

# TREE SURVEY AND ARBORICULTURAL METHOD STATEMENT

47 HIGH STREET, MUNDESLEY, NORFOLK, NR11 8JL



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## TABLE OF CONTENTS

<b>1. Introduction.....</b>	<b>3</b>
<b>2. Site Supervision and Reporting.....</b>	<b>3</b>
<b>3. Programme of Works.....</b>	<b>4</b>
<b>4. Works to Existing Trees.....</b>	<b>4</b>
<b>5. Tree Protection.....</b>	<b>5</b>
<b>6. Works Within RPA's.....</b>	<b>6</b>
<b>7. General Precautions.....</b>	<b>6</b>
<b>8. Compensatory Tree Planting.....</b>	<b>7</b>

### Appendices

<b>Appendix A</b>	Signage for Tree Protective Fencing
<b>Appendix B</b>	Specification for Trakmats and Ground Protection/Hedge Protection
<b>Appendix C</b>	Cell-Web (or equivalent) No-Dig Construction Methodology

## **1. Introduction**

1.1 This method statement has been prepared for submission to North Norfolk District Council (PF/21/1212) in connection with the proposed demolition of a dwelling house and construction of two detached dwellings at 47 High Street, Mundesley, Norfolk. A tree survey and arboricultural assessment was produced by A.T. Coombes in February 2020 which was updated by Greenleaf Planning in September 2022 and a tree constraints plan, tree protection plan and arboricultural method statement are produced within this document to satisfy Condition 5 of the planning consent.

1.2 Since the original site survey in 2020, a young cherry tree (T2) and a small group of Laurel bushes have been removed from the site in addition to some other ornamental plants and shrubs. Five individual trees and a tree group (G1) were surveyed in September 2022 from ground level and categorized. The proposed revised access has above ground constraints with T1 (Cat B, Holly) such that the tree will require removal. In total 2 trees (T1 & T2) and a group of Laurel bushes (G1) will have been removed from the site and such it is proposed that 5 new trees are planted within the garden areas as detailed.

1.3 The proposal also requires construction of parking spaces and pathway along the south boundary and which falls close to the 2 mature beech and laurel hedges H1 & H2. Sections of the RPA's of these hedges fall within the parking spaces and footpath such that a no-dig construction methodology will be required as indicated on the tree constraints plan TCP and tree protection plan TPP. A Heras fence will require installation as shown on the tree protection plan to form a barrier between the trees and the operational site areas. This normally requires a 1m buffer from the hedge centre but this has been extended to 1.5m to mirror the existing gap between the boundary and the building edge.

1.4 This document sets out the methodology for all proposed works that have the potential to affect any trees within or adjacent the proposed working areas. Compliance with this method statement will be a requirement of all relevant contracts associated with the development proposals.

1.5 Copies of this method statement will be made available for inspection on site and will be forwarded to all contractors actively participating in the development works.

## **2. Site Supervision and Reporting**

2.1 For the duration of the development a qualified arboriculturist will be appointed by the developer to supervise all arboricultural aspects of the works. The supervising arboriculturist must be approved by the local planning authority (LPA) at the commencement of works.

2.2 The supervising arboriculturist will be the point of contact between the developer and the LPA. Their primary responsibility will be to ensure that all arboricultural conditions of the planning permission are implemented and to advise on any further issues that arise during the development process.

2.3 In addition to the above, the supervising arboriculturist will also be responsible for:

- Induction of all contracting staff and raising of personnel awareness over the arboricultural implications of the development.
- Identification of individual responsibilities and key personnel within the workforce.
- Timing and methods of site visiting and record keeping, including updates.
- Procedures for dealing with variations and incidents.
- Procedures for reporting to the LPA over all arboricultural issues.

### 3. Programme of Works

3.1 All excavation, formative pruning, canopy/crown reduction and any other arboricultural works approved as part of the development consent will be carried out prior to any other site works.

3.2 Measures for the protection of retained trees will be implemented on completion of the above tree works as detailed below (Section 4). All fencing erected for protection of trees will be maintained for the entire duration of construction works.

3.3 On completion of the development, the protective fencing will only be removed with the consent of the LPA to permit completion of the scheme. Note that permission for any additional tree works not included in the original development consent will need to be obtained through application to the LPA.

### 4. Works to Existing Trees

4.1 All proposed tree works as detailed in Table 1 will be implemented in accordance with the approved plans and details. The tree works specification is detailed in **Appendix B**. Works will be carried out to the current arboricultural industry best practice and at a minimum in accordance with 'BS 3998:2010 - Recommendations for Tree Work'.

4.2 Written notice shall be given to the LPA prior to carrying out the approved tree works and any operations that present a particular risk to trees (e.g. excavation or plant machinery within or close to trees).

4.3 Any additional tree works identified as being necessary during the course of the development will only be carried out with the consent of the LPA. Tree1 T1 requires removal to facilitate the access and this requiring work pre-commencement. The remaining trees have sufficient clearance such that no formative pruning is required.

4.4 These trees are outside of a Conservation Area and are not protected by either individual or group Tree Preservation Orders.

Tree No	Species	Circumference mm	Ht (m)	No.Stems	Diameter DBH (mm)	Canopy Radius (m)	North	East	South	West	Clearance height from ground to canopy	RPA radius (m)	Rpa m <sup>2</sup>	Condition-Good, Fair, Poor	CaT-A,B,C	Remaining Contribution	AGE-LM,M, SM, EM, Y	Notes/Work Required	
T1	Holly	1150	12	2	366	2.5					2	4.4	61	Good	B1	20+	M	Fell to ground level	
T2	Holly	310	14	1	99	1.5					1.3	1.2	4.4	Good	C1	20+	SM	Multi stem x 2	
T3	Ornamental Conifer	895	6	1	285		1	2	2.4	2.1	2.6	2.8	25.5	Fair	C1	10+	EM	Multi-Stem/Leaning	
T4	Common Lime	1150	8	2	366		2	3	2.2	4.2	2.1	4.4	60.6	Good	B2	40+	EM	3m pollard with sucker shoots	
T5	Common Lime	1830	11	2	583	6.5					2.2	7.0	154	Fair	B1	40+	M	Multi-stemmed	
G1	Elder/Holly	350	9	1	111	1.5					1.2	1.3	5.6	Good	C2	10+	SM	Good	
H1	Beech Hedge																		
H2	Laurel Hedge																		

Table 1- Tree Survey Schedule

## 5. Securing of Tree and Hedgerow Root Protection Areas (RPA)

5.1 Before the commencement of any works on site (other than any preliminary tree works as detailed above) protective fencing will be erected as shown on 'Tree Protection Plan' drawing in **Figure 2**. This includes fencing along the edges of the hedgerows H1 & H2 as indicated. The LPA will be notified in writing once the fencing is in place.

5.2 The fencing will comprise a minimum of 2.3-meter-high stout barrier fencing (Heras) or scaffold framework supporting weld-mesh fencing as detailed below:

Figure 2 Default specification for protective barrier

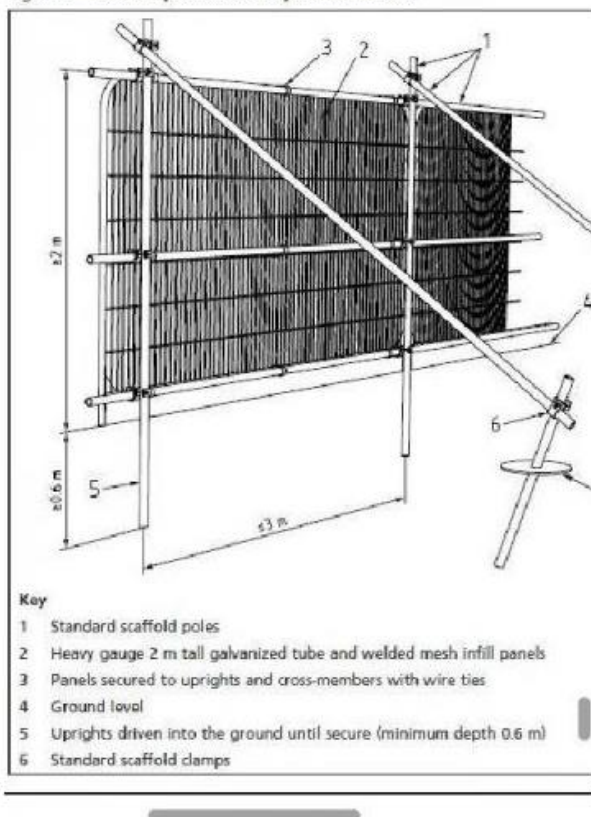


Figure 3 Examples of above-ground stabilizing systems

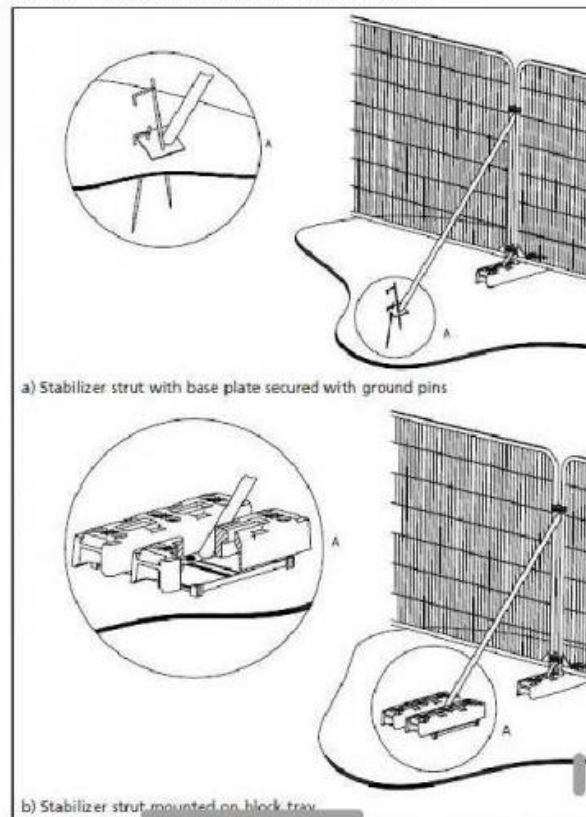


Figure 1-Tree Protective Fencing Specification

5.3 All-weather notices will be displayed on the protective fencing identifying them as tree protection measures (example notice in **Appendix A**).

5.4 Other than works detailed within this method statement or approved in writing by the LPA, no works (including any vehicular movements, storage or dumping of materials, stripping of soil) will take place within the exclusion zones defined by the protective fencing. This is to reduce to a minimum compaction of the root systems.

## **6. Works within the RPA**

6.1 No excavation works will be undertaken within the Root Protection Areas of any trees or hedges other than a shallow scrape (<50mm) for the no-dig cell-web for the parking spaces and footpath on the south boundary as shown by the hatched orange area in **Figure 2**.

6.2 Excavation works will be kept to a minimum where close to the edges or within the plotted Root Protection Areas (RPA) and will be undertaken with the use of 'Trakmats' and 'Microlite Excavator/Digger' or similar to avoid the use of heavy plant machinery which may otherwise cause unwanted ground compaction within the RPA. Any excavated soil will be stored outside of the RPA and removed off-site on completion.

6.3 In the event that any root systems are encountered within the excavation areas they will be cleaned and pruned by a suitably qualified arboriculturalist following the methodology in **Appendix B**.

6.4 Within the RPA it is usually not permissible to:

- Carry out ground excavations without seeking appropriate advice.
- Make any ground level changes without seeking appropriate advice.
- Store building materials or machinery
- Dispose of waste materials and liquids.
- Site a bonfire or erect a site hut
- Use trees as anchor points for mechanical equipment or cables.

## **7. General Precautions**

7.1 No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within the RPA.

7.2 Allowance will be made for any slope of the ground to ensure that damaging materials such as concrete washings, mortar or diesel oil is prevented from running towards trees. Protective sheeting must be used in and around any areas of concrete mixing to protect the soil in the event of spillage.

7.3 No fires will be lit in a position where their flames can extend to within 5 metres of the foliage, branches or trunk of any tree that is to be retained.

7.4 Notice boards, telephone cables or other services will not be attached to any part of the trees to be retained.

## 8. Compensatory Tree Planting

8.1 The site has to date had 1 cherry tree (T2) and a group (G1) of Laurels removed. A further Holly tree (T1) will also require removal to facilitate the revised access location. The remaining trees can all be retained, including the higher quality Lime trees. It is proposed that 5 x new trees are planted within the garden area to the following specification. The proposed tree/shrub mix for the gardens and along the access incorporates native species in addition to some fruiting trees which are beneficial to wildlife. To be planted and maintained according to the following specification;

### PLANTING SCHEDULE

TREE MIX (As necessary)				
SPECIES	DENSITY	AGE	ROOT	HEIGHT
1 x Ornamental Cherry ( <i>Prunus avium</i> )	1.5m c/s	1+1 or 1/1	BR	60-80cm
1 x Holly ( <i>Ilex aquafolium</i> )	1.5m c/s	1+1 or 1/1	BR	60-80cm
1 x Apple ( <i>Malus pumila</i> )	1.5m c/s	1+1 or 1/1	BR	60-80cm
1 x Common Lime ( <i>Tilia x europaea</i> )	1.5m c/s	1+1 or 1/1	BR	60-80cm
1 x Silver Birch ( <i>Betula pendula</i> )	1.5m c/s	1+1 or 1/1	BR	60-80cm

Table 2- Tree Planting Specification







**TREE PROTECTION AREA  
KEEP OUT !**

(TOWN & COUNTRY PLANNING ACT 1990)

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY



**PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.**

- GROUND PROTECTION** ⤴
  - TuffTrak
  - Trakmats**
  - Euromats
  - PortaPath
  - Connector Sets
- GROUND REINFORCEMENT** ⤴
  - Geogrid Premium
  - Geogrid Delineation Markers
  - GRB
  - GRB Delineation Markers
- Need Help? - Chat now**
- TurfProtecta Mesh
- GrassCarpet
- U Pins
- PVC / RUBBERISED** ⤴

Home > Products > Ground Protection > Trakmats

# Trakmats

## Trakmats, Ground Protection Mats

Suitable for heavy vehicles. Weight bearing is subject to ground conditions, not suitable for 8 wheelers or vehicles alike – please see Tufftrak; Construction Sites, Car Parks, Embankment Stabilisation and more.



**Hire Product**

**Buy Product**

Price per board per day: **£1.20** inc VAT

- i Minimum hire: 7 days.
- Minimum quantity 10 mats
- Cleaning charges apply

[Enquire about hiring this product](#)

We are now offering Trakmats, which are aimed at a variety of industries and applications. Their unique self cleaning gripped surface is aimed at dispelling mud but will still give grip to vehicles or pedestrians as they cross the mat.

## GROUNDMATZ



GroundMatz temporary roadway protection panels are a quick and affordable solution. With a unique anti-slip traction pattern and pleasing green colour, our panels will help prevent expensive damage and reinstatement costs to grassed or sensitive outside areas.

Our GroundMatz trackway panels are used daily throughout the UK across a wide range of industries including civil engineering, landscaping, golf course and sports field maintenance, holiday home parks, heritage and archaeological sites and a multitude of other applications. This enables more efficient and safer working conditions whilst at the same time promoting a more professional image to clients and customers.

We keep stock of temporary trackway panels for purchase and hire ready for immediate dispatch or collection, and can deliver using our own transport, nationwide pallet delivery companies or if you prefer, your own transport.

For more information on GroundMatz – contact us on 08456 800008.

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### Hire GroundMatz

Our anti slip traction panels are available for temporary road hire at a rate of £1.00 per panel per day (subject to a minimum charge of £10.00 per panel) and a minimum order value of £250.00 excluding delivery charges.

Panels sent out are securely strapped to a timber pallet or steel stillage. A nationwide delivery service is available either via our own transport or the pallet delivery network, with each pallet holding a maximum of 30 panels and weighing approximately 1100 kg. It is the Hirer's responsibility to provide suitable pallet-lifting machinery.

## Hedgerow root protection

### **Protection measurements**

Sensible precautions will be taken when working in close proximity to a live hedgerow, both inside and outside the prescribed buffer zones outlined below.

#### **Works outside the 1m buffer zones:**

If working near live hedgerow, we will maintain a 1m protection zone from the spread of the hedge. The protection zone will be maintained for the duration of the works and there will be no access, storage of materials, ground disturbance, burning or contamination within the protection zone area.

Always avoid tracking of machinery within or close to the protection zone. The ground within the protection zone should not be used for site roads, site offices, stockpiles of soil/fuel, material storage, storing machinery, parking of vehicles or storage of debris. We will ensure that one of our qualified Horticulturist's be in attendance when initial excavations are being undertaken to ensure no damage is caused to the root system.

#### **Works within 1m buffer zone**

Where the works are within 1m from the spread of the hedge refer to Part 7 and 11 of the British Standard Guide for trees in Relation to Construction BS 5837:1991.

Work with hand tools can generally proceed within these guidelines without prior consultation provided no roots over 25mm are severed. Consultation is required before any mechanical excavation within this zone takes place.

If working within this zone, we will ensure to not raise soil levels beyond original levels within 1m protection zone each side of the hedgerow. If soil levels are to be raised within the 1m protection Zone, we will consult with the Landscape Team for advice.

To conclude It is our expert opinion that when the above steps are followed and maintained then the risk to the hedgerow is minimal.

## **Appendix C- No-Dig Permeable Driveway Construction:**

The proposed construction methodology for the new no-dig parking edge of Plot 1 and footpath as shown as hatched orange on the tree protection plan is as follows:

A new no-dig permeable 1.5m wide buffer strip to be constructed along the south boundary edge with the hedgerows H1 and H2 as marked on the TPP. The construction will require 100-150mm of base stone beneath, a geotextile is laid on the ground, over which Terram Geocell, Cell-web, Grid-Force or similar is laid and stone spread. The type of stone must be a no fines stone that is free draining. If gravel is used as the final finished permeable surface, then the blocks should be backfilled with 38mm of 10mm single size (no fines stone) to the top of the grid. The total finished construction depth should be 150-200mm.

Schedule of works:

- Area of driveway to be marked out with sufficient room along edges for works. Total area is approximately 46m<sup>2</sup>.
- Once marked out the tree protective fencing is to be erected in accordance with the tree protection plan in Figure 1.
- A shallow scrape to a depth of no more than 50mm of the surface material will be undertaken using hand tools only as indicated. Some re-profiling of the ground outside of the RPA will be required to raise levels to meet the top level of the cell-web.
- Any exposed tree roots which are exposed during ground works will be cleaned, cut and trimmed by hand to allow quicker recovery and re-growth of the root system. Root pruning is a very specialized operation that should only be undertaken with the support and supervision of an arboriculturalist or tree surgeon. Severance of root stems greater than 25mm diameter should be avoided where possible. Pruning of buttress or other major roots can make the tree unstable. Severance of more than 30% of a tree's root system is quite likely to cause slow dieback and eventual death of a mature tree.
- No plant machinery is to be permitted within the construction exclusion zone (CEZ) beyond the fence line.
- All spoil from to be removed off-site
- Supply and lay construction grade geotextile should site conditions warrant its inclusion.
- Lay edging to new cell-web edges
- No compacted or crushed materials to be laid within the RPA. A 3d cellular grid mesh confinement system will be used to form the sub-base. The cells will be filled with clean angular stones to retain permeability over the roots and minimise compaction. A permeable membrane will be laid under the Cellweb Tree Root Protection System (TRP) as detailed below.
- Clear all site of debris and rubble on completion and make good.
- Any drainage requirements, access cover fittings, kerbs, edgings, or other sundries are additional to the specification given above

### **Ground Protection-**

If any plant machinery is required within the RPA's of trees within the CEZ, then Trakmats or similar ground protection mats must be used to prevent unwanted ground compaction within the RPA's of the trees. These can be secured using steel pegs and should remain in place until the access drive is completed.