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FIVE YEAR HABITAT MANAGEMENT PLAN

YSGOL Y GRAIG, MERTHYR TYDFIL

KIER

DOCUMENT REF: WWE20051 MMP REV C | 25/02/2020

Client:	Kier
Site/Job:	Ysgol Y Graig, Merthyr Tydfil
Report title:	Five Year Habitat Management Plan
Report reference:	WWE20051 MMP Rev C

Grid Reference:	SO0332507751
Survey date	N/A
Surveyed by:	N/A
Architect/Agent:	Austin Smith Lord
Planning reference:	P/18/0311

VERSIONING AND QUALITY ASSURANCE

Re v	Status	Date	Author(s)	Reviewed by	Approved by
A	Draft	19/02/2020	Julie Player MCIEEM Senior Ecologist	Alex Wilson MCIEEM Principal Ecologist	Alex Wilson MCIEEM Principal Ecologist
B	Draft – with amendments	21/02/2020	Julie Player MCIEEM Senior Ecologist	Alex Wilson MCIEEM Principal Ecologist	Alex Wilson MCIEEM Principal Ecologist
C	FINAL	25/02/2020	Julie Player MCIEEM Senior Ecologist	Alex Wilson MCIEEM Principal Ecologist	Alex Wilson MCIEEM Principal Ecologist

DISCLAIMER

This document has been prepared by Wildwood Ecology Limited for Kier solely as a Five Year Habitat Management Plan. Wildwood Ecology Limited accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

SUMMARY

Purpose	• Wildwood Ecology was commissioned by Kier (the client) to produce a five-year management plan for Ysgol Y Graig, Merthyr Tydfil • The development of the school received full planning approval on 17th December 2018 (P/18/0311).
Work undertaken	• The design of the general arrangement of the school and landscaping has been produced by Austin Smith Lord. • A five-year habitat management plan is required in order to discharge planning pre-commencement condition 3 of the planning application.

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1 INTRODUCTION

- 1.1 Wildwood Ecology was commissioned by Kier (the client) to produce a five year habitat management plan for Ysgol Y Graig, Merthyr Tydfil (the site) centred at grid reference SO0332507751.

Proposed development

- 1.2 The development is for the construction of a school, associated parking, play areas and landscaping. The development received full planning approval on 17th December 2018 (P/18/0311).
- 1.3 The former school (Former Vaynor And Penderyn High School) on the north-western parcel of land was demolished (P/12/0035) prior to 2015.

Purpose of this report

- 1.4 This report provides annotation and detail for the management of the landscape within the site boundary for five years post construction on the Landscape plan and general arrangement plans (YYG- ASL- 00- XX- DR- L- 9011, YYG- ASL- 00- XX- DR- L- 9010, YYG- ASL- 00- XX- DR- L- 9012). A five-year habitat management plan is required in order to discharge planning pre-commencement condition 3 of the planning application.

2 MANAGEMENT PLAN

- 2.1 In line with the guidance provided in the biodiversity code of practice for planning and development BS42040:2013, the following is included to provide a five-year management plan for the site's habitats, species and biodiversity features.

Prescriptions for management actions

- 2.2 Timescales for planting and management of vegetation and persons responsible for management can be found below and in Tables 1 and 2 below:

Wildflower mix

- 2.3 The new wildflower mix to be seeded into the margins (around the western and eastern boundary of the school site and around the boundary of the car park site) will be the Germinal WFG15 Countryside, Schools and Colleges Mix (or similar) (20% Wildflowers, 80% Grasses) to include bird's-foot trefoil, cat's-ear, common vetch, corn marigold, corn poppy, cornflower, crested dogtail, meadow buttercup, meadow foxtail, oxeye daisy, red campion, sainfoin, self heal, sheep's fescue, shepherds purse, small scabious, strong creeping red fescue, tall oat-grass, white campion and yellow rattle.
- 2.4 Grassland cuttings will be removed from the site to reduce the nutrients entering the soil, and to support and promote the growth of a diverse sward mix.

Amenity Grassland

- 2.5 The amenity grassland mix to be seeded within northern, western, central and southern area of the school site and around parking spaces and around the boundary of the MUGA within the car park site will be the Germinal A24 Mix (Wear and Tear) 100% Grasses)) to include red fescue, perennial ryegrass, and common bent.

Tree Planting

- 2.6 New trees are to be planted around the boundaries of the school site within areas of ornamental and native planting, amenity and wildflower grasslands. Species to be planted include field maple, silver birch, hawthorn, common whitebeam, rowan, small-leaved lime, cherry, pedunculate oak and chanticleer pear.
- 2.7 Where plantings fail, they will be replaced by equivalent specimens within the appropriate growing season immediately following the failing of the original.

Native Shrub Mix and Hawthorn Hedge Planting

- 2.8 Native shrub mix and hawthorn hedge planting is to be located within the southern boundary of the car park site and within the northern and western areas of the school site. Species to be planted include field maple, common hazel, hawthorn, holly, honeysuckle, blackthorn, dog rose, elder and guelder rose.

Ornamental Shrubs and Perennials and Bulb Planting

- 2.9 Ornamental shrub, perennial and bulb planting are to be located within the northern, central and southern area of the school site. Species to be planted will include *Berberis thunbergii* 'Green Carpet', *Hebe* 'Red Edge', *Brachyglottis* 'Sunshine', *Cornus sanguinea* 'Midwinter Fire', *escallonia* 'apple blossom', *Hypericum x moserianum*, *Potentilla* 'Elizabeth', *Bergenia* 'Beethoven', *Rosa* 'Kent', *Genista hispanica*, *Miscanthus* 'Yakushima dwarf', *Pennisetum alopecuroides* 'Hameln', snowdrops, welsh native narcissus and *Crocus tommasinianus*.

Fencing

- 2.10 The current weldmesh fence 200 x 50 mesh located around the perimeter of the site will remain in place and will be adapted/enhanced into a wildlife sensitive fence allowing mammals across the site.
- 2.11 Gaps of approximately 13cm x 13cm every 25m will be cut into the bottom of the fence. Where slopes or changes in ground levels occur, there may be naturally formed gaps suitable for use by hedgehogs.

Description and evaluation of features to be managed

- 2.12 The elements listed within Table 1 are to be managed in line with the recommendations provided within this document and any future best practice guidance that may become available within the management period.

Ecological trends and constraints on-site that could influence management

- 2.13 Bats –The new planting on site will enhance the availability of foraging resources by provision of an invertebrate-encouraged grassland (wildflower grassland). The likely commuting routes, foraging areas (site boundaries) and location of integrated bat boxes (eastern corner of the site above the non-treated timber cladding) are to remain unlit. The incorporation of scattered treelines, ornamental planting, wildflower grasslands and bat boxes within the site mean that there is likely to be an overall net gain for bat species at the site. Management of the grassland to promote yearly flowering and maintenance of trees will ensure there are enhanced good foraging resources and roosting locations for bats.
- 2.14 Birds – The new planting of the trees, hedgerow and shrubs onsite will provide nesting bird habitat and additional foraging resources for birds. Vegetation management will be required to

be undertaken with respect to nesting birds, with no work completed between March and August unless it is confirmed by a suitably qualified person (ecologist) that no nesting birds are present.

Table 1 – Timescales for implementing and management of prescriptions

Element	Phase	Action
Amenity Grassland	Sowing	March – October following construction of infrastructure and buildings (to prevent damage to these areas if undertaken prior to, or during construction phase). Create a fine friable seedbed down to 150mm in depth.
	First Cut	- The first cut is to be completed when the grass is approximately 50mm in height (or more) and should be cut down to no lower than 35mm in height during the first cut, cut approximately 1/3 of the grass height during the first cut. - Gradually reduce the cut down to the required height over a period of weeks. - If you have sown in the autumn, then you may only get to cut the lawn a few times before it is time to stop for the winter.
	Once established	In order to maintain the desired height of grassland sward it is recommended that the grass is cut a minimum of eight-ten times each year between March and October
Wildflower mix	Sowing	March – October following construction of infrastructure and buildings (to prevent damage to these areas if undertaken prior to, or during construction phase). Create a fine friable seedbed down to 150mm in depth.
	If sown in the autumn	First Year Maintenance - March/April - Cut to 70mm if there is sufficient material (sward above 100mm) no later than mid-April. - August/September - Cut to 40mm after flowering. In all cases remove clippings.
	If sown in the spring	First Year Maintenance August/September - Cut to 40mm after flowering. in all cases remove clippings (Note: a late Spring sowing will result in late flowering.
	Once established	- March/April - Cut to 70mm no later than mid-April. - August/September - Cut to 40mm after flowering. in all cases remove clippings. - Pull up any vigorous undesirable plants such as nettles, thistle and docks - Cut on a rotational basis so that no more than half the area is cut in any one year leaving part as an undisturbed refuge (good for wildlife), this will give the greatest diversity in sward and structure.
Tree, hedgerow shrub and ornamental planting	Planting and until established	- Bare-root stock – dig hole twice volume of root ball. Chip sides and base of hole. Place tree into hole and splay out root ball. Infill hole with compost – do not compact roots. - Larger tree (with leaf) – check health of roots. Place in hole twice volume of root ball with soil. - Stake loosely (at 45° into the wind) during planting with protective lagging to prevent the stem from becoming damaged by rubbing against the stake. - Water during dry spells.
	Management (after established)	- Water during dry spells. - For hedgerows – in the first winter following planting, prune down to 60cm to encourage bushy growth. In subsequent years, prune towards an “A” shape. - Cut during winter only (outside of bird breeding season which generally extends from March – August)). - If trees fail, replant during the following winter, like-for-like in terms of species and age/size.
Fencing	Installation	All gaps to be created during installation of fencing, prior to opening of school.
	Maintenance	Annual checks of the fences to ensure their safety and to keep passes free of leaf litter and detritus.

Table 2 – Person/body responsible for undertaking elements, under direction of the site owner (MTCBC)

Element	Phase	Responsible Person
Grass mixes	Sowing	Appointed landscape contractor.
	Management	Appointed landscape contractor.
	Monitoring	Appointed landscape contractor/ ecologist
Tree and hedge planting	Planting	Appointed landscape contractor/arborist
	Management	Appointed landscape contractor/arborist
	Monitoring	Appointed landscape contractor/arborist
Fencing	Installation	Appointed landscape contractor
	Maintenance	Appointed landscape contractor
	Monitoring	Appointed landscape contractor/ ecologist

Aims and objectives of management

2.15 The aims of the management are to retain biodiversity value as well as enhancing it onsite, and promoting wider biodiversity benefit, as appropriate within the setting of the Six Bells LNR.

2.16 The objectives are as follows:

- Provision of mammal passes within fencing
- Provision of high value grassland mixes
- Provision of a safe and secure site which establishes and maintains health and safety procedures for management and maintenance of the site complying with all statutory legislation and best practice

Appropriate management options for achieving aims and objectives

2.17 The site will be managed according to Table 1 which documents the timescales and methodology used for each of the objectives, and at locations shown in Figure 1 (landscape plans).

Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period)

2.18 The plan outlined in Table 1 provides information and timing of relevant management practices which can be carried on over a five-year period (and beyond) once established (as appropriate).

Body or organisation personnel responsible for implementation of the plan

2.19 The site owner (Merthyr Tydfil County Borough Council) is responsible for ensuring implementation of the plan.

Monitoring and remedial measures

2.20 As described above, at least annual checks are to be made to ensure the safety and integrity of the fencing, grass, tree and shrub planting.

2.21 It is unlikely that trees will develop features suitable for use by roosting bats within the five-year management plan period. In the event that crevices, fissures or other such features become apparent and that management is required within (and beyond) the five-year period,

contractors will consult with a licenced bat ecologist to ensure that no bats or roosts are impacted by works.

- 2.22 The integrated habitat 001 bat boxes (or similar design)) will be monitored (integrity of the bat box will be assessed) by a suitably qualified ecologist bi-annually (Years 2 and 4 post construction) to determine if bats are roosting within them. This will be undertaken via a bat activity survey (dusk emergence/ or dawn/re-entry survey) to determine if bats are present.
- 2.23 Any species records for the site will be submitted to the local records centre to aid long-term and wider scale conservation.

Funding resources and mechanisms to ensure sustainable long-term delivery of the proposed management.

- 2.24 The site is a Local Authority scheme and is subject to funding streams appropriate to its education provision status.
- 2.25 Management funding (ongoing) provision will be required to ensure that the vegetation is adequately managed.
- 2.26 Some tasks (e.g. flower counts, fence gap checks) may be suited to an Eco Schools group/ Friends of group, which may allow for voluntary contribution of time to ensure that some of the tasks can be completed at a lower financial cost, but providing a community and educational benefit.

Figure 1: Red shaded area highlights the proposed locations for the bat boxes



APPENDIX II: YSGOL Y GRAIG GENERAL ARRANGEMENT PLAN



