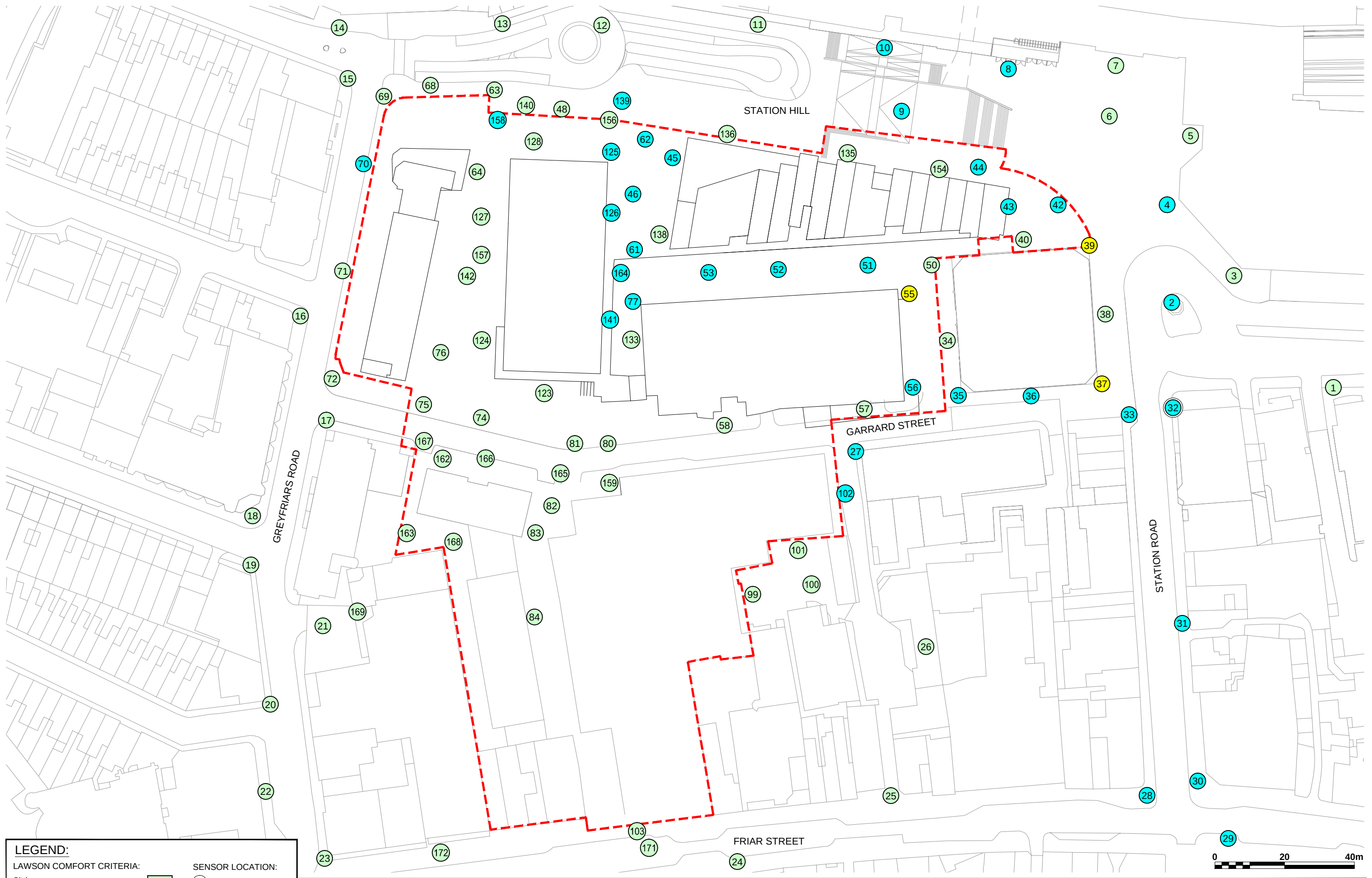




LEGEND:

LAWSON COMFORT CRITERIA:

Sitting	Light Green
Standing/Entrance	Blue
Leisure Walking	Yellow
Business Walking	Magenta
Carpark/Roadway	Red

SENSOR LOCATION:

○ Grade Level
□ Podium Level
◇ Terrace/Balcony Level

Pedestrian Wind Comfort Conditions - Configuration 1: Future Baseline, Existing Site with Existing Surrounding Buildings.
Summer Season

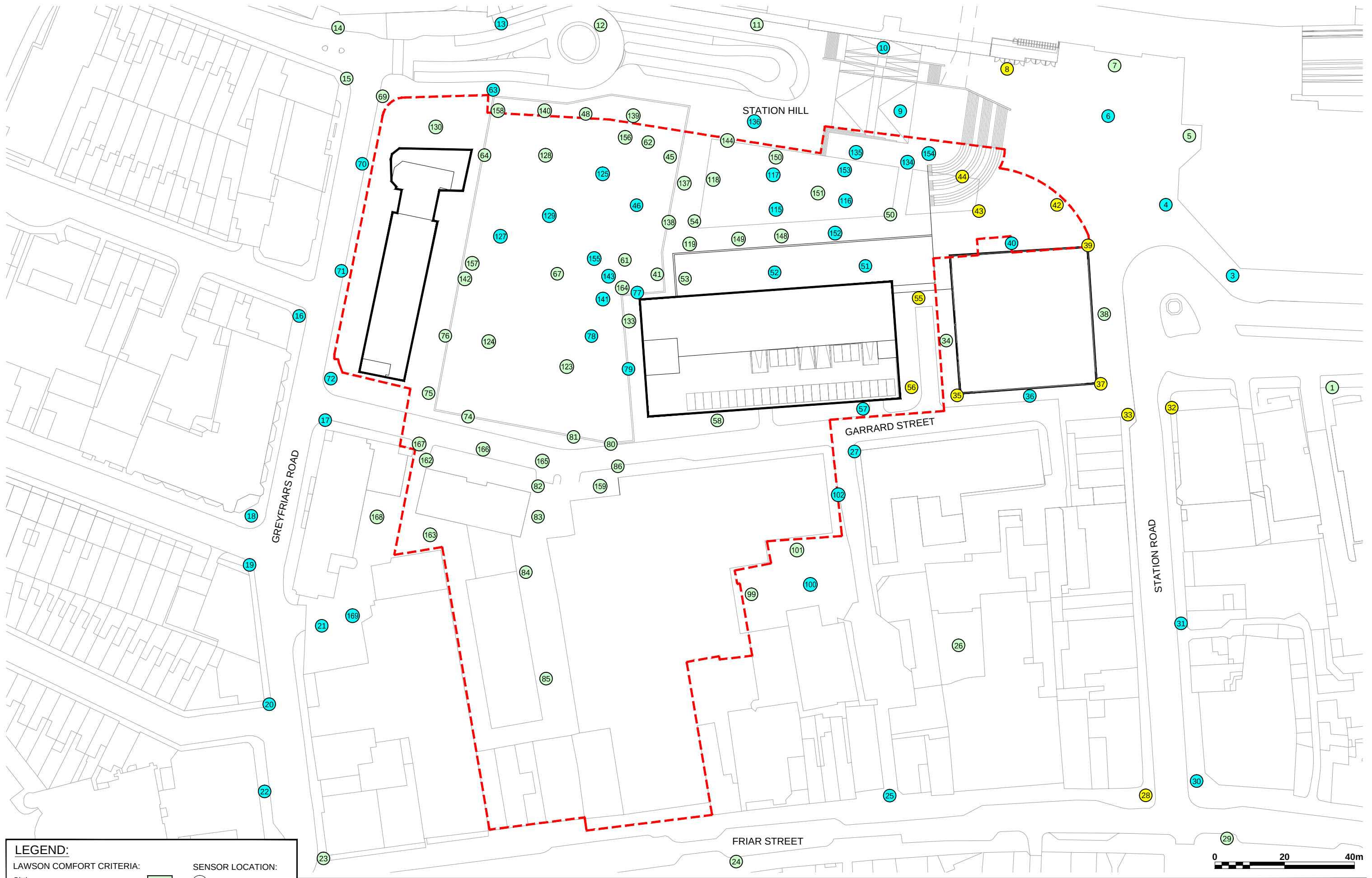
Station Hill Plot E - Reading, United Kingdom

0 20 40m

True North
↑

Drawn by: SM	Figure: 4
Approx. Scale: 1:1000	
Date Revised: June 19, 2015	

Project #1402222



LEGEND:

LAWSON COMFORT CRITERIA:

Sitting

Standing/Entrance

Leisure Walking

Business Walking

Carpark/Roadway

SENSOR LOCATION:

Grade Level

Podium Level

Terrace/Balcony Level

Pedestrian Wind Comfort Conditions - Configuration 2: Demolished Site with Existing Surrounding Buildings.
Windiest Season

Station Hill Plot E - Reading, United Kingdom



Project #1402222

Drawn by:	SM	Figure:	5
Approx. Scale:	1:1000		
Date Revised:	June 19, 2015		



LEGEND:

LAWSON COMFORT CRITERIA:

Sitting

Standing/Entrance

Leisure Walking

Business Walking

Carpark/Roadway

SENSOR LOCATION:

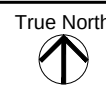
Grade Level

Podium Level

Terrace/Balcony Level

Pedestrian Wind Comfort Conditions - Configuration 2: Demolished Site with Existing Surrounding Buildings.
Summer Season

Station Hill Plot E - Reading, United Kingdom



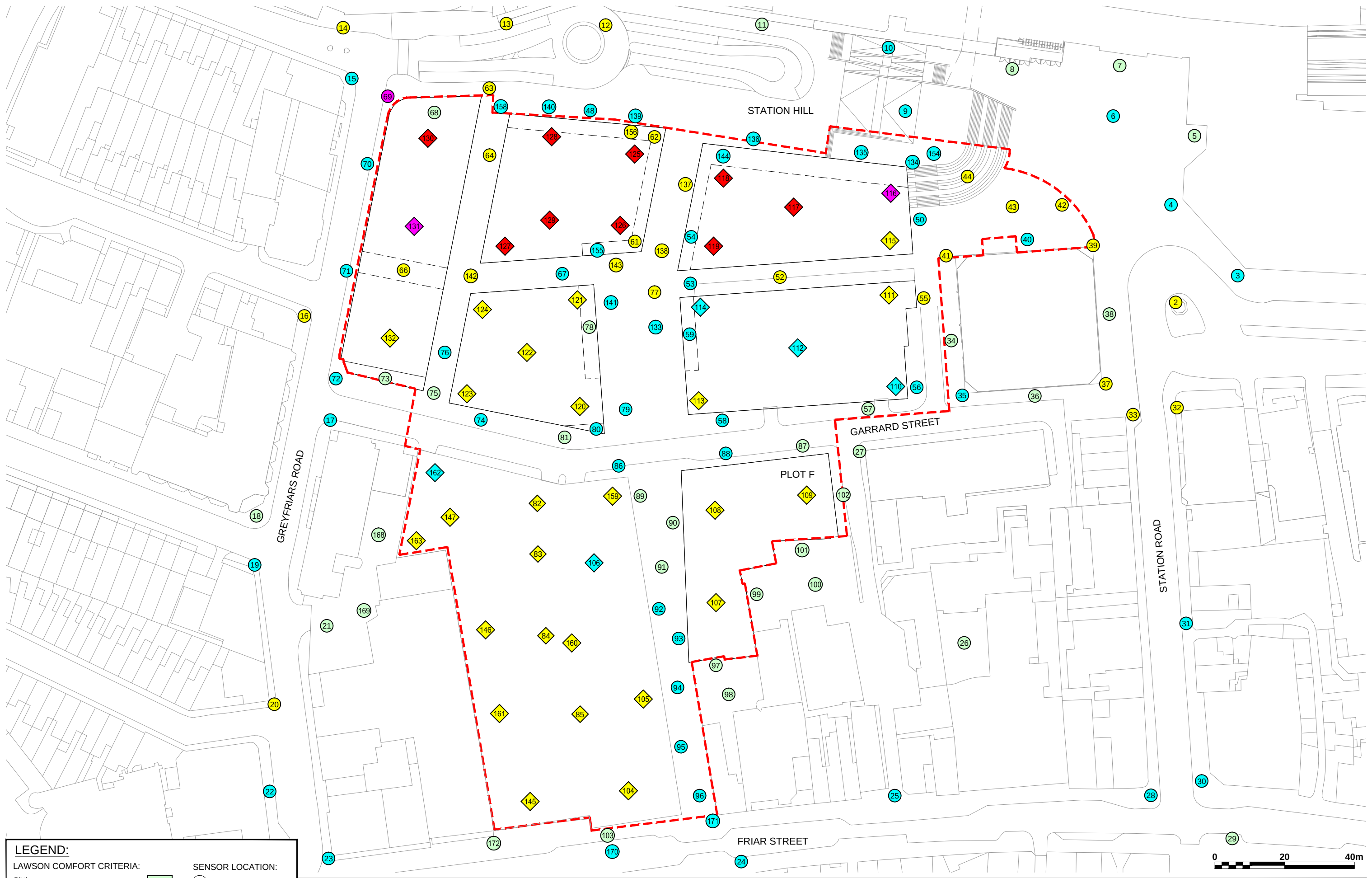
Project #1402222

Drawn by: SM

Figure: 6

Approx. Scale: 1:1000

Date Revised: June 19, 2015



LEGEND:

LAWSON COMFORT CRITERIA:	
Sitting	
Standing/Entrance	
Leisure Walking	
Business Walking	
Carpark/Roadway	

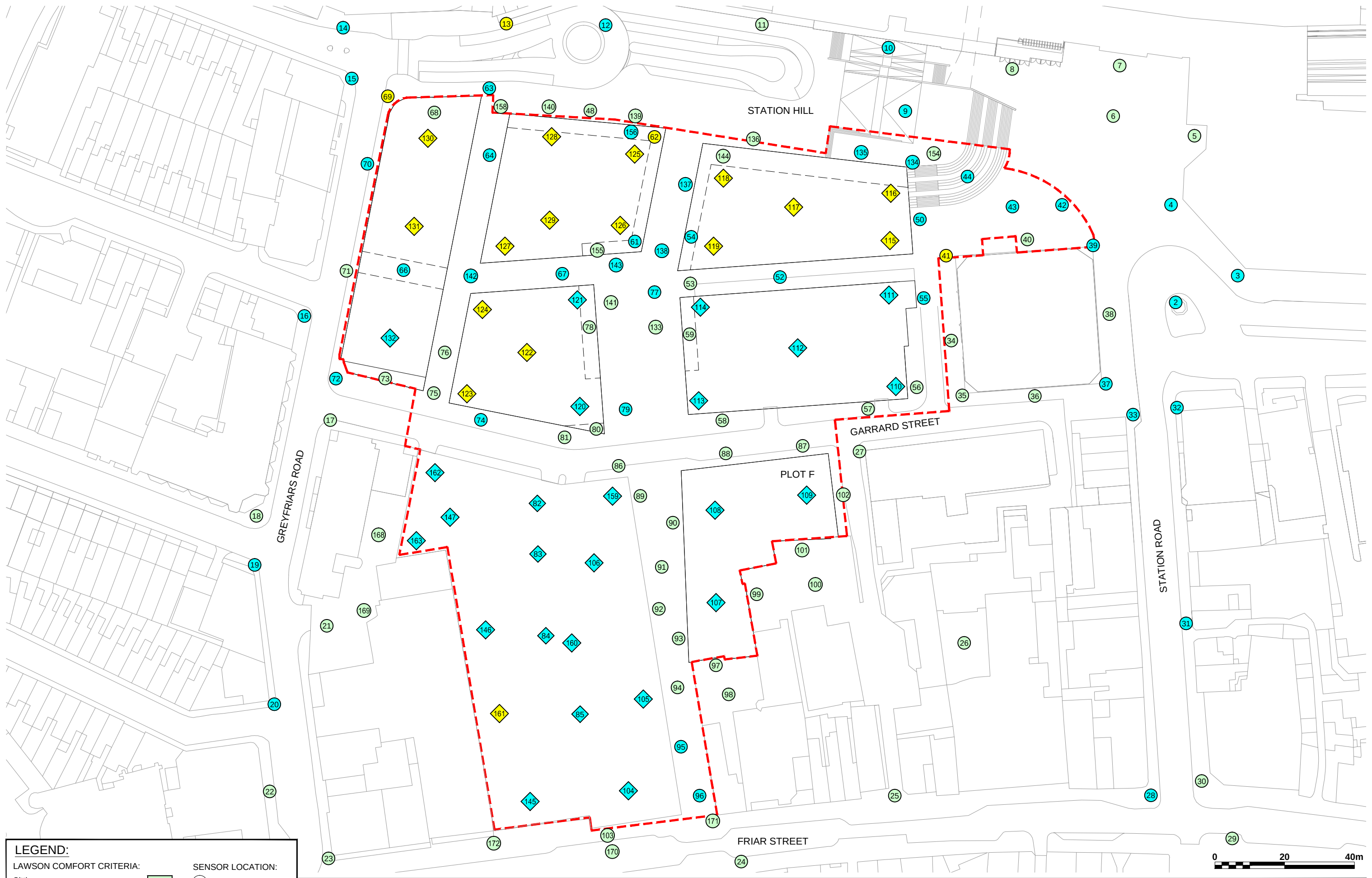
SENSOR LOCATION:	
Grade Level	
Podium Level	
Terrace/Balcony Level	

Pedestrian Wind Comfort Conditions - Configuration 3: Completed Development (maximum parameter) with Existing Surrounding Buildings.
Windiest Season

Station Hill Plot E - Reading, United Kingdom

	Drawn by: SM	Figure: 7	
	Approx. Scale: 1:1000		
	Date Revised: June 19, 2015		

Project #1402222



LEGEND:

LAWSON COMFORT CRITERIA:

Sitting	Green Diamond
Standing/Entrance	Blue Diamond
Leisure Walking	Yellow Diamond
Business Walking	Magenta Diamond
Carpark/Roadway	Red Diamond

SENSOR LOCATION:

Grade Level	Circle
Podium Level	Square
Terrace/Balcony Level	Diamond

Pedestrian Wind Comfort Conditions - Configuration 3: Completed Development (maximum parameter) with Existing Surrounding Buildings. Summer Season

Station Hill Plot E - Reading, United Kingdom

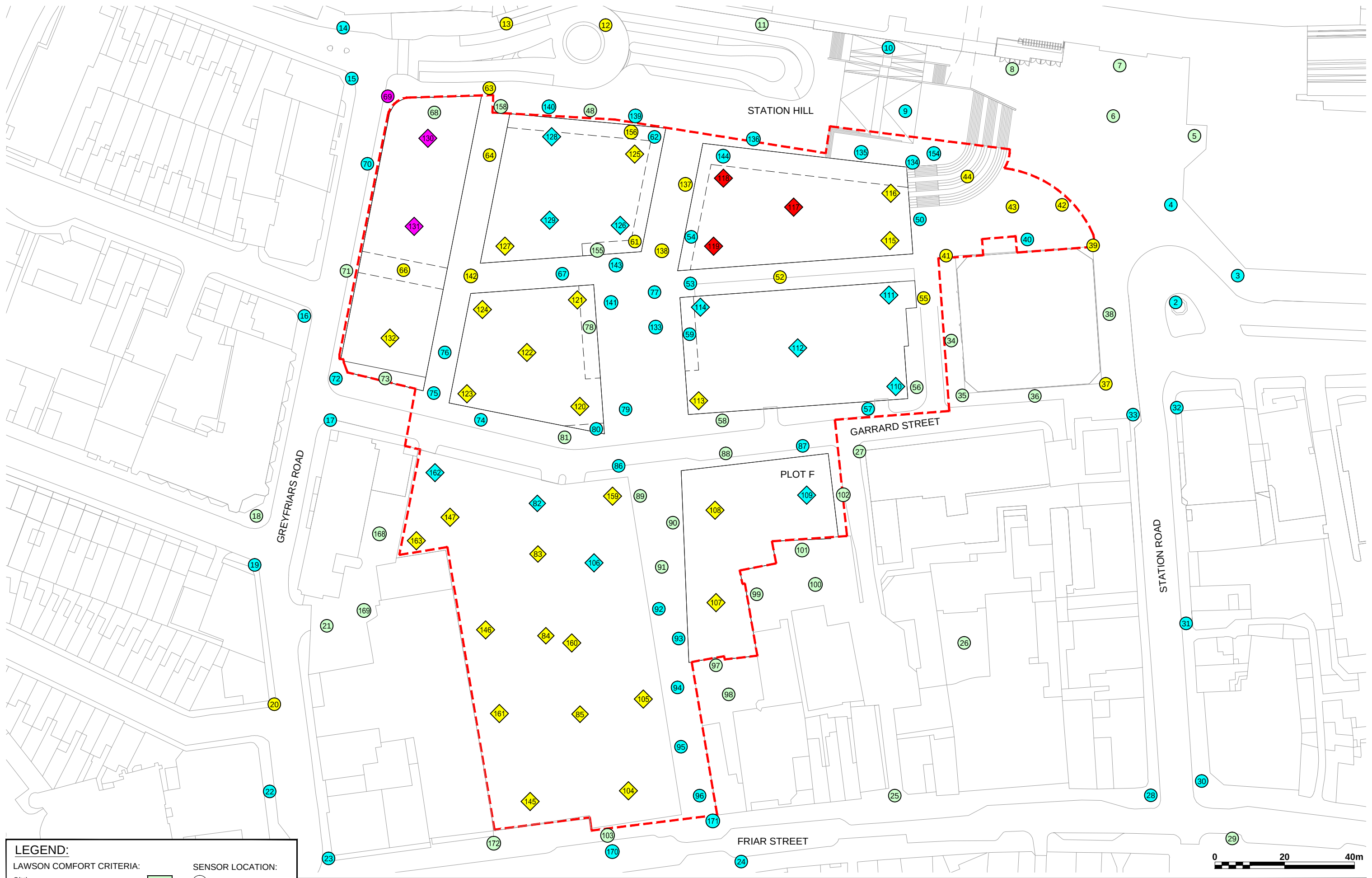
True North

0 20 40m

Project #1402222

Drawn by: SM	Figure: 8
Approx. Scale: 1:1000	
Date Revised: June 19, 2015	

RWDI



LEGEND:

LAWSON COMFORT CRITERIA:

Sitting	Light Green
Standing/Entrance	Blue
Leisure Walking	Yellow
Business Walking	Magenta
Carpark/Roadway	Red

SENSOR LOCATION:

Grade Level	Circle
Podium Level	Square
Terrace/Balcony Level	Diamond

Pedestrian Wind Comfort Conditions - Configuration 4: Completed Development (maximum parameter) with Cumulative Surrounding Buildings. Windiest Season

Station Hill Plot E - Reading, United Kingdom

True North

0 20 40m

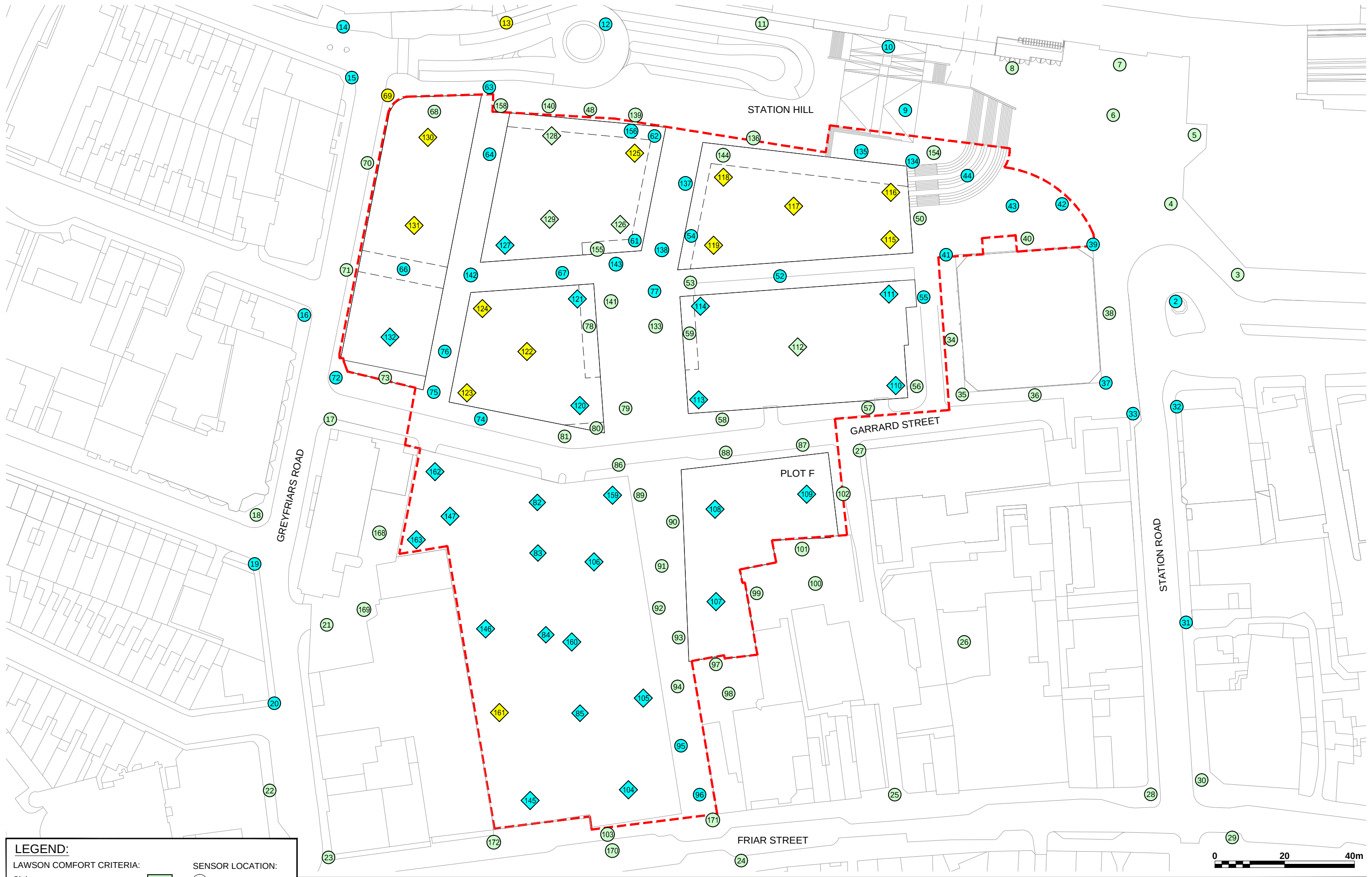
Drawn by: SM Figure: 9

Approx. Scale: 1:1000

Date Revised: June 19, 2015

Project #1402222

RWDI



LEGEND:

LAWSON COMFORT CRITERIA:

Sitting

Standing/Entrance

Leisure Walking

Business Walking

Carpark/Roadway

SENSOR LOCATION:

Grade Level

Podium Level

Terrace/Balcony Level

Appendix A: Photographs of the Wind Tunnel Model



Figure 11: Future Baseline (Configuration 1) – View in the Wind Tunnel (from the South)



Figure 12: Future Baseline (Configuration 1) – View in the Wind Tunnel (from the South, overhead)



Figure 13: Temporary scenario with temporary events space (Configuration 2) – View in the Wind Tunnel (from the South)



Figure 14: Temporary scenario with temporary events space (Configuration 2) – View in the Wind Tunnel (from the South, overhead)



Figure 15: Completed Development (maximum parameter massing) with existing surrounds (Configuration 3) – View in the Wind Tunnel (from the South)



Figure 17: Completed Development (maximum parameter massing) with cumulative surrounds (Configuration 4) – View in the Wind Tunnel (from the South)

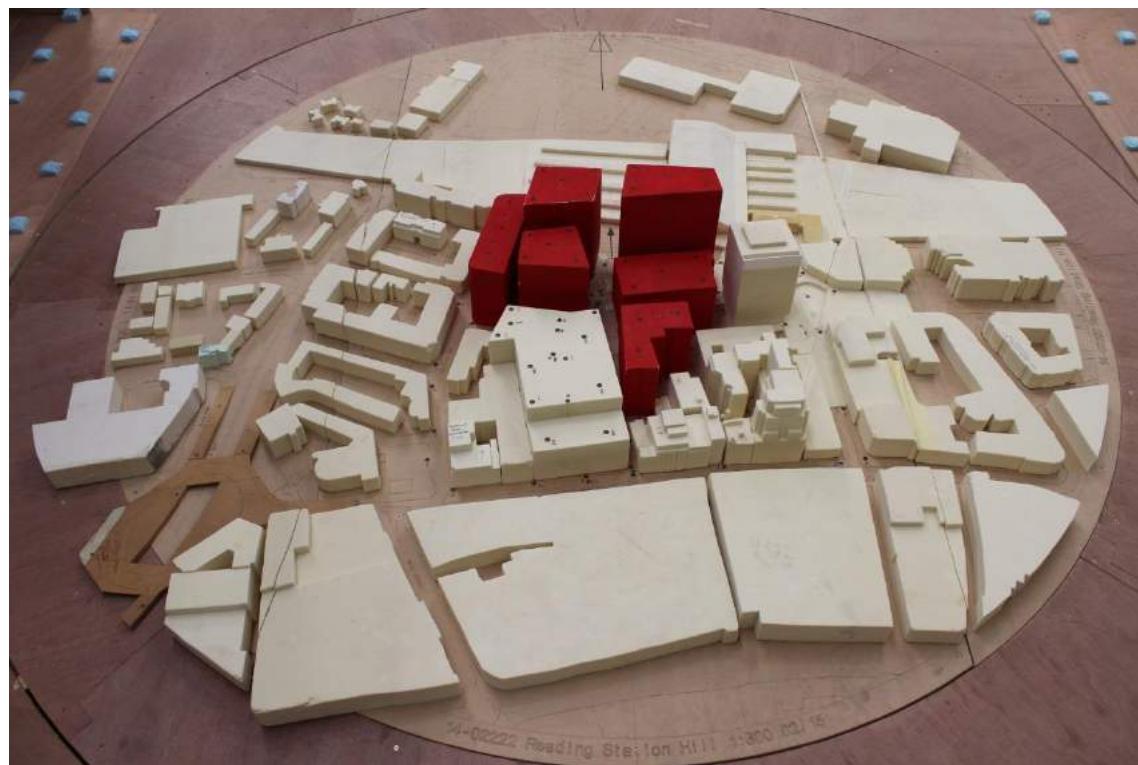


Figure 16: Completed Development (maximum parameter massing) with existing surrounds (Configuration 3) – View in the Wind Tunnel (from the North, overhead)



Figure 18: Completed Development (maximum parameter massing) with cumulative surrounds (Configuration 4) – View in the Wind Tunnel (from the South, overhead)

Appendix B: Meteorological Data

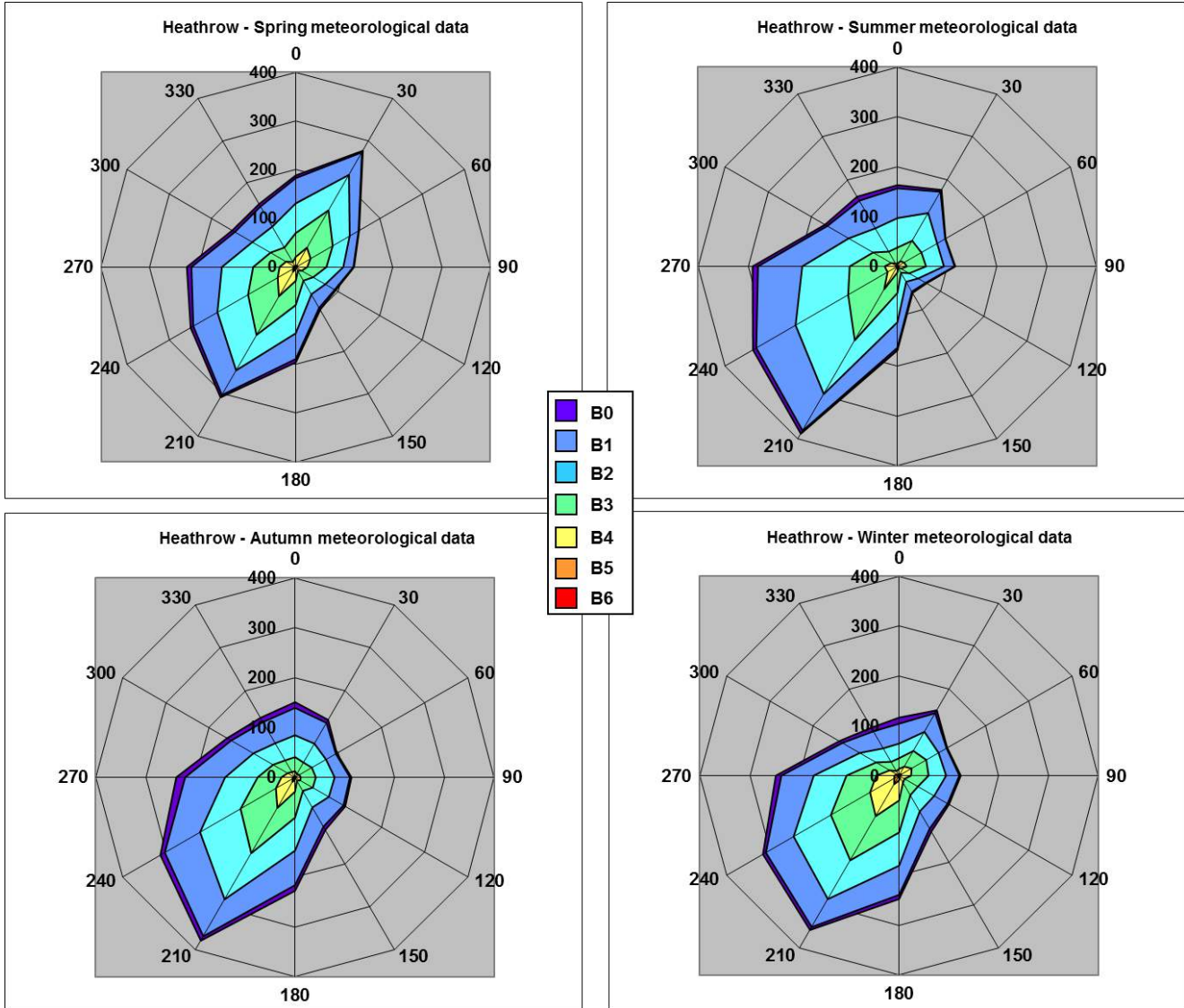


Figure 19: Seasonal wind roses for London Heathrow (in Beaufort Force)
(Radial axis indicates the hours for which the stated Beaufort Range is exceeded)

Appendix C: Lawson Comfort Criteria

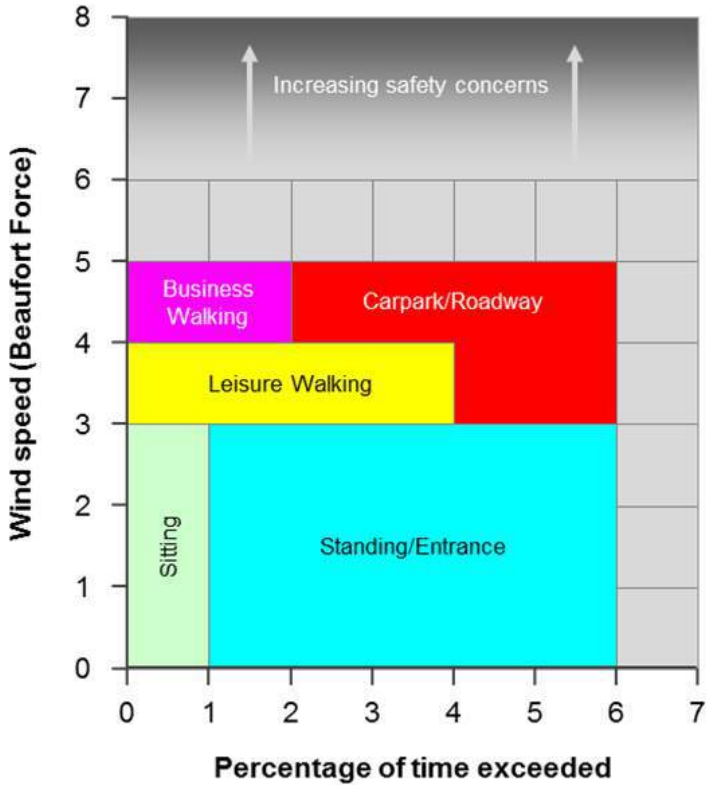


Figure 20: Graphical representation of the Lawson Comfort Criteria

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.

Figure 21: Table 4: Beaufort Land Scale