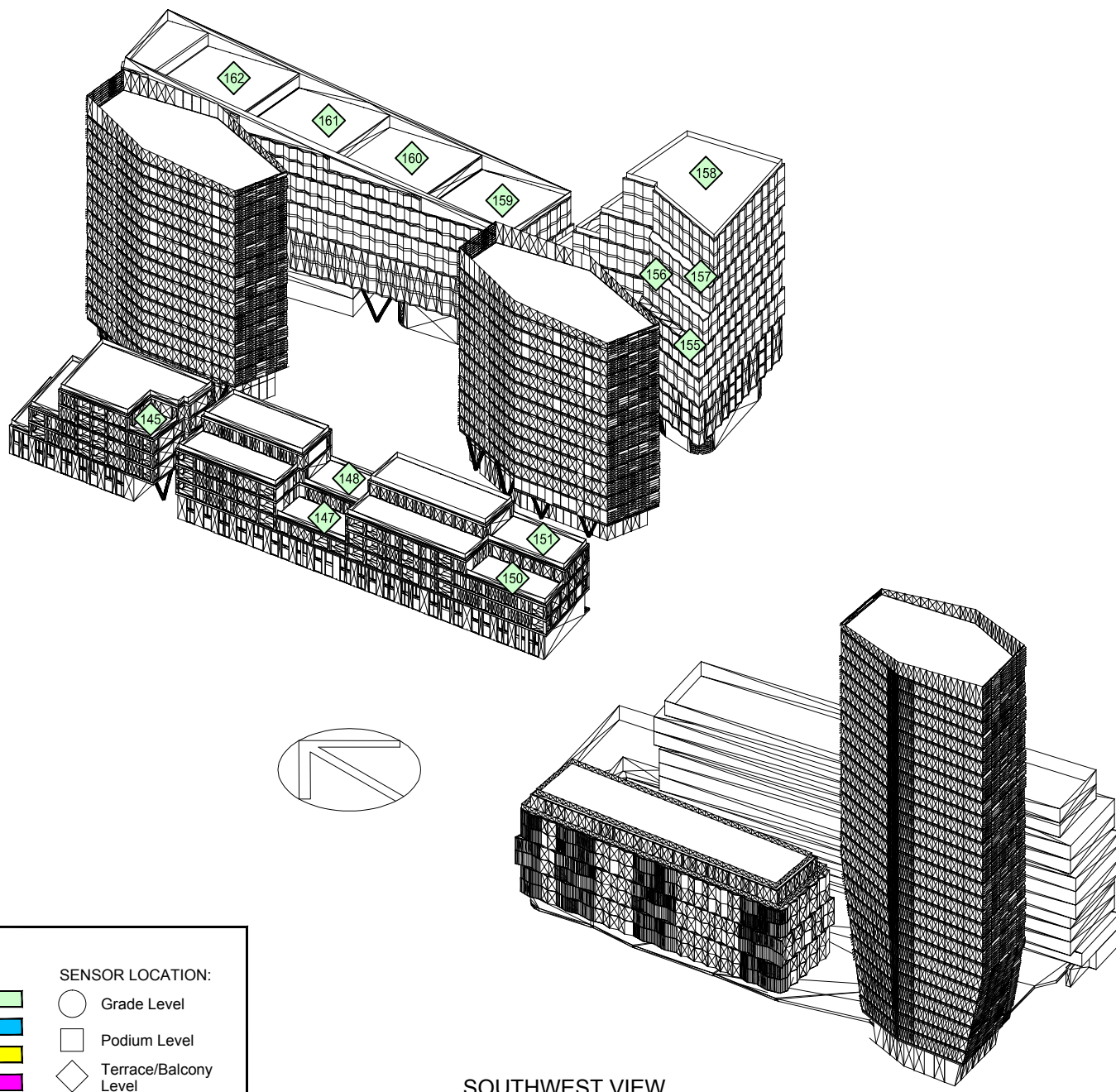


NORTHWEST VIEW



SOUTHWEST VIEW

LEGEND:	
<b>LAWSON COMFORT CRITERIA:</b>	<b>SENSOR LOCATION:</b>
Sitting ———— <span style="color: green;">■</span>	○ Grade Level
Standing/Entrance ———— <span style="color: blue;">■</span>	□ Podium Level
Leisure Walking ———— <span style="color: yellow;">■</span>	◇ Terrace/Balcony Level
Business Walking ———— <span style="color: magenta;">■</span>	
Carpark/Roadway ———— <span style="color: red;">■</span>	

Pedestrian Wind Comfort Conditions - Mitigation 4: Proposed Development with existing surrounding buildings and Proposed Landscaping

Summer Season

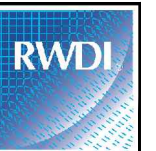
Charlton Riverside, London (U.K.)

Drawn by: CAX Figure: 12

Not to Scale:

Date Revised: Oct. 27, 2016

Project #1601701



## Appendix A: Photographs of the Wind Tunnel Model

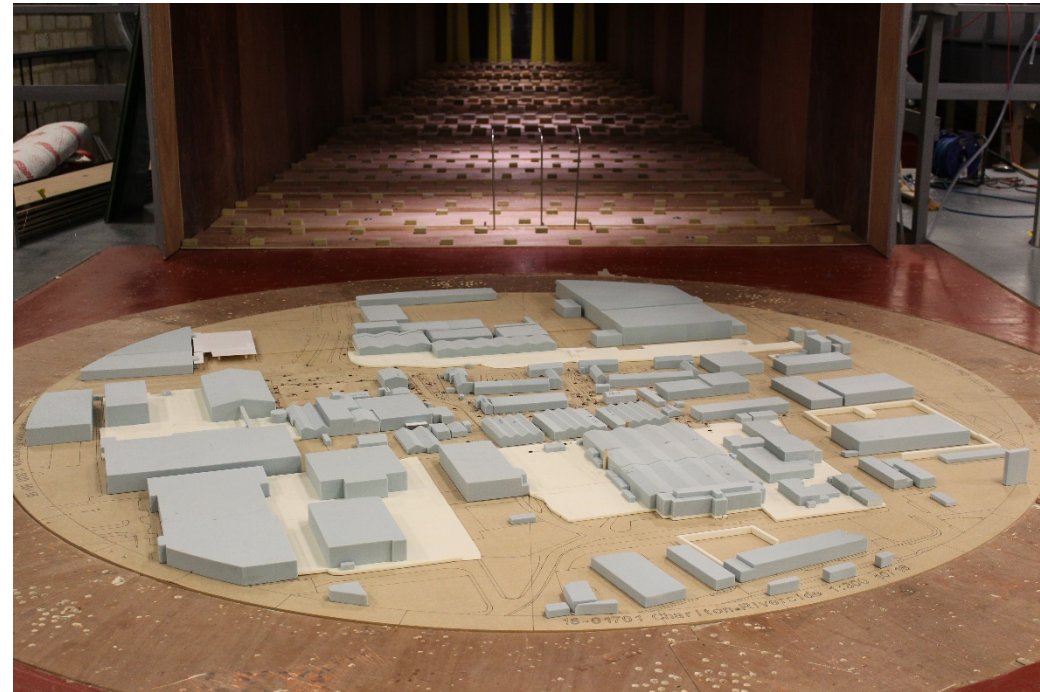


Figure 13: Existing building with existing surrounding buildings– View in the Wind Tunnel (from the East)

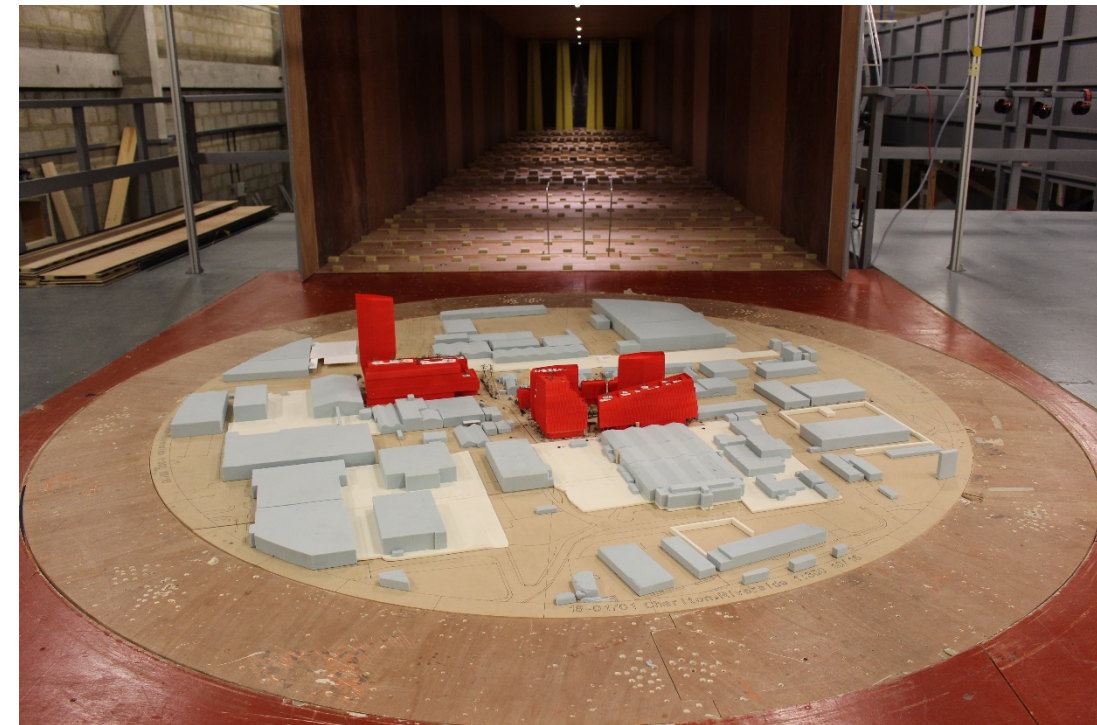


Figure 15: Proposed Development with cumulative surrounding buildings and landscaping– View in the Wind Tunnel (from the East)

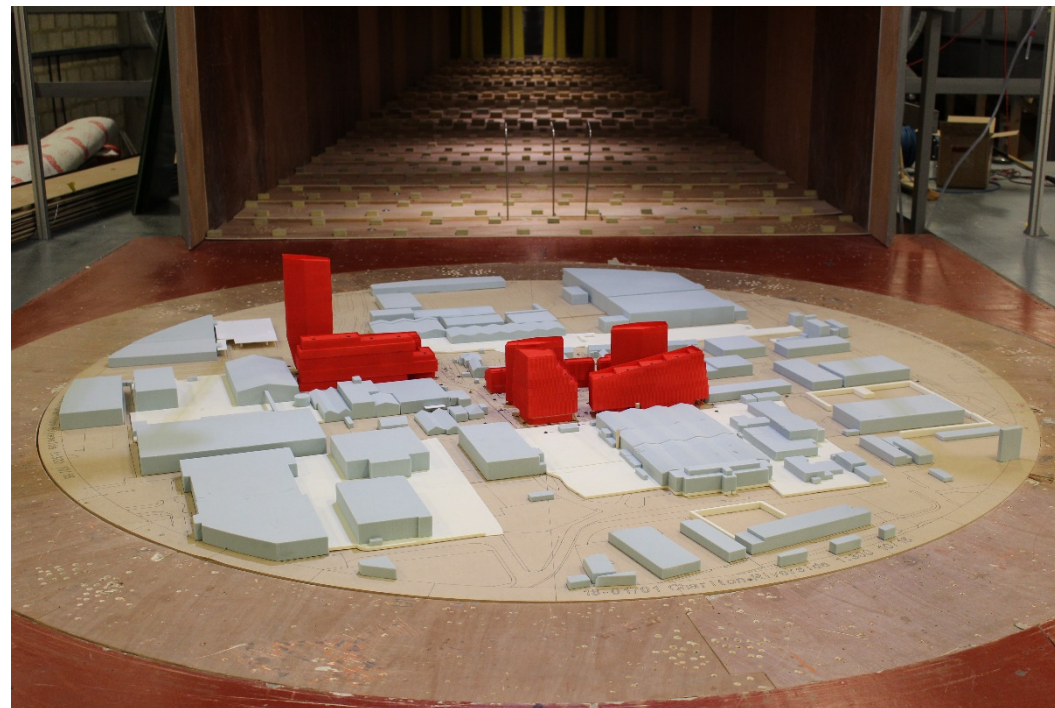
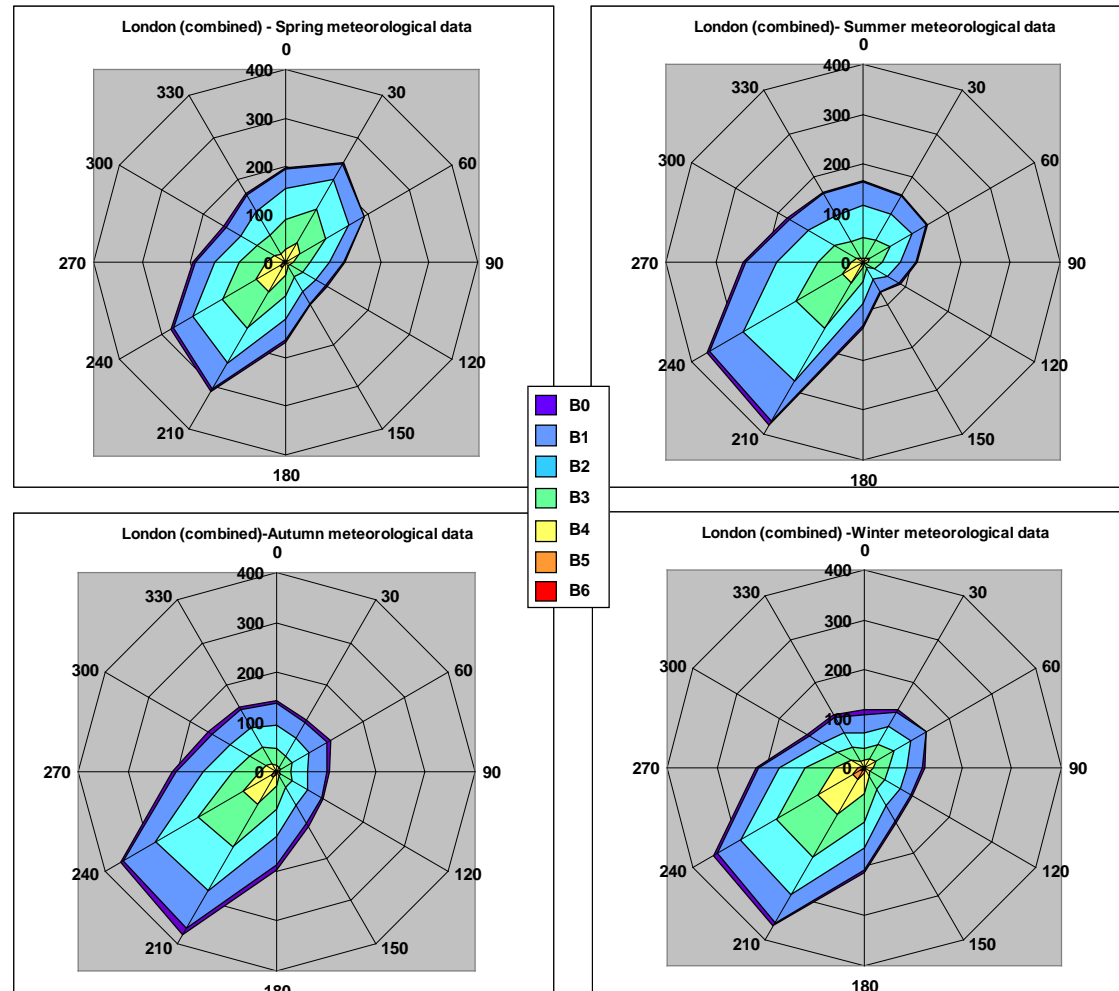


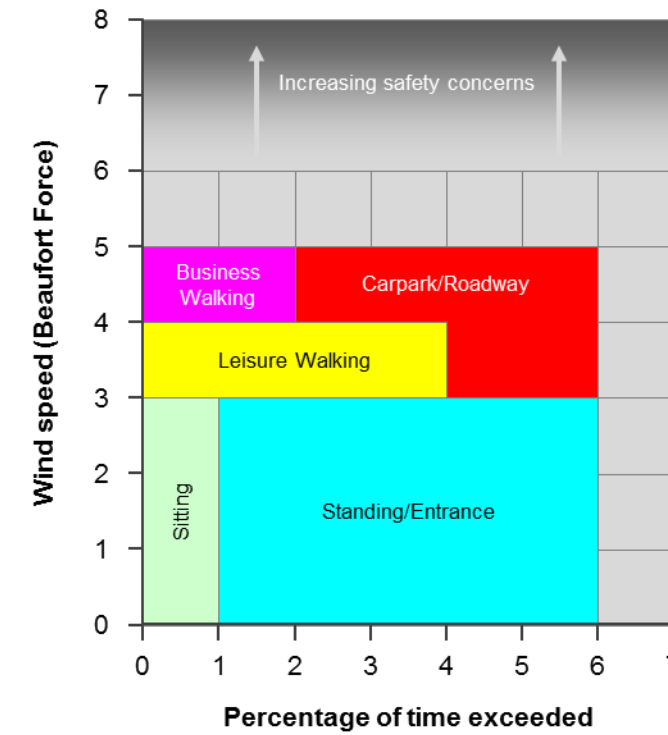
Figure 14: Existing building with existing surrounding buildings and winter trees – View in the Wind Tunnel (from the East)

## Appendix B: Meteorological Data



**Figure 16: Seasonal wind roses for London (in Beaufort Force)**  
(Radial axis indicates the hours for which the stated Beaufort Range is exceeded)

## Appendix C: Lawson Comfort Criteria



**Figure 17: Graphical representation of the Lawson Comfort Criteria**

Beaufort Force	Hourly Average Wind Speed (m/s)	Description of Wind	Noticeable Wind Effect
0	< 0.45	Calm	Smoke rises vertically.
1	0.45 – 1.55	Light Air	Direction shown by smoke drift but not by vanes.
2	1.55 – 3.35	Gentle Breeze	Wind felt on face; leaves rustle; wind vane moves.
3	3.35 – 5.60	Light Breeze	Leaves & twigs in motion; wind extends a flag.
4	5.60 – 8.25	Moderate Breeze	Raises dust and loose paper; small branches move.
5	8.25 – 10.95	Fresh Breeze	Small trees, in leaf, sway.
6	10.95 – 14.10	Strong Breeze	Large branches begin to move; telephone wires whistle.
7	14.10 – 17.20	Near Gale	Whole trees in motion.
8	17.20 – 20.80	Gale	Twigs break off; personal progress impeded.
9	20.80 – 24.35	Strong Gale	Slight structural damage; chimney pots removed.
10	24.35 – 28.40	Storm	Trees uprooted; considerable structural damage.
11	28.40 – 32.40	Violent Storm	Damage is widespread; unusual in the U.K.
12	> 32.40	Hurricane	Countryside is devastated; only occurs in tropical countries.

**Table 4: Beaufort Land Scale**

## Appendix D: Proposed Landscaping Plan

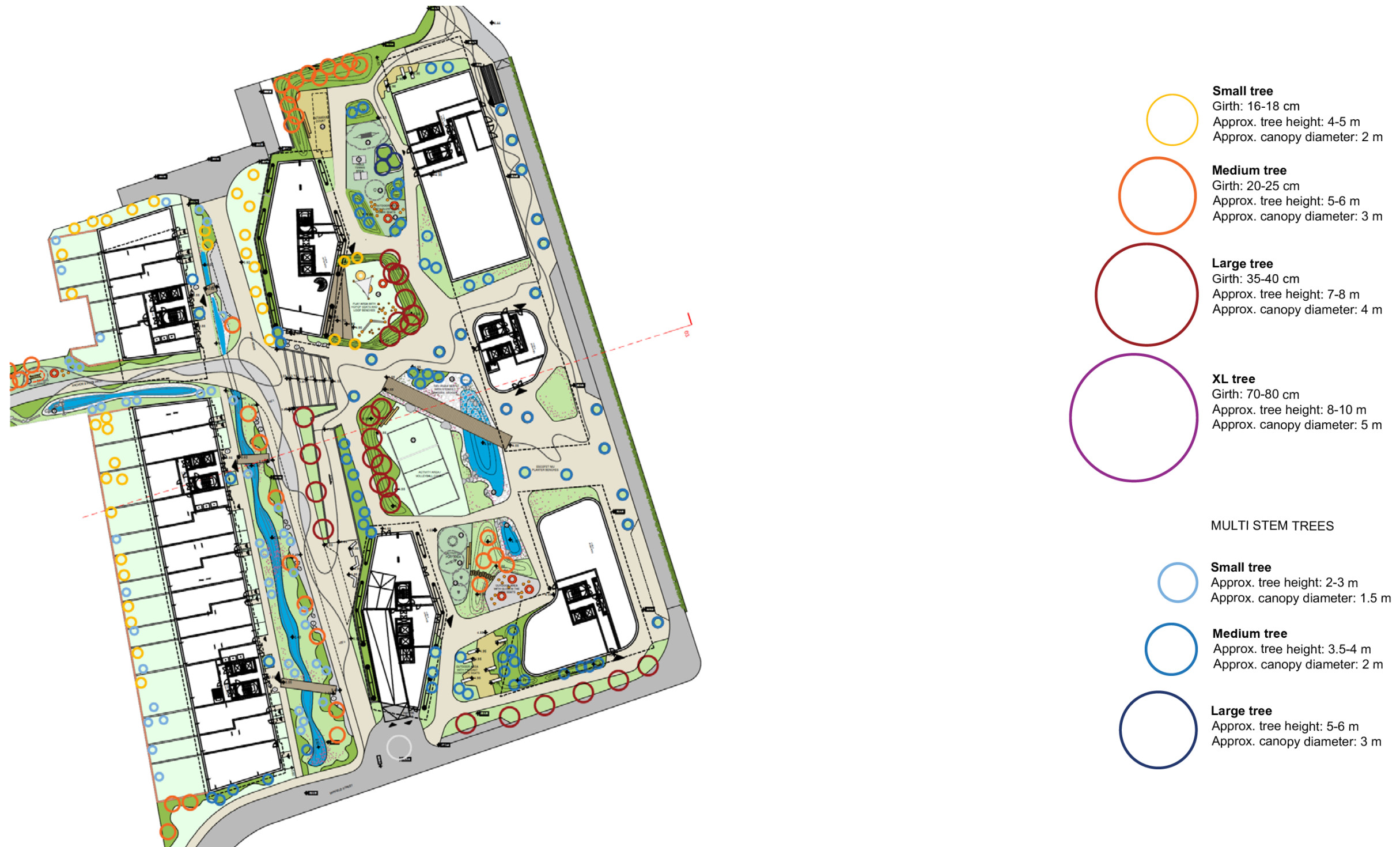


Figure 18: Ground floor Plot A Landscape Scheme received October 26<sup>th</sup>, 2016

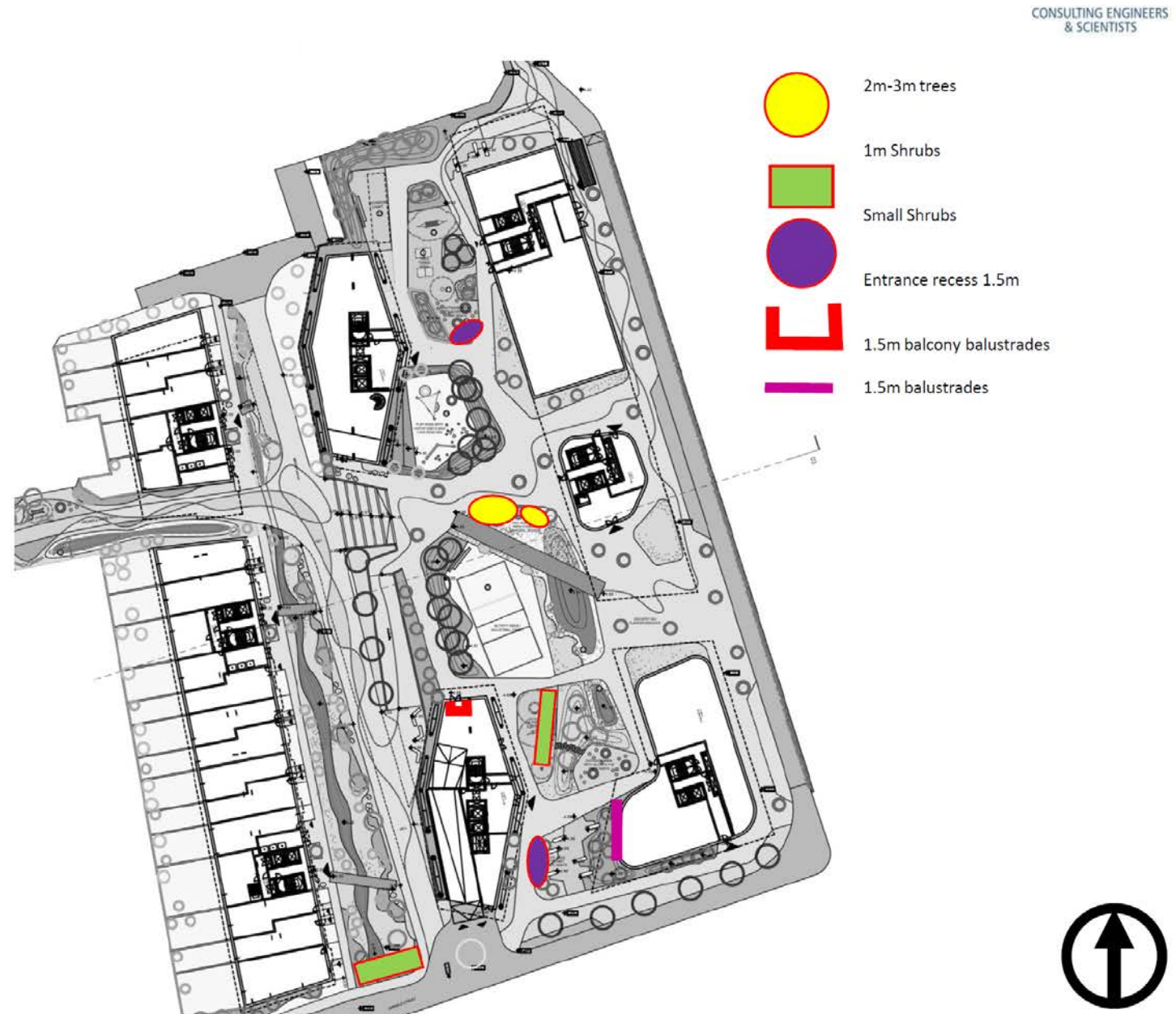


Figure 19: Plot A ground floor landscape plan with mark-up of additional mitigation measures