

Houghton, Michelle

From: Damian Ford <damian.ford@tpa.uk.com>
Sent: 24 September 2019 11:25
To: Wells, Lesley
Cc: Havant Planning and Development Mailbox New
Subject: APP/19/00768 - Land to Rear of 15-27 Horndean Road, Emsworth
Attachments: 5005 Emsworth ATC.xlsx

Follow Up Flag: checking with lesley before indexing JC
Due By: 25 September 2019 17:00
Flag Status: Flagged

Lesley

Further to my email dated 6 September and our subsequent conversation, we have now received the results of the Automatic Traffic Count which we commissioned on Horndean Road which was in place from Wednesday 11 September to Tuesday 17 September to record both the volume and speed of vehicles.

The table below sets out the variation in traffic flows between DM Mason quoted survey and our survey results:

	Northbound				Southbound				Total			
	DM Mason	TPA	Difference		DM Mason	TPA	Difference		DM Mason	TPA	Difference	
Weekday AM Peak	304	388	+84	+27.6%	433	435	+2	+0.46%	737	823	+86	+11.67%
Weekday PM Peak	395	435	+40	+10.1%	322	397	+75	+23.29%	717	831	+114	+15.90%
5-day Average	4,008	4,638	+630	+15.7%	3,976	4,319	+343	+8.63%	7,984	8,977	+993	+12.44%
7-day Average	3,714	4,356	+642	+17.3%	3,692	4,058	+366	+9.91%	7,416	8,414	+998	+13.46%

The above table demonstrates that the DM Mason ATC, which was partly undertaken during school holidays, recorded lower traffic flows than would normally be expected along Horndean Road.

During the AM peak the difference in traffic flows suggests that the frequency of vehicles along Horndean Road increases from 1 vehicle every 4.88 seconds to 1 vehicle every 4.37, while in the PM peak the frequency increases from 1 vehicle every 5.02 seconds to 1 vehicle every 4.33 seconds. The higher the frequency of vehicles along a road results in smaller gaps between vehicles for traffic to access / egress the carriageway. The change in the frequency of vehicles will mean that cars egressing the site or accessing from the north will have smaller gaps to turn in. This may result in vehicles egressing the site pulling out into gaps which are unsuitable and therefore increase the potential for conflict with other road users, while cars accessing the site from the north are more likely to have to wait result in cars queuing behind the turning vehicle, which could result in an increase in 'rear end shunts'.

The reduction in the gaps between vehicles does not take into account the restriction in visibility plays to the north due to the existing street furniture, namely the lighting column and also the telephone pole. These obstructions are likely to reduce the gaps further and further increase the potential for conflicts between vehicles.

However, with increased traffic flow there is a benefit in reduced vehicle speeds. The ATC suggests that during school term time the average and 85th percentile vehicle speeds are slightly lower than those recorded by DM Mason, as shown in the table below:

MPH	Average Speed		85 th Percentile Speed	
	DM Mason	TPA	DM Mason	TPA
Northbound	32.0	28.2	37.4	33.2
Southbound	31.3	28.0	36.4	31.1

While the 85th percentile speeds are lower they still exceed the 30mph speed limit and it should be noted that 30.2% of cars travelling along Horndean Road exceed the 30mph speed limit during the school term time. Based on the DM Mason traffic survey during school holidays the speeds of vehicles increases which in turn brings its own issues.

Based on the lower 85th percentile speeds the required visibility splays are 49.6m to the south and 45m to the north. As set out in my previous email, the on-site visibility splays which are possible (and not reliant on third party land) is 56m to the north (not taking into account the restrictions caused by the light column and telegraph pole) and 35m to the south. As such the previous findings that there is insufficient visibility provided at the access remains.

It is therefore considered that the substandard visibility splays along with the increased flows along Horndean Road is likely to result in the increase risk of accidents involving vehicles accessing and egressing the proposed development site. Given that there is no proposed mitigation to address this issue we would suggest that this is a sufficient reason for refusal of the application on highway safety grounds.

Kind regards

Damian Ford | Associate Director

Transport Planning Associates

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B2148 Horndean Road, Emsworth, ATC

Site No. 500501

Site Ref. 500501

Emsworth

Speed Report (Speed Limit 30 Mph)

Week Begin: 11 September 2019

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <5Mph	Bin 2 5-<10	Bin 3 10-<15	Bin 4 15-<20	Bin 5 20-<25	Bin 6 25-<30	Bin 7 30-<35	Bin 8 35-<40	Bin 9 40-<45
Wed 11 Sep	4518	33	28	5	0	28	43	87	578	2331	1166	226	46
Thu 12 Sep	4569	33	28	5	0	24	66	123	787	2284	1008	217	42
Fri 13 Sep	5063	33	28	5	0	38	61	136	715	2585	1224	219	61
Sat 14 Sep	3727	34	29	5	0	39	43	54	393	1751	1098	284	50
Sun 15 Sep	3476	34	29	5	0	15	40	55	344	1675	1049	232	47
Mon 16 Sep	4467	33	28	5	0	20	39	109	607	2238	1144	247	47
Tue 17 Sep	4672	33	28	5	0	28	49	141	617	2352	1175	244	46
5 Day Ave.	4658	33	28	5	0	28	52	119	661	2358	1143	231	48
7 Day Ave.	4356	33	28	5	0	27	49	101	577	2174	1123	238	48

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Wed 11 Sep	4119	33	28	5	0	22	43	133	665	2047	936	222	37

Thu 12 Sep	4377	33	28	5	0	17	40	148	798	2188	938	191	38
Fri 13 Sep	4763	33	28	5	0	17	36	129	790	2405	1045	266	50
Sat 14 Sep	3578	34	29	5	0	14	49	106	357	1682	1046	242	59
Sun 15 Sep	3233	34	29	5	0	17	23	69	357	1527	914	248	60
Mon 16 Sep	4042	33	28	5	0	28	52	143	658	1941	944	215	40
Tue 17 Sep	4294	33	28	5	0	25	47	124	618	2147	1053	224	39
5 Day Ave.	4319	33	28	5	0	22	44	135	706	2146	983	224	41
7 Day Ave.	4058	33	28	5	0	20	41	122	606	1991	982	230	46

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Wed 11 Sep	8637	33	28	5	0	50	86	220	1243	4378	2102	448	83
Thu 12 Sep	8946	33	28	5	0	41	106	271	1585	4472	1946	408	80
Fri 13 Sep	9826	33	28	5	0	55	97	265	1505	4990	2269	485	111
Sat 14 Sep	7305	34	29	5	0	53	92	160	750	3433	2144	526	109
Sun 15 Sep	6709	34	29	5	0	32	63	124	701	3202	1963	480	107
Mon 16 Sep	8509	33	28	5	0	48	91	252	1265	4179	2088	462	87
Tue 17 Sep	8966	33	28	5	0	53	96	265	1235	4499	2228	468	85
5 Day Ave.	8977	33	28	5	0	49	95	255	1367	4504	2127	454	89
7 Day Ave.	8414	33	28	5	0	47	90	222	1183	4165	2106	468	95

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Channel: Northbound

Bin 10 45-<50	Bin 11 50-<55	Bin 12 55-<60	Bin 13 =>60
8	5	0	0
12	4	1	1
16	3	1	4
10	2	1	2
14	3	1	1
8	4	1	3
11	5	1	3
11	4	1	2
11	4	1	2

Channel: Southbound

Bin 10 45-<50	Bin 11 50-<55	Bin 12 55-<60	Bin 13 =>60
10	2	1	1

12	4	1	2
19	2	3	1
15	5	2	1
12	2	1	3
11	7	2	1
9	3	4	1
12	4	2	1
13	4	2	1

Channel: Total Flow

Bin 10 45-<50	Bin 11 50-<55	Bin 12 55-<60	Bin 13 =>60
18	7	1	1
24	8	2	3
35	5	4	5
25	7	3	3
26	5	2	4
19	11	3	4
20	8	5	4
23	8	3	3
24	7	3	3