HCLT

DRAFT Design Brief (Version 4, dated 15/5/2020)

This brief aims to establish the key design considerations for schemes that HCLT might seek to deliver.

The first part, entitled core standards, covers the key standards to which any home we build should be constructed. There is then a section regarding co-housing and another for self-build or train-and-build. In the latter two cases should a scheme show signs of coming to fruition, then a much more detailed brief will be provided. In a co-housing scheme this would set out the number of individual homes required and for how many people in each case, further details of the shared co-house and any other particular features of the scheme. In a self-build or train-and-build scheme this will again set out the number and size of homes to be provided, and also the degree of self-build activity expected of participants and degree of supervision, as that might influence the choice of materials and equipment to be included in the scheme.

In addition, once a site has been selected for any scheme, there may well be specific issues which will need to be included in a brief adapted for that site.

Core Standards

These are drawn up with the following principles in mind:

- Delivering affordable warmth and reducing fuel poverty
- Creating a lower carbon society
- Making efficient use of natural resources
- Having a positive environmental impact
- Supporting the 'green economy'
- Adapting to a changing climate

As each site is likely to be very individual in its constraints and demands as well as having particular issues to consider, these core standards only seek to cover some generic features that will be common to most schemes. Other issues will need to be discussed with HCLT in relation to each site.

The Design

The design must

- avoid, or limit as far as possible, negative impacts on the ecology of the site and neighbouring areas on which it might have an impact. Where possible any scheme must seek to enhance the ecological value of the site on areas not being built upon.
- provide occupants with access to outdoor recreational space (where a site allows), including space for growing plants, designed so as to promote community spirit, activity and wellbeing.
- include measures to manage rainfall to the latest applicable directive/ regulation on Sustainable Drainage (SUDS).
- promote the design of developments where people feel safe and secure, and where crime and the fear of crime does not reduce people's quality of life or sense of community. Doors and windows must meet Secured by Design standards.
- provide, where possible, kitchen windows facing onto any communal areas so that children can play while being monitored from their home.
- promote access to daylight, which will improve the occupants' quality of life and reduce the amount of energy used to light the home.

- seek to reduce noise disturbance for occupants and neighbours by promoting good levels of sound insulation between neighbouring homes and different rooms within the home.
- minimise the risk of uncontrollable high temperatures happening as a result of current and projected future climate scenarios by recognising that this needs to be considered early in the design process.
- achieve a high standard of air quality in the home to avoid environments that could damage the health and wellbeing of people living in it.
- reduce the costs associated with running a current standard home, and encourage more thorough energy calculations during the design stage.
- encourage the selection of construction products where sustainable development principles have been followed across the supply chain, including when extracting, processing and manufacturing materials and parts.
- reduce the effect construction products have on the environment by recognising and encouraging the selection of products with a low environmental impact, including embodied carbon over the life cycle of the building.
- reduce the need for maintenance, repairs and frequent replacement of materials resulting from damage to exposed elements of the building and landscape.
- provide occupiers with suitable options for storing and disposing of recyclable waste, and reducing the amount of waste that goes to landfill by making it more convenient to store of recycling in the home before it is collected.
- reduce the amount of mains water used in the home, as compared with a current standard home.

Involvement of the local community, neighbours and future residents

During the design process extensive consultation in conjunction with HCLT should take place on the overall design and appearance of the development and its fit within the existing environment. Where future residents of the properties are known, they will be involved in agreeing the detail of the plans and in the final choice of kitchen fittings and selection of paint finishes and tiles.

Space standards

National space standards should be followed as a minimum, and these are set out below (see also: internal space standards under https://www.gov.uk/guidance/housing-optional-technical-standards):

Number of bedrooms	Number of bed-spaces*	1-storey dwellings	2-storey dwellings	3-storey dwellings	Built in storage (included in overall space and allowance of 0.5m^2 for hot water cylinder etc)
1	1	39			1
	2	50	58		1.5
2	3	61	70		2
	4	70	79		2
3	4	74	84	90	2.5
	5	86	93	99	2.5
	6	95	102	108	2.5
4	5	90	97	103	3
	6	99	106	112	3
	7	108	115	121	3
	8	117	124	130	3
5	6	103	110	116	3.5
	7	112	119	125	3.5
	8	121	128	134	3.5

* A single bedroom must have a floor area of at least 7.5m^2 and be at least 2.15m wide; a double or twin bedroom must have a floor area of at least 11.5m^2 and should be at least 2.75m wide.

Any area with a headroom of less than 1.5m is not counted as part of the overall floor area unless used solely for storage; any storage areas with a headroom of 0.9m to 1.5m is counted at 50% of the floor area, and any area under 0.9m in height is not counted at all.

Internal space (see also under Lifetime Homes on page 11)
All rooms must be of good practicable design to be able to host the likely required furniture (and shown to be such on floor plans, see below), and be pleasingly proportioned.

Built in wardrobes of 600mm internal depth should be provided in all bedrooms.

All homes with three or more bedrooms should have a separate kitchen/diner, otherwise an open plan kitchen, dining and living space is acceptable.

Where the kitchen, dining and living areas are open plan, designs should define activity areas and provide visual screening to the working areas of the kitchen by thoughtful design of space and layout.

To help allow people to work from home, the internal layout should allow a space for a desk/worktop with computer, a filing capacity, appropriate lighting and wifi connection.

A linen cupboard should be provided with a degree of low level heating available and must be provided with two rows of removable slatted softwood shelving.

The Plant Room, containing the MVHR and boiler should be easily accessible for servicing, changing of filters etc.

A coat rail with five coat hooks must be provided in the hallway or other suitable location.

There should be adequate space for refuse and recycling storage prior to removal to outside bins.

Stacking of kitchens, bathrooms or living rooms above bedrooms must be avoided.

Ensure the floor level within each dwelling will be level after the application of any screeds, tiling or floor finishes. There must be no resultant steps.

Kitchens (see also Tiling)
Kitchens should be designed to incorporate the following appliances: a cooker, a fridge/freezer, a dishwasher and a clothes washing machine. Worktops must be provided to both sides of the cooker and sink. At least one section of worktop 1m in length to be provided (not including any worktop projecting into a corner). The cooker space should not be located near a door or under a window and should incorporate gas and electricity outlets, unless there is no gas on site. A space for a separate tumble dryer must not be provided.

Flooring should be non-slip vinyl, of style and colour to be agreed with HCLT.

Bathrooms and WCs (see also Tiling)
All bathrooms should allow for some storage of toiletries and toilet rolls, most likely by providing a cupboard under a wash hand basin. A toilet roll holder is to be provided adjacent to each WC.

A heated electric towel rail, separate from the heating system, minimum 750mm long shall be fitted to all bathrooms and WCs.

In all homes of 2 bedrooms or more there should be one toilet that is separate from the bathroom.

Moisture resistant plasterboard must be used in bath and shower rooms on internal walls.

Flooring should be non-slip vinyl, of style and colour to be agreed with HCLT.

Passivhaus standards

All homes are to be built to Passivhaus standards, without seeking final certification for such a standard to save on costs. Passivhaus Planning Package (PHPP) is the principle design tool for Passivhaus buildings. The standards are set our below:

Requirements for the Passive House Standard	**Recommended**	**Best Practice**
Heating energy demand, Qh (kW h/(m2a)) Primary energy demand, PE (kW h/(m2a)) Volume related air leakage at 50 Pa, n50 (h^{-1})	<15 <120 <0.6	< or = 10 ~72/0 < or =0.2
Component or Construction Insulation of opaque envelope,U-value(W/m2K) Thermal bridge free construction, i.e., Linear thermal transmittance, ye(W/(m K))	<0.15 <0.01	0.06 <0
Thermal transmittance, Ug(W/(m2K)) Total solar energy transmittance, g-value(%)	<0.8 >50	0.51 58
Window, thermal bridge free construction, insulated frame, Uw(W/(m2K))	<0.8	0.75 (withUg= 0.7 W/(m2K))
Air leakage	<0.6 h^{-1} at 50 Pa	<0.2 h^{-1} at 50 Pa
Heat recovery with Net efficiency, hHE(%) Heat loss through casing Internal and external leakages (%)	 >75 <5 W/K <3	 92 <1
Electric energy demand for ventilation (including control), pel(W/(m3/h))	<0.45	0.3
Energy efficient electric appliances (e.g., highest EU appliance energy-label class)	Class A	<60% of Class A average
Recommended limit for primary energy use for householdelectricity (part of PE requirement), PE (kW h/(m2a))	<55	27 (assuming European electricty mix)

Attention should be given in the design to maximising passive solar gain, including for water pre-heat systems.

Conversely, buildings must not be designed so that they overheat on a sunny summer day, with shutters, overhangs or brise soleil able to screen windows from summer sun.

Breathability

Breathability is the most effective way of maintaining stable and harmless moisture levels within the building fabric. For effective breathability, there must be a moisture pathway, a driving force (essentially temperature difference), a sorptive fabric and vapour control. Breathability is not a substitute for the main mechanisms of moisture removal and prevention in and around the fabric but must be included in the construction as an effective mechanism for regulating levels of residual moisture within the fabric. The design must show how this is achieved.

Natural Light and Windows

Natural daylighting should be used to reduce the need for artificial lighting. Designers should make every effort to include windows in all kitchens and bathrooms (in the latter to help prevent condensation and remove the need for mechanical ventilation).

Large areas of full height glazing should be avoided, and all rooms with French windows must also have an alternative, opening window for ventilation.

All habitable rooms should have an openable, lockable window, and if the home only has one access door, one window far from this should allow for means of escape in case of fire.

All windows should be able to be cleaned on both sides from within the dwelling.

Key lockable handles must be provided on all ground floor opening windows. Handles and catches to comply with Secure by Design, reachable from a standing position and easily manipulated by one hand. Specifically, where there is an opening casement in kitchen windows, the opening light must be capable of being reached and opened over a worktop (i.e. low level handle at max 1200mm above finished floor level.)

The same range of ironmongery to be fitted to all windows within a property.

Ceiling height
All homes should have a minimum ceiling height of 2.4m except for limited areas such as storage or parts of rooms where any reduced ceiling height does not compromise the furniture layouts and functions of those rooms.

Sound insulation
All schemes must achieve airborne sound insulation values that are at least 8db higher and impact sound insulation values that are at least 8db lower than the performance standards set out in Part E of the Building Regulations.

Power and heat sources
Solar PV electricity generation must be considered for all sites, via panels or tiles, with thought given to the roof profiles to maximise capacity for solar PV generation. (Flat roofs might be suitable in some circumstances so as to provide a good base for orientating and angling solar panels to maximum effect, together with pre-heat water systems, hiding the necessary mechanical installations by interestingly designed parapets.)

Ground- and air-source heat pumps, and other alternative methods of providing heat to homes, should be investigated, with consideration given to their cost effectiveness, the ease and understanding of their use by residents, and maintenance issues.

For all heat and power systems consideration must be given to durability, life expectancy and ease of accessing replacement parts.

Consideration should be given to underfloor heating in preference to radiators as this allows more efficient use of floor area. Any radiators should generally be fitted under windows but must not compromise room layouts. In bedrooms radiators must not be positioned behind beds or furniture shown on room layouts. Radiators must be provided to all rooms and hallways. Thermostatic radiator valves to be fitted in all habitable rooms. Systems to have external drainoffs – and all radiators to have drain down valves.

If boilers are fitted these should be electric.

Suitably qualified consultants should be appointed to design a MVHR system for dwellings built to Passivhaus or near Passivhaus standards. At the design stage routing of ducting will need to considered as well as the siting and layout of a plant room. In flats with 1 bedroom a communal MVHR may be considered.

Provision of electric sockets and lights

Each home shall have an independent electricity supply, installation and smart meter. Meter boxes should be provided on side elevations where possible.

There should be the following provision of sockets:
Living rooms: 4 double socket outlets
Bedrooms: 3 double socket outlets (to include one on each side of the likely position of the bedhead)
Hallways and landings: 1 double socket outlet

In addition to the above:
A double television and master telephone/broadband outlet with fibre optic connection and two double socket outlets should be provided in the most suitable location for a home entertainment system.
A cooker connection outlet at low level in the cooker position.
A non-switchable 13 amp fused spur for future provision of the following:
in the hallway for an alarm
at the bottom of the stairs in a two-storey home for a stairlift.

Low energy light fittings and light bulbs are to be utilised.

Light switches / pulls to be located on the leading edge side of doors not the hinge side.

Light switches to be located at least 25mm away from architraves.

Lighting points shall be positioned to be safely accessible for replacing bulbs and a minimum of 300mm clear of door swings.

Metal and glass, flush mounted ceiling light, with opaque diffuser to fitted in any bathrooms or toilets.

All bathrooms to have a light and integral shaver/electric toothbrush point, the light to be positioned above a mirror and the electric point at shelf level.

Provide enclosed light fittings to any cupboard over 1.2 cu m volume and loft space with an illuminated switch located outside of the door.

Downstairs hallways lights to be switched from front door position and upper landing.

Upstairs landing lights to be switched from upstairs landing and downstairs hallways.

Supply a metal half coach style security light to front and rear entrance doors. At the front this is to be positioned on the lock side of the door.

Mains powered smoke alarms with battery back ups should be fitting in the kitchen, hallway and at landings on every floor.

Energy Display Device

An energy display device is required in each home to comprise a self-charging sensor fixed to the incoming mains supply to measure and transmit energy consumption data to a visual display unit.

Water usage

Part G of the Building Regulations set a standard of 125 litres of water use per person per day, but the design should aim for 110 litres per day through dual flush toilets, eco shower heads and such specifications.

Services in general
Lighting and water systems should be discreet and well-designed, being easy to access, clean and maintain. The water stopcock should be located in a convenient location for emergency use.
Adequate unobstructed routes and fixings (including ducts, chases and holes) should be made for services during construction rather than cut.

A neat, single sawn 75mm diameter hole, with cut edges sealed against water penetration, shall be cut in the sink base carcass to allow for washing machine and dishwasher hoses and waste pipes. All cut-outs in work-tops and where cut to receive an inset sink top, all exposed edges shall be smoothed and fully sealed against moisture penetration.

Doors
To allow for future carpets, unless otherwise specified for fire or smoke containment, all doors shall be adjusted or cut to create an even, regular gap to pre-carpet floor finish of 20mm (tolerance of +/- 2mm).

All front doors must be provided with:
- multi-point locking system
- sleeved letter box
- door numeral
- security chain
- door viewer set at 1500mm above threshold

A separate lockable letter box should be fitted in a convenient place near to the front door.

Tiling
Kitchens must be tiled between the worktop and the bottom of wall units, and between the skirting board behind the cooker space to the worktop. There should be no tiling in the fridge space. Trim to be finished with appropriately sized trim with trim on external corners where tiles return round corners. Tiling is to be laid to avoid small cuts at edges.

In bathrooms, full tiling must be provided to ceiling height on all sides of bath, with two courses above basins in bathrooms and separate toilets. Wetrooms are to be fully tiled to full height to all walls.

Kitchens and bathroom to have tiled window sills.

Tiles should be of a subdued colour and shade, to be agreed with residents in conjunction with HCLT.

Waterproof grout to is be used in bathrooms, kitchens and wetrooms.

Paintwork
Walls and ceilings must be painted with one mist coat and two full coats of vinyl matt emulsion paint, white on the ceilings, a muted colour, to be agreed with HCLT, to the walls. Kitchens, bathrooms and toilets should have paint work that is durable and can be easily wiped down.

Internal woodwork is to be prepared, primed and painted in two undercoats and one finishing coat of white gloss paint, tops of doors to be painted.
External woodwork is to be prepared, primed and painted in two undercoats and two finishing coat of white gloss paint.

Fire safety
Sprinkler systems should be installed in buildings of 4 storeys or over.

Access
Each home should have its own front door shared with no other home (apart from in co-housing schemes, for which see below), but access to flats may be via a shared staircase or stairwell.

All access points to the home should be a safe space and well lit.

Use of rainwater
Thought must be given to how rainwater is used, be it for flushing toilets and /or for storage for watering plants.

Raised water butts must be provided to all houses: 150 litre for 2 beds and 200 litre for 3 & 4 bed homes; to include tap, lid and detachable connection to rainwater downpipe.

Materials and Suppliers
Both materials and suppliers should be local to Hereford, where possible, so reducing transportation miles whilst also supporting local businesses and, through looking to the future, encouraging upskilling of the local workforce.

All timber used must be FSC certified.

Close attention must be given to the selection of materials with a view to ensuring their robustness and fitness for purpose. Assurance must be given that replacement parts for all products specified are affordable and readily available in the UK.

The following materials must not be used in any way in the construction:
Alkylphenols
Asbestos
Cadmium (apart from in any selected solar PV installation)
Chlorofluorocarbons (CFCs)
Chlorobenzene (might be used in paint)
Formaldehyde (added)
Halogenated flame retardants (HFRs)
Hydrochlorofluorocarbons (HCFCs)
Lead (apart from in flashings)
Mercury
Polychlorinated Biphenyls (PCBs)
Phthalates
Short Chain Chlorinated Paraffins more:
Wood treatments containing creosote, arsenic or pentachlorophenol
The following materials should only be used where no alternative can be found and it must be stated where these are to be used and why:
Bisphenol A (BPA)
Chlorinated polyethylene
Chlorosulfonated polyethlene (CSPE)
Chloroprene (neoprene)
Chromium VI (can be used in chrome plating)
Chlorinated Polyvinyl Chloride (CPVC)
Perfluorinated Compounds (PFCs)
Polyvinyl Chloride (PVC)
Polyvinylidene Chloride (PVDC)

(see also Volatile Organic Compounds (VOCs) emission levels, page 10)

External design

The appearance of buildings, be they traditional or contemporary, should provide interest, life and vitality to the public realm in the use of doors, windows, articulation, materials and detail. They should also respect the surrounding fabric whilst generating a synergy and establishing a character and identity of their own. If there are specific issues relating to the vernacular or polite architecture of the area for any site, these will be set out in a brief specific to that site.

External materials and details should take account of the need for durability and low maintenance. They must look good in all weather conditions and from a range of viewing distances. Cladding materials must be commonly available UK stock for repairs, and finishes that require regular painting should be avoided. Designers should avoid too much mixing of materials, as this can be costly for long term maintenance.

Flat roofs and similar non-traditional roof forms should be in materials that have a minimum 20-year insurance-backed guarantee and be designed/specified to minimise maintenance requirements. Access arrangements for maintenance, including gullies and outlets, should be considered at an early stage in the design development.

Drainpipes, gutters and meter boxes are integrated into the wider design to avoid a cluttered appearance.

Cladding and details should use robust materials at ground floor level. Consideration should be given to specifying anti-graffiti surfaces at street level and elsewhere where graffiti may be a problem.

Windows should be adequately recessed to enhance the appearance of the building, and thought given to the design of the space between the top of the upper windows and the eaves.

If using brick, then a mottled colour face is to be preferred over a highly uniform colour.

All boundary treatments and fencing must be stable and durable. Chain link fences should always be avoided.

External space

There should be a clear demarcation between the front of dwellings that are in the care of the occupier and adjoining public areas.

Each home should have provision for the safe storage of the number of bicycles appropriate to the potential number of occupants of the home that is easily accessible to those occupants. Such storage should be conveniently positioned and sensitively integrated into public spaces, amenity space or buildings.
Each home must have an outside three-sided enclosure of the height to hide from sight a rubbish and recycling bin.

Where possible, there should be outside space for a clothes line and also to allow for growing some plants. Where a home does not have access to any private outside space, a balcony should be provided.

Turf, not seed, must be used in any garden area that is to be laid to grass.

Services externally

Wherever possible, and in accordance with the requirements of statutory service providers, services and ducts should be in soft landscaping areas to avoid the need to disturb hard landscaping. In private gardens, care should be taken in the siting of access points such as manholes, which should not be sited in flowerbeds but rather be incorporated into paved areas.

Car Parking
HCLT seeks to discourage car use and this will be reflected in briefs specific to any site, taking into account the specific needs of the potential residents of any homes, Herefordshire Council planning requirements, together with the requirements of deliveries, car clubs and visitors, to include details of electric car charging points.

All car parking spaces should avoid full hard surfacing so as to discourage rapid rainwater run off.

Cycle Sheds
Where provided, communal cycle storage is to be safe and weatherproof, having a minimum of 3 walls and a roof and be provided with external lighting that comes on when approached.

It must have secure fixings in concrete, capable of being used to lock both the wheel and the frame of the bicycle.

Areas for refuse bins
These must have a minimum of three walls built to a height slightly higher than that of the refuse bins it will house. Bins must be obtained and positioned on site at handover, with each home's number neatly stencilled on their bins.

Floor Plans
Before a planning application is submitted, designers should provide detailed 1:50 floor plans demonstrating that furniture layouts and associated activity zones and circulation spaces, location of sockets, outlets and radiators comply with relevant quality and design criteria.

Sizes of rooms need to be marked in both metres and feet on the plans, and total floor area in square metres.

Before commencement of Construction
Architects must agree a policy with the contractor that includes covering all the following: limiting noise nuisance during construction; submission and approval of samples of any specified materials before they are ordered; the disposal of rubbish and waste in an environmental manner; the handling of defects.

On Handover
HCLT must be given:
1) All maintenance instructions and guarantees (registered with the manufacturer where required) relating to relevant items used or installed in the home
2) For all emergency call out services, provide sub-contractors telephone numbers for use after completion.
3) Supply sufficient information to allow HCLT to complete an information pack for residents which can include clear instructions about how to use any equipment provided.
4) **Energy Efficiency Certificates**. A carbon index (C.I.) rating is required for each home. A minimum score of 6.2 is required for a property with electric heating and 8.0 for properties with gas heating. A certificate proving that each dwelling has achieved the required rating is to be provided at practical completion.
5) Results of Air Tightness tests.
6) Results of a test for Volatile Organic Compounds emission levels.

Volatile Organic Compounds (VOCs) emission levels
These can emanate from decorative paints and varnishes, wood panels with organic or cementitous binders, timber structures (such as glue laminated), wood flooring such as parquet), resilient textile & laminated floor coverings (e. g. vinyl, cork, rubber), suspended ceiling tiles, flooring adhesives and paints and varnishes.

The level should be measured on completion of construction but preoccupancy. Rather than adhere to Part F of the building regulations, these should adhere to the World Health Organisation Indoor Air Quality (IAQ) guidelines of 2010.

Lifetime Homes

HCLT will consider whether to build any homes to lifetime homes standards depending upon whom the homes are being constructed for in the first instance. A group of homes being built by young people as their own future accommodation will have different future requirements than those constructed for an older group's co-housing scheme.

The lifetime home standards are included below. Further details giving specific measurements for widths, circulation arcs etc can be found on the Lifetimes Homes Standard at www.lifetimehomes.org.uk.

Regardless of whether lifetime home standards are included in a brief specific to any site, standards 1, 4, 6, 8, 11 and 12 should be followed in any event.

1) The approach to all entrances should preferably be level or gently sloping. Entrance doors should have a minimum clear effective width of 800mm, or 825mm if at right angles to the direction of approach.

2) Movement in hallways and through doorways should be as convenient as possible to the widest range of people, including those using mobility aids or wheelchairs, and those moving furniture or other objects. As a general principle, narrower hallways and landings will need wider doorways in their side walls.

3) There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchair users elsewhere.

4) A living room / living space should be provided on the entrance level of every dwelling.

5) In dwellings with two or more storeys, with no permanent bedroom on the entrance level, there should be space on the entrance level that could be used as a convenient temporary bed-space.

6) An accessible bathroom, providing ease of access in accordance with the specification below, should be provided in every dwelling on the same storey as a main bedroom.

7) Where an accessible bathroom, in accordance with the criterion above, is not provided on the entrance level of a dwelling, the entrance level should have an accessible WC compartment, with potential for a shower to be installed.

8) Walls in all bathrooms and WC compartments should be capable of firm fixing and support for adaptations such as grab rails.

9) The design within a dwelling of two or more storeys should incorporate both:
a) Potential for stair lift installation; and,
b) A suitable identified space for a through-the–floor lift from the entrance level to a storey containing a main bedroom and a suitable bathroom.

10) The structure above a main bedroom and bathroom ceilings should be capable of supporting ceiling hoists and the design should provide a reasonable route between this bedroom and the bathroom.

11) Windows in the principal living space (typically the living room), should allow people to see out when seated. In addition, at least one opening light in each habitable room should be approachable and usable by those with restricted movement and reach.

12) Location of service controls (including poer points) should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner.

Co-Housing Brief

Co-housing is where a group of households, potentially comprising a mix of single people, couples and families, choose to live as a community with a co-house as part of the built environment in which space is shared and which might, in some schemes, also be used for wider community activity.

Each co-housing scheme is likely to consist of at least 10 (to make the scheme economically viable), and probably more, households, some of those households buying their home within the complex and some renting.

Some co-housing schemes will focus on people of a certain age group initially, in such cases often older folk who want a degree of private space but also an atmosphere that encourages mutual support which is especially appreciated in times of difficulty. But all co-housing, whether for people of a certain age or one that is multi-generational seek to maximise a mutually supportive way of life which also protects and enhances its local environment.

External space will largely be shared and if there is sufficient land will generally be used to help provide a degree of self-sufficiency in vegetable production.

Co-housing might be said to seek to blend the best of the past with the best of the new, those establishing a co-housing scheme having a shared vision of what this means in practice.

A common intention will be to build homes that are beautiful, comfortable and practical whilst using the minimum of resources effectively and efficiently.

The co-house

This will have facilities for socializing, learning, entertaining and eating together, with the possible ability, depending upon the co-housing group, to offer hospitality to the wider community. This space should be wheelchair accessible and on the ground floor.

It may well also have a 'private room' on the ground floor designed for the needs of the community, probably well sound insulated, to be used for such as meetings, or noisy activities such as music learning or creation.

There will also be a small office used for storing and working on administration of the overall scheme.

There should also be a room used for storing goods bought in bulk and including space for a table that can be used to divide such goods out between households.

The ground floor will also contain laundry facilities for the community.

There will be two bedrooms with en suite bathrooms or one bathroom shared between the two for use by family and friends who visit and stay.

Residential houses and flats that are part of the scheme

These would be designed as per the homes described in the rest of the design brief, with the following exceptions:

1) No internal space needs to be allowed for a washing machine, as these would be congregated in the communal laundry in the co-house.

2) Bathrooms should be designed to allow for easy replacement of baths with a wet-room style shower.

3) The external space should be designed for communal use with limited personal space to the edges of homes.

Self-Build, Train-and-Build brief

Some construction options will need to be considered with the skills and degree of supervision and training required or intended for those participating in the construction of the scheme.

Self-builders may comprise people with a variety of skills that include, for example, those of an electrician and a plumber who carry out work on all the homes, in return for labouring help on their own home. They may also choose to buy in a particular skill rather than perform the task themselves. Self-builders will be closely involved in the design of their home homes together with the choice of finishes.

Train-and-builders will normally be working alongside the main contractor who will be providing on site skills training, perhaps in addition to a day a week attendance at college, or a pre-start on site course. Train-and-builders are likely to move into one of the homes they are helping build, but the overall design is unlikely to have involved them, but they will be involved to a limited extent in choice of such as kitchen units, and are likely to decorate their own homes.

In all such schemes a detailed brief will be provided once the basic parameters are known.

Check list for items to include on site specific brief

Who is the development for and their requirements (to include any flexible design features)
Any special factors/groups to consider re community/neeighbour consultaion
How to make use of the land: orientation, trees, nature, encouragement of walking and cycling
Drainage: swales, use of rainwater/rainwater disposal
Car parking (occupants and visitors) and charging points
Clothes drying facilities
Consideration of surrounding sites to 'mesh with': local vernacular, use of materials, scale, 'beauty'
External storage: rubbish/recycling, bicycles, prams/buggies
Relationship to public open space
Relationship to local vernacular or polite architecture

Date of Change	Changed by	Comments
08/03/20	Andy Johnson	Comments from Arbor incorporated
15/5/20	Andy Johnson	Incorporating Board comments