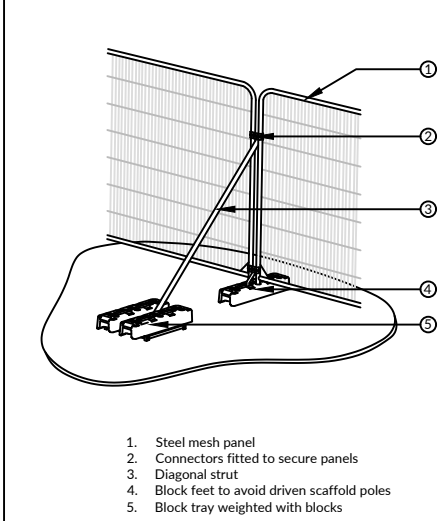


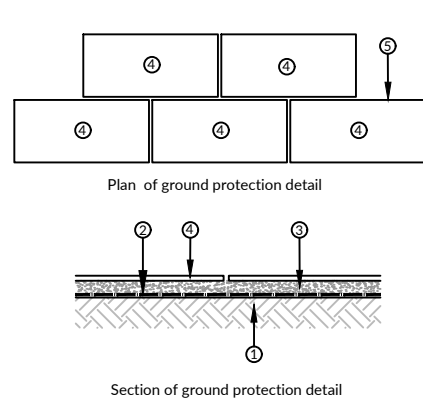
Trees at Langstone Lodge, 1 Langstone High Street, Havant																										
Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Category grading	Age class	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS3998	Root protection radius (m)	Root protection area sq.m					
			N	E	S	W	Single Stem	2-5 stems				More than 5 stems														
								Stem 1	Stem 2	Stem 3	Stem 4		Stem 5													
1	Holm oak	17	9	10	10	11		33	57	91	56	103				2	2N	M	A1	>40	Visually significant tree growing against road.		15.00	707		
2	Mimosa	9	3	3	3	3	32									1	1N	S	B1	>20	Growing close to boundary wall. Crown incised in the past.		3.84	46		
3	Sycamore	13	4	3	6	5	36									3	3S	E	C2	>10	Part of a row of similar sized trees bisecting garden. Of limited merit.		4.32	59		
4	Sycamore	15	5	3	2	5	35									4	4N	E	C2	>10	Compromising development of street tree.		4.20	55		
5	Sycamore	15	3	3	2	1	27									3	3N	E	U	<10	Part of a row of similar sized trees bisecting garden. Of limited merit.		3.24	33		
6	Sycamore	13	3	1	1	4		21	16							2	2S	S	E	<10	Extensive decay at base due to past stem loss.		3.17	32		
7	Sycamore	16	6	5	7	5	66									3	3S	E	C2	>10	Smaller tree suppressed by its much larger neighbour. Unsusited to long term.		7.92	197		
8	Ash	18	7	5	6	3	45									6	6W	E	U	<10	Forms part of a row of similar sized trees bisecting garden. Twin-stemmed from circa 1.5m above ground level. This tight union is highly susceptible to failure in future years. Prominent ribs of tissue are forming on either side confining the weakness.		5.40	92		
9	Holly	4	2	2	2	2	17	11	15	21						1.5	1.5S	S	C1	>10	Forms part of a row of trees bisecting garden. Crown development compromised by adjoining sycamore. Extensive area of deadwood on lower stem. Showing distinct signs of Ash Dieback.		3.94	49		
10	Sycamore	14	1	6	4	3	41									3	4W	E	C2	>10	Small tree at end of planting bed. Has been crown reduced in the past.		4.92	76		
11	Sycamore	15	6	4	2	5	48									3	3E	E	C2	>10	Forms part of a row of similar sized trees bisecting garden. Crown development compromised by adjoining tree.		5.76	104		
12	Sycamore	15	2	2	6	4	41									2	2S	E	C2	>10	Forms part of a row of similar sized trees bisecting garden. Pocket of decay at base. Crown development compromised by adjoining trees. Presence of this tree is compromising the development of the adjoining larger and better beech tree.		4.92	76		
13	Sycamore	15	2	4	5	1	36									2	2E	E	C2	>10	Forms part of a row of similar sized trees bisecting garden. Crown development compromised by adjoining tree. Presence of this tree is compromising the development of the adjoining larger and better beech tree.		4.32	59		
14	Sycamore	15	5	3	0	4	30									3	4N	E	C2	>10	Forms part of a row of similar sized trees bisecting garden. Crown development compromised by adjoining tree. Presence of this tree is compromising the development of the adjoining larger and better beech tree.		3.60	41		
15	Beech	17	8	7	7	7	133									3	3S	M	A1	>40	Visually significant tree of multi-stem form from circa 2-4m above ground level. Been pruned in the past. Decaying remnant of fungal fruit body at base. Fruit body too degraded to attach species.		15.00	707		
16	Sycamore	15	2	3	4	3	26									2	2W	E	C2	>10	Part of a group of 3 trees. Growing extremely close to boundary wall. Presence compromises development of street trees.		3.12	31		
17	Sycamore	15	3	1	3	4	31									2	S	E	C2	>10	Part of a group of 3 trees. Growing extremely close to boundary wall. Presence compromises development of street trees.		3.72	43		
18	Sycamore	15	6	6	5	4	38	40								2	2N	E	U	<10	Port fork formation at circa 1m above ground level. Showing signs of included bark and reaching a point where it is likely to fail. Unsusited to long term retention.		6.62	138		
19	Row of leyland cypress	2av		1av		10av										0	-	S	C2	>10	Row of conifers growing in lawn.		1.20	5		
20	Row of sycamore	18av		7av		40av										4	4S	E	C2	>10	Densely spaced line of trees along northern boundary. Would appear to have been self-set all have growing in competition with one and other. Most stems have an elevated form and are of little merit. Row contains occasional ash that is showing signs of Ash Dieback. The ash are unsusited to long term retention. Some dead stems branches and crossing branches that would be better removed to prevent their failure.	Remove dead stems, branches and crossing branches.	4.80	72		
21	Ash	19	6	6	9	5	71									7	7N	E	C2	>10	Larger tree within row. Some decay associated with past branch loss. Showing advance signs of Ash Dieback.		8.52	228		
22	Pair of ash	17av		7av		55av										2	5S	E	C2	>10	Pair of trees growing on northern boundary. Both showing signs of Ash Dieback.		6.60	137		
23	Row of leyland cypress	3av		1av		10av										0	-	S	C2	>10	Short section of conifer hedge along northern boundary.		1.20	5		
24	Row of sycamore and ash	16av		7av		60av										4	4S	E	C2	>10	Row of trees growing inside and outside the northern boundary. The sycamore has partially failed and leaning toward the east. All the ash are showing signs of advance Ash Dieback.		7.20	163		
25	Apple	4	2	1	2	2	41	22								2	2NW	E	C1	>10	Older fruit tree with extensive decay within main stem. Pruned on a regular basis.		5.58	98		
26	Sycamore	13	6	6	3	3	52									2	3E	E	U	<10	Extensive decay in main stems. Union between stems liable to failure. Unsusited to long term retention.		6.24	122		
27	Ash	14	4	7	7	7	28	34	29							3	5W	E	C2	>10	Combines with other trees of similar size on eastern boundary. Triple stemmed from circa 8m above ground level. Tight unions between those stems that are liable to failure in future years. Showing signs of Ash Dieback.		6.33	126		
28	Pair of sycamore	15av		7av		60av										2	2E	E	C2	>10	Pair of close grown stems on eastern boundary. Tight unions between stems on each tree.		7.20	163		
29	Ash	13	3	7	5	2	48									1	2E	E	U	<10	Lean acutely toward the northeast. Showing advance signs of ash dieback. Unsusited to long term retention.		5.76	104		
30	Apple	3	2	2	2	2		15	7	1.5	1.5N	S	C1	>10								4.76	71			
31	Paperbark birch	7	2	2	1	1	13															1.56	8			
32	Golden Forsythia	7	3	2	2	2	17															2.04	13			
33	Pear	3	2	2	2	2	13	14								1	1S	S	C1	>10	Small tree growing in lawn. Decay pockets in main stem.		2.29	17		
34	English oak	17	10	10	10	10	136									2	3SE	M	A1	>40	Visually significant tree growing in lawn. Past damage to lower stem and some decay now present. Some decay pockets associated with past branch loss. Some dead branches within crown.		15.00	707		
35	Ash	15	2	7	7	6	23	44	39							2	3W	E	C2	>10	Established broad-spreading tree. Showing advance signs of ash dieback. Some decay associated with past branch loss. Some broken branches within crown.	Remove broken branches	7.58	180		
36	Sycamore	16	7	10	6	10										45	6	3	3S	E	B2	>20	Reasonably well formed multi-stem tree. Crown development compromised by adjoining ash. Removal of the ash would favour the development of this sycamore.		13.23	550
37	Ash	18	7	7	6	7	75									7	7E	E	C2	>10	Stands to north of grove of sycamores. Showing signs of ash dieback. Unsusited to long term retention.		9.00	255		
38	Grove of sycamores	16av		6av		45av										3	3S	E	B2	>20	Group of closely spaced trees growing within lawn. All very slightly in their characteristic from clonal single stem to multi-stemmed. Some stems forming tight unions that are likely to failure in future years. Others are significantly defective. At some point in the future consideration should be given to selective removal to favour the better stems.		5.40	92		
39	Group of sycamore	17av		7av		45av										2	2N	E	C2	>10	Group of tightly spaced stems dividing lawn. All stems tightly packed so each ones development is compromised. Some decay pockets in stems associated with past branch loss. Selective thinning could remove the weaker specimens and retain the better ones however, there is no one tree of any particular merit worthy of retention.		5.40	92		
40	Beech	15	6	6	5	8	52									1	3SE	E	C1	>10	Established tree growing on boundary. Showing advance signs of ash dieback. Unsusited to long term retention.	Crown lift to 3m above proposed pathway.	6.24	122		
41	Sycamore	16	3	6	7	6	49									2	2SE	E	C1	>10	Crown development severely compromised by adjoining ash. Small undetected hollow indicating lack of vitality. Prominent crack in bark on southeast side.	Crown lift to 3m above proposed pathway.	5.88	109		
42	Sycamore	17	7	6	8	4	77									2	2S	E	U	<10	Sparsity of fine branch and foliage in upper crown. What foliage there is small and undersized. Extensive decay in lower stem. Hollow reveals fruit bodies of Gerdomeria decay fungi.	Crown lift to 3m above proposed pathway.	9.24	268		
43	Ash	14	7	6	7	7	44									2	2S	E	U	<10	Showing advance signs of ash dieback. Unsusited to long term retention.		5.28	88		
44	Ash	13	5	5	6	5	44									3	3S	E	C1	>10	Showing signs of Ash Dieback. Has been cut back on southern side to provide clearance in adjoining garden. Patch of dead bark and incipient decay at ground level on northern side. Unsusited to long term retention.		5.28	88		
45	Lawson cypress	9	2	2	2	2	29	27	26							1	1NW	E	C1	>10	Small conifer adjoining garden.		5.69	102		
46	Mimosa	4	3	3	3	3	13	16								1	1.2S	S	C1	>10	Small ornamental tree growing in driveway.	Remove.	2.47	19		

Figure 1: Example of a protective barrier



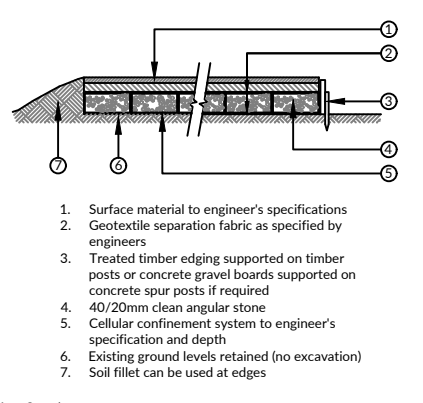
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Figure 2: Typical ground protection detail



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Figure 3: Typical detail of 'no-dig' surfacing



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Note:
All trees on site are protected by Conservation Area

NORTH



NOTES

- The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- Scale for planning purposes only.
- All dimensions to be checked on site.
- The copyright of this document resides with Keen Consultants unless assigned in writing by the company.
- Details shown on this drawing are devised with reference to BS5837:2012: Trees in relation to design, demolition and construction - Recommendations.
- Tree Preservation Order and Conservation Area based on Havant Borough Council portal map.
- Topographical survey based on Harris Surveys Ltd drawing number 21341.
- Where trees were not identified on the topographical survey they have been plotted by eye.
- Site Plan based on Thorp Design drawing number 10129.303.

KEY

- Existing site features
- Proposed extension
- Trees retained (Green-coloured line indicates extent of canopy)
- Tree for removal (Red-coloured dash line indicates extent of canopy)
- 2.0m high barrier as detail in Figure 1
- Area of ground protection as detail in Figure 2
- Minimum extent of no-dig construction. Actual deployment may be greater. As detail in Figure 3

KEY TO TREE SCHEDULE

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem Dia	All measurements conform to Annex C of BS 5837:2012
	Single stem - Stem diameter in centimetres measured at 1.5m above ground level
	Multi-stemmed tree with 2 to 5 stems - Diameter of each stem
	Multi-stemmed tree with more than 5 stems - Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	Suffix 'e' denotes an estimated dimension
Age Class	Suffix 'av' denotes an average dimension
	Age Class definitions:
	Y = Young S = Semi-mature E = Early mature
	M = Mature O = Over mature
	Summary of BS 5837:2012 categorisation:
Category grading and Estimated remaining Contribution (yrs)	1. Trees unsuitable for retention:
	U = Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years
	2. Trees to be considered for retention:
	A1, 2 or 3 = trees of high quality (substantial contribution >40 yrs)
	B1, 2 or 3 = trees of moderate quality (significant contribution >20 yrs)
	C1, 2 or 3 = trees of low quality (but adequate, ie >10 yrs or young trees - until new planting can be established)
Estimated remaining contribution	Note: Useful estimated remaining contribution of the tree or tree group based on figures stated in BS5837:2012
Condition	Brief description including physiological and structural defects
Tree Works	Works required to be undertaken to the trees to facilitate the construction of remediate a defect encountered during the survey
Root Protection Radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root Protection Area	Total area of minimum root protection area extrapolated from root protection radius

0 Preliminary issue 15.02.22

Rev Description Date

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1 LANGSTONE HIGH STREET, LANGSTONE

Title

TREE PROTECTION PLAN

Date Scale

FEB 2022 1:500@A2

Drawn by Checked by

ML JTK

Drawing Number

1760-KC-XX-YTREE-TPP01Rev0