



TRANSPORT STATEMENT
Portsdown Hill Bio-methane Injection
Facility

Engineering, Design and
Surveying Consultants

from inception to completion

Prepared for: SGN
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1	22 Jan 20	Issue 1	A Davey	V Thompson
2	22 Jan 20	Issue 2	A Davey	V Thompson
3	27 Jan 20	Issue 3	A Davey	V Thompson

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1.0 Introduction

- 1.1 This Transport Statement has been prepared by Glanville Consultants on behalf of Southern Gas Networks (SGN), to accompany a planning application which seeks planning permission for third party operators to inject bio-methane into the gas network, at the Portsdown Hill bio-methane injection facility at Farlington Redoubt, near Havant.
- 1.2 Due to the scale and nature of the proposal, it is appropriate for the planning application to be accompanied by a Transport Statement rather than a full multi-modal Transport Assessment in accordance with Department *for* Transport guidance.
- 1.3 This report describes the use of the existing site and the proposed future use of the site. Matters pertaining to access and traffic generation are also given consideration.
- 1.4 This Transport Statement is prepared in accordance with Central Government policies set out in the *National Planning Policy Framework* (February 2019) and in line with planning policy guidance, *Travel Plans, Transport Assessments and Statements* (March 2014).

2.0 Site Description and Proposal

Site Description

- 2.1 Portsdown Hill Gas Facility is situated at Farlington Redoubt, north of Portsdown Hill Road (B2177) and circa 4km west of Havant town centre. The site is located approximately 1km west of Junction 5 of the A3(M) and 2km east of the B2177 / London Road (A3) junction. Farlington Redoubt sits within the jurisdiction of Havant Borough Council, however Portsdown Hill Road is located within the jurisdiction of Portsmouth City Council. A site location plan is provided at Appendix A.
- 2.2 Farlington Redoubt lies within a dip in the landscape and is surrounded by a buffer of trees and vegetation. It is bounded to the north and west by Portsmouth Golf Course, to the southwest and east by fields and to the south by Portsdown Hill Road.
- 2.3 L&S Waste occupy the eastern half of Farlington Redoubt whilst the western half has been in use by SGN since the early 1970s when it opened as Portsdown Hill Pressure Reduction Station (PRS). Since 2014, the northwest corner of the site has been in use as a bio-methane injection facility.
- 2.4 A single private access, which runs north-south through the site and exits onto Portsdown Hill Road, is used by both SGN and L&S Waste. L&S Waste rely on LGVs and HGVs to transport recyclable materials to and from their site. A site layout plan is provided at Appendix B.
- 2.5 The bio-methane injection facility is temporarily closed whilst their existing customer carries out upgrades to the plant. Operations are expected to recommence in April 2020 to coincide with planned deliveries from a new customer. The existing customer is expected to recommence operations in Summer 2020. When operational, the facility currently receives an average of five HGV deliveries per day (Monday – Sunday). The majority of HGV drivers to / from the injection facility access the site via the Rusty Cutter roundabout to the east (via Bedhampton and Portsdown Hill).
- 2.6 When operational, in addition to HGV's, an average of fifteen visits (by car or van) per week are also undertaken by staff for either planned maintenance, ad-hoc maintenance / fault attendance and supervision. The bio-methane injection facility is the only facility on Farlington Redoubt that is operational on a Sunday. Photos of the injection facility are provided at Appendix C.
- 2.7 SGN have no restrictions on operating hours therefore the site could operate 24 hours per day, 365 days a year. The site provides five stanchions for unloading of the gas and can therefore accommodate five tankers at a time. The site can accommodate up to 20 deliveries per day, equalling a total of 140 deliveries per week.
- 2.8 Under permitted development regulations, it is considered that third party operators would not be permitted to transport and inject bio-methane in to the Portsdown Hill facility as they would not be considered to be statutory undertakers. SGN are applying for planning permission to formalise this position for third party operators.

Proposed Use

- 2.9 It is proposed to allow third party operators to undertake bio-methane injection into the gas network to enable the site to operate at full capacity with a total of 20 HGVs per day. Consequently, the site will be able to operate more efficiently. No changes are proposed to the site layout.
- 2.10 As stated above, when the injection facility is operational, an average of five HGV deliveries are currently made per day. The proposal could therefore increase the number of HGVs delivering to the injection facility by approximately 15 vehicles per day, equating to an additional 105 HGVs per week. The fifteen visits undertaken by staff on a weekly basis is not expected to increase.

3.0 Traffic Generation

Existing Traffic

- 3.1 In order to determine the peak hour and daily traffic levels at the access and along Portsdown Hill Road, two Automatic Traffic Counters (ATCs) were employed for a period of seven days. ATC 1 was placed at the gate on the site access road, whilst ATC 2 was installed on Portsdown Hill Road to the west of the site.
- 3.2 When operational, the gas injection facility currently receives an average of five deliveries per day, Monday to Sunday, equating to 35 deliveries per week. As the traffic surveys were undertaken whilst the injection facility was temporarily closed, an additional five HGVs have been added to the recorded traffic to form the existing daily traffic flow.
- 3.3 The existing flows at the site access and Portsdown Hill Road are summarised in Tables 1 and 2 respectively. Full ATC results are available at Appendix D.

Table 1 – Site Access – Existing Average Daily Traffic Flow

Direction	Total Vehicles	HGVs
Northbound (Inbound)	239	65
Southbound (Outbound)	238	66
Two-way Flow	477	132

Table 2 – Portsdown Hill Road – Existing Average Daily Traffic Flow

Direction	Total Vehicles	HGVs
Eastbound	5,318	424
Westbound	4,560	366
Two-way Flow	9,878	790

- 3.4 A total of 3,271 vehicle movements were recorded at the site access during the 7-day period, which comprises approximately 477 vehicle movements per day, of which 132 (27.6%) are classed as HGVs.
- 3.5 A total of 69,078 vehicle movements were recorded along Portsdown Hill Road during the 7-day period, equating to an average of 9,878 vehicle movements per day, of which 790 are classed as HGVs. 8.0% of the vehicles recorded travelling along Portsdown Hill Road are HGVs.

Proposed Additional Traffic

- 3.6 The proposal will create up to 15 additional HGVs travelling along Portsdown Hill Road daily in each direction, which will increase the percentage of HGVs by 0.3% on Portsdown Hill Road.
- 3.7 The 15 additional vehicles will also access and egress the site daily, increasing the percentage of HGVs travelling inbound and outbound on the access road by 4.3%.
- 3.8 SGN are able to operate 24 hours per day, 365 days a year and therefore this increase in traffic flow could be produced by SGN currently if they so wished.

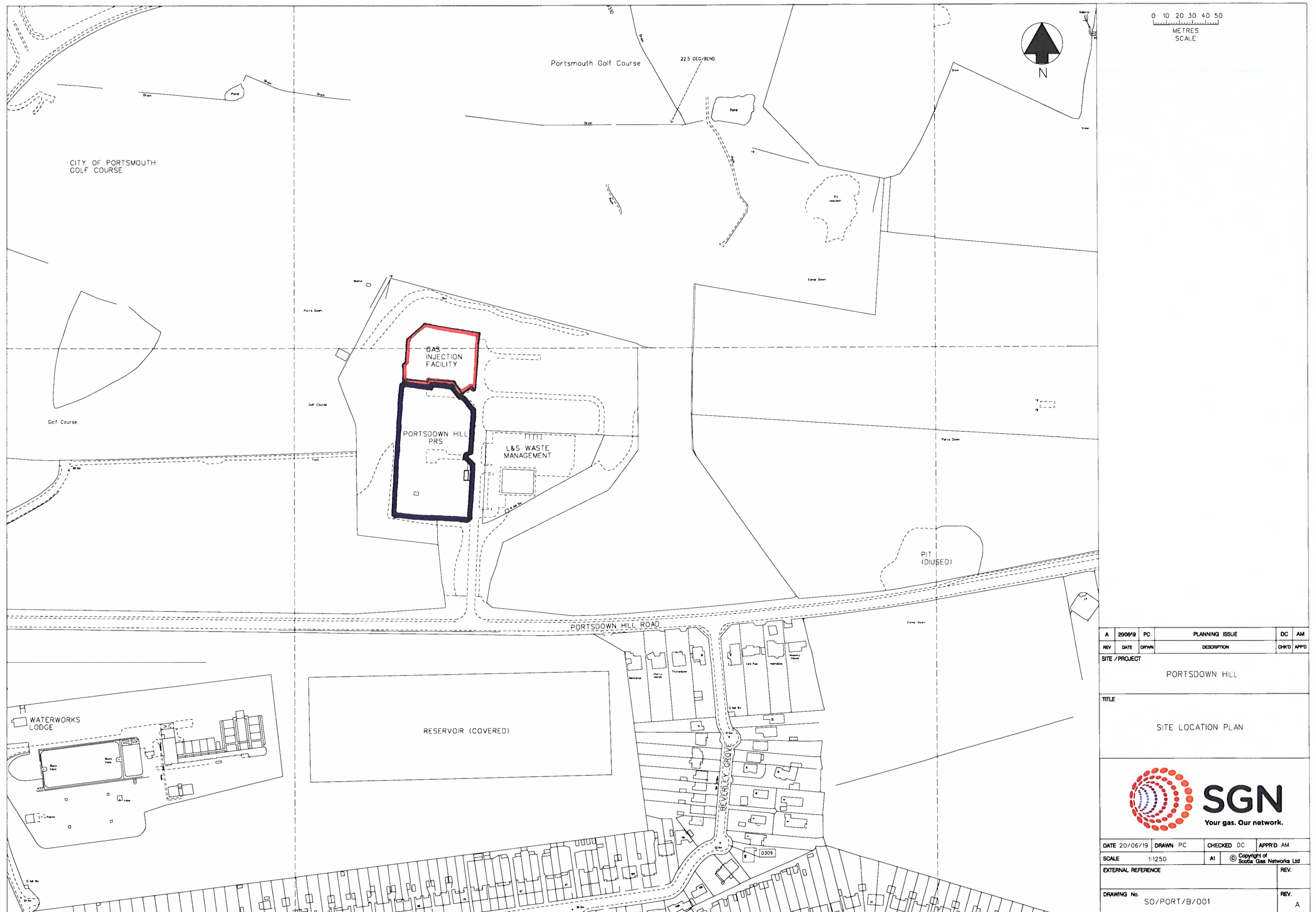
- 3.9 Furthermore, deliveries will be spread across the day and the site is located adjacent to the primary road network which avoids routing HGVs along rural roads.
- 3.10 Consequently, the proposal is considered unlikely to give rise to any material impact on the local highway network and therefore the Local Highway Authority should be able to recommend approval of the planning application.

4.0 Summary

- 4.1 This Transport Statement has been prepared by Glanville Consultants on behalf of Southern Gas Networks (SGN), to accompany a planning application which seeks planning permission for third party operators to inject bio-methane into the gas network, at the Portsdown Hill bio-methane facility at Farlington Redoubt near Havant.
- 4.2 A single private road acts as an access from Portsdown Hill Road (B2177) for both facilities. A mix of vehicles use this access.
- 4.3 The western half of the site has been in use as a Pressure Reduction Station (PRS) since the 1970s, with the northwest corner in use as a bio-methane injection facility since 2014. The injection facility could accommodate up to 20 HGV deliveries per day, a total of 140 deliveries per week. When operational, the facility currently receives an average of five HGV deliveries per day (Monday – Sunday). However, SGN are able to operate 24 hours per day, 365 days per year.
- 4.4 Under permitted development regulations, it is considered that third party operators would not be permitted to transport and inject bio-methane in to the Portsdown Hill facility as they would not be considered to be statutory undertakers. SGN are applying for planning permission to formalise this position for third party operators to enable the site to work at full capacity.
- 4.5 Automatic Traffic Counters (ATCs) were installed at the site access and on Portsdown Hill Road for a period of seven days. The data collected illustrated that an average of 790 HGVs travelled along Portsdown Hill Road per day equating to 8.0% of the total vehicle flow. An average of 132 HGVs were recorded along the site access road daily which equates to 27.6% of the total vehicle flow.
- 4.6 The proposal could increase the percentage of HGVs travelling along Portsdown Hill Road by 0.3% and the percentage of HGVs travelling through the site access by 4.3%. This increase in traffic flow is marginal and could be delivered by SGN without the need for a planning application. Furthermore, deliveries will be spread across the day and the site is located adjacent to the primary road network which avoids routing HGVs along rural roads.
- 4.7 Considering the evidence presented in this report, it is deemed that the proposals would not have a detrimental impact on highway safety and the transport impacts cannot be regarded as severe. Therefore, the proposal is in accordance with the National Planning Policy Framework (February 2019), which is in favour of sustainable development and advises that *‘Development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’*.

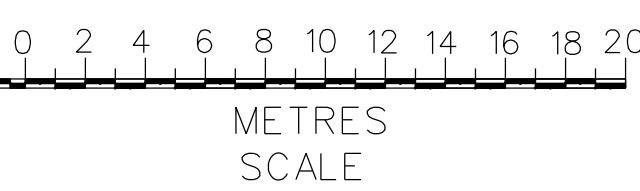
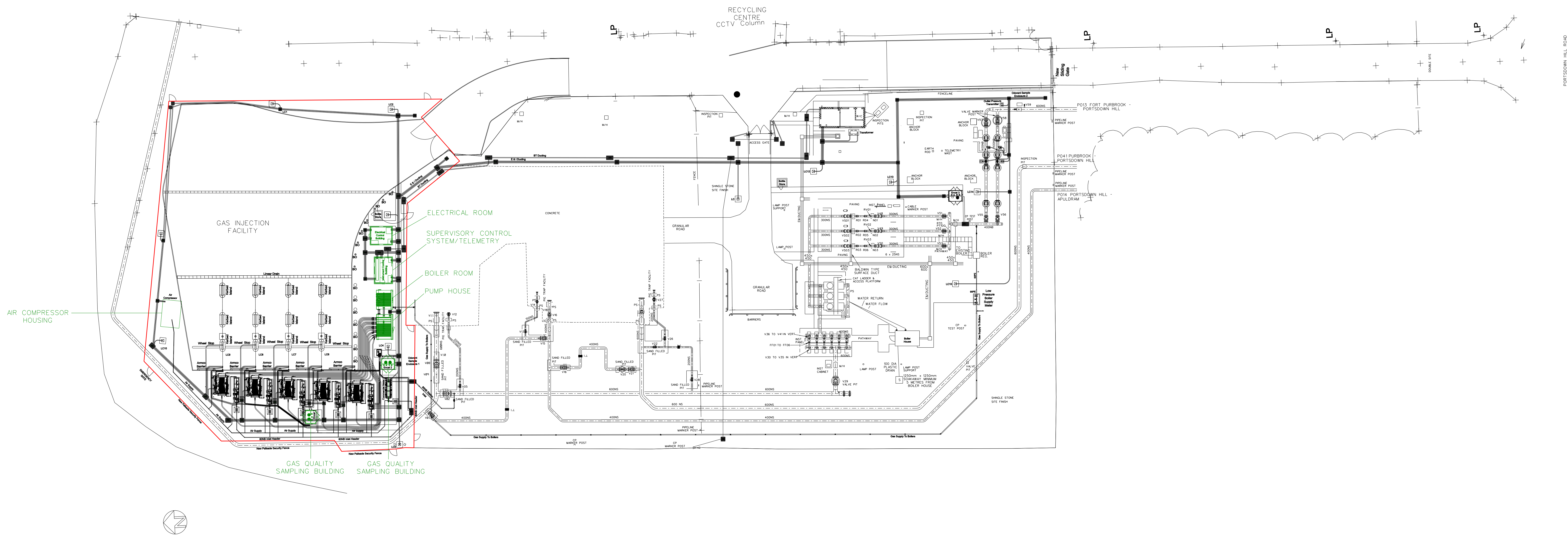
Appendices

Appendix A
Site Location Plan



Appendix B

Site Layout



20/06/19	PC	PLANNING ISSUE	DC	AM
REV	DATE	DRAWN	DESCRIPTION	CHKD APPD
SITE / PROJECT				
TITLE				
SITE LAYOUT				
				
DATE	20/06/19	DRAWN	PC	CHECKED DC APPRD AM
SCALE	1:250	A0	© Copyright of SGN Gas Networks Ltd	
EXTERNAL REFERENCE				REV.
DRAWING No. SO/PORT/B/002				REV. A

Appendix C

Site Photos





Appendix D

ATC Data

Havant ATC - Site Access

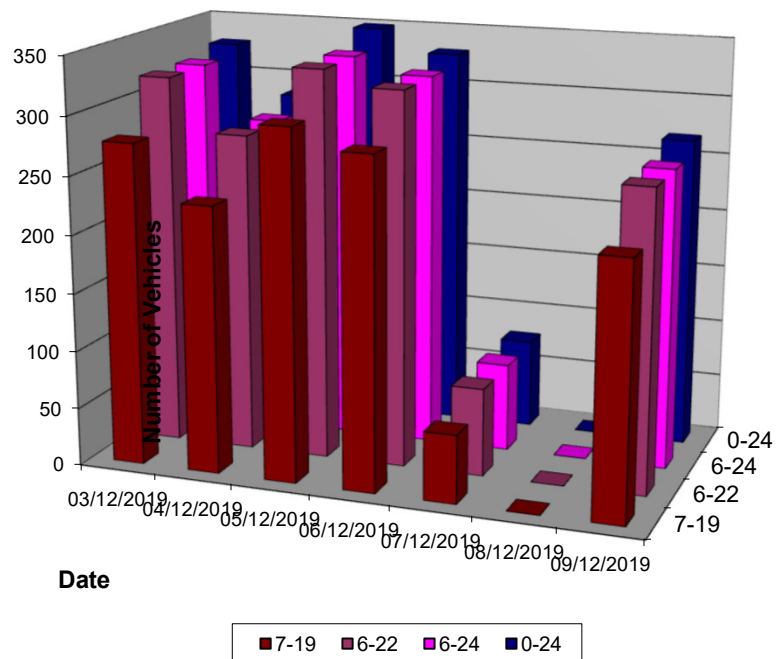
Channel 1 - Inbound

Vehicle Flow

Week 1

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday	5 Day Ave	7 Day Ave
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	2	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	8	10	12	8	1	0	10	10	7
7	43	44	35	39	17	0	40	40	31
8	42	28	25	31	15	0	17	29	23
9	29	32	27	27	15	0	17	26	21
10	29	27	43	25	5	0	22	29	22
11	38	32	34	38	10	0	18	32	24
12	19	18	31	30	8	0	27	25	19
13	16	12	18	18	4	0	15	16	12
14	26	21	30	25	2	0	26	26	19
15	18	16	28	36	0	0	22	24	17
16	27	17	38	26	0	0	26	27	19
17	24	20	20	22	0	0	22	22	15
18	9	5	5	3	0	0	5	5	4
19	0	2	1	2	0	0	1	1	1
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
7-19	277	230	300	283	59	0	218	262	195
6-22	320	275	335	322	76	0	258	302	227
6-24	320	275	335	322	76	0	258	302	227
0-24	328	285	349	330	77	0	268	312	234

Vehicle Flow (Channel 1)



Havant ATC - Site Access

Channel 1 - Inbound

Average Speed

Week 1

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	8.0	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	11.8	11.0	12.2	11.8	8.0	-	12.5
7	11.7	12.0	12.3	12.6	11.2	-	12.0
8	10.1	10.3	10.4	10.7	9.7	-	10.4
9	9.2	9.6	8.9	9.7	10.3	-	10.1
10	9.4	9.1	9.5	9.2	9.0	-	10.3
11	8.8	8.9	9.8	9.2	13.0	-	9.1
12	8.8	9.4	10.9	9.5	9.9	-	9.5
13	10.2	11.3	11.3	10.2	9.2	-	9.3
14	9.9	10.4	9.7	11.4	13.0	-	9.5
15	9.4	10.2	9.8	9.4	-	-	9.6
16	9.1	8.6	9.2	10.3	-	-	9.2
17	8.8	9.0	9.5	9.6	-	-	8.7
18	9.1	10.0	13.0	9.7	-	-	10.0
19	-	8.0	8.0	8.0	-	-	13.0
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	13.0	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-
10-12	8.8	9.1	10.3	9.3	11.6	-	9.3
14-16	9.2	9.4	9.4	9.8	-	-	9.4
0-24	9.7	10.0	10.2	10.2	10.6	-	10.0

Average 10.1

Channel 1 - Inbound

85th Percentile

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	8.9	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	18.7	13.9	13.2	13.3	-	-	13.6
7	13.5	13.1	13.7	13.9	13.9	-	13.7
8	13.6	13.9	14.0	14.0	13.3	-	13.9
9	13.3	13.4	13.2	13.4	13.8	-	13.8
10	13.3	13.5	13.5	13.3	13.4	-	13.0
11	13.8	13.8	13.1	13.2	13.3	-	13.5
12	13.0	13.1	14.0	13.2	13.9	-	13.9
13	13.8	13.6	13.7	13.6	13.6	-	13.4
14	13.8	13.5	13.0	13.4	13.6	-	13.7
15	13.7	13.3	13.6	13.4	-	-	13.5
16	13.0	8.6	13.1	13.7	-	-	13.5
17	13.4	13.6	13.1	13.3	-	-	8.8
18	13.9	13.3	18.8	13.6	-	-	13.4
19	-	8.3	-	8.2	-	-	-
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-
10-12	13.8	13.8	13.0	13.2	13.4	-	13.3
14-16	13.4	13.6	13.3	13.6	-	-	13.1
0-24	14.0	14.0	13.4	13.1	13.1	-	13.2

85th %ile 13.5

Havant ATC - Site Access

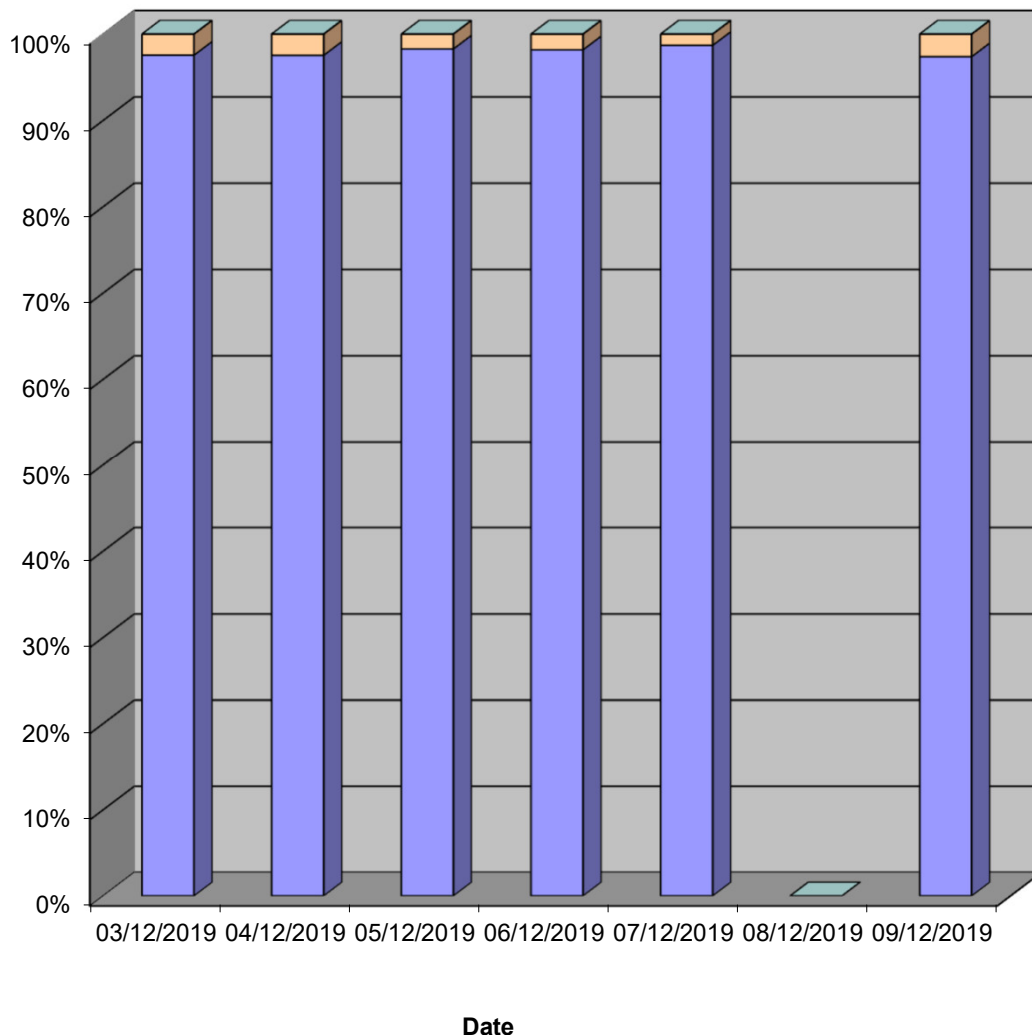
Channel 1 - Inbound

Speed Summary

Week 1

Speed (MPH)	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
0-15	320	278	343	324	76	0	261
16-30	8	7	6	6	1	0	7
31-45	0	0	0	0	0	0	0
46-	0	0	0	0	0	0	0
TOTAL	328	285	349	330	77	0	268

Speed Summary (MPH)



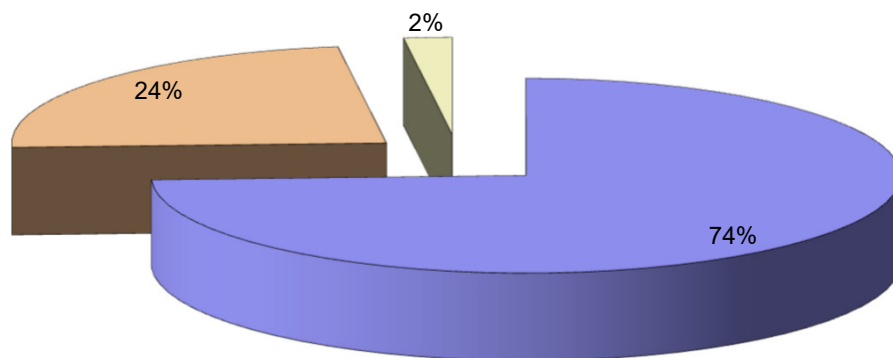
Date

0-15 16-30 31-45 46-

Havant ATC - Site Access

Channel 1 - Inbound		Vehicle Class		Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
03/12/2019				
7-19	189	83	5	277
6-22	230	85	5	320
6-24	230	85	5	320
0-24	238	85	5	328
04/12/2019				
7-19	155	69	6	230
6-22	198	71	6	275
6-24	198	71	6	275
0-24	208	71	6	285
05/12/2019				
7-19	222	72	6	300
6-22	257	72	6	335
6-24	257	72	6	335
0-24	271	72	6	349
06/12/2019				
7-19	204	68	11	283
6-22	241	70	11	322
6-24	241	70	11	322
0-24	249	70	11	330
07/12/2019				
7-19	41	18	0	59
6-22	58	18	0	76
6-24	58	18	0	76
0-24	59	18	0	77
08/12/2019				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0
09/12/2019				
7-19	141	71	6	218
6-22	181	71	6	258
6-24	181	71	6	258
0-24	191	71	6	268
Average				
7-19	136	54	5	195
6-22	166	55	5	227
6-24	166	55	5	227
0-24	174	55	5	234

Total Vehicle Class Distribution



Havant ATC - Site Access

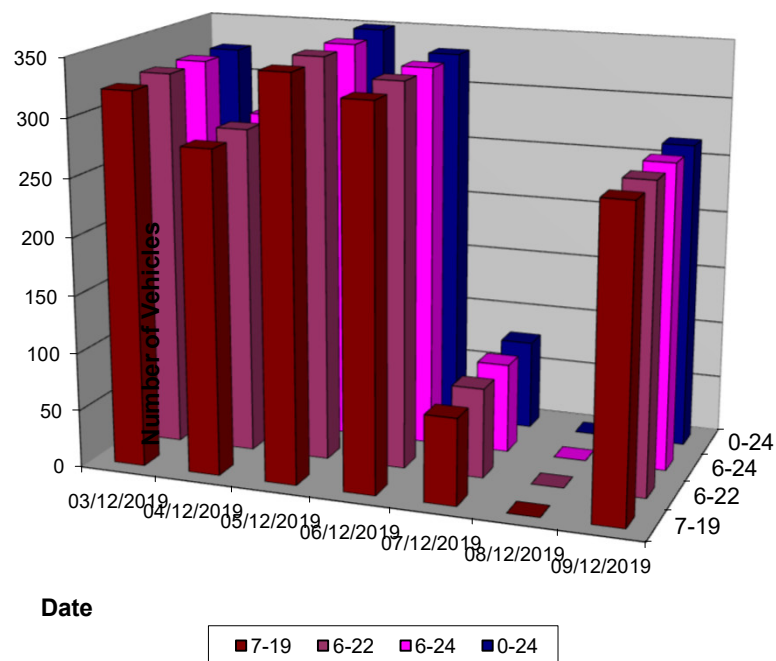
Channel 2 - Outbound

Vehicle Flow

Week 1

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday	5 Day Ave	7 Day Ave
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	1	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	1	2	1	0	0	1	1	1
7	3	3	2	4	3	0	1	3	2
8	46	25	31	32	20	0	26	32	26
9	23	25	23	37	14	0	19	25	20
10	26	26	27	26	7	0	20	25	19
11	31	32	44	32	9	0	20	32	24
12	27	19	32	31	10	0	20	26	20
13	18	23	25	23	15	0	12	20	17
14	28	20	33	29	0	0	28	28	20
15	27	30	33	33	0	0	31	31	22
16	23	25	38	32	0	0	25	29	20
17	32	24	29	24	0	0	37	29	21
18	40	25	27	26	0	0	22	28	20
19	1	5	3	2	0	0	4	3	2
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
7-19	322	279	345	327	75	0	264	307	230
6-22	325	282	347	331	78	0	265	310	233
6-24	325	282	347	331	78	0	265	310	233
0-24	325	283	350	332	78	0	266	311	233

Vehicle Flow (Channel 2)



Havant ATC - Site Access

Channel 2 - Outbound

Average Speed

Week 1

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	8.0	-	-	-	-
5	-	-	-	-	-	-	-
6	-	13.0	10.5	13.0	-	-	13.0
7	8.0	9.7	13.0	8.0	9.7	-	8.0
8	8.8	8.4	8.5	8.5	8.2	-	8.4
9	9.3	8.6	8.9	10.4	10.9	-	8.5
10	10.7	10.3	8.9	10.9	10.1	-	9.2
11	10.1	9.7	9.9	8.5	11.9	-	11.0
12	10.4	9.8	10.2	8.6	9.0	-	10.0
13	10.8	11.0	10.8	8.7	12.0	-	11.8
14	9.8	12.2	10.7	10.1	-	-	9.1
15	10.6	11.2	11.0	9.5	-	-	10.1
16	10.0	10.2	9.2	9.9	-	-	9.8
17	10.7	10.5	10.9	11.1	-	-	10.3
18	11.0	10.2	11.5	10.1	-	-	10.3
19	8.0	9.0	11.3	10.5	-	-	10.5
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-
10-12	10.2	9.8	10.0	8.6	10.4	-	10.5
14-16	10.3	10.7	10.0	9.7	-	-	10.0
0-24	10.1	10.2	10.1	9.6	10.2	-	9.8

Average	10.0
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Channel 2 - Outbound

85th Percentile

Hr Ending	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	13.7	-	-	-	-
7	9.0	13.5	13.5	8.1	13.3	-	-
8	13.1	8.8	8.6	8.5	8.3	-	8.6
9	13.4	8.7	13.1	13.3	13.5	-	8.5
10	13.4	13.8	13.7	13.9	13.2	-	14.0
11	13.5	13.0	13.9	8.8	13.9	-	13.1
12	13.2	13.2	13.5	8.7	13.6	-	13.9
13	13.5	13.1	13.1	8.8	13.8	-	13.6
14	13.3	13.1	13.8	13.3	-	-	13.3
15	13.6	13.3	13.4	13.1	-	-	13.1
16	13.5	13.1	13.5	13.0	-	-	13.5
17	13.2	13.0	13.5	13.3	-	-	13.2
18	13.9	13.5	13.2	13.8	-	-	14.0
19	-	13.7	13.3	13.3	-	-	13.1
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-
10-12	13.5	13.5	13.1	8.6	13.9	-	13.0
14-16	13.4	13.8	13.6	13.5	-	-	13.3
0-24	13.1	13.1	13.2	13.3	13.3	-	13.5

85th %ile	13.3
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Havant ATC - Site Access

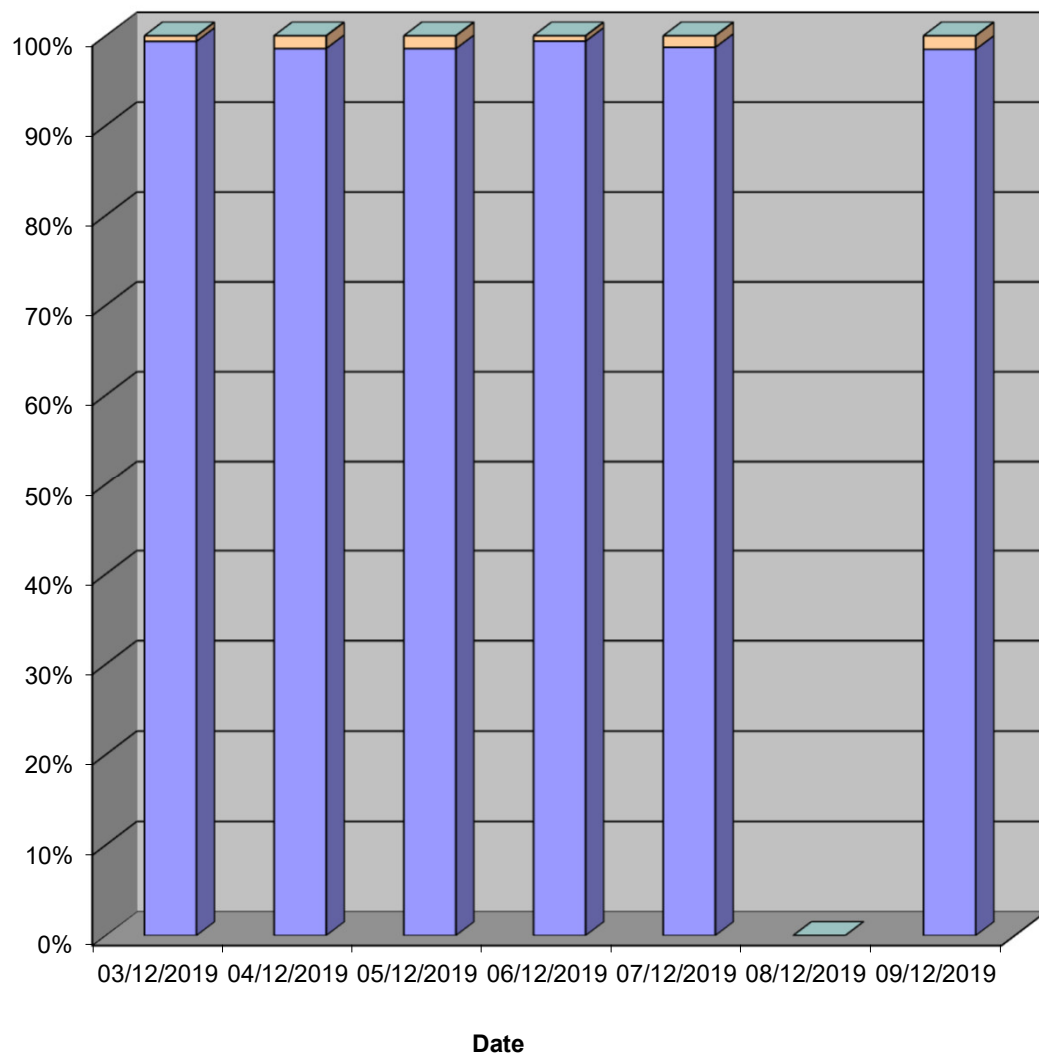
Channel 2 - Outbound

Speed Summary

Week 1

Speed (MPH)	03/12/2019 Tuesday	04/12/2019 Wednesday	05/12/2019 Thursday	06/12/2019 Friday	07/12/2019 Saturday	08/12/2019 Sunday	09/12/2019 Monday
0-15	323	279	345	330	77	0	262
16-30	2	4	5	2	1	0	4
31-45	0	0	0	0	0	0	0
46-	0	0	0	0	0	0	0
TOTAL	325	283	350	332	78	0	266

Speed Summary (MPH)



0-15

16-30

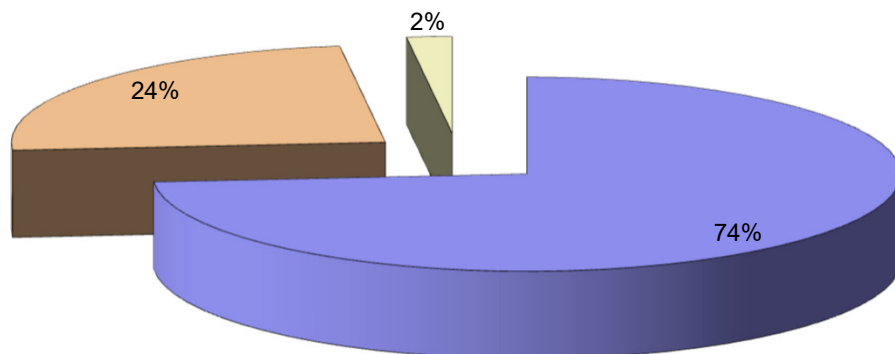
31-45

46-

Havant ATC - Site Access

Channel 2 - Outbound		Vehicle Class		Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
03/12/2019				
7-19	232	86	4	322
6-22	235	86	4	325
6-24	235	86	4	325
0-24	235	86	4	325
04/12/2019				
7-19	200	73	6	279
6-22	203	73	6	282
6-24	203	73	6	282
0-24	204	73	6	283
05/12/2019				
7-19	260	79	6	345
6-22	262	79	6	347
6-24	262	79	6	347
0-24	265	79	6	350
06/12/2019				
7-19	249	68	10	327
6-22	252	69	10	331
6-24	252	69	10	331
0-24	253	69	10	332
07/12/2019				
7-19	57	18	0	75
6-22	60	18	0	78
6-24	60	18	0	78
0-24	60	18	0	78
08/12/2019				
7-19	0	0	0	0
6-22	0	0	0	0
6-24	0	0	0	0
0-24	0	0	0	0
09/12/2019				
7-19	185	73	6	264
6-22	186	73	6	265
6-24	186	73	6	265
0-24	187	73	6	266
Average				
7-19	169	57	5	230
6-22	171	57	5	233
6-24	171	57	5	233
0-24	172	57	5	233

Total Vehicle Class Distribution



B2177 Havant ATC

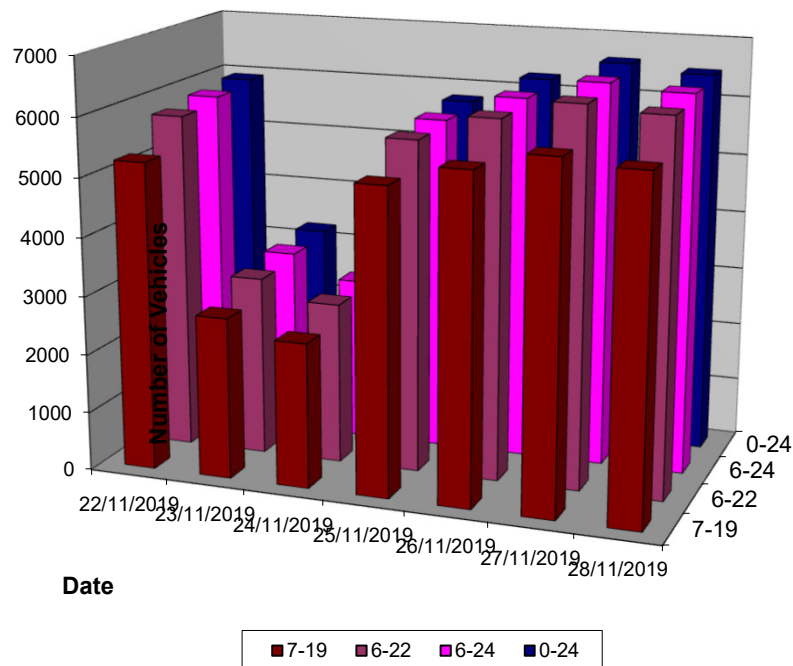
Channel 1 - Eastbound

Vehicle Flow

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday	5 Day Ave	7 Day Ave
1	11	24	27	11	16	21	7	13	17
2	9	22	25	7	6	8	8	8	12
3	5	4	7	5	3	6	2	4	5
4	5	5	9	3	6	10	9	7	7
5	12	7	8	10	9	10	15	11	10
6	37	18	9	39	48	42	34	40	32
7	133	37	22	143	138	147	148	142	110
8	607	102	78	650	660	802	635	671	505
9	719	151	90	759	828	934	780	804	609
10	379	193	148	386	411	447	445	414	344
11	315	272	194	291	321	300	331	312	289
12	328	270	243	289	300	306	321	309	294
13	327	305	329	279	307	330	336	316	316
14	353	292	338	323	303	354	336	334	328
15	400	298	279	366	374	364	382	377	352
16	513	236	265	384	437	418	482	447	391
17	581	259	231	629	628	608	646	618	512
18	446	230	166	558	610	652	656	584	474
19	276	148	113	269	355	322	380	320	266
20	179	118	119	141	181	202	200	181	163
21	116	85	88	87	126	113	143	117	108
22	82	74	49	87	98	101	89	91	83
23	62	54	26	51	73	77	65	66	58
24	36	47	11	20	18	28	40	28	29
7-19	5244	2756	2474	5183	5534	5837	5730	5506	4680
6-22	5754	3070	2752	5641	6077	6400	6310	6036	5143
6-24	5852	3171	2789	5712	6168	6505	6415	6130	5230
0-24	5931	3251	2874	5787	6256	6602	6490	6213	5313

Vehicle Flow (Channel 1)



B2177 Havant ATC

Channel 1 - Eastbound

Average Speed

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	45.7	44.9	39.9	41.2	43.6	44.9	44.4
2	40.8	42.4	40.1	42.3	36.3	45.2	44.6
3	45.0	45.5	44.8	41.0	48.8	44.7	45.5
4	36.0	51.5	39.7	39.7	38.4	47.2	46.1
5	42.4	38.0	39.6	43.2	40.5	43.2	41.5
6	41.2	44.2	39.7	42.2	42.3	42.0	42.4
7	39.6	42.2	40.5	40.0	39.6	39.1	40.2
8	35.6	40.7	39.6	34.3	33.5	31.9	34.1
9	35.7	38.3	40.2	35.5	34.2	26.8	32.1
10	37.4	37.6	38.7	35.9	35.8	34.9	34.8
11	36.1	38.3	39.5	36.9	35.5	35.8	36.4
12	36.5	37.9	38.5	34.9	35.4	35.9	35.5
13	37.9	38.3	38.1	36.0	36.2	37.4	37.5
14	36.7	38.4	38.3	36.5	36.7	36.6	36.9
15	37.0	38.3	38.7	35.9	33.8	36.1	36.3
16	36.4	38.3	38.9	36.4	35.4	37.3	36.6
17	36.4	37.1	38.2	35.9	36.0	35.6	35.7
18	37.6	39.2	38.8	35.9	35.9	35.7	35.7
19	38.5	40.2	38.8	38.5	37.8	38.2	37.4
20	39.9	40.0	39.3	40.0	39.1	38.8	38.6
21	40.2	40.4	39.4	39.2	40.6	40.0	39.4
22	41.4	39.8	43.1	40.6	39.6	40.3	40.8
23	42.2	39.3	39.6	41.7	40.3	39.6	41.2
24	41.3	38.6	40.3	41.9	37.3	40.3	40.9

10-12	36.3	38.1	38.9	35.9	35.5	35.8	36.0
14-16	36.7	38.3	38.8	36.1	34.7	36.8	36.4
0-24	37.1	38.7	38.9	36.3	35.9	34.8	35.9

Average

36.8

Channel 1 - Eastbound

85th Percentile

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	66.2	58.6	44.0	48.7	53.9	53.7	58.2
2	43.5	48.3	48.4	43.9	48.7	48.9	53.5
3	53.6	58.3	58.3	43.8	66.0	53.5	53.3
4	53.3	66.3	58.2	43.0	53.4	58.1	58.3
5	53.3	38.8	48.2	48.5	53.1	48.8	48.0
6	48.8	53.6	43.6	48.9	48.8	53.4	48.5
7	43.0	49.0	48.4	48.4	48.5	43.5	43.2
8	43.8	53.9	48.4	38.7	38.8	38.5	38.9
9	38.8	43.2	48.7	38.5	38.6	38.2	38.6
10	43.7	43.7	43.3	38.5	43.8	38.3	43.8
11	43.0	44.0	43.6	43.5	38.0	43.1	38.9
12	43.4	43.2	43.2	38.4	38.2	43.6	38.3
13	43.9	43.5	43.2	43.4	43.1	43.2	43.5
14	43.8	43.1	43.6	38.3	43.1	43.9	43.1
15	43.4	44.0	43.1	38.1	38.3	43.1	43.6
16	44.0	43.7	43.5	43.2	38.1	43.4	43.4
17	38.9	43.0	43.9	39.0	38.0	38.3	39.0
18	43.1	43.6	43.3	43.1	38.5	38.9	38.1
19	43.9	43.1	43.8	43.4	43.7	43.8	43.9
20	48.4	48.1	43.4	48.4	43.5	43.3	43.6
21	48.5	48.8	43.3	43.5	48.8	48.7	43.3
22	48.8	48.3	53.9	48.2	43.1	48.3	48.1
23	48.1	43.0	43.6	53.5	48.2	48.1	48.5
24	48.6	43.3	43.6	48.3	43.7	48.0	48.2

10-12	43.5	43.4	43.4	43.6	38.5	43.3	39.0
14-16	43.3	43.3	43.1	38.5	38.4	43.8	43.1
0-24	43.6	43.9	43.6	43.2	43.1	43.3	43.0

85th %ile

43.4

B2177 Havant ATC

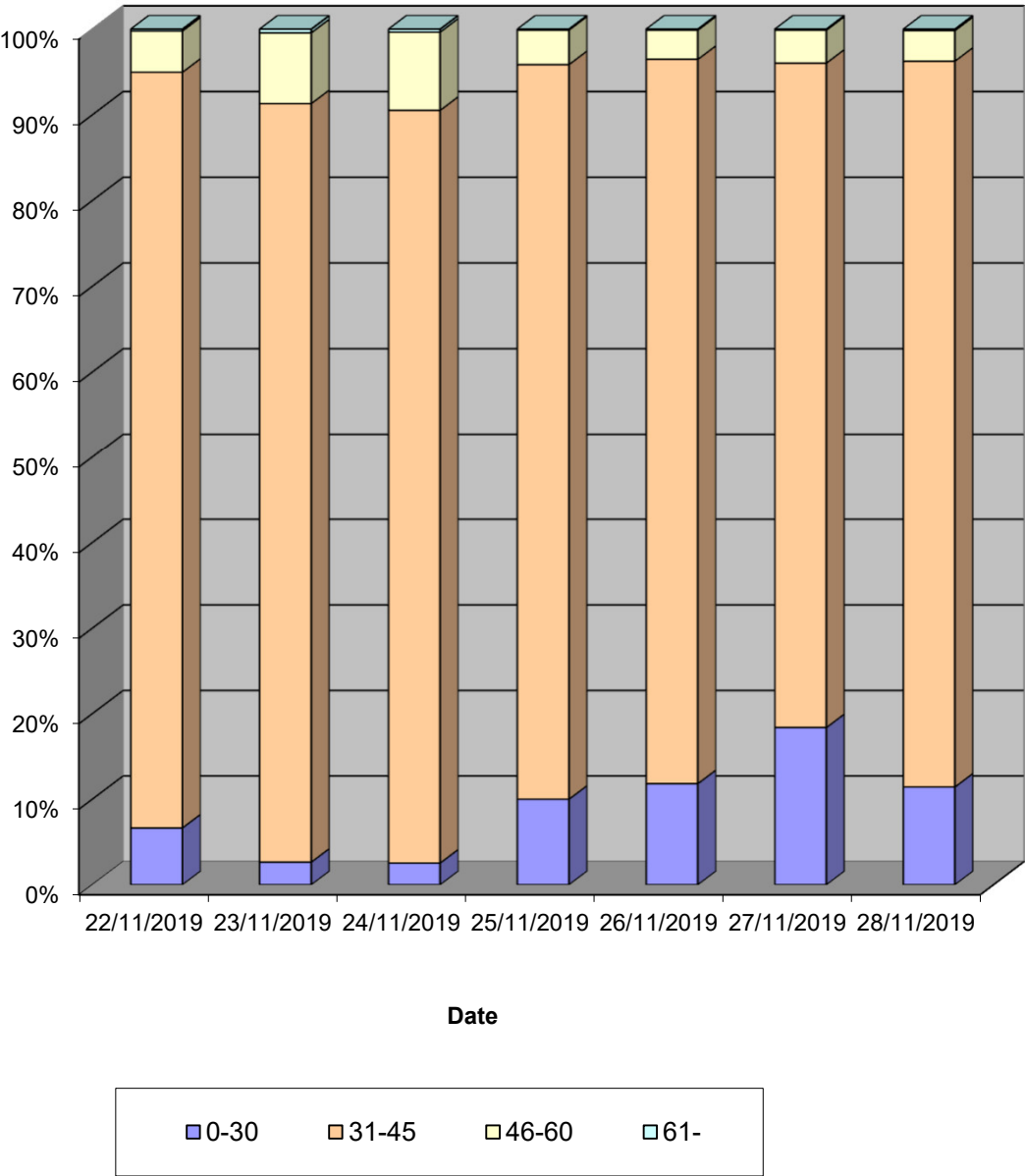
Channel 1 - Eastbound

Speed Summary

Week 1

Speed (MPH)	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
0-30	394	86	73	579	740	1214	742
31-45	5239	2883	2529	4969	5296	5127	5506
46-60	285	268	262	233	213	253	231
61-	13	14	10	6	7	8	11
TOTAL	5931	3251	2874	5787	6256	6602	6490

Speed Summary (MPH)



B2177 Havant ATC

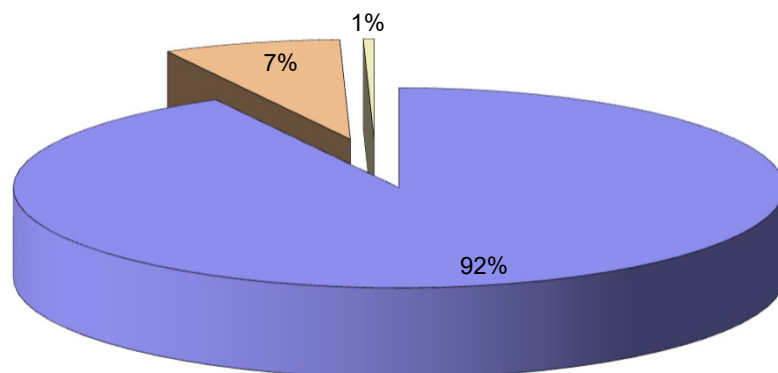
Channel 1 - Eastbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/11/2019				
7-19	4782	441	21	5244
6-22	5265	467	22	5754
6-24	5359	471	22	5852
0-24	5427	482	22	5931
23/11/2019				
7-19	2618	133	5	2756
6-22	2921	144	5	3070
6-24	3019	147	5	3171
0-24	3091	155	5	3251
24/11/2019				
7-19	2357	113	4	2474
6-22	2623	124	5	2752
6-24	2658	126	5	2789
0-24	2738	131	5	2874
25/11/2019				
7-19	4751	408	24	5183
6-22	5186	430	25	5641
6-24	5252	435	25	5712
0-24	5318	444	25	5787
26/11/2019				
7-19	5054	444	36	5534
6-22	5570	471	36	6077
6-24	5659	473	36	6168
0-24	5737	483	36	6256
27/11/2019				
7-19	5325	469	43	5837
6-22	5854	503	43	6400
6-24	5951	511	43	6505
0-24	6033	526	43	6602
28/11/2019				
7-19	5202	500	28	5730
6-22	5752	529	29	6310
6-24	5852	534	29	6415
0-24	5915	546	29	6490
Average				
7-19	4298	358	23	4680
6-22	4739	381	24	5143
6-24	4821	385	24	5230
0-24	4894	395	24	5313

Total Vehicle Class Distribution



B2177 Havant ATC

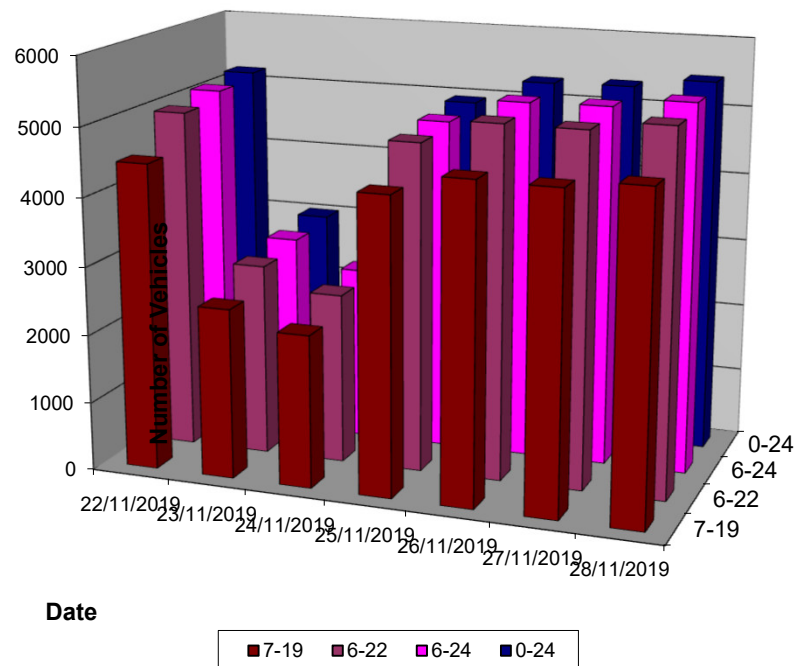
Channel 2 - Westbound

Vehicle Flow

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday	5 Day Ave	7 Day Ave
1	13	30	37	11	12	16	16	14	19
2	7	9	22	7	8	7	11	8	10
3	7	10	12	3	4	6	3	5	6
4	8	5	14	2	6	4	2	4	6
5	8	5	4	9	11	9	9	9	8
6	43	25	7	40	40	43	49	43	35
7	143	41	20	133	166	136	156	147	114
8	329	79	33	323	347	353	362	343	261
9	438	134	80	497	474	481	539	486	378
10	307	217	150	330	370	334	321	332	290
11	280	224	217	276	274	271	264	273	258
12	284	256	230	293	247	291	321	287	275
13	371	285	288	243	327	306	303	310	303
14	348	251	265	297	280	284	328	307	293
15	398	268	244	311	368	357	369	361	331
16	452	259	246	416	445	442	471	445	390
17	552	196	213	531	563	582	618	569	465
18	467	190	150	516	600	564	565	542	436
19	248	129	116	281	318	328	243	284	238
20	140	108	103	158	163	179	166	161	145
21	122	96	78	119	104	112	137	119	110
22	100	79	58	70	92	113	105	96	88
23	79	64	42	54	59	76	63	66	62
24	44	53	16	24	28	34	42	34	34
7-19	4474	2488	2232	4314	4613	4593	4704	4540	3917
6-22	4979	2812	2491	4794	5138	5133	5268	5062	4374
6-24	5102	2929	2549	4872	5225	5243	5373	5163	4470
0-24	5188	3013	2645	4944	5306	5328	5463	5246	4555

Vehicle Flow (Channel 2)



B2177 Havant ATC

Channel 2 - Westbound

Average Speed

Week 1

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	41.3	40.7	40.8	43.0	40.3	44.4	42.1
2	43.0	44.4	39.8	42.3	39.9	39.4	49.1
3	45.1	44.5	40.5	39.7	38.0	42.2	46.3
4	44.2	46.0	43.4	38.0	46.3	44.2	43.0
5	45.5	49.5	44.2	45.2	45.5	46.6	47.7
6	43.6	40.6	43.0	43.2	45.4	43.1	42.6
7	39.6	39.8	40.6	39.1	39.2	39.6	39.2
8	38.7	40.7	39.5	36.6	36.9	36.0	37.5
9	36.9	39.4	39.4	34.8	35.9	35.5	36.4
10	35.5	38.6	39.7	37.1	36.4	35.5	36.6
11	37.1	37.8	40.5	37.2	35.9	37.1	37.6
12	37.9	38.3	39.4	35.5	37.5	37.3	34.4
13	37.1	38.1	38.7	38.4	37.1	37.6	36.7
14	36.6	38.9	38.7	36.0	36.3	37.1	37.2
15	36.3	39.4	39.0	36.5	35.3	37.0	36.6
16	35.4	38.5	38.9	35.7	35.6	35.6	35.9
17	34.5	38.1	38.7	35.7	34.9	35.4	35.1
18	36.5	38.8	38.0	36.9	35.5	36.4	36.0
19	38.0	40.5	39.7	38.5	38.0	37.9	38.4
20	39.8	40.3	40.3	39.6	39.1	39.1	39.4
21	38.8	40.6	41.3	38.4	39.9	40.6	40.6
22	41.3	39.0	43.3	39.8	40.4	41.2	40.1
23	39.4	40.9	40.6	41.7	41.3	42.6	41.0
24	39.4	41.0	45.0	43.6	41.5	45.2	43.5
10-12	37.5	38.1	39.9	36.4	36.6	37.2	35.9
14-16	35.8	39.0	39.0	36.1	35.5	36.2	36.2
0-24	37.0	39.1	39.5	36.9	36.7	37.0	37.0

Average

37.6

Channel 2 - Westbound

85th Percentile

Hr Ending	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
1	48.3	48.3	48.7	48.6	48.2	53.6	53.8
2	53.5	53.3	43.5	48.3	43.2	53.8	65.8
3	66.4	53.2	48.6	43.1	38.3	53.5	58.7
4	48.5	58.5	48.2	43.2	53.8	53.2	48.4
5	53.4	65.7	53.5	65.6	58.1	53.9	58.8
6	53.8	48.6	43.7	53.4	58.5	53.4	53.7
7	48.8	48.4	48.8	44.0	43.8	48.3	48.4
8	43.7	48.9	48.4	43.5	43.8	43.8	43.1
9	43.7	43.5	43.9	38.5	43.3	43.2	43.4
10	44.0	43.2	48.7	44.0	44.0	43.4	43.3
11	43.3	43.7	48.1	43.2	43.8	43.2	43.7
12	43.5	43.7	43.6	38.4	43.7	43.9	43.3
13	43.4	43.6	43.7	43.4	43.9	43.6	43.8
14	43.7	43.8	43.0	43.3	43.9	43.4	43.2
15	43.2	43.2	43.4	43.5	43.4	43.4	43.6
16	43.4	43.8	43.4	43.1	43.1	43.9	44.0
17	38.5	43.2	43.3	38.5	39.0	38.6	38.2
18	38.8	44.0	44.0	44.0	38.8	38.9	43.9
19	43.5	48.1	43.8	43.6	43.7	43.5	43.1
20	43.4	48.1	48.7	43.9	43.4	43.3	44.0
21	43.5	48.8	48.4	43.7	48.0	48.9	48.6
22	48.2	48.4	53.7	48.4	43.2	48.3	48.6
23	43.6	48.5	43.3	48.7	48.2	48.3	48.9
24	43.5	43.1	53.4	48.1	48.5	53.2	48.6
10-12	43.7	43.1	43.4	38.8	43.4	43.3	43.2
14-16	38.9	43.2	43.9	43.7	43.1	43.0	43.9
0-24	43.4	43.0	43.1	43.5	43.3	43.7	43.1

85th %ile

43.3

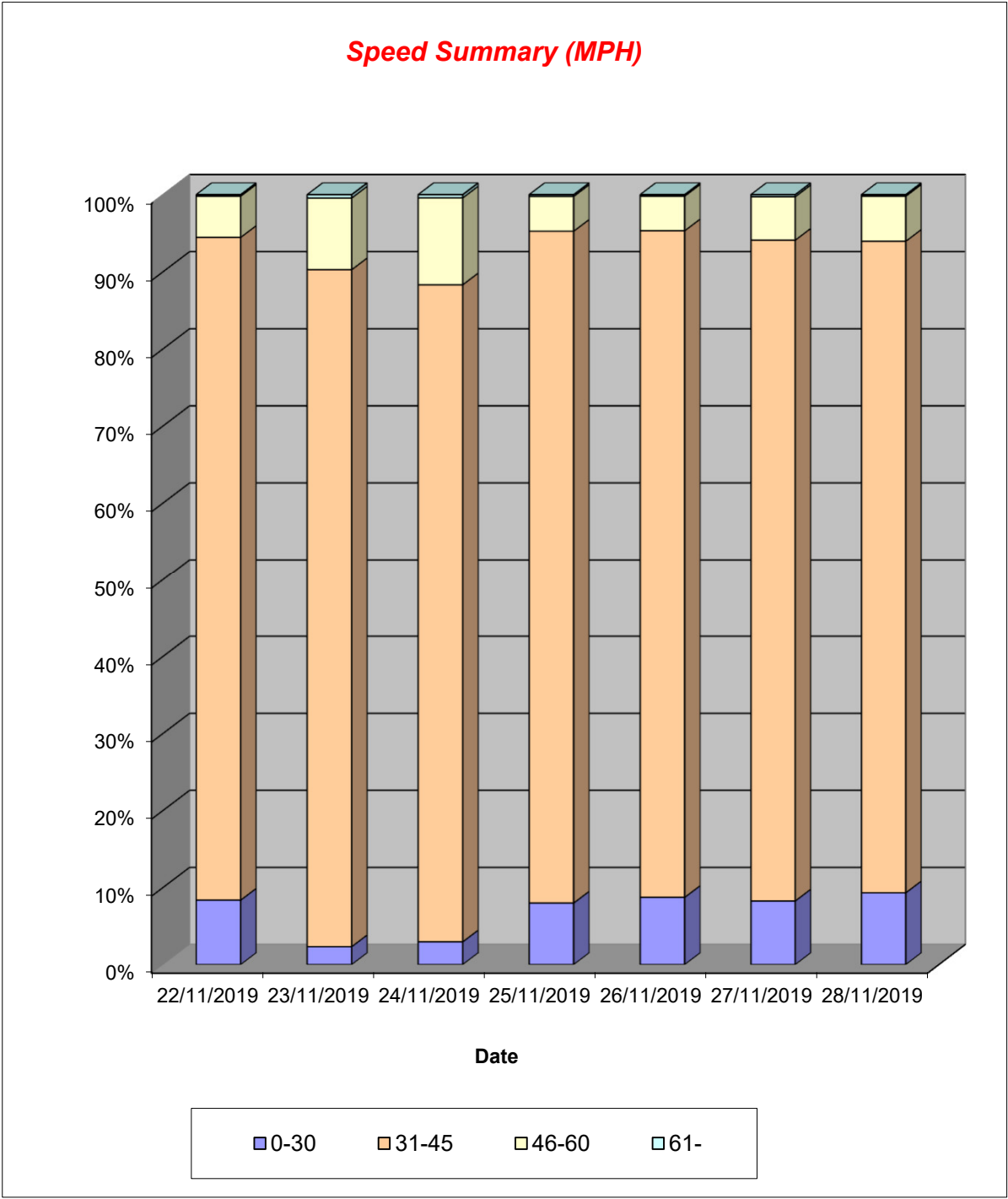
B2177 Havant ATC

Channel 2 - Westbound

Speed Summary

Week 1

Speed (MPH)	22/11/2019 Friday	23/11/2019 Saturday	24/11/2019 Sunday	25/11/2019 Monday	26/11/2019 Tuesday	27/11/2019 Wednesday	28/11/2019 Thursday
0-30	434	70	78	395	463	440	509
31-45	4467	2650	2258	4315	4595	4574	4624
46-60	277	280	298	223	238	300	319
61-	10	13	11	11	10	14	11
TOTAL	5188	3013	2645	4944	5306	5328	5463



B2177 Havant ATC

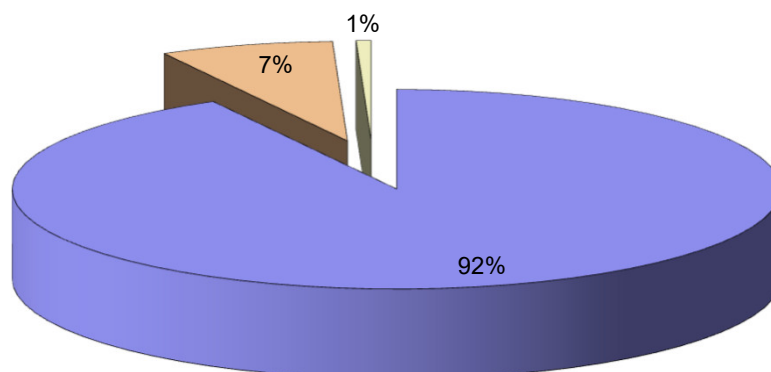
Channel 2 - Westbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
22/11/2019				
7-19	4051	389	34	4474
6-22	4531	412	36	4979
6-24	4651	415	36	5102
0-24	4727	425	36	5188
23/11/2019				
7-19	2353	130	5	2488
6-22	2666	141	5	2812
6-24	2775	149	5	2929
0-24	2848	160	5	3013
24/11/2019				
7-19	2132	97	3	2232
6-22	2384	104	3	2491
6-24	2440	106	3	2549
0-24	2531	111	3	2645
25/11/2019				
7-19	3939	338	37	4314
6-22	4388	369	37	4794
6-24	4462	373	37	4872
0-24	4526	381	37	4944
26/11/2019				
7-19	4224	346	43	4613
6-22	4725	370	43	5138
6-24	4810	372	43	5225
0-24	4873	389	44	5306
27/11/2019				
7-19	4182	374	37	4593
6-22	4699	396	38	5133
6-24	4803	402	38	5243
0-24	4878	412	38	5328
28/11/2019				
7-19	4266	403	35	4704
6-22	4796	436	36	5268
6-24	4899	438	36	5373
0-24	4976	451	36	5463
Average				
7-19	3592	297	28	3917
6-22	4027	318	28	4374
6-24	4120	322	28	4470
0-24	4194	333	28	4555

Total Vehicle Class Distribution





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- Structural Engineering
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