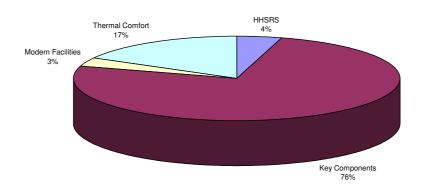
#### **APPENDIX 4**

## STOCK CONDITION SURVEY APPROACH AND METHDOLOGY

#### **SUMMARY**

- 1.0 Savills were commissioned to undertake the stock condition survey for the council in October 2009. In summary, the main objectives of the exercise were to:
  - Provide accurate and statistically reliable information concerning repairs and maintenance as well as improvement costs forecast over a 5 and 30 year term.
  - Undertake Asbestos surveys for all blocks and surveyed dwellings including where possible the analysis of samples.
  - Complete RdSAP surveys and produce Energy Performance Certificates to all surveyed dwellings.
  - Collect, validate and report upon both attribute and condition information about the stock for the purpose of improving existing records and future maintenance planning.
  - Establish a methodology upon which further surveys may be undertaken to improve the accuracy of the result and to conduct re-surveys in future years.
  - Provide data in a readily accessible format to enable import on to the Innovation Apex Asset Management Software.
  - Inform the Council's strategic review into housing investment and create flexible investment scenarios to compliment this process.
  - Report upon the standards of decency within the stock identifying future likely failures as components age over the projected 30 years life of the survey.
  - Report on any homes that fail the Housing Health and Safety Rating System (HHSRS) and in particular any Schedule 1 Hazards identified.
- 1.1 The survey assessed the current and future repairs and maintenance liability. The stock currently consists of 37,301 tenanted dwellings and 2,061 blocks.
- 1.2 The survey included a representative sample of 10% of the Council's general needs housing stock; 20% of Street Properties and 100% external and communal survey of blocks.
- 1.3 Generally the condition of the stock was well maintained on a day-to-day basis, but has not been able to receive the level of major capital investment necessary to maintain all the homes to a recommended condition. As a result, there are a significant number of major components that have reached/are reaching the end of their useful life and which will require renewal in the short term.
- 1.4 The stock condition survey has included an assessment of the properties against the decent homes criteria as set out by the CLG. In undertaking the survey, Savills have assessed the properties in terms of the Housing Health and Safety Rating system, together with assessment of the key/other building components, modern facilities and thermal comfort.
- 1.5 Approximately 34.7% (12,943 dwellings) of the stock is currently non-decent in accordance with the criteria. This percentage compares with a national average failure rate of 33.7% [ref: English House Condition Survey Headline Report; CLG, January 2007]. Of the properties that currently fail, the majority are due to kitchen, wiring and window related failures. The pie chart below is an analysis of the failures by category in the stock:



- 1.6 The survey has identified all of the works required for the decent homes obligations to be met in full within a five year timescale to 2015 and to be maintained thereafter.
- 1.7 All information recorded during the stock condition survey has been loaded onto the Innovation Apex database and this has been used as the basis for analysing the data and producing the cost reports.
- 1.8 The survey also included an energy survey carried out to a Reduced Data Standard Assessment Procedure (RdSAP) standard. This type of survey allows for the production of Energy Performance Certificates for each dwelling surveyed.
- 1.9 The results included in this report show that the housing stock has an average SAP score of 65.9; which is higher than the Social Housing average of 54. The average Environmental Impact Rating (CO2) rating of the stock is 61.5
- 1.10 With legislation relating to the management and control of asbestos, Local Authorities have an obligation to assess the risks of asbestos within their properties. The Health and Safety Executive issued a guide called the 'MDHS 100: Surveying, Sampling and Assessment of Asbestos-Containing Materials' published in July 2001. During the course of this survey the guidance was updated to 'HSG264 Asbestos: The Survey Guide'.

#### 2.0 SAMPLING TECHNIQUE

2.1 The purpose of the sampling process is to present a representative picture of the maintenance requirements of the stock using detailed surveys of a limited number of properties. The most straightforward approach to this is a simple random sample, however where characteristics are known in advance, there is benefit in creating a "stratified" sample. Typically, maintenance requirements will correlate closely with the characteristics of the sample data, thereby increasing the reliability of the results from a limited sample.

2.2 In order to provide statistically accurate results at a whole stock level, Savills reviewed the asset register in order to achieve this aim. The number of surveys undertaken by archetype was:

| Dwelling Type               | Total  | Surveys | %     |
|-----------------------------|--------|---------|-------|
| Above commercial premises   | 44     | 13      | 29.5% |
| Infill blocks               | 287    | 62      | 21.6% |
| Sheltered Housing Units     | 828    | 93      | 11.2% |
| Flats                       | 29,548 | 3,176   | 10.7% |
| Converted Street Properties | 2,490  | 393     | 15.8% |
| Street Properties           | 1,405  | 246     | 17.5% |
| Houses on Estates           | 2,699  | 327     | 12.1% |
| Grand Total                 | 37,301 | 4,310   | 11.6% |

- 2.3 Un-surveyed property costs were cloned from those produced by the surveyed sample. The cloning methodology is based on copying surveyed data to properties that were not surveyed located in the same area and of the same type. The cloning methodology was agreed between the council, Innovation Apex and Savills and is set out below.
- 2.4 The approach to cloning consisted of four key stages:
  - a) **Defining the cloning rules** A cloning principles document was produced which set out the agreed cloning rules and the associated processes for cloning.
  - b) Initial Clone Mapping once the rules for cloning were agreed the initial process to apply the clone matches to the stock were confirmed. The output of this process was identifying a list of source and target properties (UPRN, Address, archetype etc) that were cloned as part of the process. The mapping process could only be performed once all of the survey data had been loaded.
  - c) Clone Mapping Refinement –. The mapping is held as Apex characteristics and can be refined using standard maintenance facilities by the Council.
  - d) **Clone Process** when the cloning rules were agreed, the initial mapping was completed and further mapping refinements applied after initial cloning occurred.
- 2.5 Broadly the approach to cloning target properties was:

### **Cloning Traditional blocks**

- a. Matching Archetype
- b. Matching Property type
- c. Matching Bedsize
- d. Matching top floor flat indicator
- e. Matching block

#### Cloning houses, bungalows and conversions

- a. Matching Archetype
- b. Matching Property type
- c. Matching Savills Property Type
- d. Matching Built form
- e. Matching postcode

#### 3.0 Decent Homes Assessment

- 3.1 Savills identified that 24,357 properties currently pass the standard which equates to 65.3% the stock.
- 3.2 The works identified will bring the currently non decent properties up to a decent standard and prevent further properties becoming non decent. The works identified in the throughout the 30 year forecast will allow properties to be maintained to the decent homes standard.
- 3.3 A decent home, as described by Central Government, is one that is wind and weather tight, warm and has modern facilities. In order for a social landlord to achieve this aim any individual dwelling must meet the following criteria:

# a) It meets the current statutory minimum standard for housing This is currently defined as a Category 1 failure as defined by version 2 of the Housing Health and Safety Rating System 2004.

#### b) It is a reasonable state of repair

Dwellings that fail this criterion are those elements such as roofs, rewires, boilers etc that are **old** (i.e. their age exceeds their life cycle) **and in poor condition** (i.e. identified by the surveyor as needing replacement or a major repair).

The elements listed within these criteria are sub-divided into two sections, namely key components and non-key components. Failure of a single key component will fail the dwelling completely, whereby the non-key components require two or more failures to make the property non-decent.

Whenever a key component fails then the property will become non-decent in that year; however the concurrent failure of two non-key components may occur over several years (e.g. a kitchen in year 1 and bathroom in year 5).

Within the example listed above there is no fixed guidance as to how it should be reported. To avoid confusion and maintain consistency with the general cost reports, the costs for the kitchen and bathroom are included in the years that they fail. These do **not** include any costs for a dwelling that only has one non-key component failure over the forecast period.

#### c) It has reasonably modern facilities and services

The guidance lists six points of failure and any individual dwelling must fail on three or more items to be deemed non-decent. As with the methodology employed for non-key components, these have included the items within the predicted year of failure in our decent homes reports and will only include costs for those dwellings that have three or more failures before 2010.

Both modern facilities and non-key components can fail on kitchen and bathroom installations, therefore producing the potential for double counting within the decent homes reports. To overcome this the database identifies which criteria the property fails first and then prevents the other criteria from becoming populated by the same data.

An example of the above would be a dwelling that has an **old** kitchen and bathroom and one other modern facilities failure in year 1. The survey also recognizes that the kitchen and bathroom are **old and in poor condition** in later years. In such instances these do not include any costs for the non-key component potential failures.

#### d) It provides a reasonable degree of thermal comfort

This criterion requires dwellings to have both effective insulation and efficient heating.

Again there is a potential for double counting in such situations where a dwelling does not have efficient heating and the boiler or heating distribution system is old and in poor condition under criterion b. In such circumstances these will include for the requisite replacement when it first appears and then exclude it from re-appearing in the other criterion.

3.4 All Category 1 failures identified by the stock condition survey (and hence would make the dwelling fail decency) were reported to the council on the same day by Savills and dealt with immediately.