University of Brighton Assessment School of Architecture and Design and Feedback Form MSc Town Planning

Masters Level Submission

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Module Code:	AIM29	Module Title: Sustainable Urbanism in Coastal Communities
Assignment Number	Assignment 2 - Report	Assignment Title: Produce a report that critically analyses the planning context of the group's theme, including environmental and other constraints, and recommends viable planning policies that would apply across the whole neighbourhood area, and also proposals and design solutions for key sites that can be incorporated into future versions of the draft Neighbourhood Plan or associated guidance.
Date Submitted		Semester: Semester 2
Declaration: By submitting this assignment I am declaring that it is entirely my own work		

Criteria being assessed:	
Knowledge/underst anding	Level of knowledge/understanding; evidence of independent study/originality; integration of module materials
Structure/	Organisation and structure of assignment; level of analysis;
Conclusions	relevance of conclusions
Transferrable skills	Development of clear, concise argument and its communication
General assessment including presentation	Adherence to assessment task; standard of English; absence of grammatical and typographical errors and overall presentation. Accuracy of citation, referencing and bibliography
Grades: D+: Distinction (>80%) D: Distinction (7080%) M: Merit (6069%) P:Pass(5059%) F: (<50%)	
Please specify if you have a <u>Learning Support Plan (LSP)</u> and quote adjustment/s relevant to this Assignment here:	

Feedback: Strengths	
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Policy Recommendations Report: Wildlife Habitats and Connectivity

Peacehaven and Telscombe Neighbourhood Plan
AIM29 Sustainable Urbanism in Coastal Communities

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Word Count: 2703

1 Introduction

This report aims to recommend, to the Town Council, feasible wildlife habitat and connectivity policies that should be implemented in the Peacehaven and Telscombe Neighbourhood Development Plan.

Wildlife habitats and connectivity are crucial for local ecosystems and can provide a range of benefits to the local community. Improving upon this can contribute towards achieving nature recovery and net biodiversity gain. Therefore, the policy recommendations set out in this report will greatly enhance the wellbeing of the residents who live in Peacehaven and Telscombe, hereafter referred to as P&T, and substantially improve local biodiversity.

2 Site Overview

The area of P&T, as seen in Figure 1 below, is situated on UK's southern coastline, near Lewes, East Sussex. The area sits approximately 50 miles from central London, 5 miles from Brighton and 3 miles from Newhaven. P&T is directly accessible via the A259 which runs across the southern coastline. The following section outlines the survey findings produced from a site visit to the area, where detailed description of the local characteristics are presented.

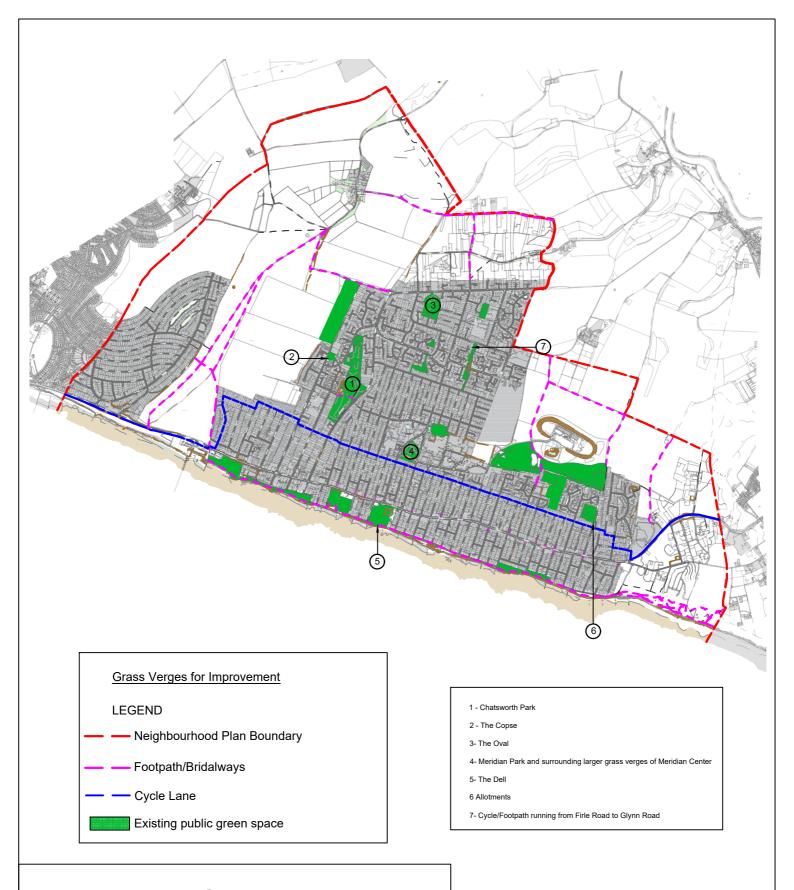


FIGURE 1 Peacehaven and Telscombe Neighbourhood Plan Area

Scale NTS May 2021 Drawn : K. Welch



2.1 Neighbourhood Plan Area Assessment

The Neighbourhood Plan covers the area of P&T, which is overlapped by parts of the South Downs National Park (SDNP) and the southern coastline. Together, these areas offer a wealth of habitats covered by environmental designations such as, the 'Brighton to Newhaven Cliffs' Sites of Special Scientific Interest (SSSI), the 'Beachy Head West' Marine Conservation Zones (MCZ), Biodiversity Action Plan (BAP) Priority Habitats and documented species protected under the Wildlife and Countryside Act 1981 (as amended) and under Section 41 of the Natural Environment and Rural Communities Act 2006. The majority of protected habitats in the area include good quality semi-improved grassland, areas of deciduous woodland and areas of maritime cliff and slope (AECOM Limited, 2021). Additionally, priority species include several species of birds, mammals, bats, insects, grasses, trees, amphibians, and reptiles (ibid).

The area is accessible by train and road traffic, only via the A259, thus road users are reliant on this key road network. The area between Saltdean and Newhaven experience moderate to heavy congestion during weekday morning peak hours and weekend lunchtime peak hours (Google, 2021). Population increase in this area is driving increasing road traffic congestion. Consequently, the road and rail networks act as physical barriers to both human and wildlife networks. This is a crucial aspect which the Town Council should address, in order to achieve biodiversity net gain.

A site visit on Saturday 8th May alongside desktop study were undertaken in order to assess the area for potential of enhancing local wildlife habitats and biodiversity.



Figure 22: View of the Promenade (Image captured at Site Visit on 8th May, 2021 at Peacehaven).



Figure 33: View of Bolney Avenue from House number 10 (Google, 2019a)



Figure 44: View of Bee Road (Image captured at Site Visit on 8th May, 2021 at Peacehaven).



Figure 55: Site of Hoddern Farm Development (Image captured at Site Visit on 8th May, 2021 at Peacehaven).

The original development of P&T is characterised by its grid formation layout. As demonstrated in Figures 2, 3 and 4, the avenues form a network of wide and exposed spaces which allows both pavements on either side of the roads to be occupied with grass verges, between 1 to 1.5m wide. It is worth noting that street trees are absent from many of these avenues.

Presumably as a traffic flow measure, various road junctions within the grid layout of the old town have been stopped-up, as seen in Figures 6 and 7. The grass remnants of these former junctions offer little biodiversity value. These spaces offer potential for antisocial behaviour such as littering.



Figure 66: A southward view at Slindon Avenue from the A259 (Google, 2019b).



Figure 7: A northward view at Bramber Avenue from the A259 (Google, 2019c).

Many of the streets share a monotonous design, with piecemeal development being widespread. Existing green spaces within the built-up area, such as amenity grassland, allotments, community gardens and woodland, have been mapped in Figure 1. All of which with recognition can be enhanced or designated under the neighbourhood plan.

The areas of Chatsworth Park, the Dell, the Oval (including the community gardens), the Copse, the allotments, the cycle/footpath running from Firle Road to Glynn Road and the cliff

tops and Meridian Park, or parts thereof, are considered important when having regard to existing wildlife habitats in the area.

A high number of barriers to movement were also observed. Examples of various traffic calming measures to paths and entrance points of green spaces, fences to green spaces stopping pedestrian access and fenced off habitat areas were seen. The impediment of pedestrian and cycle access will undoubtably increase car usage.



Figure 8: A northward view from top of Meridian Way (Image captured at Site Visit on 8th May, 2021 at Peacehaven).

Apart from the existing designated green spaces in P&T, Figure 8 demonstrates that the builtup areas lack urban landscaping. P&T has previously addressed this with tree-planting in Sutton Avenue (see Figure 10). However, these were not maintained appropriately (see Figure 11), due to lack of funding.



Figure 99: Tree planting along Sutton Avenue in May 2011 (Google, 2019d).



Figure 10: The same planted trees in March 2019 (Google, 2019e).

3 Existing Policies

Table 1 below summarises the existing policies relating to P&T.

Table 1: Existing policies relevant to Peacehaven and Telscombe.

National	When discussing habitats and biodiversity, the NPPF states that local
Planning Policy	authorities should identify and safeguard local sites of importance
Framework	relating to biodiversity and work to "promote the conservation, restoration
(NPPF)	and enhancement" of these areas When determining planning
	applications, the NPPF requires that "development whose primary
	objective is to conserve or enhance biodiversity should be supported"
	and that any opportunity to improve upon biodiversity or natural habitats
	should be encouraged (MHCLG, 2019, para 174-175).
Lewes Core	Core policy 10 relates to the natural environment and landscape
Strategy: Local	character, with a key objective to "to conserve and enhance the natural
Plan Part 1	beauty, wildlife and cultural heritage of the area". Furthermore, the policy
	seeks to enhance local biodiversity such as by improving wildlife
	corridors and avoiding the fragmentation of habitats (Lewes District
	Council, 2016b, p. 111). The core strategy additionally states how P&T
	have a large network of green spaces that offer leisure opportunities for
	residents (ibid, p. 77). The town is very reliant on car travel; strategic
	objective 9 promotes the improvement of cycling and walking provisions
	and a reduction in the need for car travel (ibid, p. 39).
Lewes District	The Lewes District Local plan has specified that 255 houses must be built
Local Plan: Part	in the P&T area, expected to be delivered between 2010 to 2030. There
2	are concerns that this could affect the existing habitats and green spaces
	(Lewes District Council, 2020, p. 13). Policy DM24 seeks to protect these
	areas recommending that development will 'only be permitted where the
	benefits of the development clearly outweigh the damage to the
	conservation interest of the site and any loss can be mitigated to achieve
	a net gain in biodiversity and/or geodiversity' (ibid, p. 100). Policies DM14
	- DM16 look to provide multi-functional green space with new
	development to meet the needs of residents (ibid, p. 88-90).
Lewes Town	Objective 8 encourages new development to include green areas with
Council	green corridors to connect these together, the planting of trees and
Neighbourhood	sustainable urban drainage systems. To enhance biodiversity, it is
Plan	recommended that planting urban wildflowers and trees to link habitats

	to the town (South Downs National Park Authority, 2019, p. 30). Policy
	LE2 requires all development proposals to demonstrate how they will
	provide an increase in the habitats, species and biodiversity on the site
	(ibid, p. 36).
Lewes District	The policies for P&T from the 2003 Local Plan found in chapter 13 have
Local Plan	been saved for use in conjunction with the new local plans. Policy PT18
Saved Policies	describes the need for more allotments in the area and policy PT10 looks
(2003)	at the accessibility in the town with particular focus on the Meridian
	Centre in terms of cycle and footpath provision (Lewes and Eastbourne
	Councils, 2003). PT19 and PT20 relate to the Valley Road area situated
	to the north of Peacehaven and the east of Telscombe, these policies
	prevent development which harms the natural setting of the area and the
	routes used for walking as well as protecting the important wildlife
	habitats in the area.
South Downs	The South Downs Local Plan covers the entire National Park and applies
Local Plan	to the land to the north of Peacehaven. Section 5B covers biodiversity,
	with policy SD9 seeking to conserve and enhance sites and policy SD11
	seeks to protect trees, hedgerows and woodlands with the use of buffers
	to protect roots and replacement of damaged specimens (South Downs
	National Park Authority, 2019).

4 Ecosystem Services

The local wildlife sites in P&T and the ecosystem services they provide are a great asset to the community but are also crucial for wider benefits to biodiversity.

97% of wildflower meadows have been lost since the 1930s in Britain (Jarvis, 2014) and this in combination with the loss of many other habitats has led to a rapid decline in the bee population and insect population (Powney et al., 2019). Pollinators, such as honeybees, are known to be responsible for pollinating food crops and invertedly contributing towards food production (Powney et al., 2019). Currently, the pollination insects and bees provide is estimated at £690 million annually (The Wildlife Trust, 2018). Pollination without natural pollinators would cost food industries £1.8 billion (The Wildlife Trust, 2018). Locally, crops in P&T, resident gardens and any other vegetation all benefit from pollinators. Therefore, the protection and enhancement of the remaining wildlife habitats and connectivity is crucial for local pollinators and for the community to benefit from these ecosystem services.

The wildlife habitats in P&T also offer the community recreational opportunities. The Peacehaven Cliffs provide a habitat for breeding seabirds and the Cliff Grassland next to Cairo Avenue is roosted by Starlings (Sussex Biodiversity Record Centre (SxBRC), 2021). The scrub at Halcombe farm also provides an important feeding ground for migratory birds and the local golf course offers a woodland for several bird species including Bluetits, Great-Tits, Robins, Blackbirds and more (ibid). From this, it is clear the range of wildlife habitats in P&T are crucial for a variety of bird species and other wildlife. The diverse range of bird species and habitats create opportunities for recreational birdwatching and hiking for the residents of the area. However, recreational activities can threaten local wildlife habitats, particularly if visitors cause foot erosion by diverging from designated footpaths, which could damage wildflowers and laid eggs by roosting bird species. This threat is visible at the Cairo Avenue site, where numerous unofficial paths have emerged over time, which has needlessly damaged the habitat (SxBRC, 2021). Therefore, clear signage and interpretive panels are vital to discourage unnecessary trampling and encourage cautious behaviour around these habitats and species.

The variety of bird species and rare wildflowers, in addition to provision of access to and through these areas with potential hiking trails, could encourage tourism to the area (Duerksen, 1997), particularly if biodiversity is further enhanced. The wildlife spaces in P&T have remained difficult to access, as the range of local wildlife habitats were generally unknown until the recent 2021 SxBRC ecological study of the area (SxBRC, 2021). Therefore, provision of opportunities of ecotourism through the neighbourhood plan or other means, could

provide opportunities for both ecotourism and, additionally, job opportunities for local people. This would be economically benefit P&T, as the current low employment opportunities within the area leads to many residents commuting between neighbouring cities such as Brighton, which was highlighted in the LDLP as an issue that needs to be rectified (Lewes District Council, 2016a; 2016b; 2020).

The recent outbreaks of COVID-19, ensuing lockdowns, has resulted in a large increase in demand for both open spaces and accessible wildlife areas (Grima et al., 2020). The pandemic has demonstrated the key benefits ecosystem services provide to a community's overall health and well-being, especially locally accessible wildlife and green space in urban centres (ibid), with human happiness being strongly correlated to natural habitat accessibility (MacKerron & Mourato, 2013). The few remaining wildlife habitats in P&T offer residents improved health, as the locality of the sites, as seen on figure 1, offers the opportunity for on-site education for locals on ecosystems and rare species without the necessity of vehicle transport. Altogether, public access to these wildlife areas helps eliminate the risk of Nature deficit disorder, which has significant health consequences, particularly for children (Driessnack, 2009).

P&T's remaining wildlife habitats and ecosystems offer significant benefits to the local community through health, the economy, education and even local vegetation outside the wildlife habitats through the protection of pollinating species. It is crucial these spaces are protected, and it is clear the presence of the sites only benefits the local community, subsequently, the recommendations outlined in this report will simultaneously benefit local and wider biodiversity, and serve the local community of P&T.

5 Wildlife and Habitats

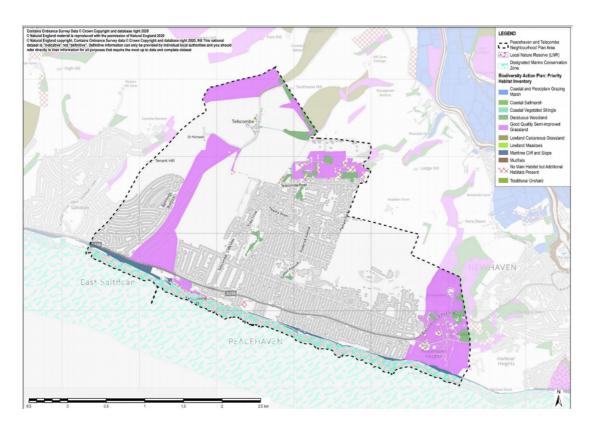


Figure 11: Statutory Designated sites and locations of recorded priority habitats in Peacehaven and Telscombe (AECOM Limited, 2021, p. 14).

P&T sits on the Beachy Head West MCZ, which is home to several threatened species, such as blue mussel beds and native oysters, as well as rare short-snouted seahorses and a nursery for several fish species (Sussex IFCA, 2021). Currently, these inter-tidal species are at threat from coastal squeeze as a result of the 'hold the line' policy (South East Coastal Group, 2006). The proposal for managed realignment by the Shoreline Management Plan on partial elements of the Peacehaven coastline therefore provides viable opportunity for net biodiversity gain.

Across the SDNP, protected migratory bird species like the Nightjar and Dartford Warbler are prevalent and require ground nesting sites. The threat to these birds is worsened by fringe development and undesignated walking routes. Fringe developments around P&T must consider the transition between rural and urban. The addition of nest boxes for bats and other bird species is a potential step.

Light pollution from streetlights and homes can also disturb certain species (Hoffman et al., 2019). Consequently, the creation of hedgerows along the perimeter of developments is important to maintain wildlife habitats. The fringe development at Pelham Rise, Peacehaven, highlights how constructive consultation can create more wildlife conscious designs. In their

planning process, alterations were made to allow hedgerows to face the SDNP, and allocation of roosting boxes for native species of bats and birds. This was arranged with long-term landscape management plan.

Continuous development in the Neighbourhood Plan area is likely to negatively impact on the existing habitats and species within further. This can be minimised with a strategy, in line with policy EL01, that plans for implementation of suitable green infrastructure to enhance the local biodiversity value in the local area.

6 SWOT Site Analysis

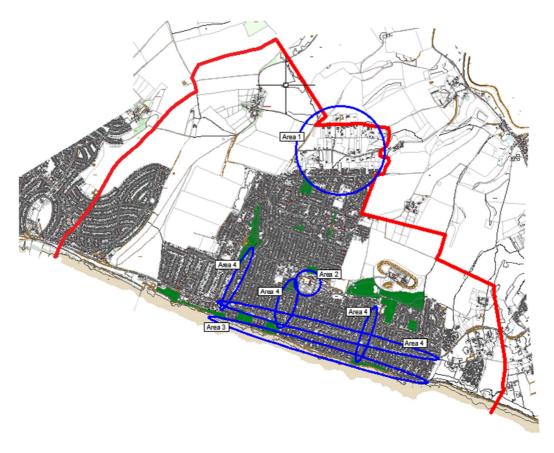


Figure 12: SWOT Area Layout

A Strengths, Weaknesses, Opportunities and Threats (SWOT) Site Analysis was undertaken in order to evaluate the key issues and opportunities in P&T.

6.1 Area 1 - SWOT Analysis of Land North of Roderick Avenue/Valley Road Area

This area is situated approximately to the North of Peacehaven and East of Telscombe where the landscape forms a long valley abutting the SDNP. The area is part of the saved site allocations in Lewes District Local Plan (Lewes District Council, 2003), as outlined on policies PT19 and PT20 (ibid). It also sits within an identified 'SHLAA' site (AECOM Limited, 2019) It has been chosen as a site of interest due to the increased pressure resulting in the need for 255 new homes across the neighbourhood plan area.

Strengths in relation to wildlife habitats and their connectivity	 Mix of Greenfield and previously developed land. Includes areas of designated local wildlife site. Site contains habitats with the potential to support priority species; notably, good quality improved grassland, broad leaved, shrub and mixed conifer woodlands. Good pedestrian and cycle access and routes within site. Individual and group tree preservation orders already present on site some significant ancient trees. Good access to South Downs National Park and is within the South Downs national character area.
Weakness	 Site is within the local plan and is identified as a growth option for residential allocation for approximately 255 houses. Unknown factors such as pollution may affect the site resulting from the informal business uses which have occurred within the area. Site is remote from the town centre by 1.5 kilometres and will therefore have limited effect in helping with connectivity where it is most needed.
Opportunities for wildlife habitats, their connectivity and benefits to ecosystems services	 Greenfield site allows specifically designed solutions rather than retrofit measures. Enhancement of already present semi-natural habitats. Opportunity to create strong links from town to National Park and Telscombe Opportunity to create strong GI Help to fulfil local plan requirements – spatial policies 1, 2 and Core Policies 1, 2, 5, 8, 9,10, 11, 12 and 13. Ability to provide 9 out of 12 core ecosystem services (climate regulation, air purification, pollination, accessible nature, aesthetical benefits, education opportunities, food provision and health and wellbeing opportunities)
Threats	 The site has been allocated for development, should wildlife and biodiversity policies not be implemented within the proposed NP then will be the potential for unsympathetic development to occur. Funding for diversity measures will be limited and may jeopardise so it's a viability.

6.2 <u>Area 2 - SWOT Analysis of Meridian Centre</u>

The Meridian centre lies at the heart of the town and is the prominent shopping area within the town. To its west is Meridian Park and 500m to the east is Centenary Park. The site has been allocated under policies PT9 and PT10 in the Neighbourhood Plan (AECOM, 2019). Currently, the designated developer is consulting with local residence regarding the Draft Layout Plan. This site has been identified due to it impending redevelopment, it has been recognised that currently plans are deficient in cohesive wildlife habitat and connectivity measures.

Strengths in relation to wildlife habitats and their connectivity	 Opportunity area, site already allocated for economic regeneration. Site contains and has surrounding scrub land and some mature planting. Good access and routes to site, predominantly vehicular. Good links to existing green spaces, the sports field to the north (part of Joffs) and the Meridian Park.
Weakness	 Site is allocated for mixed use retail and residential development which may conflict with biodiversity uses. Highly urbanised area with vehicular dominance over the site. Unknown factors such as pollution may affect the site as a result of the existing business uses which have occurred within the area.
Opportunities for wildlife habitats, their connectivity and benefits to ecosystems services	 Opportunity to create a strong centralise linking with other green spaces. Enhancement of already present semi-natural habitats. Brownfield site allows specifically designed solutions rather than retrofit measures. Opportunity to create biodiverse GI. Help to fulfil local plan requirements – spatial policies 1 and Core Policies 1, 4, 5, 6, 7, 8, 9 and 13. Ability to provide 7 out of 12 core ecosystem services (carbon storage, air purification, pollination, aesthetical benefits, education opportunities and health and wellbeing opportunities)
Threats	 Draft Layout Plan provided by developer and supporting documents does not highlight biodiversity at the early stages of the process, meaning it may become an afterthought. Viability of the site may 'squeeze' out GI and biodiversity measures

6.3 Area 3 - SWOT Analysis of Coastal Path

The coastal path runs along the top of the cliff edge. As illustrated on Figure 12, the surface is a mixture of paving stones, unmade road and grass. This area has been identified as it holds a unique position in its offerings of wildlife habitats within the town.

Strengths in relation to wildlife habitats and their connectivity	 Unique area of biodiversity within town. Peaceful Good access and routes to site, predominantly vehicular. Continuous path joining with neighbouring areas. Large area
Weakness	 Heavy footfall and erosion. Obscure path definition in places. Very little signage Very little protection of natural habitat Mixture of surfaces, in some parts shared with vehicles and unmade.
Opportunities for wildlife habitats, their connectivity and benefits to ecosystems services	 Opportunity to create a strong east west walking and cycling route. Opportunity to create definite walking vs protected areas. Creation of a sense of place. Opportunity to create biodiverse GI. Ability to provide 9 out of 12 core ecosystem services (Local climate, air purification, pollination, accessible nature, community cohesion, aesthetical benefits, wildlife watching, education opportunities and health and wellbeing opportunities)
Threats	 Underfunding funding for proposed schemes from local authority. Existing damage of wildlife from poorly thought out biodiversity schemes. Close proximity to residential properties.

6.4 Area 4 – SWOT Analysis of various areas with road verges and junctions

Road verges and junctions were identified across various sites, including Ambleside Avenue, Roderick Avenue, Piddinghoe Avenue, and various stopped-up junctions along the A259 (See Maps 1, 2, and 3 in Appendix 2). Currently, road verges are identified in the roads linking perpendicular to the A259, from the Esplanade and The Promenade. These roads altogether link to the existing open green spaces of Chatsworth Park, Meridian Park and scrub surrounding the Merdian Center and Centenary Park.

On either side of the carriageway, the width of the road verges ranges from 2m to 4m. The junctions are approximately $10m^2$ upwards to $12m \times 25m$. These verges are currently used as amenity space.

Strengths in relation to wildlife habitats and their connectivity	 Connects larger green spaces, The cliff edge to Chatsworth Park, Meridian Park and Centenary Park. Existing low amenity value of sites. Significant size and frequency of sites. Significant positions along the main A route.
Weakness	 Urban area, currently isolated strips of land. Car parking. Community engagement with projects.
Opportunities for wildlife habitats, their connectivity and benefits to ecosystems services	 Utilisation of redundant land. Sites widespread throughout location Creation of pleasant landscapes and raises levels urban greening. Raise levels of walking and cycling. Increase levels of naturalistic planting away from prominent coastal area. Utilisation of sites for GI and SUDS systems. Help to fulfil core policies 8,9 and 10 of the LDLP by improving the links between green spaces and natural habitats. Ability to provide 7 out of 12 core ecosystem services (air purification, pollination, aesthetical benefits, accessible nature, wildlife watching and health and wellbeing opportunities)
Threats	 Rejection of scheme from local community. Damage of verges from traffic and parked cars. Antisocial behaviour such as littering.

7 Recommendations

7.1 Specific Measures

The aim of this report is to provide recommendations which improve wildlife habitats and connectivity. Further to the site analysis found in section 6, the following specific measures are recommended across P&T.

7.1.1 Road verge restoration

As demonstrated on Figures 2 to 7, current road verges (as mapped on map 1, 2 and 3 on Appendix 2) offer little biodiversity. This is likely due to excessive cutting, which limits the germination of miscellaneous wildflowers (Bromley et al., 2019). These are recoverable to full potential with the appropriate method of maintenance, known as "two-cut management approach" (abid: p. 13).

Managing, expanding, and linking road verges can support crucial pollinators such as bees and butterflies, as existing road verges support nearly half (700 species) of the UK's wildflower species (Bromley et al., 2019). Expanding on road verges, with long-term practice of good maintenance, can promote further floral diversity and connective corridors. This would also benefit the wider ecological network.

7.1.2 Tree and Shrub Planting

Planting native species of trees and hedgerows will extend existing habitat and help to sustain the biodiversity. In particular, deep-rooted trees (e.g. pine trees) can support the stability of the Peacehaven cliffs by combating coastal erosion (Berg, 2006), as the roots can grasp the soil and prevent rock movement (Climate Adapt, 2016). However, deep-rooted tree-planting, particularly along road verges as street trees, would be impractical in P&T because of existing utility layouts. Therefore, lowland shrubs and wildflowers planted along green edgings and spaces are recommended. This should be implemented with support of a long-term management plans to ensure longevity of environmental initiatives.

7.1.3 <u>Nesting box implementation</u>

The flora and fauna in SDNP reveal a temperate forest (Robinson and Williams, 1983), largely occupied by arable farming and grassland (Jones and Robins, 1999). Implementing artificial nesting boxes will be beneficial to the local biodiversity as research suggest that 40% of all bird and mammal species in temperate forests rely on cavity availability for nesting or roosting (Gibbons and Lindenmayer, 2002; Newton, 1994). This will simultaneously contribute to boosting bee nest density (Inoue et al., 1993). Maintenance and monitoring will also be required, where the council should seek for a suitably qualified ecological surveyor.

7.1.4 Raising local awareness

Provision of publicly accessible and user-friendly interactive maps or interpretive panels can increase awareness of residents to mitigate disturbance to local wildlife and biodiversity. New signposted coastal paths along the Peacehaven cliffs can help to stop trampling in an area prone to cliff erosion, whilst helping to protect the unstable breeding grounds of the Fulmar bird that nest on the cliff edges.

8 Policy Recommendations

8.1 Protection of Existing Habitats

Protection of Existing Habitats

EH01 – Development which could affect any natural habitat, with particular note to the priority habitats shown in Figure 11, must demonstrate how the biodiversity of the area will be conserved and enhanced upon. In exceptional circumstances when this is not possible, clear and careful thought must be shown as to how mitigation of existing wildlife can occur and replacement landscaping and planting provided elsewhere including the replacement of any trees and hedgerows damaged in the three years after implementation of development. This policy is in line with paragraph 174-175 of the NPPF, Core Policy 10 of the Lewes Core Strategy Local Plan part 1 and DM24 of the Lewes District Local Plan part 2.

8.2 <u>Increasing Biodiversity</u>

Increasing Biodiversity

IB01 – In established green spaces and woodland an increase in existing and new species of wildlife can be achieved in the following ways:

- (i) the planting of native species of flowers, shrubs and trees (The ecological report includes a complete list of native species that would be appropriate).
- (ii) the provision of safe nesting spaces such as bird boxes and insect
- (iii) reduction in the mowing of grass in appropriate areas
- (iv) educational signage to make residents aware of the wildlife and how to protect it.
- (v) a reduction in light pollution in appropriate areas.
- (vi) Official paths through wildlife habitats must be set up to discourage unnecessary trampling and potential negative consequences for local biodiversity.

This policy is in line with policy SD9 of the South Downs Local Plan and policy LE2 of the Lewes Town Council Neighbourhood Plan.

IB02 – Wildlife corridors can be achieved through the planting of native species of wildflowers and scrubs onto the grass roadside verges. This policy is in line with objective 8 of the Lewes Town Council Neighbourhood Plan.

IB03 – To facilitate tree planting, when utility firms seek to place new, or maintain, infrastructure underground, the impact on tree planting on verges should be given consideration to help ensure as many trees as possible can be planted to enhance the environment.

8.3 Connectivity of the Town

Connectivity of the Town

CT01 – Safe footpaths and cycle lanes should be provided to link residential areas to amenities where possible to reduce car reliance. The main road should be improved upon to provide safe walkways and crossings.

CT02 – Provision for secure cycle parking should be provided in all new major development and non-residential development. New cycle storage should be provided at existing sites to encourage sustainable travel. The location and design of the store should be situated in a safe location and should respect the street scene and landscape of the area.

These policies are in line with objective 9 of the Lewes Core Strategy Local Plan part 1 and PT10 of the Lewes District Local Plan Saved Policies.

8.4 New Residential Development

New Residential Development

RD01 - Proposals for new major residential development (10 plus units) will be looked upon favorably where:

- (i) the development provides open space for the amenity of residents and wildlife, this space should feature native species of planting and landscaping, with an additional community allotment provided.
- (ii) there is no harm to existing wildlife habitats in line with policy EH01.
- (iii) the safe provision of cycle storage for each dwelling and cycle and pedestrian access throughout the site.

This Policy is in line with DM14, DM16 and DM24 of the Lewes District Local Plan part 2, objective 9 of the Lewes Core Strategy Local Plan part 1 and PT10 of the Lewes District Local Plan Saved Policies.

RD02 – Proposals for all new dwellings will be looked upon favorably where:

(i) natural landscaping and boundary treatments around the site are retained where possible with hedgerows and Grass verges implemented into the site layout design to provide wildlife corridors. This policy is in line with objective 8 of the Lewes Town Council Neighbourhood Plan.

8.5 Shoreline Management

Shoreline Management

SM01 – In areas where this is no potential risk to property the cliff face is to be left unmaintained and undefended to protect the species living on the shoreline, this is in-line with the Shoreline Management Plan.

SM02 – The planting of wind and salt resilient, deep routed trees along the cliff edge should be implemented to help to prevent rock movement.

8.6 The Meridian Centre

The Meridian Centre Future Development

MC01 – Proposals for the redevelopment of the Meridian Centre will be looked upon more favourably with the inclusion of the following

- (i) Suitable planting should be incorporated into any site layout plan
- (ii) Provision for secure cycle parking should be provided. This policy is in line with objective 8 of the Lewes Town Council Neighbourhood Plan, objective 9 of the Lewes Core Strategy Local Plan part 1 and PT10 of the Lewes District Local Plan Saved Policies.

9 Funding

The measures and proposals outlined in this report will all be funded through CIL. When the Neighbourhood plan has been approved by the local authority, 25% of the CIL that is collected from development within the neighbourhood area will become available to the Parish Council.

CIL can be spent on any infrastructure in the local area which can include:

- Social Infrastructure: E.g., Sports halls, education, signage
- Physical Infrastructure: E.g., Pavements, cycleways, footpaths
- Green Infrastructure: E.g., Public open space, woodlands, tree planting

It is understood that application for the Coastal Communities Fund could help in alleviating some of the financial burden placed on local planning authorities for funding environmental initiatives.

10 References

AECOM Limited. (2019) Peacehaven and Telscombe Neighbourhood Plan: Site Options and Assessment. [online] Available at: https://www.telscombetowncouncil.gov.uk/wp-content/uploads/2020/09/Aecom-Site-Assessment-Nov-2019.pdf [Accessed 13 May. 2021]

AECOM Limited. (2021) Strategic Environmental Assessment for the Peacehaven and Telscombe Neighbourhood Plan Scoping Report. [online] Available at: https://faf0d0ab-681e-4c9d-85ac-

bf8c57ee6b9b.filesusr.com/ugd/6d59de_5262744373e4492d9a8984758efff1c3.pdf [Accessed 16 May. 2021]

Berg, P. (2006) The Important Role of Trees in Combating Coastal Erosion, Wind and Salt Spray – A New Zealand Case Study. [online] Available at: http://www.fao.org/forestry/11283-0f0bb329900ba7bdfd3d31af07f337f85.pdf [Accessed 17 May. 2021]

Bromley, J., McCarthy, B. and Shellswell, C. (2019) *Managing grassland road verges: A best practice guide*. [online] Available at: https://www.wildlifetrusts.org/sites/default/files/2019-09/Managing%20grassland%20road%20verges.pdf [Accessed 13 May. 2021]

Driessnack, M. (2009) Children and nature-deficit disorder. *Journal for Specialists in Pediatric Nursing*, *14*(1), p. 73.

Duerksen, C. J. (1997) Habitat protection planning: where the wild things are (No. 470-471). *American Planning Association*.

Gibbons, P., and Lindenmayer, D. (2002) "Tree Hollows and Wildlife Conservation in Australia". Collingwood: CSIRO Publishing.

Google. (2019a) 10 Bolney Avenue. [online] Available at:

https://www.google.co.uk/maps/@50.7895028,0.0037085,3a,75y,352.63h,80.71t/data=!3m6! 1e1!3m4!1s3paByp7owBDkC0p3xnpvyQ!2e0!7i13312!8i6656 [Accessed 17 May. 2021]

Google. (2019b) 136 A259. [online] Available at:

https://www.google.co.uk/maps/@50.7900404,0.0073007,3a,75y,189.5h,80.26t/data=!3m6!1e1!3m4!1sXoKnNkEzXNb55r5F-GHNSA!2e0!7i13312!8i6656 [Accessed 17 May. 2021]

Google. (2019c) 201 A259. [online] Available at:

https://www.google.co.uk/maps/@50.7909897,0.0012877,3a,75y,27.77h,74.08t/data=!3m6!1e1!3m4!1sDDh65je5c85qBSFh9Nc0Cw!2e0!7i13312!8i6656 [Accessed 17 May. 2021]

Google. (2019d) Peacehaven, England. [online] Available at:

https://www.google.co.uk/maps/@50.793318,-

0.0040208,3a,75y,127.42h,76.03t/data=!3m6!1e1!3m4!1s7Jyh5YbuhK2sN3YgkAoPA!2e0!7i13312!8i6656 [Accessed 17 May. 2021]

Google. (2019e) Sutton Avenue. [online] Available at:

https://www.google.co.uk/maps/@50.7931817,-

0.0040931,3a,75y,60.48h,82.53t/data=!3m6!1e1!3m4!1s5c07HLwUkB9Zabn44Vqfag!2e0!7i 13312!8i6656 [Accessed 17 May. 2021]

Google. (2021) Newhaven to Saltdean. [online] Available at:

https://www.google.com/maps/dir/Newhaven/Saltdean,+Brighton/@50.7943996,-

0.0156578,14z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x47df7c37e7ba5a7b:0x3eb9e8f1e 73ab1da!2m2!1d0.045574!2d50.79307!1m5!1m1!1s0x48758653d8c89257:0xa0eae3048fab 2d0!2m2!1d-0.041899!2d50.80107!2m3!6e0!7e2!8j1621841400!3e0 [Accessed 22 May. 2021]

Grima, N., Corcoran, W., Hill-James, C., Langton, B., Sommer, H., & Fisher, B. (2020). The importance of urban natural areas and urban ecosystem services during the COVID-19 pandemic. *Plos one*, *15*(12), e0243344.

Hoffman, J., Schirmer, A. an Eccard, J. A. (2019) Light pollution affects space use and interaction of two small mammal species irrespective of personality. *BMC Ecology*, 19 (26)

Inoue, T., Nakamura, K., Salmah, S. and Abbas, I. (1993) "Population dynamics of animals in unpredictably-changing tropical environments. *Journal of biosciences*, 18 (4), pp. 425-455

Jarvis, D. (2014). *Wildflower Meadow: Creation and management in land regeneration*. [online] Available at: https://www.forestresearch.gov.uk/documents/2446/BPG_15.pdf [Accessed 13 May. 2021]

Jones, H. K. and Robins, N. S. (eds) (1999) *National Groundwater survey: The Chalk aquifer of the South Downs*. [online] Available at:

http://nora.nerc.ac.uk/id/eprint/12713/1/SD99001.pdf [Accessed 20 May. 2021]

Lewes District Council. (2003) Lewes District Local Plan. [online] Available at: CONTENTS (lewes-eastbourne.gov.uk) [Accessed 13 May. 2021]Lewes District Council. (2016a) Lewes

District Local Plan. [online] Available at: https://www.lewes-eastbourne.gov.uk/_resources/assets/inline/full/0/257159.pdf [Accessed 7 May 2021]

Lewes District Council (2016b) Lewes District Local Plan - Part 1 - Joint Core Strategy.

Available at: https://www.lewes-eastbourne.gov.uk/_resources/assets/inline/full/0/257159.pdf
[Accessed 13 May. 2021]

Lewes District Council. (2020) Lewes District Local Plan - Part 2 - Site Allocations and Development Management Policies. [online] Available at: https://www.lewes-eastbourne.gov.uk/ resources/assets/inline/full/0/287648.pdf [Accessed 13 May. 2021]

MacKerron, G. and Mourato, S. (2013) Happiness is greater in natural environments. *Global environmental change*, 23 (5), pp. 992-1000

Ministry of Housing Communities and Local Government. (2019) *National Planning Policy Framework, Chapter 15*. [online] Available at: https://www.gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment [Accessed 13 May. 2021]

Macdonald, M. (2016) *Brighton Marina to Newhaven Western Harbour Arm Plan.* [online] Available at: https://www.lewes-eastbourne.gov.uk/_resources/assets/inline/full/0/258572.pdf [Accessed 13 May. 2021]

Newton, I. (1994) "The role of nest sites in limiting the numbers of hole-nesting birds: a review". *Biological Conservation*, 70 (3), pp. 265-276

Powney, G. D., Carvell, C., Edwards, M., Morris, R. K., Roy, H. E., Woodcock, B. A., & Isaac, N. J. (2019). Widespread losses of pollinating insects in Britain. *Nature communications*, *10*(1), pp. 1-6.

Robinson, D. A. and Williams, R. B. G. (1983) *The Sussex Coast Past and Present*. In Sutton, A., (ed) Sussex: Environment, Landscape and Society, Brighton: The Geography Editorial Committee, pp. 50-66

South Downs National Park Authority. (2019) *Lewes Town Council Neighbourhood Plan* 2015 — 2033. [online] Available at: https://www.southdowns.gov.uk/wp-content/uploads/2019/04/Lewes-Neighbourhood-Plan-Made-Plan.pdf [Accessed 13 May. 2021]

South Downs National Park Authority. (2019) *South Downs Local Plan 2014-33*. [online] Available at: https://www.southdowns.gov.uk/wp-content/uploads/2019/07/SD LocalPlan 2019 17Wb.pdf [Accessed 23 May. 2021]

South East Coastal Group. (2006) *Beachy Head to Selsey Bill: Shoreline Management Plan*. [online] Available at: https://se-coastalgroup.org.uk/shoreline-management-plans/beachy-head-to-selsey-bill/ [Accessed 13 May. 2021]

Sussex Biodiversity Record Centre. (2021). Ecological data search for land at Peacehaven & Telscombe Parish Councils. [online] Available upon request. [Accessed 13 May. 2021]

Sussex Inshore Fisheries and Conservation Authority (IFCA). (2021) *Beachy Head West MCZ*. [online] Available at: https://www.sussex-ifca.gov.uk/beachy-head-west-mcz#:~:text=Conservation%20and%20Research-

,Beachy%20Head%20West%20MCZ,water%20line%2C%20covering%20approximately%20 24km2. [Accessed 13 May. 2021]

The Living Coast. (2021) *Biosphere Zones*. [online] Available at: https://thelivingcoast.org.uk/about/area-information/biosphere-zones [Accessed 13 May. 2021]

The Wildlife Trusts. (2018). *Saving species, Bees and pollinators*. [online] Available at: https://www.wildlifetrusts.org/savingbees [Accessed 13 May. 2021]