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WIND MICROCLIMATE PEER REVIEW RESPONSES

DATE:	2022-12-06	RWDI REFERENCE #: 2200857
TO:	Keith Mapingire	EMAIL: keith@elmsbrook.com
FROM:	Stefan Astley Andrew Proud	Email: Stefan.Astley@rwdi.com Andrew.Proud@rwdi.com
RE:	Peer Review Responses – Wind Microclimate 35-39 Friar Street Reading, UK	

Introduction

During 2022 RWDI were appointed by Elmsbrook to conduct a pedestrian level wind microclimate assessment of the proposed 35-39 Friar Street development in Reading, UK (hereafter referred to as the 'Proposed Development').

Assessment of the Proposed Development was undertaken using wind tunnel testing to determine the influence of the Proposed Development on the local wind environment and the suitability of the wind microclimate for the intended pedestrian uses, with results referencing the widely used Lawson Comfort Criteria.

Following a peer review of RWDI's methodology by ArcAero (dated 9th November 2022), this document seeks to provide responses to the points raised by the reviewer.

RWDI Responses

ArcAero Comment	RWDI Response
1.1.1. The selection of model scale (1:300), model extent (360 metres from the site), tunnel simulation of atmospheric winds and measurement techniques are all considered to be acceptable. However, the 'target wind profiles' and 'measured profiles', showing how the wind tunnel configuration adequately represents full-scale variation of approach wind speed and turbulence intensity with height, has not been provided. It is requested that this is provided.	Please see Appendix attached.

1.1.2. It is from our understanding that the Station Hill development site located directly to the west and north of the Site is already under construction, however this development appears to be modelled within the cumulative surrounds instead of the existing surrounding conditions. The wind consultant is required to clarify the reason why the Station Hill development is being included within the cumulative surrounds instead of existing surrounds when it's already under construction.

As a non-EIA scheme, a cumulative assessment would not necessarily have been required, however as a matter of good practice we have undertaken an assessment of this future scenario to understand the potential for further wind effects that might not otherwise be captured in the existing scenario given the proximity of nearby developments.

While we note that some parts of the Station Hill development have begun construction, it is our understanding that other parts of the same site are still subject to further changes in design. By assessing both an "existing" context (without Station Hill, representing an environment that pedestrians familiar with the area would have been accustomed to) and a "future" context with Station Hill in place, we have intentionally tried to capture the relevant effects on both Proposed Development by itself and in combination with the other new developments in the nearby area.

Yours truly,



Stefan Astley
Senior Project Manager

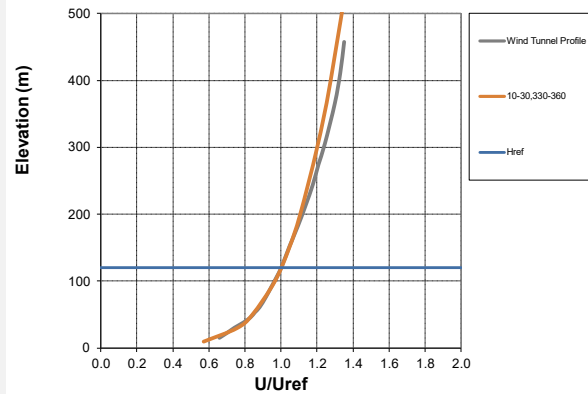


Daniel Hackett
Microclimate Practice Area Leader

APPENDIX



Wind speed with Elevation



Turbulence Intensity with Elevation

