

Church Road



Development Name: Church Road

Location: Illogan, Redruth, Cornwall

Type of Project: Residential

Applicant: Coastline Housing

BwN Assessor: Jenny Stuart, Cornwall Environmental Consultants

BwN Award: Full (Good), subject to post-construction sign off

Church Road is a small, yet influential, greenfield development. It successfully demonstrates a social housing scheme that incorporates essential green infrastructure features and encourages the health and wellbeing of its occupants.

The site is in the village of Illogan, within Redruth, Cornwall. The development includes 33 new homes, a public open space, and a footpath that links the site to existing natural woodland. The highlighted green infrastructure elements include SuDS features and wildlife enhancements such as a swift nest box, bat tube and a bee brick per dwelling.

The Illogan locale typically has a low land value. Even as such, the applicant, Coastline Housing,

is committed to the principles of multifunctional, high-quality green infrastructure. It is these priorities that underpin the Building with Nature benchmark. Since Coastline Housing went above and beyond to integrate green infrastructure into the site, they were given their final assessment and achieved the Full Award. The involvement of the BwN Assessor helped by consolidating and enhancing the proposals for the site, particularly related to the Water Standards.

*A **Building with Nature Full Award** externally certifies that a scheme meets the BwN Standards and delivers high-quality green infrastructure, at both pre- and post-construction stages.*

Introducing Building with Nature

At Building with Nature our mission is to put high-quality green infrastructure at the heart of placemaking in the UK, maximising benefits for people and wildlife. By bringing people closer to nature and building great places for us to live, work and play, development can make a major contribution towards better health and wellbeing in our communities and tackling the climate and ecological emergencies.

Building with Nature is the first evidence-based benchmark for high-quality green infrastructure in the UK. The BwN Standards Framework has been created in partnership with planners, developers, and other key stakeholders, providing a shared understanding of ‘what good looks like’ throughout the whole lifecycle of green infrastructure – from the policy framework and early-stage design, through to implementation, and long-term management and maintenance. The BwN Standards are free to use and can be downloaded from the BwN website. Building with Nature also provide a voluntary accreditation process, helping developers and other stakeholders move through the planning process more effectively, and providing an independent verification of quality when it comes to green infrastructure assets.

This case study demonstrates how this scheme’s green infrastructure meets the BwN Standards, illustrated through the BwN themes of Core, Wellbeing, Water and Wildlife.

“ Here in Cornwall, we have been working with BwN since the beginning. Our aim when we work with developers and the Local Authority is to integrate great quality green and blue infrastructure. This not only helps make space for nature, but also helps connect people with a green and blue landscape right on their doorstep.

By integrating naturalised landscapes like this residents and passers by benefit from the well known mental and physical health benefits of easy access to such spaces.

Here the developer worked with our own consultancy, CEC, to make sure green infrastructure was built into the project right at

Scheme Green Infrastructure Objectives

Outline planning permission was granted for a new residential development on the site in 2016. The resulting Reserved Matters proposals were granted planning permission in 2019 and resulted in the inclusion of a public open space.

The context of the site greatly influenced green infrastructure integration. The site lies southwest of Ilogan. To the north is a cemetery and memorial garden. To the west and southwest is Manningham Woods and a permissive footpath. To the south and east there is a rectory set on a large ground.

The BwN Assessment and Audit process on this site was used to highlight the need for further SuDS elements. The development met the Water Standards by adding a dry swale through a Non-Material Amendment application, making them eligible for the BwN Full Award.

The BwN Accreditation confirms that Church Road has demonstrated compliance with BwN Standards and can claim a BwN Full Award, subject to Post-Construction Sign-off.



Figure 1: Illogen housing site plan

the start. As a result, Coastline Housing have been able to deliver a scheme which, despite being fairly high-density affordable homes, still delivers what we consider to be the essential elements of a healthy place for people and the environment.

**Natasha Collings-Costello, Director,
Cornwall Environmental Consultants**

CORE Standards

- Standard 1** Optimises Multifunctionality and Connectivity
- Standard 2** Positively responds to the Climate Emergency
- Standard 3** Maximises Environmental Net Gains
- Standard 4** Champions a Context Driven Approach
- Standard 5** Creates Distinctive Places
- Standard 6** Secures Effective Place-keeping

The scheme presented by Coastline Housing satisfies the BwN CORE standards. It does this by using a design approach that exemplifies both the potential functions and benefits of green infrastructure features. It is an exemplar of a **small-scale scheme** functioning as a connected and multifunctional green infrastructure network.

Many of the green infrastructure features throughout the site are multifunctional. An example includes an ecological corridor that both enhances the locale and functions as a retainer.



Image 1: The site is directly adjacent to Manningham Woods

It provides a vegetated buffer between the development and the surrounding woodland. Additionally, it functions as a connective natural corridor between habitats.

The development approach worked cohesively between new tree planting and the existing planting context as set out in the LVIA. The practice not only brings about a visually satisfying planting plan but is also ecologically important.



Image 2: Cornish hedge created on site

Finally, place-keeping is laid out in the Landscape Management Plan, which details the future security of the site's management by laying out funding and stewardship.

The Landscape Management Plan allows for a **5-year period** of establishment and rooting for the long-term assurance of the success of Green Infrastructure features. Coastline Housing is responsible for life-long management of the site.



Image 3: Green infrastructure will be assessed at the Post-Construction Check as part of the Full Accreditation sign-off

WELLBEING Standards

- Standard 7** Brings Nature Closer to People
- Standard 8** Supports Equitable and Inclusive Places

The existing permissive footpath links Church Road to Manningham Woods. Along with further pedestrian routes throughout the site, it ensures that green infrastructure features are accessible to all residents. These provide connectivity throughout the wider area. Accessibility to the site is enhanced through alternative linkages along the public side of the development.

Connectivity throughout the wider neighbourhood area is encouraged by key changes between the Approved and Detailed schemes. One significant example is the addition of a **Public Open Space** at the entrance of the site. It creates a sense of openness and community cohesion.



Figure 2: Open space layout

Both new and existing members of the community have physical access to the green infrastructure features on-site. These include new visually and ecologically enhancing tree plantings and ecological corridors. They also invite residents in using shaded benches and accessible play equipment.

The use of large windows and visual corridors maximise views throughout the site to the forest or new green infrastructure features. These increase daylight within the dwellings, thus reducing artificial light loading and enhancing visual amenity.



Image 4: Accessible footpath to Manningham Woods

WATER Standards

Standard 9 Delivers Climate Resilient Water Management

Standard 10 Brings Water Closer to People

The site faced restrictions on suitable SuDS solutions, such as being deemed unsuitable for soak-away attenuation. Additionally, the water company didn't allow any water into the mainstream sewage systems that had gone through green infrastructure features.

Nonetheless, the Reserved Matters Application included surface water drainage plans and the developers were able to provide SuDS capacity in the most beneficial manner to the site.



Image 5: Church Road is currently in construction, and although some green infrastructure features are yet to be established, it is clear from the BwN site photos that Coastline Housing commitment to manage surface water runoff in part through drainage to soft green verges is evident in the built out scheme

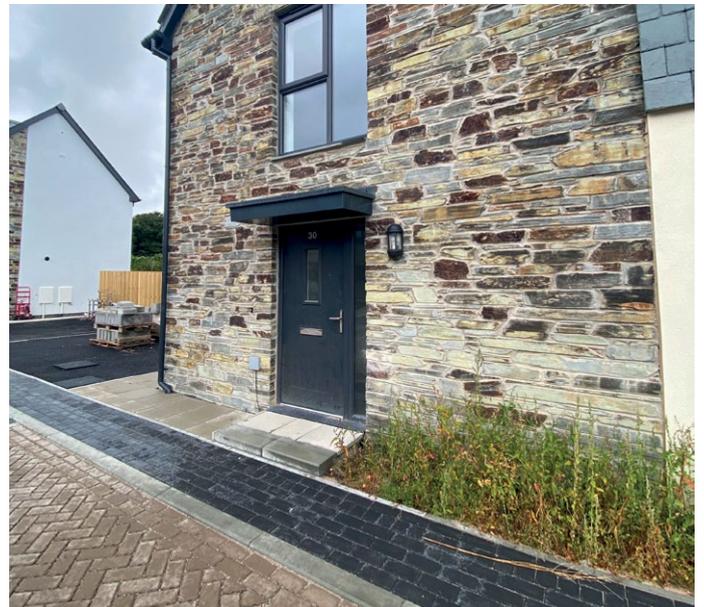


Image 6: The approach to hard landscaping at Church Road integrates water management features, such as permeable paving. This helps to maximise surface water management through the use of SuDS, and ensures hard surfaces are contoured to help irrigate areas of soft landscaping in and around homes

Soakaways and permeable paving were used throughout the development to manage water quantity and quality. These, along with a **dry swale** connecting to a green corridor, benefitted the visual amenity and environmental education opportunities on-site. The multifunctionality of the swale was further enhanced via the usage of locally relevant wildflower planting.

The **BwN recommendations** not only included the dry swale, but also opportunities for its future improvements, such as the provision of informal play opportunities. It could also improve the landscape's hydration and maintenance through further linkages.

WILDLIFE Standards

Standard 11 Delivers Wildlife Enhancement

Standard 12 Underpins Nature's Recovery

The scheme has retained a native Cornish hedgerow that grows along the northern edge of the development. The plan also saw the formation of a hedge along the eastern site boundary rich with Cornish native species. These hedges work together to bolster the scheme's **net biodiversity quality** and provide climate resilience.



Image 7: All houses have bird boxes, bat boxes and bee bricks

Bat and bird boxes have been incorporated throughout the site according to the Coastline Housing Standards for Biodiversity and the Biodiversity Enhancement Plan for the scheme. The provision is in keeping with the NPPF and the Cornwall Council policy. There is one of each allotted per dwelling to target species such as house martins and sparrows. Additionally, the fencing incorporates gaps for hedgehog movement and a reptile hibernaculum within the ecological border to Manningham Woods.



Image 8: Fence access for hedgehogs throughout site

A goal of the retention and inclusion of existing plantings is to mitigate the development's impact on green infrastructure features close to the site, including Tehidy Woods and Manningham Woods. The applicant's approach to green infrastructure creates essential habitat linkages and strengthens existing features. Examples include the ecological corridor running adjacent to Manningham Woods and the new hedge detailed above. Although on a small scale, the development makes an **overall positive contribution** to the Local Nature Recovery Strategy.

Policy Applications

Church Road has helped to contribute to Cornwall's Environmental Growth Strategy, providing nature-based solutions to tackle climate change, as well as promoting healthy ecosystems through provision of green space and wildlife habitat.

The Cornwall Plan 2020-50 promotes the common theme of a greener Cornwall with more space for nature, which Church Road and Coastline Housing have already contributed to, thus cementing the BwN standards as a reliable approach to meeting this goal.



Image 8: Church Road illustrates how even smaller schemes can deliver all aspects of high-quality green infrastructure

“ With Church Road, Coastline Housing looked at doing more than we would have done on a typical development. We have incorporated a swale into the scheme and enjoyed being able to use natural building materials such as slate and natural stone, so the scheme is in keeping with the local area. We have added a pathway that takes people through into the woods and we also worked closely with the BwN Assessor on designing in ‘ecology zones’ to the site, to create ways to ensure ecological links with the woods.

Summary

The development successfully met the Building with Nature Standards to achieve a BwN Full Award. The scheme created a high-quality built environment that integrated green infrastructure features valuable to both the new and wider members of the community. It also upheld the enhancement of biodiversity and existing green infrastructure features. The applicant successfully integrated suggested improvements from the BwN Assessment and Audit process. These included the enhancement of SuDS features to maximise the site's ability to manage the quality and quantity of water.

Ultimately, Church Road demonstrates what is possible on a BwN ‘Micro’ site (less than 50 homes) to integrate high quality green infrastructure features while delivering a range of benefits to people and wildlife

We like how the scheme feels, it's really open and we've really considered inclusivity. A lot of thought has gone into the design and we hope the residents will be proud to live here.”

**Fraser Short, Development Officer,
Coastline Housing Ltd**

Useful Links

Building with Nature: www.buildingwithnature.org.uk www.buildingwithnature.org.uk/video-case-studies

Applicant: www.coastlinehousing.co.uk

BwN Assessor: www.cecenvironment.co.uk

Download the BwN Standards: www.buildingwithnature.org.uk/standards-form



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