

8 BIODIVERSITY

Introduction

8.1 This chapter describes the ecological baseline of the site and its immediate surroundings based on information gathered through a combination of desk study and field survey. It then evaluates the ecological receptors present from this baseline, assesses the impacts of construction and operation of Jersey Future Hospital ((JFH) (which for the purposes of this report includes the redevelopment of the main hospital site and Westaway Court) on these receptors, and recommends any further ecological surveys, mitigation and enhancements as required.

Review of proposed development

8.2 The aspects of the proposed JFH which are of most relevance to biodiversity and ecology will be the demolition of buildings, any material alterations to buildings that are being retained and any clearance of vegetation which are likely to have effects on breeding birds and bats. The proposed JFH includes the main hospital site and Westaway Court. The buildings to be demolished are:

- Peter Crill House;
- Gwyneth Huelin Wing;
- Link block;
- Engineering block and chimney;
- 1960s and 1980s blocks;
- Westaway Court;
- St Elmo's (a modern extension to the rear of 1 Edward Place);
- Stafford Hotel;
- Revere Hotel;
- 33-40 Kensington Place (including Sutherland Court); and
- 44 Kensington Place.

Legislation, policy context and guidance

Legislation

8.3 The Conservation of Wildlife (Jersey) Law 2000 is the main piece of legislation in Jersey for the conservation of 'wild animals', 'wild birds' and 'wild plants'. Wild animals are those listed in Schedule 1, Part 1 (Appendix A) and include all bat species, hedgehog

Erinaceus europaeus, red squirrel *Sciurus vulgaris*, Jersey bank vole *Myodes glareolus* spp. *caesarius*, lesser white-toothed shrew *Crocidura suaveolens*, common/French shrew *Sorex coronatus*, green lizard *Lacerta viridis*, wall lizard *Podarcis muralis*, slow worm *Anguis fragilis*, grass snake *Natrix natrix*, agile frog *Rana dalmatina*, palmate newt *Lissotriton helveticus* and the common toad *Bufo bufo* and *Bufo spinosus*.

- 8.4 Wild birds are all bird species on the island except carrion crow *Corvus corone*, magpie *Pica pica*, feral pigeon *Columba livia* and wood pigeon *Columba palumbus* as listed in Schedule 1 Part 2 (see Appendix E1). Wild birds listed in Schedule 2 are given extra protection and include species such as kingfisher *Alcedo atthis*, barn owl *Tyto alba* and peregrine *Falco peregrinus* (Appendix E1).
- 8.5 Protected wild plants in Jersey are all those listed under the Conservation of Wildlife (Protected Plants) (Jersey) Order 2009 Schedule (Article 1). There are 67 plant species in total (Appendix E2) which include species such as Jersey buttercup *Ranunculus paludosus*, Jersey orchid *Anacamptis laxiflora*, pyramidal orchid *Anacamptis pyramidalis* and Jersey fern *Anogramma leptophylla*.
- 8.6 The Conservation of Wildlife (Jersey) Law 2000 makes it an offence for any person to knowingly and without appropriate licence to:
- Under Article 5(1) knowingly kill, injure or take any species of reptile, amphibian, bat, shrew, red squirrel or bird (apart from those listed on Schedule 1 Part 2) or the egg of such a bird;
 - Under Article 6 (1) to knowingly damage or destroy the den or nest of the above protected species, obstruct access to a den or nest in use or to disturb any protected species occupying a den or nest;
 - Under Article 13 to pick, uproot or to collect seed of plants listed in the Conservation of Wildlife (Protected Plants) (Jersey) Order 2009.
- 8.7 Multilateral Environmental Agreements (MEA) of which ratification has been extended to Jersey:
- Agreement on the Conservation of European Bats (EUROBATS);
 - Convention of Biodiversity (CBD);
 - Convention on the Conservation of Migratory Species and of Wild Animals (Bonn);
 - Convention on the Conservation of European Wildlife and Natural Habitats (Bern).

Policy context

8.8 **The States of Jersey Island Plan 2011**¹ contains policies for nature conservation within Section 2 Natural Environment. For the purposes of the Island Plan, the natural environment is considered to be represented by the Island's countryside and coast (extending to the 12-mile territorial limit and including offshore reefs and islands) which support and provide for a rich biodiversity.

- *Policy NE1 Conservation and Enhancement of Biological Diversity* - presumes in favour of the conservation and enhancement of biological diversity; permission will not be granted for the total or partial loss of a protected site or development, which would seriously adversely affect biological diversity.
- *Policy NE 2 Species protection* - Planning permission will only be granted for development that would not cause significant harm to animal or plant species protected by law, or their habitats. Where a proposal may have an adverse effect on protected species or habitats, applicants will be expected to undertake an appropriate assessment demonstrating proposed mitigation measures.
- *Policy NE 4 Trees, woodland and boundary features* – this policy protects trees, woodlands and boundary features (walls, fosses, banques and hedgerows) which are of landscape, townscape, amenity, biodiversity or historical value, by:
 1. refusing development proposals which will result in their loss or damage;
 2. requiring trees or hedgerows which are being retained on development sites to be adequately protected during any site works; and
 3. adding individual trees and groups of trees which make an important contribution to the landscape, townscape or local amenity value of a site or area to the List of Protected Trees.

Development proposals which do not adequately make provision for the appropriate landscaping of a site - including the retention of existing trees and hedgerows, as appropriate, and the provision of new planting with species which will be of benefit to the Island's biodiversity - will not be approved.

8.9 **Biodiversity Strategy for Jersey 2001**² – sets out Jersey's strategy for the conservation of biodiversity. It describes the contrasting habitats and different species which exist in Jersey and what should be done to protect them. It is a valuable supporting tool for the Jersey Island Plan.

¹ States of Jersey. (2011). *Island Plan 2011: Section 2 Natural Environment*. St Helier.

² States of Jersey Planning & Environment Committee. (n.d.). *Biodiversity a Strategy for Jersey*
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Relevant guidance

8.10 This assessment is based on the Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater and Coastal (CIEEM, 2016)³.

Consultation

8.11 The Principal Ecologist from the States of Jersey Natural Environment Department was consulted on the ecological assessment approach, which was proposed in February 2017. No concerns with the proposed approach were raised and therefore this approach was taken forward. Table 8.1 sets out the consultation that was carried out during the assessment. No further consultation with the States of Jersey Natural Environment Department was undertaken in 2018 as no change to the ecological assessment approach was considered necessary.

Table 8.1: Consultation responses

Stakeholder	Comment	Response
Principal Ecologist & Assistant Director Natural Environment, SoJ (John Pinel)	Agreement with ecological assessment approach (email dated 16/05/2017).	Assessment has followed methodology initially proposed.
	Bat surveys of Revere and Southerland Court should preferentially be completed prior to submission of planning application (email dated 2/05/17).	
Jersey Biodiversity Centre (Nick Aubin)	Historic biodiversity records provided (15/02/17).	These are referenced within the assessment.

4.6 Methodology

Overview

8.12 A combination of field survey and desk based study was used in order to compile the necessary baseline information for the assessment.

8.13 The Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the UK and Ireland; Terrestrial, Freshwater and Coastal (CIEEM, 2016) form the basis of this ecological assessment. These CIEEM guidelines set out a process of identifying the importance of ecological features and then characterising the impacts that are predicted. They go on to discuss the impacts on the

³ CIEEM. (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater and Coastal, 2nd Edition*

integrity or conservation status of these features, the proposed mitigation and residual impacts.

Methodology for establishing baseline conditions

Desk Study

- 8.14 Information on statutory designated sites within 2km of the site was obtained from the digital States of Jersey Island Plan⁴ and from a map of designated and proposed Sites of Special interest (SSI) provided by Jersey Biodiversity Centre (JBC)⁵ on 15th February 2017. Biodiversity data including historic records of protected and/or notable flora and fauna species within 2km of the site (5km for bat species) were obtained from the Jersey Biodiversity Centre on 15th February 2017.
- 8.15 Publically available maps and aerial photographs⁶ were examined to identify habitats and features that are likely to be of importance for protected species within the site and surrounding areas. Such habitats and features include areas of standing open water, which may support breeding amphibians, and areas of woodland and hedgerows for dormice and bats.
- 8.16 A report by Nurture Ecology⁷ detailing the findings of a preliminary bat inspection and a dawn re-entry survey for bats of Westaway Court, both carried out in September 2017, was examined.

Extended Phase 1 Habitat Survey

- 8.17 An Extended Phase 1 Habitat Survey of the 2017 redline boundary plus immediate surroundings and Westaway Court was undertaken in February 2017 in accordance with the standard Phase 1 Habitat Survey (JNCC, 2010)⁸ and the 'Extended Phase 1' method as set out in the Guidelines for Baseline Ecological Assessment (IEA, 1995)⁹.
- 8.18 Extended Phase 1 Habitat Survey is a standard technique for rapidly obtaining baseline ecological information over a large area of land. All habitat areas greater than 0.1ha are classified according to a standard set of habitat definitions and are mapped in line with the standard symbology. Any key botanical species are noted as target notes (TNs). The habitats are also appraised for their potential to support protected or notable species such as breeding birds, reptiles, bats and badgers. Any evidence of such species, in the form of footprints, droppings, hairs, or paths through vegetation are searched for and

⁴ <http://maps.digimap.je/islandplan/show.aspx>

⁵ <http://jerseybiodiversitycentre.org.je/>

⁶ <https://www.google.co.uk/maps/>

⁷ Nurture Ecology (2017). *Ecological (Bat) Survey Report for Westaway Court*.

⁸ JNCC. (2010). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Peterborough: Joint Nature Conservation Committee (JNCC).

⁹ IEA. (1995). *Guidelines for Baseline Ecological Assessment*. London: E & FN Spon.

any observations target noted. Due to the nature of the site as a built-up area in St Helier, the main species groups which were the focus of the survey were birds and bats.

For details of the survey methodology see Appendix E3 Jersey Future Hospital Extended Phase 1 Habitat Survey¹⁰ and Appendix E4 Westaway Court Preliminary Ecological Appraisal¹¹. The redline boundaries shown in these previous 2017 reports is that for the previous planning submissions however the survey area covered all areas of demolition for the current proposal.

Preliminary Bat Roost Assessment

- 8.19 A preliminary roost assessment for bats was undertaken across the site including Westaway Court of all built structures and trees in February 2017 in accordance with the Bat Conservation Trust (BCT) good practice guidelines (Collins, 2016)¹². For detailed methodology see Appendix E3.
- 8.20 The external inspection of the built structures and trees within the site was carried out from the surrounding highways and pavements, the internal courtyards of the Jersey General Hospital, pathways through the hospital site, from windows on the upper levels of the 1960s wing of the General Hospital building and from the roof tops of the Gwyneth Huelin Wing, Peter Crill House and Patriotic Street multi-storey car park. Close focusing binoculars and a high-powered torch were used. The internal inspection covered the basement and all the roof voids along the southeastern side of the Granite Block. A high-powered torch was used for the internal inspection.

Assessment methodology

- 8.21 The ecological assessment was carried out in accordance with the CIEEM guidelines. These guidelines recommend that the importance of ecological features is determined based on a geographic frame of reference as follows:
- International and European
 - National
 - Regional
 - Metropolitan, County, vice-county or other local authority-wide area
 - Local.
- 8.22 For the purposes of this assessment the following geographic frame of reference is used to align with other disciplines:
- International and European

¹⁰ Arup (2017). Jersey Future Hospital Extended Phase 1 Habitat Survey Report

¹¹ Arup (2017). Westaway Court Preliminary Ecological Appraisal Report.

¹² Collins, J. (2016). *Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. London: The Bat Conservation Trust.

- Island Wide (CIEEM National, Regional, or Metropolitan, County, vice-county or other local authority-wide area)
- St Helier (CIEEM Local)
- District (CIEEM Local)
- Neighbourhood (CIEEM Local)
- Site (CIEEM Local).

8.23 In accordance with the CIEEM guidelines, when describing ecological impacts reference should be made to the following characteristics:

- positive or negative – should be determined according to whether the change is in accordance with nature conservation objectives and policy:
 - Positive impact – a change that improves the quality of the environment e.g. by increasing species diversity, extending habitat or improving water quality.
 - Negative impact – a change which reduces the quality of the environment e.g. destruction of habitat, removal of species foraging habitat, habitat fragmentation, pollution;
- extent – the area over which an impact occurs;
- magnitude – the size of an impact in quantitative terms where possible;
- duration – the time for which an impact is expected to last;
- timing – whether impacts occur during critical life stages or seasons;
- frequency – how often impacts occur; and
- reversibility - a permanent impact is one that is irreversible within a reasonable timescale or for which there is no reasonable chance of action being taken to reverse it. A temporary impact is one from which a spontaneous recovery is possible.

8.24 The assessment only needs to describe those characteristics relevant to understanding the ecological effect and determining the significance.

Significance Criteria

8.25 The significance of effect will be determined in accordance with criteria set out in the CIEEM guidance in which ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local.

- 8.26 In broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).
- 8.27 Significant effects should be qualified with reference to an appropriate geographic scale. For example, a significant effect on a Site of Special Scientific Interest (UK) is likely to be of national significance. In Jersey, a significant effect on a Site of Special Interest (SSI) is likely to be of Island wide significance. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important. For example, an effect on a species which is listed on Schedule 1 Part 1 such as wall lizard *Podarcis muralis* may not have a significant effect on its Island wide population.

Limitations and assumptions

Limitations

- 8.28 This ecological assessment chapter is based on the baseline information gathered during the February 2017 field survey and the desk study carried out for the previous submission. The results of which are detailed in Appendix E3 and E4. These 2017 reports are still fit for purpose in providing the ecological baseline on which this assessment is based due to the fact that both the 2017 field survey and desk study covered all areas which will be affected by the current proposals.
- 8.29 The absence of protected and notable species records from the data search information returned from the JBC, does not necessarily mean the absence of these species but may reflect under recording in the search area. This is in part rectified by the Extended Phase 1 Habitat Survey which allows for a reasonable judgement to be made of the likelihood of protected and notable species being present, where they are not shown in the data search results.
- 8.30 Access to the following buildings, which were not in Department for Infrastructure (DFI) ownership, was not possible at the time of the Preliminary Roost Assessment for bats:
- Sutherland Court;
 - Revere Hotel;
 - Stafford Hotel; and
 - 1 Edward place which adjoins St Elmo's which will be demolished.
- 8.31 Only a limited external inspection of these buildings was carried out from Kensington Place and the roof tops of the Gwyneth Huelin Wing and Patriotic Street multi-storey car park. Whilst this was sufficient for a basic assessment of structural habitat suitability for bats, further survey work to include a more detailed external inspection as well as an internal inspection of the buildings for bats is required before the presence of a roost can be ruled out. This will be undertaken as soon as access can be arranged to the buildings.

8.32 Sometimes bats leave no visible sign of their presence on the outside of a building and, even when they do, wet weather can wash evidence away. Therefore, the absence of bat evidence during the external inspection does not always mean the absence of roosting bats. These limitations have not adversely affected the overall integrity of the survey, which was adequate to allow for a reasonable judgement to be made of the likelihood of bats being present.

Assumptions

8.33 As stated above, detailed bat surveys have not been carried out due to access and these further surveys remain outstanding. The assessment for bats has therefore been carried out based on a reasonable worst case using professional judgement.

Baseline Environment

8.34 The Jersey Future Hospital Extended Phase 1 Habitat Survey report (Arup, 2017)¹⁰ in Appendix E3 details the results of a desk study, Extended Phase 1 Habitat Survey and preliminary roost assessment for bats carried out in February 2017. The Westaway Court Preliminary Ecological Appraisal report (Arup, 2017)¹¹ details the findings from an ecological desk study and walkover of this site carried out in February 2017. The combined results are summarised here.

Statutory Designated Sites

8.35 The following statutory designated sites were identified within 2km of the site:

Site	Distance and orientation from site	Description
Internationally Designated Sites		
South East Coast of Jersey Ramsar Site	1.28km SW	Designated as a wetland of International Importance under the Ramsar Convention. Situated in Le Golfe Normano-Breton, the South East Coast of Jersey Ramsar Site comprises various habitats; reefs, boulder fields, mud, sandy and shingle shores not covered by water at low tide, combined with shallow tidal lagoons, seagrass beds and a constellation of outlying reefs. A tide range of 12 metres exposes extensive areas of reef at varying elevations, expansive rocky shores and a complex system of soft substrate gullies. The area also features a large, shallow, depositing, soft sediment bay, containing seagrass meadows, which provide important winter habitat for nationally important populations of waders and wildfowl ¹³ . Bird species found in the South East Coast Ramsar site include bar-tailed godwit (<i>Limosa lapponica</i>), turnstone (<i>Arenaria interpres</i>), redshank (<i>Tringa totanus</i>), grey and ringed plover (<i>Pluvialis squatarola</i> and <i>Charadrius hiaticula</i>), oystercatcher (<i>Haematopus ostralegus</i>) and curlew (<i>Numenius arquata</i>).

¹³ States of Jersey. (2011). *Jersey's South East Coast Ramsar Management Plan*.
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Site	Distance and orientation from site	Description
States of Jersey Designated Sites		
Fort Regent Ecological Designated Site of Special Interest (SSI)	0.7km SW	No other information provided by JBC, only location map.

Non-statutory Designated Sites

8.36 No records of non-statutory designated sites were provided by Jersey Biodiversity Centre for the area within 2km of the site.

Habitats

8.37 No data on protected or notable habitats was provided by the JBC for the area within 2km of the site. The following habitats were identified during the Phase 1 Habitat Survey within the application site and immediate surroundings, see Figure 1 in Appendix E-3 for the main site and Figure 1 in Appendix E-4 for Westaway Court. The habitats are not legally protected or otherwise notable in their own right.

Scattered Broadleaved Trees

8.38 There were a number of semi-mature planted scattered broadleaved trees around the hospital site and a number of mature scattered broadleaved trees in the adjacent Parade Garden. There were two mature common lime trees *Tilia x europaea* trees in the car park of Westaway Court.

Non-native species-poor hedge

8.39 Westaway court had a short stretch of species-poor non-native hedgerow bordering the car park.

Buildings and Hardstanding

8.40 The development site mainly comprises buildings and hardstanding including tarmac highways, pavements and paved areas within the grounds of the hospital, adjacent buildings being affected by the scheme and Westaway Court to the northeast.

Amenity Grassland

8.41 The majority of the neighbouring Parade Gardens comprised amenity grassland.

Plant species

8.42 The data search returned no records of protected or notable plant species for within the site boundary. A total of 34 records of protected plants species were provided for the area within 2km of the site, 17 of these were from the last 10 years. These 34 records included the Jersey fern *Anogramma leptophylla*, grey sedge *Carex divulsa ssp. divulsa*, sharp-leaved fluellen *Kickxia elatine*, motherwort *Leonurus cardiaca*, early-purple orchid *Orchis mascula*, hoary plantain *Plantago media*, Jersey buttercup *Ranunculus paludosus*, common glasswort *Salicornia europaea*, and autumn lady's-tresses *Spiranthes spiralis*. These plants are protected under Article 3 of the Conservation of Wildlife (Jersey) Law 2000 (see Appendix A1). The closest protected plant record is a Jersey buttercup, approximately 350m north-west from the site in St. Helier.

Protected Species

Bats

8.43 Historic records of nine bat species were provided by the JBC for the area within 5km of the site boundary: common pipistrelle *Pipistrellus pipistrellus*, Kuhl's pipistrelle *Pipistrellus kuhlii*, Nathusius' pipistrelle *Pipistrellus nathusii*, soprano pipistrelle *Pipistrellus pygmaeus*, serotine *Eptesicus serotinus*, whiskered bat *Myotis mystacinus*, Leisler's bat *Nyctalus leisleri*, brown long-eared *Plecotus auritus*, and grey long-eared *Plecotus austriacus*. A total of 163 records of roosts were provided for within 5km of the site, 147 of these were from the last 10 years. The 163 roost records included the following seven species and some unknown bat species: serotine, whiskered bat, Kuhl's pipistrelle, Nathusius' pipistrelle, common pipistrelle, brown long-eared, grey long-eared. 21 of the 163 roost were within 2km of the site boundary and 13 of these were from the last 10 years. The closest roost record was of an unknown bat species, approximately 540m south-east from the site in St. Helier. The bat surveys of Westaway Court carried out by Nurture Ecology in 2017 found no bats present and no further surveys are recommended.

8.44 The tiled pitched roofs of Sutherland Court and the Revere Hotel were assessed as having low potential for roosting bats during the preliminary roost assessment. Access to the rear of these buildings was not possible and access for internal inspections was not possible at the time of the survey. 1 Edward Place, which also has a tiled pitched roof and adjoins St Elmo's which is to be demolished, was not subject to a full internal/external inspection for bats due to uncertainty as to its inclusion in the scheme at that time. Further surveys including full internal and external inspections and dusk emergence and/or dawn re-entry surveys are proposed for these three buildings.

8.45 There are no high-quality foraging opportunities for bats in the surrounding area (such as riverine habitats or woodlands), but Parade Gardens would provide some sub-optimal foraging habitat. The lack of higher quality foraging habitat and lack of dark and/or green

corridors linking the site with such habitat in the wider surroundings means that the low potential buildings identified on site would be fairly isolated for most bat species. Species which readily roost in urban environments such as the common pipistrelle however may not be deterred by this.

- 8.46 No features suitable to support roosting bats or potential entry/exit points were observed on any of the other buildings. None of the trees within the application site had suitability for roosting bats.

Breeding Birds

- 8.47 A total of 2583 bird records were provided by JBC for the area within 2km of the site boundary, of which over 1900 were from the States of Jersey Environment Department Seagull study between 1998 and 2012. The closest records were recorded at the main hospital site itself, these were herring gull *Larus argentatus* and great black-backed gull *Larus marinus*. Of the total records provided within 2km, 13 were Schedule 2 wild birds including kingfisher (9 records), peregrine (3 records) and Cetti's warbler *Cettia cetti* (1 record).

- 8.48 The flat roofs and various ledges of the buildings provide opportunities for nesting birds. A pair of greater black-backed gulls *Larus marinus* was present on the highest part of roof of the Gwyneth Huelin Wing. Anecdotal evidence provided by Jersey General Hospital staff at the time of the survey indicated that they breed here every year. Several pairs of herring gull *Larus argentatus* were seen across the roofs of the General Hospital buildings at the time of the survey. Anecdotal evidence provided by Jersey General Hospital staff at the time of the survey indicated that they breed here every year. Due to the tendency of the herring gulls to intimidate patients and members of the public using the grounds of the hospital when they are breeding on the hospital roofs, their eggs are taken, under a licence from the States of Jersey, by a local pest control contractor each year. An area of climbing plants in the rear of the Revere Hotel were seen to support a number of dunnock *Prunella modularis*. Feral pigeons were present in numerous locations across the roofs of the General Hospital buildings despite efforts having been made to prevent them including pigeon spikes on ledges. The scattered broadleaved trees and area of hedgerow at Westaway Court provide potential to support common nesting birds.

Amphibians

- 8.49 There were no records of amphibians provided by JBC for the area within the application site. Two records of palmate newt from 2015 were provided for the area within 2km of the site, the closest approximately 1.1km north of the site in St. Helier. One record of agile frog from 2003 was provided approximately 950m north of the site and 72 western common toad records were provided for the search area, the closest being approximately 430m north of the site. No ponds were recorded on the application site and no ponds or other waterbodies were identified within 500m of the site and therefore it is unlikely that amphibian species use the site.

Reptiles

8.50 No historic records of reptiles were provided by the JBC for the application site. Eight slow worm, eight green lizard, three grass snake, and three wall lizard records all species protected under Schedule 1 Part 1, were provided by JBC for the area within 2km of the site. The closest record is of a slow worm approximately 560m east of the site in St. Helier. The Extended Phase 1 Habitat Survey identified no habitats within the application site or immediate surroundings with suitability for reptiles.

Other Protected Mammals

A total of 80 records of red squirrel were provided by JBC and over 600 records of hedgehog from the last 10 years, both listed under Schedule 1 Part 1. The closest hedgehog record is approximately 240m south west from the site in St. Helier. The habitats present within the site boundaries and immediate surroundings are not considered suitable to support red squirrel or hedgehog.

Evaluation of Resources

8.51 This section of the chapter evaluates the nature conservation importance of the habitats and species identified within the study area in terms of the geographic frame of reference context as identified in section 8.23-8.24. Table 8.2 below evaluates all the ecological resources present, or potentially present, within the study area.

Table 8.2: Evaluation of ecological resources

Ecological feature	Evaluation	Conservation importance in context of the development
Designated Site		
South East Coast of Jersey Ramsar Site	International / European	Designated for its range of intertidal habitats which support important populations of waders and wildfowl including bar-tailed godwit (<i>Limosa lapponica</i>), turnstone (<i>Arenaria interpres</i>), redshank (<i>Tringa totanus</i>), grey and ringed plover (<i>Pluvialis squatarola</i> and <i>Charadrius hiaticula</i>), oystercatcher (<i>Haematopus ostralegus</i>) and curlew (<i>Numenius arquata</i>).
Fort Regent Ecological Designated Site of Special Interest (SSI)	Island Wide	The site comprises a semi-natural cliff habitat which supports a diversity of plants including pale flax <i>Linum bienne</i> and the locally uncommon autumn squill <i>Scilla autumnalis</i> and nesting birds.
Habitats		
Scattered broadleaved trees	Site	Present within site boundary and neighbouring Parade Gardens.
Species-poor hedge	Less than site value	Bordering car park at Westaway Court.

Ecological feature	Evaluation	Conservation importance in context of the development
Amenity grassland	Less than site value	Present within neighbouring Parade Gardens. Intensively managed and does provide suitable habitat for protected species.
Buildings and hardstanding	Less than site value	The majority of the site comprises buildings, tarmac, and concrete. The hospital buildings have been found to support breeding birds, see evaluation for breeding birds below. The Sutherland Hotel, Revere Hotel and 1 Edward Place which adjoins St Elmo's potentially support roosting bats, see evaluation for bats. As a habitat in their own right they are of less than site value.
Species		
Bats	Neighbourhood	<p>Low potential roost features were identified on the Sutherland and Revere Hotels during the preliminary roost assessment. 1 Edward Place which adjoins St Elmo's also has potential for roosting bats due to its age and tiled pitched roof. Further surveys will be undertaken as soon as access is arranged to these buildings. Due to the nature of these buildings and the urban surroundings, if bat roosts are present, they are likely to be of a common species such as common pipistrelle and the roost status is unlikely to be more than a day roost of a single / small number of individuals and therefore roost(s) of low conservation importance.</p> <p>As no further surveys have been possible to date, on a precautionary basis bats have been valued as Neighbourhood importance.</p> <p>All species of bats are fully protected under the Conservation of Wildlife (Jersey) Law 2000.</p>
Breeding Birds	St Helier	<p>The roofs and various ledges of the General Hospital buildings and Westaway Court provide nesting habitat: at least one pair of greater black-backed gull nests on the highest part of the Gwyneth Huelin Wing roof. Several pairs of herring gull are known to nest on the roofs of the General Hospital buildings. Dunnock were present in the garden of the Revere Hotel.</p> <p>All species of birds except those on Schedule 1 Part 2, and their nests and eggs are fully protected under the Conservation of Wildlife (Jersey) Law 2000.</p>

Design Mitigation

- 8.52 Any trees to be retained will be adequately protected during the works in line with Policy NE4 Trees, woodland and boundary features. This will include fencing off the root protection zones. The details will be outlined in the CEMP.
- 8.53 Any new planting within the site boundary will be species which will be of benefit to the Island's biodiversity in accordance with Policy NE4. The details of which will be outlined in the landscape planting plan when prepared.
- 8.54 To enhance the site for bats, it is recommended that up to four bat tubes or bat bricks such as the 1FR Schwegler Bat Tube and / or the Ibstock Enclosed Bat Box C are fitted into the fabric of the new buildings. Nest boxes for birds will also be provided if suitable

locations allow within the new development and landscaping proposals. During detailed design, it may be possible to consider other enhancement measures as part of the landscaping work.

Assessment of effects

8.55 In this section of the EclA, only those ecological features valued at more than site level will be carried through to the assessment.

Assessment of effects from construction

Designated Sites

8.56 Due to the site being situated within urban surroundings, it is isolated from the designated sites identified within 2km of its boundaries in terms of hydrological or other connectivity; there will therefore be **no effects** on designated sites.

Habitats - Scattered broadleaved trees

8.57 It is likely that a number of the trees within the grounds of the General Hospital and the two at Westaway Court will need to be removed to accommodate the construction phase which will mean a minor negative effect on this habitat at the site level. As part of the standard construction/design mitigation detailed in the CEMP, the root protection zones of any trees to be retained will be fenced off during the construction work to protect the trees from damage. Furthermore, the scattered broadleaved trees within the neighbouring Parade Gardens will not be effected by the project. The clearance of the trees on the site prior to/during the construction phase is assessed as an **insignificant negative effect at the site level**.

Bats

8.58 It has not been possible to carry out the required bat surveys necessary to rule out the presence of roosting bats in the Sutherland Hotel, Revere Hotel and 1 Edward Place. However, assuming a reasonable worst case, i.e. that no more than one day roost / a very small number of day roosts of a common species (occupied by a single or very small number of individuals) is present, the effects of the demolition of these buildings has been assessed as a **significant negative effect at the Neighbourhood level**.

Breeding Birds

8.59 The nests of greater black-backed gull, herring gull and other common breeding birds found breeding on the buildings on site prior to or during the construction phase are likely to be destroyed. As part of the standard construction/design mitigation which will be detailed in the CEMP, standard best practice will be applied with regard to clearing any trees or vegetation within the site and therefore no effects on breeding birds from

this activity is expected. The effect of the demolition of the buildings on breeding birds is assessed as a ***significant negative effect at the St Helier level.***

Assessment of effects from operation

Designated Sites

8.60 No effects during operation expected.

Habitats - Scattered broadleaved trees

8.61 No effects during operation expected.

Bats

8.62 No effects during operation expected.

Breeding Birds

8.63 No effects during operation expected.

Cumulative effects

8.64 Cumulative effects are identified within Chapter 16: Cumulative effects.

Mitigation and enhancement

Mitigation of effects from construction

Bats

8.65 Further surveys for bats of the Revere Hotel, Sutherland Hotel and 1 Edward Place which adjoins St Elmo's will be carried out when access can be arranged. The surveys will comprise a full internal and external inspection and one dusk emergence /dawn re-entry survey during the activity season between the months of May and September.

8.66 If roosting bats are found, a licence from the States of Jersey must be obtained under Article 16(1) of The Conservation of Wildlife (Jersey) Law 2000 before any demolition works or other construction activities which may disturb the roost in the vicinity of the roost can commence. A method statement detailing the mitigation proposed to maintain the population at a favourable conservation status will need to accompany the licence application. The mitigation measures are likely to involve the provision of replacement roost(s) prior to construction works commencing and the timing of construction works so that demolition/other activities in the vicinity of the roost are carried out at a time when the bats are least vulnerable. The details of the mitigation will be determined following further survey work and through consultation with the States of Jersey.

8.67 If no bats are found during the further survey work, construction works can commence. In the unlikely event a roosting bat or evidence of roosting bats is found during the construction works, all works must stop in the vicinity of the roost and advice from an ecologist must be obtained. A bat mitigation licence from States of Jersey is likely to be required and mitigation will need to be put in place. Mitigation measures will need to be appropriate to the type of bat roost found, but are likely to include appropriate timing of

the continuation of the works and the installation of bat boxes on surrounding trees and /or buildings.

- 8.68 To enhance the site for bats, it is recommended that up to four bat tubes or bat bricks such as the 1FR Schwegler Bat Tube and / or the Ibstock Enclosed Bat Box C are fitted into the fabric of the new buildings.

Breeding Birds

- 8.69 The gull control measures currently in use on the General Hospital site should be continued in discussion with the local pest control firm who are currently contracted by the Hospital. They may be able to advise on additional mitigation measures including deterrents such as use of a falcon to scare the gulls.
- 8.70 Although not protected by Jersey Law, it is recommended that humane control measures of feral pigeons are put in place prior to the demolition of the buildings. The pest control firm currently contracted by the Hospital would be consulted in this regard.

Mitigation of effects from operation

Bats

- 8.71 No mitigation during operational phase required.

Breeding Birds

- 8.72 No mitigation during operational phase required.

Residual effects

Residual effects from construction

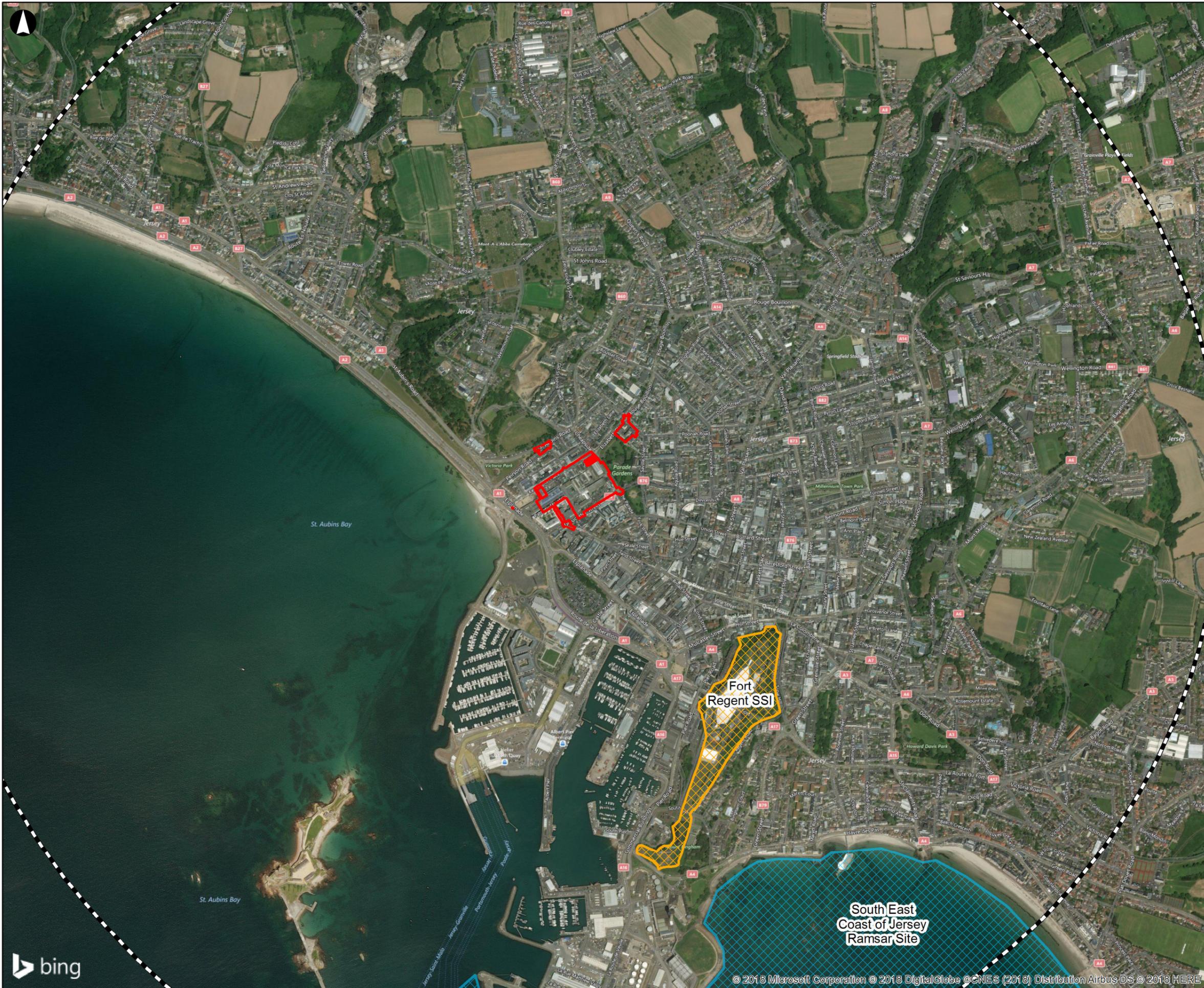
- 8.73 Following the implementation of the suggested mitigation measures above prior to and during the construction phase, no construction phase residual effects on ecological receptors are expected.

Residual effects from operation

No operation phase effects are expected.

Assessment summary matrix

Potential Effect	Receptor (s)	Sensitivity of Receptor	Magnitude (prior to mitigation)	Significance (prior to mitigation)	Mitigation	Magnitude (following mitigation)	Significance (following mitigation)	Comments
Loss of small number of roosts through demolition of buildings	Bats	International / European		Significant negative effect at the Neighbourhood level.	(If bats present) timing of works and provision of new roost(s).		No significant effect	Awaiting surveys of some of the buildings.
Disturbance / destruction of nests and eggs	Breeding Birds (mainly gulls)	Island-wide		Significant negative St Helier	Timing of works and /or gull control measures.		No significant effect	



Legend

-  Study Area
-  Site Boundary
-  Ramsar Site
-  SSI



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO.

P01.3	2018-04-05	AF	CJ	RE
Issue	Date	By	Chkd	Appd

Metres

0 162.5 325 650

ARUP

Client
Department for Infrastructure

Job Title
Jersey Future Hospital

Figure 8.1 Designated Sites for Nature Conservation

Scale at A3
1:12,000 **INSET: 1:300,000**

Job No 237035	Drawing Status For Information
Drawing No Figure 8.1	Issue P01.3