

Stourbridge House

Llysworney

Vale of Glamorgan



Design, Sustainability and Access Statement



Aerial view of the village of Llysworney. The proposed site is highlighted in red and is constrained by a stream and road to the east, and housing and gardens to the south, west and north.

Introduction



View of Llysworney from the surrounding countryside



The existing building is a detached two-storey house of little architectural merit, obscured from street view by curtilage buildings to Sydney House Farm.

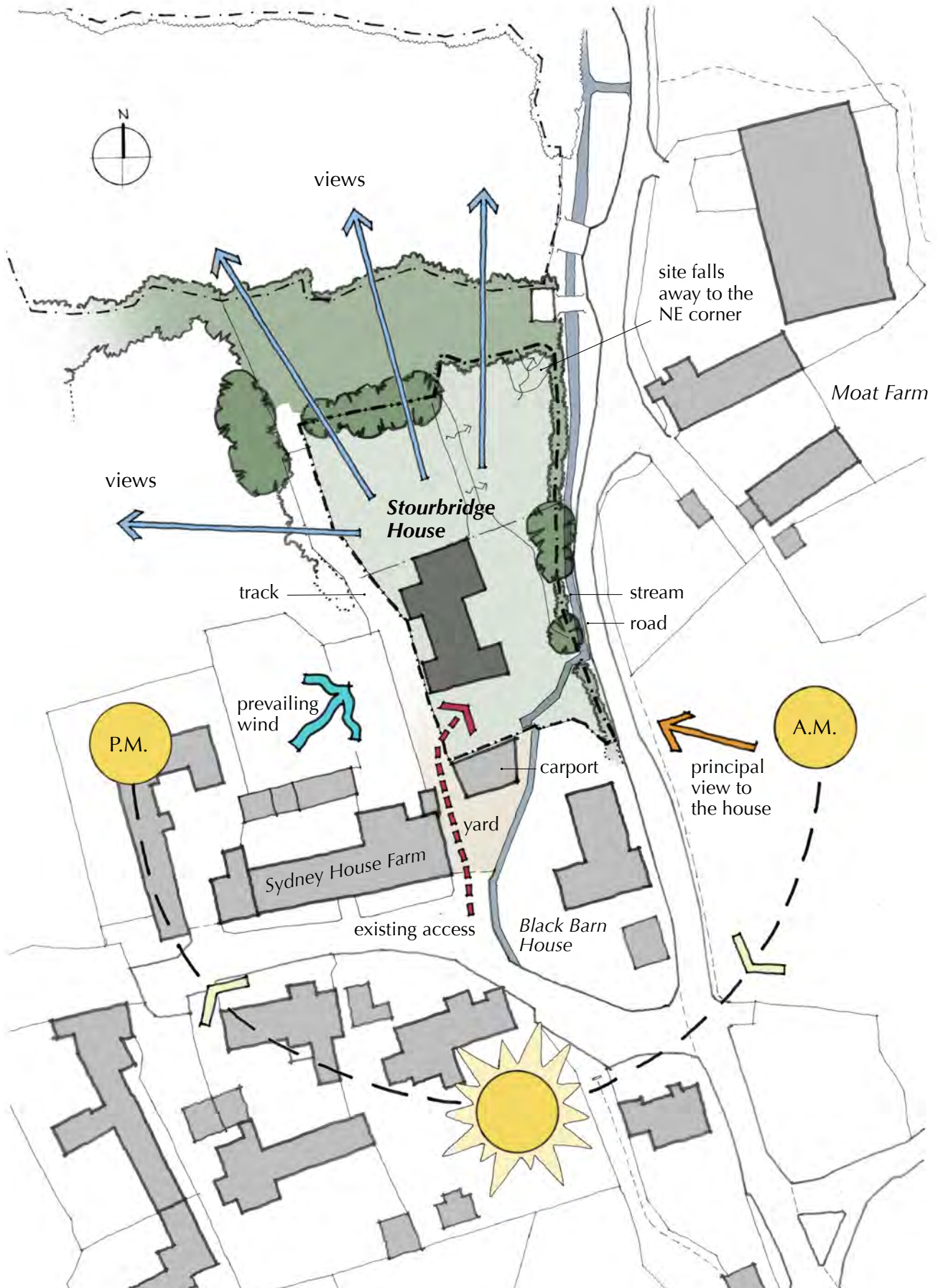


Stourbridge House was originally built on land acquired from Sydney House farm.

Llysworney is a small rural village in the Vale of Glamorgan. Situated two miles away from Cowbridge on the B4268 it has a population of around 240 people and consists of approximately 100 houses.

Historically the village was a thriving farming community dating back to 1248. Dominated by agriculture until the 1940s, the village was a nucleus of farmsteads and cottages clustered around a village pond and the 13th century St. Tydfil's Church. Since this time, the village has grown with houses being built on farm holdings, in gardens and on orchard plots. Today, the population consists mainly of commuting professionals, families and retired households.

Stourbridge House, located within a residential area to the northern edge of the village, was originally built on land acquired from the adjacent Sydney House farm. The 1970's two storey, rendered and stone-clad house, it is of little architectural merit and detracts from the Llysworney Conservation Area. As such, demolition of the existing house and its replacement with a new dwelling of improved quality and of a more sympathetic and appropriate design is proposed.



The diagram above indicates some of the influencing environmental factors that will need to be considered when orientating the new building on the site.

Site Analysis

Stourbridge House lies within the Conservation Area boundary of the village of Llysworney. However, whilst the existing house is also within the designated settlement boundary, it is acknowledged that the land to the side of the existing house is not.

The buildings that principally form the immediate built context of Stourbridge House are the detached Black Barn house to the South, which is a traditional style gable ended house, and Sydney House to the South West, which is a larger stone dwelling of traditional design. Consequently, the 1970's design of the current property is incongruous with its setting.

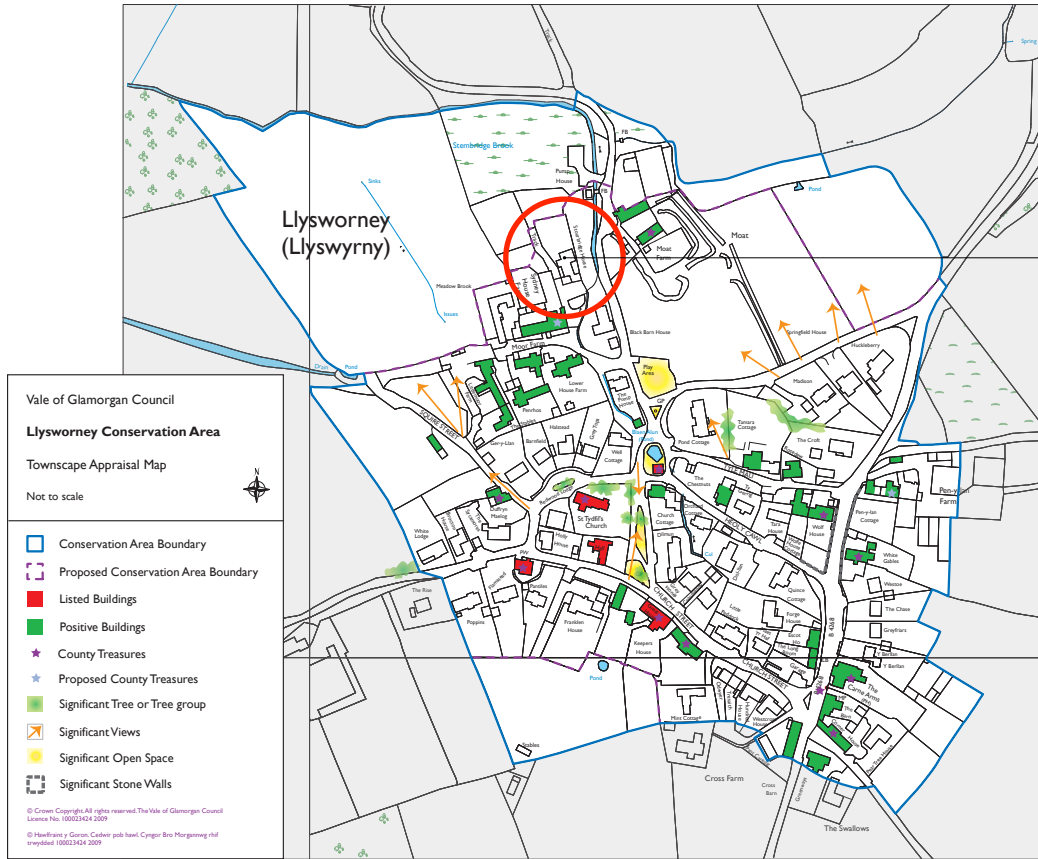
The plot of Stourbridge House is bounded by a private track and gardens belonging to Sydney Farm house to its western boundary, and a tree lined field to its northern boundary. The gardens belonging to Black Barn house form the southern boundary, whilst a stream cuts across the south-eastern corner of the plot and runs towards the north, to define the eastern boundary.

The road that connects Llysworney to Colwinston also runs along this eastern boundary of the plot, adjacent to the stream. This is an unclassified road with minimal vehicular traffic along it.

Stourbridge House is located in the south-western corner of its site, directly behind a curtilage 'car port' building to Sydney House Farm. The house has a shared pedestrian and

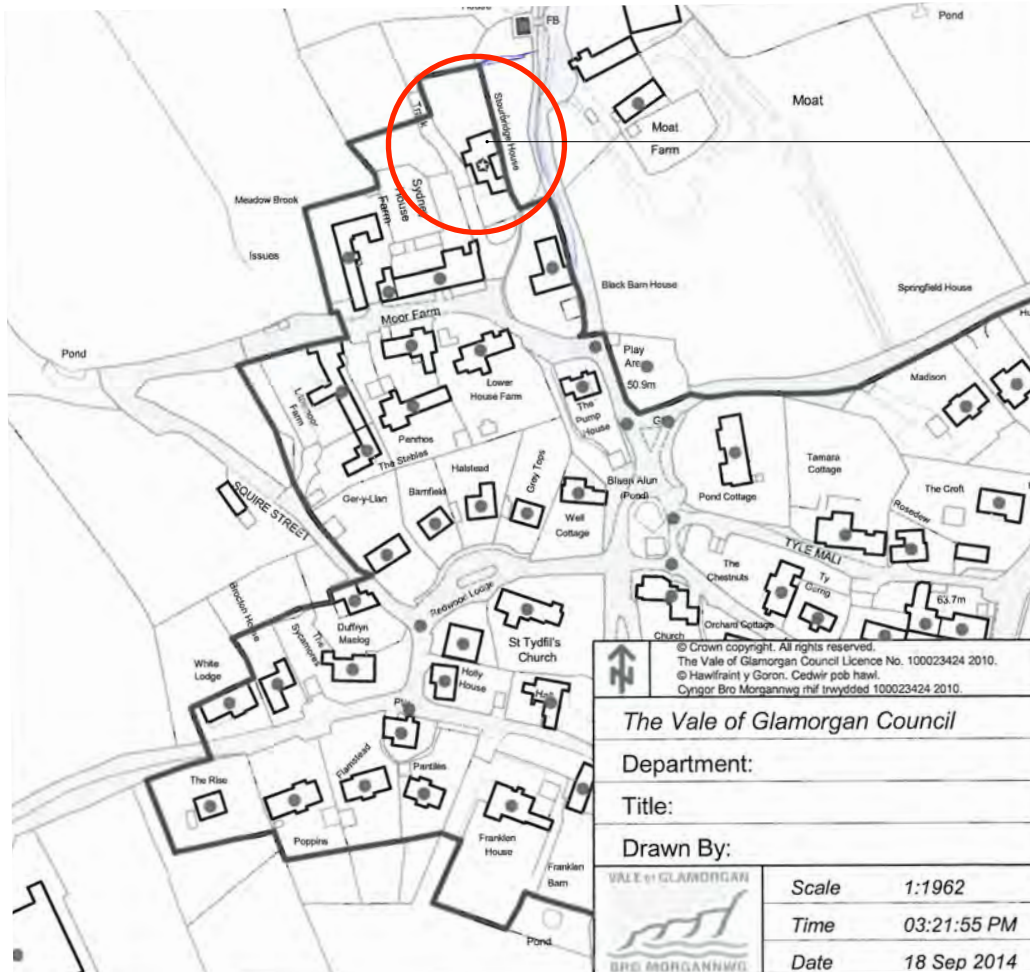
vehicular access via the otherwise private yard of Sydney House farm. As such, it has an ambiguous relationship to the public street and lacks any cohesion with the rest of the village. It is further noted that the building is extensively screened by vegetation to the North and East boundaries and therefore the principal views from the property are through the trees to the North west corner of the site.

Apart from the house and a concrete brick paved driveway to the South-West corner, the remainder of the site is principally garden. The grass steps down adjacent to the house so that the house sits on higher land to the West, with the lower land to the East site of the property. This also falls away marginally to the North West corner.



Stourbridge House

Llysworney Conservation Area Map showing Stourbridge House sitting wholly within the Conservation Area boundary



Stourbridge House

Llysworney Settlement Boundary Map showing the garden to the East side of Stourbridge House sits outside the existing settlement boundary



Sydney House farm is located to the south-west of the site and together with Black Barn Farm provides the immediate context for the site

The Constraints

- Any proposed building should aim to fit as closely as possible to the relative heights of Black Barn farm.
- The orientation of the new house needs to be carefully considered, particularly in relation to the sun path over the site and the potential to maximise free energy gains.
- The close proximity of the neighbouring Sydney farm house and the need for privacy should be carefully considered.
- The development should achieve the Vale of Glamorgan Amenity Standards.

The Opportunities



There is the opportunity to provide a new vehicular and pedestrian access via the country road along the eastern boundary of the site

- To provide a new 5 bedroom home offering flexible family living accommodation.
- To provide an unobtrusive, high quality scheme that is an exemplar of how to sensitively develop within a rural setting.
- To provide a new building that engages positively with the Llysworney Conservation area, drawing on surrounding vernacular forms and details.
- To improve on the existing approved vehicular and pedestrian access to the site from the eastern boundary, concurrently replacing the existing condition where access is made via the neighbouring farm's private yard.
- To develop a scheme that minimises its carbon footprint, maximising the use of passive solar gains and utilising local resources where possible.



Views of rural Llysworney in the Vale of Glamorgan



Llysworney consists of approximately 100 houses clustered around the village pond and St. Tydfil's Church

Economic, Social and Physical Context Analysis

The village of Llysworney was historically located on a confluence of three narrow roads centred on a natural spring and the site of the 13th Century St. Tydfil's Church. The village grew clustered around this shared water source - which became Llysworney's picturesque village pond. Stourbridge House is located to the north-west of this village centre.

The village is located on a north-west facing slope, and overlooks the valley of the Stembridge Brook. Stourbridge House, located on the northern outskirts of the village, enjoys an attractive rural setting, with long views extending to the north and west. The site enjoys privacy, shielded largely from view by dense vegetation along the road to the east.

The village is designated a conservation area and is generally characterised by its informal building relationships. The local buildings are accumulated from a variety of periods – right up to the present day – and many have been extended in a variety of different styles. Consequently there is little distinct uniform, architectural character to the place.

The local historic buildings mainly consist of cottages or farms, with almost all the the old barns and outbuildings having been converted into residential uses. Construction of the existing historic buildings is mostly in local lias



Lower House Farm (left) and Sydney House Farm (right) as seen on the approach to Stourbridge House

limestone, often faced with white painted lime render and occasionally dressed with red brick. The roofs are generally covered in natural slate.

A large number of modern houses and bungalows have been added to the village in the last 50 years. They tend to be sited back from the lanes and roads with generous gardens, continuing the informal layout of the historic buildings. Rubble stone walls and grass verges feature throughout the village.



Black Barn House sits immediately to the South of Stourbridge House, obscuring views of the site

With regards to local facilities, apart from St Tydfil's Church, the only other non-residential uses in the village are the Carne Arms pub and a garage located on the main road. There are no shops in the village. The nearest provision of local shops, library, community centre and primary or secondary schools are found in Cowbridge, two miles away.

There is no rail service to Llysworney but the V1 and V2 bus services connect Llysworney with Cowbridge and Llantwit Major.



The Pump House is located opposite Black Barn House

As Britain's population ages it is having a particular impact on more rural areas. The proportion of older people in rural Wales is significantly higher than in urban areas and the rural population is ageing more rapidly.

Migration in and out of rural areas has its part to play in this drift, with younger people tending to move away from rural areas in search of employment, better wages and

improved communications. This trend is to a lesser degree in Llysworney, the proximity to Cardiff somewhat mitigating the effects. In addition to this however, agriculture and other traditional industries have continued to decline, and rural areas such as Llysworney, have become more affluent as commuters move in. Consequently employment is primarily provided in the surrounding areas – particularly the urban centre of Cardiff.

Recent developments in ICT have made it easier to operate from a rural locations and mean it is possible for more people to work from home. This offers the opportunity to cut down on commuting, improves quality of life, cuts carbon emissions and enables people to spend more time and money in their local community. In this sense, such villages are becoming less remote from towns and cities.



Views towards the existing house (indicated by the red arrow) from the north, show that it is screened by dense vegetation.

Policy Context

Relevant Planning Policy

1. Policy Context
Planning Policy Wales (2002)
2. Relevant UDP Policies & Area Designations
HOUS 2, HOUS 8 ENV 17, ENV20, ENV 27, TRAN 10
3. Llysworney Conservation Area Appraisal and Management Plan July 2009
4. Relevant Supplementary Guidance
Amenity Standards – The Vale of Glamorgan
Technical Advice Note 12 - Design and Planning Policy Wales

Previous Planning Applications

- Planning approval 2012/00441/FUL, provides consent for a new access to be provided into the site from the East boundary.
- Application 2011/00752/FUL is an undetermined application for a new dwelling to the East side of Stourbridge House.
- Planning approval 2006/00878/FUL, provides consent for a new vehicular access and a change of use of land to garden.

Archaeology

An Archaeological Observation of Geotechnical Test Pitting has been produced by Jean Yves Robic of the Cardiff Archaeological Consultants, on behalf of the Applicant, Ref no. 2014/15 . The investigation was undertaken during the week of 20th October 2014, and a copy of the report is included under separate cover. The findings of the report state that, 'On the basis of the results

of the evaluation it is concluded and recommended that this evaluation is sufficient to support a positive determination of the proposed planning application with appropriate mitigation measures for the proposed new garage.'

Ecology

A Full Bat Survey has been carried out on the existing building by a G.F. Thomas, a bat ecologist for Merlin Bio-Surveys. A copy of the report is included under separate cover. Bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). Under Regulation 3 (4) of the Conservation (Natural Habitats &c.) Regulations 1994 local planning authorities, in exercise of their functions, are to have regard to the provisions of the 1992 *Habitats* Directive (92/43/EEC) in so far that they might be affected by those functions.

There was no evidence from a search of the building to indicate that bats have used the building internally and in response to the findings it has been concluded that the removal of the roof, to allow for the demolition of the house should take place outside of the maternity season for bats.

Involvement

Pre-application advice has been sort from the Vale of Glamorgan Local Authority with the comments on the following pages offered:

Date/Dyddiad: 24 November 2014

Isk Iar/Golywroddiwr: Mr. I. Robinson

Teleffôn/Rheolffôn: (01446) 704777

Yn eidd/Cyfrin:

My Ffeil/Cyfrin: P/DC/IR/2014/00150/PRE

e-mail/ymail: developmentcontrol@valeofglamorgan.gov.uk

The Vale of Glamorgan Council
Ddos. Cifwr. Barry Dock, Barry CF63 4RT
Ffôn: (01446) 700111

Cyngor Bro Morgannwg
Swyddfa'r Doc, Dociau'r Barri, Y Barri CF63 4RT
Ffôn: (01446) 700111

www.valeofglamorgan.gov.uk



Michael Plageman
Davies Sutton Architecture,
Penhevad Studios,
Penhevad Street,
Grangetown,
Cardiff.
CF11 7LU

Dear Sir,

Town and Country Planning Act, 1990 (as amended)
Application No. 2014/00150/PRE
Proposal: Replacement dwelling
Location: Stourbridge House, Llysworney



I refer to your correspondence received on 22 September 2014, concerning the above and your request for pre-application advice. Having considered the nature of submission in detail, I respond as follows.

Local Context and Constraints

The application site is land at Stourbridge House, Llysworney and comprises the side garden to the existing dwelling, as well as the existing house and its front and rear gardens. The application site lies within the Conservation Area boundary of the village, however, while the existing dwelling also lies within the settlement boundary, the land to the side of the house lies outside of it.

The application site lies within a residential street scene at the northern edge of the village, and is bounded to the rear by fields and to the east by the road that connects the village to Colwinston. The existing street scene contains an irregular layout of dwellings of varying designs and styles. The most closely related buildings are Blackburn House, which is a large and traditional gable ended dwelling and Sydney House, which is a larger, stone dwelling of traditional design.

Relevant Planning History

From an examination of our records, the application site/ property has the following relevant planning history:

2012/00441/FUL- New vehicular access- Approved.

Correspondence is welcomed in Welsh or English/Croeso i'r Gohobiaeth yn y Gymraeg neu yn Saesneg

Robert Thomas, Director of Development Services/ Cylwngyddwr Gwasanaethau Treflygu

2011/00752/FUL- New dwelling to the side of Stourbridge house- Undetermined.

2006/00878/FUL- New vehicular access and change of use of land to garden - Approved.

Relevant Planning Policies

In addition to national guidance contained within Planning Policy Wales, any application would be considered against the Policies within the Vale of Glamorgan Adopted Unitary Development Plan 1996 – 2011, details of which are available on the Council's web site by visiting www.valeofglamorgan.gov.uk. The relevant policies would include:

- ENV17 - PROTECTION OF BUILT AND HISTORIC ENVIRONMENT
- ENV20 - DEVELOPMENT IN CONSERVATION AREAS
- ENV27 - DESIGN OF NEW DEVELOPMENTS
- HOUS2- ADDITIONAL RESIDENTIAL DEVELOPMENT
- HOUS 8- RESIDENTIAL DEVELOPMENT CRITERIA
- TRAN 10- PARKING

The application would also be assessed against the advice contained within the Council's Supplementary Planning Guidance on Amenity Standards, the Llysworney Conservation Area Appraisal and Management Plan, Technical Advice Note 12- Design and Planning Policy Wales.

Analysis of Proposal

It is considered that the main issues involved in the assessment of the proposal are the scale, design and form of the proposed house and its impact upon the character of the area, impact on the amenities of neighbouring properties, highways issues, ecology, amenity space provision and archaeology.

The principle of the development

As noted above, part of the application site lies outside of the settlement boundary of the village, therefore, it is necessary to consider whether the proposed dwelling would be harmful in that respect. The proposed building would lie partly within and partly outside of the settlement boundary, however, given the physical context of the site and its relationship to the settlement boundary, it appears likely at this initial stage that the proposal would be viewed as a logical form of rounding off, given its relationship to the existing built environment and the boundary created by the road to the east of the site. Notwithstanding this, please ensure that this issue is comprehensively addressed in the submissions.

Scale, form, design and visual impact.

The application proposes a new dwelling as a replacement for the existing Stourbridge House. The existing house has little architectural merit and does not make a significant positive contribution to the conservation area, therefore, it is considered that its replacement with a more positively designed building would be acceptable in principle.

Correspondence is welcomed in Welsh or English/Croesawir Gohobiaeth yn y Gymraeg neu yn Saesneg

Robert Thomas, Director of Development Services/ Cyfarwyddwr Gwasanaethau Deallus

The proposed building is of a relatively traditional general design and form, with a slightly more contemporary appearance to the ancillary wings, particularly in terms of the glazing on the secondary frontages. It is considered that a building of this general design and form is likely to be acceptable in this location. I have some concerns in respect of the first floor windows on the main front elevation, which appear over scaled relative to the ground floor windows and look a little awkward on this prominent frontage.

In terms of the scale, which we had discussed the relationship to Black Barn House, on further assessment it is evident that the proposed building remains materially taller in its own right. While the submitted street scene view indicates comparable ridge heights (and consequently the proposed dwelling may appear comparative in height from much wider views) this is because the ground level of the proposed dwelling is lower. Consequently, there remain some concerns that the building would appear over scaled in its own right, and particularly in the context of closer views. While I do not have full sections of the main section of the house, it appears that the building need not be as high as indicated to secure the level of accommodation sought and I would suggest, without prejudice, that the height of the dwelling should be reduced so that its absolute height is no greater than that of Black Barn House (floor to ridge).

Subject to the issues relating to the height of the building and the windows on the frontage, I would not raise any fundamental issues in respect of the design of the proposed dwelling.

While this has not been discussed in detail previously, on further examination of the garage plans, it also appears a little top heavy due to the relatively high eaves and the space between the top of the garage door and the eaves.

Impact on the amenities of neighbouring properties.

The proposed dwelling would be sited a relatively substantial distance away from the nearest neighbouring dwellings and gardens, such that it does not appear that it would be unacceptably overbearing or unneighbourly. However, this is a matter that will require careful and subsequent consideration on site as part of the formal application process. It also appears that the main two-storey element would be sited sufficient distance from the boundary with Sydney House to ensure that there would not be unreasonable overlooking. Again, this would need to be fully considered on site.

Highways issues

It appears that the plans of the approved access into the site demonstrate vision splays of 2.4m x 32m in either direction along the carriageway. While your proposed access point would be a few metres further south, provided the same splays can be achieved, it does not appear that there would be a highway safety objection to the proposal. Regrettably due to workload, I have not received a formal written response from the Council's Highways Development Section, however, I am satisfied that the provision of equivalent splays would demonstrate the acceptability of the matter.

Correspondence is welcomed in Welsh or English/Croeso i'r Gohel iaeth yn y Gymraeg neu yn Saesneg.

Robert Thomas, Cwmdeithwr Cynllunio a Seilwyo Cymunedol a Ddiplomaidd

Ecology

The submitted bat survey identifies bat droppings Brown long-eared bats and Pipistrelle droppings around the area of the garage/parking bay and bats were seen foraging in the area. Appropriately the report recognises the need to minimise impacts upon bats through the development and recognises the need to make provision within/on the new building. Regrettably I have been unable to receive full comments from the Council's ecology officer, but it appears that the report is comprehensive. Please feel free to contact the Council's Ecologist Erica Dixon on 01446 704855 should you wish to discuss this issue further prior to the submission of the application.

Amenity space provision

The proposed dwelling would be served by an adequate area of amenity space that would meet the requirements of the Council's Supplementary Planning Guidance and policies ENV 27 and HOUS 8 of the Unitary Development Plan.

Archaeology

I am advised by Glamorgan Gwent Archaeological Trust (GGAT) that you have approached them regarding the required archaeological work at the site. To confirm from our meeting, in the case of the last application GGAT requested an archaeological evaluation prior to determination, however, clearly I will defer to their advice at this time in respect of what is required now.

Required Supporting Documentation

In addition to the submission of standard mandatory supporting documentation such as application forms, plans and a Design and Access Statement (see TAN 12 Design, Appendix 1), please be advised that any application for the above development may also need to be accompanied by the following additional documentation: -

- Ecology surveys.
- Tree Survey
- Archaeological Field Evaluation

If any subsequent application fails to include the information above, there is a chance it may not be registered and, in any event, it is likely that an application will either be refused or will not be able to be progressed until its satisfactory submission.

Requests for Further Advice

In accordance with the Council's Guidance Note on 'charging for pre-application advice', any further requests for pre-application advice will attract payment of a further fee, and should be made in writing with appropriate supporting documentation.

Correspondence is welcomed in Welsh or English/Correspondwch yn y Gymraeg neu yn Saesneg


Robert Thomas, Director of Development Services, Cynllunio a Gwasanaethau Datblygu

Development Team Approach – Building Control

Please note if you decide to employ the Councils Building Control team in respect of the proposed development for which you have sought advice, any fees you have paid in respect of this guidance will be taken into account in assessing the relevant Building Regulations fee. All Building Regulations fees are now based on a standard hourly rate with the final fee payable worked out on a risk assessed basis. Accordingly as the Councils officers will have been involved in the project from the earliest stages this will be considered in the final risk assessment based fee for Building Regulations.

Should you have any further questions regarding the above, please contact Mr. I. Robinson on the above number.

Yours faithfully,



Mr. I. Robinson
for Operational Manager Development & Building Control

Please Note:

The advice offered in this response represents an informal opinion, provided in accordance with the Council's Guidance Note on 'charging for pre-application advice'. In particular, it is emphasised that while this pre application advice will be carefully considered in reaching a decision or recommendation on an application, the final decision on any application that you may make can only be taken after we have consulted local people, statutory consultees and any other interested parties. It does not, therefore prejudice any decision which the Local Planning Authority may make should the matter come before them in a formal context.

Following these comments a conversation was held with Ian Robinson where it was explained a relative comparison of the proposed scheme with Black Barn House showed that whilst the ridge level is marginally higher than Black Barn House, the eaves levels of the proposed scheme are marginally lower. This reflects the traditional roof pitch that has been adopted as part of the proposals which a view to the building sitting more comfortably in its context. Furthermore, the height of second floor accommodation has been set at the minimum level and therefore the building

height can not reasonably be lowered any further without undertaking a complete redesign. This is demonstrated by section BB on drawing 3413 P_400.

This principle was accepted subject to detail, and consequently drawing 3413 P_301 has been produced to confirm this analysis.

In addition to this it is noted that the garage has subsequently been lowered in height in response to the comments received.



Existing access (indicated by the red arrow) is via Sydney House Farm yard and tucked behind a carport.



View looking North along the road to the East boundary of the site. Note the dense vegetation screening the plot along the left hand side of the photo



View looking South along the road to the East boundary of the site. The gentle curve of the road assists the vision splays in providing a new access to the property

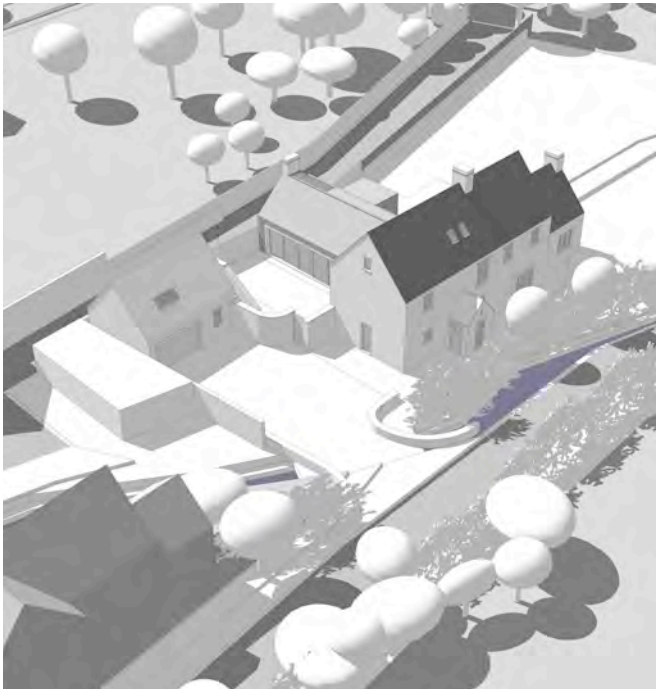
Response to Objectives of Good Design

Access

The existing access to Stourbridge House is via a shared access through Sydney House Farm to the West of the site. Planning approval 1200441FUL, gave permission for a new entrance to the eastern boundary of the site. It is therefore proposed that the site will also be accessed via a new driveway located along its eastern boundary. This will replace the existing and unsatisfactory access via the private farm yard of Sydney House.

The proposed entrance will run perpendicular to the existing country road that runs along the East boundary, providing 32m x 2m vision splays at its entrance. The proposed access is located further South than the existing approved access, therefore improving its connection with the built form and allowing the existing hedge to remain unbroken up until the new access point. The location of the proposed entrance furthermore means that no tree felling is required as part of the development.

The provision of this new access will require the existing stream to be culverted to the eastern boundary. Discussions with Clive Moon, Principal Engineer (Flood and Coastal Risk Management) at Vale of Glamorgan Council, have established that the cross sectional area of the proposed culvert should be in excess of the current culvert further



Model showing the view of the proposed primary 'traditional' block and subservient 'contemporary' extensions to the West and North.

The existing buildings surrounding Stourbridge House are informally laid out with large gardens, representing a range of periods. Apart from a general consensus in the use of pitched slate roofs, white rendered facades and a loosely formal composition of windows and doors, there is little distinct uniform architectural character.

upstream. This will be reflected in the detailed design of the culvert, with the planning drawings showing the route of the culvert. The proposal will therefore avoid causing potential problems upstream.

The driveway will provide a single access to a minimum of 3 off road parking spaces and a double garage. The scheme layout also allows for adequate on-site turning facilities to allow vehicles to access and egress the site in a forward gear.

Character

In reviewing the existing building types within Llysworney and the development pattern of the village, it is clear that the 1970's design of Stourbridge House is incongruous with its surroundings. Whilst the existing building is set back from the street and located with its access directly behind a curtilage building to Sydney House Farm, the age and style of the building detracts from and contrasts with the surrounding character of the historic buildings within the Llysworney conservation area.



Of particular note are the shallow roof pitches, and the use cement render and concrete roof tiles instead of more traditional lime renders or washes and slate roofs of steeper pitches. Use of such forms and materials mean that the overall perception of the existing house is that it draws little from its surroundings and therefore does not fit in.

The development proposal involves the demolition of the existing house and the provision of a new 5-bedroom, detached house. This comprises a two-storey traditional block running approximately North-South with rooms in the roof, with more contemporary, yet subservient extensions to the North and West. This approach means that the massing of the proposed building is broken down so that it more closely follows the built forms of the surrounding area.

The massing of the house forms a 'T' shape in plan that is orientated so that it presents a principal, 'traditional' facade to the road on the eastern boundary where the new vehicular and pedestrian access is proposed.

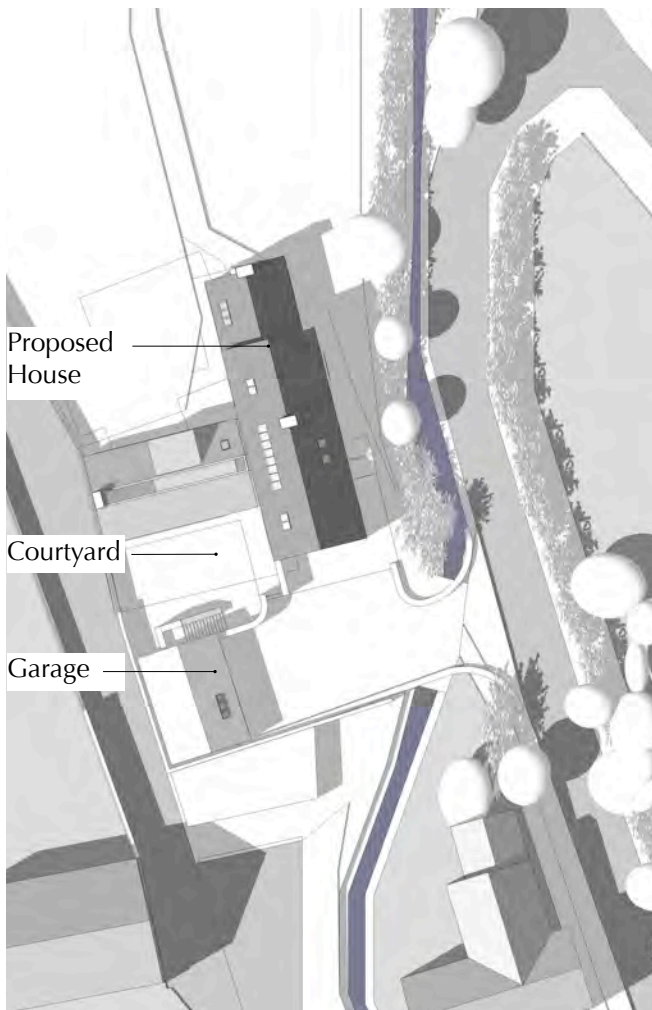
Emphasis has been placed on the proposed two-storey block being traditional, as visually it will provide the principal facade and primary building mass that will be observed from the street. Together with a traditional, pitched roof porch design completing the street facing elevation, the approach will help it to integrate with the surrounding village.

In order to achieve the traditional appearance, the roof form of the traditional block mirrors

the steep pitched roofs found across the Vale of Glamorgan, whilst the walls are of heavy stone masonry, again traditionally found in the Vale. Windows and doors will be of smaller, traditional proportions. They will have deep reveals to emphasise the masonry construction, however the details will be subtly modern at close quarters to avoid a pastiche approach.

The height of the traditional block has been carefully considered in the context of the surrounding buildings. The ridge line of the house has been lowered as much as possible whilst still affording the opportunity to include accommodation on the second floor of the property. As such, in relative terms, the ridge line of the proposed house sits 1.35m below that of Sydney House Farm and 0.4m above that of Black Barn Farm. However, whilst the ridge level is higher than Black Barn Farm, the eaves levels of the house sit 0.25m lower, and over 1m below those of Sydney House Farm. This is due to the steeper and more traditional roof pitch of the proposed scheme that will enable it to fit more comfortably within its environment.

The low eaves, the pitch of the roof and the load bearing construction of the traditional volume will give the dominant and contextual feel to the composition. This allows more contemporary and subservient extensions to the North and West to make greater use of glass to the garden and courtyard elevations. These elevations are less visible from the street and, whilst their forms will remain traditional, they are able to accommodate a more



The 'T' shape plan with the courtyard between the garage and the West 'extension' to the house

contemporary approach and character. Consequently they have higher levels of glazing that maximise the views into the surrounding garden and courtyard.

The traditional form is carried into the design of the associated garage. This building similarly has a steep pitched roof and masonry walls. Sitting subserviently to the house, its ridge height is nominally lower than that of the proposed North extension, and therefore has the appearance of a typical curtilage building.

Site and House Layout

The house has been located on its site so it sits South of the notional building line formed by the northern extents of the existing house. This retains the garden to the North of the house.

In addition to the house, a garage is located to the South West corner of the site with a study incorporated in the roof space above it. The space between the garage and the house creates a courtyard amenity space on the South side of the house. Completed by a stone wall, the courtyard is both private to the house and unobtrusive to the surrounding context. The courtyard also includes the discrete provision of a bin store on the North side of the garage.

The proposed traditional block now straddles the Settlement Boundary line that runs through the centre of the house. The location of this block has been determined by setting it away from the West boundary with Sydney House. This means that windows to the West elevation of the property will not be overlooking its

neighbour. In terms of where the actual settlement boundary should lie, there would seem some logic in rounding off the settlement boundary line so that it coincides with the conservation area boundary to the North of the site, and the more natural boundary of the road to the East of the site. This would align the boundary to the East in particular with that of Black Barn House.

With regards to the layout of the house specifically, a general layout principal has been adopted to locate habitable rooms to the South or West sides of the property. In these locations, a ground floor level, they can open onto the garden and courtyard spaces enabling them to take maximum advantage of access to natural sunlight. This improves the quality of the internal spaces and makes best use of passive solar gains to help reduce the carbon footprint of the building.

At ground floor level there is an open plan living, dining and kitchen area within the West extension, accessible toilet and a more formal living area within the North extension. The open plan living and dining space open out onto the rear garden via full height glazing, integrating the internal and external spaces. At first floor level, there are three bedrooms with en-suite facilities, and a further two bedrooms and a bathroom to the second floor.

The stairs have been centrally located at the junction between the West extension and the traditional volume of the house for ease of access. They extend between the ground and second floor, also forming a feature to the

double height entrance hallway. Furthermore, where the stairs arrive on the top floor means that the roof level externally can be lower than if the stairs were against the outer wall of the house.

The 'T' shape form maximises the reach of natural sunlight into the plan. In particular, the West extension, comprising the principal living spaces of open plan kitchen, dining and living room at ground floor level, receives sun throughout the day, whilst the North extension, which comprises a second living room, receives evening sun.

Appearance

The roof to the traditional volume of the house will be finished with slate, whilst the walls are to be rubble stone clad and finished with a mineral based paint to give the 'chalky' appearance of a lime wash, yet with an improved longevity. This is particularly typical of dwellings found in Llysworney. It is also noted that verge details will not include fascia boards, following the traditional construction of such details in the Vale.

The extension to the North will similarly have a slate roof with a steep pitch, marrying it in with the adjacent two-storey traditional block. However, the walls will be finished with a lime render to differentiate it from the principal volume and to avoid a monolithic appearance. To the West elevation of the North extension, the slate roof will wrap down over the walls giving a slightly more contemporary feel to this area.



Vernacular buildings in South Wales are typically characterised by their gables, chimneys, dormer windows and traditional materials



Slate hanging is proposed to the walls of the West extension

Windows to these two elements will be polyester powder coated aluminium, chosen because of its thin framing profiles, low maintenance and longevity. This introduction of a modern material will further serve to avoid the appearance of a pastiche building.

The extension to the West has been considered as a separate volume with its own more contemporary character. This is to emphasise the breaking up of the buildings' massing. As such, the areas of glazing are more extensive with its principal facades having large areas of sliding doors that will open to the enclosed courtyard to the South, and views to the North including from a contemporary dormer window. The extension will be clad in slate to its roof and walls. The slate to the roof will tie it together with the slate used on the traditional block and North extension, whilst the slate to the walls will evoke traditional slate hanging found in Wales. Furthermore a feature slate panel will be used to introduce art into the building on the South elevation. The form and detailing are consequently uncomplicated and robust.

In order to introduce a softer and warmer material into the elevations, the glazed openings to the West elevation are to be timber framed, whilst a timber canopy is proposed to the East side of the courtyard to provide a sheltered approach to the house. The theme of timber framing will also be picked up around the timber garage door and to the corner window of the North extension. In addition to this there will be a timber framed picture



A contemporary dormer window will be added to the North elevation of the West extension

window to the East facade of the traditional block at ground floor level. This reflects its use as somewhere to sit and engage with the adjacent vegetation and stream to the East boundary, and that screens it from the road.

Community Safety

The effect that the proposed scheme will have on community safety is negligible.



A feature slate panel is proposed to the South elevation of the West extension

Environmental Sustainability

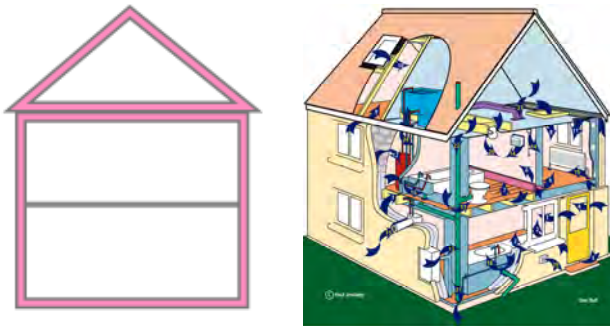
The proposed house will aim to achieve Code Level 3 under the Code for Sustainable Homes Assessment scheme. However, it must be noted that this approach can, under certain circumstances, lead to a tick box exercise being undertaken that is neither relevant nor particularly practical for the property in question. In order to avoid this, a general approach has been taken to the building that reduces its carbon footprint by sequentially looking to:

- Reduce the amount of energy that the building uses;
- Maximising the free gains that are available to the site;
- Addressing the energy source.

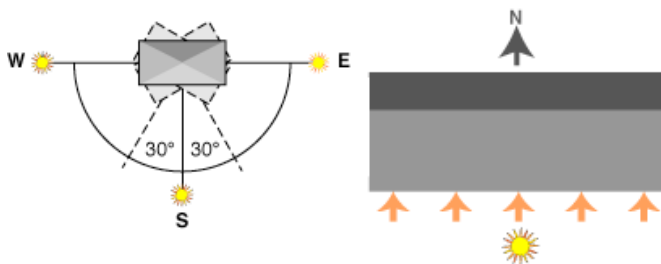


Timber framing is proposed to windows as shown here at the Bute Park Nursery building, Cardiff

This approach ensures that the building addresses the issues that can be realistically achieved and specifically relate to the individual site. It is therefore felt that the house can achieve the following as minimum standards:



In order to reduce the energy requirements of the buildings the building fabric should be highly insulated and air-tight. Ventilation should be controlled.



Free solar gains can be maximised by orientating the buildings East-West, with glazing to the South and minimal openings to the North



Having reduced the energy requirements and maximised the free gains available, the energy source can be addressed through integrating solar photovoltaics to the South facing roofs

- A 100% improvement over the Target Emission Rate as determined by the 2006 Building Regulation Standards
- An internal potable water consumption of 80l/p/d
- Materials specified to achieve a minimum D rating by the BRE Green Guide 2006
- A surface water run off strategy that ensures peak run-off rates and annual run-off rates are no greater than the previous conditions for the development site
- A site waste management plan that promotes resource efficiency
- Adequate space for the storage of household waste

Detail

At a detailed level, this has certain practical implications. In order to meet the requirements of the Target Emission Rate, a key factor is the reduction of energy usage. This has been addressed firstly by reducing the energy that is required by the proposed scheme.

The building form has been set out so that the subservient West wing runs east – west across the site. This ensures that the southerly aspect, and consequently solar gain, is maximised whilst retaining the traditional appearance of the principal North-South block. With high levels of glazing on the south facades and the main habitable rooms set within this shallow plan form, the internal spaces will consequently achieve the relevant daylight factors, reducing the artificial internal lighting needed, whilst also maximising the free solar

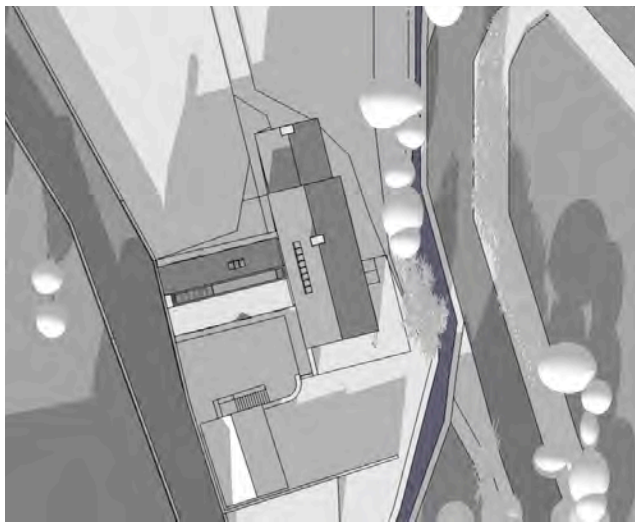
Sun Path Diagrams illustrating South facing roofs on the development model



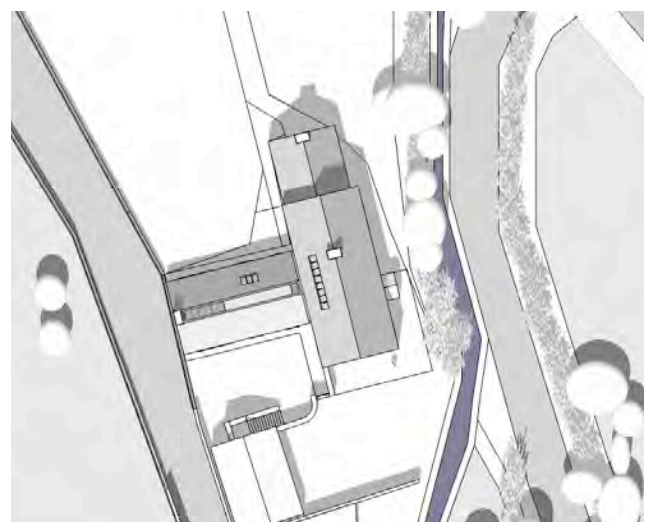
December 21st - 0900hrs



June 21st - 0900hrs



December 21st - 1200hrs



June 21st - 1200hrs



December 21st - 1600hrs



June 21st - 1600hrs



The proposed scheme has been set out with the West extension maximising its southerly aspect as shown above



The principal of a heat recovery system means that warm air can be retained within the house thus minimising the heating requirements. In addition to this, along with an air tight fabric, it will moderate and control the air flow within the properties

energy gained. The diagrams on the previous page show how the sun path across the buildings will work through out the year.

A heat recovery system in the house could ensure that this free energy is not lost, reducing the demand for heating by retaining it within the house. An airtight building fabric will serve to support this system. In addition to this the South facing pitched roofs of the West wing means that photovoltaics could be located to provide a proportion of the energy demand for the building together with solar hot water panels that will be reinforced by a Class 4 boiler under BS EN 297: 1994.

The house has looked to address the requirements of the Lifetime home standards. Inclusive design has been adopted throughout, with level thresholds to building entrances, with no internal level changes on the ground floor. All entrances are to be illuminated, and there is cover over the entrance at the front of the building. Internally the width of the doorways and corridors conform to the recommended standards with a clear opening width of 800mm in front of all doors and a 300mm leading edge to all doors at entrance level.

There is both space for turning a wheelchair in dining areas and living rooms, and also adequate circulation space for wheelchair users, especially at ground level.

The living room is at the entrance level, whilst all ground floor areas generally have low-level windows that will be easily operable.

Switches sockets, ventilation and service controls will be at a height that is usable by all.

In addition to this, a study has been incorporated above the garage. This is inherently sustainable as it offers the opportunity for living and working to take place on the same plot, reducing travel requirements.

Walls in all bathrooms and toilets will be capable of taking adaptations such as handrails and the future potential for a lift has been included to provide access to all floors. This means the house can adapt to changing needs in the future of its occupants.

Externally, car parking has been set out so that it is adjacent to the property. Although not dedicated, spaces are capable of attaining 3300mm width. Furthermore, the distance between the car and the home has been kept to a minimum whilst also working within the Vale of Glamorgan's amenity standards. The approach to the entrances to the property can be reached by level ground from within the site.

The rear garden provides private external space in accordance with the Vale of Glamorgan's Amenity standards document. A portion of this will be required for external drying space, though it is noted that an internal drying space has also been included in the property within the utility room. Space is also available for both recycling and composting facilities, ensuring that the scheme proposals meet the highest standards of sustainable design.

It is noted that the site itself is not at risk from flooding according to the Environment Agency's Flood Risk Assessment.

The building will be constructed using responsibly sourced materials, with many locally sourced. The selection of insulating materials with a Global Warming potential of less than 5 and an ozone depleting potential of zero will be adopted, together with sound insulation greater than that required by Part E of the Building Regulations. Concrete in the construction will use recycled aggregates, and all timber to be used is to be from a responsibly managed and renewable source in the UK. The British Gypsum waste-recycling scheme will be adopted by the successful contractors, who will also need to employ the Considerate Constructors Scheme.

Of the external materials, windows are to be high performance lowE double glazed in ppc aluminium frames – aluminium is totally recyclable and extremely long lasting, negating the need for future replacement. In order to retain the traditional characteristics of the surrounding vernacular buildings roofs are to be finished in Welsh slate.

In fitting out the building, great care will need to be taken to ensure that the energy saving measures incorporated in the design and construction, are not undone. Therefore, the house will be specified with greater than 75% of light fittings dedicated energy efficient. External lighting is to be provided by energy efficient light fittings, with burglar security lighting a maximum of 150W and having

movement detecting and daylight shut off devices. Eco labelled white goods including washing machines, dishwashers driers with a dedicated A rating, and tumble driers with a dedicated B rating under the EU Energy Efficiency Labelling Scheme, will be provided in the property. A home user guide or Building Manual will include information relating to the operation of the building, the site and its surroundings. This will ensure that the information required to enable the building user to operate the building most efficiently, will be provided on completion. To provide evidence of the building energy savings an Energy Usage Monitor will be installed to further encourage a reduction in energy usage by providing a visual reading of its cost.

By following the sustainable approach through from concept to detail in such a manner it is envisaged that the building will maximise the opportunities available to the site.

Movement & Accessibility

In accordance with Approved Document M a level approach will be made to entrances into the proposed house. Parking to the side of the property, together with the proposed garage, will provide space for disabled parking, although it is not felt that it is necessary for this to be defined.

Within the ground floor of the proposed house, corridors have been designed to exceed the requirements of Table 4 of Approved Document M, with doorways also being wider

than the minimum required width. The ground floor arrangements are predominantly open plan, and the requirements are also met within the utility space and associated circulation adjacent to the kitchen.

The ground floor of the house is on a single level, whilst a ground floor WC is provided adjacent to the entrance hall, which is accessible by the ambulant disabled.

All switches and sockets within the proposed scheme will be in accordance with Diagram 29 of Approved Document M, whilst the proposed stairs to the first floor are in accordance with Section 9 of the same document.



In earlier schemes the proposed house was much taller. Following discussions with the planners it has evolved sits much lower on its.



This earlier plan shows how room locations were considered during the design evolution to maximise access to sunlight

Design Evolution

The physical restrictions of the site and the relevant legislation have effectively combined to form the proposals for the Stourbridge House site. The existing situation of a modern single dwelling on the site does not sit comfortably within its environment, whilst previous applications have proven that two single dwellings on this site did not fully integrate with the surrounding character of the village.

A series of massing options were reviewed prior to selecting the developed option. The developed option created the preferred variety of spaces in the surrounding landscape, whilst also offering the best opportunity to address the site context.

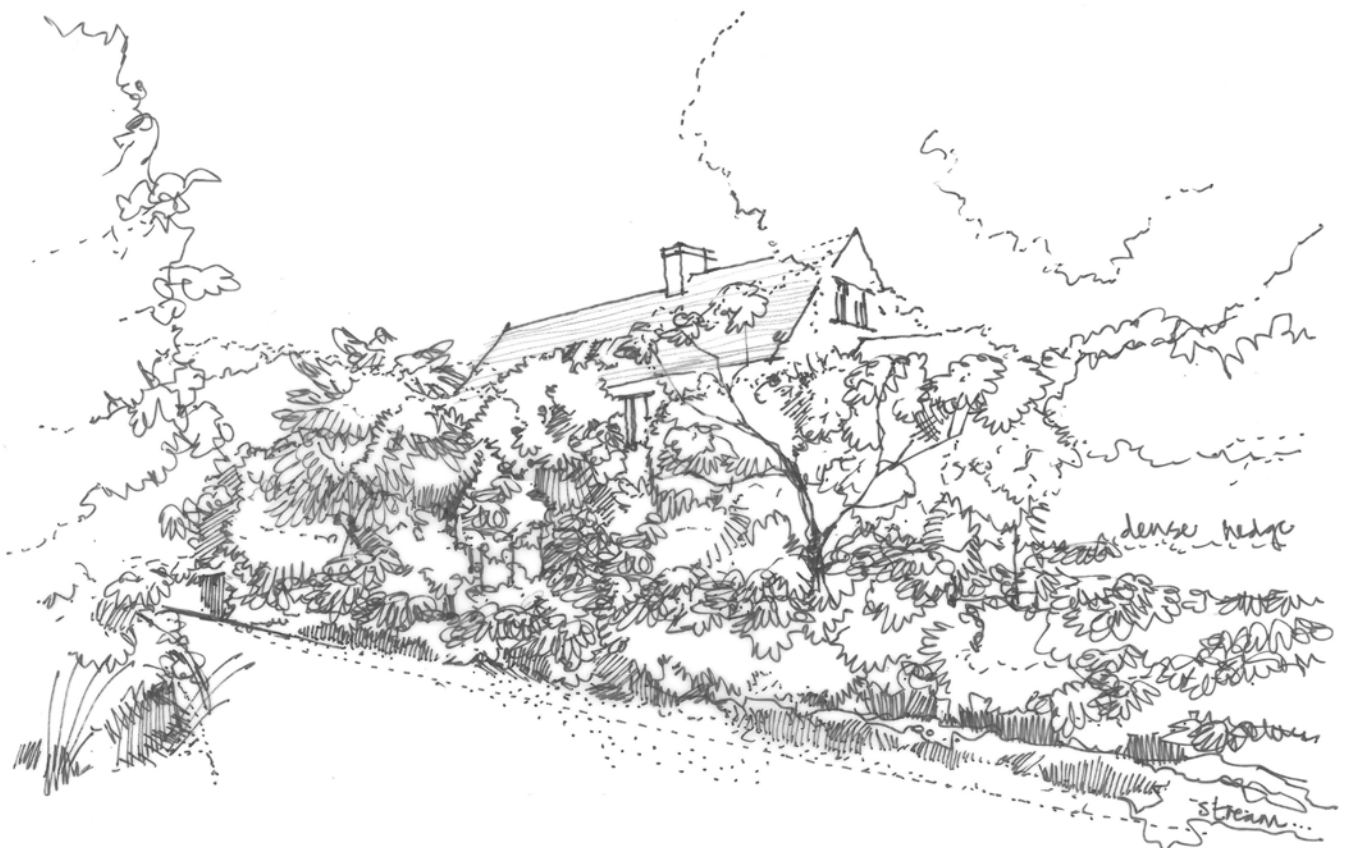
There are strongly competing issues when trying to integrate modern sustainable criteria with the more traditional character of a surrounding village. Consequently the building has effectively taken a very subtle approach by producing a hybrid between the two. Both traditional and more contemporary elevations were discussed before selecting the current proposals.

The considered massing, layout and form of the proposal, combined with the use of high quality materials and sound sustainable principles, enable the proposal not to just sit comfortably within its immediate environment, but to fully integrate with its site.

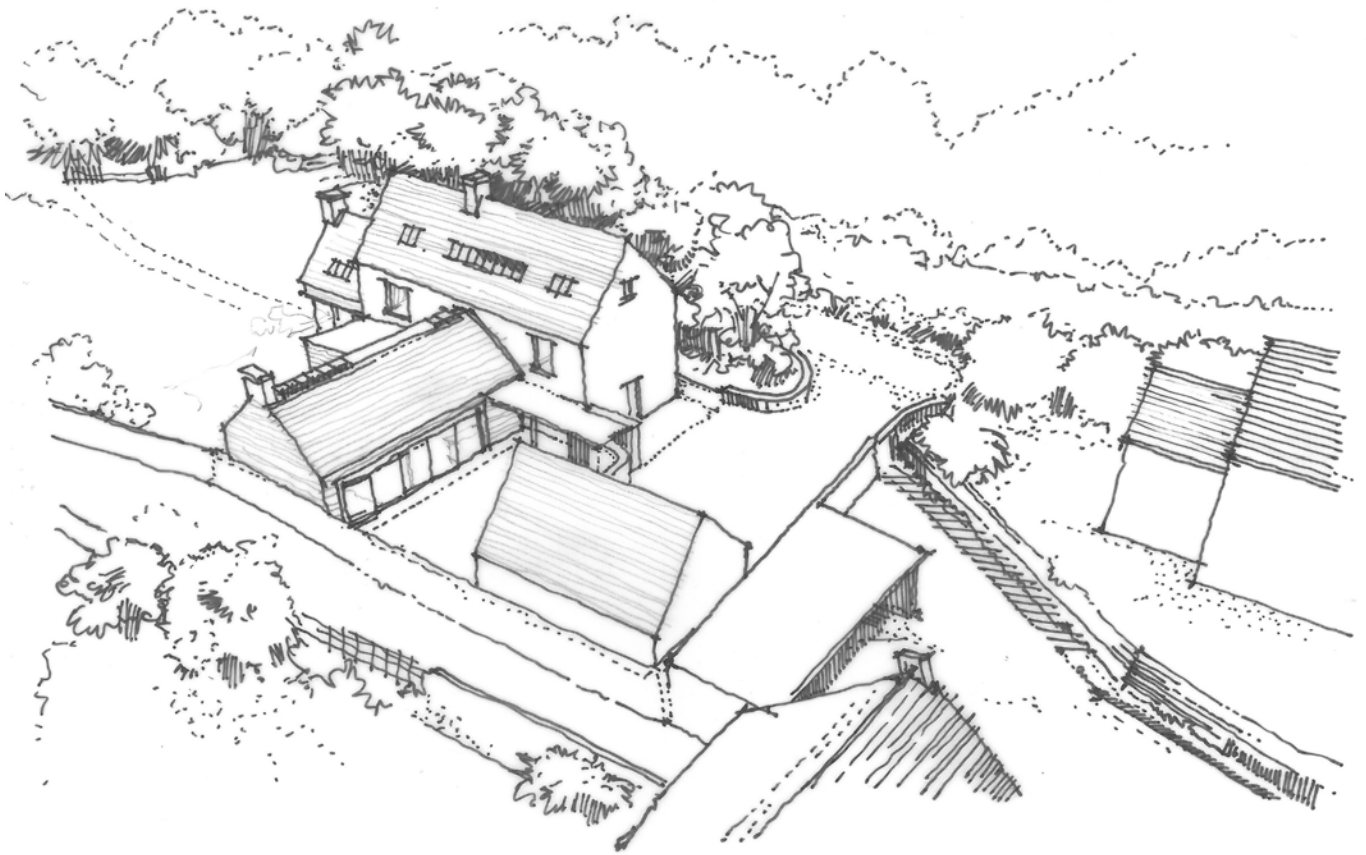
Final Scheme



View from the proposed entrance showing the traditional form and massing



View from the road to the East boundary looking South West. The building is largely screened.



View of the proposed scheme from the South West



View of the proposed building from the North West looking South

Contacts

Applicant:

Mr & Mrs D. Mackle
Corner House
Pwll Evan Ddu
Coity
Bridgend
CF35 6AY

T: 07809 436986

Architect:

Michael Plageman
Davies Sutton Architects
Penhevad Studios
Penhevad Street
Grangetown
Cardiff
CF11 7LU

T: 029 2066 4455

F: 029 2066 4411

E: mp@davies-sutton.co.uk