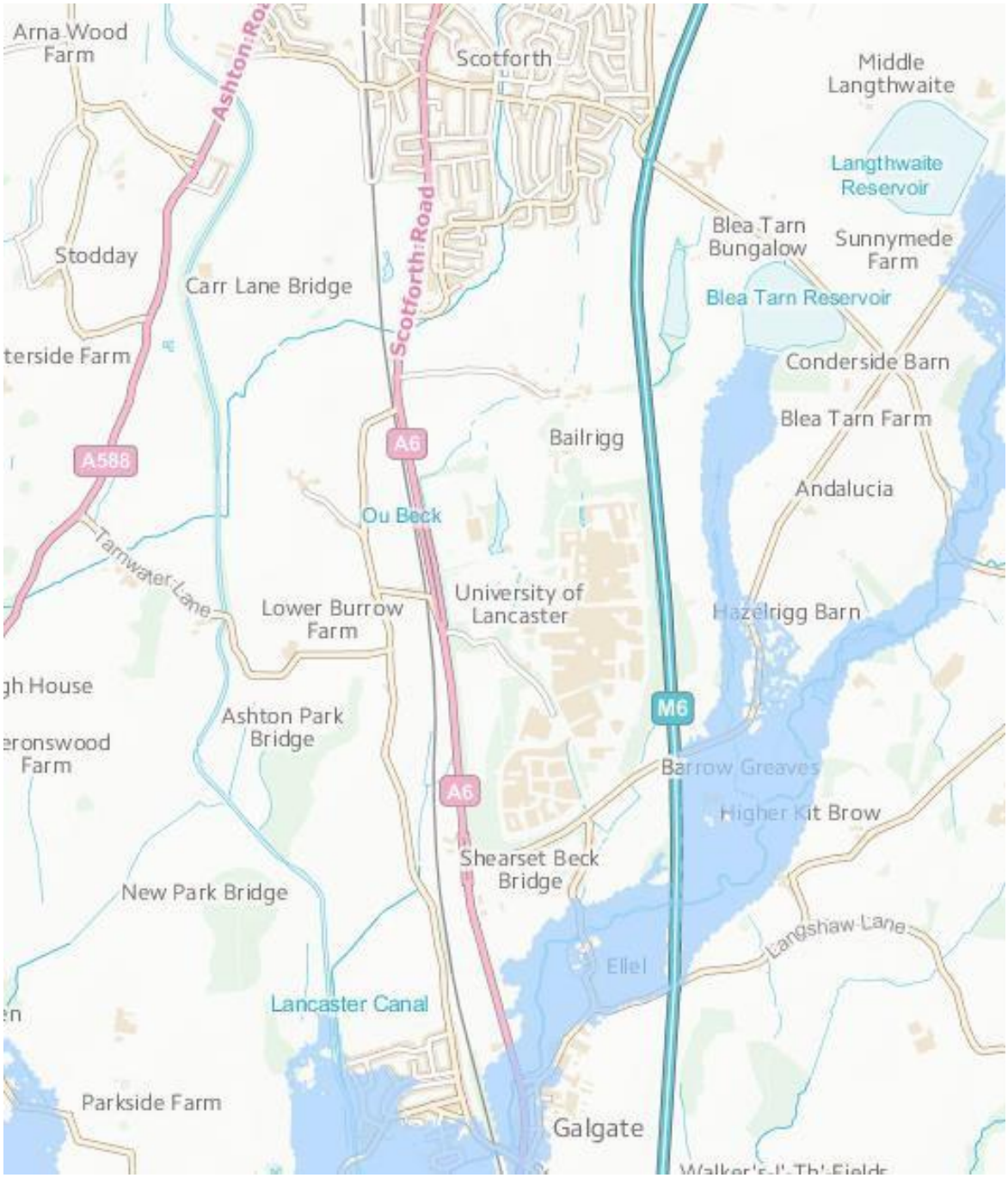


Figure B-18: Extent of flood risk from reservoirs within the AAP area (environment Agency)

The AAP area lies between Galgate and South Lancaster (Bowerham, Scotforth and Hala). These communities were significantly flooded on 22 November 2017 affecting over 150 properties in Galgate and 70 properties in South Lancaster. Most of the proposed Garden Village area naturally drains to Ou Beck and the River Conder, both of which flow to Galgate. Flood defences exist along the River Conder in Galgate.

There are no Groundwater Source Protection Zones or Water Abstraction Licences within the AAP area.

Date Gaps and Uncertainties

- Water quality data for watercourses (other than River Conder) within the AAP.
- Detailed Strategic Flood Risk Assessment results for site to be provided.

Key Sustainability Issues and Opportunities

- Water quality of the watercourses and open water within the allocation is currently an issue. Overall, water quality of the River Conder is currently 'Moderate' which offers an opportunity to improvethis and potentially other watercourses through the AAP.
- Areas at risk from flooding should be protected from development that would increase that risk. New developments should be encouraged to use SuDS to manage runoff and further reduce flood risk.
- New developments and households within the AAP area should be encouraged to minimisewater use and to re-use rainwater where possible i.e. grey water recycling systems.
- There are opportunities for the proposed development to aid flood management and reduce flood risk in Galgate and South Lancaster.

SOIL AND LAND QUALITY

There is no Grade 1 or 2 agricultural land classification (ALC) present within the AAP area, the entire area is Grade 3 agricultural land although it is not known if this is Grade 3a (best and most versatile) or 3b. Figure B-19 presents the soil types present within the AAP area which is made up of freely draining slightly acid loamy soils (brown), freely draining floodplain soils (beige) and slowly permeable seasonally wet acid loamy and clayey soils (green)[32].

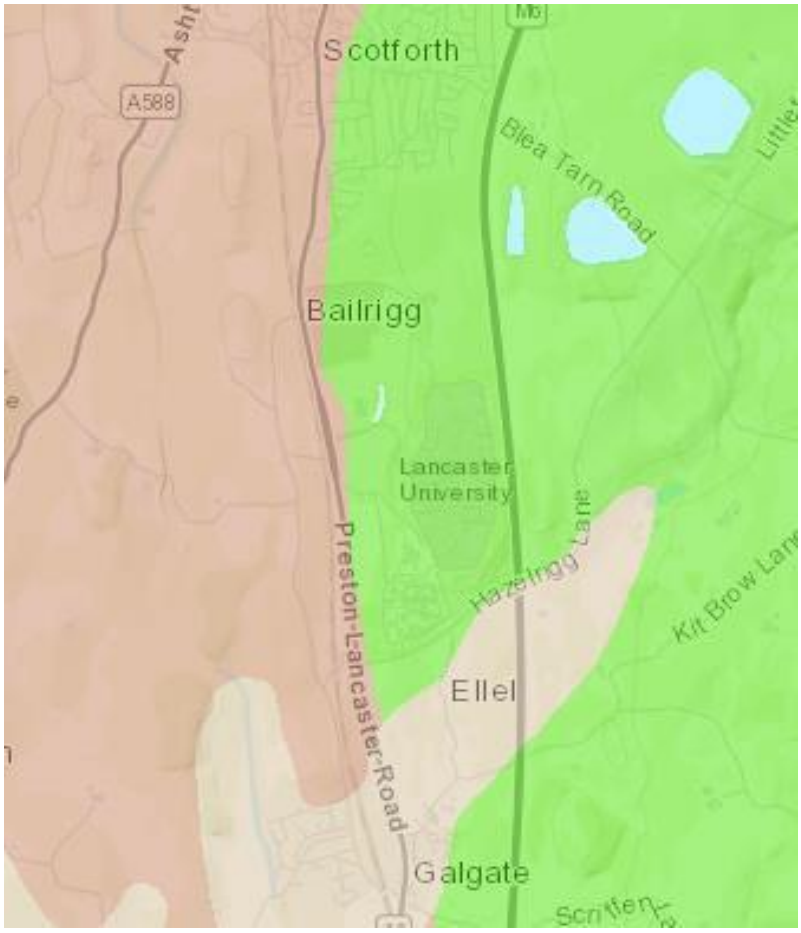


Figure B-19: Soil types present within the AAP (Soilscape)

The local superficial bedrock environment was previously dominated by ice age and river conditions. Figure B-20 presents the superficial bedrock geology of the AAP area which is dominated by till deposits (light green) formed up to 2 million years ago in the Quaternary Period and Glaciofluvial

[32] Soilscapes soil types viewer – National Soil Resources Institute. Cranfield University. Available at: http://www.landis.org.uk/soilscapes/ [Accessed: 18.02.21]

deposits (pink) comprising Devensian sand and gravel deposits formed up to 2 million years ago in the Quaternary Period formed by previous ice age conditions[33].

Alluvium deposits (yellow) comprising clay, silt, sand and gravel formed up to 2 million years ago in the Quaternary Period and River Terrace deposits (orange) comprising sand and gravel formed up to 3 million years ago in the Quaternary Period. Both of these areas were previously dominated by rivers with yellow areas to the south east still dominated by the River Conder.

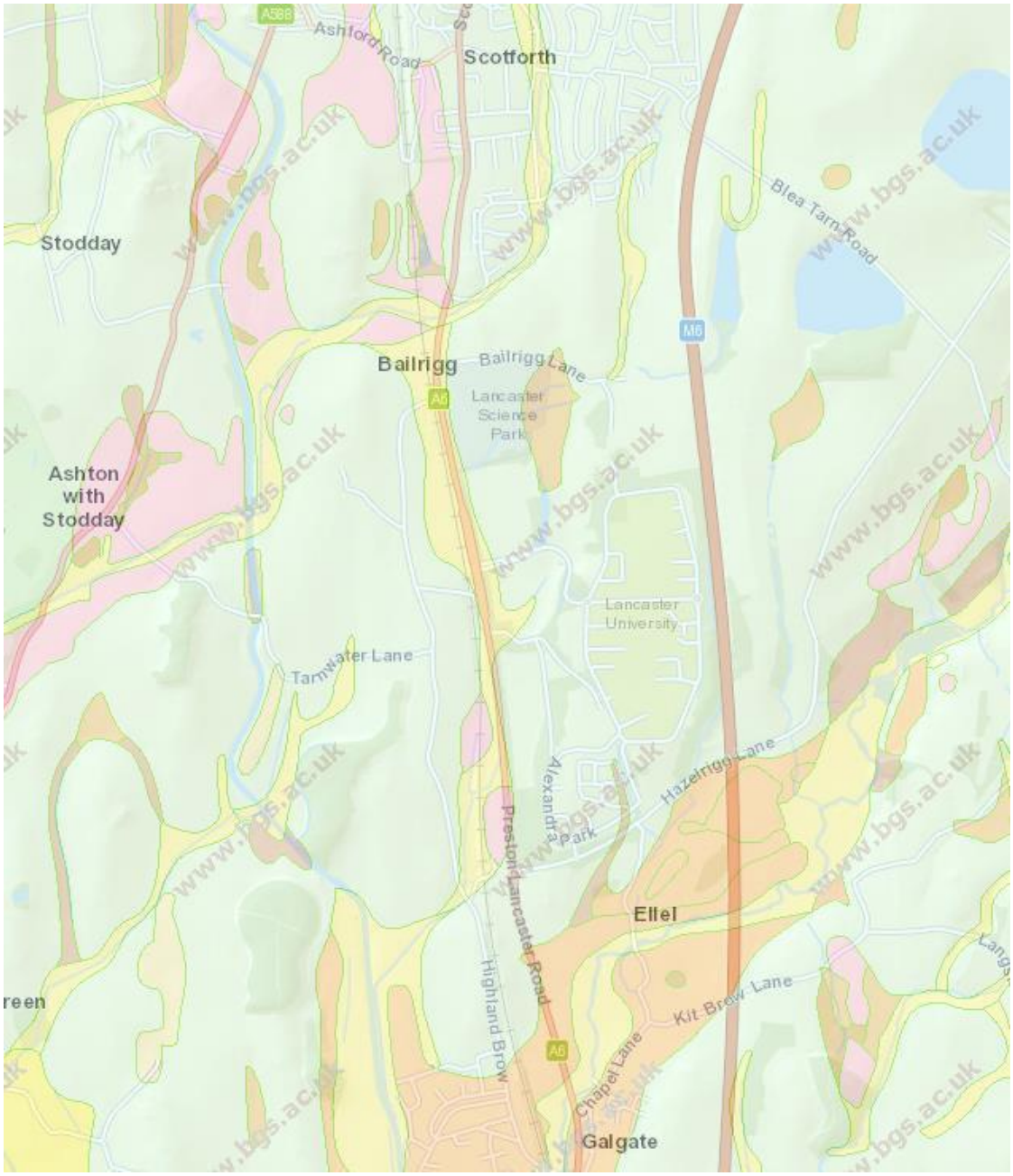


Figure B-20: Superficial surface geology of the AAP area (British Geological Survey (BGS))

Figure B-21 presents the bedrock geology of the AAP area, the north of the site (brown) is predominantly sedimentary bedrock comprised of siltstone, mudstone and sandstone formed approximately 324 to 328 million years ago in the Carboniferous Period with the local environment

[33] Geology of Britain viewer. British Geological Survey (BGS). Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html [Accessed: 18.02.21]

previously dominated by sub-aqueous slopes[34]. The southern area of the site (light green) is dominated by the millstone grit comprising mudstone, siltstone and sandstone. Sedimentary Bedrock formed approximately 319 to 329 million years ago in the Carboniferous Period with the local environment previously dominated by swamps, estuaries and deltas.

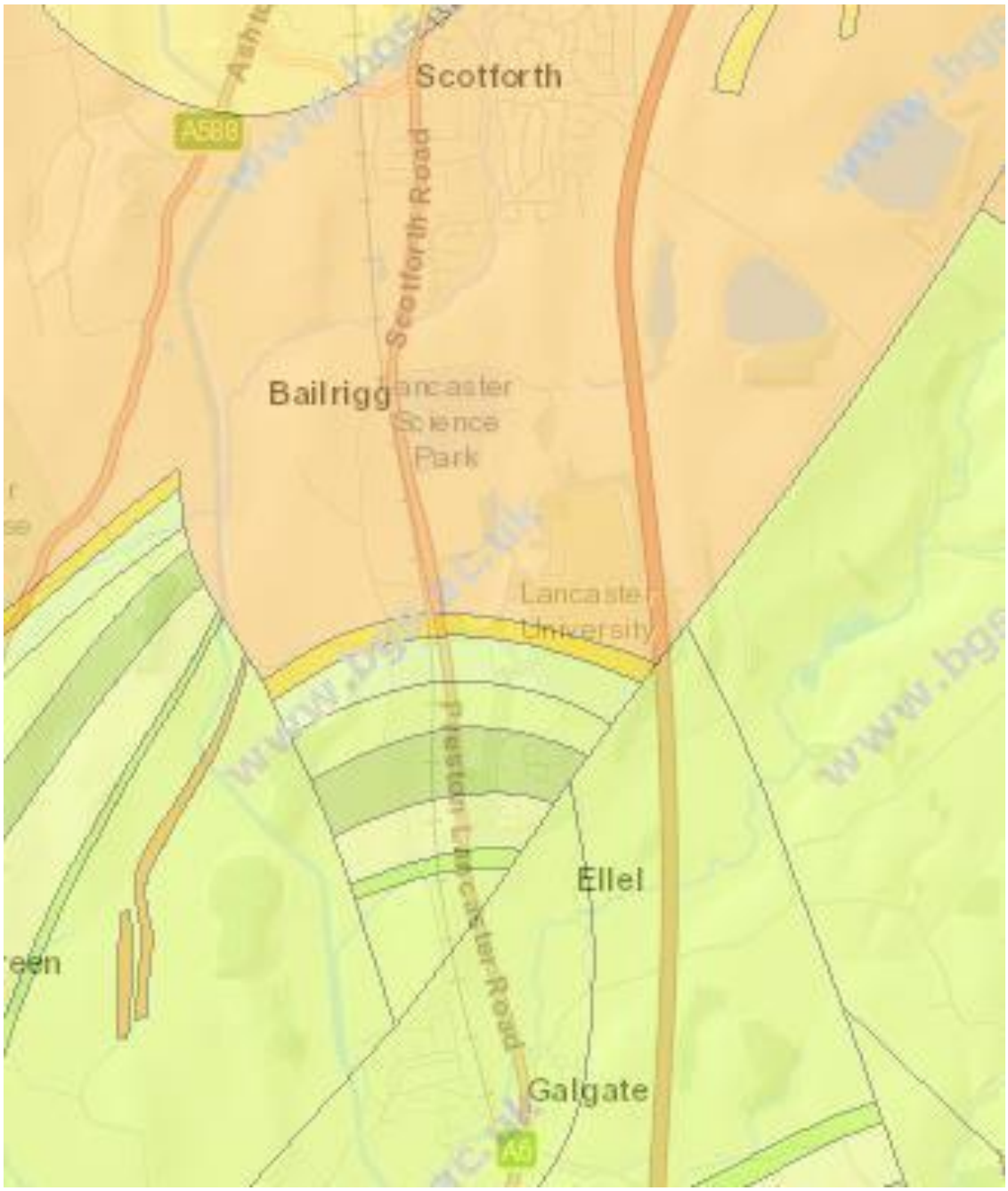


Figure B-21: Bedrock geology of the AAP area (BGS)

There are no RIGS located within or in close proximity to the AAP area.

Data Gaps and Uncertainties

- Distribution of areas known to have been subject to significant subsidence.
- Key areas of Contaminated Land if present.

[34] Geology of Britain viewer. British Geological Survey (BGS). Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html [Accessed: 18.02.21]

- Area of previously developed vacant land, vacant buildings and derelict land and buildings.

Key Sustainability Issues and Opportunities

- There is no ALC Grade 1 or 2 land within the AAP area, although whether or not there is Grade 3a land is not known.
- Where previously developed sites exist, the aim should be to continue to remediate and re-use them, although this decision should be made on a site-by-site basis as some brownfield sites may now have developed significant biodiversity interests.

AIR QUALITY

There are currently two designated Air Quality Management Areas (AQMAs) in close proximity to the AAP area[35]. Lancaster AQMA is located to the north of the AAP area within the city centre and Galgate AQMA located within Galgate centre to the south of the AAP area. Both of these AQMAs have been designated due to exceedances of Nitrogen Dioxide (NO_2) levels. The location of these AQMAs are presented in Figure B-22.

The main pollutant sources within the AAP are the M6 motorway, A6 and the West Coast Main Line (WCML) rail link all of which are primary travel routes in particularly at peak times for commuting by both train and road.

Figure B-22: Location and distribution of AQMAs in the general area of the AAP (DEFRA)

[35] AQMAs interactive map. Available at: https://uk-air.defra.gov.uk/aqma/maps/ [Accessed: 18.02.21]

The 2019 Air Quality Status Report[36] states there has been an improvement in air quality in Lancaster District, including compliance with the air quality objectives at Carnforth and Galgate AQMAs for the second year running. Exceedances were still recorded within the Lancaster AQMA, levels have improved on previous years.

Data Gaps and Uncertainties

- Combined Air Quality Indicator Scores for LSOAs within the AAP area.
- Local air quality monitoring results for nitrogen dioxide (NO_2) and particulates (PM_{10}) within the AAP area if these exist.

Key Sustainability Issues and Opportunities

- In general terms air quality in the District is good, although three AQMAs are identified in Lancaster District, two of which have potential to be influenced by the AAP proposals if significant traffic flows are generated on the A6.
- Opportunities should be sought to reduce road traffic and promote sustainable transport use to ensure against this.
- Opportunities should also be sought to improve air quality within the AQMAs in particular, where possible.
- There may be opportunities to reduce travel and distances between homes and employment sites through the AAP.

ENERGY AND CLIMATE CHANGE

Although climate change is a global phenomenon, action to avoid its most serious effects and to minimise the emission of greenhouse gases needs to occur at a local level. However, data and statistics at such a specific level for an AAP area is not readily available. With this in mind, District-wide statistics have been utilised and where available data from Lancaster University has also been used as this is one of, if not the, largest energy consumer in the AAP area.

Energy use in Lancaster District is considered average when compared to national means. Statistics for 2019 indicate that Lancaster District has a mean annual domestic gas use of 13,116 kWh per consumer per year (Figure B-23) and a mean domestic electricity use of 3,452 kWh per consumer per year. (Figure B-24)[37]. The figures for electricity have been falling in line with national averages, however gas usage figures remain roughly the same. Statistics show that the average electricity consumption for the North West is slightly lower than that for the District.

[36] Lancaster City Council (2020) 2019 Air Quality Annual Status Report (ASR) for Lancaster City Council. Available at: https://www.lancaster.gov.uk/environmental-health/environmental-protection/air-quality/air-quality-reviews-and-assessments [Accessed: 02.03.21]
[37] The Department for Business, Energy & Industrial Strategy. Domestic Energy Map. Available at: www.domesticenergymap.uk [Accessed: 26.02.21]

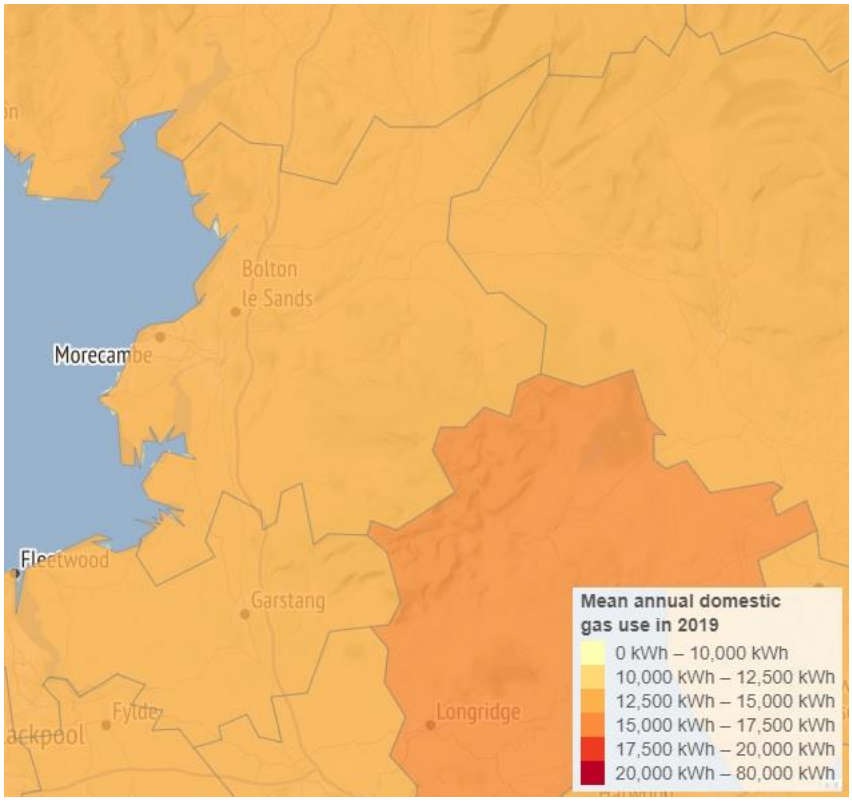


Figure B-23: Domestic Gas Usage in Lancaster District (Department of Energy and Climate Change (DECC))

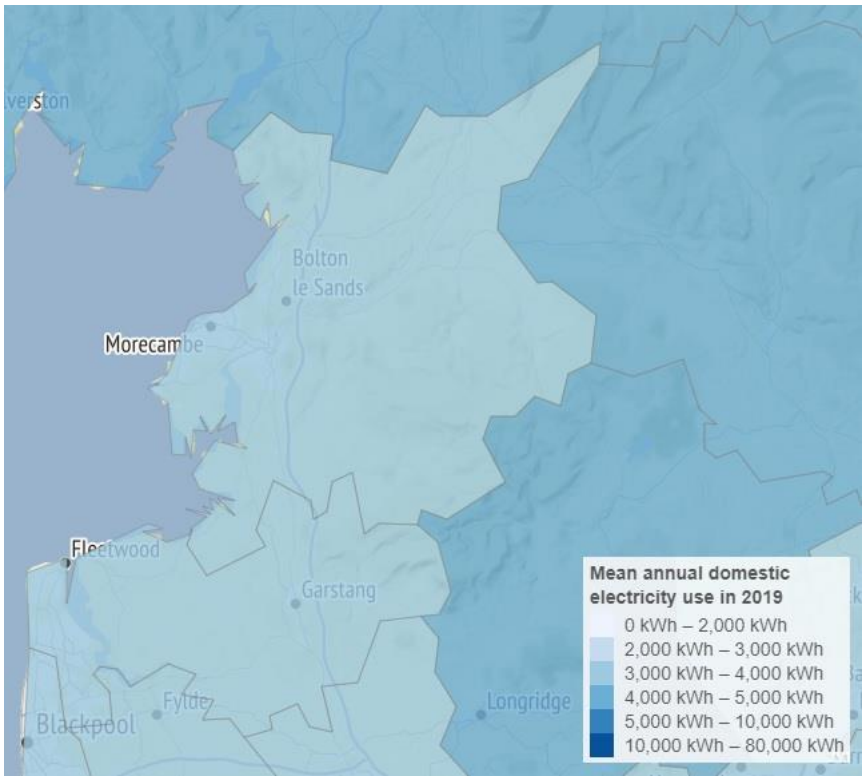


Figure B-24: Domestic Electricity Usage in Lancaster District (DECC)

Total Industrial and commercial CO_2 emissions in Lancaster District were 202 kt in 2018[38]. Domestic emissions were 207.9 kt and for road transport,359.4 kt. The Lancaster District had total per capita emissions of 5.2 tonnes. Between 2005 and 2018 there was a reduction of 2.7 tonnes of CO_2 emissions per capita in Lancaster District, equalling a 30.17% decrease in total carbon emissions (kt CO_2) (see Figure B-25)[39].

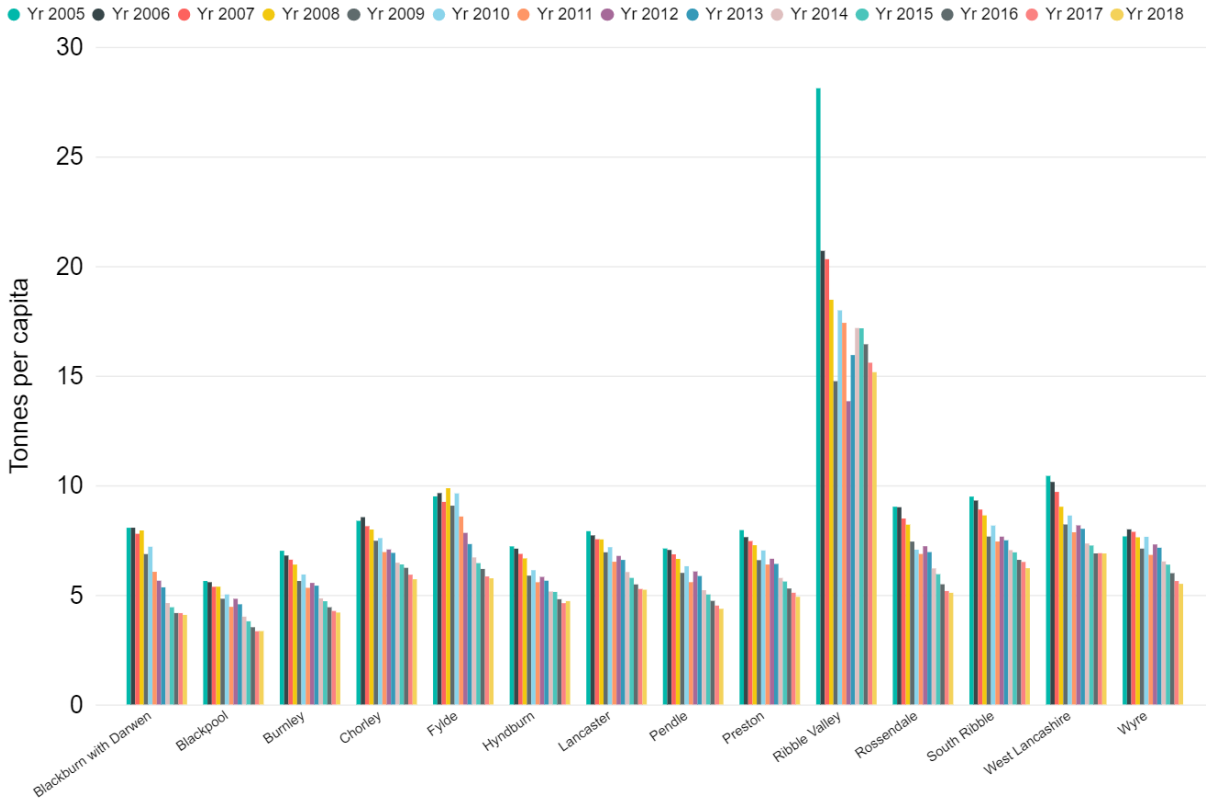


Figure B-25: Per capita CO2 emission levels in Lancashire, 2005 to 2018 (Lancashire County Council)

At a meeting of Full Council on 30th January 2019, Lancaster City Council declared a climate emergency[40]. In doing so, the Council have committed to:

- Convene a citizens' assembly to help identify how our activities can be made net-zero carbon by 2030.
- Proactively include young citizens in this process.
- Introduce climate change impact assessments, including carbon emission appraisals, in reports to Cabinet and Council.
- Support Lancashire's Air Quality Champions network and request a city councillor to attend meetings.
- Commission a report from our pension funds and investments on levels of investment in the fossil fuel industry.
- Call upon local MPs to ensure government provides the powers, resources and funding to make this possible.

[38] Available at: https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018 [Accessed: 26.02.21]
[39] Lancashire County Council. Carbon dioxide emissions. Available at: https://www.lancashire.gov.uk/lancashire-insight/environment/carbon-dioxide-emissions/#:~:text=The%202018%20carbon%20dioxide%20results,Ribble%20Valley%20and%20West%20Lancashire [Accessed: 02.03.21]
[40] Lancaster City Council. Climate Emergency. Available at: https://www.lancaster.gov.uk/sites/climate-emergency [Accessed: 02.03.21]

Lancaster District ranks first in the UK for the number of offshore wind installations and onshore wind generation was responsible for over 68,000 MWh of electricity generation in 2019[41]. In 2019, a total of 3,736,679 MWh of renewable electricity was generated in Lancaster District. The majority of this came from onshore wind farms and photovoltaics, of which there are 24 and 1,445 sites in Lancaster District respectively. The breakdown of renewable energy generation is shown in Table B-10 below[42].

Table B-10: Renewable electricity generation by technology in Lancaster District in 2019 (DEFRA, AMR)

Technology	Installed Capacity (MW)	Generation (MWh)
Photovoltaics	20.1	19,616
Onshore Wind	28.6	68,005
Hydro	0.4	1,072
Anaerobic Digestion	1.1	6,108
Offshore Wind	1,327	3,625,968
Sewage Gas	0.9	3,495
Landfill Gas	3.2	12,417
Total	1,381	3,736,679

Lancaster University have prepared a Carbon Management Plan[43]. The Plan sets a target of a 43% reduction in carbon by 2020 and an 83% by 2050. To reach these goals, Lancaster University has implemented a range of projects which have directly reduced the University's carbon emissions by 50.7% from 2005/6 to 2018/19. Lancaster University installed a 2.3MW wind turbine in 2012 which is claimed to be the first of its kind at a UK university and produces 5,000MWh of electricity per annum (15% of University electricity consumption).

The University also fully refurbished its energy centre enabling the University to provide low carbon heat and electricity across its campus and also incorporated a 2MW Combined Heat and Power (CHP) engine (which generates approximately 25% of University electricity), and a 1MW biomass boiler which produces 15% of the University's heat requirements. Both of these projects have reduced the University's carbon emissions by over 3,000tCO2e.

Data Gaps and Uncertainties

- There is a lack of data at local level for both energy and climate change which has resulted in the generalisation of baseline data presented in this section which may not necessarily portray an accurate picture of the local circumstances.

Key Sustainability Issues and Opportunities

- Achieving a low carbon footprint through energy conservation and efficiency and the promotion of renewable energy sources should be a priority for the AAP.
- New developments should be encouraged to include sustainable design principles.
- Reducing transport on local roads and encouraging more sustainable modes of transport would contribute to reducing the effects of climate change.
- Emissions of CO_2 are generally low in the District and opportunities should be sought to maintain the reduction in these levels.
- To increase the production of energy from renewable sources; in particular capitalising on the progress made by Lancaster University. Note such measures should be compatible with wider ecological and landscape aims.

[41] Lancaster City Council (2020) Authority Monitoring Report 2019 – 2020. Available at: https://planningdocs.lancaster.gov.uk/NorthgatePublicDocs/00981833.pdf [Accessed: 02.03.21]
[42] DEFRA. Renewable Energy by Local Authority. Renewable electricity generation (MWh) at Local Authority Level – 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920656/Renewable_electricity_by_local_authority_2014_to_2019.xlsx [Accessed: 19.02.21]
[43] Lancaster University Carbon Management Plan 2015-2020. Available at: https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/sustainability/strategic-plans/LUCarbonManagementPlanaccessible.pdf [Accessed: 02.03.21]

BIODIVERSITY, FLORA AND FAUNA

There are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) or Local Nature Reserves (LNRs) within the AAP area. The nearest International and National designations are the Morecambe Bay SPA/SAC/Ramsar site and the Lune Estuary SSSI approximately 850m west of the AAP area. There are, however, three Local Wildlife Sites that lie within the AAP area – Park Coppice Woodland, Burrow Beck, and the Lancaster Canal, all of which are Biological Heritage Sites (BHSs).

The area of the site to the west of the A6 is primarily agriculturally improved pastures and arable land, with areas of important broadleaved woodland, including Park Coppice Woodland BHS, and scrub.

While the area as a whole is dominated by relatively species-poor agricultural grassland there are a range of important habitats present, including a network of hedgerow and walls forming field boundaries. A number of ponds occur across the site. Scattered mature broadleaved trees are also found across the site. Two streams, Ou Beck and Burrow Beck, cross the site and the Lancaster Canal BHS forms the western boundary of the site.

Species recorded within the agricultural grassland included cocksfoot *Dactylis glomerata*, tufted hair grass *Deschampsia cespitosa*, creeping bent *Agrostis stolonifera*, yarrow *Achillea millefolium*, perennial rye-grass *Lolium perenne*, sweet vernal grass *Anthoxanthum odoratum*, mouse-ear *Cerastium sp*., pineapple weed *Matricaria discoidea*, Yorkshire fog *Holcus lanatus* and creeping thistle *Cirsium arvense*.

Desk-top records have found the following notable species within the western area of the AAP boundary:

- Otters
- Great crested newt
- Water Vole
- Badger
- Bats
- Slow worm
- Bats
- A range of ‘priority’ invertebrate species.

This range and diversity of species is perhaps to be expected across what is a very large site with a range of important habitat types present.

During the field surveys undertaken by the Greater Manchester Ecology Unit (GMEU) of the western area of the site, signs of badgers were confirmed. The priority bird species dunnock, house sparrow, lapwing, reed bunting (probably breeding), skylark (probably breeding), starling, grey heron and willow warbler were all confirmed. The possible presence of great crested newts was not confirmed by eDNA surveys and no signs of water voles were recorded along Burrow Beck during these site surveys. There is potential for otters to be present along the water courses and the Canal. The site is of high value for bats as a foraging resource, and trees and buildings may support bat roosts. Further surveys for bats will be needed in support of any detailed applications that may come forward for the area in future. The invasive plant Himalayan Balsam was also recorded along the Canal corridor and along parts of the Burrow Beck.

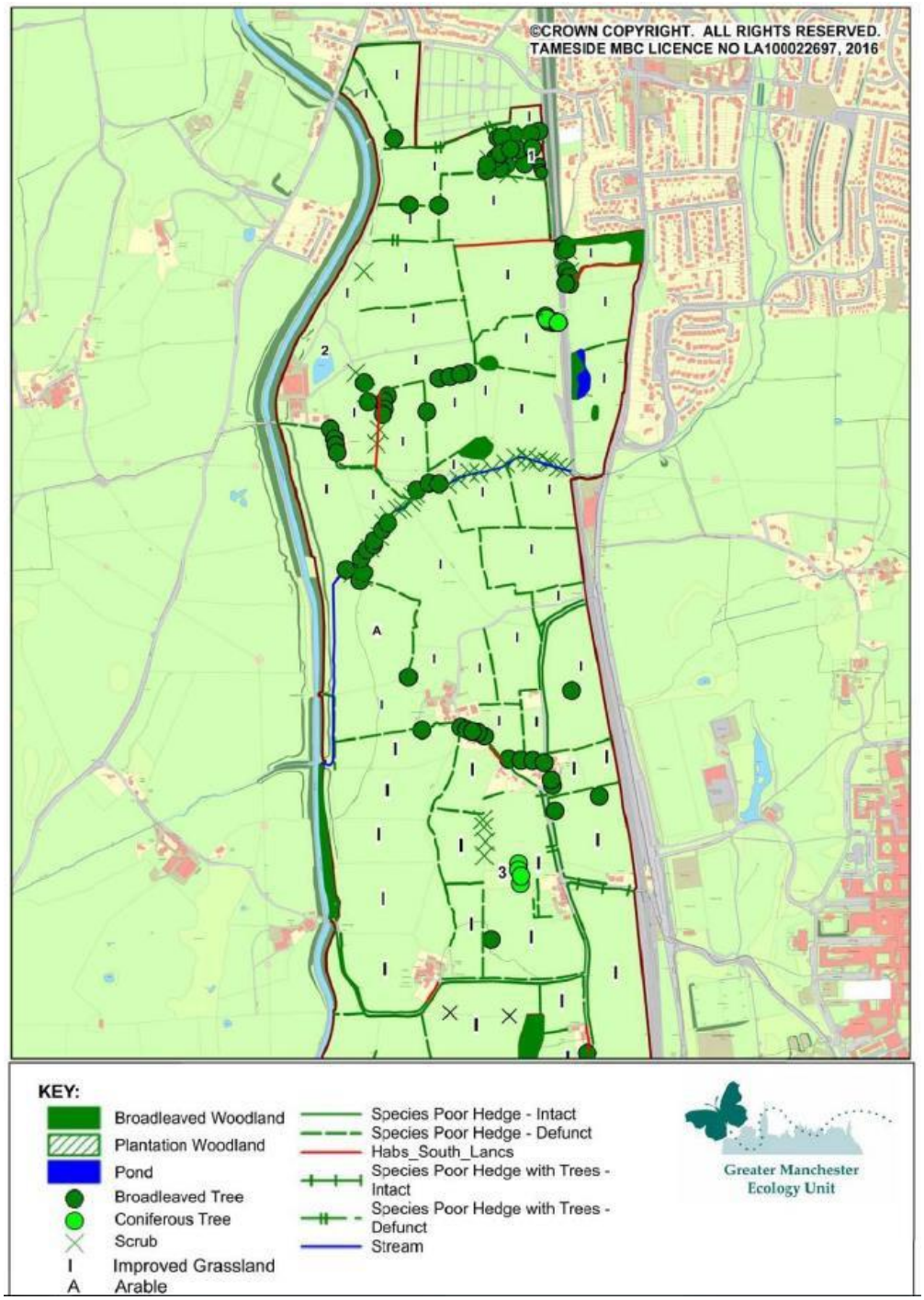


Figure B-26: Phase 1 Habitat map of the north west area of the AAP area (GMEU)

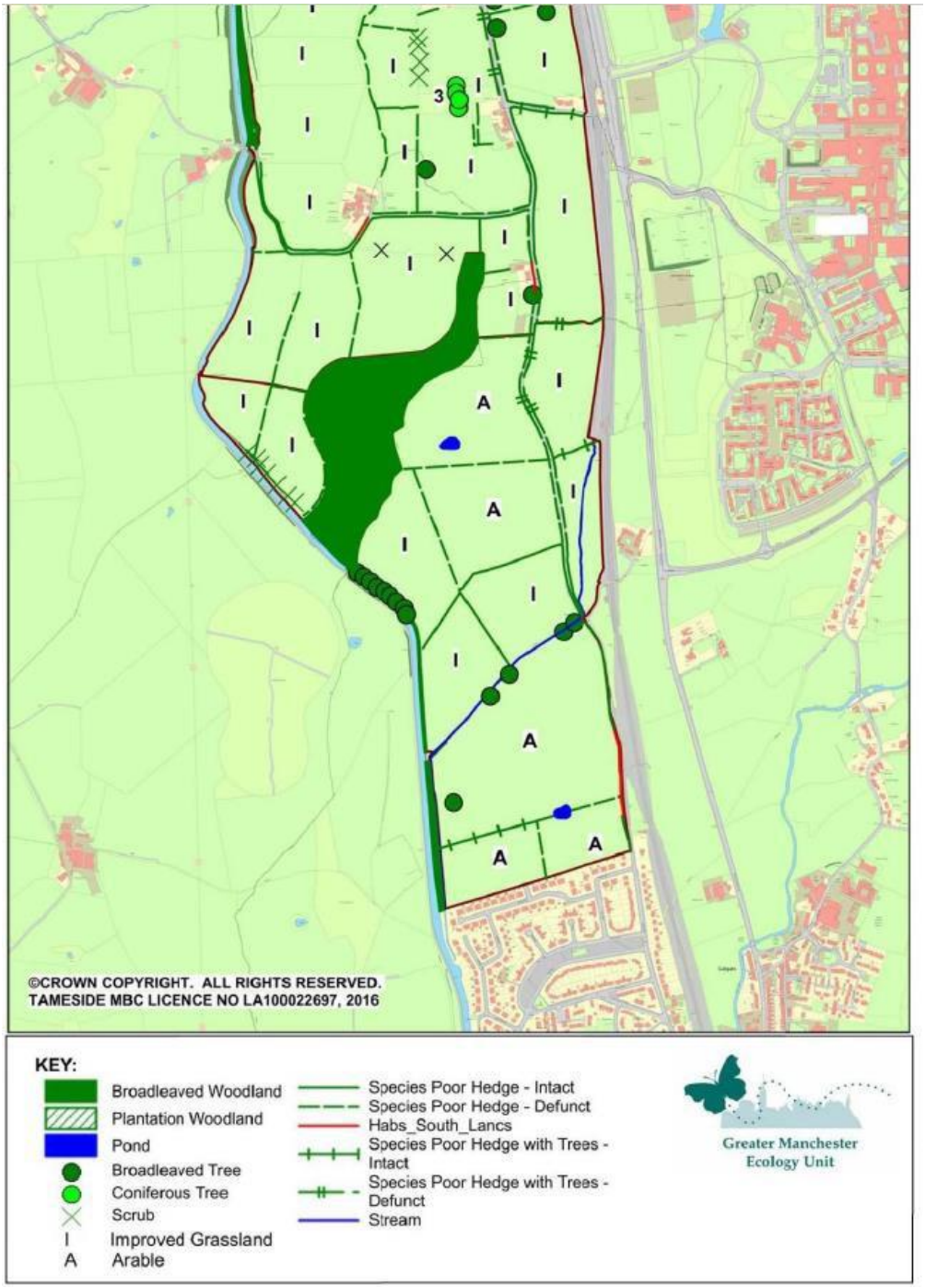


Figure B-27: Phase 1 Habitat map of the south west area of the AAP area (GMEU)

The part of the AAP area to the east of the M6 (on the opposite side of the motorway from the University) located in the setting of the Forest Hills facility (shown on Figure B-28) has high potential for supporting otters and possibly water voles through the river watercourses. The landscape is well-suited or supporting bat foraging and the following bat species have been recorded from the area – Pipistrelle, Daubentons, Natterers, Brown Long-eared. The landscape is also well- suited to badgers although no setts were recorded during field surveys undertaken by the GMEU.

The agricultural fields of the south east vicinity of the AAP area are generally dominated by MG6/MG7 pasture improved and relatively species-poor grassland. The grassland supports few forbs and is dominated by *Lolium perenne, Festuca* sp., *Holcus lanatus* grasses with *Trifolium repens* and *Cynosurus cristatus*. This type of grassland is ubiquitous throughout lowland Britain because the grasses are very palatable. The hedgerows, although dominated by hawthorn (*Crataegus monogyna*)

are well established and generally well-managed and also support other woody species such as hazel (*Corylus avellana*), ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*). Hedgerow flora and field boundaries are generaly more species-rich, albeit typical of hedgerows in improved pasture landscapes, with willowherbs, docks, nettles, bracken, bramble, Arrhenathrum. Dry stone wall boundaries add to the overall landscape character. Woodland blocks are mixed mature broadleaved, with some younger plantation woodland present on the golf course and around the fishing lake. Species recorded in the older woodland blocks include oak, ash, birch, beech and sycamore.

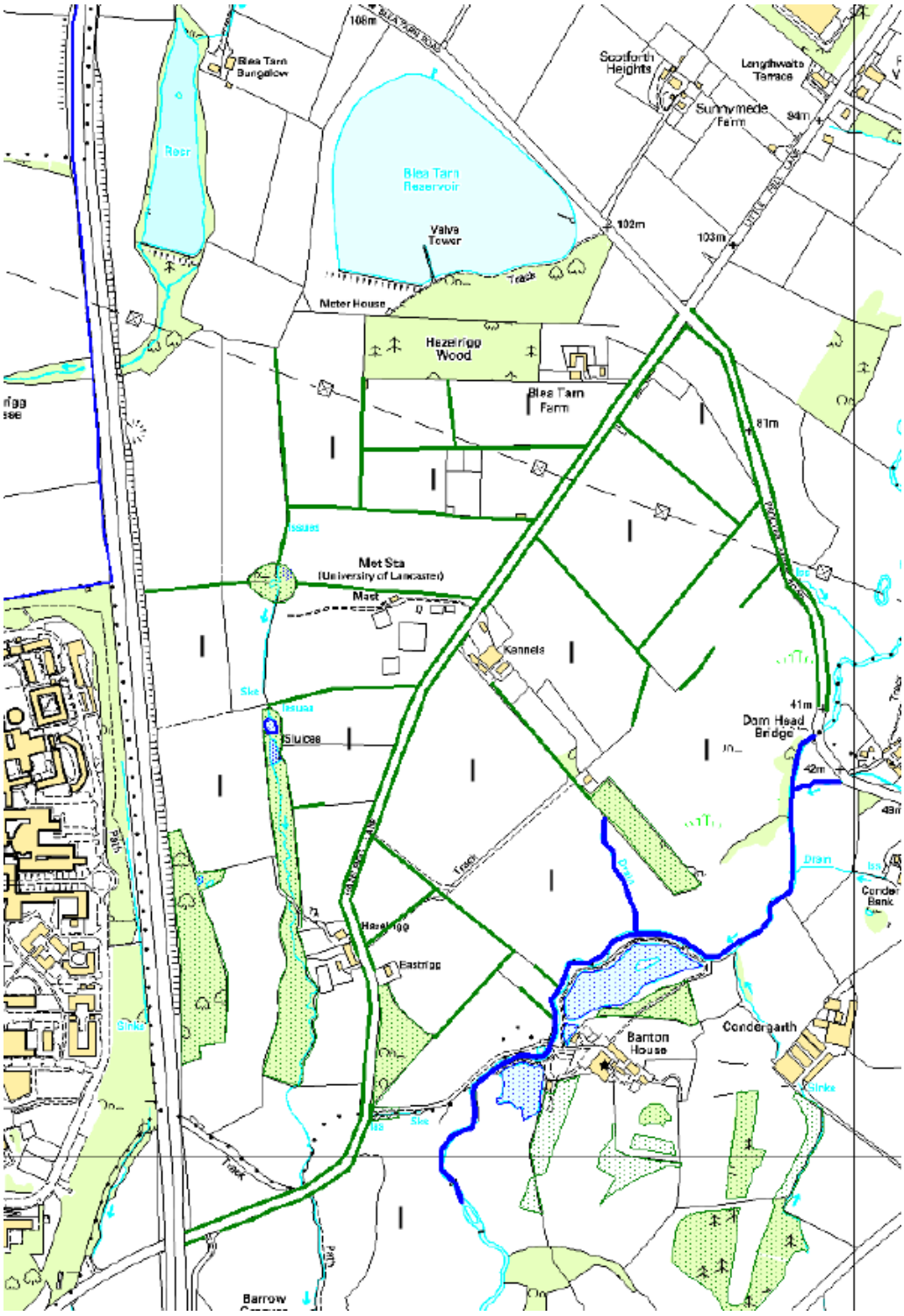


Figure B-28: Phase 1 Habitat map of the south east area of the AAP area (GMEU)

The protected bird species Little-ringed Plover was recorded in the area. The priority bird species Lapwing, Skylark, Reed Bunting, Black-headed gull, Bullfinch, Kestrel, Yellowhammer and Grey Partridge were also all recorded during field surveys, all except the gulls were considered to probably be breeding. Redshank, Snipe and Woodcock were also recorded. Bluebells were recorded in the woodland to the west of Hazelrigg Lane.

An assessment of functionally linked land has been carried out for the Broad Location for Growth. The aim of the assessment was to determine whether development on any of the sites and areas identified as potentially being subject to development associated with the creation of the AAP could directly affect functionally linked land in relation to the qualifying bird species associated with the European designated sites. The assessment considered six 'compartments' as shown in Figure B-29.

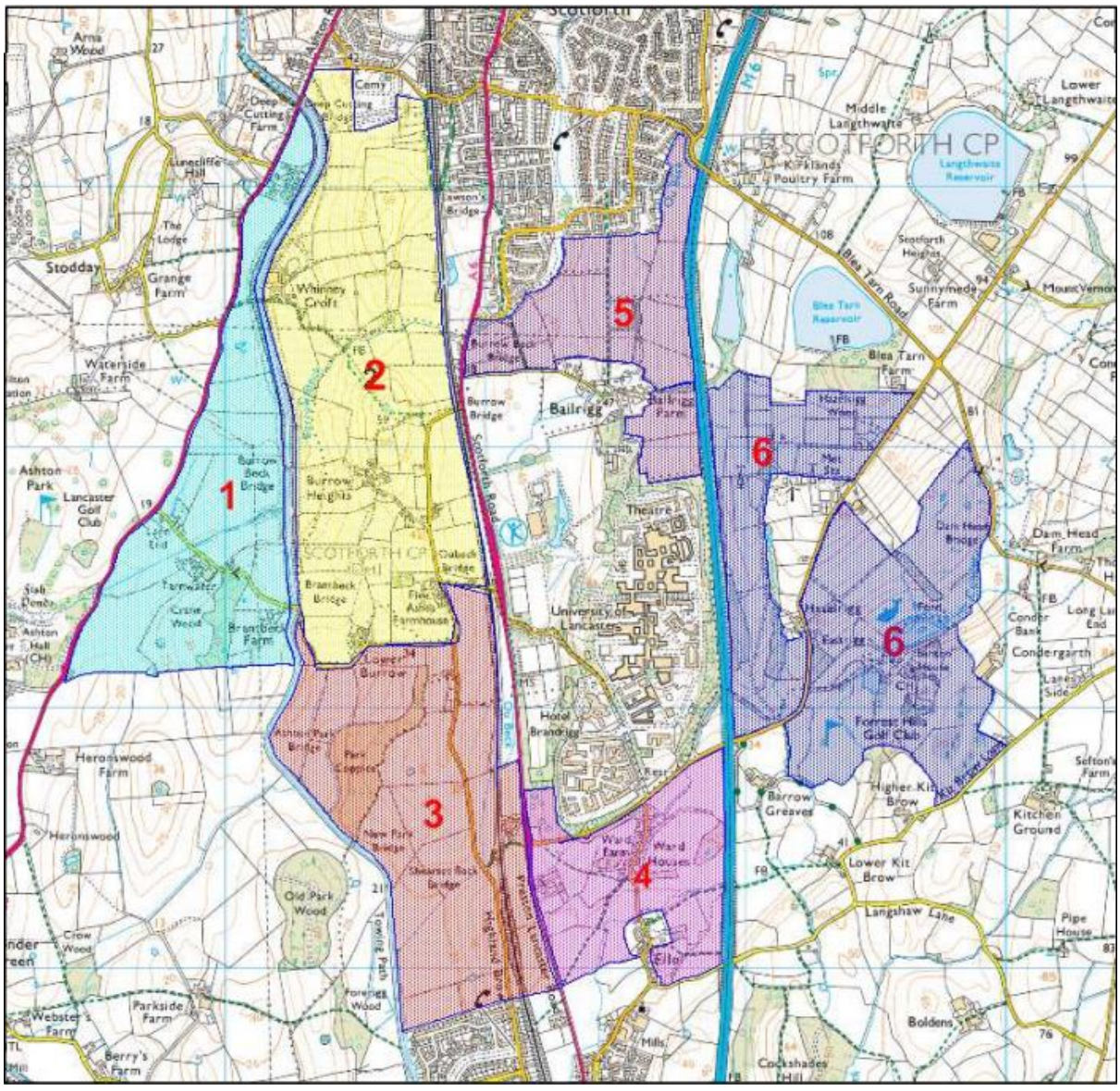


Figure B- 29: Location and extent of survey compartments

Only part of compartment six was assessed as having moderate potential to act as land Functionally Linked to the Morecambe Bay and Duddon Estuary SPA. This mostly concerns the northern part of the Forrest Hills compartment and an area to the north of the compartment around Blea Tarn Reservoir, assessed as having moderate potential because of the relatively high numbers of golden plover recorded in and close to these areas. The assessment recommends that these areas are re-surveyed as part of any future applications for development in the compartment.

As presented in Figure B-30 below, there is only one area of ancient woodland within the AAP boundary, this being Park Coppice to the south west of the AAP area. There are another four areas of ancient woodland in close proximity to the AAP boundary, most notably Crane Wood which is adjacent to the western boundary separated only by the Lancaster Canal.

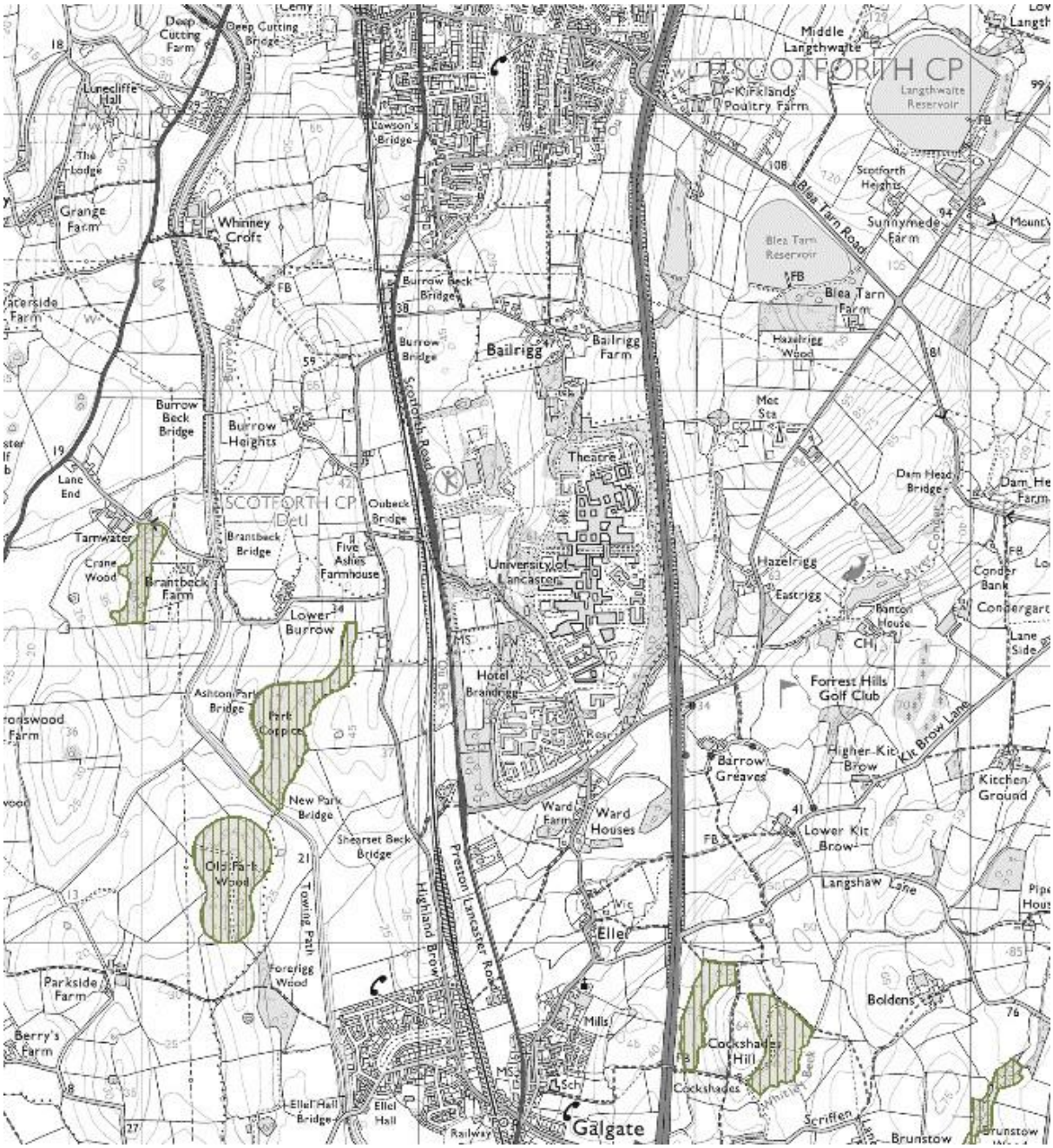


Figure B-30: Location and distribution of Ancient Woodland within the AAP area (MAGIC)

Data Gaps and Uncertainties

- It is uncertain if any of the species or habitat data has changed since the surveys took place.
- GMEU are currently undertaking bird survey work to inform masterplanning work and assessments of functionally linked land.

Key Sustainability Issues and Opportunities

- There are no Internationally or Nationally designated sites within the AAP area, however, there are three BHSs present on the site which should be retained, protected and enhanced where possible. The Morecambe Bay and Duddon Estuary SPA and Ramsar is located approximately 850m to the west.
- Enhancement of parts of the site to achieve net biodiversity gain should be included within the AAP masterplan including new tree planting and the establishment of an enhanced pond network.
- The woodland blocks, hedgerows, open water and the river course within the AAP area are all of high ecological value and should be retained as part of any development proposals.
- The land and habitats around the Forest Hills Golf and Country Club are diverse; further developments in this area will need to be supported by more involved ecology surveys and assessments.
- Park Coppice ancient woodland should be retained and enhanced where possible.

CULTURAL HERITAGE

Based on Historic maps of the area dating from the mid-19th century, the AAP area has been historically dominated by agricultural uses with very little development in the area outside of the small villages/hamlets and individual dwellings. The Lancaster Canal was introduced during the early 19th Century. The canal's principal purpose was to transport coal north from the Lancashire Coalfields, and limestone south from Cumbria. The nature of these cargoes gave the waterway its local nickname - the Black and White Canal (Canal & River Trust). The Lancaster and Preston Junction Railway Company (L&PJR) was later created by Act of Parliament in 1837, to link the towns of Preston and Lancaster which forms the part of the WCML rail link that runs through the AAP area. The 200-acre purpose-built campus of Lancaster University was donated for development by Lancashire County Council in 1963 and since became a major land-use in the area. There are no Scheduled Monuments, Registered Parks or Gardens or Conservation Areas within or adjacent to the AAP area, however, there are 15 Listed Buildings within or adjacent to the AAP area all of which are Grade II Listed, as shown on Figure B-31 below. There is also a relatively high concentration of Grade II Listed Buildings within the settlement of Galgate.

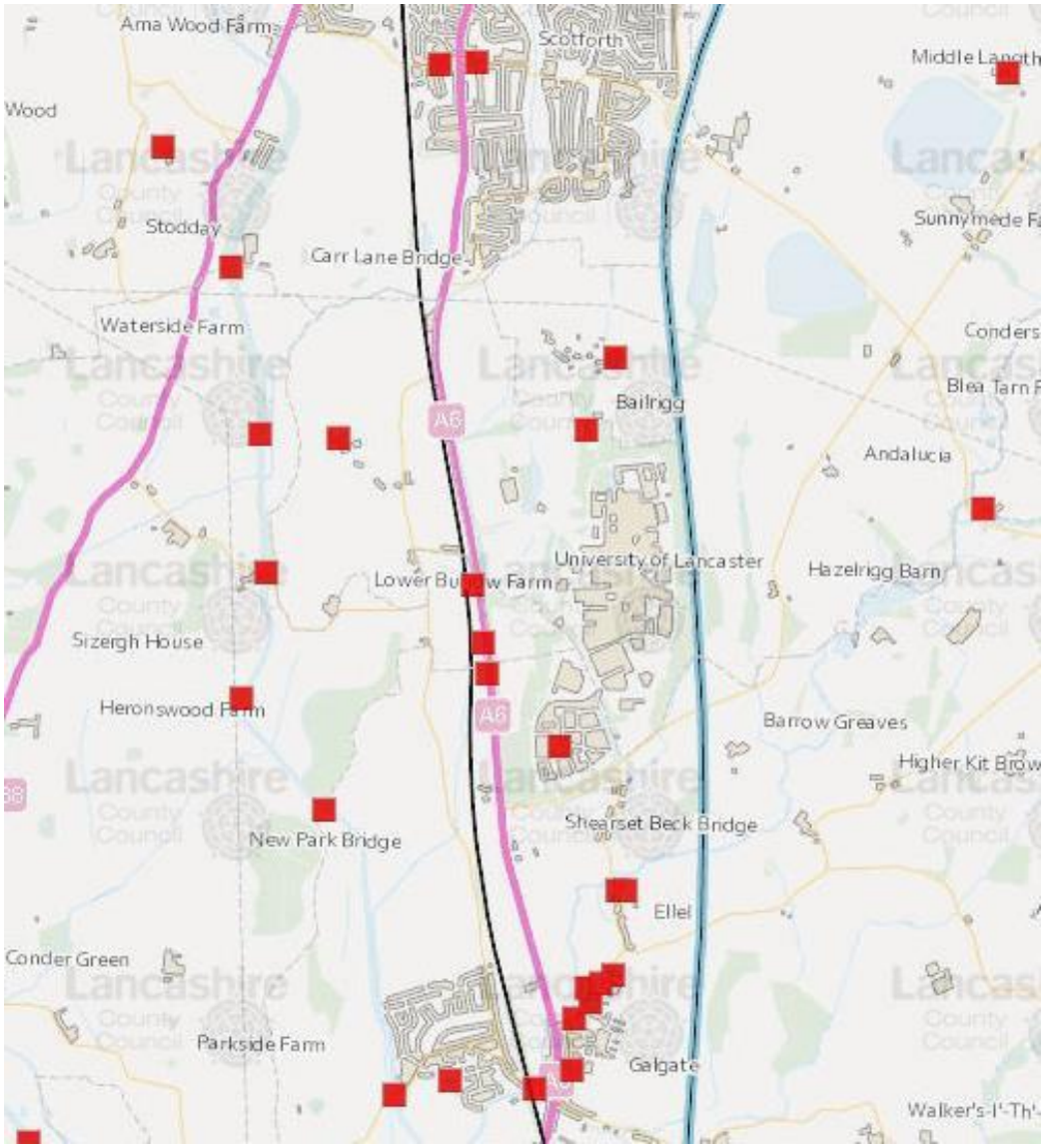


Figure B-31: Location and distribution of Listed Buildings within and immediately adjacent to the AAP area (MARIO)

None of the heritage assets within or adjacent to the AAP area are listed on the Historic England Heritage at Risk Register 2020[44].

Figure B-32, below, shows the historic landscape character areas within the AAP area[45]. The AAP area is dominated by Post Medieval Enclosure (grey/ brown colour) and Ancient Enclosure (green). The University and the settlement of Scotforth (orange) both fall within the Modern Industry character areawith the area between these falling into the Modern Enclosure character area (pink).

[44] Heritage at Risk 2020. Available at: https://englishheritage.maps.arcgis.com/apps/webappviewer/index.html?id=5fced27775b44238beb524338e62e9d3 [Accessed: 01.03.21]
[45] Archaeology Data Service Lancashire Historic Landscape Characterisation (HLC), Lancashire County Council, 2017. Available at: https://archaeologydataservice.ac.uk/archives/view/lancashire_hlc_2017/ [Accessed: 01.03.21]

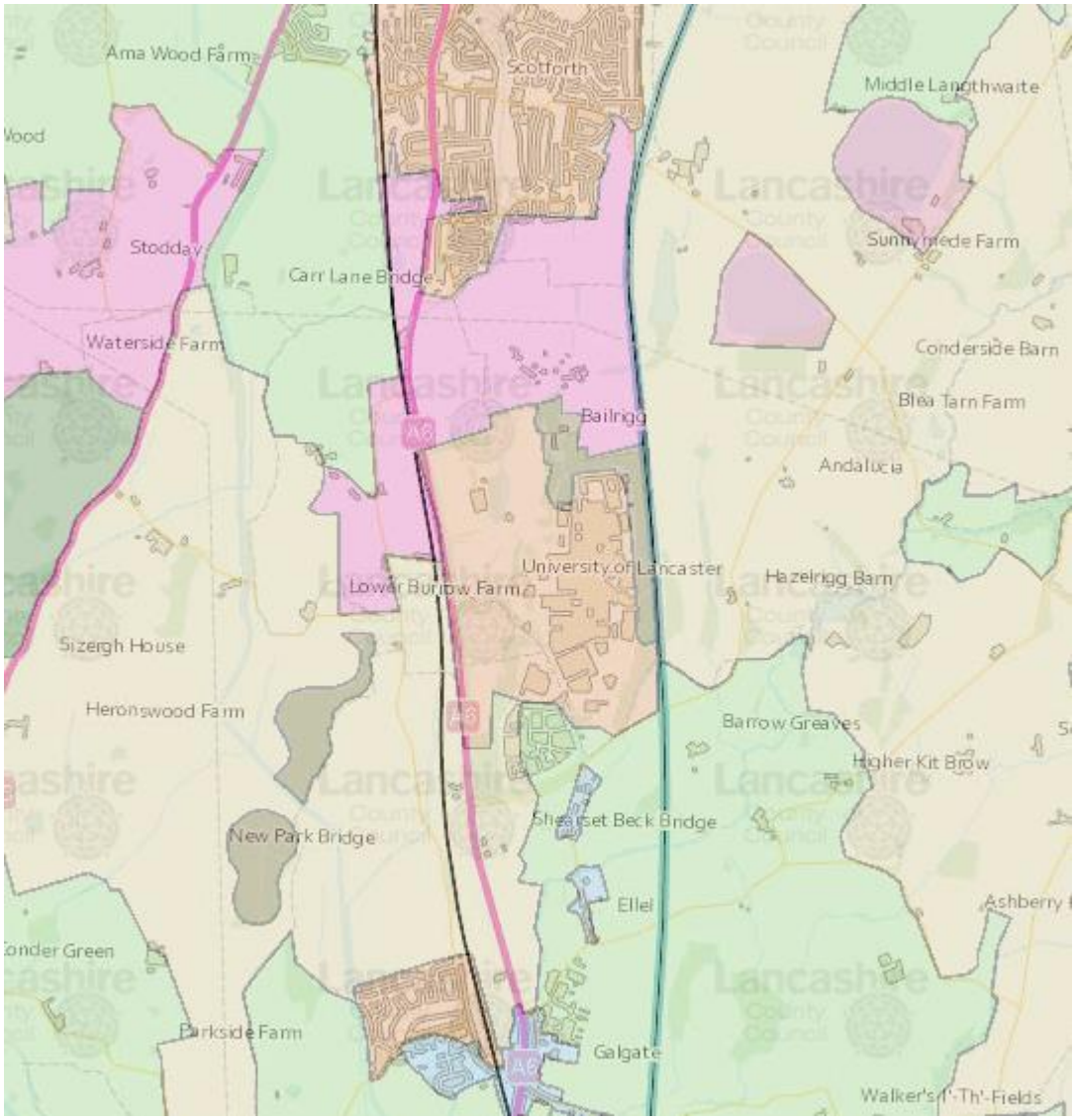


Figure B-32: Historic Landscape Character Areas within the AAP area (MARIO, Lancashire County Council)

Data Gaps and Uncertainties

- Find spots from the historic environment record and indication of archaeological potential
- Buildings of special local interest

Key Issues and Opportunities

- Heritage assets should be protected, and their settings conserved from adverse effects in the design of new development.
- In addition to protecting statutory sites, it is important to ensure that the wider historic landscape is protected and also non-designated heritage and archaeological resources.

LANDSCAPE

The Council has undertaken a series of landscape assessments, prepared by Arcadis consultants in March 2016. Assessment work suggests that land in this area is characterised by open rolling pasture farmland which is separated into fields by mature hedgerows interspersed with occasional woodland and trees, including the area of ancient woodland 'Park Coppice' to the south west of the AAP area. A number of small ponds and farms are present within this undulating area, which is bounded by road infrastructure to the east, the residential edge of Lancaster to the north and Lancaster Canal to the west. Views are interrupted by the presence of a number of pylons running east-west in the skyline.

The landscape is severed by the A6 and M6 road networks as well as the WCML rail link. The Lancaster University Bailrigg Campus also plays a dominant part in the local landscape. The small village of Bailrigg together with sporadic farm housing occasionally breaks up the rolling agricultural fields which surround the University campus. At the northern boundary of the AAP area is Scotforth which is typically of a residential nature and is the start of the urban area which stretches up to Lancaster City centre. The settlement of Galgate is immediately to the south ofthe AAP boundary, a small village offering a limited number of local services, employment and residential dwellings.

Further south the land consists of a linear ridgeline running south from Lancaster, falling away either side towards the Lancaster Canal to the west and north-west towards the rail line. The ridge offers views out east towards the Forest of Bowland AONB and west towards the coast with visibility reducing towards the edges due to the topography and vegetation.

The AAP area falls within the National Character Areas (NCA) 31: Morecambe Coast and Lune Estuary[46] and NCA 33: Bowland Fringe & Pendle Hill[47].

The AAP area takes in five Landscape Character Types (LCTs) including: LCT 5: Undulating Lowland Farmland, (Green on Figure B-33), LCT 7: Farmed Ridges. (Peach colour on Figure B-33), LCT 12: Low Coastal Drumlins, (Navy blue on Figure B-33) and LCT 13: Drumlin Field, (Red on Figure B-33)[48]..

The AAP area takes in five Landscape Character Areas (LCAs) two which form part of the Forest of Bowland AONB Landscape Character Assessment including LCA5i: West Bowland Fringes, LCA 7c: Langthwaite Ridge, LCA 12a: Carnforth-Galgate-Cockerham, and LCA 13c: Docker-Kellet-Lancaster.

[46] Natural England. NCA Profile: 31. Morecambe Coast and Lune Estuary (NE407). Available at: http://publications.naturalengland.org.uk/publication/5000283?category=587130 [Accessed: 01.03.21]
[47] Natural England. NCA Profile: 33 Bowland Fringe and Pendle Hill (NE372). Available at: http://publications.naturalengland.org.uk/publication/3522238?category=587130 [Accessed: 01.03.21]
[48] Lancashire County Council (2000) A Landscape Strategy for Lancashire: Landscape Character Assessment. Available at: https://www.lancashire.gov.uk/media/152746/characterassesment.pdf [Accessed: 01.03.21]

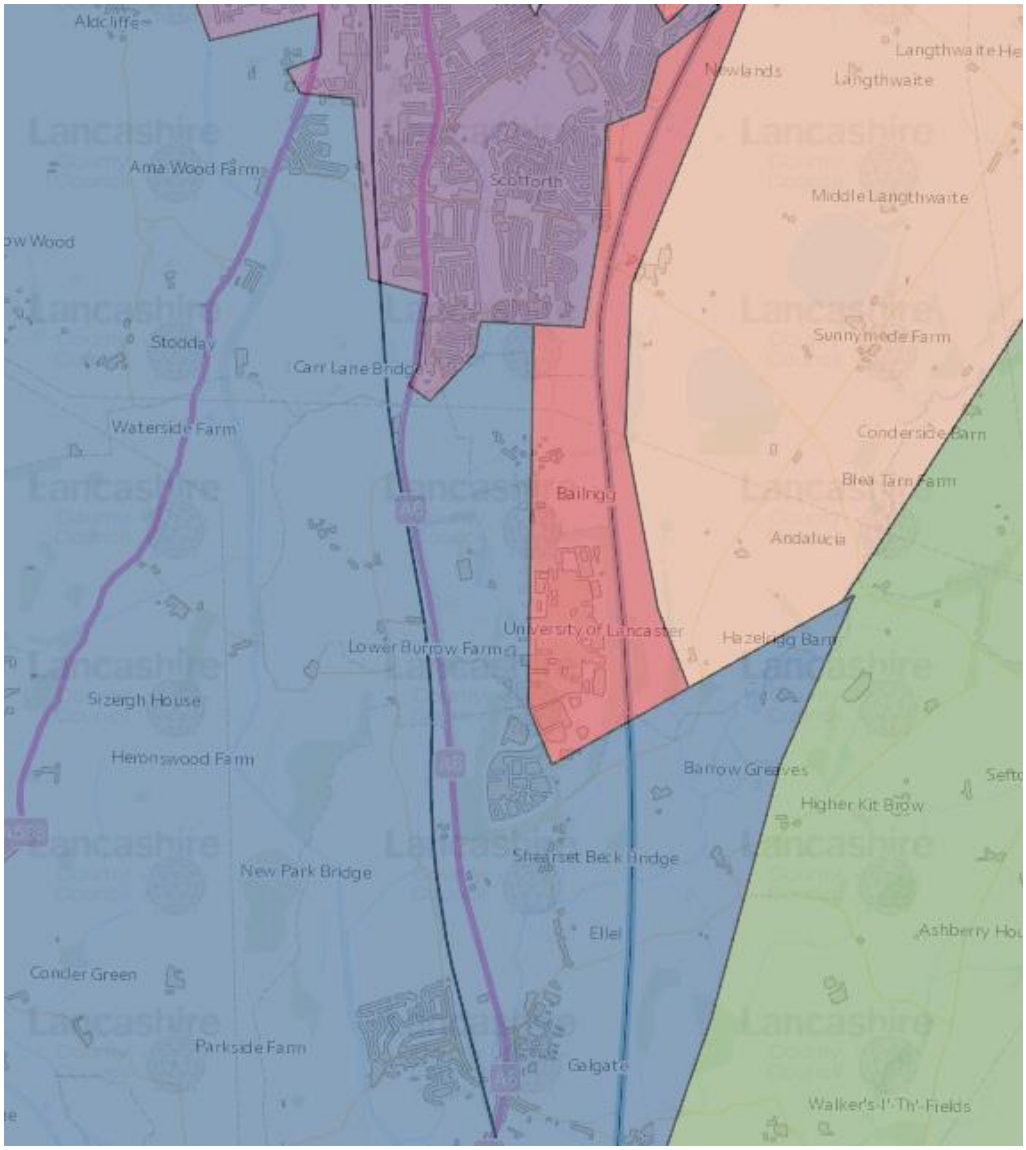


Figure B-33: Landscape Character Types taken in by the AAP area (MARIO, Lancashire County Council)

Figure B-34 below, presents the existing levels of light being produced within and around the AAP area[49]. The major source of light is produced by Lancaster City Centre however relatively high levels of light of are also being emitted by Lancaster University.

[49] CPRE. 2016. England's Light Pollution and Dark Skies. Available at: https://www.nightblight.cpre.org.uk/maps/ [Accessed: 18.02.21]

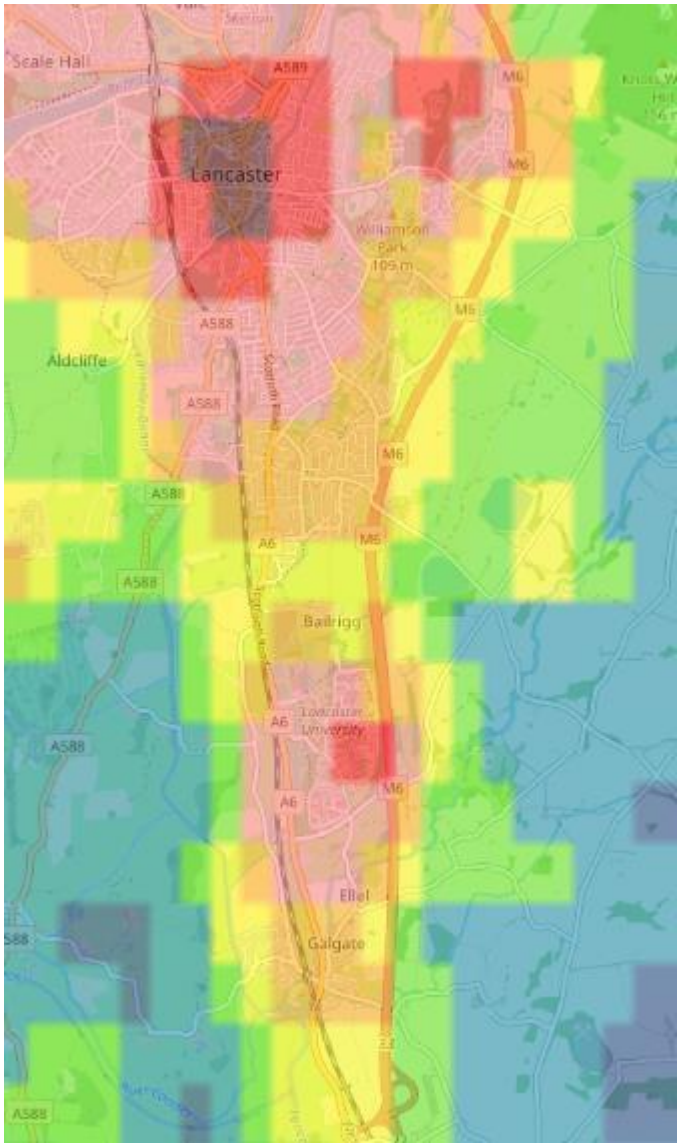


Figure B-34: Levels of light emitted within the AAP and surrounding area (CPRE)

There are no Conservation Areas within the AAP area.

Data Gaps and Uncertainties

- Land in entry/higher level stewardship schemes.
- Townscape Characterisation.

Key Sustainability Issues and Opportunities

- The AAP area is relatively close to the Forest of Bowland AONB. Key views are also afforded to the Lake District and across to the Williamson Monument which should be retained.
- Development of this area would greatly change the local and surrounding landscape due to the local topography and visibility. The topography of this site would likely present any development as a distinct change in views from the Forest of Bowland AONB out to the west towards the coast.
- It is important for landscape character and quality to be maintained and where possible restored and enhanced by maintaining certain landscape features and proposing a density and layout that will meet the requirements of a Garden Village ethos.
- Opportunities should be sought to enhance design and landscaping at the local level to improve the quality of the local environment.

- Parts of the site are elevated and prominent (e.g. Burrow Heights) and would be less suited for development.
- Opportunities could be sought to minimise light spillage as a result of development facilitated through the AAP as lighting levels in this area are already relatively high due to the presence of Lancaster University.
- Improving the quality of the public realm is viewed as very important as it contributes to an experience of a place or location. A high quality public realm can attract inward investment, benefit tourism and increase quality of life for the resident population.

MINERALS AND WASTE

As local data and statistics regarding minerals and waste at such a specific level for an AAP area is not available, statistics for Lancaster District and Lancashire have been utilised to produce an overall picture of the current minerals and waste baseline.

The Joint Lancashire Minerals and Waste Development Framework (MWDF) Core Strategy DPD[50] contains mineral and waste specific policies for use in determining planning applications for waste or quarry developments in Lancashire, Blackburn and Darwen, and Blackpool. It replaces the Minerals and Waste Local Plan prepared by Lancashire County Council and sets out the strategy for future minerals and waste development and addresses issues including mineral extraction; waste management and recycling; protecting mineral resources and restoring minerals and waste sites.

Lancaster District residents produced 45,761 tonnes of household waste per person in 2018/19, an decrease on the previous year (48,018 tonnes - 2017/18)[51]. Collected household waste per person in 2017/18 in Lancaster District was 337kg, which decreased to 317.2kg in 2018/19.

The rates of household waste sent for reuse, recycling or composting have in general been improving over the years as sharp increases in Landfill Tax have made the traditional form of Landfill disposal much more expensive. The household reuse, recycling and composting rate in Lancaster District was 36.0% in 2018/19[52]. Table B-11 presents data for the rate of household waste recycling, reuse and composting achieved in Lancaster District between 2016 and 2019.

Table B-11: Household waste recycling, reuse and composting rates in Lancaster District

	2014-15	2015-16	2016-17	2017-18	2018-19
Household water rates in Lancaster District	42.9%	44.5%	38.9%	35.6%	36.0%

Ellel Crag Quarry is closest quarry to the AAP area around 1.5km to the south east and is approximately 14ha in size. Activity at the quarry includes shale and sandstone extraction with restoration incorporating inert and biodegradable landfill. However, the closest landfill site is the Blea Tarn Landfill immediately adjacent to the north western boundary of the AAP area as shown in Figure B-35 below.

[50] Blackburn and Darwen Borough Council, Blackpool Council and Lancashire County Council (2009) Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD. Available at: https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/ [Accessed: 01.03.21]
[51] DEFRA. Local authority collected waste: annual results tables. Local Authority Collected and Household Waste Statistics 2014-15 to 2018-19, England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/849136/LA_and_Regional_Spreadsheet_1819.xlsx [Accessed: 19.02.21]
[52] DEFRA. Local authority collected waste: annual results tables Selected Waste Indicators 2010-11 to 2018-19. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/849136/LA_and_Regional_Spreadsheet_1819.xlsx [Accessed: 19.02.21]

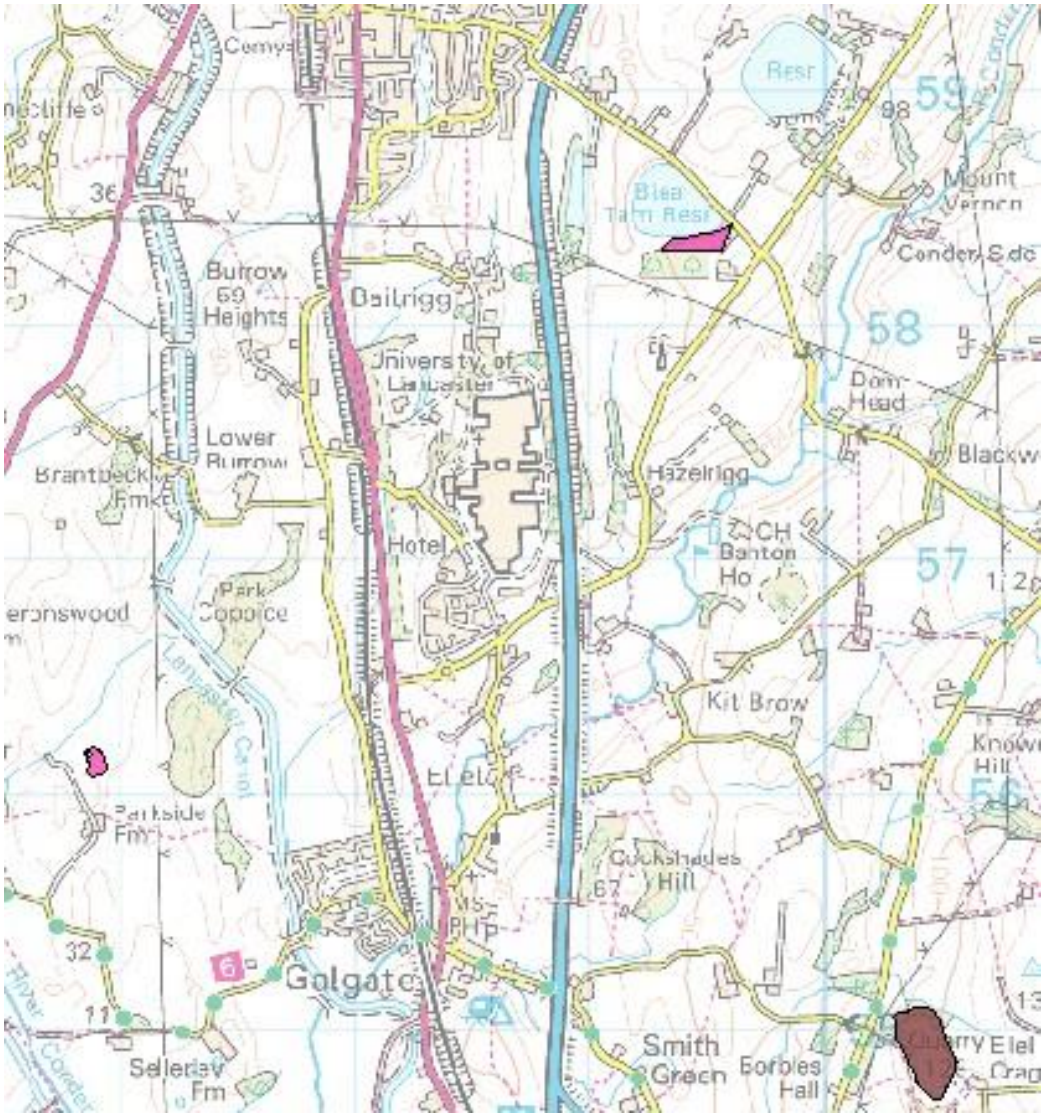


Figure B-35: Location and distribution of Quarry site (brown) and landfill sites (pink) nearby to the AAP area

Mineral Safeguarded Areas of the AAP area are shown in Figure B-36 below[53]. Safeguarded areas are present mainly in the south east, south west and north west of the AAP area with only a small area safeguarded in the north east of the area.

[53] Lancashire County Council. Local planning policy for minerals and waste Available at: https://www.lancashire.gov.uk/council/planning/local-planning-policy-for-minerals-and-waste/ [Accessed: 01.03.21]

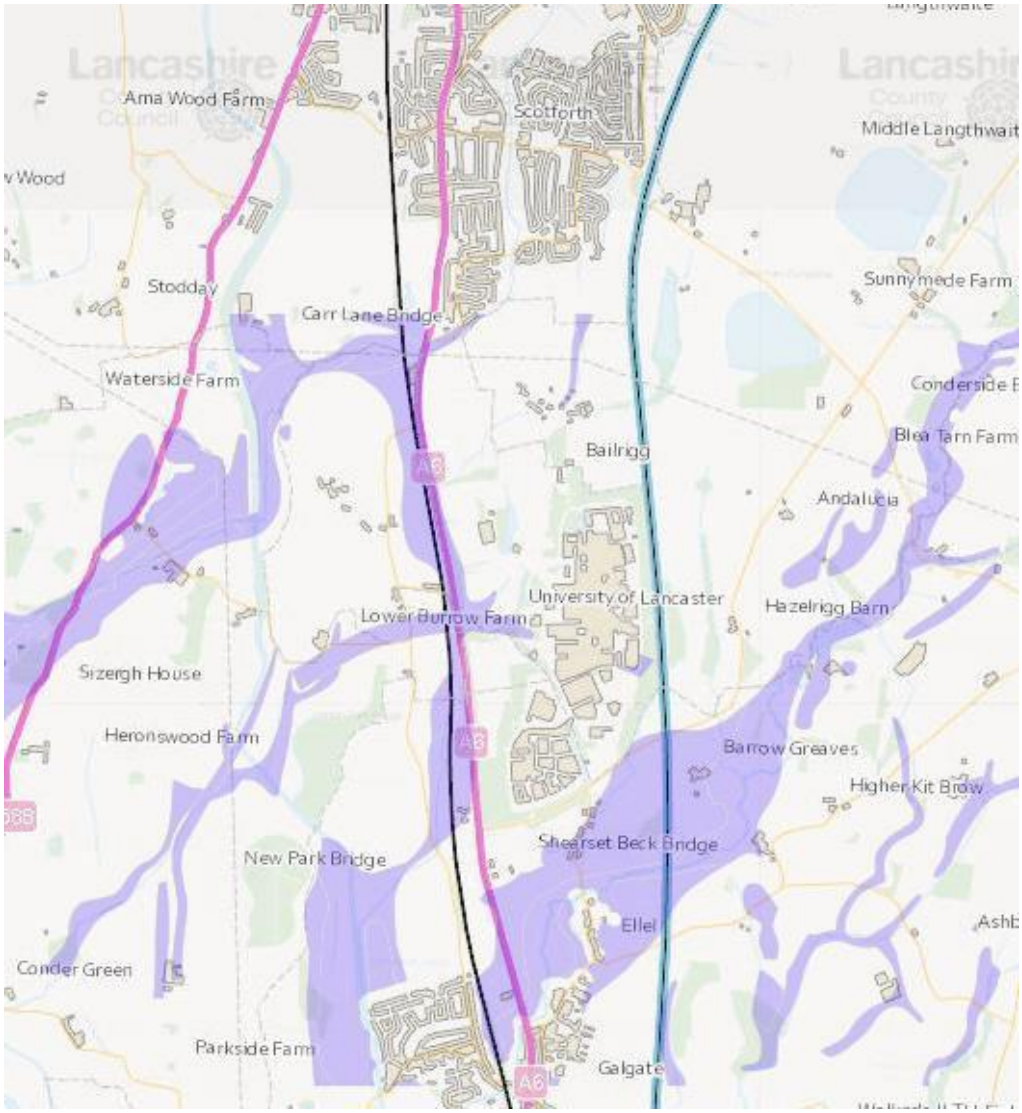


Figure B-36: Location and distribution of Mineral Safeguarded Areas within the AAP area (MARIO, Lancashire County Council)

As much of the AAP area is currently undeveloped, the key producer of waste is the University.

Lancaster University have undertaken a number of successful projects in an attempt to reduce the waste output of the university. 'Project Exodus', a student reuse project, collected 50 tonnes of items for reuse from students in 2016 and has helped the University improve its recycling rate to 83%. As of 2018/19, the recycling rate at Lancaster University was 72%. The University have also prepared the Lancaster University Waste Plan[54].

Sustainable food has also been a major theme for the University, with the ‘Edible Campus’ project and the 'Ecohub' student growing facility which has developed as a key project over the last two years, incorporating extensive growing areas, the refurbished bars, chickens, polytunnel, and pond. Continuing on the sustainable food theme Lancaster University was recognised as best in sector for its integrated approach to sustainable food issues with the presentation of a 'Green Gown Award' for sustainable Food in November 2015.

[54] Lancaster University (2017) Lancaster University Waste Plan. Available at: https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/sustainability/strategic-plans/LUWastePlan_accessible.pdf [Accessed: 01.03.21]

Data Gaps and Uncertainties

- Volume of waste produced – total and sub-divided by sector by ward.
- Data regarding the use of recycled and secondary materials in the construction industry.
- Latest data on household waste produced per person by ward.

Key Sustainability Issues and Opportunities

- The major strategic landfill site for the District is located in a neighbouring authority, therefore Lancaster District is an exporter of waste.
- The development of the AAP area will increase waste production in the area. Opportunities should be soughtto minimise this and further improve composting and recycling performance where this is possible.
- Sustainable sourcing and waste management principles should be promoted for all new development.
- Although Lancaster District has exceeded recycling levels there is still room for improvement.
- Lancaster University, the single largest waste producer in the AAP area, has reached a recycling rate of 72% providing opportunities to continue this success through adopting theUniversity's waste disposal mechanisms.
- The AAP area includes a number of minerals safeguarding areas. It will be important to demonstrate that the development within the AAP will not result in the sterilisation of important resources.

TRANSPORTATION

There are strong transport links that intersect the AAP area including the A6, M6 motorway and WCML rail link all of which run north/south through the area.

The A6 links the AAP area to the adjacent settlements of Galgate, Scotforth and into Lancaster City Centre. The M6 provides a more strategic link through the north west of England and the borders of Scotland to the north and provides links to other major cities to the south of the area such as Liverpool, Manchester and Birmingham. The nearest junction to enter and exit the M6 motorway is Junction 33 approximately 1.6km south of the AAP area.

The WCML provides a rail link that runs between Glasgow and London with the nearest station with access to this route being Lancaster Station in the City Centre. This route also provides links to east/west rail lines linking the likes of Liverpool and Manchester to the East Coast Main Line (ECML).

The closest airports operating passenger's flights to the AAP area are Manchester Airport approximately 57 miles south and Liverpool John Lennon Airport approximately 65 miles south.

The nearest port is Heysham Port which takes ferry passengers to the Isle of Man and the next closest port but the largest in terms of passenger destinations is the Port of Liverpool most commonly ferrying passengers to Ireland, Northern Ireland, and the Isle of Man.

The closest bus station is located in Lancaster city centre approximately four miles north of the AAP area. There is an existing main bus route travelling north-south with multiple bus stops along the A6 transecting the AAP area. This provides good links into Lancaster city centre and to settlements in the south. The A588 bus route transects the north western area of the site also providing links into Lancaster city centre as shown on Figure B-37 below.

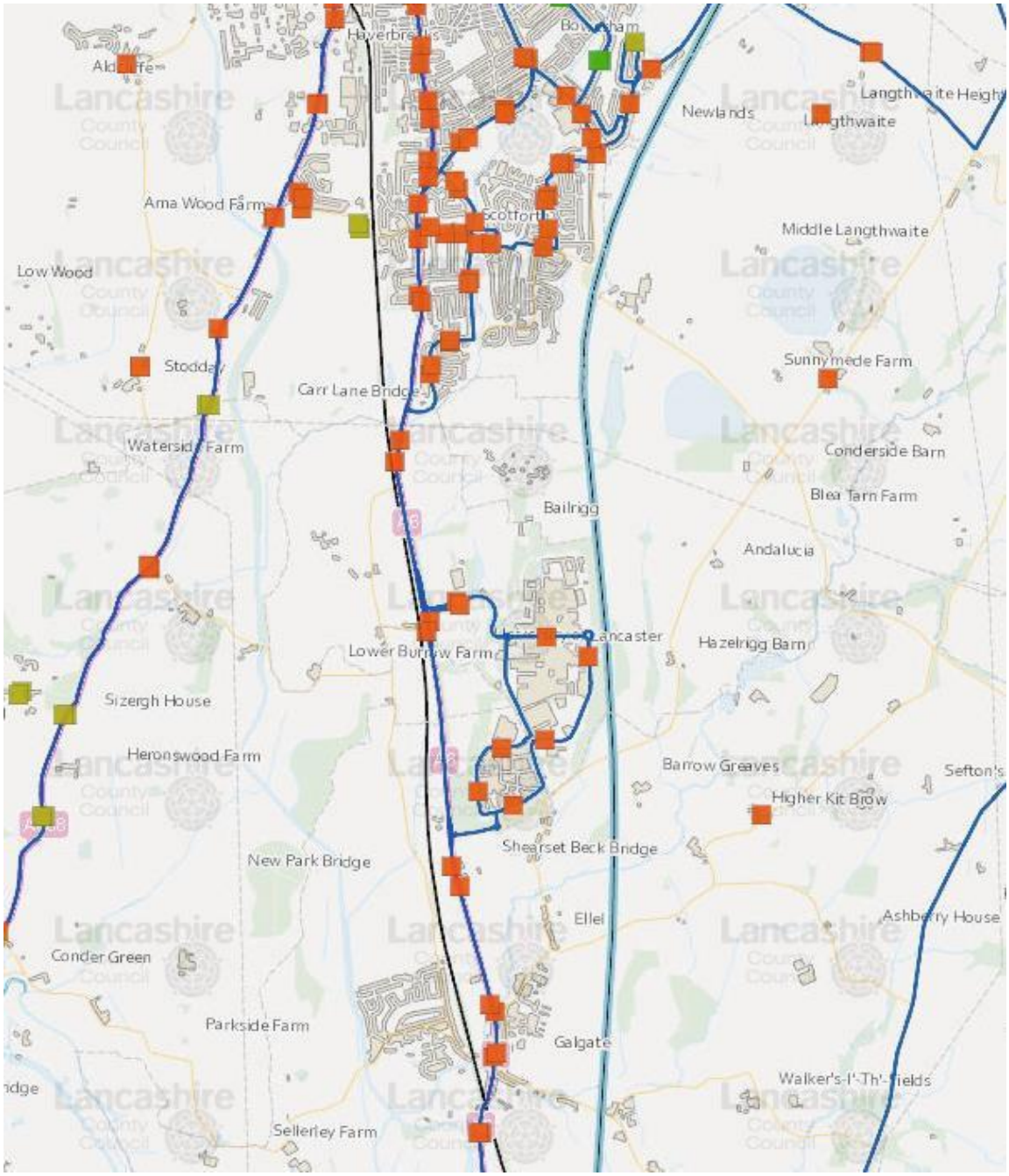


Figure B-37: Location and distribution of main local bus routes (blue) and bus stops (orange and green) within the AAP area (MARIO, Lancashire County Council)

As covered in the Health section of this document, there are a number of PRoWs that are within the AAP area boundary including: PRoW 1, 3, 14, 15, 23, 24, 25, 49, 54, 55 and 57. Bridleway 1 also falls within the AAP area. There are no National Cycle Network (NCN) routes within the AAP area (Sustrans) however, there are a number of local cycle routes that fall within the AAP boundary mainly serving Lancaster University, as shown on Figure B-9.

As a result of Lancaster University implementing a Travel Plan[55], more than half of staff and 88% of students use sustainable methods of transport, resulting in carbon emission reductions of 24%. Measures to encourage people to leave their cars behind included the highly popular subsidised university staff bus passes (with 30% increase in staff take-up) and major timetable improvements

[55] Lancaster University (2017) Lancaster University Travel Plan 2017 – 2022. Available at: https://www.lancaster.ac.uk/sustainability/sustainable-strategy/travel-plan/#:~:text=The%20Travel%20Plan%20aims%20to,carbon%20emissions%20and%20air%20pollution [Accessed: 01.03.21]

and the introduction of a bike to work and bike pool scheme (Lancaster University Annual Review 2016).

Data Gaps and Uncertainties

- Number of ICT schemes implemented in the AAP area.
- Number of homes with broadband internet access in the AAP area.
- Journey to work by mode.
- Public transport patronage.
- Additional information to be added following completion of transport study.

Key Issues and Opportunities

- Opportunities should be sought to reduce the growing dependence on the private car and increase public transport use and other sustainable modes of transport such as walking andcycling. It will be important to ensure that any new sites can be easily accessedby public transport. Such proposals would need to be safe and secure and should benefit levels of activity and health.
- North-south public transport links are strong however, these could be improved with the introduction of east-west routes linking up the network.
- The M6 is currently a barrier to development to the east with only one crossing point withinthe AAP area.
- Traffic currently is routed from the M6 via Galgate which causes congestion in the village. New development at Lancaster South broad area of growth has potential to exacerbate this and a new motorway junction isbeing considered.
- The good road connections to other parts of Lancaster District and proximity to the M6 motorway network are both an opportunity and a threat to the AAP as they could help to encourage inward investment, but they also could enable the AAP areas residents to easily commute to neighbouring authorities for employment purposes leading to a leakage of skills and also dailyspending from the local area and the District in general.

ECONOMY

The AAP area itself is dominated by agriculture and small farm holdings with the single largest employer in the area (and one of the largest in the Lancaster District) being Lancaster University employing a total of 3,027 staff members as full-time equivalents (FTE), 44% of staff are employed in an academic role with 56% employed in a non-academic role[56].

As presented in Table B-12, Scotforth East has the highest economic activity rate of the areas that fall within the AAP at 76.1%, further to this, it is the only area that is higher than the District rate of 72.5%[57]. Scotforth West falls just below the District rate at 72.3% and Ellel, University is significantly lower than the District rate at 45.3% which is due to the high student population of this particular area. Ellel, University also holds the highest economically active unemployment rate out of all the area at 11.4% almost double the rate of Scotforth West and well over the District rate of 6.7%.

Table B-12: Economic activity by ward (2011)

	Ellel, University	Scotforth East	Scotforth West	Lancaster District
Economically Active (%)	45.3	76.1	72.3	72.5
Employed (%)	40.1	71.8	68.6	67.6
Unemployed (%)	11.4	5.7	5.1	6.7

[56] Lancaster University 92019) Key Facts and Figures. Available at: https://www.lancaster.ac.uk/annual-review/2019/key-facts-and-figures/ [Accessed: 01.03.21]
[57] NOMIS. 2011 Ward Labour Market Profile. Available at: https://www.nomisweb.co.uk/reports/lmp/ward2011/1140854529/report.aspx?town=ellel [Accessed: 19.02.21]

Table B-13 presents the percentage of employment by occupation, Scotforth West holds the highest percentage of Professional occupations at 31.7% well above the District rate of 18.1%[58].

Administrative & secretarial occupations, caring, leisure and other service occupations as well as process plant & machine operative occupations were all under the District rates for all areas within the AAP area.

Table B-13: Employment by Occupation (2011)

Occupation	Ellel, University (%)	Scotforth East (%)	Scotforth West (%)	Lancaster District (%)
1 Managers, directors and senior officials	9.4	8.1	8.5	9.3
2 Professional occupations	20.1	25.3	31.7	18.1
3 Associate professional & technical	8.7	9.3	11.8	10.7
4 Administrative & secretarial	8.3	8.4	9.4	9.7
5 Skilled trades occupations	15.3	12.7	8.3	12.3
6 Caring, leisure and Other Service occupations	8.0	11.5	10.3	12.0
7 Sales and customer service occupations	11.9	7.9	7.3	8.9
8 Process plant & machine operatives	3.7	6.0	3.4	6.9
9 Elementary occupations	14.7	11.0	9.3	12.0

The 2011 Census provides an analysis of travel to work patterns and the extent to which residents in Lancaster District travel to other areas, together with details of how many people commute into the district[59]. The 2011 census data indicates that 84.5% of people who live in Lancaster District work in the district with 5.5% commuting out of Lancaster into South Lakeland. By comparison, 86.4% of workers in Lancaster also live in the district. This indicates a high self-containment level for Lancaster District and illustrates the strength of the district as an economic centre within the region. Therefore, Lancaster District is self-contained in terms of the travel-to-work patterns of its own resident working population and is self-contained in terms of the residential location of its workforce, with 86.4% of the district's workers also residing within the district.

In December 2020, 5.3% of the District's working age population were claiming Out-of-Work Benefits (see Table B-14)[60]. The highest percentage of claimants were in Scotforth East at 4.5% with the lowest rate recorded in Ellel, University at 1.3%. The number of claimants increased significantly in between December 2019 and December 2020 due to the COVID-19 pandemic and associated lockdowns limiting income for many people.

Table B-14: Percentage of Out-of-Work Benefits Claimants

Out-of-Work Benefits Claimants (%)	Ellel, University	Scotforth East	Scotforth West	Lancaster District
December 2020	1.3	4.5	3.2	5.3

[58] Ibid
[59] NOMIS. 2011. Location of usual residence and place of work by method of travel to work. Available at: https://www.nomisweb.co.uk/census/2011/wu03uk [Accessed: 15.03.21]
[60] NOMIS. 2011 Ward Labour Market Profile. Available at: https://www.nomisweb.co.uk/reports/lmp/ward2011/1140854529/report.aspx?town=ellel [Accessed: 19.02.21]

December 2019	0.5	2.1	1.4	3.0

The Visitor Economy is worth over £260 million in Lancaster as a District, supporting over 6,200 jobs, with more than 7.7 million visits a year to main visitor destinations of Morecambe, Lancaster and the rural areas. Figure B-38 shows the importance of the visitor economy to the District. It can be seen that Lancaster District has the third largest visitor economy by number and the sector accounts for 11.4% of total employment with only Blackpool (19.2%) and Wyre (12.5%) being higher (Business Register and Employment Survey, 2013).

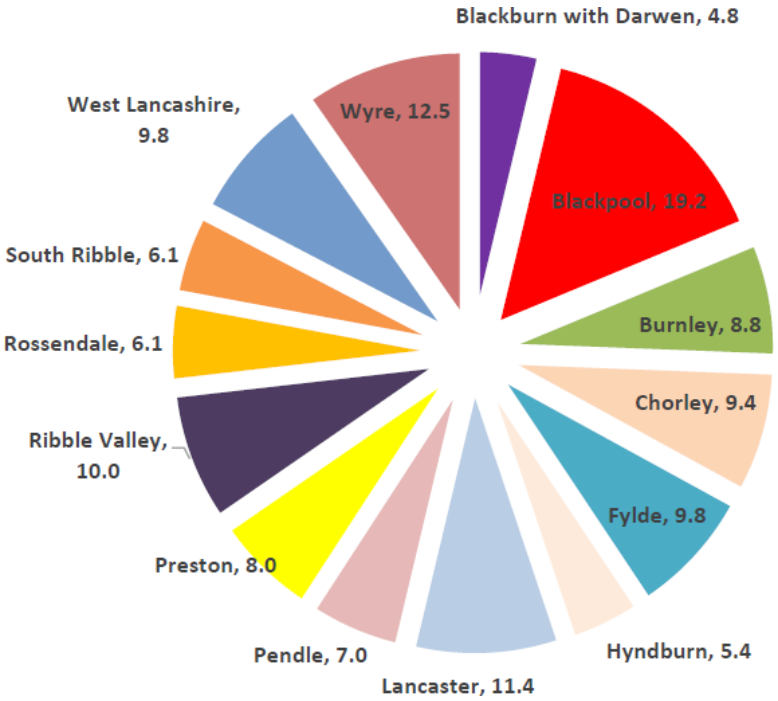


Figure B-38: Visitor economy employment as a percentage of all employment by district (ONS – Business Register and Employment Survey 2013)

None of the four LSOAs within the AAP area are amongst the bottom 30% for employment deprivation, however, LSOA 018C immediately north of the AAP boundary does fall within the 20% most deprived for employment deprivation. LSOA 017F and 019A are both among the 10% least deprived for employment deprivation, with both LSOAs 019C and 019D in the 50% least deprived for employment deprivation as shown on Figure B-39.

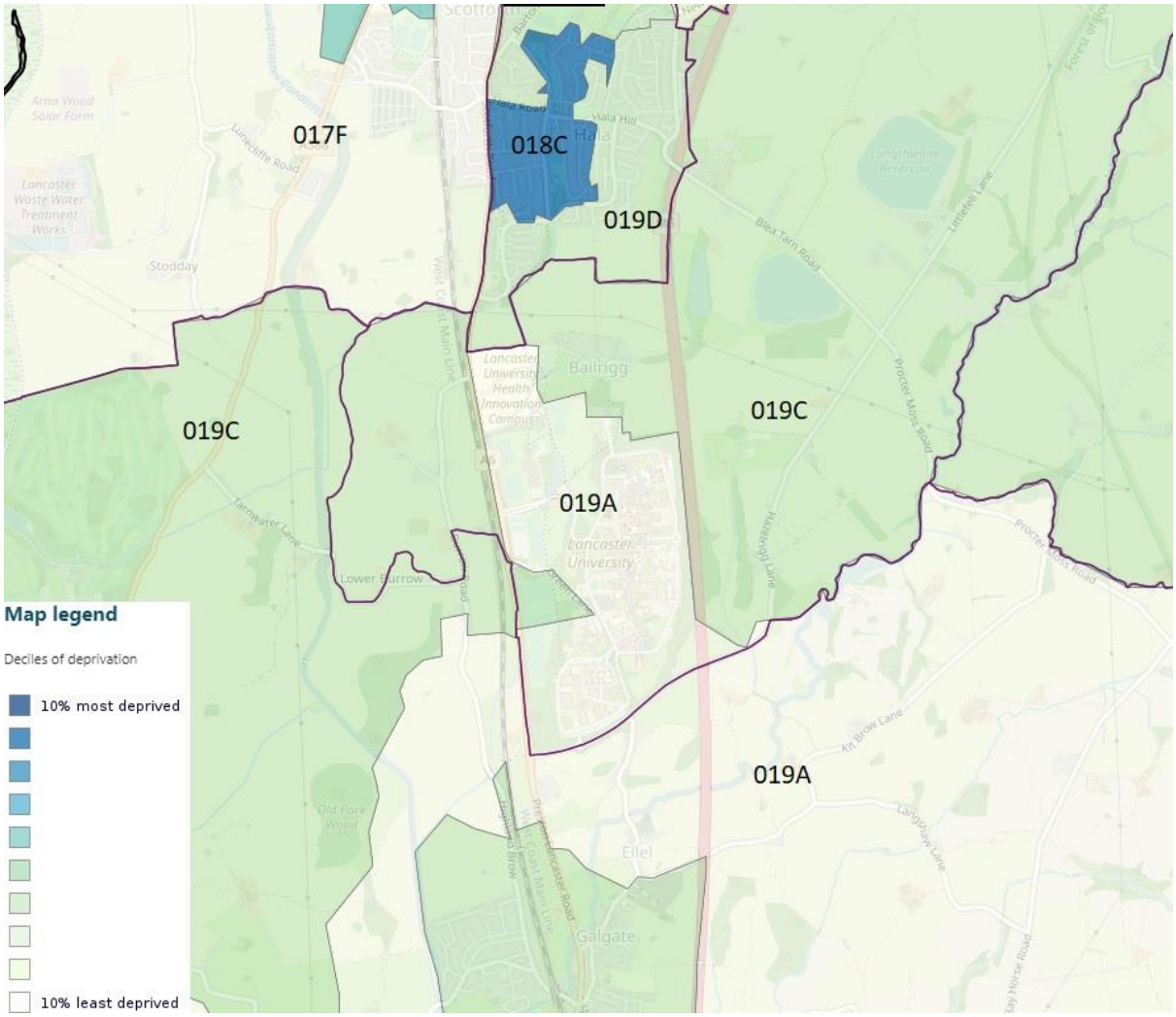


Figure B-39: Employment Deprivation (IMD, 2019)

The Income Deprivation Domain of the IMD, measures the proportion of the population experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings. None of the four LSOAs within the AAP area are amongst the bottom 30% for income deprivation, however, LSOA 018C immediately north of the AAP boundary does fall within the 30% most deprived for income deprivation (see Figure B-40). LSOAs 017F and 019A are both within the 10% least deprived for income deprivation, with LSOAs 019C in the 20% least deprived and LSOA 019C in the 30% least deprived for income

deprivation.

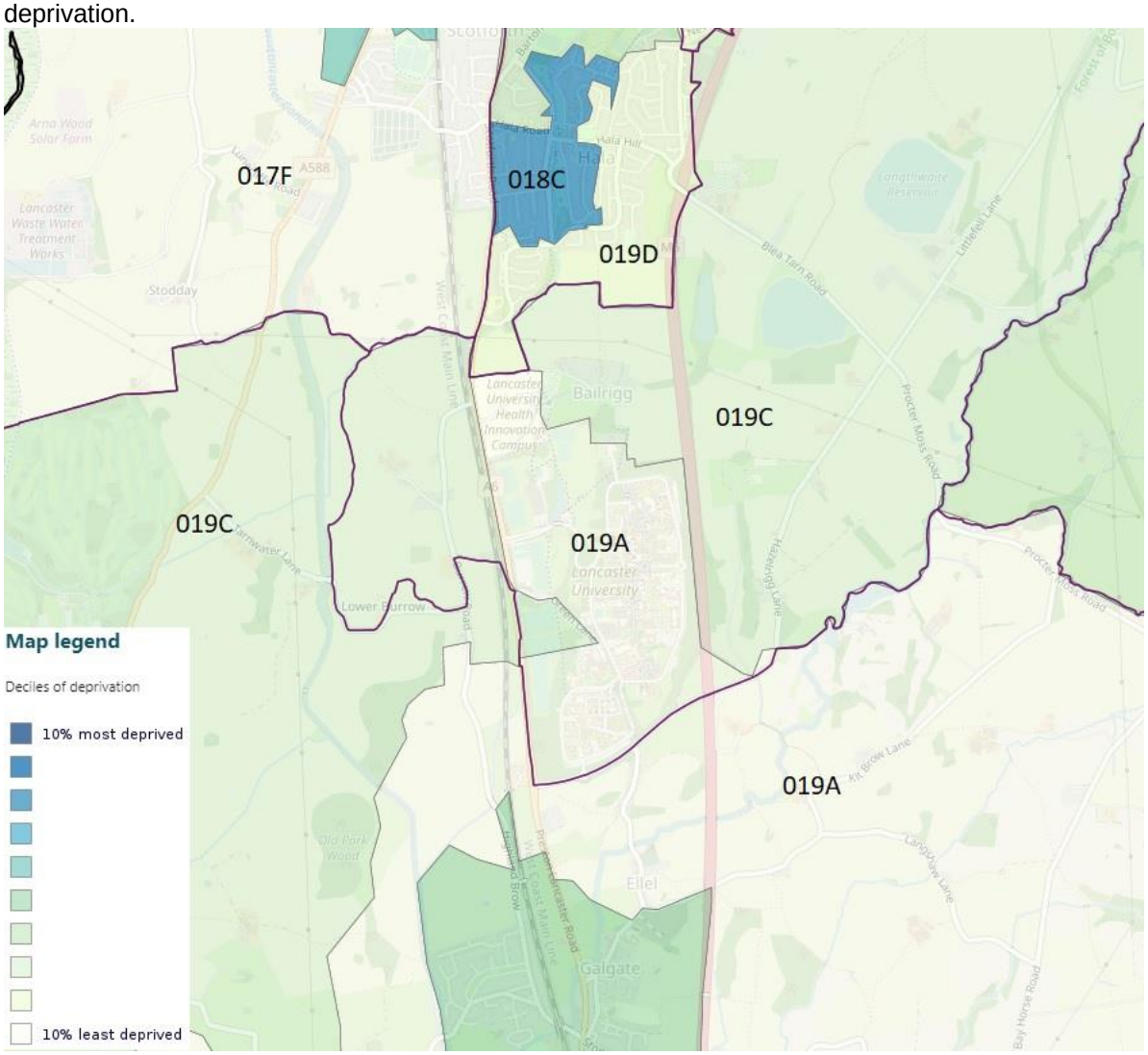


Figure B-40: Income Deprivation (IMD, 2019)

The current level of employment land available for development within the AAP area is currently unknown, however, the Lancaster Local Plan Part 1: Strategic Policies and Land Allocations DPD identifies further future growth around the University area including for the new Lancaster University Innovation Park which when fully realised, has the potential to deliver in the region of 2,000 new jobs for the district and attract up to £100 million of investment over the course of the local plan period.

Data Gaps and Uncertainties

- When collating baseline data for this topic area, difficulties were identified in obtaininginformation about inward investment in the District and research and development opportunities.

Key Sustainability Issues and Opportunities

- Economic activity levels are particularly low in the Ellel and the University area with unemployment levels also being the highest in the AAP area and significantly higher than theDistrict level. However, note that these figures are averaged across the wards so may not bedirectly relevant to the AAP boundary.
- Lancaster District has good levels of self-containment in relation to commuting. This should be maintained through the provision of employment opportunities and excellent travel links.
- None of the four LSOAs within the AAP area are amongst the bottom 30% for employment deprivation or income deprivation. However, LSOA 018C to the north of the area, does show elevated levels of deprivation.

- The AAP area is dominated by agriculture and the University. Agricultural holdings are likelyto be affected by new development in the area. The University could be a key catalyst in the area for new high-tech or science businesses within the AAP.
- The strong strategic transport links (M6, A6, WCML) and direct access to the City Centre employment sites could benefit business growth in the area subject to appropriate transportand access improvements.
- There are potential opportunities to capitalise upon the AAP area's environmental and cultural assets and to develop the tourist industry.

DEPRIVATION AND LIVING ENVIRONMENT

Deprivation is a multi-faceted and complex problem which influences and is influenced by a wide range of factors. LSOA 019C is in the least 50% deprived areas in the Index of Multiple Deprivation. LSOA 019A and 019D fall within the 30% least deprived areas (see Figure B-41). LSOA 017F falls within the least 10% deprived areas in the Index of Multiple Deprivation as shown in Figure B-40. However, although just outside the AAP area, LSOA 018C, does fall within the 30% most deprived areas for the Index of Multiple Deprivation.

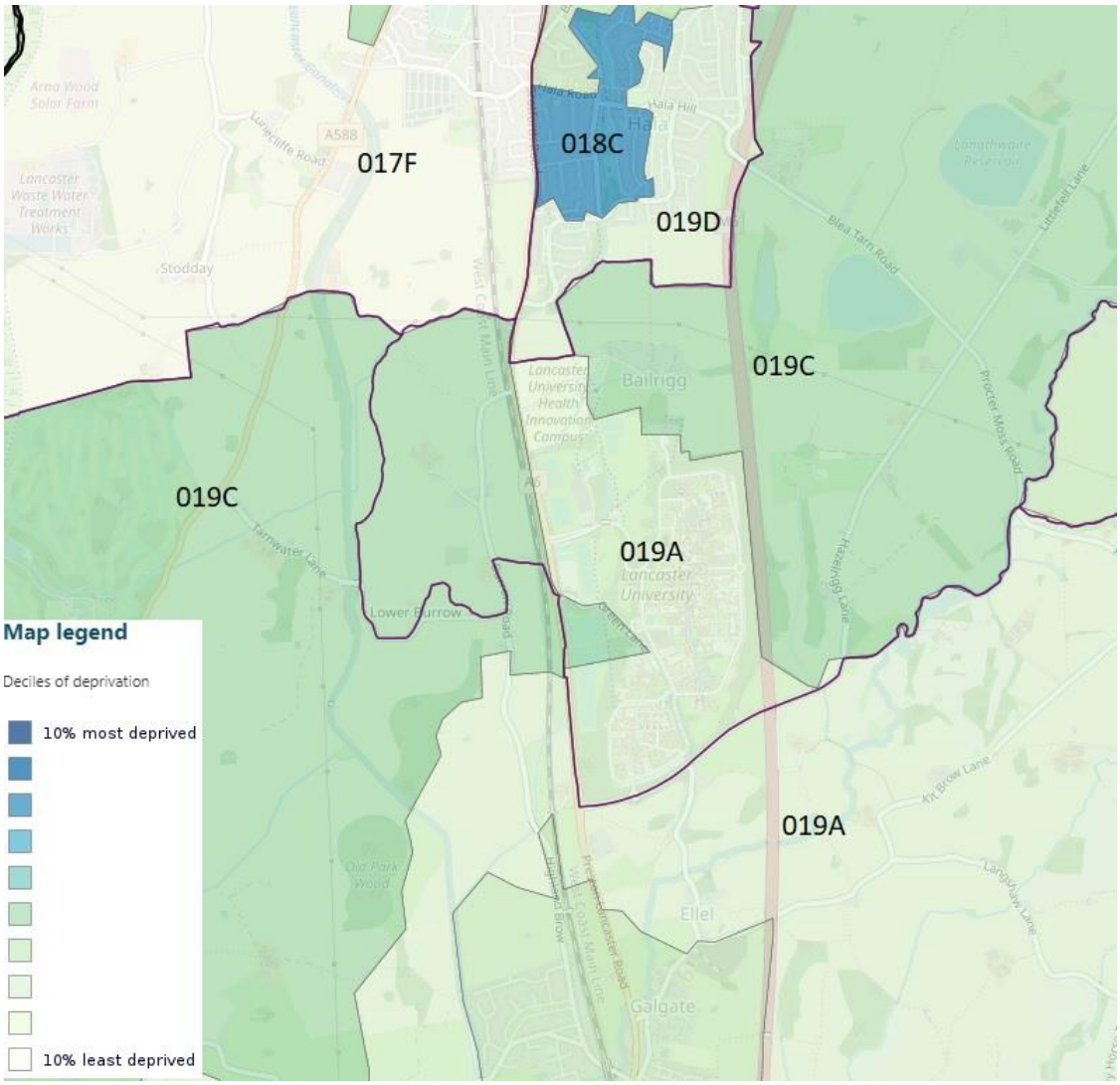


Figure B-41: Index of Multiple Deprivation (IMD, 2019)

Both LSOAs 019A and 019C fall within the AAP area are among the 10% most deprived areas for Living Environment Deprivation. LSOA 017F is among the 50% most deprived areas for Living Environment Deprivation whilst LSOA 019D falls within the 20% least deprived areas as shown on Figure B-42 below.

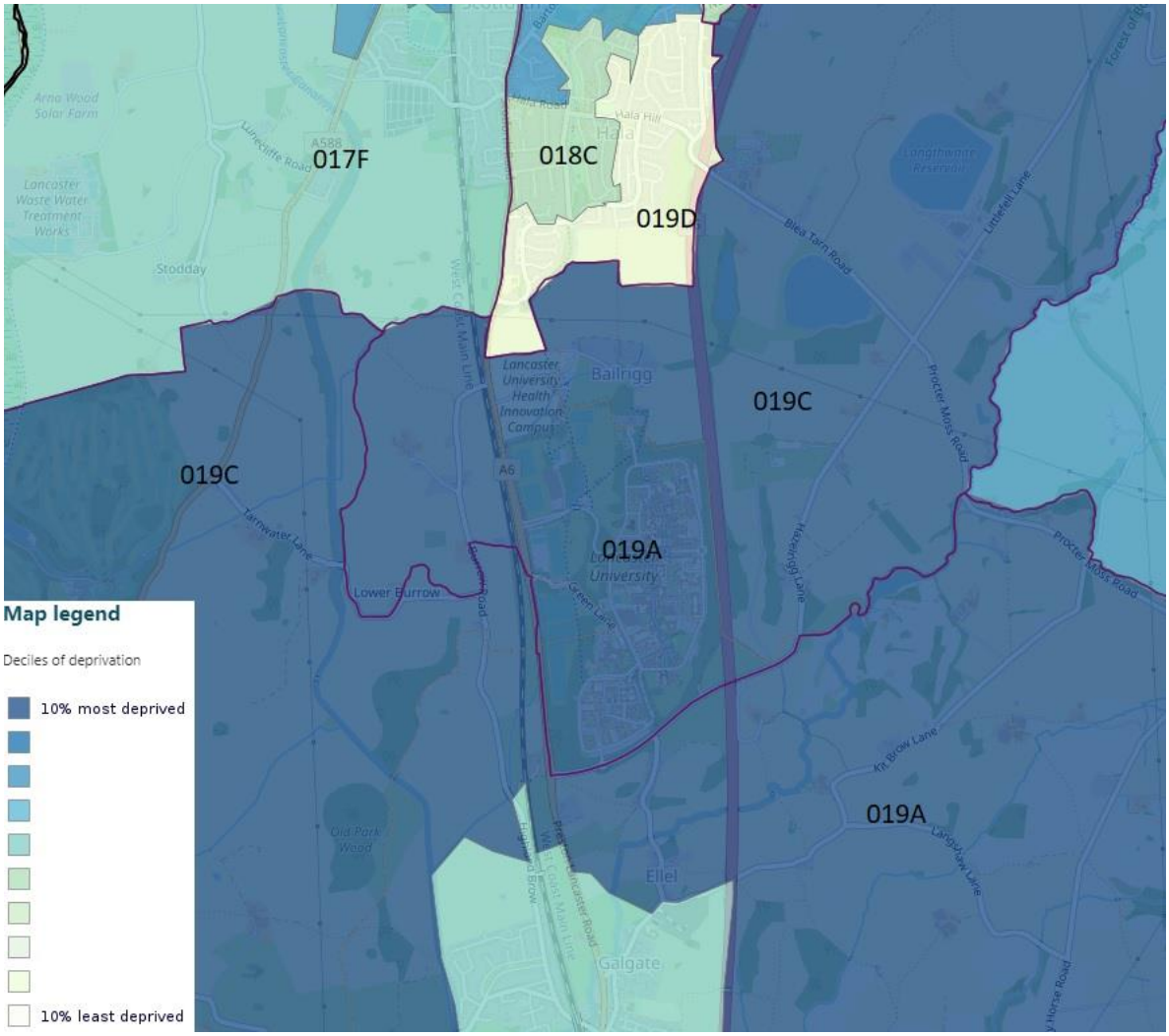


Figure B-42: Living Environment Deprivation (IMD, 2019)

LSOAs 018C, 019A and 019C that fall within the AAP area are among the 30% most deprived areas for Barriers to Housing and Services Deprivation. LSOA 017F is among the 50% most deprived areas for Barriers to Housing and Services Deprivation and LSOA 019D falls within the 40% most deprived areas as shown on Figure B-43 below.

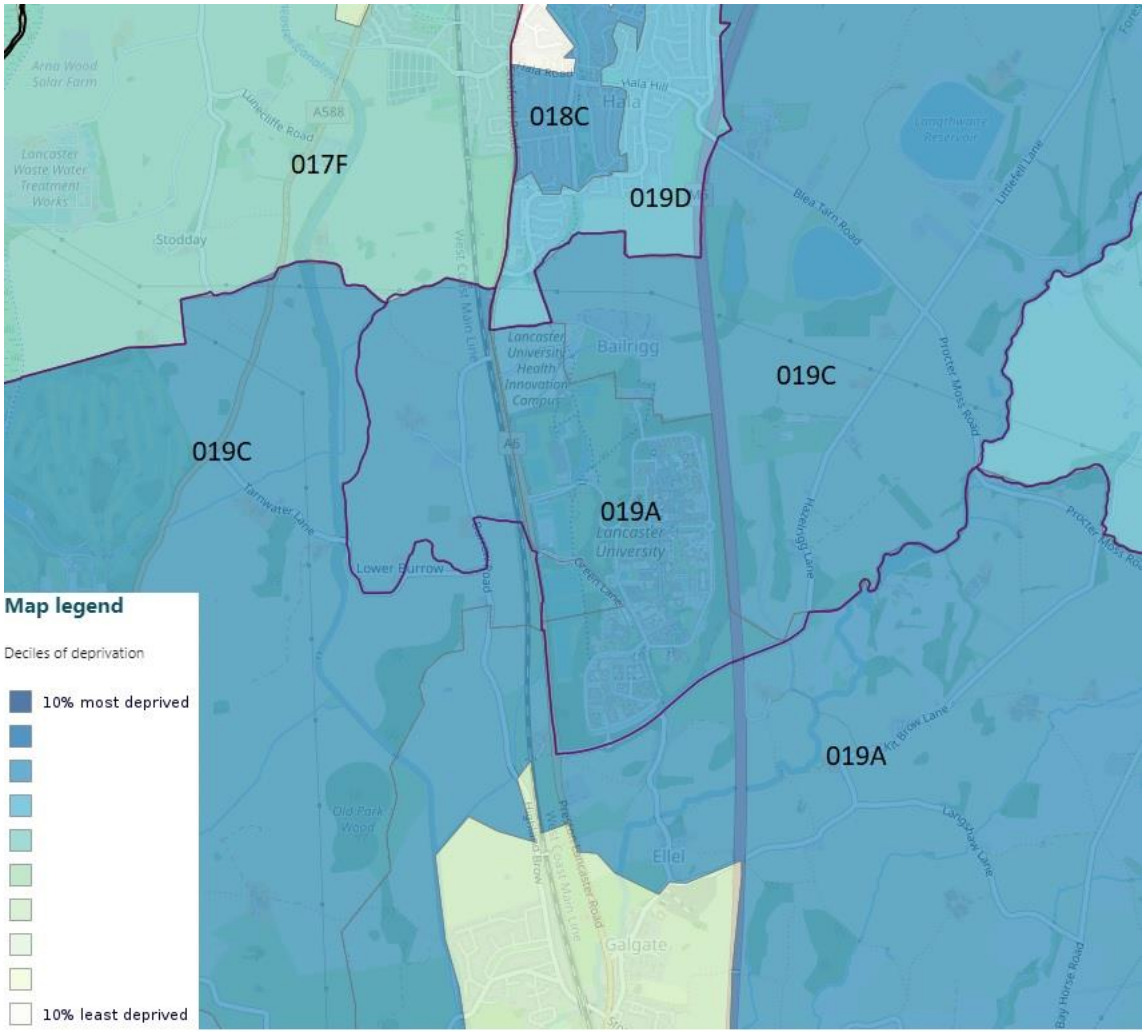


Figure B-43:Barriers to Housing and Services Deprivation (IMD, 2019)

Overall deprivation in the AAP area is low, however, living environment and housing services provides a different picture. The LSOAs 019A and 019C are particularly deprived in these two areas.

Data Gaps and Uncertainties

- Average gross pay within the wards covered by the AAP

Key Sustainability Issues and Opportunities

- Two of the LSOAs that make up the majority of the AAP area fall within the 20% most deprived areas for Barriers to Housing and Services Deprivation. Owing to its rural nature, there are issues associated with access to services and facilities. There are opportunities toamend this as part of the AAP proposals.
- Two of the LSOAs that make up the majority of the AAP area fall within the 10% most deprived areas for Living Environment Deprivation[61]. There are opportunities to address thisas part of the AAP proposals.
- Although no LSOAs within the AAP area fall within the 30% most deprived in the Index of Multiple Deprivation, LSOA 018C, slightly to the north of the boundary, doesfall within the 30% most deprived areas for the Index of Multiple Deprivation.

[61] The Living Environment domain combines four indicators to give an overall score for the level of deprivation inthe quality of the local environment. The indicators used in the latest update of this domain are; - Social and private housing in poor condition - Houses without central heating - Air quality - Road traffic accidents involving injury to pedestrians and cyclists (data.gov.uk, 2012)

HOUSING

With an average price of £288,500 as of February 2021[62], house prices in Bailrigg are more expensive than Ellel (£186,667), Galgate (£174,708) and Scotforth (£217,687). Overall sold prices in Bailrigg were 28% down on the 2007 peak of £400,000. There were only two properties sold in the past year, and 24 properties sold in the last five years.

Most of the sales in Scotforth in 2020 were semi-detached properties which on average sold for an average of £210,812. Terraced properties had an average sold price of £182,412and detached properties averaged at £344,375. In the same period, house prices in Scotforth were 7% up on the year before. In 2020, house prices in Galgate were 20% up on 2019 but 17% down on 2017 when they averaged at £211,322. Overall sold prices in Ellel in 2020 were 17% up on the previous year and 20% down on the 2017 level of £210,446. A total of 15 properities were sold in the past 12 months. . The majority of properties sold in Galgate and Ellel were semi-detached, averaging £181,692 and £176,688 respectively.

In terms of households, Scotforth West has the highest number of homes that are either owned outright or with a loan or mortgage. University and Scotforth Rural has the lowest number of owned homes out of the four wards within the AAP area. This is also the case with privately rented houses, again Scotforth West has the highest number of homes that are rented from private landlords at 730 houses with University and Scotforth Rural having the lowest number of houses that are privately rented at just 28 homes. With regards to social housing, Scotforth East has the highest number of households that are rented from the council or other social landlords at 307 with the lowest number of the four wards being University and Scotforth Rural with no households being rented from social sources (ONS, 2011). For comparison purposes, household figures for all wards within the Lancaster District are presented in graph form in Figure B-44 below.

[62] Rightmove (2021) House Prices around Bailrigg. Available at: https://www.rightmove.co.uk/house-prices/bailrigg.html?radius=0.25&page=1 [Accessed: 01.03.21]

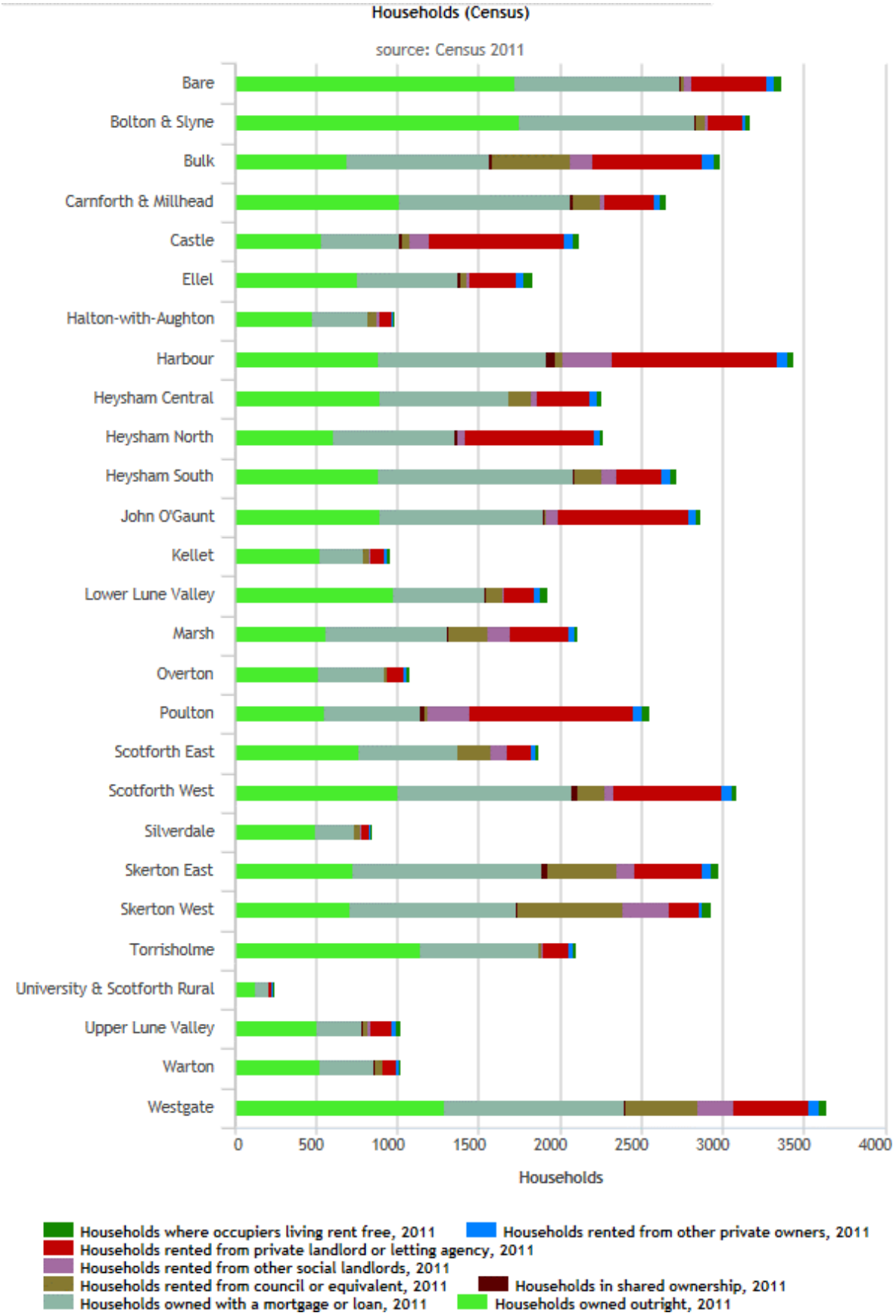


Figure B-44: Households owned, privately rented and socially rented by ward (Local Government Association)

Data Gaps and Uncertainties

- Percentage of housing vacant
- Percentage of new dwellings built on previously developed land
- Number of affordable housing in the AAP area
- Percentage split of dwelling types

Key Sustainability Issues and Opportunities

- Currently, due to its largely greenfield nature, there are very few residential dwellings withinthe AAP area.
- Student accommodation at the University accounts for the majority of dwellings.
- House prices in Bailrigg are higher than those in the surrounding settlements ofEllel, Galgate and Scotforth.
- The number of social housing rented from the Council or other social landlords is relativelylow within the four wards of the AAP area with a high number of houses being owned or owned with a mortgage or loan.

APPENDIX C

Summary of Consultation Comments

Table C-1: Consultation comments and Arcadis' response

Comments	Arcadis Comment	Action
Natural England		
The findings of the HRA should be referenced in the SA.	Will be incorporated when findings from the HRA are available.	No action at this stage – will be considered further in the SA options report. Note added to Scoping Report.
Water quality should be added as a key issue to table 4-1.	Agree	Done
Development proposals should be assessed on a case-by-case basis with regard to any likely significant effects on Functionally Linked Land.	Will be considered in the options SA report.	No action at this stage – will be considered further in the SA options report following review in the HRA Screening Report.
Under SA Objective 2, indicators should be added which seek to improve the provision of natural greenspace within the AAP area and protect and enhance green infrastructure.	Agree	Two points added to indictors.
It should be reiterated that the AAP should be in accordance with the upcoming Lancaster GI strategy.	Agree – can the council confirm when the GI strategy will be published?	Added to Appendix A stating 'due to be published in July 2021'. It is also noted that Lancashire Local Economic Partnership's 'Green Infrastructure Strategy' (2009) is already included.
Environment Agency		
Add information on recent flooding in Galgate and South Lancaster to the baseline section and state that the AAP provides an opportunity to manage flood risk in these surrounding areas.	Agree	Added background information and added as an opportunity.
Suggest hydraulic modelling is carried out in the AAP area to thoroughly identify floodplains.	Can the Council confirm if hydraulic modelling will be carried out?	Hydraulic modelling will be considered further down the masterplanning process. No action at this time.
Mention a risk of silt pollution associated with earthworks during construction.	All appropriate construction related pollution control measures will be required through the development management at the consenting stage.	A few sentences added to Table 4.3.
Add to SA Objective 6: "and are resilient to the future long-term changes in the climate".	Agree	Done
Reference North West River Basin Management Plan in Appendix A.	Agree	Done
The 2007 SFRA referenced in Appendix A is out of date, and an updated version is due to be published.	Agree – can council confirm when updated SFRA will be published?	No detail available at the moment. No action at this time.
Historic England		
No SA comments	-	-

Arcadis (UK) Limited

Arcadis Cymru House
St Mellons Business Park
Fortran Road
Cardiff
CF3 0EY
United Kingdom

T: +44 (0)29 2092 6700

arcadis.com