Forecast Junction Assessments

Thanet Local Plan Evidence Base

CO04300697/002 Revision 01

July 2018

Document Control Sheet

Project Name:	Thanet Local Plan Evidence Base
Project Number:	CO04300697
Report Title:	Forecast Junction Assessments
Report Number:	002

Issue Status/Amendment	**Prepared**	**Reviewed**	**Approved**
00 (Draft for Comment)	Name: Gareth Elphick Signature: Date: 16/07/2018	Name: Signature: Date:	Name: Signature: Date:
01	Name: Gareth Elphick Signature: Date: 18/07/2018	Name: Jeff Webb Signature: Date: 24/07/18	Name: Jeff Webb Signature: Date: 24/07/18
	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:
	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:

Contents

1 Introduction 1
1.1 Overview 1
2 A256/A254 Corridor - Forecast Traffic Conditions 5
2.1 Overview 5
2.2 Junction Capacity Assessments 7
3 A28 Corridor - Forecast Traffic Conditions 18
3.1 Overview 18
3.2 Junction Capacity Assessments 19
4 Additional Key Junctions 25
4.1 Overview 25
4.2 Junction Capacity Assessments 26
5 Summary and Conclusions 30

1 Introduction

1.1 Overview

1.1.1 Amey have been commissioned by Kent County Council (KCC) to undertake forecast junction capacity assessments at key junctions within the Thanet district local network, primarily on the A256/A254 and A28 corridors. It is intended to form part of the evidence base supporting the emerging Thanet Local Plan.

1.1.2 The purpose of the study is to provide a forecast indication of traffic conditions along the A28 and A256/A254 corridors with projected growth associated with the emerging Local Plan in 2031; with and without proposed interventions contained within the Transport Strategy for the district.

1.1.3 The development strategy for the Local Plan is largely housing led with employment land uses proposed to maintain the status quo in terms of the proportion of in/out commuting to/from the district.

1.1.4 The larger strategic allocation sites are mainly located around the existing road corridors of the A254/A256 and A28.

1.1.5 The core Transport Strategy interventions are highway only improvements consisting of a proposed 'inner circuit', comprising new and upgraded links, with the aims of providing more route choice options and relief to the existing A28 and A254/A256 corridors. An outline of the proposed 'inner circuit' proposals is shown alongside the principal Local Plan allocation sites in Figure 1-1.

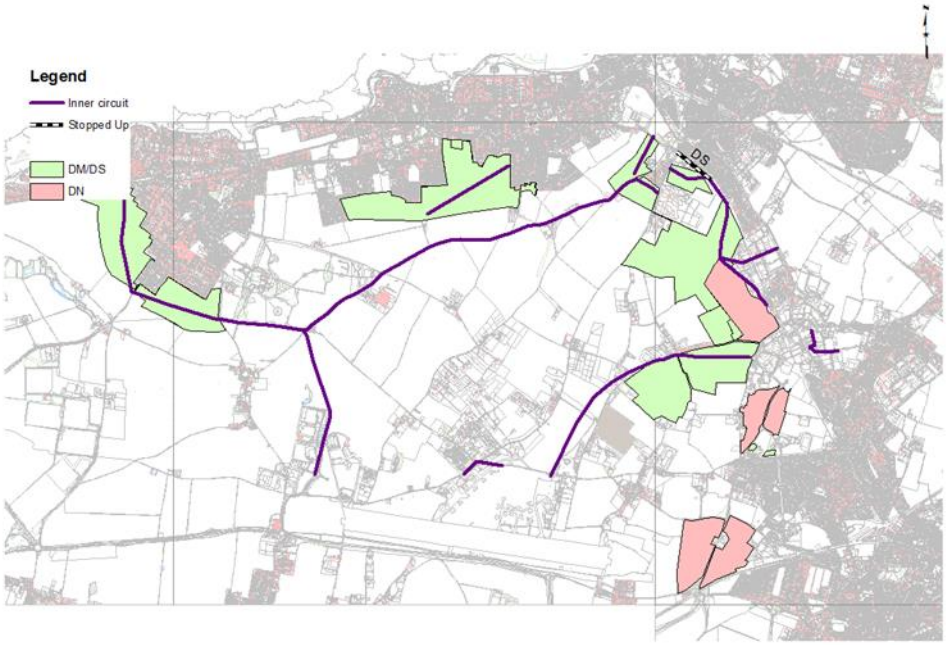

Figure 1-1: Proposed Transport Strategy Interventions

1.1.6 The junction assessments will be informed by forecast changes in traffic flow derived from a strategic SATURN traffic model, which has been developed by Amey on behalf of KCC and Thanet District Council (TDC). Please see associated LMVR and Forecasting Model Reports (ref: CO04300576_002~01 and CO04300697_001~01) for more detail regarding the strategic modelling assessment.

1.2 A256/A254 Study Corridor

1.2.1 The A256 is a key route in East Kent linking Thanet to Dover in the south. The road begins on the outskirts of Broadstairs and heads west through the Westwood (retail and employment area) joining the A254 from Margate (at Westwood roundabout).

1.2.2 The A256 Haine Road then continues south west on the western fringe of Newington towards the 'Lord of the Manor' (A256 Haine Road/ A299 Hengist Way/ A299 Canterbury Road East) junction. This junction provides access to Ramsgate to the east via the A255. At this point the A256 merges with the A299 Hengist Way, on the recently constructed East Kent Access dual carriageway, for less than two kilometres, before the A299 heads north and the A256 becomes Richborough Way and heads south towards Sandwich and on to Dover.

1.2.3 The A299 continues west meeting the A28 around 8km away, giving access to Canterbury in the south west and continuing on to become the Thanet Way towards the M2.

1.2.4 This study will focus on the A256 and A254 between the junctions of A299 Hengist Way/A256 Richborough Way (Sevenscore) Roundabout to Westwood Roundabout where the A256 meets the A254 which continues north to the 'Victoria Traffic Lights' (A254 Ramsgate Road/B2052 College Road) junction in Margate.

1.2.5 Figure 1-2 shows the A256/A254 study area:

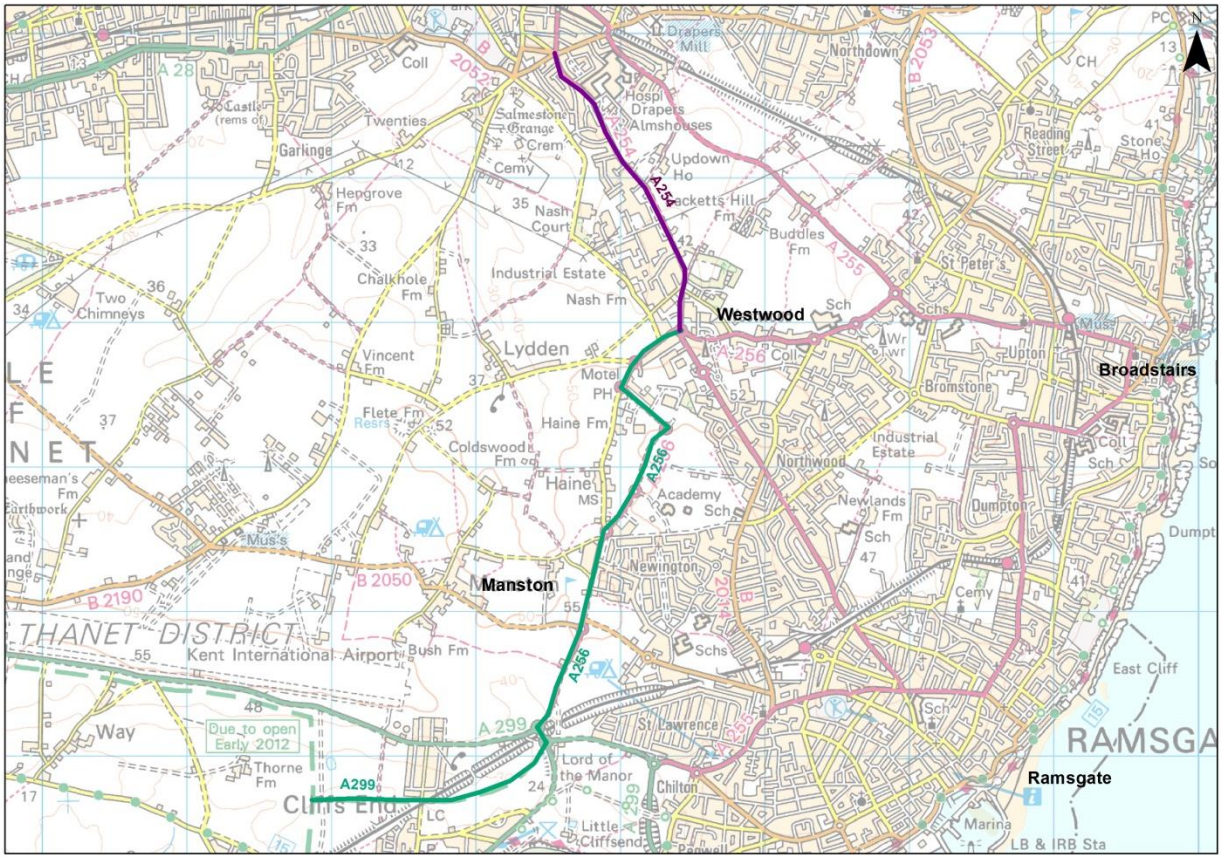

Figure 1-2: A256/A254 Corridor Study Area

1.3 A28 Study Corridor

1.3.1 The A28 links the seafront of Margate westwards to the A299 Thanet Way travelling through the villages of Birchington and Westgate-on-Sea. The road intersects with the A299 Thanet Way (M2-Ramsgate) before becoming a route across Kent via Canterbury and Ashford (including M20).

1.3.2 This study will focus on the corridor between A299 Thanet Way/A28 Canterbury Road roundabout to the A28 Marine Terrace/Marine Drive junction on the seafront at Margate.

1.3.3 The A28 provides the primary access to and from northern Thanet from other Kent towns to the west.

1.3.4 **Figure 1-3** shows the A28 study area.

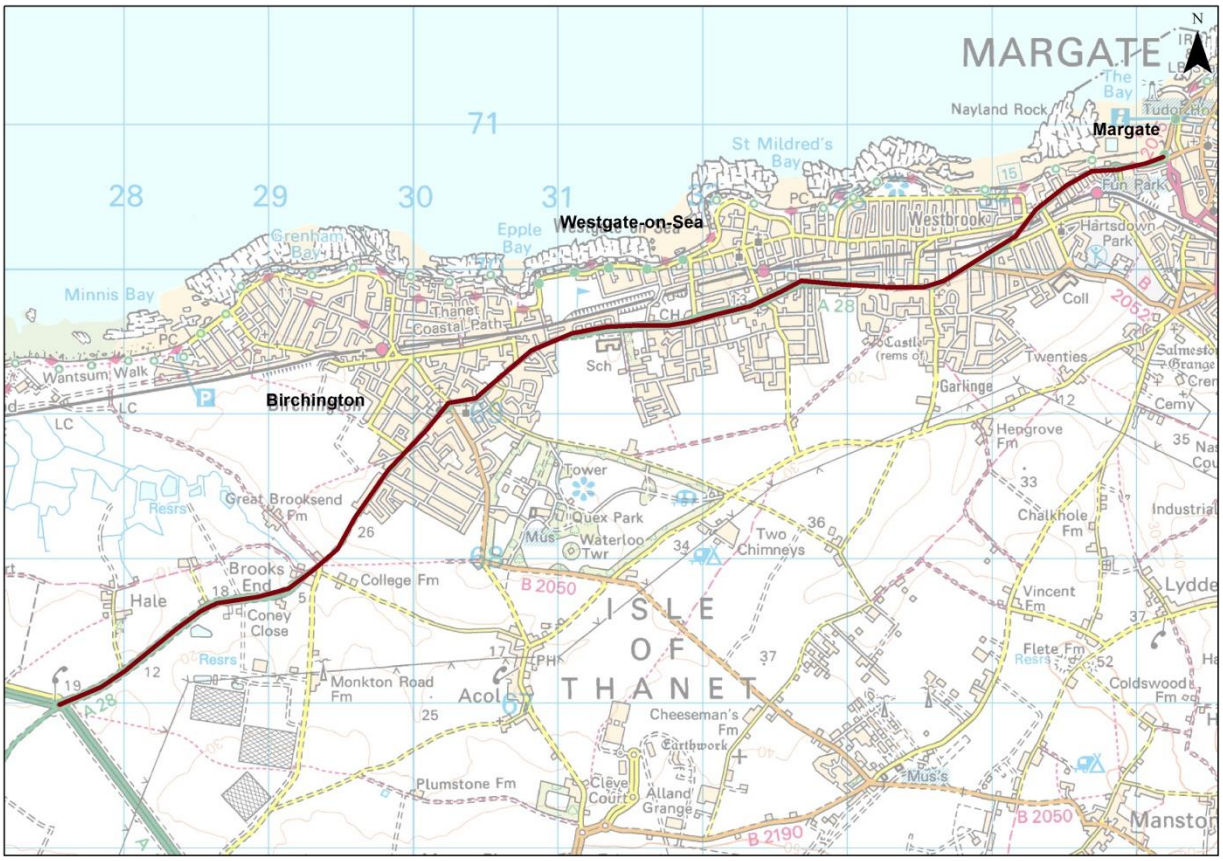

Figure 1-3: A28 Corridor Study Area

2 A256/A254 Corridor - Forecast Traffic Conditions

2.1 Overview

2.1.1 The junctions on this corridor to be assessed as part of this study are shown in Figure 2-1 and as follows:

1. A299 Hengist Way/A256 Richborough Way (Sevenscore);
2. A299 Hengist Way/Canterbury Road East / A256 Haine Road (Lord of the Manor);
3. A256 Haine Road/B2050 Manston Road (Staner Hill);
4. A256 Haine Road/St John's Ave;
5. A256 New Haine Road/Haine Road (near Spratling St);
6. A256 New Haine Road/New Cross Road;
7. A256 New Haine Road/Haine Road (Toby Carvery);
8. A256 Haine Road/Star Lane Link/Westwood Cross;
9. A256 Haine Road/A254 Margate Road (Westwood roundabout);
10. A254 Margate Road/Star Lane/Poorhole Lane (Star Roundabout);
11. A254 Ramsgate Road/B2052 College Road (Victoria Traffic Lights);

    Plus between junctions 10 and 11

12. A254 Ramsgate Road/Enterprise Road (signals); and
13. A254 Ramsgate Road/Queen Elizabeth Queen Mother Hospital (signals).

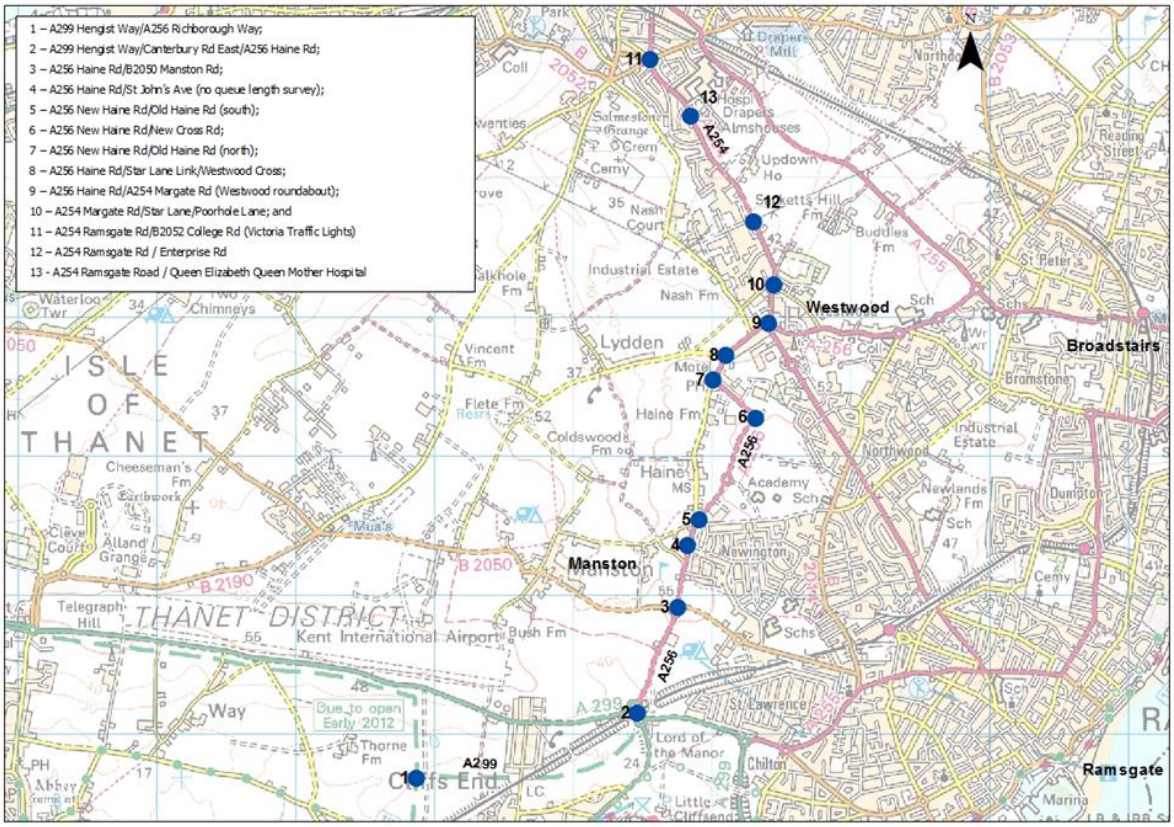

Figure 2-1: A256/A254 - Location of Assessed Junctions

2.1.2 The assessments will be undertaken to represent the weekday AM and PM peak periods for the forecast year 2031, which represents the end of the Local Plan period; for the following scenarios:

- Do Minimum (DM) – projected Local Plan development and committed transport schemes only; and
- Do Something (DS) - projected Local Plan development and proposed transport strategy schemes.

2.1.3 The forecast traffic flows will be derived from the strategic SATURN traffic model developed on behalf of KCC to test the traffic impacts of the Local Plan. The 2031 forecast turning flows for each of the above scenarios have been determined by applying the modelled uplift in flows to the observed 2016 or 2017 baseline turning movements. It should be noted that where the net forecast turning movement has resulted in a negative figure, due to significant reassignment and/or new infrastructure, a turning flow of 0 has been used.

2.1.4 It should be noted that there are forecasting flows that were not included in the strategic modelling. These specifically relate to the potential intensification in use of Ramsgate Port and the proposed Thanet Parkway Station. In addition, where certain minor arms are not included within the strategic model, i.e. Enterprise Rd, QEQM access and Westwood Cross access, an assumed uplift of 25% has been applied to base traffic flows on that arm.

2.1.5 The capacity assessments will be undertaken using industry standard software appropriate to the type of junction. These will be PICADY for priority junctions, ARCADY for roundabouts and LinSig for signalised junctions.

2.2 Junction Capacity Assessments

2.2.1 The junction capacity assessments are summarised below for each junction within the A256/A254 corridor in turn.

1. A299 Hengist Way / A256 Richborough Way (Sevenscore)

2.2.2 The A299 Hengist Way/A256 Richborough Way roundabout junction has been assessed using ARCADY. The assessment results are summarised in Table 2-1 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A299 Hengist Way (N)	0.41	1	0.20	-	0.43	+0.02	1	-	0.21	+0.01	-	-
A299 Hengist Way (E)	1.14	157	0.70	2	1.04	-0.10	59	-98	0.57	-0.13	1	-1
A256 Richborough Way	0.64	2	0.91	9	0.60	-0.04	2	-	0.83	-0.08	5	-4
Cottington Link Road	Minor arm excluded from reporting – but included in SATURN/Arcady											
Reserve Capacity	-17%		-26%		-8%		+9%		-16%		+10%	

Table 2-1: Sevenscore – Forecast Junction Assessment Summary

2.2.3 The assessment outputs indicate that the junction is predicted to operate over capacity in 2031 in the DM scenario. In particular, the A299 Hengist Way (E) approach in the AM peak.

2.2.4 In the DS scenario, the performance of the junction is predicted to improve when compared with the DM scenario. The A299 (E) arm would observe significantly less queuing and delay. The improvement at the junction within the DS scenario is likely due to the provision of the proposed Manston-Haine Link Road. These links would provide a more direct route to Westwood and Margate for traffic from the West.

2. A299 Hengist Way/Canterbury Road East/A256 Haine Road (Lord of the Manor)

2.2.5 The A299 Hengist Way/Canterbury Rd East/A256 Haine Rd (Lord of the Manor) signalised roundabout has been assessed using LinSig. The assessment results are summarised in Table 2-2 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
A256 Haine Rd	98.9	22	82.1	13	94.8	-4.1	17	-5	73.8	-8.3	10	-3
A299 Canterbury Rd	95.8	21	77.8	9	92.7	-3.1	17	-4	70.7	-7.1	8	-1
Sandwich Rd	41.0	1	43.7	1	37.2	-3.8	1	-	36.4	-7.3	1	-
A299 Hengist Way	57.8	7	72.5	11	51.6	-6.2	6	-1	56.1	-16.4	7	-4
Reserve Capacity	-10%		10%		-5%		+5%		22%		+12%	

Table 2-2: Lord of the Manor (South) – Forecast Junction Assessment Summary

2.2.6 The provision of the proposed Transport Strategy interventions in the DS scenario would result in a reasonable improvement in the operation of the junction in both peaks when compared with the DM scenario. The improvement in the operation of the junction in this scenario is again due to the provision of a more direct route to Westwood and Margate, from the west, via the proposed Manston-Haine Link Road.

2.2.7 It should be noted that the above assessments do not include traffic associated with the intensification of use of Ramsgate Port or the proposed Thanet Parkway station at this stage. This should be kept under consideration when interpreting the results.

3. A256 Haine Road / B2050 Manston Road (Staner Hill)

2.2.8 The A256 Haine Rd/B2050 Manston Rd roundabout junction has been assessed using ARCADY. The assessment results are summarised in Table 2-3 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

2.2.9 The assessment is based on the proposed design in the extant approved Manston Green planning application; which includes a bypass lane from B2050W to A256N.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A256 (N)	0.83	5	1.01	32	0.73	-0.10	3	-2	0.93	-0.08	12	-20
B2050 (E)	0.72	2	0.76	3	0.58	-0.14	1	-1	0.61	-0.15	2	-1
Manston Green (old A256 S)	0.42	1	0.26	0	0.35	-0.07	1	-1	0.23	-0.03	0	-
B2050 W (including A256 S traffic)	0.63	2	0.65	2	0.55	-0.08	1	-1	0.55	-0.10	1	-1
Reserve Capacity	12%		-5%		26%		+14%		1%		+6%	

Table 2-3: Staner Hill – Forecast Junction Assessment Summary

2.2.10 The assessment outputs indicate that the junction is predicted to operate within capacity in the AM peak 2031 in the DM scenario. In the PM peak the A256 (N) arm is predicted to operate over capacity.

2.2.11 The DS scenario reflects the relief from the Manston-Haine link.

4. A256 Haine Road/St John's Avenue

2.2.12 The A256 Haine Rd/St John's Avenue junction has been assessed using PICADY. The assessment results are summarised in Table 2-4 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Stream	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
St John's Ave left	Off scale	105	Off scale	71	1.70		42	-63	1.69		32	-39
St John's Ave right	Off scale	41	Off scale	36	1.66		18	-23	1.65		16	-20
A256 (S)	0.14	-	0.14	0	0.10	-0.04	0	-	0.08	-0.09	0	-
Reserve Capacity	-26%		-26%		-20%		+6%		-19%		+7%	

Table 2-4: A256 Haine Rd/St John's Avenue – Forecast Junction Assessment Summary

2.2.13 The assessment outputs indicate that the junction is predicted to operate significantly over capacity in both peaks in the 2031 DM scenario. The St. Johns' Avenue arm is predicted to operate with significant queuing and delay as the flow on the mainline A256 would prevent vehicles exiting the side road efficiently.

2.2.14 The DS scenario reflects the relief from the Manston-Haine link.

5. A256 New Haine Road / Haine Road (near Spratling St)

2.2.15 The A256 New Haine Rd/Haine Rd ('south') roundabout junction has been assessed using ARCADY.

2.2.16 The assessment results are summarised in Table 2-5 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
Haine Road	0.26	0	0.30	0	0.23	-0.03	0	-	0.28	-0.02	0	-
A256 (N)	0.79	4	0.81	4	0.72	-0.07	3	-1	0.77	-0.04	3	-1
A256 (S)	1.08	69	1.12	94	1.01	-0.07	29	-40	0.96	-0.16	15	-79
Reserve Capacity	-14%		-16%		-7%		+7%		-2%		+14%	

Table 2-5: A256 New Haine Rd/Haine Rd (south) – Forecast Junction Assessment Summary

2.2.17 The assessment outputs indicate that the junction is predicted to operate over capacity during both peaks in the 2031 DM scenario. In particular, the A256 (S) arm is predicted to operate with significant queuing and delay.

2.2.18 The DS scenario reflects the relief from the Manston-Haine link.

6. A256 New Haine Road/New Cross Road

2.2.19 The A256 New Haine Rd/New Cross Rd roundabout junction has been assessed using ARCADY. The assessment results are summarised in Table 2-6 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A256 (NW)	0.97	17	0.68	2	0.73	-0.24	3	-14	0.60	-0.08	2	-
New Cross Road	0.38	1	0.29	0	0.55	+0.17	1	-	0.36	+0.07	1	+1
A256 (SW)	0.67	2	0.86	6	0.65	-0.02	2	-	0.74	-0.12	3	-3
Reserve Capacity	-4%		9%		21%		+25%		27%		+18%	

Table 2-6: A256 New Haine Rd/New Cross Rd – Forecast Junction Assessment Summary

2.2.20 The assessment outputs indicate that the junction is predicted to operate within or around capacity in 2031 in the DM scenario. The A256 (NW) arm in the AM peak and the A256 (SW) in the PM peak are approaching capacity.

2.2.21 The DS scenario reflects the relief from the Manston-Haine link. The results are potentially sensitive to the possibility of traffic using New Cross Road as an alternative to reaching Westwood roundabout.

7. A256 New Haine Road/Haine Road (Toby Carvery)

2.2.22 The A256 New Haine Rd/ Haine Rd (north) roundabout junction has been assessed using ARCADY. The junction is currently a three-arm roundabout but for the forecast scenarios it becomes a four-arm roundabout. In the DM the new fourth arm is the access to a proposed strategic allocation, and in the DS this becomes both the access and the start of the proposed Manston-Haine link. A conceptual design has been used for the measurements but is subject to change. In addition, it should be noted that the loading for the allocation has only be represented in a simple aggregate manner. The results, therefore, may need to be refined.

2.2.23 The assessment results are summarised in Table 2-7 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A256(N) Haine Rd	0.53	1	0.38	1	0.54	+0.01	1	-	0.46	+0.08	1	-
A256(S) New Haine Rd	0.27	0	0.78	3	0.48	+0.21	1	+1	0.65	-0.13	2	-1
Haine Rd	0.16	0	0.24	0	0.20	+0.04	0	-	0.24	-	0	-
Proposed Link Rd	0.42	1	0.24	0	0.78	+0.36	4	+3	0.62	+0.38	2	+2
Reserve Capacity	69%		16%		15%		-54%		26%		+10%	

Table 2-7: Toby Carvery – Forecast Junction Assessment Summary

2.2.24 The assessment outputs indicate that the junction is predicted to operate comfortably within capacity during both peaks in the 2031 DM scenario.

2.2.25 The provision of the proposed Transport Strategy interventions in the DS scenario would result in a detriment, albeit manageable, to the operation of the junction when compared with the DM scenario. This is to be expected, however, as this junction forms the connection to the existing network for the proposed Manston-Haine Link Road, with the most significant impact occurring on the Proposed Link Road arm of the junction.

2.2.26 It is noted, as with the previous junction, that the model has re-routed some traffic via New Cross Road. Therefore, the throughput at this junction may be an underestimate, and a sensitivity test may be appropriate.

8. A256 Haine Road/Star Lane Link/Westwood Cross

2.2.27 The A256 Haine Rd/Star Lane Link/Westwood Cross roundabout junction has been assessed using ARCADY. The assessment results are summarised in Table 2-8 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
Star Lane Link	0.72	3	0.74	3	0.87	+0.15	6	+3	0.78	+0.04	3	-
A256 N	0.54	1	0.60	1	0.51	-0.03	1	-	0.67	+0.07	2	+1
Westwood Cross	0.10	0	0.39	0	0.09	-0.01	0	-	0.43	+0.04	1	+1
A256 S	0.45	1	0.79	4	0.72	+0.27	3	+2	0.85	+0.06	6	+2
Reserve Capacity	20%		9%		1%		-19%		5%		-4%	

Table 2-8: A256/Star Lane Link/Westwood Cross – Forecast Junction Assessment Summary

2.2.28 The assessment outputs indicate that the junction is predicted to operate comfortably within capacity during both peaks in the 2031 DM scenario.

2.2.29 The provision of the proposed Transport Strategy interventions in the DS scenario would result in a detriment, albeit manageable, to the operation of the junction in both peaks when compared with the DM scenario. This continues to reflect the additional traffic from the Manston-Haine link.

2.2.30 It should be noted that the assessments have been based upon the existing junction arrangement. It is understood that some potential improvements to the junction associated with nearby developments may be forthcoming, which would improve the predicted operation of the junction.

9. A256 Haine Road/A254 Margate Rd (Westwood Roundabout)

2.2.31 The A256 Haine Rd/A254 Margate Rd (Westwood roundabout) junction has been assessed using ARCADY. The assessment results are summarised in Table 2-9 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A254 Margate Rd (N)	0.45	1	0.54	1	0.43	-0.02	1	-	0.52	-0.02	1	-
A256 Westwood Rd	0.52	1	0.47	1	0.47	-0.05	1	-	0.43	-0.04	1	-
A254 Margate Rd (S)	0.55	1	0.49	1	0.42	-0.13	1	-	0.52	+0.03	1	-
A256 Haine Rd	0.60	2	0.75	3	0.71	+0.11	2	-	0.74	-0.01	3	-
Reserve Capacity	37%		26%		34%		-3%		28%		2%	

Table 2-9: Westwood Roundabout – Forecast Junction Assessment Summary

2.2.32 The assessment outputs indicate that the junction is predicted to operate comfortably within capacity during both peaks in the 2031 DM scenario.

2.2.33 The DS results are broadly comparable to the DM. This reflects the traffic being broadly similar, albeit with some local reassignment. There is some additional traffic from the Manston-Haine link, but this is offset with some of the new proposals such as Enterprise Road and Millenium Way offering alternative routes.

10. A254 Margate Road/Star Lane/Poorhole Lane (Star Roundabout)

2.2.34 The A254 Margate Rd/Star Lane/Poorhole Lane junction has been assessed using ARCADY. The assessment results are summarised in Table 2-10 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A254 N	0.77	3	0.80	4	0.80	+0.03	4	+1	0.81	+0.01	4	-
Poorhole Lane	0.36	1	0.60	1	0.44	+0.08	1	-	0.65	+0.05	2	+1
A254 S	1.04	29	1.03	24	0.92	-0.12	9	-20	1.09	+0.06	38	+14
Star Lane	0.87	6	0.58	2	0.74	-0.13	3	-3	0.65	+0.07	2	-
Reserve Capacity	-12%		-11%		-4%		+8%		-14%		-3%	

Table 2-10: Star Roundabout – Forecast Junction Assessment Summary

2.2.35 The assessment outputs indicate that the junction is predicted to operate over capacity during both peaks in the 2031 DM scenario.

2.2.36 Similarly, to Westwood roundabout, the DS and DM are broadly comparable. The changes relate to local reassignment due to the new proposals including Nash Rd, Enterprise Road and Millenium Way. The DS has more resilience due to the alternative routes provided by the new proposals in the Transport Strategy.

11. A254 Ramsgate Road/B2052 College Rd (Victoria Traffic Lights)

2.2.37 The A254 Ramsgate Rd/B2052 College Rd (Victoria Traffic Lights) signalised junction has been assessed using LinSig. The assessment results are summarised in Table 2-11 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
A254 Ramsgate Rd (N)	78.5	16	74.2	17	66.9	-11.6	11	-5	78.7	+4.5	17	-
College Rd (E)	119.0	52	109.2	35	96.1	-22.9	22	-30	93.1	-16.1	15	-20
A254 Ramsgate Rd (S)	117.4	89	111.4	85	95.8	-21.6	23	-66	93.5	-17.9	26	-59
Beatrice Rd	118.1	86	111.0	48	96.0	-22.1	17	-69	93.5	-17.5	14	-34
Reserve Capacity	-32%		-24%		-7%		+25%		-4%		+20%	

Table 2-11: Victoria Traffic Lights – Forecast Junction Assessment Summary

2.2.38 The assessment outputs indicate that the junction is predicted to operate significantly over capacity during both peaks in the 2031 DM scenario.

2.2.39 The provision of the proposed Transport Strategy interventions in the DS scenario would result in a general improvement, although still over-capacity, in the operation of the junction in both peaks when compared with the DM scenario. Lower throughput at the junction is expected, being attributed to new links offering secondary routes. As the proposed Hartsdown-Shottendane and Westgate links are developed, the possibility of providing alternative routes from Margate avoiding Victoria Lights can be explored.

12. A254 Ramsgate Road/Enterprise Road

2.2.40 The A254 Ramsgate Road/Enterprise Road signalised junction has been assessed using LinSig. The assessment results are summarised in Table 2-12 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
A254 N	66.9	13	86.8	32	73.1	+6.2	17	+4	88.1	+1.3	31	-1
A254 S	98.8	57	101.4	59	108.8	+10.0	103	+46	113.2	+11.8	123	+64
Enterprise Road	96.9	12	101.9	29	109.3	+12.4	39	+27	113.7	+11.8	57	+28
Reserve Capacity	-10%		-13%		-22%		-12%		-26%		-13%	

Table 2-12: A254/Enterprise Rd – Forecast Junction Assessment Summary

2.2.41 The assessment outputs indicate that the junction is predicted to operate slightly over capacity during both peaks in the 2031 DM scenario. In particular, the A254 (S) arm is predicted to operate with significant queuing and delay during both peaks.

2.2.42 The provision of the proposed Transport Strategy interventions in the DS scenario would result in a detriment to the operation of the junction in both peaks when compared with the DM scenario. The A254 (S) and Enterprise Road arms are predicted to observe a significant increase in queuing and delay during both peak periods in 2031.

2.2.43 The worsening performance of the junction in the 2031 DS scenario is due to the additional traffic using Enterprise Road as a result of the proposed link to Nash Road. Enterprise Rd would perform as a connector road between the A254 and the improved Nash Road corridors. As such an improvement to this junction would be recommended to compliment the creation of a new link between Enterprise Road, to improve levels of service at this junction

13. A254 Ramsgate Road/Queen Elizabeth Queen Mother Hospital

2.2.44 The A254 Ramsgate Road/Queen Elizabeth Queen Mother (QEQM) Hospital signalised junction has been assessed using LinSig. The assessment results are summarised in Table 2-13 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
A254 N	101.1	48	101.1	43	100.3	-0.8	44	-4	105.7	+4.6	65	+22
QEQM	84.1	5	101.5	18	83.2	-0.9	5	-	102.6	+1.1	20	+2
A254 S	100.7	18	82.8	21	99.8	-0.9	24	+6	72.4	-10.4	13	-8
Reserve Capacity	-12%		-13%		-11%		+1%		-18%		-5%	

Table 2-13: A254/QEQM Hospital – Forecast Junction Assessment Summary

2.2.45 The assessment outputs indicate that the junction is predicted to operate slightly over capacity during both peaks in the 2031 DM scenario.

2.2.46 The DS results are broadly comparable to the DM.

3 A28 Corridor - Forecast Traffic Conditions

3.1 Overview

3.1.1 The junctions to be assessed on the A28 corridor as part of this study are shown in Figure 3-1 and as follows:

1. A299 Thanet Way/A28 Canterbury Road (St Nicholas roundabout);
2. A28 Canterbury Road/Seamark Road (in Corridor Study but excluded from this report);
3. A28 Canterbury Road/Park Lane (see 4);
4. A28 Canterbury Road/Station Road (Birchington Square) (to be assessed in more detail with junction 3 as a combined junction);
5. A28 Canterbury Road/St Mildreds Road/Minster Road;
6. A28 Canterbury Road/Garlinge High St;
7. A28 Canterbury Road/George V Ave;
8. A28 Canterbury Road/A28 Marine Terrace/Station Approach; and
9. A28 Marine Terrace/A254 Marine Gardens/Marine Drive (Clocktower).

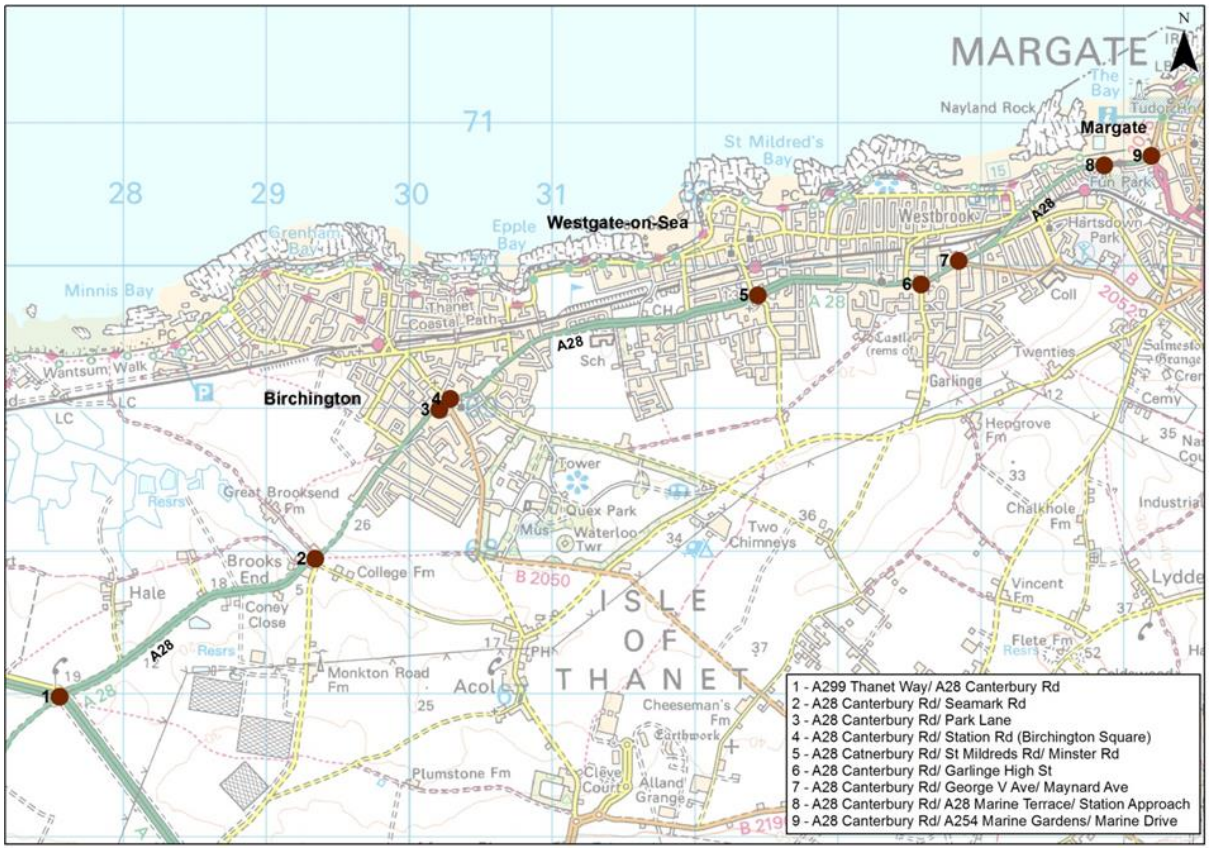

Figure 3-1: A28 - Location of Assessed Junctions

3.1.2 The assessments will be undertaken to represent the weekday AM and PM peak periods for the forecast year 2031; which represents the end of the Local Plan period for the following scenarios:

- Do Minimum – Projected Local Plan development and committed transport schemes; and
- Do Something - Projected Local Plan development and proposed transport strategy schemes.

3.1.3 The forecast traffic flows will be derived from the strategic SATURN traffic model developed on behalf of KCC to test the traffic impacts of the Local Plan. The 2031 forecast turning flows for each of the above scenarios have been determined by applying the modelled uplift in flows to the observed 2016 or 2017 baseline turning movements. It should be noted that where the net forecast turning movement has resulted in a negative figure, due to significant reassignment and/or new infrastructure, a turning flow of 0 has been used.

3.1.4 The capacity assessments will be undertaken using industry standard software appropriate to the type of junction. These will be PICADY for priority junctions, ARCADY for roundabouts and LinSig for signalised junctions.

3.2 Junction Capacity Assessments

3.2.1 The junction capacity assessments are summarised below for each junction within the A28 corridor in turn.

1. A299 Thanet Way/A28 Canterbury Road (St Nicholas Roundabout)

3.2.2 The A299 Thanet Way/A28 Canterbury Road (St Nicholas Roundabout) junction has been assessed using ARCADY. The assessment results are summarised in Table 3-1 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
Potten Street Road	Minor arm excluded from reporting – but included in Arcady (not in SATURN)											
A28 Canterbury Rd (E)	1.05	49	0.50	1	1.09	+0.04	78	+29	0.54	+0.04	1	-
A299 (S)	0.96	15	0.60	2	0.86	-0.10	6	-9	0.54	-0.06	1	-1
A28 Canterbury Rd (SW)	0.34	1	0.54	1	0.31	-0.03	1	-	0.49	-0.05	1	-
A299 Thanet Way	0.69	2	0.93	12	0.67	-0.02	2	-	0.89	-0.04	8	-4
Reserve Capacity	-6%		0%		-9%		-3%		4%		4%	

Table 3-1: St Nicholas Roundabout – Forecast Junction Assessment Summary

3.2.3 The assessment outputs indicate that the junction is predicted to operate slightly over capacity during both peaks in the 2031 DM scenario.

3.2.4 The DS results are broadly comparable to the DM. This is expected as the traffic leaving via Thanet Way will be equal with some variation on the route to reach and depart St Nicholas roundabout.

3.2.5 Whilst there has been no formal queuing survey for this junction, local knowledge evidences queues on the right-hand lanes on the A28E and A299 Thanet Way. This should be considered in any interpretation of results.

3. A28 Canterbury Road/Park Lane and 4. A28 Canterbury Road / Station Road (Birchington Square)

3.2.6 These junctions will be assessed in more detail in tandem as there are a variety of details to consider.

3.2.7 The detailed analysis would include the proximity of the junctions, shuttle-working on Park Lane, subsequent changes to driver behaviour, a pelican crossing and a variety of streetscape factors at Birchington Square. It is also required to have an assessment which considers the nature of the DS scenario where Park Lane is changed to one-way.

3.2.8 There is expected to be a noticeable improvement at Birchington Square due to traffic relief from the Brooksend link providing an alternative route to Shottendane Rd. There is likely to be further relief if the link from Minnis Rd provides an alternative route from Birchington towards St Nicholas roundabout.

5. A28 Canterbury Road/St Mildreds Road/Minster Road

3.2.9 The A28 Canterbury Road/St Mildreds Road/Minster Road signalised junction has been assessed using LinSig. The assessment results are summarised in Table 3-2 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
St Mildred's Road	130.7	40	109.4	23	133.3	+2.6	66	+26	92.5	-16.9	6	-17
A28 Canterbury Rd (E)	138.1	84	120.0	50	133.4	-4.7	71	-13	91.9	-28.1	14	-36
Minster Road	90.6	18	91.1	16	91.8	+1.2	19	+1	85.8	-5.3	11	-5
A28 Canterbury Rd (W)	142.7	83	121.0	60	133.7	-9.0	67	-16	94.5	-26.5	17	-43
Reserve Capacity	-59%		-34%		-48%		+11%		-5%		+29%	

Table 3-2: A28/St Mildreds Rd/Minster Rd – Forecast Junction Assessment Summary

3.2.10 The assessment outputs indicate that the junction is predicted to operate significantly over capacity during both peaks in the 2031 DM scenario.

3.2.11 The DS scenario reflects the relief from the Brooksend link providing an alternative route to Shottendane Road. The improved operation will be reduced if Shottendane Road is not sufficiently upgraded to cope with the additional traffic.

3.2.12 It would be prudent to revisit this junction when the masterplanning of the Westgate development (2000 houses) is more advanced. The usage of this junction will depend on the final site arrangements.

6. A28 Canterbury Road/Garlinge High Street

3.2.13 The A28 Canterbury Road/Garlinge High Street junction has been assessed using LINSIG. Although the existing junction is a priority (give-way) junction, the forecast scenarios have assumed a change to a signalised junction as part of the masterplanning for the 'Westgate' development. The signalised design is only conceptual at this stage and subject to considerable change. Nonetheless, the assessment results are summarised in Table 3-3 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
A28W	94.3	33	77.5	15	87.5	-6.8	24	-9	63.1	-14.4	10	-5
A28E	70.1	13	78.4	16	63.8	-6.3	11	-2	75.1	-3.3	14	-2
Garlinge High St	92.3	12	74.4	6	88.7	-3.6	11	-1	72.6	-1.8	6	-
Reserve Capacity	-5%		15%		1%		+6%		20%		+5%	

Table 3-3: A28/Garlinge High St – Forecast Junction Assessment Summary

3.2.14 As with the St Mildreds junction it would be prudent to revisit this junction when the masterplanning of the Westgate development is more advanced. Nonetheless, as with other junctions, an improvement is expected as the improvement of Shottendane Road is anticipated to provide relief to the A28 corridor as it provides an alternative route in/out of Westwood and Margate.

7. A28 Canterbury Road/George V Avenue

3.2.15 The A28 Canterbury Road/George V Avenue junction has been assessed using PICADY. The assessment results are summarised in Table 3-4 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

3.2.16 It should be noted that Maynard Avenue, which connects into George V Avenue close to the A28, has not been modelled explicitly, however, the traffic on this arm has been added to the George V Avenue arm. Due to this simplification, queueing data has been excluded.

Stream	2031 Do Minimum		2031 Do Something			
	AM	PM	AM		PM	
	RFC	RFC	RFC		RFC	
George V Ave left	0.41	0.52	0.28	-0.13	0.41	-0.11
George V Ave right	0.28	0.06	0.28	-	0.04	-0.02
A28W	0.56	0.45	0.73	+0.17	0.38	-0.07
Reserve Capacity	-6%	0%	-6%	-	8%	+8%

Table 3-4: A28/George V Ave – Forecast Junction Assessment Summary

3.2.17 The assessment outputs indicate that all arms of the junction are predicted to operate comfortably within capacity during both peaks in the 2031 DM scenario. However, the overall reserve capacity indicates that the give-way movements are liable to be sensitive to small changes in flow.

3.2.18 The improvement of Shottendane Road is anticipated to provide some relief to the A28 corridor as it provides an alternative route in/out of Westwood and Margate.

8. A28 Canterbury Road/A28 Marine Terrace/All Saints Ave/Station Approach

3.2.19 The A28 Canterbury Road/A28 Marine Terrace/All Saints Ave/Station Approach junction has been assessed using ARCADY. The assessment results are summarised in Table 3-5 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

3.2.20 It should be noted that this assessment is only an approximation as the junction is not strictly a roundabout. The geometric inputs to the model have been taken directly from a previous assessment which accompanied a planning application at Arlington House, however, to better reflect the true nature of the operation the A28 Canterbury Road arm has been specified as a bypass lane. The results are therefore only intended to be used as a direct comparison between the DM and DS scenarios as opposed to an accurate prediction of forecast conditions at the junction.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A28 Marine Terrace	0.62	2	0.67	2	0.67	+0.05	2	-	0.69	+0.02	2	-
All Saints Ave	0.59	1	0.39	1	0.69	+0.10	2	+1	0.44	+0.05	1	-
Station Approach	0.15	0	0.16	0	0.17	+0.02	0	-	0.16	-	0	-
A28 Canterbury Rd	0.08	0	0.08	0	0.07	-0.01	0	-	0.07	-0.01	0	-
Reserve Capacity	10%		18%		3%		-7%		13%		-5%	

Table 3-5: A28 Canterbury Rd/A28 Marine Terrace/All Saints Ave/Station Approach – Forecast Junction Assessment Summary

3.2.21 In this area, there is both reassignment from the increase use of Shottendane Road, and also re-routing to make use of the Hartsdown-Shottendane and Westgate links.

9. A28 Marine Terrace/A254 Marine Gardens/Marine Drive (Clocktower)

3.2.22 The A28 Marine Terrace/A254 Marine Gardens/Marine Drive junction has been assessed using ARCADY. The assessment results are summarised in Table 3-6 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
Marine Drive	1.88	222	1.33	85	1.46	-0.42	110	-112	1.17	-0.16	52	-33
Marine Gardens	0.77	3	0.86	6	0.89	+0.12	7	+4	0.93	+0.07	10	+4
A28 Marine Terrace	1.07	66	0.81	4	0.91	-0.16	9	-57	0.77	-0.04	3	-1
Reserve Capacity	-36%		-25%		-28%		+8%		-20%		+5%	

Table 3-6: Clocktower Junction – Forecast Junction Assessment Summary

3.2.23 The assessment outputs indicate that the junction is predicted to operate significantly over capacity during both peaks in the 2031 DM scenario. The Marine Drive arm, in particular, is predicted to operate with significant queuing and delay.

3.2.24 The provision of the proposed Transport Strategy interventions in the DS scenario would result in an improvement to the operation of the junction during both peaks when compared with the DM scenario. The most significant impacts would occur on the Marine Drive arm where large reductions in queues are predicted.

4 Additional Key Junctions

4.1 Overview

4.1.1 In addition to the assessed junctions along the A254/A256 and A28 corridors, some further key junctions were identified for assessment in order to help evaluate the impact of the Local Plan on the Thanet highway network.

4.1.2 The additional junctions to be assessed as part of this study are shown in Figure 4-1 and are as follows:

1. A256/Poorhole Lane;
2. A256/Northwood Road;
3. A256/Rumfields Road;
4. A256/A255 Dane Court Road; and
5. B2052/Manston Road (Coffin House Corner)
6. A299/Tothill St (Minster - 'Mount Pleasant' - roundabout)

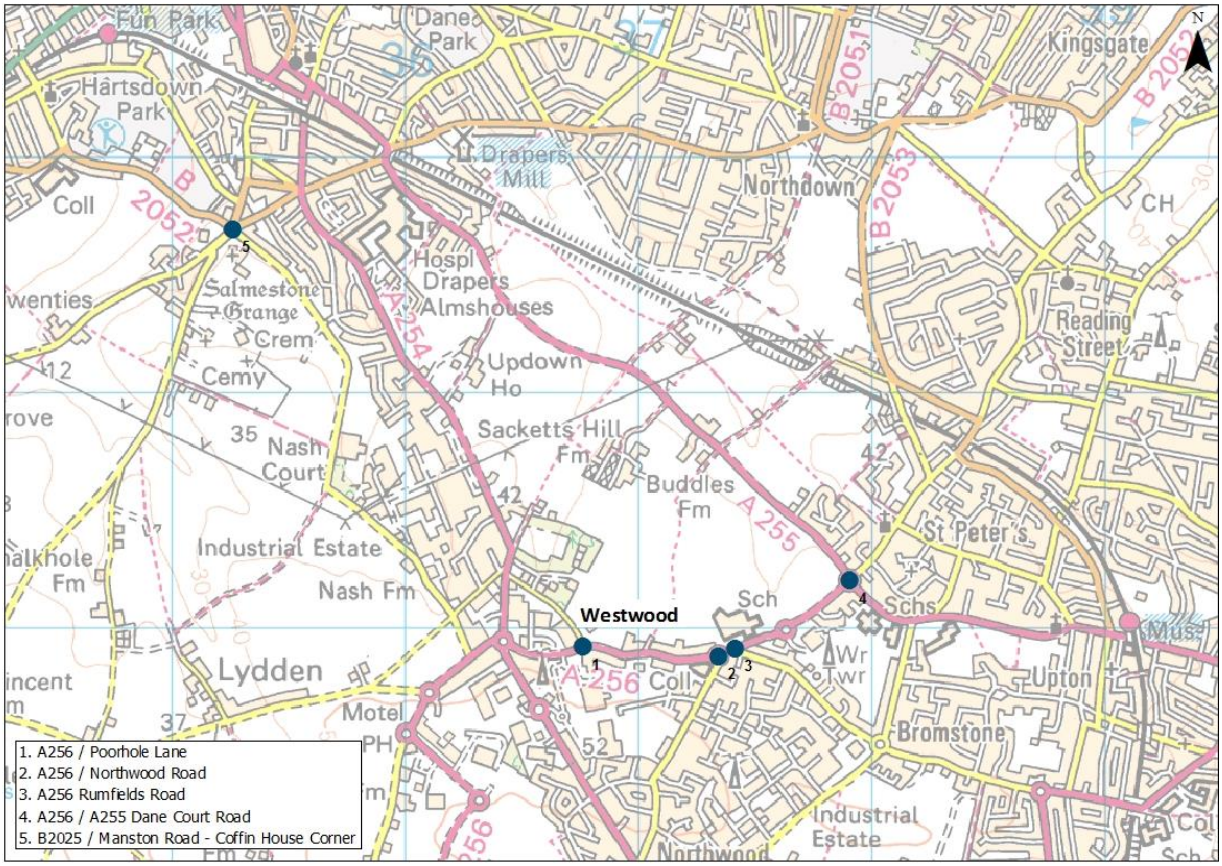

Figure 4-1: Location of Additional Junctions (excluding site 6)

4.2 Junction Capacity Assessments

4.2.1 The junction capacity assessments are summarised below for each Additional Key Junctions in turn.

1. A256 / Poorhole Lane

4.2.2 The A256/Poorhole Lane junction has been assessed using ARCADY. The assessment results are summarised in Table 4-1 to show the ratio of flow to capacity (RFC) and maximum queue length for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
A256 Westwood Rd (E)	0.71	3	0.67	2	0.74	+0.03	3	-	0.69	+0.02	2	-
A256 Westwood Rd (W)	0.46	1	0.84	5	0.47	+0.01	1	-	0.86	+0.02	6	+1
Poorhole Lane	0.45	1	0.51	1	0.49	+0.04	1	-	0.52	+0.01	1	-
Reserve Capacity	30%		9%		23%		-7%		7%		-2%	

Table 4-1: A256/Poorhole Lane – Forecast Junction Assessment Summary

4.2.3 The assessment outputs indicate that the junction is predicted to operate within capacity during both peaks in the 2031 DM scenario.

4.2.4 The provision of the proposed Transport Strategy interventions in the DS scenario is predicted to result in a relatively negligible change to the operation of the junction during both peaks when compared with the DM scenario. The junction remains within capacity.

4.2.5 It should be noted however, that an improvement at this junction is anticipated in the DS scenario as a result of the implementation of the Tesco Relief Rd and/or the Millenium Way extension. The relief provided by these improvements at the junction are not evidenced in the above assessment due to coarseness of zoning in the strategic model that has provided the forecast traffic flows underpinning it. A more detailed assessment of the complexities of the Westwood area would be needed to fully identify the impacts of these schemes.

2/3/4. A256 Junctions with Northwood Road, Rumfields Road and A255 Dane Court Road

4.2.6 The A256/Northwood Rd, A256/Rumfields Rd and A255 Dane Court Rd junctions have not been assessed at this stage as there are no proposals to improve capacity at these junctions and only a negligible change in flow, particularly in terms of junction throughput, between the DM and DS scenarios. As such the comparative assessments would show very little difference between the scenarios. This does not preclude the need for further investigation to be progressed in terms of improving capacity at these junctions. Dane Court Rd is regarded as a pinch-point.

5. B2052/Manston Road/Hartsdown Road (Coffin House Corner)

4.2.7 The B2052/Manston Road/Hartsdown Road (Coffin House Corner) signalised junction has been assessed using LinSig. The assessment results are summarised in Table 4-2 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				PM			
	DoS (%)	Max Q (PCU)	DoS (%)	Max Q (PCU)	DoS (%)		Max Q (PCU)		DoS (%)		Max Q (PCU)	
Manston Rd	124.0	109	118.5	81	121.4	-2.6	99	-10	106.4	-12.1	62	-19
Hartsdown Rd	122.2	88	106.8	33	123.8	+1.6	137	+49	106.0	-0.8	33	-
College Rd	120.4	76	119.3	103	72.6	-47.8	4	-72	106.7	-12.6	33	-70
Nash Rd	65.9	11	120.3	60								
Reserve Capacity	-38%		-34%		-38%		-		-19%		+15%	

Table 4-2: Coffin House Corner – Forecast Junction Assessment Summary

4.2.8 The assessment outputs indicate that the junction is predicted to operate significantly over capacity during both peaks in the 2031 DM scenario. All arms of the junction are predicted to operate with significant queuing and delay in either or both peak periods.

4.2.9 The DS scenario assessment has been based upon an alternative junction arrangement which incorporates the stopping up of the Nash Rd arm and lane designation changes on Manston Road. These changes are linked to the Transport Strategy proposal for a new link between Manston Road and Nash Rd and widening of Nash Rd to the south of the junction. There have been differing proposals for the new junction arrangement, particularly with regards to how to use the defunct right-turn lane from Shottendane Rd to Nash Rd. Therefore, the arrangement used should be noted, namely a left-turn from Shottendane Rd to Hartsdown Rd as opposed to a 2-into-1 movement from Shottendane Rd to Tivoli Rd.

4.2.10 It is noted that there are significant changes in the flow patterns at this junction due to the proposed highway network. The role of the new link between Shottendane Rd and Hartsdown Rd should be further considered, noting the link gives an alternative route to Coffin House Corner approaching via a different arm. An alternative run, which assumes traffic will use Shottendane Road to approach Coffin House Corner, rather than the new link road, suggests a marginally higher PRC.

6. A299/Tothill St (Minster Roundabout)

4.2.11 The A299/Tothill St roundabout has been assessed using ARCADY. This junction is an important consideration in assessing the highway network as it is part of the route created by the Manston-Haine link to the route to the A299. The assessment results are summarised in Table 4-3 to show the practical reserve capacity of the Junction (PRC) and total delay for both scenarios. The difference between the two scenarios is also shown adjacent to the Do Something scenario outputs.

Arm	2031 Do Minimum				2031 Do Something							
	AM		PM		AM				AM			
	RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC		Max Q (PCU)		RFC		Max Q (PCU)	
B2190	0.82	4	0.69	2	0.84	+0.02	5	+1	0.68	-0.01	2	-
A299 East	0.70	2	0.68	2	0.59	-0.11	1	-1	0.62	-0.06	2	-
Tothill St	1.58	116	1.02	17	1.29	-0.29	71	-45	1.02	-	18	+1
A299 West	0.76	3	0.91	9	0.68	-0.08	2	-1	0.88	-0.03	7	-2
Reserve Capacity	-23%		-9%		-18%		+5%		-9%		-	

Table 4-3: Minster Roundabout – Forecast Junction Assessment Summary

4.2.12 The assessment outputs indicate that the junction is predicted to operate significantly over capacity during both peaks in the 2031 DM scenario, with Tothill Street having the largest RFC and delay.

4.2.13 The results are broadly unchanged in the DS scenario, with Tothill Street remaining congested. There are same changes due to re-routing from the B2190 into the junction.

5 Summary and Conclusions

5.1.1 Forecast junction assessments have been undertaken on the A254/A256 and A28 corridors and at other key junctions in Thanet in order to provide an indication of the traffic impacts of the proposed Local Plan development and associated Transport Strategy interventions.

5.1.2 The assessments are intended to represent the weekday AM and PM peak periods in the forecast year 2031, which represents the end of the Local Plan period, for the following scenarios:

- Do Minimum (DM) – projected Local Plan development and committed transport schemes only; and
- Do Something (DS) - projected Local Plan development and proposed transport strategy schemes.

5.1.3 The forecast traffic flows have been derived from the strategic SATURN traffic model developed on behalf of KCC to test the traffic impacts of the Local Plan. The 2031 forecast turning flows for each of the above scenarios have been determined by applying the modelled uplift in flows to the observed 2016 or 2017 baseline turning movements.

5.1.4 In the main the junction assessment outputs indicate that the DS scenario would result in an improvement at the majority of the junctions when compared with the DM scenario. This suggests that the proposed Transport Strategy interventions would be successful in providing relief to the key corridors in Thanet.

5.1.5 In particular, the provision of the Manston-Haine Link Road would provide significant relief to the A256 Haine Road corridor to the south of Westwood. All of the junctions from the Sevenscore Roundabout to the Toby Carvery junction, where the proposed link would connect into the existing network, are predicted to operate significantly better than without the Transport Strategy interventions in place.

5.1.6 The A256 represents a key corridor in the district which provides links to the conurbations of Margate and Broadstairs in addition to the Westwood area. Also the Sevenscore and Lord of the Manor junctions have strategic importance in the district as they form part of the East Kent Access providing links between the district and the wider county and London to the West.

5.1.7 On the A28 corridor are there are generally improvements in performance in the Do Something scenario with the Transport Strategy interventions in place compared to the Do Minimum scenario. It is considered that the provision of the new link between the A28 north of Brooksend and the B2050 Manston Road together with improvements along Shottendane Road will provide an alternative route to the existing A28 corridor. The provision of this alternative route results in a reduction in forecast traffic flows on the A28 corridor when compared with the DM scenario.

5.1.8 The A28 corridor represents a key east-west route through the district and provides a direct link to Canterbury to the south west and connections to the East Kent Access strategic route.

5.1.9 In the Margate area the key junctions at Coffin House Corner and Victoria Lights are both predicted to observe some improvement in the DS scenario when compared with the DM scenario. The proposed Transport Strategy interventions in this area comprise a new link between Manston Road and Nash Road, improvements to Nash Road and reconfiguration of the Coffin House Corner junction itself. Additionally new links, including Hartsdown-Shottendane, offer additional routes which add to resilience in the network.

5.1.10 In conclusion, the comparison between the Do Minimum and Do Something scenarios has identified that the Transport Strategy interventions provide an important level of traffic relief to the A28 and A254/A256 corridors as intended.