

The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

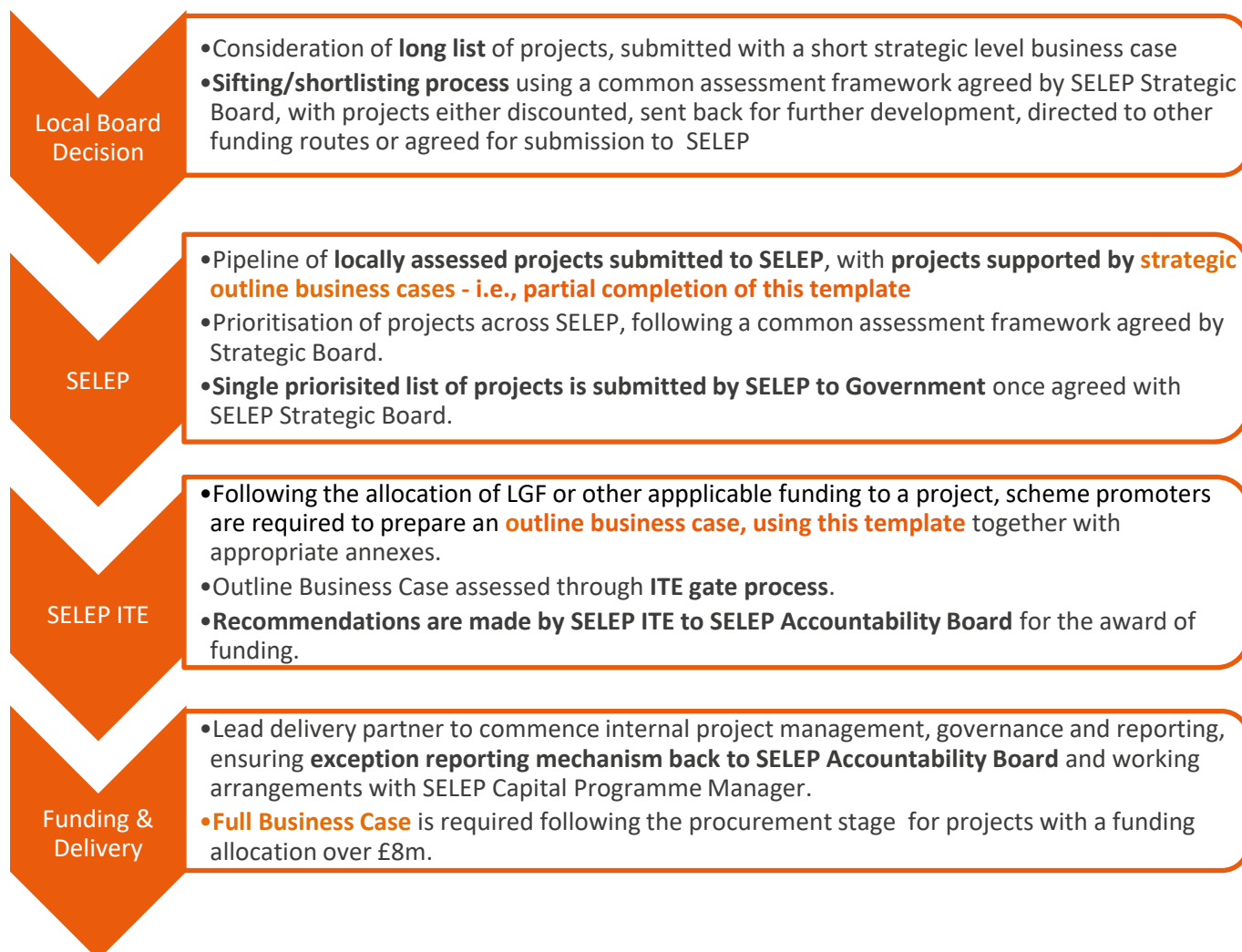
It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases, the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

The standard process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the



Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government. In the form that follows:

Version control	
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1. PROJECT OVERVIEW

1.1. **Project name:**
NU Living Modular Housing Factory (MMC), Basildon

1.2. **Project type:**
This is an important and innovative project, comprising –

- The development of new Physical Infrastructure to grow and improve the local economy – creating a resource which will supply more economic and higher quality construction modules, for residential and mixed-use developments throughout Essex and East London
- This will in turn create new (and more diverse) direct jobs, as well as new supply chain business opportunities and the associated jobs
- Direct opportunities for skills development and training / apprenticeships – developing a new workforce skilled in this new MMC technology, which will benefit the construction sector throughout the area
- The development of an Innovation Ecosystem - modular housing is a key focus of government in modernising the construction industry. Investing in this new manufacturing facility will allow investment in technology to generate further manufacturing efficiencies and increase productivity
- The development of a more efficient production process (with less waste and more efficient construction / installation methods), linked to a more sustainable design, leading towards zero carbon communities, will bolster Green Recovery across the Thames Estuary

1.3. **Federated Board Area:**
Thames Gateway South Essex

1.4. **Lead County Council / Unitary Authority:**
Essex County Council

1.5. **Development location:**

**Basildon 117,
Christopher Martin Road,
Basildon
Essex
SS14 3ES**

1.6. **Project Summary:**

Funding of £4.53m is being sought from the Getting Building Fund to allow Swan NU living to bring forward a second modular housing factory adjacent to their existing factory in Basildon. This will allow the company to both increase its current production capacity of Cross Laminated Timber (CLT) housing modules, as well as establish an innovative in-house capability to manufacture fabricated steel modules, which are essential for the construction of higher buildings (over 18m high) given recent changes in legislation with regard to combustible materials. This will enable Swan, already a leader in Modern Methods of Construction (MMC) to deliver circa 830 new homes per annum by 2024, as well as further innovate and more efficiently produce a range of construction modules.

This project is closely aligned with the priorities articulated in national, regional and local strategic plans, including the Industrial Strategy, SELEP's Strategic Economic Statement,

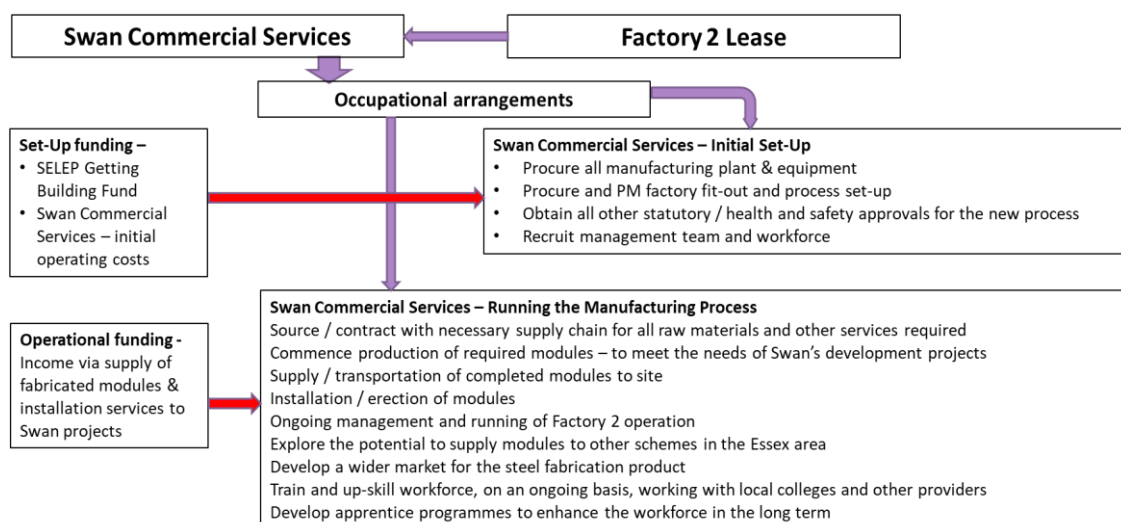
'SmarterFasterTogether' and Basildon's growth ambitions, as well as with the government's wider agenda of encouraging the use of MMC in bringing forward housing nationally.

Taking an investment decision of this scale at the present time is extremely challenging, due to the uncertainties within the housing market and the serious economic impacts arising from COVID-19, which are not expected to become clear for some time. Without the availability of public funding to support this initiative, it is expected to be some 4 / 5 years before the confidence exists in the market for Swan to proceed with a project that will require some funding.

Swan as both a housing association and a developer of housing for sale, is partnering with a number of Local Authorities in the area, on a number of key regeneration projects, and this new factory will facilitate reduced development costs and accelerated delivery (creating higher levels of value for money) as well as creating new and innovative jobs, building industry capacity for MMC, upskilling the local workforce and allowing for the supply of modular components to other local authorities / developers

1.7. Delivery partners:

Partner	Nature of involvement (financial, operational etc.)
Lead Applicant – Swan Commercial Services (SCS)	Swan Commercial Services (SCS) will be responsible for taking the on Factory 2 and be responsible for the initial fit-out / set-up of the project, and for its subsequent operation and management, throughout the life of the facility / project (a more detailed explanation of the set-up and operational arrangements are shown in the diagram below)
Other “partners” in the project are Swan’s development partners, who will benefit from the supply of the modules to key development schemes	



1.8. Promoting Body:

The scheme is being promoted by Swan NU living and Essex County Council

1.9. Senior Responsible Owner (SRO):

The Senior Responsible Officer for the project will be the Swan NU living MD.

1.10. Total project value and funding sources:

Funding source	Amount (£)	Constraints, dependencies or risks and mitigation
SELEP - Getting Building Fund	£4,530,000	GBF funding is required to enable the set-up and fit-out of this project – without this funding, the scheme will not take place at this time Funding will unlock the associated economic benefits in terms of jobs and GVA created, skills development and the efficient delivery of housing / mixed use schemes in Essex and East London
Swan NU living / Swan Housing Association Ltd		This is Swan's anticipated total project spend in managing / running the operation over a 15+ year period There are four key dependencies to delivering the project, that Swan are currently progressing, all of which are expected to be secured by November 2020 – <ul style="list-style-type: none"> • Signing the new lease on the proposed factory, which will house the new facility • Obtaining planning permission for the external works required to the building • Obtaining BOPAS accreditation of the steel fabrication process, to be developed in the project •
Total project value		

1.11. SELEP funding request, including type (LGF, GPF, GBF etc.):

Funding request - £4.53m from the Getting Building Fund

Swan has taken initial legal advice from Trowers and Hamlins which has indicated that the proposed project funding will be State Aid compliant.

1.12. Exemptions:

This project does not fall under the provisions of the SELEP Assurance Framework 2017, Section 5.7.4 and 5.7.5

1.13. Key dates:

The development of the project is already underway, with a Business Plan having been prepared, a factory for the new production facility identified, and detailed design / cost estimates being prepared. Swan Board approval has also been given for the project to proceed, and for Getting Building funding to be secured.

Approval processes are also underway, with discussions ongoing with Basildon Council, in respect of planning permission for alterations to the factory, BOPAS accreditation formalities having been submitted.

The key activity dates are listed below, and Figure 1 provides some more explanation around these events. A full Critical Path Gant Chart, has been compiled.

Project commencement: August 2020
Construction Works on site - Start: March 2021
Set-Up and Fit-Out works completed: Sept 2021
Factory 2 manufacturing starts: Oct 2021
Factory 2 at full operational capacity: March 2024

Figure 1 - Key dates

Sept / Oct 2020	Take possession of Factory 2 building
November 2020 to Sept 2021	Commencement of expenditure – plant & machinery deposits, fit-out / reconfiguration of building, procurement of production machinery and equipment and general set-up of the manufacturing operation (recruitment of workforce / BOPAS and other approvals etc)
Oct 2021	Manufacturing at Factory 2 commences; running cost expenditure commences
March 2024	Factory 2 full capacity of 2,500 modules per annum
2036	Factory 2 lease expiry

1.14. Project development stage:

Project development stages completed to date			
Task	Description	Outputs achieved	Timescale
Development options assessment	Review of scenarios for refurbishment and setting up of factory and modelling of different demand scenarios	Recommendation of preferred scenario	June-Aug 2020
Preparation of project Business Plan	Setting out the options considered and the preferred project configuration – incl funding operational, management and governance proposals	Board Approval	June 2020
Appointment of management team	Existing Factory 1 management team	Joint management of	Aug 2020

	has been supplemented with further capacity	Factories will allow operations on both sites to be managed together.	
Project development stages to be completed			
Task	Description	Timescale	
Full Business Case development including financial plan and successful GBF application	The business case will be drafted for submission in Sept 2020, and then refined / clarified as required to respond to queries from Steer / SELEP in the lead up to the SELEP Accountability Board meeting in Nov 2020	Aug-Nov 2020	
Agreeing terms on Factory 2 building		Sep / Oct 2020	
Detailed design specification for refurbishment		Sept 2020	
Procurement of contractors for refurbishment of Factory 2 building	Swan will proceed with procurement at risk pending outcome of GBF application	Sept-Nov 2020	
Procurement of equipment and machinery for Factory 2		Nov 2020-Feb 2021	
Recruitment and training of employees		March 2021	
Commence manufacturing at Factory 2	Initial revenue commences	April 2021	
Factory 2 reaches capacity	Production of 2,500 modules per annum	January 2024	

1.15. Proposed completion of outputs:

Proposed / main outputs for the project are as follows:

- 248 FTE gross operational jobs in MMC module production (124 net additional FTE jobs for South Essex, after adjusting for deadweight, leakage, displacement and multiplier effects)
- 144 new learners assisted
- Manufacturing of 2,500 steel MMC modules per annum by year 5, along with expansion of cross laminated timber (CLT) MMC module production from 720 per annum now to 1000 by year 5
- In total, supporting the development of 1,500 new homes over a five year period, of which 40% (600) are estimated to be affordable

2. STRATEGIC CASE

2.1. Scope / Scheme Description:

The construction sector has faced many challenges for some years, around the lack of skills and capacity of the traditional industry – all of which have contributed to housing targets, consistently being missed. The evolution of modern methods of construction (MMC), over recent years, through the development of off-site, modular construction techniques has begun to address some of these problems, although there is much more to be achieved.

Encouraging the use of MMC is a key government priority, wanting to see modern methods of construction – as the new gold standard of building – and being used up and down the country. In November 2019 the Housing Minister, announced that the Government ‘want to see modern methods of construction – the new gold standard of building – being used up and down the country’ and appointed Mark Farmer as Champion for MMC, bringing 30 years’ experience to the role and charged with providing independent scrutiny and advice to the Government on how to increase the use of MMC in homebuilding.

This project aligns with this developing strategy, which has the potential to improve productivity / increase efficiency levels across the sector, as well as the pace of housing delivery, higher / standardised quality standards and energy efficiency (smart heating, lighting and monitoring technology being incorporated into the basic design of modules).

The project is also closely aligned with the priorities articulated in regional policies and local strategic plans, such as the LEP’s Economic Strategy Statement and the emerging Local Industrial Strategy, and local authority growth ambitions

The Swan project is therefore an intrinsic part of the response to this challenge, by enabling the development of an innovative, steel fabrication facility (adjacent to their existing Cross Laminated Timber (CLT) factory) to manufacture fabricated modules, which are specifically designed for the construction of higher buildings (over 18m high) which is essential given the recent changes in legislation with regard to combustible materials. This will enable Swan to deliver more efficiently, circa 830 new homes per annum by 2024, as well as increase its current production capacity of CLT modules

This new factory will therefore –

- facilitate reduced development costs
- accelerate the pace of delivery
- create higher levels of value for money, enabling additional investment to be made into the affordability / social aspects of new communities
- create new and innovative jobs
- build industry capacity for MMC and more generally in the sector
- improve sustainability and move towards zero carbon communities
- diversify and upskill the local workforce, by working with local training providers / colleges and creating opportunities for further qualifications and apprenticeships
- allow for the supply of modular components to other local authorities / developers in the wider area
- by establishing an in-house expertise in this area, Swan will continually be looking to research, develop and innovate in terms of materials, production techniques, prototyping, ensuring continuous improvement and more importantly, implementing the changes required to make the build process and buildings themselves more efficient

Swan is a publicly-funded not-for-profit business accountable to its residents and funders, and the social housing regulator. All of its schemes are reviewed to ensure that regulations in relation to Governance and Financial viability are met as well as being value for money.

As a registered provider of affordable housing and with its own in-house development arm of houses for sale (Swan NU living) all profits are reinvested to create funds to deliver more affordable housing and to regenerate neighbourhoods. To date £90m has been reinvested and by 2027 Swan aims to generate over £250m of profit to reinvest into more affordable housing.

Swan is also one of the first developers / RPs to engage in direct manufacture of modular housing as well as developing sites with both private and affordable housing. Factory 1 opened in 2017 and has been working at 70% productivity in comparison to 26% productivity achieved on average in a traditional construction site.

Many lessons have been learned from the existing Factory 1 production in Basildon in terms of productivity and increasing levels of efficiency, the importance of in-house design resources, the fact that Swan's own pipeline demands cannot be met by the current facility, and the significant external interest (from LA's and others) in the factory and in partnership working.

Swan has also 25 years of housing / mixed use regeneration experience and has continually taken on large complex projects. Current schemes see Swan partnering with a number of Local Authorities in the area, including Southend, Thurrock and Tower Hamlets.

Swan are recognised by key Boroughs in the East London / Essex area, for this approach to its portfolio delivering large scale strategic regeneration opportunities in partnership with Local Authorities and Homes England. This enables it to build at scale, accessing government funding to deliver communities that people want to live in. They are also a strategic partner of the Greater London Authority (GLA) as well as being recognised by Government as a leader in the delivery of precision engineered modular housing.

Funding of £4.53m is therefore being sought from the Getting Building Fund to allow Swan NU living to bring forward this initiative. Taking an investment decision of this scale at the present time is extremely challenging, due to the uncertainties within the housing market and the serious economic impacts arising from COVID-19, which are not expected to become clear for some time. Without the availability of public funding to support this initiative, it is expected to be some 4 / 5 years before the confidence exists in the market for Swan to proceed with a project that will require funding over 15 years.

2.2. Logic Map

The Logic Map for the project, is set out in the Table on the following page.

Inputs	Outputs	Outcomes	Impacts
Grant Spend £4.53m	<p>A fully functioning, off-site steel fabricated modular factory – within the 116,841 sq ft GEA of recently constructed floorspace, which, in Option 3 (preferred) would running alongside existing factory 1 (timber modules)</p> <p>248 FTE gross operational jobs in MMC module production (124 net additional FTE jobs for South Essex, after adjusting for deadweight, leakage, displacement and multiplier effects)</p> <p>144 new learners assisted / trained</p> <p>Manufacturing of 2,500 steel fabricated building modules per annum (2,500 additional per annum compared to the Do nothing reference case)</p> <p>Manufacturing of 1,000 CLT (timber) fabricated building modules per annum by year 5 (280 additional per annum by year 5)</p>	<p>The wider creation of jobs and skills in the supply chain - appealing to a different / diversified demographic – compared to the traditional construction sector</p> <p>Reduced construction costs and improved viability on key public sector funded development projects at Better Queensway, Purfleet and Blackwall Reach.</p> <p>Accelerated delivery of housing and the benefits resulting from Homes England funded regeneration schemes</p>	<p>Increasing capacity of modular housing production supply chain</p> <p>Developing labour pool trained in skillset needed for MMC</p> <p>Improving the pace of delivery of future housing schemes across the Thames Estuary</p> <p>Improving the long term efficiency / viability of modular housing as a construction method across the industry – leading to wide scale application</p> <p>Additional affordability / social infrastructure provision on Swan's housing developments</p> <p>Improved sustainability, leading to zero carbon (or potentially carbon negative) communities</p> <p>Advances in both the MMC production / installation process and the range of materials used, through ongoing R&D and project evaluation</p>

2.3. Location description:

The proposed Factory 2 will be located within a purpose-built recently constructed industrial building on a modern industrial estate situated between the A127 to the north and the A1235 to the south; one of Basildon's principal employment areas.

Figure 2 - Map showing the location of the proposed Factory 2



As a purpose-built modern industrial building, the site has good access for road vehicles and deliveries. Some adaptation of the building will be required and forms part of Swan's business plan.

2.4. Policy context:

The proposal is closely aligned and would help deliver the priorities of key national, regional and local strategies.

The **UK Industrial Strategy** aims to position the UK as the world's "most innovative economy", through a "major upgrade" of infrastructure to "harness the power of innovation to help meet the needs of an ageing society". The project will help deliver around 2,500 modules per annum by 2024, projects between 2021 will tend to have a regeneration agenda. This project plays a vital role in increasing Swan's capacity to deliver more homes in Essex and the South East of England for our growing and ageing population. The project also aims to contribute towards one of the cornerstones of the Industrial Strategy – Strengthening the foundations of productivity – by improving productivity in the construction industry. The current factory (Factory 1) works at 70% productivity in comparison to 26% productivity achieved on average in a traditional construction site. This project aims to run at 75% capacity. Factory 1 currently utilises Cross Laminated Timber (CLT) which restricts development height. Factory 2 will deliver both improved physical

infrastructure through bespoke modular systems to increase production rates, productivity and enable the delivery of higher-density communities with height. Time on site is significantly reduced as the assembly phase of construction can be completed within a day, thus reducing the lengthy distribution associated with a building site and improving on-site efficiency.

Encouraging the use of MMC is a key government priority. In November 2019 the Housing Minister, Esther McVey, announced that the Government 'want to see modern methods of construction – the new gold standard of building – being used up and down the country' and appointed Mark Farmer as Champion for Modern Methods of Construction.

The **SELEP Strategic Economic Statement, 'SmarterFasterTogether'** sets out the path towards SELEP's Local Industrial Strategy. Key ambitions include the aim to bridge the gap in GV per filled job between the South East and the rest of the UK, uplifting productivity across the LEP area, and improving productivity especially in sectors at the 'leading edge' of innovation. Factory 2 will facilitate the delivery of these ambitions by providing an additional 70 mid-skilled jobs to Basildon.

The Strategic Economic Statement also points out that housing demand in the South East will exceed housing completions between 2016 and 2036, with further 179,000 homes needed. The SELEP rightly points out the vast implications this has on the pace of additional housing delivery, including quality and energy efficiency of new developments. The projects directly develop further solutions to increasing production and productivity to unlock housing, in particular affordable housing. Moreover, the clean and controlled factory environment facilitates standardised quality measures, and all new homes have smart heating, lighting and monitoring technology incorporated into the design of homes.

Basildon is part of the **SEP's A127 Strategic Corridor**, which is a vital artery to the economic competitiveness of the sub-region and indeed to the economy of the County of Essex and beyond. Along this corridor the A13 links the key port infrastructure of Tilbury and London Gateway with London and the wider strategic road network, while the A127 corridor connects the capital to the manufacturing hub of Basildon, and to Rochford, Southend, London Southend Airport and surrounding employment areas. Basildon has the largest concentration of employment in Essex and one of the largest concentrations of advanced manufacturing businesses in the South of England, including in the area of low carbon and renewables. There are ambitious plans to redevelop the town centre and railway station in this competitive centre for growth and innovation.

Factory 2 will drive growth in line with the vision set out in the **Thames Estuary Commission**. The new Thames Estuary Envoy, Kate Willard, was appointed in October 2019, and will act as the Chair of the Thames Estuary Growth Board which will receive £1 million of government funding to drive economic growth plans in the area. Despite its many assets the Commission report notes that the estuary has "consistently been unable to deliver the same levels of economic growth as other parts of the UK."¹ To address this, the Commission puts forward a set of measures to strengthen traditional economic sectors such as construction. Additionally, this project directly aligns with the Objective: Delivering Places including homes and balanced jobs at scale and pace with Modern Methods of Construction should be capitalised where possible.

Factory 2 is closely aligned with the ambitions of the **Opportunity South Essex Growth Strategy**. The Strategy will drive growth through key development opportunities in South Essex. One of the key development opportunities include Purfleet Centre; a 57ha brownfield site which

¹ <https://www.gov.uk/government/publications/thames-estuary-2050-growth-commission-report>

will support the delivery of 1,835 new homes and more than 2,700 new jobs alongside a new school, local services and facilities. At the heart of the Purfleet Centre are exciting plans to create a 46,000 sq. metre film and television studio complex building on the growth of the Creative and Cultural sector through the arrival of the Royal Opera House and National Skills Academy on the High House Production Park site. Swan Housing Association are a strategic joint venture partner in this project, therefore directly contributing to the delivery and success of this key regeneration project.

In particular, Factory 2 supports the following ambitions:

Priority 3: Quality of Place - Creating places and spaces that improve lives and secure investment
"Examine the unique characteristics of our town centres, consolidate their existing strengths and develop a refreshed offer that meets new demands, delivers significant housing expansion and supports local employment growth "

Priority 5: Housing – Stimulating and reshaping our housing market
"Accelerating housing delivery and finding innovative ways to offer existing and potential residents a place to live that meets or exceeds their expectations, and which they can afford."

"Promoting housing growth by creating new development models; unlocking stalled sites; tackling financial barriers; investing in infrastructure and easing the development process.

"Developing and implementing a coordinated housing estate renewal programme across South Essex to increase housing supply, support town centre regeneration and address historic image issues."

Factory 2 should play a significant role in establishing the **Thames Estuary Production Corridor**, which has been awarded £4.3m to unlock long term, transformational, culture-led growth in South Essex, North Kent and London. Following COVID-19, the Thames Estuary Growth Board launches its action plan in July 2020 **announcing its support to the Thames Estuary Production Corridor**, in particular, by increasing levels of demand for production space and services support. According to the Action Plan:

"These complex supply chains provide materials, services and skills to production and consumption activities. Examples include: manufacturing of wood products, manufacturing of fabricated metal products, specialised construction activities, wholesale of textiles, and logistics and distribution. In Basildon, existing supply chain and grassroots activities are supported through new town centre facilities and through further diversification from traditional manufacturing to creative and cultural production."

The project will link with the **Association of South Essex Local Authorities (ASELA)** and support its vision of improving the delivery of new homes, with a strong sense of place and community. There is a recognised need for, and commitment to strategic and tactical interventions that would significantly increase housing delivery rates.

Factory 2 is closely aligned with **Basildon Council's corporate ambition to be a place that encourages business to grow and residents to succeed** by: creating high aspirations, supported by access to training and skill development, reducing unemployment; and supporting the growth plans of local businesses.

These objectives will be furthered by **Basildon's Local Plan (2014 – 2034)** which aims to maintain the borough's **status as a sub-regional economic hub**. This will be achieved by

providing enough land in suitable locations with the supporting infrastructure to accommodate businesses needs including:

- Strengthening the both big and small, and supporting the diversification of the Borough's employment sector mix.
- Maintaining and enhancing business support programmes.
- Ensuring access to education and training at all level.
- To support residents into local jobs and move towards full employment.
- To deliver a thriving and mixed economy offering local jobs for local people.
- To ensure that the skills needs of business are met across a range of sectors, offering opportunities for all levels of qualifications and delivering skills support to deliver career progression and retain skilled workforce.

MMC in the UK

In 2018, the construction industry contributed £177 billion to the UK economy, 6% of the UK's total economic output (GDP) and representing 10% of employment . The construction industry is not only important in terms of its economic contribution; it is an enabler to broader economic growth and development by providing homes, infrastructure and functioning communities. A combination of acute housing demand, the skills shortage in mainstream construction and market failures in terms of the quantum, quality and cost of homes delivered have forced the industry and Government to view Offsite and Modern Methods of Construction (MMC) as a solution .

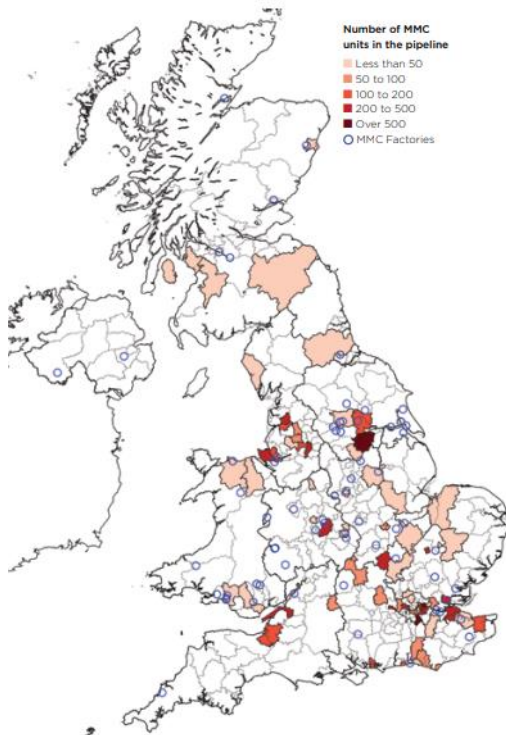
As set out above, the UK Government has identified MMC as a key vision for meeting the UK's housing need and promoted its application in the Construction Sector Deal (part of the Government's Industrial Strategy). The White Paper (August 2020) also encourages the support those using MMC as its benefits strategically align with the White Paper's key reforms- improve efficiency, build quality and provide more sustainable communities.

Savills Research (2020) identified that there are 80 Modern Methods of Construction factories in the UK. Over 100 schemes in the development pipeline are utilising MMC, resulting in the delivery of 17,000 new homes across a variety of tenures: open market sale, Build to Rent (BTR), co-living and affordable tenures. Figure 3, shows the location of MMC factories and MMC schemes.

Savills estimate that 90% of house building in the UK are from traditional construction methods with the remaining c.10% of homes using MMC. This figure is expected to rise to 20% over the next 10 years as the adoption of MMC increases .

In September 2020, Laing O'Rourke, a multinational construction firm, announced they aim to deliver 90% of construction work on projects inside its factories by 2025 . Their current '70:60:30' strategy consists of manufacturing 70% of a project's components offsite, coupled with 60% productivity gains and 30% programme improvements (through the use of design and assembly). In August 2020, Housebuilder Countryside announced that they plan to invest £20m into their second modular housing factory in Bardon, Leicestershire . The factory will increase capacity to 3,500 homes per year. The MMC industry is experiencing evident expansion with market appetite from construction firms to invest further in MMC.

Figure 3 - Map of MMC schemes and factories in the UK (Savills, 2020)



2.5. Need for intervention:

This MMC initiative, will address the challenges and failures in the **current** housing market by:

- Introducing significantly more resilience in terms of the construction process and timescales for delivering actual homes on site
- The MMC route removes the major challenges in the traditional construction process, particularly at the present time – such as restricted working due to Covid, lengthy on site construction timescales, risks to site personnel etc
- The MMC process can manufacture the modules and complete installation on site within two weeks. The traditional process can expect, particularly in current circumstances, to take several months
- Developing a major piece of infrastructure, which will not only supply Swan for at least 15 years to come, but also Local Authorities and other developers throughout the area.
- This in turn will assist with the development of an innovative modular construction ecosystem throughout the area, which linked with universities, colleges and plant and machinery suppliers / manufacturers, could be developed into a major driving force
- Introducing controlled factory conditions, into a market which can be very much influenced by the weather and site conditions – which with a high level of automation, controlled manufacturing lines / processes and high quality control, allow efficient and safer working as well as more guaranteed availability of the completed modules – as and when required
- It also overcomes the problems of skills shortages within the construction industry – by providing an alternative means of delivering new homes – using different skills and a different workforce

- This in turn significantly improves the certainty of housing supply, which from an affordable housing perspective, continues to be critical, and even more so given the wider impacts of COVID

Taking an investment decision of this scale is challenging at any time, not least in current circumstances, due to the uncertainties within the housing market and the serious economic impacts arising from COVID-19, which are still “unwinding” as the country emerges from lockdown, and potentially faces a further spike in infection rates during the autumn and winter periods.

The economic consequences are not expected to become clear for some time and looking at government and other forecasts suggest that the impacts on house values, land values, construction costs and transaction levels, could “dip” considerably, and take some years to fully recover to their pre-COVID levels.

With the significant uncertainty in the market at the present time and without the availability of public funding to support this initiative, Swan will be unable to make the required investment, and Factory 2 will certainly not proceed. Furthermore, it is expected to be some 4 / 5 years before the confidence exists in the market for Swan to proceed with a project that will require significant funding.

The immediate consequences of not proceeding with the initiative are that -

- The schemes on which Swan is working now with housing delivery promised over the next 12 to 18 months, will be delayed, potentially significantly as the continued impacts of COVID on close working conditions continues to emerge
- Given Swan’s role as a Registered Provider, this will impact the level of affordable and shared ownership homes available – which continues to be a priority due to the housing crisis in the south east
- These delays will run counter to government priorities, which are looking to “Getting Building” and providing significantly higher levels of affordable housing, now
- The potential to create immediately available new jobs, and new skills, which would be widely applicable across the manufacturing and other sectors, will be lost – particularly at a time when the government is looking to establish jobs, encourage businesses in growth and green sectors, and stimulate careers in skilled, vocational employment
- The MMC Factory 2 is targeted at the development of apartments in particular, which are not deliverable with timber MMC modules, given current government rulings on combustible materials, and the extreme difficulty of securing insurance on such structures. All of Swan’s current schemes include affordable apartments and the absence of the new factory will delay delivery timescales, increase costs (having to rely on buying in traditional materials) and deal with lengthy on site construction timeframes, particularly with the inefficiencies of working efficiently with COVID restrictions
- Continued use of traditional construction measures will waste time, prove more costly, allow physical waste in the processes to continue, significantly delay the rate at which homes can be constructed and occupied and lose the opportunity to re-skill / up-skill a diverse range of new employees, not usually attracted to construction jobs on-site
- For example, Swan’s development activity within the three priority schemes (Blackwall Reach, Purfleet and Southend) currently underway, will have to rely on traditional techniques, buying in components from elsewhere, resulting in higher construction costs and longer delivery periods

- Implementing the proposal, will allow cost savings to be made across both construction and assembly - which through Swan's not for profit status, can be used to provide more affordable housing
- If the opportunity to develop this facility is not taken now, it could be 4 / 5 years before an investment decision can be taken

In the medium term it should be stressed that -

- The modular units to be produced by Factory 2 (formed of fabricated steel), which are essential to build structures in excess of 3-storeys and required in most urban locations - will not be available for other LA schemes, or for other developers / Registered Provider's
- Some four to five years will be lost in terms of diversifying the production capacity of the construction sector, and in evolving new, innovative off-site techniques and products, which will be a key focus of the factory and encourage R&D on new manufacturing techniques, materials, installation methods as well as on higher levels of insulation and carbon savings
- Off-site manufacture will assist with the drive to create zero carbon homes / communities, and even carbon negative developments in the future, as techniques and materials are improved and construction quality is refined

Conversely, funding from the Getting Building Fund will allow investment to be made at this time, that will create additional skilled jobs at the factory, reduce costs of developing Swan's own sites, utilising innovative steel construction techniques, accelerating delivery of housing and bringing forward modular housing manufacturing capacity that will benefit the wider construction industry.

2.6. Sources of funding:

Swan have made a number of attempts over the last 12 months to fund this new manufacturing facility, through a number of sources, but without success.

Consequently, Swan were forced to consider funding the factory from its own resources, which given the current economic and market conditions, make this route impossible at the present time.

2.7. Impact of non-intervention (do nothing):

Without public funding, steel fabrication capacity would not be developed and the traditional steelwork necessary for the traditional products will have to be purchased from a third-party supplier at higher cost to the public sector. Scope for supplying others would be limited / severely deferred for 4 / 5 years as would scope for covering other Swan schemes that it would like to be supplying.

The schemes on which Swan is working now with housing delivery promised over the next 12 to 18 months, will be delayed, potentially significantly as the continued impacts of COVID on close working conditions continues to emerge (conditions which would be largely mitigated within a factory environment).

Given Swan's role as a Registered Provider, this will particularly impact the level of affordable and shared ownership homes available – which continues to be a priority due to the housing crisis in the south east.

The potential to create immediately available new jobs, and new skills, which would be widely applicable across the manufacturing and other sectors, will be lost – particularly at a time when

the government is looking to establish jobs, encourage businesses in growth and green sectors, and stimulate careers in skilled, vocational employment.

Continued use of traditional construction measures will waste time, prove more costly, allow physical waste in the processes to continue, significantly delay the rate at which homes can be constructed and occupied and lose the opportunity to re-skill / up-skill a diverse range of new employees, not usually attracted to construction jobs on-site.

For example, Swan's development activity within the three priority schemes (Blackwall Reach, Purfleet and Southend) currently underway, will have to rely on traditional techniques, buying in components from elsewhere, resulting in higher construction costs and longer delivery periods.

Not intervening will prevent cost savings from being made across both construction and assembly - which through Swan's not for profit status, can be used to provide more affordable housing.

If the opportunity to develop this facility is not taken now, it could be 4 / 5 years before an investment decision can be taken.

Finally, by moving the production capacity from Factory 1 into Factory 2, additional timber modules could be increased from 720 modules per annum (240 homes) to 1,000 modules (330 homes) per annum in the larger floorspace available. The remainder of the Factory 2 building would remain unused until the market recovers and an investment decision on steel fabrication can be set up.

2.8. Objectives of intervention:

	Problems / opportunities identified in Need for Intervention section			
	Lack of steel modular provision	Broadening construction employment opportunities	Links between industry and training providers	Reducing cost inefficiencies in construction
Objective 1: Growth of jobs and diversification	0	✓✓✓	✓✓✓	0
Objective 2: Green Recovery	✓	✓✓	0	✓✓✓
Objective 3: Modernising town and city centres	✓✓	✓✓	✓	✓✓✓
Objective 4: Physical Infrastructure to improve local economy	✓✓✓	0	0	✓✓✓
Objective 5: Developing an innovation ecosystem	✓✓✓	✓✓✓	✓✓✓	✓✓✓

2.9. Constraints:

There are a number of constraints that will need to be addressed, in establishing the new factory, but none of these are real barriers or impediments to delivering the project's objectives.

Constraints include –

- Swan will need to agree terms for the lease of the new factory and a License for Alternations to permit the new manufacturing operation to function. Status – this has already been agreed in detail and is in the hands of solicitors to prepare final documents for signature
- The allowance for a suitable period within which the operation will move into full production with a suitable workforce operating in the most efficient way – the impacts of COVID may have consequences in this respect – requiring a longer lead in period to full production and efficiency. Status – there has been a significant “learn curve” over the last 6 months with regard to the operation of Factory 1. Factory 2 also provides much more operating floorspace, which will be a major advantage, compared to the factory 1 configuration
- There may also be a need to anticipate post COVID-19 challenges around the availability / level of traditional construction skills, in a sector where salary costs are already higher than modular. The new factory however provides the opportunity to introduce a more widely based workforce, without necessarily construction experience, who can be trained up in this new part of the sector. Status – Swan have already agreed a variety of training modules with providers, to ensure that arrangements will be in place from factory opening
- Many colleges and universities are now reshaping their curriculums to provide a new generation of operatives and professionals to supply the off-site manufacturing

industry, so we expect to see a much better educated and more appropriately skilled workforce emerging.

2.10. Scheme dependencies:

There are three main scheme dependencies, which will need to be in place before the project can proceed. These are –

- Obtaining planning permission from Basildon Council, to cover the external alterations required to the factory to enable the manufacturing operation to function (e.g. reconfiguring door heights, the provision of external storage). Status – “pre-app” discussions have already been held with the Council and the building and external changes, discussed. Initial comments have suggested that there are no planning issues of concern, and the alterations undertaken to Factory 1, broadly mirror the scope of works required to Factory 2
- Obtaining all necessary / statutory approvals necessary to permit the factory to function and the end product (fabricated steel modules) to be used in the identified development projects – i.e. BOPAS accreditation, NHBC approvals, health and safety approvals etc. Status – all necessary accreditations and approvals are underway – there do not appear to be any barriers to approval at this stage
- Ultimately signing the lease / license for alterations, guarantee arrangements - having satisfied the various terms and conditions, in order to take possession of the factory, and commence the alteration works (negotiations have been concluded and engrossments instructed). Status – awaiting approvals / confirmation of the above issues – at which time there is not expected to be any difficulties with achieving signatures
- Apart from the approvals / consents set out above, there are not known to be any other approvals required to implement the proposal

2.11. Expected benefits:

This project is expected to bring the following economic benefits to South Essex and beyond:

Housing (particularly affordable housing): by increasing Swan’s capacity for production of housing modules in-house and subsequently creating cost efficiencies

Innovation: Ongoing research and development will stimulate innovation and the development of new techniques in the manufacture and use of modular housing, increasing efficiencies in construction and helping the industry to accelerate the delivery of new homes.

Economic growth / jobs: the project will create 248 FTE gross operational jobs in MMC module production (124 net additional FTE jobs for South Essex, after adjusting for deadweight, leakage, displacement and multiplier effects).

Skills: providing training to local employees to equip them with the skills required to work in a new area of the industry

2.12. Key risks:

The key risks of the project have been reviewed / assessed and there are no issues which have a high likelihood of occurrence.

3. ECONOMIC CASE

3.1. Options assessment:

Options assessment:

Because of the nature of the existing opportunity, Swan's business plan for the steel MMC production in the new factory and leasehold issues, and the uncertain nature of the current housing market there are a limited number of options which can be pursued. As a result, the long-list of options and the short-list of options is identical.

Short list of options:

The short list of options is set out below:

Option 1 Do nothing (reference case – no SELEP support) – move our current activity to factory 2 but with no steel fabrication - factory 1 is capable of producing 720 modules per annum (approximately 240 homes per annum) - moving to factory 2 is likely to allow production to increase to 1,000 modules per year. (Swan will need to commit to the lease on Factory 2 within the next few weeks). There will be no steel fabrication in factory 2 at present, as no resource to kit out / set up steel fabrication plant – which will result in “buying” in all steel modules from third parties – at higher cost, and limiting scope to supply others or to cover the range of schemes that Swan would ideally like to be supplying. Remainder of factory 2 would sub-let, until such time as market recovers and an investment decision on steel fabrication set-up can be justified

Option 2 Do less (smaller SELEP support): as above, but with some elements of steel fabrication in factory 2 dependent on the level of grant available to support an element of fit-out / plant investment. Mitigates some of the issues in Option 1, but still sub-optimal in terms of potential revenue, employment, productivity and supply and income multiplier effects

Option 3, Full factory 2 proposal (with full SELEP support): In this option we would establish a full steel fabrication plant in factory 2, initially alongside factory 1 and develop the wider Local Authority partnerships to deliver homes for them for both opportunities.

3.2. Preferred option:

The preferred option is Option 3. As we will demonstrate below, this delivers the best value for money and the greatest level of employment and GVA benefits by enabling an immediate expansion of our activity into steel MMC module manufacturing. It also enables the recruitment and training of a significant number of new manufacturing operatives over the five year period, at a time when Covid-19 economic recovery efforts are urgently needed. By allowing us to expand into factory 2, our growth in MMC modules will have significant catalytic housing benefits downstream.

Additional production of both CLT (timber) and steel MMC modules in Option 3 will help to accelerate the of pace on development sites in SELEP area, bring about potential cost reductions in housing delivery which in turn will allow us, as a not for profit organisation, to reinvest these savings and deliver greater levels of affordable housing in areas where there remains a clear affordability problem.

Current proposals are that the factory alteration works, fit-out and set-up will be complete by September 2021 and manufacture commence in October 2021.

3.3. Assessment approach:

The economic appraisal assessment approach has been restricted to a quantitative, permanent employment benefits of the factory operations under each of the three options. It has followed HM Treasury, MHCLG and other government guidance as set defined in Annex A.

Our justification for this approach is that GBF is supporting the alterations and fitting out of an existing factory building, and not development. A land value uplift approach is, we believe, not an appropriate technique to use in this instance, especially since GBF has, amongst its objectives, the delivery of jobs and skills.

All of our jobs now and those forecast to be generated in Options 2 and 3 are or will be on contracts involving 37.5 hours per week and so can be taken as permanent Full Time Equivalents.

Employment has been derived from a combination of direct observation (our existing operation in factory 1) and from our internal business planning for our factory 2 in Options 2 and 3. In each option we have shown how factory employment evolves under each option over a five year period from 2020/2021 to 2024/25, in line with SELEP guidance.

The GVA benefits associated with these jobs have then been calculated at the Essex Thames Gateway sub-regional level in constant 2020/21 prices (see Section 3.4 for more detail on the basis for these assumptions).

Deadweight benefits - the benefits which would be delivered anyway under the Option 1 (no GBF) reference case – have been deducted from the intervention options, Option 2 (do less) and Option 3 (preferred).

Leakage, displacement and supply chain and income multiplier effects in all three options have been taken into account (the derivation of assumptions is set out in Section 3.4). No adjustment has been made for labour market substitution. GBF support in Options 2 and 3 is for new factory, with the expansion and creation of a significant number of new jobs requiring a different skills mix (metal fabrication) compared with existing (timber). Other sections of the business case explain in detail the company's plans for recruitment and training of new staff to support the expansion. On this basis the risk of labour market substitution amongst employees currently working in Factory 1 is regarded as negligible.

The Present Value (PV) of the future stream of net additional GVA benefits for the intervention options is then discounted back to 2020/21 using HM Treasury's recommended Social Time Preference Rate of 3.5%.

GBF represents the only public sector funding source involved in the factory project. The GBF costs of each option (zero in Option 1, some GBF in Option 2 and our preferred Option 3 GBF funding profile) have been profiled over a five year period (in practice, costs are incurred in Years 1 and 2 only in both Options 2 and 3). A Present Value of GBF costs has then been calculated on the same basis as the benefits, i.e. discounted at 3.5% to 2020/21.

In accordance with MHCLG and HM Treasury Green Book guidance and Supplementary Guidance, we have considered the potential Optimism Bias (OB) associated with costs and works duration (see detailed assessment in Annex E). This assessment concluded that there could be unmitigated OB on costs of +7.4% in Option 3. The PV of GBF costs in Options 2 and 3 has therefore been adjusted by +7.4% for the purposes of calculating the Benefit Cost Ratio. (In

our OB assessment in Annex D we argue that OB on works duration is so small as to be considered de minimis for appraisal purposes).

A Benefit Cost Ratio (BCR) has then been calculated for Options 2 and 3 by dividing the PV of net additional benefits by the PV of GBF costs in accordance with MHCLG guidance.

Beyond the employment and GVA effects – an important contribution given the need to support Covid-19 economic recovery efforts – the operation of a new factory provides skills training opportunities for all new operatives recruited over the five year period. Although the number of trainees is quantified, and a range of other downstream housing development catalytic benefits are discussed, these other benefits have not been monetised and they do not form part of the BCR calculation.

3.4. Economic appraisal assumptions:

In order to translate the permanent FTE jobs from factory production in each option into GVA benefits, we took the GVA per FTE job in the South East region as a whole, and used the average for Standard Industrial Classification (SIC 2007) 2-digit Division 16 (Manufacture of wood products) and SIC Division 25 (Manufacture of fabricated metal products) since these two sectors represent the closest possible approximation using official data sources to our planned operation and it is not possible to obtain finer grained GVA/filled job at both sub-regional and sectoral level. Data was sourced from the Annual Business Survey (GVA in 2018) and the Business Register and Employment Survey (via NOMIS). The latter provided data on employment in the South East in the two SIC Divisions mentioned above in 2018. For the purposes of deriving a GVA per FTE job, full-time jobs from the BERR Survey were treated as 1 FTE and part-time jobs treated as 0.5 FTE.

The 2018 average GVA per FTE of £61,031 for these two 2-digit SIC Divisions was inflated to 2020/21 prices using the GDP deflator at market prices (financial years) published by ONS, yielding a GVA per FTE in 2020/21 prices of £63,398.

Prior to the GVA calculation, adjustments were made to FTE jobs at the sub-regional level to take account of leakage (16.1%), displacement (16.5%) and multiplier effects (1.21), drawing on published evaluation benchmark evidence for individual business support interventions.² The previous section explained why no adjustment was made for labour market substitution.

As noted above, once they are fabricated and transported to our development sites the MMC modules will have a number of wider catalytic benefits. However, in order to maintain clarity of focus on the main factory proposal and our justification for grant funding, and to avoid the risk of double counting of downstream benefits with other public sector funding streams, we have not attempted to quantify or monetise these catalytic effects.

3.5. Costs:

There are no sunk costs in respect of this project. All costs will be incurred from November 2020 onwards.

No inflation has been used in terms of capital costs for this project - all costs will be incurred within a 12 month period and will reflect estimates / quotations, which will remain valid for this

² Department for Business, Innovation and Skills (BIS) (2009) "Research to Improve the Assessment of Additionality" BIS Occasional Paper 1

period. Inflation has not been included in the revenue / non capital cost assumptions - reflecting the not for profit nature of the Swan Group - the price for the modules, to be paid by Swan HA and Swan New Homes, will equal the total manufacturing costs - and in the event that costs are impacted by inflation, the price paid for the modules, will reflect this.

The table below shows the build-up of GBF costs per option over the five year period.

	Total	Year 1 2020/21	Year 2 2021/22	Year 3 2022/23	Year 4 2023/24	Year 5 2024/25
Getting Building Fund costs per annum (2020/21 prices)						
Option 1 (no GBF funding, Reference Case)	£0	£0	£0	£0	£0	£0
Option 2 (do less)	£2,332,131	£1,496,875	£835,256	£0	£0	£0
Option 3 (full proposal)	£4,530,000	£2,046,625	£2,483,375	£0	£0	£0
Present Value of GBF Costs (discounted at 3.5% to 2020/2021 and adjusted for Optimism Bias)						
Option 1 (no GBF funding, Reference Case)	£0					
Option 2 (do less)	£2,474,189					
Option 3 (full proposal)	£4,753,193					

3.6. Benefits:

An assessment has been undertaken of the build-up of employment over the first five years of the project, together with the necessary adjustments from gross to net additional employment.

This analysis demonstrates that, even on the core assumption of permanent factory jobs alone – and without any monetisation of skills benefits or of catalytic benefits on specific development sites – the Benefit Cost Ratio is a healthy 1:4.2 in Option 3, higher than 1:3.7 in Option 2 due to the more productive use of factory 2 space in the latter option. **Option 3 is therefore preferred on Value for Money (VfM) grounds.**

Beyond the monetised benefits, the Appraisal shows that Option 3 delivers significantly more housing and affordable housing benefits than Option 2.

Two sensitivity tests were performed to test the robustness of BCR for Option 3 to changes in the PV of costs and monetised benefits. The first test assumed a potential cost increase of 7.5%; the second test assumed that in addition to this cost increase, the level of net additional monetised benefits in Option 3 might fall by as much as 35%.

This demonstrates that when these sensitivity tests are run sequentially (first the increase in GBF costs alone, then a combined test on an increase in costs and a reduction in benefits) the BCR for Option 3 remains comfortably above 1:2.0 – i.e. it is still within the “High” Value for Money category as defined by MHCLG.

On this basis, we can say that the Value for Money of the preferred option, Option 3, remains resilient to OB-assessed potential cost impacts and to a significant benefit reduction.

4. COMMERCIAL CASE

4.1. Procurement options:

It is proposed that Swan's procurement strategy (for the required alterations to the building and the installation / set-up of all plant and machinery to form the production lines) will follow its established OJEU compliant procurement process.

Swan is an experienced housing / mixed use regeneration developer and contractor, having been operating in this sector for some 25+ years, within which the internal provision of professional services (particularly including project management) and the procurement of external services and contractors, is a fundamental part of its day to day business.

It is also a contractor in its own right, having established NU living in 2014, one of the first housing associations, to establish its own contracting arm, since which time the company has been directly involved in developing a range of challenging projects

In addition, it has already been through the same process of specifying, designing, procuring the fit-out / set-up of its existing "timber based" MMC factory, on the site adjoining the current proposal, and therefore it has recent experience of the whole process, and has been through the "learning experience" which will prove exceptionally useful for Factory 2

Because of the above considerations, Swan is proposing that for the fit out / alterations to the factory, the sourcing / installation of all necessary plant and equipment (some of which will need to be designed / manufactured on a bespoke basis for Swan's operation) and for the future supply of services and materials (needed to run the facility and deliver the construction of the steel fabricated modules) it will be utilising its robust DPS (Dynamic Procurement System). This will adopt the fundamental principles embodied in Swan Commercial Services procurement processes, established commercial procedures and the company's financial regulations.

These procedures will also apply to the development schemes, which will be the recipient of the steel fabricated modules, ultimately produced by Factory 2. All additional works / services, not covered by the completed MMC modules, will be procured / tendered in accordance with the above procedures.

Although alternative procurement processes would be possible, the advantages of adopting a well tried and tested process, which complies with public procurement procedures, and is designed to allow local suppliers to bid and the most compliant / cost effective tenders to be selected, seems to be the most economic and efficient way of proceeding.

4.2. Preferred procurement and contracting strategy:

The procurement and contracting strategy for Factory 2, will provide for an initial detailed design and specification to be worked up for the alteration works required to the building, the plant and machinery to be installed, and the technical services to commission and bring the facility into operation.

In undertaking this, Swan will draw on the previous experience of similarly commissioning Factory 1, three years of operational experience in running that facility, and external consultant expertise, where required for the unique, steel fabrication aspects of the new facility, and the manufacturing lines required in this instance. Their considerable experience as a direct developer / contractor, will also add real value to this component of the project. This process has already

been undertaken and a range of initial quotes and estimates have been sought, in order to test the cost aspects of the business plan.

The resulting specification and performance requirements, will form the basis of the required tenders to be invited over the next 3 / 4 months

The Tender Process - In summary, the DPS tender selection process provides for “*Lotting*” - *where subcontractors / consultants / suppliers can register their willingness to be part of the tender process providing compliance with the DPS capability matrix has been achieved.*

Where possible Swan will give an opportunity to local businesses to be part of this process and provide quotations as part of the competitive tendering process - and materials / services for the new factory, will be procured in the same way and in line with their new corporate strategy with regards to sustainable sourcing.

Swan are currently undertaking a review of their approved sub-contractor register to identify which locally based contractors are on the list. The aim will be to identify, for each sub-contract/supplier, at least one company local to the immediate area / surrounding area so that for each subcontract package, they can ensure that at least one local company is given the opportunity to price the works.

Swan will also work with Basildon Council's procurement team to ensure that they are identifying all potential local suppliers for these sub-contracts/purchase orders.

Where there are no local companies already on their approved contractor list (for a sub-contract), they will proactively seek new contractors to come onto the framework, subject of course to satisfactorily completing the relevant PQQ and complying with financial regulations. In this way, such new local contractors will not only be able to bid for the Factory 2 work, but also for work on other projects in both Essex and London. In this way Swan will create a real opportunity for growth in the local economy.

Once quotations are received these will be input into the tender analysis which will be compiled and signed off through the DPS and commercial procedures process in line with Swan financial regulations and in accordance with its established financial authorisation limits. These will consider the need for all tender to prove full compliance with the designs and specifications required for both the establishment and operation of the new MMC factory – AND value for money, in terms of the most economic and cost effective means of delivering / servicing the fit out and set up process.

Once full authorisation for placement of an order is given, the commercial procedures will be followed and copies of signed orders and collateral warranty's (where applicable) will go through the sign and seal process. Orders are placed using Swan's standard form of contract, standard form of appointment and purchase order (as applicable).

4.3. Procurement experience:

As set out above, Swan have considerable experience in the tendering process (as part of their day to day business as an affordable housing supplier and developer) and subsequently procuring selected contractors, suppliers and providers of services, raw materials and component parts. They are also very experienced project managers, running all of their development projects with a directly employed workforce.

In undertaking the tender and supply process, they have a dedicated procurement team with both the experience of setting up Factory 1 and procuring a range of other housing, mixed use and broader regeneration projects.

There have also been lessons learned from the establishment and operation of MMC Factory 1, on the adjoining site to the new facility – for example:

- The advantage of having an in-house design resource, which is already making a huge difference
- The need for an efficient factory layout, particularly the configuration of the manufacturing lines in continuous runs – for the most economic production process
- The need for more external storage space – which cannot, currently be provided, and is inhibiting the size of schemes being undertaken
- The range of different / important skills needed for the MMC process (compared with traditional construction skills), which has identified the need for the workforce to be trained / upskilled both initially and over time
- The importance of establishing “partnerships” with training providers, on a bespoke basis, in order to deliver the skilled workforce required to deliver the ultimate modules - Swan have already entered into an arrangement with the STC Group (a specialist provider of vocational training and recruitment solutions for young people / adults across Essex, London and the SE

4.4. Competition issues:

In relation to Supply Chain procurement procedures (for materials / services required as part of the Factory 2 operation), Swan will adopt the procedures set out in Section 4.2 above.

As explained, the DPS tender selection process provides for “*Lotting*” - *where subcontractors / consultants / suppliers can register their willingness to be part of the tender process providing compliance with the DPS capability matrix has been achieved.*

Where possible Swan will give an opportunity to local businesses to be part of this process and provide quotations as part of the competitive tendering process - in line with their new corporate strategy with regards to sustainable sourcing. With the latest review of their procedures, Swan are looking to ensure that for each sub-contract/supplier, there is at least one company local to the immediate area / surrounding area included - so that for each subcontract package, they can ensure that at least one local company is given the opportunity to price the materials / services required.

4.5. Human resources issues:

There has clearly been a construction skills shortage for some time and the development of the MMC / modular sector has provided the opportunity to employ different people with different skillsets, which in several respects do not mirror those traditionally in the construction sector. Because of that, training and upskilling is an important part of developing a workforce, and this was experienced with Factory 1, and is expected again with the current project.

Swan will therefore work with appropriate agencies to ensure that local labour opportunities are promoted through job and training agencies, skills match etc. to maximise local recruitment. In particular, they will use the company website and Swan social media to target local people. Recent recruitment using these modes has been very successful and Facebook in particular.

To encourage local people into MMC construction employment, they will also work with local colleges and training providers to develop an appropriate Construction skills programme to

enable young people and those wishing to change career to get the skills they need to move into these roles. As set out above - Swan have already entered into an arrangement with the STC Group - a fully independent / specialist provider of vocational training and recruitment solutions for young people / adults. STC are Ofqual regulated and aim to ensure the highest standards in training and care for their students.

The courses are a starting point for initial delivery, covering trades that include Tiling, Dry Lining, Carpentry and Painting & Decorating - providing the practical skills and knowledge requirements to increase productivity, speed and quality, whilst reducing failure costs.

They will also offer the NOCN_Cskills Awards Level 2 NVQ Diploma in Construction using Off-site Manufactured Assemblies - Modular and Portable Building pathway, which has been developed for achievement in a real workplace environment.

4.6. Risks and mitigation:

The key risks which the project is likely to face, have been identified / assessed and cover such issues as set-up and fit-out costs, approvals / accreditation required, staffing issues etc. Potential mitigation factors that will need to be addressed if issues arise, have also been considered. In all cases, the likelihood of an occurrence is not significant.

4.7. Maximising social value:

Swan Group is a not for profit organisation. Every penny made through its commercial activities is reinvested in providing affordable homes for people who need them, allocated in the case of social housing by its local authority partners in Essex and East London, and in providing services to its residents including ensuring they are able to influence its services and co-design regeneration activities, providing life changing employment and training opportunities and supporting residents to access the support they need to maintain their tenancy. To March 31 2019, Swan had generated over £69m of profit from its commercial activities which has been reinvested in regeneration projects, providing services for residents, community development and engagement activities. For example:

In the financial year to March 2020 they completed over 700 new homes including almost 250 affordable homes which have been allocated by their Borough Partners in line with their local housing need. By operating with a social purpose Swan are able to take a longer term view and enter into long term strategic partnerships to enable large scale regeneration to take place, supporting regeneration at a scale that “for profit” developers would not take on, delivering much needed community infrastructure as well as new homes. This enables them to deliver large scale projects like Blackwall Reach, Purfleet-on-Thames and Better Queensway - as summarised elsewhere in this business case.

This year they continued to make progress on their community consultation on large scale regenerations including Better Queensway in Southend where they will be submitting a planning application in September 2020 for a large scale regeneration which will create circa 1700 homes, including 500 plus affordable homes and deliver significant social value investment including two new public parks, a new central concierge to manage the new estate, spaces for entrepreneurs to grow their businesses, sustainable drainage, electric charge charging and 190 new trees, and transform the centre of Southend-on-Sea for the benefit of the wider community.

They also use the income from their commercial activities to support the people and communities in which they work, delivering important social value outcomes. In the first year of their new three

strategy “Count Me In - Involvement and Communities” their Resident Involvement and RICD team has worked with 2,846 people to 31 March 2020 including:

- Supported 366 people through 31 employment, skills and training projects and initiatives. 29 people have gone on to secure paid employment whilst 66 went on to undertake further learning and development opportunities
- Delivered over 41 Community Development Projects aimed across topics such as health and wellbeing and building community cohesion.
- Worked with over 2,310 individuals who have benefitted from the projects that they have delivered including 1,884 in Community Development and Regeneration activity, 60 through the Winter Warmer campaign and 366 through their employment and training initiatives.

They have also been able to continue investing in their welfare benefits support team, who this year contacted 2,953 households and visited 634 residents to provide support. 231 residents who are eligible were supported to apply for Discretionary Housing Payments (DHPs) to cover their rent shortfall. The team also assisted residents to claim over £980,000 of various benefits to sustain their tenancies and improve their finances.

As well as these social value outcomes delivered by Swan through reinvesting all profits from commercial activities, Factory 2 will provide an opportunity for Swan to support further manufacturing in the SELEP area and to invest further in employment and training. Factory 2 will generate new jobs including multi- skilled operatives, roles which when fully supported with the Multi-Skilled Operative training programme they have created with STC Group will be targeted at people from a wide range of backgrounds, including young people but also those looking for a new role from a variety of sectors. Swan see this as an opportunity to retrain staff who may have been negatively impacted by the COVID-19 situation and may be looking for a new career.

Factory 1 was able to operate throughout the lockdown and its strictly controlled environment supports a Covid-19 response. There will also be a range of other roles created. They are committed to encouraging a diverse workforce in factory 2. They have already a range of staff working in Factory 1 and would particularly like to see a wider range of people taking the multi-skilled-operative roles in the new factory through the full training programme to be put in place. They currently have 2 women working on the factory floor and aim to increase this to 10 by the end of 2021.

STC/ Build Space is an official partner of the **Supply Chain School of Sustainability** (www.supplychainschool.co.uk) and sit on their **Offsite Leadership Council**. Build Space has helped develop 10 x training modules, all CPD accredited, which Swan propose its staff will complete prior to taking a position – known as the Build Space Offsite Construction passport. The training modules cover the following topics:

- Design: Product & Process for Manufacturers
- DfMA: Design for Manufacture and Assembly
- Logistics: Level 2
- Offsite Manufacturing Process
- Introduction to Offsite – Design
- Introduction to Offsite – Logistic Managers
- Introduction to Offsite – Project Management
- Introduction to Offsite – Procurement
- Introduction to Offsite – Cost Consultants
- Introduction to Offsite – Site Managers
- Offsite Fundamentals – Systems
- Offsite Fundamentals – Sectors

STC are currently working with Laing O'Rourke on their **Construction, Assembly and Installation Operative (CAIO)** apprenticeship programme, and the intention is that Swan would work with them to develop an apprenticeship arrangement for Factory 2.

Swan is also committed to supporting local labour and supply chains as set out in this Business case.

5. FINANCIAL CASE

5.1. Total project value and funding sources:

Funding source	Amount (£)	Constraints, dependencies or risks and mitigation
GBF	£4,530,000	GBF funding is required to enable this project and unlock the associated benefits.
Swan Group		Swan will provide the balance of capital funding and non-capital funding.
Total project value		

5.2. SELEP funding request, including type (LGF, GPF, GBF etc.):

The funding request to SELEP is for £4.53m

5.3. Costs by type:

The capital costs have been compiled by a combination of –

- Cost estimates for the alterations to the building, based on detailed drawings / specifications drawn up for the works and costed by a cost consultant
- Quotations for specialist plant and machinery, provided by companies experienced in the production of such equipment, that have submitted estimates based on specifications provided by Swan
- Estimates from companies on Swan's panel of suppliers, already providing equipment and services to Factory 1
- Internal estimates for specific set-up and fit-out works, based on experience of setting up and running Factory 1

Contingencies have been provided in the above capital costs and are considered in more detail below.

Firm quotations will be procured once approval to proceed has been given, using a competitive procurement procedure, based on a well proven supplier framework, through which Swan procures all of its materials, equipment and services.

It should also be noted that no inflation factor has been built into the capital costs, given that all works will be procured and committed over a 12 month period, based on estimates for supply and installation during that time. Swan is therefore satisfied that there will be no inflation impact over this period.

All revenue costs are based on Swan's experience of running all aspects of their current MMC Factory 1, together with their status as a physical building contractor over many years.

It should also be noted that there are no overheads, profits or uplifts included in the capital costs included in this proposal. As a not for profit organisation, Swan deal with all supplies and inputs on a strict cost basis.

As set out above, contingency allowances are included within the fit-out figures provided in respect of all capital costs. These reflect current views on the status of cost estimates / quotations received, and the experience of establishing the Factory 1 operation.

5.4. Quantitative risk assessment (QRA):

The capital costings, to cover the alterations and fit-out works to the new factory, to establish the new manufacturing process, and provided in the analysis above, have been based on –

- Preliminary quotations received to date from suppliers / contractors
- Previous experience fitting out Factory 1 for similar purposes
- External consultant advice / estimates

A contingency allowance has currently been made in respect the works involved and the supply / installation of the required plant and machinery. This broadly represents some 5% of the overall Capital Costs set out above and is incorporated in the costs of different components works required and included in the figures set out in the above table.

A QRA exercise has been undertaken in respect of the individual items, which make-up this capital cost plan, and the risks associated with each has been identified and a value attached to each. These represent some 5% of the overall capital cost, and therefore broadly equate to the contingency sums included within the figures above.

Given that the proposed Factory 2 operation, mirrors closely the MMC business which has been operating out of Factory 1 for the last three years, and the production of the ultimate modules, are to supply the development of homes on three key sites, which are already committed, and where Swan is working in joint venture arrangements with its Local Authority partners, there has been no QRA exercise undertaken to assess the risks associated with the non-capital / operational costs involved. This is Swan's normal business, and all operational issues will be resolved on a day to day basis.

5.5. Funding profile (capital and non-capital):

The forecast funding profile for the Capital and Non-Capital aspects of the Project, are set out below. These cover the first five years in detail, and the remaining years, of what is currently envisaged to be a 15 year minimum programme. [table not included]

5.6. Funding commitment:

Both Swan HA and Swan NU living have confirmed that the proposed non-capital funding is committed from their respective budgets, going forward. There are no further loans or other funds required to meet the operational costs set out in the financial plans, within this proposal.

5.7. Risk and constraints:

A detailed QRA exercise has been undertaken with regard to the capital construction and fit-out costs associated with this project. These are set out in the Section 5.4 above.

Each area / component has been examined in terms of the current state of design / detailed specification, whether one or more quotes / initial estimates have been received, and the status

of those estimates in terms of caveats / conditions etc. Where the estimates are based on detailed information and cover standard, readily accessible plant / materials / services – the level of risk is judged low and the prospect of a financial consequence, judged accordingly

Where quotes are more generalised, based on initial data, and covering more non-standardised plant / materials / services, then the risk level is judged on an individual basis, and the prospect of a financial consequence calculated as a percentage addition to the costs provided

The implication of other, more general risk factors, have also been taken into account, as part of the above exercise (and in the sensitivity considerations within the Economic Case).

With regard to capital funding risk, clearly this depends on a successful bid for Getting Building funds, and as explained earlier in this proposal, other public and private sources for funding have been explored unsuccessfully. Without the GB funding, there would be a constraint on funding, and the scheme would be placed on hold until market conditions improve to the point that a significant investment can be made in this initiative.

Inflation may be a further, potential capital funding risk – however as explained earlier in this proposal, the works are to be procured and implemented within a 12 month period and will be procured with that timeframe in mind. It is therefore not considered that there is any inflation risk in this respect.

With regard to revenue funding, given the end product of the factory, will be used by Swan on a range of committed projects over the next few years, it is not seen that this is under any significant risk, as there will be a balance between production and the need for modules on these schemes. Provided there is a “market” for the range and mix of housing that Swan produce, from fully affordable rented to private for sale, there should be no constraint on revenue funding to run the factory and manufacture the modules.

It should also be stated that Swan, as a Registered Provider, has a significant element of its business in the provision of affordable housing, which is a planning obligation and a statutory provision. There are therefore very limited risks of this demand being curtailed over future years. Indeed, the importance of affordable housing and the current housing crisis all suggest that there will be more demand for such housing provision.

With regard to revenue cost inflation, this has not been allowed for within the current projections. This reflects Swan’s “not for profit” status and the fact that its construction modules will be produced at cost, and the price paid by Swan HA and Swan New Homes will reflect those costs. It is expected that in accordance with the last few years, revenue / operating / production costs will gradually increase with inflation over time, however these will be mirrored by the prices paid for the modules, reflecting the costs involved.

6. MANAGEMENT CASE

6.1. Governance:

Setting up the factory will replicate Swan's process of setting up the existing factory and the project will be managed by the experienced team responsible for managing the existing factory operation. Swan has management in place at Factory 1 and the Factory 1 is located immediately opposite Factory 2, allowing Swan's management team to set up and operate both factories supplemented by additional resource.

During the course of the set-up and fit-out works, the project manager will manage the day to day running of the alteration contracts, to the building, and the supply / installation of the plant and machinery and software contracts, to install the manufacturing lines.

There will be regular fortnightly contract review sessions with key staff in order to monitor progress and contract spend, to take decisions on any design / installation issues required and ensure that the overall programme is on course. This process will continue until practical completion / snagging has been achieved, and the building is passed over to the operational team.

The project manager will also maintain a detailed Risk Register during the course of the works, which will be based on the range of issues set out in the Risk Management plan. This register will highlight the full range of building, approval, contractual, legal, operational, programming and financial risks that the project is likely to encounter. The register will be maintained on a daily basis and reported to the fortnightly contract review sessions.

The register will set out the initially perceived risks and be updated as and when new risks are identified, or existing risks are resolved or escalated. It will also articulate the nature of the risk, actions required to ensure that the risk is minimised in the first instance, and actions for mitigation in the event that the risk is encountered.

The Risk register will also feed into the regular review of the project cost plan and programme, and the handling of contingency allowances, to ensure that any financial implications of developing risks, are fully taken into account, and any wider issues related to overspend and extension of the contract programme, are flagged as early as possible, and mitigation measures considered and where necessary, adopted.

Any more significant decisions on overall spend, programming or specification, will be reported to the Board, where more fundamental decisions are required.

Factory 2 once operational, will be managed along the same lines already established at Factory 1, namely by a Production Manager assisted by an Assistant Production Manager with oversight of HSE, Quality Control and Stores. Reporting to the Assistant Production Manager alongside managers for these other activities, will be an Area Supervisor, to whom Team Leaders of factory Lines will report. Each line will have 36 operatives and at full capacity Factory 2 will have four Lines.

As part of the set-up, Swan will set up a full risk register and project programme.

6.2. Approvals and escalation procedures:

As set out in section 6.1, approval for the project will report ultimately to Swan's Modular Housing Director and Swan's Board. Approvals and escalation procedures will follow this hierarchy.

6.3. Contract management:

As outlined in the Commercial Case above, Swan will provide for an initial detailed design and specification to be worked up for the alteration works required to the building, the plant and machinery to be installed, and the technical services to commission and bring the facility into operation.

In undertaking this, Swan will draw on the previous experience of similarly commissioning Factory 1, three years of operational experience in running that facility, and external consultant expertise, where required for the unique, steel fabrication aspects of the new facility, and the manufacturing lines required in this instance. Their considerable experience as a direct developer / contractor, will also add real value to this component of the project. This process has already been undertaken and a range of initial quotes and estimates have been sought, in order to test the cost aspects of the business plan.

The resulting specification and performance requirements, will form the basis of the required tenders to be invited over the next 3 / 4 months

The Tender Process - In summary, the DPS tender selection process provides for "Lotting" - where subcontractors / consultants / suppliers can register their willingness to be part of the tender process providing compliance with the DPS capability matrix has been achieved.

Where possible Swan will give an opportunity to local businesses to be part of this process and provide quotations as part of the competitive tendering process - and materials / services for the new factory, will be procured in the same way and in line with their new corporate strategy with regards to sustainable sourcing.

Swan are currently undertaking a review of their approved sub-contractor register to identify which locally based contractors are on the list. The aim will be to identify, for each sub-contract/supplier, at least one company local to the immediate area / surrounding area so that for each subcontract package, they can ensure that at least one local company is given the opportunity to price the works.

Swan will also work with Basildon Council's procurement team to ensure that they are identifying all potential local suppliers for these sub-contracts/purchase orders.

Where there are no local companies already on their approved contractor list (for a sub-contract), they will proactively seek new contractors to come onto the framework, subject of course to satisfactorily completing the relevant PQQ and complying with financial regulations. In this way, such new local contractors will not only be able to bid for the Factory 2 work, but also for work on other projects in both Essex and London -. In this way Swan will create a real opportunity for growth in the local economy.

Once quotations are received these will be input into the tender analysis which will be compiled and signed off through the DPS and commercial procedures process in line with Swan financial regulations and in accordance with its established financial authorisation limits. These will consider the need for all tender to prove full compliance with the designs and specifications required for both the establishment and operation of the new MMC factory – AND value for

money, in terms of the most economic and cost effective means of delivering / servicing the fit out and set up process.

Once full authorisation for placement of an order is given, the commercial procedures will be followed and copies of signed orders and collateral warranty's (where applicable) will go through the sign and seal process. Orders are placed using Swan's standard form of contract, standard form of appointment and purchase order (as applicable).

6.4. Key stakeholders:

Key Stakeholders, who have been supporting the development of the project, and will be keen to utilise the modular products flowing from the new factory, are:

- Basildon Borough Council
- Southend Borough Council
- Thurrock Council
- Invest Essex
- ASELA/Opportunity South Essex
- Homes England

Swan is already working with the Councils in Basildon, Southend and Thurrock on joint venture schemes within those areas, which will involve detailed and ongoing working relationships on a regular basis for the next few years. As a registered provider, it will also have a close working relationship with Homes England on a number of projects, and this will provide an opportunity for further engagement on this project into the future.

In terms of other stakeholders, potentially Invest Essex, ASELA / Opportunity South Essex, and all other local authorities in the Essex area, Swan will conduct a regular programme of communication, to ensure that they are aware of the establishment of the new factory, and the opportunities created by the new product, and the implication which this will have on future development schemes in the area, particularly those in urban settings where apartments and higher density development is required.

Swan will specifically be discussing potential development sites with Local Authorities, to identify where the new product can be utilised in order to reduce overall costs, deliver schemes quicker, achieve higher levels of quality / sustainability, and enable cost savings to be recycled into further affordable or social infrastructure.

With regard to Homes England, MMC is a key priority area for that organisation at the present time (as it is for the government) and Swan will be wanting to discuss the opportunity for a wider ecosystem of MMC manufacturing facilities, linked to education and training programmes, and R&D opportunities going forward.

6.5. Equality Impact:

An Equalities Impact Assessment (EqIA) will be produced for submission to SELEP, evaluating the proposal against the three main terms of the Public Sector Equality Duty. This will be illustrated on an evidential basis. Should there be any adverse impacts identified on groups with protected characteristics, appropriate mitigations will be put in place. These will be set out in an Equalities and Diversity Plan, identifying the measures that will be put in place. Particular principles to be applied will be:

- All project staff will be recruited in line with each partners equalities strategy;
- The project will be shared and peer reviewed and the plan will be regularly reviewed and updated if required;
- An equalities and diversity champion will be identified for the project.

Where specific issues are identified, targeted support will be given.

6.6. Risk management strategy:

Swan have undertaken a detailed risk assessment exercise and developed a risk management strategy through which risks will be continually monitored and reassessed as the project progresses.

6.7. Work programme:

The proposed Work Programme is set out in a Gantt Chart which will be continually monitored and updated during the course of the project.

The programme broadly anticipates that the project is currently underway in terms of the process design, specification of works required to the factory building, initial cost estimates and quotes, identification of the required premises and negotiations of lease terms, early applications for BOPAS accreditation / NHBC, and the preparation of an overall business plan for Board approval. It is anticipated that these works will run from August 2020 until around November 2020.

From this point the procurement of contractors, plant and machinery, consultants and other services, will be undertaken, with a view to construction / fit-out / set-up works commencing in March 2021. All fit-out works should be complete by September 2021, with an initial start of manufacturing anticipated by October 2021

6.8. Previous project experience:

Swan is an experienced housing / mixed use regeneration developer and contractor, having been operating in this sector for some 25+ years, within which the internal provision of professional services (particularly including project management) and the procurement of external services and contractors, is a fundamental part of its day to day business.

Swan have considerable experience in the tendering process and subsequently procuring selected contractors, suppliers and providers of services. They are also very experienced project managers.

In undertaking the tender and supply process, they have a dedicated procurement team with both the experience of setting up Factory 1 and procuring a range of other housing, mixed use and broader regeneration projects.

There have also been lessons learned from the establishment and operation of MMC Factory 1, on the adjoining site to the new facility – for example:

- The advantage of having an in-house design resource, which is already making a huge difference
- The most efficient factory layout, particularly the configuration of the manufacturing lines – for the most economic production process
- The need for more external storage space – which cannot, currently be provided, and is inhibiting the size of schemes being undertaken

- The range of different / important skills needed for the MMC process (compared with traditional construction skills), which has identified the need for the workforce to be trained / upskilled both initially and over time
- The importance of establishing “partnerships” with training providers, on a bespoke basis, in order to deliver the skilled workforce required to deliver the ultimate modules - Swan have already entered into an arrangement with the STC Group (a specialist provider of vocational training and recruitment solutions for young people / adults across Essex, London and the SE

6.9. Monitoring and evaluation:

The Monitoring and Evaluation report and the Baseline report are currently under consideration, and will be drafted and completed before the project is considered by SELEP in detail

This will reflect the Logic Map, which has been initially prepared, and is included over the page.

6.91 Logic Map

Objectives	Inputs	Outputs	Outcomes	Impacts
<p>Objective 1: Growth of jobs and diversification</p> <p>Objective 2: Green Recovery</p> <p>Objective 3: Modernising town and city centres</p> <p>Objective 4: Physical Infrastructure to improve local economy</p> <p>Objective 5: Developing an innovation ecosystem</p>	Grant Spend £4.53m	<p>A fully functioning, off-site steel fabricated modular factory – within the 116,841 sq ft GEA of recently constructed floorspace, which, in Option 3 (preferred) would running alongside existing factory 1 (timber modules)</p> <p>248 FTE gross operational jobs in MMC module production (124 net additional FTE jobs for South Essex, after adjusting for deadweight, leakage, displacement and multiplier effects)</p> <p>144 new learners assisted / trained</p> <p>Manufacturing of 2,500 steel fabricated building modules per annum (2,500 additional per annum compared to the Do nothing reference case)</p> <p>Manufacturing of 1,000 CLT (timber) fabricated building modules per annum by year 5 (280 additional per annum by year 5)</p>	<p>The wider creation of jobs and skills in the supply chain - appealing to a different / diversified demographic – compared to the traditional construction sector</p> <p>Reduced construction costs and improved viability on key public sector funded development projects</p> <p>Accelerated delivery of housing and the benefits resulting from Homes England funded regeneration schemes</p>	<p>Increasing capacity of modular housing production supply chain</p> <p>Developing labour pool trained in skillset needed for MMC</p> <p>Improving the pace of delivery of future housing schemes across the Thames Estuary</p> <p>Improving the long term efficiency / viability of modular housing as a construction method across the industry – leading to wide scale application</p> <p>Additional affordability / social infrastructure provision on Swan's housing developments</p> <p>Improved sustainability, leading to zero carbon (or potentially carbon negative) communities</p> <p>Advances in both the MMC production / installation process and the range of materials used, through ongoing R&D and project evaluation</p>

7. DECLARATIONS

<i>Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?</i>	Yes / No
<i>Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors</i>	Yes /No
<i>Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?</i>	Yes / No

**If the answer is "yes" to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.*

I am content for information supplied here to be stored electronically, shared with the South East Local Enterprise Partnerships Independent Technical Evaluator, Steer Davies Gleave, and other public sector bodies who may be involved in considering the business case.

I understand that a copy of the main Business Case document will be made available on the South East Local Enterprise Partnership website one month in advance of the funding decision by SELEP Accountability Board. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption, as stated in Appendix G.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix G) they should provide a separate version of the main Business Case document to SELEP 6 weeks in advance of the SELEP Accountability Board meeting at which the funding decision is being taken, which highlights the proposed Business Case redactions.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend of Local Growth Fund must be compliant with the Grant Conditions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

<i>Signature of applicant</i>	
<i>Print full name</i>	
<i>Designation</i>	

APPENDIX A – ECONOMIC APPRAISAL ASSUMPTIONS

Appraisal Assumptions	Details
Guidance followed	HM Treasury Green Book 2018 MHCLG Appraisal Guidance 2016 Supplementary guidance to the Green Book on Optimism Bias (Mott MacDonald, 2002) BIS Occasional Paper 1 on Additionality, 2009
QRA and Risk allowance	QRA done and risk allowance included (see Financial Case)
Real Growth	All costs and benefits in constant 2020/21 prices – use of GDP deflator (to ensure GVA benefits in 2020/21 prices) is shown for in Appraisal Tool
Discounting	Social Time Preference Rate of 3.5% (Green Book)
Sensitivity Tests	Two tests applied to Option 3 (preferred option): test (i) +7.5% on costs and -test (ii) +7.5% on costs and -35% on the net additional monetised benefits of Option 3
Additionality	Ready-reckoners for leakage, displacement and multipliers from BIS Occasional Paper 1 (at sub-regional level, activity category: Individual Business Support
Administrative costs of regulation	Not assessed
Appraisal period	2020/21 to 2024/25 as per SELEP guidance
Distributional weights	Not assessed
Employment	Sources and methods detailed in Economic Case – see also detailed derivation in Appraisal Tool
External impacts of development	Not assessed
GDP	Sources and methods detailed in Economic Case – see also detailed derivation in Appraisal Tool
House price index	n/a
Indirect taxation correction factor	n/a
Inflation	Costs and benefits in constant 2020/21 prices; costs based on quotes and capital expenditure is not anticipated to be subject to inflation given the short period of expenditure
Land value uplift	Not assessed – See Section 3 for justification
Learning rates	Number of learners assessed, but no assessment made of impact on learning outcomes for the sub-region
Optimism bias	Assessed – see Annex E, following Supplementary Guidance to the Green Book
Planning applications	Planning application to be submitted to Basildon Council
Present value year	2020/21
Private sector cost of capital	N/A – not-for-profit organisation
Rebound effects	Not assessed
Regulatory transition costs	Not assessed

APPENDIX B - FUNDING COMMITMENT

Draft S151 Officer Letter to support Business Case submission

Dear Colleague

In submitting this project Business Case, I confirm on behalf of [Insert name of County or Unitary Authority] that:

- The information presented in this Business Case is accurate and correct as at the time of writing.*
- The funding has been identified to deliver the project and project benefits, as specified within the Business Case. Where sufficient funding has not been identified to deliver the project, this risk has been identified within the Business Case and brought to the attention of the SELEP Secretariat through the SELEP quarterly reporting process.*
- The risk assessment included in the project Business Case identifies all substantial project risks known at the time of Business Case submission.*
- The delivery body has considered the public-sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision-making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.*
- The delivery body has access to the skills, expertise and resource to support the delivery of the project*
- Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting*
- The project will be delivered under the conditions in the signed LGF Service Level Agreement or other grant agreement with the SELEP Accountable Body.*

I note that the Business Case will be made available on the SELEP website one month in advance of the funding decision being taken, subject to the removal of those parts of the Business Case which are commercially sensitive and confidential as agreed with the SELEP Accountable Body.

Yours Sincerely,

SRO (Director Level)

S151 Officer

APPENDIX C – RISK MANAGEMENT STRATEGY [Table not included]

APPENDIX D – GANTT CHART (not included)

APPENDIX E – OPTIMISM BIAS AND SENSITIVITY TEST SPECIFICATION

A formal Optimism Bias assessment has been conducted for the project, following HM Treasury Green Book and MHCLG guidance.

The first step in the Optimism Bias assessment is to classify the project. For the purposes of this assessment, the project has been classified as “Standard Building”.

On this basis, the unmitigated upper bound Optimism Bias for Works Duration is 4% and for Capital Expenditure it is 24%.

Figure OB.1 shows the factors contributing to Optimism Bias. It draws on research evidence by Mott MacDonald presented in the Supplementary Green Book Guidance (2002) on the extent to which different factors contribute to Optimism Bias in relation to both works duration and capital expenditure.

The second step in the OB assessment is to assess the level of mitigation which has been achieved in relation to each of these factors. The level of mitigation would be expected to increase the more advanced the project is in relation to its development and appraisal. The comments show how these mitigation factors have been assessed.

Figure OB.2 shows how these mitigation factors are then applied to assess the level of unmitigated Optimism Bias in relation to capital expenditure. This is found to be 7.4% (down from an unmitigated OB of 24%).

This has been used to adjust the PV of net costs for the purposes of the BCR calculation in the Economic Case (Section 3).

Figure OB.3 shows how these mitigation factors are then applied to assess the level of unmitigated Optimism Bias in relation to works duration. This is found to be 0.8%. Given that the construction/fit-out period will be very short, the potential delay due to Optimism Bias is considered de minimis for appraisal purposes and has not been incorporated into formal sensitivity testing.

Unfortunately, no evidence exists on Optimism Bias as it relates to project benefits. However, as Figure OB.1 makes clear, the principal areas that cannot be mitigated at present relate to Economic factors and Regulations, which would include those associated with Covid-19.

As many commentators, including the Bank of England, have already commented, it is not possible to accurately forecast the current impact of Covid-19 at the present time. The switching value calculation has already demonstrated that benefits would need to fall by almost two thirds (64%) before the BCR would fall below 1.5 in Option 3. A separate sensitivity test has been conducted (post-BCR calculation) to demonstrate the impact on the BCR of a 35% reduction in the level of net additional benefits generated by the project within the SELEP appraisal timescale. This is considered a “reasonable worst case” given the current uncertainty around Covid-19 and its potential impact both on demand for housing and potential impacts on site during the five year period.

Figure OB.1: Optimism Bias Contributory Factors & Mitigation Assessment – Standard Building

Figure OB.1: Optimism Bias Contributory Factors & Mitigation Assessment – Standard Building					
Project Type (note 1)		Standard Building		Proposed Mitigation Factor	Justification For Mitigation factor
Upper Bound		Works Duration	Capital Expenditure	(%)	
Optimum Bias					
(note 1)					
Risk Area Contributions to Recorded Optimism Bias (%)		4%	24%		
Procurement	Complexity of Contract Structure	1%	-	98%	No novel contract structures will be used for construction contract
	Late contractor involvement in design	3%	2%	85%	Many quotes have already been obtained and the nature of the works can be readily costed. The mitigation factor can be increased further once the project has been formally tendered.
	Poor Contractor Capabilities	4%	9%	70%	Adequate procurement periods have been allowed for in the project programme to procure a suitably capable contractor.
	Government Guidelines	-	-	-	N/A
	Dispute and Claims Occurred	4%	29%	75%	Disputes likely to be limited to landlord of Factory 2 (regarding building alterations) or to suppliers regarding works done. These can be mitigated with effective communication, good design input and effective project management. Nevertheless, these cannot be mitigated until contracts are signed.
	Information management	-	-	-	N/A
	Other (specify)	-	-	-	N/A
Project Specific	Design Complexity	3%	1%	95%	Alterations to existing building. No complexity in design
	Degree of Innovation	1%	4%	90%	No innovative design features which would impact on alterations, but some unmitigated OB allowed for in relation to plant/production equipment
	Environmental Impact	-	-	-	N/A
	Other (specify)	-	-	-	N/A
Client Specific	Inadequacy of the Business Case	31%	34%	85%	Business case has been developed in close co-operation with Sw an using their own business planning assumptions. Sense-checked by SQW, supporting Sw an and subject to third party due diligence (Essex County Council and STEER) as part of decision-making process.
	Large Number of Stakeholders	6%	-	-	N/A for capex
	Funding Availability	8%	-	90%	Rigorous process underway to support fund application to SELEP. GBF budget is available; Sw an NuLiving Board are in favour of the project proceeding to business case stage based on business planning assumptions
	Project Management Team	-	1%	80%	Dedicated factory 2 management team will be in place to oversee the alterations and the transition to Factory 2
	Poor Project Intelligence	6%	2%	95%	The factory sits within a vertically integrated supply chain intimately linked to the developer and ultimate end users. This means that factory managers are not relying on third party market intelligence relating to demand and design, but output is driven directly by development activity on the ground.
	Other (specify)	-	<1%	50%	
Environment	Public Relations	8%	2%	95%	Alterations to vacant factory premises in Basildon, contributing to a national policy agenda around MMC and providing job opportunities which will contribute to the Covid-19 economic recovery process. There is limited scope for poor PR and many opportunities for good PR for Basildon and South Essex.
	Site Characteristics	5%	2%	95%	Minor alterations and fitting out to an existing factory building which has already been surveyed by Sw an. Existing condition known and factored in to cost planning
	Permits / Consents / Approvals	9%	-	75%	Planning application for the alterations does need to be secured and has not yet been submitted, but Basildon Council are the LPA, the alterations are non-contentious and it is felt that this area offers little risk to major delays.
	Other (specify)	-	-	-	N/A
External Influences	Political	-	-	-	N/A
	Economic	-	11%	0%	Market risk linked to Covid-19 means that this has been left unmitigated at this stage, due to the possibility of a second wave which delays the alterations/fit-out or supply of key plant and/or leads to construction restrictions on sites which diminish demand for factory outputs.
	Legislation / Regulations	9%	3%	0%	Will depend on Covid-19 secure working restrictions as we exit lockdown. Not mitigated at this stage
	Technology	-	-	-	N/A
	Other (specify)	-	-	-	N/A

Figure OB.2: Optimism Bias Summary Table for Capital Expenditure

Figure OB.2: Optimism Bias Summary Table for Capital Expenditure					
Project Type				Standard Building	
(a)	Estimated Cost			100%	£4,426,021
(b)	Upper bound Optimism Bias			24%	
	Risk Area	Gross Contribution to optimism	Mitigation factor (%)	Net Contribution (%)	
	Late contractor involvement in design	2%	85%	0.3%	
	Poor Contractor Capabilities	9%	70%	2.7%	
	Dispute and Claims Occurred	29%	75%	7.3%	
	Design Complexity	1%	95%	0.1%	
	Degree of Innovation	4%	90%	0.4%	
	Inadequacy of the Business Case	34%	85%	5.1%	
	Project Management Team	1%	80%	0.2%	
	Poor Project Intelligence	2%	95%	0.1%	
	Other (specify)	1%	50%	0.5%	
	Public Relations	2%	95%	0.1%	
	Site Characteristics	2%	95%	0.1%	
	Economic	11%	0%	11.0%	
	Legislation / Regulations	3%	0%	3.0%	
(c)	Total % by which upper bound OB can be mitigated			69.2%	
(d)=bxc	Less mitigated Optimism Bias contribution (%)			16.6%	
(e)=b-d	Unmitigated Optimism Bias (%)			7.4%	
(f)	Cost of risk management (% of base cost)			0% (base costs include contingency already)	
(g)=e+f	Total Optimism Bias %			7.4%	
(h)=a+e+f	Base Cost adjusted for total mitigated Optimism Bias (%)			107.4%	
(i)=hxa	PV of Base Cost adjusted for total mitigated OB			£4,753,193	

Figure OB.3 Optimism Bias Summary Table for Works Duration

Figure OB.3 Optimism Bias Summary Table for Works Duration					
Project Type				Standard Building	
(a)	Estimated Works Duration			100%	4
(b)	Upper bound Optimism Bias			4%	
	Risk Area	Gross Contribution to optimism	Mitigation factor (%)	Net Contribution (%)	
	Complexity of Contract Structure	1%	98%	0.0%	
	Late contractor involvement in design	3%	85%	0.5%	
	Poor Contractor Capabilities	4%	70%	1.2%	
	Dispute and Claims Occurred	4%	75%	1.0%	
	Design Complexity	3%	95%	0.2%	
	Degree of Innovation	1%	90%	0.1%	
	Inadequacy of the Business Case	31%	85%	4.7%	
	Funding Availability	8%	90%	0.8%	
	Poor Project Intelligence	6%	95%	0.3%	
	Public Relations	8%	95%	0.4%	
	Site Characteristics	5%	95%	0.3%	
	Permits/consents	9%	75%	2.3%	
	Legislation / Regulations	9%	0%	9.0%	
(c)	Total % by which upper bound OB can be mitigated			79.4%	
(d)=bxc	Less managed Optimism Bias contribution (%)			3.2%	
(e)=b-d	Unmitigated Optimism Bias (%)			0.8%	
(f)	Cost of risk management (% of base cost)			0% (base costs include contingency already)	
(g)=e+f	Total Optimism Bias %			0.8%	
(h)=a+e+f	Estimated Works Duration adjusted for total mitigated OB %			100.8%	
(i)=hxa	Estimated Works Duration adjusted for total mitigated OB			4.03	months

APPENDIX F & G – LETTERS OF SUPPORT (not included)