



## **Traffic Speed in Sandyhurst Lane**

### **Report on SLRA Analysis of Two Recent Surveys (Eastern part)**

**June 2018**

#### **Introduction**

1. For many years, SLRA members have complained about the perceived excessive speed of vehicles using Sandyhurst Lane. Attempts to persuade Kent County Council to recognise this issue and to introduce measures to address it have been unsuccessful, largely because the Lane has a low incidence of traffic accidents.
2. We also lack data on the measured speed of traffic in the Lane and the SLRA Committee has discussed the possibility of commissioning a survey using Automatic Traffic Counters (ATCs).
3. However, before deciding whether to undertake such a survey, it is pertinent to review recent similar surveys which have been carried out as part of planning applications for housing developments in Sandyhurst Lane.

#### **Recent surveys**

4. Two one-week ATC traffic surveys have been carried out in recent years and these have been published in the Transport Statements submitted in support of the following planning applications:
  - **Land at Lenacre Hall Farm (LHF)**  
(applications 17/01613/AS and 18/00413/AS)  
This survey was carried out from 24 to 30 June 2017.
  - **Sand pit to the south of 200 and east of 198 Sandyhurst Lane (Sandpit)**  
(application number 17/01636/AS)  
This survey was carried out from 11 to 17 October 2016.

#### ATC locations

5. The location of the ATC equipment for the LHF survey is shown in Appendix 1. It was sited approximately 110 metres east of the vehicle entrance to Sandyacres. There are bends in the road approximately 50 metres to the east and 280 metres to the west.
6. The location of the ATC equipment for the Sandpit survey is shown in Appendix 2. It was sited on the hill which runs past the property 'Molehill' (250 Sandyhurst Lane) and was approximately 110 metres west of the bend at the top of the hill to the east and 160 metres from the bend at the bottom of the hill to the west.

7. The speed limit at both sites is 40 mph. (The Sandpit Transport Statement erroneously gives the speed limit as 30 mph in the tables of results, but is correct in the text).

### Analysis of survey results

8. In both surveys, results were recorded for each direction on each day of the week. Vehicle speeds were recorded in 12 bands: <11 mph, then 10 bands of 5 mph increments, then =>61 mph.
9. For the purposes of the SLRA analysis, the data for the days of the week were aggregated to produce data for Monday to Friday, for the weekend, and for the whole week. This was done for each direction at each site, producing four tables of results:

### Results for Lenacre Hall Farm survey

10. The aggregated results for the survey carried out as part of the Lenacre Hall Farm survey in June 2017 are summarised in the following two tables, one for each direction. Results for vehicles travelling in excess of the speed limit are shown against a red background.

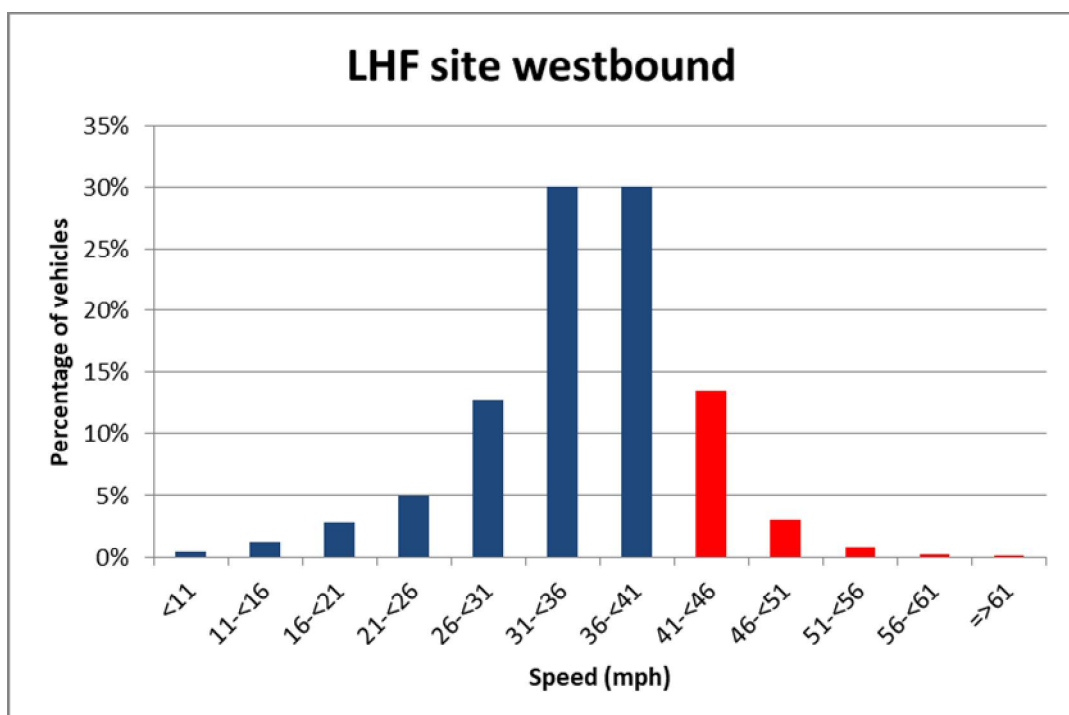
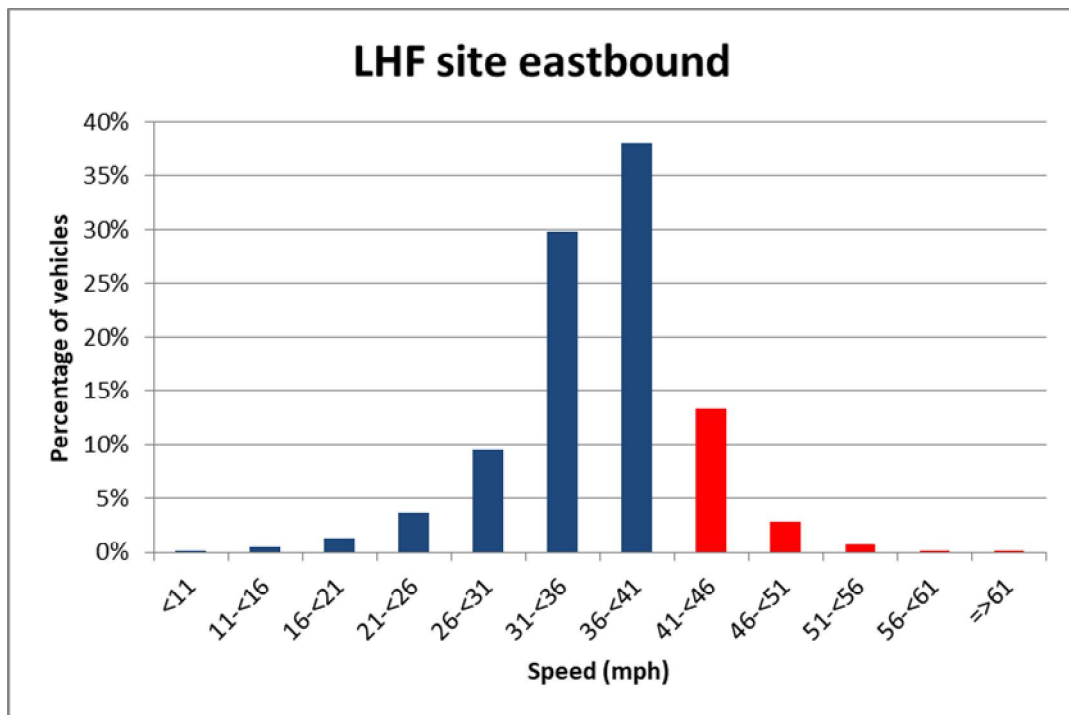
Lenacre Hall Farm ATC Survey - Vehicle numbers for eastbound traffic speeds														
Day	Date	Speed mph												TOTAL
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	=>61	
Mon	26/06/2017	1	9	24	27	105	317	455	172	31	11	4	0	1156
Tue	27/06/2017	3	6	9	25	108	366	456	151	38	12	1	0	1175
Wed	28/06/2017	2	3	16	51	124	385	492	183	35	10	2	1	1304
Thu	29/06/2017	0	9	15	81	152	428	504	172	36	5	0	0	1402
Fri	30/06/2017	1	4	15	43	103	360	510	186	31	9	0	1	1263
Sat	24/06/2017	1	6	11	29	70	281	319	99	29	3	1	0	849
Sun	25/06/2017	1	5	17	29	80	202	243	83	21	2	1	0	684
<b>Total M-F</b>		<b>7</b>	<b>31</b>	<b>79</b>	<b>227</b>	<b>592</b>	<b>1856</b>	<b>2417</b>	<b>864</b>	<b>171</b>	<b>47</b>	<b>7</b>	<b>2</b>	<b>6300</b>
<b>Percentage M-F</b>		<b>0.11%</b>	<b>0.49%</b>	<b>1.25%</b>	<b>3.60%</b>	<b>9.40%</b>	<b>29.46%</b>	<b>38.37%</b>	<b>13.71%</b>	<b>2.71%</b>	<b>0.75%</b>	<b>0.11%</b>	<b>0.03%</b>	<b>100.0%</b>
<b>Total Weekend</b>		<b>2</b>	<b>11</b>	<b>28</b>	<b>58</b>	<b>150</b>	<b>483</b>	<b>562</b>	<b>182</b>	<b>50</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>1533</b>
<b>Percentage Weekend</b>		<b>0.13%</b>	<b>0.72%</b>	<b>1.83%</b>	<b>3.78%</b>	<b>9.78%</b>	<b>31.51%</b>	<b>36.66%</b>	<b>11.87%</b>	<b>3.26%</b>	<b>0.33%</b>	<b>0.13%</b>	<b>0.00%</b>	<b>100.0%</b>
<b>TOTAL all week</b>		<b>9</b>	<b>42</b>	<b>107</b>	<b>285</b>	<b>742</b>	<b>2339</b>	<b>2979</b>	<b>1046</b>	<b>221</b>	<b>52</b>	<b>9</b>	<b>2</b>	<b>7833</b>
<b>Percentage all week</b>		<b>0.11%</b>	<b>0.54%</b>	<b>1.37%</b>	<b>3.64%</b>	<b>9.47%</b>	<b>29.86%</b>	<b>38.03%</b>	<b>13.35%</b>	<b>2.82%</b>	<b>0.66%</b>	<b>0.11%</b>	<b>0.03%</b>	<b>100.0%</b>
<b>Overall TOTAL</b>		<b>6503</b>						<b>1330</b>						<b>7833</b>
<b>Overall Percentage</b>		<b>83.0%</b>						<b>17.0%</b>						<b>100.0%</b>

Lenacre Hall Farm ATC Survey - Vehicle numbers for westbound traffic speeds														
Day	Date	Speed mph												TOTAL
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	=>61	
Mon	26/06/2017	9	24	44	67	157	381	390	179	41	11	2	0	1305
Tue	27/06/2017	1	9	22	39	137	410	428	199	33	12	4	0	1294
Wed	28/06/2017	6	15	50	59	175	397	416	217	42	7	2	0	1386
Thu	29/06/2017	6	14	46	88	237	425	398	139	35	12	2	0	1402
Fri	30/06/2017	6	21	36	89	170	405	415	174	43	11	2	0	1372
Sat	24/06/2017	1	12	23	49	138	290	259	109	31	7	1	1	921
Sun	25/06/2017	5	12	14	30	64	219	223	125	29	12	1	0	734
<b>Total M-F</b>		<b>28</b>	<b>83</b>	<b>198</b>	<b>342</b>	<b>876</b>	<b>2018</b>	<b>2047</b>	<b>908</b>	<b>194</b>	<b>53</b>	<b>12</b>	<b>0</b>	<b>6759</b>
<b>Percentage M-F</b>		<b>0.41%</b>	<b>1.23%</b>	<b>2.93%</b>	<b>5.06%</b>	<b>12.96%</b>	<b>29.86%</b>	<b>30.29%</b>	<b>13.43%</b>	<b>2.87%</b>	<b>0.78%</b>	<b>0.18%</b>	<b>0.00%</b>	<b>100.0%</b>
<b>Total Weekend</b>		<b>6</b>	<b>24</b>	<b>37</b>	<b>79</b>	<b>202</b>	<b>509</b>	<b>482</b>	<b>234</b>	<b>60</b>	<b>19</b>	<b>2</b>	<b>1</b>	<b>1655</b>
<b>Percentage Weekend</b>		<b>0.36%</b>	<b>1.45%</b>	<b>2.24%</b>	<b>4.77%</b>	<b>12.21%</b>	<b>30.76%</b>	<b>29.12%</b>	<b>14.14%</b>	<b>3.63%</b>	<b>1.15%</b>	<b>0.12%</b>	<b>0.06%</b>	<b>100.0%</b>
<b>TOTAL all week</b>		<b>34</b>	<b>107</b>	<b>235</b>	<b>421</b>	<b>1078</b>	<b>2527</b>	<b>2529</b>	<b>1142</b>	<b>254</b>	<b>72</b>	<b>14</b>	<b>1</b>	<b>8414</b>
<b>Percentage all week</b>		<b>0.40%</b>	<b>1.27%</b>	<b>2.79%</b>	<b>5.00%</b>	<b>12.81%</b>	<b>30.03%</b>	<b>30.06%</b>	<b>13.57%</b>	<b>3.02%</b>	<b>0.86%</b>	<b>0.17%</b>	<b>0.01%</b>	<b>100.0%</b>
<b>Overall TOTAL</b>		<b>6931</b>						<b>1483</b>						<b>8414</b>
<b>Overall Percentage</b>		<b>82.4%</b>						<b>17.6%</b>						<b>100.0%</b>

11. The tables show that:

- Over the weekday period, 6,300 vehicles travelled eastbound (avg 1,260/day) and 6,759 westbound (avg 1,352/day).
- Over the weekend, 1,533 vehicles travelled eastbound (avg 767/day) and 1,655 westbound (avg 828/day).
- The distribution of speeds was not significantly different between weekdays and weekends
- Overall, 17.0% of traffic eastbound and 17.6% of traffic westbound was travelling in excess of the speed limit.
- Of the traffic travelling in excess of the speed limit, 79% eastbound and 77% westbound was travelling at between 41 and 46 mph.

12. The following charts show the distribution of traffic speeds in each direction:



## Results for Sandpit survey

13. The aggregated results for the survey carried out as part of the Sandpit survey in October 2016 are summarised in the following two tables, one for each direction. Results for vehicles travelling in excess of the speed limit are shown against a red background.

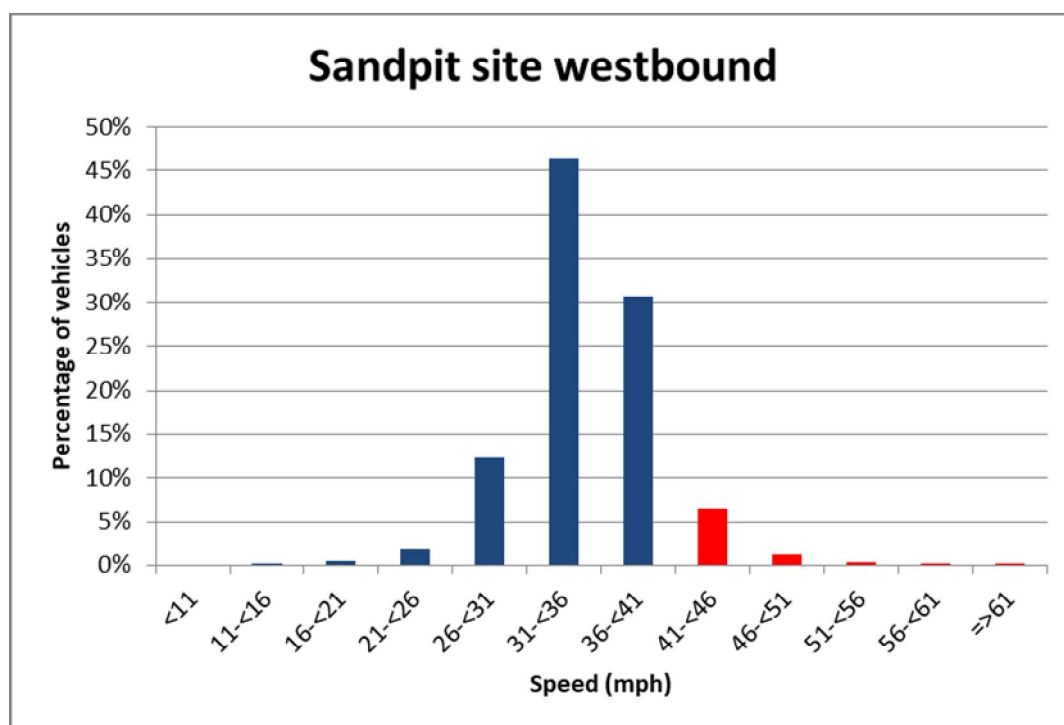
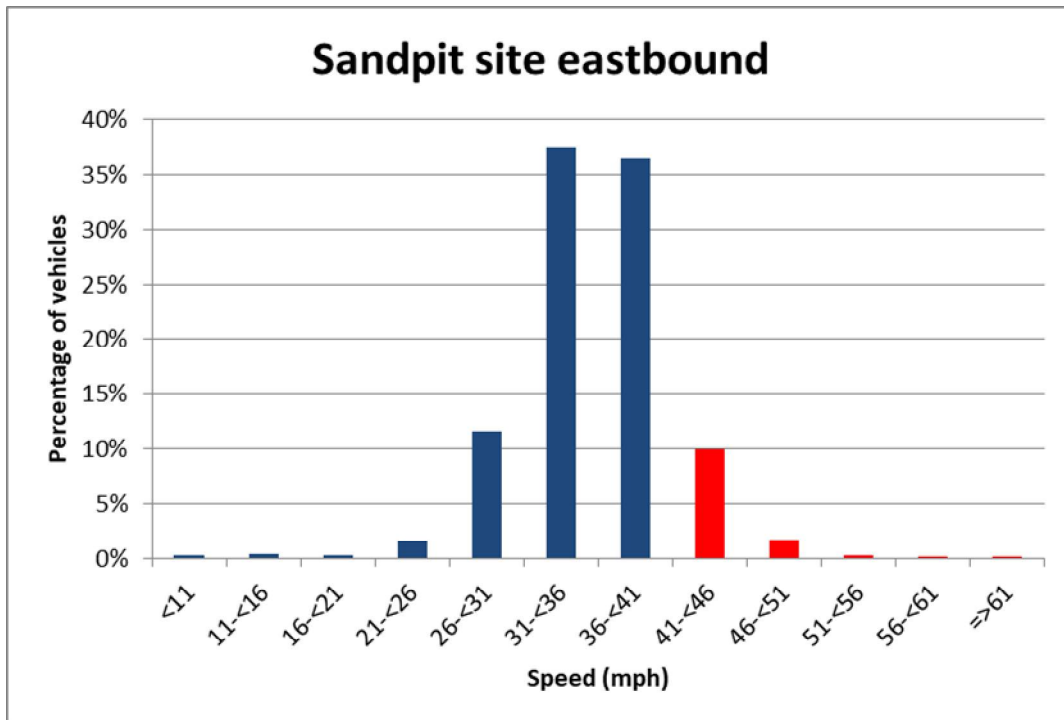
Former Sandpit ATC Survey - Vehicle numbers for eastbound traffic speeds														
Day	Date	Speed mph											TOTAL	
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61		≥61
Mon	17/10/2016	3	1	0	19	100	362	375	98	18	3	0	0	979
Tue	11/10/2016	3	3	0	15	141	470	424	104	9	4	1	0	1174
Wed	12/10/2016	1	1	4	20	157	438	377	111	12	2	1	0	1124
Thu	13/10/2016	3	3	3	17	123	385	404	107	21	4	2	0	1072
Fri	14/10/2016	3	3	5	15	96	427	421	115	21	4	1	2	1113
Sat	15/10/2016	4	9	4	8	119	300	282	91	21	2	2	0	842
Sun	16/10/2016	1	4	1	13	64	210	236	63	14	2	0	0	608
<b>Total M-F</b>		<b>13</b>	<b>11</b>	<b>12</b>	<b>86</b>	<b>617</b>	<b>2082</b>	<b>2001</b>	<b>535</b>	<b>81</b>	<b>17</b>	<b>5</b>	<b>2</b>	<b>5462</b>
<b>Percentage M-F</b>		<b>0.24%</b>	<b>0.20%</b>	<b>0.22%</b>	<b>1.57%</b>	<b>11.30%</b>	<b>38.12%</b>	<b>36.63%</b>	<b>9.79%</b>	<b>1.48%</b>	<b>0.31%</b>	<b>0.09%</b>	<b>0.04%</b>	<b>100.0%</b>
<b>Total Weekend</b>		<b>5</b>	<b>13</b>	<b>5</b>	<b>21</b>	<b>183</b>	<b>510</b>	<b>518</b>	<b>154</b>	<b>35</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>1450</b>
<b>Percentage Weekend</b>		<b>0.34%</b>	<b>0.90%</b>	<b>0.34%</b>	<b>1.45%</b>	<b>12.62%</b>	<b>35.17%</b>	<b>35.72%</b>	<b>10.62%</b>	<b>2.41%</b>	<b>0.28%</b>	<b>0.14%</b>	<b>0.00%</b>	<b>100.0%</b>
<b>TOTAL all week</b>		<b>18</b>	<b>24</b>	<b>17</b>	<b>107</b>	<b>800</b>	<b>2592</b>	<b>2519</b>	<b>689</b>	<b>116</b>	<b>21</b>	<b>7</b>	<b>2</b>	<b>6912</b>
<b>Percentage all week</b>		<b>0.26%</b>	<b>0.35%</b>	<b>0.25%</b>	<b>1.55%</b>	<b>11.57%</b>	<b>37.50%</b>	<b>36.44%</b>	<b>9.97%</b>	<b>1.68%</b>	<b>0.30%</b>	<b>0.10%</b>	<b>0.03%</b>	<b>100.0%</b>
<b>Overall TOTAL</b>		<b>6077</b>						<b>835</b>						<b>6912</b>
<b>Overall Percentage</b>		<b>87.9%</b>						<b>12.1%</b>						<b>100.0%</b>

Former Sandpit ATC Survey - Vehicle numbers for westbound traffic speeds														
Day	Date	Speed mph											TOTAL	
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61		≥61
Mon	17/10/2016	0	2	9	15	140	588	355	42	11	4	0	0	1166
Tue	11/10/2016	0	1	6	16	142	534	430	84	13	2	1	0	1229
Wed	12/10/2016	0	1	4	23	172	674	377	67	8	3	0	0	1329
Thu	13/10/2016	0	2	10	26	137	565	412	94	25	7	0	1	1279
Fri	14/10/2016	0	2	4	29	149	535	393	109	25	5	1	0	1252
Sat	15/10/2016	0	3	7	21	150	481	256	84	8	1	1	0	1012
Sun	16/10/2016	0	2	3	8	96	329	229	42	8	4	0	0	721
<b>Total M-F</b>		<b>0</b>	<b>8</b>	<b>33</b>	<b>109</b>	<b>740</b>	<b>2896</b>	<b>1967</b>	<b>396</b>	<b>82</b>	<b>21</b>	<b>2</b>	<b>1</b>	<b>6255</b>
<b>Percentage M-F</b>		<b>0.00%</b>	<b>0.13%</b>	<b>0.53%</b>	<b>1.74%</b>	<b>11.83%</b>	<b>46.30%</b>	<b>31.45%</b>	<b>6.33%</b>	<b>1.31%</b>	<b>0.34%</b>	<b>0.03%</b>	<b>0.02%</b>	<b>100.0%</b>
<b>Total Weekend</b>		<b>0</b>	<b>5</b>	<b>10</b>	<b>29</b>	<b>246</b>	<b>810</b>	<b>485</b>	<b>126</b>	<b>16</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>1733</b>
<b>Percentage Weekend</b>		<b>0.00%</b>	<b>0.29%</b>	<b>0.58%</b>	<b>1.67%</b>	<b>14.20%</b>	<b>46.74%</b>	<b>27.99%</b>	<b>7.27%</b>	<b>0.92%</b>	<b>0.29%</b>	<b>0.06%</b>	<b>0.00%</b>	<b>100.0%</b>
<b>TOTAL all week</b>		<b>0</b>	<b>13</b>	<b>43</b>	<b>138</b>	<b>986</b>	<b>3706</b>	<b>2452</b>	<b>522</b>	<b>98</b>	<b>26</b>	<b>3</b>	<b>1</b>	<b>7988</b>
<b>Percentage all week</b>		<b>0.00%</b>	<b>0.16%</b>	<b>0.54%</b>	<b>1.73%</b>	<b>12.34%</b>	<b>46.39%</b>	<b>30.70%</b>	<b>6.53%</b>	<b>1.23%</b>	<b>0.33%</b>	<b>0.04%</b>	<b>0.01%</b>	<b>100.0%</b>
<b>Overall TOTAL</b>		<b>7338</b>						<b>650</b>						<b>7988</b>
<b>Overall Percentage</b>		<b>91.9%</b>						<b>8.1%</b>						<b>100.0%</b>

14. The tables show that:

- Over the weekday period, 5,462 vehicles travelled eastbound (avg 1,092/day) and 6,255 westbound (avg 1,251/day).
- Over the weekend, 1,450 vehicles travelled eastbound (avg 725/day) and 1,733 westbound (avg 867/day).
- The distribution of speeds was not significantly different between weekdays and weekends
- Overall, 12.1% of traffic eastbound and 8.1% of traffic westbound was travelling in excess of the speed limit.
- Of the traffic travelling in excess of the speed limit, 83% eastbound and 80% westbound was travelling at between 41 and 46 mph.

15. The following charts show the distribution of traffic speeds in each direction:



## Discussion

16. The results show that the proportion of vehicles travelling in excess of the speed limit is significantly influenced by the location of the test site and its distance from road hazards such as bends.

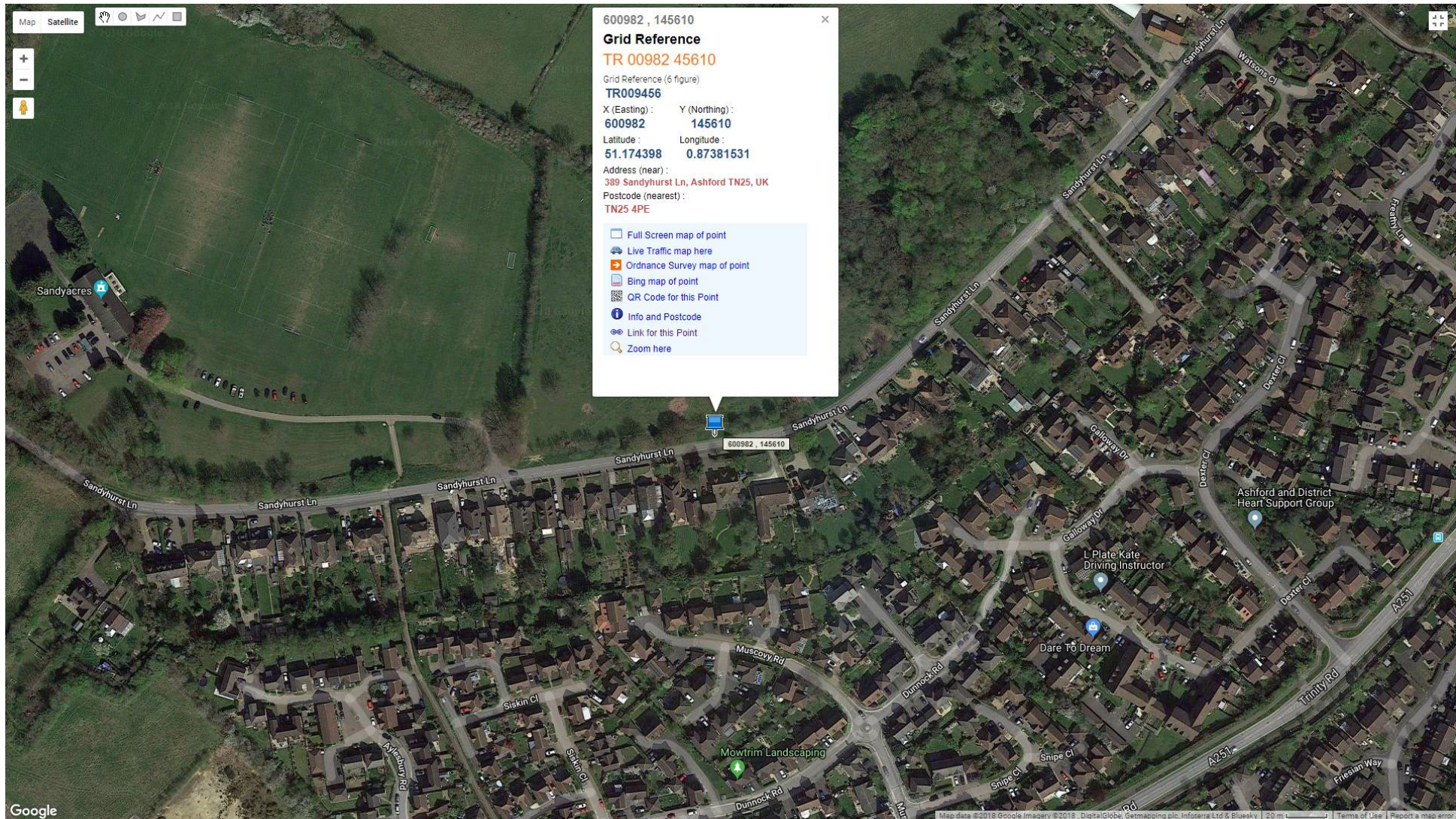
17. The location of the Sandpit test site was on a hill with a sharp bend in the road only 110 metres to the east. Consequently, the traffic speeds were significantly lower

than those for the LHF site and the proportion of vehicles exceeding the speed limit was greater eastbound (12.1%) than westbound (8.2%).

18. The LHF test site was in a location with more gentle bends nearby and the proportion of traffic exceeding the speed limit was consequently significantly higher than for the Sandpit site (17.0% eastbound and 17.6% westbound).
19. It therefore seems likely that traffic speeds may be higher in those parts of the Lane which have long, almost straight sections without intersections or appreciable gradients (eg between the entrance to Sandyhurst Farm and the entrance to the Golf Club, a distance of 600 metres).
20. The SLRA Committee will give consideration as to whether or not to conduct further tests in the light of these results.



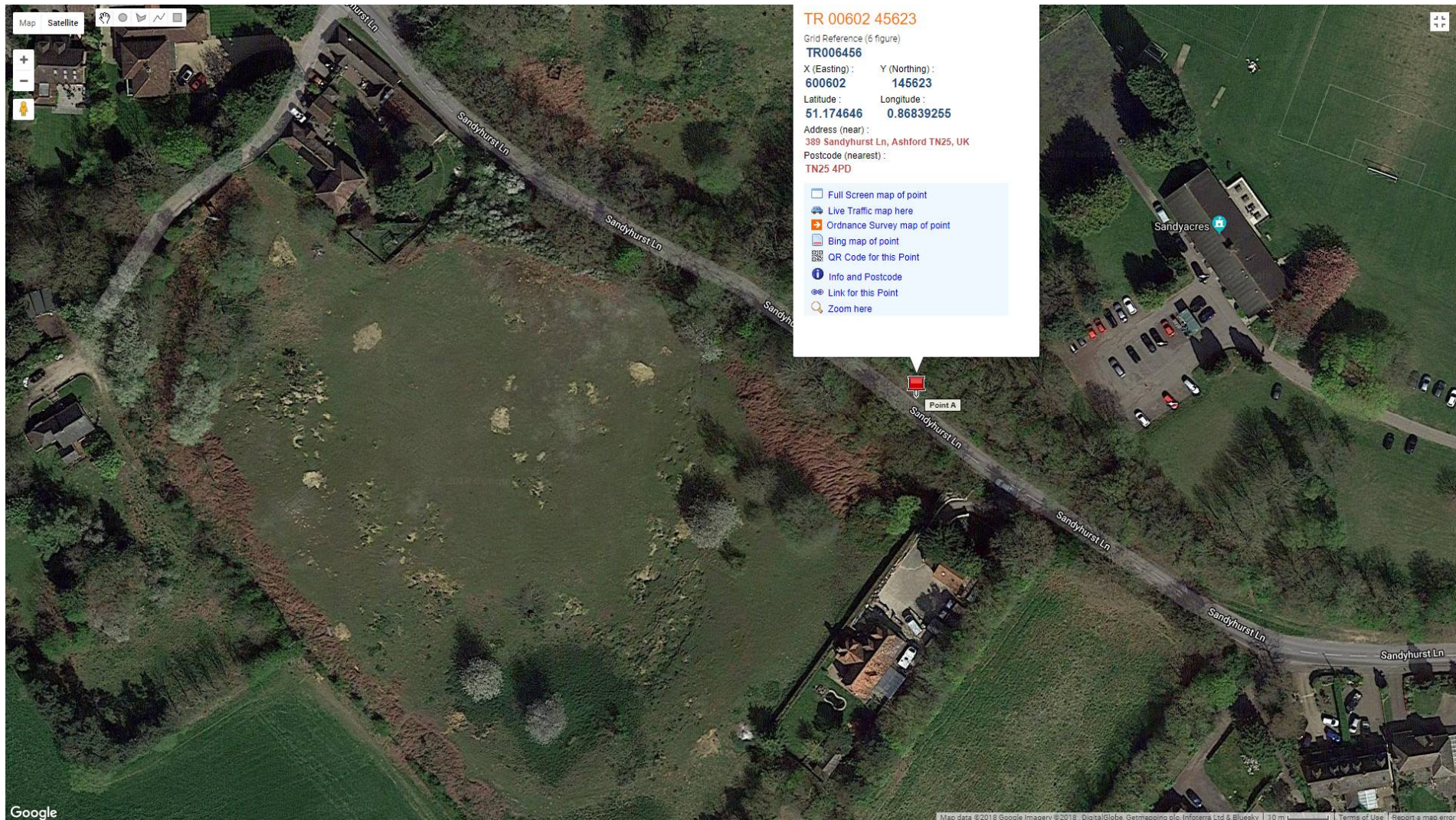
## Appendix 1: Location of Automatic Traffic Counter used in Lenacre Hall Farm Transport Statement



Link: [https://gridreferencefinder.com/?gr=TR0098245610|600982\\_s\\_c\\_s\\_145610|1&v=h](https://gridreferencefinder.com/?gr=TR0098245610|600982_s_c_s_145610|1&v=h)



## Appendix 2: Location of Automatic Traffic Counter used in Sandpit Transport Statement



Link: [https://gridreferencefinder.com/?gr=TR0060245623|600602\\_s\\_c\\_s\\_145623|1&t=600602%20%2C%20145623&v=h](https://gridreferencefinder.com/?gr=TR0060245623|600602_s_c_s_145623|1&t=600602%20%2C%20145623&v=h)