

I A N K E E N
LIMITED



**ARBORICULTURAL
METHOD STATEMENT**

**RELATING TO DEVELOPMENT
UPON LAND AT**

**HAYLING BILLY PUB,
117 ELM GROVE, HAYLING ISLAND**

**Our Reference
JTK/9030/Rev B/WDC**

October 2016

CLIENT

**McCarthy & Stone Retirement Lifestyles Ltd
South West House
1 Embankment Way
Ringwood
Hampshire
BH24 1EU**

Redlands Farm, Redlands Lane
Ewshot, Farnham, Surrey, GU10 5AS

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WARNING

Existing trees adjoining these works are protected by Tree Preservation Order 1805.

That Order protects all parts of the tree, whether above or below ground, and failure to comply with this method statement that results in damage to trees can result in prosecution resulting in a criminal record and substantial fine.

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ABSTRACT

Protective barriers and ground protection are required throughout the construction process to protect the retained trees on the site.

No tree removal is required. Tree pruning is required.

Certain sections of hard surfaces are proposed within the root protection area of retained trees.

No utility installation is required within root protection areas.

1. Statement of purpose

- 1.1 The purpose of this method statement is to demonstrate how works will be undertaken at 117 Elm Grove, Hayling Island, to avoid unacceptable arboricultural impact and provide an adequate level of protection for those trees that are to be retained.
- 1.2 This method statement has been produced for McCarthy and Stone Retirement Lifestyles in order to inform the construction team and satisfy the requirements of the Local Planning Authority (LPA), Havant Borough Council. The works are the subject of a planning application and this arboricultural method statement has been prepared to support that application.
- 1.3 This method statement merely considers the systems of work in relation to the health and safety of retained trees. It does not address requirements of the Health and Safety Executive that should be considered in detail by those parties involved.

2. Related documents and drawings

- 2.1 This method statement should be read in conjunction with the documents in Table 1 below.

Table 1: Documents referred to

Originator	Title/Reference
British Standards Institute	<i>BS5837:2012 Trees in relation to design, demolition and construction – Recommendations</i>

and the following drawings in Table 2

Table 2: Drawings referred to

Originator	Drg No	Title	Scale
New Leaf Studio	SO-2267-03-LA-MCS551/Drg 01 Rev E	Landscape Strategy	1:200 @ A1
New Leaf Studio	SO-2267-03-LA-MCS551/Drg 02 Rev A	Cross sections through proposed surfaces beneath trees and within root protection areas	As shown
Calcinotto	SK050 Rev P1	Typical Construction Details Near trees.	As shown
Ian Keen Limited	9030/01	Tree Constraints Plan	1:200 @ A1
Ian Keen Limited	9030/02 Rev C	Tree Protection Plan	1:200 @ A1

3. Arboricultural issues & implications

- 3.1 Detail of the trees and their protection are discussed and detailed in the documents, and shown on the drawings, listed above and should be read in conjunction with this method statement.
- 3.2 The buildings are located outside the notional root protection areas of all retained trees although are in close proximity and specific measures are to be taken during construction to protect the trees and their rooting environment.
- 3.3 Tree pruning work is required.
- 3.4 Supervision and monitoring of certain work close to trees is required.
- 3.5 Utility provision can be routed in locations remote from retained trees.

4. Facilitation tree works

- 4.1 Tree pruning is required to accommodate the proposed development.
- 4.2 Details of the tree work are given in the schedule at Appendix 1.
- 4.3 All tree work shall be undertaken in accordance with *BS3998:2010:Tree Work – Recommendations*.

5. General site care

- 5.1 To ensure that the trees to be retained are afforded an adequate degree of protection during the works, the following general precautions will be observed:
 - 5.1.1 No fires will be lit on site
 - 5.1.2 No access will be permitted within the temporarily barriered areas, unless and only where otherwise approved herein. Ground levels will not be changed within them and existing vegetation and topsoil will be left undisturbed but may be treated with approved herbicides if eradication is required.
 - 5.1.3 No materials, equipment or debris will be stored within any of the barriered areas and no chemicals, petrol or diesel will be allowed to spill where they may contaminate the root protection areas of retained trees
 - 5.1.4 All heavy plant, machinery, cranes and delivery vehicles shall be excluded from the areas demarcated for protection on the Tree Protection Plan.

6. Sequencing of works

6.1 A logical sequence of events is to be observed as follows:

Stage 1	Pre-commencement site meeting (See Section 12)
Stage 2	Undertake tree works
Stage 3	Erect protective barriers
Stage 4	Undertake demolition
Stage 5	Implement foundations with watching brief by arboriculturist where close to root protection areas.
Stage 6	Implement development construction
Stage 7	Implement construction of pathway by trees 1 – 3.
Stage 8	Take down protective barriers and complete soft landscape works.

7. Protective barriers and ground protection

- 7.1 Temporary barriers will be erected as indicated on the Tree Protection Plan listed in Table 2. The specification for this barriers will be in accordance with the recommendations given in *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations* Section 9.2 and will comprise 2.0m mesh barriers (Heras type panels are a simple, readily available solution) attached to a scaffold framework. Support scaffolds will be attached to the scaffold framework as necessary at an angle of 45 degrees on the side of the trees and anchored by further scaffold poles carefully firmed into the ground. Clear signs will be attached at 6 metre intervals along the line of barriers stating 'Tree Protection Area – No Access'.
- 7.2 The temporary protective barriers will remain in position during the demolition phase until ready to implement construction (Stage 6) when it will be carefully dismantled by hand and re-erected in position annotated as Construction Phase on the drawing listed at Table 2.
- 7.3 The barriers shall remain in place until soft landscape operations require its full or partial removal (see section 11). No other construction activity will take place within those areas formerly protected by the fence (see Section 5).

8. Treatment of existing hard surfaces

- 8.1 Existing kerbs and areas of hard surface are to be retained and re-utilised where within root protection areas except for a small area north-east of tree 13. Here a section of the kerb is to be lifted and ground levels reduced to accommodate the set back of the car parking along this north eastern edge.
- 8.2 Where existing hard surfaces are present within the root protection area they shall be broken up and removed by hand. If any roots are encountered they shall be cut in a single plane cleanly with secateurs, loppers or a saw and the area backfilled with topsoil immediately after cutting. Roots are not to be ripped out with machinery or equipment.
- 8.3 Roots often exist in the substrate below hard surfaces and extreme care must be taken to avoid damage to them.
- 8.4 Immediately after, the void left as a consequence of their removal shall be filled with good quality topsoil as a prelude to soft landscape unless a replacement hard surface is proposed whereupon it shall be completed in accordance with the instruction contained herein.

9. Creation of new hard surfacing within root protection areas

- 9.1 Areas of 'no-dig' construction shown on the drawing listed in Table 2 shall be implemented after the main construction works to ensure the ground around trees remains protected.
- 9.2 Any deleterious materials and debris deposited in the area are to be taken up by a tracked 360° excavator working from outside the root protection area. Final clearance shall be undertaken by hand picking.
- 9.3 The proposed areas of 'no-dig' construction within root protection areas shall be carried out in the following manner, subject to the manufacturers and engineers instructions.
 - 9.3.1 Existing surface vegetation of grass is to be treated with Glyphosate herbicide to the manufacturer's recommendation. The surface mat may be removed to a maximum of 50mm depth.
 - 9.3.2 Sharp sand is to be imported and spread over the area by hand equipment (wheelbarrows, shovels and rakes only) to bring the surface to an even level.
 - 9.3.3 A geotextile material such as Fibretex F4m is to be laid on the surface of the ground in the area of the proposed car park.
 - 9.3.4 A 3-dimensional cellular confinement material such as Cellweb Tree Root Protection System supplied by Geosynthetic Technologies Ltd is to be laid on top of the geotextile membrane.

- 9.3.5 Edging supports of railway sleepers or other treated timber are to be laid and pinned to the ground preferably through the cell confinement material.
- 9.3.6 The cells are to be filled with a no-fines aggregate commencing at the leading edge of the works and progressing forwards. Material can be imported to, and spread within, the working area by small excavators not exceeding 2 tonne capacity providing they work only off the filled cells area.
- 9.3.7 The final wearing course will be laid after the main construction works are complete.
- 9.3.8 Typical details of construction are shown on the Calcinotto drawing at Appendix 2.
- 9.3.9 Specific cross sections are shown on the New Leaf drawing at Appendix 3.

10. Excavations proximate to root protection areas

- 10.1 Excavations are proposed proximate to the root protection area of retained trees. Foundation techniques will be chosen to minimise the impact on trees
 - 10.1.1 Foundations for the building will seek to use piling (driven pre-cast piles to avoid the caustic effects of in-situ poured concrete where it is close to trees. Installation by trees 7 and 8 will be supervised by an arboriculturist as appropriate.
 - 10.1.2 Where drainage or other services are to be installed within root protection areas trenches shall be excavated by hand. Services shall be wrapped (as required) with root barrier material.
- 10.2 The typical details of the above installations are shown on the Calcinotto drawing at Appendix 2.
- 10.3 All machinery necessary to undertake the excavations shall operate outside the areas protected by temporary barriers and those areas of ground protection.
- 10.4 Removal of spoil shall be via the existing areas of hard surfacing.

11. Reinstatement and landscaping

- 11.1 Final grading to marry in new levels with existing ground will be achieved by importing topsoil and spreading by hand equipment only. The newly graded areas will be grass seeded or turfed by hand.
- 11.2 All tree and shrub planting pits will be dug by hand within the root protection areas of existing trees.

12. Planning, communication and supervision

- 12.1 A pre-commencement meeting will take place on site attended by the appointed arboricultural consultant, the tree contractor, the site manager and the local authority arboricultural officer. The purpose of this meeting is to ensure that everyone fully understands the implications of the arboricultural method statement and to agree on finer points of detail prior to any works commencing.
- 12.2 The appointed arboricultural consultant shall directly supervise the works at the following key stages:
 - 12.2.1 Erection of protective barriers
 - 12.2.2 Foundations by trees 7 and 8
 - 12.2.3 Removal of hard surface by tree 13
 - 12.2.4 Installation of pathway by trees 1 - 3
 - 12.2.5 Removal of protective barriers and re-grading of ground levels adjacent to trees
- 12.3 At the completion of each supervisory visit the appointed arboricultural consultant will circulate a short site supervision report to the client, site and the local authority arboricultural officer to confirm that works are progressing satisfactorily.
- 12.4 Monitoring visits will be undertaken by the arboricultural consultant at intervals commensurate with site progress to make sure that all tree protection measures are in place. A record of these visits will be kept and maintained for inspection on site.
- 12.5 Should any problems arise on site, the site manager will immediately inform the appointed arboricultural consultant who will assess the situation and make recommendations accordingly. If any modifications to the method statement are proposed, the arboricultural consultant will immediately advise the local authority arboricultural officer.
- 12.6 The site manager will brief all site personnel on the implications of the arboricultural method statement. A copy of this method statement will be available on site at all times. The progress reports detailed in Section 12.3 will be kept with the method statement so that both are readily available for inspection.
- 12.7 A list of contacts is attached at Appendix 4.

13. Conclusion

- 13.1 If the provisions of this arboricultural method statement are complied with in full, the proposed works will be able to proceed without detrimental impact to retained trees.

14. Health and safety method statement and risk assessment

- 14.1 Each trade is responsible for preparing their own health and safety method statement and risk assessment for each area.
- 14.2 Always consult the site manager or their Health and Safety representative to obtain guidance on any particular hazards you may encounter on this site.
- 14.3 All trades and their operatives must comply with site safety rules at all times.
- 14.4 For further information or guidance on Health and Safety Method Statements, Risk Assessments and any other safety issue contact HSE's infoline on 0845 345 0055.

APPENDIX 1

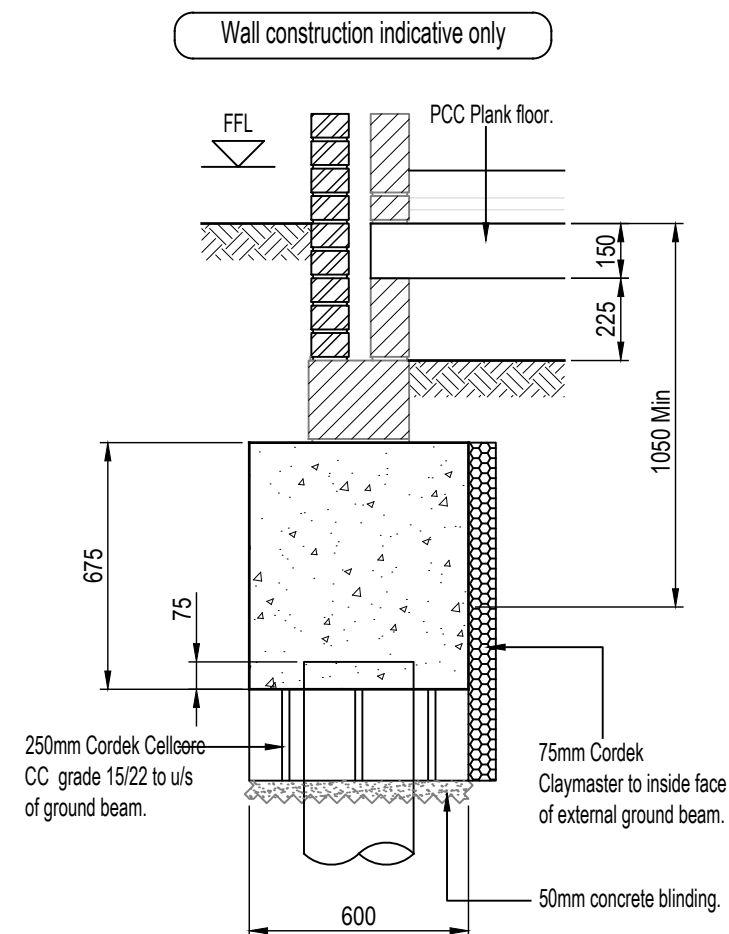
Schedule of tree works

Schedule of tree works

Tree number	Species	Action
4	Lime	Crown lift to 3m over garden
6	Lime	Crown lift to 3m over garden
7	Lime	Crown lift to 3m over garden. Prune to give 2m clearance from proposed building.
8	Lime	Crown lift to 3m over garden. Prune to give 2m clearance from proposed building.
9	Lime	Crown lift to 4m over car park.
10	Lime	Crown lift to 4m over car park.
11	Maritime pine	Crown lift to 4m over car park.

APPENDIX 2

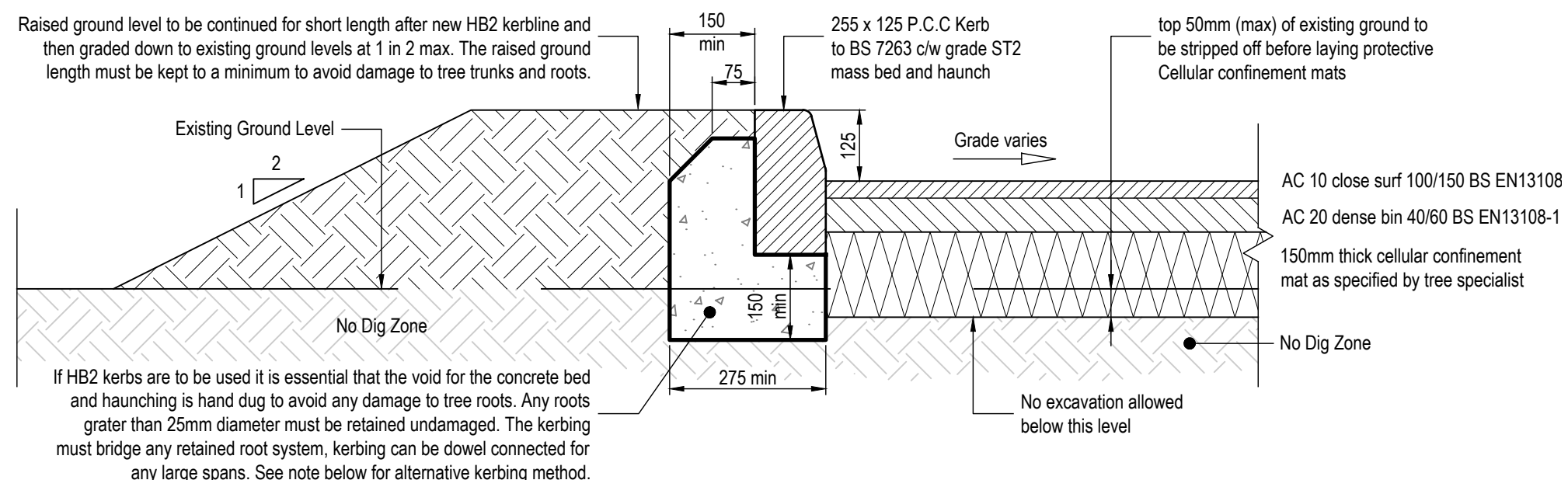
Calcinotto drawing showing typical construction details



Typical Edge Beam Foundation
SCALE = 1:10

Note:

- 1) Where foundations are in close proximity to RPA areas. Excavation to be undertaken in accordance method statement produced by Project Tree Officer. Guidance on how the tree roots encountered to be in accordance with Project Tree Officers Guidance and Structural Engineer.
- 2) If roots are encountered the face of foundation to have Tree Root Barrier provided within affected area and the root protected using coarse sand backfill in accordance with Project Tree Officers method statement



**Light Duty Macadam Car Park
with Cellular Confinement Mat Construction Detail**

SCALE = 1:10

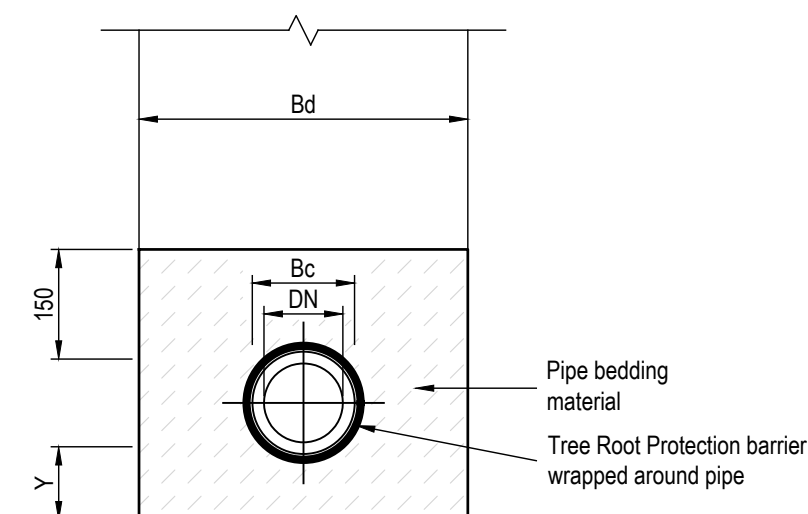
Note:

1. Pegged down sleepers could be used to form an edging along the tree protection line in lieu of the HB2 kerbs specified above. This would required no additional excavation but would not necessarily be in keeping with the site features.
2. The car park surfacing is to be laid as specified in the 'Arboricultural Method Statement'.
3. Any roots greater than 25mm diameter must be retained undamaged.

Note - For use on all pipework with:

More than 0.6m of cover in all landscaped and pedestrianised areas.
More than 1.2m of cover in all trafficked areas.

Where pipes pass close to RPA areas, excavation to be undertaken in accordance with Project Tree Officer Method Statement. Where tree roots are encountered guidance on how to be treat the affected roots to be sought from the Project Tree Officer



Pipe Passing Close to RPA's

SCALE = 1:10

ADDRESS :Calcinotto (Head Office)
Jonsen House,
43 Commercial Road,
Poole,
Dorset
BH14 0HU

TEL : (01202) 237237
FAX : (01202) 740650
EMAIL : admin@calcinotto.co.uk
WEB : www.calcinotto.co.uk

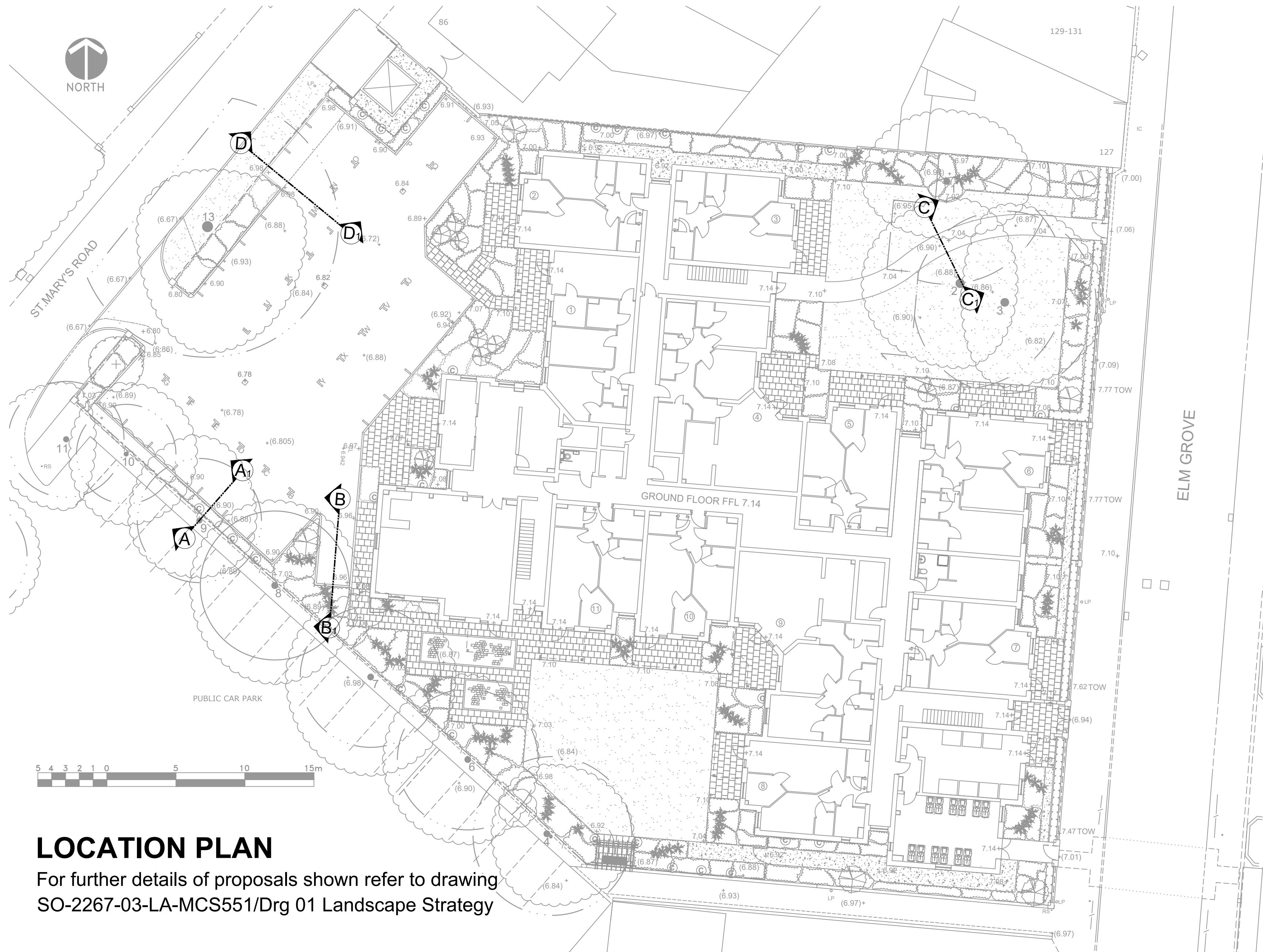
P1	29.09.16	Drawn	MJR
Rev	Date	Description	Initials

calcinotto
CONSULTING STRUCTURAL CIVIL AND ENVIRONMENTAL ENGINEERS

Project: Hayling Island Date: Sept' 16 Scale: As Shown Job Ref: JB-3216
Title: Typical Construction Details near Trees Drawn By: MJR Rev: P1 Drwg No: SK050

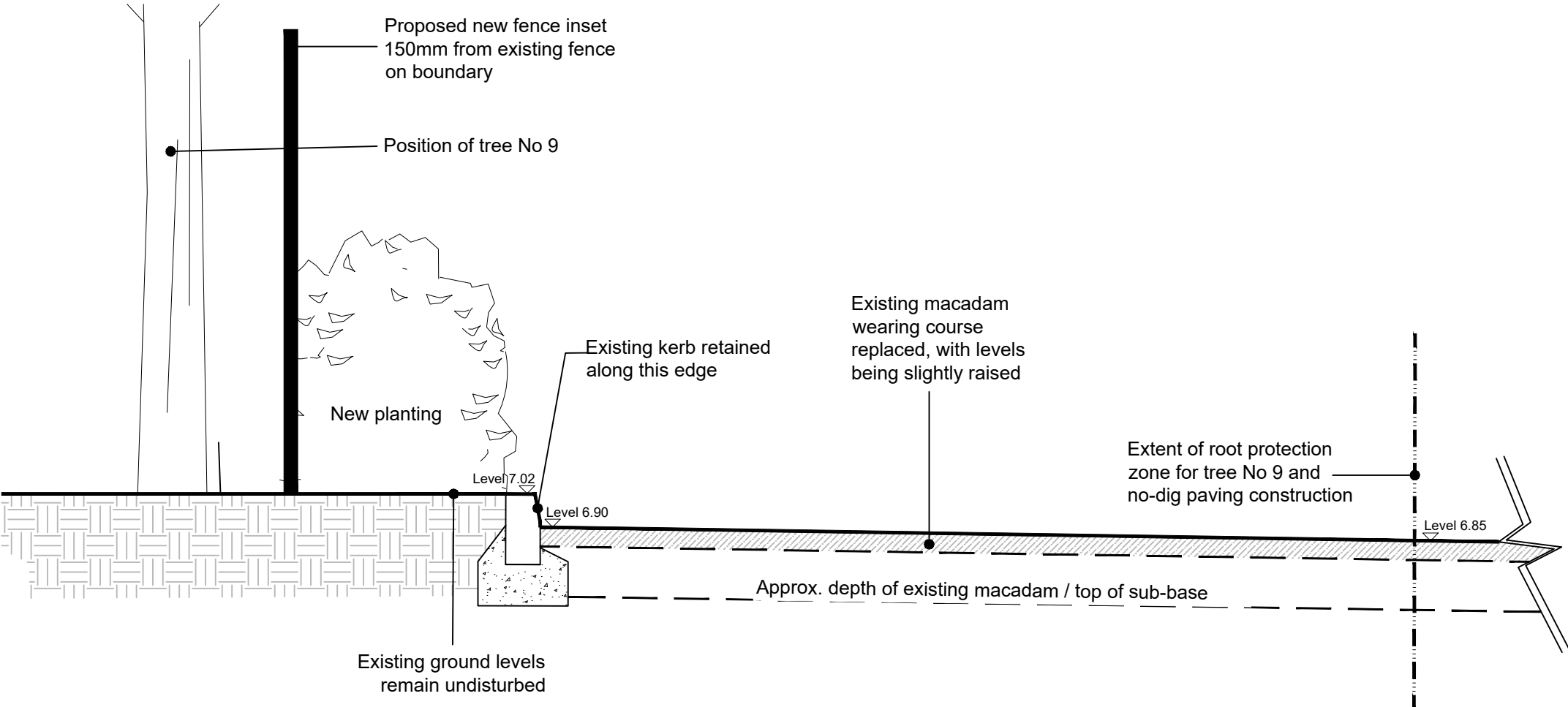
APPENDIX 3

New Leaf drawing showing specific sections through areas of surfacing

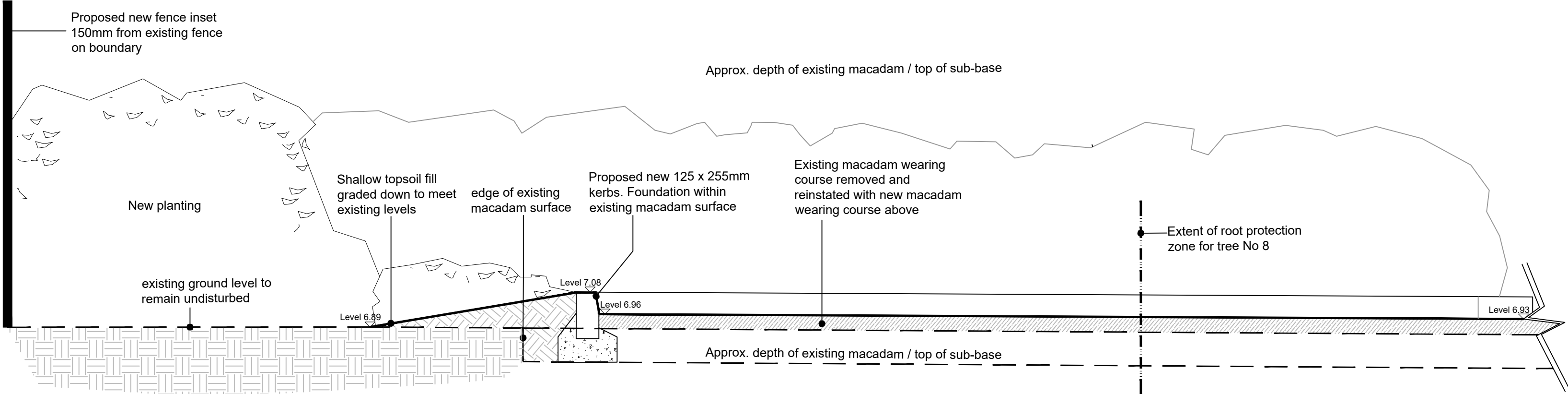


LOCATION PLAN

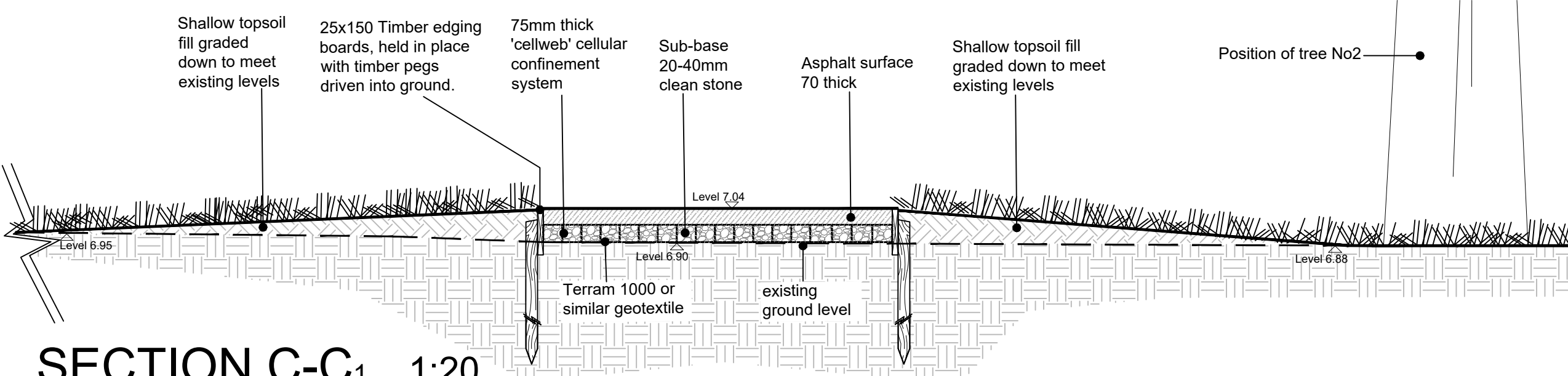
For further details of proposals shown refer to drawing SO-2267-03-LA-MCS551/Drg 01 Landscape Strategy



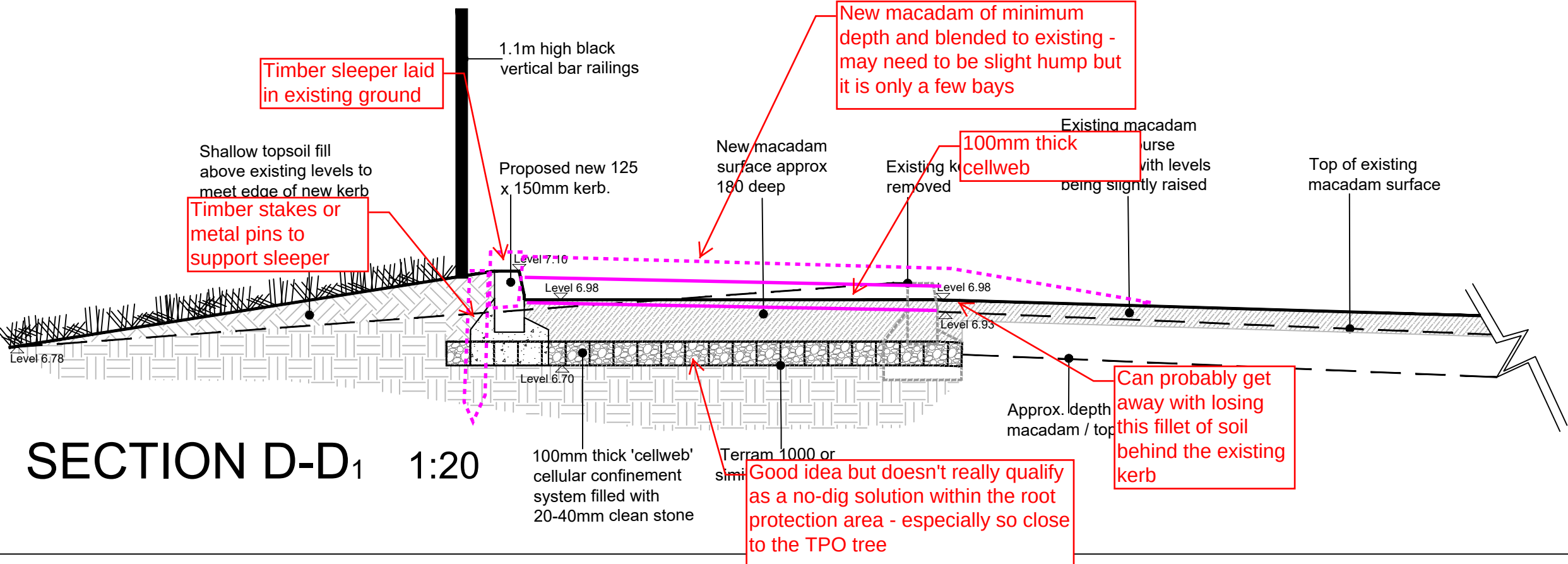
SECTION A-A₁ 1:20



SECTION B-B₁ 1:20



SECTION C-C₁ 1:20



SECTION D-D₁ 1:20



Client: McCarthy and Stone		
Project: Elm Grove, Hayling Island		
Title: Cross sections through proposed surfaces beneath trees and within root protection areas		
Drg by: RH	Date: 29.09.2016	Scale: as shown
Chkd by: ST	Drg No: SO-2267-03-LA-MCS551/Drg 02	Rev:
1.17 PAINTWORKS, BATH ROAD, BRISTOL BS4 3EH Tel: 0117 300 5330		

APPENDIX 4

List of contacts

LIST OF CONTACTS

Site Address:	117 Elm Grove, Hayling Island	
Site Manager: *		Tele No: *
Developer:	McCarthy & Stone	
Address:	South West House 1 Embankment Way Ringwood Hampshire BH24 1EU	
Contact Name: *		Tele No:
Arboricultural Consultant:	Jago Keen, MSc, Dip. Arb., MArborA, MICFor	
Address:	Redlands Farm, Redlands Lane, Ewshot Farnham, Surrey GU10 5AS	
Tele No:	01252 850096 (office)	07836 279935 (mobile)
Local Authority Tree Officer	Richard Hackwell	
Address:	Havant Borough Council Civic Centre Plaza, Civic Centre Road, Havant PO9 2AX	
Tele No:	02392 446586	

* To be inserted