



Non Traditional Homes Strategy

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Non Traditional Homes Strategy

ECONOMY

Help local people and businesses grow the local economy and increase employment

AFFORDABLE HOUSING

Provide affordable, decent and social housing

ENVIRONMENT

Help the community minimise its carbon footprint, adapt to climate change and recycle more

RESOURCES

Provide value for money to our taxpayers and high quality services to our customers

HEALTH AND WELLBEING

Promote the health and wellbeing of our communities and work with others to deliver the public health agenda

Contents

1.1	Introduction.....	1
2.1	HISTORICAL CONTEXT.....	1
3.1	BACKGROUND.....	2
3.1	WHY THE STRATEGY IS IMPORTANT.....	3
4.1	PROPERTY DATA AND PERFORMANCE.....	4
5.1	CHALLENGES.....	4
6.1	RISKS.....	5
7.1	DRIVERS.....	5
8.1	STRATEGIC LINKAGE.....	6
9.1	FUTURE PROOFING.....	6
10.1	BARRIERS TO CHANGE.....	6
11.1	CONSULTATION AND DELIVERY PLAN.....	7
12.1	VISION.....	7
	APPENDIX A.....	8
	APPENDIX B.....	9

Appendix C - Property Obsolescence Procedure Guide at Appendix 2 of the report.

1.1 Introduction

- 1.2 Not many things affect our tenants lives more than the homes we provide, and the investment we make in those homes and in our communities. Effective, efficient management of our assets is crucial for us to meet both our business objectives and our tenants' expectations.
- 1.3 Much more than simply "bricks and mortar", Stroud's Assets play a key role in shaping the social, environmental and economic wellbeing of our local communities, influencing the quality of life for local people.
- 1.4 The environment in which we operate has changed, and remains uncertain. We must therefore have robust plans in place to ensure we are able to meet, and react to these challenges as they arise.
- 1.5 To help meet these challenges Stroud District Council recognises the need to have a greater understanding of the long term financial value and performance of all of its assets. Stroud has embraced the principles of effective asset management, and recognises the importance associated with maintaining effective stock condition and attribute information.
- 1.6 The assessment of sustainability and future options for poorly performing stock, effective procurement, the value of an established relationship between the maintenance and management functions, and the effective delivery of the works programmes required to keep the stock in good condition are key to ensuring we continue to offer homes which existing and future customers aspire to live in.
- 1.7 This Strategy has been developed in conjunction with SDC's revision of its Energy Strategy which sets out key considerations to ensure our tenants are alleviated from the burdens of fuel poverty where possible. The strategy complements and will play a key part in delivering a number of objectives outlined within the Corporate Asset Management Strategy (CAMS).
- 1.8 The strategy takes due regard of the Strategic Property Priorities set out within that document.
- 1.9 This Strategy will provide a framework around which we develop a sustainable approach to our Non Traditional Housing stock.

2.1 HISTORICAL CONTEXT

- 2.2 The term 'non-traditional housing' may be used to describe all the various methods of house building that has moved away from the traditional 'bricks and mortar' approach.
- 2.3 After the First World War pre-fabrication for house building in the UK developed in a serious and significant way. The building industry was seriously affected by a shortage of skilled labour and essential materials, industrial capacity and manpower having been diverted into the war effort. The result was an acute housing shortage and, in order to alleviate it, a number of new methods of construction were developed.

- 2.4 The period between the First and Second World Wars also witnessed the development of various types of housing system based on pre-cast and in-situ concrete, timber, steel and occasionally of cast iron construction.
- 2.5 Prefabs (prefabricated houses) were a major part of the delivery plan to address the United Kingdom's post-Second World War housing shortage. In March 1944 Winston Churchill announced a Temporary Housing Programme, known officially as the Emergency Factory Made or EFM housing programme. The vision was for a Ministry of Works (MoW) emergency project to build 500,000 'new-technology' prefabricated temporary houses directly at the end of the war. Houses would be built to have a structural lifetime of 10-15 years.
- 2.6 This vision and promise passed into law as the Housing (Temporary Accommodation) Act 1944.
- 2.7 When the programme officially ended only 156,623 home had been built.
- 2.8 Despite the construction of the 150,000 plus units nationally, there was still an acute shortage of homes across the country, so Local Authorities took the lead in building new homes.
- 2.9 To meet the shortage and bring the cost of housing down, a new form of construction was pioneered, commonly called 'PRC' (Pre-cast Reinforced Concrete). These houses were quick to assemble and required less skilled labour than traditional build. Proprietary brands developed and marketed by different builders. Largely made from concrete panels reinforced with steel then bolted together or constructed with a steel frame. They included various types such as Airey, Cornish, Wates, Unity, Reema, Tarran, Woolaway, and Parkinson types.
- 2.10 The discovery of potential problems with PRC homes in the early 1980's around a number of specific non-traditional dwelling types led to them being designated defective under the 1984 Housing Defects legislation (now part XVI of the Housing Act 1985).
- 2.11 Several types of the PRCs had problems caused with corrosion of the metal reinforcing bars in their concrete structure. This designation consequently led to reduced confidence in the structures and adversely affected mortgageability.
- 2.12 In the concrete systems, the majority of problems occur because of either the carbonation of concrete or the presence of chlorides in the concrete. This often results in the corrosion of steel reinforcement and subsequent cracking and spalling of the concrete.

3.1 BACKGROUND

3.2 Presently Stroud has circa 600 homes of non traditional construction consisting of 9 different system types. this equates to 11% of the total stock numbers. The homes generate an income of circa £2.9million per annum. Of these 7 types are Designated Defective as defined within the Housing Act 1985.

3.3 Property types designated defective are listed at Appendix A.

- 3.4 A Structural Appraisal of all non traditional properties owned by Stroud District Council was undertaken by Curtins Consulting in August 2003. The report highlighted areas and features of these properties which would require attention over time.
- 3.5 A further Stock Options Appraisal undertaken by Tribal HCH in February 2005 identified further issues to be addressed, however this report largely concentrated on the costs associated in achieving the Decent Homes Standard, and a separate study of the Woolaway properties.
- 3.6 The issues relating to the non-traditionally constructed properties owned by the Council have been dealt with in an ad hoc fashion over the years. Some properties have been sold under the Right to Buy, some properties included within regeneration schemes (such as Minchinhampton and Top of Town) while others have had remedial work carried out as a matter of urgency to ensure safety and the DHS have been met.
- 3.7 Of those properties which remain in Council ownership some works have been carried out where the structure is not considered to be failing, to insulate them externally and bring them up to acceptable standards of thermal comfort. To date this has been minimal but has been supported through grant funding that came from either bidding for it as and when it has become available or claiming back grant funding under government initiatives such as CERT which has now been replaced with the Energy Company Obligation (ECO).
- 3.8 Non Traditional Homes also form part of the sub category group HTT (Hard to Treat). A “Hard to Treat” dwelling is defined as one that, for whatever reason cannot accommodate ‘staple’ or cost effective fabric energy efficiency measures.
- 3.9 Investment in these properties has been undertaken only sporadically, and no empirical evidence is available to support and substantiate that the measures taken have been effective. Key issues remain unanswered about the sustainability and viability of the properties for Stroud as the landlord, or the long term affordability for existing and future tenants in terms of energy use.

3.1 WHY THE STRATEGY IS IMPORTANT

- 3.2 The purpose of this strategy is to establish what stock the Council has, the best options available to it, the risks and financial consideration and the way forward to rectify the properties through a planned approach.
- 3.3 The strategy sets out the framework and key principles which Stroud will follow in achieving its key aims, it also provides officers and custodians of our assets with a focus, guiding principal, and common approach to evaluating the viability of our non traditional housing stock.
- 3.4 Effective Asset Management is fundamental to the successful delivery of Stroud’s business objectives, set out within the context and allowances of the HRA Business Plan, and Corporate Asset Management Strategy. Delivering good quality housing and services in a cost effective way is key to ensuring the long term viability of the assets we maintain and manage.

- 3.5 Significant change within the sector means we must be more innovative and pay greater attention to commerciality when considering investment.
- 3.6 This will be the first time that the Council has had a comprehensive strategy that will look at an approach to resolving all of the issues relating to the non-traditional properties in a co-ordinated way.

4.1 PROPERTY DATA AND PERFORMANCE

- 4.2 The collection of accurate data will be essential to ensure we have appropriate information to inform the decision making process. Targeted Stock Condition Surveys, and Structural appraisals will be undertaken in order to determine the level of investment required for each Archetype.
- 4.3 Many of the properties have structural considerations which must be taken into account, and from previous surveys undertaken it is clear that some are worse than others. Not all properties have developed structural defects however they are poorly insulated and are susceptible to key component failure.
- 4.4 Property types have been summarised (See Appendix B) by location, and type. Detailed analysis of each unit will be undertaken on energy performance, and structural integrity which will allow the organisation to target and plan where the greatest investment need exists.
- 4.5 We will complement the financial performance data by undertaking a sustainability analysis which takes into account the socio economic performance of neighbourhoods in which the asset groups are located. This approach will ensure balanced views of investment needs are considered.
- 4.6 Energy performance of these properties across all tenure has shown an average rating of 58.73 which is below the Social Housing Sector average of 65.0.
- 4.7 The Standard Assessment Procedure (SAP) is the form of measure used to calculate this rating, which is the.
- 4.8 A SAP (The UK Government's recommended method system for measuring the energy rating of residential properties) calculation is an indication of a dwelling's performance, calculated using a approved, standardised assessment methodology (the SAP) that as an output, gives an indication of carbon emissions and fuel costs associated with occupying a dwelling in a standardised, average way.

5.1 CHALLENGES

- 5.2 Although the drivers are numerous and, in many cases, urgent, there are still considerable challenges to overcome, such as the uncertainty about the performance and benefits of implemented measures, in particular the impact of occupant behaviour.
- 5.3 Empirical evidence has shown that the benefits of Some retrofit measures providing energy savings, are reduced or, often, offset by what is known as the "rebound effect" (an economic term that refers to the increased consumption that results from actions that increase efficiency and reduce consumer costs) or instances where

projected savings are not realised due to end users not using or understanding retrofitted technology.

5.4 The need to provide housing which complies with the standards and regulatory requirements set out for the sector, along with the growing expectation of existing and future tenants means the challenges we face are greater than at any time in the sectors history.

5.5 Key challenges for the organisation include:

- Welfare reform and the impact on tenants to pay, and the potential negative impact on income
- Reduction in funding such as the Feed In Tariff (FIT) and the ability to subsidise technology which otherwise may not be a viable option
- Meeting energy efficiency and carbon reduction targets
- Performance data which is used for investment planning
- Behaviour change for all stakeholders
- Availability of financial resource
- Impacts of the Housing and Planning Act

6.1 RISKS

6.2 Much of the non-traditional stock has reached such a level of deterioration that to do nothing is not an option, and with the majority of properties there is little opportunity to successfully demolish and rebuild as the sites are too small, or technically difficult to make them attractive for development.

- With refurbishment the properties may become mortgageable and increase the risk that tenants could exercise the Right to Buy
- The works represent a significant project and there is no certainty around the availability of financial resources
- Recruitment and retention of appropriately skilled officers to deliver projects
- Reputational risks if we do not consult correctly

7.1 DRIVERS

- Decent Homes
- Landlord and tenant
- CAMS
- CDP
- MTFP
- Tackling Fuel Poverty
- HHSRS
- HRA Business Plan
- Investment Considerations
- Reduction in repair expenditure
- Improved stock efficiency and viability

8.1 STRATEGIC LINKAGE

- CDP
- Environmental Policy
- CAMS
- Energy Strategy
- Housing policy
- HRA Business Plan

9.1 FUTURE PROOFING

9.2 Sustainable Reinvestment

Re-investment will be prioritised with a bias towards those units that are deemed to be of low risk and high demand in line with the obsolescence procedural guide (Appendix C).

- 9.3 The property design types designated as potentially defective are not necessarily the most thermally inefficient; however their performance is poor and often regarded as amongst the worst displayed by system built housing. Concrete has an extremely low Fuel Poverty and Non-traditional thermal resistivity, and therefore both defective and non-defective dwellings with concrete wall construction have poor U-values. The poor thermal performance of concrete and often non-cavity design of walls results in low SAP values and high running costs.
- 9.4 A **U value** is a measure of heat loss. It is expressed in W/m²k, and shows the amount of heat lost in watts (W) per square metre of material (for example wall, roof, floor etc.) when the temperature (k) outside is at least one degree lower. The lower the **u value**, the better the insulation provided by the material. – do you want to add this explanation
- 9.5 Design and refurbishment will adopt a fabric first approach; however this alone will not guarantee that tenants benefit from the measures taken to improve our homes. Changing tenant's behaviour is critical to reducing energy consumption.
- 9.6 Appraisal will also take due regard of the Egan principles "Assessing Sustainable Communities".

10.1 BARRIERS TO CHANGE

- 10.2 As part of the overall project plan a risk map that aligns with their business plan and other key strategies, will be developed to evaluate risks, their likelihood, and potential impact. Appropriate controls will be put in place to identify causes of project variation and the mitigation of their potentially negative impact.
- 10.3 Common barriers to success may include:
- Financial Constraints
 - Technical constraints in applying suitable retrofit solutions
 - Lack of specialist resource
 - Identifying suitable retrofit models which allow for transformation at scale

- The inability of households to adequately heat their homes due to rising fuel costs
- Behaviour change for tenants and stakeholders
- Management of expectations

11.1 CONSULTATION AND DELIVERY PLAN

- 11.2 The plan will enable Stroud to be clear about the extent, value, condition and suitability of the Non Traditional asset property portfolio across the District.
- 11.3 A framework will be developed to reflect the long term strategic planning required to deliver projects of this type, and will be reviewed regularly to incorporate feedback following consultation with tenants and stakeholders along with the learning outcomes from project delivery.

12.1 VISION

- 12.2 To improve the lives of our tenants by providing safe, secure and quality homes through sustainable invest in our assets, and the communities we work in, while ensuring that we remain an organisation that champions environmental sustainability for the benefit of all.

APPENDIX A

Designated Defective

The Housing Defects (Prefabricated Concrete Dwellings) (England and Wales) Designations 1984 (October 31 and November 1, 1984 – Department of the Environment/Welsh Office). The types marked with * are present within Stroud District.

Non-traditional dwellings – Designated Defective (England and Wales)	
<ul style="list-style-type: none">• Airey House *• Boot House• Boswell house• Cornish Type 1 House *• Cornish Type 2 House *• Dorrان House• Dyke House• Gregory House• Hawksley House• Lileshall House• Myton House• Newland House• Orlit House• Parkinson Frame House	<ul style="list-style-type: none">• Reema Hollow Panel House *• Schindler House• Smith House• Stent House *• Stonecrete House• Terran House• Underdown House• Unity House *• Butterley House• Waller House• Wates house• Wessex House• Winget House• Woolaway House *

APPENDIX B

Non Trad Property Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	Parish	BL8	Cornish	Dorlonco	Brickwork External Airey	Brickwork External Cornish	Ext clad Airey	Ext clad Cornish	Ext clad Unity	Ext clad Reema	Ext clad Stent	Ext clad Woolaway	Non defective PRC	Reema	Swedish timber	TOTALS
1	Bisley														2	2
2	Cam	32	20													52
3	Cashes Green			13					30	47						90
4	Chalford				7											7
5	Coaley							8								8
6	Dursley										54					54
7	Ebley				8				12							20
8	Hardwicke				16				17							33
9	Kingswood					4	1									5
10	Leonard Stanley	19										1		29		49
11	Minchinhampton													19		19
12	Miserden														2	2
13	Nailsworth												28	105		133
14	North Nibley				9										1	10
15	Painswick														6	6
16	Randwick				8											8
17	Slimbridge				1	8										9
18	Stinchcombe														3	3
19	Stonehouse					3								19		22
20	Stroud									18		26				44
21	Uley														3	3
22	Whiteshill													18		18
23	Woodchester													1		1
24	Wotton-under-Edge					7									3	10
																0
		51	20	13	49	22	1	8	59	65	54	27	28	191	20	608

Appendix C - Property Obsolescence Procedure Guide at Appendix 2 of the report.