Report Development Plan

ADVANCED PROJECT MANGEMENT

By Aaron Griffiths (2223674) | ACBA 6010 | 8th May 2026

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Brief

As the project manager to my construction firm, I have been tasked with overseeing a development plan for a new scheme. Which a successful development appraisal must demonstrated to the project. In which covers costs, required planning obligations, appropriate site value, and delivers a market-risk-adjusted return.

A development appraisal is a "structured financial assessment used to determine whether a development project is viable. It estimates the Gross Development Value and subtracts all associated costs such as construction, professional fees, finance, and marketing to calculate either the residual land value or developer profit. The appraisal primarily uses the residual method, with discounted cash flow analysis applied to more complex schemes. Its purpose is to test feasibility, support planning negotiations, and identify the most appropriate use of land." (RICS (2019). *Valuation of development property*.)

SITE PLAN

Figure 1 - Zoopla. (2026). 3 bed detached house for sale Slade, Oxwich, Swansea SA3

Figure 2 – Outlined in red, site location of the boundary - Zoopla. (2026). 3 bed detached house for sale Slade, Oxwich, Swansea SA3

The property is located in Slade, Oxwich, Swansea SA3, near the coastline of the Hamlet of Slade on the Gower peninsula.

The Hamlet of Slade on the Gower Peninsula is an area celebrated for its natural beauty and relaxed lifestyle. The property benefits from proximity to Slade Bay, a quiet and unspoilt beach ideal for swimming, kayaking, and coastal walks. Several of Gower's most renowned beaches, including Oxwich Bay, Port Eynon, Three Cliffs, and Rhossili, are all within easy reach. With scenic footpaths and cliff-top trails nearby, the location is particularly well suited to walkers, nature lovers, and those seeking tranquil coastal living.

The property sits on a 0.42-acre plot and offers approximately 1,988 sq. ft of accommodation, mainly arranged above a large double garage and workshop. It currently has three bedrooms, two reception rooms, and a south-facing sun terrace with sea views.

CONNECTIVITY:

Swansea City Centre is approximately 14 miles away, with a journey time of around 35 minutes by car, while Junction 47 of the M4 Motorway is roughly 15 miles away, providing convenient access to the wider region.

Day-to-day shopping and local amenities are available nearby in Parkmill, Knelston, and Pennard, with a broader range of shops, cafés, restaurants, and services found in Mumbles Village, approximately 11 miles away.

The property lies within the catchment area for Knelston Primary School and Bishopston Comprehensive School, both of which are well regarded locally.

Whether seeking a private coastal retreat, an ambitious self-build opportunity, or a rare lifestyle property in an exceptional setting.

(Zoopla. (2026). *3 bed detached house for sale Slade, Oxwich, Swansea SA3*.)

Background Information

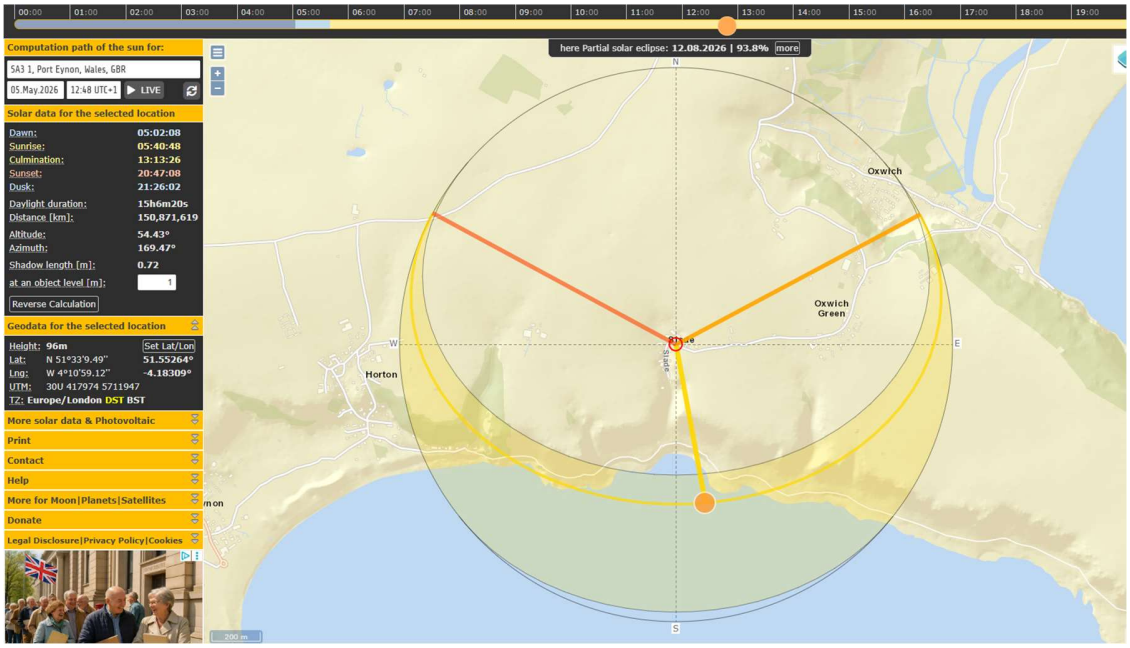


Figure 3 -Position of the sun - Suncalc.org. (2026). SunCalc sun position- und sun phases calculator.

The existing property is ideally oriented with a south-facing aspect and benefits from a sun terrace that enjoys outstanding, uninterrupted sea views. This orientation maximises natural light throughout the day.

The property is presently heated via an oil-fired central heating system and holds an EPC rating of E. It is fully connected to all main services, providing a solid infrastructure base to improve efficiency and sustainability.

Figure 4 gisportal.dwrcymru.com. (n.d.). Geocortex Viewer for HTML5.

The diagram above shows water and sewerage networks, including active and abandoned connections. The DCWW also shows other boundaries and ownerships.

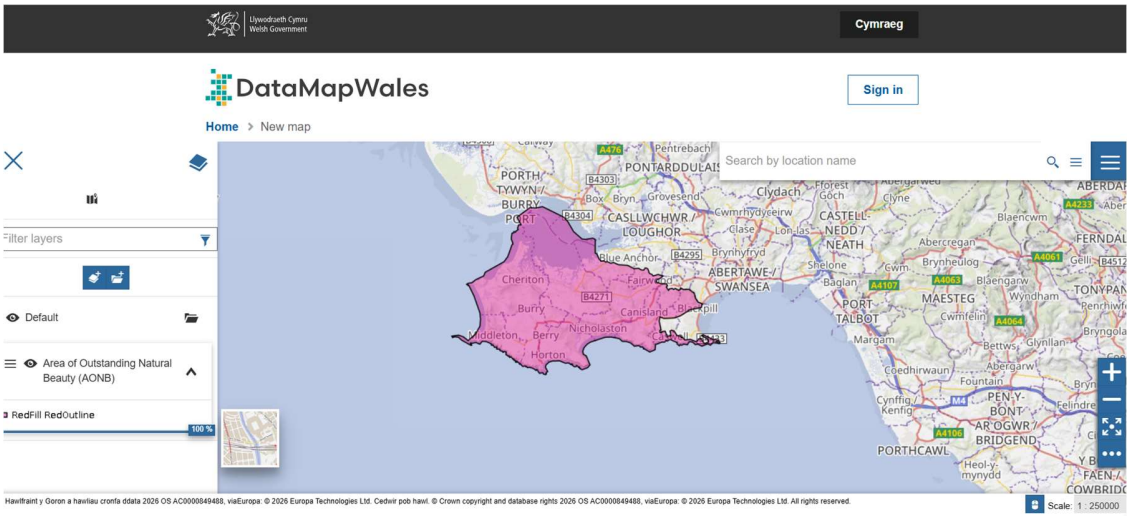


Figure 5 – AONB Map - Gov.wales. (2025). New map | DataMapWales

AONB:

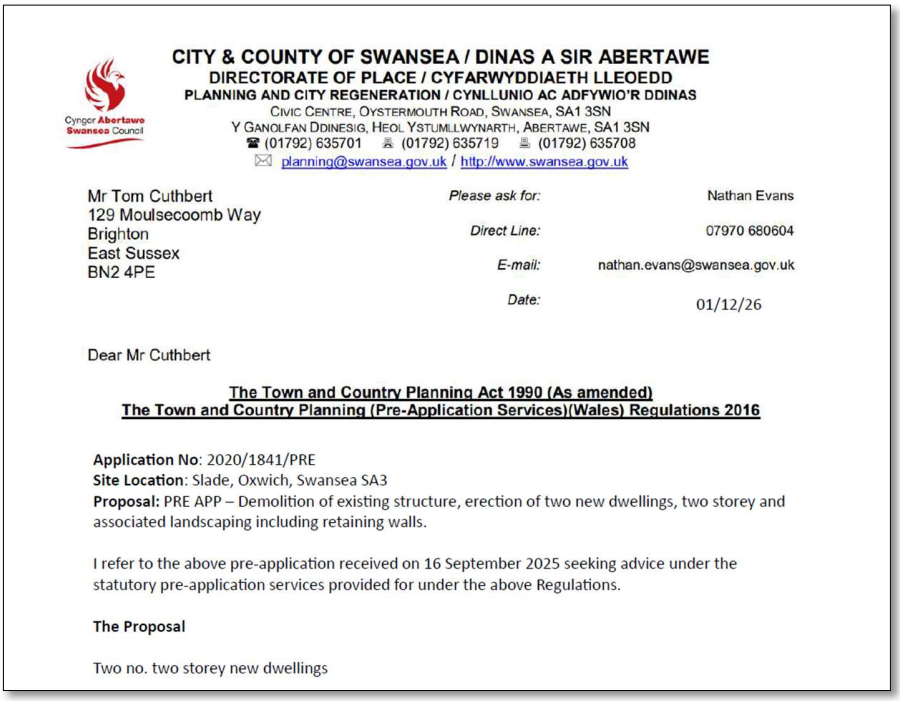
Referring to the pre app application it states" Due to the location of the application site within Slade and the Gower AONB, the Council's Placemaking and Heritage Team was consulted. They noted that the site lies within the AONB, where the statutory duty to preserve or enhance landscape character applies, and the adopted Gower AONB Design Guide is relevant. The proposal comprises two contemporary two-storey detached

dwellings with pitched roofs, using timber cladding, slate roofs and aluminium windows. This is considered a sensitive contemporary vernacular that preserves and enhances the conservation area. However, further clarification is required regarding the detached outbuildings, fenestration alignment and access arrangements." (Swansea. (2026). *Planning application search - Swansea*.)

ACCESS:

The current access arrangements the proposal would not reduce on-site parking provision, as new parking arrangements have been incorporated into the scheme. However, the development could potentially increase overall parking demand. At present, there is not clearly identified off-street parking provision for the site. A detailed parking layout should therefore be submitted as part of the full planning application, showing the number of vehicles that can be accommodated within the site. A full assessment of the proposal's impact on highway safety can only be undertaken once this additional information has been provided. (Swansea. (2026). *Planning application search - Swansea*.)

Figure 6 - Zoopla. (2026). 3 bed detached house for sale Slade, Oxwich, Swansea SA3



CITY & COUNTY OF SWANSEA / DINAS A SIR ABERTAWE
DIRECTORATE OF PLACE / CYFARWYDDIAETH LLEOEDD
PLANNING AND CITY REGENERATION / CYNLLUNIO AC ADFYWIO'R DDINAS
CIVIC CENTRE, OYSTERMOUTH ROAD, SWANSEA, SA1 3SN
Y GANOLFAN DDINESIG, HEOL YSTUMLLWYNARTH, ABERTAWE, SA1 3SN
☎ (01792) 635701 (01792) 635719 (01792) 635708
planning@swansea.gov.uk / http://www.swansea.gov.uk

Mr Tom Cuthbert
129 Moulsecoomb Way
Brighton
East Sussex
BN2 4PE

Please ask for: Nathan Evans
Direct Line: 07970 680604
E-mail: nathan.evans@swansea.gov.uk
Date: 01/12/26

Dear Mr Cuthbert

The Town and Country Planning Act 1990 (As amended)
The Town and Country Planning (Pre-Application Services)(Wales) Regulations 2016

Application No: 2020/1841/PRE
Site Location: Slade, Oxwich, Swansea SA3
Proposal: PRE APP – Demolition of existing structure, erection of two new dwellings, two storey and associated landscaping including retaining walls.

I refer to the above pre-application received on 16 September 2025 seeking advice under the statutory pre-application services provided for under the above Regulations.

The Proposal

Two no. two storey new dwellings

Figure 7 – Swansea. (2026). Planning application search - Swansea.

ECOLOGY:

Advisory from the pre application: The Council's Tree Officer advised that, based on the submitted plans and Street View imagery, no significant trees appear likely to be affected by the proposals. However, should any trees be impacted, the application must be supported by a tree survey undertaken in accordance with BS5837:2012. All trees with a diameter exceeding 75 mm are protected by virtue of the site's location within a conservation area.

"BS5837:2012 is the British Standard that provides guidance on trees in relation to design, demolition and construction. It sets out a structured approach for surveying trees, assessing their quality and value, and identifying measures to protect retained trees during development and construction works". (Bsigroup.com. (2012). *BS 5837:2012 | 30 Apr 2012 | BSI Knowledge.*")

Given the nature of the proposed works and the rural location of the site, need to follow standards such as, the Conservation of Habitats and Species Regulations 2017 protect the UK's most important wildlife sites and vulnerable species. Such as:

- Bats
- Otters
- Great crested newts
- Dormice
- Certain plants and marine species

For these species, it is illegal to deliberately:

- Capture, kill, injure, or disturb them
- Damage or destroy breeding sites or resting places

Unless a licence has been granted. They require authorities to assess and prevent damaging plans or developments which safeguards and protected habitats and species and maintain conservation status. (UK Government (2017). *The Conservation of Habitats and Species Regulations 2017*.)

Other legislation regarding ecology to follow:

- *Wildlife and Countryside Act 1981 (as amended)*

All British bat species are protected under Schedule 5 of the Wildlife and Countryside Act. This legislation is less significant since the implementation of the Conservation of Habitats and Species Regulations. *(GOV.UK (1981). Wildlife and Countryside Act 1981)*

- *Environment (Wales) Act 2016*

Section 7 of the Environment (Wales) Act 2016 lists Species of Principal Importance for Nature Conservation in Wales. These include the following bat species:

- Barbastelle bat (*Barbastelle* barbastellus)
- Bechstein's bat (*Myotis bechsteinii*)
- Brown long-eared (*Plecotus auritus*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Greater horseshoe (*Rhinolophus ferrumequinum*)
- Lesser horseshoe (*Rhinolophus hipposideros*)
- Noctule (*Nyctalus noctula*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)

GOV.UK (2016). *Environment (Wales) Act 2016*. [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/anaw/2016/3/contents.

- *Planning Policy Wales (Edition 11)*

(GOV.WALES. (n.d.). Planning policy Wales. [online] Available at: https://www.gov.wales/planning-policy-wales.)

- *Technical Advice Note (TAN) 5: Nature Conservation and Planning.*

Technical Advice Notes provide advice to local planning authorities on the application of Planning Policy Wales and legislation to the planning system. TAN 5 provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation.

(www.gov.wales. (2009). Technical advice notes (TAN) 5: nature conservation and planning | GOV.WALES. [online] Available at: https://www.gov.wales/technical-advice-note-tan-5-nature-conservation-and-planning)

Existing Site Condition

PROPERTY AGE

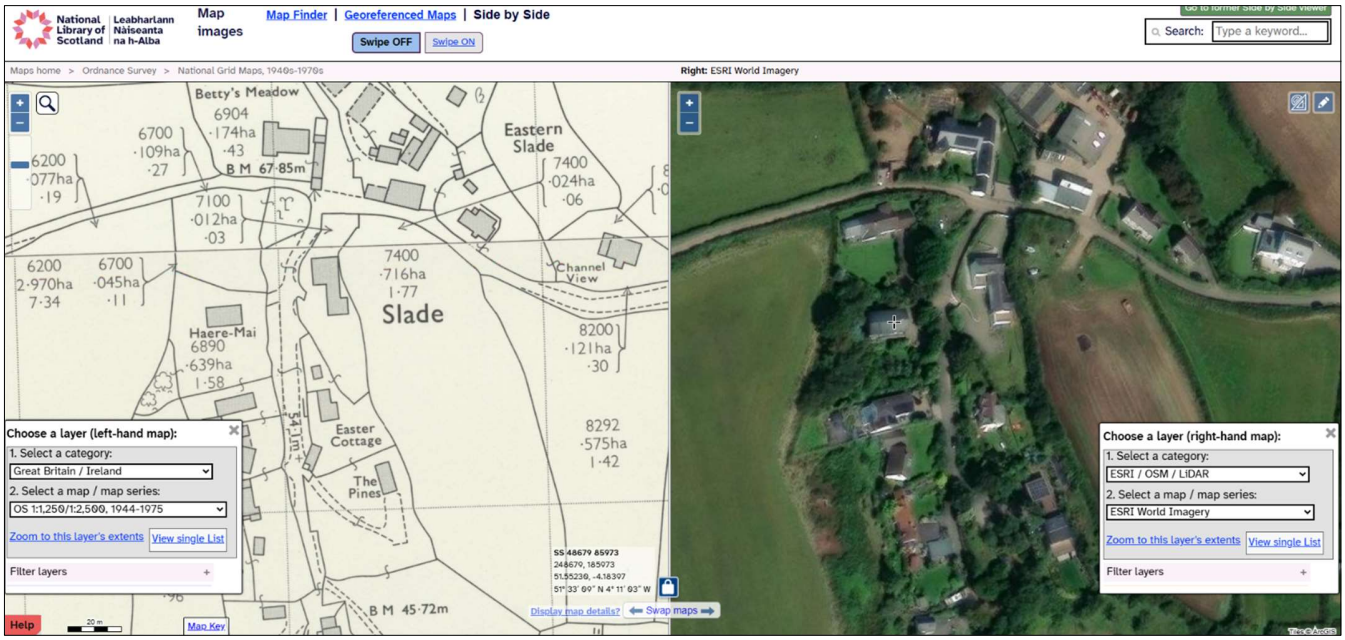


Figure 8 - National Library of Scotland (2018). National Library of Scotland.

Scottish mapping shows that the oldest available map dates from between 1944 and 1975, which suggests the property was built during this timeframe.

ASBESTOS

A complete ban on the new use, importation, and supply of all asbestos-containing materials and products in the UK came into force in May 1999. Therefore, with the age of the building asbestos containing material will be presumed to occur within the property.

"Asbestos is defined as six chemically related minerals that are regulated due to their hazardous properties when respirable airborne fibres are inhaled. The three most used types in the UK were Chrysotile (white asbestos), Asbestos Grunerite (Amosite, or brown asbestos), and Crocidolite (blue asbestos), all of which were widely imported and used across various industries. The remaining less commonly encountered regulated asbestos types are Actinolite asbestos, Tremolite asbestos, and Anthophyllite *asbestos." (UK* Government (2012). *The Control of Asbestos Regulations 2012.*)

Asbestos-related legislation:

- HSG248 Asbestos

www.hse.gov.uk. (n.d.). *Asbestos: The Analysts' Guide - HSG248.* [online] Available at: https://www.hse.gov.uk/pubns/books/hsg248.htm.

- The Health and Safety at Work Act 1974

Health and safety Executive (2024). *Health and safety at work act 1974.* [online] Hse.gov.uk. Available at: https://www.hse.gov.uk/legislation/hswa.htm.

- The construction *(Design and Management) Regulations 2015*

GOV.UK (2015). *The Construction (Design and Management) Regulations 2015.* [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/uksi/2015/51/contents

Prior to the commencement of any demolition, or intrusive works, a full asbestos refurbishment and demolition survey will be required. This survey must be undertaken by a suitably qualified and licensed asbestos sampling contractor to identify the presence, and condition of any asbestos-containing materials within the property.

Proposed Development (GDV)

The current listing price for the site is £599,995. It is proposed that the existing three-bedroom detached dwelling to be demolished and allow for the construction of two new two-storey, four-bedroom detached houses. The specification for the proposed new dwellings will include the following:

Foundations: Reinforced concrete foundations in accordance with ground conditions

- External walls: Cavity masonry construction with facing brick or rendered blockwork

Roof: Flat roof construction with timber joists and a high-performance waterproof membrane, including thermal insulation to current standards

- Windows & doors: High-performance uPVC or aluminium double-glazed units
- Floors: Concrete ground floor slab with timber or engineered upper floors
- Internal walls: Timber stud or blockwork partitions with plasterboard finish
- Insulation: High-performance thermal and acoustic insulation throughout
- Rainwater goods: uPVC or powder-coated aluminium

Figure 9 – Proposed layout for the new build construction - Provided by university lecture - Advanced Project Management (IB)

Figure 10 – Proposed site location of the 2 new developments - Provided by university lecture - Advanced Project Management (IB)

Neighbouring Property:

Compared to the Tide crest construction, which is a 4-bedroom 2 storey semi-detached property neighbouring the proposed construction location.

The Zoopla current estimated value:

(Zoopla.co.uk. (2026). *Property details for Tide Crest Slade Oxwich Swansea SA3 1NA - Zoopla*.)

Tide Crest - £770k

4-bedroom house and 3 receptions

Roughly 185sqm of the property.

770k divided by 185 = £4,162 per sqm.

The proposed build cost sqm for each property, for the two new semi-detached buildings is 200 sqm. Therefore:

200sqm x £4,162 = £832,400 build cost per property

£824,400 per dwelling x 2 =

Total build cost for the two dwellings = £1,664,800

(Contingency may be added)

SPONS Costs:

(www.designingbuildings.co.uk. (n.d.). *Badtitle*.)

For this calculation for the build cost per sqm I am using the Spons pricing PDF 2034 version as do not as access to the 2026 version. Therefore, an additional "10.5%" has therefore been applied to allow for price inflation between 2023 and 2026. (BCIS. (2025). *BCIS building forecast*.)

Private Development:

Two & Three-storey house prices are between £2050 - £2650 priced by SPONS.

Estimated Cost:

Reginal – ((£2332 x 0.88) x 110.5) =

£2332 x uplift to date = per sqm £2577

200 sqm x £2566 = £515,400 per property

£515,400 x 2 developments =

Total build cost for the two dwellings = £1,030,800

(Contingency may be added)

Case Studies Evidence

Old Farm Mews, Dinas Powis:

"Four family homes of varying size on a narrow, steeply sloping brownfield site reflect an evolution of house typology responding to the sites historic character. Employing a series of overlapping and interlocking volumes offers a legible, rhythmic, sequence of spaces. Seen together as a single, highly articulated composition, the houses assume the clarity and integrity of a genuine village street." (Design Commission for Wales. (2020). *Old Farm Mews, Dinas Powis | Design Commission for Wales*.)

In which this development is reusing previously developed land, the project benefited from existing infrastructure and services, reduced environmental impact, and delivered new homes in a highly accessible location, aligning with Welsh planning objectives for efficient land use and sustainable development.

The successful completion of this development highlights the positive impacts of brownfield redevelopment. It demonstrates that well-designed schemes can enhance local character, make efficient use of land, and integrate successfully with existing infrastructure, indicating that the proposed development would deliver similar sustainable and regenerative benefits.

Possibly Risks

CONTINGENCY:

As the prices provided above are estimates of the build cost per dwelling, there is the potential for contingency issues to arise. These could have an impact on the overall cost of the development. Issues such as

- Design development changes
- Incomplete or missing information
- Unforeseen site conditions
- Market or contractor pricing risk
- Small program delays affecting preliminaries
- Hidden services or obstructions
- Minor specification changes
- Coordination issues between trades
- Buildability adjustments
- Minor regulatory or compliance updates

ADDITIONAL PRE-APPLICATION COSTS:

Additional cost to the development will affect the return on investment (ROI), particularly when considered alongside the total construction cost of the property. In addition to the pre-application fee, several further costs that may occur:

- Architect fees
- Quantity surveyor costs
- Topographical (Topo) survey
- Services survey
- Ground investigation survey
- Planning and technical consultant fees
- Asbestos survey (R&D)
- Asbestos removal works
- Demolition costs
- Energy consultant fees
- New incoming utility services
- Radon surveys and protection measures
- Potential neighbour costs, including matters relating to a Deed of Agreement (Deed of Grant)
- Structural engineer fees
- Percolation testing

The estimated price for these additional costs is in line with a four-bedroom house in South Wales, which are non-construction based:

- Build Cost Allowance contingency.

£75,600

(Equivalent to 15% of total build cost)

- Statutory Fees

£2,438

Planning application: £588

Pre-application advice: £400

Building control: £1,450

- Surveys

£4,200
(4 survey items)

- Utilities & Site Setup

£7,500
(5 items)

- Insurance & Warranty

£3,500
(2 items)

- Community Infrastructure Levy (CIL)

£0
(Self-build exemption applied)

- Finance Interest (Estimated)
  £12,826

(Livedin (2025). *Self-Build Costs UK 2025)*

An additional 15% will be added to overall build cost. A 15% contingency will be included the development budget to allow for unforeseen costs and risks that commonly arise during construction. Even with detailed surveys and cost planning, uncertainties such as unexpected ground conditions, hidden services, design changes, or additional planning and Building Regulations requirements could occur.

Return on Investment (ROI)

Return on Investment (ROI) is a key financial metric used to assess the viability of a development by measuring the relationship between net development and total capital expenditure. In which housing appraisals, ROI is typically calculated by comparing Gross Development Value (GDV) against total scheme costs and expressing the surplus as a percentage of total cost. This approach provides a transparent measure of profitability, risk exposure, and value for money.

Industry guidance confirms that ROI is a standard indicator used alongside cashflow and cost analysis to inform investment decisions and determine whether a development achieves an acceptable return relative to risk.

(RICS (2023). *Financial viability in planning: conduct and reporting*.)

ROI for Slade, Oxwich, Swansea SA3		
	%	£
Fixed Expenses		
Price of Property		1030800
Contract Value		1001680
Stamp Duty		55325
Total		*2087805*
Professional Fees		
Design fees	10	103080
Structural Engineer	3.5	36078.00
MEP Engineers	6	61848
Quantity Surveyor	2	20616
Building Control Inspector		7500
Sustainability or Energy consultant		2500
Legal / Planning Solicitor		8000
Total		*239622.00*
Additional work requirments		
3-phase electrical upgrade		55000
Total Cost		**2382427.00**
Value of Interest		
Year one	4.5	10720.92
		2393147.92
Year two	4.5	107691.66
		2500839.58
Revenue		
Value of the neighbours Tide Crest 770k x 2		1540000
Savills guide price - 2 years	3.5	53900
Total		1593900
Selling Fees		
Estate Agent	2	30800
Fpv		1.95
		4645732.65
Return of Investment		
Total Costs		£2,729,552.50
Total Revenue		£4,345,918.43
Profit		**£1,616,365.93**

SPONS Build Cost

(Class lecture – Advanced project management)

(Savills.ie. (2017). *Savills upgrades five-year forecast for UK house price growth*.)

The total capital expenditure for the proposed development of two residential dwellings is £2,382,427.00. This figure reflects the full cost of delivering the scheme and includes all capitalised expenditure necessary to create the long-term housing assets. Capital costs comprise construction and build costs, groundworks, infrastructure, permanent utility connections, and professional fees directly attributable to the development. Statutory fees, surveys, insurance, warranties, and finance costs incurred during the build period are included where they can be capitalised.

Return on Investment (ROI) Calculation:

Formula:

ROI (%) = Total revenue (GDV) – Total Expenditure divided by Total expenditure x100

Capital Expenditure: £2,382,427

If total sales revenue (GDV) is **£1,593,900**

Net profit = £,1593,90 – £2,382,427 = **£788,527**

ROI = 788,537 divided by £2,382,427 x 100 = 13.3%

(Xero. (2024). *Understanding ROI for Small Businesses*)

The viability assessment for the two-dwelling housing scheme indicates that the decision to proceed is marginal on financial grounds. With a total capital expenditure of £2,382,427, the scheme has a high construction cost and will be affected by, programme changes, and achieved sales values.

Industry guidance confirms that small residential developments typically require a minimum return of 15–20% on cost to adequately reflect delivery, market, and funding risk. Where returns fall below this benchmark, schemes are considered financially vulnerable. On this basis, the development is only worth progressing if sales values are reduced to help sell the developments.

(Ministry of Housing, Communities & Local Government (2014). *Viability*)

Phase	Weeks
Pre-Construction	1
Site Preparation	13
Groundworks & Foundations	15
Superstructure	19
External Envelope	27
First Fix	31
Second Fix	35
Finishes & External Works	39
Completion & Handover	43

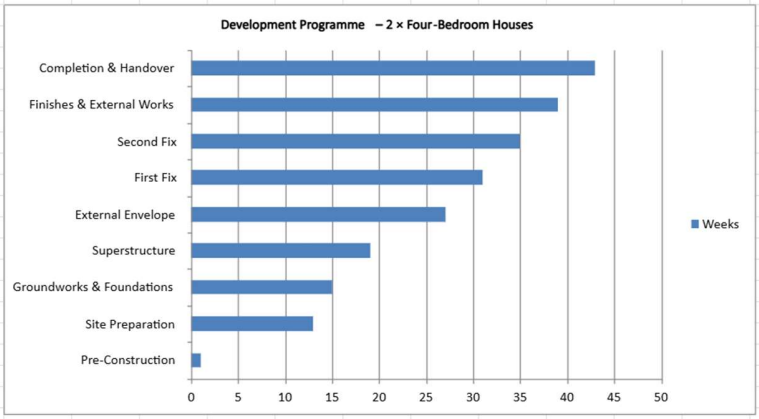


Figure 11 – Estimated program for the development

References

BCIS. (2025). *BCIS building forecast*. [online] Available at: https://www.bcis.co.uk/news/bcis-construction-industry-forecast/

Bsigroup.com. (2012). *BS 5837:2012 | Trees in relation to design, demolition and construction – Recommendations*. [online] Available at: https://knowledge.bsigroup.com/products/trees-in-relation-to-design-demolition-and-construction-recommendations

Class lecture – *Advanced project management*.

Design Commission for Wales. (2020). *Old Farm Mews, Dinas Powis*. [online] Available at: https://dcfw.org/archive/old-farm-mews-dinas-powis/ [Accessed 7 May 2026].

GOV.UK. (1981). *Wildlife and Countryside Act 1981*. [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/ukpga/1981/69/contents

GOV.UK. (2015). *The Construction (Design and Management) Regulations 2015*. [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/uksi/2015/51/contents

GOV.UK. (2016). *Environment (Wales) Act 2016*. [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/anaw/2016/3/contents

GOV.UK. (2017). *The Conservation of Habitats and Species Regulations 2017*. [online] Legislation.gov.uk. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents

GOV.UK. (2014). *Viability*. Ministry of Housing, Communities & Local Government. [online] Available at: https://www.gov.uk/guidance/viability

GOV.WALES. (n.d.). *Planning Policy Wales*. [online] Available at: https://www.gov.wales/planning-policy-wales

Gov.Wales. (2009). *Technical Advice Note (TAN) 5: Nature Conservation and Planning*. [online] Available at: https://www.gov.wales/technical-advice-note-tan-5-nature-conservation-and-planning

Health and Safety Executive. (2024). *Health and Safety at Work etc. Act 1974*. [online] Available at: https://www.hse.gov.uk/legislation/hswa.htm

Livedin. (2025). *Self Build Costs UK 2025: Calculate Instantly with a Complete Breakdown*. [online] Available at:
https://livedin.co.uk/self-build-cost

RICS. (2019). *Valuation of development property*. [online] Available at:
https://www.rics.org/profession-standards/rics-standards-and-guidance/sector-standards/valuation-standards/valuation-of-development-property

RICS. (2023). *Financial viability in planning: conduct and reporting*. [online] Available at:
https://www.rics.org/profession-standards/rics-standards-and-guidance/sector-standards/land-standards/financial-viability-in-planning-conduct-and-reporting

Savills.ie. (2017). *Savills upgrades five-year forecast for UK house price growth*. [online] Available at:
https://www.savills.ie/research-and-news/savills-news/359581/savills-upgrades-five-year-forecast-for-uk-house-price-growth [Accessed 8 May 2026].

Swansea. (2026). *Planning application search – Swansea*. [online] Available at:
https://www.swansea.gov.uk/planningsearch?lang=en [Accessed 6 May 2026].

UK Government. (2012). *The Control of Asbestos Regulations 2012*. [online] Legislation.gov.uk. Available at:
https://www.legislation.gov.uk/uksi/2012/632/contents

www.designingbuildings.co.uk. (n.d.). *Spon's Architects' and Builders' Price Book 2023*. [online] Available at:
https://www.designingbuildings.co.uk/wiki/Spon%27s_Architects%27_and_Builders%27_Price_Book_2023

www.hse.gov.uk. (n.d.). *Asbestos: The Analysts' Guide (HSG248)*. [online] Available at:
https://www.hse.gov.uk/pubns/books/hsg248.htm

Xero. (2024). *Understanding ROI for Small Businesses*. [online] Available at:
https://www.xero.com/uk/guides/roi/

Zoopla. (2026). *3 bed detached house for sale, Slade, Oxwich, Swansea SA3*. [online] Available at:
https://www.zoopla.co.uk/for-sale/details/72727373/ [Accessed 5 May 2026].

Zoopla.co.uk. (2026). *Property details for Tide Crest, Slade, Oxwich, Swansea SA3 1NA*. [online] Available at:
https://www.zoopla.co.uk/property/uprn/10011727582/ [Accessed 7 May 2026].

Appendix

Figure 1 - Zoopla. (2026). *3 bed detached house for sale Slade, Oxwich, Swansea SA3*. [online] Available at: https://www.zoopla.co.uk/for-sale/details/72727373/?search_identifier=dea6d0c08d8693b28a55401a51c9e71c471b459ddd2575819fbf2575abe1bd53&console=open&tab=images [Accessed 5 May 2026].

Figure 2 - Zoopla. (2026). *3 bed detached house for sale Slade, Oxwich, Swansea SA3*. [online] Available at: https://www.zoopla.co.uk/for-sale/details/72727373/?search_identifier=dea6d0c08d8693b28a55401a51c9e71c471b459ddd2575819fbf2575abe1bd53&console=open&tab=images [Accessed 5 May 2026].

Figure 3 - Suncalc.org. (2026). *SunCalc sun position- und sun phases calculator*. [online] Available at: https://www.suncalc.org/#/51.5526 [Accessed 5 May 2026].

Figure 4 - gisportal.dwrcymru.com. (n.d.). *Geocortex Viewer for HTML5*. [online] Available at: https://gisportal.dwrcymru.com/Html5Viewer/index.html?viewer=Web_External_Viewer#.

Figure 5 - Gov.wales. (2025). *New map | DataMapWales*. [online] Available at: https://datamap.gov.wales/maps/new?layer=inspire-nrw:NRW_AONB#/.

Figure 6 - Zoopla. (2026). *3 bed detached house for sale Slade, Oxwich, Swansea SA3*. [online] Available at: https://www.zoopla.co.uk/for-sale/details/72727373/?search_identifier=dea6d0c08d8693b28a55401a51c9e71c471b459ddd2575819fbf2575abe1bd53&console=open&tab=images [Accessed 5 May 2026].

Figure 7 - Swansea. (2026). *Planning application search - Swansea*. [online] Available at: https://www.swansea.gov.uk/planningsearch?lang=en [Accessed 6 May 2026].

Figure 8 - National Library of Scotland (2018). *National Library of Scotland*. [online] Www.nls.uk. Available at: https://www.nls.uk/.

Figure 9 – Provided by university lecture - Advanced Project Management (IB)

Figure 10 – Provided by university lecture - Advanced Project Management (IB)

Figure 11 – Estimated program for the development