



APPENDIX D:

WIND MICROCLIMATE ADDENDUM

This page has been left blank intentionally to enable double-sided printing.

Kenavon Drive, Reading
Wind Microclimate Addendum
May 2019



1.0 WIND MICROCLIMATE

- 1.1.1 This document provides an update of the assessment provided in the Original ES in light of the changes described in Chapters 2 and 3 of this ES Addendum (ESA). It should be noted that this topic was scoped out of the EIA on the basis it was unlikely to have significant effects, which is considered to remain the case. It should be read in conjunction with Annex G of Volume 4 of the Original ES.

Changes to Legislation, Policy and Guidance

- 1.1.2 There have been no changes to the legislative framework since the Original ES.
- 1.1.3 The National Planning Policy Framework (NPPF) (March 2012) described in the Original ES has recently been replaced by the new NPPF (July 2018, updated in January 2019). This provides high level guidance and principles to underpin the plan making process at a sub-national scale.
- 1.1.4 At the heart of both is a 'presumption of sustainable development', and therefore it is not considered to materially affect the acceptability of the scheme against policy, although the Planning Statement Addendum explores this further.
- 1.1.5 The RBC LDF Core Strategy was adopted in 2008 and updated in January 2015, and along with the Reading Central Area Action Plan and Sites and Detailed Policies Document, continues to be the adopted local plan. A new Local Plan was submitted to the Secretary of State in March 2018, and introduced relevant policies such as CC3: Adaptation to Climate Change, CC8: Safeguarding Amenity. However, these changes in policy are not yet adopted and as it is considered that the S73 scheme has accounted for wind impacts adequately, and therefore it is not considered that these policies will result in a material change to the assessment.
- 1.1.6 No changes in technical guidance are known to have occurred since the Original ES.

Changes to Baseline Conditions

- 1.1.7 The pedestrian level wind effects were assessed in the Original ES through an experience-based desk study undertaken by Urban Microclimate Ltd. This described how the site is partially sheltered by surrounding mid-rise buildings from wind approaching in most directions. The prevailing winds are from the south west or west-south-west, which is unchanged.
- 1.1.8 As described in Chapter 3, three schemes assessed as cumulative schemes in the Original ES have now been completed and form part of the baseline. This change has therefore already been accounted for and assessed as being acceptable. These schemes are too distant to have an influence on wind conditions at the site.
- 1.1.9 No other material changes in the baseline conditions are known to have occurred since the Original ES was submitted in March 2017.

Changes Associated with the S73 Scheme

Construction Phase

- 1.1.10 There will be no material changes to construction phase impacts as the changes would be imperceptible, as described in Chapter 2 of the ESA.

Operational Phase

- 1.1.11 The Original ES described how the introduction of taller buildings could deflect higher level winds to lower ground floor levels, causing downdrafts. Wind acceleration around and through the site could also result in places due to the introduced massing.
- 1.1.12 The Original ES concluded that the site would remain safe for all users at pedestrian levels. Figure 1.1 shows the predicted wind conditions across the site, with reference to the well-established Lawson Comfort Conditions. It also shows the location of the proposed landscaping and concludes that the conditions on thoroughfares around and through the site are expected to be suitable for their intended use.
- 1.1.13 The entrance near the south east corner of the Middle Block is expected to be slightly windy during the windiest season for its entrance use. The arrivals square in the north west of the site is expected to be suitable for short period of standing/sitting. The courtyards and private garden spaces are expected to be suitable for at least short periods of standing and sitting. The nursery playground will be well sheltered and suitable for children's play. Conditions within the riverside square will be suitable for general recreational activities.

Figure 1.1 Wind Comfort Conditions



- 1.1.14 The S73 scheme changes will not change the proposed building heights, and therefore will not cause any changes to downdrafts than were considered in the Original ES.
- 1.1.15 It does not result in any external ground floor changes of use, and therefore any new expectations for calmer wind conditions.
- 1.1.16 It does result in changes to some of the external facades, through the introduction of balconies, but there is not expected to be any greater exposure to users of the new balconies than would be the case under the Original ES scheme.

Updated Mitigation and Residual Effects

- 1.1.17 Based upon the minor design changes in the S73 scheme, this assessment has demonstrated that there is no change in the residual effects reported in the Original ES and no changes in associated mitigation.