Appendix B.2 - 2023 Baseline Survey Details & Results

Date and Locations of Survey

10:00 to 16:30 hours on 02 February 2023 in the vicinity of Lea Castle Farm (locations 1 to 7, 7', A, B and C). The locations are presented in the Plans 5.1.1 and 5.1.2 in Appendix 5.1 and described below:

Location		Description			
1	Broom Cottage	Rear garden of dwelling by fence (same as used for sample measurements in 2018)			
2	South Lodge	On driveway to west of property, ~ 20 m from edge of road (same as used for sample measurements in 2018)			
3	Heathfield Knoll School	On bridleway opposite school, ~ 15 m from edge of road (same as used for sample measurements in 2018)			
4	Brown Westhead Park	In road, by entrance gates to playing fields (same as used for sample measurements in 2018)			
5	In field to west of property (near location used for sample measurements in 2018)				
6	Keepers Cottage	On nearest part of footpath to the dwelling (near location used for sample measurements in 2018)			
7	Castle Barns	Rear of bin store at dwellings (near location used for sample measurements in 2018)			
7'	7' North Lodge Between locations 6 & 7, by fork in the road leading to Castle Bar				
Α	A Houses off Stourbridge Road North edge of development, opposite 45 Albrington Drive (for information)				
В	Lea Castle Village Lea Castle Drive, opposite sales centre, approx. 6m from road (for information)				
С	Houses at Wolverley Lodge	East of proposed dwellings, within Brown Westhead Park at edge of parking area (for information)			

Survey carried out by

Rachel Canham

Weather Conditions

Cool (10-12°C), dry, overcast, light to moderate westerly breeze, initially around 2m/s increasing to 3-4m/s.

Appendix B.2 (continued)

Instrumentation and Calibration

The instrumentation used (including serial number in brackets) is tabulated below. The sensitivity of the meter was verified on site immediately before and after the survey using the field calibrator. The measured calibration levels were as follows:

Instrumentation	Start Cal	End Cal	
Norsonic 140 Sound Level Meter (1403137)	113.7 dB(A)	113.7 dB(A)	
Norsonic 1251 Calibrator (31993)			

The meter and calibrator are tested monthly against Norsonic Calibrators, type 1253 (serial number 22906) and type 1256 (serial number 125626100) both with UKAS approved laboratory certificates of calibration. In addition, the meter and calibrator undergo traceable calibration at an external laboratory every two years.

Survey Details

Attended sample measurements of 15 minutes duration were taken at locations location 1 to 7, 7', A, B and C. The microphone was at a height of around 1.3m above local ground level, with a windshield used throughout.

Detailed observations for each survey location are included in the tabulated results. In general, road traffic remained the dominant noise source for most locations.

Appendix B.2 (continued)

Survey Results and Observations

Table 5.2.1: Survey Results 02 February 2023

Location	Start	Results dB (T = 15 minutes)			nutes)	Comments / Observations
	Time	L _{Aeq,T}	$\mathbf{L}_{Amax,f}$	L _{A10,T}	L _{A90,T}	
A	10:09	46	62	49	40	Distant and local road traffic, birdsong, occasional distant aircraft
В	10:30	54	73	57	46	Distant road traffic, occasional passing cars and construction vehicles (controlled L _{Aeq,T}), birdsong, light aircraft overhead. Distant construction activity (banging, distant plant noise, reversing beepers).
2	10:50	55	67	58	49	Road traffic on Wolverley Road, also some birdsong / calls. Motorbike and car on drive.
5	11:10	44	53	45	42	Distant road traffic, birdsong, light aircraft overhead.
1	11:35	56	71	59	48	Road traffic on Wolverley Road, some birdsong / calls, distant aircraft, some rustling leaves in trees.
1	11:51	55	65	58	48	Road traffic on Wolverley Road, some birdsong / calls, rustling leaves in trees, light aircraft overhead
4	12:13	55	76	58	47	Distant road traffic, rustling leaves, birdsong / calls. Cars arriving to park near gate.
3	12:36	60	68	63	55	Road traffic on Wolverley Road, wind noise / rustling leaves, some bird calls.
С	13:00	44	61	46	41	Distant road traffic, bird song / calls (location is sheltered compared to Location 4)
7	13:28	45	67	47	40	Distant road traffic, wind in trees, bird calls including gulls.
7'	13:48	48	68	51	41	Distant road traffic, wind in trees, bird calls, distant aircraft, distant helicopter / sirens on road.
6	14:07	52	75	54	41	Distant road traffic, wind in trees, noise from horses in paddock, some birdsong / calls, distant aircraft, light aircraft overhead.
3	14:36	57	64	59	53	Road traffic on Wolverley Road, wind in trees, birdsong / calls, distant barking dogs, distant aircraft
4	14:56	53	76	54	46	Distant road traffic, wind in trees, some bird calls, local traffic
5	15:19	47	60	50	44	Distant road traffic, wind in trees, occasional bird calls
2	15:46	57	69	60	54	Road traffic on Wolverley Road, birdsong / calls, passing car on track x 2. Also noise from farm / agricultural activity (affects L _{A90,T})
7'	16:08	54	77	56	42	Distant road traffic, wind in trees, bird song/calls, passing vehicles x 2