

# Planting Scheme and Ecological Enhancement Plan

**Date Written: 15<sup>th</sup> July 2023**

**Location:**

Land at Chapel Farm Caravan Park, Whitewell, Whitchurch

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## INTRODUCTION

A planting and landscaping scheme, along with an Ecological Enhancement Plan is required on land at Chapel Farm, Whitewell, Whitchurch in SY13 3AL. Condition 9, stipulated by Wrexham County Council requires a planting scheme and an ecological enhancement plan for the planning application. This plan has been informed by the Preliminary Ecological Appraisal completed by Salop Consulting, which has been approved by the local authority. The planning application involves the creation of 8 caravan pitches at Chapel Farm.

All hard and soft landscape works shall be carried out in accordance with the approved details prior to the occupation of any part of the development or in accordance with the timetable agreed in writing with the Local Planning Authority. Any trees or plants that within a period of 5 years after planting, are removed, die or become, in the opinion of the Local Planning Authority, seriously damaged or defective, shall be replaced with others of a similar species, size and number by the end of the first available planting season.

## HEDGEROW PLANTING DETAILS

There are two small hedgerows proposed within the caravan park (H1 and H2). H1 will be 17m long and H2 will be approximately 10m. The species chosen for the hedgerow planting is hawthorn, field maple, elder, holly, crab apple, Dog rose, and field rose. All species will be equally proportioned. These are native broadleaves, which will tie into the local landscape and enhance the foraging opportunities on the site for small mammal species and local bird populations. It will also ensure a species rich hedgerow on the site.

H1 will be planted in staggered, double rows, with 6 plants per metre. For the 17m section of hedge, this will require 102 plants and H2 will need 60 (plus a few more for any faulty stems). These hedgerows will need measuring on the site prior to planting, as these are only estimated measurements. The ground should be weed free prior to planting. The hedge should be planted in the Autumn/ Winter following the end of the ground works on site. This will ensure no unnecessary damage to the hedge and minimal beating up of plants.

The hedging plants will be purchased as bare rooted plants, from a local nursery. Nursery details have been provided on the following page. As soon as the plants are delivered, they should be unwrapped and their roots should be put into a bucket of water. Ideally they should be planted immediately, as this will avoid them drying out, as this is fatal to bare rooted plants. If this is not possible, they will need healing in temporarily (dig a hole in a spare area of ground, stand the bundle of plants in it and cover the roots with soil. This keeps the roots cool, damp and in good health). They will be planted in one straight row, no need to stagger. These should be planted so that there are three stems to 1m. Dig a small trench and place the plants at the same depth they were growing previously. The trench should be slightly wider than the roots of the bare rooted plants. Backfill the hole and firm down well. Take care not to over-compact the soil around the plants' small root systems. Once planted, water thoroughly. The hedging plants will need to be protected with a spiral guard, preferably biodegradable. The link to spiral guards is provided in the tree planting section.

Keep the hedgerow weed free for the first three years of its development. Competition from weed species can lead to loss of vitality and vigour and will eventually lead to failure. After 5 years, if any of the stems have died, been removed or have become damaged, they will be replaced with bare rooted species.

### Further Information for Hedgerow Planting:

#### **Stockists of quality local, bare rooted plants include;**

- Heathwood Nurseries in Prees Heath <https://www.heathwood.co.uk/>
- Maelor Forest Nurseries in Wrexham <http://www.maelor.co.uk/>

#### **Further guidance to planting a bare rooted hedge provided by Hedges Direct:**

<https://www.hedgesdirect.co.uk/acatalog/HD%20Bare%20Root%20Preparation%20and%20Planting%20Guide%20New.pdf>

## TREE PLANTING DETAILS

Trees have been proposed as part of the landscaping for the development of the site. There are 6 trees proposed for planting on the site. These will be planted during the Autumn/ Winter, as bare rooted plants are only available during these months.

2 of the proposed trees will be *Quercus robur* (English oak) 2 will be field maple *Acer campestre* and 2 Silver birch *Betula pendula* (Roth). These will be planted as bare rooted plants, protected with a spiral guard.

The biodegradable spiral guards can be purchased online from Bowhayes Trees

[https://www.bowhayestrees.co.uk/product-page/treebio-biodegradable-spiral-guard?cmp\\_id=19662772024&adg\\_id=147542956442&kwd=&device=c&gclid=EAlaIqobChMlxfj0g4fU\\_wlVmuDtCh1VYwAyEAAYASAAEgIBsvD\\_BwE](https://www.bowhayestrees.co.uk/product-page/treebio-biodegradable-spiral-guard?cmp_id=19662772024&adg_id=147542956442&kwd=&device=c&gclid=EAlaIqobChMlxfj0g4fU_wlVmuDtCh1VYwAyEAAYASAAEgIBsvD_BwE) or from Green Tech; <https://www.green-tech.co.uk/tree-planting-products/treebio-biodegradable-tree-planting-products/treebio-biodegradable-spiral-guard>

Prior to the tree planting, root deflectors will be installed on the edges of the caravan pitches adjacent to the new trees. This will ensure no conflict between the structural integrity of the concrete pad and the tree roots of the planted trees, which will make it more likely for these trees to reach maturity. Root deflectors can be purchased from <https://greenblue.com/gb/products/reroot/> which provide deflectors of up to 1m wide, which should be adequate for the concrete pads.

### Guide to planting

1. Remove plants from containers or fabric wrapping.
2. Spread the roots out of bare-root plants to get an idea of their spread. There is no need to trim or tease out roots.
3. Dig a planting hole that is no deeper than the roots, but is ideally at least three times the diameter of the root system.
4. If the sides of the planting hole are compacted, break the soil up with a fork before planting.
5. In grassed areas circular planting holes are easier to mow around, but square planting holes aid root penetration at the corners on heavy soils. A square hole within a mowing circle combines the two.
6. Soak bare-rooted trees or shrubs for about 30 minutes prior to planting.
7. Place the tree or shrub in the planting hole and position it so that the first flare of roots are level with the soil surface when planting is complete. Deep planting prevents essential air movement to the root system and makes the lower trunk vulnerable to disease - this can lead to poor establishment.
8. Small trees do not require staking but top-heavy or larger specimens should be staked.
9. Refill the planting hole carefully, placing soil between and around all the roots to eliminate air pockets.
10. There is little evidence that adding extra organic matter to the bottom of the planting hole helps; in fact this practice can hinder plant establishment as the organic matter decomposes and may cause the plant to sink.
11. Firm the soil gently, avoiding compacting the soil into a hard mass and water in.
12. Protect from deer or rabbit damage where necessary by using tree spirals.

The trees will have to use a weed control fabric mat to control grass and weeds within the rooting area, rather than just chemical control. The Green Tech mat, or something similar, degrades after two growing seasons, which should give the trees enough time to establish, weed free. These can be purchased from <https://www.green-tech.co.uk/tree-planting-products/weed-mats-mulch-and-tree-spats/ecomatt-weed-control-fabric-mats>

## **WATERING AND MAINTENANCE**

New trees and hedgerow plants will be watered regularly for the first three years after planting. They will be watered two times per month in March and September and four times a month April - August inclusive, with enough water to fully saturate the soil. If too little water is used the tree roots will grow close to the surface and will easily be damaged by a drought. Irrigation tubes are not deemed necessary on this site, as it has supported moderate water demand species previously.

## ECOLOGICAL ENHANCEMENT PLAN

In order to enhance the site for wildlife, there is one small section of hedgerow proposed, along with 6 new, individual trees. 3 bird boxes and 3 bat boxes will be installed on the retained mature trees. The details of all these ecological enhancements have been provided below.

### Bat Boxes

3 Schwegler 2F bat boxes will be installed on the retained trees. This will enhance the site for bat roosting potential. The bat boxes need to be installed as high as possible in the trees and they should all be facing in different directions, but in sunny aspects.

[https://www.arkwildlife.co.uk/product/schwegler-2f-bat-box/?gclid=EAlaIQobChMI5eDqyMalgAMVC7LtCh0i6QgCEAQYASABEgJvf\\_D\\_BwE](https://www.arkwildlife.co.uk/product/schwegler-2f-bat-box/?gclid=EAlaIQobChMI5eDqyMalgAMVC7LtCh0i6QgCEAQYASABEgJvf_D_BwE)

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### Schwegler 2F Bat Box

- ★ Attractive: ideal starter box to see if bats are in your area
- ★ Durable: made from air-permeable and longlasting SCHWEGLER wood-concrete
- ★ Accessible: removable front panel for easy cleaning and inspection

★★★★★ (4) **feefo**

Read All Reviews Below

✓ £47.99 Qty 1

**ADD TO BASKET**

**DETAILS**

The Schwegler 2F Bat Box is the ideal 'starter' box to see if there are bats in your area. If it is not occupied after a

## LIGHTING DETAILS FOR BATS

The increased lighting on the site will be minimal and is unlikely to have a significant impact to local bat populations. The caravan pitches will have low level lights, installed within 900mm high bollards. The existing mature trees on site were not found to provide roosting potential for bats during the Preliminary Ecological Appraisal, so no existing roosting behaviour will be impacted by the installation of low-level lighting. All lighting is low level, so is not expected to have a significant impact on foraging bats. The lights on the site are shown in the ecological plan attached in the Appendices and details of the lights can be found on this drawing. The lighting has been kept away from the hedgerows, trees and bird and bat boxes.

### BOL301 Bollard

Straight to mains, IP65, 500lm bollard

#### Features

|                |              |
|----------------|--------------|
| IK rating      | IK08         |
| IP rating      | IP65         |
| CSP Switchable | Fixed colour |
| LED Lifetime   | 30,000h L70  |
| CRI            | 80 Ra        |
| SDCM           | 4 SDCM       |

#### Installation information

|                             |                 |
|-----------------------------|-----------------|
| UK Bathroom Zone            | 2               |
| Inrush Current              | 20A             |
| Construction Material       | Aluminium / PVC |
| Weight                      | 4.6Kg           |
| Maximum Ambient Temperature | 40°C            |
| Electric Class (1, 2, 3)    | 1               |

#### Photometrics @ 25°C

| Product code | Finish        | W   | Colour | Beam | lm  | lm/W | lx @ 1m |
|--------------|---------------|-----|--------|------|-----|------|---------|
| BOL301X30    | Black RAL9011 | 23W | 3000K  | 360° | 500 | 22   | 144     |

#### Wiring information

|                              |                       |
|------------------------------|-----------------------|
| Cable Required for Connector | 3x 1.0mm <sup>2</sup> |
| Type of Wiring Required      | Parallel              |

#### LED driver

|                              |          |     |    |   |     |     |
|------------------------------|----------|-----|----|---|-----|-----|
| N/A (Integrated SLEV driver) | 220-240V | Yes | No | - | N/A | N/A |
|------------------------------|----------|-----|----|---|-----|-----|

#### Accessories

|     |                                                            |                 |
|-----|------------------------------------------------------------|-----------------|
| JB5 | Waterproof junction box / Gel filled waterproof connectors | Sold Separately |
|-----|------------------------------------------------------------|-----------------|

#### Guarantee

5 year extended warranty

#### Features & benefits

23W

IP65 ideal for car parks and walk ways

Black powder coated finish

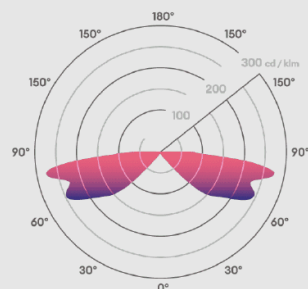
Straight to mains screw terminals

Domed top for a low glare finish, and a minimum up spill of light making it comfortable on the eye

Comes complete with root mounting kit

Benefiting from light all round with a 360° beam angle

#### Beam angle: 360°



Ø150mm



## BIRD BOXES

A total of 3 bird boxes will be erected on the retained trees. These will be positioned 2 to 4m from ground level and will avoid south facing aspects. 2 will be a small Schwegler nest box with 42mm hole and 1 will have a 32mm hole. This will increase the nesting opportunities on the site immediately, whilst the trees and hedgerows are establishing. These will then provide both foraging and nesting opportunities for local breeding bird populations once they have matured. The positions of the bird boxes can be found on the appendices site drawing.

These can be purchased from; [https://www.nhbs.com/1b-schwegler-nest-box?bkfno=174756&ca\\_id=1495&adlocale=uk&gclid=EAlaIQobChMI5pGKIL-vgAMVN4pQBh3qQwMQEAYYAIBEGJF1\\_D\\_BwE](https://www.nhbs.com/1b-schwegler-nest-box?bkfno=174756&ca_id=1495&adlocale=uk&gclid=EAlaIQobChMI5pGKIL-vgAMVN4pQBh3qQwMQEAYYAIBEGJF1_D_BwE) however there are many other stockists of Schwegler.

The screenshot shows the NHBS website interface. The top navigation bar includes links for About, Help, Blog, Jobs, Established 1985, and NHBS EU. The main header features the NHBS logo and a search bar. Below the header, there's a section for 'EU Shipping Update' and a navigation menu with categories like Promotions, Equipment shop, Bookstore, Magazines, Gifts, and Clearance.

The main content area displays the '1B Schwegler Nest Box' product. On the left is a large image of the nest box. To the right, a 'Select product (5)' section lists three options:

- 32mm Hole: Brown**  
Not in stock: Usually dispatched within 1-2 weeks  
£40.00  
#174756
- 26mm Hole: Brown**  
Not in stock: Usually dispatched within 1-2 weeks  
£40.00  
#174761
- 32mm Hole: Green**  
Not in stock: Usually dispatched within 1-2 weeks  
£40.00  
#174757

On the right side of the product page, there's a 'Manufacturer: Schwegler' section with two checkmarks indicating suitability for all garden birds and availability in different colors and entrance holes. Below this is a 'Recommended Accessories' section listing:

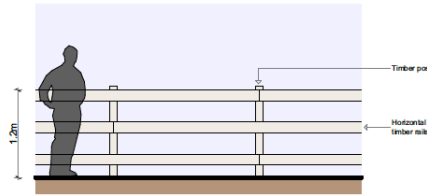
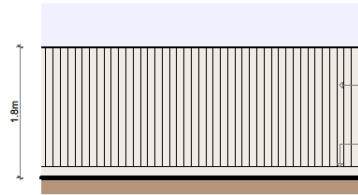
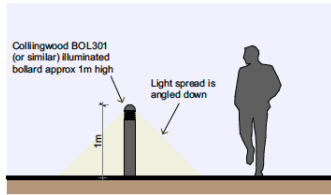
- 1B Schwegler Nest Box Replacement**  
A replacement front panel is available for the 1B nest box  
£11.50
- Schwegler Predator-Proof Front Panel**  
In areas where cats or other predators are a problem, try the predator-proof front  
£21.50
- Heavy Duty Aluminium Nails**  
Replacement tree-friendly nails are available either singly or in packs of 100  
£0.66

At the bottom left of the product image, there's a '4.8 ★★★★★ Google Customer Reviews' badge.

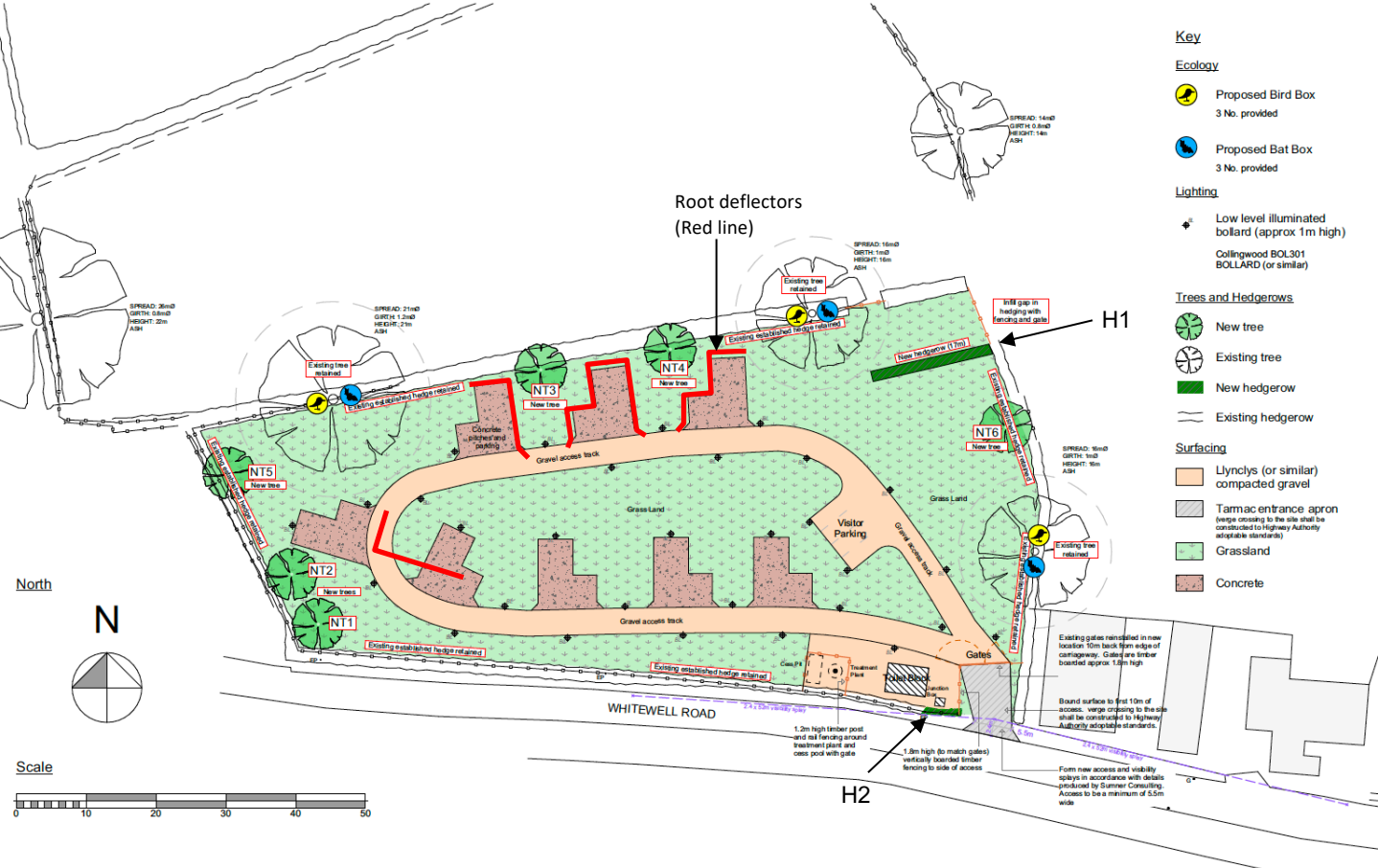
## PLANTING AND INSTALLATION OF WILDLIFE MEASURES TIMETABLE

| Item                                                    | Timing                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Root deflectors                                         | Root deflectors will be installed at the time of the creation of the concrete caravan pitches. These will only need to be installed on the pitches closest to the proposed tree planting.                                                                                                                     |
| Hedgerow planting                                       | Autumn/ Winter after the ground works have commenced.                                                                                                                                                                                                                                                         |
| Tree planting                                           | Late Autumn through to the beginning of spring, after the ground works have commenced.                                                                                                                                                                                                                        |
| Installation of bat boxes                               | Once the groundwork has been completed, the bat boxes can be installed. This will avoid any potential damage to the boxes                                                                                                                                                                                     |
| Installation of bird boxes                              | Once the groundwork has been completed, the bat boxes can be installed. This will avoid any potential damage to the boxes                                                                                                                                                                                     |
| Checking of the installation of the ecological features | Once the pitches and lighting has been completed and the tree and hedgerow planting has been completed, the named ecologist will visit the site, take photographs of the bat and bird boxes, along with the hedgerow and tree planting. These will then be recorded and reported back to the local authority. |

## **Appendix 1: Ecological Enhancement Plan, Lighting Positions and Tree and Hedge Planting**



FENCING DETAILS (1/50 @ A2)



LANDSCAPING, ECOLOGY ENHANCEMENT & LIGHTING PLAN (1/500 @ A2)

