

Lower Ponthendre, Longtown. Hereford HR2 0NY

PROPOSED BARN CONVERSIONS TO PROVIDE 2NO RESIDENTIAL UNITS 1

DESIGN AND ACCESS STATEMENT November 2014 Rev B

Prepared By Designcell Architecture Limited

DESIGNCELL ARCHITECTURE LTD, ELY HOUSE, THE POSTERN, BRECON, POWYS, LD3 9DF. TEL 01874 610873.

# Contents

1	Introduction		6	Movement	
	1.1	Document objectives		6.1	Objectives
	1.2	Vision		6.2	Context and analysis
	1.3	Background		6.3	Design proposals
	1.4	Location	-		
	1.5	Planning policy	7	Survey of existing	
2	Access			7.1	Site photographs.
		<b>-1</b>		7.2	Site photographs.
	2.1	Objective		7.3	Existing site layout and plans .
	2.2	Context and site analysis		7.4	Existing barn elevations.
	2.3	Design proposals - external.			
	2.4	design proposals internal – ground floor plan.	8	Final design proposals	
	2.5	Design proposals internal — first floor plan.		8.1	Ground floor plan.
	2.6	Switches outlets and controls.		8.2	•
	2.7	Sanitary accommodation.			First floor plan. Elevations north and south.
	2.8	Lighting.		8.3	
	2.9	Conclusion.		8.4	Elevations west and east.
				8.5	Plans and elevations for Unit 1 garage.
-				8.6	Plans and elevations for Unit 2 garage.
3	Character		9	Final visuals	
	3.1	Objective		9.1	Views from north west.
	3.2	Context and site analysis		9.2	Views from west.
	3.3	Site design proposals and materials		9.2	View from south east.
	3.4	External materials			
	3.5	Internal materials		9.4	View from north east.

2

## 4 Community Safety

3.6

4.1	Objective
4.2	Context and site analysis
4.3	Design proposals

Maintenance

## 5 Environmental Sustainability

5.1	Objectives
5.2	Context and analysis
5.3	Design proposals

# 1. Introduction

#### 1.1 Document objectives

This Design Statement has been prepared to support the full planning application and listed building consent for conversion alteration and refurbishment of the existing stone agricultural farm complex adjacent to Lower Ponthendre Farm. The farm complex is listed as Grade II which consists of two individual blocks of agricultural buildings. The aim of this document is to demonstrate that the project has gone through the dual requirements of a rigorous design verification process to ensure that the proposals put forward are consistent with the clients goals, brief and benefits the long term building stock as well as meeting the national, regional and local policies within the Planning Authority. The proposals are site specific and respond to and enhance a rural grouping of buildings within the countryside with high quality design which incorporates energy efficiency principles and ideas of sustainability, whilst at its core enhancing its immediate environment and therefore the lives of the occupants of the property.

#### 1.2 Vision

The project offers the opportunity to incorporate within a rural site residential accommodation requirements by converting the existing buildings to 2 no separate residential units. These then safeguard the listed buildings giving them an economic use ensuring necessary investment for their preservation. Our proposals have been developed in a specific way that we feel enhances the existing building grouping which creates significant improvements to the quality of the immediate area yet relates to the main adjoining buildings in terms of setting.

#### 1.3 Background

The site is currently occupied by the following,

- Barn and attached Cow shed east of Lower Ponthendre Farm-Listing NGR: SO3266027992
- Shelter shed east of lower Ponthendre but north of the barns Listing NGR:SO3266228016
- Steel barn to the south of the main stone barn.
- The surrounding area is open countryside located low down in the valley.
- The site has a farm character which has needed investment to maintain and secure its charm whilst also upgrading its facilities.

### 1.4 Location

The proposed application site is located on the Craswall to Pandy road. The site is located just outside the Brecon Beacons national park.

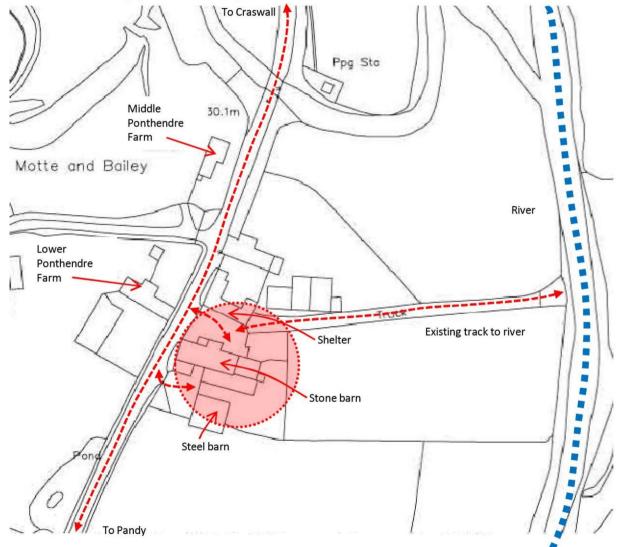






#### 2.1 Objectives

The principals of inclusive design are that they place people at the heart of the design process and acknowledges their unique diversity and difference yet offers choice where a single design solution cannot accommodate all users. It provides flexibility in use and delivers buildings and environments that are enjoyable to use for everyone.





#### 2.2 Context and site analysis

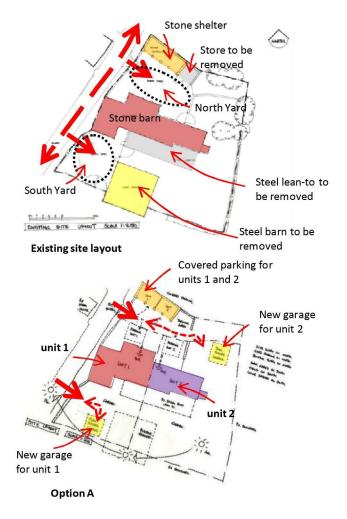
The site currently has good access, with principal access and egress taken from the rural road system to the west of the site opposite the Lower Ponthendre farmhouse. The existing barns have two separate access points off the road both north and south of the stone barn. The north access point also serves as access down to the river.

#### 2.3 Design proposals:- External.

The site has 2No access points one located to the north west of the site the other to the south west and these will not be altered. The existing stone shelter to the north of the site is to remain and provide covered parking. The steel barn to the south of the site is to be taken down and removed. The stone barn and cow shed is to be converted into 2No dwellings. The steel open fronted lean-to roof to the south of the barn is to be taken down and removed along with the a small metal lean-to on the east gable elevation.

In developing the site it was considered that the barns were too large to be converted into one dwelling. Considering the existing buildings form and internal layout the building could be simply converted into 2No dwellings using the main barn for one unit and the cow shed for another. Two options were considered in the design development of the site layout as shown below.

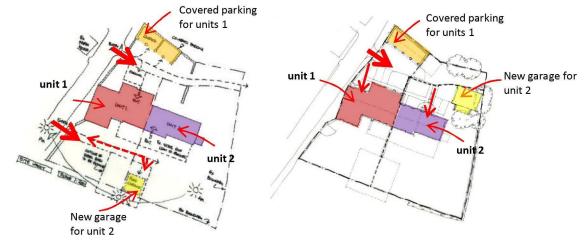
Option A incorporated a shared entry to the north west of the site which was considered to have insufficient room to manoeuvre vehicles easily and safely within the existing yard. With this option it was felt that it would be more likely that a new separate garage would be required for each unit.



Option B separated the entry to each proposed unit with the north access being used for Unit 1 and the south access being used for unit 2. This simplified the site layout and provided safe parking and manoeuvring throughout. The stone shelter provided parking to unit 1 and a new garage had been designed for unit2 located on the south boundary. This garage replace the existing steel barn and opened up the views from and to the site. This minimised new build on the site.

In developing option B after a site meeting with the planning and conservation officers it was considered that using the existing south access through to unit 2 would compromised the setting of unit 1 and limited its south facing garden area splitting it from the barn. It was felt after some discussion that only the existing access to the north of the site should be used. Access to unit 2 it was decided should be across the existing courtyard past unit 1. The courtyard would in effect be extended to improve vehicular movement. Access and parking for unit 2 it was felt could be positioned on the footprint of a previous steel barn located adjacent to the building which still allowed access to the field beyond in the north east corner of the site.

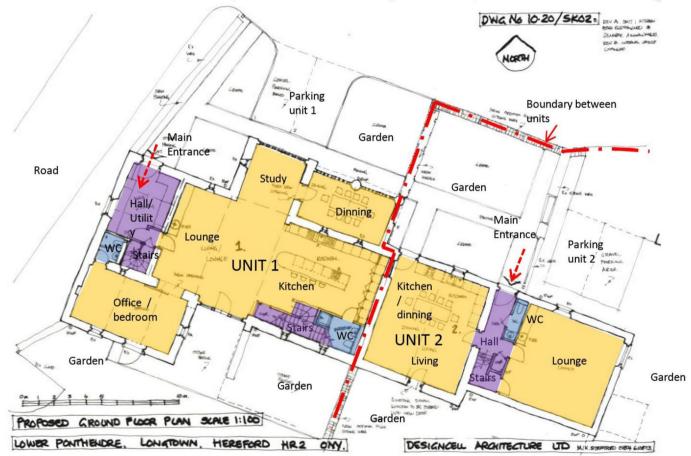
All parking areas show adequate parking is available with cars parked side by side. Parking bays are wider than standard bays and allow room for access between bays with a clear route leading up to the dwelling. Access to the dwellings is to be over new level floor finishes.



#### 2.4 Design proposals internal – Ground Floor plan

The re design of the stone barn and cow shed has been achieved with minimal alteration to the existing building to ensure the character of the listed building is maintained. Existing opening have been used with minimal openings generally located to the south elevation.

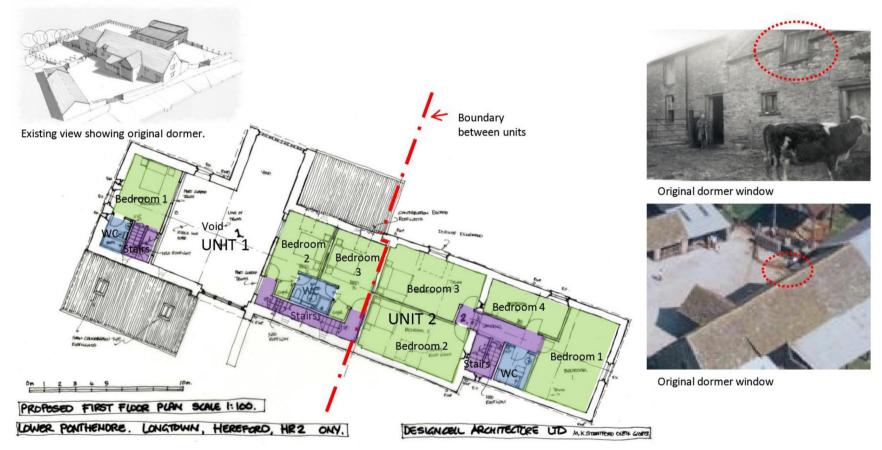
Unit 1:- has been designed to use all of the original barn areas with minimal internal subdivision. Access to the unit is from the north using an existing door located on the public noisy side of the building adjacent to the road. This access leads into a hall way / utility which has a new small stair to gain access to a first floor bedroom. A new door is located in the east wall of the hallway in an existing half timber half stone dividing wall leading to the main barn space. The main barn area has all the day spaces located open to each other. This maintains the historic barn volume with minimal alteration. The new kitchen is located at the east end of the barn with a stair and toilet located to the south side. A new door links the living area to the dining area to the north of the kitchen, this is a single storey lean-to. To the south of the lounge is a office / bedroom with new bathroom located in the rear of the hallway. The access to this area is through a new doorway formed in the stone wall.



Unit 2:- Has been designed to use all the original cow shed areas with minimal internal subdivision. Access to the unit is from the north through an existing doorway which leads into the hall. The hallway has been formed by subdividing the existing room and has a new stair and wc. A new door is formed in the existing stone wall to the west leading to the kitchen. The kitchen dining and living area has been kept as one area with no subdivisions.. The lounge is to the west end of the building formed from the remaining space after the hall was made and has a number of existing windows. The access to the garden is through a new doorway formed in the kitchen south stone wall. This provides light and heat from its south aspect.

#### 2.5 Design proposals internal – First Floor plan

Unit 1:- has been designed to use some of the original barns first floor areas with minimal internal subdivision. The first floor accommodation is located at the west and east ends of the building maintaining the central double height volume over the threshing floor. Access to the first floor is from two new stairs. The west stair leads up to a single bedroom with bathroom ensuite. This is contained by the existing timber truss and overlooks the central void. An existing window in the west gable provided light ventilation and escape. The east stair leads up to 2no bedrooms and a shared bathroom. Bedroom 2 is contained by the existing timber truss and overlooks the central void. Bedrooms 2 and 3 had no original windows or roof lights and it is proposed to introduce a new conservation escape roof lights in each.



Unit 2:- Has been designed to use all of the original upper level to the cow shed area with minimal internal subdivision. Access to the first floor is from a new stair centrally located between the two upper areas. The stairs leads up to an enclosed landing with a family bathroom. The landing leads to bedroom1 and 4 to the north and east which has a bathroom opposite. Existing windows provide light and ventilation. The landing also leads to the west where 2no bedrooms are shown. Bedroom 3 used to have a small dormer overlooking the north of the site. This is to be reinstated and photographs exist of its original location and dimensions. Bedroom 2 has no original windows or roof lights and it is proposed to introduce a new conservation type escape roof light as unit 1.

The re-design of the building has been done in accordance with the Lifetime Homes (LTH) Revised Criteria July 2010. Following the principals of the Lifetime Homes will ensure that the owners can remain at the property for life, thereby reducing any need to sell the property at a later date. It therefore increases the likelihood that the dwelling will remain as usable as possible in perpetuity. The principals of inclusive design have been considered in all the stages of the re-design development of the interior layouts of the dwelling. This approach provides future flexibility in use and delivers buildings and environments that are adaptable to future needs .

#### 2.6 Switches outlets and controls

The switches and socket outlets throughout all areas are to be located within easy reach for all and be in accordance with part M of the building regulations.

#### 2.7 Sanitary accommodation

All toilets and bathrooms will be designed to assist the users of all abilities with the opportunity to maintain a degree of independent living. Flexibility will be designed in to allow for future proofing the facilities wherever possible. Doors will be a clear 900mm for ease of access with sufficient manoeuvrability space being provide as required. The layout of all the sanitary equipment is to meet all the requirements of good practice to ensure their usage.

#### 2.8 Lighting

The use of good lighting to define the shape of spaces helps with orientation for the buildings users.

Entrance foyers and lobbies as well as corridors act as transition spaces to enable people to adjust to changes in lighting levels from inside to outside. Lights will be positioned where they do not cause glare, reflection, shadow or pools of light and dark.

Transitional schemes which contrast in colour and luminance could be used to separate elements of the building such as steps, handrails etc as well as wall, floor and ceiling finishes.

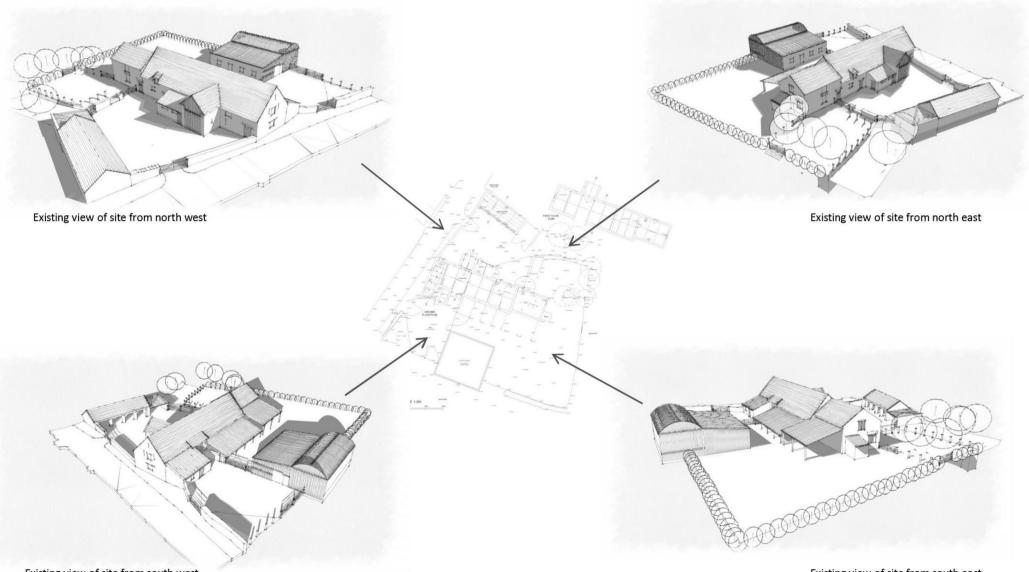
#### 2.9 Conclusion

We have sought to sensitively design the buildings to increase its usability by as many people as possible. These proposals we feel go some way towards providing flexible residential accommodation for a wider group of people.

# 3. Character

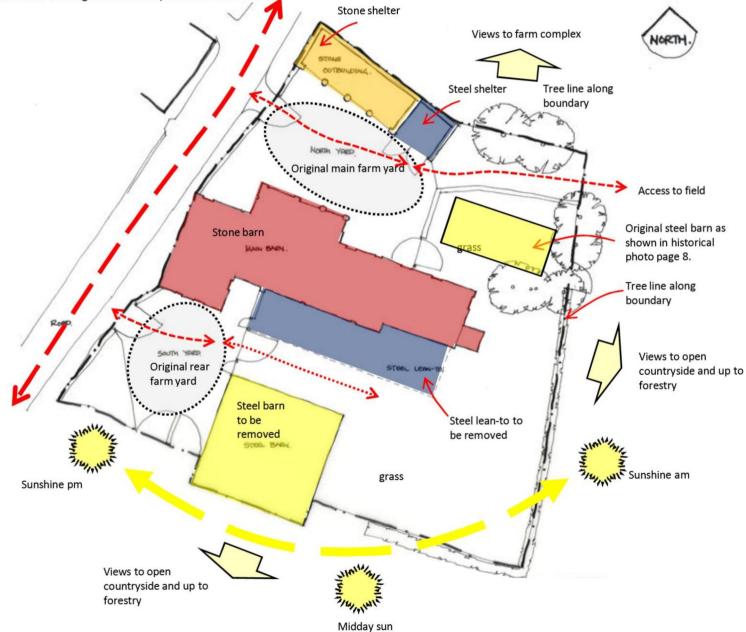
### 3.1 Objectives

Every site has a specific and individual character made up of its location, history, materials and vernacular elements. It is by careful analysis and understanding of the existing site and its character that you are able to contribute to it, ensuring that any design proposals secure and enhance a site for the future.



#### 3.2 Context and site analysis

The site consists of a rural grouping of listed buildings set in the countryside. We propose to maintain the rural grouping with careful design which will enhance the character of the listed buildings maintain its specific site character.



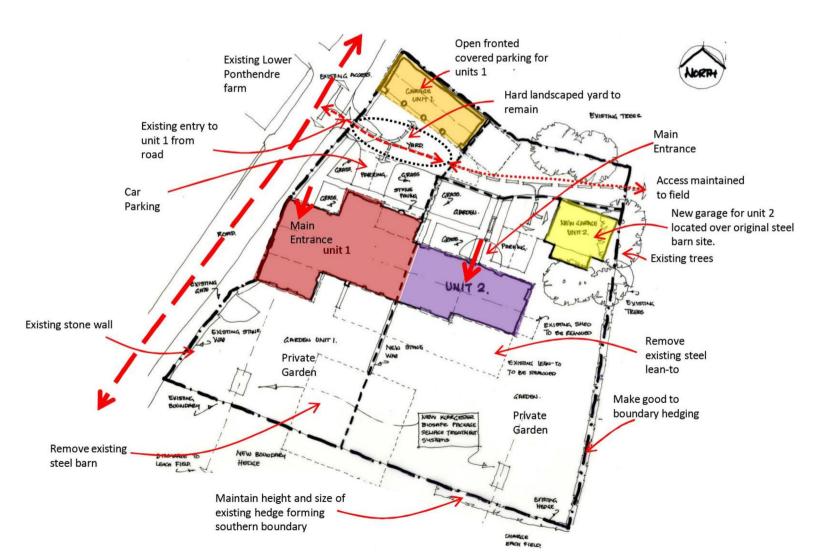
#### 3.3 Site design proposals and materials

The proposed layout of the development we believe makes a more efficient use of the existing buildings giving them purpose and securing their long term usage. There are minimal external alterations proposed to the buildings that would alter the sites existing scale or proportion.

Both the access points into the site are to be maintained.

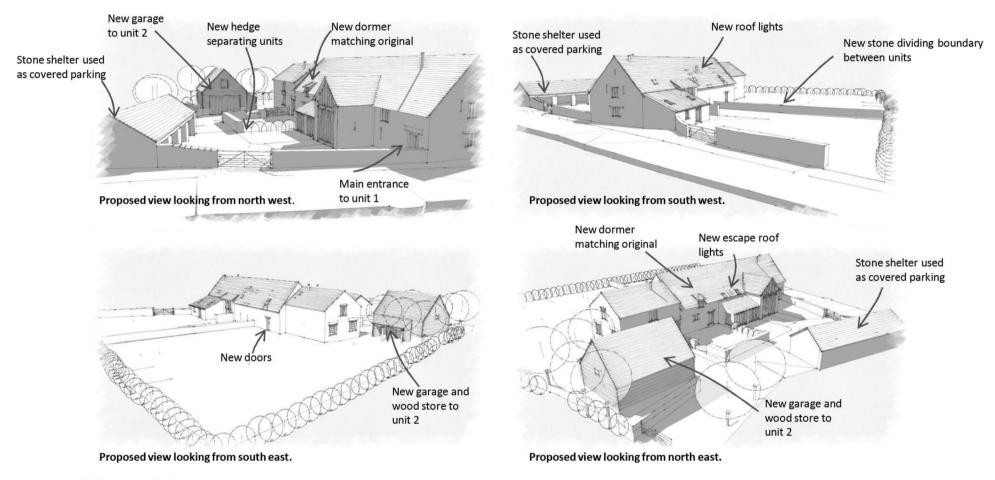
The new parking areas to each unit are kept small and local to the individual units. This grouping of parking helps to minimise the visual impact of vehicles on the buildings themselves. Parking area for unit 1 uses the stone shelter for garaging. Parking area for unit 2 has a new garage where once a steel barn was located and has a dedicated bat loft over. This garage has been located close to the east boundary to limit its impact on the barns themselves whilst also allowing close access for bats from the adjacent hedgerow.

There are minimal alterations to windows and doors of the main barns with few openings being required. Existing boundaries are to be maintained with native hedging reinforcing the rural nature of the site whilst also improving and developing its biodiversity.



#### 3.4 External materials

The external materials follow those used within the local area and on site. Walls generally to be local stone to match existing. Pitched roof areas to be stone tiles to match existing. Doors and windows to be oak to match existing. Parking areas to be gravel with linking tracks of local crushed stone. Local stone slabs to be laid to pedestrian paths.



#### 3.5 Internal materials

The internal materials to be traditional breathable finishes. Wall finishes to be insulated breathable render system with painted finish. Ceiling finishes to be plasterboard and skim throughout. Floor finishes to be a mixture of stone slabs timber flooring and quarry tile. Doors architraves and skirting to be oak.

#### 3.6 Maintenance

All the finishes have been chosen to be low maintenance, durable materials requiring minimal ongoing attention reducing long term costs whilst maintaining a traditional aesthetic.

# 4. Community Safety

#### 4.1 Objective

The principals of community safety can be reinforced by careful design of the environment which provides attractive safe public spaces through community surveillance. How the site and its proposals relate to the wider context can actively reduce crime, disorder and anti social behaviour.

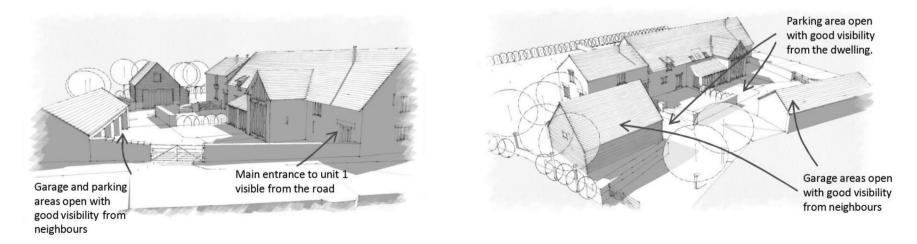
#### 4.2 Context and analysis

The site is located in the heart of the countryside with few neighbours within walking distance. The buildings are located adjacent to the main road system which in itself can deter opportunist crime. There is no defined pedestrian access to the site apart from using the main road.

#### 4.3 Design proposals

The proposals we feel respond to the existing immediate environment around the site providing opportunities for safe physical activity for the users of the site and those passing by.

We have maintained and clarified the routes both around and through the site. The existing north entry to the site clearly identifies routes for the public to use whilst also keeping them away from more private areas. The existing south entry is to be kept to service the garden of unit 1. Access to unit 1 & 2 is proposed through the existing courtyard on the north west corner of the boundary. All routes are designed to be fit for purpose being flat and well maintained. Private routes around the site will also be made flat paved with stone flats providing opportunities for safe physical activities including recreation meeting the needs of all members of society.



The development has been designed to protect the property by allowing good natural surveillance as well as hardening the envelope of the buildings responding to design suggestions within the "Secured For Design" guidance by not providing recesses to doorways which may cause opportunity for people to linger undetected.

The existing external lighting is to be located at low level minimising light pollution yet provide safe usage of the site.

# 5. Environmental Sustainability.

#### 5.1 Objective

The principles of environmental sustainability are that any alterations to the built environment should, through the design process engage both constructively and imaginatively, opportunities with the aim of delivering climatic responsive developments and or sustainable buildings. This can be achieved by the careful considerations of relevant sustainable design solutions appropriate to the works.

#### 5.2 Context and analysis

The existing buildings are at present underutilised with dead accommodation within the various agricultural buildings themselves. By redesigning the internal layouts of all the buildings the accommodation can be brought back into use as 2No domestic dwelling with little alteration. This adaptation of the existing building means that the existing building fabric can be upgraded to meet current and future needs with regard to climate change. The general upgrading of the building will minimise the demand for energy and water whilst also making the building more energy efficient.

#### 5.3 Design proposals

The existing buildings setting within the countryside will be maintained with minimal change being proposed. Their relationship to all the existing boundaries will be maintained. This will assist in sustaining the character of the group of rural buildings.

The local built environment of the site is to be maintained with regard to biodiversity by continuing to provide opportunities for species to inhabit the area and the buildings fabric. A separate biodiversity report and proposed mitigation are attached to the application.

The client will employ a local main contractor and sub contractors benefiting the local community as much as possible. To do the works the project has been developed to source local materials, building techniques and finishes where possible and economic to do so.

Passive solar design principals have been considered in the revised layout of the accommodation within the existing building with the aim of reducing the need for high inputs of energy for lighting, heating and cooling wherever possible.

In the redesign of the building we have considered the following:

- Maintaining existing openings in the external fabric of the building with minimal new external openings being formed.
- Living spaces kept to the brighter external elevations with service spaces being located off the darker areas.
- The main entrances to the individual units have been located on the more public sides of the buildings benefiting from higher light levels both day and night.
- Exposure to natural daylight for the residential accommodation and views of the surrounding landscape through the existing windows was considered important in improving quality of life for occupants of the buildings and their visitors.

Energy efficient design reduces co2 emissions and minimizes heat loss through the building fabric.

Various different technologies were considered at the feasibility stage of this project but some were discarded as inappropriate for this site because of its specific setting.

- Water consumption is from the existing private supply. Low flush toilets and high efficient taps have also been incorporated throughout.
- The heating system will incorporate the use of a individual highly efficient condensing boiler to all areas to reduce heat loss. Energy usage will be controlled through individual highly efficient localised control systems controlling temperature to the heating system to all internal areas.
- Natural daylight and ventilation have been incorporated into the scheme with windows providing rapid and trickle ventilation as required.
- High efficiency low energy lighting throughout the building will be used to reduce electricity waste.
- New package treatment systems will be built for the foul drainage of both units and a new system of surface water drainage using soakaways will be designed as required.

The alterations have been designed with the requirements of minimal maintenance and running costs. In the selection of materials we have considered good thermal performance of that material as well as the long term costs of each material. The client has then chosen to invest in more expensive materials initially which will in turn require minimal maintenance over the design life of the building. This front end investment will minimize and reduce future disruption to the running of the building and minimize future funding requirements.

The building has been designed with the requirements of improving the quality of life through encouraging sustainable behavior on site for all users. We believe that improving the understanding of energy and its usage will directly influence how it is used.

The proposals have taken into consideration the design life of the building and its materials.

Considerations in the proposals are as follows:-

- The form of the existing building with its steep pitched roofs and stone walls we feel responds to the traditional forms located in the area and these are to be maintained. These forms historically have proved appropriate to the existing local climatic conditions experienced and are considered appropriate for future climate change and require no alteration.
- Because of its rural location security is important and all doors and windows will be fitted with good quality locks.
- Robust detailing and traditional detailing is to be used throughout the proposals reinforcing the specific character of the building.
- External doors located facing the local prevailing weather are to be suitably detailed and weather proofed.

# 6. Movement

#### 6.1 Objective

The principles of movement relate to the accessibility of the site by all and also promoting sustainable means of travel.

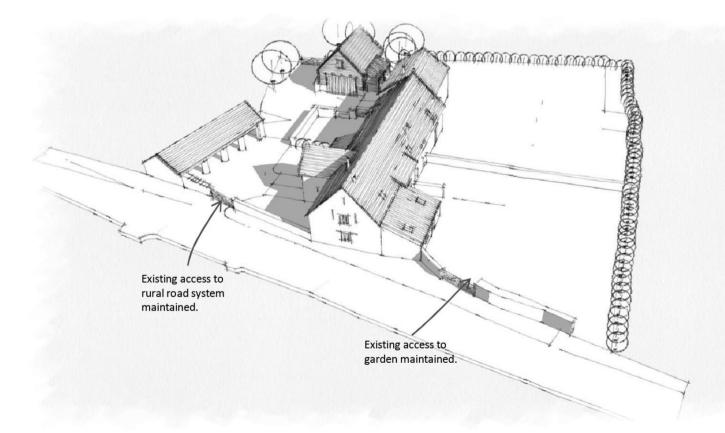
#### 6.2 Context and analysis

The site is located just off the rural road system between Craswall to the north and Pandy to the south and has limited access. The existing buildings are within the open countryside and are served by the rural road system. The site does not have any public transport services .

17

#### 6.3 Design proposals

The proposed alterations will enhance the site giving safe and clear connections to the adjoining countryside through the existing rural road network. Primarily the site will be accessed by those with vehicles and adequate parking has been provided on site for residents and visitors.



# 7. Survey of Existing

7.1 Site Photographs









## 7.2 Site Photographs



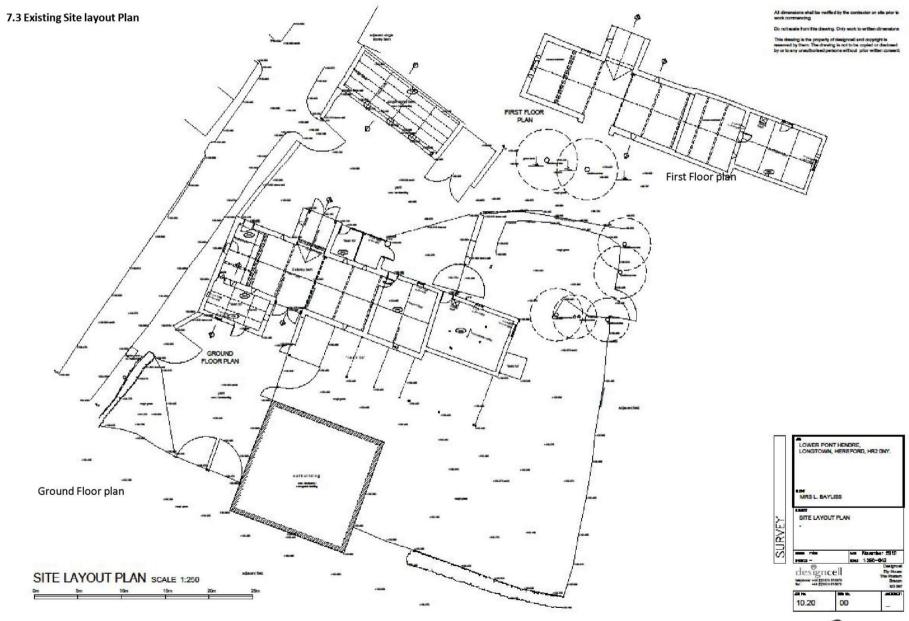














7.4 Existing Barn Elevations

All dimensions shall be writted by the contractor on site prior to work commencing. Do not scale from this drawing. Only work to written o

21

This drawing is the property of designcell and copyright is reserved by them. The drawing is not to be copied or disclo by or to any unsufficient persons without prior written con-

-.... -------IT EXISTING NORTH ELEVATION EXISTING SOUTH ELEVATION ⊞. Î BI\_ Π -----EXISTING WEST ELEVATION EXISTING EAST ELEVATION 1 ------------

BOTER MA

-

SECTION B-8

SECTION C-C

SECTION D-D

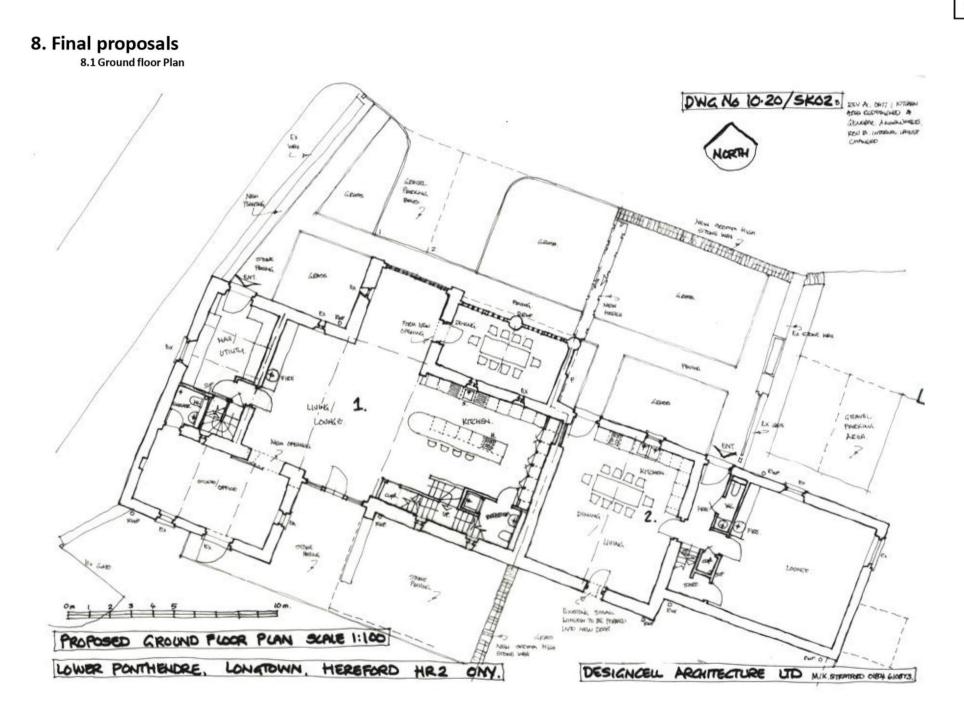
SINGLE STOREY - EXISTING SOUTH ELEVATION

44 Camden Road Brecon Powys Mr and Mrs Cooper Existing Elevations SURVEY an Jasuary 2012 - 1201 ---designcell Ely House la Postern Brecon Ido Sch -10.20 00.04

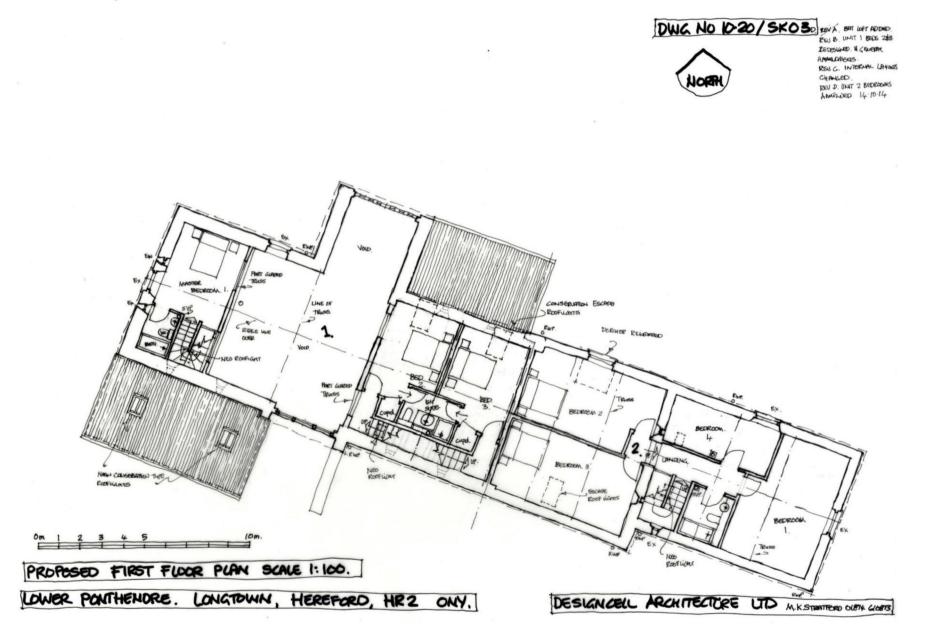
Elevation Scale 1:200

.....

designcell

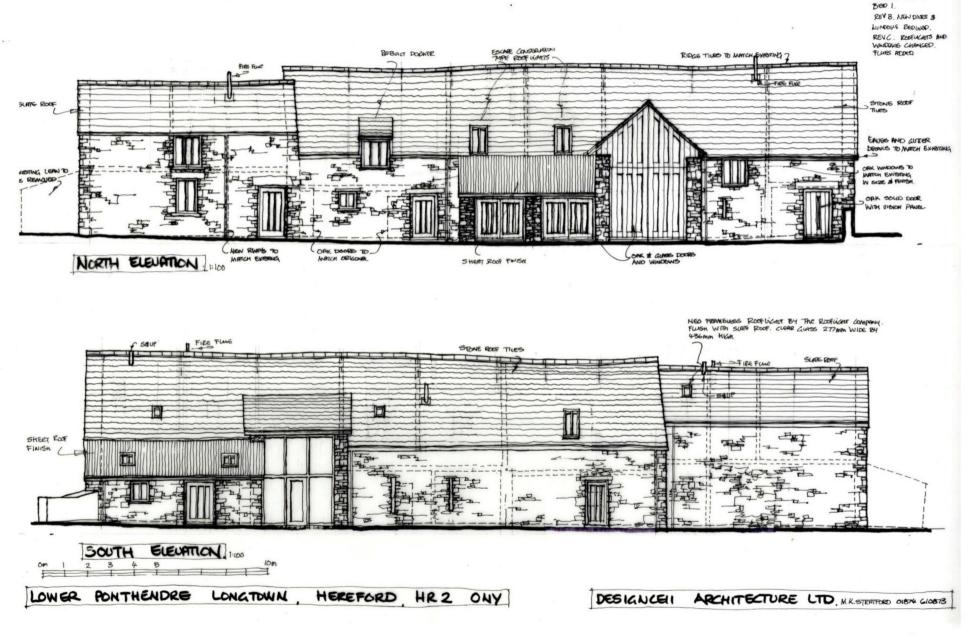








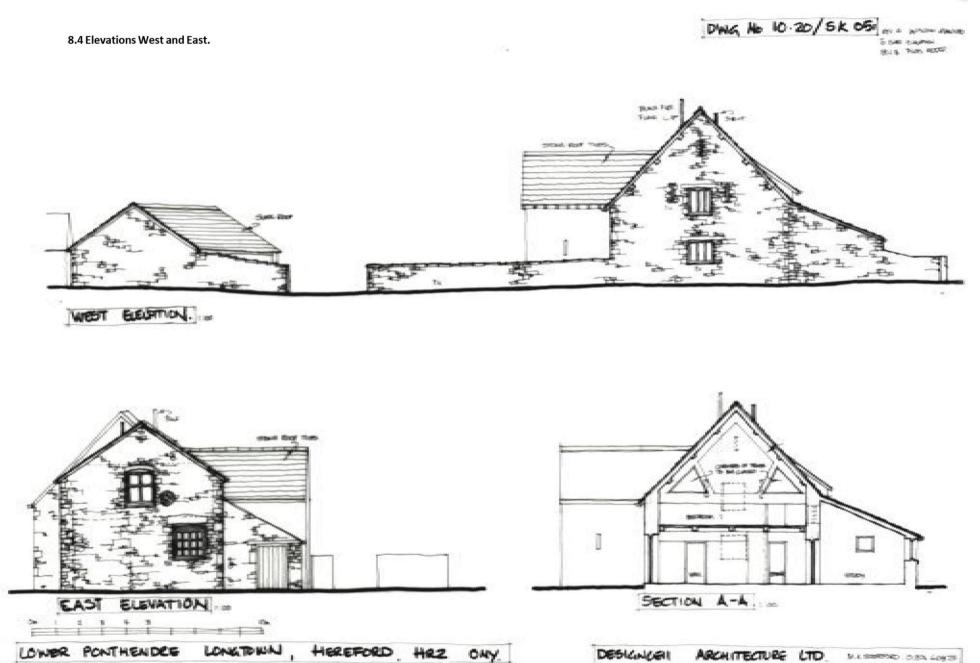




ANTERED TO UNIT 2

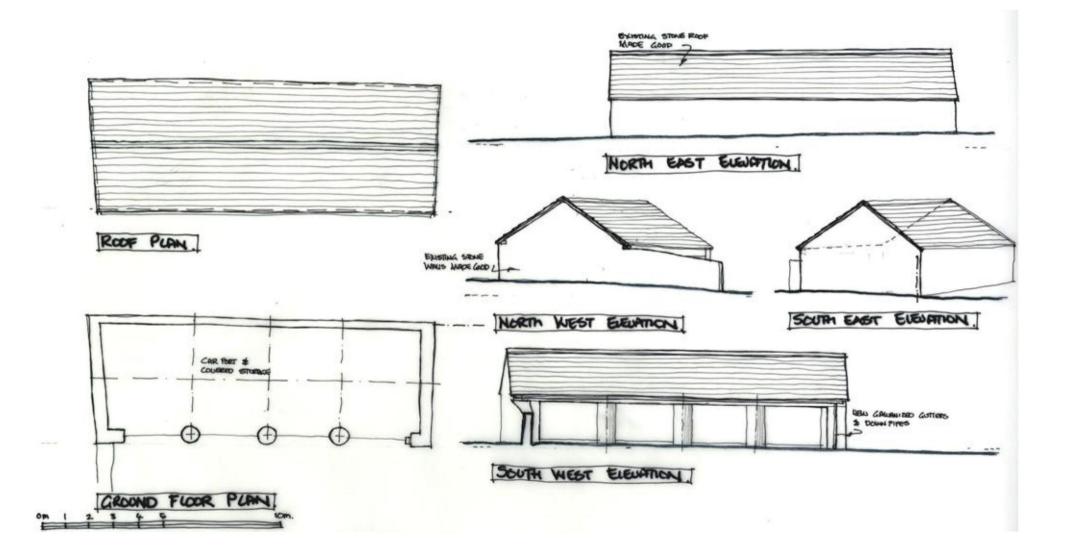
DWG NO 10.20/SKO4 C PONA WINDOW

8.4 Elevations West and East.

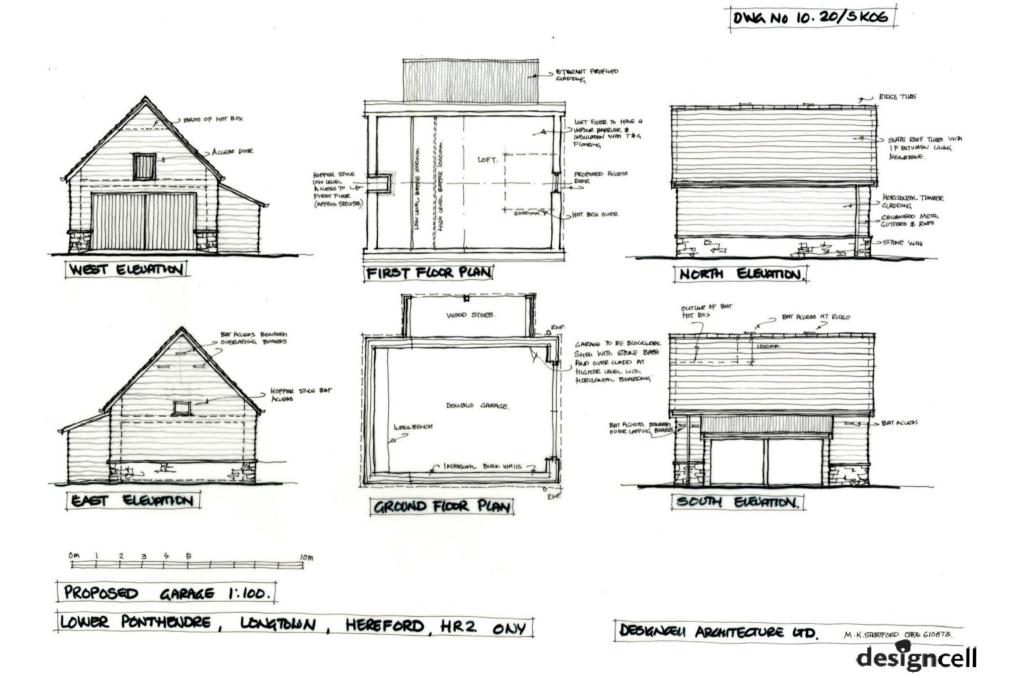


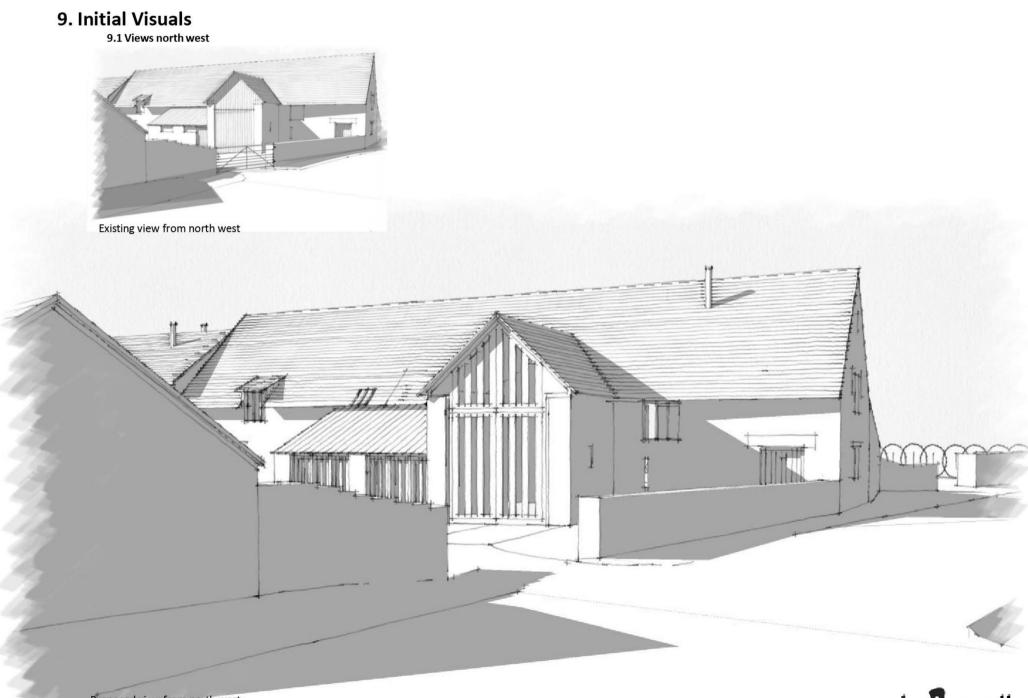


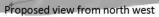
8.5 Plans and Elevations for Unit 1 garage.



designcell

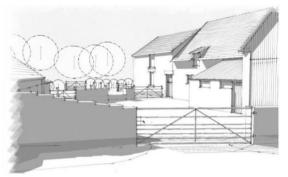








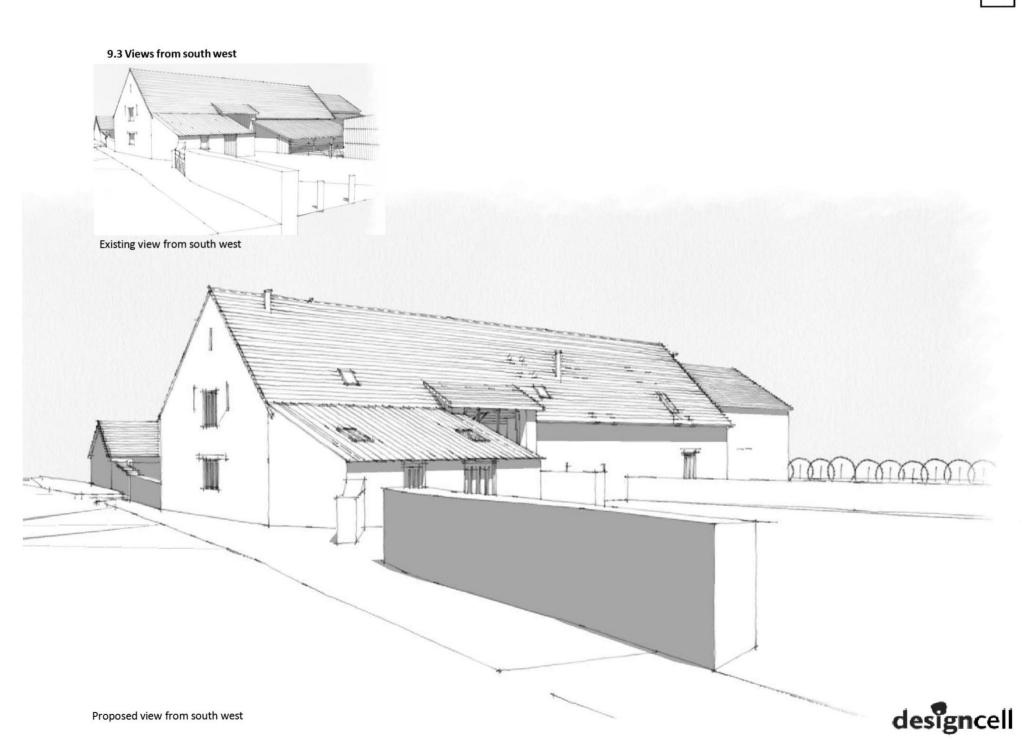
9.2 Views west



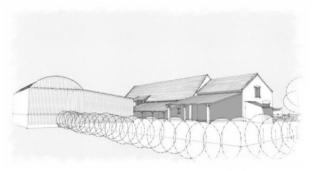
Existing view from west



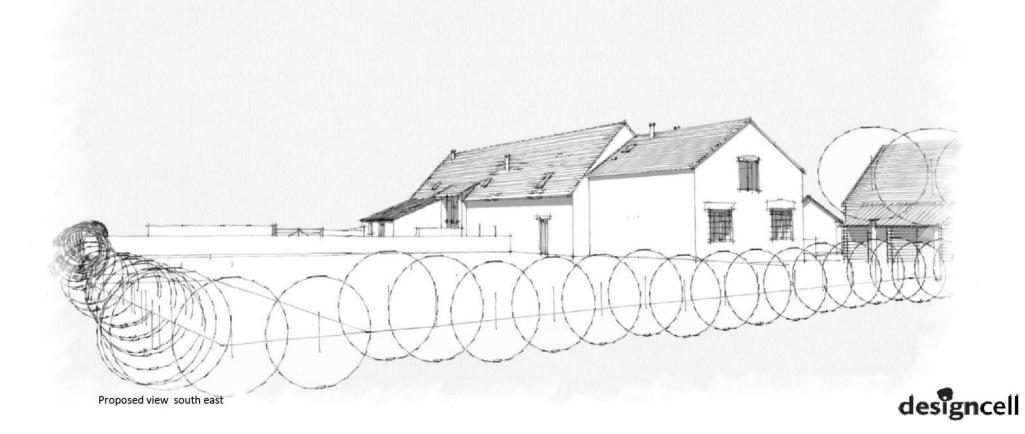




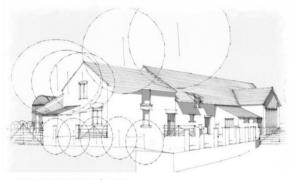
### 9.4 Views from south east



Existing view from south east



### 9.5 Views north east



Existing view north east

