VICTORIA TRAFFIC LIGHTS, MARGATE – PETITION

To:	**Thanet Joint Transportation Board, 30 September 2010**
Main Portfolio Area:	**KCC – Environment, Highways and Waste**
By:	**Head of Transport & Development, Kent Highway Services**
Classification:	**Unrestricted**
Ward:	**Salmestone** **Division : Margate & Cliftonville**

Summary: **A petition has been received, with 417 signatories, regarding the Victoria Traffic Lights, Margate.**

For Recommendation

1. Introduction

1.1 A petition with 417 signatories has been presented to Kent County Council. The covering text *ad verbatim* was as follows: "This petition has been produced to state that we, the public, would like Kent County Council to review the no right turn sign on Victoria traffic lights and another pedestrian crossing installed from outside the Victoria Public House to Andrew and Gills newsagents".

1.2 Further text is enclosed with the petition, as follows: "On Friday 11th June at about 3.30 my 4 year old daughter nearly got knocked down by a car going the wrong way it had ignored a NO RIGHT TURN sign which happens a lot. Also there is no green man set up from the Victoria public house across to Andrew and Gills newsagent".

2. Background

2.1 The "Victoria Traffic Lights" is a busy and complex five arm junction. During the course of a 12 hour period between 7am-7pm on a typical weekday in April 2010, a total of 27,500 vehicles were counted flowing through the junction.

2.2 The junction lies at the convergence of the A254 Ramsgate Road, the B2052 College Road and the B2052 Beatrice Road, in Margate. It is a key junction in the local highway network; any changes made here are very likely to have a knock-on effect upon the wider urban area of Margate and beyond.

3. The development of recent improvements

3.1 Kent Highway Services acknowledges that this junction has often been the subject of local concern. Alterations to this junction were completed in July 2008, in response to previous requests from the public, and to a crash record that had reached intervention levels.

3.2 In the three years prior to July 2008, there had been 13 personal injury crashes at this junction. Of these, one crash was designated as 'serious', and one other crash was a fatality. Four crashes involved a pedestrian.

3.3 Prior to the improvements, the junction operated very near to capacity. Indeed at times it operated over capacity; in other words, the junction was unable to cope with the amount of traffic passing through. To improve controlled pedestrian facilities and maintain a suitable

level of operation for the junction, it became clear that it would be necessary to provide controlled pedestrian facilities that can operate in parallel with non-conflicting traffic phases. This became apparent when various new phasing scenarios for the junction were tested, in order to try and introduce additional signal controlled crossing points.

3.4 To have signal controlled crossing points on all five arms of the junction, it would be necessary to introduce an additional 'all red' stage for pedestrians – i.e. pedestrians would be able to cross anywhere, whilst all the traffic entering the junction is held on red. Although this is the best scenario for pedestrians, the impact upon traffic flow would have been exceptionally detrimental. Bearing in mind the strategic importance of the junction (as outlined in 3.1), and that the junction was already over capacity at times, any additional delay and congestion was considered unacceptable.

3.5 The only way to make the scenario work for controlled crossings on all arms was to ban certain movements – for example, the left turn from College Rd (east) to Ramsgate Rd (south). This did help to keep the junction within capacity; however it was recognised that this would lead to significantly more 'rat-running' through Yoakley Square, which is already an issue for the residents of that road.

3.6 Therefore, another scenario was examined that would allow one additional controlled crossing to be introduced, that would avoid the 'all-red' phase by allowing pedestrians to cross the road whilst traffic was still operating elsewhere i.e. "walk with traffic". This would necessitate changing the phasing of the junction to the one that is now in operation at present. The main advantage of this new arrangement was that as well as providing a new controlled crossing across College Rd (east), the capacity of the junction was actually increased, with the potential for less congestion as a result. The main disadvantage was that the fifth arm of the junction (Ramsgate Rd south) remained uncontrolled.

3.7 Furthermore it was highlighted that whilst upgrading the junction, the opportunity should be taken at the same time to introduce new equipment, with the intention of further improving the efficiency of the signals. This system is known as MOVA – "Microprocessor Optimised Vehicle Actuation". MOVA is a proactive self-optimising control system for Traffic Signals. Using an on-line microprocessor housed within the traffic signal controller, MOVA maintains the optimum approach green time and control strategy to suit prevailing traffic conditions, to minimise queuing at traffic signalled junctions. It reduces delays and increases capacity, especially at congested junctions, and helps to lower crash rates.

3.8 A junction improvement scheme was subsequently approved, with an allocation of £210,000, and consisted of the following:-

- An alteration to the pattern of the signals, to optimise traffic flow.
- The introduction of MOVA, a system that can adjust the timing of the lights depending on the levels of traffic on the different approach roads.
- The installation of 'smart' equipment, to allow buses priority in the timing of the signals.
- The creation of a signal controlled pedestrian crossing on College Road (east), to allow pedestrians to cross more safely.
- Modification of the traffic island between Beatrice Road and College Road, and a new island to split traffic in Beatrice Road.

3.9 The new junction arrangement is summarised in Addendum 1.

4. Monitoring the new improvements

4.1 The effectiveness of the new improvements has been kept under close review, particularly in the light of the strategic importance and the previous poor crash history of this junction. As previously mentioned in 3.2, the three year crash record prior to the scheme amounted to a total of 13 crashes (resulting in personal injury). As the scheme was completed in July

2008, there is not yet a comparable three year period of 'after' data. Nevertheless, in the 20 months of 'after' data available to date, there have been just two personal injury crashes.

4.2 A main facet of the junction improvement was to improve congestion. As well as reducing queues, a potential side-effect of this could be to reduce driver frustration, and subsequently the frequency of crashes.

4.3 Before and after surveys were carried out on queue lengths at the signals. These are summarised in Addendum 2. Since the introduction of the new improvements, there have been significant reductions in queue lengths, on all arms of the junction.

5. Discussion of petition

5.1 The lead petitioner, Miss Donna Hinkley, has highlighted two main concerns. These relate to contraventions of banned manoeuvres, and the lack of a controlled pedestrian crossing point across Ramsgate Road (south).

5.2 Firstly, in relation to the controlled crossing point, the problems relating to this request have already been highlighted in 3.3–3.5. The potential for very high levels of congestion associated with introducing a new crossing means that the case for its introduction would have to be very compelling on safety grounds.

5.3 Turning to the other matter of concern, upon receipt of the petition it was first assumed that the relevant manoeuvre related to the banned right turn from College Rd (east) to Ramsgate Rd (north).

5.4 The reason for banning this manoeuvre under the previous junction control was to allow the operation of a controlled crossing point across Ramsgate Rd (north), at the same time as traffic was flowing from College Rd (east). A problem with this arrangement was that if drivers contravened the banned right turn, they came into conflict with pedestrians crossing Ramsgate Rd (north) under the 'green man' signal. The 'before' traffic counts in March 2008 showed that this occurred 12 times during a typical 12 hour period between 7am-7pm.

5.5 With the new junction phasing, this problem was overcome by pedestrians crossing Ramsgate Rd (north) whilst traffic was exiting Beatrice Rd to turn right towards Ramsgate, so that they were not in direct conflict with drivers contravening the banned right turn. Furthermore, this banned manoeuvre was made less attractive by the new phasing, as traffic exiting College Rd (east) now had an opposing traffic flow from Beatrice Road heading straight on towards Cliftonville; whereas before there was no opposing flow. This is borne out by the 'after' traffic count in April 2010, that showed the number of drivers committing this offence had reduced to six during the equivalent 12 hour period.

5.6 Bearing the above in mind, there was some doubt over how Miss Hinkley and her daughter had come into conflict with a vehicle contravening the banned right turn, as per the description provided in 1.2. This is because it did not fit the known junction phasing arrangements. A site meeting was therefore arranged with Miss Hinkley to establish the precise details of the incident that occurred on 11 June 2010.

5.7 At this site meeting, Miss Hinkley was able to describe the circumstances of the incident that prompted the petition. She was crossing Beatrice Road with her daughter in a northerly direction. Beatrice Road (ahead and left) was running against College Rd (east). A vehicle travelling from College Road (east) went the wrong way down Beatrice Road, contravening the 'no entry' signs. By doing this, the driver nearly came into direct conflict with Miss Hinkley and her daughter. The driver then carried on down the wrong way in Beatrice Rd, before turning right into The Greenfinches, where they were admonished by passers-by who witnessed the incident. The Police were not called to the scene.

5.8 This is a highly unusual and reckless manoeuvre, particularly as the evidence suggests the driver was from the local area. The incident is summarised in Addendum 3.

5.9 The signage for the 'no entry' to Beatrice Road was subsequently reviewed, to see if there were any issues with clarity. Some signage issues have subsequently been picked up. It is considered that a package of measures that addresses these issues could assist drivers, and help to prevent a repetition of the incident. This package is shown in Addendum 4 and amounts to approximately £6,500 of work.

5.10 The two County Members for Margate & Cliftonville have indicated that they would be willing to consider funding these improvements from their Member Highway Fund.

6. Summary

6.1 KHS has already undertaken extensive improvements at this junction. The initial results from monitoring the scheme's impact indicate that safety has been improved and congestion has been reduced.

6.2 A review of the signage has been carried out, prompted by this petition. It has highlighted that there are some areas where signage could be further improved.

7. Recommendation

7.1 It is recommended that;

7.1.1 The package of signing improvements outlined in Addendum 4 is implemented, subject to funding becoming available.

7.1.2 The lead petitioner is advised accordingly.

Contact Officer:

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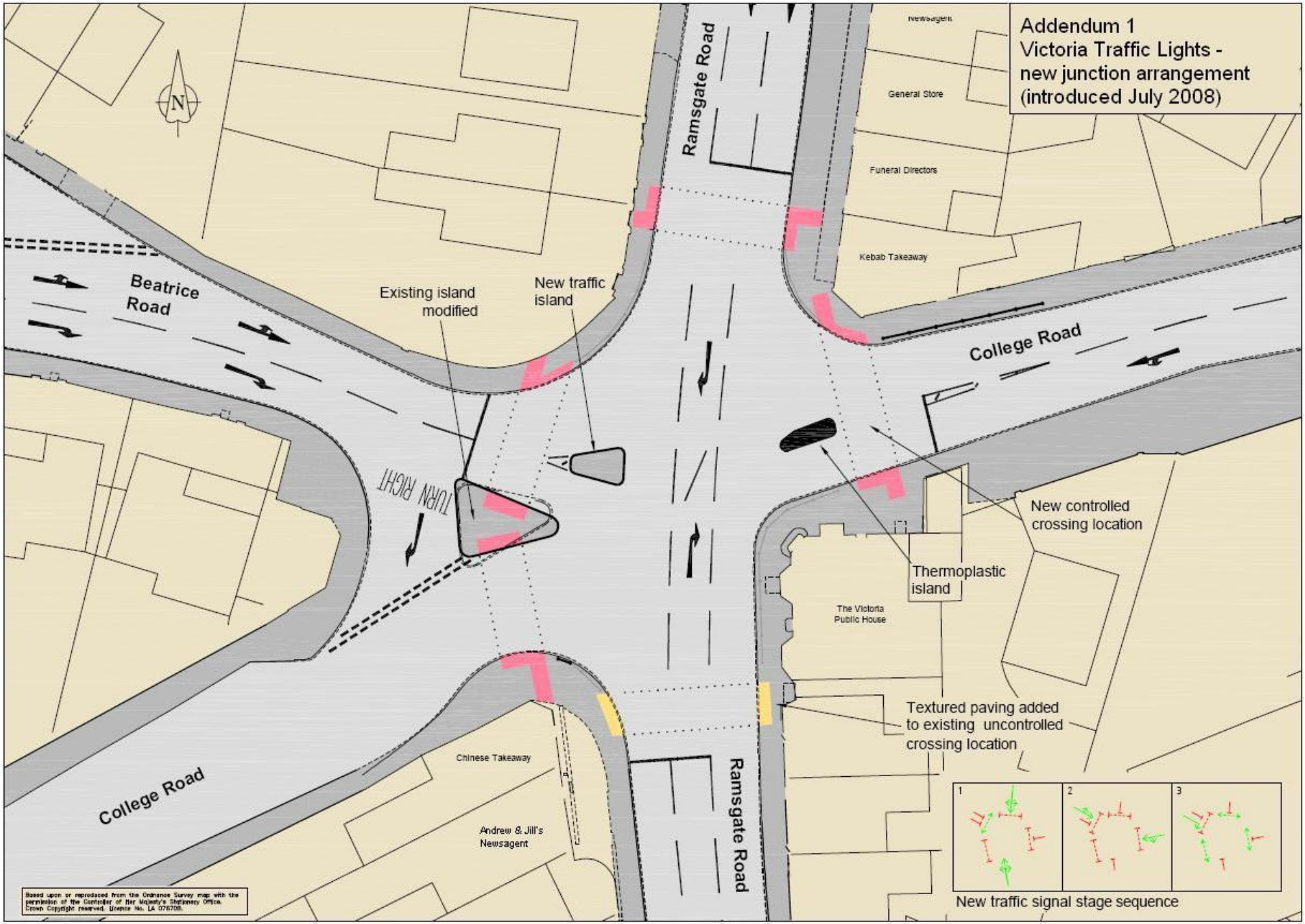
(KHS Transport & Development) - 08458 247800

Background Papers

Addendum 1: New junction arrangement
Addendum 2: Queue length surveys – 'before and after' the improvements
Addendum 3: Summary of incident on 11 June 2010
Addendum 4: Signage issues and proposed package of signing improvements


Addendum 1
Victoria Traffic Lights -
new junction arrangement
(introduced July 2008)
Ramsgate Road
Newsagent
General Store
Funeral Directors
Kebab Takeaway
Beatrice Road
Existing island modified
New traffic island
College Road
TURN RIGHT
New controlled crossing location
Thermoplastic island
The Victoria Public House
Textured paving added to existing uncontrolled crossing location
Chinese Takeaway
Andrew & Jill's Newsagent
College Road
Ramsgate Road
1
2
3
New traffic signal stage sequence
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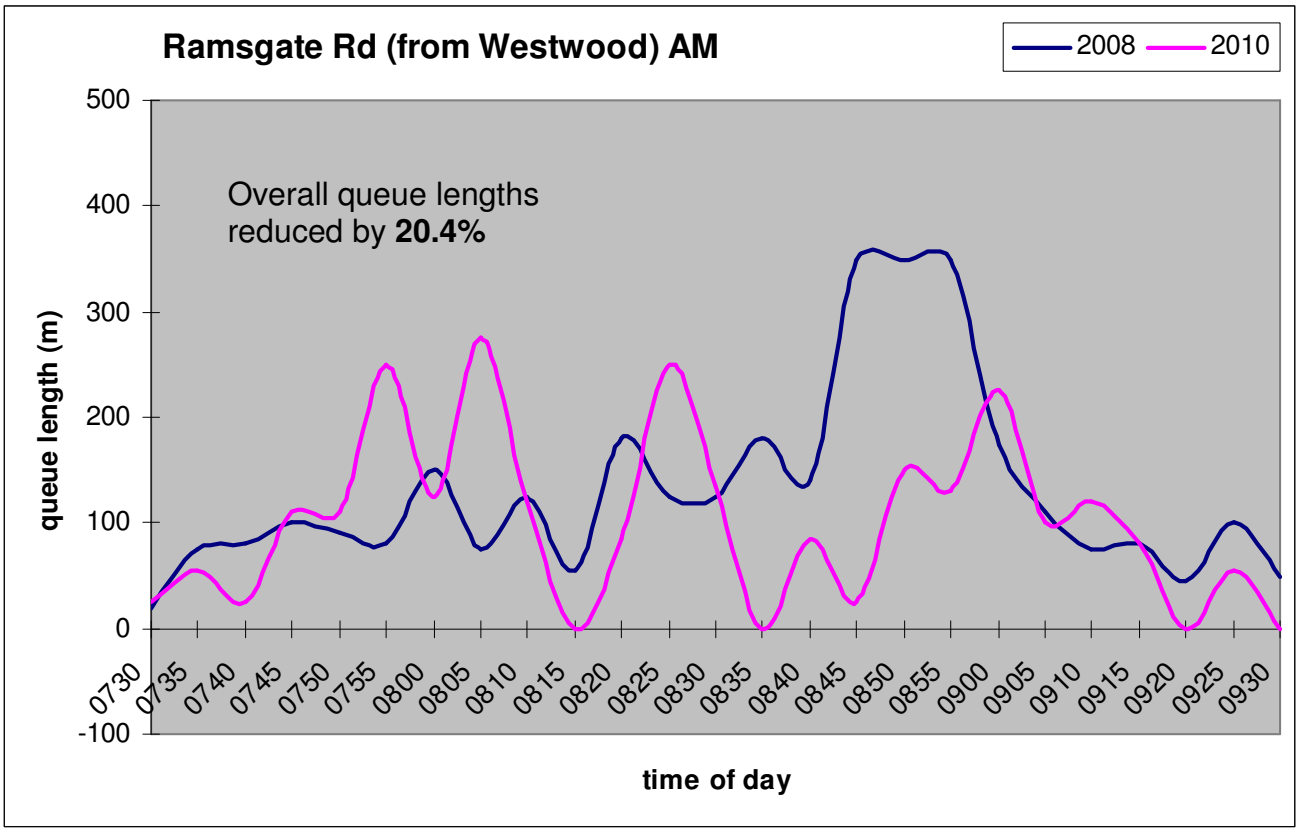
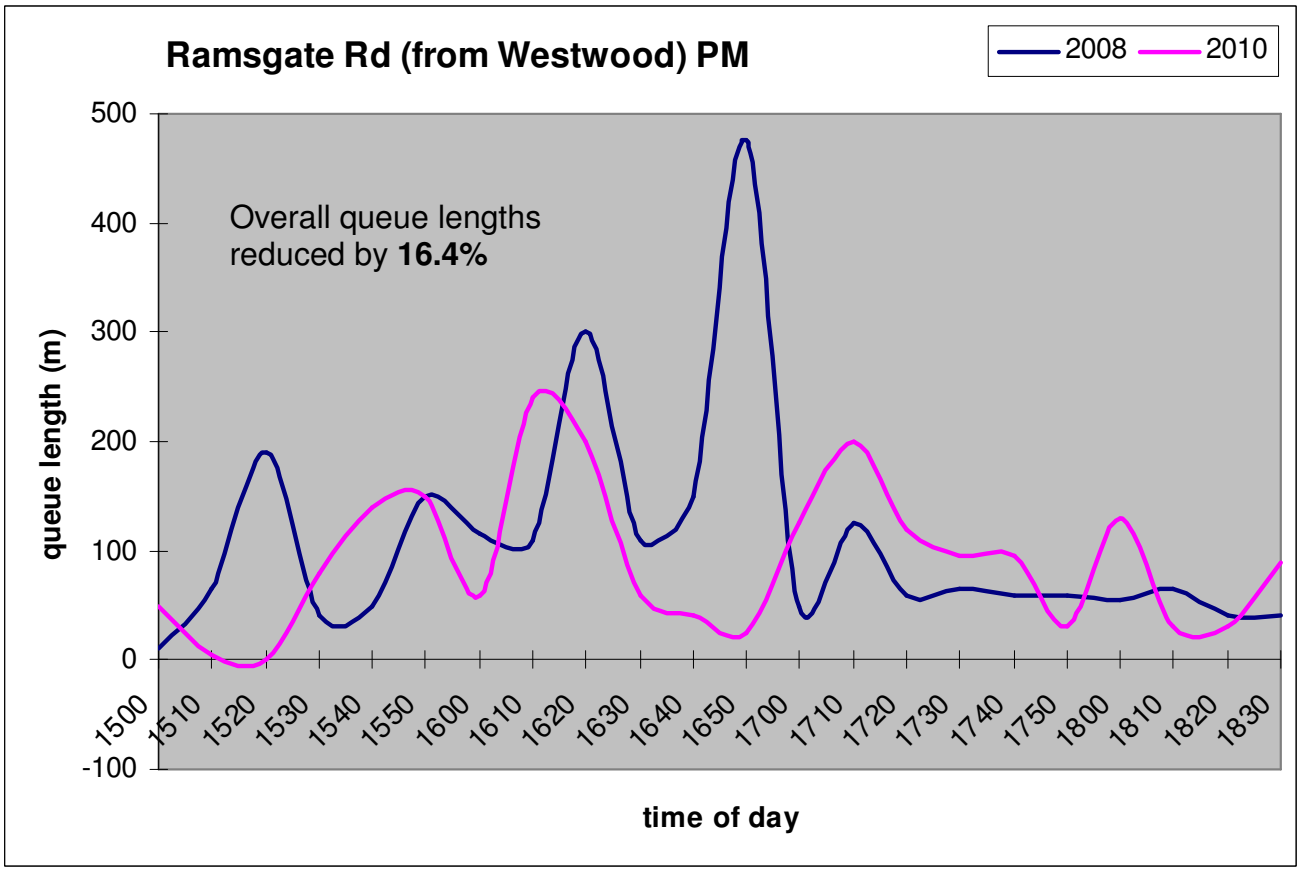
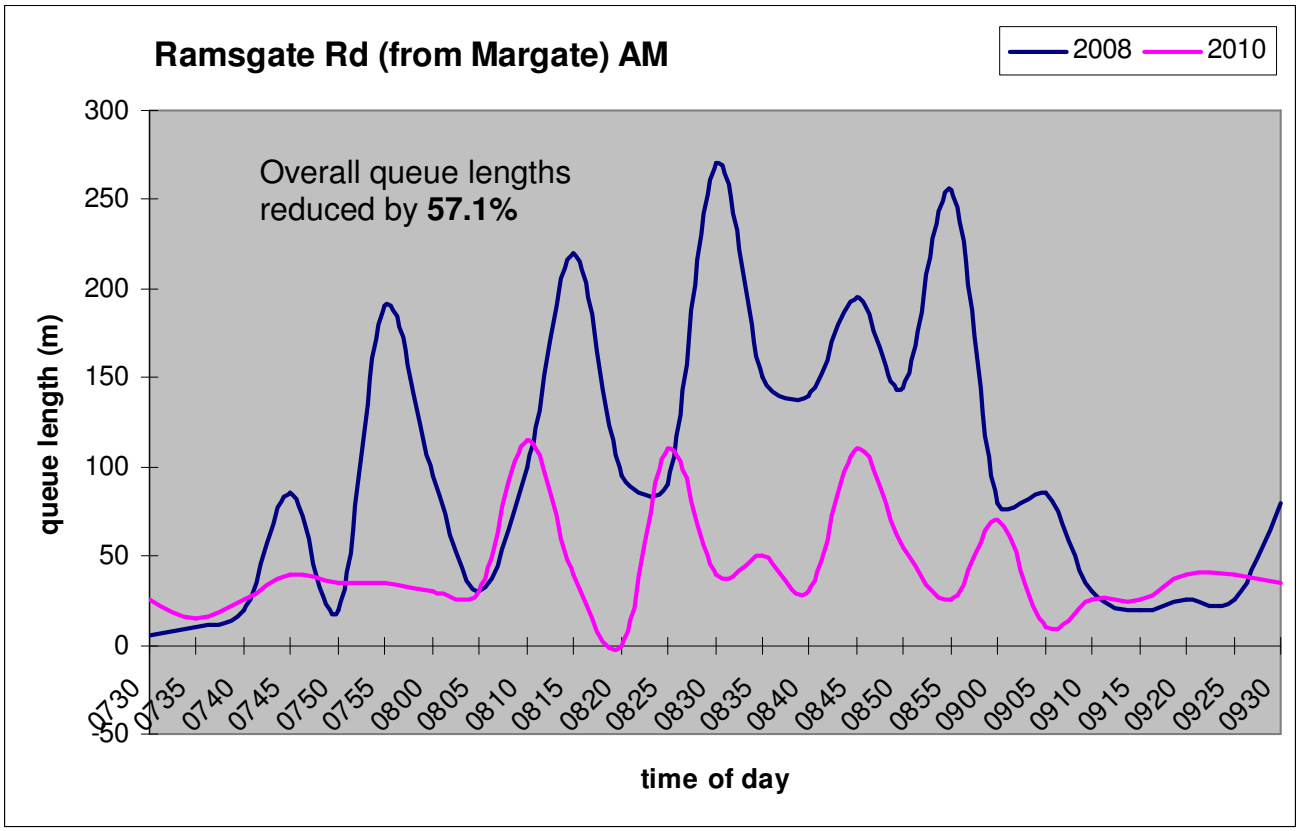
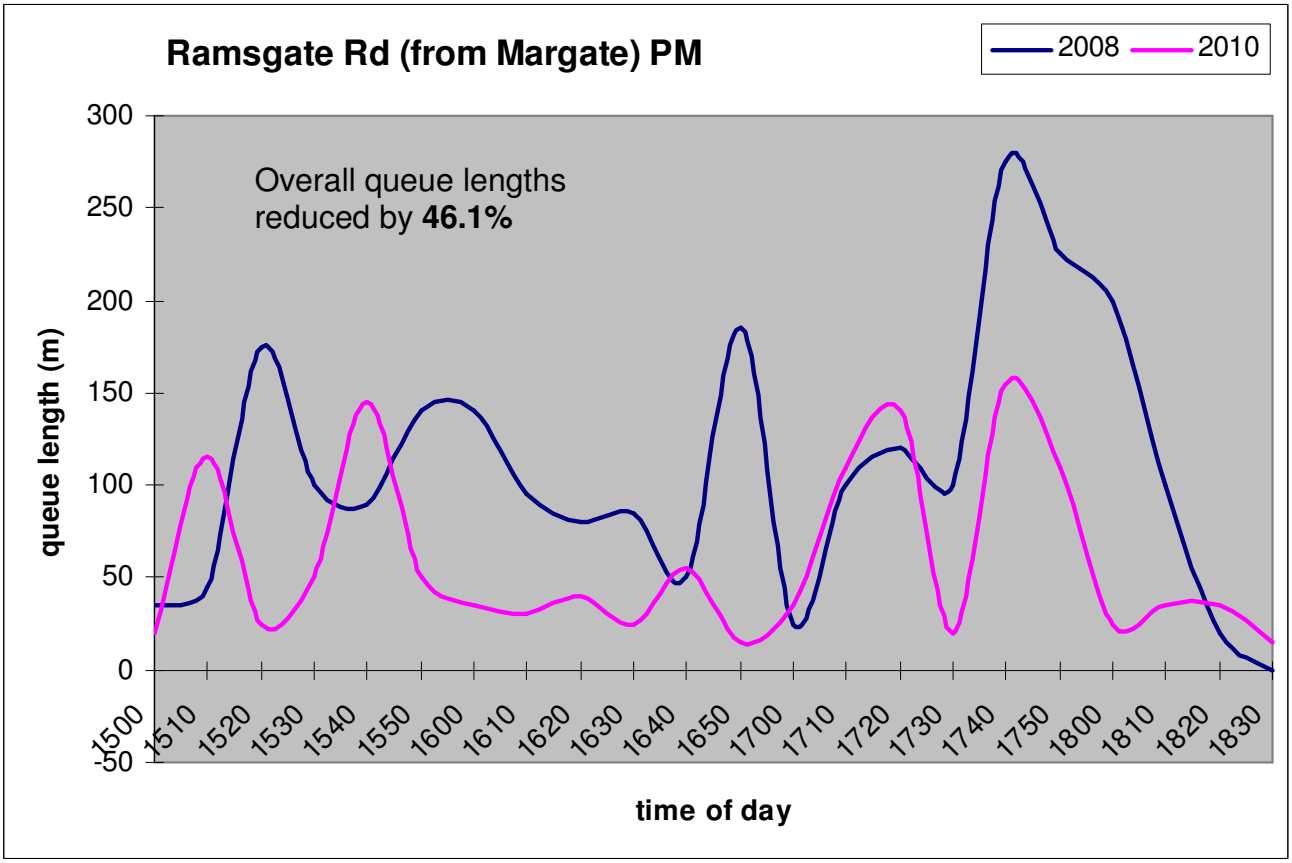
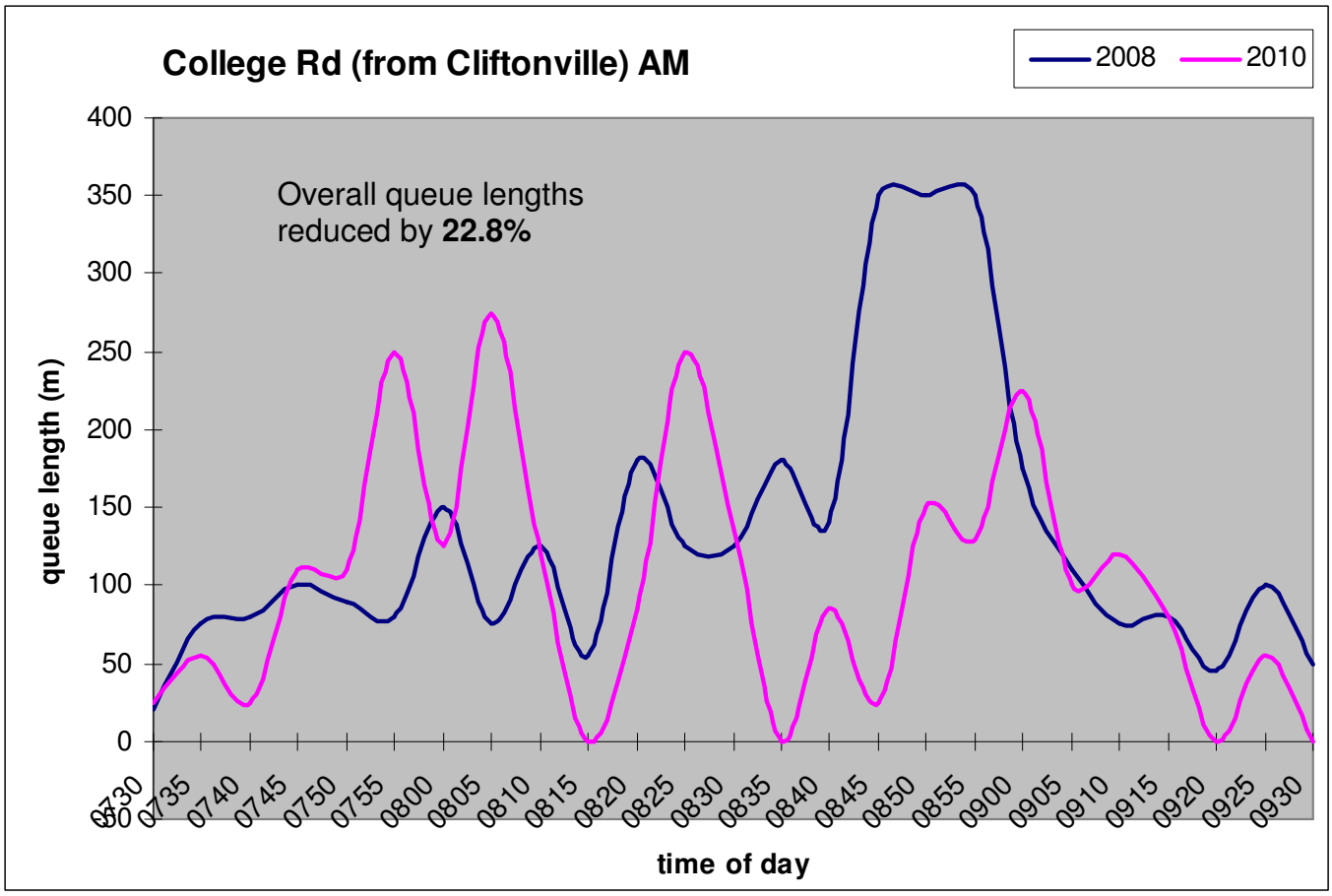
ADDENDUM 2: Queue length surveys – 'before and after' the improvements

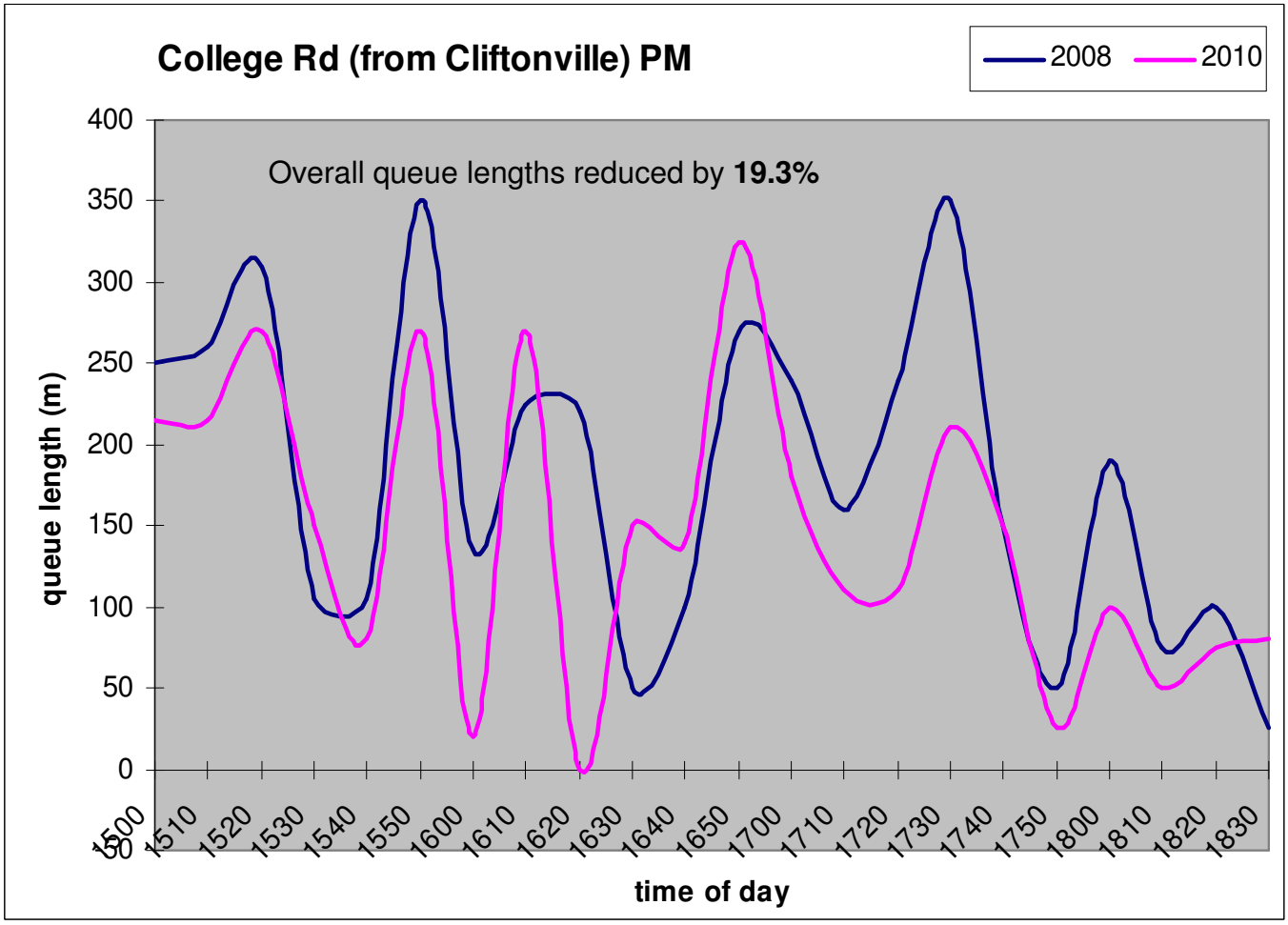


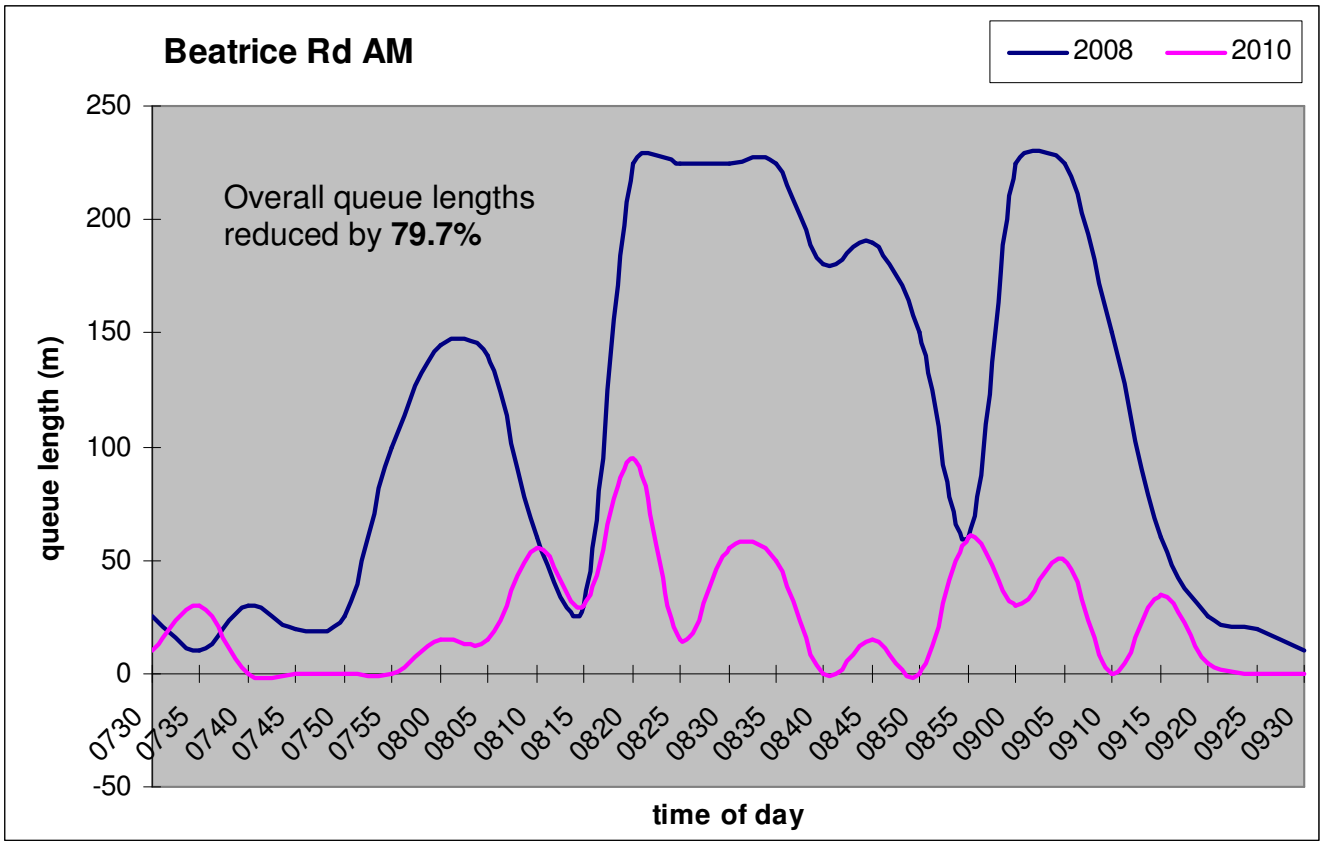



Ramsgate Rd (from Margate) AM
2008
2010
Overall queue lengths reduced by **57.1%**
queue length (m)
300
250
200
150
100
50
0
-50
0730
0735
0740
0745
0750
0755
0800
0805
0810
0815
0820
0825
0830
0835
0840
0845
0850
0855
0900
0905
0910
0915
0920
0925
0930
time of day


Ramsgate Rd (from Margate) PM
2008
2010
Overall queue lengths reduced by **46.1%**
queue length (m)
300
250
200
150
100
50
0
-50
1500
1510
1520
1530
1540
1550
1600
1610
1620
1630
1640
1650
1700
1710
1720
1730
1740
1750
1800
1810
1820
1830
time of day


College Rd (from Cliftonville) AM
2008
2010
Overall queue lengths reduced by **22.8%**
queue length (m)
time of day
400
350
300
250
200
150
100
50
0
0730
0735
0740
0745
0750
0755
0800
0805
0810
0815
0820
0825
0830
0835
0840
0845
0850
0855
0900
0905
0910
0915
0920
0925
0930


College Rd (from Cliftonville) PM
2008
2010
Overall queue lengths reduced by **19.3%**
queue length (m)
time of day
400
350
300
250
200
150
100
50
0
1500
1510
1520
1530
1540
1550
1600
1610
1620
1630
1640
1650
1700
1710
1720
1730
1740
1750
1800
1810
1820
1830


Beatrice Rd AM
2008
2010
Overall queue lengths reduced by **79.7%**
queue length (m)
250
200
150
100
50
0
-50
0730
0735
0740
0745
0750
0755
0800
0805
0810
0815
0820
0825
0830
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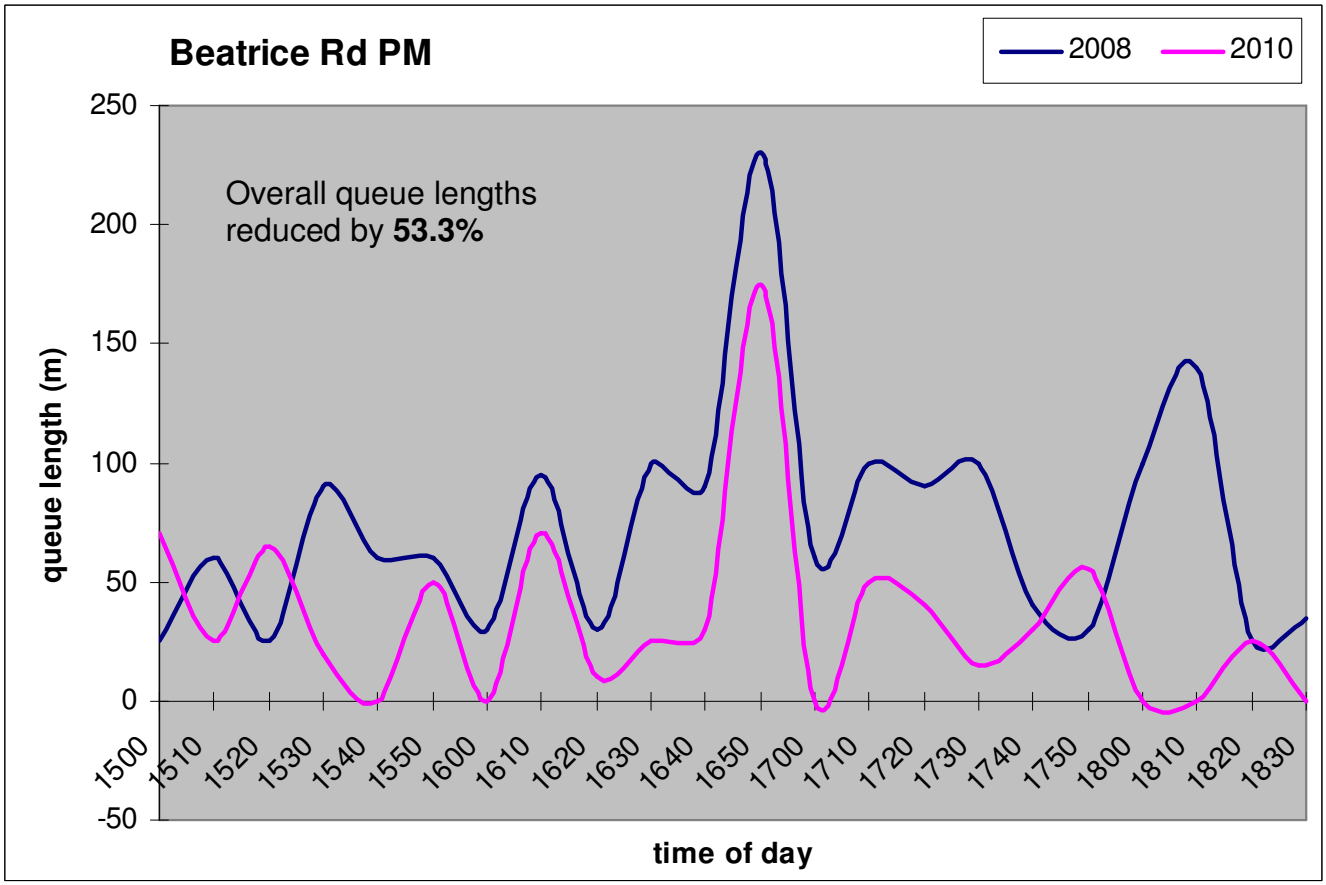
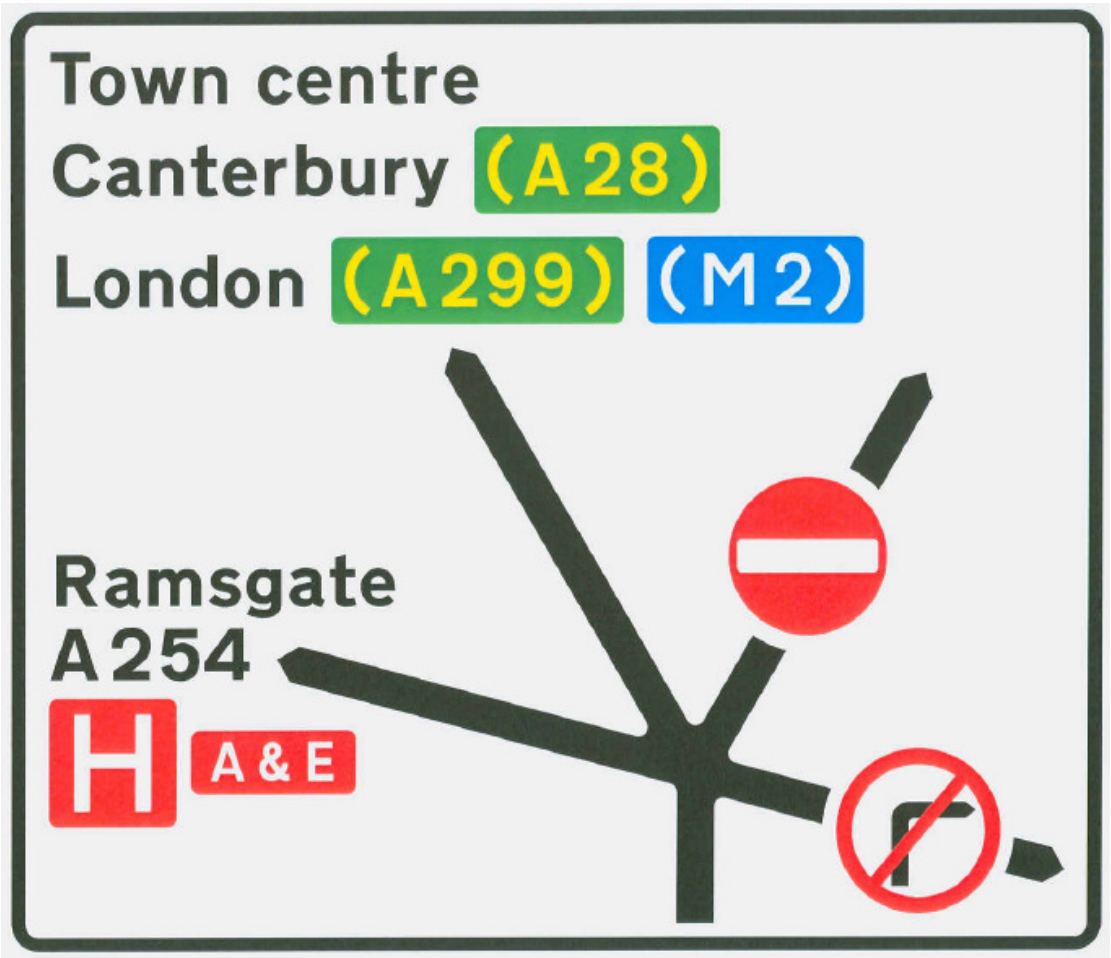
0905
0910
0915
0920
0925
0930
time of day


Beatrice Rd PM
2008
2010
Overall queue lengths reduced by **53.3%**
queue length (m)
250
200
150
100
50
0
-50
1500
1510
1520
1530
1540
1550
1600
1610
1620
1630
1640
1650
1700
1710
1720
1730
1740
1750
1800
1810
1820
1830
time of day

Addendum 3: Summary of incident on 11 June 2010

Addendum 4: Signage issues and proposed package of signing improvements

The existing map sign on the College Road approach (from Cliftonville) does not show the no-entry into Beatrice Road. It is proposed to replace the sign on the left with the new design shown below.




The existing 'keep left' sign is misleading, and could be replaced with a 'no entry' sign to supplement the existing signs (circled white)


Margate
On the approach
from Ramsgate, the lorry
sign obscures the no entry sign.
It is proposed to relocate the lorry
sign so that this no longer occurs


M&S
'No entry' can be written on the road
as a further measure, between the
points indicated by the arrows

The stack sign in Beatrice Road (on the left, above) is giving the same information as the smaller sign shown below, right. It is proposed to remove the smaller sign, to reduce sign clutter and increase footway space for pedestrians.