

***Arboricultural Report***

Arboricultural Method Statement & Tree Protection Plan

Land at: 24, 26 And 28 Shore Road, Gurnard, Isle Of Wight, PO31 8LD

Project: Demolition of three dwellings & Construction of three dwellings

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***Summary***

Planning consent 20/00914/FUL for the demolition of three dwellings and the construction of three dwellings was granted on 15/02/2021.

Condition 3 of the consent requires an Arboricultural Method Statement and Tree Protection Plan to be submitted and approved by the LPA before any works can commence.

This document is therefore submitted to the IWC to demonstrate how the retained trees shall be protected during the development. This document together with the associated Tree Protection Plan are also to be made available to the main site contractors for reference throughout the construction.

***1. Introduction***

1.1 This statement is based on BS5837:2012 "Trees in relation to design, demolition and construction Recommendations" (herein referred to as BS5837):

- An Arboricultural Method Statement (AMS) & Tree Protection Plan (TPP)

This follows a tree survey & report produced by Woodside Tree Consultancy in August 2020, which formed part of the approved documentation.

1.2 Information provided: Drawing AS/RM/0820 TPP rev B by NG.

## 2. *Arboricultural Method Statement*

2.1 Tree Works: All agreed tree works as per the aforementioned approved tree report should be carried out prior to commencement of construction works. All work should be carried out by competent and insured arboricultural contractors, in accordance with BS3998:2010.

### 2.2 *Protective fencing in accordance with BS5837:*

2.2.1 Before commencement of any site works, protective fencing shall be erected to the positioning shown on the TPP (Appendix 1). This must be maintained in position to define the 'Construction Exclusion Zone' (CEZ) around retained trees.

2.2.2 The extent of protective fencing encompasses the exposed Root Protection Area (RPA) of TP1 & TP2 on the opposite bank of the stream at the bottom of the site. Allowance should be made to provide a realistic working area and access for construction.

2.2.3 Note that the fencing also provides the necessary HSE protection from falling into the stream by operatives.

2.2.4 Vertical barriers must be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around retained trees. In most cases fencing should consist of a scaffold framework, well braced to resist impacts, with vertical tubes spaced a maximum of 3 metre intervals. An alternative but robust specification is also given in Appendix 2 of this report and on the TPP.

2.2.5 Note that the fencing will need to be braced back to the opposite bank of the stream across the water.

2.2.4 Signs shall be affixed to the fencing to inform on-site contractors of the importance of the fencing barriers (Appendix 3). Examples of signage are also shown on the TPP.

2.2.5 The RPAs enclosed within tree protective fencing should be treated as sacrosanct and the following guidelines should be adhered to at all times:

- NO mechanised excavations

- NO movement of construction traffic or parking of vehicles
  - NO excavation by any means without arboricultural site supervision
  - NO lowering or raising of levels (except manual removal of surface layer)
  - NO storage of building materials, excavated soil, chemicals or fuels
  - NO fires to be lit in close proximity to trees
- 2.2.6 Fences must only be removed following agreement of the Local Authority or project arboriculturist to confirm on-site construction activity has been completed.
- 2.3 ***Temporary ground protection:***
- 2.3.1 The positioning of protective fencing will be adequate to protect the exposed RPAs within the site from construction. However it will be necessary to set back the fence line to the opposite bank for access and construction of No.24. Any exposed and unsurfaced area of this RPA will require temporary protection to protect the ground and tree roots from potential damage due to soil compaction or contamination.
- 2.3.2 Where temporary ground protection is required during the construction phase, then the system must be fit for purpose and capable of supporting the expected loads to avoid compaction and damage to the soil structure; in accordance with BS5837.
- 2.3.3 Temporary ground protection for pedestrian access shall be installed along the bank from the dinghy park to the bridge across the stream before construction starts on site. It shall remain in place until the permanent Sudstech Trailflex footpath surface has been installed.
- 2.4 ***Avoiding above-ground tree damage:*** Care shall be taken when planning site operations in proximity to trees to ensure that any wide or tall loads, or plant with booms, jibs and counterweights can operate without coming into contact with trees. Such contact can result in serious damage and might make safe retention impossible.
- 2.5 ***Site access, contractors car parking, site huts and storage:***
- 2.5.1 All construction traffic and delivery of materials will be via Shore Road which is at the top of the site and 40m from either of the two trees T1 & T2 covered by RPAs. Any storage required for materials, spoil, plant, site huts or welfare facilities shall be positioned fully outside all RPAs.

2.5.2 Pedestrian access will be permitted via the right of way across the dinghy park and footbridge over the stream.

2.5.3 There is no onsite parking. The nearest on street parking is on Princes Esplanade which is 5 minute's walk from the site.

2.6 ***Installation of underground services within RPAs:***

2.6.1 All underground services should be positioned to avoid conflict with any RPA, and no such conflict is envisaged in this case. If, for whatever reason, installation of underground services has to pass within RPAs, the project arboriculturist and the Local Authority must be notified prior to any tree protection barrier removal.

2.6.2 Trenching, for the installation of underground services, severs any roots present and may change the local soil hydrology in a way that adversely affects the health of the tree. For this reason particular care will be taken in the routeing and methods of installing underground services. Wherever possible, they should be kept together and arboriculturally sensitive methods of excavation used. Reference can be made to the relevant National Joint Utilities Group publication (NJUG Vol.4) for guidance, but any approach must be approved by the Local Authority Tree Officer.

2.7 ***New hard surfacing within RPAs:***

2.7.1 There is no vehicular access to the site.

2.7.2 New hard landscaping within the RPA to conform to the following:

- Removal of any existing vegetation will be carried out by hand. Turf may be removed using a mechanical turf stripper or by hand.
- Any hard surfacing used within RPA should be permeable and gas porous. Paving slabs and block paving are available with built-in infiltration spaces between the slabs or blocks. These are ideal, though they should be laid dry jointed on a sharp sand foundation to allow air and moisture to penetrate to the rooting area.
- Bitumen paving can consist of porous or impermeable material. As the pores in tarmac paving will become blocked, the use of the material will be limited in extent to no more than 20% of any RPA.

2.8 ***Soft landscaping within RPAs:***

If any soft landscaping is planned within any RPA, then the following guidance must be followed:



- Ground preparation will be carried out sensitively to ensure root damage is minimised. At no time is any heavy plant to be used within the RPA. Turf may be removed using a mechanical turf stripper or by hand.
- At no time shall a rotovator be used within any RPA to prepare the soil. Any levelling will be done with the use of hand tools.
- Should the soil be compacted or have a poor structure which may hinder the development of any new planting, soil decompaction techniques may be used upon consultation with the project arboriculturist.
- New plants to be planted individually to minimise disturbance (no trench planting).
- No works will be carried out within any RPAs if the soil moisture is of a level likely to allow compaction to occur.

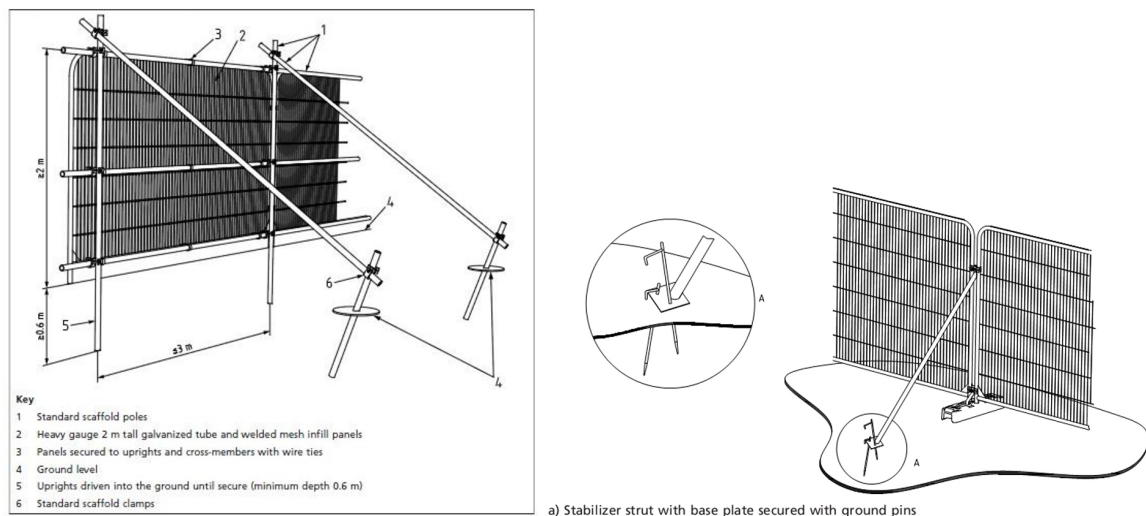
## 2.9 Arboricultural supervision & awareness:

Any works undertaken within RPAs must be supervised by an arboriculturist. All contractors working on site should be briefed regarding the importance of tree protection and adhering to all points within this document as well as the TPP. Access to these documents must be available to anyone working on site at any time.

### ***Appendix 1 - Tree Protection Plan***

(please see attached plan - drawing no. AS/RM/0820 TPP Rev A)

### ***Appendix 2 - Tree Protection Fencing in accordance with BS5837***



Default specification protective fencing (left) and recommended alternative (right).

Note that fencing to stream will need to be braced back to the opposite bank.

### Appendix 3 - Tree Protection Fencing Signage



### Appendix 4 - Example Specifications for temporary ground protection using interlocking ground mats for vehicular use

**Ground-Guards** GreenTek

Ground protection and site access system

Ground-Guards are an "Instant Roadway" system of lightweight plastic panels, capable of taking vehicles of up to 50 tonnes weight.

**Introduction** The GreenTek Ground-Guard® have become established as a proven alternative to the conventional method of stripping and stoning-up access roads on construction sites. By using the roadway system, ground damage and reinstatement work are minimised. This is an ideal method to use where there are tree roots under the surface as it avoids the need for excavation.

**Applications** The Ground-Guard site access system is designed to form temporary roads, car parks and footpaths. It is suitable for protecting grassed areas from erosion and raking during construction projects and for the protection of tree roots where site access routes need to pass close to trees.

GreenTek's Ground-Guard are a very environmentally friendly product. They:

- Protect sensitive ground from erosion.
- Are made from 100% recycled plastic, which is 100% fully recyclable.
- Provide a sustainable alternative to using up sheets of plywood for ground protection purposes.

**DESCRIPTION**

The Ground-Guard site access system consists of virtually indestructible, lightweight plastic boards which clip together without tools to quickly form temporary roads, car parks and footpaths. They are made from 100% HDPE recycled plastic and are guaranteed undrainable by vehicles of up to 50 tonnes.

These track mats can be easily moved around the site by just two people, without the need for a crane.

Ground-Guard mats are available with a choice of different tread patterns. The "Standard" tread pattern consists of a track with a high level of traction for vehicles. Other "Soft" options are designed for pedestrian walkways and event flooring.

Ground-Guard mats are also available with one side smooth which is ideal for tarmac and utilises work as it enables the mat to be easily backfilled into the trench afterwards. When being used to protect tree roots, a base layer of Ground-Guard should be followed by a cushioning layer of 150 mm of wood chippings. The Ground-Guard

trackway is then laid over the top of this in the normal way.

**Dimensions** Ground-Guard mats are available in sizes ranging from 1820 mm (G) x 810 mm (F) to 5420 mm (G) x 1210 mm (F), with a choice of different tread patterns.

**SUPPLY**

GreenTek both supplies and hires Ground-Guard direct to construction companies nationally.

**SERVICES**

Ground-Guard provides technical advice to specifiers and contractors. Brochures and samples are available on request.

**Ground-Guard trackways may be used with a cushion of woodchips to protect tree roots**

Labels in diagram: 60 mm x 60 mm x 680 mm timber stakes, 200 mm x 60 mm timber rails, Geotextile membrane, Base layer of Ground-Guard, Wood chippings, Ground-Guard trackway.

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**EuroMat®**  
Heavy Duty Temporary Access Mat

**Heavy Duty Temporary Access Mats**

Supporting loads up to 80 tonnes, EuroMat® is the ultimate heavy duty man-handleable mat for temporary roadways and work areas. EuroMat® is essential for the construction, civil engineering and ground work industries.

**Incredibly Tough & Flexible**

Made from tough 100% recycled or virgin high density Polyethylene (HDPE), EuroMat® is the market leader for temporary access and ground protection over soft or sensitive ground. EuroMat® significantly reduces damage to heritage and eco-sensitive areas, avoiding the need for reinstatement once the project is complete.

**Fast & Efficient Installation**

Weighing just 35kg EuroMat® is ideal for both short and long term projects. Incorporating strategically positioned handholds, EuroMat® is man-handleable and easy to off load and deploy by a two man team.

**Chevron Traction® Surface**

EuroMat®'s chevron traction® surface comprises of a broken pattern of rugged ribs which substantially improves the grip and forward motion of plant or vehicles and reduces side way slips, even in the most challenging weather or ground conditions. Optional hi-vis markings and cats eyes can be incorporated into EuroMat® for additional safety at night.

**Logistics**

Lighter in weight than conventional wood or steel alternatives, EuroMat® also offers the environmental benefit of more mats being loaded per wagon and in turn reducing transportation costs and carbon emissions.

©Compression tested at National Physics Laboratory, UK

# Appendix 5 – Sudstech Trailflex specification



**LANGFORD**  
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**PREMIUM + MESH**  
Pedestrian & Bridleways - Permeable Paving

Trailflex is a low cost, environmentally friendly and completely SuDs compliant permeable paving flexible up to 90°.

Fully compliant with Sustainable Urban Drainage System (SuDS), and BREEM accredited, Trailflex is a low cost porous paving surface that will not clog and requires virtually no maintenance. Providing fast and efficient drainage of rainwater the unvalved porosity can drain up to 80,000 litres per square metre per hour replenishing groundwater and allowing surrounding trees and plants to thrive.

The one-part cold poured system consists of recycled car tyres



and stone bound with our specially developed resin creating one of the greenest paving solutions on the market today.

Fast to install, Premium + Mesh Trailflex can be trafficked in under 24 hours and makes for an extremely robust system suitable for foot traffic in town or country.\*

\*Subject to ground conditions & weight. Check with technical for advice. For asphalt use only.

**ADVANTAGES**

**Flexible permeable paving** - Flexible to 90°, totally porous and 100% resistant, forming a low maintenance paving surface.

**Unvalved porosity** - A highly effective soakaway efficiently managing up to 80,000 litres per square metre per hour.

**Impervious to tree root intrusion** - The adaptable surface removes the risk of root intrusion and subsequent cracking.

**No Dig Option** - Can be laid directly onto existing ground.

**SuDs compliant** - 160 Degree attenuation and BBA approved system.

**Fast installation and curing** - Areas can be trafficked in under 24 hours after completion.

**3 - TYRES RECYCLED PER METRE\***

Trailflex recycles up to 3 tyres for every square metre laid and can help offset your carbon footprint.\* Contact us to find out more.

\* this specification is based on normal good practice for flexible surfacing and does not allow the specifier to demand a contractor to select for the superior traffic and ground conditions resulting in a green life.




**20 - YEAR GUARANTEE & 10 - YEAR POROSITY GUARANTEE**

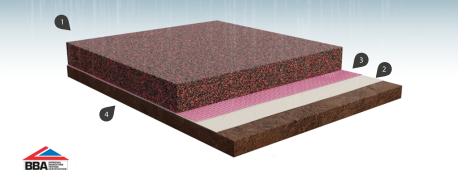
Trailflex allows small particles of dirt and grit to aggregate through ensuring the surface remains permeable. This allows us to offer a 10 year no clog guarantee.




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**Trailflex Porous Paving 35-50mm** - An innovative surface comprised of resin bound recycled tyres and aggregate used as a fully permeable and acid-resistant alternative to macadam or concrete surfacing.

**Geo-Textile Membrane** - Prevents upward migration of the soil particles.

**Premium+ Mesh** - A heavy-duty ground reinforcement membrane used for stabilisation of surface. This mesh can be laid directly onto the existing ground, creating a No Dig solution for your Trailflex paving. Due to the flexibility of both Premium+ Mesh and Trailflex, the surface will follow the contours of the ground, eliminating trip hazards such as Tree Roots.

**Existing ground - Sub-grade**

**SPECIFICATION ADVICE**

**Footpaths Only** – Clean any debris from area.

**Typical groundwork specifications** - Lay Geo-textile membrane, then overlay with Premium+ Mesh. Trailflex will then be laid onto prepared surface. (Subject to ground conditions & weight. Please check with technical for advice.)

**Speed of cure** - 4 - 16 hours (Weather dependant)

**Typical construction** - 35-50mm Trailflex Porous Paving  
Premium+ Mesh  
Geo-textile Membrane





**MAINTENANCE**

Trailflex allows small fines/grit to aggregate through the surface as the area is used. This produces a hostile environment for weeds and seedlings and ensures continual porosity.

Allowing expansion and contraction Trailflex is unaffected by low temperatures such as frost and ice which may otherwise cause damage during the freeze/thaw process.

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