

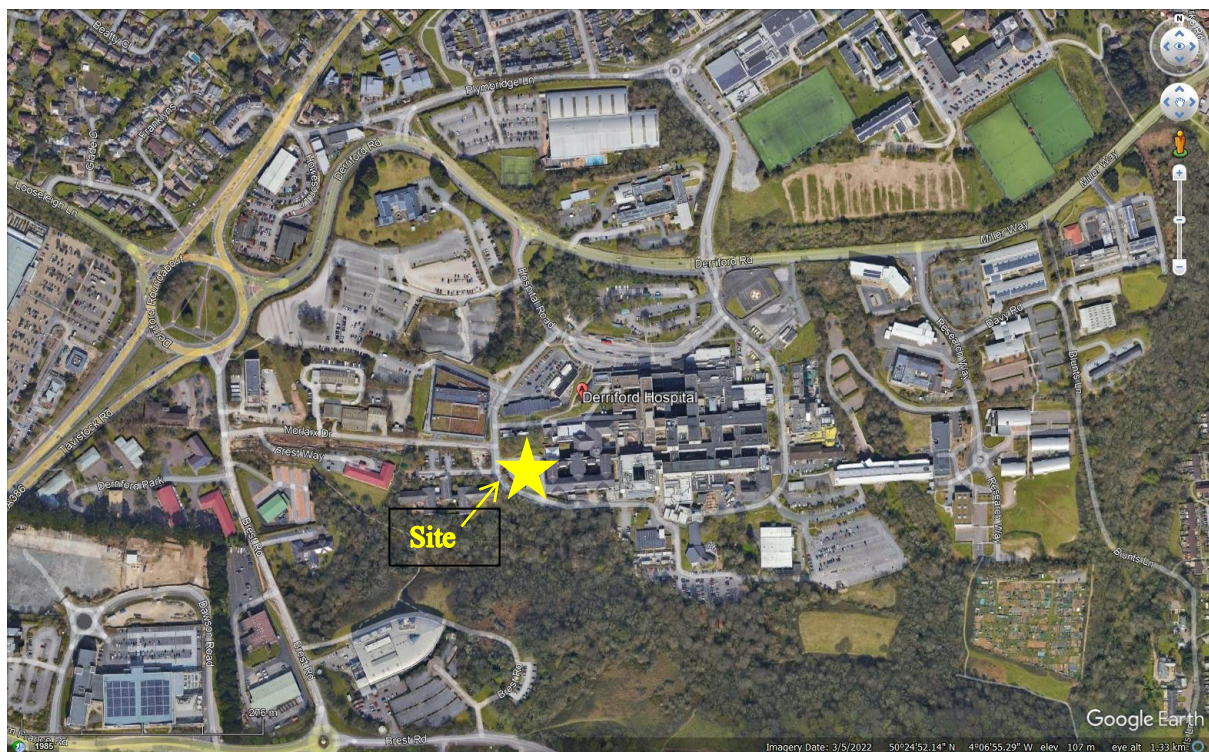
Landscape and Ecological Management Plan (LEMP)

For planning application - 23/00015/FUL10

Derriford Hospital Derriford Road Plymouth PL6 8DH

Retrospective application for the erection of temporary (up to 5 years) modular medical facility and associated landscaping and parking.

November 2023



Prepared for: University Hospitals Plymouth NHS Trust

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Date: 06 November 2023

Approved: Nick Bishop

Date: 29th November 2023

Project No: J900-08

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1. Introduction- Purpose

This LEMP is prepared by Land and Heritage for University Hospitals Plymouth NHS Trust as part of the planning process to satisfy condition no. 10 of Plymouth City Council planning permission ref: 23/00015/FUL10, decision date 11/08/2023 for the erection of temporary (up to 5 years) modular medical facility with associated landscaping and parking (hereafter referred to as the planning approval, or application site).

CONDITION 10: LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN (LEMP)

PRE-RELEVANT WORKS

Prior to any landscaping works related to the building and as approved in this consent, a Landscape and Ecological Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority.

The content of the LEMP shall include the following;

- a. Description and evaluation of features to be managed*
- b. Ecological trends and constraints on site that might influence management.*
- c. Aims and objectives of management for both the landscape elements and the biodiversity features.*
- d) Prescriptions for management actions to achieve aims and objectives*
- e) Preparation of a works schedule (including annual work plan capable of being rolled forward over a 5 year period).*
- f) Body or organisation responsible for implementation of the plan.*
- g) Detailed monitoring strategy and mechanism to introduce adaptive management where necessary (i.e. contingencies).*

The LEMP shall also include details of the legal and funding mechanism(s) by which the long term implementation of the plan will be secured by the developer with the management body(s) responsible for its delivery. This should be for a period of at least a 30 years. The plan shall also set out circumstances where adaptive management will be introduced where the results from monitoring show that conservation aims and objectives of the LEMP are not being met. The approved LEMP will be implemented in accordance with the approved details.

The LEMP provides the strategy for ensuring the landscape and ecological issues of the site are adequately managed to encourage enhancement of the landscape and environment which is important in complying with National Planning Policy Framework and provide the Biodiversity Net Gain that is proposed as part of the planning permission-

1.1. The Planning Application Site – Location and context.

The site is located within the grounds of Derriford Hospital, Derriford Road, Plymouth, PL6 8DH, to the south west of the main hospital building, on a former carpark outside the Maternity Unit. (OS Grid Reference: SX 49712 249712). Figure 1 shows the location of the planning application site boundary in red, and the wider hospital site shown in blue. There are three areas for off site mitigation associated with this planning application: an area of orchard planting and an area of

woodland restoration (shown in green) and an area for the proposed location for Bat Boxes to the south.

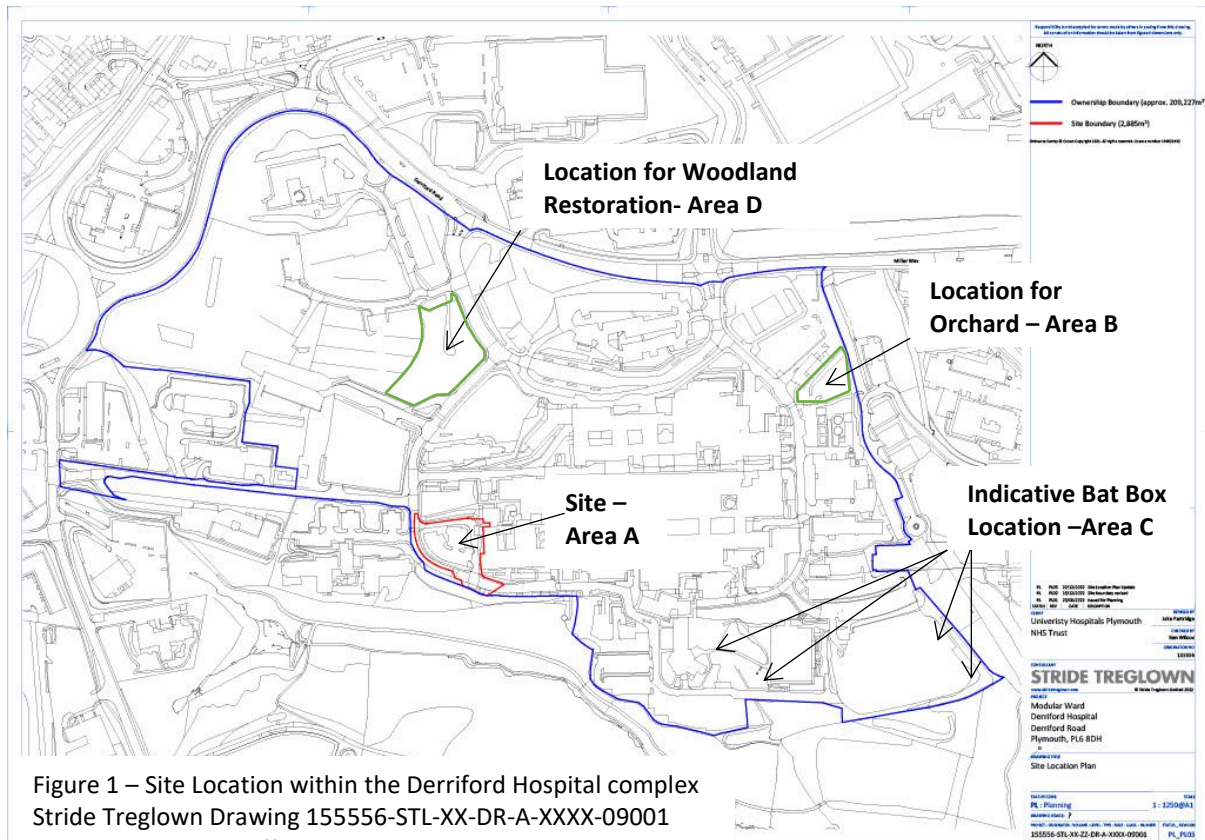


Figure 1 – Site Location within the Derriford Hospital complex
Stride Treglown Drawing 155556-STL-XX-DR-A-XXXX-09001
Annotated to show offsite areas linked to the application

The application site (Area A) is on a former carpark which consisted mainly of tarmac hardstanding, with some amenity shrubs, grass and trees. The new building takes up most of the site area and connects into the adjoining building to the east. The proposed development leaves only a narrow band of landscaping around the north, west and south of the site. (Figure 2). There will be a sedum roof to the new building within the application site.

To compensate for loss of trees on site an area of orchard planting is proposed to the east of the hospital grounds (Area B). Ecological enhancement for bats is provided by 4 bat boxes to be erected on trees to the south of the hospital grounds (Area C). (Figure 1).

Biodiversity net gain for this planning application is provided through the off site woodland restoration to the north of the site within the hospital grounds (Area D) (Figure 1). The Biodiversity net gain (BNG) achieved from the full woodland restoration contributes towards the BNG of both this development and a progressing planning application for a new Fracture Clinic on a different section of the hospital grounds, located on a car park to the south-west of Rowan House. Details of the Woodland restoration and management is provided in the document “Woodland Restoration Strategy, Derriford Hospital Oct. 2023” produced by Land and Heritage and submitted to discharge Condition 6 of this application. To avoid repetition reference should be made to that document for the management of that area.



Figure 2 – Site Proposal – Area A
Stride Treglown Drawing 15556-STL-XX-ZZ-DR-L-XXXX-1000 (S2-P12)

1.2. Wider Ecological Context of the Application Site.

There are no statutory ecological designations on the application site. However Bircham Valley Local Nature Reserve is situated immediately to the south. It extends to the south and east of the Hospital site and includes significant areas of Deciduous Woodland Priority Habitat. (Figure 3)

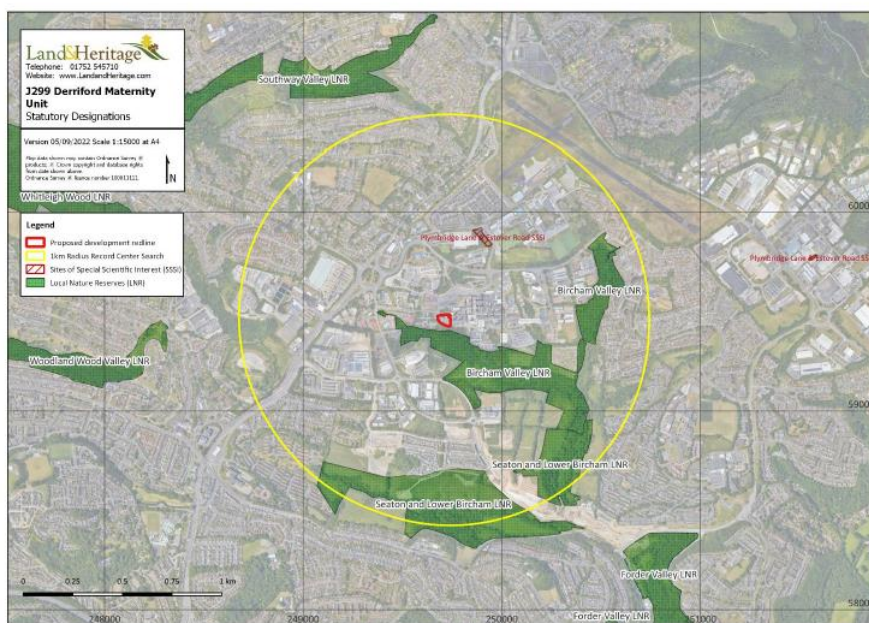


Figure 3 – Surrounding Native Broadleaved woodland within Local Nature Reserve / Priority Habitat in the area.

Within the Plymouth and South West Devon Joint Plan, the wider estate of Derriford Hospital includes stepping stone sites which will provide linkages and connectivity for wildlife between designated site (Figure 4). The area covered by the woodland restoration is one of these sites.

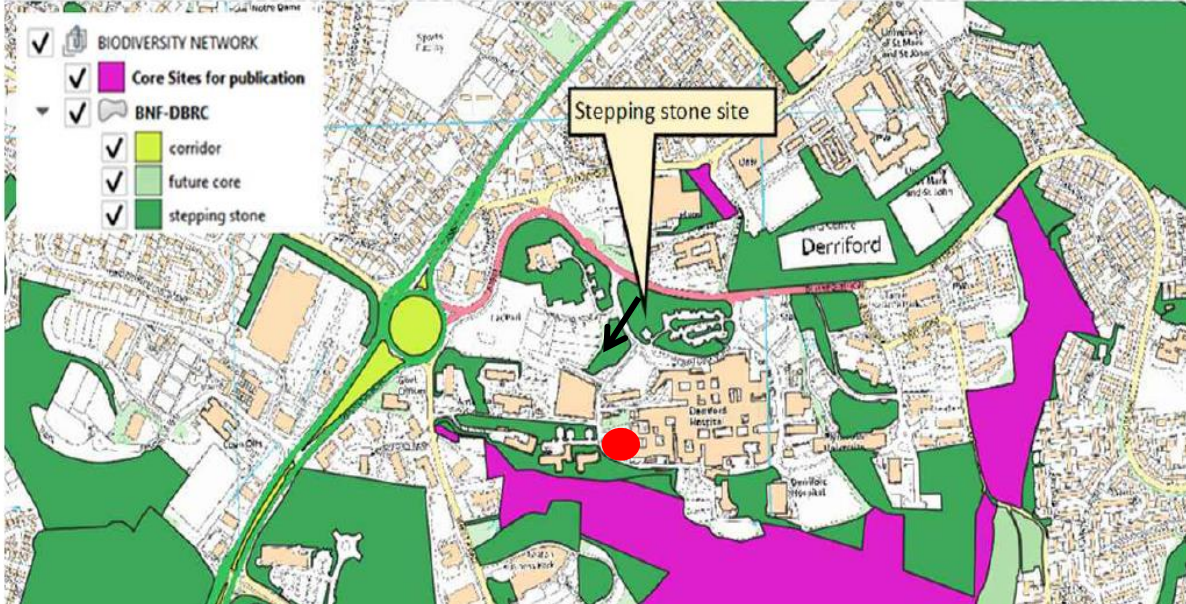


Figure 4 – Biodiversity Network Stepping stone Site (from Plymouth and South West Devon Joint Plan)

There is a Tree Preservation Orders * (TPO) on 2 trees adjacent to the north of the development 15m from the proposed works. The “King and Queen Oaks”, covered by TPO Number 3848, ref 00/0053/TPO (Figure 5). These trees are outside of the proposed development area. (*relevant at the time of writing this document). An important band of native broadleaved trees occurs to the south of the site which buffers Derriford Hospital from the Bircham Valley LNR.

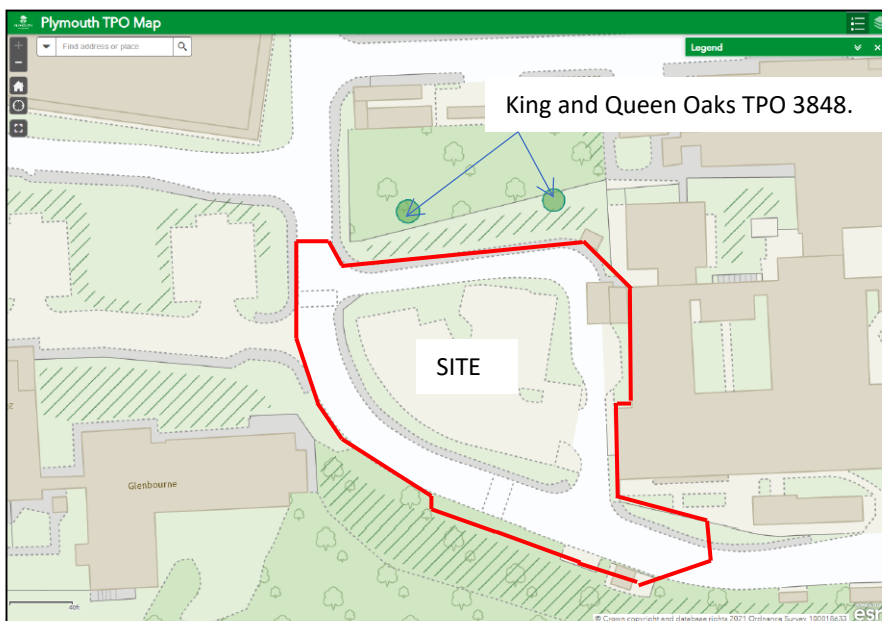


Figure 5 – Tree Preservation order on land adjoining the application site.

The Bat Survey undertaken as part of the planning application (*Land and Heritage - Derriford Hospital, Maternity Unit Bat Survey, Nov 2022*) found “that Bat activity within the proposed development area was focussed on the woodland edges to the south and west of the site, with bats primarily using woodland edges for commuting. This habitat use included moderate to high numbers of commuting Common and Soprano Pipistrelle and of Noctule, suggesting the feature is of importance for commuting bats roosting nearby.

Several recordings of small Myotis bats and Brown Long-eared Bat within the woodland edges to the south of the proposed development area indicate a more diverse bat species assemblage adjacent to the site, and that light-averse bats species are using woodland alongside the proposed development area in which to forage. This woodland edge requires protection from light spill.

Lighting design must be considerate of the nocturnal living landscape, with dark corridor provision along the site’s southern and eastern edges. Recommendations for mitigation design have been provided which will protect and enhance a dark corridor to provide ecological functionality for commuting bats and protect the adjacent Local Nature Reserve’s use by bats.”

2. Planning Application and Landscape and Ecological Features to be managed and aims and objectives

The landscape and ecological elements to be provided on the site are shown on (see Figure 6, 7 and 8). The planning application is for the construction of temporary modular medical facilities and access. The application is a temporary consent and the site (Area A) shall be restored and returned to its former condition (car parking) within five years from the date of the decision, (i.e 8th August 2028) unless otherwise agreed in writing with LPA. (as stipulated in Condition 3 and 4 of the application)

During the life of the building the immediate landscaping of the development site (Area A comprises:

- Hard landscaping to provide safe and easy access into the new building
- Soft landscaping to provide an attractive approach to the building including benefits for biodiversity and a
- Sedum roof to the building to increase biodiversity for the duration of the building (*covered by condition 8 -Within three (3) months of the date of this decision, full details of the planting mix for the sedum roof shall be submitted to and approved in writing by the Local Planning Authority. Once approved the sedum roof shall be planted within three (3) months of the date of this decision and shall thereafter be maintained for the life of the building.*)
- Woodland edge to the south needs to be protected from light spill from operation on site to remain considerate to the nocturnal living landscape.

Area A –The Development Site landscape elements are:

- Native Scrub (NS1)
- Amenity Planting (AS1-5)
- Sedum Roof (GR1)

Other offsite areas, to mitigate tree losses and provide biodiversity enhancement and BNG, as described in section 1.1 are long term elements to be managed for a period of at least 30 years. They include the following landscape and ecological elements:

Area B –Orchard (Figure 7) within an area of existing grass and trees, where additional trees will be planted to extend the wildlife value of the area.

- 12 new Trees (T1-12)

Area C –Area to the south east for the installation of 4no. Bat Boxes (Figure 8) in locations agreed with Land and Heritage’s Ecologist at time of erecting the boxes. The boxes are to enhance roosting opportunities for the existing bat population and shall be maintained and retained in perpetuity. The Bat boxes are to be woodcrete boxes by Schwelger 3no x 2F and 1 no x. 3FN bat boxes. *(The bat boxes are covered by condition 9 –(Notwithstanding the details submitted, prior to occupation of the building Four bat boxes shall be sited in and around the hospital complex. These should be placed in areas where bats are known to frequent and away from brightly lit areas. Once installed, and prior to occupation of the building a plan shall be submitted to the Local Planning Authority showing the location of the bat boxes. The bat boxes shall thereafter be maintained and retained in perpetuity.)*

And Area D –Woodland Restoration to deliver 10% biodiversity net gain for the development (see separate Woodland Restoration Strategy by Land and Heritage, which includes aims and objectives and the establishment works 1-5 years and Long term Management 6-30 years to achieve these, produced to satisfy condition 6 Woodland Restoration Strategy and Biodiversity Net Gain.

3. Overall Landscape Management Aims / Objectives

The following section outlines the overall aims and principles to be adopted in the landscape maintenance of the site, applicable across all of the landscape elements.

- To carry out management in accordance with safe working practices and CDM regs
- To carryout maintenance in a manner so the long term management objectives are met
- To carryout appropriate maintenance, including watering, to establish the trees, sedum roof and areas of new planting.
- To maintain planting areas to provide healthy plants, a good ground cover and contain plant growth to intended areas and purpose.
- To monitor and maintain planting to avoid any damage to the building or surrounding hard landscape and monitor plants against damage from deer.
- To adopt manage principles and adjust the management regimes of the site to maximise the benefit to local wildlife. To include:
 - Minimise use of herbicides and fertilisers to provide only targeted needs
 - Avoid maintenance operations such as, pruning during bird nesting seasons (March to September inclusive). If works are required during the nesting season (March to September inclusive), the vegetated areas must be checked by an ecologist for nesting birds and works delayed should active nest be found.
- To adapt the maintenance to suit specific weather, climate and operational conditions
- Replace any dead or defective planting, within the management program, for a period of 5 years in order to compile with Condition 7 of the planning application. Replacements shall be with the same or other suitable species that meet the design objectives, and are to be carried out at the earliest opportunity after being reported.

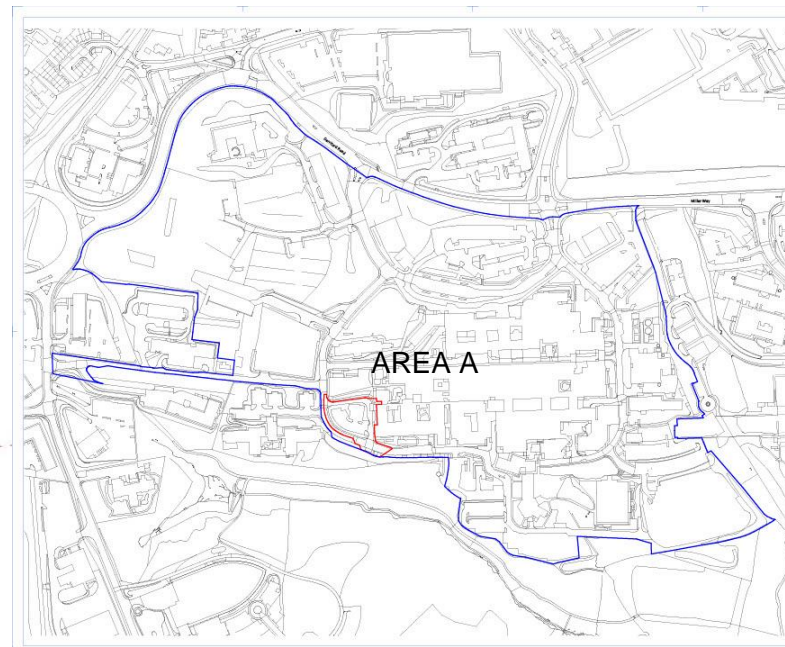


Figure 6 – SITE - AREA A
Landscape and Ecological Elements

Extract from Stride Treglown Drawing 15556-STL-XX-ZZ-DR-L-XXXX-1000 (S2-P12)

| STATUS | REV | DATE | DESCRIPTION |
|--------|-----|------------|---|
| PL | P01 | 13/12/2022 | Proposal released for planning |
| S2 | P05 | 18/04/2023 | Landscape GA sheet updated to include tree strategy |
| S2 | P06 | 24/04/2023 | Trees removed from landscape plans |
| PL | P07 | 15/05/2023 | Landscape GA updated following comments |
| S2 | P08 | 01/06/2023 | Updates to GA and Orchard plans |
| S2 | P09 | 27/06/2023 | Update GA drawing |
| S2 | P11 | 07/09/2023 | Updated GA drawing |
| S2 | P12 | 11/09/2023 | Updated proposed paving |
| S2 | P12 | 19/09/2023 | Revised GA Drawing |

Landscape Legend

- Shrub Beds:** All top soil to meet BS3882:2015 specification with 300 mm of quality topsoil and 300mm of subsoil bot to comply with specification Grassed areas: 150mm of Top soil and 150mm of subsoil to be seeded with Em1 by Emersgate or other approved
- Mix A Ornamental Planting:** Carex Morrowii 30%, Hakonechloa macra 20 % Descapsia cespitosa 'Goldtau' 20%, Sedum Matronna 10%, Achillia Terracotta 10% Verbascum thapsus 10%. Grasses to be planted in large drifts interspersed with Achillia and Verbascum.
- Mix B Native Structure Planting:** Cratageus monogyna 30%, Prunus nigra, 20% Acer pseudoplatanus 15% Corylus avellana 20%, Rosa canine 10%, Lonicera periclymenum 2% Ilex aquifolium 3% planted at 1/m²
- Terram Membrane and Hedera Helix Hibernica**
- TensorTech GreenSlope System**
All plants should be well established in 75mm pots prior to planting and should be seen to have a good quality rootball. Species to include: Armeria Maritima 20%, Phlox Subulata 20%, Dianthus "Firewitch" 20%, Sedum "Anglina" 20% and Saponarch "Bressingham" 20%
- Overseeding w. Floral Seed Mix**
- Rock Face**
- Kerbs**
145mm up stand bullnose Precast concrete
- Flush Kerb**
50mm flush square section pin kerb
- Proposed Tarmac Surfacing**
Tarmac to pedestrian grade for footpaths and access areas, roads to engineers details & specification
- Proposed Paving**
Glendinning Devontex Charcoal Paving Slab
- Natural Grey
- 450mm x 450mm x 35mm
- New Retaining Walls**
to Engineers details & specification
- French Drain**
Trench filled with loose gravel/rock around the buildings edge
- Transition Zone**
Areas to be formed by Tarmac to engineers specification and to be feathered into existing highway construction
- Knee Rail**



NS1

AS1-5

he orchard at the

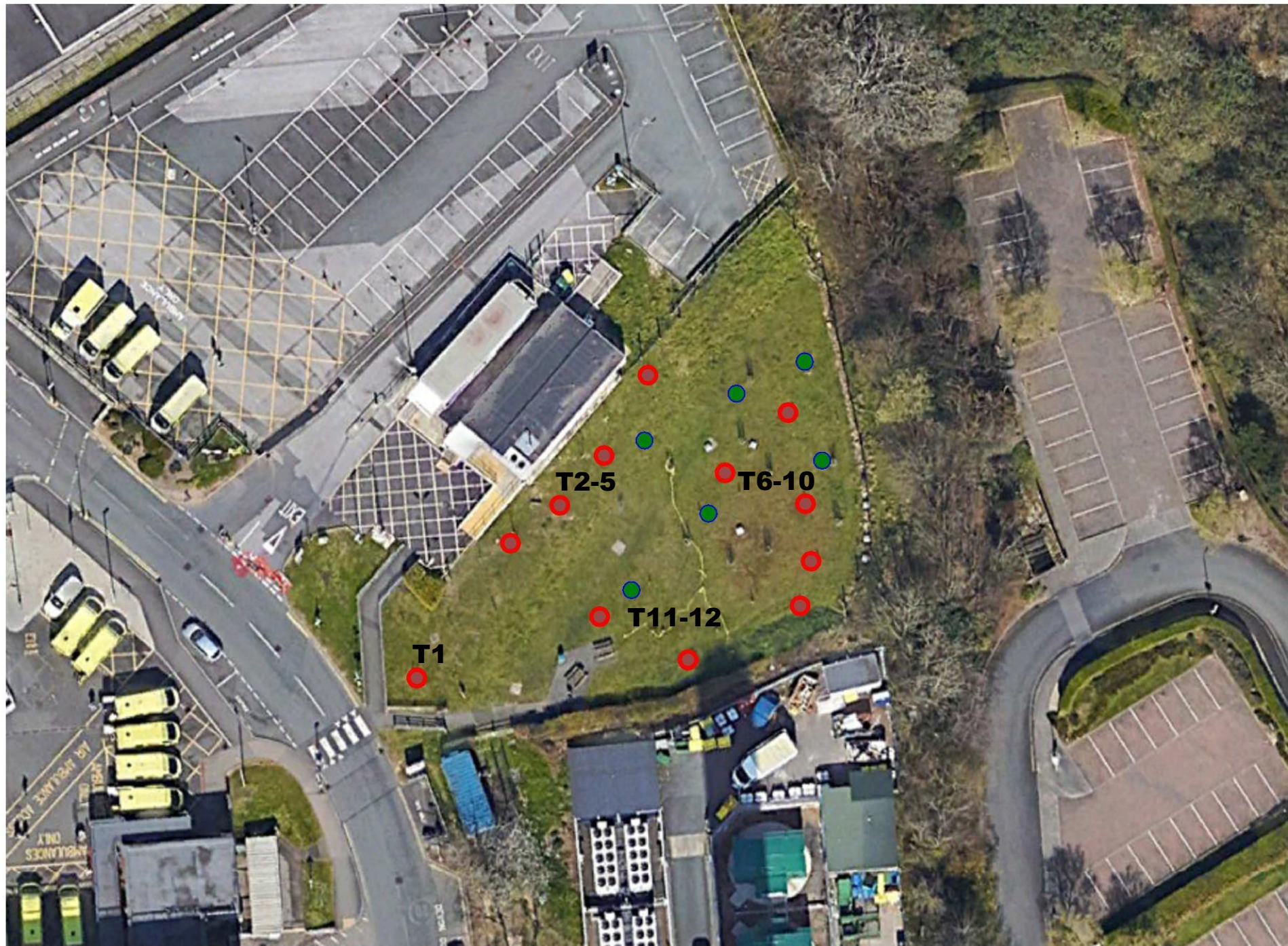
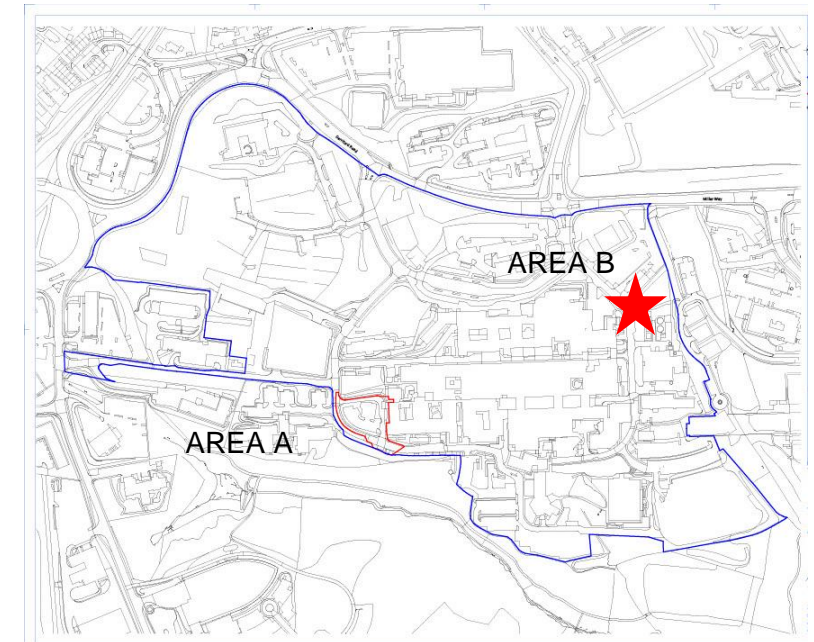


Figure 7 – TREE PLANTING /ORCHARD
AREA B
Landscape and Ecological Elements

Extract from Stride Treglown Drawing 15556-STL-XX-ZZ-DR-L-ZZ-SK003

- Location of proposed **T1-12** trees
- Existing trees



| | | | | |
|--|-----|------------|---------------------------------|---------------|
| S2 | P08 | 01/06/2023 | Updates to GA and Orchard plans | |
| STATUS | REV | DATE | DESCRIPTION | |
| CLIENT | | | | REVISED BY |
| Univeristy Hospitals Plymouth NHS Trust | | | | IE |
| | | | | CHECKED BY |
| | | | | DH |
| | | | | ORIGINATOR NO |
| | | | | 155556 |

CONSULTANT
STRIDE TREGLOWN

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PROJECT
Modular Ward
Derriford Hospital
Derriford Road
Plymouth, PL6 8DH

DRAWING TITLE
Orchard Layout Plan

SUITABILITY STATUS SCALE
S2 : Suitable for information 1 : 500@A3

| | |
|--|-----------------|
| DRAWING USAGE: | |
| PROJECT - ORIGINATOR - VOLUME - LEVEL - TYPE - ROLE - CLASS - NUMBER | STATUS_REVISION |
| 155556-STL-XX-XX-DR-L-ZZ-SK003 | |

NOTE: 12 fruit trees 10-12cm girth , cont grown trees to be planted in the orchard at the trusts direction. Trees are to be made up of cultivars in the same fruiting groups these include 2x Amelanchier Lamakkii 2x Cercis siliquastrum 2x Cratageus monogena 1x Prunus spinosa to be planted as buffer planting and an additional Prunus perscia 'Flavorcot' (Apricot) x 1Prunus domestica 'Oullins' (Greenage) x 1 Prunus domestica 'Opal' x2 (Plum) and Prunus domestica 'Victoria' x 1 (Plum). Trees to be planted with single low stake and cleft timber deer guards, in 3m3 of good quality top soil with circular impervious weed suppressing matt and an application of well rotted manure /slow release fertilizer.

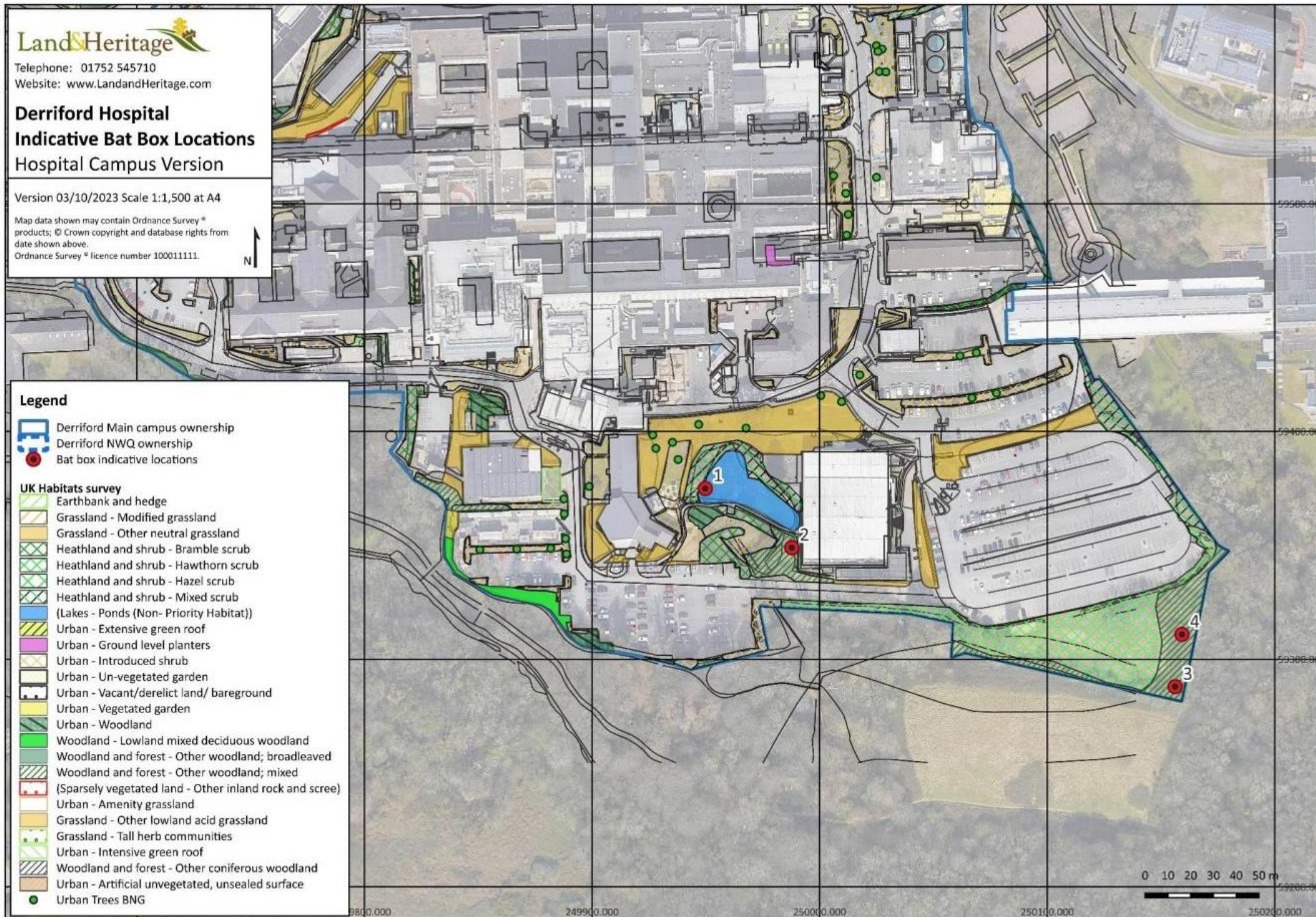


Figure 8 – BAT BOXES Ecological Elements



4 Bat boxes in total comprising :-
 3 Schwelger 2F Bat Box General purpose (left) and
 1 Schwelger 3FN Bat Box (right)
 From nhbs www.nhbs.com

Responsibility for the installation will be held by the University Hospital Plymouth

Siting & positioning: On the trees-trunk. Suitable trees to be agreed with the Project Ecologists.

Cleaning and inspection: Easy Cleaning and inspection due to removable front panel. Once boxes are inhabited they may only be disturbed by licensed bat workers.

Material: Long lasting SCHWEGLER woodcrete
 Galvanized steel hanger - forestry approved
 Aluminium Nail - forestry approved

2F Bat Box
Colour: Black and Grey
Dimensions: H-33cm x Dia 16cm:
Weight: 4kg approx.

3FN Bat Box
Colour: Black and Grey
Dimensions: H-35cm x Dia 16cm:
Weight: 4.9kg approx.

4. Management Prescriptions for Landscape Elements

The following sections show the aims and objective and management operations during the first 5 years for each of the landscape and ecological elements. Refer to Figure 6,7 and 8 for location of elements and specific area references. Maintenance operations should be carried out referring to the landscape drawings and planting plans for the site (as listed at Appendix 1 (or latest revision).

4.1. General

- a. Litter and leaf Clearance- Keep all soft and hard landscape area clear of litter and debris.
- b. Replace any dead or defective planting, within the management program, for a period of 5 years in order to compile with Condition 7. Replacements shall be with the same or other suitable species that meet the design objectives, and are to be carried out at the earliest opportunity after being reported.
- c. Monitor plant damage from deer and take remedial action as required

4.1.1 Watering - New Trees (Area B) and New Planting areas and Sedum roof (Area A)

All new plants; trees, sedum roof and planting beds shall be monitor and watered as necessary to receive adequate moisture to ensure healthy plant growth for the first 2 year whilst establishing. Watering is to take place on, over and just beyond the root area of the plants, giving a thorough soak to the ground to encourage downward and lateral development of the root systems.

Operations - All new planting; new tree, planting beds and sedum roof shall be monitored and watered as necessary during the spring and summer months (April – September) for the first two growing seasons after planting. The quantity applied is to be adjusted to the size of tree or plant. The site conditions will varying depending on the soil type, it's exposure, the weather, time of year and plant growth. Therefore conditions are to be monitored closely from March, to determine if the ground is showing signs of drying out, and adequate watering applied accordingly. The contractor shall manage the watering regime in terms of frequency and volume of water dispensed as over watering can be as harmful as no watering.

4.2. Area A - Planting Beds (including perennials, shrubs + native scrub) (AS1-5 and NS1)

Objective – To establish planting that provides a full canopy ground cover to beds and manage plants to retain blocks or drifts of planting.

Operations – Planting on Tensar Tech Greenslope systems, and Terram to be correctly irrigated for the 1st 12months, hand watering targeting delivery of water to the root system of each individual plant. Watering in the second summer, is subject to establishment in year 1. Planting areas are to be kept weed free in particular from alien, invasive or pernicious weeds. Replace dead or defective plants and infill gaps to ensure successful establishment of the planted areas with good ground cover. Maintenance to include monitoring and pruning as required to control growth within planted area to ultimately achieve closed canopy; cut back plants overhanging or encroaching on paths or hard surfaces and to maintain sight lines; remove damaged, dead or diseased shoots; prune species at times of years to maximize their fruiting and flowering and maintain natural shape ; remove dead material and cut back seed heads from perennials in late winter, before new growth. Fork over soil

in standard planting beds to keep soil loose, as required, and adding compost/fertiliser biennially (if required); Top up bark mulch to original depth annually as required until plant canopy suppresses weed growth, and sweep adjacent hard paving and remove of litter.

4.3. Area A -Hard Landscape

Objective – To monitor, maintain and check paths and fencing are fit for purpose and safe.

Operations — Paths to be kept clear of litter and vegetation and free from ice or snow in accordance with Derriford Site Wide management prescriptions. Monitor condition of hard landscape, report and make safe immediately.

4.4. Area A - Sedum Green Roof (GR1)

Objective – To establish and maintain a sedum roof for the building's life to enhance biodiversity.

Operations – Water the green roof during prolonged periods without rain, by prolonged soaking to prevent fully drying out for the life of the building. Sedum Roofs are grown in a shallow growing medium which contains very little nutrient, apply an annual application of fertiliser to ensure the plants remain healthy. Fertiliser should ideally be applied during March/April, as it helps the plants to prepare for extreme weather conditions. Dead vegetation and leaf litter should be removed from the roof (Spring and Autumn) as required and ensure gutters are clear

4.5. Area B – New Trees (T1-T12)

Objective - Manage the trees to provide long term biodiversity, visual, climate and health benefits for the site. Monitor trees conditions and identify and manage any potential problems with the trees that pose a risk to people or property. Manage the new tree planting in accordance with BS8545 to establish healthy trees with a balanced structure

Operations - Water trees for the first two growing seasons between April – Sept. (as 4.1.1). Watering shall be in accordance with BS8545:2014. Contractor must assess the weather and on site soil conditions to ensure adequate rate of watering are provided to promote healthy establishment of trees. Typically watering to give 25L per standard tree 8-12cm girth per week when needed Monitor tree growth in accordance with BS8545, and carryout any formative pruning to the crown to be carried out if required to remove crossing branches and give a balanced crown. Prune any damaged branches or replace dead, dying or damaged tree as soon as noticed. Top up soil levels and bark mulch at base of trees following soil settlement and keep free of weeds. Check tree tie and stakes are firm and adjust if required. Re-firm soil at base of trees after winds and ensure trees are upright. Remove tree ties and stakes after 5 years once plants have established. Check deer guards are intact. Keep 1000mm diameter at base of new trees or specimen shrubs growing in grass clear of grass and maintain the integrity of mulch mats. Do not strim around trunks of trees

4.6. Area C - Bat Boxes

Objective – Provide roosting opportunities for bats in perpetuity.

Operations – **Bat boxes** - Visit to check condition of and occupancy of boxes after one year by suitably Class Licence holding ecologist, including relocation boxes as required and a report of condition or replacement if needed and updated locations if needed. Monitor boxes for activities and ensure fixings remain sound during subsequent years. Consult project Ecologist if work is required to any of the boxes. Replace boxes when they come to the end of their life.

5. Implementation of the LEMP – Responsibility for Landscape Maintenance

University Hospitals Plymouth NHS Trust, Derriford Hospital will be responsible for the delivery of the LEMP and its long term management. Responsibility will be held by the Estates Department of the Trust, with maintenance undertaken by the in-house grounds' maintenance team or suitably qualified landscape contractor appointed by the Trust.

The main contractor will implement the landscaping and it is presumed the first year maintenance of landscaping until end of the defects period in both Area A (the Site) and Area B (to the east of the development). At handover the main contractor shall ensure that the landscape is handed over to the Trust in an acceptable condition with trees in good health, planting and sedum roof establishing and fully stocked. In advance and at the completion of the development, the developer shall convene a meeting with University Hospitals Plymouth NHS Trust to inspect the landscaping, ensuring all planting, maintenance and replacements have been taken place in accordance with the drawing, to ensure a smooth handover to the Trust's maintenance contractor. Handover between any management contracts will run continuously with no breaks in the landscape management programme.

Landscaping in Area A is part of a temporary consent for a medical facility (5 years). After 5 years, management of this area should be reviewed in the light of the site's future use. Where appropriate the landscaping should be retained and management of the area extended. Tree planting in Area B; Bat boxes in Area C and Woodland Restoration in Area D are to be managed for at least 30 years as part of long term management of the hospital estate.

6. Monitoring Requirement of the LEMP

Monitoring will be undertaken to assess the establishment and biodiversity interest of the developing landscape on behalf of University Hospitals Plymouth NHS Trust. The Trust will enter into a long term arrangement with Land and Heritage to carry out this work. This will include an annual check and report, delivered to the University Hospitals NHS Trust annually in September. Monitoring should be carried on an annual basis to assess the landscape and ecological objectives of the LEMP..

On completion of the initial construction works the ecologist and landscape architect should confirm compliance with the LEMP. There after a site visit to assess initial planting will be carried out in year 1 of the LEMP by a suitably qualified landscape professional and year 2. After one year a suitably Class Licence holding ecologist, shall visit to check condition of and occupancy of boxes and relocate boxes if needed. They will report on the condition or replacement if needed and updated locations if needed. The developing landscaping will be monitored annually for 5 years post completion to assess establishment and the effectiveness of the management regime and to advise on additional actions which may be necessary to meet the objective. Any remedial action should be delivered through University Hospitals Plymouth NHS Trust with advice from the ecologist or landscape architect. Feedback from these site visits will be provided to the Trust and an adaptive management approach be adopted whereby the results of monitoring are fed back into the appropriate management regimes to retain the site's biodiversity and align with the objectives of the LEMP.

7. Limitations of the LEMP

THE LEMP sets out the principles and objects for the landscape and ecological management of the site to achieve the biodiversity enhancements and net gains for the application site. . It provides the initial management envisaged for the first 5 years after planting, which should be rolled out once plants are established. The dynamic nature of the environment and plant growth will result in changes to the environment as seasons change from year to year. The maintenance operations therefore should adapt accordingly to meet specific requirements on site.

This report has been prepared solely for the use of the client, and may not be relied upon by other parties without written consent from Land and Heritage Ltd. In addition, it must be understood that this report does not constitute legal advice.

8. References

Land and Heritage - Woodland Restoration Strategy, Derriford Hospital Oct. 2023

Land and Heritage - Derriford Hospital, Maternity Unit Bat Survey, Nov 2022

Appendices

APPENDIX 1 – Relevant Approved Planning Documents

APPENDIX 2– Maintenance Tables

APPENDIX 3– Annual work Plan

Appendix 1:- List of Planning approved landscape drawing

PLYMOUTH CITY COUNCIL PLANNING DECISION NOTICE

GRANT OF PLANNING PERMISSION

Planning application:- 23/00025/FUL10

for the erection of temporary (up to 5 years) modular medical facility with associated landscaping and parking

Approved on :-11 August 2022

Discharge of Conditions applications

23-01458-CDM- Conditions 7 (landscape Details)-9 (Provision of Bat boxes)-14 (cycle provision)

Submitted Landscape Plans

General Arrangement - Stride Treglown Drawing 15556-STL-XX-ZZ-DR-L-XXXX-1000 (S2-P12) (Extract of which is included in Figure 6)

Orchard Layout - Stride Treglown Drawing 15556-STL-XX-ZZ-DR-L-ZZ-SK003 (Extract of which is included in Figure 7)

Indicative Bat Locations – (as shown n Figure 8)

Discharge of Conditions applications for Condition 6

Condition 6 - Woodlands Restoration strategy and Biodiversity Net Gain

Land and Heritage - Woodland Restoration Strategy, Derriford Hospital Oct. 2023

Discharge of Conditions application for Condition 8

Condition 8 - Sedum Roof ... details of planting mix for sedum roof

To be confirmed

APPENDIX 2 - Management Table

| LANDSCAPE ELEMENT | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|--|--|--|--|--|---|
| General (4.1a) | Litter clearance Leaf litter accumulation –removed | Litter clearance Leaf litter accumulation –removed | Litter clearance Leaf litter accumulation –removed | Litter clearance Leaf litter accumulation –removed | Litter clearance Leaf litter accumulation –removed |
| General – All new planting (as 4.1b) | Replace dead, or defective planting | Replace dead, or defective planting | Replace dead, or defective planting | Replace dead, or defective planting | Replace dead, or defective planting |
| Area A - Planting Beds (AS1-5 andNS1) (4.2) | Planting Monitor growth | Monitor growth | Monitor growth | Monitor growth | Monitor growth |
| | Monitor for weed growth Keep Weed Free Fork over soil (if necessary) Top up bark mulch to 75mm Pruning as required to suit species Perennials - cut back dead material – autumn/ late winter, leaving some seed heads through winter for wildlife benefit | Monitor for weed growth Keep Weed Free Fork over soil and add compost (if necessary) Top up bark mulch to 75mm Pruning as required to suit species Perennials - cut back dead material – autumn/ late winter, leaving some seed heads through winter for wildlife benefit | Monitor for weed growth Keep Weed Free Fork over soil (if necessary) Top up bark mulch to 75mm Pruning as required to suit species Perennials - cut back dead material – autumn/ late winter, leaving some seed heads through winter for wildlife benefit | Monitor for weed growth Keep Weed Free Fork over soil and add compost (if necessary) Top up bark mulch to 75mm Pruning as required to suit species Perennials - cut back dead material – autumn/ late winter, leaving some seed heads through winter for wildlife benefit | Monitor for weed growth Keep Weed Free Fork over soil (if necessary) Pruning as required to suit species Perennials - cut back dead material – autumn/ late winter, leaving some seed heads through winter for wildlife benefit |
| | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting |
| | Watering -April- Sept | Watering -April- Sept | | | |
| Area A – Hard Landscape (4.3) | Monitor Maintain in accordance with Derriford Site Wide management prescriptions Leaf litter accumulation –removed Clear snow and ice | Monitor Maintain in accordance with Derriford Site Wide management prescriptions Leaf litter accumulation –removed Clear snow and ice | Monitor Maintain in accordance with Derriford Site Wide management prescriptions Leaf litter accumulation –removed Clear snow and ice | Monitor Maintain in accordance with Derriford Site Wide management prescriptions Leaf litter accumulation –removed Clear snow and ice | Monitor Maintain in accordance with Derriford Site Wide management prescriptions Leaf litter accumulation –removed Clear snow and ice |
| Area A - Sedum Roof (4.4) | Planting Monitor growth | Monitor growth | Monitor growth | Monitor growth | Monitor growth |
| | Monitor for weed growth –remove undesirable weeds Clear leaf litter Spring and Autumn Apply Fertiliser annually | Monitor for weed growth –remove undesirable weeds Clear leaf litter Spring and Autumn Apply Fertiliser annually | Monitor for weed growth –remove undesirable weeds Clear leaf litter Spring and Autumn Apply Fertiliser annually | Monitor for weed growth –remove undesirable weeds Clear leaf litter Spring and Autumn Apply Fertiliser annually | Monitor for weed growth –remove undesirable weeds Clear leaf litter Spring and Autumn Apply Fertiliser annually |
| | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting | Infill gaps in planting Replace dead, or defective planting |
| | Monitor and water in prolonged dry spells-during April- Sept | Monitor and water in prolonged dry spells-during April- Sept | Monitor and water in prolonged dry spells-during April- Sept | Monitor and water in prolonged dry spells-during April- Sept | Monitor and water in prolonged dry spells-during April- Sept |

| LANDSCAPE ELEMENT | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | |
|---|---|---|---|---|--|--|
| AREA B - New Tree planting (4.5) | Planting Monitor tree growth Formative pruning to BS 8545 Prune any damaged branches as soon as noticed | Monitor tree growth Formative pruning to BS 8545 Prune any damaged branches as soon as noticed | Monitor tree growth Formative pruning to BS 8545 Prune any damaged branches as soon as noticed | Monitor tree growth Formative pruning to BS 8545 Prune any damaged branches as soon as noticed | Monitor tree growth Formative pruning to BS 8545 Prune any damaged branches as soon as noticed | |
| | Check tree ties, stakes, mulch mats, top up bark mulch to 75mm. Keep 1m at base of plant free from weed or grass Top up soil levels, mulch Replace dead, or defective planting | Check tree ties, stakes, mulch mats, top up bark mulch to 75mm. Keep 1m at base of plant free from weeds Top up soil levels, mulch Replace dead, or defective planting | Check tree ties, stakes, mulch mats, top up bark mulch to 75mm. Keep 1m at base of plant free from weeds Top up soil levels, mulch Replace dead, or defective planting | Check tree ties, stakes, mulch mats, top up bark mulch to 75mm. Keep 1m at base of plant free from weeds Top up soil levels, mulch Replace dead, or defective planting | Check tree ties, stakes, mulch mats, top up bark mulch to 75mm. Keep 1m at base of plant free from weeds Replace dead, or defective planting | Remove tree ties, stakes if trees suitably established. Keep 1m at base of plant free from weeds Replace dead, or defective planting |
| | Monitor and Water -April- Sept | Monitor and Water -April- Sept | | | | |
| | | | | | | |
| AREA C - Bat boxes (4.6) | Observe usage Check securely fixed End Year 1 – Qualified Ecologist to check condition of and occupancy of boxes and relocate boxes if needed. | Observe usage Check securely fixed | Observe usage Check securely fixed | Observe usage Check securely fixed | Observe usage Check securely fixed | |
| AREAS A-C Monitoring (6.0) | Monitoring Report to University's Hospital Trust | Monitoring Report to University's Hospital Trust | Monitoring Report to University's Hospital Trust | Monitoring Report to University's Hospital Trust | Monitoring Report to University's Hospital Trust | |

| DEVELOPMENT AT DERRIFORD HOSPITAL | | REF: J900-07 | | | | | | | | | | | |
|--|--|--------------|---|---|---|---|---|---|---|---|---|---|---|
| LANDSCAPING ASSOCIATED WITH MATERNITY UNIT PLANNING APPLICATION 23/00015/FUL10 | | | | | | | | | | | | | |
| to be read in conjunction with Landscape and Ecological Management Plan | | | | | | | | | | | | | |
| WORKS | J | F | M | A | M | J | J | A | S | O | N | D | Notes |
| Hard Landscaping - AREA A | | | | | | | | | | | | | |
| Litter Removal | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Shrub Bed Planting - AREA A | | | | | | | | | | | | | |
| Keep Weed free | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Watering | | | | | | | | | | | | | First year |
| Top up mulch | | | | | | | | | | | | | |
| Prune and cut back from path edges | ■ | ■ | ■ | ■ | ■ | | | | | | | | In winter or to suit individual species |
| Cut back perennial and seed heads | | | | | | | | | | | | | |
| Replace dead and dying plants | ■ | ■ | ■ | ■ | ■ | | | | | | | | For first 5 years |
| Sedum Roof - AREA A | | | | | | | | | | | | | |
| Monitor growth | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Watering | | | | | | | | | | | | | Each year in Prolonged Dry Spells |
| Apply fertiliser | | | | | | | | | | | | | Annually |
| Remove undesriable weeds | | | | | | | | | | | | | Each year |
| Clear Leaf litter | | | | | | | | | | | | | Each year |
| Replace dead and dying plants | ■ | ■ | ■ | ■ | ■ | | | | | | | | For first 5 years |
| New Orchard Trees - AREA B | | | | | | | | | | | | | |
| Monitor tree growth | | ■ | | | ■ | | ■ | | ■ | | ■ | | throughout the year until established |
| Check tree ties and stakes | | ■ | | | ■ | | ■ | | ■ | | ■ | | adjust as and when required |
| Check tree deer guards are intact | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | First 5 years |
| 1m weed free and top up mulch - in grass | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | First 5 years |
| Watering | | | | | | | | | | | | | First 2 years |
| Formative pruning to crown | ■ | ■ | | | | | | | | | | | To form balanced canopy |
| Remove tree stakes and ties | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | Once plants are established |
| Replace dead and dying plants | ■ | ■ | ■ | ■ | ■ | | | | | | | | For first 5 years |
| Bat Boxes - AREA C | | | | | | | | | | | | | |
| Monitor use | | | | | | | | | | | | | |
| Check boxes are secure | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | Ecologist guidance to be obtained |
| Woodland Restoration - AREA D | | | | | | | | | | | | | |
| | Refer to Woodland Restoration Strategy | | | | | | | | | | | | |
| | By Land and Heritage Nov 2023 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Management - provided no risk to ecology
 Annual maintenance activity