

Ecological Design Strategy

Land West of Wesley Avenue, Netherthong

7th March 2022



Prepared by:

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For Planning	P Middleton MCIEEM	Robert Bell MCIEEM	P Middleton MCIFFM	07/03/2023

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1. Summary

- 1.1.1 This Ecological Design Strategy (EDS) was commissioned by Jonathan Mayo, on behalf of the client Heywood Homes Ltd in order to inform the proposed construction of up to 35 dwellings on approximately 1.2ha of land, located off Wesley Avenue in Netherthong.
- 1.1.2 This work was commissioned in order to inform the discharge of Condition 16 of the planning permission (APP/Z4718/W/21/3276678).
- 1.1.3 The outline planning application was informed by an Ecological Impact Assessment (EcIA), undertaken by Middleton Bell Ecology in July 2020 (MBE, 2020). Specific ecological enhancement proposals were subsequently included in the updated 2022 EcIA (MBE, 2022). The purpose of this Ecological Design Strategy (EDS) is to formalise these prescriptions within the proposed layout. The findings of the EcIA have informed the writing of this EDS.
- 1.1.4 This EDS details the creation of a 0.19 ha area of open space at the northern end of the site comprising a wildflower meadow with fruit trees. An embankment on the south boundary will be planted with dwarf shrub. In addition, a species rich hedgerow will be planted along the western boundary all of which are presented in an appended landscaping plan.
- 1.1.5 This EDS also includes the prescription for the installation of integrated bat or swift boxes in each new dwelling on the site. Swift boxes have been chosen in preference to other types of integrated bird boxes, as research has shown many common species of bird that nest in buildings will readily use swift boxes.
- 1.1.6 Holes of an appropriate size to facilitate the free movement of hedgehog will be cut at all fence or wall junctions and also at select locations within lengths of boundary wall or fences of the site.
- 1.1.7 Eighteen new fruit trees a mix of native crab apple, wild cherry and domestic apple will be planted within the open space on site. In addition, native broad-leaved trees will be planted across the wider site.

2. Introduction

- 2.1.1 This Ecological Design Strategy (EDS) was commissioned by Jonathan Mayo, on behalf of the client Heywood Homes Ltd in order to inform the proposed construction of up to 35 dwellings on approximately 1.2ha of land, located off Wesley Avenue in Netherthong, Holmfirth Barnsley (Ordnance Survey Grid Reference: SE 13639 09744). The site location is shown in Figure 1.

Figure 1. Site location indicated by red line



- 2.1.2 This work was commissioned in order to address Condition 16 of the planning permission (APP/Z4718/W/21/3276678), which states:

19.) Details of 'layout', 'landscaping' and 'appearance' submitted pursuant to condition 1 shall include an Ecological Design Strategy that details a scheme of measures to provide a demonstrable net gain for biodiversity on the site.

The agreed scheme shall be fully implemented before the development is brought into use.

- 2.1.3 The outline planning application was informed by an Ecological Impact Assessment (EcIA), undertaken by Middleton Bell Ecology in July 2020 (MBE, 2020). Specific ecological mitigation and enhancement proposals were subsequently included in the updated 2022 EcIA (MBE, 2022). The purpose of this Ecological Design Strategy (EDS) is to formalise these prescriptions within the proposed layout. The findings of the EcIA have informed the writing of this EDS.

3. Purpose and Conservation Objectives

- 3.1.1 The strategy is to achieve the following:

- To provide a 0.19 ha area of open space at the northern end of the site comprising a wildflower meadow.
- To include within the proposals, new plantings of fruit trees to enhance the ecological value of green spaces.
- To provide a priority habitat comprising dwarf shrub on an embankment along the south boundary.
- To create a species rich hedgerow along the western boundary.
- To provide native or wildlife friendly ornamental tree and shrub planting within new domestic gardens on the site.
- To provide hedgehog with free access of movement for this species between adjacent properties and on and off site.
- To provide new bat roost provision within the proposed scheme.
- To provide new provision for nesting birds that utilise buildings within the proposed scheme.

4. Detailed Scheme Prescription

- 4.1.1 Eight mitigation/enhancement measures are described here. For detail of all landscaping specification, preparation and maintenance refer to the landscaping plan in Appendix 1. All other measures are detailed fully within this section of the report.

Wildflower meadow seeding

- 4.1.2 The public open space will be seeded with Emorsgate EM1 standard neutral meadow mix comprising 90% grasses including red fescue *Festuca rubra*, common bent *Agrostis capillaris*, Crested dogstail *Cynosurus cristatus*, smaller cat's-ear *Phleum bertolonii* and smooth-stalked meadow-grass *Poa pratensis*. Wildflowers comprise Yarrow *Achillea millefolium*, common knapweed *Centaurea nigra*, oxeye daisy *Leucanthemum vulgare*, musk mallow *Malva moschata*, ribwort plantain *Plantago lanceolata*, salad burnet *Poterium sanguisorba*, meadow buttercup *Ranunculus acris* and yellow rattle *Rhinanthus minor*. The seed mix is best sown on a nutrient deficient substrate for optimum success.

Fruit trees

- 4.1.3 Eighteen new fruit trees in total will be planted within public open space. Fruit trees provide food for pollinating insects, fruit for a range of faunal species in late summer/autumn and are also valuable hosts for fungi and lichens.
- 4.1.4 It is recommended that six of the new fruit trees comprise native crab apple *Malus sylvestris*. The remaining trees will comprise wild cherry *Prunus avium* and domestic

apple. All trees should be sourced from UK nurseries. The locations of new fruit trees to be planted are shown in Appendix 1.

- 4.1.5 Along the southern boundary there will be a 4 m wide timber crib (see Plate 1). Which will be planted with heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus*, both on top and on the sloping front. The planting substrate must be nutrient deficient and have a low ph in order prevent the establishment of nutrient loving grasses and aid the establishment of the dwarf shrub.

Plate 1. Example of Timber Crib



Hedgerow planting

- 4.1.6 One length of new species rich native hedgerow will be planted along the west boundary, with c.260 m of hedgerow to be planted in total (Appendix 1).

Table 1. Species mix for hedgerow planting

Percentage	Common name	Latin name
10	Spindel	<i>Euonymus europaeus</i>
30	Hazel	<i>Corylus avellana</i>
20	Holly	<i>Ilex aquifolium</i>
20	Blackthorn	<i>Prunus spinosa</i>
10	Guelder-rose	<i>Viburnum opulus</i>
10	Dog rose	<i>Rosa canina</i>

Wildlife friendly ornamental tree and shrub planting

- 4.1.7 In addition to new trees to be planted in the open space, new broadleaf trees are to be planted within the street scene. Trees should include both rowan *Sorbus aucuparia* and whitebeam *Sorbus aria* standards (see Appendix 1).

Integrated bat boxes

- 4.1.8 UK bats are known to have suffered historic declines in abundance and modern building methods can result in new buildings lacking potential bat roost locations or

presenting a risk of entanglement in modern roofing membranes. The provision of new integrated boxes increases the number of safe roosting options for bats in the area.

- 4.1.9 Eleven new integrated bat roost boxes, to be installed in almost one third of dwellings have been included across the scheme (Appendix 2 and Figure 2). These boxes are to comprise Vivara Pro Build-in WoodStone Bat Boxes. The boxes are to be installed at wall top height, away from external lighting on the new buildings. Four of the boxes will be south facing with seven boxes on an east elevation.
- 4.1.10 This design of box has an entrance hole which sits flush within a course of bricks to provide a discreet roost for bats. This design of box offers particular appeal to crevice roosting species of bat, such as the common pipistrelle *Pipistrellus pipistrellus*. Both this box type and the other box types subsequently listed can be purchased from NHBS (<https://www.nhbs.com/>).

Plates 2 & 3. Vivara Pro Build-in WoodStone Bat Box



Figure 2. Bat box location from Unit 5 (Appendix 1)



Figure 3. Bat box location from Unit 6 (Appendix 1)

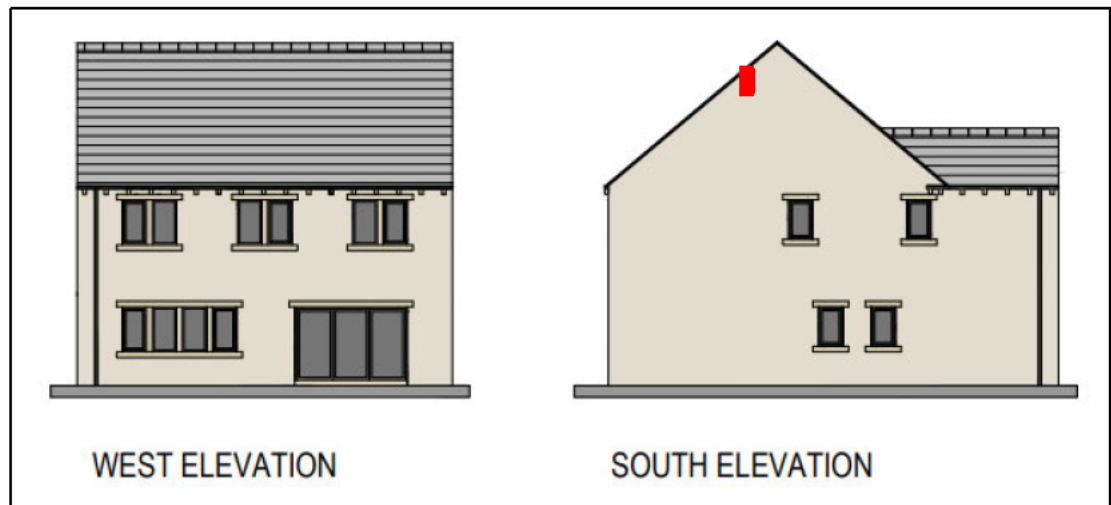


Figure 4. Bat box locations from Units 9 & 12 (Appendix 1)



Figure 5. Bat box locations from Unit 13 (Appendix 1)



Figure 6. Bat box location from Unit 14 (Appendix 1)

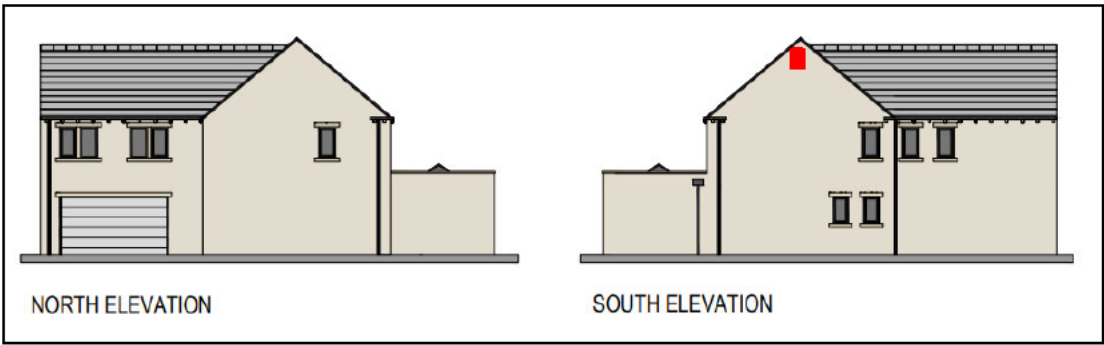


Figure 7. Bat box location from Unit 17 (Appendix 1)

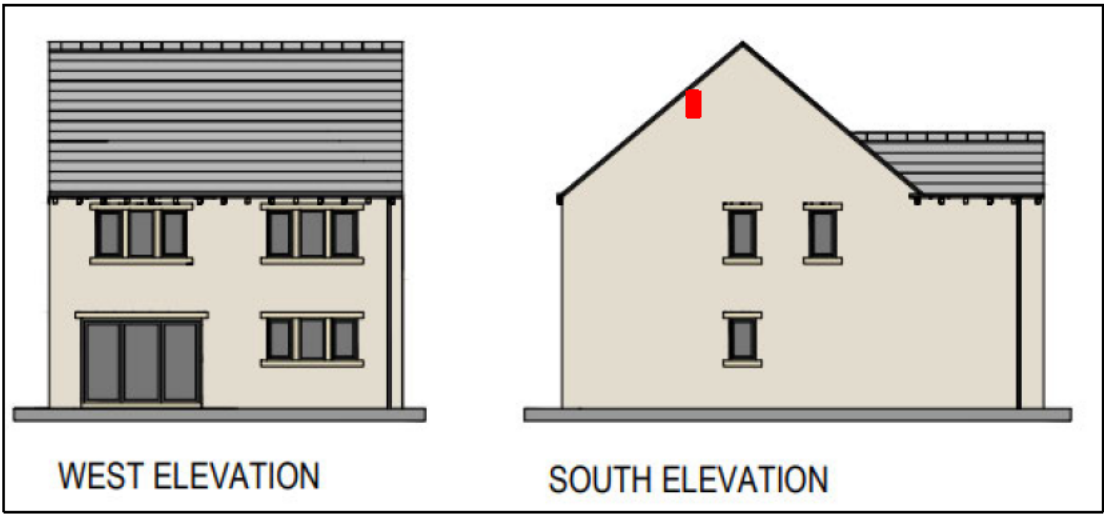


Figure 8. Bat box location from Unit 19 (Appendix 1)

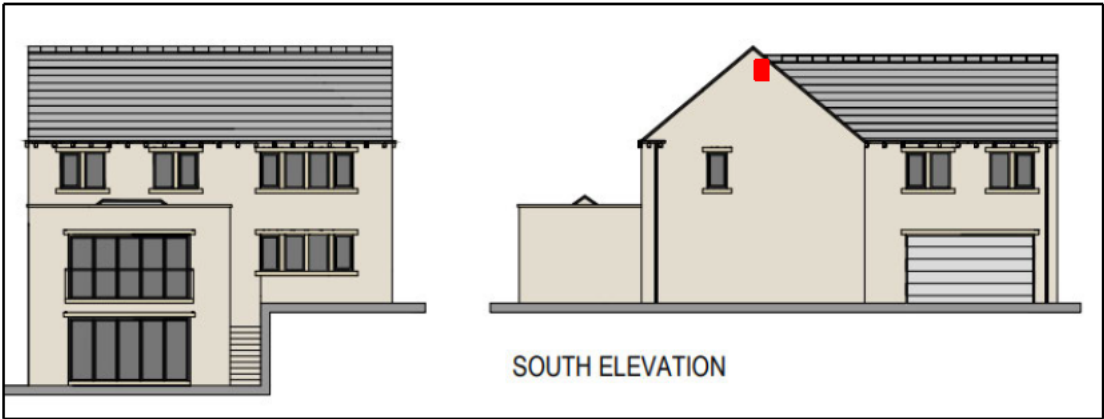


Figure 9. Bat box location from Unit 20 (Appendix 1)

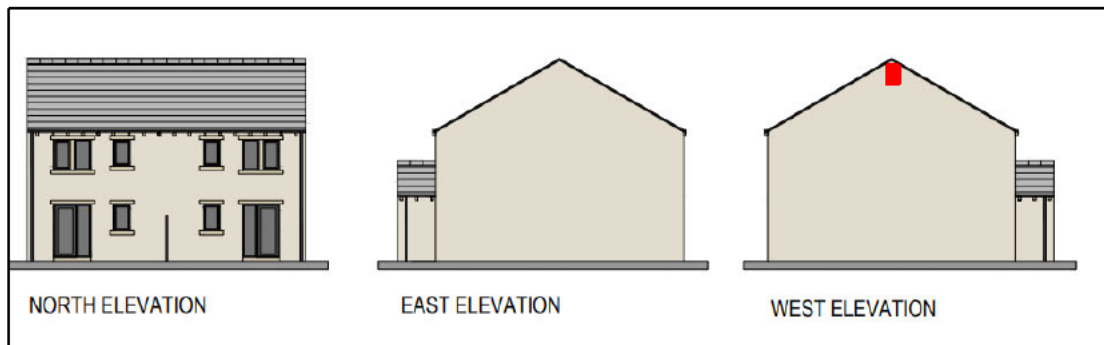


Figure 10. Bat box location from Unit 26 (Appendix 1)

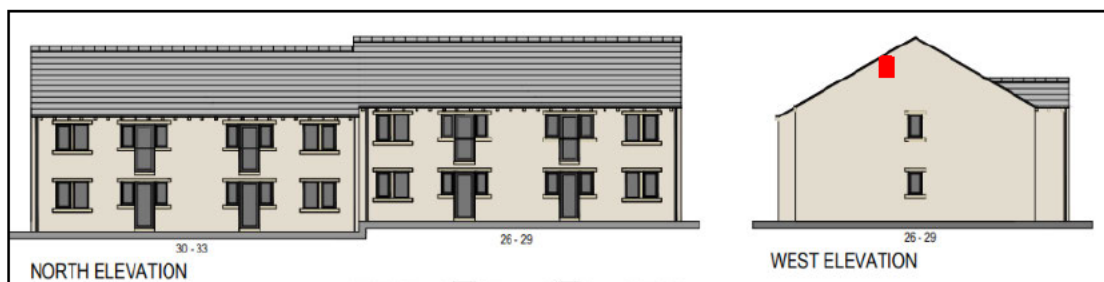
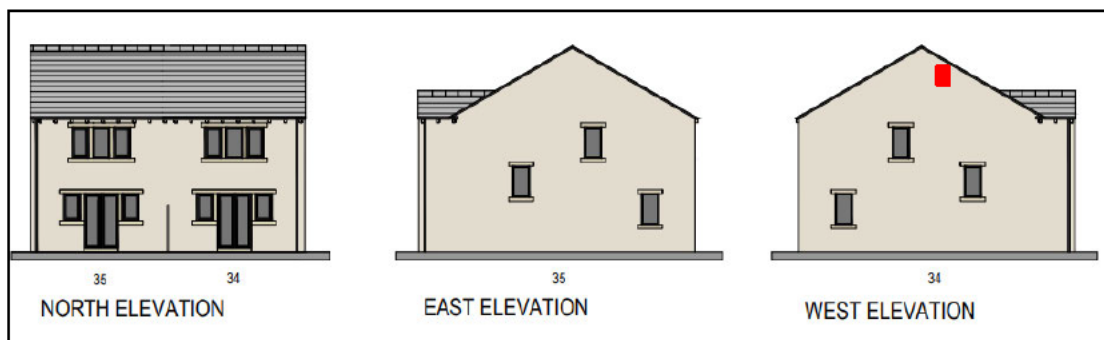


Figure 11. Bat box location from Unit 34 (Appendix 1)



Integrated swift boxes

- 4.1.11 Swifts are summer visitors to the UK. Each year they journey from their wintering grounds in Africa to breed, before returning again in August. Their nests are made high under the eaves of old buildings. Many modern and refurbished buildings now have much more effective sealing of the eaves, meaning that nesting spaces are becoming more difficult to find. This species is classed as Red Listed on the Birds of Conservation Concern list (Stanbury *et al.*, 2021).
- 4.1.12 A study of 741 swift boxes/bricks installed by the Duchy of Cornwall showed their use by a variety of building nesting birds including house sparrow *Passer domesticus*, starling *Sturnus vulgaris*, house martins *Delichon urbicum* and blue tit *Cyanistes caeruleus*. Given the appeal of swift boxes to other species, it has been decided to install swift boxes only in connection with this scheme, with the expectation that other species of nesting birds that utilize buildings will also use the boxes.

- 4.1.13 A total of 12 integrated swift boxes will be installed in new dwellings. These boxes are to be spread across the site, with all boxes to be installed at wall top height on either north or east gable elevations. The box design recommended to be fitted is the Manthorpe Swift Brick. The Manthorpe Swift Brick has been developed in conjunction with major house builders and conservation experts to provide a safe, spacious and habitable area to allow swifts to nest within the well-built construction of modern dwellings.

Plates 4 & 5. Manthorpe Swift Brick



Figure 12. Swift brick location from Units 15, 16 & 18 (Appendix 1)

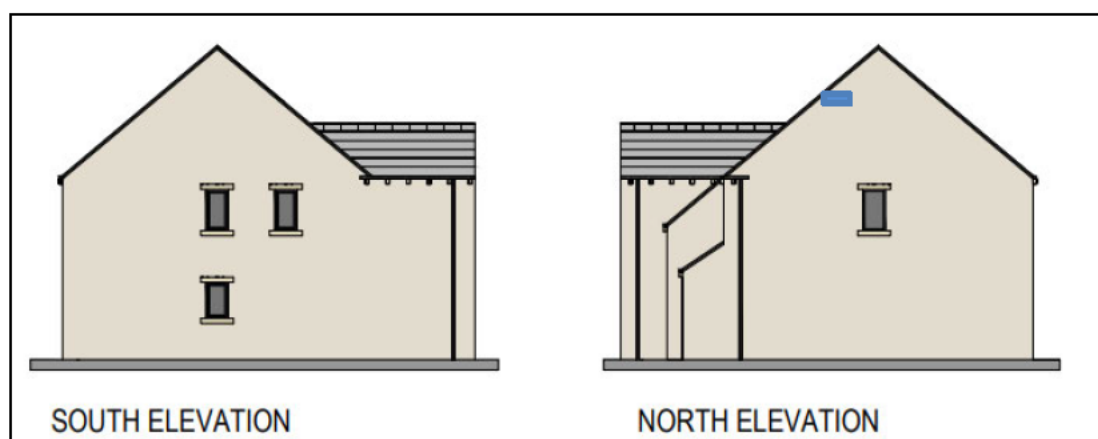


Figure 13. Example of Swift brick locations from east gables of Units 1, 2, 3, 7, 10, 23, 25, 33 & 35 (Appendix 1)

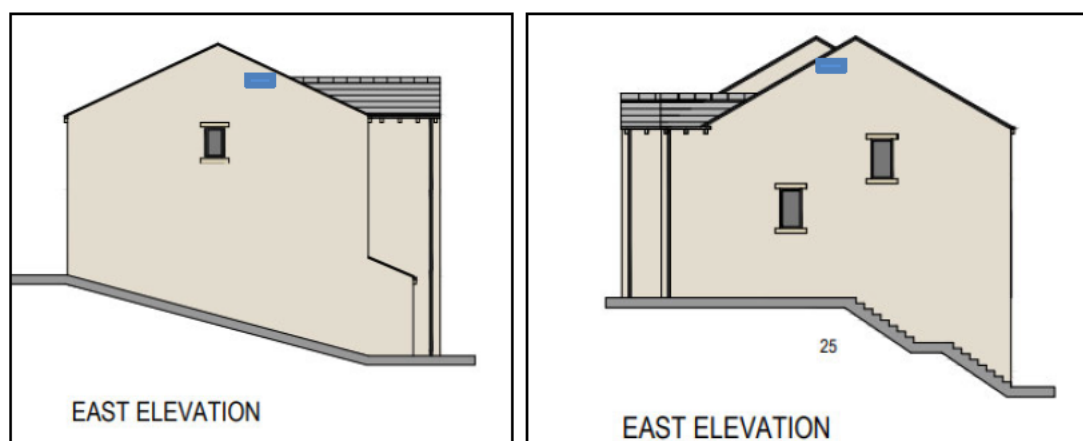


Table 1. Bat and swift box provision

Plot Number	Box Type	Plot Number	Box Type
1	Swift	19	Bat
2	Swift	20	Bat
3	Swift	21	N/A
4	N/A	22	N/A
5	Bat	23	Swift
6	Bat	24	N/A
7	Swift	25	Swift
8	N/A	26	Bat
9	Bat	27	N/A
10	Swift	28	N/A
11	N/A	29	N/A
12	Bat	30	N/A
13	Bat	31	N/A
14	Bat	32	N/A
15	Swift	33	Swift
16	Swift	34	Bat
17	Bat	35	Swift
18	Swift		

Hedgehog holes

- 4.1.14 Hedgehogs are declining rapidly within the UK and part of the reason for the decline in urban areas is the lack of habitat connectivity and road casualties. The creation of access routes through the development serves the dual purpose of keeping hedgehogs away from roads whilst retaining access to foraging areas within the animal's home range.
- 4.1.15 In order to ensure that hedgehogs continue to be able to freely access the site, purpose made 13 cm x 13 cm hedgehog holes will be cut at the base of close boarded fences in the locations shown in Appendix 2. These locations have been selected to fall at the junctions of internal fences, with several holes also present in the perimeter fence, in order to allow access for hedgehog on and off the site, from the surrounding area (see Appendix 2).
- 4.1.16 In order to show new homeowners, the purpose of new fence/wall holes, signs should be affixed over the hole on both sides of the fence as shown in Plate 7. A suitable type of sign comprises the Eco Hedgehog Hole Fence Plate, which is made in the UK from 100% recycled plastic.

Plate 7. Sign fixed across fence hole to show purpose to homeowner



5. Timetable of Works

Table 2. Works timetable

Development activities and timing		
Activity	Timing	Notes
Integrated bat boxes	During construction when walls are almost complete	In locations specified in Appendix 2. At wall top height. Not above windows or doors and away from artificial light spill.
Integrated swift boxes	During construction when walls are almost complete	In locations specified in Appendix 2. At wall top height. Not above windows or doors and away from artificial light spill.
Wildflower meadow	At completion of construction phase	Seeded with neutral wildflower grassland mix on nutrient poor substrate. Best done in autumn or spring.
Planting of fruit trees and native street trees	At completion of construction phase	Best done between October and April. Avoid planting in waterlogged or frozen soil. To be watered during dry spells in first two summers.
Dwarf shrub planting	At completion of construction phase	Best done between October and April in nutrient poor substrate.
Hedgehog holes and houses	During fencing of plots	Holes to be cut before fencing installed, with signs affixed to fences, during completion phase

Persons responsible for implementation of works

- 5.1.1 The developer (Heywood Homes Ltd) is responsible for the purchase of materials and the installation or planting of ecological enhancement features specified in this document.

Aftercare and long-term maintenance

- 5.1.2 No maintenance is strictly required for bat, bird or hedgehog features.
- 5.1.3 New trees and dwarf shrub should be watered once a week during dry spells over the first two summers.

6. References

MBE (2020) Land off Miry Lane, Netherthong. Ecological Impact Assessment. Middleton Bell Ecology, Barnsley.

MBE (2022) Land west of Wesley Avenue, Netherthong. Ecological Impact Assessment. Middleton Bell Ecology, Green Moor, Sheffield.

Stanbury, A, Eaton M, Aebischer N, Balme, D, Brown AF, Douse, A, Lindley, P. McCulloch, N, Noble, D and I Win (2021) The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747.

Appendix 1. Landscaping Plan

SPECIES LIST

SHRUBS				
ID	Qty	Species	Density	Size
A.j.Ro	24	Aucuba japonica 'Rozannie'	4	3L pot, 60-80cm
B.c.S	33	Bergenia cordifolia 'Silberlicht'	8	3L cover pot
C.a.I	35	Cornus alba 'Ivory Halo'	5	3L pot, 60-80cm
C.L	21	Crococsmia 'Lucifer'	6	2L cover pot
E.G.R	17	Euonymus 'Green Rocket'	6	2L pot, 30-40 cm
E.f.E	133	Euonymus fortunei 'Emerald Gaiety'	4	5L pot 30-40 cm
G.J.B	183	Geranium Johnsons Blue'	8	3L cover pot
H.R.E	15	Hebe 'Red Edge'	5	5L pot
H.P.P	17	Heuchera 'Palace Purple'	6	3L cover pot
H.a.A	24	Hydrangea arborescens 'Annabelle'	4	3L cover pot
L.a.H	102	Lavandula angustifolia 'Hidcote'	6	5L pot, 15-20cm
L.n.M.G	102	Lonicera nitida 'May Green'	6	3L cover pot 30-40 cm
P.B.B	9	Phormium 'Bronze Baby'	4	3L pot min. 7 leaves
P.f.A	45	Potentilla fruticosa 'Abbotswood'	4	3L pot, 20-30cm
R.K	9	Rosa 'Kent'	4	5L pot
S.j.R	24	Skimmia japonica 'Rubella'	4	5L min pot, 40-60cm
V.b	9	Verberna bonariensis	4	3L pot
V.m.A	17	Vinca minor 'Alba'	6	3L cover pot

SPECIMEN SHRUBS			
ID	Qty	Species	Size
SPECIMEN 2		Amelanchier lamarckii	10L pot 1m ht
SPECIMEN 3		Viburnum x bodnantense 'Dawn'	25L, branched, 6 breaks

CLIMBERS			
ID	Qty	Species	Size
H.h	5	Hedera helix	2L, 40-60cm, Caned, several shoots, 5 breaks
P.h	2	Parthenocissus henryana	2L, 60-80cm, Caned, several shoots, 2 breaks



ESPALIER TREES			
ID	Qty	Species	Size (girth and height)
M.d.C	8	Malus domestica 'Cox's Orange Pippin'	125-150cm ht; B; Espallier MM106; central leader; 3 tiers

ORCHARD TREES FOR POS			
ID	Qty	Species	Size (girth and height)
Ma.sy	6	Malus sylvestris	14-16cm, 350-425cm ht, min 200cm cs
Pa	3	Prunus avium	14-16cm, 425-600cm ht, min 200cm cs

TREES FOR FRONT GARDENS			
ID	Qty	Species	Size (girth and height)
B.p	3	Betula pendula	12-14cm, 350-425cm ht, min 200cm cs
C.b.F	1	Carpinus betulus 'Frans Fontaine'	12-14, 350-425cm ht, min 175-200cm cs
P.SB	4	Prunus 'Sunset Boulevard'	12-14cm, 350-425cm ht, min 175-200cm cs
S.a.M	4	Sorbus aria 'Majestica'	12-14cm, 350-425cm ht, min 175-200cm cs
S.a.S	5	Sorbus aucuparia 'Streetwise'	12-14cm, 350-425cm ht, min 175-200cm cs

RETAINED AREA PLANTING MIX				
Planting on top of the wall, heather and bilberry in groups of 5 to 7				
ID	Qty	Species	%	Density / sq m
C.v	119	Calluna vulgaris	50	1.7
V.m.	119	Vaccinium Myrtillus	50	1.7

NATIVE HEDGEROW MIX				
To be planted as 5 plant/ sq metre, double staggered row				
ID	Qty	Species	Size (girth and height)	%
C.av	129	Corylus avellana	B; 40-60cm ht; 1+1	30
E.e	43	Euonymus europaeus	B; 40-60cm ht, 1+1, transplant, 3 breaks, 10	
I.aq	86	Ilex aquifolium	3L pot; 40-60cm ht; bushy; 3 breaks	20
P.sp	86	Prunus spinosa	B; 40-60cm ht; 1+1	20
R.c	43	Rosa canina	B; 30-40cm ht, 1+0	10
V.o	43	Viburnum opulus	B; 40-60cm ht, 1+1, transplant, 2 breaks, 10	

ORNAMENTAL HEDGES			
To be planted as 5 plants/ linear metre			
ID	Qty	Species	Size
C.bet	99	Carpinus betulus	5L pot; 80-100cm, 1+1, 5 breaks
C.t	119	Choisya ternata	5L pot, 40-60cm ht
E.D.S	124	Escallonia 'Donard Seedling'	3L pot; 40-60cm ht; 4 breaks
H.p.S	198	Hebe pinguifolia 'Sutherlandii'	3L pot; 20-30cm; 5 breaks
L.ov	330	Ligustrum ovalifolium	5L pot, 40-60cm ht

BULBS			
ID	Qty	Species	Density (/m2) Size (bulb gr
C.bi	382	Crocus bicolour mix	20 5-6
G.n	382	Galanthus nivalis	20 5-6
N.p	382	Narcissus pseudonarcissus	20 7+
T.s	382	Tulipa sylvestris	20 6+

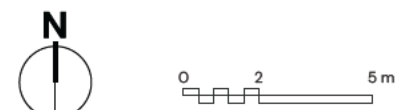
KEY

EXISTING

- Site boundary
- Existing trees/vegetation

PROPOSED

- Specimen shrubs
- Espalier fruit trees against wall
- Trees
- Bulb planting
- Wildflower meadow grass (10% native wildflower, 90% grass) EMI Basic General Purpose Meadow mixture by Emorsgate or similar approved
- Front gardens: Medallion turf by Rolawn or similar approved
- Rear gardens: Grass seed
- Existing grassland
- Ornamental planting
- Single species hedge
- Native mixed hedge
- Ornamental gravel TBC
- Breedon Gravel footpath or s milar TBC
- Dry stone wall Entrance feature
- Indicati e Steps and Handrail TBC
- SEAT
- Seat Hatton 4 slat timber seat with backrest. Supplied by Broxap or similar approved TBC
- Indicative drainage easement related to proposed drainage tank. Specified by engineers
- +000.00 Indicative proposed evels TBC



C	07.03.23	KA	Minor amendments
B	06.03.23	KA	Minor amendments
A	03.03.23	KA	Minor amendments

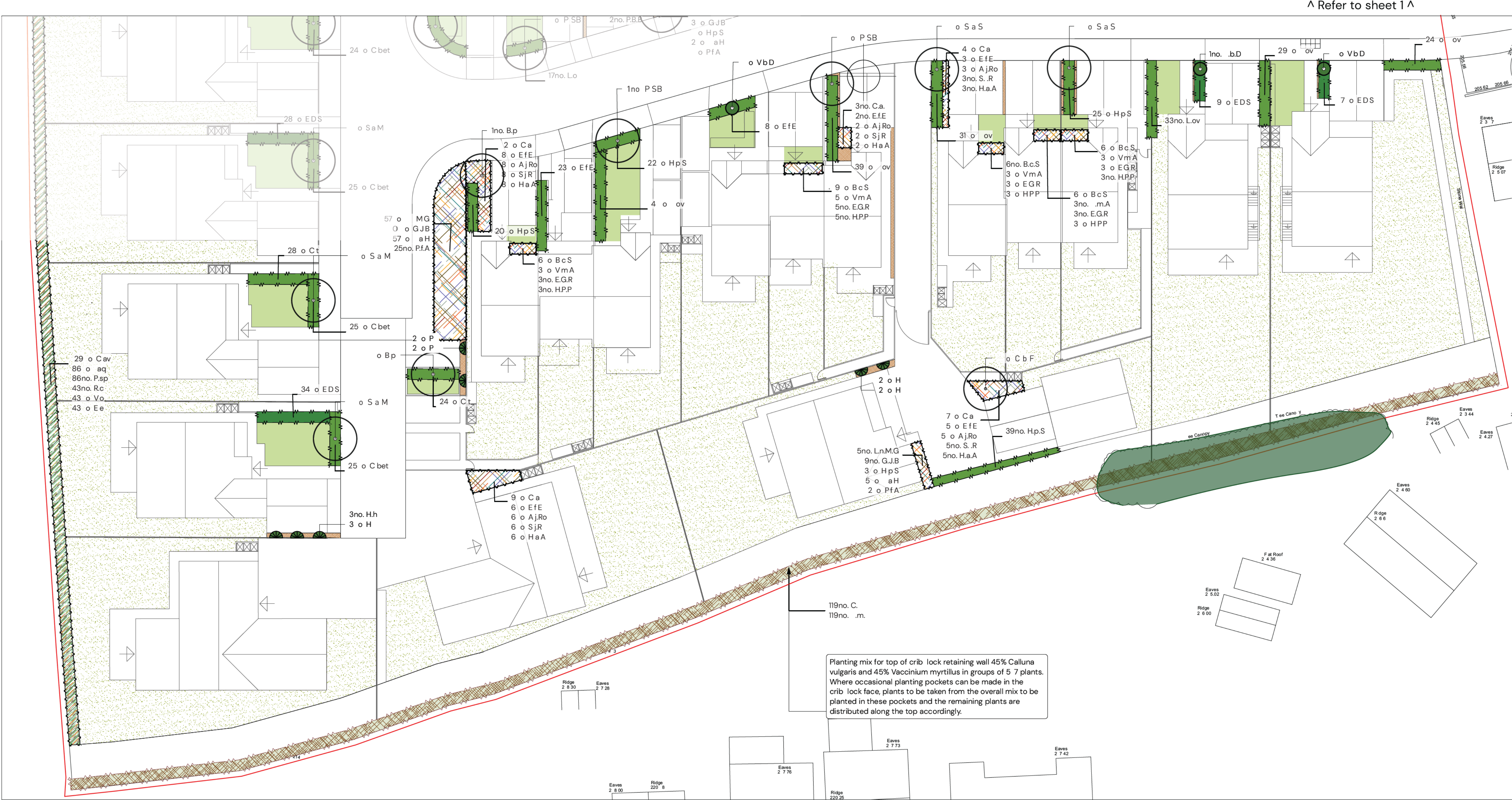
Rev Date By Note

Detailed Landscape Proposal
Sheet 1 of 2
Land at Wesley Avenue,
Netherthong

Client: Heywood Developments
DRWG No: P22-2837_EN_0002_01
Drawn by: KG
Date: 27/02/23
Scale: 1:200 @ A1

Approved by: KC
PEGASUS GROUP

Planting notes refer to sheet 2



KEY

EXISTING

- Site boundary
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- Specimen shrubs
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- Indicative Steps and Handrail TBC
- SEAT
- Seat Hutton 4 slat timber seat with backrest. Supplied by Broxap or similar approved TBC
- Indicative drainage easement related to proposad drainage tank. Specified by engineers
- +000.00 Indicative proposed levels TBC

LANDSCAPE SPECIFICATION NOTES

Topsoil
All soil is to be site topsoil, or imported to meet BS topsoil requirements for 'General Purpose' use.
Topsoil depths:
New shrub beds: minimum 450mm depth after compaction.
Hedge lines: minimum 450mm depth after compaction.
Grass areas (seed and turf): minimum 150mm depth after compaction.
Wildflower seed areas (lawn): minimum 75mm depth after compaction.
Crib-lock retaining wall: backfilled with BS8601:2013 British Standard Subsoil.

Trees
Root barriers are to be employed near services. All standard trees are to be planted in separate pits 1m x 1m x 900mm which shall be backfilled with a mixture of approved top soil and tree and shrub planting compost at a rate of one part compost to two parts topsoil. Each tree shall be planted centrally within the pit to the original root collar and secured by two untreated softwood stakes 1.4m min. length with approved ties.
After planting all trees shall be watered-in and a mulch layer of 1m diameter approved forest bark spread over the tree pit to 50mm depth. A spiral guard will be fixed to the base of each tree to protect it from rabbit attack and strimmer damage.

Hedgerows (Native & Ornamental)
Hedgerow trenches shall be dug 450mm wide x 450mm depth the base of which shall be broken up before returning the approved topsoil backfill mixture to the trench at the rate of one part compost to two parts topsoil. Plants to be planted at densities shown in the plant schedule. All stock shall be planted to the root collar and well firmed in place. After planting a 50mm layer of approved compost fine bark (nominal size 1-10mm) shall be spread over the whole hedge length (1m wide). On completion all hedge plants shall be thoroughly watered in. Mixed native Hedgerows on the perimeter of the site are to be protected from rabbit attack using spiral guards, tubes or rabbit proof fencing.

Ornamental shrubs and groundcover areas
Plants to be planted in variety groups with taller species to back of beds. Refer to Example Planting Beds diagrams. All shrub beds shall be back-filled with good quality topsoil depth 450mm, the base ground being thoroughly broken up before placement.
Tree and shrub planting compost shall be spread to a minimum depth of 50mm and thoroughly rotavated in during cultivation. All stock shall comply with the specification provided on the drawing. All plants shall be well firmed in after planting and watered if necessary. After planting all beds shall receive a 50mm layer of approved forest bark mulch over the extent of the bed.

Retained area planting mix
Individual pits shall be dug 450mm x 450mm x 300mm depth the base of which shall be broken up before returning the approved topsoil backfill mixture to the trench at the rate of one part compost to two parts topsoil. All stock shall be planted to the root collar and well firmed in place.
After planting a 50mm layer of approved compost fine bark (nominal size 1-10mm) shall be spread over each pit (1m wide). On completion all plants shall be thoroughly watered in. Heather and bilberry in groups of 5 to 7. Where occasional planting pockets can be made in the crib-lock face, plants to be taken from the overall mix to be planted in these pockets and the remaining plants are distributed along the top accordingly.

Turf areas (front gardens)
All areas to be turfed shall be top-soiled to a minimum depth of 150mm, the base for which shall be thoroughly broken up. Once placed, the topsoil shall be cultivated and fine graded to even running falls before raking and cross raking.

Rolawn Medallion Turf or similar and approved shall be laid to front garden areas in accordance with good practice. Prior to laying, a pre-seeding fertiliser shall be applied in accordance with the manufacturer's instructions.

Wildflower/Meadow seed areas
Undertake ground preparation as specified for grass seed areas above.

All wildflower seed areas shall be top-soiled to a minimum depth of 75mm the base for which shall be thoroughly broken up. Once placed, the topsoil shall be cultivated and fine graded to even running falls before raking and cross raking.Emorsgate EL1 Flowering Lawn Mixture or similar and approved, shall be sown in accordance with good practice.

Bulbs in POS
Bulbs are to be broadcast throughout the areas shown and planted where they land for a naturalistic effect.

MAINTENANCE

All planting in public areas shall be maintained as detailed below by the management company in good order with any plant material which dies within a five year period being replaced to the original specification. Planting and lawns in private areas will be maintained by the individual plot holders.

Trees
All trees shall be regularly checked and any broken ties, guards or stakes replaced. Mulch shall be topped up to maintain original levels. In periods of dry weather all trees shall be regularly watered to field capacity. The area around the base of each tree is to be kept mulched to 50mm depth minimum and weed free to a minimum diameter of 1m. At the end of each growing season all trees shall receive an application of slow release fertiliser. After approximately 5 years stakes and ties are to be removed once trees have established.

Hedgerows (Native & Ornamental)
All hedgerows shall be maintained weed and rubbish free and any loose plants re-firmed. All canes and spirals where employed shall be regularly checked and adjusted or replaced as required. All hedge lines shall be regularly watered in times of drought to field capacity and shall receive an application of slow release fertiliser at the end of the growing season. Mulch shall be regularly topped up to original levels. All hedge lines shall be maintained to 1.6m high. After approximately 5 years stakes and ties are to be removed once trees have established.

Ornamental shrub and groundcover areas
Plant borders are to be kept weed and rubbish free and any loose plants re-firmed. All borders to be regularly watered in times of drought and receive an annual application of slow release fertiliser. Mulch shall be regularly topped up to original levels.

Turf areas (front gardens)
Any turfed areas which fail to provide a good quality initially vigorous grass sward shall be re-cultivated and re-sown / re-turfed as required.

Wildflower/Meadow seed areas
Species rich meadow areas as identified on the plan, shall be mown regularly throughout the first year of establishment to maintain the balance between faster growing grasses and slower developing wild flowers, and to remove competition from the first flush of annual weeds.
From the second year of establishment onwards areas should be allowed to grow to full height and be cut once a year at the end of August to a minimum height of 10cm, unless identified as mown edge/mown amenity grass within the plan.
All arisings are to be allowed to lay in situ for ten days to allow seeds to be cast within the area prior to removal from site.

Notes
Bare root plants specified for planting during planting season only. Containerised and rootballed stock to be employed when necessary as advised by supplier;
No cultivation should be undertaken in wet/waterlogged conditions;
Imported topsoil to accord with BS3882;
Supplying nurseries shall be registered under the HTA Nursery Certification Scheme, and plant material should be of certified British provenance;
All plants shall be packed and transported in accordance with the Code of Practice for plant handling as Published by The Committee for Plant Supply and Establishment (CPSE);
All plant material to conform with BS:3936 and BS:4428;
Planting operations to be undertaken during appropriate climatic conditions to avoid wet/waterlogged or frost bound soil conditions, frosts, droughts or during periods of excessive cold drying winds.

Note:
Landscape contractors to confirm potential build programme with house builder when pricing soft landscape works to allow for and accommodate potential out of season planting and phased release of plots for implementation. Allowances to potentially include for supply of containerised stock, additional attendance in relation to phasing and additional watering.

In September following implementation plants to be checked for successful establishment and any losses replaced in the following planting season. Planting proposals to be checked and confirmed by project engineer for construction against ground conditions/soil types and foundation design.

For Planting schedules refer to sheet 1

N

0 2 5m

C	07.03.23	KA	Minor amendments
B	06.03.23	KA	Minor amendments
A	03.03.23	KA	Minor amendments
Rev	Date	By	Note

Detailed Landscape Proposal
Sheet 2 of 2
Land at Wesley Avenue, Netherthong

Client: Heywood Developments
DRWG No: P22-2837_EN_0002_02
Drawn by : KG
Date: 27/02/23
Scale: 1:200 @ A1

Approved by: KC
PEGASUS GROUP

Appendix 2. Ecological Enhancement Plan

