



READING STATION SUSTAINABILITY STATEMENT OF COMMON GROUND REVISION D

This Statement of Common Ground (SoCG) has been prepared by Watkins Payne on behalf of Aviva Life & Pensions UK Ltd (hereafter referred to as 'the Appellant') and the Local Planning Authority Reading Borough Council (RBC). The SoCG is submitted in relation to the appeal made by the Appellant under Section 73 of the Town and Country Planning Act 1990 for non-determination by RBC of the planning application relating to Vastern Court ('the Site').

The purpose of this SoCG is to set out the sustainability matters agreed between the parties and those that are not, the aim being to focus on the issues that separate the parties in respect of the proposed development and narrow the areas of disagreement.

The SoCG focuses on an assessment of how the Appeal Scheme addresses the planning policy requirements set out in the Reading Local Plan (adopted November 2019) and the Sustainable Design and Construction Supplementary Planning Document (December 2019). Specifically, it addresses those policies referred to in RBC's punitive Reason for Refusal 11. It also considers the effect the Building Regulations 2022 will have on any future reserved matters applications that would follow the outline permission should the Appeal be allowed, and planning permission be granted for the Appeal Scheme.

1.00 MATTERS OF COMMON GROUND

The following section sets out the matters of common ground between RBC and the Appellant. These are agreed between the parties, subject to the imposition of appropriately worded conditions (as set out in ID34).

Reading Borough Local Plan

1.01 ***Sustainable Design and Construction***

CC2: SUSTAINABLE DESIGN AND CONSTRUCTION

Proposals for new development, including the construction of new buildings and the redevelopment and refurbishment of existing building stock, will be acceptable where the design of buildings and site layouts use energy, water, minerals, materials and other natural resources appropriately, efficiently and with care and take account of the effects of climate change.

To meet these requirements:

- All major non-residential developments or conversions to residential are required to meet the most up-to-date BREEAM 'Excellent' standards, where possible;***
- All minor non-residential developments or conversions to residential are required to meet the most up-to-date BREEAM 'Very Good' standard as a minimum;***
- All non-residential development or conversions to residential should incorporate water conservation measures so that predicted per capita consumption does not exceed the appropriate levels set out in the applicable BREEAM standard. Both residential and non-residential development should include recycling greywater and rainwater harvesting where systems are energy and cost effective.***



It is agreed that a BREEAM Predictive Assessment (dated February 2019) prepared by Envision (CD1.5) was submitted in support of the application.

~~It is agreed that whilst the Council's Sustainability Manager raised a number of concerns over the detail provided in the Assessment, a suitably worded sustainability condition would address those concerns.~~

~~It is agreed that draft Conditions 67 and 68 represent suitably worded conditions and as a result the Appeal Scheme accords with Policy CC2. It is agreed that draft Conditions 67 and 68 represent suitably worded conditions and would secure BREEAM excellent.~~

1.02 **Adaptation to Climate Change**

CC3: ADAPTATION TO CLIMATE CHANGE

All developments will demonstrate how they have been designed to incorporate measures to adapt to climate change. The following measures shall be incorporated into development:

- *Wherever possible, new buildings shall be orientated to maximise the opportunities for both natural heating and ventilation and reducing exposure to wind and other elements;*
- *Proposals involving both new and existing buildings shall demonstrate how they have been designed to maximise resistance and resilience to climate change for example by including measures such as solar shading, thermal mass, heating and ventilation of the building and appropriately coloured materials in areas exposed to direct sunlight, green and brown roofs, green walls, etc;*
- *Use of trees and other planting, where appropriate as part of a landscape scheme, to provide shading of amenity areas, buildings and streets and to help to connect habitat, designed with native plants that are carefully selected, managed and adaptable to meet the predicted changed climatic conditions; and*
- *All development shall minimise the impact of surface water runoff from the development in the design of the drainage system, and where possible incorporate mitigation and resilience measures for any increases in river flooding levels as a result of climate change*

~~It is agreed that the Appeal Scheme is submitted in outline form and as a result specific detail required by the policy is not currently available. It is agreed that as an outline scheme that there would be further detail which would need to be submitted at reserved matters stage.~~

~~It is agreed that this information will be required and provided at the reserved matters stage once the detail of the scheme and specific buildings is known.~~

It is agreed that the Design and Access Statement (CD1.48-1.55) contains a ~~detailed~~ Site Evaluation Section, Design Evolution, and an Illustrative Scheme.

~~Further it is agreed that the Parameter Plans which form part of the application, and have been submitted for approval, have been the subject to an Environmental Assessment which amongst other matters includes daylight, sunlight, overshadowing and Solar glare modelling; wind microclimate modelling; and flood risk and drainage. It is agreed that the Environmental Assessment includes some modelling of daylight and sunlight, overshadowing, solar glare and wind microclimate, and flood risk and drainage.~~

~~It is agreed that further modelling on these matters will be controlled by conditions (Draft conditions 22, 55, 56, 61, 62 and 63).~~



It is agreed that draft conditions 22, 61, 62 and 63 requires the submission of further detail for daylight and sunlight, wind microclimate, drainage.

~~It is agreed that landscaping matters will be addressed as part of future reserved matters submissions and are subject to separate draft planning conditions (numbers 27-29).~~

It is agreed that draft conditions 27 to 29 relate to the submission of further details for landscaping

It is agreed that condition 46 relates to the submission of further details for drainage matters. drainage matters will be controlled by draft planning condition 46.

~~It is agreed that the Appeal Scheme accords with Policy CC3.~~

1.03 Decentralised Energy

CC4: DECENTRALISED ENERGY

In meeting the sustainability requirements of this plan, developments of the sizes set out below shall demonstrate how consideration has been given to securing energy for the development from a decentralised energy source.

Any development of more than 20 dwellings and/ or non-residential development of over 1,000 sq m shall consider the inclusion of decentralised energy provision, within the site, unless it can be demonstrated that the scheme is not suitable, feasible or viable for this form of energy provision.

Where there is existing decentralised energy provision present within the vicinity of an application site, further developments of 10 dwellings or more or non-residential development of 1,000 sq m or more will be expected to link into the existing decentralised energy network or demonstrate why this is not feasible.

It is agreed that Reading Borough Council has proposed to develop a district energy network which is discussed within the Energy Strategy (4568-ReadingStationPark-Rep-EnerStrat-Iss3-Resi-MW-SK-02-20 and 4568-ReadingStationParkRd-Rep-Energy Strat-Iss3-MW-SH-02-20).

It is agreed the development will be provided with a decentralised energy centre which will have provision to connect on to RBC's district energy network when available.

It is agreed that currently there are no decentralised energy provisions present within the vicinity.

~~It is agreed that the Appeal Scheme accords with Policy CC4.~~



1.04 Standards for New Housing

H5: STANDARDS FOR NEW HOUSING

New build housing should be built to the following standards, unless it can be clearly demonstrated that this would render a development unviable:

- a. All new build housing outside the Central Area as defined on the Proposals Map will comply with the nationally-described space standard.*
- b. All new build housing will be built to the higher water efficiency standard under Regulation 36(3) of the Building Regulations⁷⁹.*
- c. All major new-build residential development should be designed to achieve zero carbon homes.*
- d. All other new build housing will achieve at a minimum a 19% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations.*
- e. All new build housing will be accessible and adaptable in line with M4(2) of the Building Regulations, unless it is built in line with M4(3) (see below).*
- f. On developments of 20 or more new build dwellings, at least 5% of dwellings will be wheelchair user dwellings in line with M4(3) of the Building Regulations. Any market homes provided to meet this requirement will be 'wheelchair adaptable' as defined in part M, whilst homes where the Council is responsible for allocating or nominating an individual may be 'wheelchair accessible'.*

It is agreed that the Energy Strategy (4568-ReadingStationPark-Rep-EnerStrat-Iss3-Resi-MW-SK-02-20) discusses RBC's [aim requirement](#) to deliver zero carbon homes.

It is agreed that the notional building (TER) achieved a carbon emission rating of 18.92 kg CO₂/m² with the actual development (DER) achieved a carbon emission rating of 9.53 kg CO₂/m². This is a carbon reduction of 49.64% over the target emission rate.

It is agreed that [this further](#) information will be provided at the reserved matters stage as required by the draft conditions (65, 66) and the Amended Development parameters Schedule – March 2022 (CD1.34.9).

It is agreed that the Appeal Scheme accords with Policy H5.

1.05 Tall Buildings

CR10: TALL BUILDINGS

In Reading, tall buildings are defined as 10 storeys of commercial floorspace or 12 storeys of residential (equating to 36 metres tall) or above. Tall buildings will meet all the requirements below.



- v) *In addition to the area-specific requirements, all tall building proposals should be of excellent design and architectural quality, and should:*
- Enhance Reading's skyline, through a distinctive profile and careful design of the upper and middle sections of the building;*
 - Contribute to a human scale street environment, through paying careful attention to the lower section or base of the building, providing rich architectural detailing and reflecting their surroundings through the definition of any upper storey setback and reinforcing the articulation of the streetscape;*
 - Contribute to high-quality views from distance, views from middle-distance and local views;*
 - Take account of the context within which they sit, including the existing urban grain, streetscape and built form and local architectural style;*
 - Avoid bulky, over-dominant massing;*
 - Conserve and, where possible, enhance the setting of conservation areas and listed buildings;*
 - Use high quality materials and finishes;*
 - Create safe, pleasant and attractive spaces around them, and avoid detrimental impacts on the existing public realm;*
 - Consider innovative ways of providing green infrastructure, such as green walls, green roofs and roof gardens;*
 - Locate any car parking or vehicular servicing within or below the development;*
 - Maximise the levels of energy efficiency in order to offset the generally energy intensive nature of such buildings;*
 - Mitigate any wind speed or turbulence or overshadowing effects through design and siting;*
 - Ensure adequate levels of daylight and sunlight are able to reach buildings and spaces within the development;*
 - Avoid significant negative impacts on existing residential properties and the public realm in terms of outlook, privacy, daylight, sunlight, noise, light glare and night-time lighting;*
 - Provide managed public access to an upper floor observatory and to ground floors where appropriate, and ensure that arrangements for access within the building are incorporated in the design stage;*
 - Incorporate appropriate maintenance arrangements at the design stage.*

~~It is agreed that the roof gardens are referenced in the Design Code at section 5.6.5 and included in the illustrative scheme, DAS section 6.4.~~

~~xx~~

~~Green roofs are referenced in the Design Code sections 5.9.4 and again at 6.1.6 where some of the benefits are described "Green roofs can help the sustainability of a building by absorbing rainwater, improving insulation for the building and providing important habitat for birds and invertebrates."~~

~~It is agreed that the design code section 4 references discreet locations for servicing for each plot and section 6 outlines that any surface parking spaces should be integrated within the landscaping design. The illustrative scheme shows that parking and servicing have been included beneath the podium in plots B and C. Parking provision is minimal due to the inherently sustainable location of the appeal site adjacent to excellent transport links and is only blue badge parking for wheelchair users and other disabled people.~~

~~It is agreed that the tall buildings on site have their shortest elevations facing south to reduce solar gain and possible overheating in summer. The Design Code section 5.9.3 further specifies window-to-wall percentages for each use to limit the amount of glass subject to solar gain and refers to the use of~~



adjustable or fixed external shading and/or further reduction of the glazed area to lower solar gain where appropriate, for example on West facing elevations to limit solar gain on hot afternoons. Building fabric requirements to minimise energy use are set out in the Building Regulations. For non-residential use BREEAM Excellent rating is targeted by the Design Code section 2.3.

~~Overshadowing has been considered in the orientation of the tall buildings. They are located to the South of our site so that they do not overshadow the properties on Vastern Road. The tall buildings on plots A, B and C are placed in the south-western corner, which, in conjunction with dropping the south-eastern corner, allows light into the internal courtyards and amenity spaces. Mitigating the effects of wind is outlined in the Design Code section 5.4.9 and turbulent effects of wind will be further considered as designs develop, forming a part of the assessment of any Reserved Matters applications.~~

It is agreed that the massing of the proposed development has been carefully articulated to ensure that adequate daylight and sunlight reaches the amenity spaces and residential accommodation. In the illustrative scheme, 80% of the residential units achieve the recommended ADF and amenity spaces meet the BRE guide to good practice, Design Code section 5.6.5

~~It is agreed that the massing of the illustrative scheme has been arranged to avoid negative daylight/sunlight impact on the houses on the northern side of Vastern Road.~~

The tall buildings and amenity spaces within the proposals have been positioned so that spaces receive sufficient sunlight. The Design Code section 5.6.5 references the BRE guide to good practice. Privacy for existing and proposed residents is maintained; minimum separation distances of 20m are specified throughout the application documents.

~~Amenity spaces are sheltered from the effects of noise and vibration from Vastern Road by the building blocks of the appeal site, and from the railway line by the Royal Mail proposals to the south of the site. Further noise, light glare and night-time lighting impacts are considered matters of more detailed design and will be considered as part of any Reserved Matters applications.~~

~~It is agreed that the Energy Strategy (4568-ReadingStationPark-Rep-EnerStrat-Iss3-Resi-MW-SK-02-20) discusses the viability of services options that could be applied to the development. Following the energy hierarchy, the best energy efficient services have been utilised.~~

~~It is agreed that plant replacement and maintenance details will be set out at the Reserved Matters stage.~~

1.06 Reading Supplementary Planning Guidance

The SPD is intended to guide developers and decision-makers on the implementation of key sustainability policies set out in the Reading Local Plan, namely CC2-CC5, EN18 and H5. ~~Compliance with those policies relevant to the Appeal Scheme has been addressed above. Additional matters/requirements are, however, set out below.~~

The relevant sections from the Sustainable Design and Construction SPG are as follows:

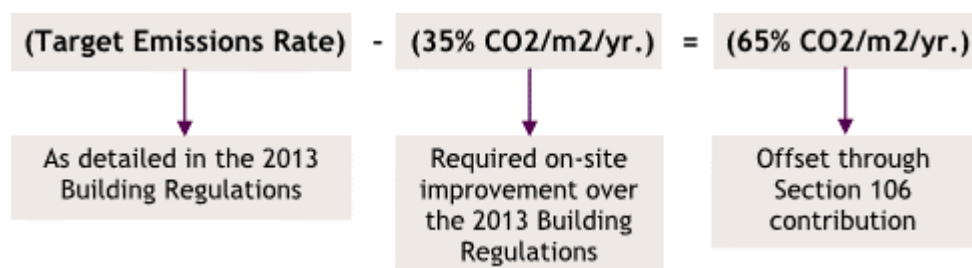


Table 3.1: Required level of sustainability standard

	Size of Development	Required Standard
New-build residential	Minor (fewer than 10 dwellings)	19% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations
	Major (10 dwellings or more)	Zero Carbon (or if unachievable, a minimum 35% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations and planning contribution to offset remaining carbon emissions to zero)
Creation of new residential units through conversion from other uses and/or	Minor (fewer than 10 dwellings)	BREEAM 'Very Good'
	Major (10 dwellings or more)	BREEAM 'Excellent'
Non-residential development (including development for non-C3 residential)	Minor (less than 1,000 sq. m of floorspace)	BREEAM 'Very Good'
	Major (1,000 sq. m of floorspace or more)	BREEAM 'Excellent'
Non-residential refurbishment (including refurbishment for non-C3 residential)	Minor (less than 1,000 sq. m of floorspace)	BREEAM 'Very Good'
	Major (1,000 sq. m of floorspace or more)	BREEAM 'Excellent'

As stated above, the requirement for major new residential developments is to achieve Zero Carbon Homes. However, the policy recognises that it is not always achievable, and, in such circumstances, developments must achieve a minimum of 35% improvement in regulated emissions over the Target Emissions Rate (TER) in the 2013 Building Regulations, plus a Section 106 contribution of £1,800 per remaining tonne towards carbon offsetting within the Borough calculated as £60/tonne over a 30 year period). £60 per tonne of carbon is a nationally recognized price of carbon and reflects the amount established by the Zero Carbon Hub.

The following calculation should be used to determine contribution:



It is agreed that the Energy Strategy (4568-ReadingStationPark-Rep-EnerStrat-Iss3-Resi-MW-SK-02-20) discusses RBC's requirement ~~aim~~ to deliver zero carbon homes.



It is agreed that the actual development is likely to achieve a carbon emission of 497.96 Tonnes CO₂/year. This is a shortfall of 505.12 Tonnes CO₂/year.

It is agreed that the Energy Strategy calculates the cash contribution to offset the remaining carbon for the development to ~~comply with zero carbon homes requirements~~. The cash in lieu contribution is £909,216.50.

Further, it is agreed that this contribution will be secured via draft condition 65 and the draft S106 Agreement currently in negotiation between the parties.

1.07 Building Regulations 2022

From 15th of June 2022 the following Building Regulations will come into force:

- Building Regulation Part L Conservation of fuel and power – Volume 1 (residential).
- Building Regulation Part L Conservation of fuel and power – Volume 2 (commercial).
- Building Regulation Part F Ventilation – Volume 1 (residential).
- Building Regulation Part F Ventilation – Volume 2 (commercial).
- Building Regulation Part O Overheating; and
- Building Regulation Part S Infrastructure for the charging of electric vehicle.

It is agreed that from 15th of June 2022 Building Regulation Part L, F O and S will come to effect in England. The regulations do not apply to work subject to a building notice, full plans applications or initial notices submitted before this date provided the work is started on site before 15th of June 2023. The Appeal Scheme is an outline planning application and shall therefore be subject to the new regulations.

One of the key changes to Building Regulation Part L is the assessment of primary energy for both residential and commercial developments.

The following parameters need to be met or bettered for residential and commercial developments:

Part L Approved Document Volume 1: Dwelling

- Dwelling Primary Energy Rate
(kWh_{PE}/m² per annum)
- Dwelling Emission Rate
(kgCO₂/m² per annum)
- Dwelling Fabric Energy Efficiency Rate
(kWh/m² per annum)

Part L Approved Document Volume 2: Building other than dwelling

- Building Primary Energy Rate
(kWh_{PE}/m² per annum)
- Building Emission Rate
(kgCO₂/m² per annum)

It is agreed Building Primary Energy Rate is a new requirement and needs to be implemented for the Reading commercial scheme.

With the de-carbonation of the electricity grid, future electricity use will become more sustainable and involve fewer carbon emissions than would be previously have been involved where energy was principally generated by non-renewable methods. The assessed energy impacts for both residential and commercial schemes will therefore become increasingly less impactful as the electricity grid becomes increasingly supplied by renewables sources of energy generation.



It is agreed that the development will be assessed at reserved matters stage against the new carbon emission factors.

The limiting U-Values have been updated for both residential and commercial developments within the new Building Regulation to further improve energy consumptions.

It is agreed that the development will be required to meet the new limiting U values as set out in the Building Regulations 2022.

Under the Building Regulation Part F for residential (Volume 1) schemes, the minimum ventilation rate per bedroom and the background ventilation has increased. The commercial (Volume 2) for Part F now has a requirement for CO₂ monitoring and ventilation to be provided for common parts which enhances the air quality within the commercial premises.

It is agreed that under the Building Regulations 2022, the development will be required to meet higher ventilation rates and air quality requirements at the reserved matters stage than would have been required under the Building Regulations 2013.

Building Regulation Part O for overheating is a new addition to the regulations which covers residential developments. The guide sets out parameters of acceptable temperatures, opening (window) limitations based on hour of the day and how accessible the opening is to mitigate overheating on residential properties.

It is agreed that an overheating assessment will need to be submitted to Building Control for approval at the reserved matters stage.

Building Regulation Part S, which is also a new addition to the regulations, states that where the total number of parking spaces being provided at the development is less than the total number of dwellings being provided at the development, all of those parking spaces must provide Electric Vehicle Charging (EVC) infrastructure. Part S also requires one EVC space for every 10 commercial car parking spaces per development.

It is agreed that the compliance with Part S will be required at reserved matters stage.

2.00 Matters in Dispute

Policy CC2

It is not agreed that the submitted assessments adequately demonstrate how the outline scheme, which seeks approval for parameter plans and design code, has complied with the fundamental requirement of Policy CC2 as set out in the extract above.

The Appeal scheme cannot demonstrate that due consideration in the design process has been made of energy, water, natural resources and materials. Notwithstanding any subsequent BREEAM assessment, the baseline passive and fabric-based measures that could be undertaken have not been demonstrated in the Appeal scheme, therefore compliance with Policy CC2 has not been demonstrated. Compliance with Policy CC2, could not be secured through conditions, as suggested by the Appellant as the fundamental issues have not been addressed or demonstrated to have informed the Parameter Plans.

It is therefore, not agreed that the Appeal scheme accords with Policy CC2.

Policy CC3



It is not agreed that the Parameter Plans, upon which the Appellant seeks to rely, have been informed by detailed evidence within the Environmental Assessment, which adequately demonstrates maximising opportunities for natural heating and ventilation in accordance with Policy CC3. The reports merely provide an assessment of the proposed development as opposed to how these have informed the Parameter Plans in terms of adhering to the Energy Hierarchy described in the Sustainable Design and Construction SPD (2019).

It is not agreed that the Parameter Plans and submitted assessments demonstrate how they have been designed to maximise resilience to climate change including measures such as thermal mass, heating and ventilation and appropriate coloured materials. No assessment has been made of the role of landscaping, trees, green roofs and walls alongside SuDS in mitigating the urban heat island effect, contributing to solar shading, drought or resilience to extreme weather events either in terms of function or the long term maintenance and successful establishment of the features. The cooling effect in summer based on the surface area and use of water has also not been assessed. It is not known whether there is sufficient quantity and how the orientation and design of the landscaping is contributing to the first stage in the energy hierarchy. The role of any green roofs remains unclear in terms of their function.

The Parameter Plans, which will guide the reserved matters application, have not been informed by the appropriate application of the energy hierarchy at the design stage.

The submitted Design and Access Statement (CD1.48-1.55) contains a Site Evaluation Section, Design Evolution, and an Illustrative Scheme, however this is in insufficient detail to demonstrate compliance with Policy CC3, because of a lack of detailing regarding prevailing wind, sun path detail.

It is not agreed, therefore, that the Appeal Scheme accords with Policy CC3.

Policy CC4

It is not agreed that the Appeal Scheme accords with Policy CC4 as there are inconsistencies between the Residential and Non-Residential Energy Strategies and the Environmental Statement and insufficient certainty has been provided regarding the technology, potential connection points and pipework corridors.

Policy H5

It is not agreed that the Appeal Scheme accords with Policy H5 as the energy hierarchy has not been correctly applied and the subsequent calculations regarding renewable energy requirements and ultimately offsetting Section 106 Contributions are therefore skewed. In terms of zero carbon homes there has been insufficient consideration of the energy hierarchy at the design stage leading to an over-reliance on offsetting as there is also a limited potential for renewable energy.

Although the information submitted sets out what the development would be likely to achieve in terms of carbon emissions this is based on the inappropriate application of the Energy hierarchy in the design process. The carbon emission figures are based on the fabric energy and passive measures assessed at the end of the design process and as such the potential for on-site energy efficiency has not been demonstrated. The calculation is therefore flawed in its assumptions, in terms of the potential of the site and the design of the buildings and fixed through the Parameter Plans. Therefore, although further detail could be provided at reserved matters stage, the Parameter Plans, for which approval is sought, have not been informed by the appropriate application of the energy hierarchy.



Policy CR10

It is not agreed that the Appeal Scheme demonstrates that fabric energy efficiency has been maximised as described in Policy CR10.

Building Regulations 2022

The changes to the Building Regulations performance standards will be applied to the scheme as proposed and defined by the Parameter Plans and the mandatory elements of the Design Code. This has not changed, and the re-iteration of the proposed changes, in whatever detail provided, does not change the fact that development has been designed without reference to the potential of the site and layout to contribute to fabric energy efficiency. This could result in an excess use of materials, technology or design consequences that may impact on the aesthetics of the scheme of additional resource consumption. For these reasons it is not agreed that the proposed reliance on and compliance with the Building Regulations is acceptable in terms of policy compliance.



Declaration

The above matters have been agreed by RBC and the Appellant.

Signed and Dated on behalf of the Appellant

Signed and Dated on behalf of Reading Borough Council