OVERARCHING PRINCIPLES/ISSUES THAT APPLY TO ALL OF THESE SITES

The bulk of the affordable housing sites identified in the BIP might be considered to have little value for biodiversity, either because they are currently in agricultural production or lying fallow, and that what biodiversity there is, may be limited to the field boundaries. There is some truth in that view however the existing value and potential shouldn't be underestimated. Adopting such a simplified assessment limits opportunity. There are a number of sites that will certainly have elevated levels of on-site biodiversity or that occupy an important place in the ecological network of the Island. The ecological value of all of these sites should also be set in the context of important adjacent ecological features as well as the impacts of cumulative development of schemes (St Peters Village sites as an example).

<u>Wildlife (Jersey) Law 2021</u> - The Wildlife (Jersey) Law 2021 is the primary law protecting wild animals, birds and plants in Jersey. Species that are listed in the Schedules to the Law, as well as their dens, nests, breeding sites and resting sites are protected from harmful activities. The Law also imposes a duty upon public bodies to have regard to promoting the conservation of biodiversity. As you'll be aware this theme is also picked up in the NE chapter of the BIP and whilst not currently well defined, it provides an opportunity for consultees and regulators to discuss at the earliest possible opportunity how proposals might address the aims of the Minister for the Environment - "to engage with, and strongly encourage, government-sponsored development schemes, including those to be delivered by arms-length agencies, to actively explore how the concept of biodiversity net gain might be delivered in Jersey during the plan period". Land Resource Management are currently developing guidance to support the Wildlife Law and links to this could be added to any online documentation you develop when completed.

Boundaries - Boundary features provide ecological habitat, connectivity and a range of other ecosystem services, including improved drainage, enhancing access, reductions in noise and air pollution and opportunities to combat the effects of climate change. They also support cultural reference and landscape setting. In (semi)rural locations boundaries vary in type, quality and nature ranging from stone walls and bare grassy banks through to mature tree and hedgerow lined features. This variation extends to both roadside and internal boundaries, although is likely to be different in nature depending on which it is. These variations are primarily the result of current and/or historic land management practice or possibly the perceived risk to public or property. For many the boundaries of these sites represent the key ecological feature to address in the design and development of these sites, however their importance and that of any associated species is often not reflected when site plans are realised. Enhancement must be mindful of the need for retention of the both the ecological and cultural relevance. It must be recognised that the removal of mature boundaries (all be it for legitimate reasons) will result in a significantly lower biodiversity value for the site, for an extended period - an important consideration when developers are seeking to deliver net gain for biodiversity on the site.

Where there are existing trees and hedging these should be retained, increased in scale, density and quality, protected into the future and maintained in accordance with best practice. Species selection (ideally native) should also sit well within the existing landscape and compliment the boundary type, soil type and likely maintenance programs. New boundaries should complement existing ones and work with cultural significance or design features to provide enhanced connectivity. Again, all new planting needs to be native and compliment locality.

The development of more rural or village edge locations often results in the removal of roadside boundary habitat (for engineering purposes, establishing pavements, transport infrastructure, (vehicle entrance splays and bus shelters) and new lighting, where previously there was none) and depending on the design of the development there is no replacement. Mature roadside trees that are retained can be subjected to irreparable root damage or poor arboricultural management that will see their inevitable decline and the need for earlier than required felling. The roadside "urbanisation" of these locations needs to be a consideration in proposals. There are numerous examples of the negative consequences of these decisions across housing developments.

Opportunities should be considered to set back developments and reconsider conventional layouts, including the positioning of gardens, paths, internal roadways and lighting to benefit retention and enhancement of boundary vegetation. Where external public pavements are introduced (which are often wide) then there is an opportunity to set them back or plant roadside trees, incorporate green infrastructure (on, for example, bus shelters) to improve the long-term quality of the landscape and environment for the public and biodiversity. All roadside boundary trees that are to be retained must be adequately assessed and protected from development activity in line with BS5837 and the Wildlife Law..

The impact of development on internal field boundaries can be significant. In many cases because of historical and possibly limited management these boundary habitats can be more mature and less disturbed. Although valuable from an ecological perspective many of the trees and hedges (or the banques themselves) may well be deemed "unsafe" (through survey) either to people or property (from an adjacency point of view) resulting in felling or additional disturbance. Trees that do remain can suffer significant root damage leading to accelerated decline and ultimately the need for removal. The replanting of new hedgerows and standard trees (whilst welcome) does not replace the scale of the loss of biodiversity and this will be a position that extends well into the future whilst the vegetation matures.

If new boundary planting is inadequate (incl. species selection), not sufficiently well maintained in the future (needs to be managed for at least 5-10years) then the biodiversity potential will never be realised. The introduction of lighting adjacent to these boundaries is also of particular concern as historically they will have been the least illuminated. Developers should seek to adopt and incorporate lighting guidance from the Bat Conservation Trust – (Bats & Artificial lighting in the UK; Bats & The Built Environment).

Redundant glasshouse sites - Experience has shown us that these sites often have an increased ecological value, supporting a range of protected species because they are generally inaccessible, undisturbed and in some situations have an historic irrigation pond now supporting a range of herpetological species. It's imperative that the on-site ecology is considered at an early stage as there is a timeframe for surveying, site clean-up and potential habitat construction that needs to be considered and factored into the design. A qualified ecologist can advise on the best ways to approach this work and this will allow applicants, architects and developers to meet their obligations to the BIP Policies and Wildlife (Jersey) Law 2021. For example, amphibians can often be associated with these sites and there is therefore the need to consider aquatic habitat provision within the design brief.

There is an indicative timetable for survey that might be worth including in the Development briefs.

	JAN	FEB	MAR	AP	R	MAY	JUNE	JULY	AUG	SEPT		ост	NOV	DEC
Bats														
(Hibernation Roosts)														
Bats														
(Summer Roosts)														
Birds (Breeding)														
Small mammals														
Amphibians			AQUATI	IC		TERRESTRIAL								
Invertebrates														
Reptiles														
Key : optim	al survey	time			pos	ssible survey time						1	1	1

Design Features for Ecological mitigation:

There are a multitude of design features that can benefit and promote biodiversity in housing schemes of all sizes; sensitive lighting schemes (following published guidance by the Bat Conservation Trust), bird and bat boxes and bricks, roost features (in associated infrastructure such as bin stores, power outbuildings, bike sheds), green/brown roofs and green walls, pollinator planting, swales and rain gardens for drainage, garden biodiversity, small mammal highways and under road wildlife tunnels. These features incorporated, in many cases as mitigation/compensation measures, can in their own right and as part of more sustainable design create a more diverse and appealing environment and community to live in.

The following guidance provides some examples of what are considered to be good design features for biodiversity and a sustainable living environment.

https://www.nhbcfoundation.org/wp-content/uploads/2021/05/S067-NF89-Biodiversity-in-new-housingdevelopments_FINAL.pdf

BIP Affordable Housing Sites

Field J1109, La Grande Route de St. Jean, St. John - Address Locator (gov.soj)

Some terrestrial mammal records. Important bat roosts adjacent to the site (known Greater long-ear and pipistrelle bat roost in Church Mews (formerly Sion Temple) directly adjacent to the north of this site, plus potential for others in neighbouring buildings). Important to maintain hedgerow connectivity in both an east west and north south direction as site sits in close proximity to the woodland valley ESA's. Overarching principles

LRM have had some early discussion with the applicant's ecologist about the extent of the surveys that should be undertaken given the known ecological records. These surveys will help to highlight the importance of the boundary features, the need to improve them and ensure design options considering layouts and ecological features are sympathetic to the findings.