

Somerset West and Taunton Council

Full Council – 7 July 2020

Zero Carbon Affordable Homes Pilot

This matter is the responsibility of Executive Member for Housing, Councillor Francesca Smith

Report Author: Chris Brown, Assistant Director Housing Development and Regeneration (Interim)

1 Executive Summary / Purpose of the Report

- 1.1 In 2019, the Council declared a climate emergency and committed to working towards achieving carbon neutrality and climate resilience by 2030. As a result SWT is developing policies and delivering actions to reduce the pace of climate change. In 2020 the Council agreed a Housing Revenue Account (HRA) 30 year Business Plan. This plan included an ambition to develop 1000 new affordable homes for the HRA over 30 years. These ambitions have been joined in this proposed pilot scheme to build up to fifty (50) zero carbon council homes and create a blueprint for future affordable housing developments in the District.

2 Recommendations

- 2.1 The Executive Committee makes the following recommendations to Full Council:

- (a) Approve the development of up to fifty (50) Zero Carbon Affordable Homes.
- (b) Allocate a Zero Carbon Affordable Homes Capital budget of £10.8m to deliver up to fifty (50) new homes which will include Right to Buy Receipts on all eligible units plus additional borrowing. This comprises a supplementary capital budget increase of £9.3m and a transfer of £1.5m from the social housing development budget within the existing approved capital programme.
- (c) Support the use of underused SWT garage sites and one temporary housing site for new zero carbon affordable homes.
- (d) Delegate authority to the Housing portfolio Holder and Director of Housing and Communities, in consultation with the Assistant Director – Finance (Section 151 Officer), to sign off the plans for each site.
- (e) Delegate authority to the Housing portfolio Holder and Director of Housing and Section 151 Officer to determine the final funding profile for this scheme once the development plans of each individual site has been finalised to identify which elements qualify for RTB

funding.

- (f) Note the use of affordable rents for new build HRA homes in line with the 2020 Rent Setting Policy. The affordable rents will be set to ensure scheme viability at between 60% and 80% of market rent.
- (g) Agrees to suspend investment and letting of garages on the identified sites and support the negotiation of alternative garage accommodation for garage tenants and garage owners, and where required the Director of Housing and Communities negotiate and complete the purchase of privately owned garages.

3 Risk Assessment

3.1 The key risks associated with this project are:

Risk	Score out of 25 based on probability x impact	Mitigation
Insufficient market interest to engage in the tender process.	8 (probability 2 x impact 4)	To mitigate this a pre tender questionnaire has been sent to procurement framework members to understand interest and ability to support essential client requirements. The Council will promote the tender opportunity more widely should insufficient interest be shown.
The number of units reduces due to site anomalies	5 (probability 5 x impact 1)	The pilot has identified seven sites with the capacity to deliver circa sixty (60) units. In the case of fewer than fifty (50) homes the pilot would retain its purpose and benefit.
The blend of house types and sizes may change	3 (Probability 3 x impact 1)	The final blend will be agreed through the planning process. The current blend is weighted to large homes (inc.15x4bed) and pilot includes 4 fully wheelchair accessible unit. The final blend will be agreed through the planning process but the current mix has been included in the costs
Right to Buy Receipts must be used within three years to avoid payment back to Government with interest	8 (probability 4 x impact 3)	The Council has requested, with other authorities an extension to the requirement to spend RtBR within the three year one for one agreement as the Covid lockdown restricted the council's ability to progress developments and buy backs. The scheme will still draw on RtBR if the government does not support our request however officers energies and some HRA capital investment will be diverted to acquiring homes from the market
Twelve (12) temporary accommodation units will be cleared to create	6 (probability 3 x impact 2)	This site is likely to be developed in 2021-2023. Accommodation through lease arrangements with the HRA will be

Risk	Score out of 25 based on probability x impact	Mitigation
a scheme circa 20 units The 12 units may not be eligible for subsidy.		achievable to ensure homelessness provision is maintained. The scheme has included within £10.8m all costs for developing the scheme.
Timescale could slip - The timeline for delivering the first homes is very ambition especially to complete a comprehensive procurement process and gain planning permissions.	15 (probability 5 x impact 3)	A number of consultants have already been appointed and discussions with procurement and procurement frameworks. Early discussions have taken place with planning however site are likely to be assessed by planning as a separate applications. The delivery of the 50 units will be split into 2 Lots and 3 phases which provides some opportunity for staggering planning and highway approvals. Off-site manufacture should reduce the on-site delivery time.

4 Background and Full details of the Report

- 4.1 The Zero Carbon Affordable Homes pilot aims to build up to fifty (50) low carbon affordable homes within thirty (30) months.
- 4.2 The pilot will provide the opportunity for learning and a specification to support future SWT low carbon developments and in particular low carbon affordable housing.
- 4.3 Seven (7) sites have been identified for these homes including six (6) garage sites identified through the garage site review. The seventh and largest site is currently used for the provision of temporary accommodation.
- 4.4 The sites are all in SWT ownership although circa 6 garages have been previously sold and require purchase through negotiation with the owners.
- 4.5 The planning process will consider any necessary garage/parking re-provision which may be required due to the loss of garage sites. However many garages are not used for vehicles and some re-provision is possible within alternative SWT garage sites.
- 4.6 The pilot will need to ensure the re-provision of accommodation to compensate for the loss of twelve (12) units of temporary accommodation. This could be achieved through off site lease or purchase arrangements.

The proposed development sites

- 4.7 The garage site review is looking at 146 SWT garage sites. Around twenty (20) sites have been identified to date with development potential. These sites are either underused, require investment and/or are causing blight.
- 4.8 Many of these are small and difficult sites to develop but the pilot provides an opportunity for SWT to retain the assets and reuse land for a new purpose. The garage sites vary in their potential and their site constraints. Appendix 1 shows the six garage sites

proposed for redevelopment and their ranking within the garage site review.

4.9 Garage site constraints include:

- being of a small size and less inviting for development contractors
- trees and buried services
- more costly to develop as build economies are difficult and more infrastructure and site set up works are required
- there are privately owned garages within the Council-owned sites
- sites may be overlooked from neighbouring properties or subject to previously granted access rights restrict land use
- little or no room for construction site compounds
- narrow access to the sites
- many of these sites will not be suitable for traditional building methods

4.10 The Council owns land and twelve properties, including eight (8) poor quality prefabricated homes and 4 small one bed units, at Sneddon Grove, Taunton. This site has some site constraints including maturing trees and current service layout. The properties are occupied as temporary accommodation and alternative temporary or permanent accommodation would be required though or outside of the scheme. Recently the Council has increased its supply of temporary accommodation and time is available to manage licences to allow the site to be developed.

4.11 Although the seven sites have the potential for circa 60 units it is envisaged the pilot will be constrained to fifty (50) or fewer dwellings or the blend of dwellings may change due to site constraints.

Building Zero Carbon Affordable Homes

4.12 Zero carbon homes are becoming more common and the technology to build low carbon homes using traditional or off site manufacturing techniques is becoming better understood.

4.13 SWT has been exploring off-site manufacture able to meet the Council's carbon neutral ambition. The Council is not committed to off-site construction to deliver zero carbon homes however on some sites new methods of construction are better suited. Off-site manufactured homes can be delivered quicker than traditional housing as the site preparation and build process can take place simultaneously.

4.14 Officers believe that off-site manufactured units or panellised systems could be better suited to managing some of the garage site complexities and provide an opportunity to deliver more units on sites which have otherwise low development potential.

4.15 It is intended to deliver up to fifty (50) affordable homes for rent. The final mix of unit types and sizes will emerge through the ongoing site assessment studies, procurement and planning processes.

4.16 The current financial appraisal is heavily weighted in favour of larger units and includes 4 fully wheelchair accessible homes. The starting assumption is:

- 5 x 1 bed flats
- 14 x 2 bed flats
- 12 x 2 bed houses

- 4 x 3 bed houses
- 15 x 4 bed houses
- 4 of the above units are proposed to be fully wheelchair accessible.

Developing a low carbon standard for SWT

- 4.17 Most low carbon exemplar schemes focus on a fabric first (well insulated, air tight homes requiring little energy to heat) and renewable heat and energy often from on-site technology.
- 4.18 These qualities produce great homes for the user and require little energy to heat. The SWT zero carbon affordable homes pilot aims to deliver dwellings which are carbon neutral when occupied.
- 4.19 However, the pilot seeks to go further and develop its knowledge in relation to Net Zero Carbon Homes. Net Zero Carbon Homes are homes which are not only carbon neutral during their occupation but also in their manufacture and disassembly. A Net Zero Carbon Home is therefore a much bigger challenge than a zero carbon home as we need to measure and develop an understanding of the use of carbon in the materials, transportation of materials and labour, construction, maintenance and reuse of components or materials.
- 4.20 With the decarbonisation of the grid on-site renewable energy will reduce in importance in delivering zero and net zero homes and considerations in relation to the materials, transportation of materials and construction processes will increase in importance to climate change.
- 4.21 Understanding carbon capture and energy use in the construction of homes is less well understood and we aim to develop SWTs understanding during the delivery of these homes.
- 4.22 To understand the performance of homes ongoing data collection and analysis is required. One of the aims of the pilot is to incorporate a data collection rigour which will allow the carbon and energy performance be measured and therefore allow the council to evidence carbon and cost benefits. Ensuring the council is able to evidence carbon and fuel benefits will increase the opportunity for customers and development partners to support and adopt a higher standard.
- 4.23 The pilot will contract an energy advisor to develop our capacity to measure carbon and energy and a longer term project, ideally with local colleges linked to a university, will be run to help collect and analyse data to evidence low carbon living benefits when the homes are occupied
- 4.24 As each site is developed it is intended to create temporary show homes to help promote low carbon living. It is envisaged that the show homes would support SWT climate change awareness events and opportunities to support school and college curriculums.
- 4.25 The pilot seeks to develop an approach to low carbon which considers a broad range of carbon and energy factors through benchmarking alternative tender proposals against the London Energy Transformation Initiative (LETI) standard.
- 4.26 The LETI standard is one of several standards which the council has considered but is unique in its emphasis on the use of carbon and energy in the use of materials and construction of the house and in the rigor of collecting data to evidence carbon and

energy savings. A summary diagram of the LETI standard can be found in Appendix 2.

4.27 The LETI standard considers four (4) key criteria:

- Carbon capture and energy use in the manufacture/construction of homes
- Fabric first / well insulated and air tight buildings
- Renewable heat and energy
- Data collection and analysis

4.28 In addition to benchmarking against the LETI model the programme will be guided by the Taunton Garden Town principles and SWTs Design Guide and Checklist.

Procurement

4.29 A traditional development approach would tend to require the development of a client specification, progress planning permission and then procure a development partner to deliver the specification. The pilots approach is to recognise that offsite manufacturers tend to have a single or limited number of products which vary in quality and characteristic. Therefore we need to engage with manufacturers and test their product qualities before appointing.

4.30 The pilot is therefore seeking to use a competitive dialogue procurement process. This procurement approach allows a two stage tendering process where a short list of contractors is created after an initial tender process. The initial procurement stage usually allows two or three strong contractors to enter a conversation with the client to explore their offer in more detail for example through site visits, additional examination of their products, materials and approach. A second procurement stage will lead to a lead contractor(s) being appointed.

4.31 The use of a competitive dialogue process will allow SWT to be better able to measure bidders against the LETI benchmark standard. The procurement process will also require certain quality hurdles to ensure the form first approach retains prominence for example thermal insulation values.

Rents for new build zero carbon homes

4.32 The Council wishes to retain flexibility over setting affordable or social rents to ensure homes are truly affordable to those in housing need whilst ensuring new housing schemes are financially viable. Appendix C contains more information about affordable rents and how they would be applied.

4.33 The approved HRA rent setting policy April 2020 provides the following guidance on rent charges for new homes. The guidance does not recognise the additional cost savings to the tenant of Zero Carbon Homes over the benefits in quality and thermal efficiency of a modern new home which achieves build regulation standards of thermal comfort.

HRA Rent Setting Policy

4.34 The Council has the option to charge an affordable rent for all new build properties. Affordable rents are set at up to 80% of the market rate inclusive of service charges but must not exceed Local Housing Allowance (LHA) rates. In exceptional cases wheelchair adapted properties are set at rents higher than the LHA with the assumption the additional rent will be covered through other welfare income.

- 4.35 Affordable rents need to be periodically rebased to ensure they continue to reflect the market rent. The market rate will vary from property to property, but cannot exceed 80% of the equivalent market rent for the property. In determining the market rate, we will consider affordability in the local area and viability of any new build housing schemes. The market rate will typically range between 60% and 80%.
- 4.36 Any decision to apply an affordable rent at less than 80% of market rate will be made after completion of an affordability and viability review and will be subject to approval by the Director of Housing. The new homes will be reappraised prior to homes being advertise to ensure the final rent supports the schemes costs but conforms to the parameters of the rent setting policy.

What benefits will the Council gain as a result of this pilot?

- 4.37 The council will benefit from:
- Up to 50 Zero Carbon Council owned and managed homes which are close to Passivhaus standard (high quality low carbon homes)
 - 50 HRA affordable rented homes with on-site renewable heating and energy (no gas)
 - Neighbourhoods where SWT's Garden Town and Design Guide and checklist have been applied
 - Better use of Council assets and the removal of some blighted sites
 - A build specification that is capable of being used or adapted to future council affordable housing schemes
 - An investment solution to resolve poor quality temporary accommodation
 - Test the alignment of planning and housing in the delivery of low carbon homes
 - The collection of a significant amount of knowledge gained through the delivery of the schemes and applied to the pipeline of council developments
 - A number of challenges which the council will need to consider to sustain its zero carbon ambition and move towards a net zero carbon homes. Some of these may also come forward within the pilot:

Key Milestones

- 4.38 The timescales proposed are ambitious. Officers have appointed a number of contractors to support feasibility work including engineers to survey the sites, architects and an EA to prepare initial tendering briefs with the council and site capacity drawings.
- 4.39 Next Steps
- July – procurement of energy consultant
 - Pre application planning discussions June/July
 - July onwards - Consultation with garage tenants and negotiation with garage owners to purchase or swap their garages
 - July procurement of architect
 - August – commence procurement of main contractors potentially through a competitive dialogue process with site visits
 - September – November - Main contractor appointment
 - December 2020 – April 2021 - Planning permission progressed
 - April – July - Start on site and off site construction phase 1 – 4-6 month programme

- Phases 2 and 3 follow including reducing the use of Sneddon Grove for temporary accommodation and providing suitable accommodation in other localities.

5 Links to Corporate Strategy

- 5.1 In 2019, the Council declared a climate emergency and committed to working towards achieving carbon neutrality and climate resilience by 2030. The development of low carbon affordable homes in the District has been identified in the Somerset Climate Change action plan.
- 5.2 In 2020 the Council agreed the HRA 30 year business plan. The business plan included the commitment to build 1000 council homes over 30 years.

6 Finance / Resource Implications

- 6.1 Members are being asked to approve a £10.8m capital budget to fund the delivery of up to 50 new zero carbon homes to be let at an affordable rent.
- 6.2 This scheme fully supports the aspiration to deliver 1,000 new homes into the community over the next 30 years as seen in the HRA 2020 Business Plan that was approved in February 2020, as well as working towards the Council's commitment of achieving carbon neutrality by 2030.
- 6.3 The estimated cost to deliver these 50 units is higher than the development costs previously estimated within the Business Plan and consequently increases the expected capital development costs by approximately £3.5m. This premium, however, will be affordable if Members approve to let these units at an 'affordable rent' based on between 60% to 80%. The application of affordable rent, as opposed to social rent, is slightly compensated as these zero carbon homes will provide lower running costs and a larger living space footprint for the tenants than the market would provide. The application of affordable rent will also help to maximise future rental income for the Housing Revenue Account (HRA) to increase the probability that the remaining new build aspirations are affordable and viable in the long term, as highlighted in the Business Plan report. The Business Plan originally estimated social rent income for all new builds and acquired properties.
- 6.4 As indicated in section 4, key milestones, the scheme is likely to start incurring provisional costs such as planning during 2020-21 with the first delivery of new homes anticipated in the summer of 2021-22 and final delivery during 2022-23. A high level estimated spend profile per year is in Table 1 below. Due to this planned profile of spend, £1.5m (funded 30% by RTB capital receipts and 70% by borrowing) will be utilised from the existing 2020/21 capital budget of £6.898m approved in February 2020, with the remainder of the £10.8m requested as a supplementary budget.

6.5 Table 1: Estimated Spend Profile

	£k
2020-21	1,500
2021-22	5,000
2022-23	4,300
Total	10,800

- 6.6 The total development cost of £10.8m includes an allowance for buying back garage plots previously sold to private ownership, as well as a contingency of 10% on fees and

6% on Works. At appendix D a summary of financial considerations can be found . However there is still a risk that the financial cost of this scheme may change as the project progresses (if approved), for example from a procurement perspective we do not know how COVID-19 will impact the market and the availability of the products / materials required for this type of build and the pricing of those products / materials. The investment appraisal also makes assumptions with regards to rates of inflation and the cost of borrowing which may change in reality. Therefore the costs of delivering each site will need to be reviewed in light of the project as a whole as the scheme progresses through each phase.

- 6.7 This scheme also supports the Right To Buy (RTB) 'one-for-one' spend requirements where the Council needs to spend approximately £3.8m in 2021/22 and £7.7m in 2022/23 to avoid returning some the receipts to the Treasury. This scheme will be able to contribute towards that spend requirement and means that up to 30% of the project costs could be funded from existing RTB capital receipts with the remainder being funded by borrowing. The final funding profile for this scheme will be determined and approved by the Section 151 Officer once the development plans of each individual site has been finalised to identify which elements qualify for RTB funding. Whilst this scheme alone does not fully meet the 'one-for-one' spend requirements this does fulfil a large proportion of this requirement with the remaining planned to be met from other existing schemes such as the North Taunton Woolaway project.
- 6.8 The cash flow forecast within the investment appraisal for this scheme assumes full tenancy at affordable rent net of void / bad debt provision, maintenance, service costs, management costs, major repairs and interest payments (net of RTB contribution) over the next 60 years.. It assumes full RTB capital receipt funding at 30% with the remaining funded through borrowing at 3.5% (as per the business plan). The discounted cash flow analysis of this scheme returned a positive internal rate of return (IRR) and a positive Net Present Value (NPV) after interest, indicating that the financial return generated by this project over the long term is higher than the implementation costs thus indicating scheme viability. In comparison, we also modelled this on social rents which resulted in a negative NPV which means that the business plan would have to financially support this scheme for at least the next 60 years. The Business Plan also maintains a reasonable provision of Interest Rate Cover when adjusting the cost per unit for the 50 units and forecasting affordable rent income.
- 6.9 In terms of affordability to the Housing Revenue Account, the development should be affordable in the longer term and deliver a positive impact on the ongoing annual revenue budget implications after an initial period of net costs due to financing costs. The projections suggest that net income after assumed interest payments is positive and increases thereafter from estimated inflationary increases on affordable rents. The investment appraisal then assumes a contribution to the major works capital programme from Year 7 onwards, reflecting the need to maintain the properties as they age, and this still continues to deliver a positive net income

7 Legal Implications (if any)

- 7.1 None identified in this report.

8 Climate and Sustainability Implications

- 8.1 The Zero Carbon Affordable Housing Pilots will evidence the council commitment to tackling climate change. The use of the LETI model to benchmark its low carbon homes shows a commitment to a Net Zero Carbon target.

- 8.2 The development of zero carbon homes in the District will grow SWTs knowledge which can then be applied to other HRA and corporate initiatives.
- 8.3 The development of zero carbon show homes will promote low carbon living and increase the opportunity to engage with customers and partners.

9 Safeguarding and/or Community Safety Implications (if any)

- 9.1 The pilots include the use of under used garage sites some of which cause blight.
- 9.2 There are no safeguarding implications.

10 Equality and Diversity Implications (if any)

- 10.1 The pilot has considered the districts housing needs. The homes will all be rented at affordable rent levels.
- 10.2 The blend of homes has been weighted in favour of larger homes including fifteen four (4) bedroom homes. Four (4) of the fifty (50) homes will be fully wheelchair accessible.

11 Social Value Implications (if any)

- 11.1 The procurement process will consider the additional contractors can contribute in terms of social value in particular local labour, use of local contractors and supply chain.
- 11.2 The LETI approach encourages the use of local material and labour to minimise carbon and energy used in the construction of homes.

12 Partnership Implications (if any)

- 12.1 Establishing low carbon exemplar housing in the District will show commitment and leadership within SWTs affordable housing partnership.

13 Health and Wellbeing Implications (if any)

- 13.1 Zero carbon homes which are well insulated, have good levels of airtightness and use mechanical ventilation systems are considered healthy homes. The construction methods remove the opportunity for condensation and damp. Fuel poverty is reduced where onsite renewable energy is incorporated and a fabric first approach is adopted.
- 13.2 A number of homes will be fully wheelchair accessible to allow greater independent living for families.

14 Asset Management Implications (if any)

- 14.1 The pilot proposes to make better use of underused council garage sites and replace twelve (12) poor quality prefabricated units with circa twenty two (22) high quality Zero carbon homes

15 Data Protection Implications (if any)

- 15.1 No data protection considerations

16 Consultation Implications (if any)

- 16.1 Consultation will be required with tenants and owners of garage sites and adjacent

properties.

- 16.2 Temporary accommodation customers living at Sneddon Grove will be informed about the council's intention however temporary tenancies typically last between a few months and a year. This means that at a certain point in time no new licences will be granted and a natural vacation of homes will take place. The council will ensure alternative accommodation is available has recently secured more homeless accommodation which could also be utilised.

17 Scrutiny Comments / Recommendation(s) (if any)

(To be included usually in reports which are submitted for consideration by the Executive or Full Council.)

Democratic Path:

- **Scrutiny Committee – No**
- **Executive – Yes**
- **Full Council – Yes**

Reporting Frequency: Once only

List of Appendices

Appendix A	Sites identified with development potential ranked according to the development criteria (CONFIDENTIAL)
Appendix B	London Energy Transformation Initiative Standard (Small Homes)
Appendix C	Affordable rents to support new council affordable homes (CONFIDENTIAL)
Appendix D	High Level Budget Impact Forecast of the Zero Carbon Affordable Home In Comparison to the 2020 HRA Business Plan (CONFIDENTIAL)

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