

STRIDE TREGLOWN



Environmental Statement: Chapter 12 – Summary of Mitigation

Ellel Holiday Village, Lancaster

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12. Summary of Mitigation

12.1. Introduction

12.1.1 This chapter provides a summary of the design interventions, mitigation measures and residual effects identified in the technical chapters of this Statement.

12.2. Methodology

12.2.1 Mitigation and enhancement opportunities have been identified through the design process with the objective of minimising environmental effects and maximising beneficial effects. In the context of this Statement, mitigation and enhancement includes matters of;

- Avoidance – measures to avoid adverse effects;
- Reduction – measures to reduce adverse effects; and
- Compensation – measures to offset significant adverse effects

12.2.2 Within the technical chapters of this Statement, a range of design measures have been identified to avoid and reduce adverse impacts. Where necessary, such design interventions are supplemented by further mitigation measures during both the construction and operational phases to ameliorate any outstanding adverse impacts.

12.2.3 Using the information provided within the technical assessments (Chapters 6-11), this Chapter provides a summary of the following;

- Design interventions;
- Mitigation measures during the construction phase; and
- Mitigation measures during the operational phase.

12.3. Summary of Design Interventions

12.3.1 Using the information provided within the technical assessments (Chapters 6-11), **Table 12.1** provides a summary of design measures which have been proposed to avoid and reduce adverse impacts.

Table 12-1: Summary of Design Interventions

Topic	Design Intervention
Landscape and Visual Impacts	The strategic landscape proposals are presented alongside the site masterplan. This strategy seeks to establish a strong framework for the development which is outlined in Chapter 6 of this Environmental Statement.

Topic	Design Intervention
Ecology	The ecological design interventions are numerous and relate to a number of various aspects of the ecological context of the site itself and beyond. Detailed discussion of the interventions is provided in Chapter 7 of the ES, along with the various Technical Appendices found in Volume 2.
Highways and Transportation	The proposed development has been informed by the following key design principles: <ul style="list-style-type: none"> • Sustainable Travel Corridors; • Sustainable Travel Choices; • Integration with the Neighbouring Areas; and • Sustainable Hierarchy of Movement.
Air Quality	Lancaster City Council requires the following measures for all sites in order to limit air quality impacts from developments of any size or location; <ul style="list-style-type: none"> • Production and adoption of a Construction and Environment Management plan (CEMP); and • Inclusion of electric vehicle (EV) infrastructure. <p>As outline in the Framework Travel Plan for the development, the following design interventions are included as part of the proposals;</p> <ul style="list-style-type: none"> • Provision of secure cycle parking and EV charging facilities in line with the appropriate guidance; • Two existing canal bridges will be improved to allow connections across all areas of the site and improve access to the canal towpath;
Cultural Heritage	None identified at the outline stage, however, during detailed design stage, it may be necessary to undertake appropriate further investigations to determine whether any archaeological features are identified.
Climate change Adaption	None identified at outline stage

12.4. Summary of Construction Phase Measures

12.4.1 Using the information provided within the technical assessments (Chapters 6-11), **Table 12.2** provides a summary of mitigation measures which have been proposed to avoid and reduce adverse impacts during the construction phase of the proposed development.

Table 12-2: Summary of Construction Phase Mitigation Measures

Topic	Proposed Mitigation
Landscape and Visual Impacts	<p>Mitigation of the likely significant effects on landscape and views will be largely achieved through the implementation of a Construction Environmental Management Plan (CEMP) which will include the following:</p> <ul style="list-style-type: none"> • Protection of hedgerows and trees to be retained in accordance with BS5837 (2012), for the duration of clearance, grading and construction phases; • Protection of landscape/townscape features such as the existing tree belt to the southern site boundary, that are to be retained through careful working methods and handling of materials to prevent pollution and ensure integrity of resources; • Visual screening of the site activity where it is practical to do so, and where this would not be a negative visual distraction in itself; • Siting of construction compounds to minimise visual effects on receptors; • Management of working time to minimise visual effects on receptors in the evenings and weekends; • Phasing of development to ensure minimal construction activity on site at any one time.
Ecology	<p>Chapter 7 of this ES outlines the construction phase mitigation for each ecological aspect. Most of the ecological aspects require some form of mitigation during construction works, and detail of this can be found in Chapter 7. The main mitigation relates to;</p> <ul style="list-style-type: none"> • Tree protection measures and hedgerow management • Sustainable drainage principles to filter surface water pollutants • Protection and management of retained grassland • Construction activities and visitor access to sensitive habitats will be managed to minimise impact beyond the works footprint. • Timing of site preparation to avoid nesting bird season. • Protection of retained habitats through with fencing • Sensitive, low level lighting

Highways and Transportation	<p>A Construction Management Plan will be prepared that sets out consideration of the measures that will be used to ensure safe, efficient and environmentally considerate construction practices.</p> <p>The Construction Management Plan will identify the construction access locations and routes, and will outlines measures that will be used to reduce environmental effects, such as:</p> <ul style="list-style-type: none"> • Promotion of public transport modes of travel • Delivery management measures to reduce conflict with vulnerable road users and impact during peak periods, including timing controls, etc • Measures to reduce effects on dirt and dust, such as wheel washing, road sweepers and segregated cutting zones, etc
Air Quality	<p>Measures to mitigate dust emissions will be required during the construction phase of the development in order to minimise effects upon nearby sensitive receptors. A Construction Environment Management (CEMP) Plan can deal with such matters and can be dealt with through an appropriate condition.</p>
Cultural Heritage	<p>In order to reduce the effect of the construction phase of the development on the archaeological resource it is recommended to undertake a geophysical survey of the development area, excepting the woodland, followed by targeted evaluation in the form of trenching of any identified below ground geophysical anomalies. This would be secured through a written scheme of investigation condition attached to any planning permission granted on the land.</p>
Climate Change Adaption	<p>The following measures are in place to mitigate the impact of climate change during construction;</p> <ul style="list-style-type: none"> • Consideration of the use construction materials with superior properties which offer increased tolerance to fluctuating temperatures. • Standard operating procedures in place for use in the event of necessary road closure and/or traffic diversion during construction

12.5. Summary of Operational Phase Mitigation Measures

12.5.1 Using the information provided within the technical assessments (Chapters 6-11), **Table 12.3** provides a summary of mitigation measures which have been proposed to avoid and reduce adverse impacts during the operational phase of the proposed development.

Table 12-3: Summary of Operational Phase Mitigation Measures

Topic	Proposed Mitigation
Landscape and Visual Impacts	<p>Mitigation measures have formed an integral part of the design process to avoid, reduce and offset any adverse effects on the landscape and visual amenity. Specific design elements which are pertinent to the landscape and visual amenity of the site are;</p> <ul style="list-style-type: none"> • Existing landscape features will be retained and protected where possible; • Any loss of vegetation will be compensated for by new trees and hedgerows; • Appropriately masterplanned to retain the open fields and parkland setting associated with the Grade II listed Home Farm or its features; • Holiday park areas designed within a country park setting with recreational cycle and pedestrian routes; • Marketplace building designed with a sloping green roof to reflect the drumlin landscape character; • Restoration of former field boundaries and creation of new landscape features typical of the local landscape character; • Proposed woodland blocks and hedgerows aligned adjacent to the canal, along the PRowS and to the west of the A6 in order to filter views of the proposal; and • Creation of a variety of new habitats including an eco-park and wetland habitats.
Ecology	<p>Chapter 7 of this ES outlines the operational phase mitigation for each ecological aspect. Some aspects do not require any mitigation however the below summarises the measures where necessary;</p> <ul style="list-style-type: none"> • Appropriate lighting strategy • Watercourse management regime; • Planting plan and maintenance plan • Woodland access and long term management plan • Sustainable drainage systems to minimise surface water pollutants • Management of visitor access to retained grassland

Topic	Proposed Mitigation
Highways and Transportation	<p>The proposed development includes a commitment to adopt a Travel Plan and to introduce a dedicated bus route between the site and the centre of Lancaster. These measures will be of benefit in terms of reducing car trips generated by the site and therefore reducing delay to negligible significance on strategic roads and the Hampson Green Roundabout.</p> <p>Other completed development mitigation has been set out as follows;</p> <ul style="list-style-type: none"> • It is proposed to reduce the speed limit through the Hampson Green Roundabout and along the site frontage from 50mph to 40mph. This will have benefits to road safety levels at this location and will improve the active travel mode environment. • Appropriate levels of standard, accessible, EV and cycle parking will be provided for the scheme in line with local and national policy guidance. • The development offers the opportunity to deliver a sustainable and eco-tourism facility in Lancaster. The applicant is committed to developing a destination where visitor, activity and accommodation destinations are sensitively embedded into the proposal with the aim of enabling people to meet many of their needs without needing to travel off site or use a vehicle within the site. Play destinations are comprised of both formal leisure facilities (food and drink destinations and activity centres) and informal leisure areas that take advantage of the surrounding environment (canalside walks, open space and play areas). A tourist information point will be provided within the development to allow guests to find information on other tourist destinations in the area. • The final site layout will be designed so that guests staying at the site are required to leave their vehicles on entry at the car park and either walk, cycle or use the electric buggies to access their accommodation. This allows the creation of a car-free circular route around the site which promotes active and safe travel.

Topic	Proposed Mitigation
Air Quality	<p data-bbox="603 376 1417 432">As outlined in the Framework Travel Plan for the development, the following mitigation is included as part of the proposals;</p> <ul data-bbox="651 465 1422 1283" style="list-style-type: none"> <li data-bbox="651 465 1145 495">• Production and implementation of a Travel Plan <li data-bbox="651 528 1414 584">• A Travel Plan Co-ordinator (TPC) will be appointed two months prior to occupation to co-ordinate the implementation and review of the Travel Plan; <li data-bbox="651 618 1422 696">• A Travel Pack will be prepared by the TPC prior to occupation and issued to all operators and staff. Following initial occupation, the travel pack will be regularly updated and re-issued accordingly; <li data-bbox="651 696 1422 775">• Information on local walking and cycling routes will be provided to staff in the travel pack and staff and guests on the travel page of the website and at the Tourist Information point; <li data-bbox="651 808 1414 864">• Promotion of local and national travel campaigns including changes to public transport services; <li data-bbox="651 898 1414 976">• Guests will be required to leave their vehicles on entry at the car park and either walk, cycle or use the electric buggies to access their accommodation, creating a car-free circular route around the site; <li data-bbox="651 1010 1382 1066">• Provision of secure cycle parking and EV charging facilities in line with the appropriate guidance; <li data-bbox="651 1099 1398 1155">• The site will be served by a bike hire scheme that can be used by both staff and guests to travel around the site, and for guests to travel off-site; <li data-bbox="651 1189 1145 1218">• Promotion of the Liftshare car sharing database; <li data-bbox="651 1240 1422 1283">• Provision of a shuttle bus to provide connections to Lancaster City Centre and the train station;
Cultural Heritage	None identified – subject to further detailed investigations at reserved matters stage.

Topic	Proposed Mitigation
Climate Change Adaption	<p>The following measures are in place to mitigate the impact of climate change during construction;</p> <ul style="list-style-type: none"> • Identification of suitable network redundancies and diversion routes. • Emergency response and contingency plans in place. Standard operating procedures in place for use in the event of necessary road closure and/or traffic diversion. • Regular maintenance of drainage systems. • Inclusion of flood compensation areas and compensatory floodplain within the design to account for future climate change. • Regular maintenance of assets to detect deterioration and damage. • Road user warning systems in place. Ensure effective, essential winter maintenance. • Emergency response and contingency plans in place. • Standard operating procedures in place for use in the event of necessary road closure and/or traffic diversion