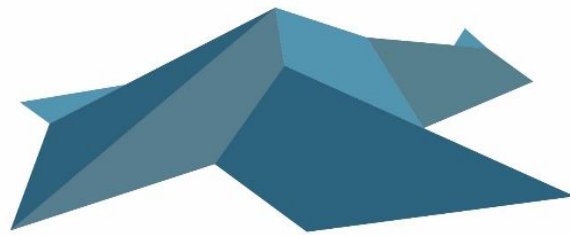


Ecological Design Strategy

BE-1342.1

Nab Lane, Mirfield WF14 9BN



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1. Scope of Report

David Watts Associates have been instructed on behalf of Peel Construction to produce an Ecological Design Strategy of the land at Nab Lane, Mirfield WF14 9BN.

The report contains details regarding planting and the installation of habitat features to ensure that the ecological value of the site is enhanced upon completion of the development proposals.

A plan showing the proposed mitigation can be viewed in [Appendix 1: Ecological Enhancement Plan](#).

2. Tree Planting

Four trees are to be included in the development proposals. These include:

- 1 silver birch (*Betula pendula*)
- 1 ornamental crab apple (*Malus 'Evereste'*)
- 1 broadleaved cockspur thorn (*Crataegus persimilis 'Prunifolia'*)

Trees should be heavy standard in size.

Planting should be carried out in accordance with British Standards (2014)¹. Trees should be supported by a stake, affixed to the stem with a biodegradable tie. Vegetation should be removed in a 1 m radius around tree stems, and an organic woodchip mulch should be applied within this area.



Figure 1: (left to right) Silver birch, broadleaved cockspur thorn, ornamental crab apple

¹ British Standards (2014). *BS845: 2014 – Trees: From Nursery to Independence in the Landscape*. British Standards Institute, London

3. Hedge Planting

A beech (*Fagus sylvatica*) hedge should be planted adjacent to the property boundaries. This should consist of two staggered bare root whips, each spaced 50 cm apart. The hedge will be 33 m long, therefore approximately 132 trees will be required.

Hedge planting should be carried out as specified for tree planting above, although stakes and cable ties will not be required.



Figure 2: Beech hedge

4. Native Shrub Planting

An area of native shrub planting 9m² in size is designated to the north of the site. Native shrubs should be planted within this area at a spacing of 0.5 m. Approximately 15 shrubs will be required.

Species should include:

- Hazel (*Corylus avellana*)
- Hawthorn (*Crataegus monogyna*)
- Spindle (*Euonymus europaeus*)
- Blackthorn (*Prunus spinosa*)
- Dog rose (*Rosa canina*)
- Guelder rose (*Viburnum opulus*)

Native shrubs should be supplied in 5 l pots.



Figure 3: (clockwise) Blackthorn, spindle, hawthorn, guelder rose, dog rose, hazel

5. Sourcing of Trees and Shrubs

All trees and shrubs should be sourced from a reputable plant nursery. In the interests of biosecurity, trees and shrubs should ideally be grown from seed within the UK. If this is not possible to source, trees and shrubs must have been grown within the UK for at least one year after import.

6. Lawn

It is recommended that a species rich grass seed mix is used for the lawn area. A suitable grass seed mix is EM1: General purpose Grass Seed Mix.

7. Bat Box

It is recommended that a bat box is installed onto the south aspect of the building, as close to the gable apex as possible. The bat box should be of type Schwegler 1WQ or similar, ensuring suitable habitat for maternity and hibernation roosts.



Figure 4: Schwegler 1WQ Bat box

8. Swift Box

It is recommended that a swift box is installed onto the north aspect of the building. The swift box should be of type Schwegler 16.



Figure 5: Schwegler 16 Swift box

9. Aftercare

Aftercare of all trees, shrubs and hedges will be required for a period of five years. Aftercare should include watering during the summer months, and where necessary, formative pruning, readjustment/removal of cable ties and reapplication of mulch.

If any trees and/or shrubs have failed to establish within this period then they should be replaced. If more than 10% of hedge plants have failed to establish then these should be replaced. Further advice from a consultant ecologist and/or arboriculturist may be required to establish the cause of mortality.

10. Further Monitoring

Post-development monitoring will be required for a period of three years. Monitoring should include:

- Checks of trees, shrubs and hedges to ensure that plants have established.
- Bat box checks (must be carried out by a licensed bat ecologist).
- Swift box checks.

If plants have failed to establish, and if habitat boxes are unoccupied, further remedial measures may be required (e.g. planting of alternative species, relocation of habitat boxes). A letter should be submitted by the project ecologist to the local authority on an annual basis, detailing the results of the monitoring.

Appendix 1: Ecological Enhancement Plan



Ecological Enhancement Plan

Key:

- Silver birch (*Betula pendula*)
- Crab apple (*Malus 'Evereste'*)
- Broadleaved cockspur thorn (*Crataegus persimilis 'Prunifolia'*)
- Mixed native shrub planting
- Beech (*Fagus sylvatica*) hedge
- Lawn
- Schwegler 1WQ bat box
- Schwegler 16 swift box

NORTH

Project:	Nab Lane
Drawing number:	EDS-1342-01
Drawn by:	David Watts
Date:	08/04/2020
Scale:	1:100 @ A3

To be reproduced in colour only.

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