

Chapter 3: Alternatives and Design Evolution

INTRODUCTION

- 3.1 Under the 2017 EIA Regulations, an ES is required to provide a “description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.
- 3.2 This chapter summarises the main design alternatives considered by the Applicant and provides a qualitative comparison of their relevant environmental aspects.
- 3.3 A narrative is provided on the evolution of the selected design option for the site focussing on key design modifications made during the design evolution process. This information has been drawn from the Design and Access Statement, which provides a detailed overview of the evolution of the design of the Proposed Development. Environmental considerations which have influenced the design evolution process are discussed where relevant.

POLICY BRIEF

Hosier Street Area Development Framework (HSADF)¹ (2018)

- 3.4 The site sits within the Hosier Street Area Development Framework (Figure 3.1). The Hosier Street area is the subject of a policy in the Submission Draft Local Plan. However, with the various sites, and other adjoining land being in different ownerships, and likely to come forward at different times, RBC have identified a need for a detailed framework to be prepared to guide and co-ordinate the various developments and to ensure the most appropriate form of development to serve the wider area.
- 3.5 It clearly sets out a vision of this area as:
“a distinctive and high quality, high density, mixed use area within Reading’s Central Core. The area will portray a unique character and sense of place retaining the historical associations of the area and providing high quality public realm, both through the enhancement of existing public spaces adjacent to the site and the provision of new spaces that provide a setting and focus for new development.”
- 3.6 A key note on the building heights in relation to Station Hill development² is set out below:
“The hub and spoke approach to tall buildings in the town assigns pre-eminence and dominance to the central cluster at Station Hill. Consequently buildings on the site will need to perform a supporting function to the central cluster at the station.”
- 3.7 The framework identifies the opportunity for two tall buildings located on the podium level of the Broad Street Mall. Additionally, the framework stipulates a nominal height capacity of 20 storeys above podium level, in relation to the Station Hill development (referenced as a committed development in the cumulative schemes list, see **ES Volume 1: Chapter 1 - Introduction**).
- 3.8 The framework identifies that the tall buildings within the area should be subservient to the development at Station Hill, but the nonetheless should be a significant landmark with long range and sky line viability.
- 3.9 The framework identifies that the height classifications as well as the general principle of grading down towards the conservation area.

Reading Tall Building Strategy

- 3.10 The Reading Tall Building Strategy identifies that site is located within the Western Cluster (Figure 3.2).
- 3.11 The Western Cluster is identified as being suitable for:
‘Up to three tall buildings would be appropriate, focused along the line of the IDR, to mark the area as the civic heart of Reading and a gateway to the centre’
‘Transition in scale should be achieved by including angular planes which ensure that tall buildings step away from the lower scaled neighbouring buildings and the use of setbacks that are aligned with surrounding building heights.’

Figure 3.1 Site location within the context of the Hosier Street Area Development Framework

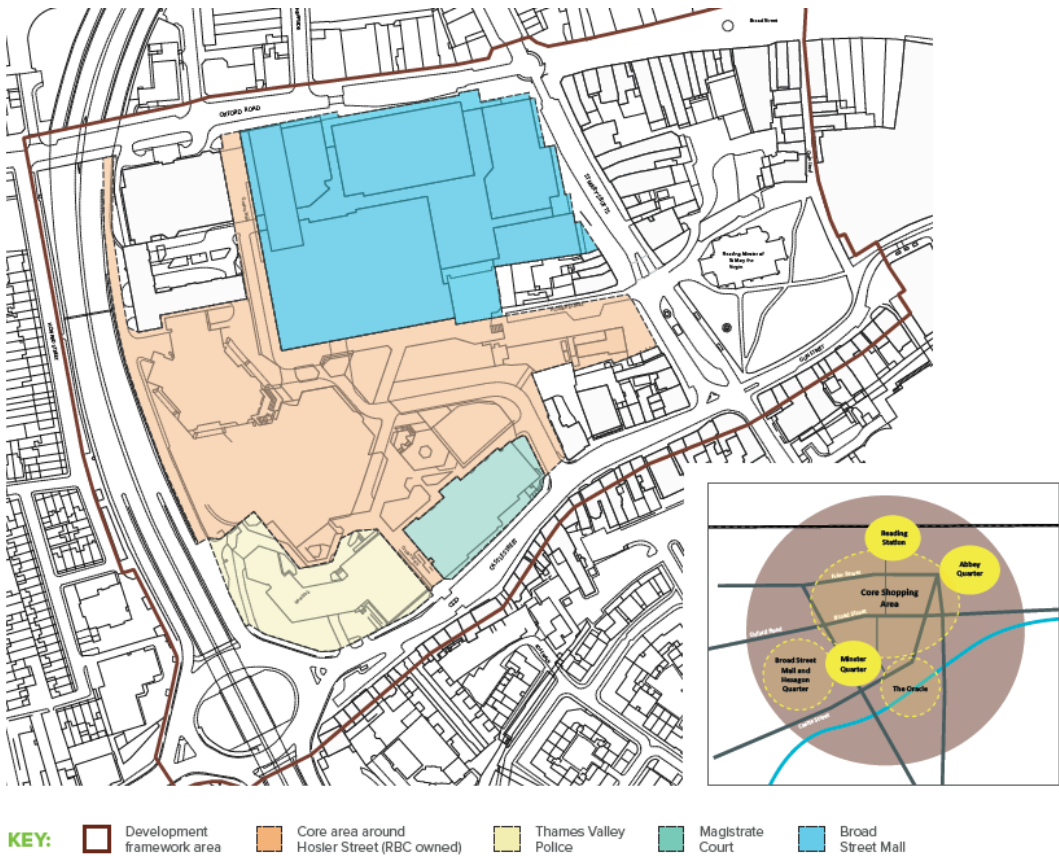
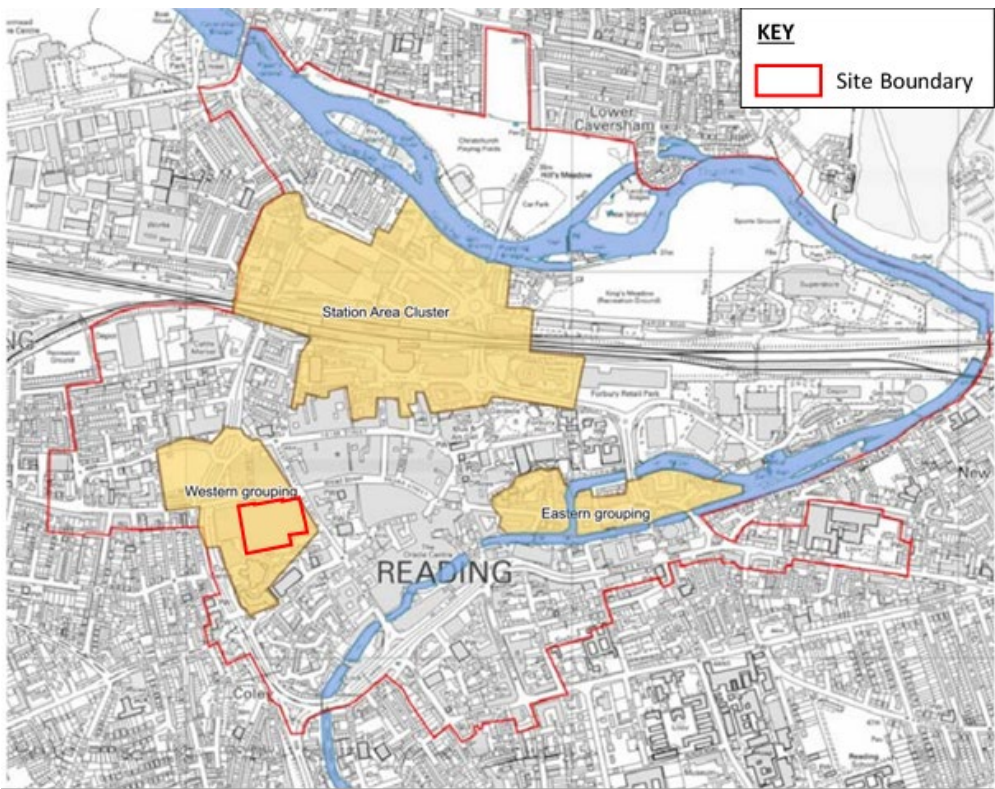


Figure 3.2 Preferred Tall Building Locations



¹ Website: <https://consult.reading.gov.uk/dens/draft-hosier-street-area-development-framework/>

² Located approximately 500m north east of site, planning reference: 151427.

ALTERNATIVES

3.12 The following sections review the alternatives to the Proposed Development that have been considered by the Applicant, including:

- Alternative Sites; and
- The Do-Nothing / No Development Alternative.

Alternatives Sites

3.13 No alternative sites or locations have been considered for the Proposed Development.

3.14 The Applicant owns the site and the Applicant is keen to continue the redevelopment of the site and introduce a mixed-use development on site. Aiding the development of this key central urban area of Reading.

3.15 Additionally, the site is identified in local policy (Hosier Street Area Development Framework) as suitable for development of residential provision.

Do Nothing / No Development Alternative

3.16 The Do-Nothing / No Development Alternative refers to the option of leaving the site in its current state.

3.17 The option of Do-Nothing / No Development whatsoever on the site has therefore not been considered as the site represents an opportunity for the continued development of the existing shopping centre in a sustainable manner, which will be capable of providing new residential floorspace and new public realm. Regeneration of this nature will lead to employment opportunities and other direct and indirect socio-economic benefits that would otherwise not be realised should the site be left in its current status.

DESIGN INFLUENCES

Site Constraints

3.18 The site is subject to constraints which have been key drivers in shaping the design of the Proposed Development, the constraints are listed below:

- The existing Broad Street Mall shopping centre on site;
- The existing multi storey car park;
- 1970s mall design leads to a blank inward looking development and does not respond well to its context or public realm;
- Urban environment although green is drab and inactive;
- Poor quality and tired architecture and poor gateways especially around south court;
- St Mary's Butts / Castle Street conservation area located to the south and east of site; and
- Views towards St Mary Church / Reading Minster.

Site Opportunities

3.19 The sites location provides a few opportunities for the design of the Proposed Development as outlined below:

- The site is centrally located and near to numerous forms of public transport;
- The site is located within the Western Cluster of the Reading Tall Building Strategy; and
- The site is located within the Draft Hosier Street Area Development Framework.

DESIGN BRIEF

3.20 The design aspirations for the Proposed Development are focused around the Applicant's vision for the continued renovation and development of the Broadstreet Mall site, changing the site to a mixed-use development.

3.21 The design brief included making the most of the opportunities of present on site, as outlined below:

- Opportunity to take advantage of one of the few brownfield sites in the centre of Reading to accommodate the growing demand for urban living;
- Develop a design strategy for upper level uses with the least disruption to the live retail environment;
- To strengthen the area as a key quarter, as it once was, through new development;
- Open up the frontages and continue the rejuvenation of Broad Street Mall offer through bringing in a broader mix of uses;
- Ensure where possible that the new development has an active outward looking aspect both at street level and upper level;
- Evolve an architectural strategy that responds the design guidance set out in the tall buildings guidance³;
- Become a vibrant catalyst for future development in this quarter of the city;
- Take advantage of a highly accessible public transport area;
- Develop an architectural approach that responds to the modernist 1970's architecture of broad street mall but is also sensitive to the adjacent conservation area;
- Ensure good quality design and architecture; and
- Ensure that the development aligns with the principles set out in the Hosier Street Area Development Framework.

CONSULTATION

Pre-Application Discussions

3.22 The Applicant recognises the ongoing need to provide clarity about the proposals. As a result, the project team thought it was important to facilitate an open and transparent discussion about their proposals. The aim was to provide information about the proposals to Broad Street Mall and address any queries from councillors, community and amenity groups and local residents.

3.23 Consultation and engagement on the future of the site began with a preview event. The event was held at the Broad Street Mall on Monday 6th and Tuesday 7th August and was promoted through a letter sent to all tenants, key stakeholders and 598 near neighbours.

3.24 The programme of public engagement continued with the Council's autumn SPD consultation which was attended by members from the project team. The event was also attended by Deputy Leader of the Council, Cllr Tony Page, Vice-Chair of Planning Applications Committee, Cllr Karen Rowland, and Abbey ward councillor Mohammed Ayub.

3.25 Representatives from local businesses, institutions and residents associations were also in attendance. The event gave attendees an opportunity to address local concerns, including questions on the proposals for Broad Street Mall. The project team were on hand to address any questions in relation to the plans for the Mall.

Public Consultation

3.26 Most recently, a public exhibition was held over three days from Thursday 29th November to Saturday 1st December. The public exhibition was based in Broad Street Mall and was advertised to stakeholders, tenants and approximately 5,300 local residents. Attendees included representatives from the Council, local amenity societies and local businesses.

3.27 An advertisement for the exhibition was also displayed on digital screens around the mall. In addition, members of staff wore exhibition branded jackets during the exhibition.

3.28 Throughout the consultation process a dedicated telephone number, e-mail and mailing address were supplied, providing further information to residents, local groups and stakeholders upon request which will continue to be active as proposals develop and progress.

³ <http://www.reading.gov.uk/media/2870/Reading-Tall-Buildings-Strategy-0308/pdf/Reading-Tall-Buildings-Strategy-0308.pdf>

DESIGN EVOLUTION

3.29 Prior to engaging in pre-application discussions with the RBC, initial studies were undertaken into the main design elements. This process allowed the scheme and brief to be tested and developed, to ensure the Proposed Development meets the needs and demands of building users. The main design elements which have evolved through the design process, are as follows:

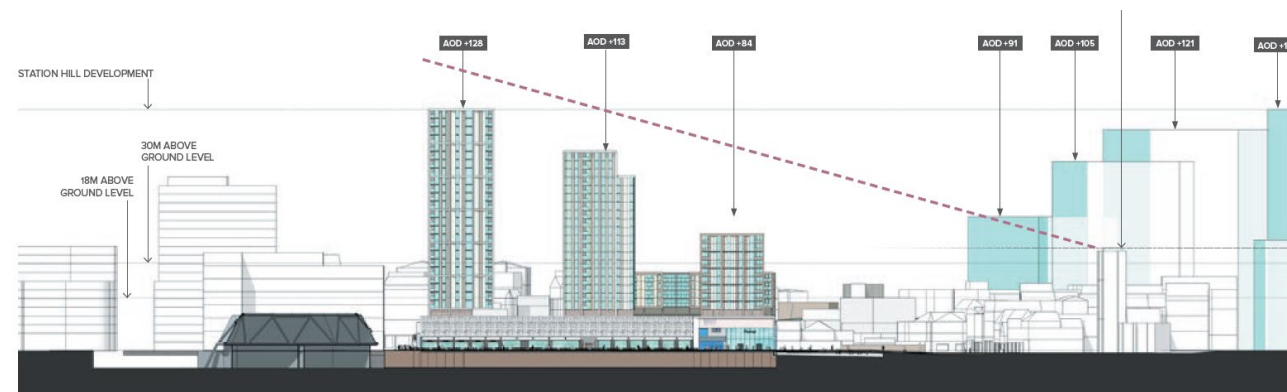
- Height and Massing; and
- Layout.

Height and Massing

Buildings A, B and C

3.30 The key driver in the design development of buildings A to C relates to the presence of the St Mary's Butts / Castle Street conservation area to the south and east, and the presence of Reading Minster of St Mary (Grade I listed) and it's protected view located to approximately 100m to the east of site (Figure 3.3).

Figure 3.3 Proposed Development Height within the context of other Tall Buildings within Reading



3.31 As previously mentioned in Policy Brief section, the site is located within the Western Grouping for Reading's Tall Building Strategy and the HSADF identifies the potential for two tall buildings to be present on site and a nominal height of 20 storeys from podium level and the response of the site to the station hill development.

3.32 Consequently, the Proposed Development include two tall buildings on the podium level of Broad Street Mall, the tallest building (Building A) of the Proposed Development is 22 storeys above podium height (25 storeys in total). Therefore, the Proposed Development aligns with the building height cap set out by the Station Hill development (128 m) to ensure subservience.



September 2016

3.33 The initial Massing studies were based upon available space / core locations at ground level and testing various height options against the Station Hill Outline Consent.



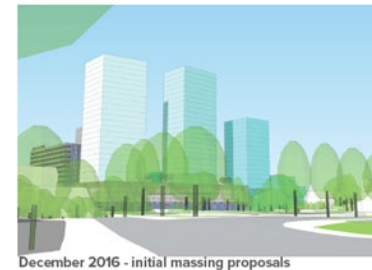
October 2016

3.34 Further development of the scheme to provide student accommodation was developed. This involved linking the 3 distinct towers at the lower levels immediately above the car park. It was felt however that this massing option was inappropriate due to lack of permeability through the site from a North to South aspect.



November 2016

3.35 A tall massing option was redeveloped as private residential with a square floorplate.



December 2016

3.36 The architectural treatment began to develop in order to achieve a tall, slender looking family of buildings. The orientation of the cores was also interrogated.



May 2017

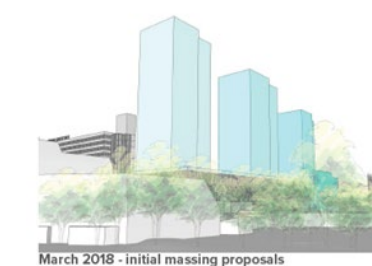
3.37 The floorplates of Buildings A to C were inset, helping break down the mass and improving the vertical emphasis of the forms.

3.38 Buildings A and B were shown at the same height but with a step in the massing to respond to the adjacent conservation area.



August 2017

3.39 The heights of sites A and B were still shown similar in height but the architectural treatment was developed further following advice that the scheme should be taller.



March 2018

3.40 The step in the mass was retained and the scheme was lowered following further advice from RBC who had reservations on the scale.

Building D

3.41 Structural limitations of the existing Broad Street Mall limited the extent of the extension and redevelopment which the Proposed Development could under take. As such Building D of the Proposed Development will result in a 2 storey extension of the existing structure and refurbishment to provide residential units.

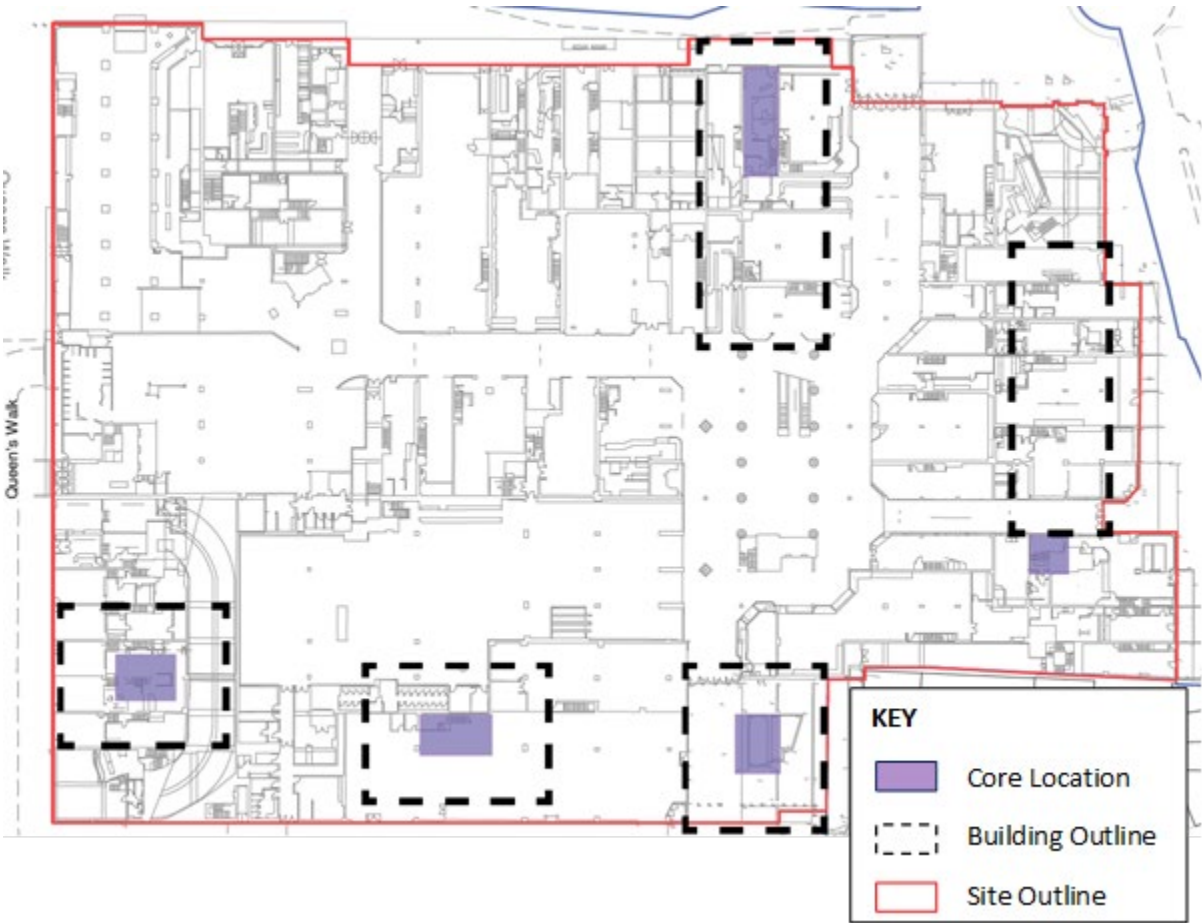
Building E

3.42 Massing and design of Building E has evolved from two buildings to a reduced massing in a single building to minimise the DSO and rights of lights impact on the residential buildings adjacent to the north of site, see Daylight, Sunlight and Overshadowing below.

Layout

- 3.43 One the first exercises in the layout process was to determine where the development could meet the ground level to allow easy access and activate the street frontage.
- 3.44 The Applicant has recently undertaken a series of aesthetic updates and improvements to the existing mall.
- 3.45 In a constrained live retail environment the areas available for development were limited and it was important to minimise disturbance to the existing retail environment, the final residential core locations can be seen in (Figure 3.4).
- 3.46 The core positions were defined by the areas where it is anticipated they will have the least disruption to the existing retail centre, subsequently a structural strategy was compiled to work within the constraints of a live retail environment further details regarding the demolition and works associated with the Proposed Development can be found in *ES Volume 1: Chapter 5 - Demolition and Construction*.

Figure 3.4 Residential Building Core Locations



KEY ENVIRONMENTAL CONSIDERATIONS

- 3.47 Several environmental considerations have had a meaningful design influence. These have been as follows:
 - Townscape, Built Heritage and Visual Impact Assessment;
 - Daylight, Sunlight and Overshadowing; and
 - Wind Microclimate.

Townscape, Built Heritage and Visual Impact Assessment

- 3.48 The HSADF also identifies that:
'Additionally, primacy of a central tall building and supporting tall buildings providing a stepped transition to the high point is the preferred configuration for tall building distribution within the site and takes into account:

- The high percentage of listed buildings locally, especially:
 - St Mary's Grade 1 Listed Church and views thereto.'

- 3.49 Buildings A to C have been designed to step down in height to east, in order to minimise the Proposed Developments impact upon the Reading Minster of St Marys as outlined within the HSADF (Figure 3.5). Additionally, the cladding of Building C has been selected to be sympathetic to the existing surrounding character of the conservation area, Building C will use two tones bricks.

Figure 3.5 Down grading of Buildings A to C



- 3.50 The Proposed Development has been designed to in keep with the maximum height and lying at 120 m tall, whilst it is taller than the nominal 20 storey figure suggested within the HSADF is still subservient to the 128 m AOD Station Hill development.

Daylight, Sunlight and Overshadowing

Buildings A to C

- 3.51 Buildings A to C, the tallest buildings on site, are located on the southern boundary of the site. Locating towers along the southern boundary minimises the impact of overshadowing created by the site, as rather than impacting the surrounding residential receptors the majority of the overshadowing caused by the Proposed Development will fall over the existing site (Figure 3.6).

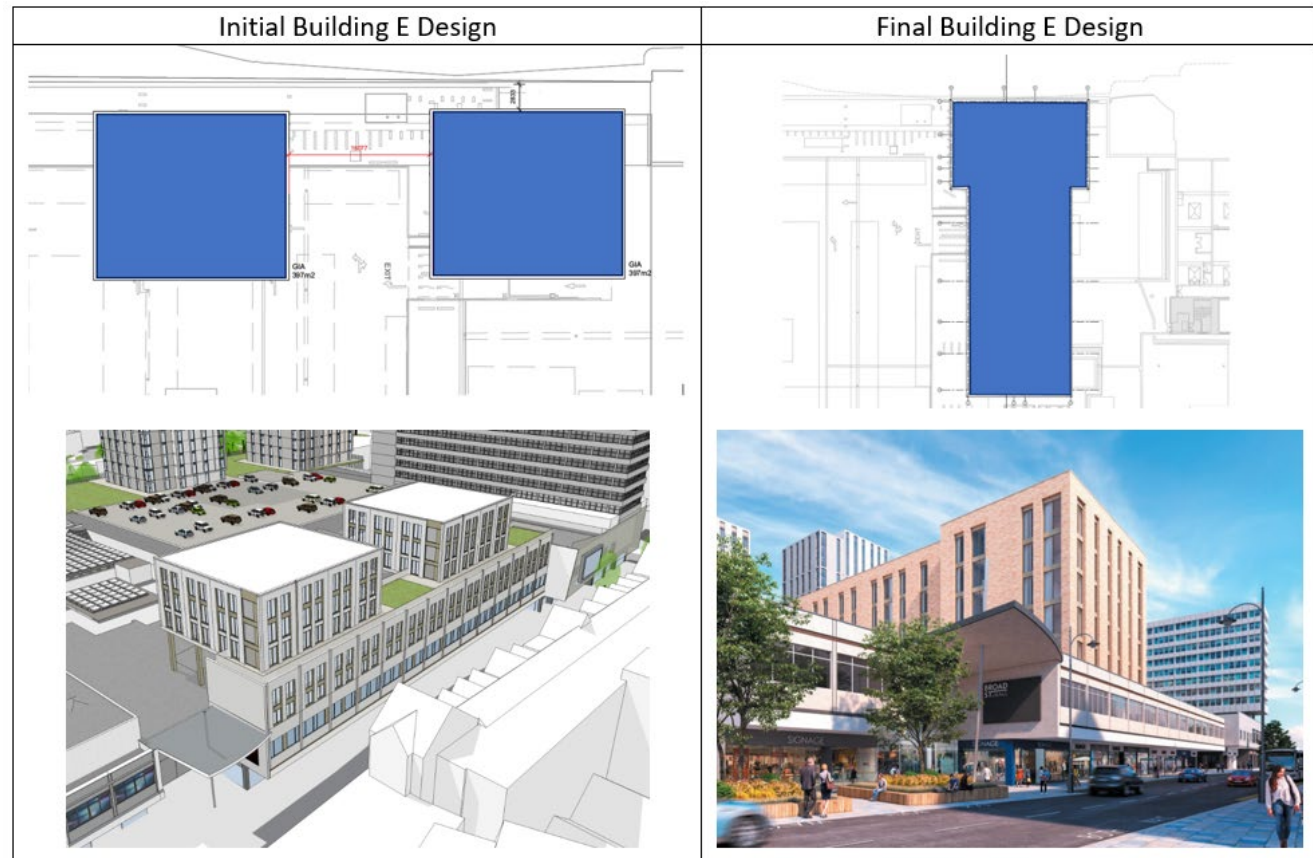
Figure 3.6 Buildings A to C Overshadowing – 21st June (9am, 12pm and 5pm) Combined



Building E

- 3.52 Initially, Building E included the absorption of two existing retail units at ground level with two buildings above the centre (Figure 3.7), joined by two levels of accommodation along the northern edge, however following Daylight Analysis and concerns that the height and massing would impact on the McIlroy building to the north of site, it was established that the proposals would impose a substantial negative impact on the McIlroy's right of light. Consequently, the massing of Building E was reduced and the massing was rotated 90 degrees in plan, avoiding any overshadowing and improving the aspect of all units within the block (Figure 3.7).

Figure 3.7 Building E Layout and Appearance (Initial and Final)



Wind Microclimate

3.53 Wind tunnel testing of the Proposed Development identified unsuitable conditions (i.e. stronger wind conditions than desired) on the amenity deck between Buildings A, B and C on site and at off-site locations along Queen's Walk and Hosier Street. A wind mitigation workshop has been undertaken to identify the mitigation measures required to make appropriate the wind conditions on and off site. The wind mitigation measures include detailed landscaping measures on and off site. Further details regarding the type of mitigation measures and where the measures are located can be found in *ES Volume 1: Chapter 10 - Wind Microclimate, Chapter 13-Mitigation and Monitoring* and *ES Volume 1: Chapter 4 - Proposed Development*.