

18 Crowsport, Hamble- Le- Rice

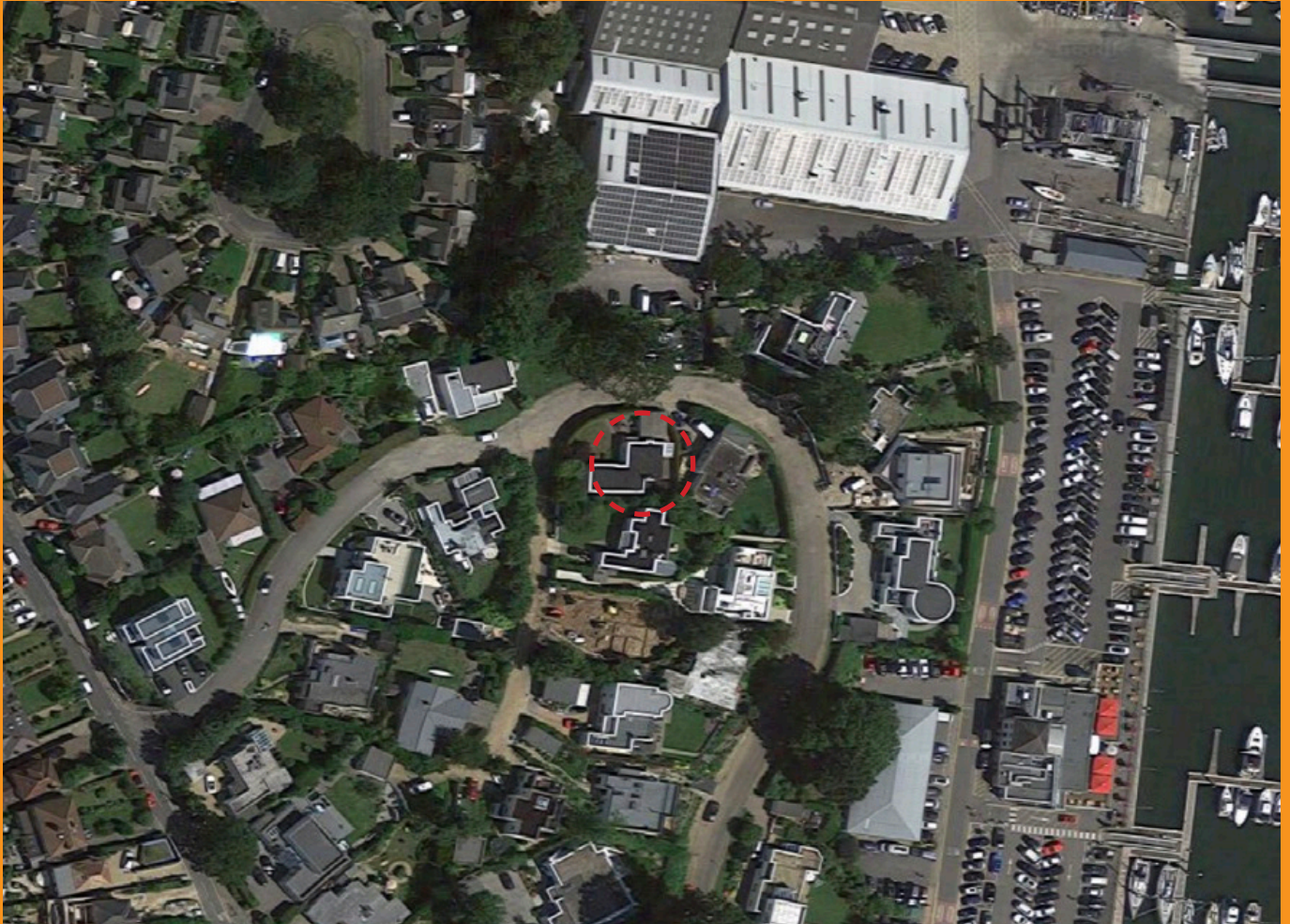
PLANNING - Design & Access Statement

Proposed Replacement Dwelling at 18 Crowsport

Our ref: 22014_Design & Access

September 2022

Revision A



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1.0 Introduction

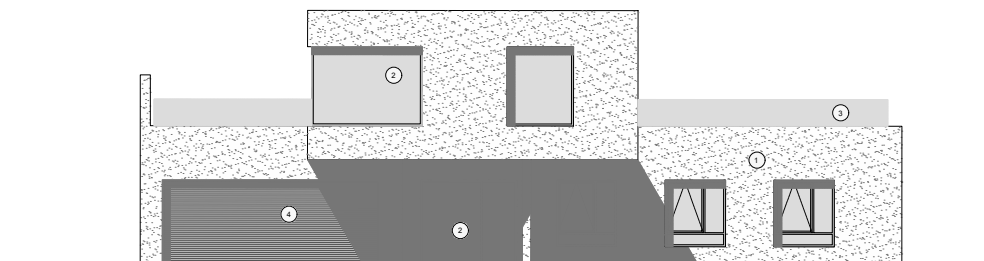
This report is to accompany the planning application information for the proposed replacement dwelling at 18 Crowsport, SO31 4HG. The existing dwelling is situated within an established residential area, within a settlement boundary and also one of the Hamble Conservation Areas. This Design and Access Statement is included as part of the planning application and has been prepared to support the proposal. It should be read in conjunction with the drawings prepared by dwell design as submitted to Eastleigh Borough Council.

The site is located within the Eastleigh Borough Council unitary authority. The existing building has residential use and is single storey.

Key Project Information

Site Location: 18 Crowsport
Hamble- Le- Rice
SO31 4HG

Architect / Agent: dwell design
Funtley Court
Funtley Hill
Fareham
PO16 7UY



2.0 Site Location & Context

2.1 Site Location & Context

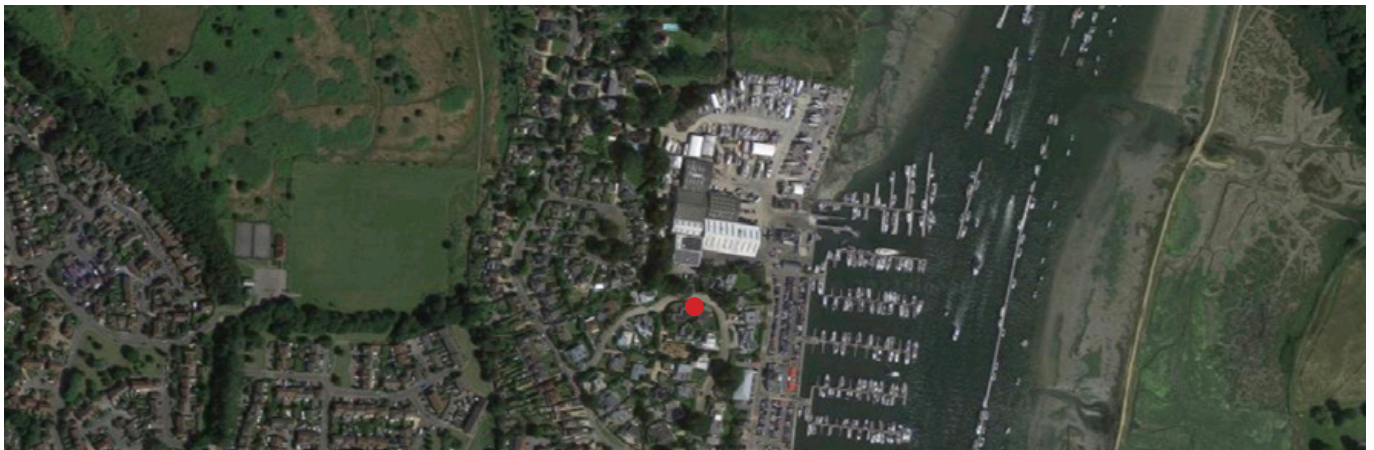
Hamble is a town situated on the south coast of England, in the county of Hampshire. There are good transport connections with the nearby M27 motorway. Crowsport is a historical development from the 1930s which was built specifically because of its close proximity to the River Hamble and uniquely it was created for sportspeople who used this watercourse.

2.2 Existing Site Description

Situated within Crowsport, the existing site consists of a detached early- 20th century dwelling with a detached garage. The building is single-storey in height, it is single skin construction with a render finish and a felt flat roof. The detached garage is a 'catalogue' type construction with a corrugated sheet roof and cellular construction walls. The house is set towards the back of the site.

The access into the property is from the north and the west with the nearest adjacent dwelling being to the south. The neighbouring dwelling is set up from number 18 and overlooks the site in a limited manner owing to the trees and planting to the southern boundary.

The total site ownership area is in the region on 503 sqm.



02 Aerial View of Site - Macro Level



03 Aerial View of Site - Micro Level

2.3 Existing Site Photographs



04 View north from Crowsport side road



05 View southeast from garden boundary



06 View south from garden boundary



06 View north from garden boundary

2.4 Photographs of surrounding area



07 View north from dwelling to Crowsport road



08 View east from dwelling to Crowsport road



09 View northeast from dwelling to side road

3.0 Planning Context

3.1 Planning Policy: Key National Policy

National planning policy devolves guidance on building within settlement policy boundaries to local authorities, which align with the principles of this document.

National Planning Policy Framework (2021, Department for Housing, Communities and Local Government)

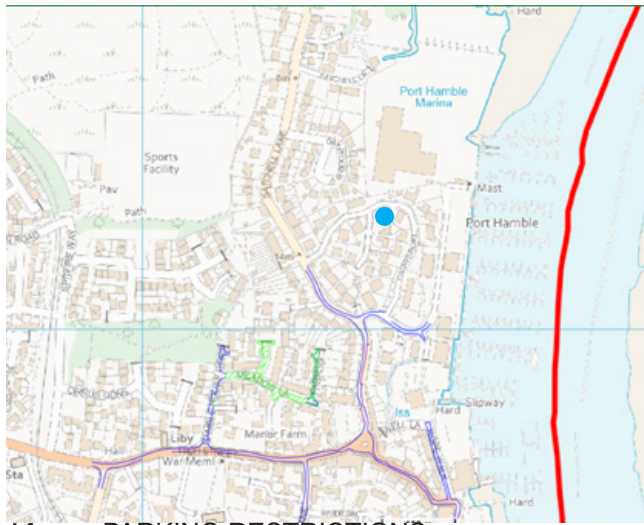
Three key objectives of the NPPF (National Planning Policy Framework) regarding achieving sustainable development and sustainable communities are:

- 1. an economic objective** - an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- 2. a social objective** –to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- 3. an environmental objective** – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

It is proposed that the essence of this design will deliver a high-quality replacement dwelling within the existing Crowsport development which aligns with current best practice and exceeds the requirements for the 2022 revision to Part L of the Approved Documents.

Other policy sections noted below have been used to help develop the proposal:

- Quality Places Supplementary Planning Document
- Hamble Conservation Area Local Development Framework 2011- 2026
- Residential Parking Standards Supplementary Planning Document
- Character Area Appraisals: Bursledon, Hamble- Le- Rice, Hound



14 PARKING RESTRICTIONS

Maps available from Eastleigh Borough Council website:

<https://emaps.eastleigh.gov.uk/WebMaps/Map.aspx?MapName=WebmapsNoLocalPlan>

3.3 Local Authority: Planning Policy Guidance

Local Policy:

The design has been reviewed against the following documents:

Eastleigh Borough Council Character Area Appraisals

Eastleigh Borough Local Plan 2016- 2036 (April 2022 revision)

Eastleigh Borough Development Management items:

DM1

DM23

DM24

DM25

DM26

DM27

DM31

DM32

Eastleigh Borough Council Quality Places SPD

Residential Parking Standards SPD

Space Standards

Whilst undertaking the design, National Space Standards have been used as a reference to ensure that the proposal meets all current standards.

The SPD documentation has been consulted to provide guidance and ensure that the proposal confirm to the requirements of housing design in Eastleigh Borough generally.

dwell design considers it best practice to adhere to these space standards.

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) ²			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

- 15 National Space Standards Table
 Available: www.designingbuildings.co.uk/wiki/Technical_housing_standards_-_nationally_described_space_standard

3.4 Flood Risk Assessment

A flood risk search was undertaken on 9th September 2022.

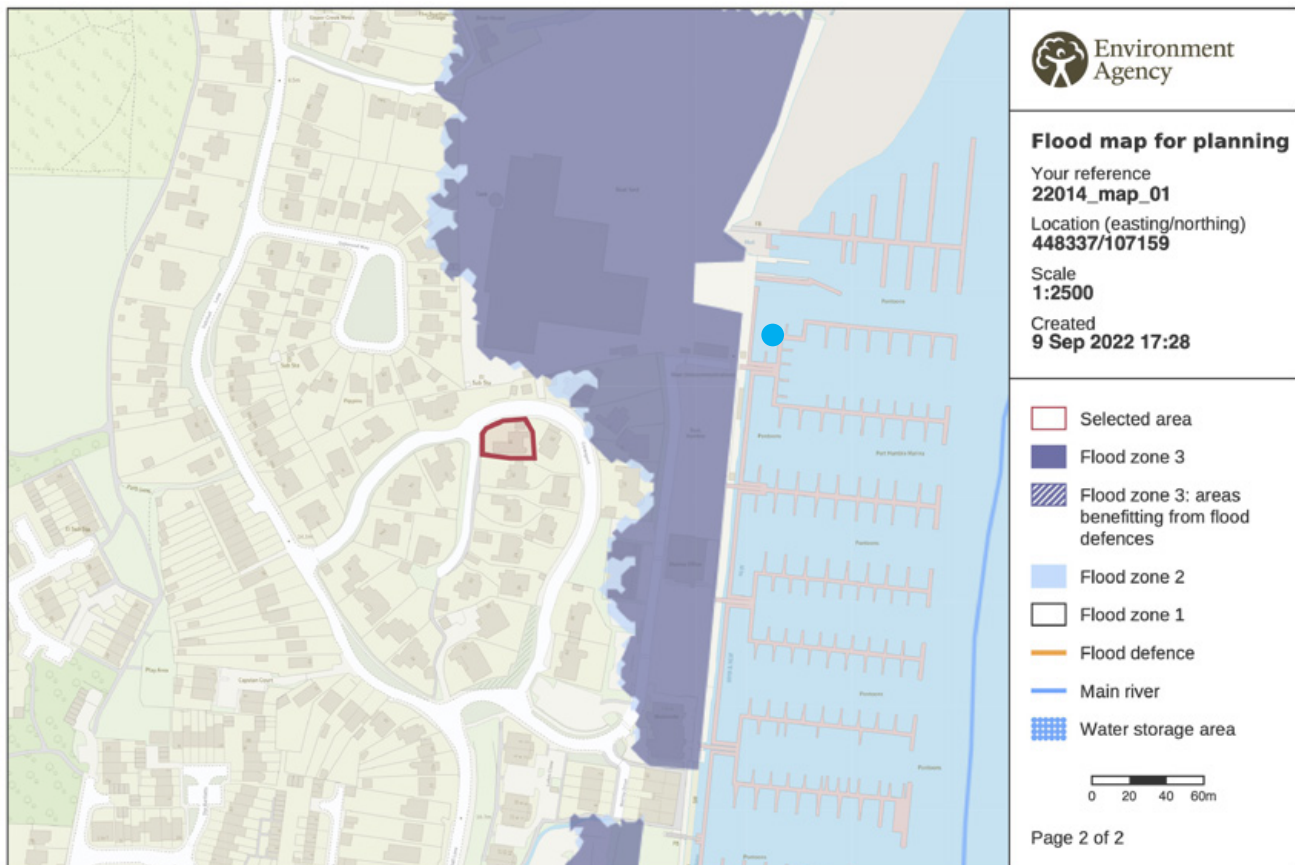
Searches conclude that the site lies in Flood Zone 1 so the risk of flooding is low.

The risk of surface water flooding (see next page) at this site is low.

THE FLOOD MAPS DEMONSTRATE THAT THE SITE LOCATION IS OUTSIDE FLOOD ZONE 2 OR 3 AND HAS A RISK OF LOW SURFACE WATER FLOORING.

Source: Environment Agency

16 Sea or River Flood Risk Map



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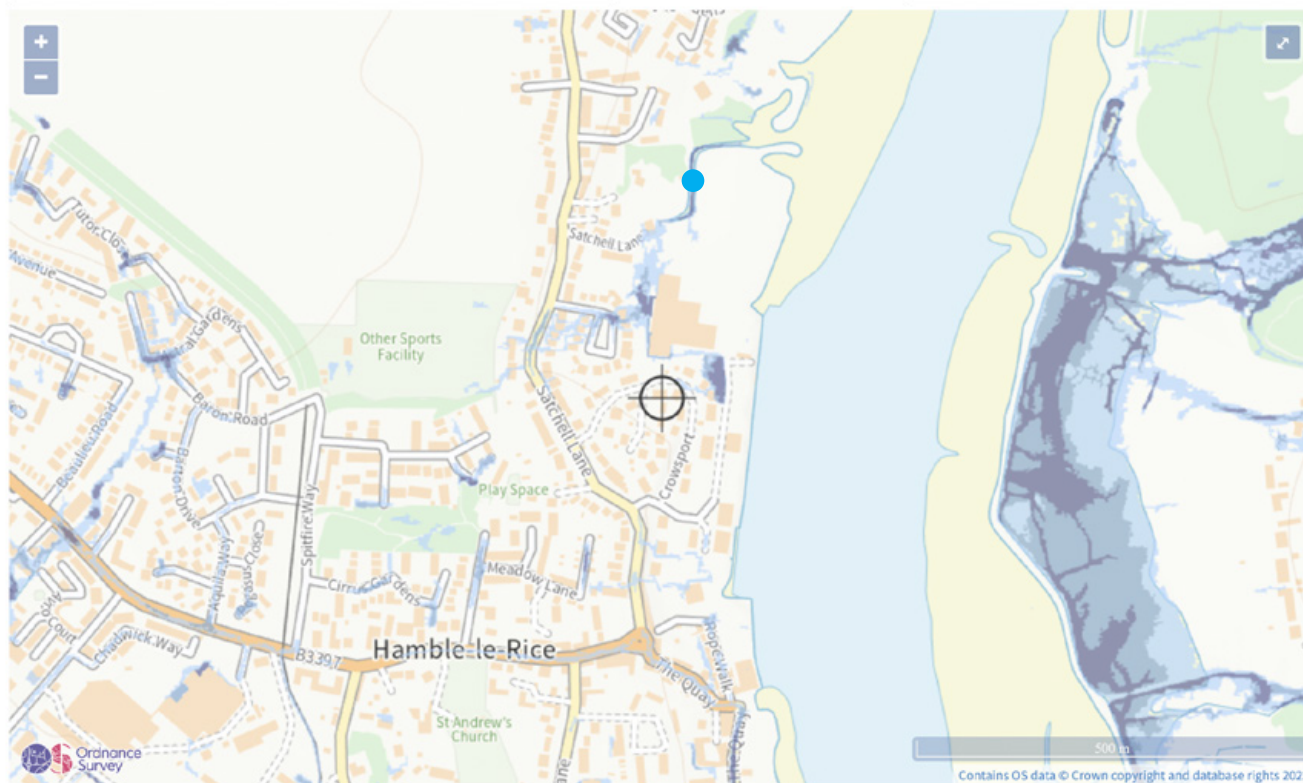
17 Surface Flood Risk Map

Flood risk

Extent of flooding

Location

Enter a place or postcode



Extent of flooding from surface water

High Medium Low Very low Location you selected

18 Surface Flood Risk Comments

Flood risk

Extent of flooding

Location

Enter a place or postcode

Flood risk from surface water



Very low risk means that this area has a chance of flooding of less than 0.1% **each year**. Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.

[Back to map](#)



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Extent of flooding from surface water

High Medium Low Very low Location you selected

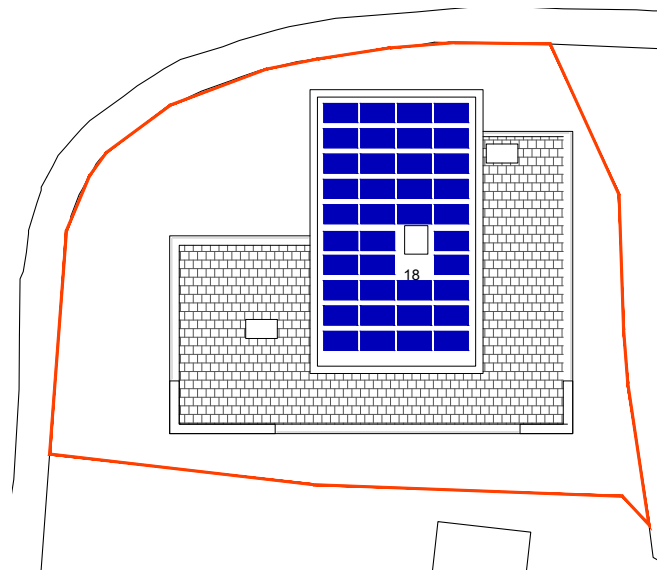
4.0 Proposed Design

4.1 Proposed Design

The brief is for the redevelopment of the site to accommodate a replacement dwelling in a style which matches the surrounding dwellings, but also allows for extensive installation of renewables and the provision of additional external space as the plot size is quite limited. The external space is to take advantage of limited views to the River Hamble. In addition to this, we are required to align with the requirements of the design guidance for the area noted in the previous section which includes any upper floor area to be 50% or under of the ground floor size.

Key Design Features:

- New-build residential accommodation which adheres to National Space Standards
- Materiality to match the existing aesthetic of Crowsport
- Design to have a flat roof behind a parapet
- Appearance generally to comply with the requirements of the Crowsport design guidance/ Character Area Appraisal



18 Proposed Site Layout Plan

4.2 Massing

The footprint is largely similar to the existing dwelling, the most prominent aspect is the projecting upper floor which will be largely screened from view by the existing hedging, which is to be retained (although some trees were ascertained as being necessary for removal) as the planting and hedging is one of the aspects picked up in the Character Area Appraisals as being typical to the locality.

The mass of the upper floor is set forward from the dwelling to the rear and set in from the neighbouring dwelling to the east. Additional to the built area and the opaque- glazed 1.7m high screening to the south and east elevations, there are areas of localised rendered masonry screening to assist with the prevention of overlooking and these areas also form seating spaces. The upper floor is also located in such a way as to maintain any river views from the south.

4.3 Use & Amount

The new dwelling is a replacement dwelling, so C3 use, as the existing. The amount/ areas are as follows:

Existing dwelling:

144sqm (not including garage)

Proposed dwelling:

Ground floor:

195sqm

Upper floor:

95sqm

As noted previously, the dwelling has been designed specifically to comply with the guidance in relation to massing that the upper floor should be no more than 50% the area of the ground floor.

4.4 Local Architectural Precedents

The local vicinity has provided a rich source of information, with the newer dwellings all sharing a similar architectural language which ties back with the original 1930s Internationalist Style/ Bauhaus/ Art Deco appearance of the dwellings set in the Crowsport development . The following key aspects were inspired by the surrounding context in relation to the scheme's original appearance.

01 Minimal Parapet Detailing

02 Glazed/ 'Invisible' Balustrades/ Open Upper Floor Areas

03 'Punched' Windows

04 Corner Windows



4.5 Materials

The materials options are minimal, because of the design precedent in the locality. We have kept to a very limited palette so the design sits comfortably with the surroundings.

Key Materials:

The following key materials were selected in relation to the scheme's finish.

01 White Render

- Provides a clean crisp finish

02 Dark, Slim- Framed Windows/ Glazing

- To provide the best sightlines possible and disappear when viewed from outside



4.6 Sustainability

This has been an important design criterion and ensures that the development will be future proofed in relation to increased government targets.

Key sustainable principles for the scheme include:

Re-use of land

- Utilisation of a brownfield site by virtue of the nature of the redevelopment.

Materials

- Efficient glazing will provide a low U-value.
- Design focused on either PassivHaus principles or very low energy consumption, or possible net positive energy build with a highly- insulated construction and minimal losses at junctions.

Energy Conservation and CO2 Emissions

- Insulation and thermal mass
- Low energy fittings
- MHVR system for ventilation
- Industry- best standard levels of airtightness, rather than aiming for base level Approved Document requirements.
- Natural daylight to all living spaces
- Battery storage
- 10kW+ PV install assumed
- Thermal storage for hot water
- Efficient heating system assuming minimal energy usage for this element and heating from solar gain and then heat retention.

Waste

- The dwelling is proposed as using either:
 - Timber frame or light- gauged metal framing for minimal construction waste and/ or
 - Insulated rendered single skin blockwork construction for high thermal mass.
- Dedicated recycling bin and bin storage provision.

4.7 Community Involvement

- The design proposal has been developed to minimise the impact on the neighbouring dwellings and the image below demonstrates the existing relationship between the dwellings adjacent to number 18 and shows how we've focused on minimising impact, before the homeowners/ applicants presented the scheme to the owners of the neighbouring dwellings. Please see the image on the next page in relation to the relative location of the adjacent dwellings.

As noted previously, the upper floor was located in such a way, from the initiation of the design process, so as to allow glimpses from the south of the view to the river and to prevent overshadowing to the east when the sun was at a lower point in the afternoon.

Additional to this, there has previously been a design shared where a masonry wall was shown full height for screening on the east elevation. At the request of the neighbour, this was revised to opaque glazing.



5.0 Landscape & Visual Assessment

5.1 Landscape Site Plan

The landscape proposals are minimal, as the site is modest. It's proposed that as much grassed area is to be retained as possible. All new surfaces will be permeable, rather than running to soakaway, and as noted previously the only trees to be removed will be done on the advise of an Arborist.

5.2 Foul Sewage & Utility Provision

Crowsport is connected to a mains sewer system. The proposal looks to utilise the existing sewer system.

6.0 Access and Parking

6.1 Access

The house is currently accessible from two dropped kerbs which are accessed from Crowsport private roads.

The site access is to remain as-is.

Access is a careful and integral part of the scheme to ensure that:

- A level external approach is achieved at no more than 1:21 slope.
- Any steps will comply with the requirements of Part K of the Approved Documents.
- Minimum door widths are 900mm clear providing accessibility for both ambulant, mobility-impaired and wheelchair users alike.
- Spacing and manoeuvrability have been carefully considered in line with the requirements for Part M (Volume 1: dwellings) of the Building Regulations.
- Where possible, open plan living space will be included to create space which is free from potential obstacles which may restrict those with mobility impairments.
- Where practically possible, level hard paved areas are provided.
- The parking spaces allow for 3600mm width in at least one instance in line with Lifetime Homes guidance.
- Car charging is included (connected to the PV cells and house battery/ batteries)

6.2 Cycle Provision and Parking

The proposal design allows for separate cycle parking within the garage area, sufficient for the number of bedrooms proposed.

6.3 Bin Storage

A dedicated and discrete bin store has been incorporated into the design. This is to ensure that the SPD document design guidance is integrated into the proposal for the site and the distances for bin movements ties with building regulations requirements.

The space allocated to the east of the dwelling will meet all recycling and refuse provision requirements.

7.0 Conclusion

The scheme offers a design which positively responds to its context, surrounding area and other requirements. The proposal utilises the key features of the site to create a considered design which works well with its setting and uses appropriate and contextual materials and a layout that follows the current layout, by virtue of the proposal to build largely over the existing footprint. Inspiration has been drawn from the vernacular to create a design that responds appropriate to the local context in both appearance and materiality.

The applicants are happy to engage in a positive dialogue with Eastleigh Borough Council. We would appreciate feedback from the planning team as soon as possible so any concerns or issues can be addressed immediately.

8.0 Appendix





1259.bjh.let

24th July 2022

Mr A Brown
Dwell Design Ltd.
Funtley Court
Funtley Hill
Fareham

Dear Anthony,
Arboricultural Assessment
for 18 Crowsport, Hamble

I am pleased to confirm that having attended site on Monday 18th July to carry out the Tree Survey works I am now in a position to offer you advice on the constraints which trees could place on the viability of the re-development of this site and the likelihood of success through the Planning process.

Tree Survey Schedule

- This acts as an inventory of the trees present on site at the time of my inspection which may have the potential to be a constraint on the redevelopment of the site.
- You will see that the trees are graded **A**, **B**, **C** and **U** in accordance with BS5837:2012 recommendations and according to their appearance and condition.
- I would ask that you refer to the tree survey notes included within the report for further guidance on definitions for each category grading.

Root Protection Schedule

- This defines the minimum root protection areas (RPA's) which will need to be applied and respected in order to comply with British Standard 5837:2012 Recommendations. You will see that where there is no perceived constraint to the rooting pattern the RPA is shown as a circle whose radius is measured from the centre of the trees trunk. Where there is a perceived constraint to rooting then BS5837 requires that the Arboricultural Consultant estimates the most likely pattern of rooting and also shows this as a polygon equivalent to the same area as the circle.
- Please note that some Local Authorities apply the British Standard 5837:2012 Recommendations '20% ruling' which means that if your development overlaps the RPA's by 20% or more of previously open/undeveloped ground then it can be used as a reason for refusal.

Tree Constraints Plan – BH 01/02

- This is a graphical/visual representation of the tree survey data that has been collected – primarily crown spreads and colour coded trunk centres to show a trees grading.
- Tree RPA's [blue dotted circles and blue dashed polygons] are shown as well on the same plan.
- Any development that is shown to be taking place within a trees RPA requires that we provide the Planners with a detailed Arboricultural Method Statement covering the mitigation measures which will be applied to protect tree roots and/or minimise damage.

The Granary – White Chimney Row – Westbourne PO10 8RS

mobile: 07875 520881 email: bernieharverson@gmail.com

Legal Constraints

- **Conservation Area** – if this site is within a Conservation Area then all trees are protected and would require a 6 week written notification to be submitted to the local planning authority for any proposed tree removal or tree surgery work. Alternatively this could be submitted as part of a planning application for the site.
- **Tree Preservation Order** – if this site is covered by a Tree Preservation Order then those trees that are protected cannot be worked on until a TPO Application has been submitted to the local planning department and permission received in writing for same. Alternatively this could be submitted as part of a planning application for the site.

Tree Stock Overview & Design Guidance

- The tree survey covers 7 individual trees; 2 Groups and 1 Hedge.
- In order to make a more detailed comparison I would need you to first send me the new layout at the same 1:200 scale as the Tree Constraints Plan please? However, I submit the following initial advice for your guidance at this stage.
- **T1 Purple Plum** is a U graded tree that has a short safe life expectancy because of the fungal decay at the base – this should therefore be shown to be removed for safety reasons as part of the redevelopment proposals.
- The two key trees are **T2 Leylandii** and **T3 Birch** – of these undoubtedly the better tree is the Birch. The conifer is poor but may be protected by CA or TPO cover so this needs to be determined. **IF** there is no CA or TPO cover and no Covenant restriction then I would suggest removing the conifer now and retaining just the Birch. We will however need to use a porous No Dig replacement for the driveway within this trees RPA, so if you wish to avoid this complication then you may wish to consider removing this tree as well!
- **T4 through to Grp 2** – all are behind a retaining wall and thus their root systems will not impinge on the redevelopment potential of the site as shown.

I trust that this initial guidance is of assistance to you?

Yours sincerely,

Bernie Harverson



ARBORICULTURAL CONSTRAINTS ASSESSMENT

18 Crowsport, Hamble

- prepared on behalf of Mr & Mrs Wilson -

The Granary, White Chimney Row, Westbourne PO10 8RS

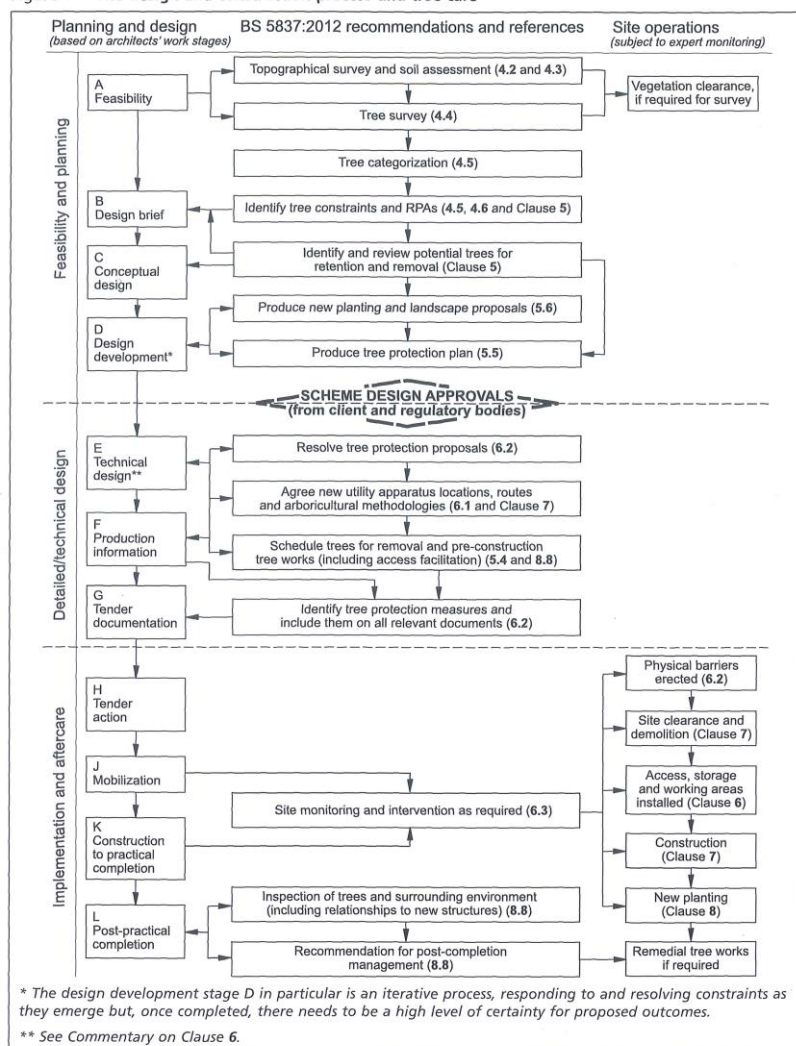
mob: 07875 520881 - email: bernieharverson@gmail.com



Tree Survey Schedule

+ T/S Notes & BS5837 Flow Diagram

Figure 1 The design and construction process and tree care



TREE SURVEY NOTES

These Tree Survey Notes have been prepared in accordance with the recommendations of **British Standard 5837:2012** and they define the criteria for pre –development tree surveys.

- Each tree/group/hedge/shelterbelt/woodland has been allocated a unique number (**No.**), where specifically requested and appropriate fees are agreed small durable numbered metal tags can be applied to each tree/group surveyed.
- The tree species (**Species**) is provided in both English and Latin name formats.
- Height assessments (**Ht**) are estimated in metres. This will be adequate for the majority of cases, but where accurate heights become a critical issue it may be necessary to return to site, as a separately commissioned exercise, to collect accurate measurements with the aid of optical instruments.
- Trunk/stem diameters (**Diam**) are measured in millimetres at 1.5m above ground level – where the tree is inaccessible the diameter is estimated as indicated by suffix #
- Radial crown spread assessments (**Brch Sprd**) are estimated in metres from the centre of the trunk/group to each of the four primary points of the compass (**N**-north; **E**-east; **S**-south and **W**-west) in order to achieve a representation of the crown shape which will be shown on the accompanying tree survey plan. These provide a general guide as to the main bulk outline of a tree/groups crown but are not tape measured dimensions. These would only be undertaken as part of a separately commissioned exercise, where precise dimensions are critical to the project at hand.
- Both the canopy ground clearance (**GC**) and the height & compass direction of the lowest major branch (**LMB**) are estimated and shown in metres
- An assessment of a tree/groups 'life stage' (**LS**) is made in terms of its site specific maturity as part of the surrounding landscape, taking into account its overall shape and form in that setting, and is recorded thus :-
Y - Young tree/group; **SM** - Semi-Mature tree/group; **EM** - Early-Mature tree/group;
M – Mature tree/group; **OM** - Over – mature tree/group
- Data on the structural condition (**Condition Comments**) of the tree/group is provided to give its visual appearance and any significant health and safety issues.
- Details of any recommended tree works required at the time of survey is given under the heading – **Preliminary Management Recommendations**.
- An estimate of a tree/groups remaining contribution in years (**RC**) is made and is recorded thus :-
0-5; 5-10; 10-20; 20-30; 30-40 or **>40** years.

- The category grading (**Cat**) for each tree/group is assessed according to the criteria provided within **BS5837:2012**. The assessment is made of the tree/group in its current condition and within the environment encountered bearing in mind its suitability for retention as part of any future proposed

development; although the exact layout detail of any specific scheme will not be known at the time of surveying. The trees have been classified into one of four categories and colour coded as BS5837 recommends :- **U** (dark red); **A** (light green); **B** (mid-blue) and **C** (grey). Please note that suffixed numerical sub-categories are also applied for guidance only and do not carry any cumulative or increased value for the tree/group. This colour coding scheme will be applied to all drawings provided.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Colour on plan
Trees unsuitable for retention				
Category 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.	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (i.e. where, for whatever reason the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve.			Dark Red
Trees to be considered for retention				
	Criteria – Subcategories			
	1	2	3	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and /or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Light Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in the category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Mid Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Grey

TREE SURVEY SCHEDULE

Client : Mr & Mrs Wilson

Site Location : 18 Crowsport, Hamble

Surveyor : Bernie Harverson

Date Surveyed : 18th July 2022

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Comments	Preliminary Management Recommendations	Rem Contr yrs	Cat
Hedge 1	Golden Leyland Cypress <i>Cupressocyparis leylandii</i> 'Castlewellan'	3	Av 80	N 0.6 E – S 0.4 W-	0	Y	Small diameter deadwood throughout-tip dieback and has patches of dieback on inner face of hedge-most likely due to repeated heavy pruning and stress and/or frost damage.	No works required at this time	10-20	C2
1	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	5	320	N 3.5 E 3.5 S 3.5 W3.5	1.5	EM	Roots exposed and mower damaged-fungal bracket attached to trunk at ground level just above the graft union -bifurcated at 2m-tight fork with included bark-small diameter deadwood - dieback throughout-previously topped out at 3m-open centre to crown.	Consider removal for safety reasons – in view of basal decay	<10	U
2	Leyland Cypress <i>Cupressocyparis leylandii</i> 'Castlewellan'	6.5	380	N 3.5 E 3.5 S 3.5 W3.5	1	SM	Small diameter deadwood throughout-patches of dieback-previously topped out at 4.5m-open centre to crown and a flat top as a result of the heavy lopping-poor quality tree overall.	No works required at this time	10-20	C1
3	Silver Birch <i>Betula pendula</i>	8	240	N 4 E 4 S 4 W4	2	SM	Ivy smothering throughout-growing out of a raised container bed some 0.5m above the main ground levels throughout the plot.	Remove all of the Ivy	20-30	B1
4	Bay Laurel <i>Laurus nobilis</i>	5	120 90 75 50	N 2 E 2 S 1.5 W1	1	Y	Multi stemmed at ground level- growing out of a raised container bed some 0.5m above the main ground levels throughout the plot- previously topped out at 2.5m-suppressed by the Birch.	No works required at this time	10-20	C1
5	Holly <i>Ilex aquifolium</i>	4	90 #	N 0.5 E 0.5 S 0.5 W0.5	1.5	Y	Unable to access as tree is off site-growing in the adjacent garden behind a retaining wall and some 0.75m above the ground levels within the plot-low crown density and dieback noted-poor quality tree overall.	Not under the clients control	10-20	C1
6	Holly <i>Ilex aquifolium</i>	4	75 #	N 0.5 E 0.5 S 0.5 W0.5	0	Y	Unable to access as tree is off site-growing in the adjacent garden behind a retaining wall and some 0.75m above the ground levels within the plot-low crown density and dieback noted-poor quality tree overall.	Not under the clients control	10-20	C1
7	Holly <i>Ilex aquifolium</i>	5	120 #	N 1 E 1 S 1 W1	1	Y	Unable to access as tree is off site-growing in the adjacent garden behind a retaining wall and some 0.75m above the ground levels within the plot-low crown density and dieback noted-poor quality tree overall.	Not under the clients control	10-20	C1

Group 1	Bay Laurel <i>Laurus nobilis</i> x 2 of	4	50 x 10 #	N 2.5 E 3 S 2 W4	0.5	SM	Unable to access as trees are off site-growing in the adjacent garden behind a retaining wall and some 0.75m above the ground levels within the plot-multi stemmed at ground level-ivy smothering throughout-previously topped out at 3m-poor quality tree overall.	Not under the clients control	10-20	C2
Group 2	Golden Leyland Cypress <i>(Cupressocyparis)</i> x 3 of Dogwood <i>(Cornus)</i> x 1 of	4 to 8	100 to 250 #	N 2 E 2 S 1.5 W1	0.5	SM to EM	Unable to access as trees are off site-growing in the adjacent garden behind a retaining wall and some 0.75m above the ground levels within the plot-multi stemmed at ground level- linear boundary screen planting- crown shapes dictated by group pressures.	Not under the clients control	10-20	C2



Root Protection Area Schedule

+ BS5837 RPA Calculation Methodology

4.6 Root Protection Area (RPA)

4.6.1 For single stem trees, the RPA should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter measured at a height of 1.5m from ground level. For trees with more than one stem, one of two calculation methods should be used as illustrated and explained below.

a) For trees with 2 to 5 stems, the combined stem diameter should be calculated as follows:

$$\sqrt{(\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 \dots \text{up to } + (\text{stem diameter } 5)^2}$$

In words - measure the diameter of each of the stems – square each one and add it to the next - finally assess the square root of the combined total to derive one measurement which you look up in Table D.1 to find the radial RPA and area measurement equivalent to the area of a circle with that radius - in case you have to apply a polygon protection zone [see at 4.6.2 below].

The calculated RPA for each tree is to be capped at 707 m²

b) For trees with more than five stems the combined stem diameter should be calculated as follows:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{the total number of stems}}$$

In words – measure all of the stem diameters – add them all together and divide by the total number of stems (= mean stem diameter) – then square this figure – then multiply that figure by the total number of stems and then finally assess the square root of that figure to derive one measurement which you look up in Table D.1 to find the radial RPA and area measurement equivalent to the area of a circle with that radius - in case you have to apply a polygon protection zone [see at 4.6.2 below].

4.6.2 The RPA for each tree should initially be plotted as a circle centred on the accurate position of the trunk of the tree. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area to the circle should be plotted instead of the circle. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.

4.6.3 Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:

- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);
- b) topography and drainage;
- c) the soil type and structure;
- d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

Root Protection Area – Table D1

The RPA's given in Table D.1 should be used for single stem trees and the equivalent resultant combined stem diameter for multi-stemmed trees

Stem Diam. mm	Circle Rad. m	Area m ²	Stem Diam. mm	Circle Rad. m	Area m ²	Stem Diam. mm	Circle Rad. m	Area m ²	Stem Diam. mm	Circle Rad. m	Area m ²	Stem Diam. mm	Circle Rad. m	Area m ²
75	0.9	3	310	3.7	43	545	6.5	134	780	9.4	275	1015	12.2	466
80	1.0	3	315	3.8	45	550	6.6	137	785	9.4	279	1020	12.2	471
85	1.0	3	320	3.8	46	555	6.7	139	790	9.5	282	1025	12.3	475
90	1.1	4	325	3.9	48	560	6.7	142	795	9.5	286	1030	12.4	480
95	1.1	4	330	4.0	49	565	6.8	144	800	9.6	290	1035	12.4	485
100	1.2	5	335	4.0	51	570	6.8	147	805	9.7	293	1040	12.5	490
105	1.3	5	340	4.1	52	575	6.9	150	810	9.7	297	1045	12.5	494
110	1.3	5	345	4.1	54	580	7.0	152	815	9.8	301	1050	12.6	499
115	1.4	6	350	4.2	55	585	7.0	155	820	9.8	304	1055	12.7	504
120	1.4	7	355	4.3	57	590	7.1	157	825	9.9	308	1060	12.7	508
125	1.5	7	360	4.3	59	595	7.1	160	830	10.0	312	1065	12.8	513
130	1.6	8	365	4.4	60	600	7.2	163	835	10.0	315	1070	12.8	518
135	1.6	8	370	4.4	62	605	7.3	166	840	10.1	319	1075	12.9	523
140	1.7	9	375	4.5	64	610	7.3	168	845	10.1	323	1080	13.0	528
145	1.7	10	380	4.6	65	615	7.4	171	850	10.2	327	1085	13.0	533
150	1.8	10	385	4.6	67	620	7.4	174	855	10.3	331	1090	13.1	538
155	1.9	11	390	4.7	69	625	7.5	177	860	10.3	335	1095	13.1	542
160	1.9	12	395	4.7	71	630	7.6	180	865	10.4	339	1100	13.2	547
165	2.0	12	400	4.8	72	635	7.6	182	870	10.4	342	1105	13.3	552
170	2.0	13	405	4.9	74	640	7.7	185	875	10.5	346	1110	13.3	557
175	2.1	14	410	4.9	76	645	7.7	188	880	10.6	350	1115	13.4	562
180	2.2	15	415	5.0	78	650	7.8	191	885	10.6	354	1120	13.4	568
185	2.2	16	420	5.0	80	655	7.9	194	890	10.7	358	1125	13.5	573
190	2.3	16	425	5.1	82	660	7.9	197	895	10.7	362	1130	13.6	578
195	2.3	17	430	5.2	84	665	8.0	200	900	10.8	366	1135	13.6	583
200	2.4	18	435	5.2	86	670	8.0	203	905	10.9	371	1140	13.7	588
205	2.5	19	440	5.3	88	675	8.1	206	910	10.9	375	1145	13.7	593
210	2.5	20	445	5.3	90	680	8.2	209	915	11.0	379	1150	13.8	598
215	2.6	21	450	5.4	92	685	8.2	212	920	11.0	383	1155	13.9	604
220	2.6	22	455	5.5	94	690	8.3	215	925	11.1	387	1160	13.9	609
225	2.7	23	460	5.5	96	695	8.3	219	930	11.2	391	1165	14.0	614
230	2.8	24	465	5.6	98	700	8.4	222	935	11.2	396	1170	14.0	619
235	2.8	25	470	5.6	100	705	8.5	225	940	11.3	400	1175	14.1	625
240	2.9	26	475	5.7	102	710	8.5	228	945	11.3	404	1180	14.2	630
245	2.9	27	480	5.8	104	715	8.6	231	950	11.4	408	1185	14.2	635
250	3.0	28	485	5.8	106	720	8.6	235	955	11.5	413	1190	14.3	641
255	3.1	29	490	5.9	109	725	8.7	238	960	11.5	417	1195	14.3	646
260	3.1	31	495	5.9	111	730	8.8	241	965	11.6	421	1200	14.4	652
265	3.2	32	500	6.0	113	735	8.8	244	970	11.6	426	1205	14.5	657
270	3.2	33	505	6.1	115	740	8.9	248	975	11.7	430	1210	14.5	662
275	3.3	34	510	6.1	118	745	9.0	251	980	11.8	435	1215	14.6	668
280	3.4	35	515	6.2	120	750	9.0	255	985	11.8	439	1220	14.6	673
285	3.4	37	520	6.2	122	755	9.1	258	990	11.9	443	1225	14.7	679
290	3.5	38	525	6.3	125	760	9.1	261	995	11.9	448	1230	14.8	685
295	3.5	39	530	6.4	127	765	9.2	265	1000	12.0	452	1235	14.8	690
300	3.6	41	535	6.4	130	770	9.2	268	1005	12.1	457	1240	14.9	696
305	3.7	42	540	6.5	132	775	9.3	272	1010	12.1	462	1245	14.9	701
												1250	15.0	707

ROOT PROTECTION AREA SCHEDULE

Client : **Mr & Mrs Wilson**

Site Location : **18 Crowsport, Hamble**

Tree No.	Tree Species	Cat	Diam mm	BS5837:2012 Table1 Radial Protection Zone m	BS5837:2012 Table D1 Polygon Area m ²
Hedge 1	Golden Leyland Cypress <i>Cupressocyparis leylandii</i> 'Castlewellan'	C2	Av 80	1.0	3
1	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	U	320	3.8	46
2	Leyland Cypress <i>Cupressocyparis leylandii</i> 'Castlewellan'	C1	380	4.6	65
3	Silver Birch <i>Betula pendula</i>	B1	240	2.9	26
4	Bay Laurel <i>Laurus nobilis</i>	C1	120 90 75 & 50	2.1	14
5	Holly <i>Ilex aquifolium</i>	C1	90 #	1.1	4
6	Holly <i>Ilex aquifolium</i>	C1	75 #	0.9	3
7	Holly <i>Ilex aquifolium</i>	C1	120 #	1.4	7
Group 1	Bay Laurel <i>Laurus nobilis</i> x 2 of	C2	50 x 10 #	1.9	11
Group 2	Golden Leyland Cypress (<i>Cupressocyparis</i>) x 3 of Dogwood (<i>Cornus</i>) x 1 of	C2	100 to 250 #	1.2 3.0	5 28



Tree Constraints Plan



Qualifications & Experience



QUALIFICATIONS AND EXPERIENCE

- My name is **Bernie Harverson** and I am a self employed independent arboricultural consultant in private practice.
- I take instructions primarily in the South of England but also on occasions work nationwide and abroad and have an office at : –

The Granary, White Chimney Row, Westbourne PO10 8RS

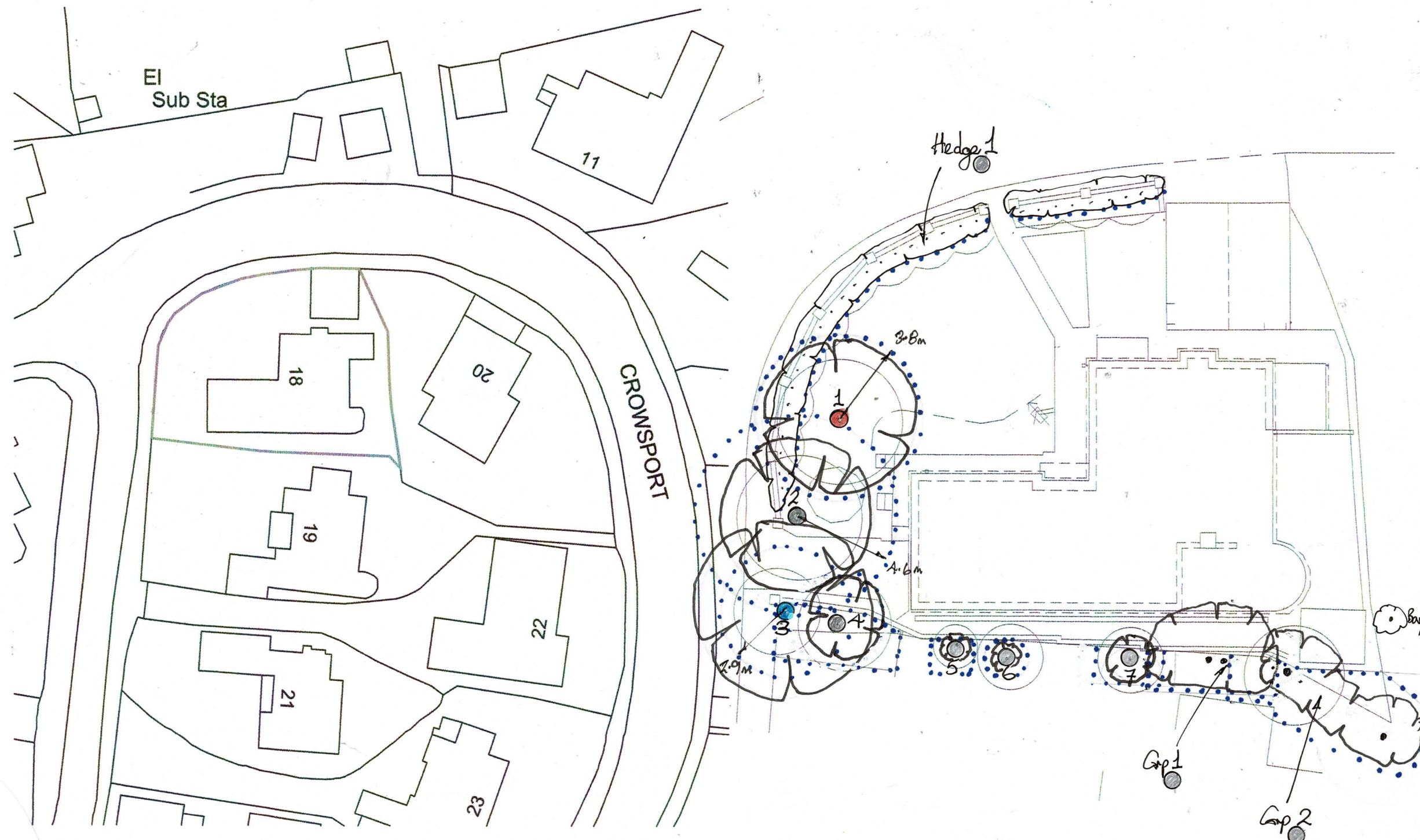
- I hold the following arboricultural qualification – **National Diploma in Arboriculture** (Royal Forestry Society – 1976)
- I have **fifty-one (51)** years of practical and managerial experience in the arboricultural industry including periods in both the public and private sectors.
- My Local Government sector experience comprises one year as a tree surgeon with Brighton Parks and nine years spent in Arboricultural Officer posts with both Westminster City Council and Portsmouth City Council
- My past practical experience in the private sector includes two years at Tilhill Forest Nursery and over ten years for various companies as a Climbing Arborist/Tree Surgeon.
- Managerial work in the private sector includes two years as manager of Beechings Tree Surgeons and twelve years with the CBA Tree Consultancy Practice as Managing Director and Senior Arboricultural Consultant.
- As an independent self employed Arboricultural Consultant [since 2005] I now provide a comprehensive range of services including :-
tree surveys, appraisals, assessments and inspections with particular reference to planning and development and tree safety audits with a service offered as a climber to undertake full climbing inspections to better understand the condition of a given tree before prescribing a management strategy.
- I also undertake litigation work appearing as an Expert Witness in Court Actions and at Planning Appeals, Hearings and Local Inquiries.

The Granary, White Chimney Row, Westbourne PO10 8RS

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project	18 Crowsport Hamble
client	Mr & Mrs Wilson
title	Tree Constraints Plan
dwg	BJH 01/02
scale	1:200 @ A3
date	July 2022
job	1259
drawn by	bjh
The Granary – White Chimney Row – Westbourne PO10 8RS 07875 520881 bernieharverson@gmail.com	



- Key:**
-  = Trees of A (high) grading
 -  = Trees of B (moderate) grading
 -  = Trees of C (low) grading
 -  = Trees of U (fell) grading
 -  = Root Protection Area in accordance with BS5837:2012

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ence number 100022432

1 existing site plan
scale 1:1250 @ A3

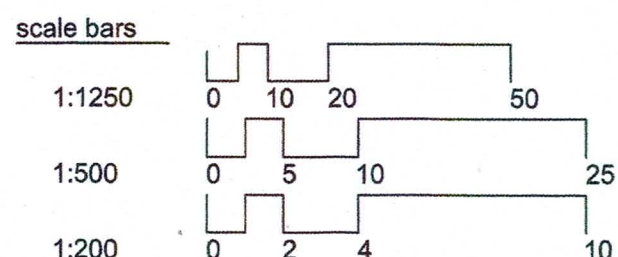
2 existing site plan
scale 1:500 @ A3

3 existing site layout plan
scale 1:200 @ A3

work in progress

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revisions
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scale
1:1250/ 1:500/
1:200 @ A3
date
march 22

job name
18 crowsport

job number
22014

drawing number
(sk)01

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ltd

drawing name
existing site plans

status
sketch

revision
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