



ARBORICULTURAL METHOD STATEMENT

SITE: 53 Hart Plain Avenue,
Cowplain, Waterlooville,
Hampshire.
PO8 8RG

CLIENT: C Y Developments

February 2015

Table of Contents

1. Introduction.....	3
2. Liaison & Communication.....	3
3. Tree Removals and Pruning.....	4
4. Protective Fencing.....	4
5. Construction of Foundations.....	5
6. Construction of Hard Surfaces.....	5
7. Underground services.....	6
8. Landscaping.....	7
9. Supervision & Monitoring.....	7

Appendices.

1. Tree Schedule.
2. Tree Protection Plan.

1. Introduction.

1.1. The purpose of this method statement is to detail what actions need to be taken to prevent unacceptable damage occurring to the retained trees on this and the adjacent site during the proposed development at 53 Hart Plain Avenue, Cowplain, Waterlooville, Hampshire. PO8 8RG

1.2. This method statement has been drawn up to comply with the planning policies of Havant Borough Council which requires that an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) is submitted as part of the planning application process to demonstrate how any potential damage to retained trees may be mitigated.

1.3. This method statement also complies with the recommendations of British Standard BS 5837: 2012, *'Trees in relation to design, demolition and construction – Recommendations'* (BS 5837).

1.4. This method statement is designed to reflect the principles of the tree protection required for the proposed development and should not be read as a definitive engineering or construction statement for this site. Matters relating to construction detail or engineering performance should be referred to a qualified structural engineer for further information and specification.

2. Liaison & Communication.

2.1. The developer shall appoint an arboricultural consultant to ensure that the specified tree protection measures are carried out during the entire construction process. A copy of the letter of appointment shall be sent to the Local Planning Authority (LPA).

2.2. Before any works of any description takes place on the site the developer shall convene a pre-start meeting. This should be attended by the developer's contract manager, the site manager, the groundwork contractor, the arboricultural consultant and, if appropriate, the LPA tree officer. The meeting will be led by the arboricultural consultant who will ensure that contact numbers are exchanged and the methods of tree protection outlined in this statement are fully discussed and explained. Any modifications to this statement arising from this meeting will be recorded and the revision circulated to all parties.

2.3. The developer shall inform the arboricultural consultant if at any time during the construction process, the site manager is replaced. In this instance the arboricultural consultant will, within 5 days, arrange a meeting with the new site manager to review all the remaining aspects of this method statement.

2.4. A copy of this method statement shall be given to all personnel who have control over works of any nature within the Root Protection Areas (RPAs) of the retained trees. The contractor will ensure that adequate instruction is given for the implementation of the protection measures outlined within this statement.

3. Tree Removals and Pruning.

3.1. No trees are proposed to be removed and no pruning is required.

4. Protective Fencing.

4.1. No vehicles of any kind shall enter the site or any works commence until the root protection areas of the retained trees, as shown on the Tree Protection Plan, have been protected by the erection of protective fencing to the specification found in BS 5837, Section 6.2. The location of the fencing is denoted by the continuous, bold purple lines on the Tree Protection Plan. This lines shall be marked out on the ground by the arboricultural consultant before any works commence.

4.2. The fencing shall be at least 2.1m in height and comprise of standard ‘Heras’ welded mesh fence panels mounted on a scaffolding framework. The panels shall be fixed to each other with at least two clamps and secured with anti-lift devices to concrete or rubber bases that are pinned to the ground to a depth of 450mm by short lengths of scaffolding tube.

4.3. Scaffold uprights shall be at 3.5m centres and supported on the side closest to the retained trees by struts braced to the ground at an angle of 45 degrees. The ‘Heras’ panels shall be secured to the two cross members between the uprights with heavy duty cable ties. Notices stating “Tree Protection Zone – Keep Out” will be attached with cable ties to every second panel.

4.4. No activity of any kind shall be undertaken behind this protective fencing; there shall be no storage of materials, no access for vehicles or personnel and no excavation or changes in soil level of any kind.

4.5. The contractor site huts may, where appropriate, be incorporated into the protective fencing line. If this is so then the location must be agreed in advance with the arboricultural consultant and a method statement supplied that details how the huts are to be erected and supported without compacting the soil within the RPA. Details of the hut location will be supplied to the LPA in advance of the positioning of the huts on site.

4.6. Areas for storing or mixing of fuels, oils or cement shall be agreed at the pre-start meeting and marked on site. None of these areas shall be within 10m of any retained tree.

4.7. No fixtures of any nature shall be attached to the retained trees.

4.8. Where tall plant or equipment may be passing close to the canopies of the retained trees, timber uprights shall be erected and fastened to the protective fencing. Cross members shall be marked clearly with reflective tape to ensure high visibility.

4.9. If the protective fencing is accidentally damaged or knocked over, the damaged sections shall be immediately marked with high visibility tape or mesh fencing. The damaged sections should be replaced or repaired to the original specification within 48hrs. All events of this nature must be recorded and reported to the arboricultural consultant.

4.10. When the installation of the protective fencing is complete, the arboricultural consultant shall be informed so he may come and inspect it. If it complies with this statement he will record the fact and notify the client and LPA.

4.11. This protective fencing will not be moved or relocated without the prior approval of the arboricultural consultant. When the construction period is complete the fencing may then be removed but only after first informing the arboricultural consultant of this intention.

5. Construction of Foundations.

5.1. None of the foundations for the proposed dwellings lie within the RPAs of retained trees. Accordingly, no special foundation construction measures are required to protect the retained trees.

6. Construction of Hard Surfaces.

6.1. Prior to the commencement of any construction works (other than the erection of protective fencing), the proposed access drive, denoted by red honeycomb hatch on the Tree Protection Plan, shall be constructed to the specification detailed below and in accordance with the recommendations of Section 7.4 in BS 5837.

6.2. The proposed access drive shall be clearly marked out before any associated work starts. Existing vegetation may be removed with hand tools or sprayed with an approved non residual herbicide such as 'Glyphosate'.

6.3. Any small hollows may be filled with clean sharp sand (not builders' sand) to a maximum depth of 100mm. A permeable geotextile membrane (such as '*Terram*') shall be laid down prior to the installation of the cellular containment system.

6.4. The ground shall be covered with a perforated cellular confinement system such as 'Geoweb' with a minimum cell depth of 150mm and backfilled with clean, MoT Type 1, no-fines aggregate (20mm-40mm). Edge supports of appropriate size and strength should be set above ground level and should be secured with steel pins driven into the ground. The outer edge of the supports may be banked up with clean topsoil.

6.5. A permeable geotextile membrane will also be laid on top of the Geoweb to prevent fines and other debris filling the air spaces in the aggregate. The wearing course shall be of a permeable and gas porous nature such as porous tarmac or concrete sets with sand jointing.

7. Underground services.

7.1. Detailed drawings of proposed underground services have not been produced at this stage of the planning application thus it is not possible to identify any potential impacts between trees shown retained on the TPP and proposed services.

7.2. At the detailed design stage and subject to planning consent, proposed underground services will be either located outside the RPAs of trees shown retained or will utilise existing service routes.

7.3. Where existing services within RPAs require upgrading, care shall be taken to minimise disturbance and where practicable, trenchless techniques employed; only as a last resort should open excavations be considered. Where existing services within RPAs are deemed not satisfactory for any further use they should be left in situ rather than being excavated/removed.

7.4. In the event that incursions into RPAs are unavoidable any new installation will comply with the methods and guidelines detailed in; 'Guidelines for the Planning, Installation, and Maintenance of Utility Services in Proximity to Trees' NJUG 10 (April 1995).

7.5. The locations of proposed service routes will be approved by the arboricultural consultant and shown on a revised Tree Protection Plan.

8. Landscaping.

8.1. Prior to the commencement of any landscaping works within the protected area behind the protective fencing the developer shall arrange a pre-start meeting with the site manager, the arboricultural consultant and the landscape contractor. The details of this method statement shall be discussed in relation to the proposed landscape operations and a clear sequence of operations established.

8.2. Within the RPAs the following principles will be maintained:

- Existing ground levels shall not be substantially altered.
- No plant or vehicles shall enter the RPA.
- No fuels or chemicals shall be stored within any of these areas.
- Any excavation required for fence posts, log retaining walls or any other landscape structures shall be undertaken by hand under direct arboricultural supervision. If roots are encountered then the position of the excavation shall be moved to a new location. If this is not possible then any roots with a diameter less than 25mm may be cut cleanly by hand. Any exposed roots shall be re-covered within 24hrs of excavation.
- No structure shall be fastened in any way to the trunks of the retained trees.
- No drainage or irrigation pipes shall be installed within the RPAs of the retained trees.
- Any unwanted vegetation shall be removed by hand.

9. Supervision & Monitoring.

9.1. From the start of the construction process the arboricultural consultant shall regularly visit the site to inspect the tree protection measures. If these measures comply with the specification detailed in this method statement a statement of compliance shall be sent to contractor/developer and copied to the LPA.

9.2. The arboricultural consultant shall then visit the site on a regular basis, as agreed with the local planning authority at the pre-start meeting (Section 2.2 above), or when specifically required as per the **Table 1** below, to ensure that tree protection measures are kept in place and functioning as designed. Regular contact will be maintained with the site manager to determine any forthcoming operations that may make an impact on these tree protection measures and if

arboricultural supervision is required. A record of these monitoring visits will be kept and copies sent to the developer and the LPA.

9.3. The site manager shall give 48hrs notice to the arboricultural consultant of any operations, i.e. installation of underground services, construction of hard surfacing etc., which may make an impact on the RPAs of the retained trees.

9.4. Any alterations or variations in drawings for the site that are in, or within, the RPAs of the retained trees shall be referred in the first instance to the arboricultural consultant for his advice. If these changes make any kind of impact on the retained trees the arboricultural consultant shall suggest changes that will either avoid damage to the retained trees or offer solutions to mitigate the impact. Following this consultation, the arboricultural consultant shall issue revised Tree Protection Plans that reflect the changes.

Where any operations carried out by the developer deviate substantially from this method statement, a meeting will be convened between the developer, the arboricultural consultant and the site manager to determine the best method to mitigate any damage that may have occurred.

Visit no.	Timing of visit	Function carried out
1	Prior to the start of any construction works.	To mark on the ground the line which the Protective Fencing will follow.
2	Erection of Protective Fencing and trunk wrapping.	To check Protective Fencing and Trunk Wrapping has been installed in the correct location and to the correct standard.
3	Immediately prior to commencement of construction works on site	Mark out the location of the existing driveway extension and the new pedestrian footpath.
4	Every four weeks during the construction phase.	To check the Protective Fencing & Trunk Wrapping is in place and that activities which would be harmful to trees are not being carried out.
5	During the installation of the above soil surfacing within the RPAs of trees nos. 11 & 12.	To supervise the construction of the above soil surfacing.
6	At any other time which is sensitive in arboricultural terms.	To ensure retained trees are protected from development activities.

Table 1 - Timings of Supervision and Monitoring Visits.

David Archer Associates

February 2015



APPENDIX 1

Tree Schedule



TREE SCHEDULE

53 Hart Plain Avenue
Cowplain
Waterlooville
Hampshire
PO8 8RG

Client:- CY Developments

Date of Survey:- July 2014

Kingston Barn 15 St Julian's Lane Kingston Buci West Sussex BN43 6EH

Office:- 01273 597796 Mobile:- 07512 346919

E.Mail:- david@daa-arboriculture.co.uk Web: www.daa-arboriculture.co.uk

Explanatory Notes for the Tree Schedule

Site:- 53 Hart Plain Avenue, Cowplain, Waterlooville, Hampshire, PO8 8RG

Surveyor:- David Archer

This schedule is based on an inspection carried out by David Archer on Wednesday the 2nd July 2014. Weather conditions at the time were clear and sunny. Deciduous trees were in full leaf.

The information contained in this schedule reflects the conditions of those specimens at the time of inspection. They were inspected from the ground only; they were not climbed and no internal investigations were undertaken, thus no guarantee may be given as to their structural integrity.

As trees are dynamic organisms and subject to continual change no dimensions expressed in this schedule may be relied upon for development purposes for more than 24 months from the date of survey. Estimated dimensions are marked thus; #

1. Tree no: - Expressed in sequential order starting from number 1.

2. Species: - The common name as expressed within "*A Field Guide to the Trees of Britain and Northern Europe*" Alan Mitchell (1978).

3. Height: - Given as an approximate measure with the aid of a 'Disto' laser range finder and expressed in metres.

4. Trunk diameter: - Measured at 1.5m above ground level and expressed in millimetres; where multiple stems are present they are measured individually and a cumulative total calculated in accordance with BS5837 (2012).

5. Radial Crown Spread: - Distance from the centre of the trunk to each cardinal point of the compass and expressed in metres.

6. Crown Clearance: - Distance from adjacent ground level to the lowest point of the crown and expressed in metres.

7. Crown Break: - Distance from ground adjacent ground level to the first significant branch and expressed in metres. Brackets denote branch orientation.

8. Life Stage: - young; semi mature; early mature; mature; over mature.; Veteran - surviving beyond the typical age range for the species.

9. Physiology: - Health, condition and function of the tree in comparison to a normal specimen of its species and age.

10. Structure: - the structural condition of the tree based on an assessment of any visible roots, trunk and crown, noting the presence of any defects or decay; Good - no significant visible structural defects with a form typical for the species; Moderate - a specimen with only minor defects that are easily remedied or of no long term significance; Poor - significant and irremediable physiological or structural defects that may lead to early or premature decline; Hazardous - significant structural defects of such a degree that there is a risk of imminent collapse or failure.

11. Estimated Years: - Estimate of remaining contribution expressed in years (<10, 10+, 20+, 40+)

12. Comments: - Notes relating to health and condition, structure and form, estimated life expectancy and importance within the local landscape.

13. Category: - A rating given to individual trees based on Table 1 in the British Standard, BS 5837 (2012) "*Trees in relation to design, demolition and construction - Recommendations*".

Category 'A' - Trees of high quality and value; in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

Category 'B' - Trees of moderate quality and value; those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

Category 'C' - Trees of low quality and value; currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.

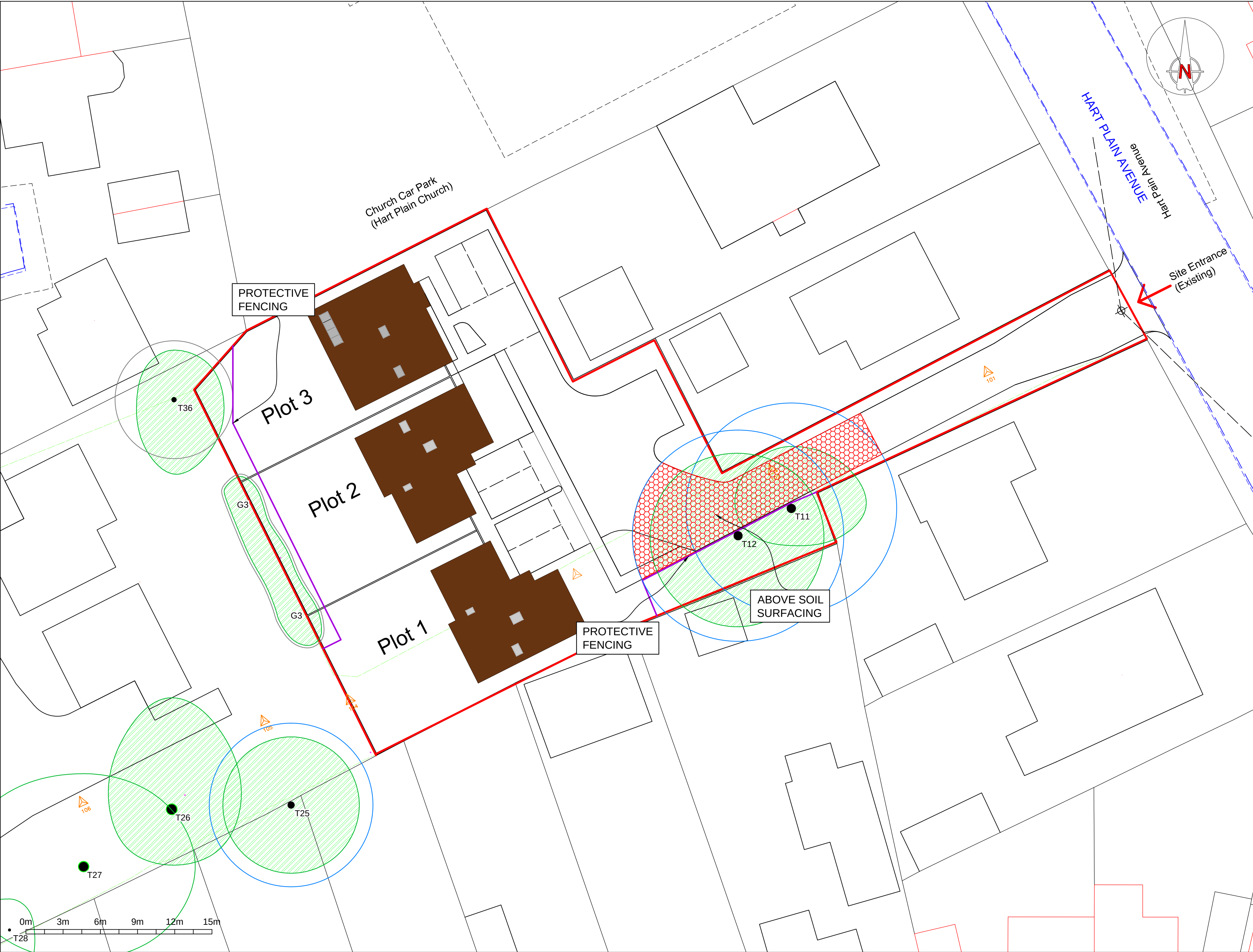
Category 'U' - Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboriculture management.

No.	Species	Height	Trunk Diameter	Crown spread	Crown clearance	Age	Physiology	Structure	Life Expectancy	Comments	Category
T11	Common Oak	14	720	N: 5 E: 6 S: 3 W: 4.5	3	Mature	Fair	Good	40+	Low broad crown typical for species; no readily visible structural defects; form & structure typical for species and age; of high quality and of moderate value.	B1
T12	Common Oak	14	710	N: 6.5 E: 7 S: 7.5 W: 7	3	Mature	Fair	Good	40+	Low broad crown typical for species; no readily visible structural defects; of high quality and of moderate value.	B1
T25	Ash	15	550	5.5	6	Mature	Fair	Moderate	40+	Off-site; major branch union at 2m on north side, potentially poor structure; of moderate quality and value.	B12
T36	Hawthorn	10	250 120 90	N: 1 E: 2 S: 3 W: 5	2	Mature	Fair	Moderate	10+	Ornamental tree of low quality and value.	C12
G3	Leyland Cypress	12	200	2	4	Early Mature	Poor	Poor	10+	Short linear group; of low quality and value.	C12



APPENDIX 2

Tree Protection Plan



PROTECTIVE FENCING

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding; or a 2.3m high scaffolding framework comprising of vertical and horizontal framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On to this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire. Standard anti-climb welded mesh panels on rubber or concrete feet are not resistant to impact and should not be used. All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

1 Standard scaffold poles
2 Uprights to be driven into ground
3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4 Wire mesh welded to the uprights and horizontals
5 Standard scaffold clamps
6 Wire mesh and secured on inside face of fencing to avoid away from traffic
7 Crowned level
8 Uprights driven approx. 600mm into ground

Figure 2 - Protective barrier

ABOVE SOIL SURFACING

Hard surfacing shall be constructed using an above soil surface design in accordance with guidance set out in section A.1.5 of BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations. There shall be no lowering of existing soil levels or severance of any roots.

DAVID ARCHER ASSOCIATES
ARBORICULTURAL CONSULTANCY

Project: 53 Hart Plain Ave,
Cowplain, Waterlooville,
Hampshire. PO8 8RG

Client: CY Developments

Drawing: **TREE PROTECTION PLAN**

Based on: Proposed site plan

Drawing No:	TTP 03		Rev:	----	
Date:	Feb. 2015	Scale:	1:200 @ A2	Drawn:	MR
Tree nos.:	● 1	Canopies of trees to be retained:	●	Trees to be removed:	✖
Category 'A' trees:	○	Category 'B' trees:	○	Category 'C' trees:	○
Protective fencing:	—	Above soil surfacing:	■		

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