

Chapter 12: Likely Significant Effects and Conclusions

INTRODUCTION

- 12.1** This chapter of the ES presents a summary of the likely significant environmental and socio-economic effects of the Proposed Development during the demolition and construction works, and once completed and occupied. This chapter also provides the conclusions of the EIA.
- 12.2** Likely significant effects are generally effects that are moderate or major in scale (although it is noted that professional judgement and published assessment guidance are also used in concluding whether an effect is significant).
- 12.3** For a detailed description of all environmental and socio-economic effects, reference should be made to individual technical chapters (**Chapters 6 – 10**) of this Volume of the ES.
- 12.4** [Townscape, Built Heritage and Visual Impact Assessment to be completed].

LIKELY SIGNIFICANT EFFECTS

- 12.5** For details of the methodology used to define the scale (and so significance), nature, geographic extent and duration of effects and whether effects are direct or indirect, reversible or irreversible, reference should be made to **ES Volume 1, Chapter 2: EIA Methodology** and the individual technical chapters of ES Volume 1 (**Chapters 6 – 10**).
- 12.6** [Townscape, Built Heritage and Visual Impact Assessment to be completed].
- Demolition and Construction**
- 12.7** The technical chapters of the EIA (**Chapters 6 – 10 (ES Volume 1)**) have not identified any significant effects which will result from the demolition and construction works associated with the Proposed Development.
- 12.8** [Townscape, Built Heritage and Visual Impact Assessment to be completed].
- Completed Development**
- 12.9** Table 12.1 outlines the likely significant effects resulting from the Proposed Development once it is complete and occupied. For ease of identification, significant adverse effects are shaded in 'orange' and significant beneficial effects are shaded in 'green'.

Table 12.1 Completed Development - Likely Significant Effects

EIA Topic Area	Receptor	Description of Residual Effect	Classification of Residual Effect				
			Scale and Nature (Geographic Extent)	D I	P T	R IR	St Mt Lt
Socio-Economics	Local Housing Supply	Provision of new houses for the local housing supply	Moderate Beneficial (Local)	D	P	IR	Lt
	Population and Labour Market	Increase in the local population and working population within Reading	Moderate Beneficial (Local)	D	P	IR	Lt
Daylight, Sunlight and Overshadowing	Neighbouring Residential Receptors	Daylight: Locations- 21-23, 58, 61 – 62 St Mary's Butts and 15 Queens Walk (Queens Court)	Minor Adverse (Local)	D	P	IR	Lt
		Daylight: Locations -19, 20 St Mary Butts and McIlroys Building	Minor to Moderate Adverse (Local)	D	P	IR	Lt
		Daylight: Locations - 59, 60 St Mary Butts	Moderate Adverse (Local)	D	P	IR	Lt

EIA Topic Area	Receptor	Description of Residual Effect	Classification of Residual Effect				
			Scale and Nature (Geographic Extent)	D I	P T	R IR	St Mt Lt
		Sunlight: Locations - 61 and 62 St Marys Butts	Negligible to Minor Adverse (Local)	D	P	IR	Lt
		Sunlight: Locations – 21, 22, 23, 32, 35, 36, 37 St Mary's Butts, 15 Queens Walk (Queens Court) and McIlroys Building)	Minor Adverse (Local)	D	P	IR	Lt
		Sunlight: Locations - 38 Oxford Road, 19 – 20 St Marys Butts	Moderate Adverse (Local)	D	P	IR	Lt
		Sun Hours on Ground: Amenity Areas	Negligible to Minor Adverse (Local)	D	P	IR	Lt
		Transient Overshadowing: Amenity Areas	Minor Adverse (Local)	D	P	IR	Lt
Wind Microclimate	Pedestrians and Cyclists (Ground Floor)	Off site Thoroughfares: Queen's Walk	Minor Adverse (Local)	D	P	IR	Lt
		Entrances: Queen's Walk (on site) St Mary's Church (off site)	Minor Adverse (Local)	D	P	IR	Lt
		Off site Amenity Areas (summer season): Off St Mary's Butts	Minor Adverse (Local)	D	P	IR	Lt
		Off site Roadways (Pedestrian and Cyclist): St Mary's Butts	Moderate Beneficial (Local)	D	P	IR	Lt
		Off site Roadways (Pedestrian and Cyclist): Oxford Road	Major Beneficial (Local)	D	P	IR	Lt
	New Introduced Residents (Podium and Terrace Level)	On site Amenity Areas (summer season): Between Buildings A and B and Buildings B and C	Moderate Adverse (Local)	D	P	IR	Lt
		On site Terraces (summer season): Buildings A, B and C	Minor Adverse (Local)	D	P	IR	Lt
Townscape, Built Heritage, and Visual Impact Assessment	Townscape, Built Heritage and Visual Impact Assessment to be completed						

EIA Topic Area	Receptor	Description of Residual Effect	Classification of Residual Effect				
			Scale and Nature (Geographic Extent)	D I	P T	R IR	St Mt Lt
Climate Change	Global Climate	Contribution of GHG to the environment	Significant Adverse (Global)	D	P	IR	Lt
Notes: Nature = Beneficial / Adverse / Neutral Scale = Negligible / Minor / Moderate / Major Geographic Extent = Site or Local / District or Borough / Regional / National -ve = Negative (Adverse) / +ve = Positive (Beneficial) D = Direct / I = Indirect P = Permanent / T = Temporary R = Reversible / IR= Irreversible St = Short Term / Mt = Medium Term / Lt = Long Term							

- 12.10** The EIA process has demonstrated that the likely significant adverse effects once the Proposed Development is fully complete and occupied, relate to Daylight, Sunlight and Overshadowing and Wind Microclimate.
- 12.11** Once the Proposed Development is fully complete and occupied, likely significant beneficial effects relate to Socio-Economics and Wind Microclimate.
- 12.12** [Townscape, Built Heritage and Visual Impact Assessment to be completed]

SUMMARY AND CONCLUSIONS

Demolition and Construction

- 12.13** The EIA process has demonstrated that the demolition and construction works associated with the Proposed Development will not result in any likely significant adverse effects. The result of no significant effects has been achieved by the appropriate implementation of best practice mitigation measures in relation to Air Quality and Noise and Vibration, a Construction Environmental Management Plan will also be implemented for the demolition and construction works associated with the Proposed Development.
- 12.14** In terms of climate change and the impact of the contribution of GHG emissions to the global climate, the inherent assumption outlined within relevant guidance that *'any increase in GHG emissions... has the potential to be significant due to the high sensitivity of the receptor (global climate) to increases in GHG emissions...'* means that any contribution to the environment during the lifecycle stages of the development is considered significant and that opportunities to avoid, reduce or off-set the contribution should be adopted where feasible.

Completed and Operational

- 12.15** The Proposed Development, once complete and operational, will provide significant beneficial effects for the local housing supply, population and labour market within Reading city centre. The Proposed Development will provide 493 residential units, 5% of which are accessible, and the Applicant will endeavour to deliver the maximum reasonable amount of affordable housing as part of the proposed scheme (subject to viability testing). This number of units will result in approximately 980 persons. This would introduce a working population of approximately 775 persons.
- 12.16** The likely changes in daylight levels for existing residential properties surrounding the site is a consideration for those residing within dense urban areas. The prediction where the change experienced is likely to be significant is limited to a relative low proportion of habitable rooms, where the greater majority is not considered significant. The daylight analysis indicates that the majority of neighbouring residential receptors would not experience significant effects to the levels of daylight they receive with the Proposed Development site in place. Whilst alterations are predominantly negligible, there are instances of minor, moderate and major alterations seen to windows or rooms at several properties. When considering the properties as a whole, impacts on six

properties is considered to be negligible, a further five properties experience an overall effect considered minor adverse and one property experiences a loss considered moderate.

- 12.17** In terms of change in the levels of sunlight, the technical analysis has shown the effect on five of the nine properties technically assessed will be negligible. There are instances of minor, moderate and major alterations to the remaining four properties. When considering the properties as a whole, five properties are considered to experience a minor impact and two are considered to experience a moderate alteration. The results also identify instances where daylight and sunlight impacts are still likely which is a consideration for regenerating a site within a dense urban location surrounded by existing residential receptors.
- 12.18** The Proposed Development will also result in negligible to minor and minor effects respectively for sun hours on ground and transient overshadowing impacts on the amenity area associated which will be introduced as part of the Proposed Development.
- 12.19** Similarly, the Proposed Development will result in unsuitable and in some cases unsafe wind conditions. Consequently, mitigation measures, possibly comprising the introduction of pergolas, trellises, screens and further landscaping (as discussed in **ES Chapter 10 Wind Microclimate (Volume 1)**), will be developed through further detailed design. Following the implementation of suitable mitigation measures the Proposed Development will experience wind microclimate conditions suitable for the anticipated end use.
- 12.20** These locations pose a safety concern and a comprehensive landscaping and mitigation plan for these locations will be developed through further detailed design and verification testing.
- 12.21** [Townscape, Built Heritage and Visual Impact Assessment to be completed]
- 12.22** As for the construction phase, in terms of climate change and the impact of the contribution of GHG emissions to the global climate, the inherent assumption outlined within relevant guidance that *'any increase in GHG emissions... has the potential to be significant due to the high sensitivity of the receptor (global climate) to increases in GHG emissions...'* means that any contribution to the environment during the lifecycle stages of the development is considered significant and that opportunities to avoid, reduce or off-set the contribution should be adopted where feasible.
- 12.23** The Proposed Development is also likely to bring benefits and opportunity in the long-term, as well as the potential to act as a catalyst for regenerating the surrounding area, to those already living and working in the local area, as well as those future residents and occupants within the Proposed Development. The EIA has identified that the Proposed Development will bring benefits in terms of additional housing provision and the local labour market, as well beneficial improvements in the wind conditions present on site. The Proposed Development seeks to continue the regeneration and improvement efforts brought forward by the Applicant since the acquisition of the Mall in August 2015. The significant investment has included the refurbishments of Broad Street Mall and Fountain House.
- 12.24** [Townscape, Built Heritage and Visual Impact Assessment to be completed]