

# STRATEGIC INVESTMENT GROUP

# **BUSINESS CASE – CAPITAL INVESTMENT**

This Business Case provides justification for undertaking a project. The completed form will be reviewed by the Strategic Investment Group who will make a recommendation to Council whether the bid should be approved and included within the Capital Plan. All sections should be completed and evidence of costs will need to be supplied.

For details of Strategic Investment Group meetings and deadlines for the submission of this form, please

Project Name:		Passivhaus home	Passivhaus homes at Lodge Farm, Denbigh				
Project Reference:							
Project Manager:		Mark Dixon					
Workstream:		Young People &	Housing				
		<u> </u>					
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Project Executive	Gran	nam Boase	Lead member:	Cllr Tony Thomas			
Service:		nce & Property vices	LM Portfolio:	Housing, Regulation & the Environment			
Form completed by:	Marl	k Dixon	Date:	25/11/2019			
Service Accountant:			Date:				
PROJECT TYPE							
Please categorise your pro	oject typ	e. Mark <b>one</b> box	only.				
SMALL	MEDI		LARGE	٦			
	W.E.D.		271102	_			
		To recommo	nd a proposal to const	truct Dessirbans hames on			
				truct Passivhaus homes on Cabinet for approval			



#### **EXECUTIVE SUMMARY**

Highlights the key points in the Business Case to include:-

- what the project will achieve / important benefits
- estimated costs
- how the project will be funded

#### **Background**

Analysis of the Single Housing Register for Denbighshire has identified Denbigh as the community which has the third highest unmet need for social housing in the county. The requirement for homes which meet the needs of growing families is particularly strong.

An area of land owned by the County Council at Lodge Farm in Denbigh which is shaded in red on the plan in Appendix 1 was allocated for residential development in the Local Development Plan for Denbighshire 2006-21.

In 2015/16, the land was appropriated to the Housing Revenue Account in readiness for the future development of affordable homes.

In August 2019, a Planning application was submitted for the development of 22 no. semi-detached houses on the site.

#### **Project description**

The project will involve the construction of;

- an estate road;
- 18 no. 2 bedroom and 4 no. 4 bedroom semi-detached houses for social rent; and
- a spur road which will provide access to the adjacent field which is a candidate site for residential development in the next Local Development Plan and which is shaded in blue on the plan in Appendix 1.

The Welsh Government has been keen to support the delivery of energy efficient homes using modern methods of construction with funding provided through its Innovative Housing Programme. A grant has been awarded to meet the additional costs of building the new homes on the site to the Passivhaus standard of energy efficiency using an off-site modular construction technique for which a subsidiary of Cartrefi Conwy holds the franchise. They will also offer training opportunities to local people to acquire the skills in this technique.

In addition to this, further energy efficiency measures such as the use of ground source heat pumps and photo voltaic cells will be incorporated into the development.

#### **Benefits**

The key benefits will be;

- the provision of new homes to help to address the unmet need for social housing in Denbigh;
- minimizing the amount of carbon emitted and reducing fuel poverty by adopting an energy efficient standard for design and construction;
- the provision of skills in modular construction techniques for local people; and
- the provision of an access road to a potential future residential development site.



#### **Estimated costs**

The estimated costs of the proposal are as follows.

Item	Estimated cost
Construction of new homes	£3,600,000
Abnormal costs	
Additional cost of Passivhaus construction	£850,000
Green heating system	£180,000
Site works	£1,870,000
Sustainable Drainage System	£200,000
Total	£6,700,000

#### **Funding**

The proposed sources of funding are as follows.

Source	Amount
Denbighshire Housing Revenue Account	£5,610,000
Welsh Government Innovative Housing Programme	£850,000
Renewable Heat Incentive	£240,000
Total	£6,700,000

The Council's funding is already included in the 30 Year Housing Stock Business Plan.

There may also be an opportunity to use Welsh Government Affordable Housing Grant towards the cost of the development in addition to Innovative Housing Programme grant.

#### **BUSINESS OPTIONS**

Option title:

Analysis and reasoned recommendation for the base business options of: do nothing / do the minimal or do something

Do nothing - maintain the existing situation

Please provide brief details:						
This option would involve;  output  not developing land at Lodge Farm to provide affordable housing.						
Please mark with an X how this option compares with the preferred option in terms of Cost, Time, Quality and Benefits:						
Costs	Costs more		Time	Takes longer to deliver	✓	
	Costs the same		-	Takes the same to deliver		
	Costs less	✓		Is quicker to deliver		
Quality	Improves the quality		Benefits	Improves benefits		
	Is the same quality			No impact on benefits		
	Is a lower quality	<b>√</b>		Worsens benefits	✓	
What is the ma	in reason this option has not	been sele	ected?			

This option has not been pursued because;

• the opportunity to develop an unused piece of land for much needed social housing would be lost.



Option title: Minimum option

Please provide brief details:

This option would involve;

• building new homes on the site but not to the Passivhaus standard using a modular construction technique.

# Please mark with an X how this option compares with the preferred option in terms of Cost, Time, Quality and Benefits:

Costs	Costs more		Time	Takes longer to deliver	
	Costs the same			Takes the same to	✓
		deliver			
	Costs less	✓		Is quicker to deliver	
Quality	Improves the quality		Benefits	Improves benefits	
	Is the same quality			No impact on benefits	
	Is a lower quality	<b>√</b>		Worsens benefits	✓

What is the main reason this option has not been selected?

This option has not been pursued because;

- the new homes would not be as energy efficient as if they were to be built to the Passivhaus standard;
- the amount of carbon emitted would be higher;
- the risk of tenants experiencing fuel poverty would be greater; and
- the opportunity to provide local people with skills in modern methods of construction would be lost.

#### **EXPECTED BENEFITS**

The benefits that the project will deliver expressed in measurable terms against the situation as it exists prior to the project

The benefits expressed in measurable terms are;

- 22 social rented homes delivered; and
- the emission of 13 tonnes of carbon per annum avoided.

#### **EXPECTED DIS-BENEFITS**

Outcomes perceived as negative by one or more stakeholders

Residents of the neighbouring development at Tan y Sgubor voiced a concern that;

• their homes would be darker inside as a consequence of the development.

This was discounted during the Planning process because the height of the new properties and the separation from the existing ones will comply with adopted Supplementary Planning Guidance on this matter.



#### **TIMESCALE**

Over which the project will run (summary of the Project Plan) and the period over which the benefits will be realised

Date	Milestone
10 <sup>th</sup> December 2019	Determination of business case by Strategic Investment Group
15th January 2020	Planning Committee
13 <sup>th</sup> April 2020	Contractor commences mobilisation
2 <sup>nd</sup> July 2021	Completion of development

#### **CAPITAL COSTS – CONSTRUCTION PROJECTS**

The capital cost of a project is an important consideration in terms of whether or not it should proceed.

- Any costs relating to ICT infrastructure and equipment should have been provided by ICT department.
- Any costs that relate to construction should have been provided by Design & Development or Building Services.

Please provide details of the capital funding requirement (not including amount already spent):							
Enter details of cost element below: 2019/20 2020/21 2021/22 All Year							
				Total			
Professional Fees	300,000	550,000		850,000			
Construction		4,250,000	1,600,000	5,850,000			
TOTAL	300,000	4,800,000	1,600,000	6,700,000			

Please provide details of proposed capital funding sources							
Enter details of funding source	Status:	2019/20	2020/21	2021/22	TOTAL		
Housing Revenue Account	Approved	150,000	4,100,000	1,360,000	5,610,000		
Welsh Government Innovative Housing Programme	Approved	150,000	700,000		850,000		
Renewable Heat Incentive	Pending			240,000	240,000		
TOTAL		300,000	4,800,000	1,600,000	6,700,000		



#### **REVENUE COST IMPACT**

#### TO BE COMPLETED FOR ALL PROJECTS

In considering whether a project should be developed due regard should be made to the potential impact on revenue budgets.

If the activity will result in a requirement for additional revenue funding, please provide details below:					
What is the impact of this project in terms of the annual revenue requirement for:	Existing Revenue Budget	Post- project Revenue Budget	Increase/ Decrease		
staff costs (salaries and associated)	n/a				
energy costs (heating, lighting, ICT, etc)	n/a				
property maintenance and servicing costs	n/a				
other property related costs (rental, insurance, etc)	n/a				
ongoing ICT costs (licences, etc)	n/a				
mileage of Denbighshire fleet vehicles	n/a				
mileage for business travel by Denbighshire employees using their personal vehicles	n/a				
OVERALL REVENUE REQUIREMENT	n/a				

Please provide brief details of the revenue impact of this project:

- Where revenue savings are forecast, you should detail what is proposed for the saving (e.g. reduction of an existing revenue budget, re-allocation of revenue to alternative services area, etc)
- Where revenue increases are forecast, you should provide details of how the revenue shortfall will be addressed. In this instance you should also append a three year surplus/deficit forecast.
- Details of any one-off revenue cost requirements that may be required post-project implementation (e.g. recruitment, redundancies, etc). DO NOT include any costs detailed in the capital section of this Business Case

There is no revenue requirement for the project either during the development phase or follow	ving
completion. The development will generate an income stream for the Housing Revenue Acco	unt.



# **PROJECT MANAGEMENT**

Please provide details of proposed project management – Establishment of Project Board etc.

The project will be managed by the Housing Development Manager.
The project executive will be the Corporate Director: Economy & Public Realm.
Highlight reports will be provided to the Young People & Housing Programme Board.
STATUTORY REQUIREMENTS / HEALTH & SAFETY  This section should identify how the activity will help Denbighshire meet any of its statutory requirements. Please include any Health & Safety Issues that the activity will address in this section Please leave blank if not applicable.  Not applicable



#### CARBON MANAGEMENT IMPACT

Please consult with Denbighshire's Principal Energy Manager before completing this section.

Denbighshire has committed to reducing its carbon emissions by 15% by 2020. The Business Case requires you to make a forecast for the anticipated carbon emissions impact of the project. Please mark a cross in the appropriate box.

Forecasts:	Annual (current)	Carbon Equivalent	Annual (Post Project)	Carbon Equivalent (t CO <sub>2</sub> pa)	Carbon Variance (t CO2 pa)
Energy consumption: (UNIT = kWh)		n/a		20	+20
Mileage of Denbighshire Fleet vehicles: (UNIT = miles travelled)		n/a			
Tonnes of waste produced going to landfill: (UNIT = tonnes)		n/a			
Tonnes of waste produced being recycled: (UNIT = tonnes)		n/a			
Mileage of Business Travel (personal vehicles): (UNIT = miles travelled)		n/a			
TOTAL CARBON EMISSIONS					

Please provide brief details of the carbon impact of this project, and detail specific actions that will be taken to reduce carbon emissions. If carbon emissions are expected to increase as a result of this project, please provide details of proposed actions to compensate for this increase in other areas of the Service's activity.

The project involves the construction of additional homes. The additional carbon emitted will be minimized through the application of energy saving measures and will be 15% of that emitted by an average home. This will contribute towards the achievement of the commitment to make the authority net carbon zero by 2030 agreed at the meeting of the County Council held on 2<sup>nd</sup> July 2019.



#### **BIODIVERSITY IMPACT**

Please consult with Denbighshire's Biodiversity Officer before completing this section:

joel.walley@denbighshire.gov.uk

The Council has a statutory duty to ensure compliance and enforcement of the habitats regulations (as amended in 2007) and the NERC Biodiversity Duty (2006). At this pre-feasibility stage, what is the anticipated impact on biodiversity of the project. Please mark a cross in the appropriate box.

Will this project impact on a habitat that supports living organisms (plant or animal)?	Yes	✓	No	
				ĺ

If you have answered yes to the above question, please complete <u>all</u> the following biodiversity sections. If answered no please leave blank

THREATENED/PROTECTED SPECIES	Yes	No	<b>√</b>
Will this project impact on any protected or threatened species as			•
defined in Denbighshire's Local Biodiversity Action Plan (LBAP)?			

ALL SPECIES (including threatened/protected) Forecasts:	Current number	Post- project number	Variance (+/-)
Number of plant species present:			
Number of animal species present:			
TOTAL NUMBER OF SPECIES PRESENT			

Please provide brief details of the action you will be taking in association with this project to protect or enhance biodiversity. Specific reference should be made to the mitigation strategy if the project impacts on any protected or threatened species as defined in Denbighshire's Local Biodiversity Action Plan (LBAP).

An ecological survey was undertaken as part of the Planning process.

The Council's Ecology Officer has recommended that each building should include provision for roosting bats and nesting birds as suggested in the ecological survey and that an external lighting/light spillage scheme should be implement to avoid any negative impact on bats.



# **MAJOR RISKS TO THE PROJECT**

A summary of the key risks associated with the project together with the likely impact and plans should they occur (*Please also add to your project risk register*)

Key Risk	Likely Impact	Mitigating Action
Failure to obtain Planning consent		Site allocated for residential development in Local Development Plan
Cost over run		Estimates based on construction industry price indices

#### SUPPORTING INFORMATION

Please list any supporting documents that accompany this Business Case

Appendix 1 - Location plan	
Appendix 2 – Proposed site plan	
Appendix 3 - Visual of proposed development	

#### ANNUAL CAPITAL BIDS - BLOCK ALLOCATIONS

Please provide details of expenditure and commitments for allocations received in the current financial year.

Not applicable		



#### COUNTY LANDLORD STATEMENT

Please provide a statement from the County Landlord and where applicable the recommendation of the Asset Management Group

The proposals are supported. The project will deliver appropriate accommodation to address an identified need. The project also delivers energy efficiency solutions in line with the Council's and Welsh Government aspirations for carbon neutral developments and provides affordable homes in the truest sense – affordable to rent and affordable to run. While it is recognised that the cost per unit has increased, additional funding has been secured to offset this at least in part. The opportunities for employment and training in new/innovative construction solutions and green energy provision are also significant. The proposals will increase the value of the adjoining Council owned land by providing highways access.

**Supplied by:** David Lorey **Date:** 25<sup>th</sup> November 2019

CHIEF FINANCE OFFICER STATEMENT				
Supplied by:	: Steve Gadd	Da	ate: 2019	
VERIFICA	TION:			
Project Manager:	Mark Dixon			
Project Executive:	Graham Boase			
Name:	Graham Boase	Position:	Corporate Director Economy & Public Realm	
Signature:	Graham H Boase	Date:	10 <sup>th</sup> December 2019	
For use by Fi				
Date of Meet				
Approval				



Code	



# Appendix 1

# Location Plan





# Proposed site plan

#### Appendix 2







# Visual of proposed development

