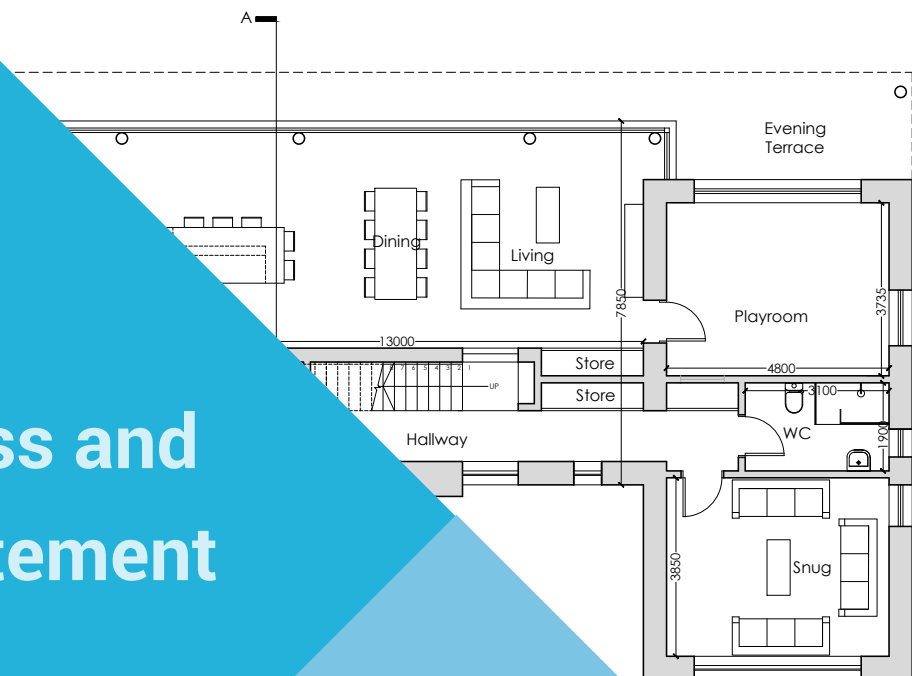




Design, Access and Drainage Statement

New Dwelling on
Land Adjacent to
1 Crossbarn, Hensingham
Whitehaven

For Mr and Mrs Bound
Project Ref 20.19
Revision B - 2021.01.20



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INTRODUCTION

The proposal is for a reserved matters application following an outline application approval reference no: 4/19/2433/001. This is a reserved matters application that addresses the information required to discharge the conditions of the outline approval. All documentation should be read in conjunction with the outline application including the approved drawings, planning statement and all associated correspondence.

The proposal will develop a piece of land currently used as a garden for the current occupants of 1 Crossbarn.

THE BRIEF

Our brief was to design a new two-bedroom single storey home with good links to the surrounding garden and available views. Our clients wanted a well-proportioned, accessible home to ensure that mobility issues can be catered for in the future.

The layout should consist of a sheltered entrance area with a front porch, cloaks area, a WC, utility, two double bedrooms and a bathroom. The main living area will be an open plan space with a kitchen, dining, living area. This space should be flexible with sliding doors to partitioned off the living room from the kitchen and dining room.

The site has such amazing views our design will ensure that all habitable rooms have access to a view. The habitable spaces will also have access to a garden area with projecting eaves and gable roof lines designed to protect the patio areas and the glazing from the worst of the weather. The extended roof lines will also increase privacy. The design should maximise the potential of this site, connect the inhabitants with all of the available views and provide good links to private gardens and the surrounding countryside.

As designers we will ensure that the layout and orientation of the internal rooms and external spaces will benefit from natural sunlight at pertinent times throughout the day. The design style will have contemporary fenestration set within a simple traditional form with modern architectural detailing. The elevations will incorporate a palette of robust materials including white render, natural slate roofing and wall cladding.

The property will be well insulated and airtight to ensure that heat losses and therefore running costs are kept to a minimum. Our clients will consider using renewable heating system such as a ground or air source heat pump rather than burning fossil fuels, high levels of insulation are a vital prerequisite for this type of heating system.

SITE DESCRIPTION

The proposed development land is located in Hensingham, Whitehaven adjacent to a detached property known as Crossbarn. The occupants of 1 Crossbarn own the land, which was previously maintained as a vegetable garden.

The existing boundaries consist of a concrete block retaining wall to the North East and North West with a stock fence to the South East and South West boundary. In order to level the site, the proposed boundaries will be concrete block with a facing brick or stone clad finish. There is a shared access into the site off Sneckyeat Road and Galemire, the details of the site access were agreed in the outline approval.

The site is not located in an area which would negatively impact on any designations, such as SSSI's or areas of protected woodland. The site is located adjacent to an established group of 6 dwellings a mixture of predominantly 20th Century properties. Details of the surrounding area were assessed as part of the outline application.

DETAILED DESIGN

The proposed new dwelling will be residential use (class C3), which is consistent with the surrounding area. The new single storey, two-bedroom home will provide a robust, practical, well insulated home with low running costs. The site is within easy walking distance of all the local amenities and public transport infrastructure, as established in the outline application.

Our clients brief, the location of the neighbouring properties and the orientation and shape of the land available to develop have all been instrumental in the final layout and building form. The property is located centrally on the site with all the habitable spaces orientated towards natural daylight and the available views. The glazing on this South facing elevations will maximise passive solar gains during winter months with roof and wall projections that will provide shade in the hot summer months whilst proving shelter from the prevailing winds and rain.

The layout will ensure that all the habitable spaces are located with good links onto areas of private garden. The main habitable rooms are all open to the available sunlight and views whilst ensuring the privacy of the neighbours and occupants is respected.

There is a proposed pedestrian and vehicular access into the site, designed with a turning area and sufficient parking on the driveway for a 2-bedroom property. The existing site entrance will be increased in width as illustrated on our detailed drawings.

The ground floor plan contains an open plan kitchen, dining, living room, two bedrooms, a bathroom, a utility room, a separate WC, an entrance porch with cloaks and boot storage and a loft access.

The habitable spaces have been organised to ensure the occupants can enjoy the South facing aspect of this site and the amazing views. The glazing to the Southern elevations all open out onto, or have access onto sheltered patios. The patio areas are protected by a glass balustrade and are set back within the elevation as the gable walls and roof project beyond the main elevation.

Externally, the building will be finished with a palette of simple, practical and robust materials. The superstructure will be concrete block cavity walls finished with a mixture of render and natural slate, the roof will be finished in slate. The slate on the walls has been used to add texture and to break up the expanses of white render. The slate roof will accommodate solar PV's to provide a renewable source of power.



Planning Drawing (Not to Scale)

The window and door openings will provide natural ventilation. The size and location of the openings will reduce the need for heating and artificial light sources due to the passive solar gains and increased natural light levels. The location and orientation of the openings will be protected from the worst of the weather with the roof projections.

Modern construction methods including high levels of insulation and airtight construction will raise the standard of this property toward that of a Passivhaus. The proposed form, palette of natural and vernacular materials along with the associated landscaping will help to quickly establish the proposal in this location.

All aspects of the design have been carefully considered to meet the brief and respect the surrounding properties. A sustainable construction, form, layout and orientation with good links onto private gardens will ensure this home meets the needs of all future occupants.

The finishes, simple detailing and well insulated superstructure will require a high level of skill and craftsmanship to execute successfully.

AMOUNT AND SCALE

The proposed dwelling has an internal floor area of 143m² and a total footprint of 166m². The proposal is appropriate for the size of the site which has an area that totals 792m². The proposal equates to a development of 22% of the available site area.

The property is a well-proportioned development on a private access road which has no impact on the residential amenity and relates well to the array of modern properties in the vicinity.

ACCESS

There will be a Building Regulations Part M compliant level access up to the front door of the property from the driveway. The parking areas are located near the entrance to the site and the Northern boundary with sufficient space to ensure cars can be turned on the site and parking for at least two cars. The proposal provides more than the minimum parking spaces required by Cumbria County Highways for a 2-bedroom property. There will be no intensification of parking in the area due to the development of this site.

DRAINAGE

Foul Drainage

The proposed foul drainage will be connected to the existing packaged sewage treatment plant in the adjacent field. Details of the existing system are provided in the appendix of this document Figure 1.10 and 1.11. The discharges and connections will all be made in accordance with United Utilities guidelines and Building Regulations Approved Document H.

The drainage connections are shown on drawing number 20.19.11.

Surface Water

We intend to deal with surface water in accordance with the National Planning Policy Framework (NPPF) and the National Planning Practice Guidance (NPPG). We will drain the site of surface water

in the most sustainable way.

The NPPG clearly outlines the hierarchy to be investigated by the developer when considering a surface water drainage strategy as follows:

1. Into the ground (infiltration) – we intend to use this method of drainage on the site and utilise the existing drainage field off the back of the treatment plant.
2. To a surface water body – There are no Environment Agency (EA) GQA classified rivers, canals, ponds or lakes recorded within c.250m of the development area.
3. To a surface water sewer, highway drain, or another drainage system – there is not a separate surface water drain on or near the proposed site.
4. To a combined sewer – there is not a combined drainage system on or near this site.

1. Infiltration

We intend to drain the site using infiltration. This method can only be achieved when measured against the following criteria: A soakaway must not be used: Within 5m of a building or road, 2.5m of a boundary or in an area of unstable land in ground where the water table reaches the bottom of the soakaway at any time of the year. *Source: Section H2 of Building Regulation Approved Document H 'Drainage and Waste Disposal' 2002 edition.*

There is an existing packaged treatment plant and associated drainage field, the treatment plant is clearly marked on the plans. We propose to discharge the surface water into this drainage field. All works will be carried out in accordance with United Utilities guidelines and Building Regulations Approved Document H.

Surface water will be collected from the main roof and the proposed hard surface areas will have drainage channels at door thresholds and the driveway exit all connected to the proposed surface water drainage scheme.

Flooding

Following a review of Environment Agency information, the site and immediate surrounding area are not at risk of flooding associated with rivers or the sea and are therefore classified as a Zone 1 Flood Risk.

IMPACT ON NEIGHBOURS

We have paid attention to the neighbouring properties to ensure that the proposed property does not harm the amenity. The detached properties to the North are well screened by the existing topography, landscaping features and vegetation. The properties are also orientated in such a way that there is no overlooking of the proposed site. The properties at 1 Crossbarn to the North West are at a higher level, we have set the proposed property slightly lower on the site, at a level that will not impact the occupants of 1 Crossbarn or the adjacent garden.

The layout and orientation of the main body of the house has been carefully designed to ensure that overlooking from adjacent properties and their gardens is minimal. Our clients are keen to ensure their privacy is protected, so this has been an important consideration.

The site is located at the end of a private road and the proposed location, layout, orientation and existing landscaping will all ensure that the property has no detrimental impact on the neighbouring properties.

PLANNING POLICIES

Planning policies should be read in conjunction with the SRE Associates Planning Statement submitted as part of the outline planning approval. Some of the most relevant guidance and policies that have informed our approach to this design, are as follows:

The presumption in favour of sustainable development

11. Plans and decisions should apply a presumption in favour of sustainable development.

For **plan-making** this means that:

- (a) plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;
- (b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas ⁵, unless:
 - (i) the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area ⁶; or
 - (ii) any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

For **decision-taking** this means:

- (c) approving development proposals that accord with an up-to-date development plan without delay; or
- (d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date ⁷, granting permission unless:
 - (i) the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed ⁶; or
 - (ii) any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

National Planning Policy Framework

Paragraph 11 of the NPPF strongly promotes the importance of sustainable development. The proposed property will be built with high levels of insulation and incorporate renewable energy and heating systems. The aim of the proposal is to develop a highly sustainable carbon neutral home.

131. In determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.

38. Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible.

Paragraph 131 and 38 (above) of the NPPF clearly places great weight on good design and sustainable development as long as they fit the form and layout of the surroundings. There are no heritage assets which will be impacted by the proposal and, the proposed property has been well designed and sustainable. The Council should approve this proposal, given the design and sustainability characteristics.

Presumption in Favour of Sustainable Development

The proposed development will be sustainable, the proposed dwelling will help to mitigate the impact of climate change by lowering energy consumption and consequently reducing carbon dioxide emissions for all occupants of this property.

Copeland Local Plan Strategic and Development Management Policies

Sustainable Development Standards

The proposed dwelling will be energy efficient and help reduce the carbon footprint of Copeland Borough Council. Developments such as this should be encouraged as they help mitigate the climate change impact from housing. In addition, the design of the proposed property is practical and sympathetic to the locality. Therefore, the proposal satisfies the criteria set out within the Policy.

Design

The design of the proposed dwelling will respond positively to the local character and amenity with a local vernacular style and materials already present in this establish settlement. This single storey property is an appropriate size and scale for the available site and will also contribute towards a sustainable community in accordance with Policy DM10.

Residential Amenity

The design and appearance of the proposed dwelling is sympathetic with the surrounding area and neighbouring properties. The proposal will not exert any detrimental impact towards the locality in terms of visual amenity. The proposal will help to enhance the environmental quality of the area and exceeds the spatial requirements as set out in Policy DM12.

Access and Transport

The development is an appropriate size and scale for the available site area. There is a fully accessible footpath with Part M compliant access and patio areas around all the elevations of the property. This will ensure that all areas of the site can be accessed by all future occupants. The development has incorporated a generous driveway for at least 2 vehicles, the development of the site will not generate any parking issues. The layout has been developed in accordance with Policy DM21 and DM22.

Sustainable Construction

The proposed dwelling will help to reduce carbon dioxide emissions and energy consumption through the incorporation of renewable technologies and sustainable design. The proposal will have minimal impact on the environment and will not affect any ecological habitats and networks.

Standards of Good Design

The proposed development is well related to other dwellings in the area in terms of positioning on the site, the material finishes and fenestration. The proposed footprint responds to the available site area and the context. The placement ensures there are generous spaces between neighbours, on-site parking can be achieved and it retains a feeling of space and openness. The proposal will not cause any overlooking issues and the appearance of the proposed development will respect the local character and the neighbouring properties.

The design is a well-considered response to our clients brief, the site, orientation, the vicinity, national and local planning policy. A well detailed form, which is energy efficient with materials that are ever present in the Cumbrian vernacular, quality finishes and a design robust enough for an unforgiving climate and an exposed site.

The site layout and interior plan is fit for the intended use with well-proportioned habitable spaces. High levels of natural daylight with both physical and visual links to the surrounding gardens and views over open countryside towards the Lake District fells and St. Bees head. All of these considerations are a prerequisite for good design and the ability for this home to be enjoyed by occupants and local residents alike.

CONCLUSION

The proposal will provide a highly insulated, energy efficient residential dwelling which will help to mitigate the impact of climate change and contribute to Copeland Borough Council's carbon emission reduction goal.

The design of the proposed property has been carefully considered and informed by the clients brief, the site location, national and local planning policy and the neighbouring properties. There are no designations impacted by the development and there are no trees with any bearing on the development.

The property has been designed to respect the character of the area, taking account of the site constraints and will not impact on the residential amenity of the neighbouring properties. The proposed dwelling is of an appropriate layout, design and scale for the site and will not cause any overlooking or overbearing issues.

It is considered that the proposed development is of a suitable scale and design for the area and is supported by the principles and policies for the area both nationally and locally. The proposal will create a high performance, sustainable home. The design will enhance the area, exert real benefits for the environment, the applicants and all future occupants.

The proposal will provide a new dwelling in accordance with all the relevant planning policies. It is in full accordance with the aims and objectives of both national and local policy and on the basis of the outline approval and the detailed drawings and additional information supplied in support of this application, it should be supported.

APPENDIX

Figure 1.10 - Existing Packaged Treatment Plant –Make and Model

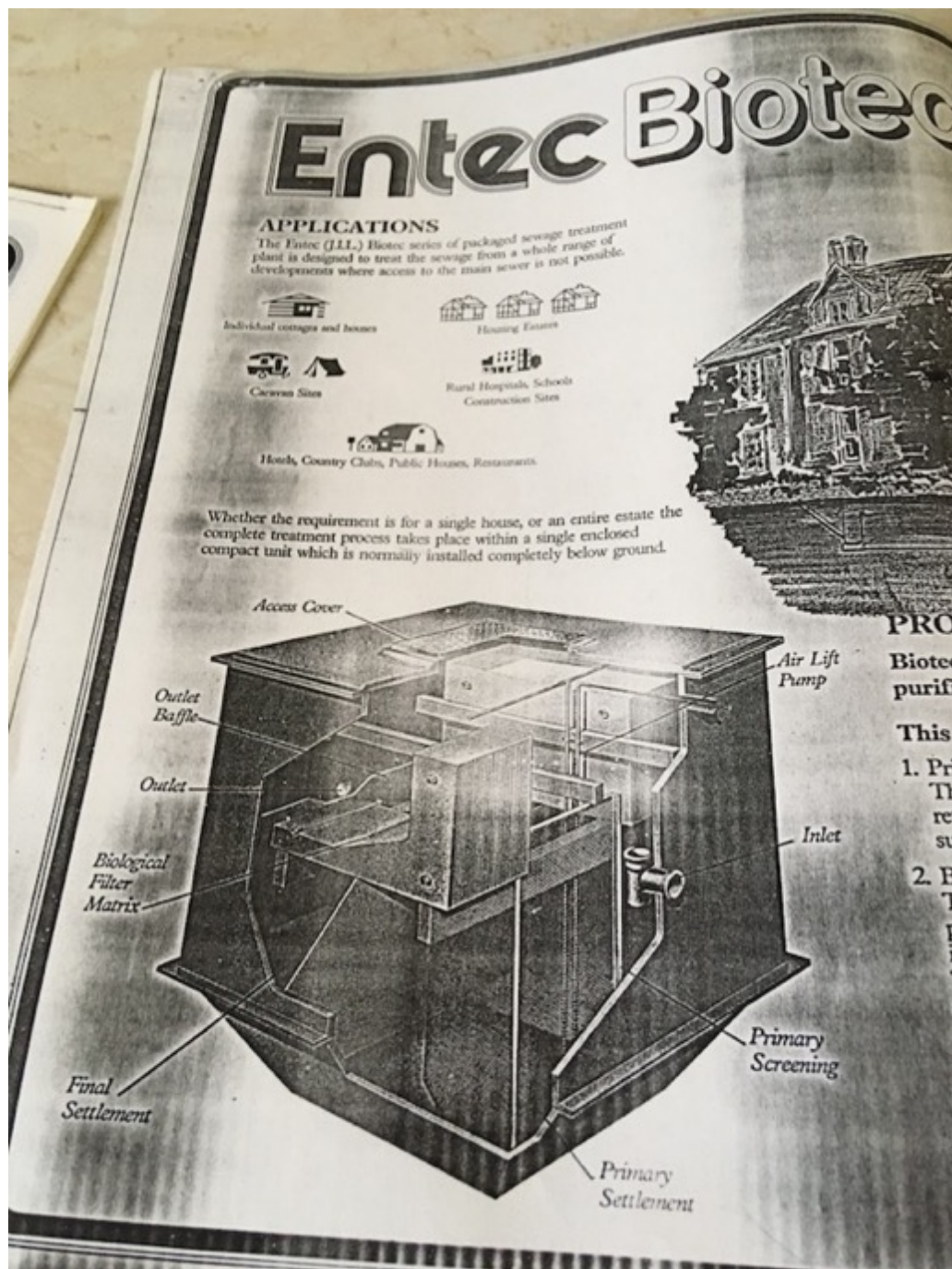


Figure 1.11 - Existing Packaged Treatment Plant - Technical Specifications Including Capacity

3. <u>Final Settlement</u>	
The treated sewage transferred from the bio filter to the third stage is again settled, allowing humus solids to separate as the clarified liquor is passed through the final up-flow zone. It is then discharged to a water course, soakaway, or for tertiary treatment.	
<u>Process Specification</u>	
Plant Type	Biotec ST4
Application	Domestic sewage or sewage of a similar nature.
Population Equivalent	Up to 40
Total BOD loading	2.4 kg/day
Surface area of filter media	Nominal 720 m.sq.
Media loading	Nominal 3.0 gm/m.sq.
Maximum flow	8.0 m.cu./day
Total detention time	1 day
Instantaneous surge volume	6.7% DWF
Note 1: Population Equivalent:	Refers to normal family residents, some of whom have day time occupations or schooling away from the house and includes over-night guests who may stay for periods of more than one night. Contact Entec (Pollution Control) Limited for advice regarding non standard situations.
Note 2:	The use of waste disposal grinders materially increases the biological loading of all sewage treatment plants. If waste disposal grinders are to be used, advice should be sought from Entec with regard to the sizing of the plant and the required frequency of de-sludging.
Note 3:	The biological sewage treatment process can be affected by unusual hydraulic or biological loadings, weather, chemicals or anti-biotics affecting the micro-organisms, excess grease, lack of maintenance or by prolonged power failure.