

# **Design Statement**

**Site North West of The Croft,  
Trevaunance Road  
St Agnes, TR5 0NB**

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Design & Planning Statement for Detailed Designs for a  
new dwelling on land North east of 'The Croft' in St Agnes.

January

Planning in Principle granted in application PA19/06247

**2021**

Revision A

**Planning application for Detailed design of  
new dwelling on land North West of The  
Croft, St Agnes TR5 0NB**

Revision Date: 06<sup>th</sup> January 2021

## **Planning statement**

### **Introduction**

This design and Access statement has been prepared to outline the decisions taken by Penk Architecture to create a design for a new dwelling the site of a disused tennis court north west of the croft in St Agnes. This includes considering the site and its particulars, comments from the planning history and the policies which inform design within the local context of St Agnes.

The proposal seeks to create a new home for a family returning to St Agnes who desire to make their permanent residence in the area and who have close family living directly adjacent to the specified site. This is not a speculative development but one which seeks to provide for future further generations of the family to make their home in St Agnes.

Working within the constraints of the site and following the feedback received from previous and neighbouring applications we feel that we have created a considered and highly sustainable design for an exceptional dwelling.

The National Planning Policy framework, Cornwall Local Plan, Cornwall Design Guide and the St Agnes Parish Neighbourhood Development Plan have all been consulted to inform this proposal and we feel that this development is in accordance with the policies and guidance described in these documents.

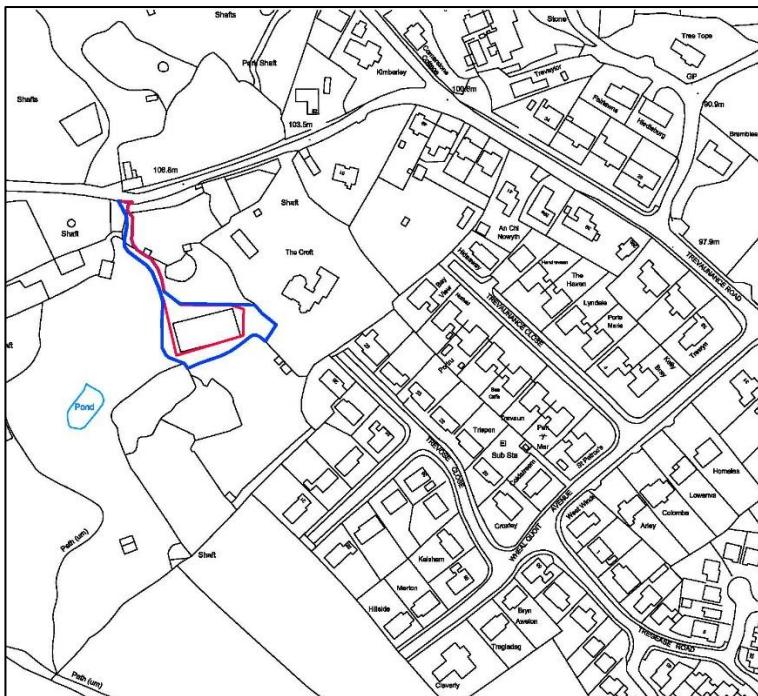
### **Overview**

The principle for creating a dwelling on the site has been established with the approved appeal decision for Planning in principle REF PA19/06247 that was obtained on the 26<sup>th</sup> of March 2020. As a result, this document will focus on the more detailed design of the new house and how it is informed by the design guidance that serves the area along with advice, which has been offered, from the previous application and subsequent appeal.

### **Site and location:**

The site lies within the area previously occupied by a disused tennis court in the curtilage of The Croft, the original property located to the south of Trevaunance Road. The tennis court site has been disused for a number of years due to subsidence which has been investigated and remedied as part of the enabling works for the site following extensive mining and land contamination surveys which are attached to this application.

To the north of the proposed site are 2 large solar arrays on top of storage sheds which will remain on the site. An existing access track links the site to Trevaunance road and the tennis court site is bordered by mature Cornish hedges on 2 sides and stone walling and vegetation to the east.



↑The site Highlighted on the edge of St Agnes



↑ View of the Tennis court with Solar Array in the background this area has now be levelled during mine capping works



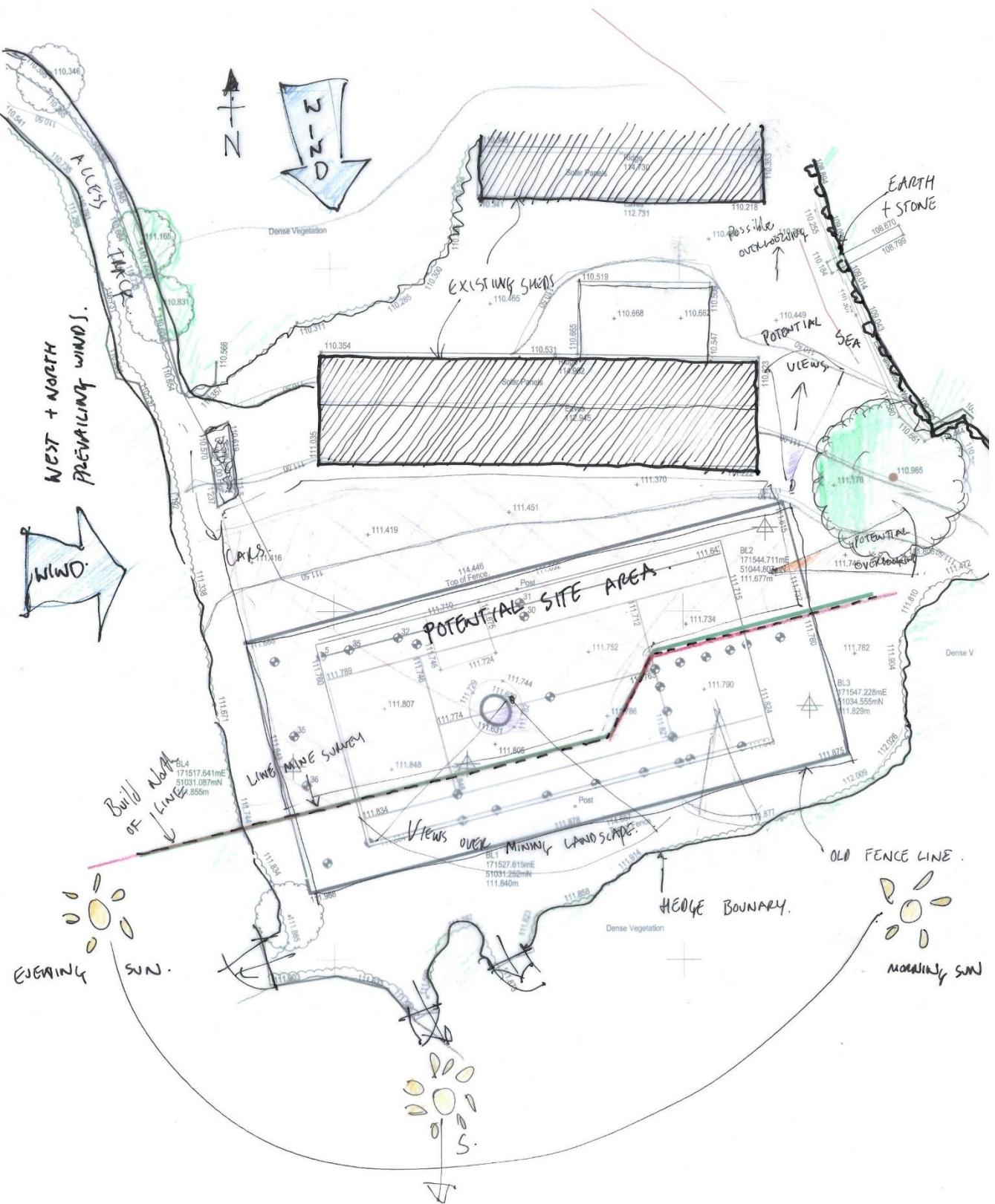
↑ View of the Access onto Trevaunance road, this has been used to gain access for the pre-construction works on the site and remains as is.



↑ Looking at the Croft from the north of the solar array showing screening between the site and croft



↑ The access Track prior to the mine capping works with the Array just the right. A Turning area will be located here with Parking to the right.



**Site Analysis Diagram** – North is up the page Note the large sheds north of the site, the outline of the tennis court and the build line which has been established by the initial mining surveys. All these factors have been crucial in assessing how best to locate the new building. The Site is well defined by existing boundary hedges to the south west and east.

## **Mining**

A number of surveys have been undertaken now to understand the effects of historic mining on the site which were already apparent from depressions forming on the Tennis court on the surface of the site. Mining Eye conducted an initial investigation into the site using Boreholes and the report is included within this application. The Primary conclusions informed the choice to remove the tennis court Tarmac and Cap 2 of the Shafts with mass concrete plugs. Building to the south of the site is to be avoided to remove the need for further works on this part of the site. This left a strip of land along the northern end of the site on which to develop the building. This has informed the elongated footprint of the proposal and the cantilevering of the upper floor to ensure that the footprint falls within the areas designated within the report.

Yes Environmental Solutions have now undertaken both a desktop and an intrusive site investigation to ascertain the likely contamination issues on the site. Both the reports are included as attachments to this application. The final conclusions of the site investigation of trial pits concludes that within the site the risk to Human health is Low, as is the risk to the flora and Fauna on the site. The reports do not recommend any further action be taken.

## **Mapping Constraints**

The site falls just outside the designated AONB. Regardless we have sought to make siting, material, and scale choices to limit the buildings impacts impact on the landscape. It falls within the 1km buffer zone to the AONB. The world heritage site designation applies to the area as well and the WHS comments primarily related to any possible spoil and the access track which is dealt with in the following access Section. A Number of other more minor site designations are present which the proposal does not affect.

## **Access and Parking**

The site will utilise the existing access which runs from Trevaunance road into the north west of the site. An existing track here has been cleared and used to get vehicular access for the mine capping works on the site and this access will remain as is for the final building with a further finish permeable stone driveway leading to the house. The intersection with the Public highway which already exists will be finished in accordance with guidance from the Roads, Highways and Pavements department of the council serving a single dwelling.

One of the concerns with the initial planning application was relating to access to the site, the WHS team expressed concerns relating to access. As was confirmed in additional correspondence from the previous application the existing access will be utilized and no spoil is present along the route. The access will remain in its current form and be finished in a permeable gravel on top of the existing rubble finish.

The WHS stated that if this access did indeed present no risk to existing spoil then they '*would not consider the proposed development as having a harmful impact on the outstanding universal value of the world heritage site.*'

The services and amenities of St Agnes are a short walk or cycle from the proposed property, and access to footpaths leading to the centre of the village can be made south of the site. From a sustainability point of view the site is well located to take advantage of the amenities of the village without necessitating the use of a car.

Parking will be integrated within the mass of the building meaning that from any distant view's vehicles will be screened by the covered carport and hidden from 3 sides. Parking for at least 2 cars will be provided within this screened carport and additional parking for at least 2 more vehicles will be provided on hard standing around the building. A turning head will also be created on permeable hard standing in the parking area west of the building. The screened carport will also provide an electric vehicle charging point for

### **Relevant Planning policies**

Due to the previous application primarily dealing with the principle of planning not a great deal was mentioned regarding the potential design of the new home. Penk architecture have been fortunate enough to complete a number of individual houses around Cornwall and have long been trying to create innovative designs for projects around the county. Where design guidance is provided at either a National or Local level, we try to ensure that our designs exceed the stated requirements to create sustainable liveable homes that will last and remain relevant and fit for purpose for future generations.

The St Agnes Parish Local Plan states its desires in Policy 4 for the support of self-build and Custom build homes. We hope it is felt that the proposal meets the requirements of policy 4 as an individual home as a primary residence which will contribute to the local housing stock. Policy 6 deals more specifically with design choices which the parish feel contribute to maintaining and enhancing the character of the area. This includes selecting materials appropriate to the local area, having an emphasis on vertical apertures and including possible terraces and integrated porches. Also keeping parking out of site was considered a benefit. As this building will have very limited public views the key principles of screening the cars and using a pallet of sympathetic materials on the exposed facades are the most crucial aspect of the design in terms of meeting these design criteria.

The Chief planning officers good design in Cornwall guidance has been consulted and the points outlined considered at each stage of the deign process. We feel that the proposal strongly adheres to points 1,2,3,4,8,9,10,11 within this guidance. Other points where not relevant to the proposal as a detached stand alone dwelling within this context.

Cornwall design guide has been consulted and while this deals primarily with guidance for larger schemes its points regarding local character and materiality, we feel, are being met by the current proposal. Any new boundary treatments will be continuations of the existing Cornish hedges and local Flora.

### **Design - (This should be read in conjunction with the accompanying plans, and elevations.)**

The design of the dwelling has been informed by a large part by the constraints of the site and the desire to create a building which will be both environmentally friendly to build and sustainable through its lifetime. Both form and materiality have been considered in terms of sustainability, buildability, context and the comfort of the end users. Designs of other buildings in the area have been consulted to understand the varied contemporary Typologies that exist within and around St Agnes.

### **Layout and Position**

The building occupies the northern most part of the site, primarily this is because of the reports from the mining investigations on the site that dictate the build area to a great extent.

However, keeping the building pushed up against the northern boundary also means that maximum private garden space is created to the south. The building focus then is to the south. The primary views and southern sunlight flooding into the ground floor living spaces are a crucial feature of the design to maximise passive solar heating. No windows are present on the northern façade facing the existing shed buildings as there is no view. By abutting so closely to the existing shed wasted space between the two buildings is also minimised and all useable space is orientated away from open aspects of the new development to the north.

Sire

### **Form**

The form of the building as well as responding to the site limitations and principles of energy efficiency has also been reached in order to limit the overall impact of the building on the surrounding landscape. In the Appeal inspectors' final statement which granted the planning in principle, the following is stated regarding views of the site.

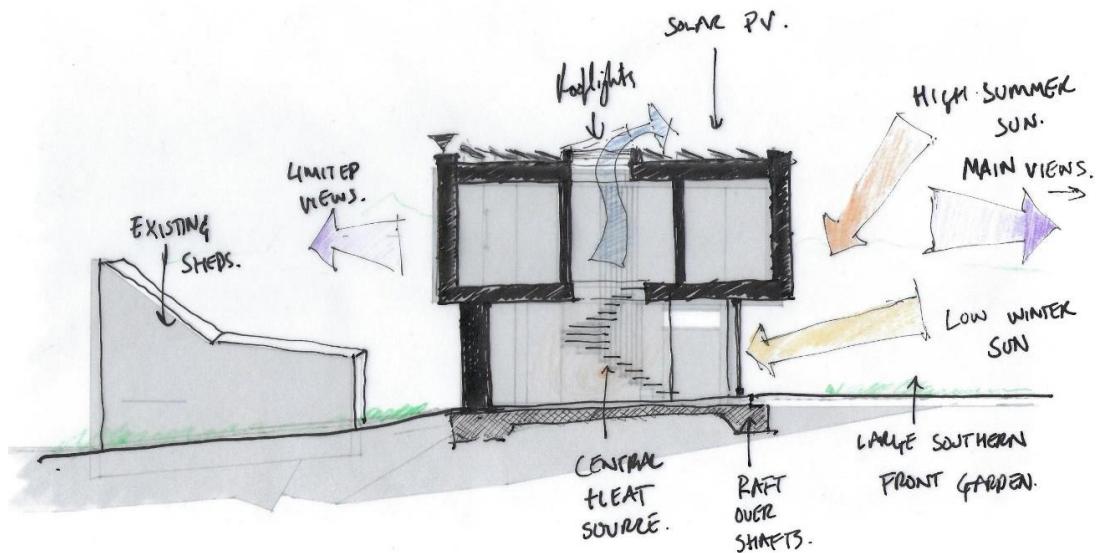
*"The Council contends that the site has many of the key characteristics of the LCA, forming part of the heath covered coastal plateau. However, the site itself is a hard-surfaced tennis court, contained by boundary hedges. The high mesh fence is not readily visible from any point on the road to the north. It therefore follows that a dwelling would be equally well concealed, particularly if ground levels are reduced, as suggested in the appellant's submissions."*

Ground Levels will indeed be reduced and to further limit the impact that the building will have on wider views the building has flat roofs that lower the ridge height considerably when compared to a two-storey building with a pitch. By cladding the upper storey in reclaimed slate any views of the built form would be presenting a finish that is similar in appearance to conventional slate roofs. All of the lower storey of the building will be below the level of the previous chain link fencing and thus only visible from private views on the adjacent properties.

The Inspectors appeal report further acknowledges the minimal impact that a building here would have in one of its final points.

*"Any glimpses of the proposed dwelling from the road would be restricted to views of its roof, which would be seen within the context of the existing roofs of the solar array building, The Croft, and the two approved dwellings (if implemented). The proposed access, which is already partly in place, cuts through a semi-wild area, but it is not a prominent feature in the landscape, being well-screened by remaining vegetation on both sides. The dwelling house would not, therefore, have a harmful impact on the rural character of the area."*

The cantilevered form of the upper floor is necessary for providing adequate sleeping accommodation upstairs for the family of 4. This floor area translated onto the ground would not fit within the confines outlined by the mining survey or it would end up longer with potential corridors. So, it is beneficial to have this increased width of footprint on the first floor making it more compact and less wasteful of space. It is also critical to the passive solar design of the property that the cantilever acts as a deep overhang to extensive glazing on the southern façade of the ground floor. The smaller cantilevered overhang to the north and east provide protection to the lower storey walls and aligns with the general ground floor roof overhang.



#### ↑ Sketch section of the proposed building

This sectional sketch shows the narrow ground floor living areas and cantilevered upper floor. Passive solar design will be critical in ensuring the long-term environmental performance of the house. It is proposed to create the northern wall using straw insulation that will increase the wall thickness on the north but provide a super insulated structure using a local, natural low Carbon waste material.



#### ↑ Sketch of the proposed building looking from the south west

Parking is located in a carport which is an extension of the ground floor volume. This lower roof would be the part covered in a biodiverse green roof.



↑ Sketch of the proposed building looking from the south east. The upper volume clad in reclaimed slate overhangs the ground floor on 3 sides protecting the interiors from overheating during the summer and sheltering the timber cladding from excessive weathering.



↑ Sketch of the proposed building looking from the north west. Existing Cornish hedge boundaries are the remain and additional indigenous planting will screen the shed building on approach. Turning head for parking will occupy the area



↑ Sketch of the proposed building looking from the north east. Opening on the north side are limited to avoid overlooking and because of the proximity of the shed to the rear. The central vertical window in the upper façade will be permanently frosted glazing.

### Materials

The Materials palette of the building aims to be simple, natural and subdued in keeping with the building location within a highly sensitive and dramatic landscape. Materials have been selected to compliment the natural qualities of the site and fit within the WHS status of the area. For the most prominent part of the building reclaimed slates will be used to clad the first floor which will instil the building with a aged patina from the start of its life that will age gracefully. This is also the most exposed part of the building in terms of weather so slate, as a resilient material, will mean that the upper floor not only looks beautiful but also will require little maintenance over the buildings life. As a durable material it will also enable the upper storey to have no overhang and the slate will travel right up the walls creating a parapet around the roof terminating in a minimal metal capping. Solar panels will then be concealed behind this small parapet from views from the ground and surroundings.

The more well protected areas of the ground floor all exposed walls will be clad in local timber cladding which will be well protected by the overhangs of the upper floor and ground floor roof. This ground floor roof will be planted with a bio-diverse green roof to create a habitat from this large area that will also be viewed from the western bedrooms. A similar roof treatment was used on a contemporary Dental surgery developed by Martin Penk on the outskirts of St Agnes.

The northern ground floor wall which face directly onto the adjacent shed will be clad in a low maintenance metal cladding which we feel is appropriate for this visually concealed façade backing onto the roof of the adjacent buildings. In its simplicity this façade will give precedent celebration and prominence to the reclaimed slate volume of the first floor.



**Reclaimed Slate**



**Timber Cladding**



**Bio-diverse Green roof**



**Steel Cladding**

### **Windows and doors**

Windows and doors on the property have been considered for maximum benefit to the interior spaces while still maintaining an overall vertical emphasis that is preferred by the design guidance. The southern façade incorporates the majority of the glazing; most of the ground floor glazing is focused on a large set of bi-folding doors that will allow low winter sun to penetrate into the living space and heat the super insulated concrete slab within. In summer time overhangs will protect this glazing from overheating the interior and the entire span can be opened creating an uninterrupted connection between the garden and the inside of the house. In winter months the mass of the slab remains cool and assists in moderating extreme temperatures which are only likely to increase with current global warming. Each bedroom has one corner window seat focusing on views to the west and east and one additional vertical window.

The few windows on the north are either focusing their views away from the sheds and possibly views of neighbouring properties or obscured with frosted glazing such as the window in the en-suite bathroom.

### **Sustainability**

The building aims at being sustainable not only in the long term during its operation but also in its construction. Low embodied energy materials and Carbon sequestering timber and straw are proposed throughout. Where straw as insulation is impractical reclaimed sheep's wool will be used to insulate walls and the roof. The glazing and exterior doors will adhere to the highest thermal standards as will the raft foundations which are required to spread the load over the remedial mining works.

In operation the building will aim to generate its own electricity and require minimal space heating. A wood burner is located in the centre of the living space to heat this area and, combined with the aforementioned solar gains, it is hoped that the building will have little need of supplemental heating. The central stair layout with opening flat roof light above allows for high level purge ventilation through the chimney effect to occur should the building need venting in the summer time.

### **Drainage**

Foul and Rainwater drainage will aim to be connected to the mains sewer which is located on Trevaunance road by routing pipework along the access road.

### **Trees**

The building is to be situated to avoid the removal of specimen trees from the site. All larger trees currently located on the boundary of the site and the specimens in the Garden are to be retained and protected in accord with BS 5837:2012 however there is no relevant trees in the area to be developed.

### **Conclusion**

As the principle of a dwelling on the site has been approved this statement has focused on describing a design which aims to respond to the constraints of the site and the desires of the future occupants along with the advice given by the parish and planning guidance. It is hoped that the design fulfils this diverse set of requirements and will create a home that will make an overall positive impact on its surroundings. The removal of the existing tennis court and fencing and its replacement with a sensitive landscaped garden and long low dwelling should radically improve the quality of the site in terms of landscape character. The buildings proximity to existing structures means the overall impact of the new development is minimal and it in fact screens more utilitarian structures behind it. The flat roof which although not traditional keeps the volume of the building to a minimum and the materials have been selected with the aim of further reducing its visual impact. Access, parking and garden amenities within the proposed site are very generous and well beyond the standard requirements for a dwelling of this size.

We hope that considering the current proposed plans and the previous planning history of the site this application will be supported for approval.