

Biodiversity Net Gain Assessment

New Bandstand & gardens, St George's Road, Millom

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Report 1025/1

Report commissioned by;

Millom Town Council

via

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EXECUTIVE SUMMARY

The local planning authority have requested a Biodiversity Net Gain (BNG) assessment for the proposed new bandstand and formal gardens (Palladium Gardens) on parkland at St George's Road, Millom. BNG requires a 10% gain in wildlife habitats post construction.

This report describes the existing habitats on site (using UK Habitats classification criteria) and provides an assessment of their condition, as well as any habitat losses as a direct consequence of the proposed development. The habitat value of the site was calculated using DEFRA's Statutory Small Sites Metric.

Enhancement measures are described in the report, and implementation (planting plans), management, and monitoring plans are included.

A desktop search for statutory protected sites and priority habitats was undertaken. There are no such sites within the red line boundary. There are three statutory sites within 500m – Duddon Estuary SSSI, Morecambe Bay SAC and Morecambe Bay & Duddon Estuary SPA, all 450m north-east of the site boundary. There are two priority habitats within 500m – coastal saltmarsh (450m north-east), and coastal & floodplain grazing marsh (400m north-east).

The site comprises urban parkland, including amenity (mown) grassland, flower beds, paths, benches and mature trees. A small part of the green parkland habitat will be lost to the development. All of the existing trees on site will be retained.

No condition assessments are required for urban habitats. The creation of the bandstand will result in the loss of 0.052 habitat units.

The loss of the green habitat can be compensated through the proposed planting plan – whereby 55 trees (native and non-native), and various shrubs and wildflowers are proposed to be planted in the existing flower beds. The shrubs and flowers have no value in the BNG metric within urban habitats, but the additional trees ensure an appropriate net gain (12.6%) from the project.

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1. INTRODUCTION

1.1 The aim of the report

The aim of the report is to make an assessment of the baseline ecological conditions present at Palladium Gardens, Millom and to compare these conditions with the likely ecological status of the site after the development, both with and without enhancement measures. Ecological enhancement measures will be designed to ensure that the completed project results in a measurable gain to local habitats. Implementation, management and monitoring plans will be included for the lifetime of the project (30 years), including a planting plan.

This report follows technical guidelines provided by CIEEM (Chartered Institute of Ecology and Environmental Management) and the habitat was mapped following UK Habitat Classification guidance (see Appendices for full references).

1.2 Biodiversity Net Gain

Following the Environment Bill 2021, a demonstrable net gain in biodiversity is required for most new developments (with some specific exceptions). This is mandatory for most projects from 12th February 2024, and for small sites from 2nd April 2024. As part of the assessment the current biodiversity value of the landholding is calculated, and compared with the likely biodiversity value of the land after the development after taking account of enhancement measures prescribed by the ecologist. The aim is for a minimum of a 10% gain in biodiversity value of the land after completion of the development.

The standard means of calculating Biodiversity Net Gain (BNG) is using the Statutory DEFRA Matrix. As the area affected by this project is less than 0.5ha, the small sites calculation tool has been used. The full details and calculations are included in the appendices.

1.3 Proposed works

The proposed works involve creation of a small bandstand with associated access paths, and creation of formal gardens on the site.

1.4 Location

The property is located on George Street in Millom Town Centre (grid reference SD171 801).

Figure 1: Location of proposed development (red line)



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2. SURVEY METHOD

2.1 Desktop study

The DEFRA Magic website (www.magic.gov.uk) was used to ascertain whether any priority habitats has been identified on, or adjacent to, the site. Natural England and JNCC websites were used to obtain boundaries of any statutorily designated sites in the area.

2.2 Walkover survey

The walkover survey was carried out by Tamsin Douglas MCIEEM (South Lakes Ecology) on September 22nd 2025. Weather was warm, dry and calm.

Habitats within the survey area were classed into standard UK Habitats Classification categories (UKHab 2023). The Professional edition of the UKHab guidance was followed, and habitats classed to level 5 of the hierarchy were applicable. An assessment was also made of the condition of the habitats on site, following guidance described in the BNG Metric methodology.

2.3 Survey constraints

There were no constraints on access. The weather (bright, warm with light breeze) and time of year was suitable for carrying out botanical surveys.

3. BASELINE ECOLOGICAL CONDITIONS

3.1 Desktop survey results

3.1.1 Protected and statutory sites search

There are no statutory protected sites on the site of the development. There are several protected sites within 500m – all 450m to the north-east. These are Duddon Estuary SSSI, Morecambe Bay SAC and Morecambe Bay & Duddon Estuary SPA. These are all designated for their coastal and inter-tidal habitats and species (especially breeding, wintering and migratory waterbirds and waders).

There are no foreseen impacts on these sites from the proposals, and there is no requirement to consult Natural England regarding this project.

3.1.2 Notable habitats search

The Magic website indicated that there are no priority habitats mapped on the site of the development. Within 500m of the project there is coastal salt marsh habitat (450m to the north-east), and coastal & floodplain grazing marsh (400m north).

3.2 Habitat survey results

The habitats were categorised, following UKHab methodology (see methods section and appendices). Descriptions of the major habitats are given in section 3.2.2 below.

Figure 2: Aerial image of the site location, showing boundary trees and urban location.



Photographs of the area of the proposed works are shown below.

3.2.1 Habitats recorded within survey area

- u1 Urban – parks and gardens

3.2.2 Habitat descriptions

u1 – Parks & Gardens (urban)

The area comprises a mixture of mown amenity grassland with large flower beds, mature and maturing trees and shrubs, paths and urban furniture (benches). The flower beds are overgrown and in need of rejuvenation.



Image 1.
Existing flower beds, looking along the southern edge of the site to the mature willow trees. Palladium garden planting will be in this area.

The proposed band stand will be constructed on an area of paths and mown grassland. The Palladium gardens will involve extensive planting of native and non-native trees and cultivars, shrubs and wildflowers. A total of 55 new trees will be planted.



Image 2.
Location of proposed bandstand in the north-east corner of the site.

There are no boundary hedgerows within the red line area, the area is bounded by walls and/ or fences.

There are numerous mature and maturing trees on the site, none of which are due to be removed. Sizes vary from extra large (crack willow) to small maturing trees on the southern boundary.

3.2.3 Habitat condition assessments

No habitat condition assessments are required for urban habitats (and none are required for the small sites BNG metric).

There is no direct category for urban parks in the metric, so 'vegetated garden' was used in the calculation tool.

4. Biodiversity Net Gain assessment

4.1 Rationale

The principles of Biodiversity Net Gain (BNG) are enshrined in local planning policy, and an assessment is required for most new developments (with some specific exceptions). The local planning authority (Cumberland Council) has requested a BNG assessment for this development, with a target increase of 10%. Habitats enhanced or retained as part of the BNG calculation need to be managed appropriately for a minimum of 30 years to satisfy the requirements of the metric.

Using the habitat condition assessments above, the impact of the proposals on the conservation value of the habitats has been calculated using DEFRA's Statutory Small Sites Metric. The calculation tool Excel file is attached separately, but summary results are shown in 4.3 below.

4.2 Proposed measures

The areas of the respective habitats on site will be broadly similar, with a slight loss of green urban park habitat overall. This can be compensated through the proposed new tree planting for the Palladium Gardens, whereby 55 trees (as well as numerous shrubs and wildflowers) are to be planted on the southern edge of the site.

4.3 Metric calculations and conclusions

The proposed development will result in the net loss of approximately 260m² of urban park habitat to allow the creation of the bandstand and associated paths, which equates to 0.052 habitat units.

There are a lot of trees already on site (which will be retained), which add a lot of habitat units to the site total.

The planting of 55 trees on the existing flower beds and park area will result in a 12.6% net gain in habitats on site. The additional shrub and wildflower planting will also have wildlife benefits, but these are not given numerical values in the BNG metric.

A copy of the headline results page of the BNG calculation is shown in Figure 3 overleaf. These indicate that the additional planting on site, will result in at least 10% net gain in habitats (12.6%).

All trading rules have been followed.

Figure 3. Headline results, showing required gain is achievable.

Site Name		George Street Palladium Gardens	
Sheet Name		Headline Results	
Headline Results			
Headline		BNG Targets Met ✓	
Trading Rules		Trading Rules Satisfied ✓	
Next steps		Check for input errors/rule breaks present in the metric ⚠	
Baseline Units	Area habitat units	5.0195	
	Hedgerow units	Zero Units Baseline	
	Watercourse units	Zero Units Baseline	
Post-development Units	Area habitat units	5.6518	
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net unit change	Area habitat units	0.6323 ✓	
	Hedgerow units	0.0000	
	Watercourse units	0.0000	
Total net % change	Area habitat units	12.60% ✓	
	Hedgerow units	% target not appropriate	
	Watercourse units	% target not appropriate	

N.B. The yellow box highlighted above is in response to the acknowledgment that there are priority habitats and/ or statutory sites within 500m of the project. There are no foreseen impacts on these sites, so it is still appropriate to use the small sites metric.

5. Implementation and monitoring

5.1 Planting plan

5.1.1 Tree planting

The trees (and also shrubs and wildflowers) will be planted according to Millom Town Council's plan, and the planting specifications of the contractor.

5.2 Management plan

5.2.1 New trees

Where possible, the trees should be permitted to grow tall and develop full crowns, and only be pruned when necessary.

5.3 Monitoring

Trees should be checked after the first season of growth to check survival, and if any replacement trees are required. Following this initial check, a walkover survey should be carried out at 3 yearly intervals to check on growth.

6. REFERENCES

- Butcher B., Carey P., Edmonds R., Norton L. and Treweek J. (2023) The UK Habitat Classification User Manual version 2.01 www.ukhab.org
- Cumbria Biodiversity Data Centre <https://www.cbdc.org.uk/data-services/cumbria-biodiversity-evidence-base/cbeb-interactive-map/>
- DEFRA (2007) *Hedgerow Survey Handbook*
- DEFRA Metric Details and calculation tools for BNG and condition assessment <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>
- Halliday G. (1997) *A Flora of Cumbria* University of Lancaster
- Institute of Ecology and Environmental Management, Professional Guidance Series (CIEEM www.cieem.net) [Members only]
- NCC (1990) *Handbook for Phase 1 Habitat Survey* JNCC Peterborough
- Preston C.D., Pearman D.A. & Dines T.D. (2002) *New Atlas of the British and Irish Flora* Oxford University Press
- Stace C.(2010) *New Flora of the British Isles* 3rd edition Cambridge University Press
- www.magic.gov.uk (Information on priority habitats, species and protected sites)
- www.jncc.defra.gov.uk (Information on legal framework, BAP species and habitats)