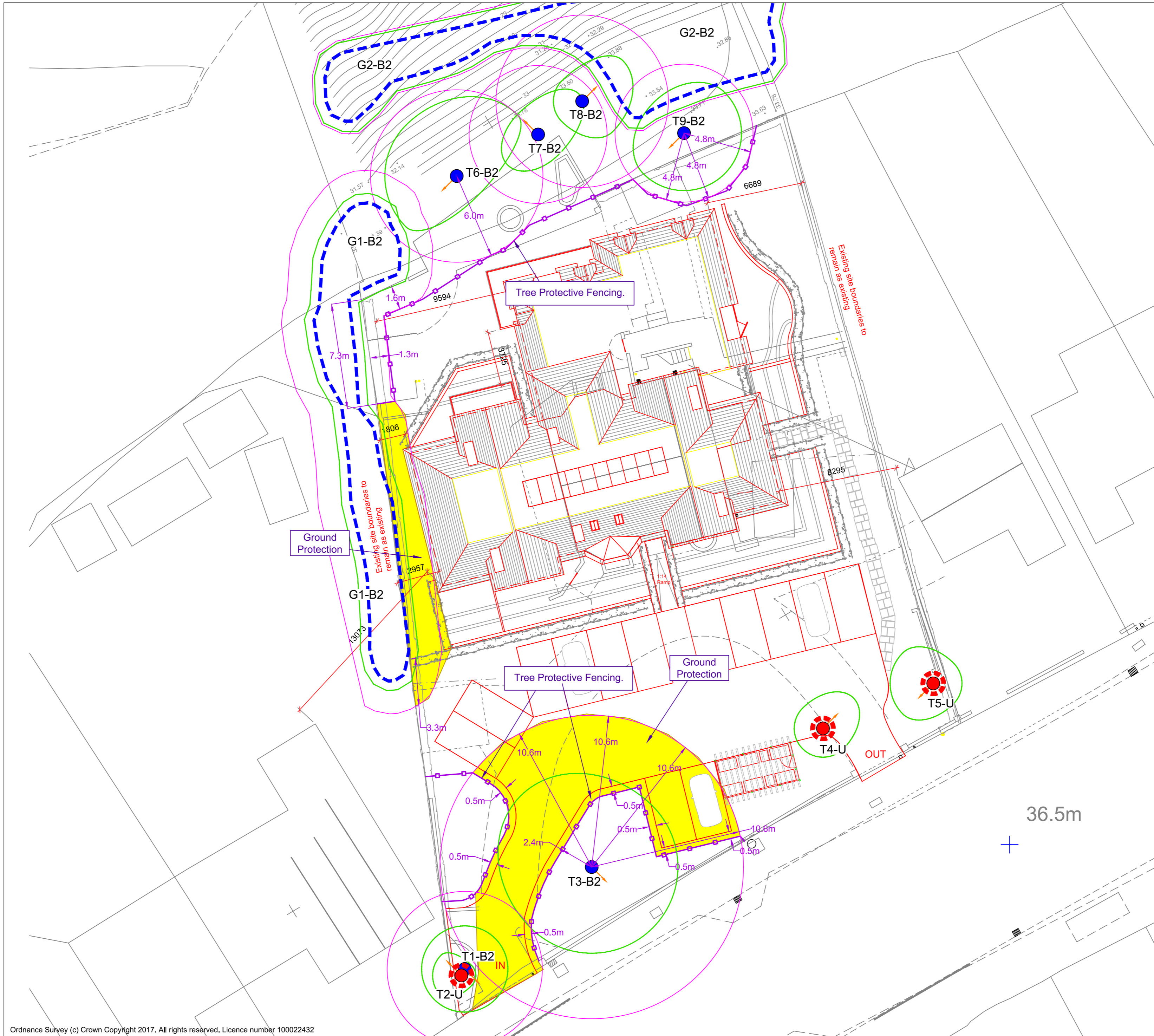
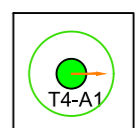

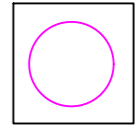
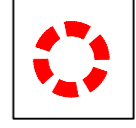
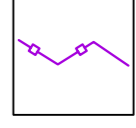
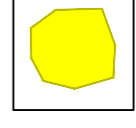


Notes  
 To be used in conjunction with the tree data schedule which accompanies this drawing.  
 Do not scale off drawing.  
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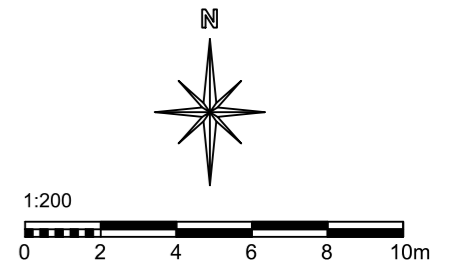


### Tree Protection Plan showing existing and proposed layout with trees and arboricultural controls.

**Key**

-  Tree  
Showing tree location, category colour, canopy, optional FSB direction and tag number.
-  Tree Groups  
Showing location, category colour, canopy and tag number.
-  Tree Root Protection Area  
Shown where applicable.
-  Trees for Removal
-  Tree Root Protective Fencing
-  Ground Protection

Tree/Group numbering: T1-T9, G1-G2.



1:200  
 0 2 4 6 8 10m

#### Tree Protective Fencing

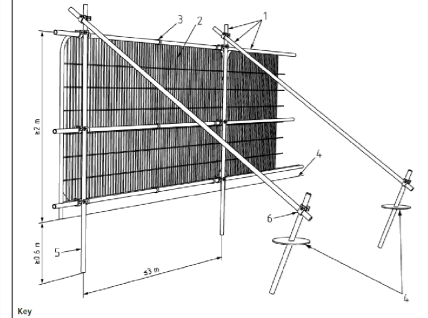
- Trees for removal to be identified from the drawing and marked by an arboriculturalist.
- No vehicles to enter the grass verge or root protection zone during tree removal or fencing installation/removal.
- Fencing to be installed prior to any construction works (including demolition, materials delivery, works compound installation).
- The location of the tree protective fencing is indicative only and must not be directly measured from this plan. Its true location must be surveyed accurately on site and where applicable be measured from the tree centre by the stated dimension value.
- Fencing to remain in place until all construction works have ceased.

#### BS5837: 2012 Recommendations (extract)

- 6.2.2 - Barriers  
 6.2.2.1 - Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.  
 6.2.2.2 - The default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in Figure 2. The vertical tubes should be spaced at a maximum interval of 5m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.

#### Fencing Specification

The fencing will comprise of standard GS7/Heras styled steel self-supporting security fencing panels. The panels must be securely clamped together. They must be secured to the ground with robust steel stakes to a depth of 600mm. These are securely clamped to the panels. The use of steel mesh panels in conjunction with just clamps and self supporting bases is not acceptable for use. They must be secured to the ground with stakes to prevent movement. Where stated, additional bracing of the panels must use angled scaffolding poles to prevent further movement (see diagram).



- Key**
1. Standard scaffold poles
  2. Hera gauge 2 in full galvanized tube and welded mesh in-fill panels
  3. Fences secured to uprights and cross-members with wire ties
  4. Ground level
  5. Uprights driven into the ground until secure (minimum depth 0.6 m)
  6. Secured scaffold bracing

#### Why Is Fencing Erected Around Trees?

- The major cause of damage to trees on construction sites is due to soil compaction.
- Roots use the spaces between soil particles to obtain Oxygen, Water and Nutrients.
- Heavy plant and machinery compresses (compacts) the soil, squashing out the air spaces and preventing root function.
- A compacted soil structure will stay compacted.
- Consequently the tree suffers and will show signs of branch die-back.
- Symptoms such as die-back may take several years to appear.
- Soil compaction over roots can be prevented by maintaining a fenced exclusion zone over the tree roots.
- The exclusion zone is calculated using British Standard 5837.
- Protective Fencing is installed around the calculated area.
- Protective Fencing is a condition of planning approval. If it is removed or repositioned the construction firm is in breach of a condition and may be subjected to legal action.

**ArborSense**  
 Arboricultural Consultants  
 Tel: 07930 644 440 Email: saulthreeman@gmail.com

**Client**  
 UPNA Ltd

**Project**  
 No.106 Bexley Road, Erith DA8 3SP.

**Drawing Title**  
 Tree Protection Plan

<b>Scale</b> 1:200@A2	<b>Date</b> Jun 2021	<b>DB</b> CS	<b>CB</b> SH
<b>Drawing Number</b> AS-TPP-4-9-17.1	<b>Rev</b> 4		