



Land West of
Swanbridge Road, Sully

Design and Access Statement

September 2016 / version 1

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Land West of Swanbridge Road, Sully

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CONTENTS

1.0 Introduction

- 1.1 Preface
- 1.2 Consultant Team
- 1.3 Structure of the Document

2.0 Vision

- 2.1 Preface
- 2.2 Vision
- 2.3 Aims

3.0 Site Context and Appraisal

- 3.1 Preface
- 3.2 The Application Site
- 3.3 Local Surroundings
- 3.4 Accessibility
- 3.5 Planning Policy Context

4.0 Site Analysis

- 4.1 Preface
- 4.2 Contextual Analysis
- 4.3 Site Features
- 4.4 Other Considerations
- 4.5 The Character of Swanbridge Road
- 4.6 Heritage and Archaeology
- 4.7 Access Points, Footpaths and Links
- 4.8 Levels
- 4.9 Flooding
- 4.10 Public Transport
- 4.11 Local Facilities
- 4.12 Summary

5.0 Design

- 5.1 Preface
- 5.2 Design Evolution
- 5.3 Design Content
- 5.4 Design Solution
- 5.5 Existing Characteristics to Capitalise on
- 5.6 New Notions and Ideas
- 5.7 Scale
- 5.8 Density
- 5.9 Access
- 5.10 Considering Open Spaces, Typology and Position
- 5.11 Further Development of the New Design Ideas

6.0 Character

- 6.1 Preface
- 6.2 Describing the Key Elements
- 6.3 Crosslink's
- 6.4 Overarching Character

7.0 Movement, Access & Drainage

- 7.1 Preface
- 7.2 Current Provision
- 7.3 Proposed Provision
- 7.4 Inclusive Access
- 7.5 Drainage and Utilities

8.0 Landscaping

- 8.1 Preface
- 8.2 Landscape Policy Context
- 8.3 Site Character
- 8.4 Landscape Fabric
- 8.5 Visual Amenity
- 8.6 Landscape Strategy

9.0 Community Safety

- 9.1 Preface
- 9.2 Delivering Community Safety

10.0 Environmental Sustainability

- 10.1 Preface
- 10.2 Environmental Sustainability
- 10.3 Creating a Sustainable Place

11.0 Conclusions

- 11.1 Preface
- 11.2 Proposed Development
- 11.3 Key Conclusions

12.0 Masterplan

1.0 Introduction

1.1 Preface

This statement is prepared on behalf of Taylor Wimpey UK Ltd in support of the application to develop land to the West of Swanbridge Road (South) in Sully for residential development. It follows an earlier approval for land south of Cog Road which is adjacent and will be served in highway terms by the site. This document narrates the Physical and Policy context which is relevant to the site and then explains the reasoning for the design and how it was derived.

In the context of the Deposit LDP (2013) this site is part of the proposed housing allocation site HA46 for 500 units, the majority of which has been subject of an earlier planning application (350) 2013/01279/OUT.

The site comprises a singular field which is physically bounded by the approved scheme for 350 units, Swanbridge Road, an existing housing estate and a post and wire fence*, which represents its restraining edges. The proposals contained within this document have evolved as a result of analysis of key constraints and consultations with the NRW

The application seeks outline permission with all matters reserved for subsequent final discussion and determination. The proposal seeks to deliver:

- Up to 190 new homes
- A new highway network
- A series of public open spaces for play and simple enjoyment interconnecting and serving the housing areas
- A new access off Cog Road (consented previously with the initial northern parcel)
- A new ecological reserve which will co-join the reserve noted in the previously consented 350 unit approval
- A SUDS drainage proposal which will have a visual and landscape function additional to its technical function

Taylor Wimpey, through their team of consultants have undertaken a comprehensive assessment of the site and its setting to inform the design and assess deliverability.

The following studies have been carefully assessed and the findings of each have influenced the final proposals. These studies are adjusted versions of the studies submitted with 2013/01279/OUT

- o Visual Impact Assessment
- o Traffic and Transportation Survey, and causal analysis
- o Archaeological Evaluation and Constraints Findings
- o Ecological Studies and Assessments
- o Flooding and Drainage Assessments including Capacity Analysis and Causal Analysis

* - The post and wire fence is sometimes not physically manifest. This boundary is referred to in this way in document. However, the 'line' here is the edge of the application site to the south.

Supporting documents have been submitted in respect of these aspects and should be read in conjunction with this statement and the masterplan. The proposal has also been subject to an Environmental Impact Assessment.

1.2 Consultant Team



CWArchitects –
Design, Masterplanning



Savills –
Planning Consultants, Environmental Impact Assessment



Vectos –
Drainage Infrastructure and Flood Risk



Soltys Brewster –
Visual Impact Assessment, Landscape Advice, Ecological Assessment



Vectos Consultancy –
Transport Assessment, Highways Design



Cotswold Archaeology -
Investigation of Archaeology and Historical Features and Influences

1.3 Structure of the Document

Section 2.0 - Describes the overall vision which anchors the design approach.

Section 3.0 - Illustrates the physical context in a wider localised geography and describes the Planning Policy context

Section 4.0 - Analyses the site in detail, its condition and features and considers its immediate context and surroundings

Section 5.0 - Describes the design evolution and the recycling of ideas and introduction of findings that informed the proposals as they became tangible

Section 6.0 - Describes where the designers feel the character of the scheme should head and why

Section 7.0 - Describes how people and vehicles move in and around the site, how the areas interact and how the development will influence the baseline transportation situation

Section 8.0 - Discusses the current landscape, arboriculture and ecology of the site, how it will be influenced and what we will do to augment such natural features. It describes the designed landscape strategy and how it will influence and enhance biodiversity, the visual enjoyment of the site and interact with the architecture and layout

Section 9.0 - Illustrates how the development will affect existing Community Safety and how the new area will be designed to be safe for its residents and visitors using both passive and active design devices

Section 10.0 - Discusses the sustainability of the site in both environmental terms and also in creating a sustainable place for people to enjoy.

Section 11.0 - Takes the essence of the findings of each chapter and shows how they have resulted in the design via a series of actionable conclusions

Section 12.0 - Shows graphically the Masterplan which has been derived from the analysis, designs and influencing decisions

2.0 VISION

2.1 Preface

This section outlines the fundamental aims of the design. These encompass all the ideas and aspirations from the broad disciplines of the team. They guide the design forward and act as a 'touchstone' to refer to when considering other influences and their validity. These aims are the vehicles by which we deliver the vision.

2.2 Vision

Broadly speaking the vision has three key components. These are:



Create a cohesive and sustainable place to live and enjoy, the design of which capitalises on the unique sense of place offered by the site and its surroundings

Perpetuate local character devices and forms into the site and use them to root the design into the existing context



Consider what we are trying to do and achieve and create specific aims for the vision

2.3 Aims

In constructing the vision we have identified the following key aims:

1. Maintain the character of the key site edges which is a rural lane with hedgerows and a fully rural edge forming an agricultural boundary to the south
2. Consider the character and sense of place of the previous approval and design with this in mind
3. Create a new open space which is an arbitrator between the previous approval and the new proposal, whilst addressing both
4. Carefully consider movement through the site and ensure a new connection via the previous approval to mitigate vehicular use of Cog Road and Swanbridge Road as conduits
5. Consider character and how it will address and announce the site
6. Consider inter-connection with the existing housing estate to the West and ensure porosity
7. Ensure the development successfully addresses the homes and gardens which immediately front onto the site adjacent to the south western boundary respecting their open character and generous frontage. Allow the mature trees on this boundary to flourish. Ensure retention of privacy
8. Create sustainably sized, varied and useful areas of public open spaces arching over different use types and appealing to all generations. Make these strategically located and let them act as walkable green links free from traffic
9. Ensure variety in housing form, type and character. Make a cohesive yet diverse environment with identifiable character areas
10. Ensure new built forms witnessed from the agricultural land to the south are sympathetic in scale and appearance and look outwards onto this space
11. Ensure new built forms which 'peep' over the hedges along Swanbridge Road are to be recessed and set back, not dominating the road or substantially changing its character
12. Ensure entrance forum off the proposed originally consented parcel into the housing pocket is legible and has character.
13. Ensure the new homes close to Swanbridge Road respect those already present on the opposite side and ensure we do not 'urbanise' this short stretch

3.0 SITE CONTEXT AND APPRAISAL

3.1 Preface

This section introduces the site in broad terms and notes its key features. It also considers the site in a regional and local context and considers how it relates and connects to its surroundings. Secondly, here, we set out Planning Policy context and discuss how this is relevant to this application in terms of the site location and the policies that affect design and environment.

3.2 The Application Site

The site is a roughly rectangular parcel measuring approximately 400m long by 150m wide. It co-joins the extended settlement of Sully, backing onto a housing estate constructed in the 1970s – 1980's. It is bounded to the North by an unconstructed approval for 350 dwellings and to the East by Swanbridge Road. Both of these can be used as access opportunities. It is a fairly level plateau and slopes very gradually downwards from North to South. It sits in extensive surroundings which are at the same level.

The site is close to the main B4267 Lavernock Link Road which connects East-West along the coast in between Barry and Cardiff. There are some mature trees interspersed in the Swanbridge Road hedge.

3.3 Local Surroundings

The site is on the North Eastern fringe of the Sully settlement and bounded by residential and agricultural land uses.

The housing to the Eastern boundary is a mass built medium density housing estate from the 1970's – 1980's which has spread back North over time from the B4267 road. The hamlet to the North Eastern corner of the 01279/OUT approval is vernacular in form with well spaced farm buildings and detached houses in large plots. There is a similar sized group of houses to the South East of the site on Swanbridge Road albeit on the opposite side of the road. Their architectural character however is different to the "Cog hamlet". Cog Road, right up to the northern land site boundary has a more suburban feel than Swanbridge Road from the South East which is more rural in character. Both these roads will serve the site via 01279/OUT.

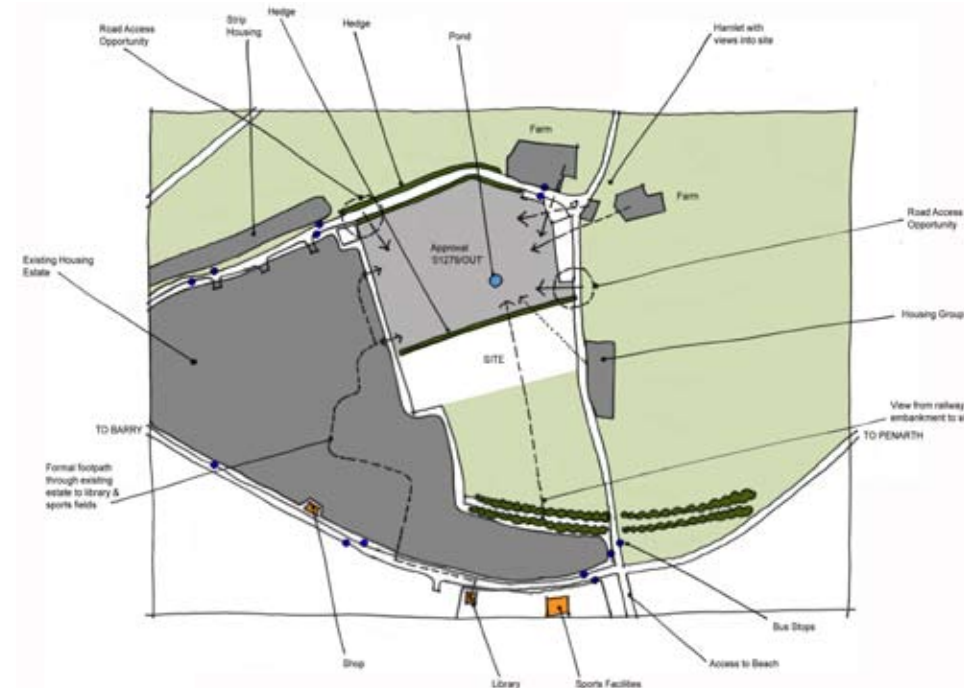
The approach via the existing housing from Cog Road is more urbanised and the housing is newer and more modern close to the junction of Cog Road with the B4267, where there is a local pub (The Sully Inn). Additionally there is a local convenience store in the centre of Sully, on the Northern side of South Road (B4267).

Swanbridge recreational grounds are to the South of the site by some 1km, which provide a number of formal sports pitches and a library.

Soltys Brewster have carried out a Landscape and Visual Impact Assessment (LVIA) of the site and its surroundings. This includes a detailed assessment of the existing site and its wider relationship with the surrounding landscape and townscapes.



Aerial view of Sully. The site is outlined in red with the previous approval in blue



Site context



Views into the site

3.4 Accessibility

Whilst there are limited pedestrian facilities along Cog Road and Swanbridge Road, there is a comprehensive footpath network adjacent to the western boundary of the site which serves the existing residential areas of Conybeare Road and Arlington Drive. As such, pedestrians are able to walk from the site through to South Road using the existing footpath network which in part is segregated from the residential estate roads.

A shared cycle / footway is provided between Penarth and Barry following Lavernock Road and South Road.

The site is also accessible by public transport and two bus services which provide a frequent service between Barry and Cardiff via Penarth. The closest bus stop is located to the west of the Lavernock Road / Swanbridge Road junction (650m from the centre of the site).

There are Eastbound and Westbound bus stops on both Cog Road and Swanbridge Road which 'loop' round back onto the main East-West route. The existing bus stops on the two roads allow all housing to be within 200m of each service. Additionally the bus service could, if necessary, divert close to the site within the previously approved land.

The nearest train stations are at Barry, being Barry Halt and Cadoxton. This regional line connects to the National Rail Network at Bridgend and Cardiff. There is also a Halt at Dinas Powys. The nearest Motorway link is the M4 some 10km North at Junction 33.

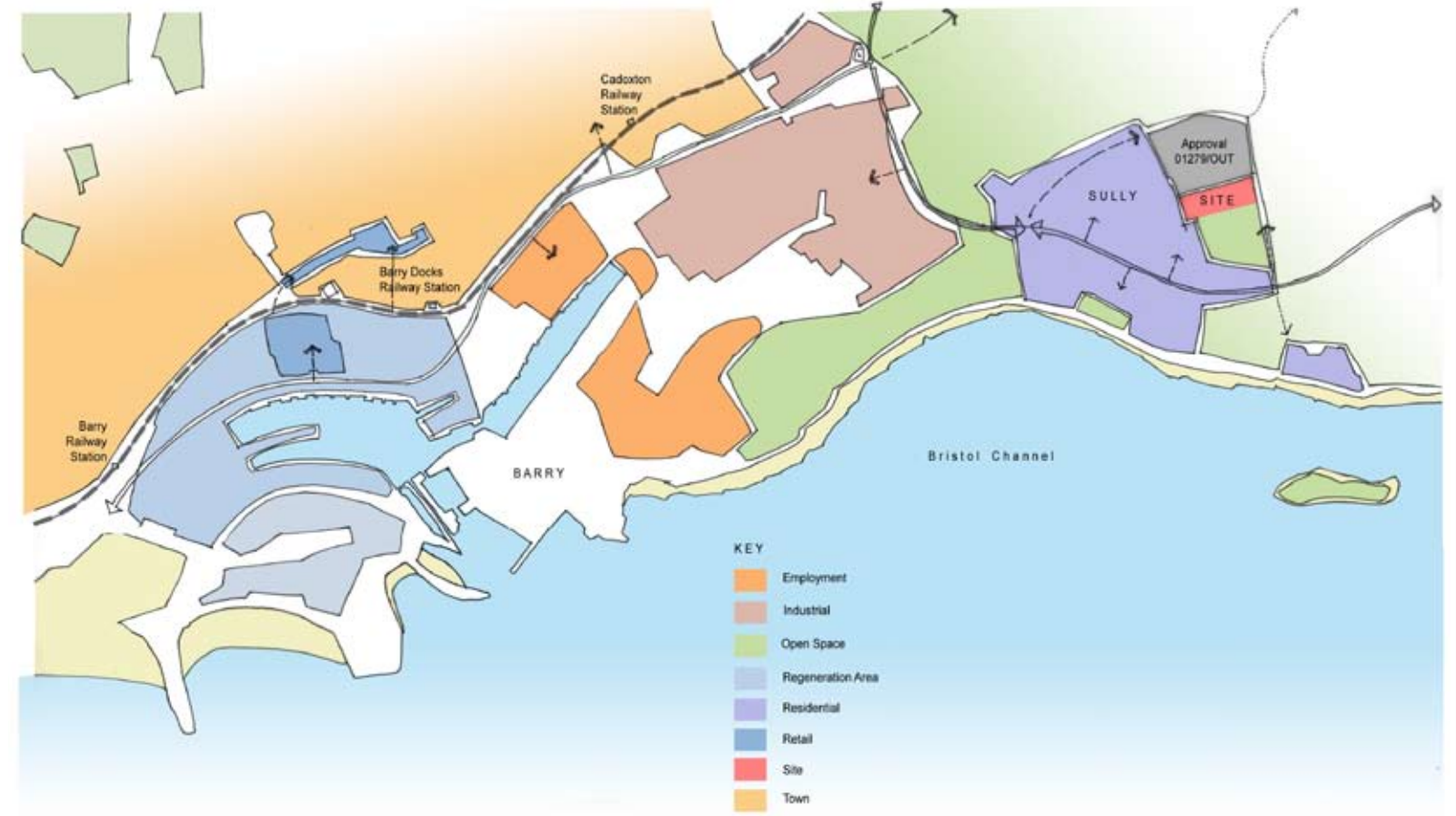
Roadway connections to the site can be made at both Swanbridge Road and Cog Road but via the northern approved land. The site is on the Eastern fringe of Sully and is served by Cog Road and Swanbridge Road, both of which connect back to South Road (The B4267). The B4267 connects along the coast between Cardiff and Barry.

Both Cog Road and Swanbridge Road are local 'distributor roads'. Cog Road is orientated in an east-west direction, forming junctions with Sully Road and Swanbridge Road to the east and the B4267 South Road to the west. West of the junction with South Road the B4267 continues eastbound through Sully, Penarth and into Cardiff and westbound into Barry. To the east of the junction with Sully Road and Swanbridge Road, Sully Road also forms part of the route into Cardiff to the north, and Swanbridge Road links to South Road to the south of the site.

Cog Road has the most open geometry and has a wider carriageway up to the site boundary to the North West. It has a footpath and street lights and up to this point at each side to the road. Swanbridge Road is a 'single track' nevertheless it has enough width for vehicles to pass.

The site takes advantage of the opportunity for a 'through link' to alleviate extra traffic on both Swanbridge Road and Cog Road as they join in the North Eastern corner, which will be facilitated by approval 01279/OUT. It is not considered necessary to make a further independent access onto Swanbridge Road

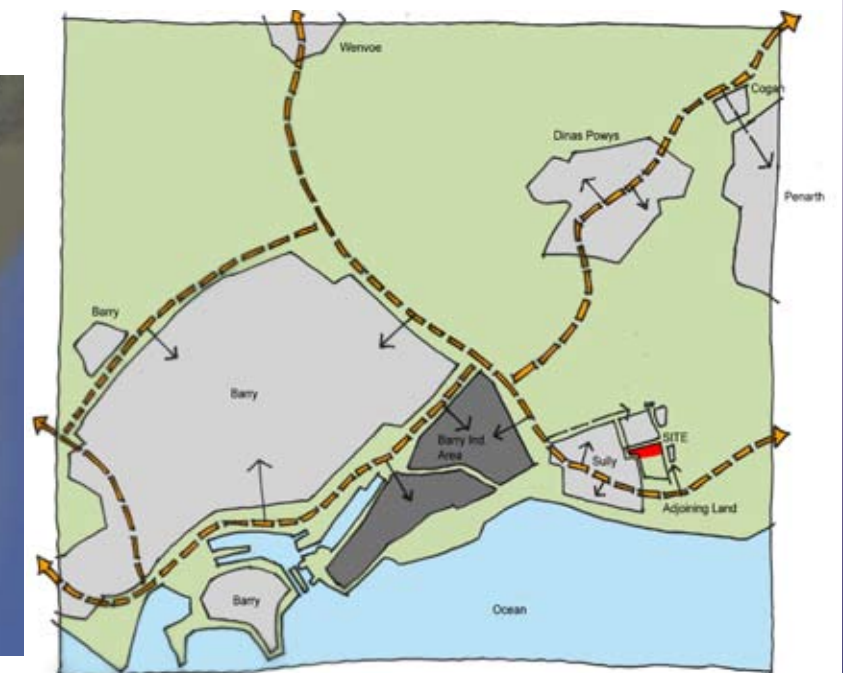
Vectos have prepared a Transport Assessment which considers the potential effect of the development on the local highway network. This document, which accompanies the planning application, provides a detailed description of the existing highway infrastructure and transportation networks and the existing accessibility of the site.



Local Position Diagram



Aerial overview of Sully and the surrounding area



Links to urban areas

3.5 Planning Policy Context

An in depth analysis of the planning policy framework and local development plans is undertaken within the planning statement, prepared by Savills. This should be read in detail. For the purposes of this document, the following policy framework is relevant.

National Policy Framework:

Planning Policy Wales (Edition 8 2016)

PPW forms the overarching national planning policy document within Wales, providing guidance to Local Planning Authorities ('LPAs') for the preparation of development plans and the determination of planning applications through their development management functions.

The principal objectives contained in PPW, which are relevant to this application are very well known and include:

- The promotion of high quality, sustainable, resource-efficient and safe settlement patterns that minimise land-take and urban sprawl;
- Protecting the natural and built environment;
- Ensuring that all local communities have sufficient good quality housing for their needs;
- Promoting access to employment, shopping, education, health, community, leisure and sports facilities and open and green space, maximising opportunities for community development and social welfare;
- Locating developments to minimise the demand for travel, especially by private car; and
- Securing the provision of infrastructure to form the physical basis for sustainable communities (including water supplies, sewerage and associated waste water treatment facilities, waste management facilities, energy supplies and distribution networks and telecommunications).

Technical Advice Notes:

The guidance set out in the following TANs has been taken into account:

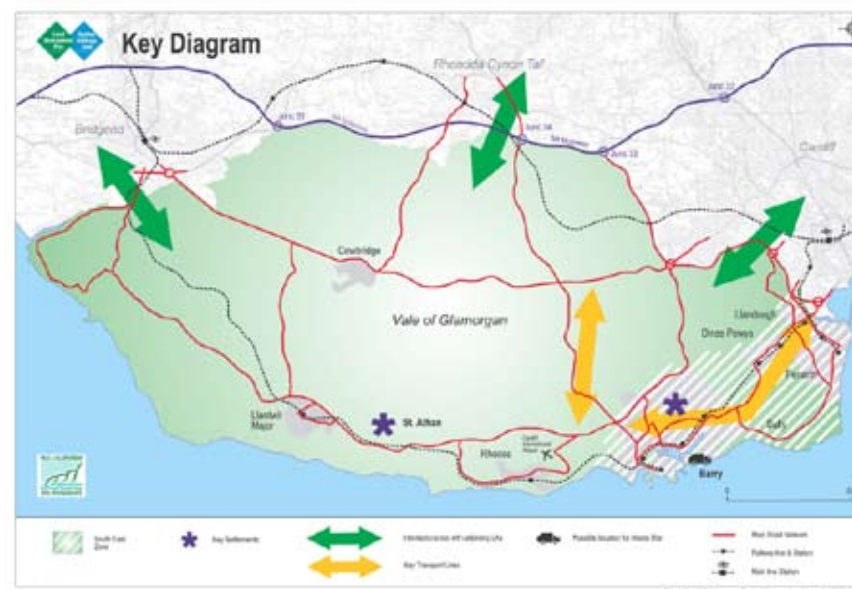
- TAN 5: Nature Conservation and Planning (September 2008)
- TAN 12: Design (June 2009)
- TAN 15: Development and Flood Risk (July 2004)
- TAN 16: Sport, Recreation and Open Space (January 2009)
- TAN 18: Transport (March 2007)
- TAN 22: Planning for Sustainable Buildings (June 2010)

Local Planning Policy Context:

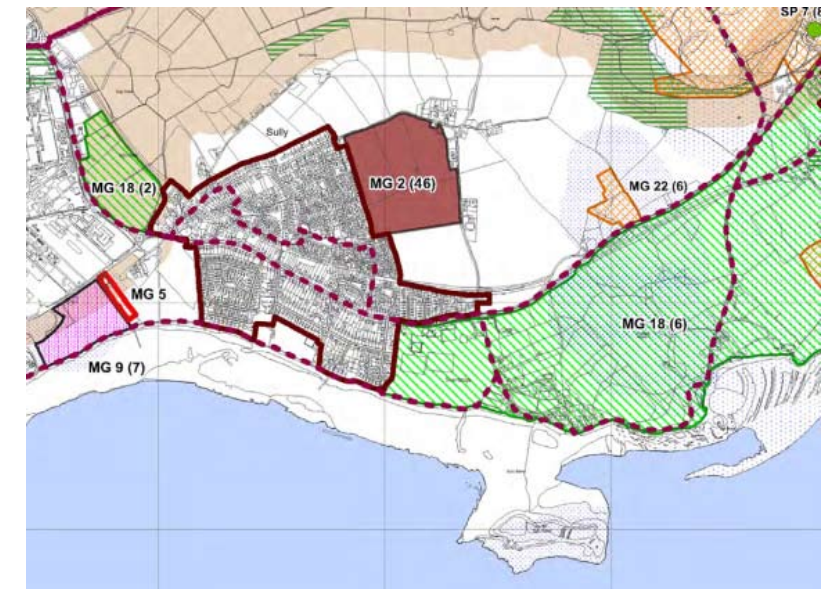
The LDP Deposit (November 2013) allocates the site for housing development as part of allocation MG2(46) – Land West of Swanbridge Road. The allocation is for a total of 500 houses on a 20 hectare site. The supporting text to the allocation sets out the following relevant context to this document:

- The allocation (in total) could yield 500 dwellings, and the need to not compromise a comprehensive development of the whole allocation must not be taken into account.
- Safe access points need to be provided.
- Future development would need to have regard to the listed buildings within the hamlet of Cog.

For reasons sets out in the planning statement, it is considered that the Deposit Plan LDP (November 2013) is the most relevant to support the principle of the proposals. The relevance of the allocation and the significance of the LDP are assessed in detail within the planning statement.



Deposit LDP (2013) Strategy Plan



Deposit LDP (2013) Proposals Map

4.0 SITE ANALYSIS

4.1 Preface

This section builds on the previous section and considers the actual site in detail and how the site connects to its surroundings. The findings of this detailed analysis affects the design, acting as constraints or opportunities, or sometimes both.

4.2 Contextual Analysis

On a wider level the site is in the centre of the coastal plain, between Barry and Penarth, a roughly flat strip of land which laminates East-West and spreads back Northward from the coast for a considerable distance. Co-joining Sully itself, it lies to the North of this settlement adjacent to an agricultural backdrop of arable farming.

- To the West is a housing estate which has units backing and fronting onto the site boundary, the gardens of which are some 10-15m deep.
- To the South is a post and wire fence separating the site from similarly characterised agricultural land
- To the North is the 01279/OUT approval for 350 units which is separated from the site by a tall hedge
- To the East is a small settlement of houses with some farm buildings. All set in large curtilages off Swanbridge Road



High Level Analysis Plan



Site Analysis Plan

4.3 Site Features

The actual site itself is fairly featureless agricultural land.

It is currently used for crops. The roughly square site measures some 400m x 150m and is undivided.

As explored in more detail in the Agricultural Assessment submitted as part of this application, Agricultural Land Classification surveys have been undertaken and confirms that the is Grade 3b and 4. This report provides detail on the agricultural quality and validity of the land - which is mainly clay based soils over a predominantly limestone sub strata.

The land falls some 5m from South West to North East. There is a small Great Crested Newt population in evidence in the adjacent pond (off site) – as discussed in detail in the Ecological Surveys and Assessment which accompany this application.



The Northern boundary to the site is a tall mixed species hedge in good condition. It is proposed in the previous approval to augment this hedge up to a width of 10m to increase landscape and ecological value. The design of the previous approval ensures houses either 'gable on' or face this development boundary and are laid out in a way that the hedge can be unilaterally maintained in the long term



On the Eastern boundary of the site is Swanbridge Road and separating this from the site itself are a series of detached larger houses in substantial plots with quite long back gardens. These address the site's Eastern boundary via Swanbridge Road. On this boundary are various broadleaf indigenous specimen standard trees including Beech and Chestnut in a good state of maturity. There is a short length of Eastern site boundary with a hedge directly onto Swanbridge Road to the South of the houses. Here the site 'dog legs' out and co-joins Swanbridge Road.



The Southern boundary of the site is a post and wire fence. This lies on the site boundary. On the opposite side of this fence is cultivated agricultural land which is ploughed and planted with regularity in the same manner as the site.



The Western boundary of the site is formed by the gardens of a housing estate, there is a hedge (of sorts) and various derivations of fencing along this boundary and the most Southerly part of the boundary does allow for an inter-site pedestrian access to be formed to link the original housing site with any new proposals. In the existing estate, most house frontages face away from the site whilst back gardens abut the site edge.

4.4 Other Considerations

There is another small collection of existing houses on Swanbridge Road which are opposite the site boundary but can view access to the site. However, they lie to the East of Swanbridge Road and opposite is a belt of tall broadleaf trees in the hedgeline that will eclipse the view to some extent.

To the immediate South one field away is the former railway embankment which is raised. It currently has outgrown saplings along its length especially on the embankments. However, the top of this structure is frequently walked, albeit the trees screen and filter the potential view into the site.

4.5 The Character of Swanbridge Road

Swanbridge Road is of a similar character to the rural part of Cog Road. It is slightly wider as it joins the B4267 and then it naturally narrows as it goes underneath what was a railway bridge built in engineering brick about 100m in from the main road junction. From here there are hedges to each side, similar to Cog Road although in the example of this road there are interspersed dwellings and the hedge of the site boundary side has a number of mature trees within its width.

Where both roads come together the edge treatment to both changes from hedges to agriculturally derived stone walls built in local limestone.



Swanbridge Road - above, the rural character after passing under the railway bridge, below, the character changes as Swanbridge Road approaches Cog Road

4.6 Heritage and Archaeology

Cotswold Archaeology have undertaken a Heritage Desk-based Assessment which accompanies this application. In summary, this assessment has not identified any heritage constraints that would preclude development.

The report refers to the Model Farm adjacent and North but this is a semi contextual reference. A number of Listed Buildings (Grade 2) are situated at Cog Road, Nicells House and Home Farm to the north-east of the site. Of note are 8 rickstands 290m North of the site behind the model farm buildings. These are Grade 2 listed and unspoilt. Their setting though is one of the Model Farm rather than the site. Nicells House is located adjacent to the northern land (already approved) and therefore, proximity has already been addressed.

The barn at Home farm is some distance away (250m) and in a group of buildings itself.

It is concluded that careful development, especially giving the pre-disposed aspect of Nicells House and the northern land approval (towards Cog farm) would not fundamentally alter the intelligibility, preservation of value of these buildings. Given that the previous approval now forms a “built buffer” between these assets and the proposal it is concluded that this is now less of an issue than with the previous application.

It has been considered that the site is just visible on its northern edge visible from the secluded fort on Sully Island but when the site is viewed from such a point it is within the context of a plethora of modern development and the adjacent approval. It is therefore assumed that there is no negative effect on the scheduled monument.

The site itself will marginally, from the upper parts, provide views over Sully Island and fort which will be prefaced by the railway line and tree belt which hide the modern development on South Road beyond.

4.7 Access Points, Footpaths and Links

At present the site is only accessed through field gates on Swanbridge Road, however a Public Highway abuts one side so the provision of continued road infrastructure is achievable. In this instance however new access will be formed via infrastructure facilitated by approval 01279/OUT.

The housing estate to the West has public walking infrastructure up to the site boundary in the Southern corner so a pedestrian connection could be made here. Access into the existing housing estate allows access to a wider pedestrian infrastructure within Sully and it is envisaged that interconnections can be made with 01279/OUT at detailed stage.

4.8 Levels

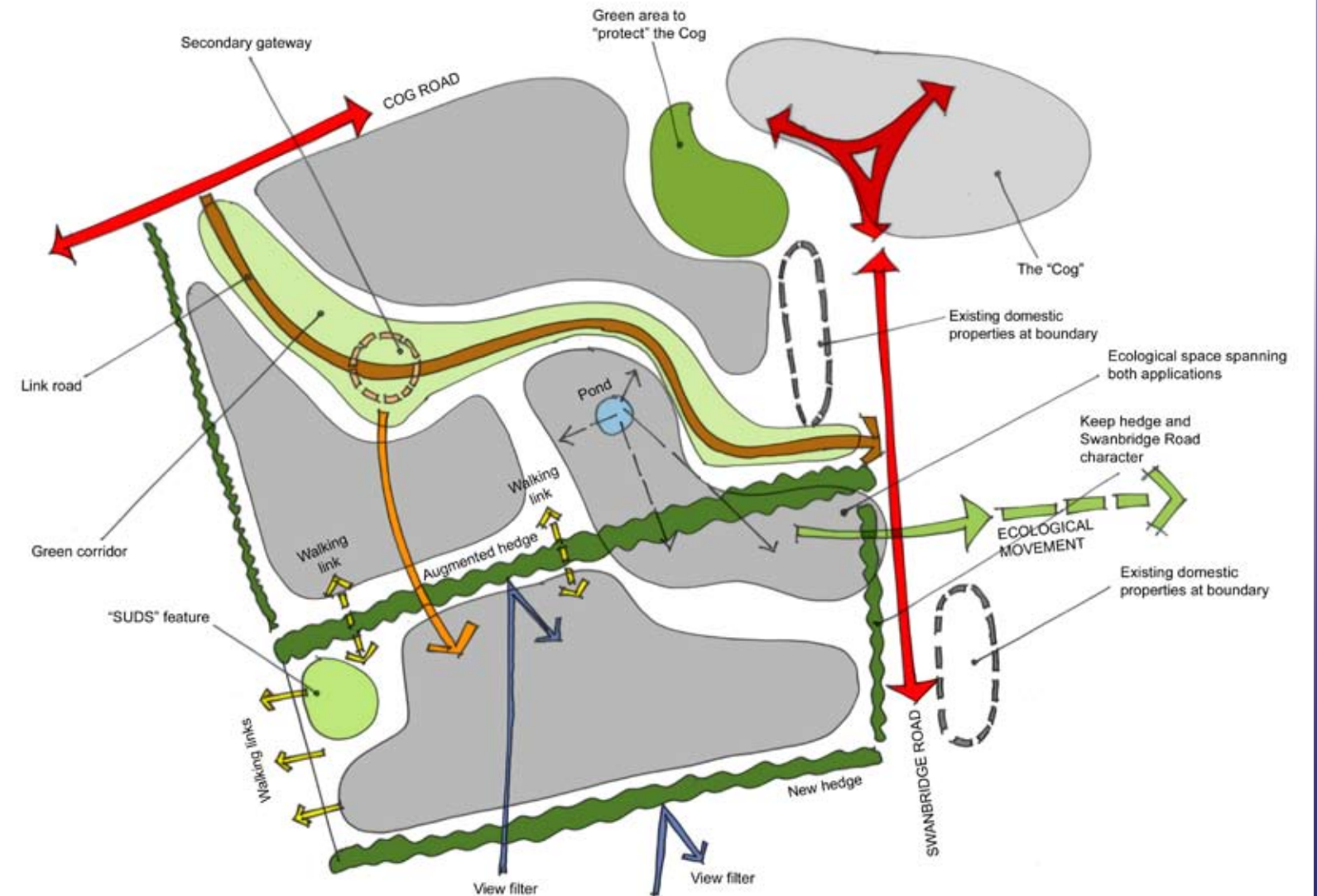
In terms of development of the site for housing it is ostensibly flat. There is a 7m crossfall across the total diagonal width but the footprints of the proposed buildings are so small that it is not envisaged that a ‘cut and fill’ exercise will be required. Existing drainage infrastructure is at the lower parts of the site so gravity connections can be made without compromising existing land forms.



Nicells Farm



The Model Farm at Cog Farm



Site Concept Diagram

4.9 Flooding

The site is not in a flood zone according to the Natural Resources Wales mapping systems. There is no localised flooding from minor brooks or watercourses within the vicinity. It is unlikely that development will cause flooding of existing adjacent areas. Infiltration scenarios to cover eventualities of poor porosity have been derived to ensure hard run off in terms of dynamic rainfall can be accommodated. Flood Risk and Drainage are covered in greater detail in the FCA and Drainage Statement which accompanies this application.



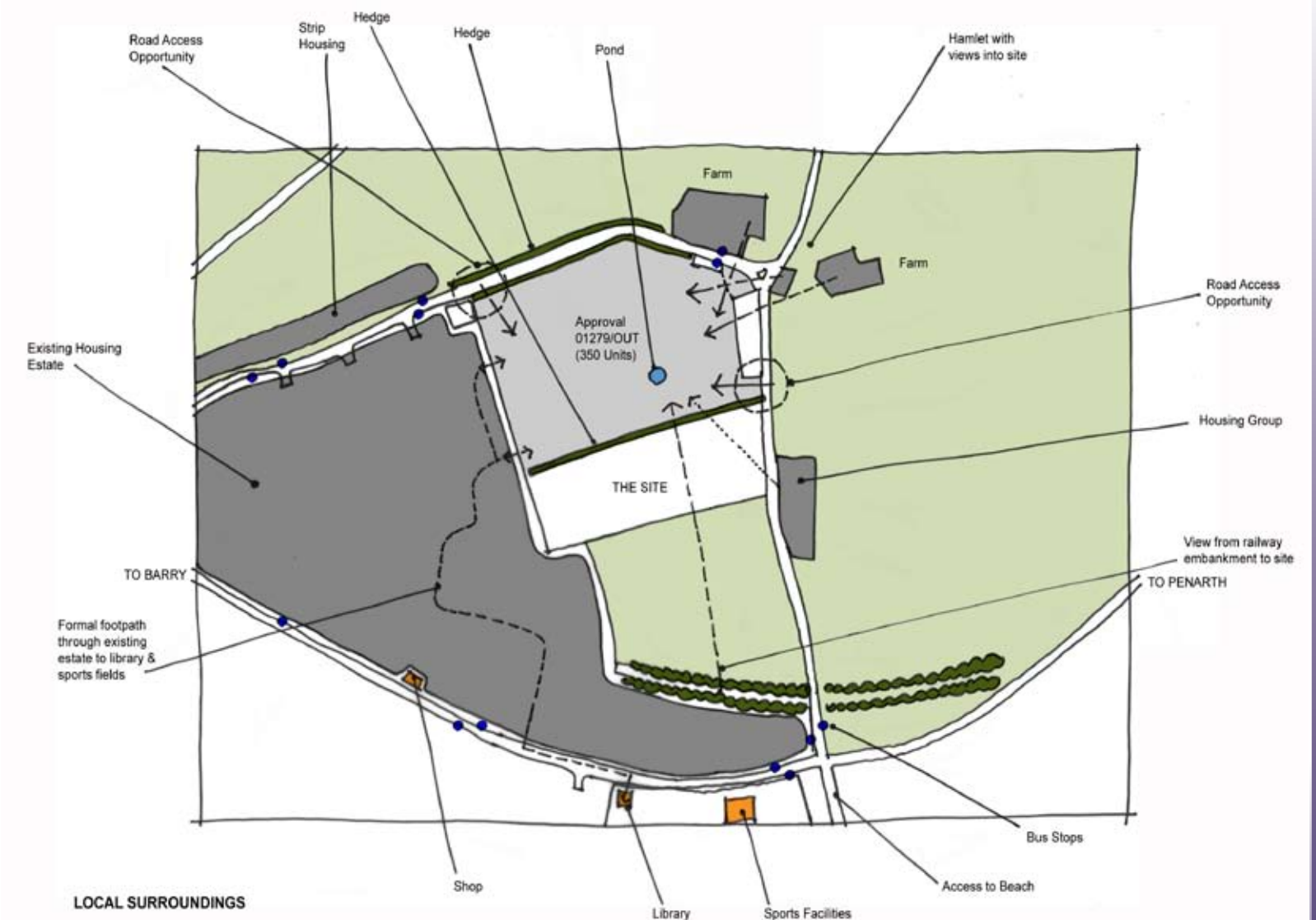
4.10 Public Transport

The site is served by public transport routes on the B4267. Here regional services connect between Barry and Cardiff via Penarth. There are Eastbound and Westbound bus stops on both Cog Road and Swanbridge Road which 'loop' round back onto the main East-West route. The existing bus stops on the two roads allow all housing to be within 200m of each service. Additionally the bus service could, if necessary, divert through the site.

In terms of rail services, the bus service connects to Barry where a rail service is available for regional connections at Cadoxton and Barry Stations. These serve Cardiff and Bridgend where national connections can be made.

4.11 Local Facilities

There is a range of existing facilities within the surrounding local, neighbourhood and regional areas including sport facilities, a shop and library along with reasonably accessible bus stops.



4.12 Summary

This site is a relatively level and regularly shaped area which co-joins an existing settlement. It is bounded by a road on one side and housing to the west, which give it a natural and pragmatic containing features. It has manageable ecological, arboricultural and archaeological constraints and its surrounding contextual features offer good opportunities to knit into the existing landscape and townscape fabric.

The site benefits from existing public transport provisions and is considered accessible for both bus and train connections.

There are a range of existing facilities within the surrounding area. Road access provision is easily achievable and land form modelling is not required.

5.0 DESIGN

5.1 Preface

This section considers the evolution and derivation of the design. It notes influences on the design (as identified in the preceding sections) and describes how they have been addressed. It also describes design progression and illustrates the ultimate conclusions.

5.2 Design Evolution

- **Amount of Development**

This application is for up to 190 new homes. The amount has been determined by the number of homes proposed in the draft LDP allocation and proportion of this allocation already approved on the northern land.

- **The Brief, Constraints and Design Theorem**

The progress of the design has been led by a broad client brief into an evolving analysis of the site.

This process was subject to modification during the design process as the initial site analysis posed questions of a broad nature, be it arboricultural, ecological, archaeological, flooding or others. The knowledge, approach, grain and density aspiration were carried forward from the “northern land” and the brief from the client was to emulate this development pattern and density. This poses questions about character and diversity of appearance.

The desire to deliver a layout based on sound masterplanning and sustainability principles was influenced by constraints and opportunities gleaned from our analysis of the site. A number of broad designs were explored as shown in the sketch options.

Our key goals here were to marry solid urban design principles with physical and esoteric opportunities offered by the site. These key goals were tested against the sketch options and by ‘scoring’ the options against the aims described in ‘The Vision’, an appropriate scheme was taken forward.



- **Developing the Vision**

Our vision statement is set out earlier in this document and is reinforced here. These key points are pivotal to the delivery of the vision i.e. the most appropriate development for the site. The main objectives are:

- o Make a new route for traffic through the “northern land” and allow development to be served from it at a key point. Make it green and pleasant like a country road, to connect our “southern land” (this application) to this.
- o Knit the new road junction into Cog Road and Swanbridge Road at the earliest possible geographical opportunity to preserve as much as possible the existing character of these two roads (This was a prerequisite of the “northern land” but carries through because of access logistics. This application will be physically served from this point
- o Extend the “heart” of the site visioned in the “northern land” to make a bigger, more valid green lung with added ecological value. Consider the position of this relative to the site boundary to help species migration on and off the site to adjacent land
- o Carefully create a sense of entrance off the “northern land” infrastructure.
- o Create a housing ‘pocket’ beyond the spine road to maintain the visual integrity of the spine road and its country character in the “northern land”.
- o Create a strategically arranged matrix of open spaces of a variety of natures to cater for a wide user demographic. Make sure that these are accessible on foot and that they are localised to user groups, and are overlooked and “self policing”.
- o Use the linear green space alongside the Southern hedge to connect walkers and cyclists between the existing housing estate and the new development.



Possible views inside the site



Possible view from Swanbridge Road looking north with the new development behind the existing hedge

5.3 Design Content

The masterplan at this stage addresses the site on a broad level. It is a strategy derived from aims and aspirations borne from constraints and opportunities. However, it necessarily provides a framework that is usable on a more intimate scale to 'design forward' to completion without compromising the core strategy and retain the sound design principles already identified.

The plan delivers at 'high level' but allows further development at detail stage around a pre ordained strategy.

Here we have considered in broad terms, over and above architecture:

- Connections between people and places
- Movement and form
- Nature and its relationship with built fabric
- Public realm
- Legibility
- Morphology
- Walkability
- Sustainability
- Defensible space
- Accessibility
- Character
- Environmental capital

Work undertaken in terms of arboriculture, traffic, ecology and highway access were tested against the final strategy.

Because the site analysis only discovers a few key principal pointers and design drivers, the layout can be newly derived. The site is relatively featureless apart from its edge characteristics and design decisions generated by the "northern land" approval.

5.4 Design Solution

Having considered options and made known fully all physical site characteristics, the layout was developed to respect these. Additionally new notions and ideas to fit against these characteristics to complete the layout were introduced. As an outline application, the key principles and parameters for development can be developed with detail design to follow at reserved matters stage.

5.5 Existing Characteristics to Capitalise on

In essence we have these 'as known' characteristics, to be aware of, work with and capitalise on:

- A design notion for the approval on the "northern land"
- A country lane with high hedges running North-South on the Eastern boundary
- A housing estate to the West backing onto the site
- Detached large existing homes on the Eastern boundary with large gardens and mature trees - albeit on the other side of Swanbridge Road
- A small pond with a protected species population close to the site - but not on it
- A fence running East-West on the Southern boundary
- A long view to Sully Island to the South in precis positions

The questions that these elements ask of us and answers they derive have been:



A housing estate to the West backing onto the site

Pursue connection possibilities here for pedestrian links to make a porous boundary. Consider some existing back gardens overlook this boundary and use 'gable on' orientations to mitigate overbearing and protect privacy. Consider whether to 'close off' this aspect from the public realm view within the site.



Detached large existing homes on the Eastern boundary with large gardens and mature trees (on the opposite side of Swanbridge Road)

Respect privacy here and use larger homes with bigger gardens against this boundary to perpetuate grain and scale.



A small pond with a protected species population

This has been capitalised in the "northern land" and to ensure ecological connectivity we must do the same on the southern land. This should then form one space.



A fence running East-West on the Southern boundary

Make a new hedge here to act as a filter to "settle" new housing onto this rural edge. Front houses onto it. Keep it in the public realm. Use it to generate a route with instant landscape capital.



A long view to Sully Island to the South (in precis positions)

Consider this in the layout. Concede that all homes will not have this aspect. Consider that on the long view into the site the 'lamination' of the new houses will be legible.



A design notion for the approval on the Northern land

The layout of the northern land was well researched and derived and whilst it will require minor modification to accommodate access into the land for this application the design principles stand firm. Our new layout must connect onto this successfully and the two must knit happily together, not on the least as they join at the hedgeline



A country lane with high hedges running North-South on the Eastern boundary

Make a conscious decision to keep the form and feel of this lane. Resist using it as a frontage for new houses. Respect it is a rural approach and aim to retain this character. Understand that building behind it may dominate if not set back correctly and that the elevations of such buildings will be seen above the hedge. Determine the extent to which this will happen.

5.6 New Notions and Ideas

- Consider using hierarchial vehicular routes through the site and avoid 'urbanising' the development onto Swanbridge Road. Feed the site from the 'middle out' and not the 'edge in'
- Consider home zones and identifiable areas.
- Interconnect all areas with a pedestrian matrix passing play areas and open spaces to capitalise on the enjoyment of the route and the spaces
- Make a green heart for the site to be enjoyed by all and be a landmark for the scheme setting its quality and feel and let this transgress into the "northern land"
- Make memorable entrances and legible routes

The questions that arise from these new ideas have been answered as follows:



- **Drive a new pedestrian and vehicular route through the site to avoid 'fronting' the development onto Cog Road. Feed the site from the 'middle out' and not the edge in.**

Whilst the "northern land" will especially, given its size, benefit from a spine road because it will be making a cross connection this is not so here. Instead we can use road hierarchy to make the vehicular routes more legible and signify status



- **Consider home zones and identifiable areas.**

The arrangement of the site should allow the architecture to vary naturally by way of layout. Here the layout validates this.

- **Interconnect all areas with a pedestrian matrix passing play areas and open spaces to capitalise on the enjoyment of the route and the spaces.**

These routes are derived from a high level assessment of connecting key goals. We have used 'shortcuts' to positive effect, keeping travel distances down and allaying social frustrations. We have routed most walkways along natural features already existing on the site to allow access to be 'in touch' with them.



- **Make a green heart for the site to be enjoyed by all and be a landmark for the scheme setting its quality and feel and let this transgress into the northern land**

In this instance the obvious candidate is to capitalise on the the pond "heart" in the northern land but we also have amenity standards to consider for different sorts of space. This too can link to the heart in a direct and legible way. The ponds environment will be developed to make more of it and allow it to let the development breathe. Visual contact with this feature has been optimised for site users.

- **Make memorable entrances and legible routes.**

We have considered the key nodes as having a hierarchy. Primary are the connections to Cog Road and Swanbridge Road precipitated by the northern land. We must carefully knit into this infrastructure. Secondly the entrance into this housing zone has to be signalled and portray meaning. This has been done by means of hard and soft landscaping designed with an eye to traditional agricultural enclosure detailing.



Possible cumulative development including land to the South of the hedgerow

5.7 Scale

The designs assume that the site will be between three and two storey buildings but that two storey buildings will predominate. This decision is made because the surroundings are at this scale. This variety in height will create interest. Additionally, this can potentially be achieved through another three methods:

1. Differing roof pitches between 30° and 45°
2. Differing gable widths which consequently adjusts roof heights
3. Changing storey heights to make taller and shorter buildings

Other devices such as feature gables, chimneys, bays and proportion of windows will also serve to change the feel of building scale. The benchmark for scale in this instance is 'domestic' and this is echoed by the buildings that already exist and are close to the site. They do not exhibit the slightly increased scalar elements that say semi-urban Victorian and Georgian designed buildings have, and are rooted in the vernacular. In this instance we have also followed the rules set down in the Design & Access Statement for approval 01279/OUT

The following illustrations and table show the parameters to which the forms will adhere. There will be some three storey buildings but this will be mainly achieved via roofspace accommodation rather than adding a full storey to buildings. However, this stage only outline permission is sought and therefore, whilst some principal design parameters may be determined at this stage, detailed design will follow during Reserved Matters applications.

Plot footprint

Link houses:

Building width	= 4.5min / 6.0m max
Building depth	= 7.5min / 9.0m max

Semi-detached houses:

Building width	= 5.0min / 9.0m max
Building depth	= 7.0min / 9.0m max

Detached houses:

Building width	= 6.0min / 15.0m max
Building depth	= 7.0min / 9.0m max

Height

2-Storey Housing:

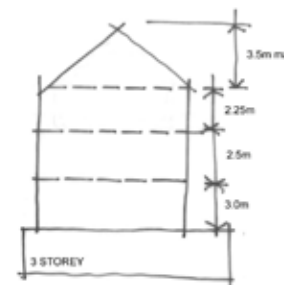
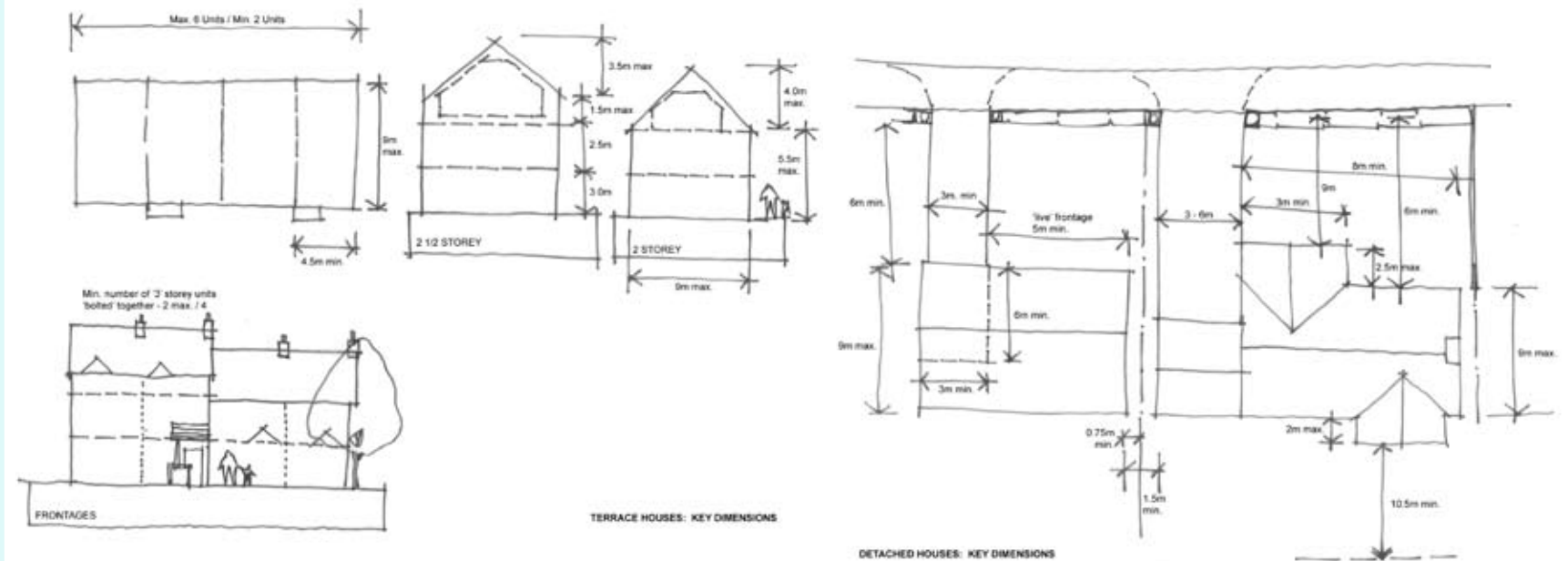
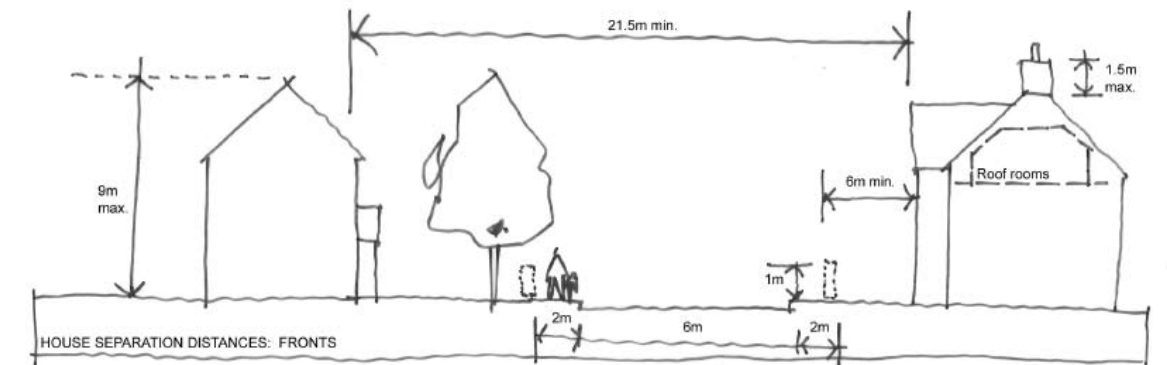
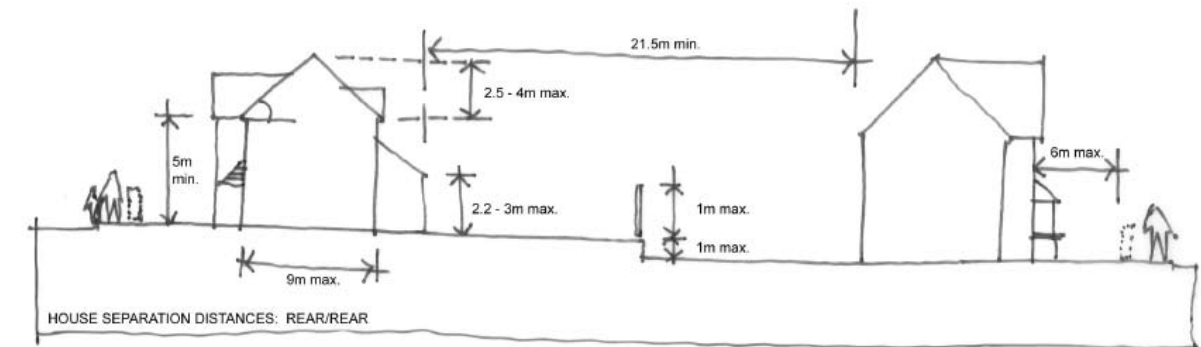
Floor to floor height	= 2.8min / 3.0m max
Height to eaves	= 5.0min / 5.5m max
Roof pitch	= 30 degree min / 50 degree max

2 ½ - Storey Housing:

Floor to floor height	= 2.5min / 3.0m max
Height to eaves	= 6.5min / 7.0m max
Roof pitch	= 30 degree min / 50 degree max

3 - Storey Housing:

Floor to floor height	= 2.5min / 3.0m max
Height to eaves	= 7.0min / 7.5m max
Roof pitch	= 30 degree min / 35 degree max



5.8 Density

It is envisaged that there will be a maximum of 190 new units on the site. That said, the density of the whole site will not be unilateral. Certain areas would by their innate character suggest a change in density. For example in the entrance vicinity from the northern land it is envisaged that there will be a 'hot spot' which will be close knit taller houses forming a strong gateway. The opposite of this would be the line of homes fronting onto the existing large houses at Swanbridge Road. Here the plots will be larger and there will be more space between the houses, which in turn will be of a greater scale.

The houses that back onto the hedge line of Swanbridge Road will be slightly more dense than this and the majority of the homes in the depths of the site will represent a density somewhere in the region of the existing adjacent estate. A hierarchy is therefore created responding to edge, position and proximal relationships.



Parameter Plan - Density

5.9 Scale discussed in the context of Layout

At outline stage it is very difficult to fully explore the broad aspects of scale so here we discuss it in terms of layout. It means the physical size of the site and the physical size of the units, as opposed to the scale of elements within the given size of houses. This is more fully discussed in the character section of this document.

For scale to be described properly, it has to be a comparable. In layout terms this is a medium scale development of which the elements are a 'domestic' scale.



Parameter Plan - Building Heights

5.10 Access

The principle of the access is to use the new spine road in the northern land to access the site. However, the spine road does not embrace the boundary of this application. Due to ecological constraints to the East an extended state road will access the southern land. From here the 4 level hierarchy of routes will distribute the traffic. A further independent access into Swanbridge Road was considered inappropriate and unduly damaging to the character of the road.

The finite proposals for the Cog Road Swanbridge Road “cross link” have been agreed in the northern land application and this has been capitalised in this design.

The hierarchy of roads in the application site are

- Main through road
- Estate road
- Mews or cul-de-sac
- Private drive

In parallel for pedestrian circulation:

- Key destination lead crosslink
- District connection inter-housing pockets
- Local connection within housing pocket

Of course the primary and secondary road links will have associated footpaths, but these will only serve as being short connections between the hierarchical footpath network and for inter plot circulation.



Access Strategy Plan



5.11 Considering Open Spaces, Typology and Position

One 'natural' opportunity and two new opportunities allow this design to create open space. The natural one is the extended pond ecological hinterland. The new opportunities are the preclusion of development from the south eastern corner because of services and the desire for a SUDS feature in the low north western corner. Capitalising on these features as generators for green spaces is an integral part of the layout. They function dually, to protect and enhance and also to satisfy spatial needs for statutory planning obligations.

Outside these instances, we have 'designed' social space. In this instance the housing pocket has LAPs within 60m of homes (2 in larger pockets) and can capitalise on the LEAP in the "northern land" adjacent to the pond. A NEAP has not been included in this design because there are formal areas for play at Sully Sports Club which lies within 1.5km of the site. Notwithstanding this, open space standards have been calculated on 55.4m² per household which equals approximately 2 acres.

The breakdown of these areas is broadly as follows:

• LEAP	0.5 acres (off site and not included)
• Pond Park	1.5 acres (extended from 2.0ac in the "northern" land)
• "SUDS" land with some amenity use	0.75 acres
• LAP (x 2)	0.2 acres (Total)
TOTAL	2.45 acres



Parameter plan showing open spaces



6.0 CHARACTER

6.1 Preface

This is an outline application and therefore can only address character at a broad level. The character of the site is one of pockets of vernacular scale two-storey houses served by separate infrastructures off a main spine of circulation.

6.2 Describing the Key Elements

As discussed in the previous section, the character of the masterplan is driven by the expanded pond part, the SUDS feature, the circulation hierarchy, density, scale and the hedges. These will set the visual tempo for the area as being a landscape-led development.

Turning to the architecture, the design envisages pitched roof traditional forms with reference to the original local vernacular. It is envisaged that local stone will be a component of both buildings and hard landscape features which will tie in with prevailing local methodologies.

The site will also envisage the use of render and, to a lesser extent, brickwork.

Over and above the very strong infrastructure elements it is envisaged that enclosure of front gardens will be by a mix of walls, openness and hedges. It is envisaged that most houses will be fronted by a garden of at least 6m and cars and driveways will be kept between house frontages rather than in front of them. In the instance of cottages and link houses, frontages can be shorter and vehicles will be parked to the front in courtyards. Buildings in keynote positions, high on the onlookers visual agenda will be treated carefully to 'present' the development to the wider context.

It is envisaged that the site will have a unilateral character and can if necessary stand architecturally apart from the "northern" land. Whilst this development is big enough to support areas with different architectural approaches it is not thought appropriate here.

6.3 Crosslink's

The masterplan has a matrix of easily understood recognisable features and landmarks which will inform finite design and reinforce legibility.

Built form must successfully address the pedestrian site crosslinks. It will serve to enclose, define and confirm character for these key routes.

6.4 Overarching Character

It is considered that the masterplan is strong enough in concept and vision to create an overarching character which will take detail design in a certain direction. The layout is sinuous and therefore encourages informality of approach and form. Axial routes and symmetry are not seen as appropriate here. Roads will wind and houses will be viewed obliquely to each other creating the interest and diversity of an organic derivation.



Nicells Farm



The Model Farm



Parameter plan showing landscaping and housing

7.0 MOVEMENT, ACCESS & DRAINAGE

7.1 Preface

This chapter summarises the movement and access arrangements and sets out the drainage proposals to the site

7.2 Current Provision

1. Site Access

Currently there is only agricultural 'gate' access to the site, however there is an envisaged new highway infrastructure on the approved "northern" land.

2. Walking

Footpath access will be via the "northern" land infrastructure. There are a series of pedestrian routes within the adjacent housing estate to the West and these are easily connected to the application site. There is also footpath access from Swanbridge Road although both Swanbridge Road and Cog Road are frequently walked and used in a 'shared surface' sort of way.

3. Cycling

The existing road infrastructure adjacent provides for cyclists. There is no formal cycling network in the area. Traditionally cyclists use the roadways. The area is generally flat as conducive to cycle use.

4. Public Transport

The site is served directly by the local bus network and there are duo directional stops on both Swanbridge Road and Cog Road. There are also stops on the main B4267 some 1km from the site. The traffic assessment sets out the frequency, timetabling and location of these stops in detail.

5. Rail Service

There are regional rail stops at Cadoxton and Barry which serve national connections at Bridgend, Swansea and Cardiff. These regional linkages can be reached by bus from adjacent to the site as laid out in the previous point. The Transport Assessment, and section 4 illustrates these in more detail.

7.3 Proposed Provision

1. A new roadway will be taken through the site into the "northern land" which will connect Swanbridge Road and Cog Road diagonally Northwest to Southeast. This road will have footpaths and lighting, and will be of a suitable geometry and width to take an amended bus route if necessary with stops in both directions on both sides of the road.
2. Two new resultant junctions will be formed onto Cog Road and Swanbridge Road. There will involve a change of priority for traffic to flow via the site rather than around it (if vehicles were pre-disposed to do this originally). This will be the case in both the approved and the current application
3. The site will be divided up into four separate vehicle hierarchies. These will be interconnected for pedestrians alike. Here a series of cul-de-sacs and mews will serve collections of homes.
4. The housing parcel will be linked by a series of footpaths connecting to the spine roads, bus stops and play areas / public open space. There will also be a footpath link established between the western boundary of the site allows existing residents to walk safely on formal pathways back to Sully or bus stops without having to rely on shared surfaces.
5. A Traffic Assessment which includes existing and predicted flow of vehicles to and from the site and which also considers provision of public transport also accompanies this application. The design of junctions onto the two existing roads has been conceived in terms of arrangement, vision, traffic speed and geometry.
6. A complete new pedestrian infrastructure will be derived for the site following the principles set out in the masterplan. This will link key areas as previously discussed and connect to existing provision on Cog Road and the adjacent housing estate. Cycling, pedestrian, vehicular and bus routes will interconnect in a rational manner to ensure a holistic, cohesive approach to movement both within the site and in attachment to the existing network.



Parameter plan showing movement throughout the site

7.4 Inclusive Access

We have adopted an integrated approach to accessibility, safety and security that will be developed throughout the detailed design and construction programme in close liaison with officers at the Council and local access interest groups.

Throughout, the scheme will be designed for accessibility and inclusivity for all, including full compliance with the requirements of the Disability Discrimination Act. All homes will comply with Part M of the Building Regulations and will also consider the 'Lifetime Homes' standards.

In the public realm "access for all" will be manifested by avoidance of steps, where possible, use of light ramping gradients, placement of seats in public areas, ample lighting levels, non-slip materials, bus access facilities for wheelchair access, signing and information to cater for different abilities etc. Tactile paving will be used to indicate pedestrian road crossings. This information will be agreed as part of the detailed design process.

We will follow the principles of 'Secured by Design'. In particular there will be clear definition between private and public realm with natural surveillance of all vulnerable areas. Access, safety and consideration of public concerns are of paramount importance, both during construction, when there will be close liaison between contractors and residents, and in every aspect of the design and management of the completed scheme.

7.5 Drainage and Utilities

The application is accompanied by a Flood Consequences Assessment and Drainage strategy, prepared by Vectos Ltd. The report demonstrates that the site lies outside EA Flood Zone 1 and Dam Flood Zone A, i.e. in an area of low flood risk and low flood risk from surface water, tidal, groundwater and artificial sources.

The overriding objective of the drainage strategy is to ensure that the site can be sustainably drained without creating any new flood risk on or off-site while taking into account the effects of climate change; and where possible, to provide betterment over the current situation.

The drainage strategy for the site considers a singular drainage scenario as a low level of ground infiltration. If the soil conditions are assumed to be conducive to high levels of infiltration, minimal on site storage of surface water will be required and the attenuation area shown will not be required but can be still used for open space. The drainage strategy devised by Vectos has been used to inform the masterplan.

The attenuation required effectively reduces the overall developable area and cannot have a dual purpose to include formal play space. However, it was an overall amenity landscape function. Subject to detailed design and infiltration levels, the areas could however be landscaped and provide some form of useable open space. The photographs show how the areas could be landscaped.



Ultimately, the layout of the site at the reserved matters stage will be influenced by the rates at which surface water can in a finite infiltrate the land. The masterplan will evolve to accommodate the requirement to introduce a drainage strategy that would manage the surface water runoff to pre-developed rates. Where there is existing flooding as a result of overland flows from the site, on-site proposals would intercept these flows and attenuate them before discharging safely from the site at agreed discharge rates, providing additional betterment of the current scenario.

8.0 LANDSCAPING

8.1 Preface

A Landscape and Visual Assessment has been undertaken by Soltys Brewster Consulting which describes and evaluates the existing landscape character and visual amenity and also assesses the potential effects of the development, including the effects of the scheme on the physical landscape and visual amenity of the locality. This is contained in the Environmental Statement (ES) which accompanies this application.

The ES suggests that mitigation measures are required to reduce the potential impact of the development on the physical landscape and visual amenity. These have been taken into account in the evolution of the masterplan.

8.2 Landscape Policy Context

There are no landscape protection designations that apply to the site.

8.3 Site Character

The topography of the site slopes gently upwards from south to north, the northern hedgerow boundary of the site being located at the rising peak of Sully ridge.

The hedgerow is augmented to a width of 10m in the 'northern land' approval so will make a strong device to divide development form in the wider context.

The new 3m wide hedge on the new southern boundary will act in a similar manner and will settle the development into the wider landscape.

8.4 Landscape Fabric

The landscape is shaped by varied ridge and lowland floodplain topography, including the prominent Sully ridge, rising to approximately 54m AOD, and the low-lying floodplain of Cog Moors, which is crossed by a series of drainage channels and watercourses, including Sully Brook and Cadoxton River. Cog Moor contains mosaic landcover of rough pastoral fields. Field boundaries are often formed by overgrown or gappy hedgerow, containing individual and grouped trees and stretches of wire fence. In contrast, the Sully Ridge contains pastoral landcover, with mosaic arable fields defined by more well managed, low hedgerow boundaries.

The area to the north, east and west contains urban settlements, including the southern extents of Lower Penarth, Dinas Powys and the eastern fringes of Barry, such as Palmerstown and Cadoxton.

The residential settlement of Sully contains a mixture of residential styles, primarily late 20th Century housing, largely of modular form on more elevated ground, with some linear development toward the lower, flatter southern fringes of the urban area overlooking Sully Bay. To the south eastern fringes, leisure landuses are more dominant, with a sports ground, holiday park and public house overlooking Sully Sound and Sully Island. Neighbouring urban residential settlements of Lower Penarth and Dinas Powys are similarly mixed in character, largely comprising modular housing development of 20th Century construction. The outer eastern extents of Barry lie within the west of the study area, containing the residential areas of Palmerstown and Cadoxton along with the large-scale industrial, light industrial, commercial and business development to the south.

The surrounding landscape is crossed by a network of vehicular routes, including the well-trafficked A4055 primary route, which links Barry and Cardiff, via Dinas Powys cutting through the centre influencing landscape. The A4231 runs north from Barry industrial complex, connecting with north east Cardiff. Sully and Lower Penarth are served by the B4267, which lies approximately 60m from the southern site boundary at its nearest point. A number of other more minor routes cross the influencing landscape, linking Sully, Dinas Powys, Penarth and Llandough.

The LVIA provides a detailed consideration and analysis of LANDMAP data and the likely impact of the proposed development on relevant Landscape Character Areas.



Land use parameter plan

8.5 Visual Amenity

The LVIA also contains a detailed assessment of the potential effects of the proposed development on key receptor groups and viewpoints.

8.6 Landscape Strategy

The arrangement and orientation of housing is expected to respond to existing site constraints – including the ridgeline contours, and the possibilities for integration and landscape and visual relationship with existing semi-rural development with the settlement of Cog.

The layout incorporates landscape buffer hedge areas on the southern and northern fringes of the site, including buffering through generous rear gardens plots and integral public open space. The extension of the ecology land to the north and NEAP open space within the north-eastern corner of the northern site provides protection to existing ecohabitat and the existing hamlet. Integration with the model farm group to the north of the original approval is not a factor in this application but the development must successfully address the houses on the eastern side of Swanbridge Road.

Both linear and modular arrangements are indicated within the scheme layout, containing a number of amenity spaces and a central 'green space' which cuts through the northern and southern sites, providing the principal space and incorporating a framework of structural landscape vegetation which will assist with the establishment and integration of the scheme into the landscape facilitating fragmentation of façade and roofscape views.

The character of built form is to be fully considered through a Reserved Matters application, however Landscape and Visual Impact Assessment indicates that the palette of architectural forms and materials should reflect the surrounding built forms, including rural references to the hamlet of Cog within the north eastern corner of the site. As described, the scheme could incorporate the use of design signals to reference the transition from the grouped, semi-rural style development within the immediate setting of Cog to a more linear arrangement along Cog Road and with the existing settlement of Sully to the west.

Within views looking toward the site, especially from the south, where available, roofscapes have the potential to be visually dominant, and the arrangement of form, texture and colour is considered as part of the embedded mitigation strategy. The responsive use of slate or similar effect roofing materials, to minimise visual impact and integrate with existing character is expected. A simple range of exterior wall finishes/ rendering of natural tone and with references to the white, colour washed walls within the immediate context could be used, to contribute to a cohesive visual character. Reflective materials are to be kept to a minimum.

The scheme is contained within existing augmented and retained hedgerow to the north and new hedgerow to the south as part of the framework of landscape infrastructure. The southern boundary is a post and wire fence and at certain times is underminate being part of a larger field. Here a 3m thick mixed species hedge will provide important visual screening and softening. The use of stone wall boundaries is also incorporated within the design, further assisting the integration of the development within the landscape and retention of the integrity of landscape character.

The development includes the provision of a new hierarchy of routes, with vehicular access to the site gained by a key junction on to the spine road on to the "northern land". At this location, the use of design references, including route widths, pavements and surface material changes will signal to road users that the proposed new 'green route' through the site is the primary access route to Sully. This is to maintain the relatively rural character of Swanbridge Road and Cog Road, and particularly the Cog Road intersection.



Landscape and Open Space Strategy

9.0 COMMUNITY SAFETY

9.1 Preface

Community safety is an increasingly important consideration, even more important when planning the comprehensive development of a large site and there is the ability to encourage positive planning from the outset. Schemes should be designed to maximise opportunities for 'built in' community safety, adopting good urban design principles such as natural surveillance and defensible space.

The following section explores how community safety has been taken into consideration through the scheme. It should be remembered that much more detailed consideration will be made at reserved matter stage.

9.2 Delivering Community Safety

The physical arrangement of the site has a strong bearing on the behaviour of its users and occupiers. In this instance the masterplan of the site has been arranged in order to deliver a safe environment that promotes and encourages community safety. It should, however, be noted that much of the detailed matters relating to design safety will be further addressed at any subsequent reserved matters applications.

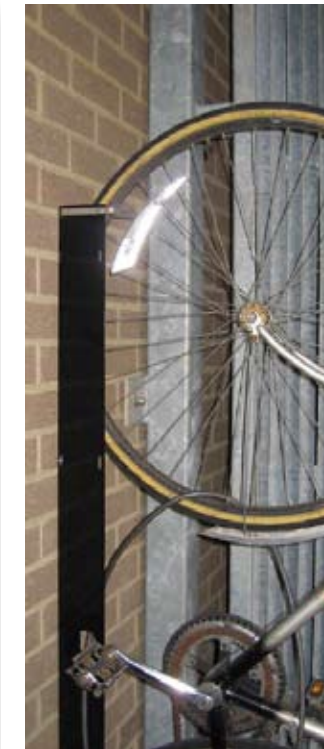
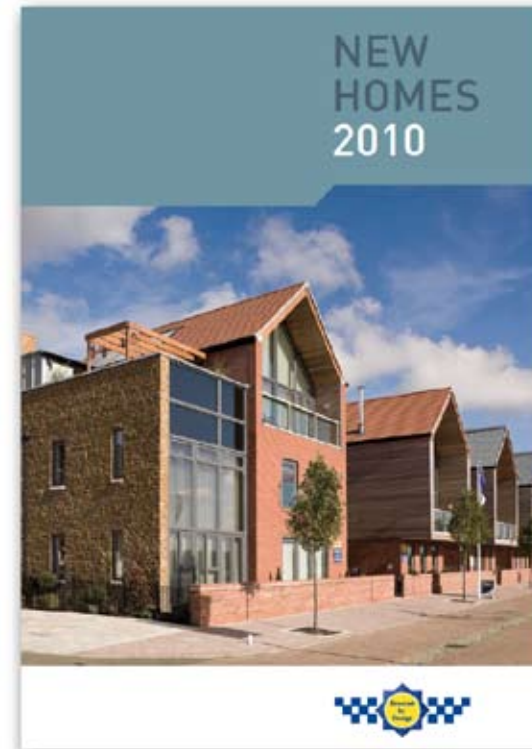
The scheme proposes a high quality public realm that will knit social fabric together and affect how users will interact with each other and the environment. The open spaces have a legible layout and distinct goals making them physically safe and encouraging people to use them. In the main they are overlooked to provide passive, natural surveillance.

The 2 LAP and 1 LEAP (adjacent) areas are in nodal positions, easy to reach and designed in a way that they will be overlooked from occupied buildings in the future.

Although more detailed road layouts are to follow during reserved matters applications, dead ends are 'designed' out and the circulation will 'loop' through the centre of the site encourages use and activity. The loop road layout with the estate roads serving off it is a definite street hierarchy and will encourage low road speeds through its curving nature. Crossing points will be clearly identified and where public footways cross roads, they do so in legible positions easily read by both drivers and pedestrians.

Secured by Design:

The layout allows detailed designers to embrace principles of 'Secured by Design'. The detailed arrangements of which will be agreed at detailed stage.



10.0 ENVIRONMENTAL SUSTAINABILITY

10.1 Preface

This section considers how sustainable the development is in terms of energy use and life in use. It comments further on the more esoteric aspects of sustainability such as if the design will last and stand the tests of time in a social and emotive context, asking “is it ‘a nice place to be’?”

10.2 Environmental Sustainability

Here we consider location, energy use, ecology and biodiversity.

Firstly it must be considered that this is a sustainable location that co-joins an existing settlement which is served by local facilities within walking distance. It also has a sustainable mode of transport (bus service) close by. Importantly this service itself connects well to national public infrastructure including train services within a relatively short distance. Existing bus stops are within 200m of new homes and the site delivers the opportunity to route or re-route bus services through the site which has a positive effect on movement outside and around the site.

On site play facilities are located in the key housing pockets, providing immediate access to green space for children without relying on arduous journeys either by bus or car. Bus services also link to employment and services centres.

Secondly, road access is good and the major centres for employment at Barry, Bridgend and Cardiff are all within reasonable commuting distance. There are major shopping and leisure facilities at Barry with a regular bus service having a journey time of less than ten minutes.

High levels of thermal insulation and air tightness will ensure low energy uses for the houses and will address the appropriate SAP ratings. Low water use sanitary appliances and AA rated white goods will compliment passive fabric enhancements.

The site on the whole is designed at an appropriate density to allow orientation to be carefully chosen to take maximum advantage of solar technologies and to use solar gain to maximum effect.

In terms of ecology, at present the site has a relatively narrow band width due to the intense level of cultivation of the land. The introduction of a broader arboriculture along with eco-corridors to allow existing and new species to migrate across and through the site can see an increase in fauna species breadth.

A purposeful buffer zone has been incorporated around the off site but adjacent pond and its environment will be carefully treated to preserve and enhance its existing bio-habitat. Overall the design offers a variety of meaningful green spaces and considers its rural edges properly, ensuring their long term viability. Their dual use for pedestrian movement spaces for amenity from play to quiet contemplation give them extra validity.

10.3 Creating a Sustainable Place

Most often ignored is the fact that over and above energy use and energy type filtering down via the code process and sustainable location of the site, is the sustainability capital, which can be raised by broad design decisions themselves at a strategic level. Vitality must be borne from a characterful and attractive place to live, a truly sustainable place.

It is here that the quality of spatial planning advocating good urban design principles brings an intangible but important sustainability strand.

The layout considers and delivers the cornerstones of urban design, which strive to connect people with places

Here we use:-

- Structure
- Typology
- Accessibility
- Legibility
- Animation
- Function and fit
- Complementarity
- Character and meaning
- Order and Incident
- Continuity and change
- Civil placemaking

... to create our sustainable place

11.0 CONCLUSIONS

11.1 Preface

This section summarises the site findings and resultant design solutions which resulted with the layout and adopted principles.

11.2 Proposed Development

The application seeks outline permission for residential development at this highly accessible and sustainable location. All matters bar are reserved for future consideration, however this DAS hypothesises a tangible deliverable solution and broad solution which can be finessed at detail stage and proves deliverability of the given number.

The content of the masterplan is as follows:

- A housing pocket of varying character to compliment the 4 pockets approved on the “northern land”
- A link to a green through road crossing the “northern land” diagonally
- A major open space and a series of localised play areas connected by a network of footpaths along with a ‘SUDS’ feature suitably located at the natural low point.
- Retention of key peripheral hedgerows and augmentation of the seating of the pond and trees in the northern land



11.3 Key Conclusions

The DAS sets out a clear vision and establishes design objectives. These have remained central to the evolution of the layout.

The design responds to a specific set of contextual criteria and augments them with new ideas to create a viable solution.

The design delivers an appropriate level of development whilst observing modern urban design considerations such as compactness.

The design will perpetuate local character and sense of place rather than force a reinvention of the feel of the area through development of a new district.

Community safety, movement and sustainability have been watchpoints in the development of the masterplan hand in hand with pure ideals and response to context.

The DAS demonstrates that the design and access credentials of the site have been fully assessed prior to, during and at the conclusion of the process, delivering a contextually appropriate solution.

