24th July 2015

Strategic Allocation Site at Greenhill Transport Implications

A Traffic and Transport Appraisal (TTA) was prepared in March 2014 by Bancroft Consulting for Hollamby Estates. The purpose of the appraisal was to provide a level of confidence that 600 dwellings could be accommodated on this site, without overbearing highway safety and capacity concerns ensuing.

This subsequent note is intended to provide a response to this document, in order to assist the examination of local strategic housing allocations in relation to the emerging Canterbury Local Plan.

Local Context

Greenhill Road is an unclassified residential access road linking to the south to Thornden Wood Road which is a rural connection to Canterbury. It is 7.0 to 7.5m wide for most of the northern end but is significantly narrower at its southern end, where road alignment changes are proposed by the developer. The residential length of the road is subject to a 30mph limit.

Greenhill is within walking distance of a range of sustainable transport opportunities. The local junior school is located within 500m, Herne Bay High secondary school approximately 1 mile and the nearest rail station is approximately 1.2 miles from the site. There is a controlled pedestrian crossing on the A2990 to the east of Greenhill roundabout, which pedestrians would use to access Herne Bay.

All of Greenhill is within cycling distance to Herne Bay, but cyclists are impeded by the A2990 Thanet Way. Improvements would be required at the northern end of Greenhill Road South at its junction with Greenhill Road East, and to the existing pedestrian crossing to accommodate cyclists and provide a safe route into the town.

Greenhill is served by an offshoot of the existing triangle bus route, which provides a regular bus service to Herne Bay, Whitstable and Canterbury (albeit this is not a fast or direct service from Greenhill). The site is not currently served by a bus route to the south into Canterbury.

Trip Rates

The residential trip rates applied in the TA are given as 0.41 (per dwelling) in the am peak and 0.448 in the pm hour.

This trip rate gives the following additional trips generated from a 600 dwelling housing site:-

- 246 (am peak hour)
- 269 (pm peak hour)

KCC have undertaken their own trip appraisal, based on data contained within the TRICS database. TRICS is a database of trip rates for developments and is used in the United Kingdom for transport planning purposes, to quantify the trip generation associated with new development.

The following parameters have been used to calculate a trip rate per dwelling for residential development in this location:-

- Houses privately owned sites
- Trip rates for vehicles

- Sites located in England (excluding Greater London);
- Sites located in town centre or edge of town centre locations have been excluded
- Sites with car ownership levels in the range 1.1 1.5
- Weekday surveys

The trip rates (per dwelling) identified are shown in **Appendix A**. These equate to 0.518 in the am peak and 0.579 in the pm hour. This generates the following development trips:-

- 310 in the AM Peak (an additional 64 vehicles to those indicated in the TTA)
- 347 in the PM Peak (an additional 78 vehicles to those indicated in the TTA)

It is relevant to note that even higher residential trip rates (per dwelling) were recently adopted by Bancroft Consulting for proposals relating to 40-50 dwellings on part of the same site (local planning authority reference CA/12/01431). A copy of this TA is provided in **Appendix B**. It should be noted that the quantum of development differed to that proposed through the strategic allocation. The TA submitted to support this application related to up to 80 affordable type dwellings.

Trip distribution

It is noted that the traffic in the TTA has been distributed onto the local highway network using a PT² gravity model. This is not considered to be an appropriate model for Canterbury district. The gravity model assumes that only 10% of traffic will distribute to Canterbury via Thorndon Wood Road. The highway authority considers that this does not appreciate Canterbury (being a City Centre) as an attractive and likely destination for trips of both employment and education (including colleges, universities and grammar school provision).

The trip distribution contained within the TTA, also differ to those shown in a 2010 Transport Appraisal by Bancroft Consulting **(Appendix B)**, which was subsequently used to support planning a recent planning application for this site under planning reference CA/12/01431.

The 2010 document concluded that approximately 31% of traffic would travel towards Thorndon Wood Road, which differs to the suggested trip distribution of 10% in the 2014 TA (despite a more direct route to Thorndon Wood Road being created through a larger development proposal). Therefore it is not considered that the TTA document has provided satisfactory assurances that an accurate and robust trip distribution has been established. This is likely to have a bearing on the relative impact to each of the highway links and associated junctions.

It is considered that census data would provide a more robust method of ascertaining local commuter travel distribution habits, which could then be used to provide a measureable perspective on likely trip distribution from the new occupants on the development site.

Notwithstanding the above The 2014 TA shows 27 additional traffic movements to the south from the site and 242 additional movements to the north in the peak hour. This can be compared with the base counts of traffic flow in Greenhill Road as follows:

		Without Development	With Development	Increase	% Increase
Northbound	am	543	707	164	30%
Northbound	pm	431	518	87	20%
Southbound	am	427	488	61	14%
Southbound	pm	502	659	157	31%
	am	970	1195	225	23%
Two way	pm	933	1177	233	25%

This represents a significant traffic increase and it is not clear whether background growth has been taken into account and if traffic generated from the other strategic sites has been accounted

Junction Modelling

The Arcady modelling submitted in the TTA suggests that the Greenhill roundabout junction at the A2990 Thanet Way will perform within theoretical capacity, with no significant queuing with additional development traffic.

The highway authority questions the outputs of the model, as current observations suggest that vehicle queues and delay are currently in excess of those indicated within the submitted modelling. It is known that this junction experiences queuing at peak times now, with particularly on the Greenhill Bridge Road exit arm, (largely in relation to the Sea Street signal junction). This subsequently leads to blocking back of the roundabout at the A2990, which is a secondary route in the road hierarchy of Kent and carries a significant amount of vehicular traffic.

The following observations have been made in relation to the LINSIG capacity model for the Sea Street Signal Junction:-

- There is not an existing LINSIG capacity model contained within the transport appraisal, therefore it is not possible to compare the proposed and existing scenarios and ascertain what the impact the development will have on the traffic signal junction or to validate baseline traffic conditions.
- The proposed LINSIG model shows that the junction will be over capacity -5% Practical Reserve Capacity during the PM peak. The TTA suggests that this is acceptable. In the am peak hour, a maximum queue of 24.3 pcus has been identified on the Greenhill Bridge Road arm. This is likely to result in queuing vehicles back onto the roundabout and A2990 Thanet Way, as the stop line for the junction is set back and the carriageway has areas of keep clear marking. It is not considered that that the operation of the traffic signals would be acceptable with this scenario. There have not been any mitigation proposals suggested by the TTA document.

The existing traffic signals were installed in 2001. They currently operate under vehicle actuation control and there are no controlled pedestrian crossing facilities. This will need to be considered in the context of the development, the need to facilitate pedestrian movement in the future and the impact that this would have to PRC as a whole.

Greenhill Road

As per previous planning proposals under LPA reference CA/12/01431, it is noted that a single way working arrangement is indicated for a section of Greenhill Road. This is to enable pedestrian facilities to be provided to minimum widths to the southern side of the carriageway leading to the adjacent school site. The indicated pedestrian access arrangements (to minimum widths contained within the Manual for Streets) are considered to

KCC Highways & Transportation – Assessment of Traffic & Transport Appraisal for Land at Greenhill

be permissible for a smaller development proposals, however much larger proposals (for example 600 dwellings) would generate a much larger demand for walking and cycling, as such it is recommended that this standard should be improved and a 2.0metre footway should be achieved (In accordance with recommended parameters contained within The Manual For Streets). It is not clear if the developer has the required land available in order to make such improvements.

Due to the close proximity of the school, Greenhill Road is subject to a large amount of both pedestrian and vehicular activity during the morning peak hour. The road is also used as a popular alternative route to and from Canterbury, via Thorndon Wood Road. The provision of a development of 300 dwellings (as proposed in the draft strategic allocation) will inevitably impact on journey times within this road, particularly if single way working is employed at this location, as indicated by the TA documents. Whilst it is appreciated that this appraisal is not evidenced by a junction capacity model, it is considered that a doubling of this potential impact to 600 dwellings would be overbearing from a highway safety and amenity perspective.

Conclusion

The TTA does not provide sufficient evidence that a 600 dwelling allocation could be accommodated within the local highway network. As such the highway authority are still of the opinion that this site is not appropriate for a 600 house strategic development allocation. It is likely that it will generate a significant volume of traffic, which will create a considerable and potentially severe impact, whether it distributes to the north or south.

Visum modelling for Canterbury demonstrates additional traffic delay in St Stephens Hill as traffic from the Herne Bay sites use other routes to enter the city. This development will add to that as its direct access into Canterbury will be via Thornden Wood Road and St Stephen's Hill.

Trip rates used to measure likely vehicular impact from this site are not considered to be acceptable and a suggested trip rate is provided in this document, using the TRICS database methodology. This increases the predicted traffic impact from those identified within the TTA.

The predicted distribution of vehicle trips from the proposed development is not agreed. The gravity model that has been used is not an appropriate tool within the given location and a more locally robust methodology using census home to work data may be a more appropriate tool.

It is considered that the existing allocation of 300 would more acceptable in highway terms given the evidence and observations submitted / noted to date. However it is evident that localised highway mitigation is likely to be required to address highway impacts.

James Wraight

Strategic Transport & Development Planner

Kent County Council – Highways & Transportation.

<u>Appendix A</u>

Suggested Trip Rate – TRICS Outputs

TRICS 7.2.2 160615 B17.20	(C) 2015 TRICS Consortium Ltd	Friday 24/07/15
		Page 1
KENT COUNTY COUNCIL ST	MICHAELS CLOSE MAIDSTONE	Licence No: 446201

Calculation Reference: AUDIT-446201-150724-0718

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : A - HOUSES PRIVATELY OWNED VEHICLES

Selected regions and areas:

03	SOUTH WEST			
	CW CORNWALL	1 days		
	DC DORSET	1 days		
04	EAST ANGLIA	-		
	CA CAMBRIDGESHIRE	1 days		
	NF NORFOLK	1 days		
05	EAST MIDLANDS	-		
	LN LINCOLNSHIRE	1 days		
06	WEST MIDLANDS			
	SH SHROPSHIRE	1 days		
	ST STAFFORDSHIRE	1 days		
07	YORKSHIRE & NORTH LINCOLNSHIRE			
	NY NORTH YORKSHIRE	2 days		
	SY SOUTH YORKSHIRE	1 days		
80	NORTH WEST			
	CH CHESHIRE	2 days		

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of dwellings
Actual Range:	9 to 186 (units:)
Range Selected by User:	6 to 4334 (units:)

Public Transport Provision: Selection by:

Include all surveys

Date Range: 01/01/07 to 11/12/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:	
Monday	3 days
Tuesday	4 days
Wednesday	3 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:	
Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

<u>Selected Locations:</u> Suburban Area (PPS6 Out of Centre)

12

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

KENT COUNTY COUNCIL ST MICHAELS CLOSE MAIDSTONE

Friday 24/07/15 Page 2 Licence No: 446201

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class: C3

11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile: 1,001 to 5,000 3 days 5,001 to 10,000 2 days 15,001 to 20,000 4 days 20,001 to 25,000 2 days 25,001 to 50,000 1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:	
5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	3 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5

12 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

<u>Travel Plan:</u> No

12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

KENT COUNTY COUNCIL ST MICHAELS CLOSE MAIDSTONE

LIST OF SITES relevant to selection parameters

1	CA-03-A-04	DETACHED		CAMBRIDGESHIRE
2	THORPE PARK ROAD PETERBOROUGH Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: T CH-03-A-06 CREWE ROAD	Out of Centre)	9 18/10/11 WS	Survey Type: MANUAL CHESHI RE
3	CREWE Suburban Area (PPS6 No Sub Category Total Number of dwe Survey date: CH-03-A-08 WHITCHURCH ROAD BOUGHTON HEATH CHESTER	llings: TUESDAY DETACHED	129 14/10/08	Survey Type: MANUAL CHESHIRE
4	Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: CW-03-A-02 BOSVEAN GARDENS	llings:	11 22/05/12	Survey Type: MANUAL CORNWALL
5	TRURO Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: T DC-03-A-01 ISAACS CLOSE	llings:	73 18/09/07	Survey Type: MANUAL DORSET
6	POOLE Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: V LN-03-A-02 HYKEHAM ROAD	llings: WEDNESDAY	51 16/07/08	Survey Type: MANUAL LINCOLNSHIRE
7	LINCOLN Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: 1 NF-03-A-02 DEREHAM ROAD	llings:	186 14/05/07	Survey Type: MANUAL NORFOLK
	NORWICH Suburban Area (PPS6 Residential Zone Total Number of dwe Survey date: I	llings:	98 22/10/12	Survey Type: MANUAL

KENT COUNTY COUNCIL ST MICHAELS CLOSE MAIDSTONE Licence 1 LIST OF SITES relevant to selection parameters (Cont.) 8 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11 Survey Type: MANUAL 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 9 NY-03-A-09 TeRRACED Survey Type: MANUAL 9 NORTHALLERTON Survey date: MONDAY 16/09/13 Survey Type: MANUAL 10 SH-03-A-04 TERRACED SHROPSHIRE SHROPSHIRE 11 Strose of devellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 S	24/07/15
LIST OF SITES relevant to selection parameters (Cont.) 8 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 SURVEY date: FRIDAY 14/10/11 Survey Type: MANUAL 9 NY-03-A-09 MIXED HOUSI NG NORTH YORKSHI RE Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 Survey Type: MANUAL 10 SH-03-A-04 TERRACED SHROPSHIRE SI MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED STAFFORDSHIRE 12 ST-03-A-05 TERRACED STAFFORDSHIRE 13 ST-03-A-05 TERRACED STAFFORDSHIRE 14	24/07/15 Page 4
8 NY-03-A-06 HORSEFAIR BUNGALOWS & SEMI DET. NORTH YORKSHIRE 8 NY-03-A-06 Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 9 NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 10 SH-03-A-04 TERACED SHROPSHIRE 5T MICHAEL'S STREET SHROPSHIRE SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PP56 Out of Centre) Residential Zone 14	No: 446201
8 NY-03-A-06 HORSEFAIR BUNGALOWS & SEMI DET. NORTH YORKSHIRE 8 NY-03-A-06 Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 9 NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 10 SH-03-A-04 TERACED SHROPSHIRE 5T MICHAEL'S STREET SHROPSHIRE SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PP56 Out of Centre) Residential Zone 14	
HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11 Survey Type: MANUAL 9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 Survey Type: MANUAL 10 SH-03-A-04 TERRACED SHROPSHIRE ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11 Survey Type: MANUAL NORTH YORKSHI RE GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 Survey Type: MANUAL 10 SH-03-A-04 TERRACED SHROPSHI RE ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED STAFFORDSHI RE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 Survey Type: MANUAL 10 SH-03-A-04 TERRACED SHROPSHIRE ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) StoKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14 14	
Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13 Survey Type: MANUAL SH-03-A-04 TERRACED SHROPSHIRE ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
10 SH-03-A-04 TERRACED SHROPSHIRE ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 Survey Type: MANUAL 11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
11 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE WATERMEET GROVE ETRURIA STOKE-ON-TRENT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 14	
Total Number of dwellings: 14	
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL	
12 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE A19 BENTLEY ROAD BENTLEY RISE DONCASTER Suburban Area (PPS6 Out of Centre) Residential Zone	
Total Number of dwellings:54Survey date: WEDNESDAY18/09/13Survey Type: MANUAL	

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	75	0.076	12	75	0.252	12	75	0.328
08:00 - 09:00	12	75	0.152	12	75	0.366	12	75	0.518
09:00 - 10:00	12	75	0.156	12	75	0.212	12	75	0.368
10:00 - 11:00	12	75	0.143	12	75	0.160	12	75	0.303
11:00 - 12:00	12	75	0.164	12	75	0.158	12	75	0.322
12:00 - 13:00	12	75	0.191	12	75	0.171	12	75	0.362
13:00 - 14:00	12	75	0.171	12	75	0.152	12	75	0.323
14:00 - 15:00	12	75	0.158	12	75	0.176	12	75	0.334
15:00 - 16:00	12	75	0.220	12	75	0.172	12	75	0.392
16:00 - 17:00	12	75	0.281	12	75	0.170	12	75	0.451
17:00 - 18:00	12	75	0.352	12	75	0.227	12	75	0.579
18:00 - 19:00	12	75	0.211	12	75	0.173	12	75	0.384
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.275			2.389			4.664

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 186 (units:)
Survey date date range:	01/01/07 - 11/12/14
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

<u>Appendix B</u>

TA Produced for Hollamby Estates by Bancroft Consulting January 2010



Hollamby Estates Ltd

Greenhill Road, Herne Bay

Transport Assessment

JANUARY 2010



www.bancroftconsulting.co.uk

bancroftconsulting

Hollamby Estates Ltd

Greenhill Road, Herne Bay

Transport Assessment

January 2010

Bancroft Consulting Ltd Mercury House Shipstones Business Centre Northgate, New Basford Nottingham NG7 7FN

AUTHOR:	SJH
CHECKED:	СЈВ
APPROVED:	СЈВ
REPORT REF:	F09120 Greenhill Rd, Herne Bay Transport Assessment (Rev B, September 2010)
STATUS:	FINAL

DOCUMENT ISSUE RECORD		
REVISION	COMMENTS	DATE
DRAFT	Draft report issued to Client	Jan '10
А	Report updated following client comments	Feb '10
В	Report updated following discussions with Kent Highway Services	Sept '10

CONTENTS

		Page Number
1.0	INTRODUCTION AND BACKGROUND INFORMATION	1
2.0	EXISTING CONDITIONS	2
3.0	PROPOSED DEVELOPMENT	10
4.0	TRAFFIC GENERATION	11
5.0	DISTRIBUTION MODEL AND ASSIGNMENT	12
6.0	HIGHWAY IMPACT	13
7.0	OPPORTUNITIES TO ENCOURAGE NON-CAR TRAVEL	17
8.0	SUMMARY AND CONCLUSIONS	22

TABLES

Table 1	Details of local bus services
Table 2	Proposed development traffic generation profile
Table 3	Summary results of the proposed Greenhill Road/site access junction PICADY assessment

FIGURES

Figure 1	Site location plan
Figure 2	Pedestrian isochrone (2 kilometres)
Figure 3	Cyclist catchment area (5 kilometres)
Figure 4	Local bus routes
Figure 5	2009 observed peak hour traffic flows
Figure 6	Accident Study Locations
Figure 7	Proposed development distribution pattern
Figure 8	Proposed development traffic assignment
Figure 9	2017 Design Year 'without development' traffic flows
Figure 10	2017 Design Year 'with development' traffic flows

DRAWINGS

F09120/01	Proposed site access layout
F09120/02 Revision B	Proposed site access layout

bancroftconsulting

APPENDICES

Appendix A	Correspondence between Bancroft Consulting and Kent Highway Services
Appendix B	Highway boundary information
Appendix C	Rights of Way map
Appendix D	Traffic survey results
Appendix E	Personal injury accident data
Appendix F	TRICS output data
Appendix G	PICADY output data
Appendix H	National statistics data

GREENHILL ROAD, HERNE BAY TRANSPORT ASSESSMENT JANUARY 2010

1.0 INTRODUCTION AND BACKGROUND INFORMATION

- 1.1 Bancroft Consulting were appointed by Hollamby Estates Ltd to undertake an assessment of transport conditions associated with proposals to redevelop land on the south side of Greenhill Road, Herne for residential purposes. The site has been allocated in the Canterbury District Local Plan for "Community Use" under Policy C12, which includes the provision of affordable housing. The report is to accompany an outline planning application for affordable housing.
- 1.2 The objective of this Transport Assessment is to assess the impact of the proposed development on the surrounding highway infrastructure and determine whether it could satisfactorily accommodate any increases in trips. It assesses the proposed use traffic generation and considers how the overall conditions could change as a result of the proposals. In keeping with current Government policy contained within PPG13: Transport [March 2001], the report also examines opportunities for travel to the site by sustainable modes of transport. Furthermore, the Department for Transport documents 'Guidance on Transport Assessment' (March 2007) and 'Manual for Streets' (March 2007) have also been used for guidance in producing this assessment.
- 1.3 An initial version of this Transport Assessment (Revision A) was submitted to Kent Highway Services in February 2010 for their in-principle approval. Kent Highways Services subsequently commented on the report within their email dated 25 March 2010, which highlighted a number of areas that needed to be resolved before any support could be given. Following further discussions with Kent Highway Services and subsequent detailed assessment the main concerns of the local highway authority were addressed. This document therefore reflects the outcomes of the subsequent work that was undertaken to address the local highway authority's concerns regarding the intial proposals. Copies of all relevant correspondence between Bancroft Consulting and Kent Highway Services is provided within Appendix A.

2.0 EXISTING CONDITIONS

General

- 2.1 The site is located on the south side of the Herne Bay settlement area and to the north of the A299 Canterbury Road. More specifically, the site measures approximately 2 hectares in area and comprises undeveloped land that fronts Greenhill Road and Junction Road. The detailed site location and indicative redline boundary is shown on Figure 1.
- 2.2 The site is bound to the north by Greenhill Road and Junction Road, with open fields abutting the site at its eastern, western and southern boundaries. The surrounding area to the north is predominately urban in character, with a number of residential streets, shops and schools located nearby. To the south the area is more rural, with farms and associated fields. Further afield of the site, Herne Bay is located approximately 2 kilometres to the north and Whitstable is located approximately 4 kilometres northwest. Both these areas comprise significant amounts of residential, retail, and employment developments.
- 2.3 The site has a current allocation within the Canterbury Local Plan (Policy C12) for community use. The Local Plan states that this should include "social and physical infrastructure provided to meet identifiable local need; and can be buildings for local groups and the community, playing fields, car parking, areas of open space and affordable housing."

Highways

2.4 Greenhill Road is a local distributor road that extends between its junction with the A2990 (Thanet Way), through Greenhill to Canterbury via Thornden Wood Road. In the vicinity of the site the carriageway measures between 4.1 and 4.4 metres wide and is subject to a 30mph speed limit. However, this road width increases to 7.3 metres as it continues north towards Thanet Way. The road has a sinuous alignment with significant bends to the east and west of the site. Residential development has taken place at both the northern and western sides of Greenhill Road, which also includes the Briary Primary School immediately to the north of Junction Road. To the south of its junction with Thornden Close,

Greenhill Road becomes Thornden Wood Road and takes on a more rural character.

- 2.5 Junction Road forms part of the northern boundary to the site and has an informal junction with Greenhill Road. To determine the status of Junction Road, highway boundary information was obtained from Kent Highway Services. A copy of the plan is included within **Appendix B**, which confirms that Junction Road is privately maintained. Junction Road currently serves a single dwelling and land to the east of that dwelling. The carriageway takes the form of an informal track and ranges in width between 2.5 and 3.1 metres. Its boundaries are poorly defined and access is not restricted by gates or other deterrents.
- 2.6 The Greenhill Road/Hawks Road T-junction is located approximately 90 metres west of the site boundary. Hawks Road is a residential road and leads into the Greenhill residential estate. At the junction, the carriageway measures approximately 6.8 metres wide and includes 12 metres kerb radii. Visibility from the junction is good, with 2.4 x 70 metres splays being achievable in both directions.
- 2.7 The Greenhill Road/Thornden Close junction is located a further 180 metres west of Hawks Road and takes the form of a priority T-junction. Thornden Close is a residential cul-de-sac, which serves approximately 16 dwellings.
- 2.8 Opposite the site, a private link road exists that cuts across the bend in Greenhill Road and provides access to 10 dwellings. The access measures approximately 3.7 metres wide and has two dropped kerb access points from Greenhill Road. Looking at the highway boundary information (**Appendix B**), this link is privately owned.
- 2.9 The Greenhill Road/Granville Drive junction and Greenhill Road/Rowland Drive junctions are located approximately 110 and 160 metres north of the Greenhill Road/Junction Road T-junction, respectively. These arrangements both take the form of priority T-junctions, with 6.5 metres wide carriageways and 8 metres kerb radii. Both these roads serve residential properties within the Greenhill estate.

Pedestrian Travel

- 2.10 The Institution of Highways and Transportation [IHT] publication 'Guidelines for providing for journeys on foot' [2000] provides guidance on how to encourage pedestrian travel. The guidelines note that walking accounts for over one quarter of all journeys and four-fifths of journeys less than one mile (1.6 kilometres). Furthermore, walking is also an essential part of much car and almost all public transport travel. Promoting sustainable, integrated transport therefore involves providing good pedestrian links to public transport facilities.
- 2.11 The IHT guidelines describe 'acceptable' walking distances for pedestrians without impaired mobility. They suggest that for a commuting or school trip, up to 500 metres is the desirable distance, up to 1000 metres is an acceptable distance, and 2000 metres is the preferred maximum. **Figure 2** shows a 2 kilometres pedestrian isochrone centred on the site, which demonstrates that all of Greenhill is within a reasonable walking distance, as well as the southernmost part of Herne Bay. All of the local amenities within these areas, such as the shops, schools and public buildings, are therefore within a reasonable walking distance of the site.
- 2.12 No footway is available on the southernmost edge of Greenhill Road and a 1.8 metres wide footway is located at its northern edge, which runs from Thornden Close up to the private link road then ceases. At this point, pedestrians are required to walk either within the private link road or Greenhill Road carriageway. At the northern access into the link road, footways are available on both sides of Greenhill Road, with the eastern footway fronting the Briary Primary School. These footways continue along Greenhill Road leading into Herne, with streetlights along its length. No footways are available along either side of Greenhill Road, to the south of Thornden Close.
- 2.13 Approximately 90 metres north of the Greenhill Road/Junction Road junction a zebra crossing is available to assist pedestrian movements to and from the Briary Primary School across Greenhill Road.
- 2.14 No footways are available on Junction Road. However, following discussions

with the Rights of Way Officer at Kent Highways Services, it was confirmed that Route CH11 exists between the eastern end of Junction Road and Bullockstone Road. Route CH10 is also available within the site, which extends from Greenhill Road at the north through to Hatch Road at the south. A copy of the plan provided by the Rights of Way Officer is included at **Appendix C**

2.15 Footways are available along both sides of Hawks Road, which measure approximately 1.8 metres in width, these footways link Greenhill Road with the residential areas to the north of the site

Cycle Travel

- 2.16 PPG13 identifies cycling as having "the potential to substitute for short car trips, particularly those under 5 km, and to from part of longer journeys by public transport". **Figure 3** shows the site centred within a 5 kilometres catchment area. It demonstrates that surrounding areas including Herne Bay, Whitstable, Herne Common, Chestfield, Broomfield, Tankerton and Hampton are all within a reasonable cycle distance. Inspection of the Sustrans Cycle Route Map reveals that the Crab and Winkle Way cycle route passes through Whitstable and South Street.
- 2.17 The immediate surrounding area does not benefit from any specific cycle routes, which results in cyclists being required to travel within the carriageways of the local road network. However, the general layout and topography of these roads should not present any major issues of concern.

Public Transport

2.18 Details of local bus services are summarised in Table 1 and shown in Figure 4. Figure 4 shows that a total of 11 bus routes operate within a reasonable 400 metres walking distance of the site's northern boundary. Eight of these bus routes operate from Monday to Saturday at a combined peak hour frequency of 10 services per hour in each direction, or approximately one service every 6 minutes to locations including Canterbury, Herne Bay, Whitstable, and Sturry. The remaining routes (A1, 4b and 6b) operate on Sundays at a combined frequency of 3 buses per hour, or approximately one bus every 20 minutes. Routes 4a and 6a travel along Greenhill Road past the site's northern boundary and Routes 4a, 4b, 6, 6a and 6b travel along Greenhill Road and Rowland Drive, approximately 350 metres north of the site's northern boundary.

- 2.19 The closest bus stops that serve the main routes detailed above are located on both sides of Hawks Road. Further stops are located on both sides of Rowland Drive approximately 370 metres north of the site.
- 2.20 Herne Bay Train Station is located approximately 2 kilometres north of the site at the southern edge of Herne Bay. This station lies beyond the usual threshold for reasonable walking distances for public transport. However, it is served by the Southeastern Mainline and Southeastern high-speed services, which link Herne Bay to areas such as Ebbsfleet, Dover, Ashford International, Canterbury, Maidstone, Tonbridge and Folkestone. Services run at a frequency of approximately one train every 15 minutes in each direction during weekday daytimes. Further connections are available linking the Mainline Route to the Southeastern Metro Route, which leads to central London. Given the regular train services to areas that are not easily or often accessible by bus, it is considered that the train station is suitably located to serve public transport journeys between the site and locations further afield of the local areas.

Traffic flows

- 2.21 To ascertain existing traffic flows within the surrounding highway network during the weekday, 12-hour full turning count traffic surveys were carried out by Countsequential Surveys Ltd at the following junctions:
 - Greenhill Road/Hawks Road T-junction
 - Greenhill Road/Granville Drive T-junction
 - Greenhill Road/Rowland Drive T-junction

The above surveys were all carried out on Thursday 5 November 2009 between 0700 and 1900 hours. Details of the resulting morning and evening peak hour turning movements are summarised in **Figure 5**, with a full copy of the results included within **Appendix D**.

2.22 In addition to observing traffic flows at each of the above junctions, the number of pedestrians travelling along each junction arm was also recorded. These details are also provided within **Appendix D**.

Highway safety

- 2.23 Personal Injury Accident Data for the surrounding road network covering the last five years was obtained from Kent County Council (data provided for 01/01/05 to 30/06/09). The data covered an area comprising the site and surrounding highway network, including Greenhill Road, Junction Road, Hawks Road, Granville Drive and Rowland Drive. Figure 6 shows the locations of each accident that occurred during the study period with full details of the accident data provided at Appendix E.
- 2.24 Overall there have been 9 recorded accidents in the vicinity of the site during the study period. Of these, 1 was classed as serious and the remaining 8 were classed as slight. In total, 2 of the accidents involved pedestrians and one involved a pedal cyclist, whilst the remaining 6 accidents involved vehicles only. Each of the accidents can be broken down by the following years:
 - 2005 2 accidents (22%)
 - 2006 0 accidents (0%)
 - 2007 4 accidents (44%)
 - 2008 2 accidents (22%)
 - 2009 1 accident (12%)
- 2.25 Figure 6 shows that there was no specific area where clusters of three or more accidents occurred over the last five years, with no accidents occurring along Greenhill Road adjacent to the site's northern boundary. Of the nine accidents one occurred opposite the Briary Primary School, on a Sunday in 2007 at 1815 hours. The accident was a rear end shunt on the approach to the zebra crossing. Two accidents occurred on Granville Drive, one in 2005 and the other in 2007. The 2005 accident involved a car that overtook a parked vehicle and collided with a 4 year old child crossing the road from behind the parked vehicle. This accident occurred on a Thursday within the morning peak hour. The 2007

accident involved a cyclist emerging from a minor road into the path of an oncoming car. This accident occurred on a Wednesday at 1215 hours.

- 2.26 Two accidents occurred at the Greenhill Road/Blackburn Road junction. Both accidents involved right turning vehicles either into or out of Blackburn Road. The first accident occurred in 2005 and occurred when a car turned right out of the minor road into the path of an oncoming car. The second accident at this junction occurred in 2008 and comprised a rear end shunt when a vehicle stopped to turn into Blackburn Road. Both these accidents occurred on weekdays, with the latter incident occurring during the evening peak period.
- 2.27 Two accidents occurred on the approach to the Greenhill Road/Westlands Road junction, with one accident involving a 30 year old pedestrian being knocked down by a car travelling in the northbound direction. This accident occurred on a Saturday at 1955 hours in 2007. It was also confirmed in the accident report that the pedestrian was under the influence of alcohol at the time of the accident. The second accident involved a head-on collision between two cars travelling around the bend. This accident occurred on a Sunday at 1525 hours in 2007.
- 2.28 The final two accidents in the study area occurred to the south of the site on Thornden Wood Road and Molehill Road. The first accident occurred on Thornden Wood Road, which was classed as serious. This occurred as a result of a car travelling over a bridge towards a car performing a u-turn manoeuvre. The car swerved to avoid collision and left the carriageway. This accident occurred on a Saturday at 1300 hours in 2008. The accident on Molehill Road occurred in 2009 as a result of a car losing control whilst driving on ice.

Summary

2.29 Overall, there are good opportunities to access the site by sustainable modes. All of Greenhill and a significant proportion of Herne Bay are within a reasonable walking distance of the site. However, in the vicinity of the site, pedestrians travelling to the north would be required to walk within the Greenhill Road carriageway for a short period, as no footways are available where the road bends to the north. Beyond this point, a comprehensive range of pedestrian facilities are available within Greenhill, with footways leading to a number of surrounding amenities. Many areas surrounding the site can also be reached within a five kilometres cycle distance. There are regular bus services that travel to key local destinations and stop within 400 metres of the site. In the vicinity of the site Greenhill Road comprises a narrow road width and a footway located approximately 50 metres east of the site boundary, at the eastern edge of the carriageway. However, whilst the accident study has demonstrated that nine accidents have occurred in the surrounding area, there are no particular reasons or trends in their occurrence. Hence, no highway safety issues exist.

3.0 PROPOSED DEVELOPMENT

- 3.1 This assessment has been based on development proposals incorporating the construction of 80 'affordable type' dwellings, a new access road junction to Greenhill Road and associated off-site highway improvements. The eastern section of the site will be set aside as a Multi Use Games Area.
- 3.2 The assumed opening year for the development has been set at 2012.

4.0 TRAFFIC GENERATION

- 4.1 To determine an appropriate trip rate for the development proposals the TRICS database was examined. To reflect the affordable housing nature of the development all site within the TRICS category 'Residential Houses for Rent' was interrogated, with the Greater London, Northern Ireland, and Republic of Ireland regions excluded, all sites with up to 135 dwellings selected and all weekend surveys excluded. This search produced a total of 11 sites covering 11 survey days. Given the low number of resultant sites, no 85th percentile site was recommended. Therefore, from further investigation into the remaining sites TRICS site reference WO-03-B-01 (Terraced Houses, Worcester) was subsequently selected as a suitable comparison for the proposed development. The TRICS site comprised 76 dwellings, is located in an edge of town residential area, and is served by a similar level of public transport services.
- 4.2 The following trip rates (per dwelling) were therefore deemed appropriate for the residential development:
 - morning peak hour 0.170 arrive 0.500 depart 0.670 total
 - evening peak hour 0.360 arrive 0.250 depart 0.610 total
 - daily total 2.828 arrive 2.922 depart 5.750 total

4.3 Based on the above trip rates, the proposed 80 dwelling development would result in the following peak hour traffic generation:

- morning peak hour
 14 arrive
 40 depart
 54 total
- evening peak hour
 29 arrive
 20 depart
 49 total
- daily total
 226 arrive
 234 depart
 460 total

The daily trip generation profile for the above is demonstrated within **Table 2** and details of the corresponding TRICS output data are contained within **Appendix F**.

5.0 DISTRIBUTION MODEL AND ASSIGNMENT

- 5.1 The traffic count surveys recorded a 12-hour two-way flow on Greenhill Road (across the site frontage) of 2352 vehicles with the directional split being fairly equal, at 47% of traffic travelling eastbound and 53% travelling westbound. The peak hour movements show a marked bias towards Canterbury in the morning and a reversed trend in the evening. The directional distribution of traffic at the side road junctions does not repeat the tidality of the main line traffic flows with the majority of morning traffic movements being towards the north. This is likely to correspond with trips being made towards the Briary Primary School and Herne Bay High School.
- 5.2 Given the similarities between the proposed development and the residential area on the other side of Greenhill Road, it is considered that the distribution of traffic at the Greenhill Road/Hawks Road junction would reflect that of the proposed development traffic. Therefore, the distribution pattern of traffic at the Greenhill Road/Hawks Road T-junction was calculated and applied to the proposed site access, the results of which are demonstrated on **Figure 7**.
- 5.3 The proposed development traffic was subsequently assigned to the surrounding highway network in accordance with Figure 7. The resulting proposed development morning and evening peak hour traffic assignment is shown in Figure 8.
- 5.4 The observed network traffic flows were also adjusted to a local highway network Design Year scenario of 2017 (opening year 2012 + 5) using a Tempro growth estimate of 1.082 (2009 to 2017). The resulting 2017 Design Year 'without development' turning movements for the local highway network are summarised within Figure 9.

6.0 HIGHWAY IMPACT

On-site issues

- 6.1 Drawing Number F09120/01 demonstrates the proposed site access layout that was initially submitted to the local highway authority for approval. Concerns were subsequently raised over the impact of pedestrians through the scheme, particularity to the north of the site between the development and the nearby school. In order to address these concerns, a detailed Topographical survey was undertaken along Greenhill Road.
- 6.2 Based on the results of the Topographical survey, Drawing Number F09120/02 Revision B demonstrates a proposed site access layout that includes a traffic calming scheme through the bend in Greenhill Road. The scheme includes the widening of Greenhill Road to 5.5 metres throughout the site frontage, with a section of kerb build-out along the southern edge of the carriageway, which narrows the major road width to form a 3.25 metres wide single lane for a short period. This in turn allows for a footway to be implemented along the southern edge of the carriageway, which ranges in width between 3.7 and 0.9 metres. The 0.9 metres section of the footway is sufficient enough to accommodate a wheelchair to travel safely, without encroachment onto the main road carriageway. The footway would run from the site access, across Junction Road and up to the existing facility adjacent to the school. A maximum achievable forward visibility splay of 30 metres can be achieved from a give-way line, which is located in the southbound traffic lane of Greenhill Road.
- 6.3 Currently, the narrow road width through the bend on Greenhill Road heightens the risk of conflict when two cars meet. To avoid conflict it is evident that vehicles are overrunning the kerbline at the southern edge of the carriageway and utilising the adjacent grass verge. This also increases the risk of collisions between vehicles travelling along Greenhill Road and pedestrians walking along either the carriageway or the verge. The proposed layout would provide a more formal arrangement by increasing the road width up to the traffic calming feature along Greenhill Road and formalising the bend in the carriageway to allow vehicles to travel without the risk of conflict. The footway provision along the

southern edge of the carriageway would also provide a safe area for pedestrians to travel along Greenhill Road.

- In accordance with the Kent Design Guide for a residential development with 6.4 between 50 and 300 dwellings, the drawing also demonstrates a carriageway width of 5.5 metres, 6 metres kerb radii and 2.4 x 45 metres visibility splays. Whilst the document states that two points of access are preferred, it also indicates that a single point of access could be acceptable where an emergency access is available and the internal road forms a loop. Paragraph 6.7.3 of the Department for Transport document 'Manual for Streets' advises that the fire services adopt a less number-driven approach to determining cul-de-sac lengths or number of dwellings served by a single point. The document states that a minimum width of 3.7 metres should be maintained over a short period to allow a fire tender to pass any parked or broken down vehicle along the single point of access. Therefore, to ensure that the access would not be blocked in the event of an emergency, it was subsequently concluded that in addition to the 5.5 metres wide carriageway, a 3.7 metres wide shared footway/cycleway emergency access link could provided on the eastern edge of the access road to accommodate any emergency access requirements.
- 6.5 In accordance with the Kent Design Guide, visibility splays of 45 metres could also be achieved both directions of the access, from a 2.4 metres setback distance. Details of the highway land boundary were obtained from Kent Highway Services (**Appendix B**) and the results confirmed that both visibility splays could be maintained within land that is under public ownership.
- 6.6 The Canterbury District Local Plan was adopted on 13 July 2006 and provides maximum parking standards for residential dwellings. However, according to Kent Highway Services, these standards have been subsequently superseded, and it is expected that the following levels of provision should apply:
 - 1 bed dwellings 1 space per dwelling
 - 2/3 bed dwellings 1.5 spaces per dwelling (0.5 communal)
 - 4+ bed dwellings 3 spaces per dwelling

Using the above standards, the proposed 80 dwelling residential development should require a maximum parking provision of 120 spaces, based on a mix of 1

to 3 bedrooms per dwelling across the site.

6.7 Servicing would take place from within the site layout. Refuse collection vehicles already manoeuvre along Greenhill Road to access the adjacent properties and it is envisaged that this service would be extended to include the proposed development. Any further development of the site masterplan should demonstrate that a large refuse vehicle could satisfactorily manoeuvre within 25 metres of any likely collection point and depart the site in a forward gear.

Off-site issues

- 6.8 The publication 'Guidance on Transport Assessment' (DfT, March 2007), suggests that a significant traffic increase could occur at around 30 hourly twoway movements, at any particular junction. This threshold was therefore adopted to determine the extent of local highway network that should be examined in further detail. However, it is important to note that Guidance on Transport Assessment merely recommends the 30 movements threshold as a starting point for assessment and larger increases may be acceptable where capacity or highway safety issues are unlikely.
- 6.9 Figure 8 shows the proposed development traffic assignment for the weekday morning and evening peak hours, throughout the initial study area. It demonstrates that increases of 30 or more vehicle movements would occur at the proposed Greenhill Road/Site Access junction, the Greenhill Road/Granville Drive junction and the Greenhill Road/Rowland Drive junction. Figure 8 demonstrates that a maximum increase of 40 movements (average of one vehicle every 1.5 minutes) would occur at both the Greenhill Road/Granville Drive junction and the Greenhill Road/Rowland Drive junction during the morning peak hour. Given the dimensions of each junction, with 6.5 metres wide minor road carriageway widths and 8 kerb radii, this relatively minor level of increase satisfactorily accommodated. Therefore no further detailed should be assessment should be required.
- 6.10 To assess the potential impact of development traffic at the proposed site access junction, the proposed development traffic generation (**Figure 8**) was assigned to

the 2017 Design Year 'without' development turning movements (**Figure 9**). The resulting 2017 Design Year 'with development' turning movements are shown in **Figure 10**.

- 6.11 Details of the geometric layout at the proposed Greenhill Road/Site Access junction (as shown in **Drawing Number F09120/01**) were entered into PICADY and tested using the 2017 Design Year 'with development' peak hour turning movements (as shown in **Figure 10**). The results of the assessment are summarised in **Table 3**, which shows that the junction would operate satisfactorily during both peak hours. The arm with the least spare capacity would be the site access arm, which operates at a maximum 9.3% capacity with a maximum queue length of 0.1 vehicles during the morning peak hour. Whilst it is acknowledged that the proposed layout has changed slightly from the arrangement shown in **Drawing Number F09120/01**, it is not considered that these amendments would significantly affect the results and conclusions of the capacity assessment. A full copy of each PICADY output is provided at **Appendix G**.
- 6.12 The accident study demonstrated that a total of nine accidents have occurred within the study area over the last five years, as shown on **Figure 6**. The results show that there were no significant areas of concern where three or more incidents occurred in a specific location. Furthermore, the specific nature and reasons for their occurrence all differ and no accident correlations appear to exist. Therefore, it is considered that no specific highway safety problem exists within the area that could be exacerbated by the proposed development.
- 6.13 Overall, the above details demonstrate that the extent of development traffic increases could be satisfactorily accommodated within the surrounding highway network. Furthermore, whilst no highway safety issues exist within the study area, despite there being no footway on either side of Greenhill Road at the bend in the carriageway the proposed layout would be significantly improving the current layout by providing a formal feature to allow vehicles to pass safely and also a segregated footway for pedestrian to travel. Consequently there should be no requirements for any further detailed assessment or mitigating improvements beyond the proposed site access layout.

7.0 OPPORTUNITIES TO ENCOURAGE NON-CAR TRAVEL

7.1 To address travel by all modes of transport, PPG13 requires an assessment of modal splits for new developments. Inspection of the National Statistics website shows the following combined journey to work modal split for the Canterbury 003 and 004 super output areas (lower layer) which includes the site and its surrounding residential areas within Greenhill:

•	work mainly at or from home	9.28%
•	by underground, metro, light rail or train	0.10%
•	by train	4.28%
•	by bus	3.47%
•	by motorcycle/scooter/moped	1.31%
•	by car/van (as driver)	61.10%
•	by car/van (as passenger)	7.59%
•	by taxi or minicab	0.52%
•	on bicycle	2.98%
•	on foot	8.98%
•	other	0.43%

A copy of the output data from the website is contained at **Appendix H**.

7.2 The 'people who work mainly at or from home' category was removed and the remaining percentages adjusted accordingly, resulting in the following modal split:

• by underground, metro, light rail or train	0.10%
by train	4.72%
• by bus	3.82%
 by motorcycle/scooter/moped 	1.44%
• by car/van (as driver)	67.35%
 by car/van (as passenger) 	8.37%
• by taxi or minicab	0.57%
on bicycle	3.28%
on foot	9.90%
• other	0.47%

- 7.3 The above modal split was adopted for the purposes of this assessment. To calculate the hourly amount of person trips by each mode, the following approach was also adopted:
 - 67.35% of vehicle drivers is equal to 54 total car movements during the morning peak hour
 - 54 / 67.35 equals the number of person trips per percent, or 0.802
 - The peak hour person trips can therefore be calculated by multiplying the modal percentage for each category by 0.802
- 7.4 Inspection of the traffic generation calculations for the proposed development show that approximately 11.74% of all daily vehicle movements would occur during the morning peak hour. This results in a conversion factor of 8.52 from peak hour to daily movements [1 / 0.1174].
- 7.5 Using the above process, it was possible to calculate that the proposed development would generate the following total person trips:

ре	ak hour	daily
• by underground, metro, light rail, or tram	0	1
by train	4	32
• by bus	3	26
 by motor cycle/scooter/moped 	1	10
 by car/van (as driver) 	54	460
 by car/van (as passenger) 	7	57
by taxi or minicab	0	4
by bicycle	3	22
on foot	8	68
• other	0	3

Pedestrian travel

7.6 Based on the above results, the proposed development would generate a total increase of 68 daily pedestrian movements, including a maximum of 8 hourly movements during the morning peak hour. This level of increase could be satisfactorily accommodated by the proposed footways within the junction

arrangement.

- 7.7 Beyond the site access, it is likely that the main pedestrian draw would be to the north of the site towards Herne Bay, where a number of employment and educational sites exist. To access these areas, as shown on Drawing Number F09120/02 Revision B, the development would provide a footway on the southern side of the carriageway adjacent to the site, which ranges in width between 3.7 and 0.9 metres wide. This 0.9 metres width should be sufficient to allow a single pedestrian or wheelchair user to travel along the footway.
- 7.8 Pedestrian movements along Greenhill Road were also observed during the 12hour traffic count at the Greenhill Road/Hawks Road T-junction, the results of which are provided at **Appendix D**. The details show that throughout the day 141 pedestrian movements occurred along the Greenhill Road (east) arm of the junction, with the majority travelling to and from Hawks Road. These results demonstrate that a significant amount of pedestrians currently travel along the existing Greenhill Road link, presumably walking within the carriageway at the bend. The Personal Injury Accident data does not show any evidence of pedestrian related accidents at this location and suggests that they are able to travel relatively safely.
- 7.9 A public right of way (Route CH10) exists within the site. As part of the development this route would be improved, which could include appropriate surfacing and lighting. Initial discussions have taken place with the Area Public Rights of Way Officer for Canterbury, who has confirmed that they would have no immediate objections to the principle of improving this link.
- 7.10 Given that the proposed site access arrangement would provide a pedestrian link through the bend in Greenhill Road, where none currently exists, it is considered that the proposed increases of 68 daily pedestrian movements could be satisfactorily accommodated. The proposed improvements would also provide a substantial benefit for existing users in the area, who are technically required to walk either within the carriageway or the grass verge.

Cycle travel

- 7.11 The person trip calculations show that the proposed development would generate 22 daily cycle movements, including a maximum of 3 hourly movements. Whilst there are limited designated facilities within the immediate surrounding area, the key route for cyclists would be along Greenhill Road to the main employment areas within Herne Bay and Whitstable.
- 7.12 The Canterbury District Local Plan (Appendix 2) contains minimum cycle parking standards for residential dwellings and recommends the provision of one cycle parking space per bedroom. These could take the form of cycle racks within garages or stands within the property boundary. Alternatively, communal cycle parking could be provided within any courtyard areas.

Bus travel

7.13 The proposed development would also generate a total increase of 26 daily bus passenger movements, with a maximum of 3 hourly movements. Detailed inspection of the timetables for the local bus routes that run in the vicinity of the site show that the timings of the services should be suitable to accommodate bus trips to and from the main employment and residential areas surrounding the site, such as Herne Bay, Canterbury and Whitstable. Currently, the closest bus stops that would serve the site are located on Hawks Road and Rowland Drive, which would be within the required maximum distance. It is therefore considered that the existing level of bus provision could satisfactorily accommodate this increase in demand and no improvements should be required.

Rail travel

7.14 The proposed development would also generate a total increase of 32 daily train passenger movements, with a maximum of 4 hourly movements. Herne Bay train station is located within a 2 kilometre walking distance from the site or a 500 metres walking distance from passing bus routes. Detailed inspection of the timetables for the train routes that operate at Herne Bay show that services would be available to employment areas within Caterbury, Folkestone, Dover and

Herne. Given the opportunities for travelling to key destinations further afield it is not unreasonable to expect people to walk the 2 kilometres distance. Therefore, it is considered that the existing level of train provision should satisfactorily accommodate this increase in demand.

Travel Plan

7.15 In line with the requirements of Guidance on Transport Assessment (DfT, March 2007) a travel plan would be required for the proposed residential development. The travel plan should encourage residents to take advantage of the surrounding sustainable travel opportunities and provide them with up to date information on upcoming schemes and initiatives, in order to minimise any demand for car travel.

8.0 SUMMARY AND CONCLUSIONS

- 8.1 Bancroft Consulting were appointed by Hollamby Estates Ltd to undertake an assessment of transport conditions associated with proposals to redevelop land on the south side of Greenhill Road, Herne for residential purposes.
- 8.2 This assessment has been based on development proposals incorporating the construction of 80 'affordable type' dwellings, a new access road junction to Greenhill Road and associated off-site highway improvements. The eastern section of the site will be set aside as a Multi Use Games Area.
- 8.3 The proposed development would generate the following peak hour and daily movements, which were derived using robust trip rates from the TRICS database.
 - morning peak hour
 14 arrive
 40 depart
 54 total
 - evening peak hour
 29 arrive
 20 depart
 49 total
 - daily total
 226 arrive
 234 depart
 460 total
- 8.4 Using national statistics data, the proposed development would generate the following total person trips:

ре	ak hour	daily
• by underground, metro, light rail, or tram	0	1
by train	4	32
• by bus	3	26
 by motor cycle/scooter/moped 	1	10
• by car/van (as driver)	54	460
• by car/van (as passenger)	7	57
by taxi or minicab	0	4
by bicycle	3	22
on foot	8	68
• other	0	3

8.5 The proposed development traffic generation was assigned to the highway network at a Design Year of 2017. The Greenhill Road/site access junction was

subsequently tested, with the results of the capacity assessments revealing that that it would continue to operate satisfactorily during both peak hours with the development in place.

- 8.6 An accident study revealed that no highway safety problems exist within the surrounding highway network. It is therefore unlikely that the proposed development would create or exacerbate any specific highway safety issues. Drawing Number F09120/02 Revision B Notwithstanding this point, demonstrates the proposed site access, which includes a traffic calming scheme at the bend in Greenhill Road. The scheme includes the widening of Greenhill Road to 5.5 metres, with a section of kerb build-out along the southern edge of the carriageway, which narrows the major road width to form a 3.25 metres wide single lane for a short section. This in turn allows for a footway to be implemented along the southern edge of the carriageway, which ranges in width between 3.7 and 0.9 metres.
- 8.7 The proposed layout also provides a 2 metres wide footway at the western edge of the carriageway and a 3.7 metres wide shared footway/cycleway emergency access link at the eastern edge of the access road, which should accommodate any emergency access requirements. Internally, the site access should ideally form a loop road to alleviate any possible further emergency access issues. Satisfactory visibility splays of 45 metres could also be achieved both to the east and west of the access from a 2.4 metres setback distance.
- 8.8 The proposed 80 dwelling residential development should provide a maximum of 120 spaces, based on a mix of 1 to 3 bedrooms per dwelling across the site. To accommodate cycle parking, provision for one cycle parking space per bedroom should also be provided. These spaces could take the form of cycle racks within garages or stands within the property boundary. Alternatively, communal cycle parking could be provided within any courtyard areas.
- 8.9 To accommodate servicing at the development, it is recommended that any further development of the site masterplan should demonstrate that a large refuse vehicle could satisfactorily manoeuvre within 25 metres of any refuse collection point and then depart in a forward gear.

8.10 In conclusion, the proposed development should not result in any detrimental impact on the surrounding highway network. The proposed site access junction would comply with relevant design guidance and provides a significant highway safety benefit both for passing traffic along Greenhill Road and also pedestrians, which has been accepted by the local highway authority. Consequently, the proposed development would satisfy the requirements contained within PPG13 and should be acceptable to the local highway authority.

				Frequency (s	services)	
Route No.	Operator	Details	Weeko	days		Sunday
	•		peak am + pm	off peak	Saturday	Sunday
4A	Stagecoach	Canterbury-Whitstable-Herne Bay-Sturry-Canterbury (One-way)	30 mins	30 mins	60 mins	1 service
4B	Stagecoach	Canterbury-Whitstable-Herne Bay-Sturry-Canterbury (One-way)	no service	no service	no service	60 mins
6	Stagecoach	Canterbury-Sturry-Herne Bay-Whitstable-Canterbury (One-way)	no service	30 mins	30 mins	no service
6A	Stagecoach	Canterbury-Sturry-Herne Bay-Whitstable-Canterbury (One-way)	30 mins	30 mins	30 mins	no service
6B	Stagecoach	Canterbury-Sturry-Herne Bay-Whitstable-Canterbury (One-way)	no service	no service	no service	30 mins
6X	Stagecoach	Canterbury-Sturry-Herne Bay-Whitstable-Canterbury (One-way)	30 mins	60 mins	30 mins	no service
645	Stagecoach	Hilborough School Reculver-Greenhill Coulter Road	no service	1 service	no service	no service
907	Stagecoach	Herne Bay-Canterbury (School)	1 service (AM only)	1 service	no service	no service
908	Stagecoach	Herne Bay-Canterbury (School)	1 service (AM only)	1 service	no service	no service
917	Stagecoach	Hilborough-Canterbury (School)	1 service (AM only)	1 service	no service	no service
919	Stagecoach	Herne Bay-Canterbury (School)	1 service (AM only)	1 service	no service	no service

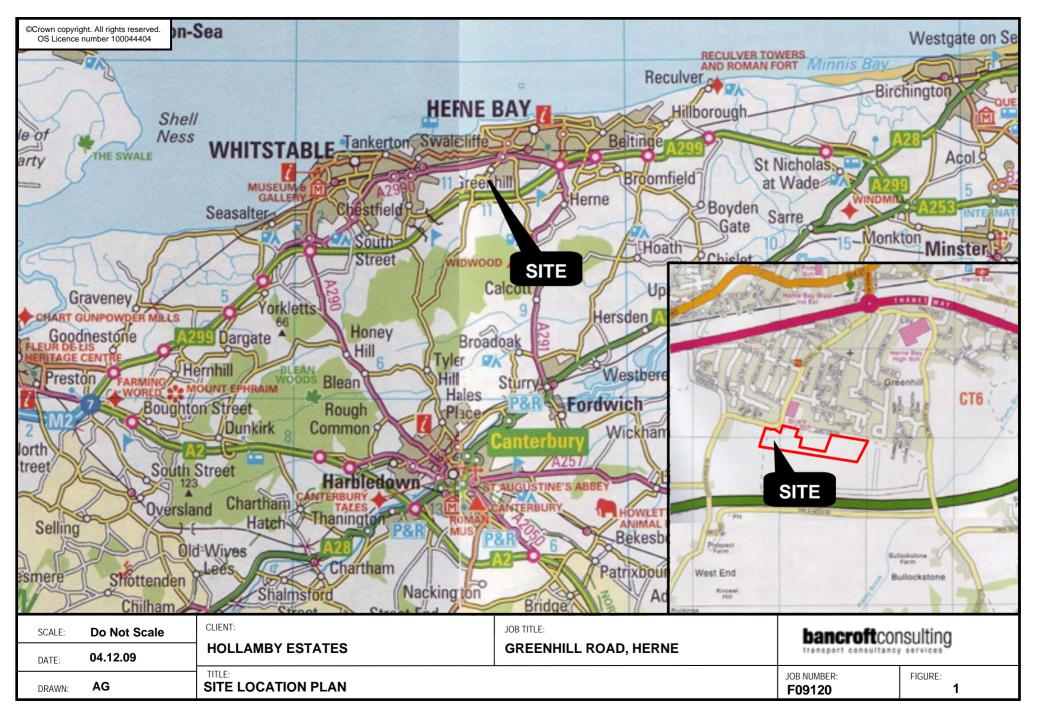
TABLE 1: DETAILS OF LOCAL BUS SERVICES

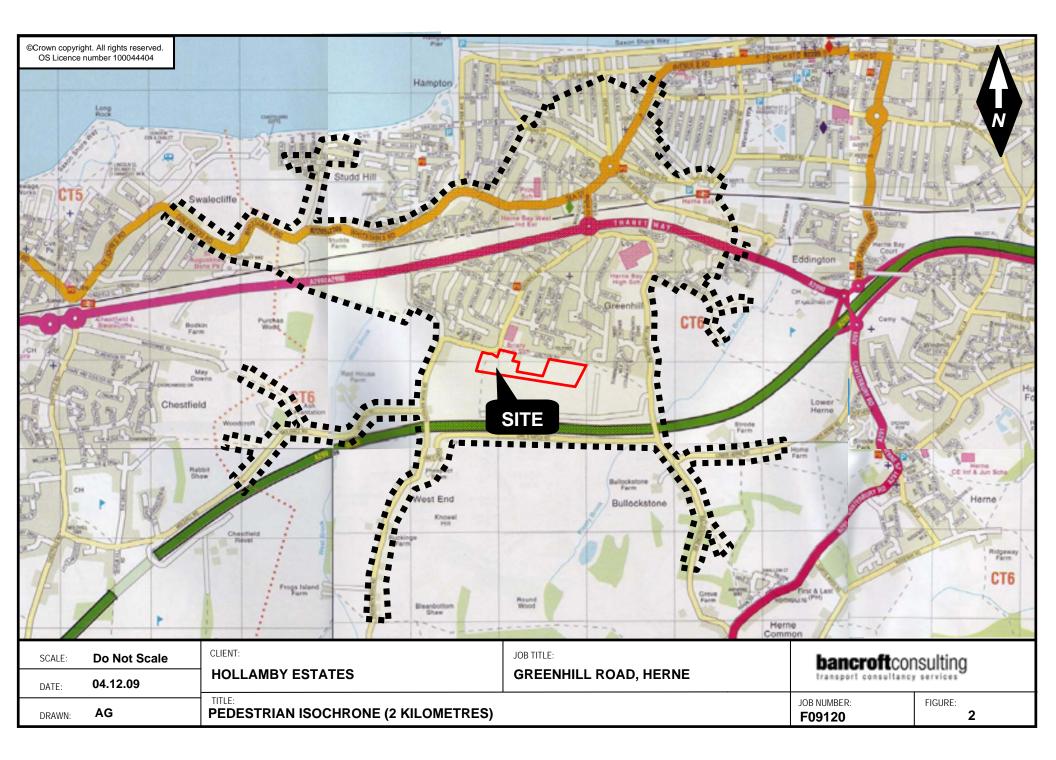
	80 Residential Dwellings					
Time Period	Trip Rates			Traffic Generation		
	Arrive	Depart	Total	Arrive	Depart	Total
00:00 -01:00	0	0	0	0	0	0
01:00 -02:00	0	0	0	0	0	0
02:00 -03:00	0	0	0	0	0	0
03:00 -04:00	0	0	0	0	0	0
04:00 -05:00	0	0	0	0	0	0
05:00 -06:00	0	0	0	0	0	0
06:00 -07:00	0	0	0	0	0	0
07:00 -08:00	0.12	0.21	0.33	9	17	26
08:00 -09:00	0.17	0.50	0.67	14	40	54
09:00 -10:00	0.25	0.13	0.38	20	11	31
10:00 -11:00	0.20	0.18	0.38	16	15	30
11:00 -12:00	0.13	0.18	0.32	11	15	25
12:00 -13:00	0.11	0.17	0.28	8	14	22
13:00 -14:00	0.17	0.22	0.40	14	18	32
14:00 -15:00	0.28	0.30	0.58	22	24	46
15:00 -16:00	0.41	0.28	0.68	33	22	55
16:00 -17:00	0.41	0.28	0.68	33	22	55
17:00 -18:00	0.36	0.25	0.61	28	20	48
18:00 -19:00	0.24	0.21	0.45	19	17	36
19:00 -20:00	0.00	0.00	0.00	0	0	0
20:00 -21:00	0.00	0.00	0.00	0	0	0
21:00 -22:00	0.00	0.00	0.00	0	0	0
22:00 -23:00	0.00	0.00	0.00	0	0	0
23:00 -24:00	0	0	0	0	0	0
Total	2.83	2.92	5.75	226	234	460

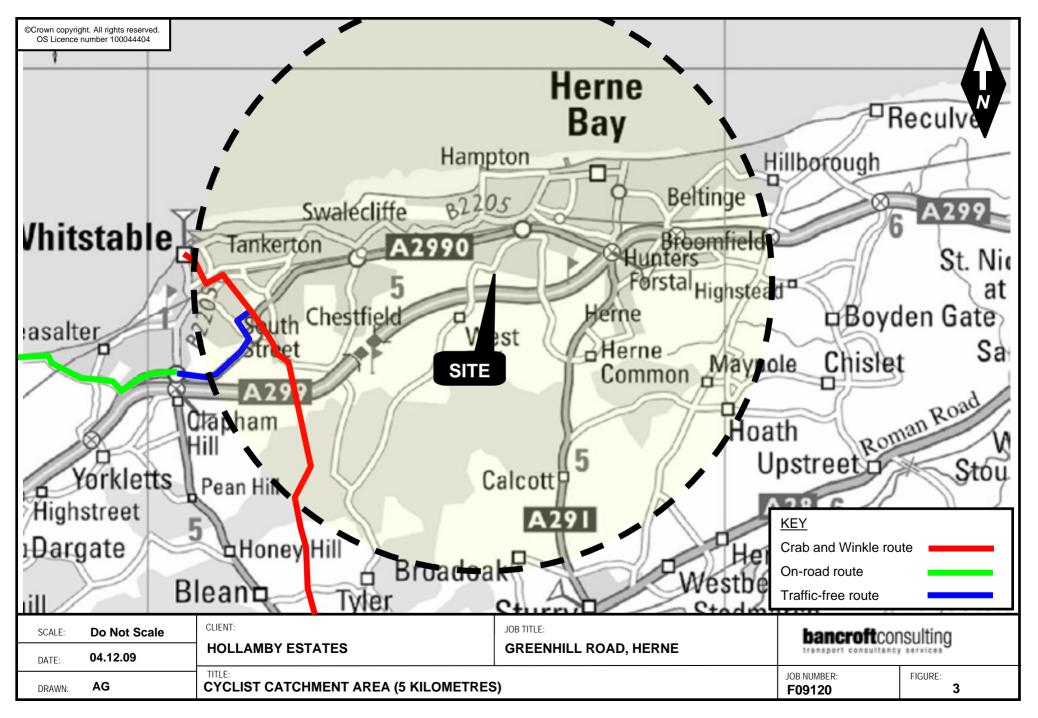
TABLE 2: PROPOSED DEVELOPMENT TRAFFIC GENERATION PROFILE

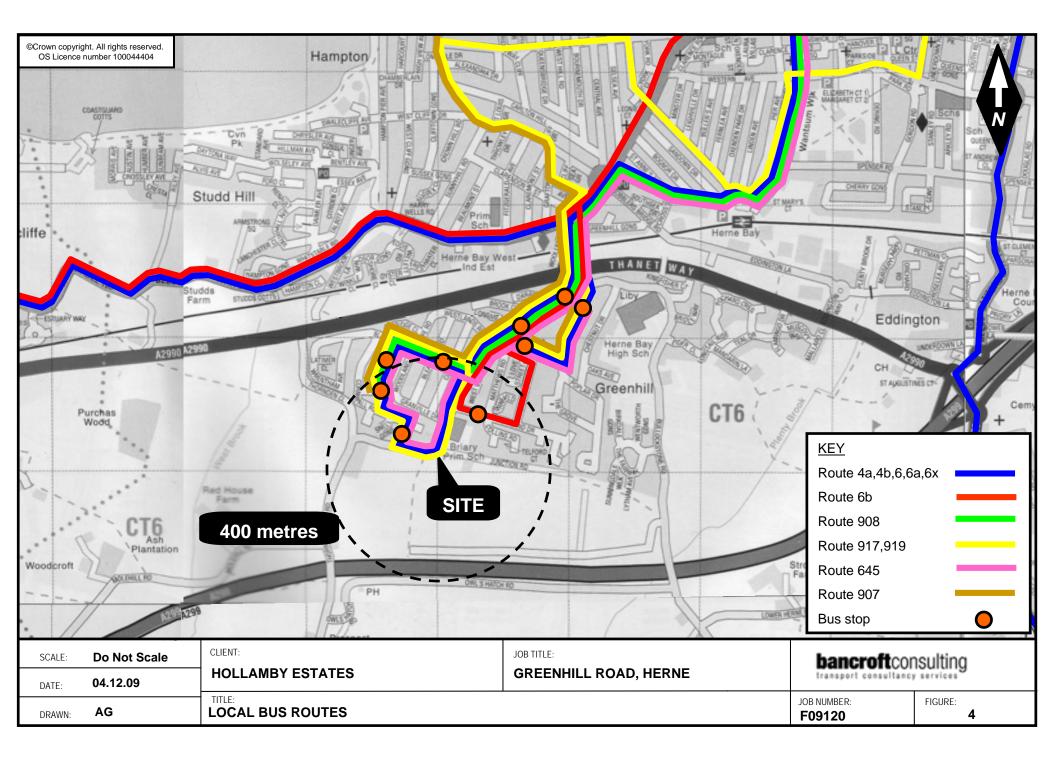
		Site Access	Greenhill Road
Traffic scenario		left/right	East
2017 Design Year traffic flows - AM peak with development	RFC value	9.30%	0.40%
	max queue (vehs)	0.1	0.0
	av. delay (mins/veh)	0.13	0.11
2017 Design Year traffic flows - PM peak with development	RFC value	4.40%	3.00%
	max queue (vehs)	0.0	0.0
	av. delay (mins/veh)	0.12	0.11

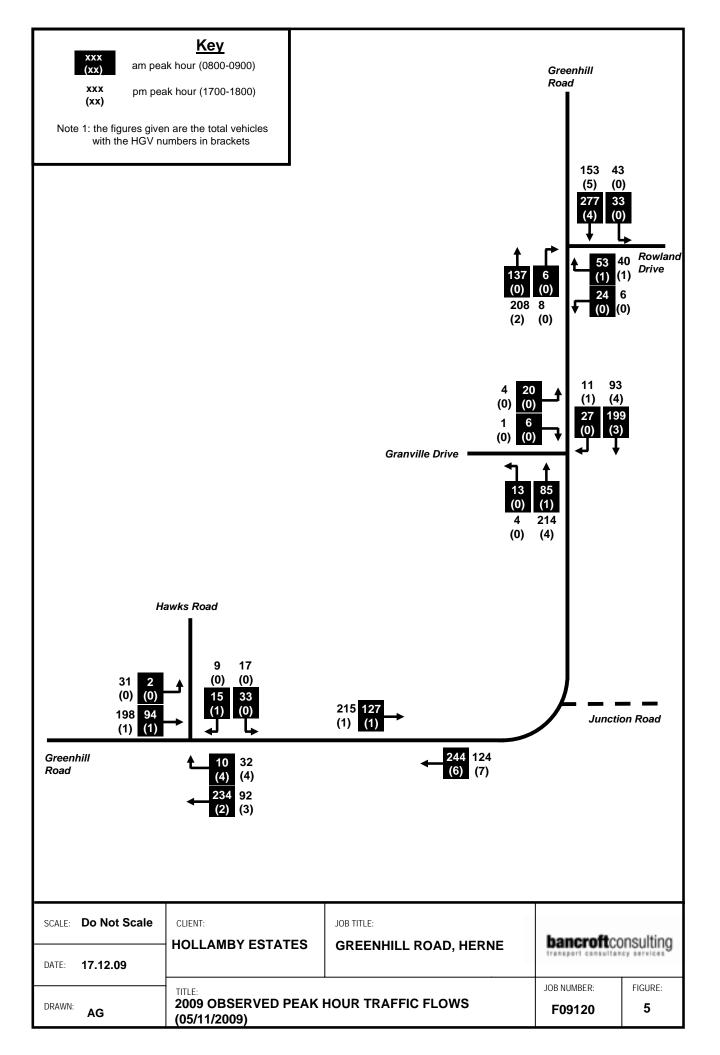
TABLE 3: SUMMARY RESULTS OF THE PROPOSED GREENHILL ROAD/SITE ACCESS T-JUNCTION PICADY ASSESSMENT

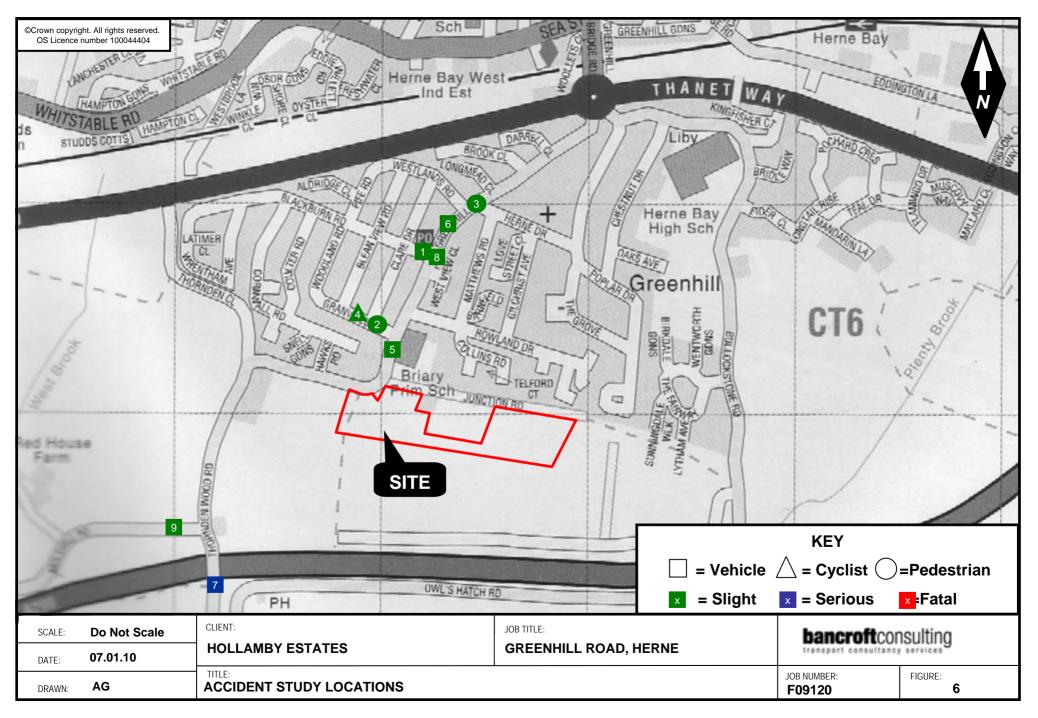


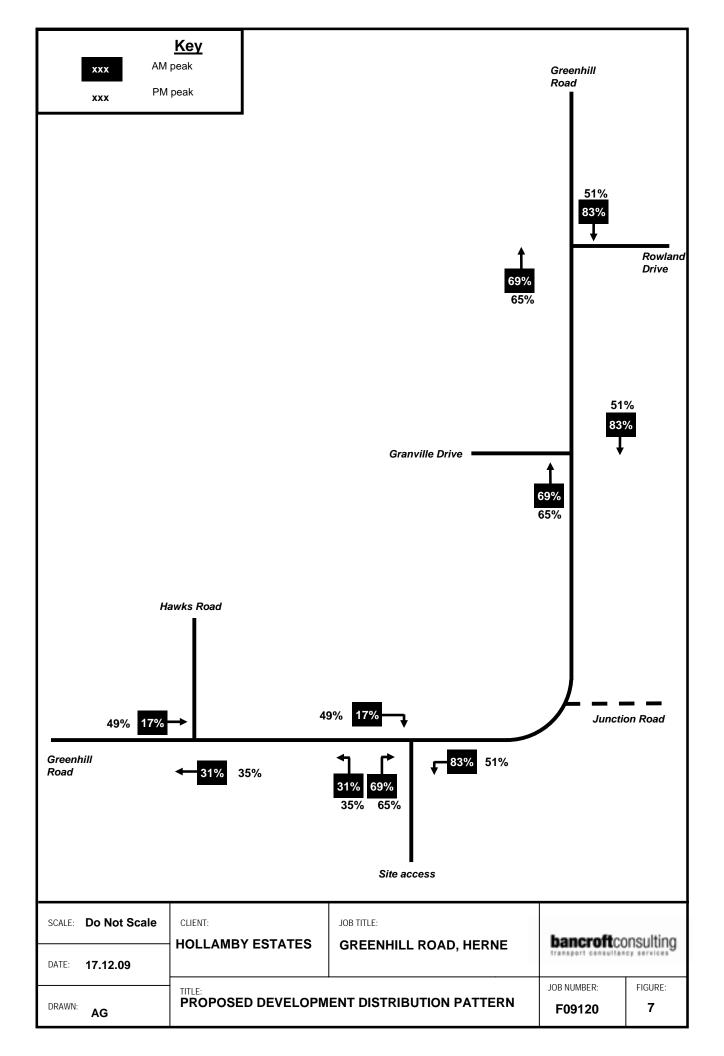


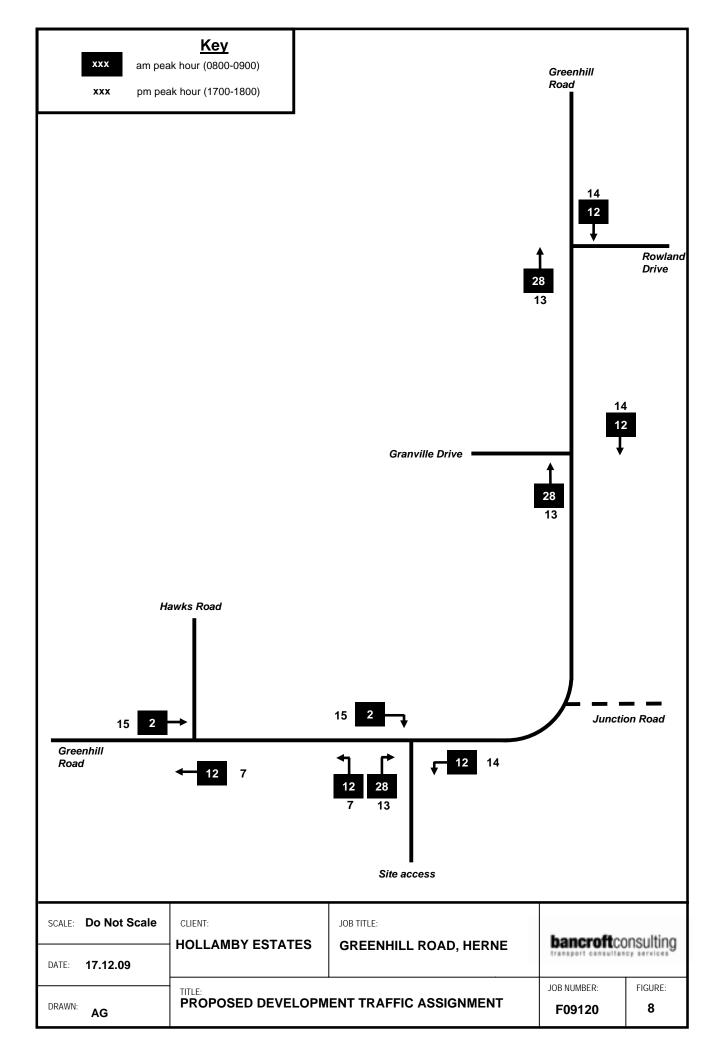


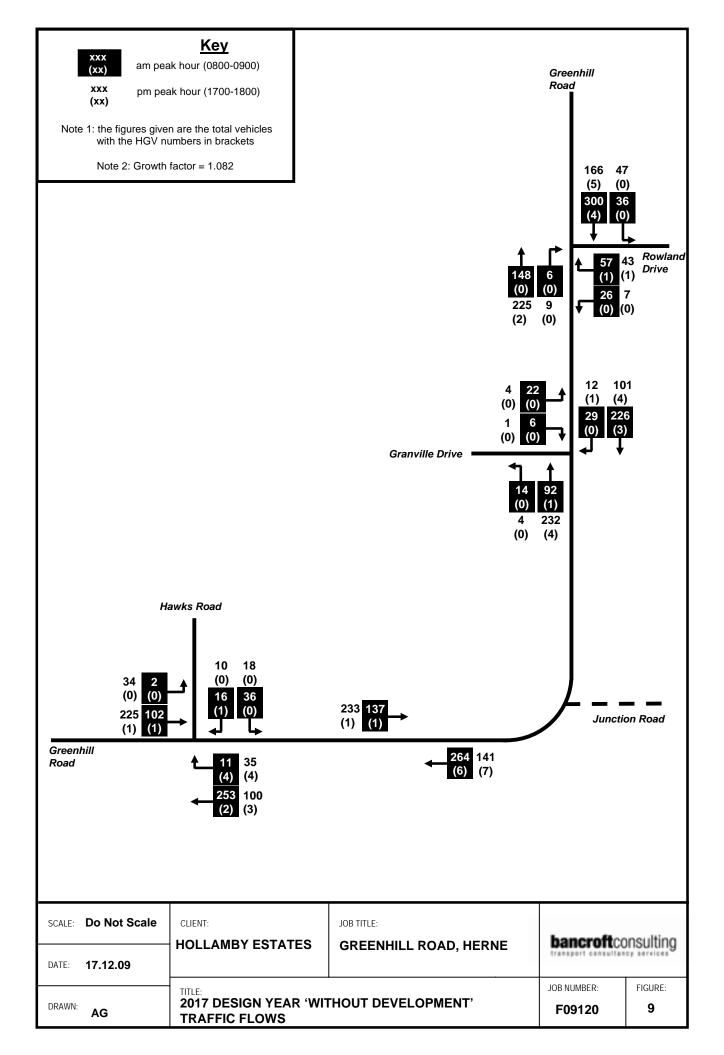


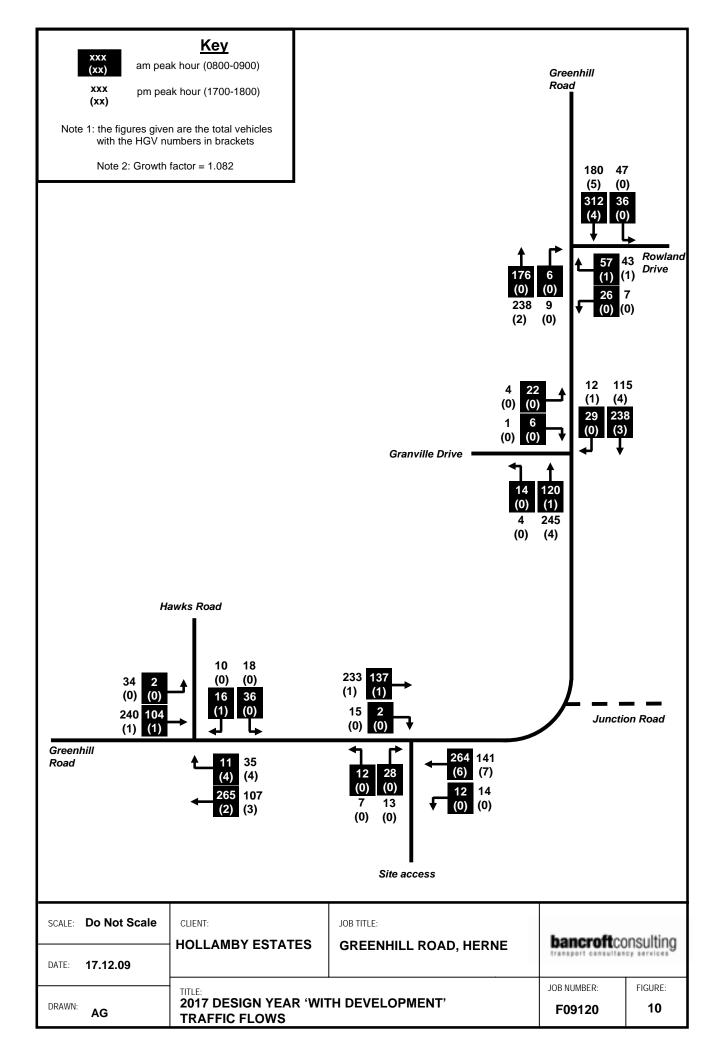


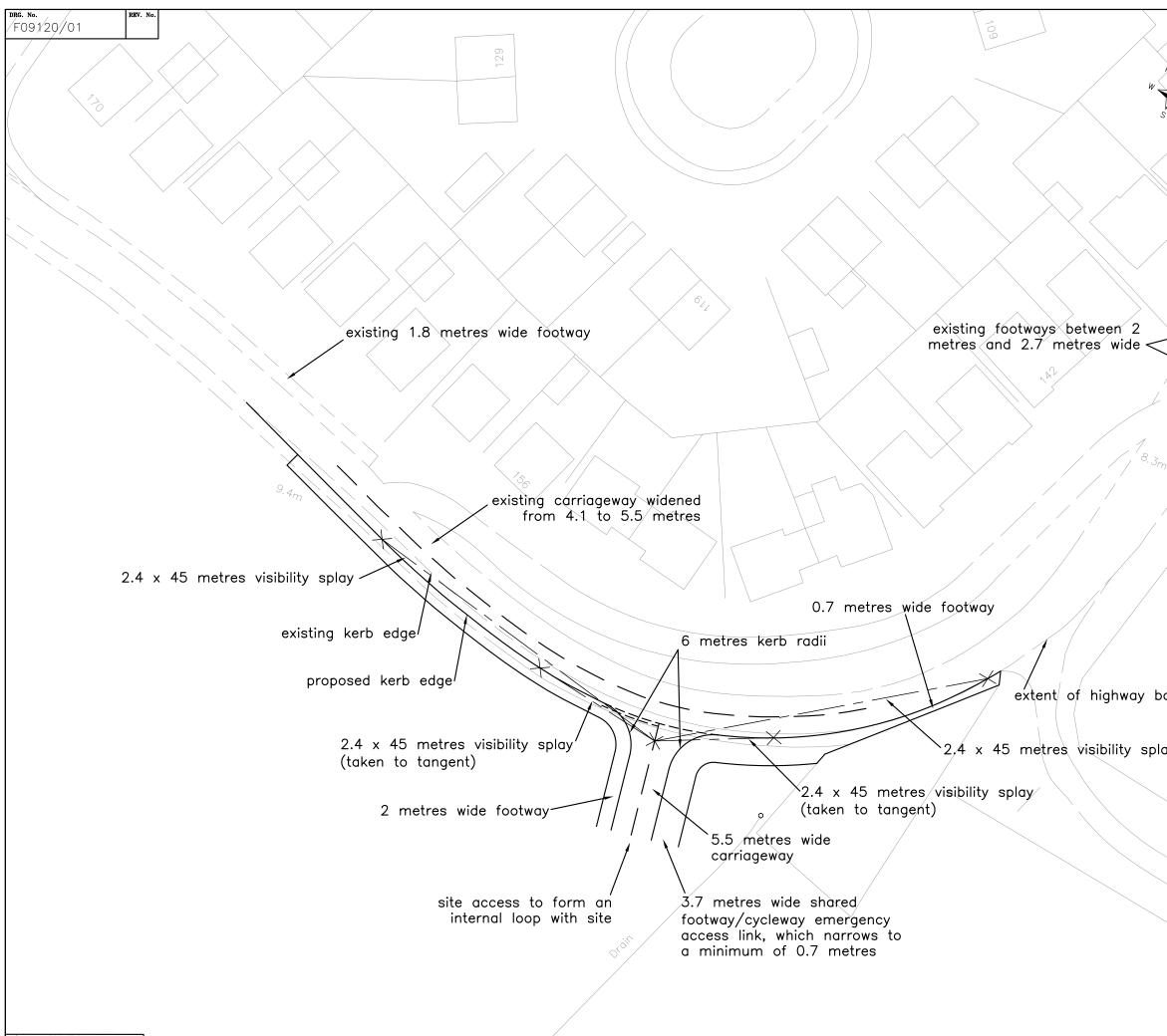






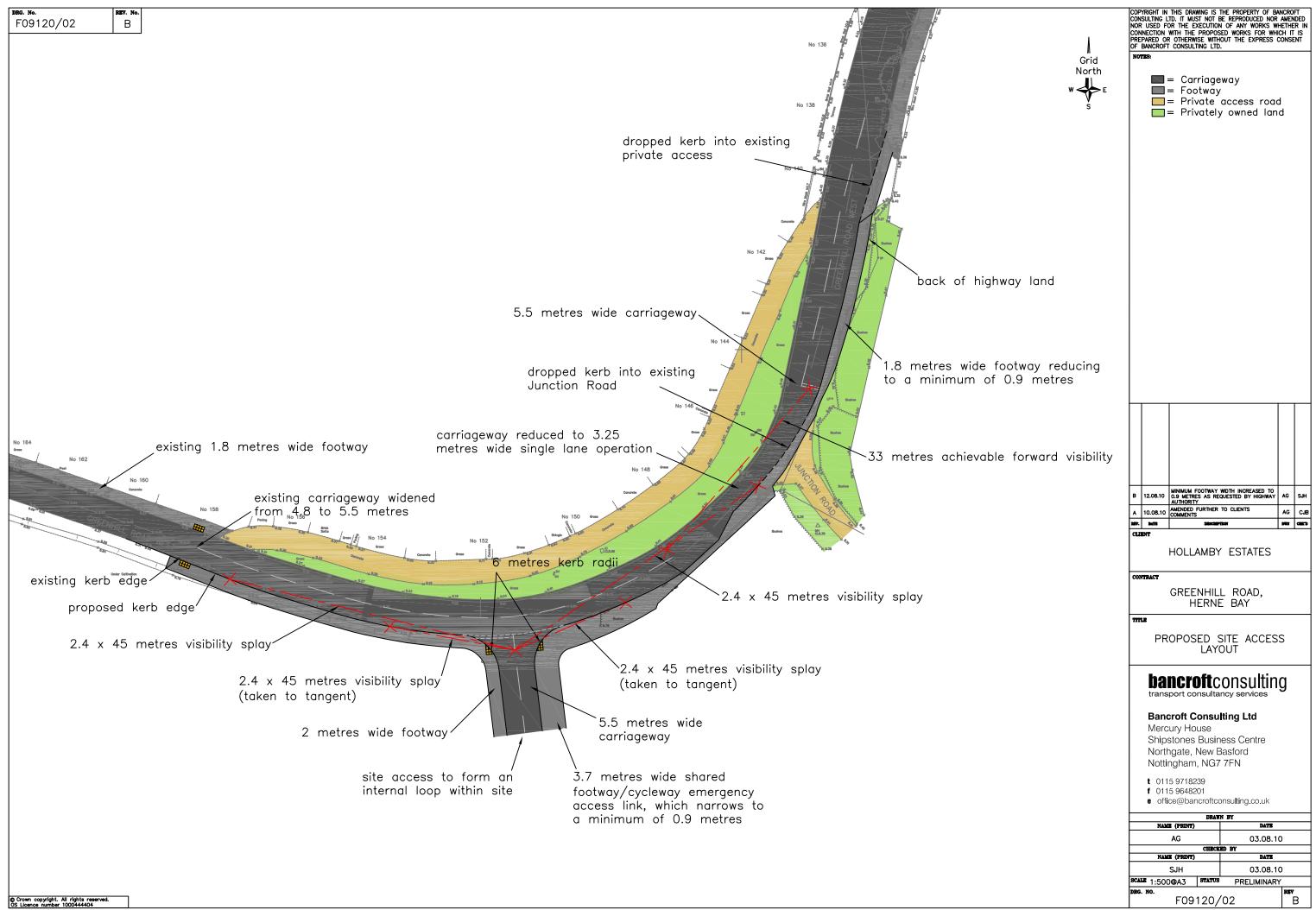






© Crown copyright. All rights reserved. OS Licence number 1000444404

	COPYRIGHT I	THIS DR	AWING IS 1	HE PROPERTY	OF BAN	CROFT
	CONSULTING	LTD. IT MU FOR THE I	JST NOT B	E REPRODUCE	D NOR A	THER IN
	CONNECTION	WITH THE	E PROPOS	ED WORKS F	OR WHIC	HITIS
	PREPARED C OF BANCROF	R OTHER	WISE WITH	OUT THE EXP	RESS CO	ONSENT
Grid North	NOTES:	1 001301	LING LID.			
Norti	NULES:					
2 ~ / / /						
\sim $^{\prime}$						
<u> </u>						
/ / / / /						
. / /						
*						
_ / >						
n / /						
	REV. DATE					WN CHK'D
			DESCRIPT	ION		MAN CHR.D
	CLIENT					
		HULL		ESTAT	ED	
	CONTRACT					
					٦	
		GKE		L ROAI	J,	
oundary			HER	UNE		
,						
	TITLE					
			SED 9	SITE AC	0 F C F C C	
		NUPU:			0533	þ
ay			LAY(JUI		
-						
	-		-			
	hg	ncr	nftr	ONSU	ltind	n I
<				UIJU	เน่าเป	1
\sim	trans	sport C	onsulta	ncy servic	69	
	_		_			
	Ban	croft (Consul	ting Ltd		
		cury Ho				
<u> </u>				ess Centi	re	
\sim					0	
			New B			
	Nott	Inghan	n, NG7	7FN		
	_	15 9718				
, <u>``</u>		15 9648			,	
	e of	ice@ba	ncroftco	nsulting.cc	.uk	
			DRAWI	N BY		
	NA	ME (PRINT			DATE	
	MA		,			
		AG			.01.10	
			CHECK			
	NA	ME (PRINT	,		DATE	
		SJH		22	.01.10	
	scale 1:50	0@A3	STATUS	PRELIM	INARY	
	DRG. NO.		•			REV
			9120/	′∩1		
		FUS	11207	UT	1	



APPENDIX A – CORRESPONDANCE BETWEEN BANCROFT CONSULTING AND KENT HIGHWAY SERVICES

Simon Hall

From:	James.Wraight@kent.gov.uk
Sent:	25 March 2010 11:55
То:	Simon Hall
Subject:	Greenhill Road, Herne Bay - Transport Assessment

Good Morning Simon

Sorry for the delay in getting back to you on this one.

On the whole the Transport Assessment is of good quality, however the following issues will need to be resolved.

The scheme should cater for pedestrian desire lines, in my view it is imperative that a footway link is provided to the existing highway network to the north where schools and local amenities are located. I appreciate that this will involve negotiations with third party land owners (Junction road and the school) however the lack of direct footway links will lead to pedestrians walking within the carriageway to the detriment of highway safety, in accordance with national guidance this will also encourage sustainable travel options.

The provision of a link to the west would still be required as the majority of the local bus routes are accessible from the stop located on Hawkes Road. The provision of the northern link is likley to result in this route being used by school children travelling from the east, therefore further survey work in respect of pedestrian flows from this direction should be investigated to ascertain which type of crossing provision would be appropriate. The point at which the crossing is situated will need to take into account forward visibility appropriate to the design speed of the road.

In accordance with the Kent Design Guide any development exceeding 50 dwellings should make provision for alternative emergency access.

I would encourage you to make contact with the KCC public rights of way in respect of the potential impact to route within the vicinity - Particularly route CH10.

The parking standards are slightly out of date, however I appreciate that these are stated within the local plan. I would expect a mix of

1 space per 1 bed dwelling

1.5 spaces (0.5 being communal) per 2-3 bed property

3 spaces per 4+ bed dwelling (1 being communal)

If you require any further clarification, please do not hesitate to contact me.

Regards

James

James Wraight Kent Highway Services

Ashford Highway Depot Henwood Industrial Estate Javelin Way Ashford Kent **TN24 8AD**

08458 247 800 (Contact Centre) 01233 614174 (Direct Dial) 01233 648320 (Fax) james.wraight@kent.gov.uk



Bancroft Consulting Ltd

Mercury House Shipstones Business Centre Northgate, New Basford Nottingham, NG7 7FN

- t 0115 9718239
- **f** 0115 9648201
- e office@bancroftconsulting.co.uk

Kent Highway Services Ashford Highway Depot Henwood Industrial Estate Javelin Way Ashford Kent TN24 8AD FAO: Mr James Wraight

Our Ref: CJB/F09120/170510

Date: 2 June 2010

Dear James

GREENHILL ROAD, HERNE BAY

I refer to your email dated 25 March 2010 and our subsequent telephone conversation in respect of the Transport Assessment we produced in support of proposals at the above site. Within your email you raise a number of concerns, which relate particularly to pedestrian movements along Greenhill Road and also emergency access and car parking levels within the site. Therefore, the aim of this letter is to consider your concerns and address any outstanding issues in order to reach an in-principle highways agreement.

Your first point of concern relates to the potential for pedestrians walking within the carriageway between the site access and the north, where a grass verge currently exists. We recognised this as being a potential concern within our Transport Assessment and looked at the level of usage already taking place along this link. The survey results showed that 141 daily pedestrian movements took place along this section, whilst no accidents had occurred during the past five years. In our opinion, this provides clear evidence that the combination factors in the area make it a safe environment for all users and that the proposed increase of 68 daily movements should not change this conclusion.

It is also important to note that the site has an allocation within the Canterbury Local Plan (Policy C12) for community use. The Local Plan defines this policy as including "social and physical infrastructure provided to meet identifiable local need; and can be buildings for local groups and the community, playing fields, car parking, areas of open space and affordable housing." Whilst I note the details of Policy C11, which state "Proposals for new buildings or uses for local communities to provide social infrastructure will be encouraged and granted planning permission on the basis that any new building is appropriately designed and

located, and highway safety would not be prejudiced", I cannot see how this site would have been allocated without some understanding of the implications that additional pedestrian movements could have along the link to the north. Hence, we must conclude that, in line with the conclusions of our Transport Assessment, the proposals should be acceptable in principle.

Notwithstanding the above points, we have looked at the possibility of providing a localised traffic calming scheme that should be deliverable within public land. Details of the potential layout are enclosed in sketch form for your initial thoughts and the layout comprises a narrowing of the carriageway around the bend to enable a footway to be provided along the southern edge of Greenhill Road. Whilst I anticipate some concerns regarding forward visibility across third party land at the inside of the bend, on-site observations indicate that many vehicles already have to informally give way to oncoming traffic at the bend so the arrangement simply represents a formalised system that has the substantial added benefit of including a footway. Clearly, given the allocated status of the site, we feel that the impact of development trips should not warrant this scheme. However, it may provide the basis for further discussion to overcome your concerns and move forward to a position where a planning application would receive your support.

Your second point of concern relates to pedestrian and cyclist movements associated with the west and bus services on Hawks Road. We agree that this link should be accommodated but do not feel that the low demand for pedestrian movements along this route would justify a formal crossing facility. Consequently, we would envisage that a set of dropped kerbs with tactile paving located at the western end of the footway shown within our drawing number F09120/01, should suffice in this instance. The location of this crossing point should not present any concerns regarding visibility of oncoming vehicles.

The third point of concern relates to the potential need for an emergency point of access to serve developments in excess of 50 dwellings. Our proposed site access layout (drawing number F09120/01) addresses this point by including a wide footway/cycleway at the eastern edge of the access road, which is in accordance with your adopted design guidance. However, I note your concerns about the need for this to be supported by an internal loop road and my client is well aware that any future development of the site layout plan must take this into consideration. Notwithstanding the above, the site boundary does extend significantly to the west of the proposed site access location and it would not appear to be a major problem to provide an informal pedestrian/cycle link, which has restricted access by collapsible bollards and a minimum width of 3.7 metres, should you feel that this is absolutely necessary.

Details of the surrounding public footpaths were obtained from the Area Public Rights of Way Officer for Canterbury and included within our Transport Statement. Following subsequent discussions with the Officer, we understand that they would welcome any improvements to the link and there would be no objections to the principle of developing Footpath Route CH10 as it passes through the site. The details of such improvements would be developed with the site layout and agreed in due course. The Officer also confirmed that, despite Footpath Route CH11 terminating at the end of Junction Road, they were not aware of any public rights of way along this link.

In response to your comments regarding parking, the Transport Assessment identified a maximum provision of 120 spaces at the site based on the adopted standards within the Local Plan, which you indicate may have been superseded. Based on the revised standards you provided (1.5 spaces per 2 to 3 bed dwelling), the maximum level of parking spaces at the site would remain at a 120 spaces, based on a worst case development mix of 80 two to three bed dwellings. However, we note these revised figures and confirm that any development of the site layout will take these on board.

We trust the above details satisfactory for your purposes and that they address any outstanding concerns you may have. Hence, following consideration of the above, I should be grateful if you could respond confirming that the local highway authority would now be in a position to offer their 'in-principle' support for any future planning application. However, should you have any questions or require further information, please do not hesitate to contact us.

Yours sincerely

Chris Bancroft Director Bancroft Consulting t: 0115 9718239 m: 0778 6966615 e: office@bancroftconsulting.co.uk enc.

сс	Mr Marcus Baldwin	-	Hollamby Estates
	Mr Vic Hester	-	VLH Associates
	Mr Peter Bunn	-	PMC Associates

Simon Hall

From:	James.Wraight@kent.gov.uk
Sent:	16 June 2010 11:47
To:	Chris Bancroft
Subject:	Greenhill Road, Herne Bay
Follow Up Flag:	Follow up
Flag Status:	Flagged

Chris

Further to your letter dated 2nd June and our subsequent telephone conversation.

I confirm that the issue of emergency access can be largely overcome. The initial footpath /cycle path can be widened to accommodate emergency access, the impact of this on the street scene can be kept to a minimum, if a loop road arrangement is implemented relatively close to the junction with Greenhill Road.

I understand your comments in relation the the land allocation, and I agree that this should be however this does not preclude the provision of necessary highway infrastructure improvements to facilitate development of the land.

I maintain the view that it is essential that an acceptable footway link be secured to the north. I cannot support the sketch proposals for a potential traffic calming arrangement, as the close proximity of two priority arrangements would interfere with the efficient flow of traffic on Greenhill Road. I also have concerns in relation to forward visibility at the bend, and the restricted width of the proposed footway.

As discussed there may be mileage in revisiting this principle of a priority arrangement on the bend, should sufficient betterment be demonstrated taking into account any existing vehicle conflict in the locality due to restricted carriageway width. The viability of this solution will largely depend on your client securing land between Junction Road and the school, to provide a wider footway link without requiring unnecessary narrowing of the carriageway outside 138 -136 Greenhill Road. A safety audit will be required to support any highway scheme proposals.

I accept that the level of pedestrian traffic generated by the development will not necessitate the provision of a controlled crossing point on Greenhill Road, however the implementation of a new footway link may compromise the existing use of the existing Zebra crossing to the north (primarily for school traffic), therefore I recommend that pedestrian counts are undertaken to identify the number of pedestrians currently walking in this direction.

In summary, until this issue has been resolved, I am unable to offer in-principle support for the proposals.

If you wish to discuss this further please do not hesitate to contact me.

Regards

James

James Wraight Kent Highway Services Ashford Highway Depot Henwood Industrial Estate Javelin Way Ashford Kent TN24 8AD

08458 247 800 (Contact Centre) 01233 614174 (Direct Dial) 01233 648320 (Fax) james.wraight@kent.gov.uk

Simon Hall

From:	Chris Bancroft
Sent:	13 August 2010 17:07
То:	'James.Wraight@kent.gov.uk'
Cc:	'M.Baldwin@hollambyestates.co.uk'; 'VHester@goddardhester.co.uk';
	'pmc.associates@yahoo.co.uk'
Subject:	RE: Greenhill Road, Herne Bay
Attachments:	F09120_02 Rev B.pdf

James,

Many thanks for taking the time to discuss this project earlier today. As promised, please see the attached drawing which shows the proposed layout with footways amended to a minimum width of 0.9 metres.

Following our conversation I understand that you should now be in a position to support the proposed access arrangement as part of any subsequent planning application. However, to aid you in your defence of the scheme to any potential future objectors, you requested that we formally submit the drawing along with a general overview of the highway benefits that would be generated over that of the current arrangement. This statement should also provide an 'executive summary' of the Transport Assessment work undertaken so far,. I have no problem with producing this statement, but would be extremely grateful if you could take a quick look at the layout shown and confirm that this is now satisfactory.

Once again, many thanks for all your assistance and advice so far on this project. I look forward to receiving your response in due course.

Have a great weekend.

Best regards

Chris

From: Chris Bancroft
Sent: 12 August 2010 13:58
To: 'James.Wraight@kent.gov.uk'
Cc: M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject: RE: Greenhill Road, Herne Bay

Hi James,

Many thanks for the prompt reply. Before we go ahead with amending the drawing and resubmitting it, I would be extremely grateful if we could have a quick chat about where this will leave my Client, in respect of securing local highway authority support.

We have no problem widening the footways to a minimum of 0.9 metres, as requested, although the distance between the decision points will increase slightly and is likely to slightly overrun the area of land at the inside of the bend – I presume you would be satisfied with this trade-off? As regards your concerns over the impact of the bend, in my opinion each section of narrowed footway is sufficiently short for curvature not to be a major concern. I also note your concerns about satisfying the needs of potential pedestrian users, but our survey results have shown there is already a significant demand for pedestrian movement along this section of Greenhill Road West, so what we have shown must be seen a substantial improvement given the relatively small increases in traffic/pedestrian movements past this point (and the fact that the site already has an allocation for community use).

My Client has looked into land ownership on the inside of the bend and I gather that the parcel of land is effectively partitioned off and allocated to each of the adjacent dwellings.

I am around all day tomorrow and would be grateful if you could contact me to discuss the above if at all possible.

Thanks again.

Chris

From: James.Wraight@kent.gov.uk [mailto:James.Wraight@kent.gov.uk]
Sent: 11 August 2010 11:04
To: Chris Bancroft
Cc: M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject: RE: Greenhill Road, Herne Bay

Hi Chris

Thanks for the drawing, good to see that you have managed to do a topo so that we know exactly how much space there is.

I'm still a little concerned about the narrowing to 0.75 as this is below the recommended minimum width of 0.9m for disabled access within MFS, this is made even more difficult with the footway not being on straight alignment. I appreciate the argument about betterment, however it is important to ensure that when a route is provided that it is useable by all - particularly parents with prams and the disabled given the proximity of the school.

Did you do a land registry search to find out who owns the verge opposite 142 -156?

I know that you will be keen to avoid any kind of ransom issue, but It may be that we (highways) control some of that land for maintenance of the kerb line, which could free up some space. I want to ensure that all possible avenues have been explored.

Thanks

James

From: Chris Bancroft [mailto:office@bancroftconsulting.co.uk]
Sent: 10 August 2010 16:13
To: Wraight, James - EHW KHS
Cc: Marcus Baldwin; Vic Hester; peter bunn
Subject: Greenhill Road, Herne Bay

James,

I trust all is well.

Further to our recent telephone conversation regarding the potential highway improvement scheme at the above site, please see the attached drawing (and accompanying letter) which sets out a potential layout on a topographical survey base. A hard copy of the details will follow in tonight's post, although by submission of this email I would hope we could discuss the layout and agree a way forward at the earliest opportunity. As previously discussed, I am more than happy to attend a meeting on-site should you wish to review the layout 'on the ground'.

I look forward to hearing from you in due course.

Best regards

Chris

Chris Bancroft (Director)

Bancroft Consulting Limited www.bancroftconsulting.co.uk

Nottingham office: Mercury House, Shipstones Business Centre, Northgate, New Basford, Nottingham, NG7 7FN tel: 0115 9718239 fax: 0115 9648201

Transport Assessments - Road Safety Audits - Access Appraisal - Highway Design - Travel Plans - Conceptual Design and Masterplanning

Bancroft Consulting Ltd is a limited company registered in England and Wales. Registered number: 5471239 Registered office: 18 Ramsdale Crescent, Sherwood, Nottingham, NG5 4DU

This message contains confidential information and is intended only for whom it is addressed. Please notify office@bancroftconsulting.co.uk immediately by e-mail if you have received this messagel by mistake and delete this e-mail from your system as you should not disseminate, distribute or copy this e-mail. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Bancroft Consulting Ltd therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version. Please note that Bancroft Consulting Ltd may monitor email traffic data and also the content of email for the purposes of security and staff training.

Simon Hall

From: Sent:	James.Wraight@kent.gov.uk 16 August 2010 09:46
To:	Chris Bancroft
Cc:	M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject:	RE: Greenhill Road, Herne Bay

Chris

I can confirm that I am now happy to support these proposals, on balance there are adequate highway gains to mitigate the minor departures required to deliver the footway link utilising land in your clients control. This is without the benefit of a stage 1 safety audit, and as such the final scheme submission may be subject to minor changes as raised through this process.

I trust that should planning permission be granted (subject to determination by the planning authority), that landowners will be approached again, as a more "standardised" arrangement may then be achievable. As we discussed on Friday, a summary of the benefits would be extremely useful and should be submitted with the final planning submission.

Regards

James

James Wraight Kent Highway Services

Ashford Highway Depot Henwood Industrial Estate Javelin Way Ashford Kent TN24 8AD

08458 247 800 (Contact Centre) 01233 614174 (Direct Dial) 01233 648320 (Fax) james.wraight@kent.gov.uk

From: Chris Bancroft [mailto:office@bancroftconsulting.co.uk]
Sent: 13 August 2010 17:07
To: Wraight, James - EHW KHS
Cc: M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject: RE: Greenhill Road, Herne Bay

James,

Many thanks for taking the time to discuss this project earlier today. As promised, please see the attached drawing which shows the proposed layout with footways amended to a minimum width of 0.9 metres.

Following our conversation I understand that you should now be in a position to support the proposed access arrangement as part of any subsequent planning application. However, to aid you in your defence of the scheme to any potential future objectors, you requested that we formally submit the drawing along with a general overview of the highway benefits that would be generated over that of the current arrangement. This statement should also provide an 'executive summary' of the Transport Assessment work undertaken so far,. I have no problem with producing this

statement, but would be extremely grateful if you could take a quick look at the layout shown and confirm that this is now satisfactory.

Once again, many thanks for all your assistance and advice so far on this project. I look forward to receiving your response in due course.

Have a great weekend.

Best regards

Chris

From: Chris Bancroft
Sent: 12 August 2010 13:58
To: 'James.Wraight@kent.gov.uk'
Cc: M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject: RE: Greenhill Road, Herne Bay

Hi James,

Many thanks for the prompt reply. Before we go ahead with amending the drawing and resubmitting it, I would be extremely grateful if we could have a quick chat about where this will leave my Client, in respect of securing local highway authority support.

We have no problem widening the footways to a minimum of 0.9 metres, as requested, although the distance between the decision points will increase slightly and is likely to slightly overrun the area of land at the inside of the bend – I presume you would be satisfied with this trade-off? As regards your concerns over the impact of the bend, in my opinion each section of narrowed footway is sufficiently short for curvature not to be a major concern. I also note your concerns about satisfying the needs of potential pedestrian users, but our survey results have shown there is already a significant demand for pedestrian movement along this section of Greenhill Road West, so what we have shown must be seen a substantial improvement given the relatively small increases in traffic/pedestrian movements past this point (and the fact that the site already has an allocation for community use).

My Client has looked into land ownership on the inside of the bend and I gather that the parcel of land is effectively partitioned off and allocated to each of the adjacent dwellings.

I am around all day tomorrow and would be grateful if you could contact me to discuss the above if at all possible.

Thanks again.

Chris

From: James.Wraight@kent.gov.uk [mailto:James.Wraight@kent.gov.uk]
Sent: 11 August 2010 11:04
To: Chris Bancroft
Cc: M.Baldwin@hollambyestates.co.uk; VHester@goddardhester.co.uk; pmc.associates@yahoo.co.uk
Subject: RE: Greenhill Road, Herne Bay

Hi Chris

Thanks for the drawing, good to see that you have managed to do a topo so that we know exactly how much space there is.

I'm still a little concerned about the narrowing to 0.75 as this is below the recommended minimum width of 0.9m for disabled access within MFS, this is made even more difficult with the footway not being on straight alignment. I appreciate the argument about betterment, however it is important to ensure that when a route is provided that it is useable by all - particularly parents with prams and the disabled given the proximity of the school.

Did you do a land registry search to find out who owns the verge opposite 142 -156?

I know that you will be keen to avoid any kind of ransom issue, but It may be that we (highways) control some of that land for maintenance of the kerb line, which could free up some space. I want to ensure that all possible avenues have been explored.

Thanks

James

From: Chris Bancroft [mailto:office@bancroftconsulting.co.uk]
Sent: 10 August 2010 16:13
To: Wraight, James - EHW KHS
Cc: Marcus Baldwin; Vic Hester; peter bunn
Subject: Greenhill Road, Herne Bay

James,

I trust all is well.

Further to our recent telephone conversation regarding the potential highway improvement scheme at the above site, please see the attached drawing (and accompanying letter) which sets out a potential layout on a topographical survey base. A hard copy of the details will follow in tonight's post, although by submission of this email I would hope we could discuss the layout and agree a way forward at the earliest opportunity. As previously discussed, I am more than happy to attend a meeting on-site should you wish to review the layout 'on the ground'.

I look forward to hearing from you in due course.

Best regards

Chris

Chris Bancroft (Director)

Bancroft Consulting Limited www.bancroftconsulting.co.uk

Nottingham office: Mercury House, Shipstones Business Centre, Northgate, New Basford, Nottingham, NG7 7FN tel: 0115 9718239 fax: 0115 9648201

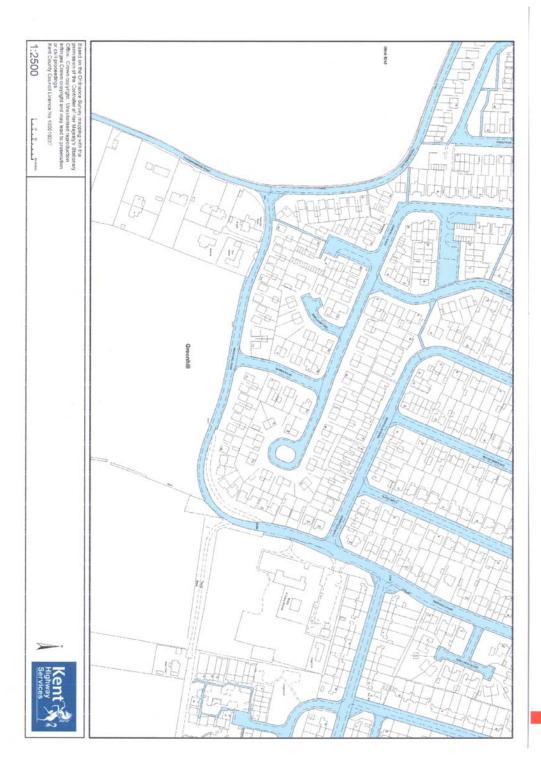
High Wycombe office: Victoria House, Desborough Street, High Wycombe, HP11 2NF Tel 01494 601112 fax: 01494 601113

Transport Assessments - Road Safety Audits - Access Appraisal - Highway Design - Travel Plans - Conceptual Design and Masterplanning

Bancroft Consulting Ltd is a limited company registered in England and Wales. Registered number: 5471239 Registered office: 18 Ramsdale Crescent, Sherwood, Nottingham, NG5 4DU

This message contains confidential information and is intended only for whom it is addressed. Please notify office@bancroftconsulting.co.uk immediately by e-mail if you have received this messagel by mistake and delete this e-mail from your system as you should not disseminate, distribute or copy this e-mail. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Bancroft Consulting Ltd therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version. Please note that Bancroft Consulting Ltd may monitor email traffic data and also the content of email for the purposes of security and staff training.

APPENDIX B - HIGHWAY BOUNDARY INFORMATION



Bancroft Consulting Ltd. Mercury House, Shipstones Business Centre, Northgate, New Basford. Nottingham NG7 7FN

Kent Highway Services, Highway Definition Team, Miller House. 43-51 Lower Stone Street. Maidstone. Kent ME15 6GB DX 123690 Maidstone 6 kenthighwayservices@kent.gov.uk Contact us at: 08458 247 800 01622 666507 01622 666002 Mrs Val Wickenden AG/FO9120/031209 VJW/14401499/Heme Bay 15 January 2010.

Dear Sir/Madam.

GREENHILL ROAD, HERNE BAY

Thank you for your letter and plan dated 3 December 2009 which has been passed to me to reply. I am sorry not to have been able to reply sooner.

DX

Fax:

Ask for: Your Ref:

Our Ref:

Date:

Telephone:

Direct Dial:

For your assistance I enclose a plan at scale 1:2500 indicating, in blue tint, the extent of the publicly maintainable highway in the vicinity of your enquiry as far as can be ascertained from the County Councils existing records. These records also suggest that small ares of the said land were acquired for highway purposes.

I trust this information proves helpful and acknowledge with thanks receipt of your cheque for £80.00 towards the cost of providing this information.

For details concerning Public Rights of Way please contact the Public Rights of Way Team at Invicta House, County Hall, Maidstone, Kent ME14 1XX, or telephone 08458 247 800 for current information.

The replies are given on the understanding that the Council does not warrant the accuracy of any of the replies and on the basis that neither the Council nor any officer, servant or agent of the Council is legally responsible, either in contract or in tort, with the exception of negligence, for any inaccuracies, errors or omissions herein contained. Any liability for negligence will extend to the person who raised the enquiries and the person on whose behalf they were raised.

Yours faithfully,

JJOLekober

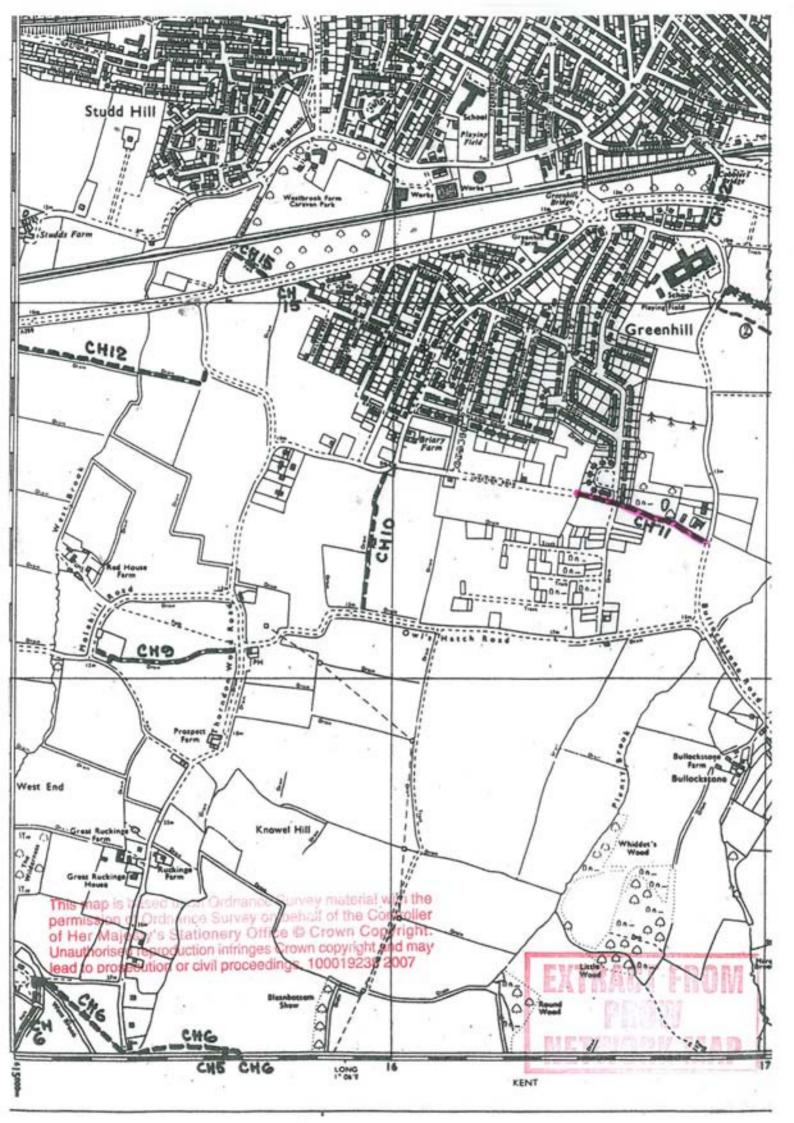
Highway Definition Officer

Enc





APPENDIX C - RIGHTS OF WAY MAP



APPENDIX D - TRAFFIC SURVEY RESULTS

C Countsequential



Manual Classified Surveys

Greenhill Road West, Herne Bay

Thursday 05th November 2009

for:

Bancroft Consulting Ltd

Countsequential Ltd

3 Lewes Road - Bromley Kent - BR1 2RN

T 020 8819 5809 F 020 8819 5617 M 07973 280966 E info@countsequential.co.uk RE

REF: HP/326

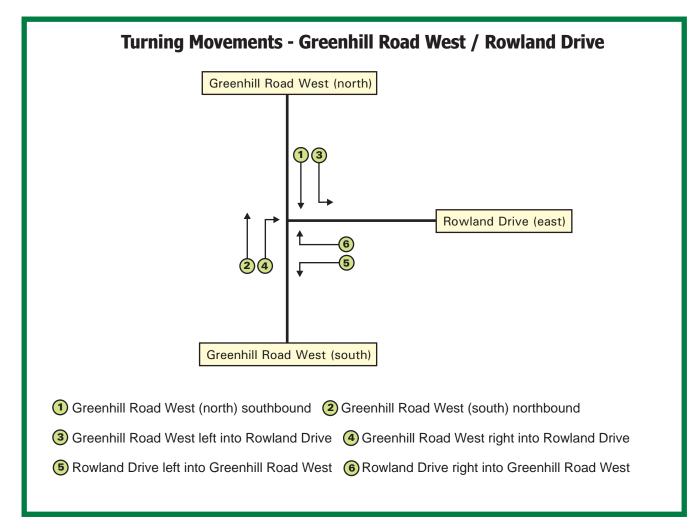


Greenhill Road West / Rowland Drive, Herne Bay - Photos

Greenhill Road West (south)

Greenhill Road West / Rowland Drive, Herne Bay - Photos







MANUAL CLASSIFIED SURVEY RESULTS

GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

THURSDAY 05th NOVEMBER 2009

Countsequential Ltd

3 Lewes Road - Bromley Kent - BR1 2RN

T 020 8819 5809 F 020 8819 5617 M 07973 280966 E info@countsequential.co.uk

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

	GREENHILL ROAD WEST (NORTH)									
				SOUTHBOUN						
				ment 1 (0700 ·	,					
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	17	9	0	2	0	0	28			
0715-0730	33	4	0	5	1	3	46			
0730-0745	50	5	0	2	0	0	57			
0745-0800	48	7	0	3	0	0	58			
0800-0815	63	6	0	1	0	0	70			
0815-0830	67	4	0	1	0	4	76			
0830-0845	57	4	0	1	0	37	99			
0845-0900	68	4	0	1	0	22	95			
0900-0915	40	6	0	2	0	9	57			
0915-0930	23	4	0	2	0	2	31			
0930-0945	31	8	0	1	0	2	42			
0945-1000	18	13	0	1	1	0	33			
1000-1015	20	4	0	2	0	4	30			
1015-1030	24	5	0	0	0	4	33			
1030-1045	21	7	0	2	0	1	31			
1045-1100	16	1	0	3	1	0	21			
1100-1115	20	2	0	1	0	3	26			
1115-1130	18	3	0	1	0	6	28			
1130-1145	20	5	0	1	0	1	27			
1145-1200	18	2	0	1	0	3	24			
1200-1215	31	3	0	1	0	0	35			
1215-1230	26	1	0	1	0	3	31			
1230-1245	12	2	0	2	0	1	17			
1245-1300	22	1	0	1	0	4	28			
1300-1315	21	8	0	3	0	1	33			
1315-1330	22	1	0	1	1	2	27			
1330-1345	24	4	0	1	0	1	30			
1345-1400	23	5	1	1	0	0	30			
1400-1415	18	3	0	3	0	0	24			
1415-1430	17	2	0	1	2	0	22			
1430-1445	35	2	0	2	0	6	45			
1445-1500	31	1	0	1	1	24	58			
1500-1515	23	5	0	2	1	5	36			
1515-1530	25	4	0	1	1	0	31			
1530-1545	37	6	0	2	0	1	46			
1545-1600	39	3	0	1	1	2	46			
1600-1615	36	6	0	0	0	1	43			
1615-1630	19	2	0	3	0	0	24			
1630-1645	30	3	0	2	0	0	35			
1645-1700	32	4	1	2	0	1	40			
1700-1715	28	2	0	1	0	2	33			
1715-1730	29	4	0	1	0	3	37			
1730-1745	38	7	0	2	0	2	49			
1745-1800	33	7	0	1	0	0	41			
1800-1815	25	10	0	2	0	0	37			
1815-1830	35	1	0	2	0	1	39			
1830-1845	18	4	0	0	0	0	22			
1845-1900	16	3	0	0	0	0	19			
0700-1900	1417	207	2	73	10	161	1870			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	148	25	0	12	1	3	189
0715-0815	194	22	0	11	1	3	231
0730-0830	228	22	0	7	0	4	261
0745-0845	235	21	0	6	0	41	303
0800-0900	255	18	0	4	0	63	340
0815-0915	232	18	0	5	0	72	327
0830-0930	188	18	0	6	0	70	282
0845-0945	162	22	0	6	0	35	225
0900-1000	112	31	0	6	1	13	163
0915-1015	92	29	0	6	1	8	136
0930-1030	93	30	0	4	1	10	138
0945-1045	83	29	0	5	1	9	127
1000-1100	81	17	0	7	1	9	115
1015-1115	81	15	0	6	1	8	111
1030-1130	75	13	0	7	1	10	106
1045-1145	74	11	0	6	1	10	102
1100-1200	76	12	0	4	0	13	105
1115-1215	87	13	0	4	0	10	114
1130-1230	95	11	0	4	0	7	117
1145-1245	87	8	0	5	0	7	107
1200-1300	91	7	0	5	0	8	111
1215-1315	81	12	0	7	0	9	109
1230-1330	77	12	0	7	1	8	105
1245-1345	89	14	0	6	1	8	118
1300-1400	90	18	1	6	1	4	120
1315-1415	87	13	1	6	1	3	111
1330-1430	82	14	1	6	2	1	106
1345-1445	93	12	1	7	2	6	121
1400-1500	101	8	0	7	3	30	149
1415-1515	106	10	0	6	4	35	161
1430-1530	114	12	0	6	3	35	170
1445-1545	116	16	0	6	3	30	171
1500-1600	124	18	0	6	3	8	159
1515-1615	137	19	0	4	2	4	166
1530-1630	131	17	0	6	1	4	159
1545-1645	124	14	0	6	1	3	148
1600-1700	117	15	1	7	0	2	142
1615-1715	109	11	1	8	0	3	132
1630-1730	119	13 17	1	6	0	6	145
1645-1745	127			-	0	8	159
1700-1800	128	20 28	0	5	0	7	160
1715-1815	125	28	-	6	-	5 3	164
1730-1830 1745-1845	131 111	25	0	5	0	3	166 139
1745-1845	94	18	0	3	0	1	139
1000-1900	34	10	U	4	U	1	117

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

	GREENHILL ROAD WEST (SOUTH)										
				NORTHBOUN							
				ment 2 (0700 ·	,						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот				
0700-0715	11	3	0	0	0	0	14				
0715-0730	12	2	0	0	1	1	16				
0730-0745	13	0	0	1	1	2	17				
0745-0800	22	3	0	1	0	2	28				
0800-0815	34	4	0	0	0	0	38				
0815-0830	19	4	0	0	0	2	25				
0830-0845	21	5	0	0	1	1	28				
0845-0900	44	5	0	0	0	37	86				
0900-0915	30	4	0	0	0	5	39				
0915-0930	23	2	0	1	0	3	29				
0930-0945	23	3	0	2	0	0	28				
0945-1000	18	4	1	1	0	0	24				
1000-1015	15	4	1	0	0	2	22				
1015-1030	13	4	0	0	0	5	22				
1030-1045	9	2	0	0	0	0	11				
1045-1100	15	5	0	1	0	0	21				
1100-1115	18	3	0	0	0	1	22				
1115-1130	18	4	0	0	1	3	26				
1130-1145	28	1	0	2	0	4	35				
1145-1200	13	4	0	0	0	0	17				
1200-1215	23	1	0	0	0	7	31				
1215-1230	16	2	1	0	0	5	24				
1230-1245	19	2	0	0	0	3	24				
1245-1300	24	1	0	0	1	0	26				
1300-1315	23	3	0	0	1	4	31				
1315-1330	16	0	0	0	1	0	17				
1330-1345	21	3	0	0	0	1	25				
1345-1400	11	4	0	0	0	2	17				
1400-1415	19	6	1	2	0	0	28				
1415-1430	21	6	0	0	0	1	28				
1430-1445	25	6	1	0	1	1	34				
1445-1500	37	3	0	0	0	11	51				
1500-1515	24	5	0	0	3	68	100				
1515-1530	27	8	0	1	1	3	40				
1530-1545	41	3	0	0	1	0	45				
1545-1600	27	5	1	0	0	2	35				
1600-1615	39	7	0	1	0	10	57				
1615-1630	39	3	0	0	1	0	38				
1630-1645	51	5	0	1	0	0	57				
1645-1700	35	6	0	0	1	1	43				
1700-1715	52	2	0	0	0	2	43 56				
1715-1730	52 61	2	0	1	0	2	69				
1730-1745	32	3	-		0	0	35				
1730-1745	32 45	3	0	0	0	0	35 50				
	45 44	4	0	0	0	0	50 47				
1800-1815		-	-	-	-	-					
1815-1830	21	4	0	0	1	0	26				
1830-1845	36	4	0	0	1	2	43				
1845-1900	27	1	0	0	0	0	28				
0700-1900	1250	173	7	15	17	191	1653				



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	58	8	0	2	2	5	75
0715-0815	81	9	0	2	2	5	99
0730-0830	88	11	0	2	1	6	108
0745-0845	96	16	0	1	1	5	119
0800-0900	118	18	0	0	1	40	177
0815-0915	114	18	0	0	1	45	178
0830-0930	118	16	0	1	1	46	182
0845-0945	120	14	0	3	0	45	182
0900-1000	94	13	1	4	0	8	120
0915-1015	79	13	2	4	0	5	103
0930-1030	69	15	2	3	0	7	96
0945-1045	55	14	2	1	0	7	79
1000-1100	52	15	1	1	0	7	76
1015-1115	55	14	0	1	0	6	76
1030-1130	60	14	0	1	1	4	80
1045-1145	79	13	0	3	1	8	104
1100-1200	77	12	0	2	1	8	100
1115-1215	82	10	0	2	1	14	109
1130-1230	80	8	1	2	0	16	107
1145-1245	71	9	1	0	0	15	96
1200-1300	82	6	1	0	1	15	105
1215-1315	82	8	1	0	2	12	105
1230-1330	82	6	0	0	3	7	98
1245-1345	84	7	0	0	3	5	99
1300-1400	71	10	0	0	2	7	90
1315-1415	67	13	1	2	1	3	87
1330-1430	72	19	1	2	0	4	98
1345-1445	76	22	2	2	1	4	107
1400-1500	102	21	2	2	1	13	141
1415-1515	107	20	1	0	4	81	213
1430-1530	113	22	1	1	5	83	225
1445-1545	129	19	0	1	5	82	236
1500-1600	119	21	1	1	5	73	220
1515-1615	134	23	1	2	2	15	177
1530-1630	141	18	1	1	2	12	175
1545-1645	151	20	1	2	1	12	187
1600-1700	159	21	0	2	2	11	195
1615-1715	172	16	0	1	2	3	194
1630-1730	199	20	0	2	1	3	225
1645-1745	180	18	0	1	1	3	203
1700-1800	190	16	1	1	0	2	210
1715-1815	182	17	1	1	0	0	201
1730-1830	142	14	1	0	1	0	158
1745-1845	146	15	1	0	2	2	166
1800-1900	128	12	0	0	2	2	144

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

	GREENHILL ROAD WEST (NORTH)									
			LEFT IN	TO ROWLAN	D DRIVE					
				ment 3 (0700 ·	,					
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	1	1	0	0	0	0	2			
0715-0730	3	0	0	0	0	1	4			
0730-0745	2	4	0	0	0	0	6			
0745-0800	2	1	0	0	0	3	6			
0800-0815	6	1	0	0	0	0	7			
0815-0830	7	2	0	0	0	4	13			
0830-0845	10	1	0	0	0	2	13			
0845-0900	5	1	0	0	0	3	9			
0900-0915	8	2	0	0	1	1	12			
0915-0930	5	0	0	1	1	4	11			
0930-0945	5	1	0	0	1	5	12			
0945-1000	10	0	0	0	1	1	12			
1000-1015	7	3	0	0	0	1	11			
1015-1030	2	1	0	1	1	0	5			
1030-1045	5	0	0	0	0	1	6			
1045-1100	6	1	0	0	2	0	9			
1100-1115	8	2	0	0	0	2	12			
1115-1130	10	0	0	1	0	0	11			
1130-1145	6	0	0	0	0	2	8			
1145-1200	3	1	0	0	0	2	6			
1200-1215	7	3	0	0	0	6	16			
1215-1230	3	1	0	1	0	1	6			
1230-1245	3	2	0	0	1	4	10			
1245-1300	10	0	0	0	0	0	10			
1300-1315	6	0	0	0	0	0	6			
1315-1330	2	0	0	1	0	0	3			
1330-1345	3	0	0	0	1	5	9			
1345-1400	8	1	0	0	1	2	12			
1400-1415	6	1	0	0	0	1	8			
1415-1430	13	1	0	0	2	0	16			
1430-1445	8	0	0	0	0	3	11			
1445-1500	13	0	0	0	1	0	14			
1500-1515	7	0	0	0	0	5	12			
1515-1530	6	2	1	1	0	0	10			
1530-1545	12	5	0	1	0	6 1	24 13			
1545-1600 1600-1615	10 7	2	0	0	0	1 7	13 17			
1600-1615	3	1	0	0	2	1	17 8			
1615-1630	3	4	0	0	0	1	8 13			
1630-1645	9	0	0	0	1	3	13			
1645-1700	8 5	1	0	0	0	4	9 10			
1700-1715	5 15	2	0	0	0	4	10			
1715-1730	9	2	0	0	0	0	17			
1730-1745	9	3	0	0	0	0	10			
1745-1800	11	0	0	0	0	1	10			
	11	2	0	0	0	3	12			
1815-1830	7	2	0	-	0	3	16			
1830-1845		2	-	0	-	1	9			
1845-1900	7		0	0	0					
0700-1900	327	58	1	7	16	87	496			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	8	6	0	0	0	4	18
0715-0815	13	6	0	0	0	4	23
0730-0830	17	8	0	0	0	7	32
0745-0845	25	5	0	0	0	9	39
0800-0900	28	5	0	0	0	9	42
0815-0915	30	6	0	0	1	10	47
0830-0930	28	4	0	1	2	10	45
0845-0945	23	4	0	1	3	13	44
0900-1000	28	3	0	1	4	11	47
0915-1015	27	4	0	1	3	11	46
0930-1030	24	5	0	1	3	7	40
0945-1045	24	4	0	1	2	3	34
1000-1100	20	5	0	1	3	2	31
1015-1115	21	4	0	1	3	3	32
1030-1130	29	3	0	1	2	3	38
1045-1145	30	3	0	1	2	4	40
1100-1200	27	3	0	1	0	6	37
1115-1215	26	4	0	1	0	10	41
1130-1230	19	5	0	1	0	11	36
1145-1245	16	7	0	1	1	13	38
1200-1300	23	6	0	1	1	11	42
1215-1315	22	3	0	1	1	5	32
1230-1330	21	2	0	1	1	4	29
1245-1345	21	0	0	1	1	5	28
1300-1400	19	1	0	1	2	7	30
1315-1415	19	2	0	1	2	8	32
1330-1430	30	3	0	0	4	8	45
1345-1445	35	3	0	0	3	6	47
1400-1500	40	2	0	0	3	4	49
1415-1515	41	1	0	0	3	8	53
1430-1530	34	2	1	1	1	8	47
1445-1545	38	7	1	2	1	11	60
1500-1600	35	9	1	2	0	12	59
1515-1615	35	10	1	2	2	14	64
1530-1630	32	12	0	1	2	15	62
1545-1645	29	8	0	0	2	12	51
1600-1700	27	6	0	0	3	11	47
1615-1715	25	6	0	0	1	8	40
1630-1730	37	4	0	0	1	7	49
1645-1745	37	4	0	0	1	4	46
1700-1800	36	7	0	0	0	4	47
1715-1815	42	6	0	0	0	1	49
1730-1830	38	6	0	0	0	4	48
1745-1845	36	7	0	0	0	5	48
1800-1900	36	5	0	0	0	6	47

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

1	GREENHILL ROAD WEST (SOUTH)									
				NTO ROWLAN						
	0.1.0	1.01/		ment 4 (0700 ·		858				
0700 0745	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	0	1	0	0	0	0	1			
0715-0730		0	0	0	0	0	0			
0730-0745	0	0	0	0	0	1	1			
0745-0800	0	0	0	0	0	0	0			
0800-0815	2	0	0	0	0	1	3			
0815-0830	0	1	0	0	0	4	5			
0830-0845	0	1	0	0	0	8	9			
0845-0900	2	0	0	0	0	7	9			
0900-0915	4	0	0	0	0	3	7			
0915-0930	1	2	0	0	0	7	10			
0930-0945	0	0	0	0	0	1	1			
0945-1000	2	0	0	0	0	0	2			
1000-1015	1	1	0	0	0	0	2			
1015-1030	1	0	0	0	2	0	3			
1030-1045	0	0	0	0	0	0	0			
1045-1100	1	1	0	0	0	1	3			
1100-1115	0	0	0	0	1	0	1			
1115-1130	3	0	0	0	0	0	3			
1130-1145	0	0	0	0	1	0	1			
1145-1200	0	0	0	0	1	0	1			
1200-1215	4	1	0	0	0	1	6			
1215-1230	0	0	0	0	0	9	9			
1230-1245	0	1	0	0	1	0	2			
1245-1300	1	0	0	0	0	0	1			
1300-1315	2	1	0	0	0	4	7			
1315-1330	0	0	0	0	0	5	5			
1330-1345	1	1	0	0	0	0	2			
1345-1400	1	0	0	0	1	0	2			
1400-1415	2	0	0	0	1	0	3			
1415-1430	3	0	0	0	0	2	5			
1430-1445	4	0	0	0	3	0	7			
1445-1500	1	0	0	0	1	8	10			
1500-1515	1	0	0	0	2	1	4			
1515-1530	4	0	0	0	0	0	4			
1530-1545	2	0	0	0	0	0	2			
1545-1600	0	0	0	0	0	0	0			
1600-1615	2	0	0	0	0	8	10			
1615-1630	2	2	0	0	0	0	4			
1630-1645	1	0	0	0	2	0	3			
1645-1700	0	0	0	0	1	3	4			
1700-1715	2	0	0	0	0	2	4			
1715-1730	3	0	0	0	0	1	4			
1730-1745	1	0	0	0	0	2	3			
1745-1800	2	0	0	0	0	0	2			
1800-1815	3	0	0	0	1	2	6			
1815-1830	0	0	0	0	0	0	0			
1830-1845	0	1	0	0	0	0	1			
1845-1900	1	0	0	0	0	0	1			
0700-1900	60	14	0	0	18	81	173			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	0	1	0	0	0	1	2
0715-0815	2	0	0	0	0	2	4
0730-0830	2	1	0	0	0	6	9
0745-0845	2	2	0	0	0	13	17
0800-0900	4	2	0	0	0	20	26
0815-0915	6	2	0	0	0	22	30
0830-0930	7	3	0	0	0	25	35
0845-0945	7	2	0	0	0	18	27
0900-1000	7	2	0	0	0	11	20
0915-1015	4	3	0	0	0	8	15
0930-1030	4	1	0	0	2	1	8
0945-1045	4	1	0	0	2	0	7
1000-1100	3	2	0	0	2	1	8
1015-1115	2	1	0	0	3	1	7
1030-1130	4	1	0	0	1	1	7
1045-1145	4	1	0	0	2	1	8
1100-1200	3	0	0	0	3	0	6
1115-1215	7	1	0	0	2	1	11
1130-1230	4	1	0	0	2	10	17
1145-1245	4	2	0	0	2	10	18
1200-1300	5	2	0	0	1	10	18
1215-1315	3	2	0	0	1	13	19
1230-1330	3	2	0	0	1	9	15
1245-1345	4	2	0	0	0	9	15
1300-1400	4	2	0	0	1	9	16
1315-1415	4	1	0	0	2	5	12
1330-1430	7	1	0	0	2	2	12
1345-1445	10	0	0	0	5	2	17
1400-1500	10	0	0	0	5	10	25
1415-1515	9	0	0	0	6	11	26
1430-1530	10	0	0	0	6	9	25
1445-1545	8	0	0	0	3	9	20
1500-1600	7	0	0	0	2	1	10
1515-1615	8	0	0	0	0	8	16
1530-1630	6	2	0	0	0	8	16
1545-1645	5	2	0	0	2	8	17
1600-1700	5	2	0	0	3	11	21
1615-1715	5	2	0	0	3	5	15
1630-1730	6	0	0	0	3	6	15
1645-1745	6	0	0	0	1	8	15
1700-1800	8	0	0	0	0	5	13
1715-1815	9	0	0	0	1	5	15
1730-1830	6	0	0	0	1	4	11
1745-1845	5	1	0	0	1	2	9
1800-1900	4	1	0	0	1	2	8

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

	ROWLAND DRIVE								
				GREENHILL F					
	0.1.5	1.01/		ment 5 (0700 -		858			
	CAR	LGV	HGV	PSV	CYCLE	PED	тот		
0700-0715	4	0	0	0	0	0	4		
0715-0730	2	1	0	0	0	0	3		
0730-0745	2	0	0	0	0	0	2		
0745-0800	5	1	0	0	0	3	9		
0800-0815	5	0	0	0	1	10	16		
0815-0830	4	1	0	0	0	6	11		
0830-0845	2	0	0	0	3	19	24		
0845-0900	5	0	0	0	3	5	13		
0900-0915	4	1	0	0	0	1	6		
0915-0930	2	0	0	1	0	0	3		
0930-0945	1	1	0	0	0	2	4		
0945-1000	2	0	0	0	0	0	2		
1000-1015	2	2	0	0	0	2	6		
1015-1030	0	0	0	0	2	0	2		
1030-1045	3	0	0	0	0	8	11		
1045-1100	0	0	0	0	0	3	3		
1100-1115	0	0	0	0	1	0	1		
1115-1130	3	1	0	0	0	0	4		
1130-1145	4	2	0	0	0	1	7		
1145-1200	0	0	0	0	1	6	7		
1200-1215	1	2	0	0	0	10	13		
1215-1230	1	0	0	0	2	3	6		
1230-1245	1	0	0	0	0	0	1		
1245-1300	1	0	0	0	1	2	4		
1300-1315	1	1	0	0	0	1	3		
1315-1330	3	0	0	0	0	2	5		
1330-1345	1	2	0	0	0	0	3		
1345-1400	0	1	0	0	1	2	4		
1400-1415	2	1	0	0	1	0	4		
1415-1430	5	0	0	0	3	0	8		
1430-1445	0	0	0	0	3	1	4		
1445-1500	1	0	0	0	3	17	21		
1500-1515	1	0	0	0	3	16	20		
1515-1530	3	0	0	0	1	0	4		
1530-1545	0	2	0	0	0	4	6		
1545-1600	0	0	0	0	0	2	2		
1600-1615	1	2	0	2	0	0	5		
1615-1630	1	0	0	0	2	1	4		
1630-1645	2	0	0	0	0	0	2		
1645-1700	1	0	0	0	0	2	3		
1700-1715	1	0	0	0	0	0	1		
1715-1730	1	1	0	0	0	0	2		
1730-1745	1	0	0	0	0	0	1		
1745-1800	2	0	0	0	0	0	2		
1800-1815	1	0	0	0	0	0	1		
1815-1830	3	0	0	0	0	2	5		
1830-1845	2	0	0	0	0	0	2		
1845-1900	0	0	0	0	0	0	0		
0700-1900	87	22	0	3	31	131	274		



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	13	2	0	0	0	3	18
0715-0815	14	2	0	0	1	13	30
0730-0830	16	2	0	0	1	19	38
0745-0845	16	2	0	0	4	38	60
0800-0900	16	1	0	0	7	40	64
0815-0915	15	2	0	0	6	31	54
0830-0930	13	1	0	1	6	25	46
0845-0945	12	2	0	1	3	8	26
0900-1000	9	2	0	1	0	3	15
0915-1015	7	3	0	1	0	4	15
0930-1030	5	3	0	0	2	4	14
0945-1045	7	2	0	0	2	10	21
1000-1100	5	2	0	0	2	13	22
1015-1115	3	0	0	0	3	11	17
1030-1130	6	1	0	0	1	11	19
1045-1145	7	3	0	0	1	4	15
1100-1200	7	3	0	0	2	7	19
1115-1215	8	5	0	0	1	17	31
1130-1230	6	4	0	0	3	20	33
1145-1245	3	2	0	0	3	19	27
1200-1300	4	2	0	0	3	15	24
1215-1315	4	1	0	0	3	6	14
1230-1330	6	1	0	0	1	5	13
1245-1345	6	3	0	0	1	5	15
1300-1400	5	4	0	0	1	5	15
1315-1415	6	4	0	0	2	4	16
1330-1430	8	4	0	0	5	2	19
1345-1445	7	2	0	0	8	3	20
1400-1500	8	1	0	0	10	18	37
1415-1515	7	0	0	0	12	34	53
1430-1530	5	0	0	0	10	34	49
1445-1545	5	2	0	0	7	37	51
1500-1600	4	2	0	0	4	22	32
1515-1615	4	4	0	2	1	6	17
1530-1630	2	4	0	2	2	7	17
1545-1645	4	2	0	2	2	3	13
1600-1700	5	2	0	2	2	3	14
1615-1715	5	0	0	0	2	3	10
1630-1730	5	1	0	0	0	2	8
1645-1745	4	1	0	0	0	2	7
1700-1800	5	1	0	0	0	0	6
1715-1815	5	1	0	0	0	0	6
1730-1830	7	0	0	0	0	2	9
1745-1845	8	0	0	0	0	2	10
1800-1900	6	0	0	0	0	2	8

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / ROWLAND DRIVE, HERNE BAY

	ROWLAND DRIVE RIGHT INTO GREENHILL ROAD WEST									
				ment 6 (0700 ·						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	1	1	0	0	0	3	5			
0715-0730	2	1	0	0	1	1	5			
0730-0745	10	5	0	0	0	3	18			
0745-0800	4	5	0	0	1	1	11			
0800-0815	11	2	0	0	0	1	14			
0815-0830	6	4	0	1	0	3	14			
0830-0845	12	0	0	0	0	5	17			
0845-0900	14	1	0	0	2	3	20			
0900-0915	8	3	0	0	1	6	18			
0915-0930	4	1	0	0	0	7	12			
0930-0945	2	0	0	1	2	2	7			
0945-1000	4	1	0	0	0	1	6			
1000-1015	3	0	0	0	0	0	3			
1015-1030	5	1	0	0	1	2	9			
1030-1045	6	1	0	0	0	5	12			
1045-1100	4	0	0	0	0	6	10			
1100-1115	6	1	0	0	0	1	8			
1115-1130	3	0	0	0	0	4	7			
1130-1145	12	3	0	0	0	2	17			
1145-1200	4	0	0	0	0	2	6			
1200-1215	11	2	0	0	0	4	17			
1215-1230	8	0	0	0	0	0	8			
1230-1245	10	0	0	0	0	0	10			
1245-1300	7	0	1	0	0	0	8			
1300-1315	2	1	0	0	0	3	6			
1315-1330	8	0	0	0	0	0	8			
1330-1345	2	0	0	0	0	1	3			
1345-1400	5	2	0	0	2	0	9			
1400-1415	5	1	0	0	1	5	12			
1415-1430	8	0	0	0	0	0	8			
1430-1445	6	1	0	0	0	0	7			
1445-1500	10	1	0	0	0	0	11			
1500-1515	14	1	0	0	0	3	18			
1515-1530	5	0	0	1	0	3	9			
1530-1545	6	1	0	0	0	3	10			
1545-1600	5	3	0	0	1	1	10			
1600-1615	8	0	0	0	0	1	9			
1615-1630	4	2	0	0	0	1	7			
1630-1645	8	1	0	0	0	0	9			
1645-1700	6	0	0	0	1	0	7			
1700-1715	8	0	0	0	0	0	8			
1715-1730	12	1	0	0	0	0	13			
1730-1745	11	0	0	0	0	0	11			
1745-1800	6	1	0	0	1	1	9			
1800-1815	11	0	0	0	0	2	13			
1815-1830	11	1	0	0	0	0	12			
1830-1845	8	0	0	0	0	0	8			
1845-1900	9	0	0	0	1	0	10			
0700-1900	335	49	1	3	15	86	489			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	17	12	0	0	2	8	39
0715-0815	27	13	0	0	2	6	48
0730-0830	31	16	0	1	1	8	57
0745-0845	33	11	0	1	1	10	56
0800-0900	43	7	0	1	2	12	65
0815-0915	40	8	0	1	3	17	69
0830-0930	38	5	0	0	3	21	67
0845-0945	28	5	0	1	5	18	57
0900-1000	18	5	0	1	3	16	43
0915-1015	13	2	0	1	2	10	28
0930-1030	14	2	0	1	3	5	25
0945-1045	18	3	0	0	1	8	30
1000-1100	18	2	0	0	1	13	34
1015-1115	21	3	0	0	1	14	39
1030-1130	19	2	0	0	0	16	37
1045-1145	25	4	0	0	0	13	42
1100-1200	25	4	0	0	0	9	38
1115-1215	30	5	0	0	0	12	47
1130-1230	35	5	0	0	0	8	48
1145-1245	33	2	0	0	0	6	41
1200-1300	36	2	1	0	0	4	43
1215-1315	27	1	1	0	0	3	32
1230-1330	27	1	1	0	0	3	32
1245-1345	19	1	1	0	0	4	25
1300-1400	17	3	0	0	2	4	26
1315-1415	20	3	0	0	3	6	32
1330-1430	20	3	0	0	3	6	32
1345-1445	24	4	0	0	3	5	36
1400-1500	29	3	0	0	1	5	38
1415-1515	38	3	0	0	0	3	44
1430-1530	35	3	0	1	0	6	45
1445-1545	35	3	0	1	0	9	48
1500-1600	30	5	0	1	1	10	47
1515-1615	24	4	0	1	1	8	38
1530-1630	23	6	0	0	1	6	36
1545-1645	25	6	0	0	1	3	35
1600-1700	26	3	0	0	1	2	32
1615-1715	26	3	0	0	1	1	31
1630-1730	34	2	0	0	1	0	37
1645-1745	37	1	0	0	1	0	39
1700-1800	37	2	0	0	1	1	41
1715-1815	40	2	0	0	1	3	46
1730-1830	39	2	0	0	1	3	45
1745-1845	36	2	0	0	1	3	42
1800-1900	39	1	0	0	1	2	43

TOTAL FLOW INTO SURVEY SITE=

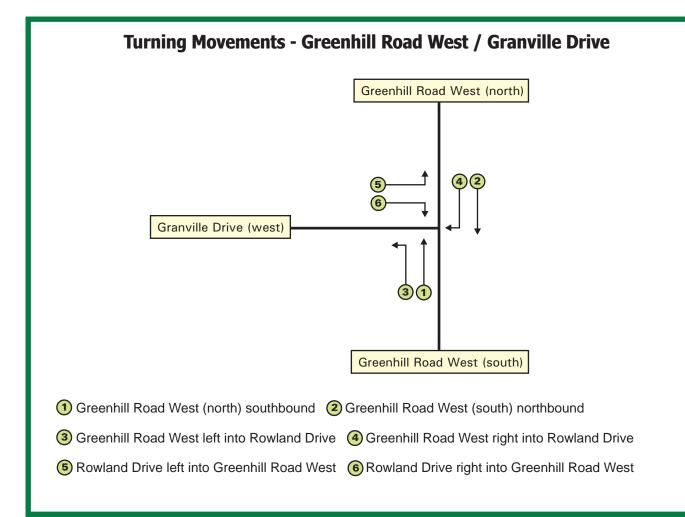








Greenhill Road West / Granville Drive, Herne Bay - Photos





MANUAL CLASSIFIED SURVEY RESULTS

GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

THURSDAY 05th NOVEMBER 2009

Countsequential Ltd

3 Lewes Road - Bromley Kent - BR1 2RN

T 020 8819 5809 F 020 8819 5617 M 07973 280966 E info@countsequential.co.uk

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GREENHILL ROAD WEST (SOUTH) NORTHBOUND									
				ment 1 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	7	5	0	0	0	0	12			
0715-0730	7	1	0	0	0	1	9			
0730-0745	14	1	0	2	1	0	18			
0745-0800	19	0	0	1	0	2	22			
0800-0815	25	4	0	0	0	4	33			
0815-0830	21	2	0	1	0	0	24			
0830-0845	19	4	0	0	0	48	71			
0845-0900	8	1	0	0	0	32	41			
0900-0915	18	4	0	0	0	10	32			
0915-0930	14	4	0	0	0	1	19			
0930-0945	18	4	0	0	0	0	22			
0930-0945	17	4	0	0	0	0	21			
1000-1015	17	4	0	0	0	0	16			
1015-1030	12	5	0	0	0	3	20			
1030-1045	12	1	0	0	0	0	11			
1045-1100	13	5	0	0	0	0	18			
1100-1115	16	2	0	1	0	0	19			
1115-1130	15	2	0	1	0	0	18			
1130-1145	13	1	0	0	0	0	14			
1145-1200	14	3	0	1	0	0	18			
1200-1215	14	3	0	1	1	2	26			
1215-1230	16	3	0	1	1	0	20			
1230-1245	13	0	0	2	0	0	15			
1245-1300	17	4	0	1	0	4	26			
1300-1315	30	2	0	1	3	5	41			
1315-1330	15	0	0	0	0	1	16			
1330-1345	16	8	1	0	0	0	25			
1345-1400	10	2	0	0	2	2	16			
1400-1415	21	7	0	2	0	1	31			
1415-1430	25	2	0	0	0	1	28			
1430-1445	22	6	0	1	1	4	34			
1445-1500	14	1	0	0	1	6	22			
1500-1515	15	2	0	1	0	90	108			
1515-1530	27	14	0	1	2	2	46			
1530-1545	33	4	0	2	0	2	40			
1545-1600	25	0	1	1	0	0	27			
1600-1615	39	9	0	1	0	14	63			
1615-1630	45	11	0	0	1	9	66			
1630-1645	29	1	0	0	0	0	30			
1645-1700	43	8	0	1	0	5	57			
1700-1715	57	3	0	0	0	0	60			
1715-1730	50	6	0	1	0	0	57			
1730-1745	46	5	2	0	0	1	54			
1745-1800	38	5	1	0	0	0	44			
1800-1815	50	3	0	0	1	0	54			
1815-1830	18	4	0	0	0	0	22			
1830-1845	29	2	1	1	0	0	33			
1845-1900	16	0	0	1	0	0	17			
0700-1900	1070	172	6	26	14	250	1538			



CAR	LGV	HGV	PSV	CYCLE	PED	тот
47	7	0	3	1	3	61
65	6	0	3	1	7	82
79	7	0	4	1	6	97
84	10	0	2	0	54	150
73	11	0	1	0	84	169
66	11	0	1	0	90	168
59	13	0	0	0	91	163
58	13	0	0	0	43	114
67	16	0	0	0	11	94
61	16	0	0	0	1	78
59	17	0	0	0	3	79
51	14	0	0	0	3	68
47	15	0	0	0	3	65
51	13	0	1	0	3	68
54	10	0	2	0	0	66
57	10	0	2	0	0	69
58	8	0	3	0	0	69
61	9	0	3	1	2	76
62	10	0	3	2	2	79
62	9	0	5	2	2	80
65	10	0	5	2	6	88
76	9	0	5	4	9	103
75	6	0	4	3	10	98
78	14	1	2	3	10	108
71	12	1	1	5	8	98
62	17	1	2	2	4	88
72	19	1	2	2	4	100
78	17	0	3	3	8	109
82	16	0	3	2	12	115
76	11	0	2	2	101	192
78	23	0	3	4	102	210
89	21	0	4	3	100	217
100	20	1	5	2	94	222
124	27	1	5	2	18	177
142	24	1	4	1	25	197
138	21	1	2	1	23	186
156	29	0	2	1	28	216
174	23	0	1	1	14	213
179	18	0	2	0	5	204
196	22	2	2	0	6	228
191	19	3	1	0	1	215
184	19	3	1	1	1	209
152	17	3	0	1	1	174
135	14	2	1	1	0	153
113	9	1	2	1	0	126
	47 65 79 84 73 66 59 58 67 61 59 51 54 47 51 54 47 51 54 62 62 62 65 76 75 78 71 62 72 78 89 100 124 142 138 156 179 191 184 152 135	47 7 65 6 79 7 84 10 73 11 66 11 59 13 58 13 58 13 67 16 61 16 59 17 51 14 47 15 51 13 54 10 57 10 58 8 61 9 62 10 62 9 65 12 76 9 75 6 78 14 71 12 62 10 72 19 78 17 82 16 76 11 78 23 89 21 100 20 124 27<	47 7 0 65 6 0 79 7 0 84 10 0 73 11 0 66 11 0 59 13 0 58 13 0 58 13 0 67 16 0 61 16 0 51 14 0 47 15 0 51 13 0 54 10 0 57 10 0 58 8 0 61 9 0 62 10 0 62 10 0 62 10 0 62 10 0 62 10 0 75 6 0 78 14 1 71 12 1 78 17 0 82 16 </td <td>47703$65$603$79$704$84$1002$73$1101$66$1101$59$1300$58$1300$67$1600$67$1600$67$1600$51$1400$51$1301$54$1002$57$1002$57$1003$62$905$65$1003$62$905$75$604$78$1412$71$1211$62$1712$78$1703$82$1603$76$1102$78$1703$89$2104$100$2015$142$2715$142$2414$138$2112$174$2301$179$1802$196$2222$191$1931$184$1931$152$1730</td> <td>47703165603179704184100207311010661101059130005813000671600061160005114000511301054100205710020588031621003265100526510052651003378141237814122781703382160327611022781703382160327611022782303489210431002015214224141138211201911931018419<!--</td--><td>4770313$65$60317$79$70416$84$1002054$73$1101090$59$1300091$58$1300041$66$1100011$67$1600011$61$160003$51$140003$51$130103$51$130103$51$130103$54$100200$58$80312$62$100322$62$100322$62$90549$75$604310$71$121158$62$171224$78$170338$82$1603212$76$1103212$76$11043100$100$2015294$142$27152</td></td>	47703 65 603 79 704 84 1002 73 1101 66 1101 59 1300 58 1300 67 1600 67 1600 67 1600 51 1400 51 1301 54 1002 57 1002 57 1003 62 905 65 1003 62 905 75 604 78 1412 71 1211 62 1712 78 1703 82 1603 76 1102 78 1703 89 2104 100 2015 142 2715 142 2414 138 2112 174 2301 179 1802 196 2222 191 1931 184 1931 152 1730	47703165603179704184100207311010661101059130005813000671600061160005114000511301054100205710020588031621003265100526510052651003378141237814122781703382160327611022781703382160327611022782303489210431002015214224141138211201911931018419 </td <td>4770313$65$60317$79$70416$84$1002054$73$1101090$59$1300091$58$1300041$66$1100011$67$1600011$61$160003$51$140003$51$130103$51$130103$51$130103$54$100200$58$80312$62$100322$62$100322$62$90549$75$604310$71$121158$62$171224$78$170338$82$1603212$76$1103212$76$11043100$100$2015294$142$27152</td>	4770313 65 60317 79 70416 84 1002054 73 1101090 59 1300091 58 1300041 66 1100011 67 1600011 61 160003 51 140003 51 130103 51 130103 51 130103 54 100200 58 80312 62 100322 62 100322 62 90549 75 604310 71 121158 62 171224 78 170338 82 1603212 76 1103212 76 11043100 100 2015294 142 27152

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GREENHILL ROAD WEST (NORTH) SOUTHBOUND									
				ment 2 (0700 ·						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	18	10	0	3		0	31			
0715-0730	34	4	0	5	1	2	46			
0730-0745	53	4	0	1	0	0	58			
0745-0800	50	11	0	4	0	0 0	65			
0800-0815	54	3	0	0	1	0	58			
0815-0830	50	3	0	2	0	1	56			
0830-0845	42	3	0	0	0	58	103			
0845-0900	35	5	0	1	0	18	59			
0900-0915	38	4	1	2	1	3	49			
0915-0930	19	6	0	1	1	3	30			
0930-0945	29	5	0	2	0	2	38			
0945-1000	21	10	1	1	0	0	33			
1000-1015	17	4	0	2	0	0	23			
1015-1030	17	3	0	0	0	0	20			
1030-1045	21	5	0	2	0	1	29			
1045-1100	12	1	0	3	0	0	16			
1100-1115	18	2	0	1	0	0	21			
1115-1130	19	3	0	1	0	0	23			
1130-1145	24	6	0	0	0	1	31			
1145-1200	16	3	0	1	0	2	22			
1200-1215	16	2	0	0	0	5	23			
1215-1230	16	0	1	0	0	0	17			
1230-1245	19	3	0	0	0	1	23			
1245-1300	13	1	0	0	0	3	17			
1300-1315	29	9	0	3	1	0	42			
1315-1330	21	5	0	1	0	4	31			
1330-1345	14	1	0	1	0	2	18			
1345-1400	8	3	0	1	0	0	12			
1400-1415	21	4	0	2	1	0	28			
1415-1430	16	4	0	1	2	0	23			
1430-1445	19	3	0	2	1	1	26			
1445-1500	6	0	0	1	0	24	31			
1500-1515	10	2	0	1	1	14	28			
1515-1530	15	6	0	1	2	0	24			
1530-1545	21	6	0	2	1	2	32			
1545-1600	20	5	0	1	0	1	27			
1600-1615	20	4	0	2	0	0	26			
1615-1630	15	3	0	2	0	2	22			
1630-1645	15	0	0	2	0	0	17			
1645-1700	19	4	1	1	0	6	31			
1700-1715	12	1	0	1	0	3	17			
1715-1730	11	1	0	1	0	2	15			
1730-1745	27	5	1	0	1	0	34			
1745-1800	26	5	0	1	0	0	32			
1800-1815	20	4	1	0	0	0	25			
1815-1830	21	3	0	2	0	0	26			
1830-1845	13	3	0	0	0	0	16			
1845-1900	14	3	0	0	0	0	17			
0700-1900	1064	185	6	61	14	161	1491			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	155	29	0	13	1	2	200
0715-0815	191	22	0	10	2	2	227
0730-0830	207	21	0	7	1	1	237
0745-0845	196	20	0	6	1	59	282
0800-0900	181	14	0	3	1	77	276
0815-0915	165	15	1	5	1	80	267
0830-0930	134	18	1	4	2	82	241
0845-0945	121	20	1	6	2	26	176
0900-1000	107	25	2	6	2	8	150
0915-1015	86	25	1	6	1	5	124
0930-1030	84	22	1	5	0	2	114
0945-1045	76	22	1	5	0	1	105
1000-1100	67	13	0	7	0	1	88
1015-1115	68	11	0	6	0	1	86
1030-1130	70	11	0	7	0	1	89
1045-1145	73	12	0	5	0	1	91
1100-1200	77	14	0	3	0	3	97
1115-1215	75	14	0	2	0	8	99
1130-1230	72	11	1	1	0	8	93
1145-1245	67	8	1	1	0	8	85
1200-1300	64	6	1	0	0	9	80
1215-1315	77	13	1	3	1	4	99
1230-1330	82	18	0	4	1	8	113
1245-1345	77	16	0	5	1	9	108
1300-1400	72	18	0	6	1	6	103
1315-1415	64	13	0	5	1	6	89
1330-1430	59	12	0	5	3	2	81
1345-1445	64	14	0	6	4	1	89
1400-1500	62	11	0	6	4	25	108
1415-1515	51	9	0	5	4	39	108
1430-1530	50	11	0	5	4	39	109
1445-1545	52	14	0	5	4	40	115
1500-1600	66	19	0	5	4	17	111
1515-1615	76	21	0	6	3	3	109
1530-1630	76	18	0	7	1	5	107
1545-1645	70	12	0	7	0	3	92
1600-1700	69	11	1	7	0	8	96
1615-1715	61	8	1	6	0	11	87
1630-1730	57	6	1	5	0	11	80
1645-1745	69	11	2	3	1	11	97
1700-1800	76	12	1	3	1	5	98
1715-1815	84	15	2	2	1	2	106
1730-1830	94	17	2	3	1	0	117
1745-1845	80	15	1	3	0	0	99
1800-1900	68	13	1	2	0	0	84

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GREENHILL ROAD WEST (SOUTH) LEFT INTO GRANVILLE DRIVE									
				TO GRANVILL ment 3 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	0	0	0	0	0	0	0			
0715-0730	1	0	0	0	0	0	1			
0730-0745	0	0	0	0	0	0	0			
0745-0800	1	0	0	0	0	0	1			
0800-0815	1	0	0	0	0	0	1			
0815-0830	1	0	0	0	0	0	1			
0830-0845	6	0	0	0	1	0	7			
0845-0900	3	0	0	0	1	1	5			
0900-0915	4	0	0	0	0	4	8			
0915-0930	1	0	0	0	0	2	3			
0930-0945	0	0	0	0	0	0	0			
0930-0943	0	0	0	0	0	0	0			
1000-1015	0	0	0	0	0	0	0			
1015-1030	1	0	0	0	0	0	1			
1030-1045	0	0	0	0	0	0	0			
1045-11045	1	0	0	0	0	0	1			
1100-1115	2	0	0	0	0	1	3			
1115-1130	3	0	0	0	0	0	3			
1130-1145	1	0	0	0	0	0	1			
1145-1200	1	0	0	0	0	0	1			
1200-1215	0	0	0	0	0	2	2			
1215-1230	0	0	0	0	0	0	0			
1230-1245	0	0	0	0	0	0	0			
1245-1300	5	1	0	0	1	0	7			
1300-1315	0	0	0	0	0	0	0			
1315-1330	0	0	0	0	0	0	0			
1330-1345	0	0	0	0	0	0	0			
1345-1400	0	0	0	0	0	0	0			
1400-1415	0	0	0	0	0	0	0			
1415-1430	0	0	0	0	0	1	1			
1430-1445	0	0	0	0	0	0	0			
1445-1500	1	0	0	0	0	0	1			
1500-1515	0	0	0	0	0	142	142			
1515-1530	0	0	0	0	0	0	0			
1530-1545	0	0	0	0	0	0	0			
1545-1600	0	0	0	0	0	0	0			
1600-1615	2	0	0	0	0	0	2			
1615-1630	1	0	0	0	0	1	2			
1630-1645	0	0	0	0	1	3	4			
1645-1700	2	0	0	0	0	3	5			
1700-1715	1	0	0	0	0	0	1			
1715-1730	2	0	0	0	0	0	2			
1730-1745	1	0	0	0	0	0	1			
1745-1800	0	0	0	0	0	0	0			
1800-1815	1	0	0	0	0	0	1			
1815-1830	0	0	0	0	0	0	0			
1830-1845	0	0	0	0	0	0	0			
1845-1900	0	0	0	0	0	0	0			
	43	1	0	0	4	160	208			
0700-1900	43		v	v	4	100	200			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	2	0	0	0	0	0	2
0715-0815	3	0	0	0	0	0	3
0730-0830	3	0	0	0	0	0	3
0745-0845	9	0	0	0	1	0	10
0800-0900	11	0	0	0	2	1	14
0815-0915	14	0	0	0	2	5	21
0830-0930	14	0	0	0	2	7	23
0845-0945	8	0	0	0	1	7	16
0900-1000	5	0	0	0	0	6	11
0915-1015	1	0	0	0	0	2	3
0930-1030	1	0	0	0	0	0	1
0945-1045	1	0	0	0	0	0	1
1000-1100	2	0	0	0	0	0	2
1015-1115	4	0	0	0	0	1	5
1030-1130	6	0	0	0	0	1	7
1045-1145	7	0	0	0	0	1	8
1100-1200	7	0	0	0	0	1	8
1115-1215	5	0	0	0	0	2	7
1130-1230	2	0	0	0	0	2	4
1145-1245	1	0	0	0	0	2	3
1200-1300	5	1	0	0	1	2	9
1215-1315	5	1	0	0	1	0	7
1230-1330	5	1	0	0	1	0	7
1245-1345	5	1	0	0	1	0	7
1300-1400	0	0	0	0	0	0	0
1315-1415	0	0	0	0	0	0	0
1330-1430	0	0	0	0	0	1	1
1345-1445	0	0	0	0	0	1	1
1400-1500	1	0	0	0	0	1	2
1400-1500	1	0	0	0	0	143	144
1410-1510	1	0	0	0	0	143	144
1430-1530	1	0	0	0	0	142	143
1500-1600	0	0	0	0	0	142	143
1515-1615	2	0	0	0	0	0	2
1530-1630	2	0	0	0	0	1	4
	3	0	0	0	1	4	4
1545-1645	-	-	-	-	-	4	-
1600-1700	5 4	0	0	0	1	7	13
1615-1715		-	0	0			12
1630-1730	5	0	0	0	1	6	12
1645-1745	6	0	0	0	0	3	9
1700-1800	4	0	0	0	0	0	4
1715-1815	4	0	0	0	0	0	4
1730-1830	2	0	0	0	0	0	2
1745-1845	1	0	0	0	0	0	1
1800-1900	1	0	0	0	0	0	1

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GREENHILL ROAD WEST (NORTH) RIGHT INTO GRANVILLE DRIVE									
				ment 4 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	1	0	0	0	0	1	2			
0715-0730	0	0	0	0	0	1	1			
0730-0745	2	0	0	1	0	0	3			
0745-0800	0	0	0	0	0	1	1			
0800-0815	0	1	0	0	0	0	1			
0815-0830	6	0	0	0	0	2	8			
0830-0845	15	0	0	0	0	9	24			
0845-0900	5	0	0	0	0	3	8			
0900-0915	6	1	0	0	0	1	8			
0915-0930	1	0	1	0	0	0	2			
0930-0945	2	0	0	0	0	0	2			
0945-1000	1	0	0	0	0	0	1			
1000-1015	2	0	0	0	0	2	4			
1015-1030	3	2	0	0	2	0	7			
1030-1045	2	0	0	0	0	0	2			
1045-1100	1	1	0	0	2	0	4			
1100-1115	0	0	0	0	0	0	0			
1115-1130	1	0	0	0	1	0	2			
1130-1145	1	0	0	0	0	0	1			
1145-1200	8	0	0	0	1	0	9			
1200-1215	4	0	0	0	0	4	8			
1215-1230	1	0	0	0	1	11	13			
1230-1245	0	0	0	0	0	0	0			
1245-1300	2	0	0	0	1	1	4			
1300-1315	3	0	0	0	0	4	7			
1315-1330	3	0	0	0	0	1	4			
1330-1345	2	0	0	0	0	0	2			
1345-1400	3	1	0	0	0	0	4			
1400-1415	0	0	0	0	0	0	0			
1415-1430	5	0	0	0	0	0	5			
1430-1445	10	0	0	0	0	2	12			
1445-1500	7	0	0	0	0	1	8			
1500-1515	5 4	0	0	0	1	1	7 5			
1515-1530 1530-1545	4 5	1	0	0	0	0 4	5 9			
1530-1545	5 9	0	0	0	1	4	9 10			
1600-1615	8	0	0	1	0	41	50			
1615-1630	4	0	0	0	0	0	4			
1630-1645	4	1	0	0	0	0	2			
1645-1700	3	0	0	1	0	0	4			
1700-1715	6	0	0	0	0	0	6			
1715-1730	3	0	0	0	0	0	3			
1730-1745	0	0	0	0	0	0	0			
1745-1800	1	Ő	Ő	1	Ő	0 0	2			
1800-1815	9	0	0	0	0	0	9			
1815-1830	2	0	0	0	0	0	2			
1830-1845	2	0	0	0	0	0	2			
1845-1900	1	0	0	0	0	1	2			
0700-1900	160	8	1	4	10	91	274			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	3	0	0	1	0	3	7
0715-0815	2	1	0	1	0	2	6
0730-0830	8	1	0	1	0	3	13
0745-0845	21	1	0	0	0	12	34
0800-0900	26	1	0	0	0	14	41
0815-0915	32	1	0	0	0	15	48
0830-0930	27	1	1	0	0	13	42
0845-0945	14	1	1	0	0	4	20
0900-1000	10	1	1	0	0	1	13
0915-1015	6	0	1	0	0	2	9
0930-1030	8	2	0	0	2	2	14
0945-1045	8	2	0	0	2	2	14
1000-1100	8	3	0	0	4	2	17
1015-1115	6	3	0	0	4	0	13
1030-1130	4	1	0	0	3	0	8
1045-1145	3	1	0	0	3	0	7
1100-1200	10	0	0	0	2	0	12
1115-1215	14	0	0	0	2	4	20
1130-1230	14	0	0	0	2	15	31
1145-1245	13	0	0	0	2	15	30
1200-1300	7	0	0	0	2	16	25
1215-1315	6	0	0	0	2	16	24
1230-1330	8	0	0	0	1	6	15
1245-1345	10	0	0	0	1	6	17
1300-1400	11	1	0	0	0	5	17
1315-1415	8	1	0	0	0	1	10
1330-1430	10	1	0	0	0	0	11
1345-1445	18	1	0	0	0	2	21
1400-1500	22	0	0	0	0	3	25
1415-1515	27	0	0	0	1	4	32
1430-1530	26	1	0	0	1	4	32
1445-1545	21	1	0	0	1	6	29
1500-1600	23	1	0	0	2	5	31
1515-1615	26	1	0	1	1	45	74
1530-1630	26	0	0	1	1	45	73
1545-1645	22	1	0	1	1	41	66
1600-1700	16	1	0	2	0	41	60
1615-1715	14	1	0	1	0	0	16
1630-1730	13	1	0	1	0	0	15
1645-1745	12	0	0	1	0	0	13
1700-1800	10	0	0	1	0	0	11
1715-1815	13	0	0	1	0	0	14
1730-1830	12	0	0	1	0	0	13
1745-1845	14	0	0	1	0	0	15
1800-1900	14	0	0	0	0	1	15
		÷	÷	Ť	, v	•	

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GRANVILLE DRIVE LEFT INTO GREENHILL ROAD WEST									
				ment 5 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	1	0	0	0	0	0	1			
0715-0730	3	0	0	0	1	0	4			
0730-0745	1	0	0	0	0	0	1			
0745-0800	4	2	0	0	0	0	6			
0800-0815	11	0	0	0	0	2	13			
0815-0830	1	0	0	0	0	0	1			
0830-0845	4	0	0	0	0	0	4			
0845-0900	4	0	0	0	0	1	5			
0900-0915	6	0	0	0	0	3	9			
0915-0930	5	0	0	0	0	2	7			
0930-0945	3	0	0	0	0	0	3			
0945-1000	2	0	0	0	0	1	3			
1000-1015	1	0	0	0	0	1	2			
1015-1030	2	0	0	0	2	0	4			
1030-1045	0	0	0	0	0	0	0			
1045-1100	2	1	0	0	0	2	5			
1100-1115	1	0	0	0	0	0	1			
1115-1130	0	0	0	0	0	0	0			
1130-1145	5	0	0	0	0	4	9			
1145-1200	4	0	0	0	1	3	8			
1200-1215	1	0	0	0	0	7	8			
1215-1230	1	0	0	0	0	0	1			
1230-1245	0	0	0	0	1	0	1			
1245-1300	5	0	0	0	1	2	8			
1300-1315	3	0	0	0	0	2	5			
1315-1330	0	0	0	0	0	0	0			
1330-1345	1	0	0	0	0	0	1			
1345-1400	2	0	0	0	1	2	5			
1400-1415	0	0	0	0	0	1	1			
1415-1430	1	0	0	0	0	2	3			
1430-1445	7	0	0	0	0	4	11			
1445-1500	7	0	0	0	0	6	13			
1500-1515	4	0	0	0	0	0	4			
1515-1530	0	0	0	0	0	0	0			
1530-1545	0	0	0	0	0	0	0			
1545-1600	0	1	0	0	0	0	1			
1600-1615	2	0	0	0	0	0	2			
1615-1630	4	0	0	0	0	7	11			
1630-1645	4	0	0	0	2	0	6			
1645-1700	4	0	0	0	0	0	4			
1700-1715	1	0	0	0	0	3	4			
1715-1730	1	0	0	0	0	0	1			
1730-1745	0	0	0	0	0	0	0			
1745-1800	2	0	0	0	0	0	2			
1800-1815	1	0	0	0	0	0	1			
1815-1830	3	0	0	0	1	0	4			
1830-1845	3	0	0	0	0	2	5			
1845-1900	3	0	0	0	0	0	3			
0700-1900	120	4	0	0	10	57	191			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	9	2	0	0	1	0	12
0715-0815	19	2	0	0	1	2	24
0730-0830	17	2	0	0	0	2	21
0745-0845	20	2	0	0	0	2	24
0800-0900	20	0	0	0	0	3	23
0815-0915	15	0	0	0	0	4	19
0830-0930	19	0	0	0	0	6	25
0845-0945	18	0	0	0	0	6	24
0900-1000	16	0	0	0	0	6	22
0915-1015	11	0	0	0	0	4	15
0930-1030	8	0	0	0	2	2	12
0945-1045	5	0	0	0	2	2	9
1000-1100	5	1	0	0	2	3	11
1015-1115	5	1	0	0	2	2	10
1030-1130	3	1	0	0	0	2	6
1045-1145	8	1	0	0	0	6	15
1100-1200	10	0	0	0	1	7	18
1115-1215	10	0	0	0	1	14	25
1130-1230	11	0	0	0	1	14	26
1145-1245	6	0	0	0	2	10	18
1200-1300	7	0	0	0	2	9	18
1215-1315	9	0	0	0	2	4	15
1230-1330	8	0	0	0	2	4	14
1245-1345	9	0	0	0	1	4	14
1300-1400	6	0	0	0	1	4	11
1315-1415	3	0	0	0	1	3	7
1330-1430	4	0	0	0	1	5	10
1345-1445	10	0	0	0	1	9	20
1400-1500	15	0	0	0	0	13	28
1415-1515	19	0	0	0	0	12	31
1430-1530	18	0	0	0	0	10	28
1445-1545	11	0	0	0	0	6	17
1500-1600	4	1	0	0	0	0	5
1515-1615	2	1	0	0	0	0	3
1530-1630	6	1	0	0	0	7	14
1545-1645	10	1	0	0	2	7	20
1600-1700	14	0	0	0	2	7	23
1615-1715	13	0	0	0	2	10	25
1630-1730	10	0	0	0	2	3	15
1645-1745	6	0	0	0	0	3	9
1700-1800	4	0	0	0	0	3	7
1715-1815	4	0	0	0	0	0	4
1730-1830	6	0	0	0	1	0	7
1745-1845	9	0	0	0	1	2	12
1800-1900	10	0	0	0	1	2	13

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / GRANVILLE DRIVE, HERNE BAY

	GRANVILLE DRIVE RIGHT INTO GREENHILL ROAD WEST									
				ment 6 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	3	1	0	0	0	0	4			
0715-0730	0	0	0	0	0	0 0	0			
0730-0745	2	0	0	0	0	0	2			
0745-0800	3	0	0	0	0	0 0	3			
0800-0815	0	0	0	0	0	3	3			
0815-0830	1	0	0	0	0	9	10			
0830-0845	2	1	0	0	0	118	121			
0845-0900	2	0	0	0	0	42	44			
0900-0915	2	0	0	0	0	4	6			
0915-0930	0	0	0	0	0	0	0			
0930-0945	0	0	0	0	0	1	1			
0945-1000	0	0	0	0	0	2	2			
1000-1015	0	0	0	0	0	0	0			
1015-1030	0	0	0	0	0	0	0			
1030-1045	0	0	0	0	0	0	0			
1045-1100	0	0	0	0	0	0	0			
1100-1115	2	0	0	0	1	0	3			
1115-1130	0	0	0	0	0	0	0			
1130-1145	1	0	0	0	0	0	1			
1145-1200	0	0	0	0	0	0	0			
1200-1215	0	0	0	0	0	2	2			
1215-1230	0	0	0	0	0	0	0			
1230-1245	0	0	0	0	0	1	1			
1245-1300	1	0	0	0	0	1	2			
1300-1315	1	0	0	0	0	0	1			
1315-1330	0	0	0	0	0	0	0			
1330-1345	0	1	0	0	1	0	2			
1345-1400	0	0	0	0	0	0	0			
1400-1415	4	0	1	0	0	0	5			
1415-1430	0	0	0	0	0	0	0			
1430-1445	0	0	0	0	0	3	3			
1445-1500	0	0	0	0	0	34	34			
1500-1515	0	0	0	0	0	24	24			
1515-1530	0	1	0	0	0	0	1			
1530-1545	1	0	0	0	0	0	1			
1545-1600	0	0	0	0	0	13	13			
1600-1615	2	0	0	0	0	5	7			
1615-1630	1	0	0	0	0	1	2			
1630-1645	0	0	0	0	0	0	0			
1645-1700	0	0	0	0	0	1	1			
1700-1715	0	0	0	0	0	0	0			
1715-1730	0	0	0	0	0	0	0			
1730-1745	1	0	0	0	0	0	1			
1745-1800	0	0	0	0	0					
1800-1815	0	0	0	0	0	0	0			
1815-1830	2	0	0	0	0	0	2			
1830-1845	0	0	0	0	0	0	0			
1845-1900	0	0	0	0	0	0	0			
0700-1900	31	4	1	0	2	265	303			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	8	1	0	0	0	0	9
0715-0815	5	0	0	0	0	3	8
0730-0830	6	0	0	0	0	12	18
0745-0845	6	1	0	0	0	130	137
0800-0900	5	1	0	0	0	172	178
0815-0915	7	1	0	0	0	173	181
0830-0930	6	1	0	0	0	164	171
0845-0945	4	0	0	0	0	47	51
0900-1000	2	0	0	0	0	7	9
0915-1015	0	0	0	0	0	3	3
0930-1030	0	0	0	0	0	3	3
0945-1045	0	0	0	0	0	2	2
1000-1100	0	0	0	0	0	0	0
1015-1115	2	0	0	0	1	0	3
1030-1130	2	0	0	0	1	0	3
1045-1145	3	0	0	0	1	0	4
1100-1200	3	0	0	0	1	0	4
1115-1215	1	0	0	0	0	2	3
1130-1230	1	0	0	0	0	2	3
1145-1245	0	0	0	0	0	3	3
1200-1300	1	0	0	0	0	4	5
1215-1315	2	0	0	0	0	2	4
1230-1330	2	0	0	0	0	2	4
1245-1345	2	1	0	0	1	1	5
1300-1400	1	1	0	0	1	0	3
1315-1415	4	1	1	0	1	0	7
1330-1430	4	1	1	0	1	0	7
1345-1445	4	0	1	0	0	3	8
1400-1500	4	0	1	0	0	37	42
1415-1515	0	0	0	0	0	61	61
1430-1530	0	1	0	0	0	61	62
1445-1545	1	1	0	0	0	58	60
1500-1600	1	1	0	0	0	37	39
1515-1615	3	1	0	0	0	18	22
1530-1630	4	0	0	0	0	19	23
1545-1645	3	0	0	0	0	19	22
1600-1700	3	0	0	0	0	7	10
1615-1715	1	0	0	0	0	2	3
1630-1730	0	0	0	0	0	1	1
1645-1745	1	0	0	0	0	1	2
1700-1800	1	0	0	0	0	1	2
1715-1815	1	0	0	0	0	1	2
1730-1830	3	0	0	0	0	1	4
1745-1845	2	0	0	0	0	1	3
1800-1900	2	0	0	0	0	0	2
1300-1300	-	v	v	v	v	v	~

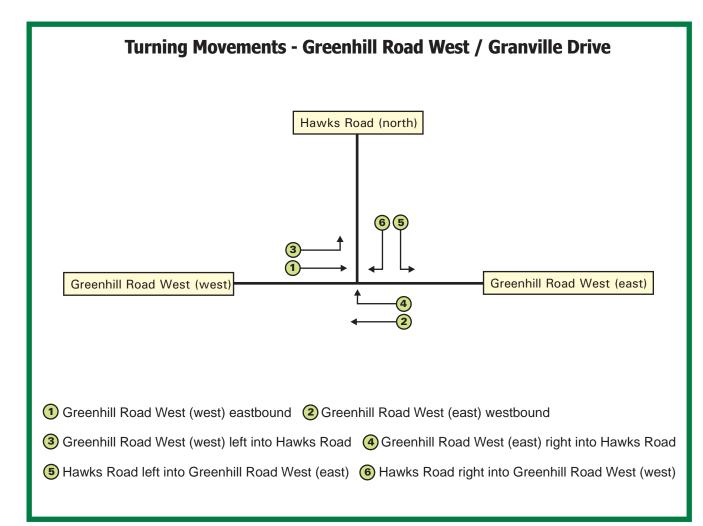
TOTAL FLOW INTO SURVEY SITE=

Greenhill Road West / Hawks Road, Herne Bay - Photos





Greenhill Road West / Hawks Road, Herne Bay - Photos





MANUAL CLASSIFIED SURVEY RESULTS

GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

THURSDAY 05th NOVEMBER 2009

Countsequential Ltd

3 Lewes Road - Bromley Kent - BR1 2RN

T 020 8819 5809 F 020 8819 5617 M 07973 280966 E info@countsequential.co.uk

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

	GREENHILL ROAD WEST (WEST) EASTBOUND									
			move	EASTBOUND nent 1 (0700 ·						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	5	1	0	0		0	6			
0700-0715	6	1	1	0	0	1	9			
0730-0745	11	2	0	0	1	0	14			
0745-0800	13	1	0	0	0	0	14			
0800-0815	14	3	0	0	0	1	14			
0815-0830	21	2	0	0	1	1	25			
0830-0845	21	5	0	0	2	6	41			
0845-0900	16	1	0	1	0	1	19			
0900-0915	18	4	0	0	0	0	22			
0915-0930	13	4	0	0	0	0	17			
0930-0945	21	2	0	0	0	1	24			
0945-1000	6	3	0	0	0	0	9			
1000-1015	9	4	1	0	0	0	14			
1015-1013	9	4	0	0	0	0	13			
1030-1045	5	2	0	0	0	0	7			
1045-11045	12	5	0	0	0	0	17			
1100-1115	15	2	0	0	1	1	19			
1115-1130	12	2	0	0	0	0	14			
1130-1145	16	0	0	0	0	0	16			
1145-1200	16	3	0	0	0	0	19			
1200-1215	14	3	0	0	0	0	17			
1215-1230	10	0	2	0	0	0	12			
1230-1245	19	3	0	0	0	1	23			
1245-1300	14	3	0	0	0	0	17			
1300-1315	23	5	0	0	0	0	28			
1315-1330	14	0	0	0	1	0	15			
1330-1345	21	2	0	0	0	0	23			
1345-1400	6	2	0	0	0	2	10			
1400-1415	11	3	0	0	0	0	14			
1415-1430	23	2	0	0	0	5	30			
1430-1445	21	5	0	1	1	0	28			
1445-1500	28	2	0	0	0	5	35			
1500-1515	13	4	0	0	0	1	18			
1515-1530	22	8	0	0	1	0	31			
1530-1545	28	4	0	0	0	2	34			
1545-1600	30	1	1	0	0	0	32			
1600-1615	32	6	0	1	0	1	40			
1615-1630	38	6	0	0	0	2	46			
1630-1645	26	3	0	0	0	0	29			
1645-1700	32	7	0	0	0	0	39			
1700-1715	44	2	0	0	0	0	46			
1715-1730	62	8	0	0	0	1	71			
1730-1745	37	5	0	0	0	0	42			
1745-1800	36	3	1	0	0	0	40			
1800-1815	15	5	0	0	0	0	20			
1815-1830	19	2	0	0	0	1	22			
1830-1845	24	1	0	0	0	0	25			
1845-1900	16	0	0	0	0	0	16			
0700-1900	944	146	6	3	8	33	1140			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	35	5	1	0	1	1	43
0715-0815	44	7	1	0	1	2	55
0730-0830	59	8	0	0	2	2	71
0745-0845	76	11	0	0	3	8	98
0800-0900	79	11	0	1	3	9	103
0815-0915	83	12	0	1	3	8	107
0830-0930	75	14	0	1	2	7	99
0845-0945	68	11	0	1	0	2	82
0900-1000	58	13	0	0	0	1	72
0915-1015	49	13	1	0	0	1	64
0930-1030	45	13	1	0	0	1	60
0945-1045	29	13	1	0	0	0	43
1000-1100	35	15	1	0	0	0	51
1015-1115	41	13	0	0	1	1	56
1030-1130	44	11	0	0	1	1	57
1045-1145	55	9	0	0	1	1	66
1100-1200	59	7	0	0	1	1	68
1115-1215	58	8	0	0	0	0	66
1130-1230	56	6	2	0	0	0	64
1145-1245	59	9	2	0	0	1	71
1200-1300	57	9	2	0	0	1	69
1215-1315	66	11	2	0	0	1	80
1230-1330	70	11	0	0	1	1	83
1245-1345	72	10	0	0	1	0	83
1300-1400	64	9	0	0	1	2	76
1315-1415	52	7	0	0	1	2	62
1330-1430	61	9	0	0	0	7	77
1345-1445	61	12	0	1	1	7	82
1400-1500	83	12	0	1	1	10	107
1415-1515	85	13	0	1	1	11	111
1430-1530	84	19	0	1	2	6	112
1445-1545	91	18	0	0	1	8	118
1500-1600	93	17	1	0	1	3	115
1515-1615	112	19	1	1	1	3	137
1530-1630	128	17	1	1	0	5	152
1545-1645	126	16	1	1	0	3	147
1600-1700	128	22	0	1	0	3	154
1615-1715	140	18	0	0	0	2	160
1630-1730	164	20	0	0	0	1	185
1645-1745	175	22	0	0	0	1	198
1700-1800	179	18	1	0	0	1	199
1715-1815	150	21	1	0	0	1	173
1730-1830	107	15	1	0	0	1	124
1745-1845	94	11	1	0	0	1	107
1800-1900	74	8	0	0	0	1	83

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

	GREENHILL ROAD WEST (EAST) WESTBOUND								
				ment 2 (0700 -					
	CAR	LGV	HGV	PSV	CYCLE	PED	тот		
0700-0715	20	10	0	0	0	1	31		
0715-0730	35	4	0	0	1	0	40		
0730-0745	58	5	0	0	0	0	63		
0745-0800	48	7	0	0	0	0	55		
0800-0815	56	8	0	0	1	0	65		
0815-0830	58	3	0	0	0	0	61		
0830-0845	47	3	1	1	0	2	54		
0845-0900	53	3	0	0	0	0	56		
0900-0915	33	6	0	0	2	0	41		
0915-0930	21	6	0	1	1	0	29		
0930-0945	20	6	1	0	0	0	27		
0945-1000	16	8	0	0	1	0	25		
1000-1015	14	8	0	0	0	0	22		
1015-1030	16	2	0	0	0	1	19		
1030-1045	15	6	0	0	0	1	22		
1045-1100	8	2	0	0	0	0	10		
1100-1115	12	3	0	0	0	0	15		
1115-1130	14	4	0	0	0	0	18		
1130-1145	16	4	0	0	0	0	20		
1145-1200	8	2	0	0	0	0	10		
1200-1215	24	2	0	0	0	0	26		
1215-1230	16	2	0	0	0	0	18		
1230-1245	8	3	0	0	1	0	12		
1245-1300	16	1	0	0	0	0	17		
1300-1315	11	4	0	1	0	0	16		
1315-1330	18	1	0	0	0	0	19		
1330-1345	14	4	0	0	0	0	18		
1345-1400	12	2	1	0	0	0	15		
1400-1415	6	2	0	0	0	0	8		
1415-1430	14	3	0	0	1	2	20		
1430-1445	13	3	0	1	0	0	17		
1445-1500	12	1	0	0	0	0	13		
1500-1515 1515-1530	16 20	5 3	0	1	0	4	26 24		
1515-1530	20 16	8	0	0	0	0	24		
1545-1600	19	4	0	0	0	0	24		
1600-1615	19	3	0	0	0	1	23		
1615-1630	15	3	0	0	0	2	20		
1630-1645	15	3	0	0	0	2	20		
1645-1700	15	1	1	0	0	0	17		
1700-1715	19	2	0	0	0	0	21		
1715-1730	16	1	0	0	0	0	17		
1730-1745	27	5	2	0	1	0	35		
1745-1800	16	2	1	0 0	0	0 0	19		
1800-1815	40	4	0	0	1	0	45		
1815-1830	23	0	0	0	0	0	23		
1830-1845	15	5	0	0	0	0	20		
1845-1900	8	1	0	0	0	0	9		
0700-1900	1034	178	7	5	11	16	1251		



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	161	26	0	0	1	1	189
0715-0815	197	24	0	0	2	0	223
0730-0830	220	23	0	0	1	0	244
0745-0845	209	21	1	1	1	2	235
0800-0900	214	17	1	1	1	2	236
0815-0915	191	15	1	1	2	2	212
0830-0930	154	18	1	2	3	2	180
0845-0945	127	21	1	1	3	0	153
0900-1000	90	26	1	1	4	0	122
0915-1015	71	28	1	1	2	0	103
0930-1030	66	24	1	0	1	1	93
0945-1045	61	24	0	0	1	2	88
1000-1100	53	18	0	0	0	2	73
1015-1115	51	13	0	0	0	2	66
1030-1130	49	15	0	0	0	1	65
1045-1145	50	13	0	0	0	0	63
1100-1200	50	13	0	0	0	0	63
1115-1215	62	12	0	0	0	0	74
1130-1230	64	10	0	0	0	0	74
1145-1245	56	9	0	0	1	0	66
1200-1300	64	8	0	0	1	0	73
1215-1315	51	10	0	1	1	0	63
1230-1330	53	9	0	1	1	0	64
1245-1345	59	10	0	1	0	0	70
1300-1400	55	11	1	1	0	0	68
1315-1415	50	9	1	0	0	0	60
1330-1430	46	11	1	0	1	2	61
1345-1445	45	10	1	1	1	2	60
1400-1500	45	9	0	1	1	2	58
1415-1515	55	12	0	2	1	6	76
1430-1530	61	12	0	2	1	4	80
1445-1545	64	17	0	1	1	4	87
1500-1600	71	20	0	1	1	4	97
1515-1615	73	18	0	0	1	1	93
1530-1630	68	18	0	0	0	3	89
1545-1645	71	13	0	0	0	5	89
1600-1700	67	10	1	0	0	5	83
1615-1715	68	9	1	0	0	4	82
1630-1730	69	7	1	0	0	2	79
1645-1745	77	9	3	0	1	0	90
1700-1800	78	10	3	0	1	0	92
1715-1815	99	12	3	0	2	0	116
1730-1830	106	11	3	0	2	0	122
1745-1845	94	11	1	0	1	0	107
1800-1900	86	10	0	0	1	0	97

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

	GREENHILL ROAD WEST (WEST) LEFT INTO HAWKS ROAD									
				ment 3 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	0	0	0	0	0	0	0			
0715-0730	0	0	0	0	0	0	0			
0730-0745	1	0	0	0	0	0	1			
0745-0800	0	0	0	0	0	0	0			
0800-0815	0	0	0	0	0	0	0			
0815-0830	0	0	0	0	0	0	0			
0830-0845	1	1	0	0	0	0	2			
0845-0900	0	0	0	0	0	0	0			
0900-0915	1	0	0	0	0	1	2			
0915-0930	3	0	0	0	0	0	3			
0930-0945	2	0	0	0	0	0	2			
0945-1000	2	0	0	0	0	0	2			
1000-1015	1	0	0	0	0	0	1			
1015-1030	0	0	0	0	0	0	0			
1030-1045	0	0	0	0	0	1	1			
1045-1100	3	0	0	0	0	0	3			
1100-1115	2	0	0	0	0	0	2			
1115-1130	1	1	0	0	0	1	3			
1130-1145	3	1	0	0	0	0	4			
1145-1200	3	0	0	0	0	0	3			
1200-1215	1	0	0	0	0	0	1			
1215-1230	2	0	0	0	0	0	2			
1230-1245	2	0	0	0	0	0	2			
1245-1300	0	2	0	0	0	1	3			
1300-1315	1	1	0	0	0	0	2			
1315-1330	2	0	0	0	0	1	3			
1330-1345	2	0	0	0	0	1	3			
1345-1400	1	1	0	0	0	0	2			
1400-1415	1	0	0	0	0	0	1			
1415-1430	2	2	0	0	0	0	4			
1430-1445	2	0	0	0	0	0	2			
1445-1500	2	0	0	0	0	0	2			
1500-1515	4	0	0	0	0	0	4			
1515-1530	5	0	0	0	0	0	5			
1530-1545	4	0	0	1	0	2	7			
1545-1600	3	0	0	0	0	0	3			
1600-1615	2	0	0	0	0	0	2			
1615-1630 1630-1645	4	1	0	0	1 0	2	8			
1630-1645	7	0	0	0	0	3	10			
1645-1700	7	1	0	0	0	3	10			
1700-1715	5	0	0	0	0	0	о 5			
1715-1730	5 8	1	0	0	0	0	9			
1730-1745	о 8	1	0	0	0	0	9			
1745-1800	0	1	0	0	0	0	9			
1815-1830	2	0	0	0	0	0	2			
1830-1845	4	0	0	0	0	2	6			
1845-1900	4	0	0	0	0	2	0			
	111	14	0	1	1	15	142			
0700-1900	111	14	U	1	I	10	142			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	1	0	0	0	0	0	1
0715-0815	1	0	0	0	0	0	1
0730-0830	1	0	0	0	0	0	1
0745-0845	1	1	0	0	0	0	2
0800-0900	1	1	0	0	0	0	2
0815-0915	2	1	0	0	0	1	4
0830-0930	5	1	0	0	0	1	7
0845-0945	6	0	0	0	0	1	7
0900-1000	8	0	0	0	0	1	9
0915-1015	8	0	0	0	0	0	8
0930-1030	5	0	0	0	0	0	5
0945-1045	3	0	0	0	0	1	4
1000-1100	4	0	0	0	0	1	5
1015-1115	5	0	0	0	0	1	6
1030-1130	6	1	0	0	0	2	9
1045-1145	9	2	0	0	0	1	12
1100-1200	9	2	0	0	0	1	12
1115-1215	8	2	0	0	0	1	11
1130-1230	9	1	0	0	0	0	10
1145-1245	8	0	0	0	0	0	8
1200-1300	5	2	0	0	0	1	8
1215-1315	5	3	0	0	0	1	9
1230-1330	5	3	0	0	0	2	10
1245-1345	5	3	0	0	0	3	11
1300-1400	6	2	0	0	0	2	10
1315-1415	6	1	0	0	0	2	9
1330-1430	6	3	0	0	0	1	10
1345-1445	6	3	0	0	0	0	9
1400-1500	7	2	0	0	0	0	9
1415-1515	10	2	0	0	0	0	12
1430-1530	13	0	0	0	0	0	13
1445-1545	15	0	0	1	0	2	18
1500-1600	16	0	0	1	0	2	19
1515-1615	14	0	0	1	0	2	17
1530-1630	13	1	0	1	1	4	20
1545-1645	16	1	0	0	1	2	20
1600-1700	20	1	0	0	1	5	27
1615-1715	25	2	0	0	1	5	33
1630-1730	26	1	0	0	0	3	30
1645-1745	27	2	0	0	0	3	32
1700-1800	28	3	0	0	0	0	31
1715-1815	21	3	0	0	0	0	24
1730-1830	18	3	0	0	0	0	21
1745-1845	14	2	0	0	0	2	18
1800-1900	6	1	0	0	0	2	9

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

			GREENHILL ROAD WEST (EAST)									
	RIGHT INTO HAWKS ROAD movement 4 (0700 - 1900)											
	0.1.5				,	858						
0700 0745	CAR	LGV	HGV	PSV	CYCLE	PED	тот					
0700-0715	1	0	0	2	0	0	3					
0715-0730	1	1	0	6	0	0	8					
0730-0745	1	0	0	1	0	0	2					
0745-0800	0	0	0	3	0	1	4					
0800-0815	3	0	0	1	0	0	4					
0815-0830	0	0	0	1	0	2	3					
0830-0845	0	0	0	1	0	0	1					
0845-0900	3	0	0	1	0	5	9					
0900-0915	7	0	1	0	0	3	11					
0915-0930	5	0	0	1	0	1	7					
0930-0945	1	0	0	2	0	2	5					
0945-1000	0	2	0	1	0	0	3					
1000-1015	3	1	0	1	0	0	5					
1015-1030	0	0	0	0	0	0	0					
1030-1045	4	1	0	2	0	1	8					
1045-1100	0	0	0	2	0	0	2					
1100-1115	3	0	0	1	0	0	4					
1115-1130	2	0	0	1	1	0	4					
1130-1145	2	0	0	1	0	4	7					
1145-1200	1	0	0	1	0	1	3					
1200-1215	3	1	0	1	0	0	5					
1215-1230	4	0	0	1	0	1	6					
1230-1245	2	0	0	2	0	0	4					
1245-1300	2	0	0	1	0	0	3					
1300-1315	6	3	0	2	0	3	14					
1315-1330	3	0	0	1	1	0	5					
1330-1345	6	0	0	1	0	0	7					
1345-1400	0	1	0	1	0	0	2					
1400-1415	2	0	0	1	0	0	3					
1415-1430	2	0	0	1	2	1	6					
1430-1445	6	0	0	1	0	0	7					
1445-1500	3	0	0	1	0	1	5					
1500-1515	6	1	0	1	0	16	24					
1515-1530	4	1	0	1	2	0	8					
1530-1545	7	0	0	2	1	0	10					
1545-1600	5	0	0	1	0	1	7					
1600-1615	12	2	0	1	0	0	15					
1615-1630	2	1	0	2	0	1	6					
1630-1645	6	0	0	3	1	1	11					
1645-1700	7	0	0	1	0	1	9					
1700-1715	6	0	0	1	0	4	11					
1715-1730	8	0	0	1	0	0	9					
1730-1745	7	0	0	1	0	0	8					
1745-1800	7	0	0	1	0	1	9					
1800-1815	10	1	0	1	0	0	12					
1815-1830	6	0	0	1	0	0	7					
1830-1845	4	0	0	1	0	0	5					
1845-1900	7	1	0	0	0	0	8					
0700-1900	, 180	17	1	62	8	51	319					



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	3	1	0	12	0	1	17
0715-0815	5	1	0	11	0	1	18
0730-0830	4	0	0	6	0	3	13
0745-0845	3	0	0	6	0	3	12
0800-0900	6	0	0	4	0	7	17
0815-0915	10	0	1	3	0	10	24
0830-0930	15	0	1	3	0	9	28
0845-0945	16	0	1	4	0	11	32
0900-1000	13	2	1	4	0	6	26
0915-1015	9	3	0	5	0	3	20
0930-1030	4	3	0	4	0	2	13
0945-1045	7	4	0	4	0	1	16
1000-1100	7	2	0	5	0	1	15
1015-1115	7	1	0	5	0	1	14
1030-1130	9	1	0	6	1	1	18
1045-1145	7	0	0	5	1	4	17
1100-1200	8	0	0	4	1	5	18
1115-1215	8	1	0	4	1	5	19
1130-1230	10	1	0	4	0	6	21
1145-1245	10	1	0	5	0	2	18
1200-1300	11	1	0	5	0	1	18
1215-1315	14	3	0	6	0	4	27
1230-1330	13	3	0	6	1	3	26
1245-1345	17	3	0	5	1	3	29
1300-1400	15	4	0	5	1	3	28
1315-1415	11	1	0	4	1	0	17
1330-1430	10	1	0	4	2	1	18
1345-1445	10	1	0	4	2	1	18
1400-1500	13	0	0	4	2	2	21
1415-1515	17	1	0	4	2	18	42
1430-1530	19	2	0	4	2	17	44
1445-1545	20	2	0	5	3	17	47
1500-1600	22	2	0	5	3	17	49
1515-1615	28	3	0	5	3	1	40
1530-1630	26	3	0	6	1	2	38
1545-1645	25	3	0	7	1	3	39
1600-1700	27	3	0	7	1	3	41
1615-1715	21	1	0	7	1	7	37
1630-1730	27	0	0	6	1	6	40
1645-1745	28	0	0	4	0	5	37
1700-1800	28	0	0	4	0	5	37
1715-1815	32	1	0	4	0	1	38
1730-1830	30	1	0	4	0	1	36
1745-1845	27	1	0	4	0	1	33
1800-1900	27	2	0	3	0	0	32
		_	-	-	-	-	

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

	HAWKS ROAD LEFT INTO GREENHILL ROAD WEST								
				GREENHILL F ment 5 (0700 ·					
	CAR	LGV	HGV	PSV	CYCLE	PED	тот		
0700-0715	2	2	0	0	0	0	4		
0715-0730	2	0	0	0	0	0	2		
0730-0745	3	1	0	0	0	0	4		
0745-0800	2	0	0	1	0	1	4		
0800-0815	12	0	0	0	0	0	12		
0815-0830	3	1	0	0	0	0	4		
0830-0845	9	0	0	0	1	12	22		
0845-0900	6	1	0	0	0	3	10		
0900-0915	3	0	0	0	0	0	3		
0915-0930	6	1	0	0	0	0	7		
0930-0945	1	0	0	1	0	0	2		
0945-1000	4	0	0	0	0	0	4		
1000-1015	6	0	0	0	0	0	6		
1015-1030	3	1	0	0	0	2	6		
1030-1045	5	0	0	0	0	0	5		
1045-1100	1	0	0	0	0	0	1		
1100-1115	4	0	0	0	0	0	4		
1115-1130	5	0	0	0	0	0	5		
1130-1145	3	2	0	1	1	0	7		
1145-1200	0	0	0	0	0	0	0		
1200-1215	3	0	0	0	0	3	6		
1215-1230	4	0	0	0	0	0	4		
1230-1245	2	1	0	0	0	1	4		
1245-1300	4	0	0	0	0	0	4		
1300-1315	2	0	0	0	1	0	3		
1315-1330	0	0	0	0	0	0	0		
1330-1345	1	2	0	0	0	0	3		
1345-1400	4	1	0	0	0	1	6		
1400-1415	2	0	0	0	0	0	2		
1415-1430	4	2	0	0	0	0	6		
1430-1445	4	0	0	0	0	0	4		
1445-1500	3 4	0	0	0	0	12	15 5		
1500-1515 1515-1530	4	0	0	0	0	0	3		
1515-1530	3 5	0	0	0	0	2	3		
1530-1545	5	0	0	0	0	0	1		
1600-1615	3	2	0	1	0	0	6		
1615-1630	4	1	0	0	1	0	6		
1630-1645	6	0	0	0	1	0	7		
1645-1700	7	1	0	0	1	3	12		
1700-1715	4	1	0	0	0	0	5		
1715-1730	3	0	0	0	0	0	3		
1730-1745	5	0	0	0	0	0	5		
1745-1800	3	1	0	0	0	0	4		
1800-1815	3	0	0	0	0	1	4		
1815-1830	2	1	0	0	0	0	3		
1830-1845	8	0	0	0	0	0	8		
1845-1900	2	0	0	0	0	0	2		
0700-1900	176	23	0	4	6	41	250		



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	9	3	0	1	0	1	14
0715-0815	19	1	0	1	0	1	22
0730-0830	20	2	0	1	0	1	24
0745-0845	26	1	0	1	1	13	42
0800-0900	30	2	0	0	1	15	48
0815-0915	21	2	0	0	1	15	39
0830-0930	24	2	0	0	1	15	42
0845-0945	16	2	0	1	0	3	22
0900-1000	14	1	0	1	0	0	16
0915-1015	17	1	0	1	0	0	19
0930-1030	14	1	0	1	0	2	18
0945-1045	18	1	0	0	0	2	21
1000-1100	15	1	0	0	0	2	18
1015-1115	13	1	0	0	0	2	16
1030-1130	15	0	0	0	0	0	15
1045-1145	13	2	0	1	1	0	17
1100-1200	12	2	0	1	1	0	16
1115-1215	11	2	0	1	1	3	18
1130-1230	10	2	0	1	1	3	17
1145-1245	9	1	0	0	0	4	14
1200-1300	13	1	0	0	0	4	18
1215-1315	12	1	0	0	1	1	15
1230-1330	8	1	0	0	1	1	11
1245-1345	7	2	0	0	1	0	10
1300-1400	7	3	0	0	1	1	12
1315-1415	7	3	0	0	0	1	11
1330-1430	11	5	0	0	0	1	17
1345-1445	14	3	0	0	0	1	18
1400-1500	13	2	0	0	0	12	27
1415-1515	15	3	0	0	0	12	30
1430-1530	14	1	0	0	0	12	27
1445-1545	15	1	0	0	0	14	30
1500-1600	13	1	0	0	0	2	16
1515-1615	12	2	0	1	0	2	17
1530-1630	13	3	0	1	1	2	20
1545-1645	14	3	0	1	2	0	20
1600-1700	20	4	0	1	3	3	31
1615-1715	21	3	0	0	3	3	30
1630-1730	20	2	0	0	2	3	27
1645-1745	19	2	0	0	1	3	25
1700-1800	15	2	0	0	0	0	17
1715-1815	14	1	0	0	0	1	16
1730-1830	13	2	0	0	0	1	16
1745-1845	16	2	0	0	0	1	19
1800-1900	15	1	0	0	0	1	17

TOTAL FLOW INTO SURVEY SITE=

CONDITIONS: DRY

LOCATION : GREENHILL ROAD WEST / HAWKS ROAD, HERNE BAY

	HAWKS ROAD RIGHT INTO GREENHILL ROAD WEST									
				GREENHILL ment 6 (0700 -						
	CAR	LGV	HGV	PSV	CYCLE	PED	тот			
0700-0715	2	1	0	0	0	0	3			
0715-0730	7	0	0	0	0	0	7			
0730-0745	6	3	0	0	0	0	9			
0745-0800	5	0	1	0	0	0	6			
0800-0815	3	0	0	0	0	0	3			
0815-0830	3	0	0	1	0	1	5			
0830-0845	6	0	0	0	0	0	6			
0845-0900	2	0	0	0	0	0	2			
0900-0915	7	0	1	0	0	0	8			
0915-0930	4	0	0	0	0	0	4			
0913-0930	4	0	0	0	0	0	4			
0930-0945	4	0	0	0	0	0	0			
1000-1015	6	0	0	0	0	0	6			
1015-1015	0	0	0	0	0	0	0			
1013-1030	2	0	0	0	0	0	2			
1045-11045	0	0	0	0	0	1	1			
1100-1115	0	0	0	0	0	0	0			
1115-1130	0	1	1	0	0	0	2			
1130-1145	1	0	0	0	0	1	2			
1145-1200	3	1	0	0	0	1	5			
1200-1215	0	1	0	0	1	0	2			
1215-1230	4	1	0	0	0	0	5			
1230-1230	4	0	0	0	0	0	4			
1245-1300	4	0	0	0	0	2	3			
1300-1315	1	0	0	0	0	0	1			
1315-1330	4	0	0	0	0	1	5			
1330-1345	4	2	0	0	0	0	3			
1345-1400	0	1	0	0	0	0	1			
1400-1415	1	0	0	0	0	0	1			
1415-1430	3	0	0	0	0	0	3			
1430-1445	3	1	0	0	0	0	4			
1445-1500	1	0	0	0	0	0	1			
1500-1515	2	0	0	0	0	0	2			
1515-1530	1	0	0	0	0	0	1			
1530-1545	1	0	0	0	0	0	1			
1545-1600	4	0	0	0	0	2	6			
1600-1615	3	0	0	0	0	1	4			
1615-1630	2	0	0	0	0	2	4			
1630-1645	1	0	0	0	1	1	3			
1645-1700	2	0	0	0	0	0	2			
1700-1715	2	0	0	0	0	0	2			
1715-1730	3	0	0	0	0	1	4			
1730-1745	3	0	0	0	0	0	3			
1745-1800	1	0	0	0	0	0	1			
1800-1815	2	0	0	0	0	0	2			
1815-1830	5	0	0	0	0	0	5			
1830-1845	0	0	0	0	0	1	1			
1845-1900	0	2	0	0	0	0	2			
	116	2 14	3	1	2	15	151			
0700-1900	110	14	3		2	10	131			



	CAR	LGV	HGV	PSV	CYCLE	PED	тот
0700-0800	20	4	1	0	0	0	25
0715-0815	21	3	1	0	0	0	25
0730-0830	17	3	1	1	0	1	23
0745-0845	17	0	1	1	0	1	20
0800-0900	14	0	0	1	0	1	16
0815-0915	18	0	1	1	0	1	21
0830-0930	19	0	1	0	0	0	20
0845-0945	17	0	1	0	0	0	18
0900-1000	15	0	1	0	0	0	16
0915-1015	14	0	0	0	0	0	14
0930-1030	10	0	0	0	0	0	10
0945-1045	8	0	0	0	0	0	8
1000-1100	8	0	0	0	0	1	9
1015-1115	2	0	0	0	0	1	3
1030-1130	2	1	1	0	0	1	5
1045-1145	1	1	1	0	0	2	5
1100-1200	4	2	1	0	0	2	9
1115-1215	4	3	1	0	1	2	11
1130-1230	8	3	0	0	1	2	14
1145-1245	11	3	0	0	1	1	16
1200-1300	9	2	0	0	1	2	14
1215-1315	10	1	0	0	0	2	13
1230-1330	10	0	0	0	0	3	13
1245-1345	7	2	0	0	0	3	12
1300-1400	6	3	0	0	0	1	10
1315-1415	6	3	0	0	0	1	10
1330-1430	5	3	0	0	0	0	8
1345-1445	7	2	0	0	0	0	9
1400-1500	8	1	0	0	0	0	9
1415-1515	9	1	0	0	0	0	10
1430-1530	7	1	0	0	0	0	8
1445-1545	5	0	0	0	0	0	5
1500-1600	8	0	0	0	0	2	10
1515-1615	9	0	0	0	0	3	12
1530-1630	10	0	0	0	0	5	15
1545-1645	10	0	0	0	1	6	17
1600-1700	8	0	0	0	1	4	13
1615-1715	7	0	0	0	1	3	11
1630-1730	8	0	0	0	1	2	11
1645-1745	10	0	0	0	0	1	11
1700-1800	9	0	0	0	0	1	10
1715-1815	9	0	0	0	0	1	10
1730-1830	11	0	0	0	0	0	11
1745-1845	8	0	0	0	0	1	9
1800-1900	7	2	0	0	0	1	10
1000-1000	'	4	U	Ū	0		10

TOTAL FLOW INTO SURVEY SITE=

APPENDIX E - PERSONAL INJURY ACCIDENT DATA

ACCIDENT ANALYSIS CHART

SITE.....Greenhill Road, Herne Bay.....

Job No.F09120.....

PERIOD01/01/2005to 30/06/2009.....

DATA OBTAINED FROMKent Highway Services....

ACCIDENT PLOT NO.	1	2	3	4	5	6	7	8	9	10
DAY	Wednesday	Thursday	Saturday	Wednesday	Sunday	Sunday	Saturday	Tuesday	Friday	
DATE	20/07/2005	03/11/2005	26/05/2007	30/05/2007	30/09/2007	30/12/2007	15/03/2008	09/12/2008	09/01/2009	
ТІМЕ	1522	0853	1955	1215	1815	1525	1500	1748	0930	
LIGHT/DARK	Light	Light	Light	Light	Light	Light	Light	Dark	Light	
WEATHER	Fine	Rain	Fine	Fine	Fine	Fine	Rain	Fine	Fine	
ROAD SURFACE	Dry	Wet	Dry	Dry	Dry	Dry	Wet	Wet	Frost/Ice	
SEVERITY	Slight	Slight	Slight	Slight	Slight	Slight	Serious	Slight	Slight	
CONFLICT DIAGRAM	V1 (Car) V2 ↓ ↓ (Car) X <: ¹	Ot 4/m V1 (Car)	ੀ ਡਿਆ x ▲ (LGV)	$\bigvee_{V_2}^{V_1} X$	V1 (Car) ↓ X V2 (Car)	V2 (Car) X V1 (Car)	V1 (Car)	V1 (Car) X ≪ ¹ V2 ≪ ¹ (Car)	v1 x (Car)	
COMMENTS	V2 (Car) turning right from Blackburn onto Greenhill Road collided with V1 (Car) travelling south along Greenhill Road waiting to turning right onto Blackburn Road.	V1 (Car) travelling east along Granville Drive collided with a pedestrian that entered the carriageway from infront of a parked vehicle.	a drunk pedestrian deliberately ran into the side of V1 (LGV) travelling along Greenhill Road.	V1 (P/C) entering Granville Drive from infront of parked vehicle collided with V2 (Car) travelling west along Granville Drive.	V1 (Car) travelling south along Greenhill Road skidded and collided into the rear of V1 (Car) travelling south along Greenhill Road waiting at a zebra crossing for a pedestrian to cross.	V1 (Car) and V2 (Car) both travelling along Greenhill Road around a bend in opposite directions collided.	wood Road travelled	V1 (Car) travelling south along Greenhill Road collided into the rear of V2 (Car) waiting to turn right onto Blackburn Road.	V1 (Car) travelling east along Molehill Road lost control on ice leaving the carriageway and collideding with a telegraph pole.	

NOTE : -SEE ACCIDENT PLOT FOR LOCATIONS

ᡲ᠉ Moving Vehicle Pedestrian (age/sex) **KEY : -**← Vehicle Lost Control N/S Nearside ≁ Waiting To Go Ahead Overtaking Heavy Goods Vehicles HGV O/S Offside \square Stopping Vehicles Parked Vehicles Pedal Cycle P/C ► Vehicle Changing Lane --√→ Vehicle Skidding Motor Cycle M/C ⊒

Kent County

Council

Strategic Planning D-Print Crash Report

Date 03 Dec 2009 Time 9:44.21

Greenhill Rd Herne Bay

5 years data up to 30.6.2009

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Factors	Direction	Involved	КСС
1	Road No E3130 Section 001 Grid Ref 616118E 166879N	SLT	20/07/2005	Wed	15:22	L STL	Dry	Fine	Veh1 L.Turn Veh2 G.A.Oth	N -> E S -> N	Car (24) Car (22)	INTERNAL
	GREENHILL ROAD, JUNCTION WITH	BLACKBURN F	ROAD, HERNE BA	λΥ				Cantebury				ΪÂ
	V1 HAD STOPPED AT JUNCTION, WAITING TO TURN RIGHT INTO BLACKBURN ROAD. V1 THEN PULLED INTO PATH OF V2 WHICH THEN STRUCK THE FRONT OF V1.											2 2 2
2	Road No A229 Section 278 Grid Ref 616032E 166686N 166686N	SLT	03/11/2005	Thu	08:53	L STL	Wet/Damp	Rain, Windy	Veh1 Stopping	N.W. N.E> S.W.	Ped (4) Car (32)	ONLY
	A229 GRANVILLE DRIVE, GREENHILL ROAD, HERNE BAY Cantebury											υ
	VEHICLE ONE TRAVELLING DOWN GRANVILLE DRIVE TOWARDS GREENHILL ROAD WHEN A YOUNG CHILD RAN OUT FROM BEHIND A PARKED VEHICLE AND RAN INTO THE SIDE OF VEHICLE ONE											1 lease
3	Road No E3130 Section 001 Grid Ref 616172E 166957N	SLT	26/05/2007	Sat	19:55	L STL	Dry	Fine	Veh1 G.A.Oth	S.W> N.E.	Ped (30) LGV <=3.5t (28)	destroy
	GREENHILL ROAD, OUTSIDE NO 2A	GREENHILL, H	ERNE BAY (M/	APPED TO	0 REF 28/0	6/07)		Cantebury	-			
	A PEDESTRIAN DELIBERATELY RAN INTO THE ROAD AND INTO THE SIDE OF VEHICLE ONE THE PEDESTRIAN WAS DRUNK VEHICLE ONE STOPPED IMMEDIATELY										Casualties 1 Vehicles 1	1 1
4	Road No E3130 Section 001 Grid Ref 616005E 166702N	SLT	30/05/2007	Wed	12:15	L STL	Dry	Fine	Veh2 G.A.Oth Veh1 G.A.Oth	E -> W N -> S	Car (43) Cyclist (8)	file
	GRANVILLE DRIVE, HERNE BAY, 50 METRES EAST OF JUNCTION WITH CLARE DRIVE Cantebury											
VEH 2 DRIVING WEST ALONG GRANVILLE DRIVE, CYCLE CAME FROM IN FRONT OF PARKED CARS ON OFFSIDE, THE CYCLE STRUCK THE SIDE OF VEH 2										Casualties 1 Vehicles 2	1 2	

	<u>Severity</u>	Street Lighting	<u>Factors</u>		Involved	Special Conditions
	FTL - Fatal	L - Daylight	Rev - Reversing	C.R.Lane - Changing lane right	PED - Pedestrian	ATS OUT Traffic Lights not working
Key	SER - Serious	DRK - Dark	L.Turn - Left Turn	O.O.M.V - Overtaking o.s moving vehicle	HGV - Heavy Goods Vehicle	ATS DEF Traffic Lights defective
	SLT - Slight	NSL - No Street Lights	R.Turn - Right Turn	O.S.V - Overtaking stationary vehicle	LGV - Light Goods Vehicle	SIGNS Road signs defective /obscured
		STL - Street Lights	W.L.Turn - Waiting to turn left	O.Near - Overtaking on nearside	M/C - Motorcycle	RDWRKS Road Works
		USL - Street Lights Unlit	W.R.Turn - Waiting to turn right	G.A.L.B - Going Ahead Left Bend	PSV - Bus/Coach	SURFACE Road surface defective
			C.L.Lane - Changing lane left	G.A.R.B - Going Ahead Right Bend		

G.A.Oth - Going Ahead Other

Kent County

Council

Strategic Planning **D-Print Crash Report**

Date 03 Dec 2009 Time 9:44.21

Greenhill Rd Herne Bay

5 years data up to 30.6.2009

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Factors	Direction	Involved	
5	Road No E3130 Section 001 Grid Ref 616198E 166991N 166991N	SLT	30/09/2007	Sun	18:15	L STL	Dry	Fine	Veh2 G.A.Oth Veh1 G.A.Oth	N.E> S.W. N.E> S.W.	Car (41) Car (-1)	
	GREENHILL ROAD, HERNE BAY, KEN	IT (MAPP	ED TO REF)					Cantebury				
	V2 STOPPED AT ZEBRA CROSSING F SKIDDED PRIOR TO HITTING REAR C								EE THAT V2 HAD STOP	PED, AND	Casualties Vehicles	1 2
6	Road No E3130 Section 001 Grid Ref 616151E 166946N 166946N	SLT	30/12/2007	Sun	15:25	L STL	Dry	Fine	Veh2 G.A.L.B Veh1 G.A.R.B	E -> N N -> E	Car (19) Car (50)	
	GREENHILL ROAD, O/S 138 100MTRS	NORTH OF B	LACKBURN ROA	D, GREEN	NHILL, HER	RNE BAY		Cantebury				-
	VEHICLES ONE AND TWO WERE NEGOTIATING A BEND IN OPPOSITE DIRECTIONS VEHICLE TWO FAILED TO STOP AS VEHICLE ONE WAS ALL OVER THE ROAD VEHICLE ONE HIT VEHICLE TWO CAUSING BOTH CARS TO SWIVEL AROUND BLOCKING THE WHOLE ROAD										Casualties Vehicles	4 2 2
7	Road No E3130 Section 001 Grid Ref 615560E 166226N 166226N	SER	15/03/2008	Sat	15:00	L NSL	Wet/Damp	Rain	Veh2 G.A.Oth Veh1 U.Turn	S -> N N -> S	Car (37) Car (-1)	
	THORNDEN WOOD ROAD, 10MTRS NORTH OF MOLEHILL ROAD, GREENHILL, HERNE BAY Cantebury VEHICLE TWO TRAVELLING NORTH ON THORNDEN WOOD ROAD CROSSED THE RISE OF THE FLYOVER BRIDGE OVER THE A299 THANET WAY TO FIND VEHICLE ONE PERFORMING A U-TURN IN THE MIDDLE OF THE ROAD TO TRAVEL BACK TOWARDS HERNE BAY BECAUSE OF THE CREST/RIDGE VEHICLE TWO DID NOT SEE VEHICLE ONE UNTIL IT WAS TOO LATE VEHICLE TWO TOOK EVASIVE ACTION TO TRY AND AVOID VEHICLE ONE DRIVING TOWARDS THE O/S KERB, VEHICLES ONE AND TWO DID NOT COLLIDE BUT VEHICLE TWO PLOUGHED OFF THE CARRIAGEWAY INTO HEAVY DUTY CONCRET											
										Casualties Vehicles	4 2	
8	Road No E3130 Section 001 Grid Ref 616120E 166860N 166860N	SLT	09/12/2008	Tue	17:48	DRK NSL	Wet/Damp	Fine	Veh1 W.R.Turn Veh2 G.A.Oth	S -> N S -> N	Car (40) Car (25)	
								Cantebury				
	GREENHILL ROAD 7 METRES SOUTH	BLACKBURN	ROAD, HERNE	DAT				cuntosuij				

Severity FTL - Fatal

Key

SER - Serious

DRK - Dark SLT - Slight

Street Lighting

L - Daylight Rev L.Turn NSL - No Street Lights R.Turn STL - Street Lights USL - Street Lights Unlit

Factors - Reversina - Left Turn - Right Turn W.L.Turn - Waiting to turn left W.R.Turn - Waiting to turn right C.L.Lane - Changing lane left

C.R.Lane - Changing lane right O.O.M.V - Overtaking o.s moving vehicle O.S.V - Overtaking stationary vehicle O.Near - Overtaking on nearside G.A.L.B - Going Ahead Left Bend G.A.R.B - Going Ahead Right Bend G.A.Oth - Going Ahead Other

Involved

PED - Pedestrian HGV - Heavy Goods Vehicle LGV - Light Goods Vehicle M/C - Motorcycle PSV - Bus/Coach

Special Conditions

ATS OUT Traffic Lights not working ATS DEF Traffic Lights defective SIGNS Road signs defective /obscured RDWRKS Road Works SURFACE Road surface defective

Kent
County

Council

Strategic Planning D-Print Crash Report

Date 03 Dec 2009 Time 9:44.21

Greenhill Rd Herne Bay

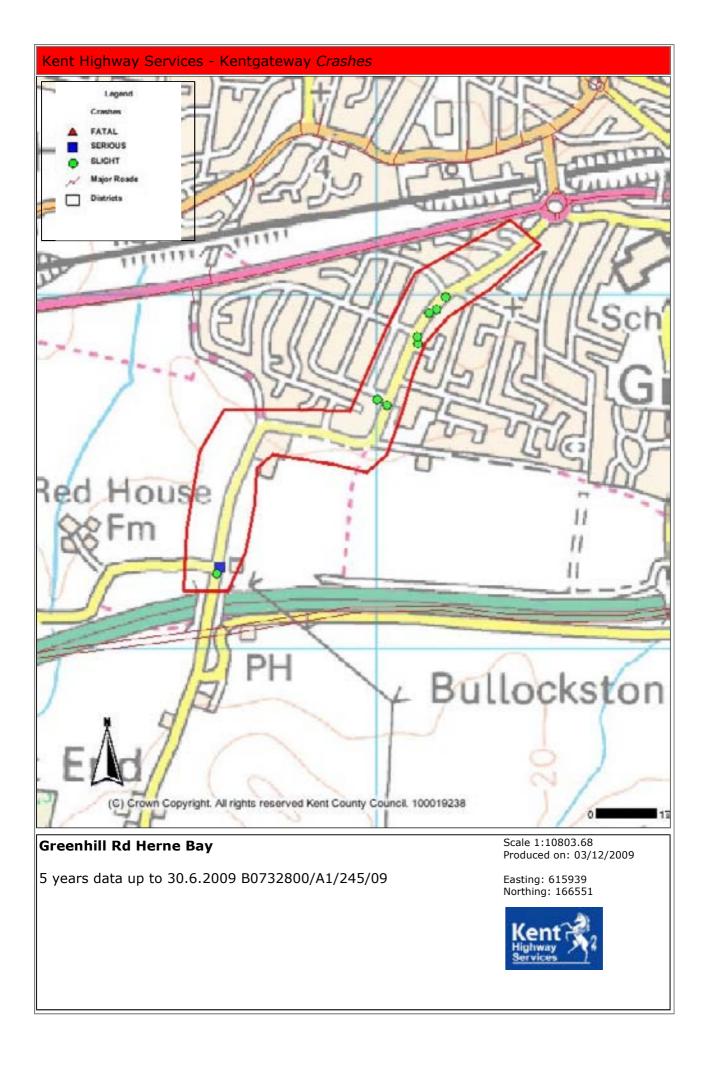
5 years data up to 30.6.2009

9 Road No E3130 Section 001 Grid Ref 615551E SLT 09/01/2009 Fri 09:30 L NSL Frost/Ice Fine Veh1 G.A.Oth W ~> E Car (34) Car (34) Prost/Ice Image: Car (34) Car (34) <th>No</th> <th>Location</th> <th>Severity</th> <th>Date</th> <th>Day</th> <th>Time</th> <th>Street Lighting</th> <th>Road Surface</th> <th>Weather</th> <th>Factors</th> <th>Direction</th> <th>Involved</th> <th>КСС</th>	No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Factors	Direction	Involved	КСС
VEHICLE 1 WAS DRIVING ALONG THE ROAD WHEN SLIPPED ON ICE AND HIT TELEGRAPH POLE AND WENT INTO DITCH Casualties 1 Vehicles	9		SLT	09/01/2009	Fri	09:30	L NSL	Frost/Ice	Fine	Veh1 G.A.Oth	W -> E	Car (34)	INTER
		MOLE HILL ROAD JUNCTION WITH THORNDEN WOOD ROAD, GREENHILL, HERNE BAY Cantebury											Î
		VEHICLE 1 WAS DRIVING ALONG THE ROAD WHEN SLIPPED ON ICE AND HIT TELEGRAPH POLE AND WENT INTO DITCH											

	<u>Severity</u>	Street Lighting	<u>Factors</u>		Involved	Special Conditions
	FTL - Fatal	L - Daylight	Rev - Reversing	C.R.Lane - Changing lane right	PED - Pedestrian	ATS OUT Traffic Lights not working
Key	SER - Serious	DRK - Dark	L.Turn - Left Turn	O.O.M.V - Overtaking o.s moving vehicle	HGV - Heavy Goods Vehicle	ATS DEF Traffic Lights defective
	SLT - Slight	NSL - No Street Lights	R.Turn - Right Turn	O.S.V - Overtaking stationary vehicle	LGV - Light Goods Vehicle	SIGNS Road signs defective /obscured
		STL - Street Lights	W.L.Turn - Waiting to turn left	O.Near - Overtaking on nearside	M/C - Motorcycle	RDWRKS Road Works
		USL - Street Lights Unlit	W.R.Turn - Waiting to turn right	G.A.L.B - Going Ahead Left Bend	PSV - Bus/Coach	SURFACE Road surface defective
			C.L.Lane - Changing lane left	G.A.R.B - Going Ahead Right Bend		

G.A.Oth - Going Ahead Other

Page 3



APPENDIX F - TRICS OUTPUT DATA

Bancroft Consulting Mercury House, New Basford Nottingham

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL Category : B - HOUSES FOR RENT VEHICLES

Selec	cted regions and areas:	
02	SOUTH EAST	
	ES EAST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	-
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCO	DLNSHIRE
	WY WEST YORKSHIRE	1 days
09	NORTH	-
	CB CUMBRIA	1 days
	DH DURHAM	1 days
11	SCOTLAND	-
	HI HIGHLAND	2 days
	MO MORAY	2 days

Filtering Stage 2 selection:

Parameter:	Number of dwellings
Range:	14 to 135 (units:)

Public Transport Provision:

Selection by: Date Range:

Include all surveys

<u>Selected survey days:</u> Monday Tuesday Wednesday Thursday Friday	1 days 4 days 2 days 2 days 2 days
<u>Selected survey types:</u> Manual count Directional ATC Count	11 days 0 days
<u>Selected Locations:</u> Edge of Town Centre Suburban Area (PPS6 Out of Centre) Edge of Town Neighbourhood Centre (PPS6 Local Centre)	2 3 3 3
<u>Selected Location Sub Categories:</u> Residential Zone Built-Up Zone Village No Sub Category	6 1 1 3

01/01/00 to 21/05/09

Licence No: 539501

Bancroft Consulting Mercury House, New Basford Nottingham

Licence No: 539501

Filtering Stage 4 selection:

<u>Use Class:</u> C3	11 days
Population within 1 mile: 1,001 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 25,001 to 50,000	2 days 2 days 3 days 2 days 2 days
Population within 5 miles: 5,001 to 25,000 25,001 to 50,000 50,001 to 75,000 75,001 to 100,000 125,001 to 250,000 250,001 to 500,000	1 days 2 days 2 days 3 days 1 days 2 days
Car ownership within 5 miles: 0.6 to 1.0 1.1 to 1.5	8 days 3 days
<u>Travel Plan:</u> Not Known	1 days

	1 00 33
No	10 days

Page 3

Licence No: 539501

Bancroft Consulting Mercury House, New Basford Nottingham

LIST OF SITES relevant to selection parameters

1	CB-03-B-01 TERRACED, (VICTORIA ROAD BOTCHERBY	CARLISLE	CUMBRIA
2	CARLISLE Total Number of dwellings: Survey date: TUESDAY DH-03-B-01 SEMI DETAC BLACKGATE WAY		Survey Type: MANUAL DURHAM
3	COXHOE Total Number of dwellings: Survey date: MONDAY DV-03-B-01 TERRACED, I HAM DRIVE	78 09/06/03 PLYMOUTH	Survey Type: MANUAL DEVON
4	PLYMOUTH Total Number of dwellings: Survey date: WEDNESDAY ES-03-B-01 BUNGALOWS BOWLEY ROAD	35 06/07/05 S, HAILSHAM	Survey Type: MANUAL EAST SUSSEX
5	HAILSHAM Total Number of dwellings: Survey date: THURSDAY HI-03-B-05 TERRACED, I PLANTATION ESTATE KENNEDY ROAD		Survey Type: MANUAL HIGHLAND
6	FORT WILLIAM Total Number of dwellings: Survey date: TUESDAY HI-03-B-06 TERRACED, CARNARC CRESCENT		Survey Type: MANUAL HIGHLAND
7	INVERNESS Total Number of dwellings: Survey date: THURSDAY MO-03-B-01 SEMI DETAC HAWTHORN ROAD		Survey Type: MANUAL MORAY
8	ELGIN Total Number of dwellings: Survey date: FRIDAY MO-03-B-02 BUNGALOWS PLUSCARDEN ROAD	15 12/05/06 S, ELGIN	Survey Type: MANUAL MORAY
9	ELGIN Total Number of dwellings: Survey date: WEDNESDAY SF-03-B-01 SEMI D./TEF A1144 ST PETERS STREET	40 10/05/06 RRACED, LOWESTOFT	Survey Type: MANUAL SUFFOLK
	LOWESTOFT Total Number of dwellings: Survey date: TUESDAY	46 20/09/05	Survey Type: MANUAL

TRICS 200	Monday 30/11/09			
Bancroft Cor	nsulting Mercury House, New Basford Not	ttingham		Licence No: 539501
Danci Ult CUI	isutting mercury nouse, new basiord not	tungnann		LICENCE NO. 539501
LIST	OF SITES relevant to selection parameters (C	ont.)		
10	WO-03-B-01 TERRACED, WORCE	STER	WORCESTERSHIRE	
	LYPPARD HANFORD WORCESTER			
	Total Number of dwellings:	76		
	Survey date: FRIDAY	15/03/02	Survey Type: MANUAL	
11	WY-03-B-01 TERRACED, LEEDS		WEST YORKSHIRE	
	LINCOLN GREEN ROAD			
	LEEDS			
	Total Number of dwellings:	29		
	Survey date: TUESDAY	18/09/07	Survey Type: MANUAL	
			5 51	

Bancroft Consulting Mercury House, New Basford Nottingham

RANK ORDER for Land Use 03 - RESIDENTIAL/B - HOUSES FOR RENTVEHICLESRanking Type:TOTALSTime Range:08:00-09:00WARNING:Using 85th and 15th percentile highlighted trip rates in data sets of under

20 surveys is not recommended by TRICS and may be misleading.

15th Percentile = No. 9 (**) 85th Percentile = No. 3 (**)

Median Values

Arrivals:0.100Departures:0.250Totals:0.350

							Trip Rate (Sorted by Totals)		Travel	
Rank	Site-Ref	Description	Area	DWELLS	Day	Date	Arrivals	Departures	Totals	Plan
1	WO-03-B-01	TERRACED, WORCESTER	WORCESTERSHIRE	76	Fri	15/03/02	0.171	0.500	0.671	
2	HI-03-B-05	TERRACED, FORT WILLIAM	HIGHLAND	126	Tue	19/05/09	0.159	0.389	0.548	
3 * *	DH-03-B-01	SEMI DETACHED, COXHOE	DURHAM	78	Mon	09/06/03	0.218	0.244	0.462	
4	WY-03-B-01	TERRACED, LEEDS	WEST YORKSHIRE	29	Tue	18/09/07	0.138	0.310	0.448	
5	ES-03-B-01	BUNGALOWS, HAILSHAM	EAST SUSSEX	14	Thu	03/07/03	0.143	0.286	0.429	
6	MO-03-B-02	BUNGALOWS, ELGIN	MORAY	40	Wed	10/05/06	0.100	0.250	0.350	
7	DV-03-B-01	TERRACED, PLYMOUTH	DEVON	35	Wed	06/07/05	0.114	0.229	0.343	
8	MO-03-B-01	SEMI DETACHED, ELGIN	MORAY	15	Fri	12/05/06	0.067	0.267	0.334	
9 * *	SF-03-B-01	SEMI D./TERRACED, LOWEST	SUFFOLK	46	Tue	20/09/05	0.130	0.196	0.326	
10	HI-03-B-06	TERRACED, INVERNESS	HIGHLAND	108	Thu	21/05/09	0.139	0.130	0.269	
11	CB-03-B-01	TERRACED, CARLISLE	CUMBRIA	135	Tue	28/10/03	0.096	0.096	0.192	

	JMP Consultants Ltd on behalf of the TRICS Consortium	Monday 30/11/09
SITE DETAILS FOR WO-03-B-01		Page 1
Bancroft Consulting Mercury House, New Basford	Nottingham	Licence No: 539501
Site Reference: Latitude/Longitude: Land Use Type: Region/Area	WO-03-B-01 52.2012011095267, -2.17407314983765 03 - RESIDENTIAL/B - HOUSES FOR RENT WEST MIDLANDSWORCESTERSHIRE	
Description: Street: District: Town: Post Code:	TERRACED, WORCESTER KNOTTS AVENUE LYPPARD HANFORD WORCESTER	
Location: Location Sub Category: Use Class:	Edge of Town Residential Zone C3	
Population within 500m: Population within 1 Mile: Population within 5 Miles: Car ownership within 5 Miles: Buses/Trains per day (both directions): Is site associated with a travel plan: Is the location of the site hilly or flat: Urban Regeneration:	3300 15,001 to 20,000 125,001 to 250,000 0.6 to 1.0 80+ per day	
Site area Number of dwellings Housing Density	2.20 hect 76	
No. of developments for this Site: No. of survey Days for this Site:	1 3	

Comments

This site is located at the eastern edge of Worcester, close to the M5 motorway (which heads north into Birmingham and south to the junction of the M50). Other local routes include the B4636 (just to the south of the site) which heads west towards the centre of Worcester and east across the motorway, and the A422 and A46 to Stratford Upon Avon (eastbound).

The site is in a large residential area, and has a single vehicle access off Knotts Avenue.

Bus (or tram) site accessibility

- 3. Is there at least 1 bus (or tram) stop within the site frontage or within 400m of the site frontage? : Yes
- 5. If yes to question 3, are there at least 2 buses (or trams) per hour (per direction between 0800 and 1800) with routes serving significant areas of population within a 5 kilometre radius? (Mon-Sat): Yes
- 6. If yes to question 5, what are the service characteristics? (please complete the outline information below)

Destination (town/area)	Number per hour	Approx. journey time
Worcester City Centre	6	20

11. Please enter general comments/views about the relevance, quality and importance of public transport services relating to this development.

A primary school and a Tesco store are both within 5 minutes walk of this site, reducing the need for access to public transport.

Design features encouraging non-car modes

TRICS 2009(b)v6.4	.2 280909 B14.19 (0	C) 2009	JMP Consultants Ltd on behalf of the TRIC	S Consortium Monda	ay 30/11/09
SITE DETAILS FOR	WO-03-B-01				Page 2
Bancroft Consulting	Mercury House, New I	Basford	Nottingham	Licen	ce No: 539501

12. Pedestrians

The Warndon Villages development has a network of shared footpaths and cycleways.

13. Pedal cycles

See above

14. Public transport

None

TRICS 2009(b)v6.4.2 280909 B14.19 (C) 2009 DEVELOPMENT DETAILS FOR WO-03-B-01 / 01	JMP Consultants Ltd on behalf of the TRICS Consortium	Monday 30/11/09 Page 3
Bancroft Consulting Mercury House, New Basford	Nottingham	Licence No: 539501
Site reference:	WO-03-B-01	
Trade name:	SWALLOWFIELDS	
Site area (h/a):	2.20	
Open since	2001	
Occupied dwellings Unoccupied dwellings Total dwellings	76	
Privately owned units	0	
Non-Privately owned units Name of nearest site	76	
Distance to nearest similar site	1 Km	
Average Bedrooms Per Unit	3	
No of units with 1 bedroom	0	
No of units with 2 bedrooms	20	
No of units with 3 bedrooms	34	
No of units with 4+ bedrooms	22	
Total bedrooms	230	
On street parking per unit	0.07	
Garages per unit Unit Density	0 34.5	
Unit Density	JT.J	

Residential unit types

	Private	Non-Private	Total
Detached houses	0	0	0
Semi-detached houses	0	0	0
Terraced houses	0	76	76
Bungalows	0	0	0
Flats (in houses)	0	0	0
Flats (in blocks)	0	0	0
Other (specify below)			
Other:			

Off-Site parking available

Comments

This site consists of 76 terraced houses owned by Worcestershire Housing Association. 22 of these have 4 bedrooms, 34 have 3 bedrooms, and 20 have 2 bedrooms. The estimated number of residents at the site is 300.

There are no other land uses within the site.

All 76 housing units have 1 off-street parking space within the site, and there are an additional

5 unallocated on-street spaces. There are no other marked on-street spaces within the site, although vehicles sometimes do park on the road.

No

The nearest similar site in terms of size and nature is in Old Warndon.

School minibuses serve this site.

	(C) 2009 JMP Consultants Ltd on behalf of the TRICS Consor	tium Monday 30/11/09 Page 1
Bancroft Consulting Mercury House, Ne	ew Basford Nottingham	Licence No: 539501
TRIP RATE CALCULATION SE	LECTION PARAMETERS:	
Land Use : 03 - RESIDENTIA Category : B - HOUSES FOR VEHICLES		
Selected regions and areas: 06 WEST MIDLANDS WO WORCESTERSHIRE	1 days	
Filtering Stage 2 selection:		
Parameter: Number of c Range: 76 to 76 (un		
Public Transport Provision: Selection by:	Include all surveys	
Date Range: 01/01/00 to	21/05/09	
<u>Selected survey days:</u> Friday	1 days	
<u>Selected survey types:</u> Manual count Directional ATC Count	1 days 0 days	
Selected Locations: Edge of Town	1	
Selected Location Sub Categories Residential Zone	<u></u> 1	

Bancroft Consulting Mercury House, New Basford Nottingham

> TRIP RATE for Land Use 03 - RESIDENTIAL/B - HOUSES FOR RENT VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	1	76	0.118	1	76	0.211	1	76	0.329
08:00 - 09:00	1	76	0.171	1	76	0.500	1	76	0.671
09:00 - 10:00	1	76	0.250	1	76	0.132	1	76	0.382
10:00 - 11:00	1	76	0.197	1	76	0.184	1	76	0.381
11:00 - 12:00	1	76	0.132	1	76	0.184	1	76	0.316
12:00 - 13:00	1	76	0.105	1	76	0.171	1	76	0.276
13:00 - 14:00	1	76	0.171	1	76	0.224	1	76	0.395
14:00 - 15:00	1	76	0.276	1	76	0.303	1	76	0.579
15:00 - 16:00	1	76	0.408	1	76	0.276	1	76	0.684
16:00 - 17:00	1	76	0.408	1	76	0.276	1	76	0.684
17:00 - 18:00	1	76	0.355	1	76	0.250	1	76	0.605
18:00 - 19:00	1	76	0.237	1	76	0.211	1	76	0.448
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			2.828			2.922			5.750

Parameter summary

Trip rate parameter range selected:	76 - 76 (units:)
Survey date date range:	01/01/00 - 21/05/09
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	13

Licence No: 539501

APPENDIX G - PICADY OUTPUT DATA

TRL LIMITED

(C) COPYRI GHT 2006

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.0 ANALYSIS PROGRAM RELEASE 3.0 INTERIM(APR 2006)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION, PROGRAM ADVICE AND MAINTENANCE CONTACT: TRL SOFTWARE BUREAU TEL: CROWTHORNE (01344) 770758, FAX: 770864 EMAIL: SoftwareBureau@trl.co.uk _____

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF HIS RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-"Z:\2009 Projects\F09120H Greenhill Road, Herne Bay\Misc\Picady AM peak.vpi" (drive-on-the-left) at 10:39:21 on Friday, 22 January 2010

RUN INFORMATION

RUN TITLE: Greenhill Road, Herne AM peak LOCATION: DATE: 17/12/09 CLIENT: ENUMERATOR: simon.hall [BCL002] JOB NUMBER: F09120 STATUS: DESCRIPTION:

. MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)

MINOR ROAD (ARM B)

ARM A IS Greenhill Road east ARM B IS Site Access ARM C IS Greenhill Road west

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

ī	DATA I TEM	ī	MINOR	ROAD B	Ī
	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH CENTRAL RESERVE WIDTH		(W) (WCR)	6.00 M. 0.00 M.	ļ
	MAJOR ROAD RIGHT TURN - WIDTH - VISIBILITY - BLOCKS TRAFFIC		(WC-B) (VC-B)	2.20 M. 35.0 M. YES	
	MINOR ROAD - VISIBILITY TO LEFT - VISIBILITY TO RIGHT - LANE 1 WIDTH - LANE 2 WIDTH		(VB-C) (VB-A) (WB-C) (WB-A)	18.0 M. 23.0 M. 3.70 M. 0.00 M.	

. SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity

will be adjusted)

I Intercept For	Slope For Opposing	Slope For Opposing I	
I Stream B-C	Stream A-C	Stream A-B I	
I 683.16	0. 26	0. 10 I	

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposingl
	Stream B-A	Stream A-C	Stream A-B	Stream C-A	Stream C-B I
Ī	529.42	0. 24	0. 10	0. 15	0.35 I

I Intercept For Slope For Opposing	Slope For Opposing I
I Stream C-B Stream A-C	Stream A-B I
I 594.23 0.23	0. 23 I

NB These values do not allow for any site specific corrections

. TRAFFIC DEMAND DATA

ī	ARM	ī	FLOW	SCALE(%)	ī
 	A B C	 		100 100 100	
-					

Demand set: Greenhill Road, Herne

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MINUTES. LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I I ARM I		FLOW STARTS	Т	NUTES FROM TOP OF PEAK IS REACHED	1	FLOW STOPS	L	BEFORE	I.	AT TOP	L	AFTEŔ I
I ARM A I ARM B I ARM C	İ.	15.00 15.00 15.00	 	45.00 45.00 45.00	 	10.00	•	3. 45 0. 50 1. 74		5. 18 0. 75 2. 61		3.45 I 0.50 I 1.74 I

	i ·	TURNI NG PR TURNI NG CO PERCENTAGE	UNTS (VEF	i/HR) i
TI ME	I FROM/TO	I ARM A I	ARM B I	ARM C I
07.45 - 09.15	I ARM A I I I	0.01 (0.0)	(0.0)	264.01 (2.3)1
	I ARM B I I	28.01	0.0 1	0. 300 12. 0 (0. 0)
 	I ARM C	I 137.0 I		0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Greenhill Road, Herne AND FOR TIME PERIOD 1

	AND I	FOR TIME P	ERIOD	1					
I TIME	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07. 45-0 B-AC C-AB A-B A-C	8.00 0.50 0.03 0.15 3.31	8.37 9.09	0.060 0.003		0. 00 0. 00	0. 06 0. 00	0. 9 0. 0		0. 13 0. 11
TI ME 08. 00-0	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
B-AC C-AB A-B A-C	0. 60 0. 03 0. 18 3. 96	8. 16 8. 93	0. 073 0. 003		0. 06 0. 00	0. 08 0. 00	1.2 0.0		0. 13 0. 11
TIME		CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)		GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08. 15-0 B-AC C-AB A-B A-C	8. 30 0. 73 0. 04 0. 22 4. 84	7.86 8.71			0. 08 0. 00	0. 10 0. 00	1.5 0.1		0. 14 0. 12
TIME	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
08. 30-0 B-AC C-AB A-B A-C	8. 45 0. 73 0. 04 0. 22 4. 84	7.86 8.71	0. 093 0. 004		0. 10 0. 00	0. 10 0. 00	1.5 0.1		0. 14 0. 12
TIME		CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MIN)	QUEUE	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
08.45-0 B-AC C-AB A-B A-C	9.00 0.60 0.03 0.18 3.96	8. 16 8. 93	0. 073 0. 003		0. 10 0. 00	0. 08 0. 00	1. 2 0. 1		0. 13 0. 11
TIME	DEMAND (VEH/MIN)	CAPACI TY (VEH/MI N)	DEMAND/ CAPACI TY (RFC)	FLOW	QUEUE	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)

0. 08 0. 00

i

QUEUE FOR STR	EAM B-AC
TIME SEGMENT ENDING	VEHI CLES
08.00	IN QUEUE 0.1
08.15	0.1
08.30	0.1 0.1
08.45 09.00	0.1
09.15	0.1
QUEUE FOR STR	EAM C-AB
TIME SEGMENT	NO. OF
ENDI NG	VEHI CLES
08.00	IN QUEUE
08.15	0.0
08.30	0.0
08.45 09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STR	EAM I	TOTAL	DEMAND I	* QUEUE * DELA		'		QUEUEING * I AY * I
i	1-	(VEH)	(VEH/H) I	(MIN)	(MI N/VEH)	I	(MIN)	(MIN/VEH) I
I B- I C- I A- I A-	AB I B I	55. 1 2. 8 16. 5 363. 4	I 1.8 I I 11.0 I	7.3 0.3 	0. 13 0. 11	 	7.3 0.3	0.13 0.11
I AL	LI	626.3	I 417.5 I	7.6 I	0. 01	I	7.6	I 0.01 I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

TRL LIMITED

(C) COPYRI GHT 2006

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.0 ANALYSIS PROGRAM RELEASE 3.0 INTERIM(APR 2006)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT BY PERMISSION OF THE CONTROLLER OF HMSO

FOR SALES AND DISTRIBUTION INFORMATION, PROGRAM ADVICE AND MAINTENANCE CONTACT: TRL SOFTWARE BUREAU TEL: CROWTHORNE (01344) 770758, FAX: 770864 EMAIL: SoftwareBureau@trl.co.uk _____

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF HIS RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-"Z:\2009 Projects\F09120H Greenhill Road, Herne Bay\Misc\Picady PM peak.vpi" (drive-on-the-left) at 10:40:00 on Friday, 22 January 2010

RUN INFORMATION

RUN TITLE: Greenhill Road, Herne PM peak LOCATION: DATE: 17/12/09 CLIENT: ENUMERATOR: simon.hall [BCL002] JOB NUMBER: F09120 STATUS: DESCRIPTION:

. MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)

MINOR ROAD (ARM B)

ARM A IS Greenhill Road east ARM B IS Site Access ARM C IS Greenhill Road west

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

ī	DATA I TEM	ī	MINOR	ROAD B	ī
1	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH CENTRAL RESERVE WIDTH	1	(W) (WCR)	6.00 M. 0.00 M.	1
	MAJOR ROAD RIGHT TURN - WIDTH - VISIBILITY - BLOCKS TRAFFIC		(WC-B) (VC-B)	2.20 M. 35.0 M. YES	
	MINOR ROAD - VISIBILITY TO LEFT - VISIBILITY TO RIGHT - LANE 1 WIDTH - LANE 2 WIDTH		(VB-C) (VB-A) (WB-C) (WB-A)	18.0 M. 23.0 M. 3.70 M. 0.00 M.	

. SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity

will be adjusted)

I Intercept For	Slope For Opposing	Slope For Opposing I	
I Stream B-C	Stream A-C	Stream A-B I	
I 683.16	0. 26	0. 10 I	

	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposingl
	Stream B-A	Stream A-C	Stream A-B	Stream C-A	Stream C-B I
T	529.42	0. 24	0. 10	0. 15	0.35 I

I Intercept For Slope For Opposing	Slope For Opposing I
I Stream C-B Stream A-C	Stream A-B I
I 594.23 0.23	0. 23 I

NB These values do not allow for any site specific corrections

. TRAFFIC DEMAND DATA

ī	ARM	ī	FLOW	SCALE(%)	ī
 	A B C	 		100 100 100	
-					

Demand set: Greenhill Road, Herne

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES. LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I I ARM I		FLOW	STARTS	L	TOP	0F	PEAK	1	ART WHEN FLOW STOPS FALLING	Т	BEFORE	Ť.	AT ⁻	TOP`	1	AFTER I
I ARM A I ARM E I ARM C	3 I	1	5.00 5.00 5.00			45. 45. 45.	00		75.00 75.00 75.00	 	1. 94 0. 25 3. 10	 	Ō.	91 38 65	i.	1. 94 I 0. 25 I 3. 10 I

	I TURNI NG PROPORTI ONS I I TURNI NG COUNTS (VEH/HR) I I (PERCENTAGE OF H. V. S) I							
TI ME	I FROM/TO	I ARM A I	ARM B I	ARM C I				
16.45 - 18.15	ARM A	I (0.0)I I I I 0.650 I I 13.0 I	0.090 14.0 (0.0) 0.000 0.0 (0.0)	141.0 (5.0) 0.350 7.0				
	I ARM C I I I	I 0. 940 I I 233. 0 I	0.060 0.060 15.0 (0.0)	0. 000 I 0. 0 I				

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Greenhill Road, Herne AND FOR TIME PERIOD 1

	AND I	OR TIME P	ERIOD	I					
I TIME	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
I 16.45-1 I B-AC I C-AB I A-B I A-C I	7.00 0.25 0.19 0.18 1.77	8.69 9.44	0. 029 0. 020		0. 00 0. 00	0. 03 0. 02	0. 4 0. 3		0. 12 0. 11
I TIME	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
17.00-1 B-AC C-AB A-B A-C	7. 15 0. 30 0. 22 0. 21 2. 11	8. 51 9. 34	0. 035 0. 024		0. 03 0. 02	0. 04 0. 02	0.5 0.4		0. 12 0. 11
TIME	(VEH/MIN)	CAPACI TY (VEH/MI N)		PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)		GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)
17. 15-1 B-AC C-AB A-B A-C	7.30 0.37 0.28 0.26 2.59	8. 27 9. 22	0. 044 0. 030		0. 04 0. 02	0. 05 0. 03	0. 7 0. 5		0. 13 0. 11
TI ME	(VEH/MIN)	CAPACI TY (VEH/MI N)	DEMAND/ CAPACI TY (RFC)	PEDESTRI AN FLOW (PEDS/MI N)	QUEUE	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)	PER ARRI VI NG
B-AC C-AB A-B A-C	0. 37 0. 28 0. 26 2. 59	8. 27 9. 22	0. 044 0. 030		0. 05 0. 03	0. 05 0. 03	0. 7 0. 5		0. 13 0. 11
TIME		CAPACI TY (VEH/MI N)	CAPACI TY	PEDESTRI AN FLOW	QUEUE	END QUEUE		GEOMETRI C DELAY (VEH. MI N/	
17.45-1 B-AC C-AB A-B A-C	8. 00 0. 30 0. 22 0. 21 2. 11	8. 51 9. 34	(RFC) 0. 035 0. 024	(PEDS/MIN)	(VEHS) 0.05 0.03	(VEHS) 0. 04 0. 02	TIME SEGMENT) 0.6 0.4	TIME SEGMENT)	VEHI CLE (MI N) 0. 12 0. 11
 I TIME I	DEMAND (VEH/MIN)	CAPACI TY (VEH/MI N)	DEMAND/ CAPACI TY (RFC)	FLOW	QUEUE	END QUEUE (VEHS)		GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRI VI NG VEHI CLE (MI N)

0. 04 0. 02

.....

I

I i

QUEUE FOR STR	EAM B-AC
TIME SEGMENT ENDING	NO. OF VEHI CLES IN OUFUE
17.00 17.15 17.30 17.45 18.00 18.15	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
QUEUE FOR STR	EAM C-AB
TIME SEGMENT ENDING	NO. OF VEHI CLES IN OUFUE
17.00 17.15 17.30 17.45 18.00 18.15	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND	 	* QUEUEING * * DELAY *	 		QUEUEING * I AY * I
-	(VEH) (VEH/H)	1	(MIN) (MIN/	/EH) I	(MIN)	(MIN/VEH) I
I B-AC I I C-AB I I A-B I I A-C I	27.5 18.4 20.6 13.8 19.3 12.8 194.1 129.4	Ì	3.4 0. 2.3 0. 		3.4 2.3	I 0. 12 I I 0. 11 I I I I
I ALL I	582.2 I 388.2	1	5.6I 0.0	D1 I	5.6	I 0.01 I

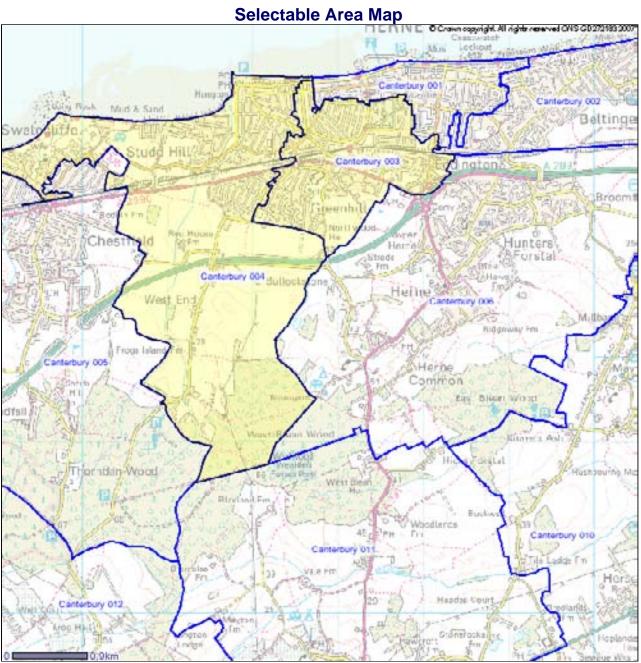
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

APPENDIX H - NATIONAL STATISTICS DATA

Neighbourhood Statistics

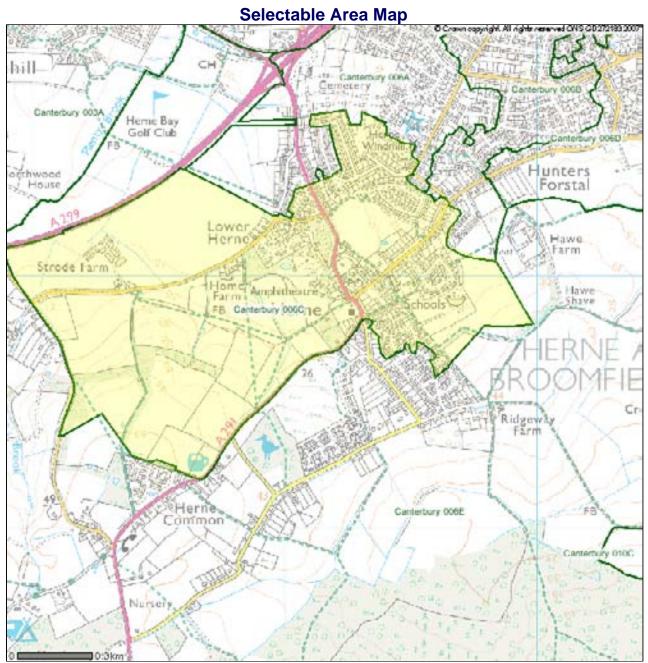
Office for National Statistics



This material is Crown Copyright. Users are granted permission to reproduce Crown Copyright material provided that a Click-Use Licence has been obtained from HMSO. The Click-Use Licence can be obtained from www.clickanduse.hmso.gov.uk When reproducing this material, the source should be acknowledged.

Neighbourhood Statistics

Office for National Statistics



This material is Crown Copyright. Users are granted permission to reproduce Crown Copyright material provided that a Click-Use Licence has been obtained from HMSO. The Click-Use Licence can be obtained from www.clickanduse.hmso.gov.uk When reproducing this material, the source should be acknowledged.

Neighbourhood Statistics

<	Office	for	National	Statistics
---	--------	-----	----------	------------

	Canterbury 0043	Canterbury 0033
	Super Output Area	Super Output Area
	Middle Layer	Middle Layer
People who work		
mainly at or from		
home ^{1 2}	9.74	8.81
Persons Persontage		
<i>Percentage</i> Apr01		
People aged 16-74		
who usually travel to work by:		
Underground, Metro,		
Light Rail or Tram ¹ ²	0.00	0.19
Persons		
Percentage		
Apr01		
People aged 16-74 who usually travel to		
work by: Train ¹ ²		
Persons	3.29	5.26
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: Bus, Mini		
Bus or Coach ¹ ²	3.76	3.17
Persons		
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: Motorcycle, Scooter or Moped ¹ ²	1.69	0.93
Persons	1.07	0.95
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: Driving a Car		
or Van <mark>1 2</mark>	63.18	59.01
Persons		
Percentage		
Apr01		
People aged 16-74		
who usually travel to work by: Passenger in		
a Car or Van ¹ ²	7.80	7.37
Persons	7.00	1.57
Percentage		
Apr01		
People aged 16-74		
who travel to work by:		
Taxi or Minicab ¹ 2	0.63	0.42
Persons	0.05	0.42
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: Bicycle ¹ 2 Persons	3.13	2.82
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: On foot1 2	C 40	11 64
Persons	6.42	11.54
Percentage		
Apr01		
People aged 16-74		
who usually travel to		
work by: Other ^{1 2}	0.38	0.48
Persons	0.50	0.10
Percentage		
Apr01		

Last Updated: 02 June 2006 Source: Office for National Statistics

Notes

- 1 From the dataset: Travel to Work (KS15)
- 2 National Statistics
- 3 Part of the NeSS Geography Hierarchy

Caution:

using statistics from different sets of data means that you may not be comparing like with like. This material is Crown Copyright. Users are granted permission to reproduce Crown Copyright material provided that a Click-Use Licence has been obtained from HMSO. The Click-Use Licence can be obtained from www.clickanduse.hmso.gov.uk When reproducing this material, the source should be acknowledged.