Hyder

LANCASTER CITY COUNCIL
Promoting City, Coast & Countryside

Strategic Environmental Assessment and Sustainability Appraisal

Land Allocations DPD

Options Development

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1 Introduction and Approach

1.1 Purpose of this Report

This report describes the preliminary Sustainability Appraisal (SA) of the land allocation options for the Land Allocations Development Plan Document (DPD). The overall approach to the SA is outlined in the SA Scoping Report (003-WX44644-WXR-02-F). This report forms an important first step in developing the preliminary set of allocation options. In conjunction with the work being undertaken by the Lancaster City Council (LCC) Planning Policy Team[1], the SA process plays an important part in developing a robust and sustainable suite of allocations.

In the future, a more detailed SA will be undertaken on the agreed set of DPD options and the preferred options.

1.2 Background to the Land Allocations DPD

The Land Allocations DPD will provide more detail and will allocate land within the framework provided by the Core Strategy. As such it is a key document in the LDF to be read alongside the Core Strategy and the emerging Development Management Policies DPD which will set out the main tests that the Council will take into account when it decides whether to grant planning permission for new development.

The Land Allocations DPD will allocate land within the district to meet the following needs:

- housing
- employment
- leisure and retail development
- defining settlement boundaries
- identifying and protecting areas of environmental and historic importance
- safeguarding land needed for the construction of new infrastructure

This involves defining lines on a map to provide certainty to residents and developers. Land allocation policy documents may also include detailed development and infrastructure requirements for major sites.

The Land Allocations DPD is intended to be cover a five year period from 2011 to 2016.

1.3 Approach to the Assessment

The Planning Advisory Service's online Plan-Making Manual identifies that Stage B of the SA process corresponds to developing and assessing the DPD options. Further guidance on how to undertake this is presented in the Government's Practical Guide to the SEA Directive (ODPM 2006).

Drawing upon (and adding to) this guidance, the approach adopted included the following steps:

[1] See the *Lancaster City Council Development Management DPD Options Paper* (June 2011) for further details on options development methodology

1 Discuss the draft allocations at a workshop involving both internal (LCC) and external specialists

2 High-level review of the allcoation options against the SA objectives using the Initial Appraisal Tables presented in this report.

3 Prepare a series of recommendations to assist LCC in further developing the DPD options

1.3.1 The Initial Appraisal Tables

The appraisal tables are presented in Section 2 of this report.

One table was produced for each allocation option. Each table compares each option against each of the 18 headline SA objectives topics[2] and provides a summary commentary and recommendations for further development.

The following nomenclature has been used for each:

Symbol	Definition
+	On balance the allocation option contributes to the achievement of the objective.
-	On balance the allocation option detracts to the achievement of the objective.
+/-	The allocation option both contributes to and detracts from the achievement of the objective in different ways.
0	On balance the allocation option neither contributes to nor detracts from the achievement of the objective.
?	The assessment is uncertain at this stage

1.3.2 The Workshop

A workshop was held on 6 June 2011 in Lancaster Town Hall to provide feedback on the land allocations area options using the SA objective topics as a guide. The attendees originally invited by LCC included representatives of LCC officer groups to provide a range of knowledge and each of the statutory SEA bodies (Environment Agency, English Heritage and Natural England). Apologies were received from Natural England. The following attended:

Maurice Brophy – LCC Planning and Housing Policy Manager
Rebecca Richards – LCC Planning Policy Officer
Kelly Brown – LCC Planning Policy Officer
Nicky Hartley – Hyder SA Consultant
David Hourd – Hyder SA Consultant
Tom Brown – LCC Regeneration Officer
Emma Coffey – LCC Conservation Officer
Jill Wesolowski – LCC Sustainability Officer
Nick Howard – LCC Environmental Health Manager
Sharon McGuinness - Lancashire County Council
Philip Carter – Environment Agency
Judith Nelson – English Heritage
Wayne Clinton – Age UK Lancashire

[2] Note the full SA objective has not been repeated for the purpose of brevity

The workshop consisted of the following elements:

- a presentation on the SA and DPD-making processes by Hyder and LCC
- review of allocation option areas using an SA worksheet in groups followed by plenary feedback sessions
- development of a series of general recommendations

1.3.3 Recommendations

The recommendations made during the workshop together with Hyder's independent views were collated and are presented in section 2 of this report.

LCC should review these recommendations and take them on board as they see fit during the continued development of the options.

1.4 Habitats Regulations

Under Article 6 of the Habitats Directive, an assessment is required where a plan or project may give rise to significant effects upon a Natura 2000 site (also known as 'European Sites'). The requirements of the Habitats Directive are transposed into UK law out to territorial water limits by means of the Conservation of Habitats and Species Regulations 2010.

The process of assessment under the Habitats Regulations comprises up to four stages, the first of which is 'Screening'. This report does not constitute an official screening report but instead identifies some initial risks and actions associated with the current allocation options and European Sites. This will be used to help inform the further development of the options prior to a formal screening stage.

This information is presented in section 3.

2 Initial review of land allocation options

2.1 DPD allocation options reviewed

The allocations have been grouped into five family groups. The assessment considers each site individually and then also considers each family group as a whole. The sites are illustrated in Appendix A.

The allocations and family groups reviewed were:

Luneside Family Group

- SHLAA 312
- SHLAA 411 Lune Mills
- SHLAA 364 New Quay Road
- SHLAA 960 New Quay
- ES 7 Adjacent to Lune Business Park

Lancaster East Family Group

- SHLAA 320 Grab Lane (Strategic Site)
- SHLAA 878 Lancaster Leisure Park
- SHLAA 287 Wyresdale Road
- SHLAA 876 Farmers Auction Mart
- SHLAA 405 Lancaster Moor
- SHLAA 412 Nightingale Hall Farm
- ES 13 Ridge Lea
- SHLAA 323 Newlands Road
- ES 8 Daisybank
- SHLAA 380 Land at Fenham Carr Lane
- SHLAA 1310 Land at Fenham Carr Lane

Lancaster South Family

- SHLAA 285 Land off Bailrigg Lane
- SHLAA 286 Land at Whinney Carr/Lawson's Bridge
- SHLAA 414 Land behind Royal Albert Hospital
- SHLAA 382 Land at Royal Albert Fields
- CFS 15 Land opposite Cutting Farm
- CFS 16 Land between Pinewood Close and Carr Lane Bridge

Carnforth Family Group

- SG 4 South Carnforth (Strategic Site)
- CFS 18 Land to the south of Windermere Road, Carnforth
- SHLAA 413 Lundsfield Quarry

- SHLAA 387 Carnforth Football Club
- SHLAA 419 Land to the rear of Greengate Lane, Crag Bank
- SHLAA 289 Bank Field off Scotland Road
- SHLAA 192 TDG Carnforth
- SHLAA 357 Warton Road
- SHLAA 283 Keer Bridge
- SHLAA 213 Brewers Barn
- SHLAA 202 Brewers Barn

Central Lancaster Family

- SHLAA 295, Canal Corridor North (Strategic Site)
- LP_1 Kingsway
- LP_2 Bulk Road

Heysham Energy Coastline

- Land around Heysham Nuclear Power Station, Heysham

The following Initial Appraisal Tables provide summaries of the review and recommendations for each allocation.

2.2 Appraisal of Luneside Family Group

Allocation: SHLAA 312

Current Use: The former Forbo Kingfisher factory that is currently vacant. Planning permission has been granted for mixed residential and commercial uses.

Potential proposal: This is a regeneration priority area that is suitable for mixed-use waterfront regeneration.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	This is an identified regeneration area and the site is currently vacant. Development in the form of residential and commercial uses could, in the long-term, benefit crime and safety by helping to provide new employment opportunities and enable 'secured by design' principles to be included in the regenerated site. Whilst the facilities in the centre of Lancaster are relatively close to the site, there are a limited number of services in this area, including health care and such services would need to be provided, particularly if other sites within the 'Luneside East' family are to be developed. There is scope to improve access to the River Lune (which is currently an under-utilised recreational resource) and to integrate the existing Strategic Cycle Network link, green corridor and an existing Public Right of Way (PRoW) into the redeveloped site which could offer some indirect health benefits. Remediation of contaminated areas would also benefit human health. Access to services is a potential issue for this site, as the main access to the site is via New Quay Road and there are already traffic congestion problems. Therefore, despite the relative proximity of the services in Lancaster City Centre, improved public transport and access measures would need to be considered and/or the provision of local services within the site or in close proximity. There is scope to better integrate this site and the wider area with Lancaster City Centre which could potentially benefit community spirit and vibrancy in the long-term.
S 2 Housing	+	
S3 Health	+/ -	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	+	This allocation is for a mixed-use development and this could provide some job opportunities

EC2 Economic Drivers	+	and help to stimulate economic development within the wider area. Discussion at the workshop suggested that visitor based enterprises or cafes and restaurants may be appropriate, in view of the river-side location of one of the site frontages. It is uncertain whether the employment opportunities provided at this site would be taken by local residents although it is located within an area of relatively high employment deprivation.
EC 3 Workforce	0	
EC 4 Economic inclusion	+	
EN 1 Climate change	-	The site lies within Flood Zone 3 and this is one of the most significant environmental constraints. The area benefits from 1 in 500 year flood protection from Carlisle Bridge to the end of the Quay and 1 in 75 year flood protection to the east of Carlisle Bridge, although residual flood risk remains. This site already has planning permission and, therefore, it is assumed that the Environment Agency is satisfied that flood risk can be suitably mitigated. However, should the planning permission expire then it is expected that a new application would need to be accompanied by a Flood Risk Assessment. A negative score has been assigned to EN 1 as PPS 25 highlights that development should be directed away from land at risk of flooding. The redevelopment of this site could have localised townscape benefits by removing vacant buildings and creating an attractive environment adjacent to the River Lune. There are existing residential communities adjacent to the site and it will be important to ensure that the new development is well integrated with the existing townscape. Access to this part of Lancaster is limited and uses already congested roads. New development in this area could potentially increase air pollution in the centre of Lancaster, where there is an Air Quality Management Area (AQMA) designated. There is an existing green corridor that runs along the boundary of the site adjacent to the River Lune. It will be important to ensure that this existing green corridor is integrated into the new site and opportunities sought to enhance biodiversity and enhance existing features of value adjacent to the river. The River Lune is also designated a Biological Heritage Site (BHS) and, therefore, it will be important for any new development to be constructed and designed such that there are no adverse effects on the river. The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. Effects are assessed as positive and negative, as there is scope for the site to be developed in a way that maximises biodiversity enhancement opportunities. To the east of the site lies a historic landfill and there is potential for contamination from this landfill to have migrated into the site. Redevelopment of the site may provide an opportunity to remediate some historical areas of contamination which could provide benefits for water and soil quality. As this site is brownfield positive effects are recorded against EN 5. A development of this site would increase energy use and waste production, although this would be the case in any area. Whilst there are no designated sites within the site or immediately adjacent to it, there is potential for the site to be of archaeological and local cultural heritage value and this should be investigated further. This was highlighted by English Heritage at the workshop.
EN 2 Water	+	
EN 3 Biodiversity	+ /-	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and Sustainable Drainage Systems (SuDS).

Consideration should be given to improving the transport links into the site and to the city centre – in view of the high levels of congestion, public transport, walking and cycling measures will be essential. The provision of new facilities e.g. shops, healthcare, schools to make this area of Lancaster more 'self sufficient' could also help to alleviate some of the congestion problems.

An archaeological desk-based assessment should be undertaken to inform the redevelopment of the site. There is the potential to incorporate important heritage features into the redeveloped site.

A review should be undertaken of the capacity of existing services in the area (schools, healthcare) to accommodate this scale of development and to determine whether additional provision will be required.

The site should be designed to maximise and enhance the river front location. The existing green corridor, Strategic Cycle Link and PRoW should be incorporated into the site and opportunities sought to enhance these links in line with the PRoW Improvement Plan. Opportunities to enhance the recreational facilities in this part of Lancaster should be sought to capitalise upon the proximity of the River Lune.

Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals.

There are a number of large sites identified within this part of Lancaster and there may be benefits associated with developing a specific masterplan for all of the sites to enable the full regeneration potential of these sites to be achieved.

Liaison must occur with the Environment Agency regarding the requirements for a Flood Risk Assessment at the site.

A contaminated land desk study should be undertaken to enable the risks associated with historical contamination to be understood. A risk assessment should also be undertaken to determine the remediation that may be required as part of the redevelopment works.

Careful consideration should be given to the layout and density of new development, particularly building heights to ensure that the development does not adversely affect adjacent residential areas.

The capacity of local infrastructure (water, electricity, sewerage) should be reviewed and appropriate mitigation provided as necessary to accommodate the level of development proposed (this review should also consider the potential cumulative effects of the development of multiple sites in this part of Lancaster).

Consideration should be given to the types of commercial uses that may be appropriate at the site in view of the adjacent residential areas. This area of Lancaster is important from an economic perspective and any redevelopment that occurs should continue to ensure that the economic role of this area is retained and enhanced.

Allocation: SHLAA 411 Lune Mills

Current Use: Former industrial land

Potential proposal: Proposed mixed use water front regeneration – residential led scheme being promoted by the City Council has planning permission.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	This is an identified regeneration area and the site is currently vacant. Development in the form of residential and commercial uses could, in the long-term, benefit crime and safety by helping to provide new employment opportunities and enable 'secured by design' principles to be included in the regenerated site.
S 2 Housing	+	
S3 Health	+/ -	
S4 Learning	0	There is scope to improve access to the River Lune (which is currently an under-utilised recreational resource) and to integrate the existing Strategic Cycle Network link, green corridor and an existing PRoW into the redeveloped site which could offer some indirect health benefits. Remediation of contaminated areas would also benefit human health. Access to services is a potential issue for this site, as there are already traffic congestion issues in this part of Lancaster. Therefore, despite the relative proximity of the services in Lancaster City Centre, improved public transport and access measures would need to be considered and/or the provision of local services within the site or in close proximity. There is scope to better integrate this site and the wider area with Lancaster City Centre which could potentially benefit community spirit and vibrancy in the long-term.
S5 Access	+/-	
EC 1 Local economy	+	This allocation is for a residential-led development and, therefore, it is assumed that commercial uses would form part of, but would not be the main component of the site. The development of this site could provide some job opportunities and help to stimulate economic development within the wider area. Discussion at the workshop suggested that visitor based enterprises or cafes and restaurants may be appropriate at this site, in view of the river-side location. It is uncertain whether the employment opportunities provided at this site would be taken by local residents although it is located within an area of relatively high
EC2 Economic Drivers	+	
EC 3 Workforce	0	
EC 4 Economic inclusion	+	

		employment deprivation.
EN 1 Climate change	-	Part of the site lies within Flood Zone 3 and Part within Flood Zone 2. The area benefits from 1 in 500 year flood protection from Carlisle Bridge to the end of the Quay and 1 in 75 year flood protection to the east of Carlisle Bridge, although residual flood risk remains. This site already has planning permission and, therefore, it is assumed that the Environment Agency is satisfied that flood risk can be suitably mitigated. However, should the planning permission expire then it is expected that a new application would need to be accompanied by a Flood Risk Assessment. A negative score has been assigned to EN 1 as PPS 25 highlights that development should be directed away from land at risk of flooding. The redevelopment of this site could have localised townscape benefits by removing vacant buildings and creating an attractive environment adjacent to the River Lune. There are existing residential communities adjacent to the site and it will be important to ensure that the new development is well integrated with the existing townscape. Whilst reasonably extensive vegetation screens the site on two sides, there is potential for this site to be visible from sites within Lancaster that are of heritage value e.g. the Castle and, this should be considered in the design of the site. A very small part of the site lies within a Conservation Area and there is potential for the site to have archaeological value which needs to be investigated further. Access to this part of Lancaster is limited and uses already congested roads. New development in this area could potentially increase air pollution in the centre of Lancaster, where there is an AQMA designated. There is an existing green corridor that runs along the boundary of the site adjacent to the River Lune and parts of the green corridor network within the site. It will be important to ensure that the existing green corridors are integrated into the new site and opportunities sought to enhance biodiversity and enhance existing features of value adjacent to the river. The River Lune is designated a BHS and, therefore, it will be important for any new development to be constructed and designed such that there are no adverse effects on the river. The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. Effects are assessed as positive and negative, as there is scope for the site to be developed in a way that maximises biodiversity enhancement opportunities. Where possible, the redevelopment works should seek to retain existing vegetation. To the south west of the site lies a historic landfill and there is potential for contamination from this landfill to have migrated into the site. The site itself is also former industrial land used as a gas works and so there will be contamination requiring remediation. Remediation would provide benefits for water and soil quality. As this site is brownfield positive effects are recorded against EN 5. A development of this site would increase energy use and waste production, although this would be the case in any area.
EN 2 Water	+	
EN 3 Biodiversity	+ /-	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Consideration should be given to improving the transport links into the site and to the city centre – in view of the high levels of congestion, public transport, walking and cycling measures will be essential. The provision of new facilities e.g. shops, healthcare, schools to make this area of Lancaster more 'self sufficient' could also help to alleviate some of the congestion problems.

An archaeological desk-based assessment should be undertaken to inform the redevelopment of the site. There is the potential to incorporate important heritage features into the redeveloped site. Liaison must also occur with the Lancaster City Council Conservation Officer and English Heritage regarding the Conservation Area designation that lies within the site boundary and appropriate mitigation and site design.

A review should be undertaken of the capacity of existing services in the area (schools, healthcare) to accommodate this

scale of development and to determine whether additional provision will be required.

The site should be designed to maximise and enhance the river front location. The existing green corridor, Strategic Cycle Link and PRoW should be incorporated into the site and opportunities sought to enhance these links in line with the PRoW Improvement Plan. Opportunities to enhance the recreational facilities in this part of Lancaster should be sought to capitalise upon the proximity of the River Lune.

Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals.

There are a number of large sites identified within this part of Lancaster and there may be benefits associated with developing a specific masterplan for all of the sites to enable the full regeneration potential of these sites to be achieved.

Liaison must occur with the Environment Agency regarding the requirements for a Flood Risk Assessment at the site.

A contaminated land desk study should be undertaken to enable the risks associated with historical contamination to be understood. A risk assessment should also be undertaken to determine the remediation that may be required as part of the redevelopment works.

Careful consideration should be given to the layout and density of new development, particularly building heights to ensure that the development does not adversely affect adjacent residential areas and Conservation Areas and other heritage resources in Lancaster City Centre.

The capacity of local infrastructure (water, electricity, sewerage) should be reviewed and appropriate mitigation provided as necessary to accommodate the level of development proposed (this review should also consider the potential cumulative effects of the development of multiple sites in this part of Lancaster).

Consideration should be given to the types of commercial uses that may be appropriate at the site in view of the adjacent residential areas. This area of Lancaster is important from an economic perspective and any redevelopment that occurs should continue to ensure that the economic role of this area is retained and enhanced.

Allocation: SHLAA_364 New Quay Road

Current Use: Light industry, general industry and storage

Potential proposal: The land owner has suggested that the site may be available for alternative development including a mixed use water front regeneration – residential led

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	There is scope to improve access to the River Lune (which is currently an under-utilised recreational resource) and to integrate the existing Strategic Cycle Network link, green corridor and an existing PRoW into the redeveloped site which could offer some indirect health benefits. Remediation of contaminated areas would also benefit human health. The site lies adjacent to an area of existing urban greenspace and this would provide an accessible recreational resource for any new community created on the site (although workshop discussion identified that this area would benefit from some enhancements). Access to services is a potential issue for this site, as there are already traffic congestion issues in this part of Lancaster. Therefore, despite the relative proximity of the services in Lancaster City Centre, improved public transport and access measures would need to be considered and/or the provision of local services (health/education/local shops) within the site or in close proximity. There is scope to better integrate this site and the wider area with Lancaster City Centre which could potentially benefit community spirit and vibrancy in the long-term. Mixed-use development could, in the long-term, benefit crime and safety by helping to provide new employment opportunities and enable 'secured by design' principles to be included in the regenerated site.
S 2 Housing	+	
S3 Health	+/ -	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	+/-	The site is currently used for light industry that provides valuable local employment. Whilst the site lies within a regeneration priority area it will be important to ensure that valuable
EC2 Economic Drivers	+/-	

EC 3 Workforce	0	local jobs and businesses are not lost and that they can be integrated into new development and additional employment opportunities provided. There is also a risk that development of this site and others nearby could result in the loss of low rent employment land that is important to the local Lancaster economy. There is scope for the redeveloped site to include new commercial uses and potentially those that could support the development of improved waterside access and recreation. The cumulative effects of regenerating a number of sites in this part of Lancaster could help to increase the attractiveness of the borough as a place to live, work and visit and help encourage more people to use this part of Lancaster City. A recognised constraint in this area is the transport infrastructure and these issues would need to be addressed if the local economy of this part of Lancaster is to develop further. For the above reasons effects are assessed as positive and negative.
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies within Flood Zone 3 and this is a significant site constraint. Whilst the area benefits from 1 in 500 year flood protection from Carlisle Bridge to the end of the Quay and 1 in 75 year flood protection to the east of Carlisle Bridge, residual flood risk remains. A planning application would need to be accompanied by a Flood Risk Assessment to determine risks to potential users at the site and the potential issue of increased off-site flood risk. Further consultation should be undertaken with the Environment Agency (EA). A negative score has been assigned to EN 1 as PPS 25 highlights that development should be directed away from land at risk of flooding. The redevelopment of this site could have localised townscape benefits and there is scope for some of the buildings with local cultural heritage value to be retained and where possible integrated into new development. New development would need to take into account the adjacent communities and proposals for other sites in the vicinity (although this site is situated further away from existing residential properties than some of the others sites within this strategic family). Access to this part of Lancaster is limited and uses already congested roads. New development in this area could potentially increase air pollution in the centre of Lancaster, where there is an AQMA designated. Whilst the site does not occupy a riverfront location, an existing green corridor runs along the boundary of the site that is closest to the River Lune. It will be important to ensure that the existing green corridors are integrated into the new site and opportunities sought to enhance biodiversity and enhance existing features of value adjacent to the river. The River Lune is designated a BHS and, therefore, it will be important for any new development to be constructed and designed such that there are no adverse effects on the river. The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. Effects are assessed as positive and negative, as there is scope for the site to be developed in a way that maximises biodiversity enhancement opportunities. Where possible, the redevelopment works should seek to retain existing vegetation. The site is bounded by a historic landfill and there is potential for contamination from this landfill to have migrated into the site. The site itself is also currently occupied by industrial uses that may have caused contamination. Any remediation required would provide benefits for water and soil quality and the adjacent BHS. As this site is brownfield positive effects are recorded against EN 5. Discussion at the workshop identified the site as potentially having local cultural heritage value and for archaeological remains associated with the former industrial uses of this area to be present on site. Whilst redevelopment could result in the loss of these features there is also scope for features to become a part of the new townscape and for interpretation to be improved. A development of this site would increase energy use and waste production, although this would be the case in any area.
EN 2 Water	+	
EN 3 Biodiversity	+ /-	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	-/+	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Consideration should be given to improving the transport links into the site and to the city centre – in view of the high levels of congestion, public transport, walking and cycling measures will be essential. The provision of new facilities e.g. shops, healthcare, schools to make this area of Lancaster more 'self sufficient' could also help to alleviate some of the congestion problems.

An archaeological desk-based assessment should be undertaken to inform the redevelopment of the site. There is the potential to incorporate important heritage features into the redeveloped site.

A review should be undertaken of the capacity of existing services in the area (schools, healthcare) to accommodate this scale of development and to determine whether additional provision will be required.

The site should be designed to maximise the value of its proximity to the River Lune. Connections with the existing green corridor, Strategic Cycle Link and PRoW should be made from the site. Such improvements should complement the Rights of Way Improvement Plan where possible.

Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals.

There are a number of large sites identified within this part of Lancaster and there may be benefits associated with developing a specific masterplan for all of the sites to enable the full regeneration potential of these sites to be achieved.

Liaison must occur with the Environment Agency regarding the requirements for a Flood Risk Assessment at the site.

A contaminated land desk study should be undertaken to enable the risks associated with historical contamination to be understood. A risk assessment should also be undertaken to determine the remediation that may be required as part of the redevelopment works.

Careful consideration should be given to the layout and density of new development, particularly building heights to ensure that the development does not adversely affect adjacent residential areas.

The capacity of local infrastructure (water, electricity, sewerage) should be reviewed and appropriate mitigation provided as necessary to accommodate the level of development proposed (this review should also consider the potential cumulative effects of the development of multiple sites in this part of Lancaster).

Consideration should be given to the types of commercial uses that may be appropriate at the site in view of the adjacent residential areas. This area of Lancaster is important from an economic perspective and any redevelopment that occurs should continue to ensure that the economic role of this area is retained and enhanced.

Allocation: SHLAA 960 New Quay

Current Use: Former industrial buildings

Potential proposal: Mixed use water front regeneration – residential led

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	There is scope to improve access to the River Lune (which is currently an under-utilised recreational resource) and to ensure that links are provided from the site to the existing Strategic Cycle Network link, green corridor and an existing PRoW which could offer some indirect health benefits by providing residents with an opportunity to pursue healthy lifestyles. Remediation of contaminated areas would also benefit human health. The site lies close to an area of existing urban greenspace and this would provide an accessible recreational resource for any new community created on the site (although workshop discussion identified that this area would benefit from some enhancements). Access to services is a potential issue for this site, as there are already traffic congestion issues in this part of Lancaster. Therefore, despite the relative proximity of the services in Lancaster City Centre, improved public transport and access measures would need to be considered and/or the provision of local services (health/education/local shops) within the site or in close proximity.
S 2 Housing	+	
S3 Health	+/ -	
S4 Learning	0	
S5 Access	+/-	

		There is scope to better integrate this site and the wider area with Lancaster City Centre which could potentially benefit community spirit and vibrancy in the long-term. Mixed-use development could, in the long-term, benefit crime and safety by helping to provide new employment opportunities and enable 'secured by design' principles to be included in the regenerated site.
EC 1 Local economy	+	The development of this site could provide some job opportunities and help to stimulate economic development within the wider area. Discussion at the workshop suggested that visitor based enterprises or cafes and restaurants may be appropriate at this site, in view of the river-side location. It is uncertain whether the employment opportunities provided at this site would be taken by local residents although it is located within an area of relatively high employment deprivation. The cumulative effects of regenerating a number of sites in this part of Lancaster could help to increase the attractiveness of the borough as a place to live, work and visit and help encourage more people to use this part of Lancaster City. A recognised constraint in this area is the transport infrastructure and these issues would need to be addressed if the local economy of this part of Lancaster is to develop further.
EC2 Economic Drivers	+	
EC 3 Workforce	0	
EC 4 Economic inclusion	+	
EN 1 Climate change	-	The site lies within Flood Zone 3 and this is a significant site constraint. Whilst the area benefits from 1 in 500 year flood protection from Carlisle Bridge to the end of the Quay and 1 in 75 year flood protection to the east of Carlisle Bridge, residual flood risk remains. A planning application would need to be accompanied by a Flood Risk Assessment to determine risks to potential users at the site and the potential issue of increased off-site flood risk. Further consultation should be undertaken with the EA. A negative score has been assigned to EN 1 as PPS 25 highlights that development should be directed away from land at risk of flooding. This site is also largely now greenfield (although it is understood it was previously industrial land) and so there would be the loss of infiltration capacity and potentially adverse effects upon local water quality. Access to this part of Lancaster is limited and uses already congested roads. New development in this area could potentially increase air pollution in the centre of Lancaster, where there is an AQMA designated. A PRoW follows the boundary of the site closest to the River Lune and there is a green corridor and Strategic Cycle Network link on the boundary furthest from the river. In view of the small-scale of this site, its presently greenfield character, the adjacent boundary of the BHS and the proximity of a number of larger nearby sites for mixed-use development, this site could potentially be considered as a primarily recreational resource/area of open space that could support wider development in this part of Lancaster City. There is also scope for landscaping at the site to complement the existing habitats at the site and those of the adjacent BHS. The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. Effects are assessed as positive and negative, as there is scope for the site to be developed in a way that maximises biodiversity enhancement opportunities. Where possible, the redevelopment works should seek to retain existing vegetation. The site lies in close proximity to a historic landfill and there is potential for contamination from this landfill to have migrated into the site. Any remediation required would provide benefits for water and soil quality and the adjacent BHS. Discussion at the workshop identified this area of Lancaster as potentially having cultural heritage and archaeological value. A development of this site would increase energy use and waste production, although this would be the case in any area.
EN 2 Water	+/-	
EN 3 Biodiversity	+ /-	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	
Recommendations		

Consideration should be given to improving the transport links into the site and to the city centre – in view of the high levels of congestion, public transport, walking and cycling measures will be essential. The provision of new facilities e.g. shops, healthcare, schools to make this area of Lancaster more 'self sufficient' could also help to alleviate some of the congestion problems.

An archaeological desk-based assessment should be undertaken to inform the redevelopment of the site.

The site should be designed to maximise the value of its proximity to the River Lune. Connections with the existing green corridor, Strategic Cycle Link and PRoW should be made from the site. Such improvements should complement the Rights of Way Improvement Plan where possible.

There are a number of large sites identified within this part of Lancaster and there may be benefits associated with developing a specific masterplan for all of the sites to enable the full regeneration potential of these sites to be achieved.

Liaison must occur with the EA regarding the requirements for a Flood Risk Assessment at the site.

A contaminated land desk study should be undertaken to enable the risks associated with historical contamination to be understood. A risk assessment should also be undertaken to determine the remediation that may be required as part of the redevelopment works.

Owing to the proximity of the BHS, the current greenfield nature of the site and the recreational routes (green corridor, PRoW, cycle routes) that surround this site, it is recommended that further consideration is given to this site as a potential recreational resource to support development on other sites in this part of Lancaster. Consideration should be given to a buffer between any development and the BHS to reduce the risk of adverse effects. Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals.

Where possible, existing vegetation should be retained on the site and this should be informed by more detailed ecological surveys.

Careful consideration should be given to the layout and density of new development, particularly building heights to ensure that the development does not adversely affect adjacent residential areas.

The capacity of local infrastructure (water, electricity, sewerage) should be reviewed and appropriate mitigation provided as necessary to accommodate the level of development proposed (this review should also consider the potential cumulative effects of the development of multiple sites in this part of Lancaster).

Consideration should be given to the types of commercial uses that may be appropriate at the site in view of the adjacent residential areas. This area of Lancaster is important from an economic perspective and any redevelopment that occurs should continue to ensure that the economic role of this area is retained and enhanced.

Allocation: ES_7 Land adjacent to Lune Business Park

Current Use: Playing fields and Freemans Wood. Previously storage/distribution

Potential proposal: Urban greenspace, outdoor recreation and leisure. It has been suggested that some residential and employment use could be developed on the site.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	It is unknown what scale of housing might be considered on this large site if it is not used solely for recreation/leisure uses. The development of this site as an enhanced area of greenspace could provide health benefits by enabling nearby residents and potentially those of newly developed sites to pursue healthy lifestyles. There are PRoW and the Strategic Cycle Network close to this site and, therefore, links to them could be provided as part of the proposals at this site. Discussion during the workshop identified that this area is currently occupied by playing fields and is a local informal recreational resource, although it is in need of improvement and improved management. If residential/employment uses are considered for this site, the scale of this should be carefully considered to prevent the loss of open space. Improving this site could potentially benefit community spirit and vibrancy in the long-term. Whilst no specific comments were raised at the workshop about crime issues at this site, it
S 2 Housing	?	
S3 Health	+	
S4 Learning	0	
S5 Access	+/-	

		was suggested that improved management could address any potential 'fear of crime' perceptions associated with the site. Access to services is an issue in this part of Lancaster and providing an area of open space and improved leisure/recreational facilities in this location to support future development could help to positively address this issue. Conversely, any residential/employment development at the site would need o be supported by appropriate health and education facilities.
EC 1 Local economy	0/+	Improved leisure/recreation development could have some local economic benefits and there may be opportunities to capitalise upon the proximity to the river. However, this site, if developed in this manner is unlikely to generate significant employment opportunities. It is unknown whether the employment opportunities provided at this site would be taken by local residents. Creating an improved area of open/recreational space could support the wider regeneration proposed in this part of Lancaster. The cumulative effects of regenerating a number of sites in this part of Lancaster could help to increase the attractiveness of the borough as a place to live, work and visit and help encourage more people to use this part of Lancaster City.
EC2 Economic Drivers	0/+	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	+/-	Retaining this existing area of open space would potentially have indirect climate change benefits by maintaining existing drainage patterns and infiltration. The site does lie within Flood Zone 3 and, therefore, a recreational/leisure use may be more appropriate than residential/employment land. Effects are assessed as positive and negative against objective EN 1 – although there is uncertainty about how the site will be used. Retaining this area in an open space/recreational use and improving the quality/range of facilities could have localised townscape benefits. There are existing access issues and air pollution problems in the centre of Lancaster. By providing enhanced recreational facilities at this site, there may be a reduced requirement for travel into the centre of Lancaster for this purpose which could help to alleviate congestion. Effects are uncertain. The nearest designated ecological site is the River Lune which is designated a BHS – this is unlikely to be affected by any development at this site. There is scope for the site to retain as far as possible existing vegetation and to deliver biodiversity improvements that are consistent with the Lancashire Biodiversity Action Plan (BAP). The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. The site lies in close proximity to a historic landfill and there is potential for contamination from this landfill to have migrated into the site. The need for any remediation would depend upon the end use of the site, but if undertaken could benefit soil and water quality, as well as human health. Discussion at the workshop identified this area of Lancaster as potentially having cultural heritage and archaeological value and, therefore, a desk-based assessment may be appropriate. Effects on energy and waste would depend upon the type of use at the site.
EN 2 Water	+/-	
EN 3 Biodiversity	+ /-	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+/-	
EN 6 Energy	?	
EN 7 Heritage	?	
EN 8 Air quality	?	
EN 9 Waste	?	

Recommendations

If the site is used for residential development, a review should be undertaken of the capacity of existing services in the area (schools, healthcare) to accommodate this scale of development and to determine whether additional provision will be required.

The site should be designed to maximise the value of its proximity to the River Lune. Connections with the existing green corridor, Strategic Cycle Link and PRoW should be made from the site. Such improvements should complement the Rights of Way Improvement Plan where possible.

Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals.

There are a number of large sites identified within this part of Lancaster and there may be benefits associated with developing a specific masterplan for all of the sites to enable the full regeneration potential of these sites to be achieved.

Liaison must occur with the EA regarding the requirements for a Flood Risk Assessment at the site (depending upon the final use that is proposed).

A contaminated land desk study should be undertaken to enable the risks associated with historical contamination to be understood. A risk assessment should also be undertaken to determine the remediation that may be required as part of the redevelopment works.

Where possible, existing vegetation should be retained on the site and this should be informed by more detailed ecological surveys.

Allocation: Luneside Family

Cumulative Discussion

- If all or the majority of the sites in this family were to be brought forward, there would be a number of cumulative effects as follows:
- This would make a significant contribution to the achievement of the district's housing targets.
- There would be major regeneration in a area of Lancaster that is targeted for regeneration.
- There would be positive redevelopment of a number of brownfield sites.
- There would be scope to enhance this part of Lancaster to maximise the proximity of the River Lune and to further develop a number of under-utilised footpaths and recreational links – this could have wider landscape/townscape, health and biodiversity benefits.
- There would be potential adverse effects on traffic and transport and as a result air quality. Access to the sites in this family is restricted and relies upon movements through the already congested centre of Lancaster city centre where an AQMA has been designated. This issue would need to be addressed through a transport study that considered the viability of improving public transport and potentially providing a new access point into this area, potentially through a new river crossing (although this in itself could have significant environmental impacts). This issue could also be addressed by improving the number of services in this area to create a new self sufficient district in Lancaster.
- There is scope to provide a number of improvements to recreational links in this part of Lancaster as part of the redevelopment of the sites.
- Owing to the number and size of the sites that are being considered for redevelopment in this area and the potential for significant regeneration benefits to be achieved, it is recommended that consideration is given to creating a masterplan for the area that enables the sites to be considered holistically and for needs across the entire area to be assessed and considered in the design of the sites. There is a risk that ad hoc development of the sites could result in the potential benefits not being realised.
- The existing employment uses in this area are important to the Lancaster economy. The risks associated with the loss of low rent employment land and the effects on local business viability must be considered.
- All of the sites lie within the floodplain and there would be a cumulative loss of floodplain storage if all sites are

developed. Further liaison must occur with the EA regarding the need for Flood Risk Assessment and appropriate mitigation – this issue would again suggest a masterplan for the entire area may be beneficial to enable sufficient storage areas to be included.

- The river flows into the Lune Estuary SSSI and Morecambe Bay SAC, SPA and Ramsar site. Risks will need to be considered further as the options are developed. Further consideration should be given to the potential effects upon the ecologically designated sites adjacent and downstream of the proposals, notably with regard to cumulative development.

2.3 Appraisal of Lancaster East Family Group

Allocation: SHLAA 320 Grab Lane (Strategic Site)

Current Use: Agriculture, greenfield

Potential proposal: residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	?	The provision of new housing on this scale should significantly help to achieve housing targets and increase the quality of the district's housing stock. This may help to improve levels of health together with the opportunities it presents for walking, cycling and the provision of recreational greensapce within the development. However, there may be localised issues regarding traffic congestion and adverse air quality. Noise, vibration and adverse air quality from the M6 may also be a concern. It is not clear how crime and safety would be affected. With regard to access to services, some local services would be provided although access to the site by car and to the city centre is currently constrained and would need to be improved, notably with regard to public transport and car access. Service provision in the area is currently poor and this development could put pressure on this.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	Although some jobs would be created through local service provision, the allocation is primarily aimed at residential development and the effect upon the local economy would extend only insofar as helping to make the district a more attractive place to live. This in turn may encourage a new dynamic of employees to locate to the area. The construction of this large site would also create a number of temporary construction jobs although it is not clear where these may be sourced from.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a large greenfield site currently used for agriculture. Development would lead to potential adverse effects upon local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. Although agricultural, the proposals may result in the loss of some biodiversity such as farmland bird habitat and a loss of the wider green network. The loss of an area of greenfield land of this size could also adversely affect the local landscape and views towards Lancaster from the M6 and the Bowland Fells AONB, notably, views towards (and setting of) the historic Ashton Memorial, Williamson Park and hospital may be affected although this should be confirmed through a visual analysis. Another key concern with this site is that it could encourage significant car usage (especially in conjunction with other sites in proximity) which in turn may lead to traffic congestion at key pinch points and potential adverse effects on air quality and CO_2 emissions. The development of a large site such as this would also increase energy use and waste production, although this would be the case in any area. Note that this site does not affect any statutory or non-statutory environmental designations and it may be possible to mitigate for a number of the environmental issues identified.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

If it is determined that the site would have an adverse landscape and visual effect, it may be possible to reduce this through careful site layout, reduced density, reduced building heights and incorporation of greenspace, trees or other innovative measures for example green roofs. It is recommended that a detailed visual analysis of the site be undertaken. Furthermore, opportunities should be sought to retain green corridors through to Williamson Park from the open countryside beyond.

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling

links and recreational open space.

It seems likely that the whole site would not need to be developed. It is recommended that the boundary be reduced to better focus the development to reducing the environmental impact of the proposals. It may also be prudent to incorporate a buffer zone along the M6 to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

It is recommended that this site is not developed until the adjacent abattoir has also been relocated.

Allocation: SHLAA 878 Lancaster Leisure Park

Current Use: Leisure park with numerous operators

Potential proposal: Residential and retention of some existing leisure uses

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. It is possible that crime levels and fear of crime in the area may be reduced through the provision of higher levels of natural surveillance from the new houses and through incorporating secured by design principles. The site is also located close to Williamson Park which provides opportunities for outdoor recreational access. Access to facilities is currently poor in this area and this development may put pressure on this in combination with other adjacent proposals.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	-	
EC 1 Local economy	-	The loss of some retail units would have a small adverse effect on the area's economic potential albeit that some units will be retained.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	Part of site falls within floodplain. This would need to be avoided and appropriate measures incorporated within the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution. Given the site is currently used for commercial retail purposes, the change of use to residential would have limited impact upon energy use, waste production or traffic generation. However, cumulatively with other adjacent proposals, traffic and access may be an issue. The site also represents a re-use of previously developed land. There are no known features of heritage, biodiversity or landscape significance. The site is currently located next to an abattoir which is also earmarked for redevelopment. If this site is developed whilst the abattoir is still in operation, there may be amenity issues for new residents.
EN 2 Water	-	
EN 3 Biodiversity	0	
EN 4 Landscape/townscape	0	
EN 5 Natural resources	+	
EN 6 Energy	0	
EN 7 Heritage	0	
EN 8 Air quality	?	
EN 9 Waste	0	

Recommendations

Floodplain would need to be avoided and appropriate measures incorporated within the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates.

It is recommended that this site is not developed until the adjacent abattoir has also been relocated.

Allocation: SHLAA 287 Wyresdale Road

Current Use: Abattoir

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. It is possible that crime levels and fear of crime in the area may be reduced through the provision of higher levels of natural surveillance from the new houses and through incorporating secured by design principles. The site is also located close to Williamson Park which provides opportunities for outdoor recreational access. Access to facilities is currently poor in this area so whilst this development may put pressure on this in combination with other adjacent proposals, it does include some provision of local services within it.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	?	The site is currently an abattoir. Redevelopment for residential would result in the loss of this business although it may be relocated elsewhere.
EC2 Economic Drivers	?	
EC 3 Workforce	?	
EC 4 Economic inclusion	0	
EN 1 Climate change	?	The site contains a group of trees protected by TPO. If these were removed there would be a minor adverse effect upon biodiversity and landscape. The replacement of an existing industrial operation with primarily residential use would be beneficial in terms of water quality and it offers the potential to remediate any land contamination that may exist. It is uncertain whether the proposals would use more or less energy than the existing industrial use or produce more or less waste. Whilst the site itself is small, it is likely to result in more traffic movements than the existing use and may result in greater vehicle emissions relative to the existing industrial emissions which are currently regulated.
EN 2 Water	+	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	+/-	
EN 5 Natural resources	+	
EN 6 Energy	?	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	?	

Recommendations

The trees protected by TPO should be retained and incorporated into the development.

The provision of local services and access improvements, particularly opportunities for public transport, are essential for this development in combination with other adjacent sites.

Allocation: SHLAA 876 Farmers Auction Mart

Current Use: Farmer's auction

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. It is possible that crime levels and fear of crime in the area may be reduced through the provision of higher levels of natural surveillance from the new houses and through incorporating secured by design principles. The site is also located close to Williamson Park which provides opportunities for outdoor recreational access. Access to facilities is currently poor in this area so whilst this development may put pressure on this in combination with other adjacent proposals, it does include some provision of local services within it.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	-	The proposals would result in the loss of the farmer's auction thereby losing a local employer. However, it is possible that the auction may relocate elsewhere in Lancaster.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies immediately adjacent to Williamson Park, listed buildings and the Conservation Area. The proposals have potential to improve the townscape adjacent to this to improve views access and the setting of these features. The site reuses previously developed land and presents opportunities to incorporate SuDS which could benefit localised surface/groundwater quality and energy efficiency measures although it is likely that the new development will use more energy and produce more waste than the existing use. Given the increase in vehicle traffic it may also cause, this could give rise to an increase in CO_2 emissions. Cumulatively with other adjacent developments, the effect on traffic congestion may result in localised adverse air quality effects.
EN 2 Water	+	
EN 3 Biodiversity	0	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	+	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Good, sensitive design is essential for this site given its proximity to the registered park, listed buildings and conservation area.

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use.

Allocation: SHLAA 405 Lancaster Moor

Current Use: Vacant former hospital site.

Potential proposal: Planning permission granted for 440 dwellings including conversion of hospital.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The preservation of the historic hospital building is potentially beneficial for the spread of knowledge regarding historic assets and the former hospital activities.
S 2 Housing	+	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. The site is also located adjacent to areas of open and green space which provide outdoor recreational opportunities. It is possible that crime levels and fear of crime in the area may be reduced through the provision of higher levels of natural surveillance from the new houses and through incorporating secured by design principles. Access to facilities is currently poor in this area so this development may put pressure on this in combination with other adjacent proposals.
S3 Health	+	
S4 Learning	+	
S5 Access	-	The proximity of the site to the young offenders institute may be considered to affect residents fear of crime levels.
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site incorporates the conversion of the existing listed former hospital building. Assuming this conversion is sensitive to the building this provides an opportunity for the retention and preservation of the listed structure and its setting.
EN 2 Water	-	Part of the site is brownfield land and part of the site is greenfield. Development on the greenfield areas has potential to result in adverse effects upon water quality, drainage, landscape and potentially also biodiversity (for example farmland bird habitat). Some of the greenfield land is currently designated as urban greenspace.
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	+	The use of previously developed land and buildings on the majority of the site represents a sustainable use of natural resources and offers the potential to remediate any former contamination left from the hospital activities. Nonetheless, the site will provide a new waste producing source.
EN 6 Energy	-	
EN 7 Heritage	+	
EN 8 Air quality	-	Whilst the site has good access to thte city centre via road, this has potential to increase traffic flows along this route, potentially leading to an increase in vehicle emissions including greenhouse gas emissions.
EN 9 Waste	-	

Recommendations

The conversion of the listed hospital building should be sensitive to its historic value and its setting.

Existing woodland should be retained and enhanced where possible.

Urban greenspace should be retained within the development proposals.

SuDS schemes should be proposed to benefit water quality and drainage.

A green travel plan should be developed to alleviate any potential increase in traffic congestion.

High standards of sustainable design should be incorporated to improve energy and resource efficiency.

Allocation: SHLAA 412 Nightingale Hall Farm

Current Use: Former rendering plant

Potential proposal: Planning permission granted for 164 dwellings

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. The site has good access to adjacent open/greenspace which could provide recreational opportunities and improve health and wellbeing levels. Crime levels and fear of crime around this vacant site may be reduced through the provision of higher levels of natural surveillance from the new houses and through incorporating secured by design principles. The site has relatively easy access to city centre facilities via the highway network.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies adjacent to Williamson Park and the Conservation Area. The proposals have potential to improve the townscape adjacent to this to improve views access and the setting of these features. The site reuses previously developed land and presents opportunities to incorporate SuDS which could benefit localised surface/groundwater quality and energy efficiency measures although it is likely that the new development will use more energy and produce more waste than the existing use. Given the increase in vehicle traffic it may also cause, this could give rise to an increase in CO_2 emissions. Cumulatively with other adjacent developments, the effect on traffic congestion may result in localised adverse air quality effects.
EN 2 Water	+	
EN 3 Biodiversity	0	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	+	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

The development design should be sensitive to the setting of the adjacent historic Williamson Park.

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use.

Allocation: ES 13 Ridge Lea

Current Use: Hospital although NHS suggest this may become available in the future

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The proposal would help to meet housing requirements and improve the overall quality of the local housing stock. This may benefit human health. The site has good access to adjacent open/greenspace which could provide recreational opportunities and improve health and wellbeing levels. This site is poorly served by local services although some local services would be provided as part of the development proposals. The proximity of the site to the young offenders institute may be considered to affect residents' fear of crime levels.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	-	The proposals are primarily residential. This assumes that the existing hospital will close down and jobs will subsequently be lost or relocated. Some new jobs would be created through the provision of local services although on balance it is assumed that there may be a net loss of jobs.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies immediately adjacent to the historic Williamson Park. The proposals have potential to improve the townscape adjacent to this to improve views access and the setting of these features. The site reuses previously developed land and presents opportunities to incorporate SuDS which could benefit localised surface/groundwater quality and energy efficiency measures although it is likely that the new development will use more energy and produce more waste than the existing use. Given the increase in vehicle traffic it may also cause, this could give rise to an increase in CO_2 emissions. Cumulatively with other adjacent developments, the effect on traffic congestion may result in localised adverse air quality effects.
EN 2 Water	+	
EN 3 Biodiversity	0	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	+	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

The development design should be sensitive to the setting of the adjacent historic Williamson Park.

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use.

Allocation: SHLAA 323 Newlands Road

Current Use: Agricultural use

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	?	The provision of new housing should help to achieve housing targets and increase the quality of the district's housing stock. This may help to improve levels of health together with the opportunities it presents for walking, cycling and the provision of recreational greensapce in adjacent areas. However, there may be localised issues regarding traffic congestion and adverse air quality. Noise, vibration and adverse air quality from the M6 may also be a concern. It is not clear how crime and safety would be affected. With regard to access to services, some local services would be provided although access to the site by car and to the city centre is currently constrained and would need to be improved, notably with regard to public transport and car access. Service provision in the area is currently poor and this development could put pressure on this.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	Although some jobs would be created through local service provision, the allocation is primarily aimed at residential development and the effect upon the local economy would extend only insofar as helping to make the district a more attractive place to live. This in turn may encourage a new dynamic of employees to locate to the area.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a greenfield site currently used for agriculture. Development would lead to potential adverse effects upon local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. Although agricultural, the proposals may result in the loss of some biodiversity such as farmland bird habitat and a loss of the wider green network. The loss of an area of greenfield land in this location could also adversely affect the local landscape and views towards Lancaster from the M6 although this site is smaller than the nearby Grab lane site and is partially screened by existing development. Access to the site is currently poor and the development is likely to encourage car trips which in turn may lead to traffic congestion at key pinch points and potential adverse effects on air quality and CO_2 emissions. The development would also increase energy use and waste production, although this would be the case in any area. Note that this site does not affect any statutory or non-statutory environmental designations and it may be possible to mitigate for a number of the environmental issues identified.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Measures should be proposed to incorporate energy efficient design and SuDS.

Consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space.

It may also be prudent to incorporate a buffer zone along the M6 to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

Allocation: ES 8 Daisybank

Current Use: Agriculture

Potential proposal: Residential with some local service provision

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	?	The provision of new housing should help to achieve housing targets and increase the quality of the district's housing stock. This may help to improve levels of health together with the opportunities it presents for walking, cycling and the provision of recreational greensapce in adjacent areas. However, there may be localised issues regarding traffic congestion and adverse air quality. Noise, vibration and adverse air quality from the M6 may also be a concern. It is not clear how crime and safety would be affected. With regard to access to services, some local services would be provided. Service provision in the area is currently poor and this development could put pressure on this.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	Although some jobs would be created through local service provision, the allocation is primarily aimed at residential development and the effect upon the local economy would extend only insofar as helping to make the district a more attractive place to live. This in turn may encourage a new dynamic of employees to locate to the area.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a greenfield site currently used for agriculture. Development would lead to potential adverse effects upon local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. Although agricultural, the proposals may result in the loss of some biodiversity such as farmland bird habitat and a loss of the wider green network. The loss of an area of greenfield land in this location could also adversely affect the local landscape and views towards Lancaster from the M6 although this site is smaller than the nearby Grab lane site. Access to the site is currently poor and the development is likely to encourage car trips which in turn may lead to traffic congestion at key pinch points and potential adverse effects on air quality and CO_2 emissions. The development would also increase energy use and waste production, although this would be the case in any area. Note that this site does not affect any statutory or non-statutory environmental designations and it may be possible to mitigate for a number of the environmental issues identified.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Measures should be proposed to incorporate energy efficient design and SuDS.

Consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space.

It may also be prudent to incorporate a buffer zone along the M6 to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

Allocation: SHLAA 380 Land at Fenham Carr Lane

Current Use: Greenfield site designated as a BHS

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The development of the site would result in a loss of open space although it would result in new houses being built next to an available recreational resource in the neighbouring Williamson Park thereby providing a service to the new residents. Access to other essential services is more limited in this location although some local services may be provided. The provision of new housing should help to achieve housing targets and increase the quality of the district's housing stock.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	Although some jobs would be created through local service provision, the allocation is primarily aimed at residential development and the effect upon the local economy would extend only insofar as helping to make the district a more attractive place to live. This in turn may encourage a new dynamic of employees to locate to the area.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a small greenfield site currently designated as a BHS containing grassland and trees. The development of the site would destroy this habitat and reduce the area of the wider green infrastructure network. As this is a greenfield site, development would also have potential to adversely affect water quality and run-off rates and would impact upon the local landscape including views towards the adjacent Williamson Park, Conservation Area and the Ashton Memorial. Access to the site is currently poor and the development is likely to encourage car trips which in turn may lead to traffic congestion at key pinch points and potential adverse effects on air quality and CO_2 emissions. The development would also increase energy use and waste production, although this would be the case in any area.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It is recommended that the biological importance of this site is given significant consideration. If the site were to be developed, a commensurate compensation package should be delivered and the impacts on the site itself minimised through careful design and layout.

As with other sites, measures should be proposed to incorporate energy efficient design and SuDS and consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space.

Allocation: SHLAA 1310 Land at Fenham Carr Lane

Current Use: Greenfield site.

Potential proposal: Residential with some local services

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The development of the site would result in a loss of greenspace although it would result in new houses being built next to an available recreational resource in the neighbouring Williamson Park thereby providing a service to the new residents. Access to other essential services is more limited in this location although some local services may be provided assuming there is sufficient critical mass with other local developments. The provision of new housing should help to achieve housing targets and increase the quality of the district's housing stock.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	Although some jobs would be created through local service provision, the allocation is primarily aimed at residential development and the effect upon the local economy would extend only insofar as helping to make the district a more attractive place to live. This in turn may encourage a new dynamic of employees to locate to the area.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a small greenfield site so any new development will have the potential to adversely affect water quality and potentially biodiversity if present on the site. Whilst the site itself is not designated for any particular sensitivity, it does lie adjacent to a BHS, Conservation Area and Historic Park and Garden. Development has potential to adversely affect the setting of the heritage feature and may cause indirect disturbance to the BHS although sensitive design should be able to minimise these effects. Access to the site is currently poor and the development is likely to encourage car trips which in turn may lead to traffic congestion at key pinch points and potential adverse effects on air quality and CO_2 emissions. The development would also increase energy use and waste production, although this would be the case in any area.
EN 2 Water	-	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It would be important for the site to be designed and developed with consideration to avoiding adverse impacts upon the neighbouring Williamson Park and BHS.

If site SHLAA 380 were to be developed, this site should perhaps be left undeveloped to retain a green linkage from Williamson Park to the open countryside.

As with other sites, measures should be proposed to incorporate energy efficient design and SuDS and consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space.

Allocation: Lancaster East Family Group

Cumulative Discussion

If all or the majority of the sites in this family were to be brought forward, there would be a number of cumulative effects as follows:

- This would make a significant contribution to the achievement of the district's housing targets.
- Cumulative traffic generation could be a significant issue given the low capacity of the existing road network and key pinch points en route to the city centre. This may result in pockets of congestion, noise and poorer air quality. Further options regarding access via junction 33 of the M6 would need to be explored although these may have further environmental impacts. A comprehensive public transport and walking and cycling network should also be encouraged.
- Loss of greenspace, potential farmland bird habitat and landscape resource, notably with respect to those greenfield sites on the urban fringe (particularly the Grab Lane site). These may also have adverse effects upon views towards the city from the M6 and the Bowland Fells AONB including to the Ashton Memorial and Williamson Park. It is recommended that a viewpoint analysis be undertaken and options be considered for sensitive layout, density and design of the developments to minimise any adverse effects.
- If all or many of these sites were to come forward it is recommended that green corridors be maintained through the sites connecting the open countryside through to Williamson Park and into the City.

2.4 Appraisal of Lancaster South Family Group

Allocation: SHLAA 285 Land off Bailrigg Lane

Current Use: Agricultural land

Potential proposal: Mixed use development including residential

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	?	It is unknown as to what effects this allocation would have on crime rates, however, there is a growing body of research that establishes the relationships between local environmental quality, crime levels and people's fear of crime. Higher quality living environments can also be a big factor in attracting investment, visitors and creating a virtuous cycle of regeneration and community ownership. The provision of new housing units within this allocation would contribute to meeting housing targets, improving Lancaster's housing stock and offer indirect health benefits. Additional residential development may, however, put additional pressure on existing health services, therefore additional local service provision would be required as part of developing a site of this size. Access is likely to be an issue for this large allocation as at present there is only one existing route out of Lancaster City to the South (A6) which suffers from congestion problems. Exacerbating congestion problems on the A6 would also decrease local air quality. There may also be noise issues associated with this allocation due to its proximity to the M6. Overhead powerlines within this allocation may also cause problems with development on this site. This site does, however, offer opportunities to link the university with the City centre and has existing public transport infrastructure in place. A strategic cycle network route passes through the site to the west which links the university with the City centre. This route should be maintained if the site is taken forward and developed as it would promote sustainable transport and promote healthy lifestyles.
S 2 Housing	+	
S3 Health	?	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	+	A small number of jobs would be created through additional local service provision that would be required as part of developing a site of this size. Improvements to the local environment would also attract new residents to the area which in turn could lead to increased investment, facilitate regeneration and create a place people want to work and live. However, it should be ensured that there are sufficient employment opportunities within Lancaster and surrounding areas to support the increased population of this large allocation. This site would generate a large number of temporary construction jobs although it is not certain where these may be sourced from.
EC2 Economic Drivers	+	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a large greenfield area currently used for agricultural purposes. Development on a site of this size would also lead to potential adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk, particularly as the western boundary of the allocation lies within Flood Zone 3. Although agricultural, the proposals may result in the loss of some biodiversity such as farmland bird habitat and a loss of the wider green network, a green corridor forms the western boundary of the allocation. It should be ensured this green corridor is preserved along with the row of trees that form part of the western boundary of the allocation (as they are protected by TPOs) as both will facilitate the movement of wildlife throughout the borough. It is known that Great Crested Newts are present within ponds in South Lancaster. The loss of an area of greenfield land of this size could also adversely affect the local landscape and views towards Lancaster and of the open countryside. In addition vistas from existing residential properties that currently look out onto open greenfield land would be permanently changed. If the allocation were taken forward and developed in its entirety energy use would significantly increase along with waste production. Local climate change and air quality
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	

	would also be affected as the Galgate / Hala areas currently suffer with congestion problems at peak times and a development of this size would increase the number of private cars on the local road network increasing local CO_2 emissions and causing local air quality issues. Constraints mapping does not indicate the presence of heritage resources within the allocation or immediate surrounding area, however, new development would pose risks to unknown archaeological remains.

Recommendations

If determined this site would have an adverse landscape and visual effect, it would be possible to reduce this through careful site layout, reducing density, reducing building heights and including areas of greenspace and trees. It is recommended that detailed visual analysis of the site is undertaken. Opportunities should also be sought to retain the green corridor that forms the western boundary of the allocation, along Burrow Beck and the TPOs that form part of the western boundary.

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power (CHP) and micro wind generation) and SuDS.

Consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space (this would mitigate for existing large areas of informal open space lost to development).

It is recommended that the boundary be reduced to better focus the development to reducing the environmental impact of the proposals (i.e. away from Burrows Beck located within Flood Zone 3, away from green corridors and TPOs). It may also be prudent to incorporate a buffer zone along the M6 to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

It should be ensured that safety by design measures are incorporated into an allocation of this size.

Allocation: SHLAA 286 Land at Whinney Carr/Lawson's Bridge

Current Use: Agricultural land

Potential proposal: Mixed use

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	?	It is unknown as to what effects this allocation would have on crime rates, however, there is a growing body of research that establishes the relationships between local environmental quality, crime levels and people's fear of crime. Higher quality living environments can also be a big factor in attracting investment, visitors and creating a virtuous cycle of regeneration and community ownership. The provision of new housing units within this allocation would contribute to meeting housing targets, improving Lancaster's housing stock and offer indirect health benefits. Additional residential development may, however, put additional pressure on existing health services (in an area where there seems to be a lack of local services), therefore additional local service provision would be required as part of developing a site of this size. Access is likely to be an issue for this large allocation as at present there is only one existing route out of Lancaster City to the South (A6) which suffers from congestion problems. Exacerbating congestion problems on the A6 would also worsen local air quality and may lead to health problems. In order for this site to be brought forward it would need to be demonstrated that crossing the rail line would be feasible. This site does, however, have good links to the City centre and located on existing public transport routes.
S 2 Housing	+	
S3 Health	?	
S4 Learning	0	
S5 Access	-	
EC 1 Local economy	+	A small number of jobs would be created through additional local service provision that would be required as part of developing a site of this size. Improvements to the local environment would also attract new residents to the area which in turn could lead to increased investment, facilitate regeneration and create a place people want to work and
EC2 Economic Drivers	+	
EC 3 Workforce	0	

EC 4 Economic inclusion	0	live. However, it should be ensured that there are sufficient employment opportunities within Lancaster and surrounding areas to support the increased population of this large allocation. This site would generate a large number of temporary construction jobs although it is not certain where these would be sourced from.
EN 1 Climate change	-	This is a large greenfield area currently used for agricultural purposes. Development on a site of this size would also lead to potential adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk, particularly as the southern boundary of the allocation lies within Flood Zone 3. Although agricultural, the proposals may result in the loss of some biodiversity such as farmland bird habitat and a loss of the wider green network, a green corridor forms the western boundary of the allocation along with the Lancaster Canal BHS. It is known that Great Crested Newts are present within ponds in South Lancaster. The loss of an area of greenfield land of this size could also adversely affect the local landscape and views towards Lancaster and of the open countryside. In addition vistas from existing residential properties that currently look out onto open greenfield land would be permanently changed. It should be ensured that TPOs along the eastern boundary of the allocation are preserved to help screen existing views from residential property on the A6 from the large allocation. If the allocation were taken forward and developed in its entirety energy use would significantly increase along with waste production. Local climate change and air quality would also be affected as the Galgate / Hala areas currently suffer with congestion problems at peak times and a development of this size would increase the number of private cars on the local road network increasing local CO_2 emissions and causing local air quality issues. A railway line and the A6 dissect this allocation towards to east which may have noise implications for new residents. Constraints mapping does not indicate the presence of heritage resources within the allocation or immediate surrounding area, however, new development would pose risks to unknown archaeological remains.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It is recommended that detailed visual analysis of the site is undertaken. If determined this site would have an adverse landscape and visual effect, it would be possible to reduce this through careful site layout, reducing density, reducing building heights and including areas of greenspace and trees. Opportunities should also be sought to retain the green corridor that forms the western boundary of the allocation and Lancaster Canal BHS.

Given the scale of the site, measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, CHP and micro wind generation) and SuDS.

Consideration should be given to improving the transport links into the site and connections to wider areas and the city centre including increased public transport provision. Opportunities should also be sought to incorporate walking and cycling links and recreational open space (this would mitigate for existing large areas of informal open space lost to development).

It seems likely that the whole site would not need to be developed. It is recommended that the boundary be reduced to better focus the development to reducing the environmental impact of the proposals (i.e. away from flood zones and Lancaster Canal BHS). It may also be prudent to incorporate a buffer zone along the A6 and railway line to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

It should be ensured that safety by design measures are incorporated into an allocation of this size.

Allocation: SHLAA 414 Land behind Royal Albert Hospital

Current Use: Grounds of the Royal Albert Hospital

Potential proposal: Residential

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	It is unlikely that this site in isolation would lead to significant changes in crime rates due to its size, however, residential development to the rear of the Royal Albert hospital would increase natural surveillance of the area. The provision of new housing units within this allocation would contribute to meeting housing targets, improving Lancaster's housing stock and offer indirect health benefits. Additional residential development, although small scale, may put additional pressure on existing health services (in an area where there seems to be a lack of local services). Access could be an issue for this allocation as there appears to be one existing route in and out of the allocation. The site does appear to have good links to the City centre with a strategic cycle network route located adjacent to the site boundary. The site is not located on a primary bus corridor therefore access to public transport may be an issue for this allocation.
S 2 Housing	+	
S3 Health	0	
S4 Learning	0	
S5 Access	-	
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	It is unlikely this small area of open space to the rear of the Royal Albert Hospital would lead to significant adverse effects on landscape and townscape. This is because the site appears to be an enclosed landscape bounded by trees and hedgerows which would help screen residential development from surrounding areas. Existing views from the hospital will be permanently changed. Several listed buildings are also located to the north west of the allocation however the Royal Albert Hospital appears to screen these historic buildings from the allocation. New development could pose risks to unknown archaeological remains. Development on this site could lead to minor adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. Residential proposals would also result in the loss of some biodiversity resources such as bird habitat and a loss of green areas. New development on this site would lead to increased energy use and waste production. Local climate change and air quality could also be affected as the Galgate / Hala areas currently suffer with congestion problems at peak times and this allocation could add to an existing problem as it would increase the number of private cars on the local road network increasing local CO_2 emissions and causing local air quality issues. However, due to the small size of the allocation these effects are not likely to be significant if the site were to be taken forward in isolation.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	0	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use.

It should be ensured local service provision can accommodate a proposed increase in population.

Hedgrows and trees (although not covered with TPO status) should be preserved where possible as this would help to protect biodiversity resources and facilitate the movement of wildlife throughout the borough.

Allocation: SHLAA 382 Land at Royal Albert Fields

Current Use: Recreation / Urban Greenspace

Potential proposal: Residential

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This small allocation is currently designated as Urban Greenspace in its entirety, and could be used for recreational purposes. If taken forward this greenspace would be permanently lost and could have health implications. It is unlikely that this site in isolation would lead to significant changes in crime rates due to its size, however, residential development on this allocation would increase natural surveillance of the area. The provision of new housing units within this allocation would also contribute to meeting housing targets and improve Lancaster's housing stock. The site does appear to have good links to the City centre, via Ashton Road (avoiding the congested A6) with a strategic cycle route very close to the site boundary. The site is not located on a primary bus corridor therefore access to public transport may be an issue for this allocation.
S 2 Housing	+	
S3 Health	0	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	Environmental constraints mapping does not identify any environmental designations on this allocation or within close proximity. It is unlikely this small area of urban greenspace located on Royal Albert Fields would lead to significant adverse effects on landscape and townscape. This is because the site appears to be an enclosed landscape bounded by trees and hedgerows which would help screen residential development from surrounding areas. Existing views from Ashton Road would however be permanently changed. New residential development could also pose risks to unknown archaeological remains. Although a small allocation development on this site could lead to minor adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. New residential proposals may also result in the loss of some biodiversity resources such as bird habitat and a loss of wildlife corridors (hedgerows). New development on this site would lead to increased energy use, use of natural resources and waste production. Local climate change and air quality could also be affected as the Galgate / Hala areas currently suffer with congestion problems at peak times and this allocation could add to an existing problem as it would increase the number of private cars on the local road network increasing local CO_2 emissions and causing local air quality issues. However, these effects are not likely to be significant due to the size of the allocation.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	0	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	0	
EN 9 Waste	-	

Recommendations

Some urban greenspace should be retained within the development proposals.

It should be ensured local service provision can accommodate a proposed increase in population.

Hedgrows and trees (although not covered with TPO status) should be preserved at this site if it were to be taken forward and developed as this would help to protect biodiversity resources and facilitate the movement of wildlife throughout the borough.

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use.

Allocation: CFS 15 Land opposite Cutting Farm

Current Use: Agricultural land

Potential proposal: Residential

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	It is unlikely that this site in isolation would lead to significant changes in crime rates due to its small size, however, residential development on this allocation would increase natural surveillance of the area. The provision of new housing units within this allocation would also contribute to meeting housing targets and improve Lancaster's housing stock. Additional residential development, although small scale, may put additional pressure on existing health services (in an area where there seems to be a lack of local services). The site does appear to have good links to the City centre via Ashton Road, which means it can be accessed avoiding the congested A6 route. Immediately north of the allocation is a public footpath and part of the strategic cycle network which may offer indirect benefits to health (encouraging people to walk / cycle into the centre of Lancaster). However, the site is not located on a primary bus corridor therefore access to public transport may be an issue for this allocation.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district. However, the allocation is very small therefore any effects would be very minor.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	If taken forward this small site currently used for agricultural purposes would be permanently lost along with biodiversity resources at the site. Lancaster Canal Forms the eastern boundary of the allocation which is designated a BHS and forms an important green corridor for the district. It should be ensured proposals for residential development at the site do not impact upon this important district asset. Although not located within a flood zone the Lancaster Canal forms the eastern boundary of the allocation, therefore new development could increase surface run-off which may in turn lead to an increase in localised flood risk and water quality issues. The site appears to be a largely enclosed landscape with trees and hedgerows following the south and eastern boundaries. However, views from residential properties opposite the allocation on Ashton Road, would be permanently changed. There are no heritage assets within the allocation or within the immediate vicinity of the allocation, however, there may be risks to buried unknown archaeological remains. Like any new residential development this allocation would lead to increased energy use and produce more waste than the existing agricultural use. Given the small increase in vehicle traffic it may also cause, this could give rise to a small increase in CO_2 emissions locally. However, it is not likely these effects would be significant. Cumulatively with other adjacent developments, the effect on traffic congestion may result in localised adverse air quality effects, particularly if SHLAA_286 and SHLAA_285 were taken forward. Although a small allocation development on this site could lead to minor adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	0	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	0	
EN 9 Waste	-	

Recommendations

It should be ensured adequate public transport infrastructure is in place at this site as a lack of public transport options would lead to an increased use in private cars which would exacerbate existing congestion problems in Lancaster.

It should be ensured local service provision can accommodate a proposed increase in population.

Hedgrows and trees (although not covered with TPO status) should be preserved at this site if it were to be taken forward and developed as this would help to protect biodiversity resources and facilitate the movement of wildlife throughout the borough.

The proposals should encourage the use of SuDS to ensure that an improvement in water quality and reduced run-off rates occur compared with the existing use, due to the proximity of Lancaster Canal.

Allocation: CFS 16 Land between Pinewood Close and Carr Lane Bridge

Current Use: Agricultural land

Potential proposal: Residential

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	It is unlikely that this site in isolation would lead to significant changes in crime rates due to its small size, however, residential development on this allocation would increase natural surveillance of the area and should incorporate secured by design principles. The provision of new housing units within this allocation would also contribute to meeting housing targets and improve Lancaster's housing stock. Additional residential development, although small scale, may put additional pressure on existing health services (in an area where there seems to be a lack of local services). The site does appear to have good links to the City centre via Ashton Road, which means it can be accessed avoiding the congested A6 route. There two public footpaths located to the south and west of the allocation which lead into areas of open countryside which may offer indirect health benefits for new residents. However, the site is not located on a primary bus corridor therefore access to public transport may be an issue for this allocation.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+/-	
EC 1 Local economy	0	The proposal is for residential development only. There may be some indirect benefits to the economy through the creation of new housing which may encourage people to live and work in the district. However, the allocation is small therefore any effects would be very minor.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	If taken forward this small site currently used for agricultural purposes would be permanently lost along with biodiversity resources at the site. Lancaster Canal Forms the eastern boundary of the allocation which is designated a BHS and forms an important green corridor for the district. It should be ensured proposals for residential development at the site do not impact upon this important district asset. The site appears to be a largely open landscape with trees and hedgerows following only the eastern boundary. Views from residential properties opposite the allocation on Pinewood Close would be permanently changed. There are no heritage assets within the allocation or within the immediate vicinity of the allocation, however, there may be risks to buried unknown archaeological remains. Like any new residential development this allocation would lead to increased energy use and produce more waste than the existing agricultural use. Given the small increase in vehicle traffic it may also cause, this could give rise to a small increase in CO_2 emissions locally. However, it is not likely these effects would be significant. Cumulatively with other adjacent developments in the South Lancaster Family the effect on traffic congestion may result in
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	0	
EN 9 Waste	-	

	significant adverse air quality effects, particularly if both SHLAA_286 and SHLAA_285 were taken forward. Although small, new residential development on this site could lead to adverse effects on local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk and water quality issues. This would be particularly important to mitigate due to the proximity of the Lancaster Canal BHS.

Recommendations

It is recommended a visual analysis of the site is undertaken. If determined this site would have an adverse landscape and visual effect, it would be possible to mitigate this through careful site layout.

It should be ensured local service provision can accommodate a proposed increase in population.

It should be ensured adequate public transport infrastructure is in place at this site as a lack of public transport options would lead to an increased use in private cars which would exacerbate existing congestion problems in Lancaster.

Allocation: Lancaster South Family Group

Cumulative Discussion

If all or the majority of the sites in the Lancaster South Family were to be brought forward, there would be a number of cumulative effects as follows:

- Cumulative large loss of agricultural land / greenspace, potential farmland bird habitat and landscape resource, particularly with SHLAA_286 and SHLAA_285 sites. These may also have adverse effects upon views from existing properties in South Lancaster, views from the A6 (particularly approaching South Lancaster from the south) and views from the M6 towards Lancaster City. It is therefore recommended that a viewpoint analysis be undertaken and options be considered for sensitive layout, density and design of the developments to minimise any adverse effects.
- This family would make a significant contribution to the achievement of the district's housing targets and improvements to housing stock.
- Cumulative traffic generation would be a significant issue if all sites were to be brought forward in this family due to the low capacity of the existing road network and key pinch points (Hala and Galgate) en route to the city centre. Development would exacerbate current congestion problems resulting in greater noise nuisance, poorer air quality and increased CO_2 emissions. The Highways Agency stated they would not be averse to an additional junction on the M6, however, they would not pay for it. This option would need to be explored as a new junction on the M6 may lead to further environmental impacts. Opportunities to create a link road through from Aston Road to the A6 (which would alleviate the Hala area) would also need to be explored further.
- Walking and cycling networks should be maximised.
- Existing public transport infrastructure would need to be enhanced, particularly if sites SHLAA_286 and SHLAA_285 were both brought forward, due to the potential large increase in population.
- Local service provision would also need to be enhanced if all sites were to be brought forward for development as cumulatively this family would lead to a large increase in population which would put a strain on existing local services (seems to be a general deficiency of local service provision within South Lancaster).
- If all of these sites were to be brought forward it is recommended that green corridors be maintained through the sites connecting the open countryside through new residential development and into the City.

2.5 Appraisal of Carnforth Family Group

Allocation: SG4_South Carnforth (Strategic Site)

Current Use: The site is currently greenbelt and used for agriculture

Potential proposal: Residential development (this site was identified through the spatial planning engagement sessions in early 2011. The Carnforth Regeneration Area Project has also identified opportunity for leisure led development in this part of Carnforth.)

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This is a very large site that could positively contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. This is an area of the borough where there is a need for market and affordable housing. Discussion at the workshop suggested that development of sites south of Carnforth would require access improvements. Whilst there are very good strategic links (M6 in close proximity and west coast mainline railway) that provide excellent links out of the borough, links within Carnforth itself are more restricted and there are already congestion problems. There may be scope to improve cycle connections into Carnforth to help reduce congestion and to encourage the pursuit of healthier lifestyles. Access to services could potentially be an issue for this site, owing to its distance from the centre of Carnforth – development of this scale would require associated infrastructure including health and education facilities. If the site were developed to provide new leisure facilities including football, cricket and rugby then there could be local health and access benefits. It is acknowledged that Carnforth requires a greater number and variety of recreational facilities. Effects are assessed as positive and negative against health and learning as it is recognised that more facilities are required but there is the potential for this scale of development to help stimulate greater local service provision in Carnforth. Part of the site is PPG 17 open space and this area of open space should not be lost – it will also be important for the site to incorporate the number of PRoW that cross the site and for connections to the Lancaster Canal to be enhanced which is a valuable recreational resource. If a new residential development of this size is developed then secured by design principles should be adopted to ensure that a safe community is established.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	+/-	
S5 Access	+/-	
EC 1 Local economy	0	Effects on the local economy are uncertain. Discussion at the workshop identified that this site, compared to others in the centre of Carnforth may be better suited to residential owing to a number of constraints that might restrict the suitability of other sites for housing development. It is, therefore, not expected that this site would make a significant contribution to the local economy. However, if the quality and mix of housing available in Carnfoth were improved and new recreational/leisure facilities provided then this may make Carnforth a more attractive place to live and work. Conversely, the proximity of the M6 to this site may mean that new residents live at the site but out-commute for employment to other boroughs which would result in the loss of potential income for the borough. There would be a loss of agricultural land which could have localised adverse economic effects for the landowners involved. Given the scale of the site, development would create a number of temporary construction jobs although it is not certain where these would be sourced from.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a large greenfield site currently used for agriculture. Development would lead to potential adverse effects upon local water quality and drainage patterns increasing surface
EN 2 Water	-	

EN 3 Biodiversity	-
EN 4 Landscape/townscape	-
EN 5 Natural resources	-
EN 6 Energy	-
EN 7 Heritage	
EN 8 Air quality	-
EN 9 Waste	-

run-off which may in turn lead to an increase in localised flood risk. However, this site currently lies outside of the floodplain. The site lies within the Greenbelt and a strategic review of the Greenbelt would be required if the site were to be developed – at the workshop it was questioned whether development of this scale is needed in Carnforth and that evidence should be obtained to determine whether such a strategic review of the Greenbelt is needed. There would also be potential landscape and visual amenity effects as a result of developing a site of this scale.

Within the boundary of the site there is a BHS (the boundary of this is consistent with the PPG17 open space designation). Any development could adversely affect this site and ecological surveys and appropriate mitigation would be required to inform a planning application. The loss of land to development that is currently agricultural could also result in the loss of farmland bird habitat. It is acknowledged above that there are access constraints and development of this scale could increase local air pollution (there is already an AQMA designated in the centre of Carnforth as a result of vehicular traffic).

The site borders the M6 and so there would be nuisance and air quality issues that may place a constraint on housing development.

Development of this scale may also be visible from the Arnside and Silverdale AONB which lies to the west of the site (approximately 4 km away).

As this is a greenfield site that would result in the loss of soil resources effects are assessed as negative for EN 5. The site would also affect a Geodiversity Heritage Site.

A development of this site would increase energy use and waste production, although this would be the case in any area.

Whilst there are no known heritage features within the site boundary, there are Listed Buildings to the south west of the site boundary. Potential effects on the setting of these Listed Buildings would need to be assessed and an archaeological desk study completed to inform the site development and design.

Recommendations

If a new residential development of this size is developed then secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

A number of PRoW cross the site, these should be effectively incorporated into the site and improved connections provided to the Lancaster Canal.

It may be possible to reduce the landscape and visual amenity effects through careful site layout, reduced density, reduced building heights and incorporation of greenspace, trees or other innovative measures for example green roofs. It is recommended that a detailed visual analysis of the site be undertaken and the visibility of the site from the AONB. Furthermore, opportunities should be sought to retain green corridors through to the Lancaster Canal and the countryside beyond.

Further consideration should be given to the scale of development and the amount of new housing required in Carnforth. This information should be used to inform decisions about whether a strategic review of the Greenbelt is appropriate and whether further studies should be undertaken into the viability of the site – there are a number of environmental constraints at this site that would need to be effectively mitigated.

Consideration should be given to improving the transport links into the site and connections to wider areas and the centre of Carnforth including increased public transport provision.

It seems likely that the whole site would not need to be developed. It is recommended that the boundary be reduced/reconsidered to better focus the development and to reduce the environmental impact. It may also be prudent to incorporate a buffer zone along the M6 to avoid adverse impacts of traffic noise, vibration and air quality on new residents.

Allocation: CFS_18 land to the South of Windermere Road, Carnforth

Current Use: Currently identified as greenbelt.

Potential proposal: Site submitted to the council through the Call for Sites process as an area of land with potential for residential development.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. This is an area of the borough where there is a need for market and affordable housing.
S 2 Housing	+	
S3 Health	+/-	Whilst there are very good strategic links (M6 in close proximity and west coast mainline railway) that provide excellent links out of the borough, links within Carnforth itself are more restricted and there are already congestion problems. There may be scope to improve cycle connections into Carnforth to help reduce congestion and to encourage the pursuit of healthier lifestyles. Whilst this site borders an existing residential development to the north, access to services could potentially be an issue for this site, owing to its distance from the centre of Carnforth (as the crow flies, it is approximately 1300m from the site to Carnforth station) – it is expected that new health and education facilities would be required. Effects are assessed as positive and negative against health and learning as it is recognised that more facilities are required but there is the potential for this scale of development to help stimulate greater local service provision in Carnforth. A PRoW cross the site and there is scope for the site to be designed to improve existing footpath and cycle links which would help encourage new residents to pursue healthy lifestyles. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
S4 Learning	+/-	
S5 Access	+/-	
EC 1 Local economy	0	Effects on the local economy are uncertain. Discussion at the workshop identified that this site, compared to others in the centre of Carnforth may be better suited to residential owing to a number of constraints that might restrict the suitability of other sites for housing development. It is, therefore, not expected that this site would make a significant contribution to the local economy. However, if the quality and mix of housing available in Carnforth were improved and new recreational/leisure facilities provided then this may make Carnforth a more attractive place to live and work. Conversely, the proximity of the M6 to this site may mean that new residents live at the site but out-commute for employment to other boroughs which would result in the loss of potential income for the borough.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This is a greenfield site and development would lead to potential adverse effects upon local water quality and drainage patterns increasing surface run-off which may in turn lead to an increase in localised flood risk. Part of the site also lies within Flood Zone 2. The site lies within the Greenbelt and a strategic review of the Greenbelt would be required if the site were to be developed. There would also be potential landscape and visual amenity effects associated with the development of this site, although it does lie adjacent to an existing residential area, rather than being detached from the existing urban boundary like SG4. Any new development would need to be designed to ensure that the site is well integrated with the existing residential area. The western boundary of the site lies adjacent to a BHS and, therefore, there is the potential for this site to be adversely affected. There may also be the loss of habitat currently used by birds and other protected species (ecological surveys would be required to confirm this). It is acknowledged above that there are access constraints and development of this scale could increase local air pollution (there is already an AQMA designated in the centre of Carnforth as a result of vehicular traffic). As this is a greenfield site that would result in the loss of soil resources effects are assessed
EN 2 Water	-	
EN 3 Biodiversity	0/-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	

	as negative for EN 5. A development of this site would increase energy use and waste production, although this would be the case in any area.

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

A PRoW crosses the site and this should be incorporated into the site and improved connections provided to nearby footpath links – there may also be scope to improve cycle connections into Carnforth.

It may be possible to reduce the landscape and visual amenity effects through careful site layout, reduced density, reduced building heights and incorporation of greenspace, trees or other innovative measures for example green roofs. Green corridors should also be incorporated into the development to provide landscape, biodiversity, water/drainage and health benefits.

Further consideration should be given to the scale of development and the amount of new housing required in Carnforth. This information should be used to inform decisions about whether a strategic review of the Greenbelt is appropriate and whether further studies should be undertaken into the viability of the site.

Consideration should be given to improving the transport links into the site and connections to wider areas and the centre of Carnforth including increased public transport provision.

It is recommended that the boundary be reduced/reconsidered to better focus the development and to reduce the environmental impact. It would be prudent for a buffer to be developed between the BHS to reduce potential effects – this should be informed by a more detailed ecological study.

Allocation: SHLAA 413 Lundsfield Quarry

Current Use: Quarry

Potential proposal: Identified as a development opportunity and subject to the signing of a Section 106 agreement, benefits from planning permission for 200 dwellings.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. This is an area of the borough where there is a need for market and affordable housing. Although the site is relatively close to the centre of Carnforth, access is restricted by the Lancaster Canal and, therefore, the site could result in increased traffic use and the need for journeys by car to access facilities in the town centre. It was identified through the planning process that a proposed pedestrian/cycle bridge crossing of the canal would help to overcome some accessibility concerns. Provision of this structure could help to increase activity levels and would provide a further recreational resource. The proximity of the Lancaster Canal is considered a potential health benefit of this site. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	-	
EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work. Conversely, the proximity of the M6 to this site may mean that new residents live at the site but out-commute for employment to other boroughs which would result in the loss of potential income for the borough.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	This site appears to lie just outside of Flood Zone 2. SuDS should be included to reduce

EN 2 Water	-	surface run-off rates and attenuate any surface water pollution.
EN 3 Biodiversity	0/-	The site borders the Lancaster Canal which is a BHS and there is the potential for adverse effects upon the canal depending upon the layout and design of the site. Any new infrastructure such as a new canal crossing could also affect the site and this would need to be assessed.
EN 4 Landscape/townscape	0	The site appears to be relatively well screened and with good design it should be possible to create a site that is well integrated with the existing landscape and with the existing residential development to the east. Green corridors within the site to the canal could be provided.
EN 5 Natural resources	+/-	The site is allocated as PPG 17 open space urban and this would be lost if developed for housing – although there is scope for open space to be an integral part of the new development. There is a historic landfill within the site and there are likely to be contamination land issues associated with previous land uses. Appropriate remediation would be required and this would provide soil and water quality benefits.
EN 6 Energy	-	There are no heritage designations within the site boundary although it is recognised that the Lancaster Canal has heritage value and there may be scope for contributions to made to improve/restore canal features as part of the development.
EN 7 Heritage	0	It is acknowledged above that there are access constraints and development could increase local air pollution (there is already an AQMA designated in the centre of Carnforth as a result of vehicular traffic). Negative effects could be reduced through a new canal crossing.
EN 8 Air quality	-	The site is also designated a Geodiversity Heritage Site associated and, therefore appropriate mitigation e.g. recording or interpretation may be required in advance of development occurring.
EN 9 Waste	-	A development of this site would increase energy use and waste production, although this would be the case in any area.

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Improved connections to the centre of Carnforth should be provided and this could be achieved through a new pedestrian/cycle crossing of the Lancaster Canal. Any adverse environmental effects associated with this crossing should be assessed e.g. loss of habitat/trees, effects upon the BHS, heritage features associated with the canal.

The site should be appropriately remediated in advance of development occurring.

Consideration should be given to incorporating a buffer into the site such that there are no adverse effects upon the Lancaster Canal BHS.

Allocation: SHLAA_387 Carnforth Football Club

Current Use: Carnforth Football Club

Potential proposal: Site remains in use as a football club. The club has aspirations to find a better site and there may be an opportunity to provide joint leisure facilities for the football club, cricket club and rugby club that have previously been investigated. If an alternative location were found for the football club then this site would be available for residential use in conjunction with the larger Lundsfield Quarry.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. This is an area of the borough where there is a
S 2 Housing	+	

S3 Health	+/-	need for market and affordable housing.
S4 Learning	0	Although the site is relatively close to the centre of Carnforth, access is restricted by the Lancaster Canal and, therefore, the site could result in increased traffic use and the need for journeys by car to access facilities in the town centre. If a pedestrian/cycle bridge were provided as part of the approved Lundsfield Quarry development then this could overcome some accessibility issues. The proximity of the Lancaster Canal is considered a potential health benefit of this site. There may be a requirement for additional health service provision if this site were developed. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
S5 Access	-	
EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work. Conversely, the proximity of the M6 to this site may mean that new residents live at the site but out-commute for employment to other boroughs which would result in the loss of potential income for the borough.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	This site appears to lie just outside of Flood Zone 2. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution. The site borders the Lancaster Canal which is a BHS and there is the potential for adverse effects upon the canal depending upon the layout and design of the site. Any new infrastructure such as a new canal crossing could also affect the site and this would need to be assessed. Change from a recreational use to residential would have localised townscape effects although there should be scope to mitigate these through high quality design and effective integration with any development proposals on the adjacent Lundsfield Quarry site. There would be loss of greenfield land which would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil resources. The site appears to be relatively well screened and with good design it should be possible to create a site that is well integrated with the existing landscape and with the existing residential development to the east. Green corridors within the site to the canal could be provided. There is a historic landfill adjacent to the site and contamination may have migrated into this site – an assessment of potential contamination risks would be required. There are no heritage designations within the site boundary although it is recognised that the Lancaster Canal has heritage value and there may be scope for contributions to made to improve/restore canal features as part of the development. It is acknowledged above that there are access constraints and development could increase local air pollution (there is already an AQMA designated in the centre of Carnforth as a result of vehicular traffic). Negative effects could be reduced through a new canal crossing. A development of this site would increase energy use and waste production, although this would be the case in any area.
EN 2 Water	-	
EN 3 Biodiversity	0/-	
EN 4 Landscape/townscape	0	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Improved connections to the centre of Carnforth should be provided and this could be achieved through a new pedestrian/cycle crossing of the Lancaster Canal. Any adverse environmental effects associated with this crossing should be assessed e.g. loss of habitat/trees, effects upon the BHS, heritage features associated with the canal.

The site should be appropriately remediated in advance of development occurring.

Consideration should be given to incorporating a buffer into the site such that there are no adverse effects upon the Lancaster Canal BHS.

Allocation: SHLAA_164 Back Lane/Kellet Lane

Current Use: Greenfield land

Potential proposal: Residential development

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. This site is just over one kilometre from the facilities in the centre of Carnforth, including the railway station and is well positioned in relation to the strategic road network. Whilst this is a relatively small site, if other sites in Carnforth are developed then there will be a need for increased service provision. This site is close to existing educational facilities (primary and secondary schools) although the capacity of these sites to accommodate more pupils is not known. Effects are assessed as positive for S5 as this site is potentially more accessible than other sites to some facilities. The site is slightly detached from nearby residential areas as a result of the cemetery to the west – this could potentially make integration with existing communities more problematic and could potentially lead to a small 'island' development adjacent to the M6. The site, by providing new housing, could offer local health benefits by improving the range and quality of the housing stock. However, the site is immediately adjacent to the M6 and, therefore there may be adverse air quality and noise effects on any potential new residents and these could have adverse health effects – for this reason, the use of the site for residential development may not be entirely appropriate. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work. Conversely, the proximity of the M6 to this site may mean that new residents live at the site but out-commute for employment to other boroughs which would result in the loss of potential income for the borough.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	This site lies partially within Flood Zone 2. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution. Liaison should also occur with the EA regarding the need for Flood Risk Assessment. There would be loss of greenfield land which would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil
EN 2 Water	-	
EN 3 Biodiversity	0	
EN 4 Landscape/townscape	-	

EN 5 Natural resources	-	resources.
EN 6 Energy	-	This is a small site that lies adjacent to the M6 – the site would need to be well screened from the motorway to enable a desirable area to be created for new residents. As noted above, integration of this site with surrounding communities may be more difficult owing to its relative detachment from nearby residential communities.
EN 7 Heritage	0	Air quality and noise from the M6 could potentially make this site undesirable for new residents.
EN 8 Air quality	-	There are no heritage designations within the site boundary or immediately adjacent that could be affected.
EN 9 Waste	-	The development would increase energy use and waste production, although this would be the case in any area.

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Liaison should occur with the Environment Agency regarding Flood Risk Assessment requirements.

Consideration should be given to incorporating a buffer into the site such that there are no adverse effects upon the BHS.

The suitability of this site for residential development should be reconsidered in view of the close proximity of the M6 and the availability of other sites within Carnforth for residential development.

Allocation: SHLAA_419 Land to the rear of Greengate Lane, Crag Bank

Current Use: Greenfield land

Potential proposal: Residential development

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs.
S 2 Housing	+	This is a small site and, therefore, the demand for additional services (education, health) would be lower for this site compared to others. The site is approximately 1km from the centre of Carnforth. The site is less well-positioned than others to the strategic road network and so may potentially be viewed as a less desirable site.
S3 Health	+/-	The site, by providing new housing, could offer local health benefits by improving the range and quality of the housing stock. However, the site lies to the west of the West Coast Mainline and, therefore, there may be adverse noise effects for new residents. The site is located adjacent to an existing residential community and so there may be potential for this scale of development to be effectively integrated into the existing residential area which may have localised vibrancy and vitality benefits.
S4 Learning	0	Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
S5 Access	+/-	
EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	

EN 1 Climate change	-	This site lies within Flood Zone 2. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution. Liaison should also occur with the EA regarding the need for Flood Risk Assessment. The site also lies in Greenbelt and whilst still a much smaller site than others proposed in the Greenbelt, there would need to be good justification to pursue this site. The loss of greenfield land would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil resources. The site lies adjacent to the Crag Bank SSSI that comprises fen marsh and swamp. The site is already in unfavourable declining condition and there is the potential for development immediately adjacent to worsen this status. This site is also situated approximately 750m from the Arnside and Silverdale AONB and so there may be adverse landscape and visual amenity effects, although they would depend upon detailed site design. There are no heritage designations within the site boundary or immediately adjacent that could be affected. The development would increase energy use and waste production, although this would be the case in any area.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Liaison should occur with the Environment Agency regarding Flood Risk Assessment requirements.

Consideration should be given to incorporating a buffer into the site such that there are no adverse effects upon the SSSI. Alternatively, other sites should be considered for development that are not situated as close to a SSSI.

The site is located close to a PRoW and there is scope to improve connections to the existing rights of way network as part of the site development.

The suitability of this site for residential development should be reconsidered in view of the close proximity of the M6 and the availability of other sites within Carnforth for residential development.

The potential visibility of the site from the AONB should be considered further and the site would need to be designed appropriately to ensure landscape integration.

Allocation: SHLAA 289 Bank Field off Scotland Road

Current Use: Greenfield land

Potential proposal: Residential development

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. However, it is quite a small site and so it is assumed that additional sites would be needed to meet local housing needs. This is a small site and, therefore, the demand for additional services (education, health) would be lower for this site compared to others. The site is well situated in relation to the centre of Carnforth and so scores well from an accessibility perspective. The site is also close to bus stops along the A6. The site, by providing new housing, could offer local health benefits by improving the range and quality of the housing stock. From a health perspective, the site is located very close to the AQMA and air quality in this area would not be as good as in other locations which may make it less appropriate for residential uses. The site is also located adjacent to the A6 and
S 2 Housing	+	
S3 Health	+/-	
S4 Learning	0	
S5 Access	+	

		so there could also be noise constraints at parts of the site. Indeed, increased development at this location could exacerbate existing air quality issues – although facilities in Carnforth would be accessible by walking/cycling. There is a PRoW to the north east of the site which provides a connection to the Lancaster Canal which would be a valuable recreational resource for new residents. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.
EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	The site does not lie within the floodplain.
EN 2 Water	-	The loss of greenfield land would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil resources.
EN 3 Biodiversity	+	No designated ecological sites e.g. SSSIs, or BHSs would be affected by the development.
EN 4 Landscape/townscape	+	The site is located adjacent to the existing built up area of Carnforth and so it should be possible for the site to be designed to integrate with the existing townscape. There are Conservation Areas abutting the site.
EN 5 Natural resources	-	
EN 6 Energy	-	The development would increase energy use and waste production, although this would be the case in any area.
EN 7 Heritage	+	The site lies close to the AQMA and further development could exacerbate pollution problems. However, the site is located close to the centre of Carnforth which means facilities and public transport connections are accessible which could reduce the reliance on the private car by new residents.
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Liaise with the Lancaster City Council Conservation Officer regarding the site design to ensure that the site is well integrated with the existing townscape, Conservation Areas and adjacent buildings of local heritage value.

Provide a footpath connection from the site to the PRoW to the north that connects with the Lancaster Canal.

Allocation: SHLAA 192 TDG Carnforth

Current Use: This area is occupied by distribution operators. The City Council is aware of TDG's plans to relocate their business outside of the district with their site potentially being vacant for redevelopment.

Potential proposal: Potential uses for this site need to be investigated with residential or continued employment use being possibilities

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The proposed use of this site is uncertain and so it is not known if the site would contribute to the housing needs of the borough.
S 2 Housing	?	
S3 Health	+/-	This site is already in employment use and is situated close to railway lines and busy main roads, for this reason it may be more appropriate for an employment land use as there could

S4 Learning	0	be negative health effects associated with noise and adverse air quality. The more industrialised nature of this site may also make it less desirable as a residential development. The site is very accessible to the centre of Carnforth and its facilities and this is a positive sustainability feature of the site.
S5 Access	+	
EC 1 Local economy	+	The existing operators of the site plan to move out of the district. This would result in local job losses and therefore retaining the site for employment use could help to address this issue. Effects on the economy are uncertain as it is not known how the site would be developed. Effects have been recorded as positive against EC1 as the site has the necessary infrastructure to support a new business use.
EC2 Economic Drivers	?	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	0	The site does not lie within the floodplain. The redevelopment of this site would not result in the loss of greenfield land and so effects are assessed as positive against EN 5. There are no designed ecological sites within the site boundary although there is a BHS to the north and is separated from the site by railway. This would be unlikely to be affected although this would depend upon the selected used for the site. A Conservation Area lies partially within the site boundary and, therefore, the site development could be used as an opportunity to redesign the site to benefit the local townscape and adjacent features of cultural heritage interest. Conversely, inappropriate development or a modified commercial use could have adverse effects upon these adjacent features. A change of commercial use of the site and/or new residential development could exacerbate existing traffic congestion problems in Carnforth and so there would need to be access studies undertaken and improvements made to public transport to serve the development. However, the site is well positioned in relation to the facilities in the centre of Carnforth.
EN 2 Water	0	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	+/-	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

Secured by design principles should be adopted to ensure that a safe community is established.

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

The economic effects of loss of this site to residential use should be investigated further. In view of the transport connections that surround the site, it may be better retained in a commercial use.

Liaise with the Lancaster City Council Conservation Officer regarding the site design to ensure that the site is well integrated with the existing townscape, Conservation Areas and adjacent buildings of local heritage value.

Allocation: SHLAA 357 Warton Road

Current Use: Former tip site. The site has been partially naturalised and is designated as a BHS. The site has previously been suggested for residential development.

Potential proposal: Residential or potentially a Local Nature Reserve?

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The proposed use of this site is uncertain and so it is not known if the site would contribute to the housing needs of the borough. This site is situated close to railway lines and for this reason it may be more appropriate for a none residential use as there could be negative health effects associated with noise and
S 2 Housing	?	
S3 Health	-	

S4 Learning	0	adverse air quality. However, there are areas of urban greenspace to the east of the site which could provide a recreational resource for future residents. In comparison to other sites, the site is situated further from PRoW and the Lancaster Canal. New development within Carnforth could exacerbate existing traffic congestion and air quality problems. This site is potentially less accessible to the centre of Carnforth on foot or bicycle owing to the rail constraints and the industrialised nature of nearby land uses which may make the routes less desirable for walking/cycling.
S5 Access	-	
EC 1 Local economy	?	The effects upon the economic effects are uncertain. The site is well positioned for an economic use as it is close to strategic transport links and neighbouring economic uses.
EC2 Economic Drivers	?	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies within Flood Zones 2 and 3 and, therefore a Flood Risk Assessment would need to be undertaken and appropriate measures incorporated into the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution. The site is now designated a BHS (this designation occupies the entire site) and so would be adversely affected by any development on the site. For this reason, use as a Local Nature Reserve or recreational use would be more appropriate than residential or employment uses. The site lies close to the Arnside and Silverdale AONB and so any development would need to be carefully designed to ensure no adverse effects upon landscape and visual amenity. Whilst the site is a former tip, it has been re-naturalised and there would be loss of vegetation and soil resources associated with any redevelopment. There are no designated cultural heritage features at the site. New development within Carnforth could exacerbate existing traffic congestion and air quality problems. This site is potentially less accessible to the centre of Carnforth on foot or bicycle owing to the rail constraints.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It is considered that a residential or employment use would be inappropriate for this site owing to the number of environmental constraints at the site.

It is recommended that consideration is given to enhancing the ecological value of the site which could in the long-term lead to its designation as a Local Nature Reserve.

Allocation: SHLAA 283 Keer Bridge

Current Use: Existing employment site

Potential proposal: The site is allocated for employment land in the Local Plan although it has been suggested that the site could be reconsidered for residential development.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The proposed use of this site is uncertain and so it is not known if the site would contribute to the housing needs of the borough. This site is situated close to railway lines and for this reason it may be more appropriate for a none residential use as there could be negative health effects associated with noise and adverse air quality. However, there are areas of open space to the north west and the
S 2 Housing	?	
S3 Health	-	
S4 Learning	0	

S5 Access	-	Arnside and Silverdale AONB in close proximity which could provide recreational opportunities for future residents. New development within Carnforth could exacerbate existing traffic congestion and air quality problems. This site is potentially less accessible to the centre of Carnforth on foot or bicycle owing to the rail constraints and the industrialised nature of nearby land uses which may make the routes less desirable for walking/cycling.
EC 1 Local economy	?	The effects upon the economic effects are uncertain. The site is already an employment site and retention of the site for employment purposes would benefit the local economy and ensure that there continue to be job opportunities in Carnforth. The site is well placed for the rail and road networks and so an employment use may be more appropriate.
EC2 Economic Drivers	?	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site lies within Flood Zones 2, therefore a Flood Risk Assessment would need to be undertaken and appropriate measures incorporated into the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	The site lies adjacent to a BHS and so there may be a risk of adverse effects upon this designation.
EN 5 Natural resources	+	The site lies close to the Arnside and Silverdale AONB and so any development would need to be carefully designed to ensure no adverse effects upon landscape and visual amenity (although the existing site is not particularly visually appealing).
EN 6 Energy	-	
EN 7 Heritage	0	This site would re-use previously developed land.
EN 8 Air quality	-	There are no designated cultural heritage features at the site.
EN 9 Waste	-	New development within Carnforth could exacerbate existing traffic congestion and air quality problems.

Recommendations

It is considered that a residential use may be less appropriate for this site owing to the flood risk constraints and the proximity of the AONB and the BHS.

The site is already under employment use and retaining the site for a similar type of use i.e. with limited redevelopment may be most appropriate. This would also capitalise upon the good transport links in this location.

Allocation: SHLAA 213 Brewers Barn

Current Use: Greenfield Site

Potential proposal: The landowner has suggested a mixed use leisure led development incorporating a marine and a hotel

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The current proposals for this site are leisure led development and so it is assumed that any residential component would be limited and, therefore, the site may not make a significant contribution towards the borough's housing needs.
S 2 Housing	0	
S3 Health	+	A leisure-led development adjacent to the canal could improve the desirability of the canal as a recreational resource and could indirectly benefit health it if helps to encourage the pursuit of healthier lifestyles. However, any health benefits would depend upon the final details of the development. This development would improve the leisure offer in Carnforth.
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	+	A leisure led development could positively contribute to the local economy and help

EC2 Economic Drivers	+	encourage more visitors to the borough and Carnforth in particular. Improved facilities and a marina, would provide facilities for other residential developments and could help to attract new investors and residents.
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	Part of the site lies within Flood Zones 2, therefore a Flood Risk Assessment would need to be undertaken and appropriate measures incorporated into the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	?	The loss of greenfield land would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil resources.
EN 5 Natural resources	-	The site lies adjacent to the Lancaster Canal and an existing residential area. Development of this nature, particularly a new hotel and marina could increase traffic volumes and potentially noise nuisance for adjacent residential developments. Layout and design of the site would need to take into consideration these potential issues. However, the proximity of the site to the M6 means that it would be very accessible and a development of this nature, may be more appropriate than housing so close to the strategic road network.
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	-	
EN 9 Waste	-	The site may potentially be visible from the AONB. Although this needs further consideration. There are no designated cultural heritage features at the site.

Recommendations

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Liaison should occur with the EA regarding Flood Risk Assessment requirements.

Potential effects upon traffic, congestion and air quality should be subject to further consideration.

The layout of the site and the site design should take into consideration the proximity of an existing residential development and potentially visibility of the site from the AONB.

Allocation: SHLAA 202 Brewers Barn

Current Use: Greenfield Site

Potential proposal: The landowner has suggested the site as an extension to existing residential development with residential use proposed.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	This site would contribute to the housing needs of the borough assuming a balance of housing is provided that meets local needs. However, it is quite a small site and so it is assumed that additional sites would be needed to meet local housing needs.
S 2 Housing	+	
S3 Health	+/-	This is a small site and, therefore, the demand for additional services (education, health) would be lower for this site compared to others. The site is reasonably well situated in relation to the centre of Carnforth and so scores well from an accessibility perspective.
S4 Learning	0	
S5 Access	+	The site, by providing new housing, could offer local health benefits by improving the range and quality of the housing stock. The site lies close to the Lancaster Canal and this could be a valuable recreational resource for new residents. However, part of the site borders the railway and the site is also very close to the A601 (M) and therefore there may be noise constraints that need to be considered to ensure there are no adverse health effects. Any new residential development should be designed in line with secured by design principles to ensure that a safe community is established.

EC 1 Local economy	0	It is not expected that this site would make a significant contribution to the local economy as it would be a site for residential development. However, if the quality and mix of housing available in Carnforth were improved then this may make Carnforth a more attractive place to live and work.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	Part of the site lies within Flood Zones 2, therefore a Flood Risk Assessment would need to be undertaken and appropriate measures incorporated into the design through consultation with the Environment Agency. SuDS should be included to reduce surface run-off rates and attenuate any surface water pollution.
EN 2 Water	-	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	0	The loss of greenfield land would have adverse effects upon local water quality and drainage patterns increasing surface run-off. There would also be a loss of soil resources.
EN 5 Natural resources	-	The site lies close to the Lancaster Canal and adjacent to an existing residential area. It is not expected that this site would have significant landscape/townscape effects owing to its relatively small scale. However, within and adjacent to the site boundary there are trees protected by TPOs. Removal of these trees would have adverse nature conservation and localised effects upon the townscape/landscape.
EN 6 Energy	-	
EN 7 Heritage	0	
EN 8 Air quality	0	New residential development has the potential to increase traffic congestion and have adverse effects on air quality in the centre of Carnforth. This is a relatively small site and is reasonably accessible to the services in the centre of Carnforth and, therefore these adverse effects are considered less likely than for some of the other potential allocations within this 'family'.
EN 9 Waste	-	There are no designated cultural heritage features at the site.

Recommendations

Measures should be proposed to incorporate energy efficient design, potentially localised renewable power generation (for example, combined heat and power) and SuDS.

Liaison should occur with the Environment Agency regarding Flood Risk Assessment requirements.

Potential effects upon traffic, congestion and air quality should be subject to further consideration.

The layout of the site and the site design should take into consideration the proximity of an existing residential development.

Opportunities should be sought to retain the trees within the site boundary, particularly those protected by Tree Preservation Orders.

Allocation: Carnforth Family

Cumulative Discussion

If all or the majority of the sites in this family were to be brought forward, there would be a number of cumulative effects as follows:

- This would make a significant contribution to the achievement of the district's housing targets.
- There is scope for development of this scale to result in significant investment in facilities and services in this part of the borough. This would be essential in view of the size of some of the sites being considered as there will be a need for new educational, health, recreational, commercial and public transport facilities to serve the new population.
- Further consideration should be given to the scale of development and the amount of new housing required in Carnforth. This information should be used to inform decisions about whether a strategic review of the Greenbelt is appropriate and whether further studies should be undertaken into the viability of the site (a number of them have environmental constraints).
- The Lancaster Canal would provide a key recreational resource for new residents and there are a number of PRoW in this part of the borough that could potentially be enhanced with connections provided from new residential

developments to them – this could have wider landscape/townscape, health and biodiversity benefits. The proximity of the AONB is also a strength.

- Access and congestion are existing issues in Carnforth reflected by the designation of an AQMA in the town centre. New residential development in Carnforth would exacerbate these existing problems and therefore careful consideration needs to be given to the transport effects and the potential mitigation and transport improvements that may be required if some of the sites were to be developed. A pedestrian/cycle footbridge crossing has already been considered as part of the Lundsfield Quarry planning permission and S106 agreement and development of the scale proposed to the south of the existing urban area of Carnforth could require a new road crossing of the canal. This would have significant environmental effects.
- Carnforth lies close to the Arnside and Silverdale AONB and development could potentially be visible from it. There is a risk of cumulative effects on the landscape as a result of the proposed allocations.
- There are some existing employment sites in the centre of Carnforth that may potentially be considered for residential use. These sites tend to be situated close to the strategic road network and the railway – it is recommended that these sites are retained in an employment/commercial use as they are likely to be attractive because of their good transport connections and this would ensure that there are employment opportunities in Carnforth. There is a risk, owing to the excellent connections out of the town that there would be a loss of spending and adverse effects on the local economy if a large number of people out commute to other boroughs for employment reasons.
- Some of the sites lie within floodplain and there would be a cumulative loss of floodplain storage if all sites are developed. Further liaison must occur with the Environment Agency regarding the need for Flood Risk Assessment and appropriate mitigation.

2.6 Appraisal of Lancaster Central Family Group

Allocation: SHLAA 295 Lancaster Canal Corridor North

Current Use: Area of buildings including high rates of vacancy and car parking

Potential proposal: Mixed use, potentially residential, employment, residential and/or community.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The site is currently underused and in need of regeneration. It lies north of the city centre in a more deprived area which experiences higher than average levels of crime. The proposals would regenerate the area and could reduce crime levels and fear of crime and encourage a healthier, safer environment. The development would also contribute towards the district's housing targets in an area that has good access to city centre amenities and public transport. The site also contains a number of historic buildings which, if sensitively restored as part of the development could provide learning opportunities for the public. The development would address the current squatting issue although the existing homeless centre would need to be relocated in order to avoid this group being adversely affected.
S 2 Housing	+	
S3 Health	+	
S4 Learning	+	
S5 Access	+	
EC 1 Local economy	+	The proposals include employment and commercial uses which would provide opportunities for investment and economic growth in an area that is easily accessible for some of the City's more economically deprived communities. If undertaken effectively and integrated well with the City Centre, the development could be a key driver for regeneration in this area helping to encourage a more vibrant centre which is attractive as a place to live and work. It is unclear whether there would be training and up-skilling opportunities although this is possible. It should improve the city's retail offer although it should also be encouraged not to detract from the existing city centre offer.
EC2 Economic Drivers	+	
EC 3 Workforce	?	
EC 4 Economic inclusion	+	
EN 1 Climate change	-	The site contains a number of listed buildings and other buildings of historic interest and it lies within a Conservation Area. As such the proposals present an opportunity to enhance and regenerate the historic environment and townscape if done sensitively. This should be a priority as inappropriate development may have a significant adverse effect.
EN 2 Water	-	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	+	The site is unlikely to contain significant biodiversity interest although there is potential for bats to be present in some of the vacant buildings. It also lies adjacent to a green corridor and BHS in the Lancaster Canal. This presents and opportunity to encourage biodiversity through the development although construction must be careful to avoid pollution incidents.
EN 5 Natural resources	+	
EN 6 Energy	-	Whilst the site represents a good re-use of existing resources, the new development is likely to use more energy, water and produce more waste and carbon emissions that at present although this may be true of many new developments. The site lies adjacent to the AQMA and is likely to encourage more vehicle movements in its vicinity.
EN 7 Heritage	+	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

The existing homeless centre would need to be relocated in order to avoid this group being adversely affected.

Opportunities should be sought to integrate the development with the city centre to ensure it does not become isolated. It should be outward facing and encourage footfall from the wider area through active frontages. Conversely, the site should be designed to complement rather than detract from the existing city centre offer. Close liaison with existing businesses should be undertaken to ensure benefits to all parties are achieved. The balance of the offer should be carefully considered to ensure there is sufficient economic investment to deliver the necessary heritage enhancements.

The proposals should be very sensitively designed to incorporate and enhance the existing heritage interest and townscape. A desk-based heritage assessment should be undertaken. Opportunities should be sought to encourage biodiversity through its proximity to the canal and measures should be encouraged to survey and protect against any adverse pollution incidents

or effects on protected species. Appropriate greenspace provision and planting would be welcomed. Opportunities should be sought to encourage energy and resource efficient buildings with high standards of sustainable design. Measures should be incorporated to manage traffic and promote sustainable travel options including making use of the existing cycle route through the site.

Allocation: LP_1 Kingsway

Current Use: a range of vacant and derelict buildings

Potential proposal: Business use

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The site lies north of the city centre in a more deprived area which experiences higher than average levels of crime. The proposals would help to regenerate the area and could reduce crime levels and fear of crime through the provision of passive surveillance during the daytime. Being close to the city centre, the site is accessible via a range of public transport options.
S 2 Housing	0	
S3 Health	0	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	+	The proposals for business use would provide opportunities for investment and economic growth in an area that is easily accessible for some of the City's more economically deprived communities. Being a key gateway site, the development has potential to assist the regeneration in this area helping to encourage a more vibrant centre which is attractive as a place to work and invest in. It is unclear whether there would be training and up-skilling opportunities although this is possible.
EC2 Economic Drivers	+	
EC 3 Workforce	?	
EC 4 Economic inclusion	+	
EN 1 Climate change	-	The site is a brownfield site so its re-use represents a sustainable use of land. It is not known whether there is any biodiversity interest although it is feasible that bats may roost in the derelict buildings. Compared to its current vacant use, the business development will use more energy, create more waste and produce more carbon emissions both from the buildings and vehicle movements to and from the site. The area currently suffers from traffic congestion and the surrounding roads are within the AQMA. Development of this site could contribute further transport emissions within this area. Given its location adjacent to the river, there is potential for water pollution to occur during construction. Approximately half of the site lies within Flood Zone 2 with about half of this area being in Flood Zone 3. It is assumed that given that planning permission has already been granted for this site, the Environment Agency are satisfied that flood risk can be suitably mitigated. The site also incorporates three listed buildings. The proposals for these are not known although there is potential for these to be adversely affected by the development or for them to be enhanced and incorporated into a sensitive design. If designed to a high standard, the development has potential to enhance the townscape in what is a key gateway location to the city.
EN 2 Water	?	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It is recommended that the proposals incorporate stringent measures to minimise the impact of increased traffic flow within the AQMA. This may include the provision of secured cycle parking, green travel planning and limiting the amount of car parking available.

Liaison should occur with the Environment Agency to ensure that proposals to mitigate the risk of flooding to the site are incorporated and delivered.

High standards of energy, materials and water efficiency should be incorporated into the scheme's design.

The design should encourage an appropriate and sensitive incorporation of the existing listed buildings with the aim to enhance and preserve them where appropriate. Similarly, the development should give significant consideration to the enhancement of the townscape in what is a key gateway location.

Appropriate surveys should be undertaken for protected species prior to any demolition.

Construction environmental management should be incorporated to avoid pollution to the neighbouring water course.

Allocation: LP_2 Bulk Road

Current Use: Cleared ready for development

Potential proposal: Planning permission for 56 dwellings has been granted

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	+	The proposal would contribute to meeting the district's housing targets in an area that has good access to city centre amenities and public transport. It lies north of the city centre in a more deprived area which experiences higher than average levels of crime. The proposals would help to regenerate the area and could reduce crime levels and fear of crime. This may contribute to improved levels of health and wellbeing in the locality although at this scale it is unclear whether or not this would be significant.
S 2 Housing	+	
S3 Health	+	
S4 Learning	0	
S5 Access	+	
EC 1 Local economy	0	The proposals are for purely residential development and therefore would not make a significant contribution to the local economy. However, the cumulative regeneration effects of developing this site and others has potential to encourage inward investment as a whole.
EC2 Economic Drivers	0	
EC 3 Workforce	0	
EC 4 Economic inclusion	0	
EN 1 Climate change	-	The site is brownfield and has been cleared for development. It is not know whether any biodiversity interest has developed on the site. Compared to its current vacant use, the residential development will use more energy, create more waste and produce more carbon emissions both from the buildings and vehicle movements to and from the site. The area currently suffers from traffic congestion and the surrounding roads are within the AQMA. Development of this site could contribute further transport emissions within this area.
EN 2 Water	?	
EN 3 Biodiversity	?	
EN 4 Landscape/townscape	+	
EN 5 Natural resources	+	The site lies adjacent to a number of listed buildings. The proposals should give consideration to the setting of these and the design and appearance of the structures should be sensitive to this. The site is a key gateway site and has potential to greatly improve the townscape in this area if developed appropriately.
EN 6 Energy	-	
EN 7 Heritage	?	
EN 8 Air quality	-	
EN 9 Waste	-	

Recommendations

It is recommended that the proposals incorporate stringent measures to minimise the impact of increased traffic flow within the AQMA. This may include the provision of secure cycle parking, green travel planning and limiting the amount of car parking available.

High standards of energy, materials and water efficiency should be incorporated into the scheme's design.

The design should encourage an appropriate and sensitive approach to the setting of the adjacent listed buildings. Similarly, the development should give significant consideration to the enhancement of the townscape in what is a key gateway location.

Allocation: Central Lancaster Family Group

Cumulative effects discussion

If all or the majority of the sites in this family were to be brought forward, there would be a number of cumulative effects as follows:

- All three developments should contribute to the regeneration of this area to the north of the city centre including cumulatively an improvement to the existing townscape and enhancement to the historic character and its setting
- The developments would also contribute cumulatively to residential and employment provision.
- From a negative viewpoint, the three developments could significantly increase traffic congestion along these already congested routes and could lead to an increase in vehicular emissions within the AQMA. Methods of minimising and alleviating these issues should be explored strategically.

2.7 Appraisal of Heysham Energy Coastline

Allocation: Land around Heysham Nuclear Power Station, Heysham

Current Use: Golf course

Potential proposal: Energy infrastructure associated with the proposed new nuclear power station and potential renewable energy developments in the surrounding area.

SA Objective Topics	+/- 0/?	Commentary
S1 Crime and safety	0	The development of the new power station would provide a range of new jobs and local investment which in turn may result in a reduction in levels of multiple deprivation for receiving communities. A body of evidence suggests that the risks of developing the new power station and other energy sources to human health and safety are extremely low. There may be opportunities for learning and education associated with the new power station. The site would result in the loss of a golf course which would represent a loss of access to recreational amenity space. In migrant workers and residents may also put pressure
S 2 Housing	0	
S3 Health	?	
S4 Learning	+	
S5 Access	-	
EC 1 Local economy	+	The development of the new power station would provide a range of new jobs and local investment associated with it and other renewable energy developments. This would include a range of different skills applicable to the local workforce and that from a much wider area. This may help to alleviate elevated levels of employment and income deprivation in this part of the district.
EC2 Economic Drivers	+	
EC 3 Workforce	+	
EC 4 Economic inclusion	+	
EN 1 Climate change	+/?	The nuclear power station and other renewable energy schemes would be low carbon energy sources and would hence strongly contribute to national carbon reduction targets in addition to producing new energy. The power station and wind turbines would create significant new features within the landscape. Whilst the current landscape could be considered to be degraded by the existing power station, this would potentially have and adverse landscape and visual effect. The grid connection would further exacerbate this. The site also lies immediately adjacent to the Morecmabe Bay SPA, SAC and Ramsar sites. All energy developments have potential to adversely affect these site whether it be through polluted discharge, land take or potential effects upon qualifying bird interests. It may be possible to mitigate and or compensate for these effects although this should be subject to HRA prior to development. It is recognised that the nuclear power station proposals are outside the district council's control. In terms of natural resource use, the site is not greenfield although its current use as a golf course is more readily converted to an alternative use than a power station which would sterilise the land for the future. It would also require the use of uranium ore which is a finite resource. Wind turbines can be removed at the end of their lives and the land restored to its original use. The nuclear power station would also produce a legacy of nuclear waste which would need to be managed. Central Government plans are in place to address this. Part of the site lies within Flood Zone 3. At this stage it is not know whether new development would occur in this area although this should be a key consideration, particularly in terms of safety of the site. Liaison with the Environment Agency should occur. Part of the site is designated as a BHS. These sites are of local importance although they should be important considerations in the development of the site. It is not at this stage know if the site would be affected or otherwise.
EN 2 Water	?	
EN 3 Biodiversity	-	
EN 4 Landscape/townscape	-	
EN 5 Natural resources	-	
EN 6 Energy	+	
EN 7 Heritage	?	
EN 8 Air quality	0	
EN 9 Waste	-	

Recommendations

The proposals should be subject to HRA and Environmental Impact Assessment prior to development. These elements of the plan should also be subject to HRA. The council should encourage the developer to undertake a Health Impact Assessment of the nuclear power station proposals.

The district council should continue to liaise closely with Central Government and site developers to ensure local economic and social benefits are maximised.

The implications of developing in the floodplain should be a key consideration, particularly in terms of safety of the site. Liaison with the Environment Agency should occur.

Where possible the protection of the BHS should be protected from development or the loss compensated.

3 Habitats Regulations Assessment

The draft allocation options have also been reviewed against their potential to result in adverse effects upon sites within the Natura 2000 network, known as European Sites. The following sites are located within Lancaster District:

- Bowland Fells SPA
- Morecambe Bay SPA, SAC, Ramsar
- Calf Hill and Cragg Woods SAC
- Leighton Moss SPA and Ramsar
- Morecambe Bay Pavements SAC

At this early stage of development, the allocations are insufficiently developed to accurately predict whether policy may lead to effects upon European Sites or otherwise. A precautionary approach has been adopted which identifies possible risks and promotes the amendment of policy wording as it further develops to ensure it is compliant with the requirements of the Habitats Regulations. This is presented in Table 3-1 and is designed to help steer the further development of the choice of options. Once a set of preferred allocations has been developed, a Habitats Regulations Screening Assessment will be produced and consulted upon with Natural England.

Table 3-1 Preliminary HRA considerations

Allocation	HRA Implications	Further action
Luneside Family Group		
SHLAA 312	Individually, none of the sites within this family lie directly within or adjacent to a European Site. The nearest site is the Morecambe Bay SPA, SAC and Ramsar site. The closest allocations to the European Site are SHLAA 960 and ES 7 which lie approximately 500m away. The main risks to Morecambe Bay from these sites would be increased pollution risk for the River Lune associated with the cumulative scale of the development proposed and increased recreational pressure along the river.	Recommend putting the family through HRA screening as a whole. There would not appear to be a clear reason to reject any individual site on HRA grounds at this stage of the options development process.
SHLAA 411 Lune Mills		
SHLAA 364 New Quay Road		
SHLAA 960 New Quay		
ES 7 Adjacent to Lune Business Park		
Lancaster East Family Group		
SHLAA 320 Grab Lane (Strategic Site)	Individually, none of the sites within this family lie directly within or adjacent to a European Site. The nearest site is the Bowland Fells SPA located over 3km to the east. There is potential for increased tourist/visitor pressure in the SPA as a result of the cumulative large residential population increase in the area being located adjacent to two roads which access the SPA although it is unclear at this stage whether this might be	Recommend putting the family through HRA screening as a whole, with separate reference to Grab Lane. Given the lack of direct or very clear indirect relevance to the European Sites there would not appear to be a clear reason to reject any individual site on HRA grounds at this stage of the options development process.
SHLAA 878 Lancaster Leisure Park		
SHLAA 287 Wyresdale Road		
SHLAA 876 Farmers Auction		

Allocation	HRA Implications	Further action
Mart	significant.	
SHLAA 405 Lancaster Moor	The key concern is the cumulative development of a number of these sites, although the Grab Lane site may be large enough to warrant consideration from this perspective in its own right.	
SHLAA 412 Nightingale Hall Farm		
ES 13 Ridge Lea		
SHLAA 323 Newlands Road		
ES 8 Daisybank		
SHLAA 380 Land at Fenham Carr Lane		
SHLAA 1310 Land at Fenham Carr Lane		
Lancaster South Family		
SHLAA 285 Land off Bailrigg Lane	Individually, none of the sites within this family lie directly within or adjacent to a European Site. The closest European Site is Morecambe Bay SPA, SAC and Ramsar site located approximately 1.2km to the west. There is the potential for increased tourist / visitor pressure to the SAC / SPA and Ramsar site as a result of the large cumulative proposed population increase in the area and the proximity of Morecambe Bay. However, at this stage it is unclear if these effects would be significant.	This family should be subject to the HRA Screening process as a whole with separate references to SHLAA_285 and SHLAA_286 due to their size.
SHLAA 286 Land at Whinney Carr/Lawson's Bridge		
SHLAA 414 Land behind Royal Albert Hospital		
SHLAA 382 Land at Royal Albert Fields		
CFS 15 Land opposite Cutting Farm		
CFS 16 Land between Pinewood Close and Carr Lane Bridge		
Carnforth Family Group		
SG 4 South Carnforth (Strategic Site)	Individually, none of the sites within this family lie directly within or adjacent to a European Site. The nearest site is the Morecambe Bay SPA, SAC and Ramsar site. Despite the scale of development proposed in this part of Lancaster it is	Recommend putting the family through HRA screening as a whole. There would not appear to be a clear reason to reject any individual site on HRA grounds at this stage of the options development process.
CFS 18 Land to the south of Windermere		

Allocation	HRA Implications	Further action
Road, Carnforth SHLAA 413 Lundsfield Quarry SHLAA 387 Carnforth Football Club SHLAA 419 Land to the rear of Greengate Lane, Crag Bank SHLAA 289 Bank Field off Scotland Road SHLAA 192 TDG Carnforth SHLAA 357 Warton Road SHLAA 283 Keer Bridge SHLAA 213 Brewers Barn SHLAA 202 Brewers Barn	considered unlikely that there would be significant effects on the qualifying interests. The closest allocations to the European Site are SHLAA 419 and SHLAA 283 which lie approximately 700m and 500m away. The main risks to Morecambe Bay from these sites would be increased pollution risk associated with the cumulative scale of the development proposed and potentially increased recreational pressure.	
Central Lancaster Family		
SHLAA 295, Lancaster Canal Corridor North LP_1 Bulk Road LP_2 Kingsway	At its closet point the family group lies over 2.5km from the nearest European Site, the Morecambe Bay SPA, SAC and Ramsar site. It is very unlikely that these developments could lead to an adverse effect on the site, however, the Kingsway site lies adjacent to the River Lune which eventually flows into the Morecambe Bay designations. A pollution event caused by the Kingsway site could therefore enter the designated area.	If appropriate construction environmental management is put in place whilst developing the Kingsway site and if appropriate pollution control is in place during its operation, there is unlikely to be a concern regarding the European Site. However, following the precautionary principle, it is recommended that this site is taken forward to HRA Screening.
Heysham Energy Coastline		
Land around Heysham Nuclear Power Station, Heysham	The site also lies immediately adjacent to the Morecmabe Bay SPA, SAC and Ramsar sites. Energy developments have potential to adversely affect these areas whether it be through polluted discharge, land take or potential effects upon qualifying bird interests. It may be possible to mitigate and or compensate for these effects although this should be subject to HRA prior to development.	The proposals should be subject to HRA screening. The HRA undertaken for the Nuclear National Policy Statement should also be consulted as it is recognised that the nuclear power station proposals are outside the district council's control.

Appendix A – Constraints Plans