

Sustainability Statement

RESERVED MATTERS APPLICATION

Barns Court Expansion Phase 1B

Turners Hill Road, Copthorne RH10 4HQ

The Turvey Corporation PLC

October 2024

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INTRODUCTION

1.1 STATEMENT OVERVIEW

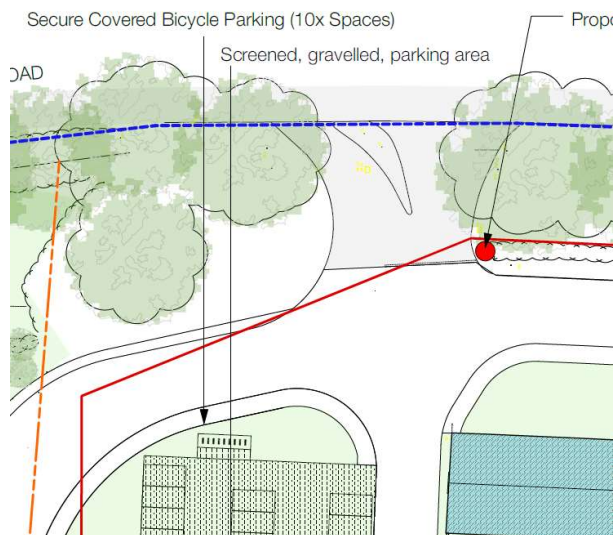
This Sustainability statement outlines the important principles we've considered in designing the extension of Barns Court, and how we have had regard to Mid Sussex Council's Design Guide (MSDG).

Key to this was adopting a design approach that has a positive environmental impact.

SUSTAINABLE TRANSPORT IMPROVEMENTS

2.1 NEW CYCLING BLOCK AND SHOWERS

To encourage cycling, two new secure cycle stores will be installed, one at the entrance to the site (10x spaces) and one (14x spaces) by the ponds. New showers will also be installed in the existing facilities block.



Locations of new bicycle parking spaces

2.2 ELECTRIC VEHICLE CHARGING

All new parking spaces will be set up ready for electric vehicles.

2.3 PROW WIDENING & EXTENSION

An existing PROW footpath (27W) runs along the southern boundary of the site. To improve accessibility into and within the site for occupiers and visitors by foot or bike, as well as for the general public to enjoy a walk amongst our ponds, we have propose two improvements:

1. In Phase 1 we are widening the existing stretch of footpath along the southern edge of the site where it was overgrown and almost impassable.
2. In Phase 2 we are creating a new footpath to run alongside the ponds and the western boundary of the site up towards the Dukes Head roundabout. Three potential routes for this extension are to be determined alongside the Phase 2 Reserved Matters application.



Photo showing PRoW 27W at the southern boundary before clearing works.

GREEN DESIGN

3.1 GREEN ROOF DESIGN AND ORIENTATION

We considered simple double-pitched roofs with gable ends, as these are the predominant roof forms in the District, and at Barns Court. However, we have opted for Extensive Green Roofs for their sustainability credentials and bio-diversity enhancements.

We have carefully considered the orientation of the terraces, in order that 7 of the 12 first phase terraces (D, E, F, G, H, I and K) have roof pitches that face south or south-west, so that occupiers can install solar panels.

3.2 SUSTAINABLE MATERIALS

Sample materials have been sent to Mid Sussex separately.

We have adopted a simple palette of two contrasting materials.

- black Kingspan cladding laid horizontally to the lower portion of the façade, and
- at first floor level this will be overlaid with unpainted, locally sourced and renewable, weatherboarding - laid horizontally.

We are using a Kingspan QuadCore KS1000RW Wall Panel cladding with best-in-class levels of insulation (indeed we consider our buildings will be so well insulated that the units will not be fitted with central heating or cooling).

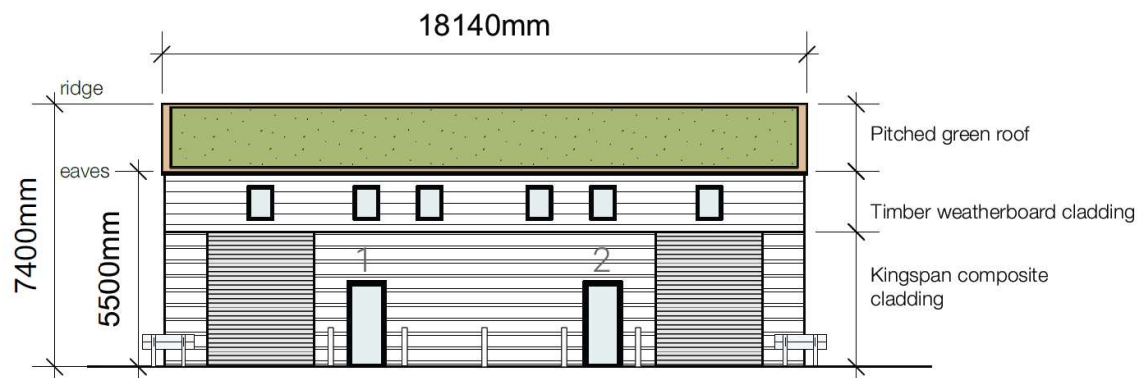


“Kingspan Insulated Panels produced in the UK are certified to BES 6001 (Framework Standard for the Responsible Sourcing of Construction Products) ‘Very Good’. QuadCore Insulated Panel systems have Environmental Product Declarations in accordance with the requirements of EN 15804:2012+A1:2013 for 100 mm thickness.

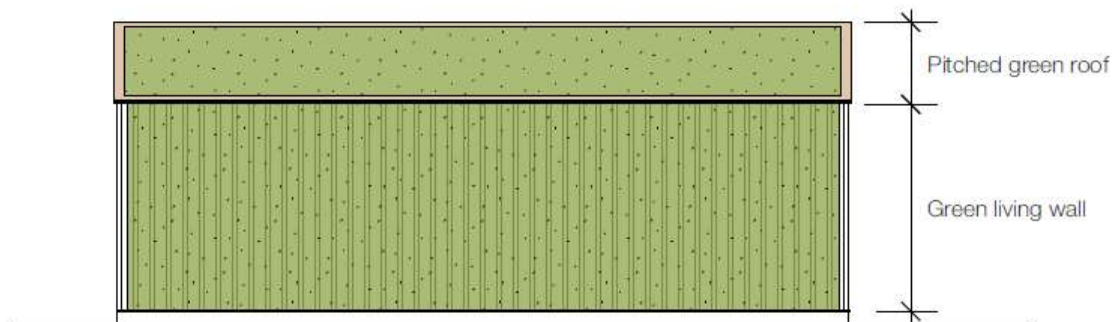
All Kingspan Insulated Panels manufacturing facilities across the UK and Ireland are powered by 100% Net Zero Energy. In addition, facilities located in Kingscourt, Holywell and Sherburn generate renewable energy on site, which contributes to that site's energy mix.

Kingspan Insulated Panels procure steel that is made from 15 – 25% recycled content. Kingspan Insulated Panels directly contribute to BREEAM® / LEED® credits.” Source: Kingspan.com

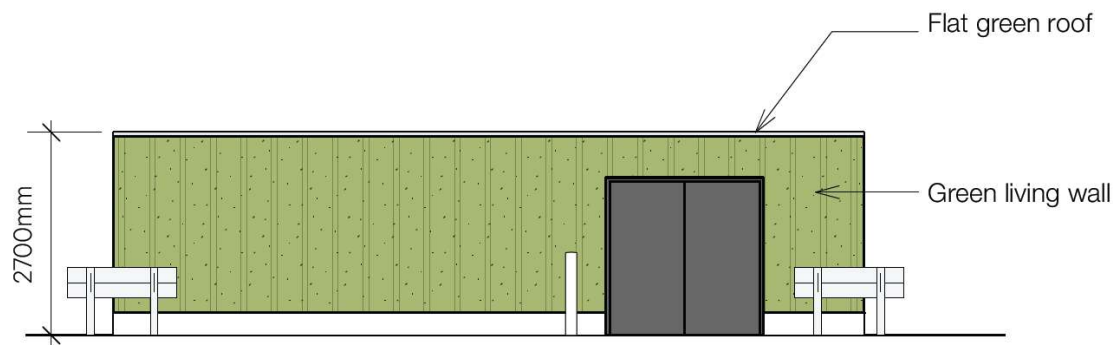
To maximise the Biodiversity Net Gain Assessment, we are utilising green roofs, and green walls for Building N and the rear elevation of Building M.



Proposed Front Elevation of Building M



Proposed Rear Elevation of Building M



Proposed Front Elevation of Ancillary Building N

HABITATS AND BIODIVERSITY

4.1 OPEN SPACES

MSDG 7.2 recommends: "Open spaces and key landscape features should be located centrally where they can form a focus for the site and designed to provide amenity for employees;

We are lucky to have attractive landscaped ponds and mature oak trees located centrally and we are using these as centrepieces that provide a community focus.

We are retaining the character of the estate by targeting a low overall 15% site density, which compares to the typical 40-50% density of most modern large corporate logistics developments.

We have maintained a generous landscaped and planted buffer between the site and Turners Hill Road.

4.2 PONDS

Currently there are five man-made plastic lined ponds. Two of these ponds are only knee-deep, and do not retain water, drying out each summer, and so providing 'poor' habitats for wildlife.



Recreational fishing ponds, existing



Photo of Pond 4, typically completely dry July to October.

To improve the biodiversity habitats, in the approved reserved matters application for Phase 1 we proposed filling in one of the two shallow drying ponds, and digging the other 0.5m deeper. This will

result in the remaining pond being able to retain water year-round, and better supporting aquatic habitats.

4.3 EXISTING AND PROPOSED TREES

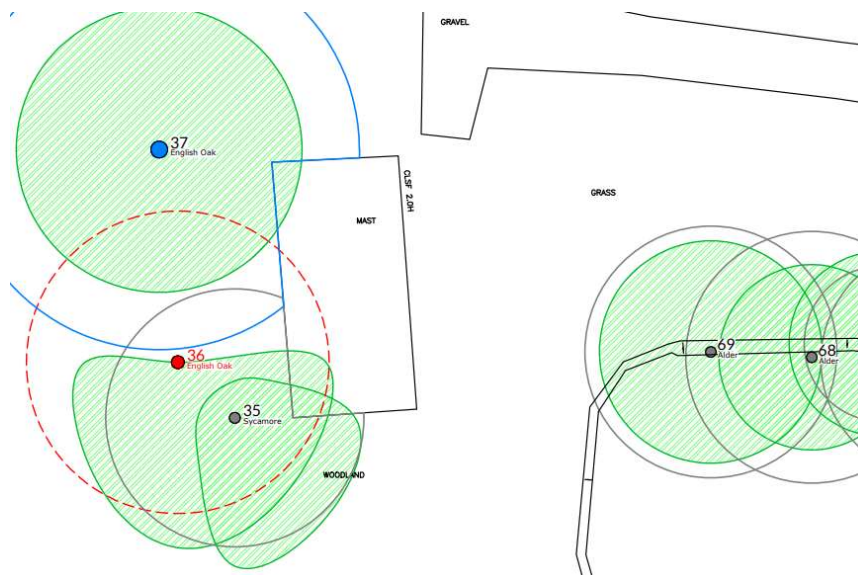
The species, number and spacing of existing trees and shrubs within and on the boundary of Phase 1b are detailed in the Topographical and Tree Survey prepared by David Archer Associates.

The proposed species, number and spacing of new trees are detailed on the Landscape Plan.

Boundary Trees

The wider site currently benefits from a mature woodland boundary, which acts to screen the site from Turners Hill Road and our neighbours. Several boundary trees have Tree Preservation Orders.

We are retaining all trees, shrubs, and hedging along Phase 1b plot's boundaries, with the exception of Tree 36 identified in David Archer Associate's Tree Survey as being 'structurally unsound' and it has been advised that this tree is removed.



'Structurally Unsound' Tree 36 will be removed.

Trees within the Plot

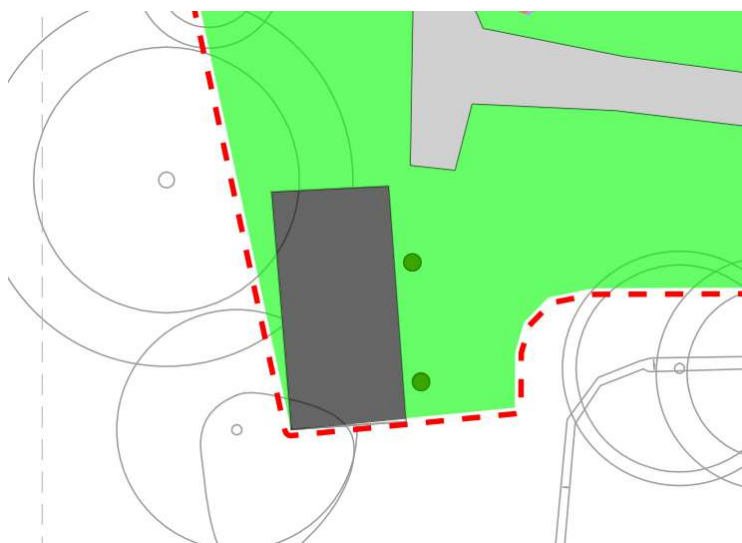
There are currently no trees within the proposed area of this part of the development which forms a broadly rectangular plot laid to grass.

There are two existing boundary trees; a Sycamore T35 (Category C) and an English Oak T37 (Category B) which have Root Protection Areas and Canopies that overlap the existing telephone mast compound. This mast compound base is being replaced by Building N, on a smaller base. These trees are being retained and works in their vicinity will be supervised by David Archer Associates in line with the Construction Management Plan.



Trees 35 and 37 have root protection areas and canopies over and under the existing telecommunications compound.

Two small trees abutting the concrete hardstanding, location shown below, were removed in 2023.



Two small trees abutting the existing telecommunications compound were removed in 2023.

Proposed New Trees

Proposed new tree species and spacing are as indicated on the accompanying Landscape Plan.

4.4 BIODIVERSITY NET GAIN ASSESSMENT

Phase 1 was assessed by aLyne Ecology Ltd as a Net Positive to the site's biodiversity habitats with a net gain of 0.19 habitat units and a net gain of 1.65 hedgerow units.

Phase 1b is currently being assessed by Middlemarch and in line with the Outline Planning Permission conditions will target a positive net gain in habitable units.

SUMMARY

Turvey deliver high quality buildings that contribute positively to the environment.

We are conscious of the historic, and present, significant contribution to CO2 emissions of the construction industry and have adopted a sustainable approach with regard to Principle DG37 in Mid Sussex Design Guide (MSDG).

Walking and Cycling

To encourage cycling, two new secure cycle stores will be installed, and new showers will be installed in a refurbished facilities block.

Improvements are being made to pedestrian and cycling access to and within the site with enhancements to the Public Right of Way.

Parking

100% of new spaces will be set up ready for electric vehicles.

Green Roof and Solar Orientation

We are building over 5,000 sq m of new Extensive Green Roofs across Phase 1 and Phase 1b.

Orientation and design of buildings and roofs has been considered to maximise daylight / sunlight penetration and solar gain, whilst also avoiding overheating, and enabling the installation of PV panels on the majority of terraces.

Materials

We are using materials with low embodied energy for example, renewable and locally sourced timber.

Insulation

We are using a Kingspan cladding with best-in-class levels of insulation (indeed we consider our buildings will be so well insulated that the units will not be fitted with central heating or cooling).

EPCs

We will target 'A' ratings for the Energy Performance Certificates (EPC).

Community Spaces

Our attractive landscaped ponds and mature oak trees act as a centrepiece that provides a community focus for occupiers and the wider public.

Habitats and Biodiversity

Our scheme has been quantitatively assessed as being a net positive to the site's biodiversity habitats.

Lighting Strategy

To protect adjacent habitats and wildlife there will be no street or external lighting.

We will incorporate movement detection and daylight sensor lighting in the workshop and office elements.

Water Saving

We will seek to minimise water usage with modern efficient fittings, leak detection and water metering. The specification of water efficient appliances such as spray taps and low volume W/C's.