DESIGNERS' MANUAL

THE SOUTHAMPTON HOME

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SOUTHAMPTON CITY COUNCIL

Contents

Permission statement

This document, including assumptions and caveats, must be read as a whole so that no part may be taken out of context. Neither the whole nor any part of this report or any reference to it may be included in any published document, circular or statement in any way without the written approval of Southampton City Council. Any further report on this document must be the subject of consultation with the authors.

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Introduction

1. The purpose of this Designers' Manual is to provide a reference resource for design teams working on SCC housing projects. The checklists provide a platform for approval and guidance for what should be provided in each project.

2. The context of the manual has been driven by SCC tenants' needs and values – safety, health, comfort, efficiency and sustainability – and embedding this within the corporate priorities for the city identified within the Green City Charter 2019. This manual has been prepared by SCC Design Services as a technical manual for use with design consultants, rather than a public policy document. This manual is for use at the earliest stage of a build project (RIBA Stages 0 and 1) to establish the project brief prior to progressing to design stages.

3. The manual was originally written for the delivery of new council-owned homes, under the 1000 Homes programme, however the manual also applies to upgrades and refurbishments where design consultants are still expected to read and apply the guidance where relevant.

4. References have been made to several local and national documents stretching beyond the minimum statutory regulations. The document does not replace current local planning policy or national legislation which designers are expected to be familiar with.

5. Part 1 sets out the aspirations and design intent and standards for the Southampton Home with reference to local and national guidance within five chapters and reflects the goals within SCC's Corporate Plan 2020-2025 for the city to be a greener, fairer and healthier place.

6. The five chapters of Part 1 describing the Southampton Home are:

    1. Be part of the community
    2. Be comfortable
    3. Be efficient
    4. Be safe
    5. Be a home for life

7. Part 2 sets out checklists where it is incumbent upon the designers to take the client representative through the checklist point by point and agree what is being provided. As well as initialling each point of inclusion or divergence, a brief explanation is required as a matter of record and prior to obtaining the SCC client approval to proceed.

8. Within Part 2, items that are 'enhancements' to the Southampton Home standard are identified, as well as items which are specific to a special housing project. The inclusion for such items will be for SCC to determine within the client role and in setting the individual project brief.

9. For an individual dwelling, SCC will need to confirm:

    a. Wheelchair accessible category based on Building Regulations Part M Volume 1: 1. Visitable (not acceptable for 1 bedroom dwellings) 2. Adaptable 3. Fully accessible.
    b. Number of bedrooms: a family designated dwelling will have two or more bedrooms
    c. Number of persons: all new dwellings will be designed for at least two persons
    d. Gross Internal Area (GIA), informed by the Nationally Prescribed Space Standards, is based on number of bedrooms AND number of persons; for example a three-bedroom house suitable for a family of six persons is larger than a three-bedroom house for a family of four.

10. Part 2 is set out in four sections, progressing from the macro to micro as follows:

    1. Site wide
    2. Building exterior
    3. Common and service areas
    4. Individual dwellings

11. This important document sets out the aspirations and standards expected by SCC in the delivery of new council-owned housing, the Southampton Home. The future challenges presented by both the environment and changing demographics mean that properties have to be built to a different standard than what has been provided traditionally.

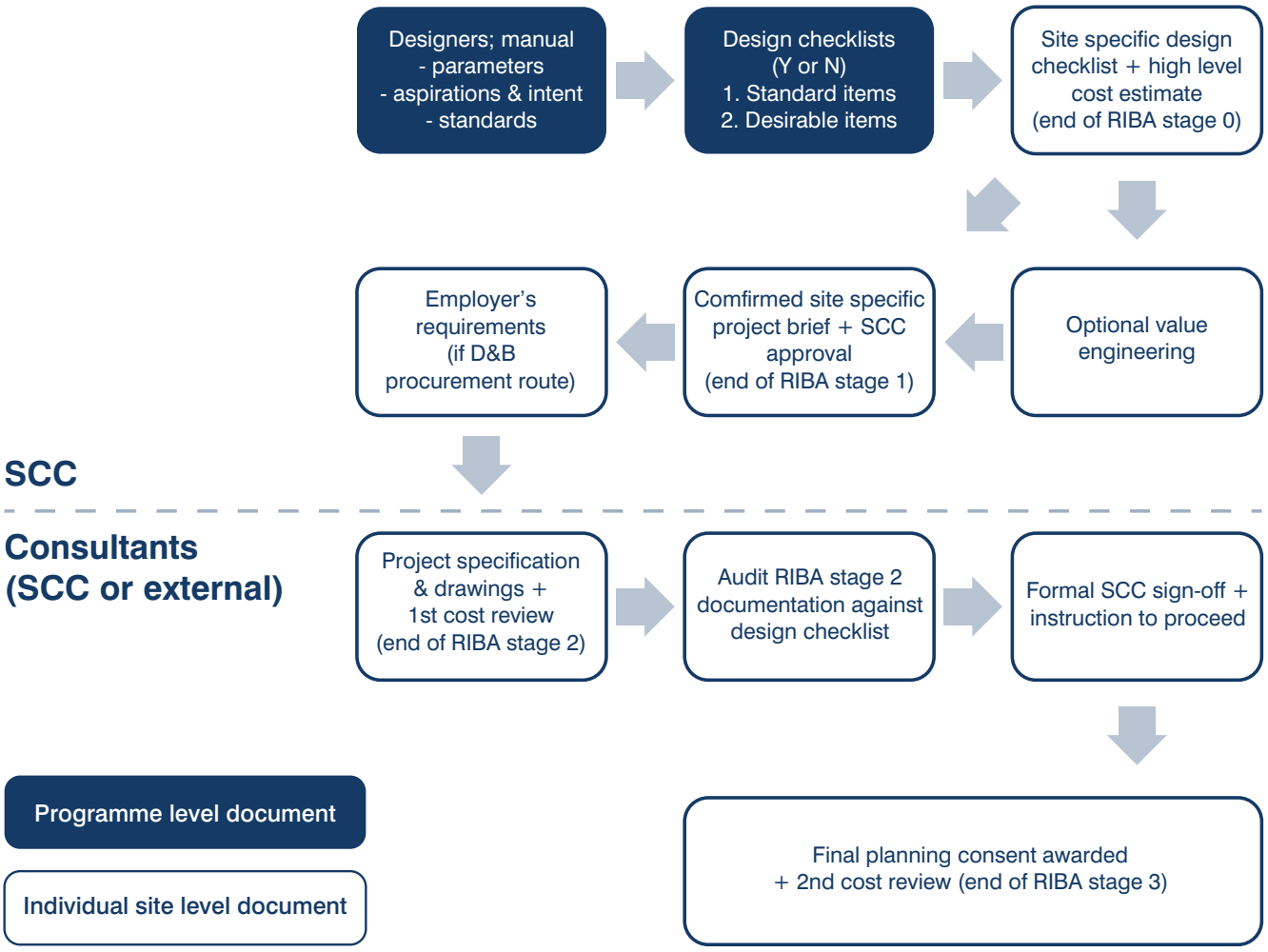
12. This manual looks to set out the general principles that designers are expected to embrace when developing designs on behalf of SCC. These have been set at a standard higher than industry requirements to ensure the delivered council-owned homes are fit for current and future occupation, as well as leaving a positive legacy for the social housing in Southampton.

Purpose of this document

The Designers' Manual has been prepared by SCC Design Services and is part of the Strategic Brief. All consultants are required to read and apply the information contained in the manual from the start of a project, to form a site specific project brief. The manual and checklists can then be referred to by all parties throughout all the project stages to ensure compliance.

The purpose of this Designers' Manual is to provide a reference resource for design teams working on SCC housing projects. The checklists ensure the right amount of detail is provided for each project.

This Designers' Manual will assist in maintaining consistency across the portfolio in products, materials, dimensions and design approach, and will give guidance on the minimum standard accepted by SCC. It is acknowledged that the minimum standard is particular to each property and frequently driven by the project budget.



How to use this document

The Designers' Manual is a controlled document and it is the responsibility of its users to ensure they are in possession of and working to the latest revision. It is anticipated that the document will be maintained by Design Services within SCC Property. A formal revision will be issued annually in response to project level feedback from SCC officers working with tenants and dealing with the management and maintenance of council homes.

Mandatory and statutory regulations and rules apply to all aspects of this Designers' Manual with particular reference to compliance with the current Building Regulations, directives issued by the Ministry of Housing, Communities & Local Government (MHCLG), relevant British Standards, and health and safety standards promoted or controlled by the Health & Safety Executive. It is assumed that professional consultants are familiar with these standards and how to apply them where required.

Part 1 sets out the aspirations and design intent and standards for the Southampton Home with reference to local and national guidance. It is set out in five chapters and reflects the goals within SCC's corporate plan 2020-2025 for the city to be a greener, fairer and healthier place.

Part 2 sets out checklists where it is incumbent upon the designers to take the client representative through the checklist point by point and agree what is being provided. As well as initialling each point of inclusion or divergence, a brief explanation is required as a matter of record and prior to obtaining the client approval to proceed.

Part 1 - The Southampton Home Standard

"Every house, every product of architecture… must be a fruit of our endeavour to build an earthly paradise for people." – Alvar Aalto[1]

Part 1 sets out the aspirations and standards targeted by SCC in the delivery of new council-owned housing, the Southampton Home. The future challenges presented by both the environment and changing demographics mean that properties have to be built to a different standard than what has been provided traditionally.

1. Be part of the community

"Nothing in this world is more simple and more cheap than making cities that provide better for people." – Jan Gehl[2]

SCC homes must positively contribute to the local and global communities. They should address current issues while not compromising the wellbeing of future communities.

All projects	Descriptor
1.1 *SCC Housing Strategy 2016-2025*[3] states that the aim for the city is to have 'good quality housing and vibrant communities'. SCC's *Residential Design Guide* (SPD)[4] establishes robust guidance from the local planning authority to help maintain this. The purpose is to set a benchmark for quality. Attention is also drawn to the *National Design Guide*[5] prepared by MHCLG with its 10 key principles and examples of best practice, which planning officers are to use in order to assess the proposed design merits of submitted planning applications.	Attractive and modern
1.2 During early project stages (RIBA 0-1) the design team are to review the *Residential Design Guide*, prepare contextual analysis and identify precedents appropriate for the site to establish a benchmark. Pre-application advice from the local planning authority must be sought to confirm the principle of proposals, e.g. density, layout, storey heights. This feedback will indicate additional survey requirements, such as ecology, tree surveys, archaeology and traffic surveys.	
1.3 Community consultation (stakeholder engagement) must be carried out in accordance with the community engagement plan established by the SCC Project Manager for the site as proposals are developed.	
1.4 Further pre-application advice *(item 1.2 above)* from the local planning authority must be sought once a concept design has been developed (during RIBA 2) to confirm principles of material, boundary fencing and form.	

All projects	Descriptor
1.5 SCC has adopted a *Parking Standards Supplementary Planning Document* (SPD)[6] for the area outside of the *City Centre Action Plan*. It provides more detail on the planning policy for car and cycle parking and other relevant policies in the determination of planning applications for residential developments. This includes the proportion of accessible bays. 1.6 This *Parking Standards* policy must be reviewed and used as a guide by the design team. Pre-application advice (*items 1.2 &1.4 above*) from the local planning authority must be sought once a concept design has been developed (during RIBA 2) to confirm amount and type (car, accessible, cycle) of parking provision for tenants and visitors. 1.7 For specialist housing provision, dedicated accessible parking bays will be required; the number is to be confirmed with the local planning authority. 1.8 With major projects (10+ dwellings), designers must consider providing parking away from the dwelling in secure car parks. This is to encourage people to walk to and from their cars, reducing anti-social behaviour and improving air quality of the residential areas. SCC is keen to promote a less car-centric design approach to larger developments. In addition, proposals, where in close proximity to existing green space, must include measures that protect the green space from being parked on. This must be discussed with the local planning authority as part of pre-application advice during RIBA stage 2. 1.9 Designers must consider ease of travel and unloading for furniture relocation trucks to the building entrance. 1.10 *SCC Air Quality Strategy 2019-2025*[7], reinforced by the *Green City Charter 2019*,[8] makes a commitment to encourage the uptake of low-emission technologies and vehicles. In respect of communal parking within residential developments, at least one in every four car parking spaces must have a 7-22kW load balanced charge point. 1.11 All new parking spaces for individual homes must have the infrastructure to enable a charging point to be installed. These charging points must meet the requirements of the *Electric Vehicle Homecharge Scheme (EVHS)*[9].	Parking

All projects	Descriptor
1.12 Designers must demonstrate compliance with the principles of sustainable development by completion of the *Green Space Factor tool*[10] for the local planning authority. The default position should be to use vegetation to achieve permeability. However, permeable and semi-permeable hard-ground surfaces must be specified to minimise run-off and help alleviate flooding; there should be no discharge from the developed site for rainfall depths up to 5mm. This includes those surfaces specified for cycle or car parking. 1.13 Designers are to explore use of green roofs on buildings, particularly where this could contribute to the sustainable urban drainage strategy. Use of green roofs will contribute to the Green Grid. The ongoing maintenance requirements of such roofs must be identified during RIBA stage 1 for approval by SCC client prior to proceeding to RIBA stage 2.	Ground treatment
1.14 As part of the *Green City Charter*, for each individual home proposed with its own garden (note the minimum space requirements detailed within Part 2 of the SCC *Residential Design Guide*), an appropriate tree will be planted in the garden or amenity space of that residence. The species of tree, typically native species will be required, must be agreed with the local planning authority's tree officer during pre-application consultation. 1.15 A landscape architect, or other suitably experienced professional, must be involved in the specification of the landscaping proposals and the maintenance management strategy, for submission to the local planning authority. Landscape proposals must be informed by ecological input (see item 1.18) to ensure ecological benefits are delivered as well as the visual benefits. Landscaped areas to be adopted by the council must be agreed by the City Services parks and landscaping departments.	Tree planting
1.16 In accordance with section 4.6 of the Residential Design Guide, new developments will provide adequate open space and play space, meeting the future needs of the community. SCC recognises that green space is important for bringing communities together. As required by the local planning authority (see *Residential Design Guide* para. 4.6.9) and through community consultation play facilities are to be proposed for local children in accordance with BS EN 1176-1:2017.	Play facilities

All projects	Descriptor
1.17 In accordance with section 6.2 of the *Residential Design Guide*, shortfalls in community services and facilities, including commercial units, may need to be addressed in the development. Where appropriate, community consultation (stakeholder engagement) must be carried out in accordance with the community engagement plan established for the site, by the SCC Project Manager, as proposals are developed to ensure these facilities are considered.	Mixed use developments
1.18 The sites on which SCC homes are built must be managed effectively from development to occupation, to ensure their ecological value is enhanced. This also reflects item 4 of the *Green City Charter 2019*[12] – "We will protect and enhance our natural environment." The approach to ecological mitigation will be informed by pre-application advice from the SCC's planning ecologist. The design team must seek to obtain this feedback and advice before proceeding to RIBA stage 2 so that a suitably qualified ecologist can be appointed at an early stage if necessary.	Ecological impact
1.19 In line with SCC's *Sustainable Procurement Policy*[13], contractors appointed to deliver the homes will be required to ensure that all timber is obtained from sustainable sources which employ a recognised forestry management system (e.g. PEFC or FSC) in line with the government's timber procurement policy. This requirement will be included in the contract preliminaries and specifications. 1.20 Landscaping works associated with the construction must ensure sustainable nursery stock is provided not using peat.	Responsible sourcing
1.21 The *Green City Charter* for Southampton states as its first goal – "We want to be carbon neutral by 2030." As such, designers must use the UK Green Building Council's *Net Zero Carbon Buildings: A Framework Definition*[14] to inform proposals. The LETI (London Energy Transformation Initiative) approach[15] to achieving Net Zero Operational Carbon is SCC's preferred approach to achieving net zero. 1.22 SCC has noted that a Net Zero Carbon building has two aspects: i) Net zero carbon construction; and ii) Net zero carbon operational and there is opportunity for carbon offsets with both aspects. The development will also need to contribute to a local carbon offset fund[16], through an S106 agreement.	Carbon footprint

All projects	Descriptor
1.23 Designers are encouraged to be innovative. The use of timber construction is recognised by SCC as a way of reducing carbon. If timber construction is proposed then a specialist fire engineer must be involved with the development of proposals to construction.	Carbon footprint
1.24 Designers are to use the BRE *Green Guide to Specification*[17] to inform proposed building materials with 80% of identifiable products to have A+, A or B rankings and no products with D or E rankings to be specified.	Environmental impact of materials
1.25 Designers must refer to the *Residential Design Guide* (RDG), Part 9 Waste Management, as a minimum, to ensure the layout of new homes provides adequate space for the sorting and storage of waste. The RDG provides detailed guidance on **internal and external** requirements, including requirements for maximum carry distances for residents (30m) and collection workers (10m). 1.26 The RDG includes requirement for buildings with multiple dwellings where storage will be required for larger communal bins. The design team must refer this and consult with SCC Waste Management where proposals are innovative (such as below ground storage) or concerns dwellings for residents with special needs. 1.27 Designers must note that a National Waste Review[18] is taking place and SCC may adjust storage requirements in line with the outcomes. It is important that proposals respond to current requirements and these must be identified within the project brief at end of RIBA stage 2. 1.28 Externally, the waste store must be separate from any other externally accessed facility, such as cycle storage, plant room or garden storage. Internally, there must be adequate space to facilitate the segregation of waste streams to ensure effective recycling. Ideas can be found within the RDG, Part 9. 1.29 Innovation is encouraged when it comes to storing waste, such as below ground storage solutions to reduce pest issues, 'bin blight' and odour pollution. Designers are encouraged to refer to case studies and solutions promoted by APSE (Association for Public Service Excellence) and discuss project level proposals with SCC Waste Management during RIBA stage 2.	Waste

2. Be comfortable

"Architecture is really about well-being. I think that people want to feel good in a space… On the one hand it's about shelter, but it's also about pleasure." – Zaha Hadid[19]

Healthier

SCC dwellings must be comfortable to live in and meet the needs of all residents who rely on them home. The buildings must not present a long-term risk to the physical or mental health of any Southampton citizen.

All projects	Descriptor
2.1 SCC will confirm the preferred bed-space, person-occupancy and tenure type of dwellings to be delivered within the specific project briefs for each site. All dwellings are to be designed to meet current *Nationally Described Space Standards*, including the storage requirements.[20]	Space standards
2.2 An open-plan layout is acceptable but the circulation must not compromise use of the room space. With family accommodation, i.e. dwellings for three or more persons, a hallway must be provided.	
2.3 Where the project is delivering specialist accommodation, such as for elderly persons or residents with physical or mental disabilities, design proposals must comply with *Building Regulations Part M Vol. 1 Dwellings Category 2 or Category 3*. The client must confirm at the start of RIBA stage 1 which category building is required for the site. This must be recorded in the checklist as a statement, for all parties, of what SCC is going to receive.	

All projects	Descriptor
2.4 In accordance with National Institute for *Health and Care Excellence (NICE) Guideline NG149*[21] in order to maximise resident comfort, building products and finishes must minimise volatile organic compounds (VOCs) and formaldehyde. This will be by using: i) inherently non-VOC or non-formaldehyde emitting materials such as brick, glass, concrete, ceramic tile, metal etc.; and ii) paints, wood-based products, flooring materials, insulation, adhesives which meet the standards identified in table 9, emissions criteria by building product type from *HQM England Technical Manual 2015.*[22] 2.5 Designers should be aware that a quality standard for indoor air quality is currently being prepared by NICE and the expected publication is October 2020.[23] 2.6 Following practical completion of a dwelling (or group of dwellings) and before occupation, an indoor air quality test will be carried out in accordance with the methodology and representative sampling criteria identified within *HQM England Technical Manual 2015.* [24]	Indoor pollutants
2.7 Based on Building Regulations Part L1A[25] paragraph 2.41, all designers must aim for the area of glazing in a dwelling to be at least 20% of the total floor area. Exceptions to this must be confirmed with the client. 2.8 All daylighting allowances and fenestration designs must be designed in accordance with BS EN 17037: 2018 *Daylighting in Buildings*, particularly with regards to potential overheating which must be managed by the design proposals. Use of the Good Homes Alliance tool[26] is encouraged.	Daylighting

All projects	Descriptor
2.9 The homes must be designed to achieve airborne and impact sound insulation values between dwellings that are at least 5dB improvement on the performance standards set out in *Building Regulations 2010: Approved Document Part E - Resistance to the passage of sound.* The Part E Robust Details may be used to inform the construction details where appropriate. 2.10 Pre-completion testing is required to ensure compliance with Part E1. 2.11 With regards to shared dwellings for residents with special needs, the residents may be considered as similar to patients in hospital, where there is a need for staff to hear sounds of distress, so this over-rides privacy. The acoustic requirements for this type of accommodation must be confirmed with the client as part of the client brief and recorded in the checklist for sign-off. 2.12 An acoustician or acoustic consultant must be appointed, where appropriate, at an early stage to carry out surveys and give advice on construction responses to external sound sources (for example: traffic sounds).	Sound
2.13 The design temperatures for the dwellings is appropriate to the needs of the occupants[27], as follows: - Bathrooms – 20-22°c - Bedrooms – 17-19°c - Hall/stairs/landings – 19-24°c (less stringent temperature control is acceptable) - Kitchen – 17-19°c - Living rooms – 22-23°c - Toilets – 19-21°c 2.14 Specialist dwellings, such as those specifically designed for older residents, will require temperatures to the upper limits of the design temperature range. The design team will confirm this for individual projects and record in the checklist for sign-off. 2.15 Designers must design out overheating, not only from solar gains but also from pipe runs and internal heat gains (see item 2.8). Use of the Good Homes Alliance tool is encouraged and the adequate mitigation of over-heating must be demonstrated to SCC prior to submission for planning consent.	Thermal comfort

All projects	Descriptor
2.16 Mechanical ventilation systems incorporating heat recovery must be explored as an option on dwellings at RIBA stage 1 on all projects. These systems are dependent on a high degree of airtightness and suitable maintenance access. Therefore a holistic approach must be taken and demonstrated on the project to ensure the final solution is appropriate for an individual project. The final requirements must be recorded and confirmed by client and designer using the checklists. 2.17 Following the UK government consultation on the Future Homes Standard, there are proposed changes to Part F of the Building Regulations which have an impact on dwellings. New Part F regulations will come into force mid/ late 2020. The design team must note this and ensure that the design complies with current legislation.	Ventilation
2.18 RIBA 2030 Climate Challenge[28] provides Best Practice Health target metrics for all buildings related to the occupants' health. Designers must refer to these as the minimum target levels for all proposed dwellings. Any enhancement on these targets must be identified by the client within the project brief and signed off by client and designer using the checklists.	Health

RIBA 2030 Climate Challenge target metrics for all buildings

Best Practice Health Metrics		References
Overheating	25-28 °C maximum for 1% of occupied hours	CIBSE TM52, CIBSE TM59
Daylighting	> 2% av. daylight factor, 0.4 uniformity	CIBSE LG10
CO_2 levels	< 900 ppm	CIBSE TM40
Total VOCs	<0.3 mg/m³)	Approved Document F
Formaldehyde	<0.1 mg/m³)	BREEAM

All projects	Descriptor
2.19 All new SCC homes must have clear, barrier free access from the street. External access routes must allow for dropped kerbs, ramps, textural changes and other landscape features to assist unimpeded access for all tenants and visitors. Colour and texture contrasts should be included for residents with visual impairments or dementia. A suitably qualified professional must be appointed where the project deals with a multiple dwelling block development rather than a site infill.	
2.20 In addition to complying with the current building regulations, for buildings containing multiple dwellings which have a communal area, the following features are required: • A handrail is provided to both sides of any ramp or staircase (compliant with BS8300) • Access control for main entrance doors • Mail boxes to secure mail, if the client confirms that access to individual letter boxes is not acceptable • Footpaths, up to 1:21 gradient are the preferred access from the public highway; if a ramp has to be incorporated into the external access due to existing levels, this ramp must comply with BS8300 • Conventional passenger lifts, large enough to accommodate emergency stretcher use, must be provided in accordance with BS8300; signage must include braille numbering • Lift access must be provided for dwellings at first floor or above; any exceptions to this must be confirmed by the client as part of the project brief. Designers are to also refer to section 4.3 concerning security of communal areas.	Communal and shared areas

All projects	Descriptor
2.21 All windows will be triple glazing and of a suitable material to support that triple glazing. The inner pane will remain at internal room temperature and therefore provide for a cosier experience for the inhabitants, particularly during colder weather. There are also acoustic and energy-efficiency benefits that triple glazing provides in addition to the thermal comforts. Any exceptions to triple glazing must be confirmed by the client as part of the project brief. Please also see comments under item 2.8	Glazing
2.22 The CIBSE *Guide A, Environmental Design* will be used by the design team to assist in the setting of appropriate criteria for and develop an integrated design that meets SCC's client brief. The building services engineers must use a project specific checklist based on the CIBSE Guide A, figure 0.3 flow chart.This checklist must be provided to SCC as evidence of the design development during RIBA stage 2.	Environmental Design Method

3. Be efficient

"The measure of a society is found in how they treat their weakest and most helpless citizens." – Jimmy Carter[29]

SCC homes must fully embrace the Green City Charter by featuring both man-made and natural resources. SCC strives to build efficiently, without wasting materials or public funding, leaving tenants with homes that are efficient to run.

All projects	Descriptor
3.1 Following a specific commitment made in the 2017 housing white paper '*Fixing our broken housing market,*'[30] the UK Government launched a cross-industry working group. The white paper identified that the housing industry, at that time, had not embraced some of the faster and more efficient construction methods that were being used in other construction sectors. In March 2019 the UK Government published the *MMC definition framework*[31], developed by a specialist sub-group of the Ministry for Housing, Communities and Local Government. This is to be used by the design team during RIBA stage 1 to identify the most appropriate construction method for the project from the seven defined MMC categories, summarised below:[32] • Categories 1 to 5 involve off-site or near-site pre-manufacturing. • Categories 6 to 7 involve site based process improvements. **CATEGORY DEFINITION** **1** Pre-manufacturing (3D primary structural systems) **2** Pre-manufacturing (2D primary structural systems) **3** Pre-manufacturing components (non-systemised primary systems) **4** Additive manufacturing (structural and non-structural) **5** Pre-manufacturing (non-structural assemblies & sub-assemblies) **6** Traditional building product led site labour reduction/productivity improvements **7** Site process led site labour reduction /productivity/assurance improvements The final proposed construction method must be confirmed as an output of RIBA stage 2 so that it can be identified within the planning application (RIBA stage 3).	Modern Methods of Construction (MMC)

All projects	Descriptor
3.2 The building must be designed with a 'fabric first' approach, i.e. maximising the performance of materials and components that make up the fabric of the building before considering the impact of building services systems on energy efficiency.[33] SCC's *Residential Design Guide* (SPD) in item 1.1 (above) reinforces this approach to make it a requirement for all new housing. Fabric first will include, but is not limited to: • Position and orientation of building types • Improving fabric U-values (floors/walls/roofs/doors/windows) • Reducing thermal bridging (typically at construction junctions) • Improving airtightness (typically air leakage occurs around openings and junctions) 3.3 *Accredited Construction Details* must be used by the designers of technical information to inform the construction detailing – the current versions are available on the *Planning Portal*[34]. Originally developed to assist the construction industry to comply with the performance standards in the Building Regulations Part L Approved Documents, the details focus on issues concerning insulation continuity (cold bridging) and airtightness. They contain indicative detail drawings for the following construction types: • Steel frame • Timber frame • Masonry cavity wall insulation • Masonry external wall insulation • Masonry internal wall insulation	'Fabric first' design

All projects	Descriptor
3.4 SCC recognises that fuel poverty is a major issue in Southampton and wishes to address this in the design of its council homes, to deliver reduced energy bills for tenants. 3.5 Following the UK government consultation on the Future Homes Standard, there are proposed changes to Part L of the Building Regulations which have an impact on dwellings. New Part F regulations will come into force mid/late 2020. The design team must note this and ensure that the design complies with current legislation. 3.6 The LETI approach for energy efficiency and carbon management is recognised as good practice and is SCC's preferred approached. The targets for SCC homes are as follows: - Total Energy Use Intensity (EUI) - Energy use measured at the meter should be equal to or less than: 35 kWh/m2/yr (GIA) for residential. - Space heating demand should be less than 15 kWh/m2/yr for all building types. The EUI target is in line with the RIBA 2030 Climate Challenge target for 2030. See item 3.17 for RIBA 2030 Climate Challenge targets where SCC is looking for further stretch targets to be achieved with regards to carbon emissions (see items 1.21 & 1.22) and water usage (see item 3.13). 3.7 In addition to demonstrating compliance to *Building Regulations Part L1A*, all dwellings, following completion, will require an *Energy Performance Certificate*[35] to comply with *Energy Performance of Buildings (England and Wales) Regulations 2012.*	Reduction in fuel bills

All projects	Descriptor
3.8 SCC is committed to creating a 'cleaner, green, healthier and more sustainable city.'[36] It is widely accepted that fossil fuels are a finite resource and their use needs to be minimised. It is proposed that the designs for the new council homes use no fossil fuels directly, i.e. no gas or oil supplies. Proven alternative fuel sources for domestic settings must be used – such as heat pumps, heat recovery systems, solar panels. 3.9 The intention is to limit the use of combustion appliances within the proposed developments. Should the design team demonstrate that it is necessary to incorporate a boiler into the development, designers must first explore the use of combustion appliances using renewable fuels (such as bio-fuels), possibly as a district heating source. The use of individual boilers in dwellings using finite fossil fuels (gas or oil) must only be considered if it can be proved that there is no reasonable alternative. 3.10 If the use of combustion appliances is unavoidable and is approved by the client, compliance with *Building Regulations Part J Combustion appliances and fuel storage* is required.	Reduction in fossil fuel use
3.11 If the proposal is considered a major development under planning legislation, i.e. 10 or more dwellings, the design team must consider minimising operational energy demand, consumption and carbon dioxide emissions. An energy specialist must be appointed, at RIBA stage 0, to assist in developing the brief, to define an energy strategy for the proposed development. This must be carried out in line with *BREEAM Communities RE 01* criteria[37] and include as a minimum: 1. A prediction of the baseline energy demand and associated emissions for a Building Regulation compliant development to cover site-wide consumption. 2. Recommendations for reducing energy use and associated emissions beyond baseline levels through implementation of energy-efficient measures 3. Opportunities to further reduce emissions through the use of decentralised energy 4. Opportunities to further reduce emissions through the installation of local (on-site or near-site) low or zero carbon (LZC) energy sources 5. Summary of the CO_2 savings resulting from items 2, 3 and 4 above.	Master-planning & decentralised energy

All projects	Descriptor
3.12 In line with goal 8 of the *Green City Charter "support the generation of sustainable energy"* the design team must consider generating more electricity than required for operational use of an individual dwelling, contributing to the aim of net zero carbon dwellings (see 1.18). No target figure is provided though the intention is that the proposal must generate more electricity than it consumes. As battery storage technology develops, SCC will review setting a minimum target. Appropriate calculations and statements must be provided during RIBA stage 3 so that it can be ratified for the relevant planning consent information.	Generate electricit
3.13 Water is one of the resources referred to in the *Green City Charter* and SCC local planning authority currently has a target that new build homes must meet the standard of 105 litres/person/day internal water use. This lies between the 2020 and 2025 RIBA Climate Challenge target for water usage. It is an improvement on the current *Building Regulation Part G - Sanitation, hot water safety and water efficiency* (2016) standard of 125 litres/person/day. 3.14 A fittings approach will be required to achieve the water usage standard and this falls within the optional requirement, paragraphs 2.8 to 2.12 of Approved Document Part G which identifies maximum consumption for water fittings as follows: **Water fitting** / **Maximum consumption** WC — 4/2.6 litres dual flash Shower — 8 l/min Bath — 170 litres Basin taps — 5 l/min Sink taps — 6 l/min Dishwasher — 1.25 l/place setting Washing machine — 8.17 l/kilogram The designers and specifiers must ensure these consumption requirements are referred to in order to achieve less than 105 litres/person/day as the local target.	Water efficiency

All projects	Descriptor
3.15 Compliance may be demonstrated by use of a water calculator. 3.16 Designers must note the following with regards to the type of dwelling that is being designed: Baths – required for all family accommodation (two or more bedrooms) Showers – are acceptable in non-family accommodation 3.17 If the proposal is for special needs accommodation, the bathroom requirements must be identified with the client and confirmed as part of the project brief in the checklists as a statement of what SCC is going to get.	Water efficiency
3.18 Where the SCC client is looking for further stretch targets to be achieved, the RIBA 2030 Climate Challenge[38] targets will be referenced as below and confirmed within the checklists for sign off by client and designer:	Climate Challenge targets

RIBA 2030 Climate Challenge target metrics for domestic buildings

RIBA Sustainable Outcome Metrics	Current Benchmarks	2020 Targets	2025 Targets	2030 Targets
Operational Energy kWh/m²/y	146 kWh/m²/y (Ofgen benchmark)	< 105 kWh/m²/y	< 70 kWh/m²/y	< 0 to 35 kWh/m²/y
Embodied Carbon $kgCO_2/em^2$	1000 $kgCO_2e/m^2$ (M4i benchmark)	< 600 $kgCO_2e/m^2$	< 450 $kgCO_2e/m^2$	< 300 $kgCO_2e/m^2$
Potable Water Use Litres/person/day	125 l/p/day (Building Regulations England and Wales)	< 110 l/p/day)	< 95 l/p/day)	< 75 l/p/day)

All projects	Descriptor
3.19 Sustainable Urban Drainage Systems (SUDS) must be explored by a drainage designer during RIBA stage 1 as the SCC LPA policy states SUDS must be incorporated into all development to help manage the city's drainage systems. The local planning authority must be consulted with reference to the proposed solution as part of pre-application discussions and applications. 3.20 Drainage capacity checks, for both foul and surface waste water, must be carried out with Southern Water during RIBA stage 1, to inform drainage proposals. The drainage engineer must note the timescales involved with these checks to ensure follow up with the utility to obtain. 3.21 Opportunities for grey water and rain water harvesting/recycling must be explored by a drainage engineer during RIBA stage 1 as part of a sustainable drainage proposal. This applies where either the proposal is considered a major development (10+ dwellings) or the site does not allow the use of alternative, more common, SUDS, such as soakaways or swales. Consideration is to be given to green roofs on all developments – see item 1.11.	Drainage
3.22 As part of achieving the required fuel conservation emissions rates, long-life lamp fittings must be energy efficient. 3.23 Consideration must be given to the positioning and placement of light fittings and sockets with regards to health and safety guidelines and best practice. If a hard-to-reach lamp cannot be avoided, then a long-life lamp and fitting must be specified. 3.24 The client will confirm where other fittings or appliances are to be specified as part of the project; this is more likely to be needed for special needs accommodation, for example with the provision of communal laundry facilities. Any such appliance must comply with the guidance available under *BREEAM Ene 08 Energy Efficient Equipment.*[39]	Other fittings

4. Be safe

"The ache for home lives in all of us, the safe place where we can go as we are and not be questioned." – Maya Angelou[40]

SCC residents identified that a safe home must be one of the key factors for a council home and this principle is to be embraced within all design proposals.

All projects	Descriptor
4.1 The design for all the projects will be carried out in accordance with the Construction (Design and Management) (CDM) Regulations 2015 which requires identification and notification of Client (SCC), Principal Designer and Principal Contractor roles to the Health and Safety Executive (HSE). SCC will appoint a Principal Designer at the start of a project. 4.2 Concerning pre-construction management of H&S risks, the client and design team are to note the CDM legislation aims to improve health and safety by helping the project team to: - Plan the work so the risks involved are managed from start to finish - Have the right people for the right job at the right time - Cooperate and coordinate work with others - Have the right information about the risks and how they are being managed - Communicate this information effectively to those who need to know - Consult and engage with workers about the risks and how they are being managed. Health and safety must be included as an agenda item for all design team and project control group meetings.	Health and safety
4.3 Where the site concerns development of a block, i.e. not an infill site, the designer must follow the standards and principles of *Secured By Design Homes 2019* guidance Section1: Development layout and design[41]. This section provides guidance on all aspects of design and layout that impact on the creation of a safe and secure environments, including: - Road layout - Footpath design - Communal areas and play space - Dwelling boundaries - Car parking - Lighting.	Site layouts

All projects	Descriptor
4.4 The doors and windows of the new dwellings must meet the requirements of *Building Regulations Approved Document Part Q – Security* which concerning the design and installation of secure doorsets and windows. To comply with Part Q, the design team must specify doorsets and windows manufactured to a design meeting British Standards PAS 24: 2012. This also applies to any communal doors and windows. For people with disabilities, doors may need to be automated so the option to add automation at a later date must be considered. See also items 4.24 and 4.27. The specific brief requirements must be identified and confirmed within the checklists.	
4.5 Designers must follow the standards and principles of *Secured by Design Homes 2019* guidance Section 2a for new dwellings which covers not only doorsets and window security, as described in the Building Regulations Part Q, but also: - Adjacent glazing panels - Garage doorsets - Door chains and viewers - Secure mail delivery - Rooflights and roof windows - Conservatories or sun rooms - Lightweight framed walls in buildings containing multiple dwellings - Communal external lighting - Utility meters - Access control for buildings containing multiple dwellings - Door entry systems - CCTV and recording, management and maintenance protocols - Mail delivery in buildings containing multiple dwellings - Lighting for buildings containing multiple dwellings - Loft hatches	Physical security
4.6 Designers must follow the standards and principles within *Secured by Design Homes 2019* guidance Section 3 for the following features: - Communal car parking - External storage facilities (e.g. cycle store) - Integral storage facilities (e.g. communal bin, mobility scooter or cycle stores) - Intruder alarms - Private external lighting	

All projects	Descriptor
4.7 All steps, stairs and changes of levels must be designed in accordance with BS8300, Part 1 External and Part 2 Buildings. See also 2.20 concerning the design of steps. 4.8 Designers will need to work with SCC and stakeholders to ensure that special resident groups, such as elderly, or those with physical or mental disabilities are protected from fall, collision and impact hazards. This may require standards above the minimum stipulated by the requirements of *Building Regulations Approved Document Part K – Protection from falling, collision and impact.* Specific requirements must be identified and confirmed within the checklists. 4.9 All roof spaces must be accessible from within the building and be fitted with an insulated and draught proof loft access hatch. In blocks of apartments, loft hatches must only be located in communal and be lockable. 4.10 Flat roofs are normally unacceptable as a design solution but where they are unavoidable they shall have a 30-year insurance-backed guarantee. Any flat roof areas must be provided with a means of safe access for maintenance purposes only, with due consideration taken to protect the integrity of the roof surface. Access to this route will be lockable. Residents must not be able to access flat roof areas unless they are specifically designed e.g. as a terrace, balcony etc. 4.11 In communal blocks, residents must not be able to access any equipment or services related to the communal aspects of the block, such as lift motor room, service risers, landlord's services or stores etc.	Protection and minimising hazards

All projects	Descriptor
4.12 All fire safety design must be carried out in a manner compliant with BS9999:2008 and the proposed building must meet the requirements of *Building Regulations Approved Document Part B Fire safety - Volume 1: Dwellings covering:* B1 Means of warning and escape B2 Internal fire spread (linings) B3 Internal fire spread (structure) B4 External fire spread B5 Access and facilities for the fire service 4.13 The design team must consult current guidance notes[42] concerning the use of certain materials, including external wall insulation, high pressure laminate (HPL) cladding and aluminium composite cladding. These notes must be consulted if the scheme concerns multi-storey and multi-occupied building. 4.14 The design team must consult with SCC's Building Control Service (not an Approved Inspector) during RIBA stage 1 on proposals to specifically discuss compliance with Part B. Building Control typically discuss proposals with Hampshire Fire & Rescue Service and this must take place before planning application submission so any guidance can be incorporated in the planning submission documents. 4.15 In addition to meeting the requirements of Building Regulations Part B, the design team must consult with SCC's Programme Manager – Fire Safety[43] to confirm specification is satisfactory at RIBA stage 2. 4.16 The design team must produce a fire strategy drawing for the building and site to convey all the fire safety aspects of the proposed dwelling(s). This is required for all proposed dwellings. 4.17 For proposals of multi-storey and multi-occupied buildings, the design team must include a dedicated fire engineer, named in the contract documentation	Fire safety

All projects	Descriptor
4.18 The proposed designs will need to meet the relevant British Standards as identified within the Building Regulations, notably: BS 5266-1 Emergency lighting BS 5446-2 Fire detection and fire alarm devices for dwellings BS 5839-6 Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises BS 9251 Fire sprinkler systems for domestic and residential occupancies 4.19 Means of escape from dwellings must comply with recommendations of *Approved Document B Fire Safety*. Smoke detection will be required in accordance with BS 5839 and escape windows must be provided to habitable rooms on the first floor of two-storey dwellings. 4.20 External walls of any high-rise buildings must be non-combustible and recommendations on the management of fire safety issues throughout the project must meet the recommendations arising from the *Fire Safety Bill* and the *Building Safety Bill* (part of the post-Grenfell recommendations). Any exceptions must be confirmed with the client. See item 4.13 (above).	Fire safety
4.21 If the proposal is for specialist housing where there will be vulnerable residents, the design team is to note that a sprinkler system is mandatory. The client will confirm the extent of the system within the project brief at the start of RIBA stage 1. 4.22 If the proposal is for a building over 11m high[44], the design team must note that a sprinkler system will be required. The client will confirm the extent of the system within the project brief at the start of RIBA stage 1.	Sprinklers

All projects	Descriptor
4.23 For buildings which are designed for residents with specialist needs, there may be a requirement for an emergency voice communication system. The client is to confirm the type of system(s) required within the project brief and this must be noted in the checklist and initialled. 4.24 Any emergency voice communication system must meet BS 5839-9 *Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems [2011].*	Emergency communication
4.25 Doorsets must be specified for all external and internal doors, i.e. the fabrication and installation of the door together with its frame. For fire resisting doorsets, certified evidence of fire performance tested in accordance with BSEN 1634, will be required in the form of a product conformity certificate. All fire doors must be clearly and permanently marked with their declared fire-resistance period (e.g. FD30S). These requirements must be identified in the contract documents. Consideration for future automation must also be given when products are selected. See also item 4.4 (above). 4.26 3rd Party Certification of the complete doorset is mandatory (door, frame and ironmongery). This testing must be in accordance with BS 476-22 or BS EN 1634; international test certification not meeting this standard is not acceptable. Currently GRP Composite Doors do not comply and must not be used. 4.27 Contractors fitting fire doors need to be FIRAS registered and installers must hold 3rd party certification as qualified fire door installers. Evidence must be provided and kept on file at SCC. 4.28 Fire doors must take account of the likely user groups; i.e. in supported schemes residents could have difficulties in opening the doors due to the weight and closer resistance and automatic closers should be considered in these situations. See also item 4.4.	Fire doors

5. Be a home for life

"We must work for simple, good, undecorated things, but things which are in harmony with the human being and organically suited to the little man in the street." – Alvar Aalto[45]

Fairer

SCC homes must be exemplar homes for the city's residents, reflecting a long shelf-life, robustness and flexibility for those who will live in them.

All projects	Descriptor
5.1 The minimum design life of the building elements and materials, subject to appropriate maintenance, shall be as follows:	Design life

	Minimum design life (years)
Structural elements, pitched roof coverings, external wall finish	60
Canopies, eaves and rainwater goods Wet heating distribution system pipework, radiators Bathrooms	40
Windows	35
Flat roof constructions (with insurance backed guarantee) Electrical wiring Storage heaters	30
GRP roofing materials (certified minimum life) External doors	25
Fixtures and fittings	15
Internal floor and wall finishes	10
Decorations	5

All projects	Descriptor
5.2 Southampton is in a coastal location with an aggressive marine environment (the city limits are within 20km of Southampton Water) and designers must take this into account with regards to the durability of elements and components and the impact on material degradation/corrosion. 5.3 In recognition of social factors which may cause accidental or malicious damage to council buildings, all partition and plasterboard systems must be specified that have a duty rating identified in accordance with BS 5234-2:1992 as follows: - Internal walls within dwellings – Heavy duty (**HD**), reflecting situational chance of accident occurring or misuse - Internal walls to communal areas – Severe duty (**SD**), reflecting situation prone to abnormally rough use 5.4 Moisture-resistant plasterboard must be specified for all bathrooms, wet rooms and kitchens.	Durability of products
5.5 Proposals need to reflect ease of maintenance with attention given to: - Placement of building and guttering with regards to leaf fall in autumn - Access to any roof surfaces requiring annual maintenance - Products that do not fade or degrade with sunlight exposure - No high-gloss external panels which quickly show dirt and impairments - Selecting colours and materials that are readily available and where possible standard across all projects. SCC Asset Management must be consulted on the final specified proposals and products. 5.6 SCC's maintenance contractor must be consulted on proposals as they develop throughout the design process. This is particularly important for mechanical and electrical aspects and the development of centralised energy proposals. 5.7 New landscaping proposals (see also item 1.13) must consider the retention of mature landscape features, such as trees, and low maintenance design, i.e. appropriate sized plants for the space they will grow into, reducing amount of annual pruning required.	Ease of Maintenance

All projects	Descriptor
5.8 Non-family accommodation must be adaptable for residents that may need facilities to aid access. Such dwellings must be designed to meet Category 2 of *Building Regulations Approved Document Part M1*. The client will confirm exceptions to this requirement (i.e. Category 1 Visitable dwellings) within the project brief for the specific site. The designers are to reflect this requirement by including (but not limited to): - Pattressing within bathroom partition walls for future installation of wall-fixed grab rails - Reinforcement for ceiling-fixed hoist installations - Barrier-free access and design, including a lift or space for a lift to accommodation at first floor or above. 5.9 Provision for mobility scooters is also a possible adaptation that may be required within the dwellings. This would require both physical space and a charging facility for a scooter to be used by a resident. The client will confirm this requirement within the project brief for the specific site. The design team must seek confirmation on this aspect for all dwellings designed for residents with special needs. 5.10 Designers must review *Part 8 Adaptability of SCC's Residential Design Guide* (see items 1.1 and 1.2) which refers to consideration of opportunities for adaptation. 5.11 Part 8.2 of the *Residential Design Guide* refers to the *Lifetime Homes Principles* devised by the *Joseph Rowntree Foundation*. The *Lifetime Homes Standard*[46] must be considered by the design team and incorporated where reasonable as examples of best practice to allow access for all. (See also items 2.19 and 5.7). For convenience these 16 principles are summarised here: 1. Parking width or widening capability 2. Approach to dwelling from parking (distance, gradients, widths) 3. Approach to all entrances 4. Entrances 5. Communal stairs and lifts 6. Internal doorways and hallways 7. Circulation space 8. Entrance-level living space 9. Potential for entrance-level bed-space 10. Entrance-level WC and shower drainage 11. WC and bathroom walls	Future proofing

All projects	Descriptor
12. Stairs and potential through-floor lift in dwelling 13. Potential for fitting of hoists and bedroom/bathroom relationship 14. Bathrooms 15. Glazing and window handle heights 16. Location of service controls Where this guidance duplicates or conflicts with other requirements, the design team must confirm project brief requirements with the client. Any selections or decisions made must be recorded in the checklist and initialled by SCC client and designer. 5.12 Designers must identify at RIBA stage 2, concept design, where it is not possible to incorporate a specific Lifetime Homes Standard principle into the design proposal. This must be noted in the checklist and initialled by the designer and SCC client.	Future proofing
5.13 *Building Regulations Part R* – Physical infrastructure for high-speed electronic communications networks contains guidance on in-building physical infrastructures to allow connection to a high-speed communications network. Designers must ensure that the building complies with the relevant aspects of B*uilding Regulations Approved Document Part R* related to provision of: - A network termination point - An access point (for multi-dwelling buildings) - Ducting/conduit and/or trays in riser.	Technology
5.14 All the projects must meet BIM Level 2 requirements, complying with BS EN ISO 19650. As such, it is expected that the design team will use appropriate tools to meet this requirement. SCC will require a BIM Execution Plan to be submitted and agreed. 5.15 SCC Property will be using NBS BIM Toolkit to define roles and information delivery on the project from the start of RIBA stage 2 onwards. 5.16 Outputs from design consultants must comply with BS1192. SCC are currently exploring the use of BIM for facilities management.	Building Information Modelling

All projects	Descriptor
5.17 In order to ensure the homes and the systems within them are performing as designed, the design consultants must adopt the principles of CIBSE *Soft Landings*[47] throughout the design development. This will involve reaching out to all stakeholders, including users, at the earliest stages of the project to understand the use of spaces. The design team must ensure that the client has considered adequate consultation with the relevant user group. 5.18 Appropriate training for the new tenants must be identified prior to construction. The designers must work closely with relevant tenant liaison officers to ensure tenants are prepared for living in their new home. There must be training sessions prior to occupation and post-occupancy evaluation during each season. This will be particularly important where newer technologies and systems are incorporated, such as heat recovery. 5.19 The design team must prepare a schedule that identifies and includes: - A suitable timescale for commissioning of all building services and control systems in line with appropriate best practice guidance - A suitable timescale for testing building fabric, in accordance with appropriate standards (e.g. airtightness testing and/or thermographic survey) - A suitable timescale and requirements for demonstrating the building and its systems to SCC Asset Management - An itemised list of any SCC Planning conditions and how they are to be met and their means of verification (i.e. air tightness testing) - With the Principal Designer, a suitable timescale for record information preparation (including as-built drawings) and the Health and Safety file. This schedule must be available as part of the tender information for the main contractor to ensure this is programmed into the project delivery before any award of practical completion can be considered.	Commissioning

Part 2: Housing design checklists

1. Site wide

Both the SCC client and the Lead Designer must initial the boxes of the right-hand column to indicate that they have read and understood each clause. Where further explanation is required, a response column is included. The response is required to be explanatory and one-word answers are insufficient. If a clause is not applicable to the specific project, this must be clearly stated.

Clauses are highlighted, either where they represent an enhancement on the minimum standard to be achieved or as a requirement for special needs housing. These are a benchmark and are not intended to diminish the importance of clauses which are not highlighted.

Key:

An enhanced standard

A standard for special needs housing (their specific inclusion is to be confirmed by the SCC client)

Contents:

1.1	General	Requirement	Response	Initials
a	Residential Design Guide and land ownership	Design should comply with the *SCC Residential Design Guide.*		
		Designs encroaching onto Highways land are to be compliant with the *Streetscape tool kit Southampton, Design Guidance for the Public Realm.* Designs must be consulted and agreed with Balfour Beatty.		
b	Site access	Ensure that the site entrance has identity.		
		SCC homes are places of residence which sometimes have a relationship with the public through public walkways or cross-site links.		
		Design defensible space at the front of the building.		
		Additional security may be required with some special needs groups – client to advise.		
		Secure gated compounds are not being sought, but clear definition between private and public space is.		
c	Vehicular entrance	Assess the suitability of the width of the crossing in relation to the public/private transition, the compliance and the ease of gradient.		
		Unadopted vehicle circulations areas must be designed to safely withstand the loadings of refuse vehicles, removal trucks, fire engines and the like without deforming or subsiding. The minimum total thickness of construction should not be less than 450 mm.		
		Analyse the adequacy of and the necessity for: vehicle crossing, speed bump and speed restriction signage, pedestrian crossing.		
		For major projects and communal buildings with a central cycle store, consider cyclist access. Preferably this is not mixed with the pedestrian realm.		
		Consider definition of the threshold with materials or other design means.		
d	Pedestrian entrance	Ensure that pedestrian entrance is delineated from the vehicular entrance.		
		Include a dropped kerb for the vehicular entrance.		

1.1	General	Requirement	Response	Initials
e	Signage	Street name plates and direction signs should be clearly visible and be fixed at an appropriate height in accordance with the local authority requirements.		
		Door numbers and road signs shall be provided in accordance with the requirements of the Post Office and Local Authority. The Contractor is to organise these matters and details shall be confirmed to the Employer.		
f	Boundaries	Define the site boundaries by means of fencing, retaining walls and other landscape elements. Trees must be planted well within boundaries, not used to mark them as this becomes an issue with who owns/is responsible for them.		
		There is a need to retain permeability of wildlife, e.g. hedgehogs, at boundaries; this must be considered within the solution.		
		SCC's Residential Design Guide presents opportunities for establishing the appropriate level of visual permeability for the site.		
g	Service vehicles	Waste truck travel is to be analysed by a highways engineer, based on current vehicles within SCC's fleet, and the analysis provided to the Project Manager (including tracking diagrams). The analysis must identify: - Pedestrian hazards especially visibility of small children or ambulatory. - Potential for damage to property (low walls, bollard, pole lamps etc.)		
		Clear access is to be facilitated for ride on mower to grassed areas in landscape design. Consult with SCC Open Spaces.		
		Consider the noise impact on tenants when specifying speed bumps or other physical speed reduction measures.		

1.1	General	Requirement	Response	Initials
h	Tenant parking	Refer to *SCC Residential Design Guide*, Maximum Parking Standards, for numbers. Manual item 1.6 above refer.		
		In some cases traffic survey may be required to determine an appropriate numbers of parking.		
		Parking bays must be future proofed with vehicle charging provision – see 1.5n.		
		Car parking bays/spaces shall be designed to withstand the loadings of cars and light vans without deforming or subsiding. Full kerbs and/or bollards are required to restrict access to pedestrian and planting areas.		
		Dropped kerbs are to be provided at the junctions of footpaths with car parking areas. This is in addition to any requirements of the SCC highways authority.		
		Car parking spaces must be defined using permanent delineation.		
		The design may vary, depending on the land ownership (housing land or highways land). Highways land: any design to comply with the *Streetscape tool kit Southampton, Design Guidance for the Public Realm.*		
		Consider planting behind the parking bays, looking towards dwellings. If habitable rooms are overlooking that parking, screening may be required to avoid flashing the car lights towards the rooms.		
i	Visitor parking	SCC's Housing Service will specify visitor car-park requirements for each site during the planning stage.		
		If these requirements are not clearly stated, the designer has the responsibility to request them from the Project Manager.		
		SCC may require a dedicated space for visiting care or medical staff if the project concerns a specialist care housing. This should be identified by SCC within the brief.		
		Locate visitor parking signage and ensure that the signage is clearly visible and unambiguous.		

1.1	General	Requirement	Response	Initials
j	Contractor maintenance parking	SCC Housing Operations may require a dedicated contractor car-park to be provided for the use of maintenance contractors.		
		Discuss this requirement with the SCC Project Manager.		
k	Accessible parking bays	Provide accessible parking to all sites as required by the planning authority and the project specific brief. Manual item 1.7 above refer.		
		Locate these bays near accessible/ ambulant apartments where provided.		
l	Emergency vehicle bays	No Parking zones may be required at the front of each building.		
		Discuss with SCC Building Control, who will liaise with Hampshire Fire & Rescue Service, to agree all the details.		
m	Bicycle storage	Provide dedicated bicycle storage and/or cycle stores as per *SCC Residential Design Guide.* Manual items 1.1 & 1.6 above refer. 'Sheffield' stands or Josta-style stackers to be specified.		
		Provide lockable cycle store for residents; contents must not be visible from street.		
		External cycle parking for visitors; secure bolted fixing for bicycle stand is required to the ground/wall.		
n	Truck unloading	Consider ease of travel and unloading for furniture relocation trucks to the building entrance.		
o	Mobility scooters	Create defined space for mobility scooter parking, where part of the brief. SCC needs to confirm how many are required as part of the brief.		
		Provide for secure power recharge facilities, isolated from general tenant use.		
		Prepare a drawing to indicate space provision, weatherproofing, security, charging.		
p	Taxi bay	Provide a taxi pick-up drop off area in shared buildings with elderly or disabled tenants. This will be confirmed in the project brief.		

1.1	General	Requirement	Response	Initials
q	Pavement markings	Marking to be consulted and agreed with SCC Highways team. Any new marking on housing land to be consistent with Highways markings.		
r	Kerbing	All new concrete kerbing to parking areas and driveways is to be heavy duty.		
		All kerbs to be compliant with SCC Highways team standards.		
s	Shelter	Design the main building entrance as the primary shelter for waiting, building identification and weather respite. As with all other common space this is a designated smoke-free zone.		
t	Smoke free	All SCC homes are smoke-free. We are seeking to reduce the health risks of passive smoking and associated litter, protect our properties and empower tenants to their right to live is a healthy environment.		
		Apartments are to be smoke free as well as communal areas including entranceways, hallways, and service areas.		
		Over and above this is the fact that smoking is not allowed in common areas as it is a fire hazard. Place smoke-free signage in the above areas.		
		Designated outdoor areas may be required for smoking and may include weather shelters or seating. This requirement will be contained in the project-specific design brief.		

1.1	General	Requirement	Response	Initials
u	External tap	Provide an external tap, or taps if required, in an appropriate location, with an internal isolation valve.		
		An external tap is to be designed for all houses; location to be considered.		
		For blocks of flats, please refer to project-specific brief.		
		Alternatively water butts may be installed to avoid any metering issues with shared buildings (see also item 4.8f), to minimise water usage or as part of rainwater collection for sustainable urban drainage. (See *SCC Green City Charter 2019*).		
		Provide drainage; do not place taps over unfinished surfaces; provide sump or connect gully into storm water system.		
v	Building orientation	Optimising the building orientation for use of solar panels must be considered at the earliest stage.		
		Orientation of the building must not be at the expense of existing retained trees or any proposed trees, where future maintenance must be considered. i.e. the tree must not require constant pruning, often life shortening, to prevent shading solar panels.		

1.2	External Lighting	Requirement	Response	Initials
a	Parking and roadway lighting	Street lighting to be consulted with SSE (Scottish & Southern Energy) at early design stage.		
		Provide general area and street lighting to a determined lux level based on the assessed risk of the site.		
		Lighting must be designed and positioned, in a maintainable location and with due consideration of existing tree canopy cover.		
		Design out lighting disturbance or light spill to wildlife, tenants and neighbours.		
b	Path lighting	Adequate exterior lighting is essential and should be provided to all communal areas and areas in need of supervision. It must be sufficient but no more and be directed to where it is needed. All external lighting shall be to a standard that would be acceptable to the highway authority for adoption.		
		Lighting must be designed to minimise ecological impact and specified to consider warmth of light, LEDs, not near trees or shrubs, wavelength; light pollution; designers must refer to Guidance Note 08/18 produced by the Institute of Lighting Professionals with the Bat Conservation Trust		
		Light fittings should be sited to avoid nuisance to residents. Lighting should not be positioned in close proximity to bedroom windows wherever possible. White light is preferred for security reasons. Light fittings should be low or renewable energy dusk to dawn controlled units of robust and vandal resistant construction and be readily maintainable – all to the approval of the Employer.		
		All external lighting which is not directly attributed to a dwelling to be from an unmetered landlords supply provided from the street lighting mains.		
		All external path lighting meets the *Secured By Design* standards.		
c	Building entrance lighting	Ensure building entrances, front doors and signage are well-lit.		
		The building entry sign is to have a dedicated light.		
		Lighting to be recessed into any entrance canopies.		

1.3	Fire Services	Requirement	Response	Initials
a	General	The fire safety aspects of all proposals must be designed in accordance with BS9999 Code of practice for fire safety in the design, management and use of buildings. Refer to item 4.12 above.		
b	Monitoring	Specification and recommendations must comply with SCC's current *Fire Safety Action Plan*.		
c	Fire systems	Building risks identified (3 Key Gateways) The first gateway point is to satisfy the JCA (Joint Competency Authority) that the building is accessible by the Fire Service, which must be determined before the building gets planning permission.		
		Secondly, the duty holder must satisfy the JCA that key building safety risks are understood and will be managed and that "robust" processes are in place, before building work can start.		
		Thirdly, the JCA must be satisfied that the signed-off design has been followed before occupation can start.		
d	Critical (fire) design points	No HPL or ACM cladding to be specified. Refer to items 4.13 and 4.19 above. No flammable materials in balcony construction		
		No flammable materials in balcony construction; all balconies are to be constructed of non-combustible material.		
		Recommendation that all buildings over 11 metres have sprinklers installed. Refer to items 4.12, 4.17 and 4.21 above.		
		Designers to ascertain whether sufficient water supply and pressure is available at the outset of any sprinkler proposals.		
		Rockwool intumescent mastic and fire batts to be used for all fire stopping.		
		HILTI Fire Collars – or equivalent (certified) product – to be used on pipework.		
		Fire-rated sheathed electrical cables to be used; cable installations must be secured in a non-combustible way.		

1.3	Fire Services	Requirement	Response	Initials
d	Critical (fire) design points	Fire Engineer to be appointed as part of the design team and named in the documents.		
		Early engagement with Hampshire Fire & Rescue Service (HFRS) is required (often SCC Building Control will carry this out).		
		Sprinkler systems is to be installed in special needs housing. Designers to ascertain whether sufficient water supply and pressure is available at the outset.		
e	Entry fail safes	Automatic doors must open freely in the event of a fire.		
		Fire engineers to incorporate design solutions that allow building entrance doors to release (fail open) in the event of fire alarm activation.		
f	Evacuation zones	Detailed fire strategy drawings will be required.		
g	Emergency (fire) box	Fire box to be located in warden's office or entrance lobby for shared accommodation.		
		The fire box is to includes details for the fire brigade like: service cut offs, master access keys, keys for the lifts etc.		
		If CCTV is installed, this key box should be monitored by a camera.		

1.4	Waste management	Requirement	Response	Initials
a	General – access to and provision for waste bins	Provide appropriate waste disposal systems.		
		Houses: provide storage space for a minimum of two external bins of 80 litres capacity and glass recycling container to each dwelling with a private garden, unless prescribed differently by the local authority.		
		SCC can also provide bins for green waste, for an additional charge, so space needs to be allowed to accommodate an additional bin.		
		Blocks of flats: provide adequate number of Eurobins to serve needs of residential/commercial use (refer to SCC *Residential Design Guide* for more information).		
		Bin store ideally to be integrated with the building, not separate. Fire, fire detection, security and refuse collection should be considered. Bins to be easily wheeled out of the bin store up to collection point by the kerb side. No steep gradients, dropped kerb to be designed for the bin collection route.		
		If any separate, external bin stores are provided, the bin store is to be constructed to include a roof, secure door and ventilation.		
		Discourage dumping by non-residents through appropriate design and location to the street as far as possible.		
		Consider the location of rubbish areas in relation to building entrances and proximity to openable windows in relation to smell.		
		Consultation with SCC Waste Management is essential if the proposal is for residents with special needs.		
		Location of bins to be considered with regard to the noise of 'back-up [reversing] bleepers' and the grinding of low gears, particularly in close proximity sheltered accommodation or dwellings for those with impairments.		
b	Recycling	Identify space in rubbish areas and locate signage for tenant separated recycling storage within the dwelling.		

1.4	Waste management	Requirement	Response	Initials
c	External rubbish enclosure	Bins, if storage is not designed in a building, are to be provided with a dedicated, secure, designed enclosure that is able to accommodate enough Eurobins (normal waste, recycling and bottles; sometimes also green waste).		
		The panels should be at least 2.1m high. Internally there should be bumpers all around to avoid damage caused by moving the Eurobins. If possible two entrances should be provided for security reasons.		
		An integral bin store to a building is the preferred option. This will require an internal gully/drainage for spills, hosing down, a sloped slab floor, natural ventilation, robust construction.		

1.5	Landscape	Requirement	Response	Initials
a	Landscape general	Landscape contractors are required to include a maintenance period of at least 12 months, or longer, depending on the nature of the proposal. Allow for handover to SCC in-house contractors at the end of rectification period.		
		Without compromising ecological net gain and biodiversity, all landscape elements must be designed for ease and cost-effective maintenance. Minimal or no specialised access equipment should be required to access landscaped areas.		
		Compost must not contain peat and any plants used in landscaping schemes must not be supplied in peat.		
		Consider how the landscaping will be maintained and ensure it is easy for SCC in-house operations team to continue maintenance after completion.		
		SCC Decent Neighbourhoods, Open Spaces, Tree Officer, Ecological Officer, Planning Authority, Highways /Balfour Beatty (if the proposal is on highways land) to be consulted with landscape proposals and the plant species being proposed.		
		Protection of existing green space in the vicinity of the site; measures to protect existing green space from people parking on it as a result of development.		

1.5	Landscape	Requirement	Response	Initials
	Landscape general	Landscape architects are required to use products that have been tested in the Southampton area and comply with Highways guidance unless agreed differently with SCC Housing Service.		
		Health and safety in design – consider sharp edges, changes in gradients, trip hazards, slip resistance. Also design out anti-social behaviour and any unwanted uses, such ball games, where balls are kicked against house/block walls, cycling in pedestrian areas, and other non-wanted vehicular access/car parking. Health and safety is a primary consideration in the design of all landscapes.		
		Secure manholes with padlocks or tack welding, particularly grille type, especially where sites are likely to be frequented by young children.		
		Consider the impact of the wind on all vegetation, allow for support of young trees, solid bark nugget to planter beds and protect roots.		
		Where providing private on-ground gardens, maintenance must be considered. Common areas are maintained by SCC Open Spaces and community; private fenced gardens or courtyards are maintained by tenants.		
b	Vegetation general	Ensure that plants are fit for purpose and will not affect the life of the buildings they are planted around.		
		All plants are to go in at ground level (with exception of green walls and roofs) or where planting is part of a community garden where raised beds may be included (see item 1.5g).		
		Do not plant close to buildings – structural consultant to be consulted regarding impact on foundation design and proximity of planting.		
		Always specify UK native species and/or species of recognised value for wildlife; species to be agreed with planting consultees as item a.		
		Consideration to the Asthma Foundation website and avoid plant species that contribute to allergies and asthma sufferers. Generally avoid positioning plants under bedroom windows and near entrances.		

1.5	Landscape	Requirement	Response	Initials
b	Vegetation general	To achieve biodiversity benefits, planting should be of recognised value for wildlife. Schemes such as the RHS (rhs.org.uk) Plants for Pollinators demonstrate value for specific groups of species. A full list of plants for pollinators is available from the Royal Horticultural Society.		
		Do not specify plants that may be poisonous, particularly at sites that are likely to be frequented by young children or adults with special needs.		
		Plants of edible plants, such as strawberries and currants, could be used in appropriate positions. Planting of herbs, i.e. rosemary, in some planter beds is encouraged.		
		Where it is judged to be appropriate to provide a level of planting close to a building face, select appropriate shallow rooting and low-spread plantings that will not compromise the waterproofing or finish of the external walls. Maintain access for maintenance equipment. Facilities Maintenance contractors must be able to undertake maintenance to a building without being hindered by planting. Protect the building structure through proper drainage.		
c	Trees	Native UK tree species must be considered first.		
		Although the planting of edibles is desirable from a community perspective, the demographics of the site must be taken into account. There are examples of trees being stolen or relocated to private areas. Fruit trees may be included as an option however choice of location is key and needs to be considered at the pre-application stage. (Landscape schemes are only permitted to contain 15% berry/fruit bearing species within the Airport's Safeguarding Zone.) Also consider the potential issues with birds feeding on the fruit and therefore congregating around buildings and clothes drying areas. This will need further consultation if it is proposed.		
		Do not plant trees close to buildings: structural consultant to be consulted regarding impact on foundation design, species and proximity of planting.		

1.5	Landscape	Requirement	Response	Initials
c	Trees	Identify existing below ground services prior to locating tress to avoid clashes.		
		Consider large trees in relation to existing ground (clay) drainage and consider replacing with modern plastic pipework.		
		Consider increased tree planting in the area, beyond one in each garden, if the site or its surroundings can sustain more tree planting in order to carbon offset naturally.		
		All plants supplied by the contractor shall be obtained from a reputable nursery. Before stock is purchased the client reserves the right to inspect the nursery or to approve samples. All material supplied will be similar in size and quality to the approved samples and in accordance with the relevant parts of BS 3936. Any Advanced Nursery or Semi Mature trees to be supplied in accordance with BS 5236.		
		Tree stakes shall be set out on site according to the plan and approved by the architect/contract administrator/ employer's agent to avoid damage to drainage and service runs. The client also reserves the right to adjust the exact position of the trees.		
		Where trees are planted in grass they are to have an area of 500mm radius around the base free of grass and weeds, and mulched as per the shrub bed specification.		

1.5	Landscape	Requirement	Response	Initials
d	Planting beds	Provide 100mm minimum border to planting beds.		
		Plant low species at the front of beds and higher species at the centre or back of the beds.		
		Raised beds are to be used only where tenants adopt them, e.g. as part of a community garden, so must be easily removable if SCC needs to take over maintenance. Raised beds are to have drainage metal to first third, top two thirds are to contain a suitable compost nutrition (not containing peat) specifically for the growing of vegetables or decorative plants.		
		Fixings for raised beds must be concealed or flush for safety and aesthetics reasons.		
e	Grassed areas	All areas designated for grass shall be turfed (not grass seeded) – this includes all rear gardens to houses.		
		Amenity grass areas must contain low-growing wildflower species to achieve biodiversity enhancement.		
		Mowing strips are to be included against beds, walls, shin rails, fencing, railings, or similar; mowing strips are concrete 'margins'– up against vertical slabs so you don't have to trim right at the edge and it makes maintenance easier.		
		For communal amenity space, ensure that SCC Open Spaces maintenance have access for ride on mowers. (1200mm min. clear width is needed for mower access to any fenced off areas.) Turning circle for the ride on mower needs to also be considered, advice can be provided by the Open Spaces Operations Manager for the area.		
		Avoid planting grassed areas of less than 4m wide or 12m^2 as they are not easily maintained.		
f	Seating	For communal gardens, provide durable external seating where possible.		
		The provision of external gathering spaces encourages community interaction and should be investigated for all shared buildings and gardens.		
		Seat heights need to be considered for tenants of the accessible and adaptable units.		
		Consider the tenant demographic when locating and specifying seating, for example elderly will require more rest areas.		

1.5	Landscape	Requirement	Response	Initials
g	Community gardens, primarily as part of special needs housing proposals	Design must have community consultations.		
		The future maintenance of community gardens must be agreed with client and SCC Open Spaces.		
		Ensure that the gardens are adequately lit and feel secure, either by fencing or by way of overlooking/natural surveillance.		
		Consider fixed seating, tables, BBQ area, external tap, and external store as part of community garden design.		
h	Play areas	Play areas, where applicable and required by the planning authority, to meet community needs.		
		Must be designed in accordance with the project-specific community brief and public consultations.		
		Design consultants must visit other SCC Housing Service playground sites for precedent studies and best practice examples.		
		Consider the following: - Types of equipment – longevity, safety, age appropriate - Childproof fencing, if any - Overlooking/surveillance - Proximity to buildings, shelter and sun - Ground materials and substrate – safety factors - Long-term maintenance - Aesthetics - Adult exercise equipment.		
		Any value engineering proposals must be discussed with client, and any other stakeholders the client feels necessary to consult with, prior to incorporation.		
i	Sports court and recreational spaces	Community requirements, from the planning process, may include the provision of a sports facilities. Refer to the community-specific brief.		
		Location to be considered with regards to the impact on all residents.		
		All-weather sports courts must include the ability for a mechanical sweeper to access the site, so will need double-access gates and appropriate external access i.e. turning circles etc. Also courts will be designed with a durable/hard-wearing top course such as a polymeric 4 coating.		
		Any value engineering proposals must be discussed with client, and any other stakeholders the client feels necessary to consult with, prior to incorporation.		

1.5	Landscape	Requirement	Response	Initials
j	Security	Apply crime-prevention design principles to all outdoor recreation areas – private and communal.		
		Communal areas should be overlooked by at least one dwelling.		
		All external design should meet the *Secured by Design* standard.		
k	Footpaths	New footpaths are to be minimum 1.2m wide.		
		Review the ownership of footpaths and follow SCC Highways guidance if footpath is on SCC Highways land.		
		Pedestrian walkways must be well lit and clearly sign posted.		
		No paths are to facilitate ponding, ensure sufficient cross falls (1:100) and subsurface free-draining material to semi permeable paths.		
		Consider cars over sailing the pavement from parking bays. A physical barrier might be required or a wider pavement.		
		Suitable materials for footpaths: - Permeable surfacing is preferred as part of SUDS solutions - Concrete or brick paving (must include weed-prevention measures, permeable paving/sub-base is preferred) - Resin bound (must include weed-prevention measures) - Asphalt is cost effective and low maintenance. Where specifying for footpaths, combine with other materials for visual interest. Consider the hierarchy of public and private space in relation to the quality of materials. Asphalt may not be appropriate in all instances.		
		Unsuitable materials for footpaths: - Compacted hoggin - Shingle or pea gravel (these have the potential to spread). Take care where pebbles or pea gravel are considered as they have the potential to spread or be used as missiles.		
		Footpaths must comply with the slip-resistant performance to British Standards.		
		Barrier-free access must be provided; aim for accessible footpaths wherever possible, consider including dropped kerb, tactile surfaces and other barrier-free principles to all footpath design.		

1.5	Landscape	Requirement	Response	Initials
l	Drying areas	Adequate provision for the drying of clothing must be provided.		
		Specify accessible clotheslines where accessible dwellings are part of project.		
		Extra consideration is to be given to adequate provision where family units are accommodated.		
		Consider adequate sun or wind exposure to external clothes lines, as well as passive surveillance from residences.		
		Houses with private gardens to be provided with a rotary dryer; an area of hardstanding must be provided adjacent to rotary dryers.		
		Clothes drying on private balconies should be retractable.		
		On-ground drying areas are the least preferred solution for communal blocks; these must be screened from streets, primary circulation routes and building entrances but visible from dwellings for security purposes.		
		Do not consider aspect of drying facilities in isolation, provide a holistic solution that works with all other aspects (e.g. heating and ventilation).		
m	Access to services	Ensure that access to manholes, fire hydrants and other service points is maintained, is visually clear and safe for service providers.		
		All legal aspects of accessing services, wayleaves, easements, must be met.		
n	Electric vehicle charging	Ducting and draw cord and feeder pillar to be installed to facilitate the installation by others of 7-22kW charge points – 25% of parking spaces, back to the landlords supply.		
		For each block of flats a further allowance of 50m from feeder pillar to a separate location.		
		Each house to have cabling from the consumer unit to an agreed point on the external wall (blanked off both ends) to facilitate potential future EV charging.		
		Consult with SSE – substation to be future proofed to allow for future EV charging. Supporting infrastructure should be reviewed to determine whether upgrades are required to meet expected future demands.		

Approval of Part 1 – Site wide design

PROJECT:			REF:
	Approved SCC Housing Management	Approved SCC Asset Management	Approved Lead Design Consultant
Print name:			
Part 1.1: General			
Part 1.2: External lighting			
Part 1.3: Fire services			
Part 1.4: Waste management			
Part 1.5: Landscape			

Date:

SCC housing management client:

Date:

SCC asset management:

Date:

Lead Design Consultant:

Date:

SCC Project Manager:

2. Building exterior

Consultants are required to use the right-hand column to indicate using a tick ✓ that they have read and understood each clause. Where further explanation is required, a response column is included. The response is required to be explanatory and one-word answers are insufficient. If a clause is not applicable to the specific project, this must be clearly stated.

Clauses are highlighted, either where they represent an enhancement on the minimum standard to be achieved or as a requirement for special needs housing. These are a benchmark and are not intended to lessen the importance of clauses which are not highlighted.

Key:

An enhanced standard

A standard for special needs housing (their specific inclusion is to be confirmed by the SCC client)

Contents:

2.1	Security and access control	Requirement	Response	Initials
a	CCTV cameras	Establish the assessed risk of the site and allow for cameras if considered necessary. This is usually in response to anti-social behaviour and is an enhancement. This requirement will be confirmed by the client. If required, it will need to be designed in consultation with the response centre.		
		Carefully consider the location of cameras to minimise impact on trees; for example, continual pruning to allow site lines is not acceptable in terms of long-term maintenance.		
		Where budget does not allow for the installation of the cameras, future proof by installing the necessary conduit and cabling. This requirement is an enhancement and will be confirmed by the client.		
b	Access control (general needs and specialist housing apartment blocks)	Provide access control – fob entry – to all communal entrances to blocks of apartments, both front and rear access. These doors are to be automated, fob access with SCC12 key override.		
		Provide fob access control with SCC12 key override to internal doors of blocks of apartments, such as: - Communal doors to corridors - Doors to lift lobbies and stairwells - Doors to cycle stores		
c	Locks	Provide secure locks on a master key suited system for the following doors in buildings with multiple dwellings: - Doors to plant rooms - Doors to roof access - Doors to riser cupboards - Doors to FM/staff only areas - Doors to commercial kitchen areas.		
d	Emergency box	See section 1.3f		

2.2	Maintenance and roofs	Requirement	Response	Initials
a	Maintenance	Design for ease of maintenance for all external surfaces, components and equipment.		
		Involvement of SCC Repairs and Maintenance teams during design stages.		
b	Pest control measures	Consider rodent, insect and pigeon/ seagull proofing to all penetrations, gutters, balconies and ledges, openings, washing lines, waste and other amenity areas; minimise window ledge depths; minimise climbing opportunities (for rodents).		
		Due to the coastal environment, careful consideration must be given to fixings, e.g. stainless steel or an aluminium alloy resistant to corrosion.		
		Refer to BPCA (British Pest Control Association) for guidance on new buildings.		
		Mitigation measures are included to all vulnerable areas.		
c	Roof access	Restrict tenant access to roofs and roof spaces (i.e. lofts).		
		Access doors must be specified as complete doorset.		
		Access hatches must be specified as frame and hatch complete, not separate.		
		See 2.1c concerning security for access doors.		
c	Rooftop drying areas	On some projects, rooftop drying areas may be considered, however only where full safety measures to prevent suicide attempts will be implemented.		

2.2	Maintenance and roofs	Requirement	Response	Initials
d	Roof safety anchors and guardrails	Consider access for maintenance to all roofs – how this is to be achieved safely must be identified within the designer's risk hazards.		
		Identify collective control measures (i.e. protecting more than one person at any one time) for roof safety; these always take priority over personal control measures.		
		Design, install and certify an appropriate guardrail for the purposes of safely cleaning and maintaining the building.		
		If a personal safety system is designed, clear signage must be specified informing maintenance contractors about the roof safety system. Full product, operational and maintenance literature is to be provided with the as-built documentation. Full certification is required at practical completion along with clear details of ongoing certification and testing requirements.		
		Depending on the frequency of access, use of particular access equipment, e.g. MEWPs, temporary scaffolding, may be the safest way to carry out roof work. This may be particularly appropriate for pitched roofs and designers should then consider access and space around the building (e.g. scaffolding zone).		

2.2	Maintenance and roofs	Requirement	Response	Initials
e	Roofing	Materials for new roofing: Pitched roofs materials: tiles, concrete, composite, clay, slate. Colour-coated steel is preferable to aluminium roofing as it is less likely to be damaged by maintenance contractors. Aluminium roofing is however appropriate in a sea spray zone and where used must be protected by a suitable access walkway. Flat roofs (if unavoidable): liquid membrane, ply, layered felt; consideration to final finish must be given if roof is overlooked. (Single ply roofing can look patchy if repairs are carried out). Green roofs should also be considered, particularly when as part of a SUDS and/or a sizeable area. The green roofs should be biodiverse to provide biodiversity net gain and contribute to the Green Grid. The design of green roofs should follow the recommendations of the *Green Roof Organisation* and *2014 Code of Practice*.		
f	Ladder access roof	Project-specific – the brief is to be obtained from SCC Housing Operations Manager		
g	Ladder access service ducts	Project-specific – the brief is to be obtained from SCC Housing Operations Manager.		
h	Rainwater goods	Deep-flow rain water goods are specified preferred by SCC Housing Operations.		
		Valley gutters are to be avoided due to difficult maintenance access and prone to leakage.		
i	Life cycle costs	To be provided as part of the design process.		

2.3	External walls	Requirement	Response	Initials
a	Blockwork (existing buildings)	Chip back render systems to check sufficiency of joints, pointing and core fill and the inclusion of reinforcing steel.		
		Replace any unreinforced concrete block or brickwork.		
		If a render system is specified, an all through system should be specified – this is particularly required to minimise maintenance on tall buildings.		
b	Brickwork (existing buildings)	Check pointing condition, check for cracked joints due to settlement, check for cavity, check for ties.		
		Check for effectiveness and corrosion of flashings. Brick veneer is not a preferred material for new buildings, however can be considered if good industry practice is followed in relation to thermal design and detailing.		
		Brick is generally a preferred material for elevations.		
c	Cladding	High pressure laminate (HPL) cladding and aluminium composite cladding must not be specified due to the fire risk. Refer to items 4.13 & 4.19 (above) refer. See also checklist item 1.3(d). Current UK guidance notes concerning the use of certain cladding materials, including external wall insulation, must be consulted.		
		Use of green walls, (as well as green roofs and trees) may be explored as part of a holistic strategy to reduce fuel use and offset carbon emissions. However, the maintenance implications must be explicitly reviewed with the client at the earliest stage.		
		Cladding systems are to be robust, tested and underwritten by a manufacturer's statement.		
d	Bird proofing	Where there are known issues in relation to birds, including sea birds, propose mitigation measures, excluding netting which can trap and kill birds. This must be reviewed with the ecologist as in some locations Schedule 1 species (such as peregrine falcon or black redstart) may be encouraged.		

2.3	External walls	Requirement	Response	Initials
e	Paint systems	The specification is to be provided by the specified paint manufacturer and cross checked by the architect.		
		For client surety regarding the painting warrantees, ensure regular specifier inspections on site during the surface preparation and painting applications by the subcontractor. Agree the inspection regime before work starts.		
		The architect is required to provide a comprehensive paint and colour schedule which includes paint types.		
		If paint for render is specified, this must be appropriate and SCC's maintenance team must be consulted concerning future maintenance.		
f	Telecommunication and Data Penetrations	To be weather collared and fire rated where necessary.		
		The specification must require that the contractor leaves any existing or new junction boxes with penetrations into the building fire sealed appropriately and left in a neat and tidy condition.		
g	Ventilation louvres	All ventilation louvers must be powder-coated metal with insect/vermin proofing. Louvres opening onto smoke-controlled common areas can allow insects to get in to detector heads.		
		Assess the risk and specific airflow requirements of the louvred opening and specify an appropriate louvre profile.		
		Avoid an 'institutional' appearance.		
i	External stairs affixed to structure	External stairs are to be avoided; access to first floor dwellings, if private, should be integral to the whole building allowing residents to have a ground floor front door.		
		If an external stair to a balcony cannot be avoided, it must be sheltered from the weather (including ice, frost and snow), provide slip resistance to steps in all types of weather, and have warm-to-touch handrails, not metallic.		
j	Extract cowls	All extract cowls and louvres grilles must be powder-coated metal with insect/vermin proofing.		
		Whole system approach to extract cowls, dampers, wind factors etc.		
k	Nesting and roosting boxes	Designers must consider the inclusion of roosting and/or nesting boxes for a variety of species within the proposals.		

2.4	Glazing	Requirement	Response	Initials
a	Glazed walls	Fully glazed screens and walls are to be avoided. Glazing needs to be designed to minimise bird strike risk, e.g. no clear views through buildings, manifestations showing that glazing is present. Consider ventilation and heat gain to communal circulation spaces, such as stairwells and lobbies, and propose mitigation measures where required.		
b	Glazed sliding doors	To be provided to accessible units and apartment balconies; must be lockable.		
		Provide for a transom in preference to manifestations as accident/hazard prevention measure.		
		In the event of a broken pane it is more efficient to replace a smaller panel – maximum pane width to be 900mm.		
c	Windows	Triple glazing will be provided for all new windows – suitable framing material must be specified. Refer to item 2.21 above.		
		As a minimum, double glazing must be specified for windows and doors; if double glazing is to be used for windows, this exception must be confirmed by the SCC client.		
		Accessible window handles to be specified to enable future adaptation of individual dwellings.		
		Easy clean hinges to be specified for all dwelling windows, as preferred by SCC in-house maintenance contractor.		
		Due to the weight of the total door assembly, triple glazing should not be specified for external doors. This does not preclude any forthcoming or future technological developments in this field.		
d	Glazed features	Balustrades, screens, walls specify laminated safety glass.		
e	Fire-rated glazing	Non-combustible materials must be specified for balconies – glazed infills is an option. .		
		Fire rated glazing may be needed to protect an escape external escape route – refer to Building Regulations Part B		
f	Standard	Doors and windows of the new dwellings must meet the requirements of Building Regulations Part Q Security; to comply with Part Q, the design team must specify doorsets and windows manufactured to meet BS PAS 24: 2012. This also applies to any communal doors and windows.		

Approval of Part 2 – Building exterior design

PROJECT:			REF:
	Approved SCC Housing Management	**Approved SCC Asset Management**	**Approved Lead Design Consultant**
Print name:			
Part 2.1: Security and access control			
Part 2.2: Maintenance and roof access			
Part 2.3: External walls			
Part 2.4: Glazing			

Date:

Date:

SCC housing management client:

SCC asset management:

Date:

Date:

Lead Design Consultant:

SCC Project Manager:

3. Common and services areas

This section is relevant only for projects which involved buildings with multiple dwellings, i.e. more than one tenancy for a single building.

Definitions:
Common areas – rooms or spaces accessed and used by tenants, including horizontal circulation
Services areas – rooms or spaces accessed by facilities/maintenance staff; not accessed by tenants

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Clauses are highlighted, either where they represent an enhancement on the minimum standard to be achieved (green) or as a requirement for special needs (blue) housing. These are a benchmark and are not intended to lessen the importance of clauses which are not highlighted.

Key:

An enhanced standard

A standard for special needs housing (their specific inclusion is to be confirmed by the SCC client)

Contents:

3.1	Main entrance	Requirement	Response	Initials
a	General	Ensure all entrance foyers are welcoming, attractive, clean, accessible and well lit. Also contrasting colour to avoid potential '*white-out*' for those with visual impairments.		
		Carefully consider the fenestration – see 2.4 for further guidance.		
		Incorporate acoustic treatment to ensure there is not excessive reverberation due to dominant hard surfaces; this will detract from the welcoming nature of the space.		
		No communal entrances shall be provided to two storey flats unless specifically approved by the client before submission of the planning application.		
b	Security/ door system	See section 2.1 concerning access control and security.		
		Provide and install a full door-entry intercom system linking to handsets in individual dwellings (see item 4.1i) with the following: - Recessed into the external wall under cover of a common porch - Stainless steel unit, sealed around its perimeter - Textured numbers to facilitate use by those with impaired vision - One button per flat - A programmable timer for tradesmen and a coded entry via a 0 to 9 key pad - An electronic keep to the door without any surface wiring; keep shall be protected by a cover plate to prevent access to the face of the keep and such plate shall be fixed with vandal resistant screws. - The lock shall have fob operation from outside for the residents, keyless exit, with key override for FM staff - System shall include an adjustable and angled camera on the external panel that will view faces of callers and transmit the image to viewing screens on each flat handset.		
		A door-entry system compliant with PAS 24 required to all communal entrances. Front and rear doors to flatted blocks are to be automated with fob access and SCC12 licensed key override. These doors are to be automated (auto opening or auto release to be confirmed).		
		The main entrance, including the door and access system, must achieve the *Secured By Design* standard.		

3.1	Main entrance	Requirement	Response	Initials
c	Main entry doorset	Main entrance door (front and rear) to have clear opening of min 1000mm.		
		To be specified as a doorset; heavy-duty aluminium, powder coated or anodised; fully glazed with central transom; door complete with ironmongery to be compatible with door-entry/security access system.		
		All doors to be pointed all round externally with suitably coloured polysulphide mastic. Communal front and rear entrance doors shall be fitted with heavy duty overhead door closers with anti-slam facility.		
		The door and access system must achieve the Secured By Design standard.		
d	Threshold	In satisfying the level threshold requirement the long-term durability of this detail is of concern to the Employer. A smooth-faced concrete threshold should be used, and 'Technical Illustration 8' from the NHF document 'Standards and quality in development – A good practice guide' is required.		
e	Automatic opening doors	A fused spur to be provided to each entry door to allow for the future installation of a remote opening device.		
f	Flooring	Provide mat well at main entrance door, at least 2m into building, for high-rise buildings, 4+ storeys.		
		Provide barrier matting to entrance areas of low-rise shared dwelling buildings; this barrier matting should be continuous for at least 2m.		
		Beyond the primary or secondary barrier carpet, vinyl non-slip flooring is preferable, with no visible joints.		
		In order to minimise VOCs within the internal environment and potential harm to residents, flooring specified must be phthalate-free and meet BSENISO 10580 or BSENISO 16000-9 or BSEN 16516 or CDPH Standard Method v1.1.		
		In order to minimise VOCs within the internal environment, interior adhesives and sealants (including flooring adhesives) specified must meet BSEN 13999 or BSENISO 16000-9 or BSEN 16516 or CDPH Standard Method v1.1.		
		In order to minimise VOCs within the internal environment, wood-based products, including wood flooring specified must meet BSEN 717-1 (formaldehyde emissions) or BSENISO 16000-9 or BSEN 16516 or CDPH Standard Method v1.1.		

3.1	Main entrance	Requirement	Response	Initials
g	Tenant notices	Provide a fire-resistant Class 0 notice-board in the entrance foyer in a visible location.		
		This notice board must be fire resistant Class 0, lockable and tamperproof.		
h	Signage	Architect is to locate all signage on plan and elevation in accordance with the requirements of SCC's Housing Service. See also checklist item 1.1.		
j	Walls	All wall surfaces shall be painted with a minimum of one mist coat and two full coats of diamond matt emulsion paint.		
		Paint system must be specified according to the substrate, e.g. concrete, masonry, fresh plaster.		
k	Ceiling	Factory finished, suspended ceiling tiles are acceptable within communal area.		
		If a ceiling surface is to be paint finish, the paint system must be specified suitable for the substrate in accordance with paint manufacturer's specification.		
		In order to minimise VOCs within the internal environment, ceiling, wall and acoustic and thermal insulation materials specified must meet BSENISO 16000-9 or BS EN 16516 or CDPH Standard Method v1.1.		
l	Interior paints	All paints to be Class 'O' for spread of fire.		
		In order to minimise VOCs within the internal environment, interior paints and coatings specified must meet BSEN16402 or BSENISO 16000-9 or BSEN 16516 or CDPH Standard Method v1.1.		

3.2	Common areas	Requirement	Response	Initials
a	Bin stores	All bin stores require fob access, suited to the block they are connected with – see section 1.5		
b	Bicycle stores	All bicycle stores require fob access, suited to the block they are connected with – see item 1.1m		
c	Storage/sheds	Dedicated external tenant storage, such as sheds, is not encouraged as it attracts management and maintenance issues. Refer to 1.1m, bicycle storage requirements, if this is included in design proposals.		
d	Common area signage	Architect is to locate all signage on plan and elevation in accordance with the SCC Housing Service signage standard.		
		Identify all doors to services cupboards, stores spaces with a room number.		
e	Power points	Isolate power outlets in communal areas, including stairwells and lobbies from use by tenants.		
f	Lighting	All communal areas must be well lit in line with CIBSE recommended lux levels; 100 lux for circulation & common areas; 200 lux for the main entrance areas.		
		Specify low-maintenance, LED, energy-efficient fittings.		
g	Light Switches	Provide permanently switched (sensor controlled and daylight responsive) lighting in building entrance lobby.		
		Sensor or timer switching to all others.		
		If timer switching is used, provide a switch at the top and bottom of stair entry points and in front of each dwelling entry.		
h	Emergency-lighting	Obtain from fire engineer and respond to the project-specific fire report.		
i	Flooring	Vinyl non-slip flooring is preferable, with no visible joints.		
j	Finishes	The specification of all finishes must meet the standards identified in the sections above: Flooring – see 3.1f		
		Walls – see 3.1j		
		Ceilings – see 3.1k		
		Interior paints – see 3.1l		

3.3	Service areas	Requirement	Response	Initials
a	Cleaner's storage	Every apartment building must have at least one cleaner's store.		
		Provide a cleaner's sink.		
		To be numbered and included on signage and key schedule as an ancillary space on a SCC12 master key.		
		Consult with SCC Housing Operations for any building-specific requirements.		
		Must be level access and adequate for complex size.		
b	Meter cupboard	The landlord's supply meter (for electricity) is to be located in a lockable room, preferably with direct access from the exterior. This room could be the electrical plant room. The door lock will be accessed using SCC12 licensed key; no access to tenants.		
		Although primarily guidance for non-domestic buildings, CIBSE TM39 principles must be used to inform the building energy metering for all buildings with a landlord supply.		
		Meters need to be able to be read by meter readers employed by power providers without the need of access equipment, including step ladders. The lowest meters can be 300mm above ground level; it is acceptable to bend and crouch to read meters.		
		Lighting in the meter room must be adequate to read the digital display as the meters are not back-lit. Electrical consultants are to ensure that lighting is provided to clearly enable the reading of meters. All meters must have clearly visible meter identification labels securely fixed to meters. This must be stated in the electrical engineering specification and checked on site during commissioning.		
c	Service risers	Ensure adequate access for maintenance contractors.		
		Where risers are fire rated, specify fire-rated doors.		
		Secure service risers from tenant access.		
d	Lift motor room	To be numbered and included on signage and key schedule.		
e	Other equipment rooms	To be numbered and included on signage and key schedule.		

3.3	Service areas	Requirement	Response	Initials
f	Roof access doors/hatches	Secure – not able to be accessed by tenants.		
		To be numbered and included on signage and key schedule.		
		See item 2.2c		
g	Compliance signage	Regulatory signage is outside the scope of the manual, however, a limited number of compliance-related signs are available in the signage manual. Continuity across all signage is preferable.		
h	Lighting	All service areas must be well lit in line with CIBSE recommended lux levels; e.g. 150 lux for plant rooms; 100 lux for storage rooms.		
		Specify LED low-maintenance energy-efficient fittings.		
i	Light switches	Provide sensor lighting to service rooms with a manual over-ride switch.		
j	Emergency lighting	Obtain from fire engineer and respond to the project-specific fire report.		
k	Flooring	Vinyl non-slip flooring is preferable, with no visible joints.		
		Painted (non-slip paint) screed floor is preferred for plant rooms, with a central floor gully for mechanical plant rooms, including pump room or water storage for a sprinkler system.		
l	Finishes	The specification of all finishes must meet the standards identified in the sections above: Flooring – see 3.1f		
		Walls – see 3.1j		
		Ceilings – see 3.1k		
		Interior paints – see 3.1l		
m	Offices or other spaces	Designers must confirm the need for additional service spaces for projects that are for residents with special needs (including the elderly) with the client; the client should confirm these within the accommodation schedule. Additional rooms may require additional, adequate infrastructure; the location of the office or room in relation to the rest of the accommodation will need to be confirmed within the brief.		

3.4	Circulation - vertical	Requirement	Response	Initials
a	Stairs general	The dimensional ranges for steps and stairs should be between 150mm and 180mm for the rise and between 300mm and 450mm for the going.		
		Treads and risers should be solid and opaque. Riser profiles should be such that people who drag their feet do not trip when ascending.		
		The surface width of a stair, between enclosing walls, strings, balustrades or upstands, should be not less than 1200mm, and the width between handrails should be not less than 1000mm. The final width of a stair MUST be informed by the number of people using that stair for escape in the event of an emergency.		
		Open-tread staircases or staircases with winders or tapered risers are unacceptable.		
b	Fire-fighting stair	All buildings containing apartments or maisonettes, with a communal entrance, must have an identified fire-fighting stair.		
		The width of an identified fire-fighting stair must be at least 1100mm between walls/balustrade.		
		This fire-fighting stair must be within a protected zone.		
		The fire-fighting stair must be designed in accordance with BS9999.		
c	Treads, risers and stringers	Each step nosing should incorporate a durable, permanently contrasting continuous material for the full width of the stair on both the tread and the riser to help people who are blind or partially sighted appreciate the extent of the stair and identify individual treads. This nosing must extend 50mm to 65mm in width from the front edge of the tread and 30mm to 55mm from the top of the riser. It should contrast visually with the remainder of the tread and riser.		
		Stairs and landings shall be complete with metal balustrading and PVC-capped handrails, all in full compliance with BS8300.		
		If the floor plan allows, it is acceptable for the under-stair void at the base of communal stairs be enclosed to form a service cupboard complete with lockable door; all to the required fire resistance.		

3.4	Circulation - vertical	Requirement	Response	Initials
c	Treads, risers and stringers	Refuges, whether within a protected stair lobby, corridor or protected room adjacent to a stairway, must be provided in accordance with BS 9999. Specific recommendations for refuges are given in BS 9999:2017, Annex G. Space provision for refuges should allow wheelchair users to manoeuvre and access the refuge independently. The controls for emergency voice communication systems should be accessible.		
		Designers must consider using tactile and/or visual ground surface indicators for Category 2 and 3 apartments.		
c	Landings	All common stairs, landings and stairwells should be designed in a manner to remove any possibility of looking up from below in an inappropriate manner (i.e. up-skirting).		
d	Refuges	Refuges, whether within a protected stair lobby, corridor or protected room adjacent to a stairway, must be provided in accordance with BS 9999.		
		Space provision for refuges should allow wheelchair users to manoeuvre and access the refuge independently.		
		The controls for emergency voice communication systems should be accessible.		
e	Balusters	Communal stairs shall be constructed using metal balustrading.		
		All strings or apron linings to be soft wood and decorated.		
		All internal joinery shall be knot, stopped, primed and painted with minimum of one undercoat and two top coats of satinwood white.		
		Balustrades should be designed not to allow climbing.		
		All internal metal balustrading shall be powder coated paint finish in accordance with the manufacturer's recommendations (colour to be agreed).		

3.4	Circulation - vertical	Requirement	Response	Initials
f	Handrails	Handrails both sides of all stairs are required where possible for the entire staircase. This is an enhancement as a safety measure for SCC residents.		
		Handrails are to be provided to one side and for the entire going of any staircase unless prescribed otherwise by Building Regulations.		
		Handrails sailing past windows, with inadequate support or seeking support from a window frame due to the aesthetic of an upright off the landing are all not acceptable.		
		Handrails to be provided with a coloured plastic capping (colour to be agreed with SCC).		
g	Signage	Architect is to locate all signage on plan and elevation in accordance with the SCC Housing requirements.		
h	Lighting	See 3.2f and 3.2g		
i	Emergency lighting	Obtain from fire engineer and respond to the project-specific fire report.		
j	Finishes	The specification of all finishes must meet the standards identified in the sections above: Flooring – see 3.1f		
		Walls – see 3.1j		
		Ceilings – see 3.1k		
		Interior paints – see 3.1l		
k	Lift	Lift access must be provided for dwellings at first floor or above; any exceptions to this must be confirmed by the client as part of the project brief.		
		If a lift is not required as part of the project brief, space for a lift, to accommodation at first floor or above, must be identified to allow future installation and adaptations.		
		Conventional electric top traction passenger lifts (minimum 1100x1400mm internal dimensions, 8-person) are preferred.		
		Motor room less (MRL) arrangements may be considered as an alternative.		

3.4	Circulation - vertical	Requirement	Response	Initials
k	Lift	The lift car size must be able to accommodate a double/queen size bed – 1500 x 2000mm. This is an enhancement and more appropriate for mid to high-rise blocks.		
		Refer to the Housing Lift Specification document prepared by the SCC Lift Engineer, responsible for maintenance of SCC lifts, who must be consulted on the proposed lift specification.		
		The lift lobby must provide at least 1500 x 1500mm as a turning circle in front of the lift.		
		The lift lobby must meet the requirements of common areas; see items 3.2e to 3.2k		
		The lift must be specified in accordance with BS8300, including: - A mirror, as a proven vandalism deterrent - Braille numbering at an appropriate height.		
		Lift shafts must have acoustic treatment where backing onto dwellings.		

Approval of Part 3 – Common and services area design

PROJECT:			REF:
	Approved SCC Housing Management	**Approved SCC Asset Management**	**Approved Lead Design Consultant**
Print name:			
Part 3.1: Main entrance			
Part 3.2: Common areas			
Part 3.3: Service areas			
Part 3.4: Vertical circulation			

Date:

Date:

SCC housing management client:

SCC asset management:

Date:

Date:

Lead Design Consultant:

SCC Project Manager:

4. Individual dwellings

Dwelling types

All briefs must identify the design category within Building Regulation Part M to be met by the dwellings, either:
Category 1 – Visitable dwellings (NOT acceptable for one-bed units)
Category 2 – Accessible and adaptable dwellings
Category 3 – Wheelchair user dwellings

Dwelling areas

All dwellings must achieve the Nationally Prescribed Space Standards, the minimum gross internal floor areas and storage (m2) are shown in the table below extracted from the Standards. *It must be noted that these area standards do not take into considerations additional space requirements of wheelchair households for Category 3 dwellings.*

Number of bedrooms (b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
	1p	39 (37)*			1.0
1b	2p	50	58		1.5
	3p	61	70		
2b	4p	70	79		2.0
	4p	74	84	90	
3b	5p	86	93	99	2.5
	6p	95	102	108	
	5p	90	97	103	
	6p	99	106	112	
4b	7p	108	115	121	3.0
	8p	117	124	130	
	6p	103	110	116	
5b	7p	112	119	125	3.5
	8p	121	128	134	
	7p	116	123	129	
6b	8p	125	132	138	4.0

***Notes (added 19 May 2016):**

1. Built-in storage areas are included within the overall GIAs and include an allowance of 0.5m^2 for fixed services or equipment such as a hot water cylinder, boiler or heat exchanger.

2. GIAs for one storey dwellings include enough space for one bathroom and one additional WC (or shower room) in dwellings with 5 or more bedspaces. GIAs for two and three storey dwellings include enough space for one bathroom and one additional WC (or shower room). Additional sanitary facilities may be included without increasing the GIA provided that all aspects of the space standard have been met.

3. Where a 1b1p has a shower room instead of a bathroom, the floor area may be reduced from 39m^2 to 37m^2, as shown bracketed.

4. Furnished layouts are not required to demonstrate compliance.

Consultants are required to use the right-hand column to indicate using a tick ✓ that they have read and understood each clause. Where further explanation is required, a response column is included. The response is required to be explanatory and one-word answers are insufficient. If a clause is not applicable to the specific project, this must be clearly stated.

Clauses are highlighted, either where they represent an enhancement on the minimum standard to be achieved or as a requirement for special needs housing. These are a benchmark and are not intended to lessen the importance of clauses which are not highlighted.

Key:
Key:

An enhanced standard

A standard for special needs housing (their specific inclusion is to be confirmed by the SCC client)

Contents:

4.1	Dwelling entrance	Requirement	Response	Initials
a	Master-keying	Apartment front doors must have master-key barrel installed following the acceptance by the client of the completed units, at practical completion.		
b	Numbering	Incorporate unit numbering from SCC Housing into the architect's signage schedule and drawings.		
c	Security system	Security is a high priority and must be taken into account in the selection of all external doors. External doors to dwellings to meet *Building Regulations Part Q* and are to be of robust construction and with or without glazing to provide additional natural light to the entrance hall. If glazing is used it must be double glazed with safety/security glass and if required fire rated.		
d	Front doors (all)	Entrance doors to have clear opening of minimum 850 mm as defined in *Building Regulations Part M.*		
		Direct entry from the front entrance door of a dwelling into a habitable room is not permitted in a family dwelling (2+ bedrooms)		
		See section 4.1da or 4.1db for additional requirements, depending on whether the door is exterior or internal facing respectively.		
		Designers must pay particular attention to the Building Regulation requirements for private entrances of category 2 and 3 dwellings, including for canopy or cover and provision of lighting.		
		Manufactured and fixed to comply with PAS24: 2012		
		Doors to achieve *Secured by Design* accreditation.		
		Doors to achieve ISO14001/BES6001 certification.		

4.1	Dwelling entrance	Requirement	Response	Initials
e	Front Doorsets (external facing)	A doorset (leaf and frame) must be specified to be manufactured to comply with the following: - 10 year insurance backed guarantee against manufacturing defects. - 10 year double glazing unit insurance backed guarantee against failure of seal. - Factory fitted glazing and beading. - All glazing must be fitted with internal glazing beads for security and to enable re-glazing from inside of the dwellings. - Factory fitted ironmongery, including letter plate, door viewer and security chain. - Weather stripping to achieve severe exposure standards, with double seals. - Main entrance doors are to have a level threshold (15mm max upstand). - Mastic seal around frame perimeter externally with tooled finish. Allow for uPVC beading or cover strips if found necessary to seal larger gaps. - All doors to be pointed all round externally with suitably coloured polysulphide mastic. - Doors to achieve current standards regarding air leakage/ permeability. - Doors and glazed panels should hold a current BBA Certificate and meet BS EN 9002 standards. - All doors shall be FENSA approved and certified		

4.1	Dwelling Entrance	Requirement	Response	Initials
f	Front Doorsets (internal facing into a communal area)	A doorset (leaf and frame) must be specified to be manufactured to comply with the following: - 10 year insurance backed guarantee against manufacturing defects. - Factory fitted glazing and beading, internal to the dwelling. - Factory fitted ironmongery, including letter plate, door viewer and security chain. - Doors should achieve current standards regarding permissible air leakage/ permeability. - Entrance doors are to have a level threshold (15mm maximum upstand) – see j below. - Mastic seal around frame perimeter externally with tooled finish. Allow for uPVC beading or cover strips if found necessary to seal larger gaps. - All glazing must be fitted with internal glazing beads for security and to enable re-glazing from inside of the dwellings. - Doors and glazed panels should hold a current BBA Certificate and meet BS EN 9002 standards. - Doorsets must be fire rated doorsets with certification as described in Part 1, items 4.25 - 28		

4.1	Dwelling Entrance	Requirement	Response	Initials
g	Door ironmongery	Factory fitted: letter plate, security chain, door viewer; fire rated as appropriate for the fire rated doorsets.		
		Provide thumbturn to main door lock internally.		
		For those residents who cannot grip, main door ironmongery must be specified to suit, e.g. a lever handle to lock door internally.		
		All dwelling entrance doors shall be fitted with 50 mm high numerals in addition to the factory fitted ironmongery.		
h	Category 2 & 3 dwellings	Consider persons with learning and physical disabilities, including persons with mental health issues, with regards door swings, external access routes, thresholds and door & window hardware.		
		All project teams are required to consult with SCC client who may require consultation with specialists such as an occupational therapist to ensure needs are met.		
		Adaptations for wheelchair users and other special needs situations, e.g. unable to grip, will be discussed on a project by project basis with room data sheets provided by the SCC client.		
i	Entrance equipment and signage	For those dwellings with a communal entrance, the main door entry intercom system (see 3.1b) will be linked to handsets with a screen for a caller image, located in the dwelling hallway, between bedroom and living room. Provide internal elevation showing location and alignment of intercom handset, light switch, call point, evacuation signage. This drawing should indicate any other project specific equipment/ signage within the entrance, such as telecare technology or SCC repairs contact signage.		
j	Thresholds	In satisfying the level threshold requirement the long-term durability of this detail is of concern to the Employer. A smooth faced concrete threshold sill should be used.		

4.2	Internal Stairs & Circulation	Requirement	Response	Initials
a	Treads, risers	Open tread staircases or staircases with winders will not be acceptable.		
		Stairs within dwellings shall be constructed in softwood complete with softwood balustrading and hardwood handrails. All strings and apron linings shall be softwood.		
		The space beneath the stairs may be enclosed to form a store or room, in accordance with the plan layout.		
b	Handrails and balustrades	Handrails are to be provided to both sides for the entire going of any staircase.		
		Balustrades must be designed to not allow climbing.		
		Handrails and stairs must be designed to meet Building Regulations Part M.		
c	Space	Identify space (min. 875mm x 1475mm) for a through-floor lift in dwellings of two or more storeys which are Part M Category 2.		
d	Internal doors	Internal sliding doors or pocket doors to rooms are not acceptable in any situation due to ongoing maintenance.		

4.3	Primary Living Area/ Room	Requirement	Response	Initials
a	General	For Category 3 dwellings provide a dimensioned furniture layout allowing for: - dining table + 4 chair positions - wheelchair position + sofa/ chairs to suit the maximum number of occupants - TV and/ or bookcase space - turning space for wheelchair Use the furniture schedule provided in Part M		
b	Ceiling and walls finish	Walls and ceilings to be decorated with emulsion paint.		
		In order to minimise VOCs within the internal environment, interior paints and coatings specified must meet BSEN16402 or BSENISO 16000-9 or BSEN16516 or CDPH Standard Method v1.1.		
c	Floor finish	Floors to be left ready to receive final finish; the tenants will be able to choose their desired floor finish		
		Where the dwelling is part of a specialist housing project, to be managed by a single care provider, the client may specify the floor finishes.		

4.4	Kitchen	Requirement	Response	Initials
a	Planning general	All kitchens must be designed to fit modern appliances.		
		Do not locate cookers beneath windows.		
		Drawings will be to scale and will show all relevant dimensions for the proposed kitchen layouts, including the positions of all doors, proposed stopcocks positions, including any meters or associated displays within the kitchen area.		
		Any mechanical equipment within the kitchen, such as MVHR units or boilers must be concealed within kitchen cabinets; consider maintenance access by maintaining a clear space in front to replace parts.		
		All stopcocks, filters, valves & meters must be accessible on completion.		
		Amount of clear uninterrupted worktop surface of 1500mm. See also item 4.4e. The kitchen layout must include space for the following appliances: cooker (between worktops), washing machine (beneath worktop), tall fridge/ freezer – allow 630mm width x 630mm depth appliance space. Relevant services for appliance must also be provided.		
		Use BS8300 to inform kitchen layout for Cat 3 dwellings which may require lower or height adjustable units and worktops.		
b	New joinery	All kitchen units are to be solid carcass units.		
		SCC Housing Operations (dealing with repairs and maintenance) preference is Moores (Affinity Range) or Symphony manufactured kitchens.		
c	Doors, drawers and shelves	Check ability for door to open usefully where clashes occur with appliances.		
		Discuss the height of overhead cupboards for usability in relation to the project specific tenant demographics.		
		Check proximity of overhead joinery to cooker, position of toasters and kettles under shelves or wall units.		

4.4	Kitchen	Requirement	Response	Initials
d	Hardware	All handles must be D-type and meet accessibility requirements.		
		All door hinges must be concealed, clip on type, min. 170 degree opening where appropriate, metal sprung.		
		Metal drawer boxes required and runners must allow full extension.		
		Soft closing upgrade to drawers and cupboard doors.		
e	Worktop	40mm thick, with post formed leading edges; worktop joints using a mitre; chrome or coloured metal (NOT plastic) Min 630mm depth to allow for modern appliances and service void behind units.		
		Minimum acceptable total length of worktop is 3m, including sink and cooker. Clear uninterrupted length must be at least 1500mm. See checklist item 4.4a.		
		Minimum length of worktop for category 2 and 3 dwellings is 4.33m (for 2 persons) and this will increase with more bed spaces, following the recommendations of Part M4 (3) table 3.3. See checklist item 4.4a.		
		End panels and brackets should be used to form voids beneath the worktop for appliances; isolated posts must not be used.		
f	Ventilation	Provide an openable window to all kitchens. See also 4.11 ventilation.		
		Provide mechanical extraction via a cooker hood to an extract duct (not acceptable as filter); to reduce moisture levels in the dwelling. This must be specifically reviewed by SCC Client and agreed with SCC Housing Operations.		
		The extract duct from a cooker hood is part of an integral MVHR system for the dwelling; with the MVHR unit installed within a kitchen cupboard for easy maintenance access.		
g	Kitchen storage	Provide appropriate storage space – the preference is for drawers and cupboards, no open shelf units.		
		Do not include a fitted bin in any kitchen cupboard as easily broken		
		Kitchen layout drawings in plan and elevation should be drawn, clearly indicating the storage units provided; as minimum the storage needs to allow for: cutlery/ utensil drawer(s), cupboard space beneath sink; large pots space; at least equivalent of 1000mm double base unit for food storage.		

4.4	Kitchen	Requirement	Response	Initials
h	Brassware	SCC to confirm if brassware will be bulk procured; if so, specify bulk procured items for new taps/ mixers.		
		Taps should have lever type handles for maximum future proofing for individual tenants and accessibility.		
		The kitchen tap fitting must have maximum of 6 l/ min water flow, to reduce water usage. Use of flow limiters is acceptable.		
		Brassware must be compatible with sinks and units; designers must ensure that the height of the outlet will allow for a large pot to be placed in the sink and filled with water.		
i	Water temperature	Temperature at outlet must be max. 55 degrees Celsius.		
j	Wall finish	Splash backs must be tiled (ceramic tiles), unless another material is agreed with the client.		
		Splashback must extend 450mm high from back of all the worktop length and must be indicated on the kitchen layout drawings.		
		Allow for full tiling behind freestanding cookers from floor level up to the top level of the splashback. Allow also for tiling all window ledges and window reveals up to the top level of the splashback where part of the window or the entire window falls within the area of the splashbacks.		
		Wall tiles shall not be less than 150 x 150 mm in size.		
		All ceilings to be painted with a minimum of 1 no. mist coat and 2 no. full coats of vinyl matt emulsion paint.		
k	Ceiling finish	All ceilings to be painted with a minimum of 1 no. mist coat and 2 no. full coats of vinyl matt emulsion paint.		
l	Floor finish	Kitchens to be finished in non-slip vinyl flooring, including underneath the cupboards. Door threshold to the kitchen to be hardwood to allow the doors to be installed a bit higher, to allow users to install carpet/thicker finish on the other side and avoid trimming the doors.		
		SCC Housing Operations (dealing with repairs and maintenance) preference is Altro or Polyflor manufactured vinyl.		

4.4	Kitchen	Requirement	Response	Initials
m	Space for cooker	Do not locate under windows or within 150mm from any window. Provide heat resistant material to walls directly adjacent the space; see tiling requirements in 4.4k. Provide sufficient space for a modern appliance – min. 630mm x 630mm. There shall be minimum 300mm clear worktop space each side of the hob, ideally with a base unit beneath or with end panels forming the cooker space.		
n	Space for fridge-freezer	The space must be capable of taking a tall fridge freezer. If the size of the kitchen allows, an additional under counter appliance space may be provided.		
o	Space for washing machine	If space is restricted, such as within the smaller units, this space could be beneath the sink drainer. Water supply, waste and electrical supply must be provided for.		
p	Space for small appliances	Allow for the placement of a microwave, jug kettle and toaster, in the kitchen on the worktops – this space be indicated on the layout drawing.		
q	Space for internal waste storage and separation	Adequate space for a general waste bin within the kitchen; capacity min. 30l for 1-2 bed homes, min. 50l for 3+ bed homes.		
		Adequate space for a recyclable waste bin within the kitchen; capacity min. 30l for 1-2 bed homes, min. 40l for 3+ bed homes.		
		All homes to be provided with internal composting waste storage that is a minimum of 10 litres in volume.		
r	Sink drainer	Configuration must be single bowl with single drainer (either LH or RH to suit the kitchen layout) with sink base unit below, min. 1000mm width.		
		There shall be a clear unrestricted space in front of the sink bowl. Worktops should be positioned at each side of the sink. Sink drainers, where possible, are to be positioned under windows.		
		Special needs housing (Cat 2 or 3) may need lower or height adjustable sinks. This must be confirmed by the client.		

4.4	Kitchen	Requirement	Response	Initials
s	Fire alarms	Smoke detectors to be located as far from cooking appliances (including toaster and microwave) as permitted by the regulations.		
		Special needs housing (Cat 3) will (likely) require a sprinkler system. Heat detectors may be required within the kitchen as part of this.		
		Any further provisions for assistant alarm call pull cord/ switch will be within the SCC client brief.		

4.5	Bathroom	Requirement	Response	Initials
a	General	Provide a dimensioned bathroom layout, plan and room elevations.		
		For Cat 2 and 3 dwellings this layout must demonstrate compliance with approved document Part M4 recommendations. Any further provisions for assistant alarm call pull cord/ switch will be within the SCC client brief.		
b	Door	Provide a solid door with a sprung lever latch handle and a bolt for privacy.		
c	Ducts	Ducts or boxing to pipework must be accessible for maintenance.		
		Place water isolation valves in easily accessible place.		
		Service duct access from the exterior of the dwelling is preferred.		
		Provide a tamperproof access panel for any ductwork or services that must be accessed from within the bathroom.		
d	WC	Vitreous china standard height, close coupled WC suite, with seat & cover.		
		Cisterns and plumbing need to be accessible for maintenance. The cistern must achieve maximum consumption of WC 4l/ flush – see *Building Regulations Part G.* Specified toilet must have larger trapway and use a wash down flushing design (as opposed to a siphon system) to ensure all waste is got rid of.		
		With Cat 3 dwellings supporting rails will be required. These must be indicated on the layout drawings in plan and elevation. See also 4.5q concerning pattressing.		

4.5	Bathroom	Requirement	Response	Initials
e	Personal hygiene	Designers must note the following with regards to the type of dwelling that is being designed: Baths – required for all family accommodation (2 or more bedrooms) Showers – are acceptable in non-family accommodation		
		For special needs housing, the bathroom requirements must be identified with the client and confirmed as part of the project brief.		
f	Bath	Specify pressed steel enamel bath (min. 1700mm x 700mm); max. 170l see Part G, slip resistant, support cradle, with robust water resistant end/ side panels.		
		Thermostatic controlled mixer valve, lever handles; with metal flexi-hose and adjustable handset over all baths to form showers; shower curtain and rail to full length of bath.		
g	Shower	Specify min. 800mm x 800mm white glazed fireclay shower tray; complete with compatible glazed screen enclosure with single opening door.		
		Shower drainage must be designed so that tray does not need to be mounted onto a plinth. Specify easy clean trap.		
		Height adjustable, removable shower handset to facilitate hair washing.		
		For Cat 3 housing a walk-in/ wet room type shower will be required.		
		Max 8l/min flow rate for shower valves; exposed mixer (NOT electric showers).		
h	Wash hand basin	Pedestal wash hand basin fixed to wall; with individual hot & cold taps with lever handles; max. flow rate 5 l/min		
		For Cat 3 housing, a wall mounted basin must be provided. The trap under the wash hand basin must be fitted to that a wheelchair user can us front on, not side on due to their knees colliding with the trap forcing them to use side on.		
		The client must confirm if this basin needs to be height adjustable.		
i	Vanity unit	Specify a vanity with storage below in family units (3+ bed dwellings). The SCC client will confirm this enhancement.		
		Special needs housing may require a small amount of bathroom storage to provide a medication cabinet. The client will confirm this requirement as part of the project brief.		

4.5	Bathroom	Requirement	Response	Initials
j	Mirrors	Mirrors of minimum 400x900mm required over all wash basins. The SCC client will confirm this enhancement.		
		Larger mirrors at a lower height will be required for Cat 3 dwellings in accordance with Part M layouts.		
k	Window treatments	Provide translucent, obscure glass to any bathroom windows or rooflights.		
l	Ventilation	All bathrooms must have mechanical moisture extraction.		
		Currently in SCC, fans contained in rooms with no natural ventilation are running constantly; in discussion with SCC Asset Management and through consideration of the operational energy use, consider fans operated by the room light switch and with a timed over run facility set to adequately remove any foul air from the room.		
		This extract duct may be part of an integral MVHR system for the dwelling.		
m	Wall finish	150mmx 150mm coloured ceramic wall tiles and accessories to form 3 course splashback over bath. Also for tiling all window ledges and window reveals where part of the window or the entire window falls within the area of the splashbacks. Include to tile all horizontal boxed in surfaces at the bath ends. Appropriate bathroom paint to be used for the rest of the walls.		
		Shower enclosures must have full height tiled finish, or a proprietary panel finish.		
		Min. 300mm high tiled splashback above the wash hand basin.		
		Wall finish, including tiling or panels must be indicated on the layout drawings.		
		Cat 3 wet rooms will need to be fully waterproof and therefore either fully tiled or use a proprietary panel system; junction with flooring must be considered.		
		Cat 2 and 3 dwellings will required pattressing to the walls to enable handrails to be installed.		
n	Ceiling finish	Prepare walls and ceilings and decorate with appropriate bathroom paint.		
		Consider ceiling structure with Cat 2 and 3 dwellings and confirm with client the requirements for a ceiling hoist.		

4.5	Bathroom	Requirement	Response	Initials
o	Floor finish	Use non-slip safety vinyl in bathrooms		
		Include vinyl coved skirting with capping detail to meet tiling for easy cleaning.		
p	Dryers	Over bath dryers are to be provided in all apartment accommodation.		
q	SCC preferred manufacturers	SCC Housing Operations, responsible for repairs and maintenance prefer the following manufacturers: - Vinyl – *Altro or Polyflor* - Sanitaryware – Ideal Standard or *Twyford* - Brassware – *Bristan* - Showers – *Twyfords* or *Shires*		

4.6	Bedrooms	Requirement	Response	Initials
a	Bed spaces	For the purpose of providing accommodation numbers – a bedroom always accommodates 2 people unless in the case of single bedrooms.		
b	Sizes	Bedroom sizes must be in accordance with Part M4(3) recommendations - Single bedrooms are not preferred, however when provided must be min 8.5m^2 and minimum width 2.4m. - Double bedrooms must be minimum 12.5m^2 and minimum width 3m. - Principal bedrooms must be minimum 13.5 m^2 and min. width 3m.		
		For Cat 2 and 3 dwellings a dimensioned furniture layout is required for all bedrooms, showing circulation space for wheelchairs in accordance with Part M4(3). Use the furniture schedule provided in Part M.		
c	Storage	Provide adequate storage space in each bedroom - space for wardrobes, drawers and cupboards.		
		For Cat 3 dwellings built-in storage/ wardrobe accessed from the bedroom is preferred to facilitate access.		

4.7	Built-in storage	Requirement	Response	Initials
a	Water heater	Refer to section 4.11 concerning hot water supply guidance.		
		Locate the cylinder in a cupboard; if the height of the cylinder allows, provide at least one shelf that can used for airing or storage of clothes/ towels/ bedding.		
		Maintenance access (door width) to be large enough to install and remove the cylinder, taking valves into account.		
b	General storage	NDSS minimum standard must be followed with regards to the amount of built-in storage space for each dwelling. This is not optional.		

4.8	Decks/balconies/ private gardens	Requirement	Response	Initials
a	Balcony/deck surfacing	Ensure slip resistant surface		
		Ensure adequate structural strength to allow residents to grow a range of plants in containers.		
		No flammable materials in balcony construction		
		Consider wind, surface water drainage, security and privacy between adjacent balconies		
b	Balustrades	Balustrades should be designed not to allow climbing. See also 2.4d.		
		The top of the balustrade rail/ edge must be at least 1100mm from the deck.		
		There must be an upstand to the balcony – or the balustrade must extend to within 20mm of the surface - to ensure materials cannot be kicked off balcony and hurt someone below.		

<table>
<tr><th>4.8</th><th>Decks/balconies/ private gardens</th><th>Requirement</th><th>Response</th><th>Initials</th></tr>
<tr><td>c</td><td>On-ground gardens</td><td>Provide amenity space for all dwellings consistent with SCC Planning min. areas:
<table>
<tr><th>Dwelling type</th><th>Depth/ Area</th></tr>
<tr><td>Terraced</td><td>10m/50sqm</td></tr>
<tr><td>Semi-detached</td><td>10m/7sqm</td></tr>
<tr><td>Detached</td><td>10m/90sqm</td></tr>
<tr><td>Flats (communal)</td><td>20sqm per unit</td></tr>
<tr><td>Sheltered</td><td>30sqm per unit</td></tr>
</table>
Smaller gardens may be acceptable in some parts of the city where gardens are typically smaller.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>Provide dedicated external space/ private amenity for ground floor apartments; use permeable paved surface, to reduce maintenance required and provide perimeter planter beds.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>For communal gardens, there will need to be footpaths (min, 1200mm width) from the public footpath to main entrance door; to bins, to bike store, to any garden entrance and to enable cleaning of ground floor windows. A landscape drawing will need to be prepared indicating the layout and surfaces. See also section 1.6</td><td></td><td></td></tr>
<tr><td></td><td></td><td>Cycle access to private rear gardens should be provided to assist with storage.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>For private gardens, there will need to be a tree, (see Part 1 item 1.12) a paved sitting area, 2.7m depth from rear of house for full width; path (not less than 900mm width) adjacent to ground floor windows to enable cleaning; path to any external garden entrance, e.g. for cycles. A landscape drawing will need to be prepared indicating the layout and surfaces.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>For private gardens of special needs housing, there may be extended requirements in addition to the private garden requirements. This must be specifically discussed and agreed with the client.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>Min. 1800mm high fencing, typically close boarded timber with gravel boards, or masonry wall, is required to the rear and side perimeter boundaries.</td><td></td><td></td></tr>
<tr><td></td><td></td><td>Provide fencing or walls to enclose the front gardens of all properties and any vulnerable private or communal planting areas – details to be agreed on a project by project basis.</td><td></td><td></td></tr>
</table>

4.8	Decks/balconies/ private gardens	Requirement	Response	Initials
d	Lighting	Dedicated lighting to balconies is not mandatory and will be considered on a case by case basis.		
		Any external lighting needs to designed carefully to avoid impacts on nocturnal wildlife.		
e	Clothes drying	Retractable clothes lines on balconies must be provided.		
		Over bath dryers also for flats with baths.		
		In dwellings with private gardens, flush socket, adjacent to paved area, to receive rotary dryer.		
f	Drainage	Ensure that balcony drainage solutions are low maintenance and protected from the build-up of dirt and plant matter.		
		Provide 150 litre water butts to all houses, bungalows and ground floor flats with private gardens, on a raised plinth and connected to a rainwater downpipe.		
g	External tap	Provide an external hose bib tap in the rear garden of each house and bungalow, adequately insulated from frost.		
h	Sheds	All houses to be provided with a timber garden shed of minimum size 1.80 x 1.20 m set on a concrete base. Size to be increased where necessary to accommodate cycles appropriate to the number of bed spaces.		

4.9	Aluminium joinery	Requirement	Response	Initials
a	Trickle vents	The mechanical consultant must confirm the need for trickle ventilation. If they are provided, the vents must be trialled for ease of use prior to specification.		
b	Windows	Aluminium framed windows are acceptable. See item 2.4		
		Easy clean hinges to be specified for all dwelling windows, as preferred by SCC in-house maintenance contractor.		
		Accessible window handles to be specified to enable future adaptation of individual dwellings.		
		Relevant windows have fire hinges to allow escape in the event of a fire.		
		Specify double tongue fasteners and restrictor stays to openable windows.		

4.10	Electrical	Requirement	Response	Initials
a	General	All electrical wiring shall be concealed and all fittings shall be of the recessed type. The consumer unit should be sited in a hallway adjacent to the main entrance at the required fixing height in a key lockable enclosure.		
		The meter must not be visible on the front elevation of the dwelling. It is expected that smart metering will be installed with a separate display located within the dwelling.		
		All proposed distribution must meet the current requirements of BS7671: Requirements for Electrical Installations.		
		Socket outlets generally to be located at 600 mm above finished floor level. In kitchens socket outlets and isolation (for below worktop outlets, e.g. for washing machine) to be located at 1125 mm (to the centre of the back boxes) above finished floor level. Light switches to be located between 1100 and 1200 mm above finished floor level.		
		Socket positions for category 2 and 3 homes or where the proposal is for residents with special needs must be confirmed with the client.		
		Provide low energy efficient compact lamps; LED type; min. L70; min 100 lumens/ watt.		
		Tenant must be able to purchase light bulbs for interior lighting from the supermarket.		
		A phone point next to a power socket is required for a personal alarm, this must be placed at the master phone point for all Cat 2 and 3 dwellings.		
		There will be other requirements, such as visual alarms, for specialist housing which must be discussed and confirmed with the client. There is flexibility with the individual room requirements listed below which should be seen as a starting point for the client and design team to work through together.		
b	Single bedroom *provide:*	- Single pendant lighting point - 2 no. double switched socket outlets, one located at bed for lamp. - Provide additional power points in bedrooms for Cat 2 and 3 dwellings		

4.10	Electrical	Requirement	Response	Initials
c	Double bedroom *provide:*	- Single pendant lighting point - 3 no. double switched socket outlets, one on each side of the double bed. - Provide additional power points in bedrooms for Cat 2 and 3 dwellings. - 1 telephone point, in the principal bedroom only, where the bedroom and living room are on different floors, telephone point to be near a double socket. - 1 no. TV aerial point (TV, satellite, cable & FM radio) (in principal bedroom only)		
d	Main living area *provide:*	Dining area - 1 no. pendant lighting point. - 3 no. double switched socket outlets. Living Room: - 2 no. pendant lighting points individually switched and 2-way where layout requires. - 4 no. double switched socket outlets with at least two near the TV/FM aerial outlet and telephone point - 1 no. fused spur for focal fire point - 1 no. TV aerial point (TV, satellite, cable & FM radio) - 2 no. telephone points for phone and broadband with one adjacent to the TV/FM aerial outlet.		
e	Kitchen *provide:*	- Low energy bulkhead light fitting - Double socket to fridge space, place above worktop height. - Dedicated fused/ isolated cooker socket - Dedicated cooker hood switch - 2 double sockets at worktop height - Provide dedicated microwave outlet. - Dedicated switched supply for washing machine, low level - Ensure each section of worktop is served with a socket but that no socket is within 900mm of a sink. - Low level double socket to wall. - 1 no. mechanical extract fan with and remote engraved switched spur with neon indicating light. Pull cord operation is not acceptable. - 1 no. central heating control unit.		
f	Bathroom *provide:*	- sealed unit light - extract fan with boost control, with engraved isolator switch outside bathroom at 1.80m above FFL. Pull cord is not acceptable.		

4.10	Electrical	Requirement	Response	Initials
g	Circulation & ancillary areas *Provide:*	Hall/Lobby - 1 no. pendant lighting point. - 1 no. double switched socket outlet. - 1 no. fused spur for future installation of a stair lift. Landing - 1 no. lighting point (2 way). - 1 no. double switched socket outlet. - 1 no. fused spur for future installation of a ceiling mounted hoist. Cloak Room (WC): - 1 no. pendant lighting point Linen Cupboard: - Tubular heater fitted if no hot water cylinder is installed. Store/Under stairs Cupboard: - 1 no. batten holder light point. - 1 no. fused spur for future installation of a burglar alarm.		
h	Fire/smoke alarm system	All fire safety design must be carried out in a manner compliant with BS9999:2008 and the proposed building must meet the requirements of Building Regulations Approved Document Part B Fire safety - Volume 1: Dwellings covering: B1 Means of warning and escape B2 Internal fire spread (linings) B3 Internal fire spread (structure) B4 External fire spread B5 Access and facilities for the fire service		
		Smoke and CO detectors located as required by regulations and connected to alarm system.		
		Provide a fire strategy drawing for each project.		
		Within individual houses and flats provide minimum 1 no. smoke alarm in all halls and landings plus minimum 1 no. heat detector in kitchens (all interconnected to any other smoke/heat alarms within the dwelling), to BS 5839-6.		

4.11	Mechanical	Requirement	Response	Initials
a	Hot water	Primary heat source to be capable of raising temperature of hot water from 10/60 degrees celsius within one hour.		
		Hot water storage cylinders shall have a minimum capacity of - 114 litres in two person units and - 180 litres in three-person or larger units.		
b	Heating	In order to minimise fuel poverty and encourage fabric first design approach, the dwelling should meet current Part L requirements and the following energy use intensity targets: - Energy use measured at the meter should be equal to or less than 35 kWh/m2/yr (GIA). - Space heating demand should be less than 15 kWh/m2/yr.		
		Designers must fully explore using non-fossil fuels for meeting heat demands with a renewable energy study.		
		Underfloor heating is preferred, however if radiators are proposed, these must have thermostatic valves fitted.		
		A separate plant room must be considered for communal blocks.		
c	Ventilation	MVHR systems must be fully explored for each building with ductwork in the roof space and the plant within a kitchen or separate store cupboard.		
		Natural ventilation to any room shall not be solely provided by an opening door, e.g. by the use of French doors; at least one opening window must be provided.		
		All bathrooms, kitchens and internal WCs shall have mechanical extract ventilation in addition to any natural ventilation.		
		Fans and passive stack ventilation ducts connected to tile vents in roof coverings or other means of vertical extract duct must be fitted with a condensation trap, including an overflow pipe.		

4.11	Mechanical	Requirement	Response	Initials
d	Renewables	SCC Repairs and Maintenance must be consulted on the incorporation of any innovative or renewable technology on a project. This includes any water-saving devices.		
		Gas will not be supplied to any project with flats in a communal building.		
		Training for the prospective tenants must be provided to ensure they can benefit from the savings available. This should be planned as part of the commissioning process, before and during occupation.		
		The project must follow the best practice principles within HQM and allow for post-occupation monitoring and data collection.		
e	Metering	Any meter must not be visible on the front elevation of the dwelling. It is expected that smart metering will be installed with a display located within the dwelling.		
		SCC has its own energy company, CitizEn Energy, which uses Robin Hood Energy SMART metering. Rather than install meters from another provider and then have to switch them over the council preference is to have Robin Hood SMART meters installed from the start. It must be noted that this may not be possible for the landlord/ commercial supply.		

4.12	Separating walls	Requirement	Response	Initials
a	Sound insulation	Party walls (and floors) between dwellings must achieve airborne sound insulation values between dwellings that are at least 5dB higher, and impact sound insulation values dwellings that are at least 5dB lower, than the performance standards set out in Part E.		
b		Any boxing formed around soil pipes within any room is to be clad with two layers of 12.5mm plasterboard, with staggered joints. Soil pipes also to be wrapped with 25mm mineral fibre.		
c		Bathroom and WC wall linings shall be sheathed with minimum 12mm plywood or similar (for full height of all walls where bath, basin and WC located) before applying plasterboard lining so that any fixtures or fittings are secure enough to provide support for a person. Also noted in item 4.5(d) above.		
d		Plasterboard in bathrooms, kitchens and any other areas generating potentially humid conditions shall be moisture resistant.		
e		In accordance with BS 5234-2:1992: - Internal partition walls within dwellings must be Heavy Duty (HD) - Internal walls to communal areas must be Severe Duty (SD)		

Approval of Part 4 – Individual dwellings

PROJECT:			**REF:**
Category (Part M) Dwelling	**No. beds**	**No. persons**	**Target GIA:**
	Approved SCC Housing Management	**Approved SCC Asset Management**	**Approved Lead Design Consultant**
Print name:			
Part 4.1: Dwelling entrance			
Part 4.2: Internal stairs			
Part 4.3: Primary living room			
Part 4.4: Kitchen			
Part 4.5: Bathroom			
Part 4.6: Bedrooms			
Part 4.7: In-built storage			
Part 4.8: Decks/balconies/ private gardens			

Approval of Part 4 – Individual dwellings

PROJECT:			**REF:**
Category (Part M) Dwelling	**No. beds**	**No. persons**	**Target GIA:**
	Approved SCC Housing Management	**Approved SCC Asset Management**	**Approved Lead Design Consultant**
Print name:			
Part 4.9: Aluminium joinery			
Part 4.10: Electrical requirements			
Part 4.11: Mechanical requirements			
Part 4.12: Separating walls			

Date:

Date:

SCC housing management client:

SCC asset management:

Date:

Date:

Lead Design Consultant:

SCC Project Manager:

References

1. Quote from Alvar Aalto, 1957 (Architect, 1898-1976), **https://www.telegraph.co.uk/culture/3675106/Alvar-Aalto.html?image=1,** accessed 28.02.2020
2. **https://www.dki.lv/exhibition-changing-mindsets-jan-gehls-life-work/** accessed 01.01.2020
3. SCC Housing Strategy 2016-2025, **https://www.southampton.gov.uk/policies/housing-strategy-06-16-27049_tcm63-386907.pdf,** accessed12.12.2019.
4. SCC Residential Design Guide Supplementary Planning Document (SPD) 2006, **https://www.southampton.gov.uk/planning/planning-policy/supplementary-planning/residential-design-guide.aspx,** accessed 12.12.2019.
5. National Design Guide, MHCLG, 2019, available at **https://www.gov.uk/government/publications/national-design-guide.**
6. SCC Parking Standards (SPD) 2011, **https://www.southampton.gov.uk/planning/planning-policy/supplementary-planning/parking-standards-spd.aspx,** accessed 12.12.2019.
7. SCC Air Quality Strategy 2019-2025, **https://www.southampton.gov.uk/images/clean-air-strategy-2019-2025_tcm63-389498.pdf,** accessed 01.01.2020
8. SCC Green City Charter, **https://www.southampton.gov.uk/environmental-issues/pollution/green-city/green-city-charter.aspx,** accessed 01.01.2020
9. Electric vehicle homecharge scheme (£500 per chargepoint) **https://www.gov.uk/government/news/new-league-table-reveals-electric-car-charging-availability-across-uk-as-transport-secretary-calls-on-local-authorities-to-do-more accessed 12.12.2019**
10. SCC Sustainability Checklist must be completed for both new and conversion residential schemes of one or more units, **https://www.southampton.gov.uk/planning/planning-permission/sustainability-checklist.aspx,** accessed 12.12.2019.
11. See BRE Home Quality Mark Technical Manual SD232:1.0 (Beta England) - 2015, see aim of section 04 Ecology (Our Surroundings).
12. Op. cit. 6.
13. SCC Sustainable Procurement Policy, **https://www.southampton.gov.uk/policies/sustainable-procurement-policy_tcm63-398998.pdf,** accessed 06.01.2020.
14. UK Green Building Council, Net Zero Carbon Buildings: A Framework Definition, **https://www.ukgbc.org/ukgbc-work/net-zero-carbon-buildings-a-framework-definition/**, accessed 06.01.2020.
15. See LETI, London Energy Transformation Initiative, Net Zero 1 pager summarising Net Zero Operational Carbon, available **https://www.leti.london/one-pager, accessed 09.06.2020.**
16. The local planning authority anticipates that the carbon offset fund will be reviewed alongside the City Vision (the new Local Plan) process. It is likely that the carbon offset fund will seek building life emissions (e.g. emissions x 30 years) as this is closer to reflecting true offset of emissions. It is anticipated that the City Vision will be adopted in 2022.
17. BRE Green Guide to Specification, **https://www.bregroup.com/greenguide/podpage.jsp?id=2126, accessed 06.01.2020**
18. See Resources and Waste Strategy 2018, **https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england/resources-and-waste-strategy-at-a-glance**.
19. Quote from Zaha Hadid (Architect, 1950-2016), **https://www.vogue.com.au/vogue-living/design/zaha-hadids-most-memorable-and-inspiring-quotes/image-gallery/b92978d33fc292acc66edd1945b2d1bc,** accessed 28.02.2020
20. UK Government Technical housing standards – nationally described space standard, **https://www.gov.uk/government/publications/technical-housing-standards-nationally-described-space-standard,** accessed 07.01.2020.
21. National Institute for Health and Care Excellence (NICE) Guideline NG149, **https://www.nice.org.uk/guidance/NG149,** accessed 08.01.2020.

References

22. See BRE Home Quality Mark Technical Manual SD232:1.0 (Beta England) - 2015, section 09 Indoor Pollutants (My Home).
23. See NICE, **https://www.nice.org.uk/guidance/indevelopment/gid-qs10113, accessed 08.01.2020**
24. See BRE Home Quality Mark Technical Manual SD232:1.0 (Beta England) - 2015, section 09 Indoor Pollutants (My Home).
25. Building Regulations 2010: Approved Document Part L1A Conservation of fuel and power in new dwellings.
26. The local planning authority recommend use of Good Homes Alliance (GHA) tool available at **https://goodhomes.org.uk/overheating-in-new-homes,** accessed 20.04.2020.
27. Customary winter operative temperatures, from Table 1.5 Recommended comfort criteria, CIBSE Guide A Environmental Design, 8th edition, 2019.
28. RIBA 2030 Climate Challenge, **https://www.architecture.com/-/media/files/Climate-action/RIBA-2030-Climate-Challenge.pdf?la=en,** accessed 20.04.2020.
29. Quote from Jimmy Carter (former US President, 1924-), **https://www.quotes.net/quote/39721,** accessed 28.02.2020
30. Fixing our broken housing market, **https://www.gov.uk/government/publications/fixing-our-broken-housing-market, accessed 13.01.2020.**
31. Modern Methods of Construction: introducing the MMC definition framework, **http://www.cast-consultancy.com/wp-content/uploads/2019/03/MMC-I-Pad-base_GOVUK-FINAL_SECURE.pdf,** accessed 13.01.2020
32. Summary chart and infographics from MMC definition framework, Category definition, ibid, accessed 13.01.2020.
33. Stenlund, Stephen; 'Applying Fabric First principles', BRE, 2016.
34. Accredited Construction Details, available **https://www.planningportal.co.uk/info/200135/approved_documents/74/part_l_-_conservation_of_fuel_and_power/6, accessed 13.01.2020.**
35. See **https://www.gov.uk/government/publications/energy-performance-certificates-for-the-construction-sale-and-let-of-dwellings,** accessed 13.01.2020.
36. Op. cit. 7, Green City Charter vision.
37. See BRE Communities International, Step 1: Establishing the principle of development, **https://www.breeam.com/communitiesmanual/content/01_step01/04_re_01_energy_strategy.htm?tocpath=Step%201%20Establishing%20the%20principle%20of%20development%7C____6,** accessed 13.01.2020.
38. Op. cit. 27, RIBA 2030 Climate Challenge.
39. BRE, **https://www.breeam.com/BREEAMIntNDR2016SchemeDocument/content/06_energy/ene08.htm#F,** accessed 13.01.2020.
40. Quote from All God's Children Need Traveling Shoes, Maya Angelou (Writer, 1928-2014), **https://www.goodreads.com/quotes/400883-the-ache-for-home-lives-in-all-of-us-the,** accessed 28.02.2020
41. See Secured By Design Homes 2019 Development Guide, available **https://www.securedbydesign.com/images/downloads/HOMES_BROCHURE_2019_update_May.pdf,** accessed 13.01.2020.
42. See Building safety advice for building owners, **https://www.gov.uk/government/publications/building-safety-advice-for-building-owners-including-fire-doors,** accessed 27.02.2020.
43. This post is on a fixed term contract.
44. The UK government consulted (Autumn 2019) on Building Regulations Part B amendments which could introduce legislation to reduce this to 11 metres or 4 storeys and above.
45. Quote from Alvar Aalto, 1957 (Architect, 1898-1976), **https://www.vam.ac.uk/blog/museum-of-childhood/alvar-aalto-bringing-well-being-to-the-little-man,** accessed 28.02.2020
46. See Lifetime Homes Standard, from July 2010), **http://www.lifetimehomes.org.uk/pages/revised-design-criteria.html,** accessed 15.01.2020.
47. CIBSE, DE9: Application of Soft Landings & Government Soft Landings in BSE, August 2018