

A38 Derby Junctions
TR010022
Volume 6
6.3 Environmental Statement
Appendices
Appendix 9.4: Baseline Noise
Monitoring

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

April 2019

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A38 Derby Junctions Development Consent Order 202[]

6.3 Environmental Statement Appendices Appendix 9.4: Baseline Noise Monitoring

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Appendix 9.4: Baseline Noise Monitoring

Table 1: Noise monitoring equipment

Site	Location	LT/ ST	Start date/ time	Finish date/ time	Sound level meter (SLM)	SLM serial number	Calibrator	Calibrator serial number	Free-field/ facade
M1	Kingsway Hospital	ST	01/06/2015 13:00	08/06/2015 17:17	SLM8	2541001	15	3005464	Free-field
M2	Greenwich Drive South	LT	01/06/2015 13:00	08/06/2015 12:44	SLM8	2541001	15	3005464	Free-field
M3	Lyttleton Street	LT	08/06/2015 12:00	15/06/2015 09:42	SLM10	2541000	15	3005464	Free-field
M4	Greenwich Drive North	LT	29/05/2015 13:00	08/06/2015 17:38	SLM4	2201511	15	3005464	Free-field
M5	Radbourne Road	LT	01/06/2015 14:00	08/06/2015 12:14	SLM3	2381585	15	3005464	1m to fence
M6	Army Reserves Centre	LT	29/05/2015 10:59	19/06/2015 11:03	VLM3	14693	15	3005464	Free-field
M7	Queensway	LT	01/06/2015 13:00	08/06/2015 10:58	SLM10	2541000	15	3005464	Free-field
M8	Markeaton Park	ST	08/06/2015 14:00	08/06/2015 17:01	SLM23	01021279	10	34425538	Free-field
M9	Mobile Home Park	ST	15/06/2015 11:00	15/06/2015 14:00	SLM23	01021279	10	34425538	Free-field
M10	Breadsall North	LT	01/06/2015 10:00	19/06/2015 11:45	SLM22	01021278	11	34425539	Free-field
M11	Breadsall Centre	LT	01/06/2015 10:00	19/06/2015 12:01	SLM16	15606	15	3005464	Free-field
M12	Breadsall South	LT	01/06/2015 13:00 08/06/2015 10:00	08/06/2015 09:38 15/06/2015 10:22	SLM28	01021284	11	34425539	1.2 m to fence
M13	Footpath Breadsall	ST	15/06/2015 11:00	15/06/2015 14:00	SLM27A	01021283	10	34425538	Free-field

LT = long-term

ST = Short-term (3 hours daytime)

Table 2: Summary of weather data

Day	Date	Average temperature °C	Average wind speed m/s	Typical wind direction	Rain mm	Notes
Monday	01/06/2015	9.7	2.6	SSW	2.9	Not full day at Markeaton start 13:00
Tuesday	02/06/2015	14.1	3.6	SW	2.5	
Wednesday	03/06/2015	13.5	1.7	W	0.3	
Thursday	04/06/2015	15.0	0.9	S	0.0	
Friday	05/06/2015	15.9	1.8	SW	0.0	
Saturday	06/06/2015	12.9	3.0	WSW	0.0	
Sunday	07/06/2015	12.5	1.4	NW	0.0	
Monday	08/06/2015	11.5	1.9	N	0.0	
Tuesday	09/06/2015	10.3	2.3	NE	0.0	
Wednesday	10/06/2015	11.4	2.2	NE	0.0	
Thursday	11/06/2015	14.6	2.3	ENE	0.0	
Friday	12/06/2015	14.8	2.4	NE	8.2	
Saturday	13/06/2015	13.4	1.3	N	21.7	
Sunday	14/06/2015	12.3	1.7	NNW	0.4	
Monday	15/06/2015	13.5	1.1	NE	0.0	
Tuesday	16/06/2015	16.9	1.1	W	0.0	
Wednesday	17/06/2015	16.8	2.0	W	0.0	
Thursday	18/06/2015	13.6	1.2	WNW	0.0	
Friday	19/06/2015	11.4	0.9	WNW	0.0	Not full day at Markeaton stop 10:20

The wind direction data has been taken from East Midlands Airport (see Figure 1), the rain data was recorded at M12 in Breadsall (see Figure 3), the temperature and local wind speed data has been taken from the weather station installed close to Markeaton junction (see Figure 2 for wind speeds).

Average daily wind speeds throughout the monitoring were fairly low. Figure 2 illustrates that hourly average wind speeds were below 5 m/s throughout the monitoring period. Appreciable rainfall occurred on the evening of Monday 1 June 2015 continuing overnight into Tuesday 2 June 2015, and on the evening of Friday 12 June 2015 continuing overnight and through most of the day on Saturday 13 June 2015. Consideration of the measured noise levels does not indicate that these periods of rainfall resulted in unusually high noise levels.

Time history graphs of the monitored levels at the long-term sites are provided in Figure 4 to Figure 12. Interference from local noise sources has been removed from the data reported in the assessment.

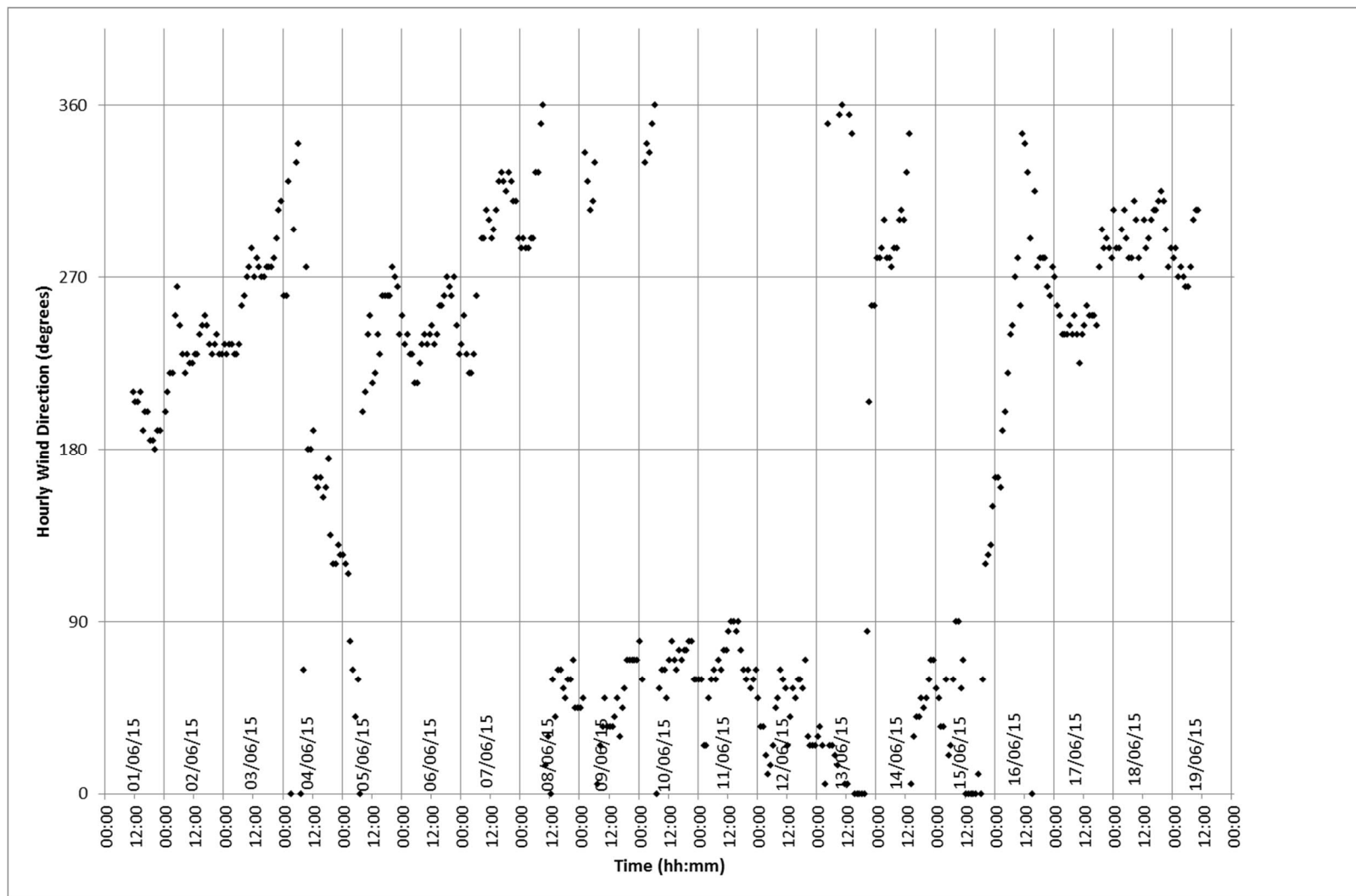


Figure 1: Wind direction (East Midlands Airport)

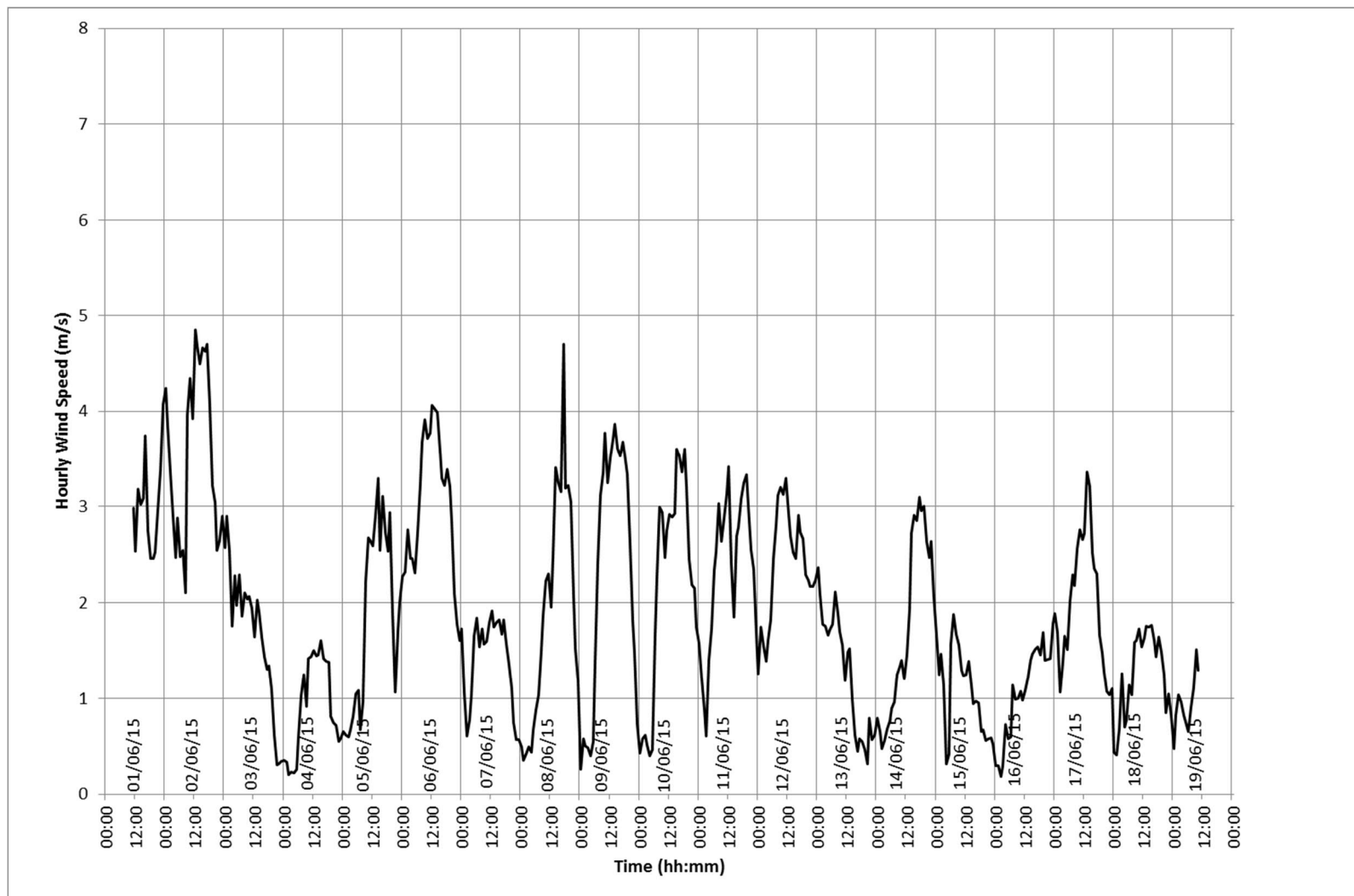


Figure 2: Average wind speed (Markeaton)

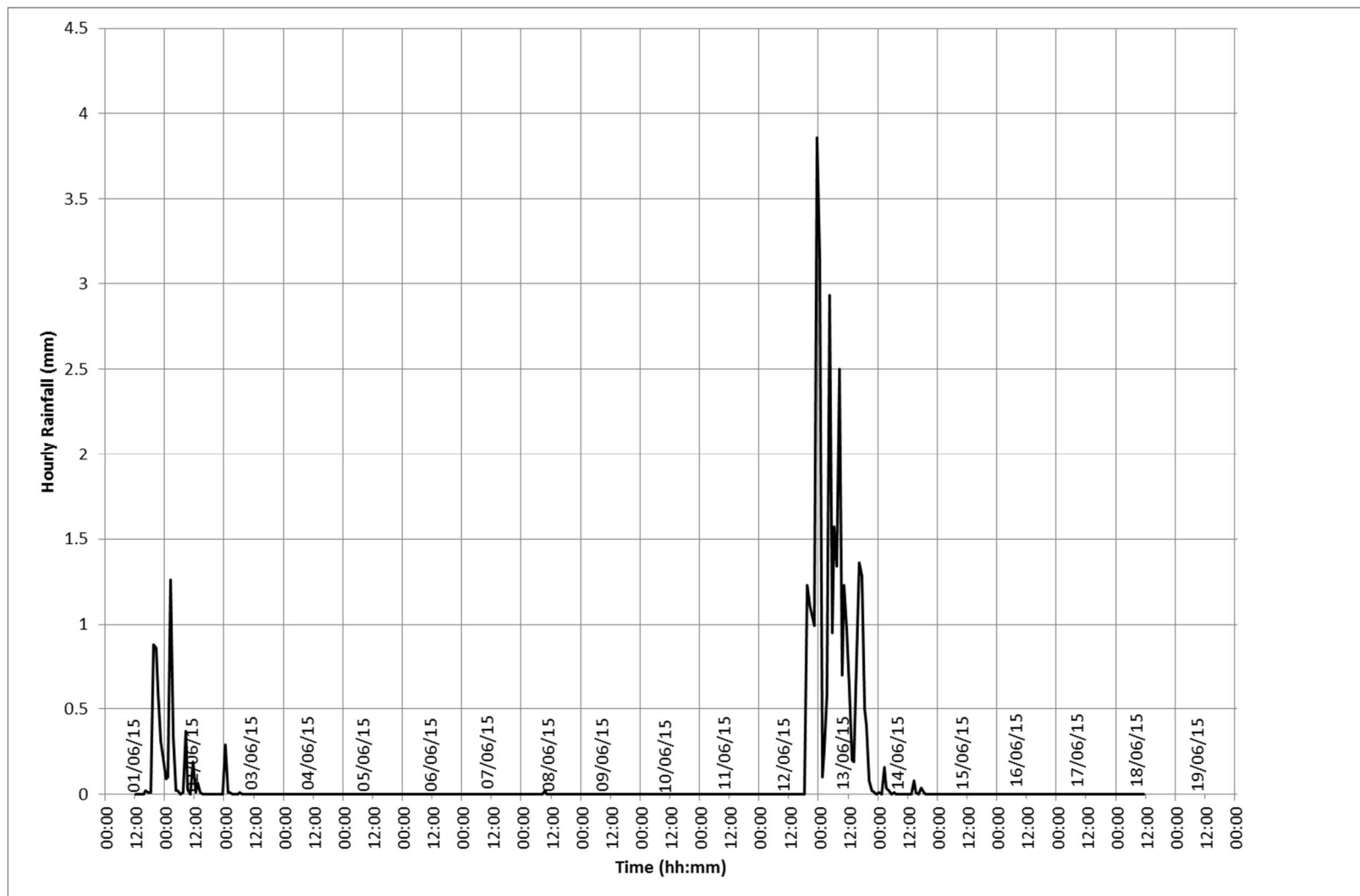


Figure 3: Rainfall (M12)

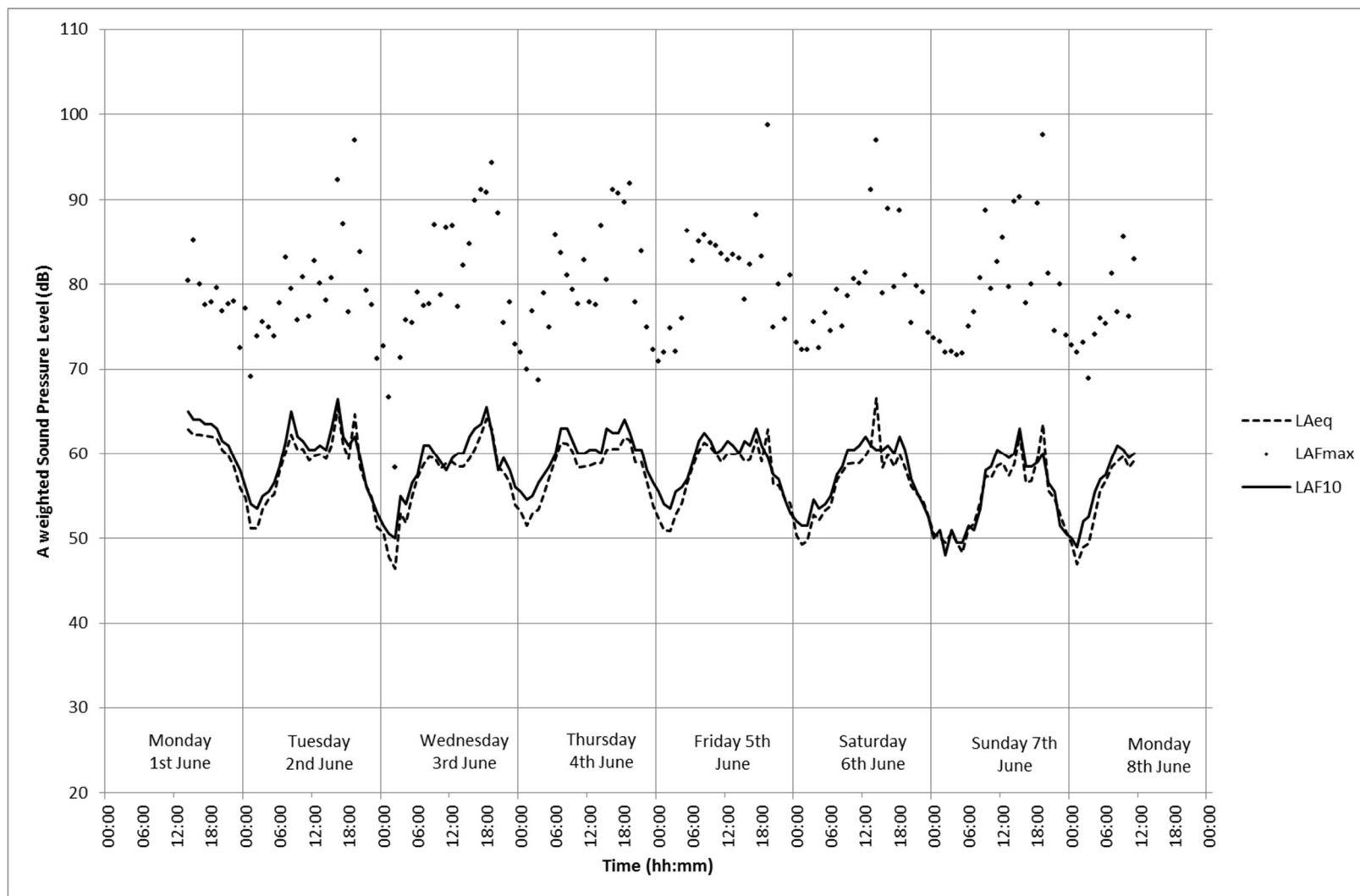


Figure 4: M2– Greenwich Drive South

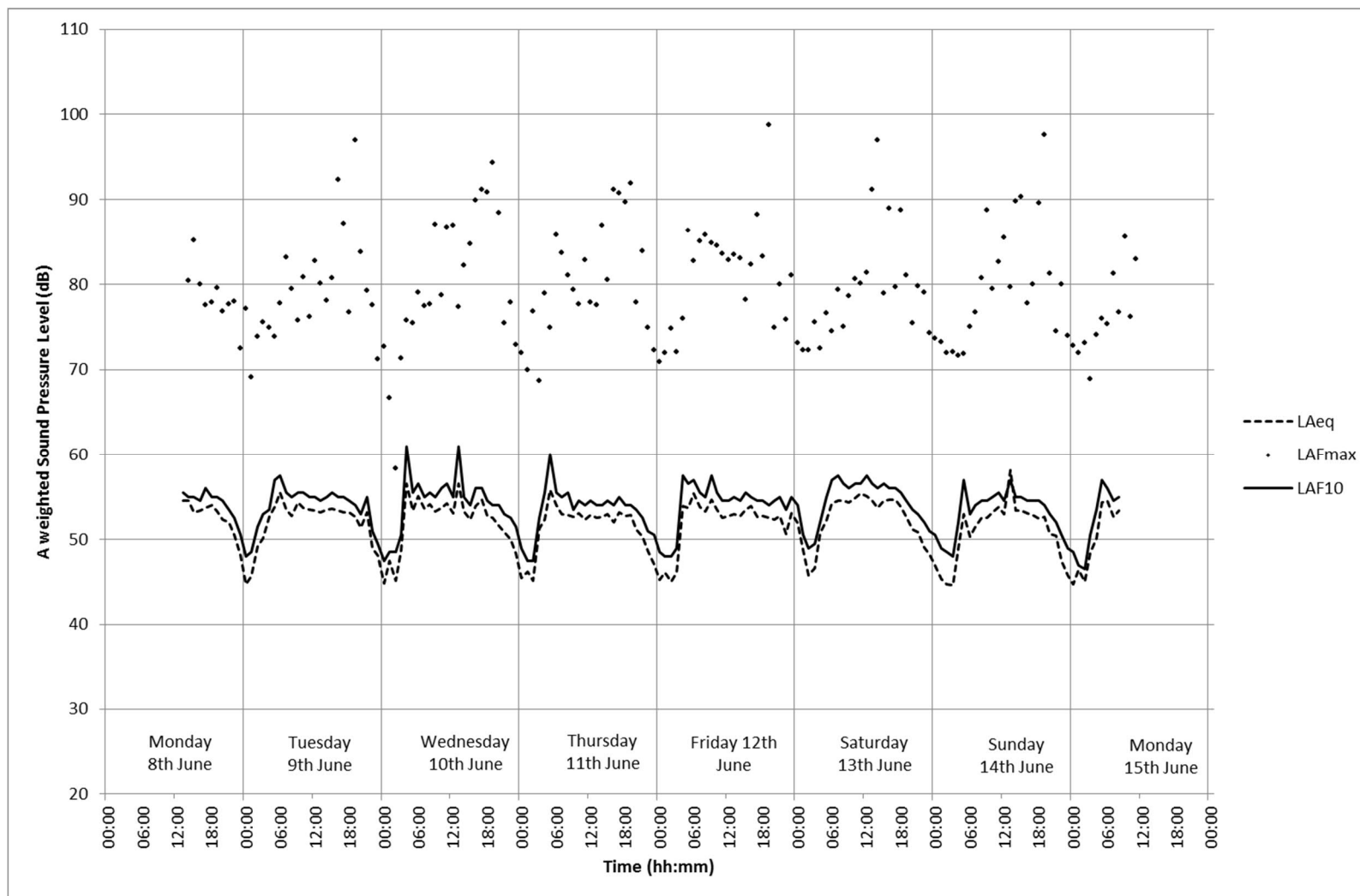


Figure 5: M3 – Lyttleton Street

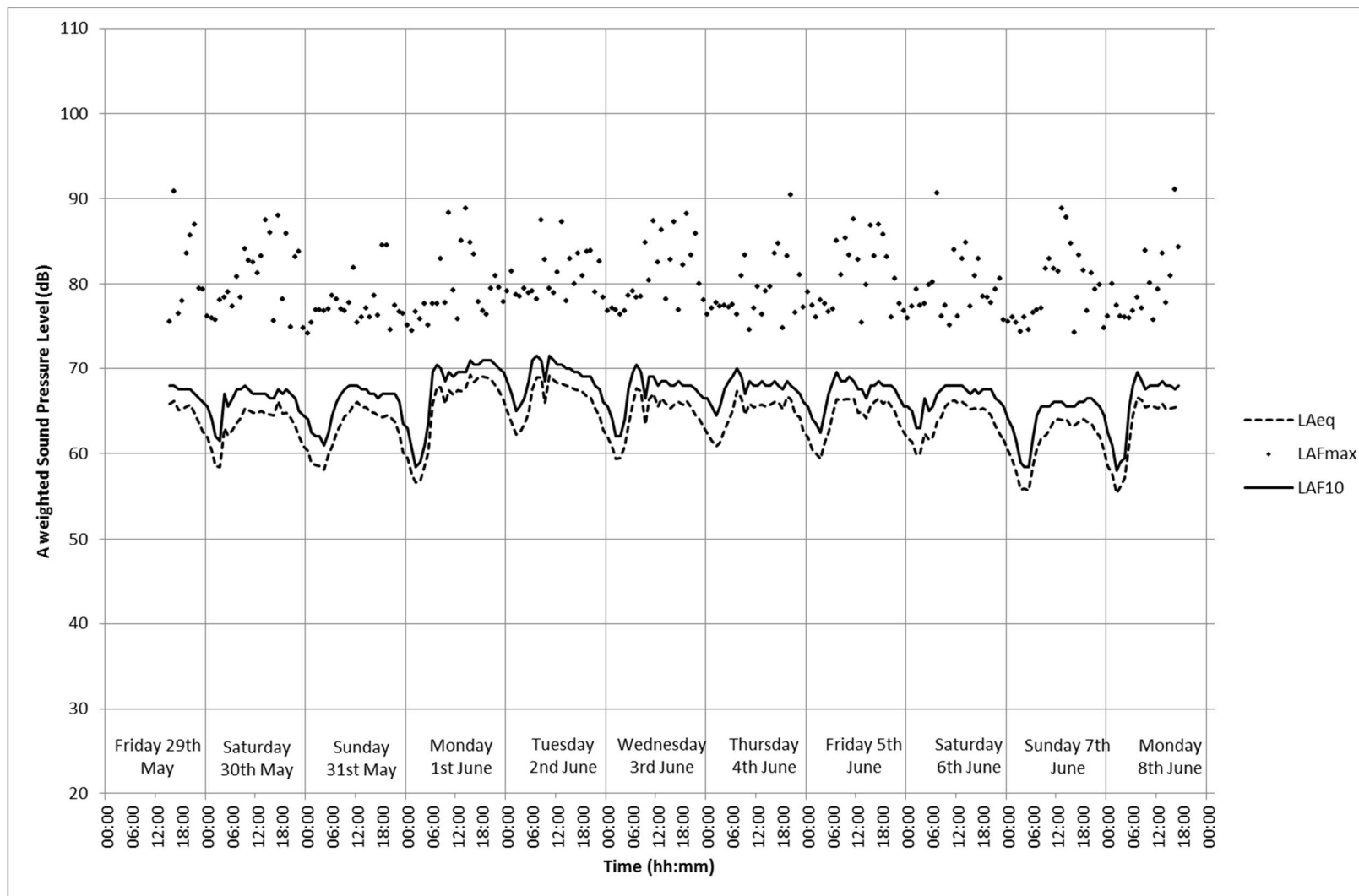


Figure 6: M4 – Greenwich Drive North

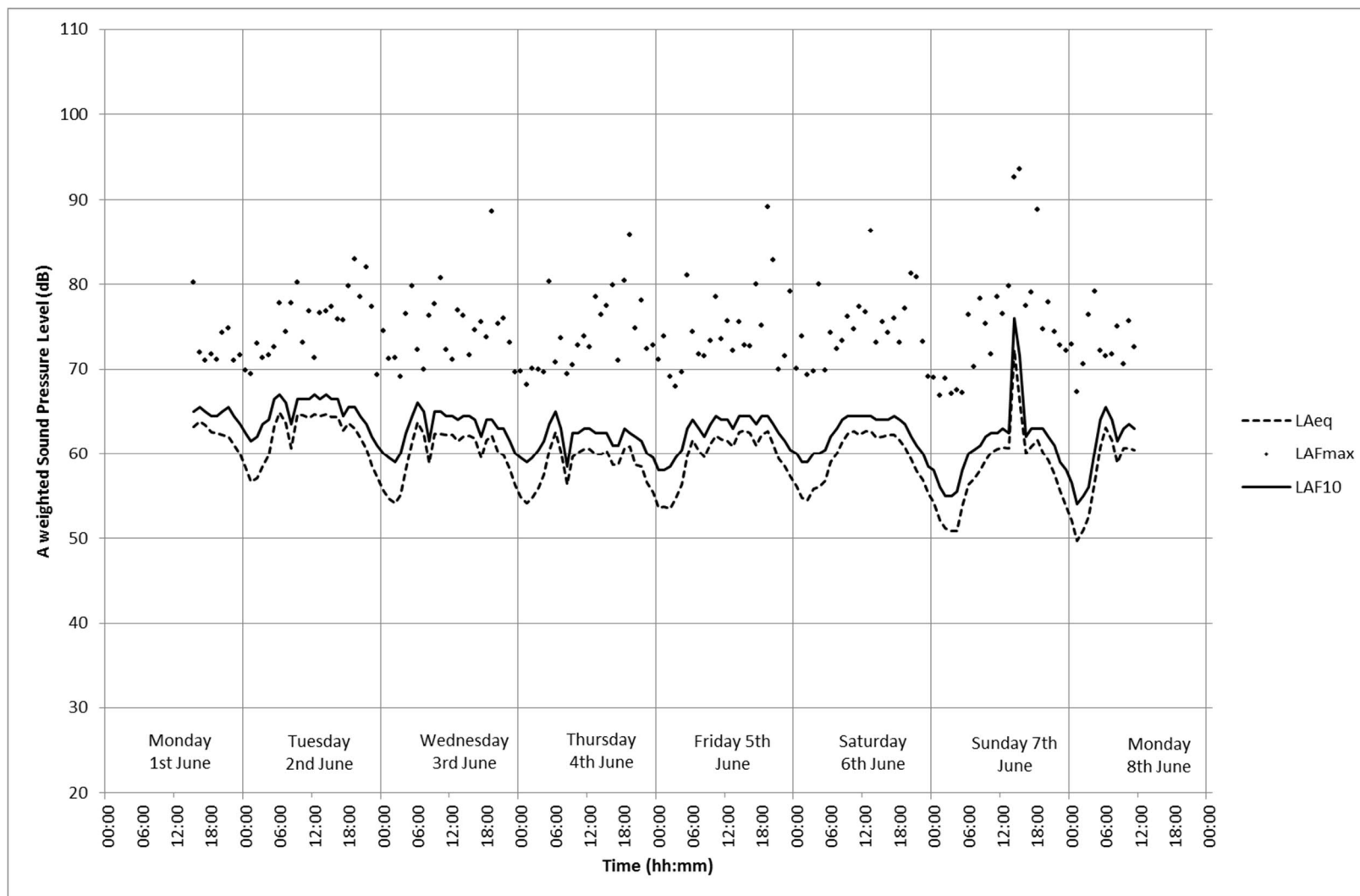


Figure 7: M5 – Radbourne Road

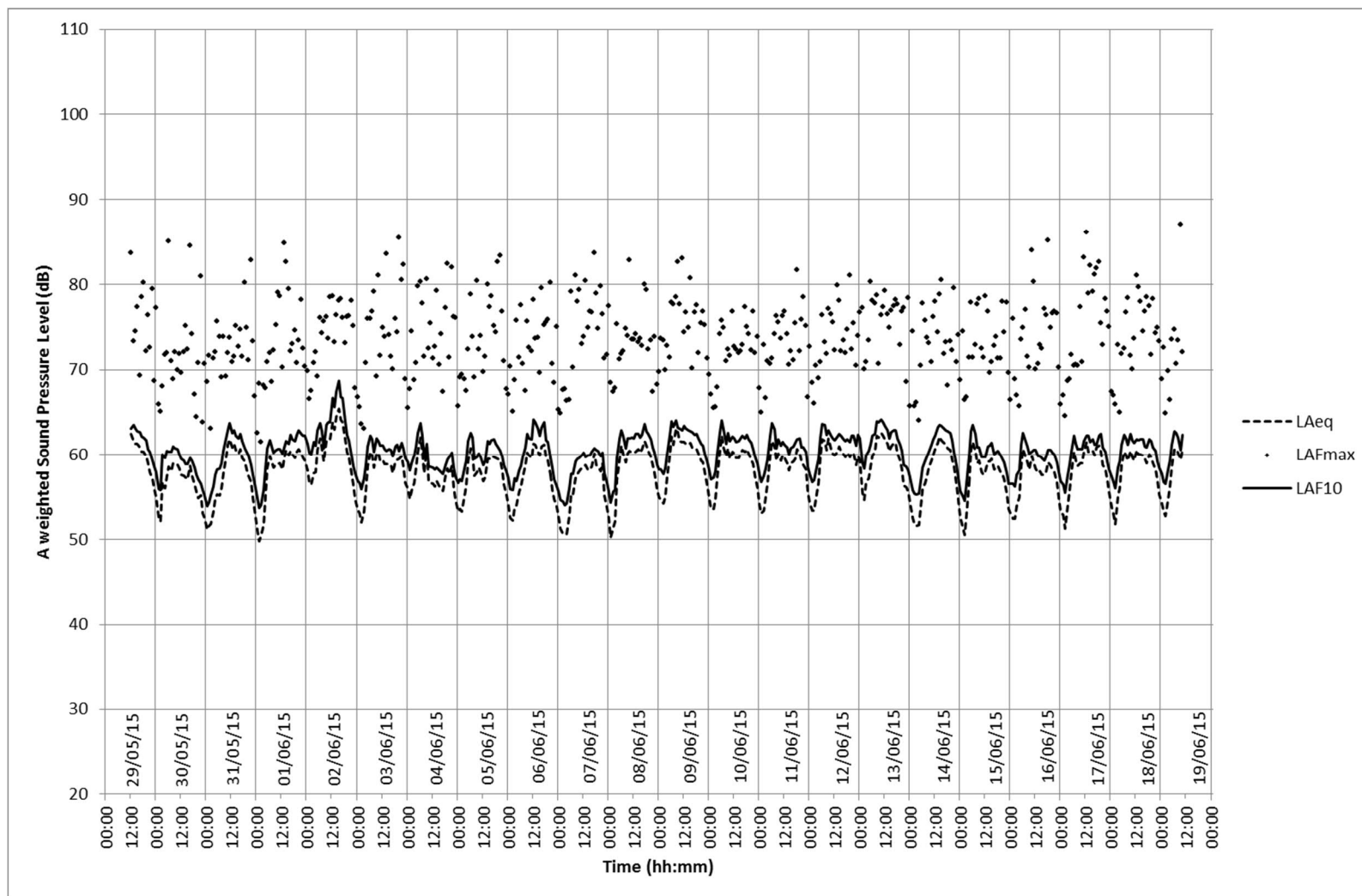


Figure 8: M6 – Army Reserves Centre Site

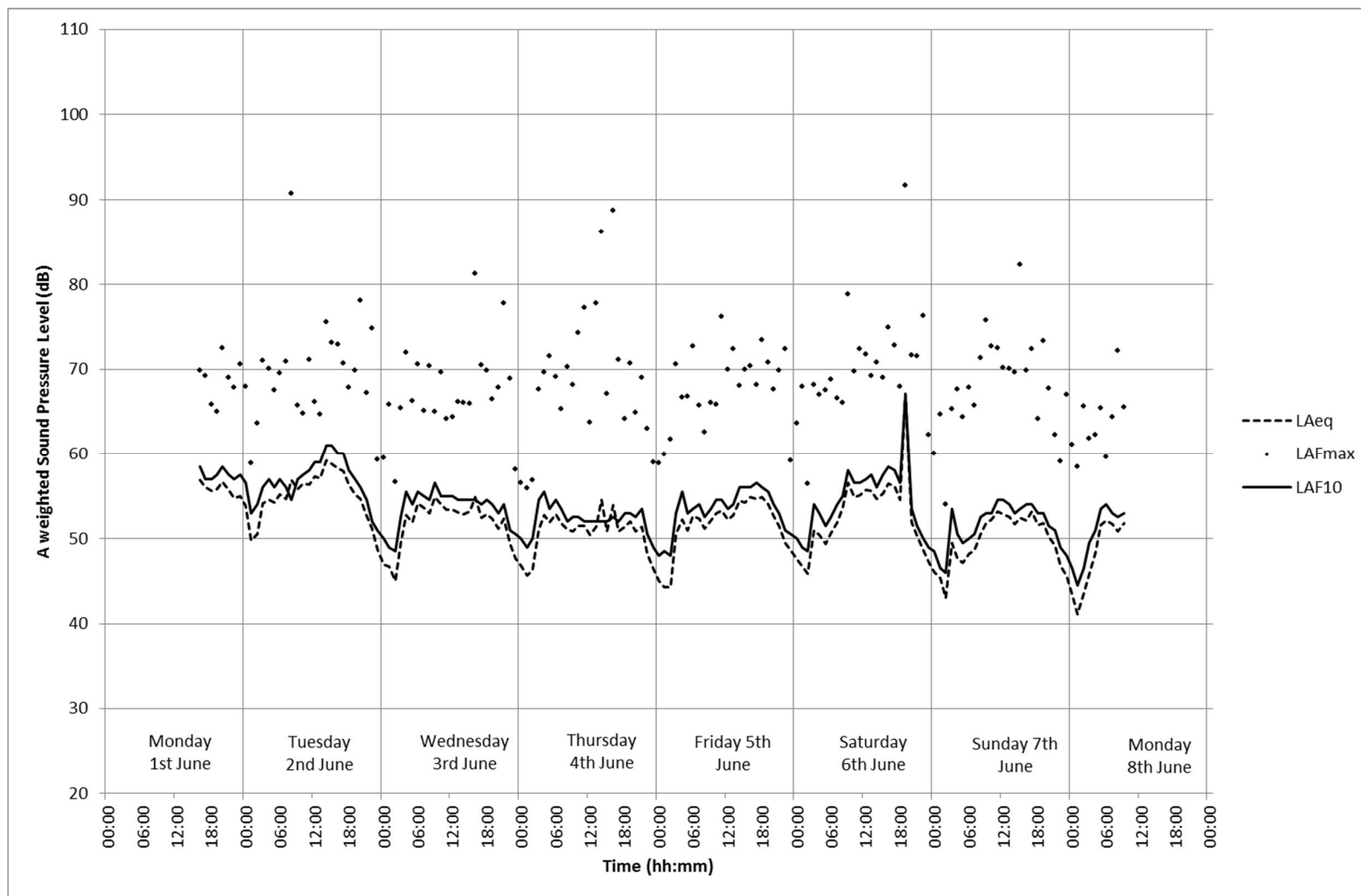


Figure 9: M7 – Queensway

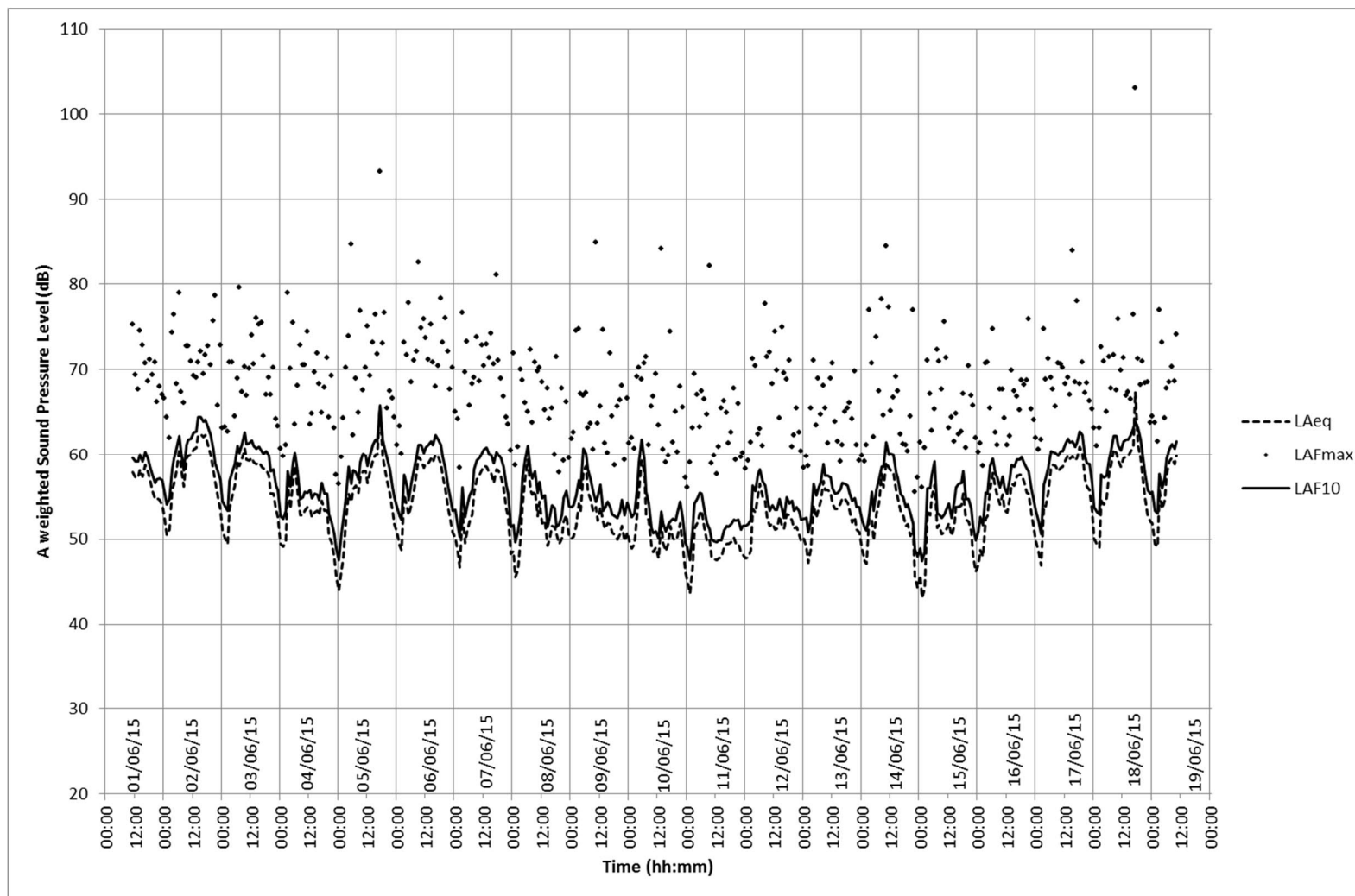


Figure 10: M10 – Breadsall North

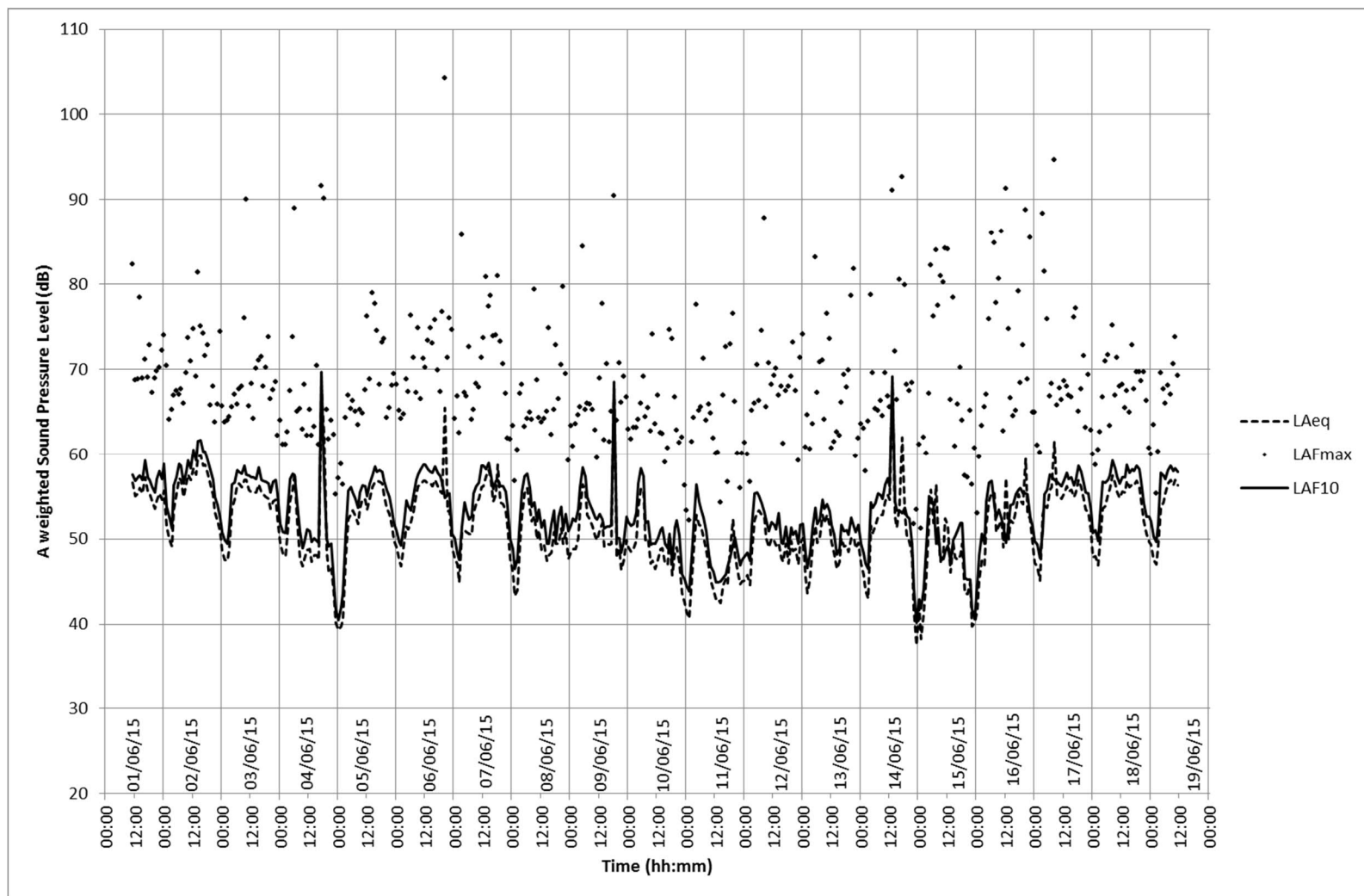


Figure 11: M11 – Breadsall Centre

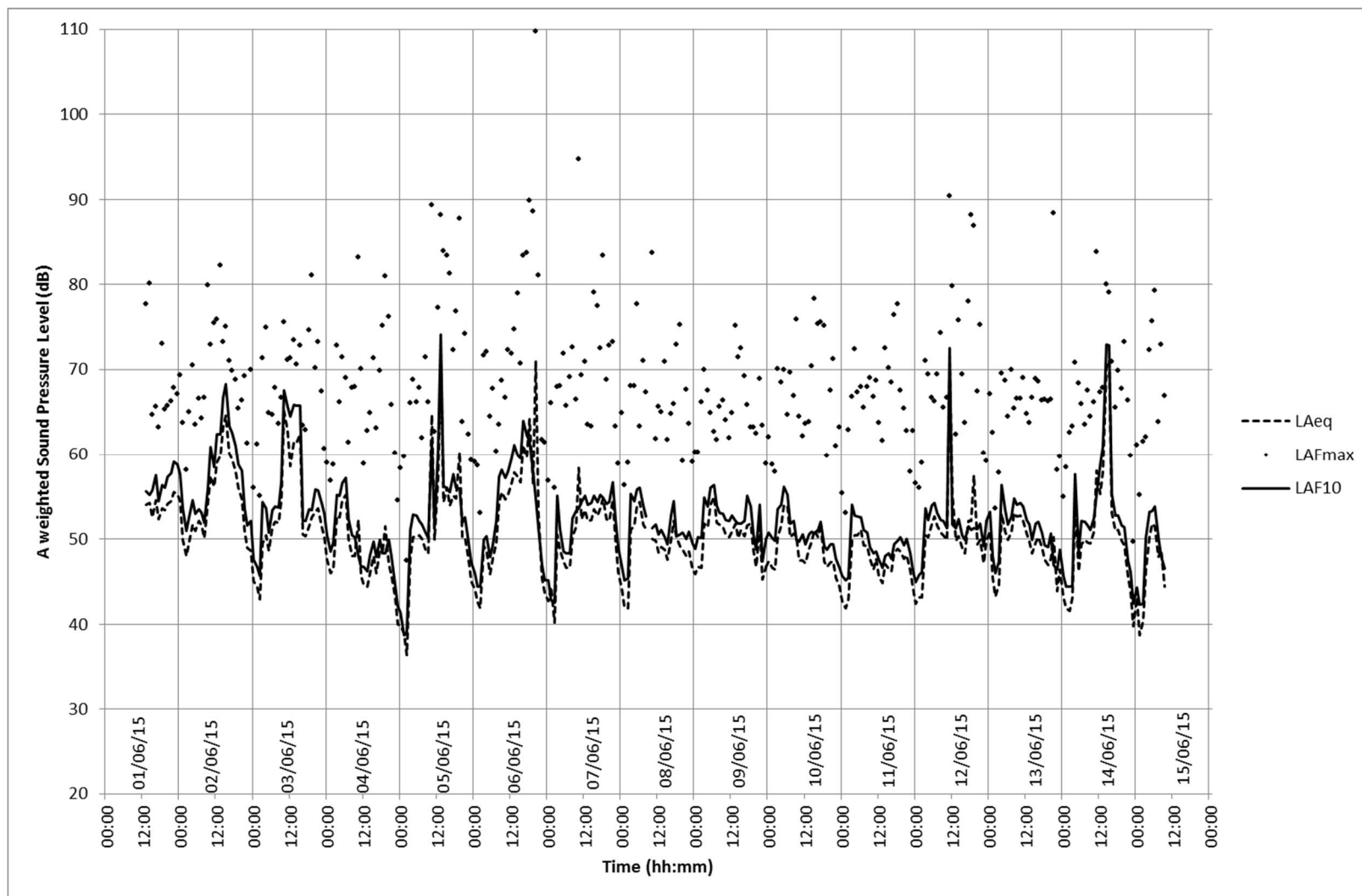


Figure 12: M12 – Breadsall South