Sworders

Church End, Little Hadham

Highway Impact Assessment

December 2023

BANCROFT CONSULTING

bancroftconsulting.co.uk

CHURCH END, LITTLE HADHAM
HIGHWAY IMPACT ASSESSMENT
REVISION A, DECEMBER 2023

1.0 INTRODUCTION AND DEVELOPMENT PROPOSALS

1.1 Bancroft Consulting was appointed by Sworders to provide highways and transport advice in respect of an outline planning application for the development of up to 7 dwellings on land to the east of Albury Road in Little Hadham, Hertfordshire. **Figure 1** shows the site in context with its local surroundings.

1.2 The site has been subject to a number of recent planning applications, including proposals for the development of up to 18 dwellings served from a single point of access at Albury Road (East Herts District Council Planning Reference: 3/17/0975/OUT). Prior to this application being withdrawn in March 2018, Hertfordshire County Council (HCC) acting in its role as the Highway Authority offered its support of the proposals. A separate planning application (East Herts District Council Planning Reference: 3/21/0588/FUL) for the creation of a new agricultural field access at Albury Road to serve the site was granted full planning permission in January 2022. Section 2 of this report will provide further details on both of these applications, including the previously submitted reports and the key principles previously agreed upon with HCC.

1.3 **Appendix A** contains the latest indicative site layout plan which confirms that up to 7 dwellings would be served by a new access at Albury Road. This access would retain the same layout as agreed during the 2018 application and include the provision of a new footway extending south. The footway would also provide a new crossing point, connecting to the existing infrastructure along the western edge of Albury Road.

1.4 The objective of this Highway Impact Assessment is to demonstrate to HCC that the latest proposals (which have been significantly reduced in scale since the 2018 application) would not result in any ‘severe’ impacts on the road network and that ‘safe and suitable’ access could be provided for all users. This report has been

prepared with consideration of the requirements outlined in Paragraphs 110 and 111 of the National Planning Policy Framework [NPPF] (MHCLG, Revised September 2023), which states:

> *"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
> *a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
> *b) safe and suitable access to the site can be achieved for all users;*
> *c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
> *d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."* [Paragraph 110]

> *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."* [Paragraph 111]

1.5 As well as considering the NPPF guidance, this Highway Impact Assessment gives due regard to current best practice advice contained in the document 'Manual for Streets' (DfT, 2007) and its companion document 'Manual for Streets 2 – Wider Application of the Principles' (CIHT, 2010). This report also considers locally adopted guidance within the 'Roads in Hertfordshire: Highway Design Guide' (HCC, 2011).

1.6 This report has been completed following a site visit undertaken on 17 November 2023 during which observations were taken on the immediate surrounding highway network. A manual radar speed survey was also completed along Albury Road at the proposed access location. The findings of the survey and other relevant observations will be referenced later in this report where necessary.

2.0 BACKGROUND INFORMATION

2.1 Site Planning History

2.1.1 The site was previously subject to an outline planning application for the development of up to 18 dwellings (with all matters reserved apart from access). The application (East Herts District Council Planning Reference: 3/17/0975/OUT) was supported by a Highway Impact Statement (Revised April 2017) with relevant extracts included in **Appendix B** for ease of reference. Following the submission of the report, the Highway Authority provided formal comments dated 26 May 2017 (included in **Appendix C**) which confirmed that HCC did 'not wish to restrict the granting of planning permission' subject to conditions. The application was later withdrawn on 18 March 2018.

2.1.2 The agreed access layout was shown in Drawing Number F16177/02 Revision B which is also included in **Appendix B**. As shown in **Image 1** below, the access comprised a bellmouth junction with 6 metres kerb radii and a 5 metres wide carriageway. A 2 metres wide footway was provided on the southern edge of the junction extending along the site boundary towards the existing Public Right of Way (Public Footpath 38). A dropped kerb with tactile paving crossing was provided at the southeastern corner of the site boundary, connecting to the existing footway along the western edge of Albury Road. It is important to note that the agreed layout was more onerous than the locally adopted standards (which required a minimum carriageway width of 4.1 metres) due to the potential of refuse collection and other servicing vehicles being required to access the site.

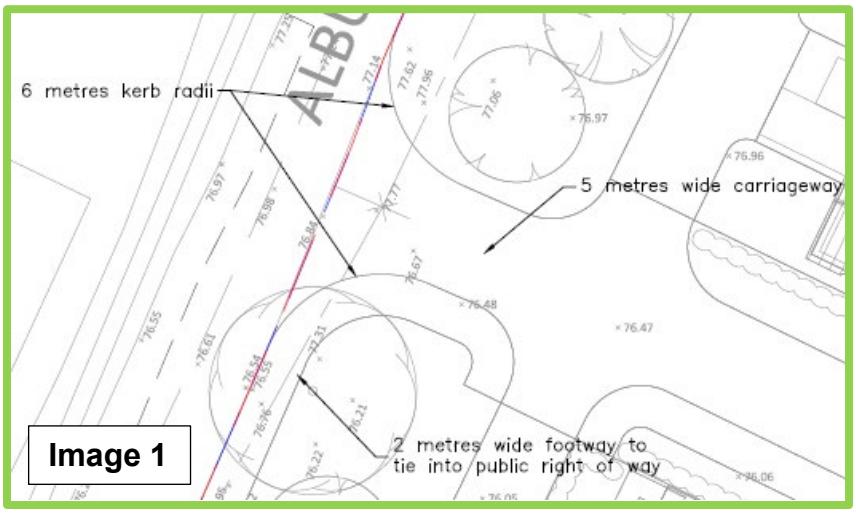


Image 1

2.1.3 The visibility splays used on the previously agreed access drawing were based on the results of a manual radar speed survey along Albury Road. This was undertaken on 13 December 2016 and confirmed 85th percentile wet weather speeds (noting that this was before the change in guidance) of 30.3mph in the northbound direction and 38.3mph in the southbound direction. The corresponding visibility splays of 61 metres to the north (southbound direction) and 43 metres to the south (northbound direction) were confirmed to be achievable at the proposed access from a 2.4 metres setback distance to the edge of the carriageway in both directions accommodated using land within the site boundary. It is important to note that the visibility splay to the north was shown to cross over the site boundary into the adjacent field (also under the applicant's ownership).

2.1.4 In addition to the proposed access strategy, the Highway Impact Statement also confirmed that there was no evidence of an existing highway safety problem in the immediate vicinity of the site. It was also outlined that Little Hadham was within a reasonable walking distance along with the bus stops at Stortford Road. Trip rates extracted from the TRICS database were used to calculate the change in traffic conditions which confirmed that the development of 18 dwellings could generate up to 14 two-way vehicle movements during the busiest morning peak hour period. This increase was agreed to be negligible and not result in any severe impacts on the surrounding highway network. As the report related to an outline planning application, recommendations were also made on parking provision and servicing strategy in accordance with the adopted standards.

2.1.5 The principles agreed with the Highway Authority as part of the 2018 application have been retained for this report. Furthermore, it must be acknowledged that since the previous application, the locally adopted guidance has not changed. The scale of the development proposals has also reduced considerably from up to 18 dwellings to now only up to 7 dwellings.

2.1.6 A separate planning application for a new agricultural field access to serve the site was granted full planning permission on 17 January 2022 (East Herts District Council Planning Reference: 3/21/0588/FUL). This application was supported by a Site Access Appraisal (August 2021) with relevant extracts included in **Appendix D** for

ease of reference. HCC confirmed they did 'not wish to restrict the granting of planning permission' subject to conditions in formal comments dated 23 November 2021 (included in **Appendix E**).

2.1.7 The approved access layout drawing is shown in Drawing Number F21114/01 (also included in **Appendix D**). This outlines that the access was located centrally within the site frontage, although further north compared to that proposed as part of the 2018 residential application. The drawing also confirmed that visibility splays of 99 metres to the north and 93 metres to the south could be achieved from a 2.4 metres setback distance to the edge of the carriageway in both directions. These visibility splays were calculated using 85th percentile vehicle speeds (37.56mph in the northbound direction and 38.90mph in the southbound direction) recorded through the use of ATCs along Albury Road in July 2021. A swept path assessment also confirmed that a farm tractor and hay wagon (19 metres long) could enter and exit the site without impacting the on-street parking along the western edge of Albury Road. The approved field access would not be implemented at the site if the proposed residential development was to be granted planning permission.

2.2 Existing Conditions

2.2.1 The site is located at the eastern edge of Albury Road, approximately 400 metres north of the Standon Road/Albury Road/Stortford Road signal junction. It currently comprises agricultural land (associated with Church End Farm) that is farmed by the applicant. It is bound by more agricultural land to the north and east (also owned by the applicant), residential dwellings to the south and Albury Road to the west. Further afield, the site is located approximately 6 kilometres west of Bishops Stortford, 12 kilometres north of Ware and 20 kilometres east of Stevenage.

2.2.2 In the immediate vicinity of the site, Albury Road is a single carriageway measuring approximately 6 metres wide and has centreline road markings throughout. At the proposed access location, Albury Road is subject to a 30mph speed limit, which is reinforced by signage, '30' roundel road markings and a vehicle-activated sign to reflect the residential character of the road. As Albury Road extends further north

past the residential dwellings located at the western edge of the carriageway it becomes subject to the national de-restricted speed limit and is rural in character.

2.2.3 On the opposite side of Albury Road at the southeastern corner of the site is Lime Kiln Place which is a private residential access road servicing 7 dwellings. The dwellings were granted planning permission in August 2017 (East Herts District Council Planning Reference: 13/17/1399/FUL) and served by an improved access at Albury Road. Upon reviewing the approved plans and based on site visit observations, the access junction to serve the 7 dwellings comprises a bellmouth junction with a 4.1 metres wide carriageway (for the first 10 metres), 5 metres kerb radii and a dropped kerb tactile paving crossing. Although no detailed highway work was submitted as part of the application, the approved plans also confirmed that visibility splays of 43 metres could be achieved at the access along Albury Road when taken to the edge of the carriageway despite the presence of on-street parking. A copy of the access drawing for Lime Kiln Place is included in **Appendix F** for reference.

2.3 Speed Survey Results

2.3.1 A manual radar speed survey was undertaken along Albury Road between 0935 and 1128 hours on 17 November 2023. The surveyor stood opposite the proposed site access and recorded vehicles as they approached from a distance of approximately 50 metres away. During the survey, 100 vehicle speeds were recorded in both the northbound and southbound directions. A summary of the recorded speeds is shown in **Tables 1** and **2**. This confirmed 85th percentile speeds of 32.40mph (52.1kph) in the northbound direction and 39.33mph (63.3kph) in the southbound direction. This indicates that the recorded vehicle approach speeds along Albury Road were 5.16mph less in the northbound direction and 0.43mph higher in the southbound direction compared to the July 2021 ATC data collected as part of the field access application.

2.3.2 The 85th percentile vehicle speeds have been used to calculate the required visibility splays based on the requirements outlined in Table 10.1 of Manual for Streets 2. As shown in **Table 3**, because the northbound 85th percentile speed was below 60kph

and over 5% of vehicles were classified as HGVs/Buses, a driver perception-reaction time of 1.5 seconds and a deceleration rate of 0.375g have been used. This calculation confirms that the proposed access should provide a visibility splay of 53 metres to the south (northbound vehicles).

2.3.3 As shown in **Table 4**, because the southbound 85th percentile speed was above 60kph the 'desirable' visibility calculation outlined in Table 10.1 of Manual for Streets 2 has been used. This requires a driver perception-reaction time of 2 seconds and a deceleration rate of 0.25g. This calculation confirms that the proposed access should provide a visibility splay of 101 metres to the north (southbound vehicles).

2.4 Highway Safety

2.4.1 The 'CrashMap' website (crashmap.co.uk) has been reviewed to determine if there are any existing highway safety problems that could potentially be exacerbated by the proposed development. As shown in **Figure 2**, there have been no incidents recorded along Albury Road near the site during the most recent 5-year study period (2018 to 2022). During this time there have also been no incidents recorded at the Standon Road/Albury Road/Stortford Road signal junction. On this basis, HCC should be satisfied that there are no ongoing safety issues near the site, and no further assessment of highway safety should be required as part of this application.

3.0 CHANGE IN TRAFFIC CONDITIONS

3.1 Section 4.1 of the Highway Impact Statement submitted as part of the 2018 application (included in **Appendix B**) provided residential trip rates that were previously agreed upon by the Highway Authority. The trip rates were extracted from the TRICS database for a single site in Backworth (TRICS reference: TW-03-A-03). It was considered that the selected site was a suitable comparison to the proposals, as they both are in a rural location with a major 'A' road nearby and also included a single point of access along with a comparable level of public transport facilities.

3.2 In light of the above, the following trip rates (per dwelling) were previously accepted:

- morning peak (0800 to 0900 hours) 0.212 arrive 0.545 depart
- evening peak (1700 to 1800 hours) 0.333 arrive 0.273 depart
- daily (0700 to 1900 hours) 3.242 arrive 3.212 depart

3.3 For robustness (noting that working habits have changed since 2018 following the pandemic, including greater flexibility to work from home etc) and considering that the above trip rates were previously agreed as being suitable by HCC, they have been retained for this assessment. A copy of the TRICS output data from the 2018 application is included in **Appendix G** of this report for reference. Based on the previously agreed trip rates, the proposed development of up to 7 dwellings could generate the following vehicle movements:

- morning peak 1 arrive 4 depart 5 total
- evening peak 2 arrive 2 depart 4 total
- daily 23 arrive 22 depart 45 total

Table 5 contains the total daily traffic generation profile (weekday)

3.4 The above confirms that the development of up to 7 dwellings at the site would result in a negligible increase in traffic with up to 5 two-way vehicle movements during the busiest morning peak hour period. This equates to circa 1 vehicle every 12 minutes on average during this period. Furthermore, given the nature of the proposals most of the traffic would be residential comprising mainly of vehicles such as cars and delivery vans (Amazon/Tesco etc). On this basis and noting that HCC previously accepted up to 18 dwellings at the site, it can be concluded that the latest proposals

would not result in any ‘severe cumulative impacts’ on the surrounding highway network and comply with Paragraph 111 of the NPPF.

4.0 SITE ACCESS

4.1 Table 4.1.1.1 'Road Design Criteria' included in HCC's 'Roads in Hertfordshire: Highway Design Guide' outlines that the minimum carriageway width of an access to serve up to 50 dwellings is 4.1 metres. Section 1.5 of the document also states that *"the carriageway width or tracking zone of any road should be appropriate to the size of vehicle and traffic volumes that will be encountered and should take account of whether on-street parking is anticipated".* It is also noted that "*the carriageway width must not restrict the necessary access of refuse collection vehicles, buses and emergency vehicles"*.

4.2 Noting the above guidance (which remains the same as the 2018 application) it has been considered that the previously agreed access layout should be retained to serve the latest proposals. As shown in **Drawing Number F16177/03** this would provide a 5 metres wide carriageway and 6 metres kerb radii. A 2 metres wide footway would also be provided at the southern edge of the junction which would extend along the site boundary and tie into Public Footpath 38. A dropped kerb with tactile paving crossing would also be provided, connecting to the existing footway along the western edge of Albury Road which provides a continuous link south towards Little Hadham.

4.3 The provision of a 5 metres wide carriageway would allow for easier access by larger vehicles such as delivery vans. Furthermore, a bellmouth arrangement with 6 metres kerb radii would allow for less onerous manoeuvres in and out of the site with consideration of Albury Road, including the potential for on-street parking which is currently evident along the western edge of the carriageway.

4.4 To give HCC further confidence that the proposed access layout remains suitable, **Drawing Number F16177/04** provides a swept path assessment of a standard delivery vehicle (7.5-tonne panel van). This drawing confirms that the largest anticipated vehicle to regularly visit the site could satisfactorily enter and exit without conflict even if vehicles were to be parked on-street adjacent to the proposed access.

4.5 Alongside the proposed access layout, **Drawing Number F16177/03** also includes a visibility assessment along Albury Road. This confirms that the required visibility splays of 101 metres to the north and 53 metres to the south could be provided from a 2.4 metres setback distance to the edge of the carriageway at the proposed site access. The visibility splays would be accommodated within the land that is within either the site boundary/applicant ownership (e.g. the adjacent field to the north) or within the adopted highway boundary. Any future detailed site masterplan would ensure that the visibility splays are secured, with no obstructions above a maximum height of 0.6 metres. On this basis, the Highway Authority should be satisfied that suitable visibility could be provided for any vehicles exiting the site along Albury Road.

4.6 In light of the above information, it can be concluded that the proposed access shown in **Drawing Number F16177/03** would ensure that 'safe and suitable access' could be provided for all users in accordance with Paragraph 110 of the NPPF.

5.0 INTERNAL LAYOUT

Servicing

5.1 The proposed access layout has been designed so that it should be able to accommodate internal refuse collection if required. If this strategy is preferred, then any future detailed masterplan will need to ensure that a suitable turning head can be provided. This would need to be tested with further swept path assessments, ensuring that the refuse vehicle could enter the site, manoeuvre internally and depart back onto Albury Road in a forward gear.

5.2 Considering the current layout of the dwellings on the indicative site masterplan (included in **Appendix A**) and proximity to Albury Road, an alternative strategy would be for refuse collection to occur externally. This would remove the requirement for refuse collection vehicles to enter/turn within the site and the bins could be collected from the edge of the carriageway on Albury Road. It is recommended that this strategy be the preferred approach, noting that the internal road within the site would likely be unadopted and also operate as a shared surface environment for all users.

5.3 To facilitate external refuse collection a bin storage point is provided for residents as shown within the indicative site layout. As per guidance within Paragraph 6.8.9 of Manual for Streets, the collection point would be within 30 metres of each dwelling and refuse collection vehicles would also be able to get to within 25 metres.

Parking

5.4 The local parking standards are outlined in Table 2 of the 'District Plan Appendix – Vehicle Parking Standards' contained within the East Herts District Council 'Supplementary Planning Document'. For residential dwellings, the following parking should be provided:

- 2 bedroom dwellings = 2 parking spaces.
- 3 bedroom dwellings = 2.5 parking spaces (to be rounded up if necessary).
- 4 or more bedroom dwellings = 3 parking spaces.

5.5 Depending on the size of the dwellings within any future detailed site masterplan, the proposed 7 dwellings would require between 14 parking spaces (based on them all being 2 bedrooms) and 21 parking spaces (based on them all being 4 or more bedrooms). At least 1 cycle parking space should also be provided for each dwelling if no garage or shed is provided.

5.6 The required layout of parking is detailed in 'Appendix C – Guidance on the design, layout and dimensions of car parking spaces' of the East Herts District Council's 'Supplementary Planning Document'. The document confirms that single garages should be a minimum of either 2.6 metres wide by 5.6 metres deep or 3.2 metres wide by 5 metres deep. For driveway parking, the guidance recommends that the spaces should measure a minimum of 6 metres in length and 3 metres in width.

5.7 Any future detailed site masterplan will ensure that sufficient parking is provided for all dwellings in accordance with the adopted standards.

6.0 SUMMARY AND CONCLUSIONS

6.1 Bancroft Consulting was appointed by Sworders to provide highways and transport advice in respect of an outline planning application for the development of up to 7 dwellings on land to the east of Albury Road in Little Hadham, Hertfordshire.

6.2 The objective of this Highway Impact Assessment has been to demonstrate to HCC that the latest proposals (which have been significantly reduced in scale since the 2018 application during which no objections were raised) would not result in any 'severe' impacts on the road network and that 'safe and suitable' access could be provided for all users. This has been prepared with consideration of the requirements outlined in Paragraphs 110 and 111 of the National Planning Policy Framework.

6.3 In light of the above, the main findings of this report can be summarised as follows:

- Using the previously agreed trip rates, the proposed development would result in up to 5 two-way vehicle movements during the morning peak hour and 4 two-way vehicle movements during the evening peak hour. This does not represent a significant change in traffic conditions and would not result in any severe impacts on the surrounding highway network.
- **Drawing Number F16177/03** retains the same access layout as previously agreed, including a 5 metres wide carriageway with 6 metres kerb radii. A 2 metres wide footway would also be provided to the south, connecting to the existing infrastructure along Albury Road.
- **Drawing Number F16177/03** also confirms that the required visibility splays based on speed survey data could be achieved at the proposed access from a 2.4 metres setback distance to the edge of the carriageway in both directions along Albury Road.
- **Drawing Number F16177/04** confirms that the proposed access layout could accommodate the largest potential vehicle to the site without conflict even if vehicles were to be parked on-street along Albury Road.
- Recommendations have been provided on parking provision and servicing strategy to be included within any future detailed site masterplan. At this stage, it is considered that external refuse collection with a bin storage point would be most suitable.

- There is no evidence of an existing highway safety problem near the site, with no accidents recorded along Albury Road during the latest 5-year study period.

6.4 Based on the findings of this report, it can be concluded that the proposed development would not result in any severe impacts and that safe access could be provided for all users. The proposals therefore comply with current planning policy and subject to the delivery of the access layout shown in **Drawing Number F16177/03**, the Highway Authority should be in a position to provide its support of the latest proposals during any future planning application.

observed speed mph	no. of readings n	n×x	n×x²
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	2	38	722
20	4	80	1600
21	2	42	882
22	5	110	2420
23	2	46	1058
24	6	144	3456
25	9	225	5625
26	12	312	8112
27	5	135	3645
28	14	392	10976
29	9	261	7569
30	6	180	5400
31	5	155	4805
32	3	96	3072
33	5	165	5445
34	3	102	3468
35	1	35	1225
36	1	36	1296
37	0	0	0
38	2	76	2888
39	3	117	4563
40	1	40	1600
41	0	0	0
42	0	0	0
43	0	0	0
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	0	0	0
51	0	0	0
52	0	0	0
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
	n=	Σv=	Σv²=
Total Σ	100	2787	79827

SPEED READINGS FOR SINGLE CARRIAGEWAYS

location: **Albury Road, Little Hadham**
direction: **Northbound**
day: **Friday**
date **17.11.23**
time: **0935 to 1128**

SUMMARY

mean	27.87 mph	44.8 kph
85%ile	32.40 mph	52.1 kph

Step 1:
Mean speed

$$m = \frac{\sum v}{n}$$ *m=* 27.87 **mph**

Step 2:
Finding Value ∑

$$\sum(v\text{-}m)^2 = \sum v^2 - \frac{(\sum v^2)}{n}$$ $\sum(v - m)^2 =$ 2153.31

Step 3:
Standard deviation

$$s = \sqrt{\frac{\sum(v-m)^2}{n-1}}$$ *s=* 4.53 **mph**

Step 4:
85 percentile dry weather spot speed

$$p85 = m + s$$ *p=* 32.40

checks: 85%ile/mean = 1.16
should be 1.1 to 1.25

S.D./mean = 0.16
should be approx 1/6 (0.17)

TABLE 1: ALBURY ROAD, LITTLE HADHAM - NORTHBOUND SPEED SURVEY RESULTS

observed speed mph	no. of readings n	n×x	n×x²
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	1	23	529
24	1	24	576
25	3	75	1875
26	4	104	2704
27	6	162	4374
28	2	56	1568
29	5	145	4205
30	4	120	3600
31	7	217	6727
32	14	448	14336
33	6	198	6534
34	5	170	5780
35	12	420	14700
36	6	216	7776
37	4	148	5476
38	4	152	5776
39	1	39	1521
40	2	80	3200
41	4	164	6724
42	2	84	3528
43	1	43	1849
44	0	0	0
45	1	45	2025
46	1	46	2116
47	1	47	2209
48	1	48	2304
49	1	49	2401
50	0	0	0
51	0	0	0
52	1	52	2704
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
	n=	Σv=	Σv²=
Total Σ	100	3375	117117

SPEED READINGS FOR SINGLE CARRIAGEWAYS

location: **Albury Road, Little Hadham**
direction: **Southbound**
day: **Friday**
date **17.11.23**
time: **0935 to 1128**

SUMMARY

mean	33.75 mph	54.3 kph
85%ile	39.33 mph	63.3 kph

Step 1:
Mean speed

$$m = \frac{\sum v}{n}$$ *m=* 33.75 **mph**

Step 2:
Finding Value ∑

$$\sum(v\text{-}m)^2 = \sum v^2 - \frac{(\sum v^2)}{n}$$ *∑ (v - m)² =* 3210.75

Step 3:
Standard deviation

$$s = \sqrt{\frac{\sum(v-m)^2}{n-1}}$$ *s=* 5.58 **mph**

Step 4:
85 percentile dry weather spot speed

$$p85 = m + s$$ *p=* 39.33

checks: 85%ile/mean = 1.17
should be 1.1 to 1.25

S.D./mean = 0.17
should be approx 1/6 (0.17)

TABLE 2: ALBURY ROAD, LITTLE HADHAM - SOUTHBOUND SPEED SURVEY RESULTS

Vehicle speeds	**32.40** mph				
	52.13 kph				
	14.48 v (m/s)				
	209.70 v^2				
Driver Perception-Reaction time	**1.5** t (s)				
	21.72 v x t				
Deceleration Rate	**0.375** g				
	3.68 d (m/s)				
	7.36 2d				
Gradient	**0.00** a*				
	3.68 d+0.1a				
	7.3575 2(d+0.1a)				
	v t	+	v^2 / 2(d+0.1a)	=	SSD
Stopping Sight Distance (SSD) =	**21.72**	+	**28.50**	=	**50.22**
SSD Bonnet Adjusted (SSD+2.4)**	**52.62**				

Formula: $SSD = vt + v^2/2(d+0.1a)$

	Manual for Streets 2		DMRB	
	Light Vehicles (less than 5% HGVs)	HGVs/Buses (over 5% of total vehicles)	All traffic (Maximum decel.)	All traffic (Desirable decel.)
Perception-Reaction Time (t)	**1.5s**	**1.5s**	**2s**	**2s**
Deceleration Rate ($g = 9.81m/s^2$)	**0.45g**	**0.375g**	**0.375g**	**0.25g**

Enter gradient as positive for uphill towards junction and negative for downhill towards junction

* for simplicity, gradient will be given as zero where details of levels are unavailable and observed gradients are deemed to be insignificant in terms of the effect on vehicle braking

** 2.4 metres added to splay to allow for bonnet length of approaching vehicles

TABLE 3 - VISIBILITY SPLAY CALCULATOR: ALBURY ROAD, LITTLE HADHAM - NORTHBOUND

Vehicle speeds	**39.33**	mph				
	63.28	kph				
	17.58	v (m/s)				
	309.00	v^2				
Driver Perception-Reaction time	**2**	t (s)				
	35.16	v x t				
Deceleration Rate	**0.25**	g				
	2.45	d (m/s)				
	4.91	2d				
Gradient	**0.00**	a*				
	2.45	d+0.1a				
	4.905	2(d+0.1a)				
	v t		+	v^2 / 2(d+0.1a)	=	SSD
Stopping Sight Distance (SSD) =	**35.16**		+	**63.00**	=	**98.15**
SSD Bonnet Adjusted (SSD+2.4)**	**100.55**					

Formula: $SSD = vt + v^2/2(d+0.1a)$

Enter gradient as positive for uphill towards junction and negative for downhill towards junction

	Manual for Streets 2		DMRB	
	Light Vehicles (less than 5% HGVs)	HGVs/Buses (over 5% of total vehicles)	All traffic (Maximum decel.)	All traffic (Desirable decel.)
Perception-Reaction Time (t)	**1.5s**	**1.5s**	**2s**	**2s**
Deceleration Rate ($g = 9.81m/s^2$)	**0.45g**	**0.375g**	**0.375g**	**0.25g**

* for simplicity, gradient will be given as zero where details of levels are unavailable and observed gradients are deemed to be insignificant in terms of the effect on vehicle braking

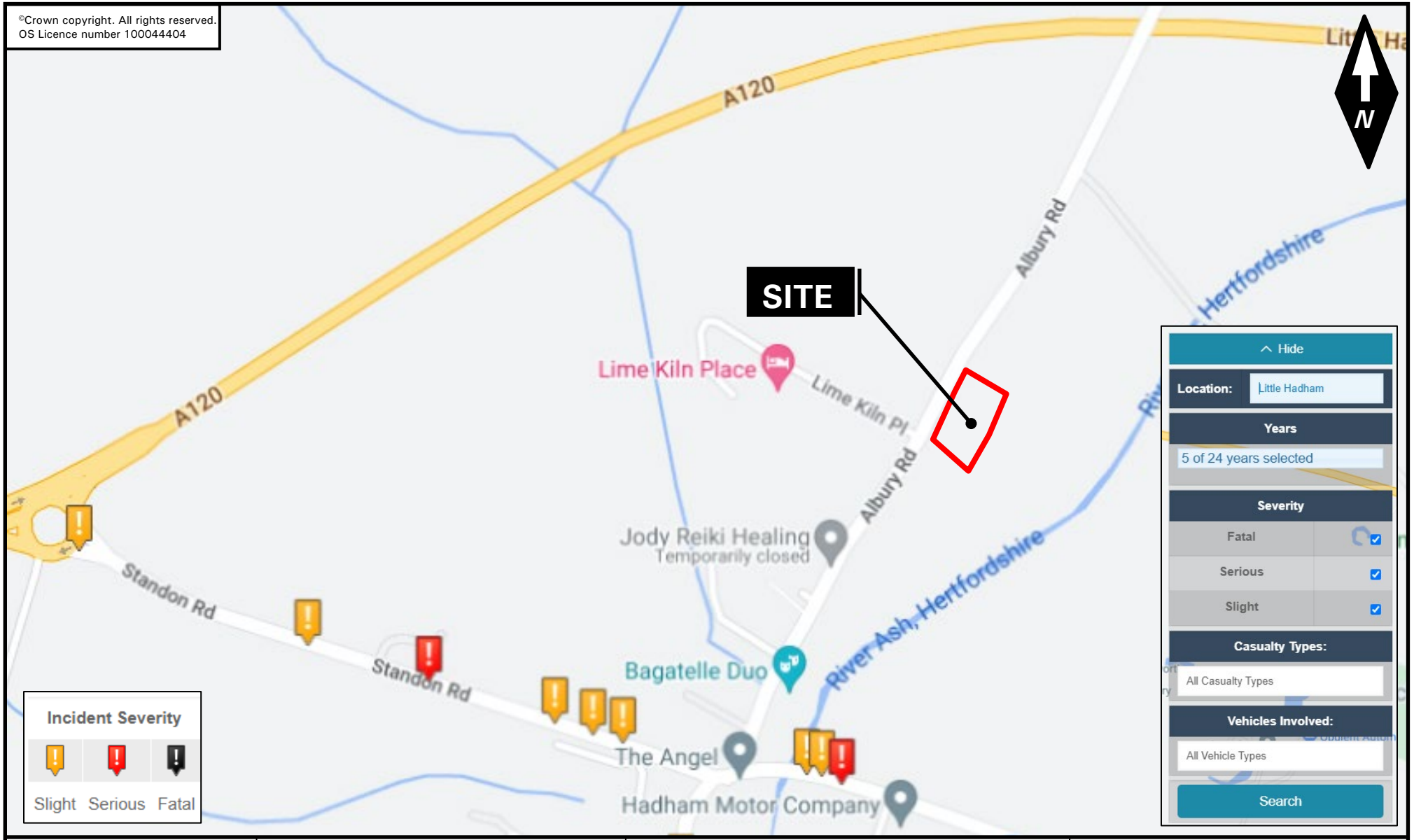
** 2.4 metres added to splay to allow for bonnet length of approaching vehicles

TABLE 4 - VISIBILITY SPLAY CALCULATOR: ALBURY ROAD, LITTLE HADHAM - SOUTHBOUND

Time Period	Trip Rates (per dwelling)		Traffic Generation (up to 7 dwellings)		
	Arrive	Depart	Arrive	Depart	Total
07:00-08:00	0.121	0.212	1	1	2
08:00-09:00	0.212	0.545	1	4	5
09:00-10:00	0.152	0.273	1	2	3
10:00-11:00	0.303	0.273	2	2	4
11:00-12:00	0.212	0.242	1	2	3
12:00-13:00	0.333	0.273	2	2	4
13:00-14:00	0.303	0.303	2	2	4
14:00-15:00	0.364	0.121	3	1	4
15:00-16:00	0.242	0.424	2	3	5
16:00-17:00	0.485	0.182	3	1	4
17:00-18:00	0.333	0.273	2	2	4
18:00-19:00	0.182	0.091	1	1	2
Daily	3.242	3.212	21	23	44

TABLE 5: PROPOSED DWELLINGS DAILY TRAFFIC GENERATION PROFILE (WEEKDAY)

SCALE: Do Not Scale	CLIENT: SWORDERS	JOB TITLE: CHURCH END, LITTLE HADHAM	BANCROFT CONSULTING
DATE: 24.11.23			
DRAWN: WM	TITLE: SITE LOCATION AND ACCESSIBILITY	JOB NUMBER: F16177	FIGURE: 1



SCALE: Do Not Scale	CLIENT: SWORDERS	JOB TITLE: CHURCH END, LITTLE HADHAM	BANCROFT CONSULTING
DATE: 24.11.23	TITLE: 2018 - 2022 ACCIDENT RECORDS (taken from crashmap.co.uk)	JOB NUMBER: F16177	FIGURE: 2
DRAWN: WM			

DRG. No. F16177/03 | REV. No.

6 metres kerb radii

5 metres wide carriageway

2 metres wide footway

VIEWPORT 1: ACCESS LAYOUT (SCALE–1:250@A3)

highway boundary (subject to confirmation)

adjacent field land boundary (under client's ownership)

2.4 x 101 metres visibility splay (taken to edge of the carriageway)

indicative location of on–street parking

bin storage area to allow external refuse collection

2.4 x 53 metres visibility splay (taken to edge of the carriageway)

site boundary

proposed dropped kerb and tactile paving crossing (to tie into existing infrastructure)

proposed 2 metres wide footway to tie into existing Public Footpath

VIEWPORT 2: VISIBILITY ASSESSMENT (SCALE–1:500@A3)

Grid North

W E S

ALBURY ROAD

Tracks

Casita

NOTES:

REV.	DATE	DESCRIPTION	DRN	CHK'D

CLIENT: SWORDERS

CONTRACT: CHURCH END, LITTLE HADHAM

TITLE: PROPOSED ACCESS LAYOUT AND VISIBILITY ASSESSMENT

BANCROFT CONSULTING

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7 Gregory Boulevard
Nottingham
NG7 6LB

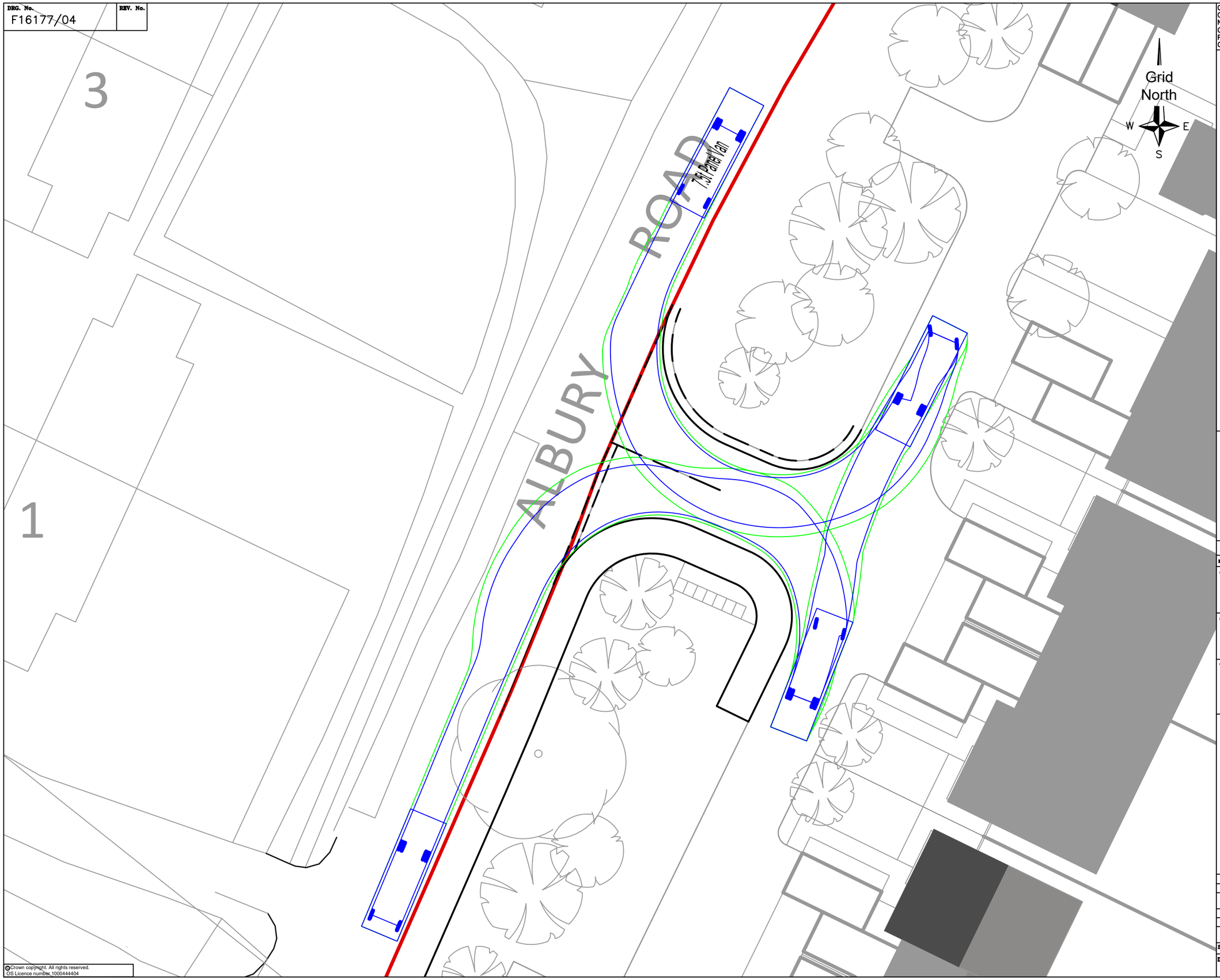
t 0115 9602919
f 0115 9648201
e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
WM	01.12.23
CHECKED BY	
NAME (PRINT)	DATE
CJB	01.12.23

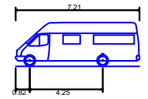
SCALE AS SHOWN | STATUS PRELIMINARY

DRG. NO. F16177/03 | REV

DRG. No. F16177/04 | REV. No.



NOTES:



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

REV.	DATE	DESCRIPTION	DRN	CHK'D

CLIENT

SWORDERS

CONTRACT

CHURCH END,
LITTLE HADHAM

TITLE

SWEPT PATH ASSESSMENT
(7.5 TONNE PANEL VAN)

BANCROFT CONSULTING

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e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
WM	01.12.23
CHECKED BY	
NAME (PRINT)	DATE
CJB	01.12.23

SCALE	AS SHOWN	STATUS	PRELIMINARY

DRG. NO. F16177/04 | REV

APPENDIX A – INDICATIVE SITE LAYOUT PLAN

0 10 20 30 40 50

1.500 Metres

Notes:

N

REVISION	DATE	AMENDMENT

SWORDERS
Agricultural Commercial Residential

SURVEYORS | PLANNERS | ARCHITECTS
HERTFORDSHIRE | NORFOLK |WARWICKSHIRE | SOMERSET
Phone (01279) 771188 | E-mail post@sworders.com

SCHEME:

LAND OFF ALBURY ROAD
LITTLE HADHAM

TITLE:

INDICATIVE LAYOUT

SCALE	PAPER SIZE:	DRAWN BY		CHECKED BY	
1:500	A2L	CW	20/11/2023	TA	20/11/2023

CLIENT NO.
RUA1408

DRAWING No.
223477 PA 00 100

APPENDIX B – RELEVANT EXTRACTS FOM HIGHWAY IMPACT STATEMENT (REVISED APRIL 2017)

4.5.2 The site access layout has been designed in accordance with the guidance outlined in the 6Cs Design Guide to allow access by refuse vehicles (minimum carriageway width of 5 metres). As shown on the latest masterplan, the internal layout design provides a suitable turning head which allows refuse vehicles to enter and exit the site in forward gear.

4.5.3 Furthermore, the site layout allows refuse vehicles to park at the kerbside adjacent to the dwellings or within the maximum carrying distances noted above. Refuse bins should be left either at the kerbside, with suitable measures in place to ensure that they do not obstruct the footway on collection days.

5.0 SUMMARY AND CONCLUSIONS

5.1 Bancroft Consulting were appointed by Sworders to provide highways and transportation advice in respect of proposals to develop 18 dwellings on land adjacent to Albury Road in Little Hadham, Bishops Stortford.

5.2 The main findings of this statement can be summarised as follows:

- The proposed development would result in 14 vehicle movements in the morning peak hour and 11 movements in the evening peak hour. This does not represent a significant change in traffic conditions and therefore does not warrant any further detailed assessment of traffic impact.
- **Drawing Number F16177/02 Revision B** shows the general layout of the proposed exit only access, which meets the requirements for an unadopted shared driveway to serve between 6 and 25 dwellings as set out in the 6C's Design Guide. This includes a 5 metres wide carriageway, with a 2 metres wide footway to the south. The access features 6 metres kerb radii. This access layout design has been deemed appropriate to accommodate all likely vehicles, including refuse collection vehicles.
- **Drawing Number F16177/02 Revision B** also shows how visibility splays of 61 metres to the north and 43 metres to the south are achievable at the proposed access at Albury Road. These splays are in accordance with the observed 85th percentile wet weather vehicle speeds and the requirements of 'Manual for Streets'.

- The parking provision shown on the site masterplan accords with the parking requirements set out in the 'District Plan Appendix – Vehicle Parking Standards' of East Hertfordshire District Council's 'Supplementary Planning Document'.
- The proposed development should generate a minimal increase in demand for travel by non-car modes such as walking, cycling, and public transport. It is considered that these additional trips could be satisfactorily accommodated by the existing infrastructure and no improvements should be required.
- Inspection of the CrashMap website for the surrounding area has revealed that there are no existing highway safety concerns in the vicinity of the site, thus it can be concluded that the proposed development should not lead to any increased risk of collisions.

5.3 In summary, this assessment clearly demonstrates that the proposed development would generate a minimal traffic increases within the surrounding highway network and no significant off-site impact would occur. Residents would also have reasonable opportunities to travel by non-car modes within the existing infrastructure. It is therefore considered that the proposed development would comply with current planning policy and best practice design guidance. Hence, subject to the delivery of the proposed access layout, as shown in **Drawing Number F16177/02 Revision B**, the local highway authority should be in a position to provide their 'in principle' support for any corresponding planning application.

Time Period	Trip Rates (per dwelling)		Traffic Generation of site (18 dwellings)		
	Arrive	Depart	Arrive	Depart	Total
0700-0800	0.121	0.212	2	4	6
0800-0900	0.212	0.545	4	10	14
0900-1000	0.152	0.273	3	5	8
1000-1100	0.303	0.273	5	5	10
1100-1200	0.212	0.242	4	4	8
1200-1300	0.333	0.273	6	5	11
1300-1400	0.303	0.303	5	5	10
1400-1500	0.364	0.121	7	2	9
1500-1600	0.242	0.424	4	8	12
1600-1700	0.485	0.182	9	3	12
1700-1800	0.333	0.273	6	5	11
1800-1900	0.182	0.091	3	2	5
Daily	3.242	3.212	58	58	116

TABLE 1: PROPOSED RESIDENTIAL DEVELOPMENT DAILY TRAFFIC GENERATION PROFILE (WEEKDAY)

DRG. No. F16177/02 | REV. No. B

6 metres kerb radii

5 metres wide carriageway

2 metres wide footway to tie into public right of way

SCALE – 1:250@A3

2.4 x 61 metres visibility splay (taken to edge of carriageway)

adjacent field land boundary (under client's ownership)

Grid North

indicative location of on-street parking

proposed dropped kerbs with tactile paving

2.4 x 43 metres visibility splay (taken to edge of carriageway)

indicative location of on-street parking

2 metres wide footway to tie into public right of way

SCALE – 1:500@A3

NOTES:

LAND BOUNDARIES

- HIGHWAY BOUNDARY AS CONFIRMED BY HERTFORDSHIRE COUNTY COUNCIL'S PLANS
- SITE BOUNDARY
- ADJACENT FIELD UNDER CLIENT'S OWNERSHIP

REV.	DATE	DESCRIPTION	DWN	CHK'D
B	20.04.17	UPDATED WITH MASTERPLAN 216324-SK05	KH	CJB
A	17.01.17	UPDATED WITH MASTERPLAN 216324-SK04	KH	SP

CLIENT: SWORDERS

CONTRACT: CHURCH END, LITTLE HADHAM

TITLE: PROPOSED SITE ACCESS (VISIBILITY TAKEN TO THE EDGE OF CARRIAGEWAY)

bancroftconsulting
transport consultancy services

Bancroft Consulting Ltd
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e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
KH	24.01.17
CHECKED BY	
NAME (PRINT)	DATE
SP	25.01.17

SCALE AS SHOWN | STATUS PRELIMINARY

DRG. NO. F16177/02 | REV B

Notes:

3 x 2 Bedroom
9 x 3 Bedroom
6 x 4 Bedroom

Total - 18 Units

DRAFT

SWORDERS
Agricultural Commercial Residential

SURVEYORS | PLANNERS | ARCHITECTS
THE GATEHOUSE, HADHAM HALL, LITTLE HADHAM, WARE, HERTS SG11 2EB
Phone (01279) 771188 Fax (01279) 771187 E-mail post@sworders.com

SCHEME:

LAND OFF ALBURY ROAD
LITTLE HADHAM

TITLE:

PROPOSED SITE LAYOUT

PAPER SIZE:			
A3L			
SCALE	DRAWN BY		CHECKED BY
1:750	CW	06/12/16	MR 06/12/16

CLIENT NO.	DRAWING No.	REVISION
RUA1408	216324 SK05	/

APPENDIX C – HCC FORMAL COMMENTS DATED 26 MAY 2017 (3/17/0975/OUT)

✓ JOL 30/5/17 MP

O'Connell Joanne

From:	oliver.sowerby@hertfordshire.gov.uk
Sent:	26 May 2017 11:52
To:	Planning
Subject:	Planning application 3/17/0975/OUT - Land Adj To Stanemede Albury Road

Response to Planning application from Hertfordshire County Council (T and CP GDP Order 2015)

District ref: 3/17/0975/OUT
HCC ref: EH/330/2017
HCC received: 08/05/2017
Area manager: Nick Gough
Case officer: Oliver Sowerby

Location
Land Adj To Stanemede Albury Road
Little Hadham
SG11 2DN

Application type
Outline application

Proposal
Outline planning for the erection of up to 18 dwellings, all matters reserves apart from access

Decision
Notice is given under article 18 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 that the Hertfordshire County Council as Highway Authority does not wish to restrict the grant of permission subject to the following conditions:

The Highway Authority does not wish to restrict the grant of planning permission, subject to the following Conditions:

CONDITIONS:

1). Concurrent with the construction of the access, visibility splays of 2.4m X 43m and 61m (to the south and north respectively), shall be provided and permanently maintained in each direction within which there shall be no obstruction to visibility between 600mm and 2m above the carriageway level.

Reason:

To provide adequate visibility for drivers entering or leaving the site.

2) Before commencement of the approved development, the new access serving the development (as shown on drawing number F16177/02 Rev B), shall be completed in accordance with the approved in principle plan and constructed to the specification of the Highway Authority and Local Planning Authority's satisfaction.

Reason:

To ensure the provision of an access appropriate for the development in the interests of highway safety and convenience.

3) Before the development hereby approved is first occupied, all on site vehicular areas, including (but not limited to) internal access roads, forecourts, garages, carports and external parking spaces, shall be accessible, surfaced, marked out and fully completed in accordance with the approved in principle plan and carried out in a manner to the Local Planning Authority's approval. Arrangements shall be made for surface water from the site to be intercepted and disposed of separately so that it does not discharge into the highway.

Reason:

So as to ensure satisfactory parking of vehicles outside highway limits and to minimise danger, obstruction, and inconvenience to users of the highway and of the premises.

4) Best practical means shall be taken at all times to ensure that all vehicles leaving the development site during construction are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. In particular (but without prejudice to the foregoing), efficient means shall be installed prior to commencement of the development and thereafter maintained and employed at all times during construction of the development. This should include cleaning the wheels of all construction vehicles leaving the site.

Reason:

In order to minimise the amount of mud, soil and other materials originating from the site being deposited on the highway, and in the interests of highway safety and visual amenity.

5) Prior to the commencement of the development, a 'Construction Traffic Management Plan' shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority. Thereafter, the construction of the development shall only be carried out in accordance with the approved Plan. The 'Construction Traffic Management Plan' shall identify details of:

• Phasing for the development of the site, including all highway works; • Methods for accessing the site, including construction vehicle numbers and routing; • Location and details of wheel washing facilities; and • Associated parking areas and storage of materials clear of the public highway.

Reason:

To ensure the impact of construction vehicles on the local road network is minimised.

6). Prior to commencement of the development, plans showing the public footpath (number 38) with a minimum safeguarded width of 4m should be supplied (to the satisfaction of the Rights of Way team at Hertfordshire County Council), in order to allow for growth of the hedges, and to avoid a sense of confinement for walkers.

Reason:

To safeguard the rights of the public and in the interest of pedestrian safety.

7/. The proposed 2m footway along Albury Road (as shown on approved in principle drawing number F16177/02 Rev B), should extend from the proposed site access to Right of Way number 38 and incorporate a tactile pedestrian crossing point at the latter.

Reason:

To provide a safe link to the public network.

8). The gradient of access shall not be steeper than 1:20 for the first 5 meters from the edge of the carriageway.

Reason:

So that vehicles may enter and leave the site with the minimum of interference to the free flow and safety of other traffic on the highway.

HIGHWAY INFORMATIVES:

I recommend inclusion of the following Advisory Notes (ANs) to ensure that any works as part of this development are carried out in accordance with the provisions of the Highways Act 1980 and other relevant processes.

AN1) Construction standards: Where works are required within the public highway to facilitate the new vehicle access, the Highway Authority require the construction of such works to be undertaken to their satisfaction and specification, and by a contractor who is authorised to work in the public highway. Before works commence the applicant will need to apply to Hertfordshire County Council Highways team to obtain their permission and requirements. Further information is available via the website: https://beta.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx

AN2) Obstruction of public highway land: It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available via the website: https://beta.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx

AN3) Construction standards for new/amended vehicle access: Where works are required within the public highway to facilitate the new or amended vehicular access, the Highway Authority require the construction of such works to be undertaken to their satisfaction and specification, and by a contractor who is authorised to work in the public highway. If any of the works associated with the construction of the access affects or requires the removal and/or the relocation of any equipment, apparatus or structures (e.g. street name plates, bus stop signs or shelters, statutory authority equipment etc.), the applicant will be required to bear the cost of such removal or alteration. Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and requirements. Further information is available via the website: https://beta.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx

AN4) Construction standards for works within the highway: The applicant is advised that in order to comply with this permission it will be necessary for the developer of the site to enter into an agreement with Hertfordshire County Council as Highway Authority under Section 278 of the Highways Act 1980 to ensure the satisfactory completion of the access and associated road improvements. The construction of such works must be undertaken to the satisfaction and specification of the Highway Authority, and by a contractor who is authorised to work in the public highway. Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and requirements. Further information is available via the website: https://beta.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx

AN5) The Public Right of Way should remain unobstructed by vehicles, machinery, materials, tools and any other aspects of the construction during works. In addition, the following should be noted:

• The safety of the public using the route and any other routes to be used by construction traffic should be a paramount concern during works; safe passage past the site should be maintained at all times; • The condition of the route should not deteriorate as a result of these works. Any adverse effects to the surface from traffic, machinery or materials (especially overspills of cement & concrete), should be made good by the applicant to the satisfaction of this Authority; and • All materials should be removed at the end of the construction and not left on the Highway or Highway verges.

If the above conditions cannot reasonably be achieved then a Temporary Traffic Regulation Order would be required to close the affected route and divert users for any periods necessary to allow works to proceed. A fee would be payable to Hertfordshire County Council for such an order.

AN6) S106 Agreement. A section 106 agreement will be required for the following:

• The provision of a bus shelter on the eastbound carriageway at the Little Hadham/Albury Road junction stop; and • A charge for Residential Development based on the HCC Planning Obligation Guidance (2008) for schemes in the local area that accord with the three CIL tests.

COMMENTS:

The Outline planning for the erection of up to 18 dwellings, all matters reserved apart from access.

Albury Road is an unnumbered classified road, and is a local distributor road in the Hertfordshire road hierarchy.

No accidents are recorded in the immediate vicinity of the site. However, the junction of Albury Road/Little Hadham is duly noted as being a point where several 'slight' classified accidents have been recorded over a five year period.

The speed limit on the site frontage is 30 mph, although immediately to the north of the site changes to the national speed limit.

Public footpath 38 runs alongside the site's southern boundary.

The Highway Authority has reviewed materials prepared in support of the application including the Planning Statement and the Highway Impact Statement.

Access

Access to the site is proposed to be taken from a new priority junction from Albury Road. The Highway Authority note the supporting information, including the speed survey to inform the visibility splays.

The Highway Authority note approved in principle drawing numbers 216324 DWG 100 'PROPOSED SITE LAYOUT' and F16177/02 Rev B 'Proposed Site Access (Visibility Taken to Edge of Carriageway)'.

As shown on drawing number F16177/02 Rev B, the s278 agreement should also include the provision of a 2m footway on Albury Road from the site access to the Right of Way. This should also include the provision of a tactile pedestrian crossing point.

Right of Way

The Rights of Way team notes the proposals which incorporate a Right of Way on the site's southern boundary.

The Rights of Way team would require that a four metre strip to be left for the public footpath, to allow for growth of the hedges, and to avoid a sense of confinement for walkers.

To this end, the Highway Authority recommend the inclusion of a Condition in order to safeguard the operation of the Right of Way.

Trip Generation

The trip generation as set out in the Highway Impact Statement is acceptable.

Sustainability

The proposed development is located on the northern edge of Little Hadham.

The Planning Statement seeks to outline the sustainability of the proposed development site.

Whilst Little Hadham does have some limited community facilities, these are largely located to the south of the Little Hadham lights.

Bus services with fair service patterns may be joined from the A120.

The presentation of the proposed development as a sustainable development is considered optimistic, and one that will most likely be heavily reliant on the private car.

Planning Contributions

Planning Obligations / Community Infrastructure Levy (CIL):

HCC's Planning Obligation Guidance (2008) implements a two-strand approach to planning obligations in order to address the immediate impacts of the new development (first strand), and the cumulative impacts of all development on non-car networks (second strand). The contribution required below will be secured via a s106 agreement.

In accordance with the HCC Planning Obligations Guidance, it should be noted that the cumulative impact of a large number of smaller developments can often be more significant than the impact of a small number of large developments, therefore for smaller developments contributions are sought on a unit rate basis and are pooled where appropriate. For residential developments the Highway Authority seek a standard charge contribution of £625 per one bed unit, £750 per two bed unit, £1125 per three bed unit, and £1500 per four (four+) bed unit. The development schedule as applied against the charging rates produces a figure of £21,375.

The contribution is payable on first occupation of the site. The contribution is to be index linked (SPON) from the date of the s106 agreement to the date of payment. The contribution is to be set aside towards implementing sustainable transport measures. An adjustment may be made for s106 contributions towards the aforementioned bus infrastructure.

An adjustment may be made for s106 contributions towards the aforementioned bus infrastructure.

Summary

The Highway Authority has reviewed the supporting transport materials for the proposed residential development in Little Hadham.

The Highway Authority is content with the access proposals to the residential development.

It is noted that whilst the development will be heavily reliant on the private car, the impact on the wider local highway network is not considered to have a material impact.

In summary, the Highway Authority does not wish to restrict the grant of planning permission, although recommend the inclusion of the aforementioned planning Conditions and Advisory Notes in order to ensure compliance with the provisions of the Highways Act.

Oliver Sowerby

Date 26/05/2017

APPENDIX D – RELEVANT EXTRACTS FROM SITE ACCESS APPRAISAL (AUGUST 2021)

Ruane Construction Ltd

Albury Road, Little Hadham

Site Access Appraisal

August 2021

BANCROFT CONSULTING

bancroftconsulting.co.uk

3.0 RESPONSE TO HCC COMMENTS

Access Strategy

3.1 **Drawing Number F21114/01** contains the proposed site access layout at Albury Road. The drawing demonstrates how the new field access has been designed with consideration of the largest type of vehicle expected to regularly use it. This includes the provision of a 6 metres wide carriageway and includes 12 metres kerb radii with 1:10 tapers over 10 metres to accommodate turning agricultural vehicles on Albury Road. **Drawing Number F21114/01** also contains a visibility assessment at the proposed access. This demonstrates how the access could provide the required visibility splays of 93 metres to the south and 99 metres to the north (based on the 2021 ATC speed data) from a 2.4 metres setback distance to the edge of the carriageway within land that is either within the site boundary or highway boundary.

3.2 It is anticipated that the largest vehicle required to use the new field access would be a tractor and wagon. A review of the available 'Auto Track' vehicle profiles concluded that the largest type of this vehicle is over 19 metres long (exceeding the length of a maximum UK legal length articulated vehicle). Due to this, it is considered that this vehicle accurately represents a 'large agricultural' vehicle as requested by HCC. Therefore, this has been used in the supporting swept path assessments of the proposed site access.

3.3 **Drawing Number F21114/02** contains a swept path assessment of the proposed access layout. The drawing demonstrates how the tractor and wagon vehicle could complete all manoeuvres in and out of the proposed site access at Albury Road, facilitated by the proposed access layout outlined above. This drawing also contains the location of parked cars that could potentially be along Albury Road as per the evidence presented earlier in this report. The details shows how the parked vehicles would not conflict with any of the vehicle turning manoeuvres.

4.0 SUMMARY

4.1 Bancroft Consulting were appointed by Ruane Construction Ltd to provide highways and transportation advice in respect of proposals to develop a new agricultural field access at Albury Road, Little Hadham in East Hertfordshire.

4.2 This Site Access Appraisal has been prepared in support of a live planning application (East Herts District Council Planning Reference: 3/21/0588/FUL). As part of this application HCC provided highways comments requesting further information so that they could reach a recommendation on the proposals. A full copy of these comments is contained at **Appendix B**.

4.3 The objective of this report is therefore to provide the Highway Authority with the required information and to demonstrate how 'safe and suitable' access could be achieved in accordance with Paragraph 110(b) of the NPPF document.

4.4 **Drawing Number F21114/01** contains the proposed site access layout at Albury Road. The drawing demonstrates how the new access has been designed with consideration of the largest type of vehicle expected to regularly use it. This includes the provision of a 6 metres wide carriageway and 12 metres kerb radii with 1:10 tapers over 10 metres to accommodate turning agricultural vehicles.

4.5 **Drawing Number F21114/01** also contains a visibility assessment at the proposed access. This demonstrates how the access could provide the required visibility splays (based on the 2021 ATC speed data) from a 2.4 metres setback distance to the edge of the carriageway within land that is either within the site boundary or highway boundary.

4.6 **Drawing Number F21114/02** contains a swept path assessment of the proposed access layout. The drawing demonstrates how a 19.02 metres long tractor and wagon vehicle could complete all manoeuvres in and out of the proposed access at Albury Road. The drawing also contains the location of parked cars that could potentially be along Albury Road as per the evidence presented within the report. **Drawing Number F21114/02** demonstrates how these parked vehicles would not conflict with any of the vehicle turning manoeuvres.

DRG. No. F21114/01 | REV. No.

highway boundary (as confirmed by Hertfordshire County Council plans)

approximate location of speed limit change and associated signage (may need to be relocated)

12 metres kerb radii with tapers of 1:10 over a distance of 10 metres to accommodate turning agricultural vehicles

indicative location of hedgerow and pedestrian cut through as discussed in Site Access Appraisal

location of on-street parking associated with adjacent dwellings as shown in image below

2.4 x 99 metres visibility splay (taken to edge of the carriageway)

6 metres wide carriageway

trees to be removed

2.4 x 93 metres visibility splay (taken to edge of the carriageway)

applicant's land boundary

Grid North

W E S

NOTES:

REV.	DATE	DESCRIPTION	DRN	CHK'D

CLIENT

RUANE CONSTRUCTION LTD

CONTRACT

ALBURY ROAD,
LITTLE HADHAM

TITLE

PROPOSED ACCESS LAYOUT AND VISIBILITY ASSESSMENT

BANCROFT CONSULTING

Bancroft Consulting Ltd
Jarodale House
7 Gregory Boulevard
Nottingham
NG7 6LB

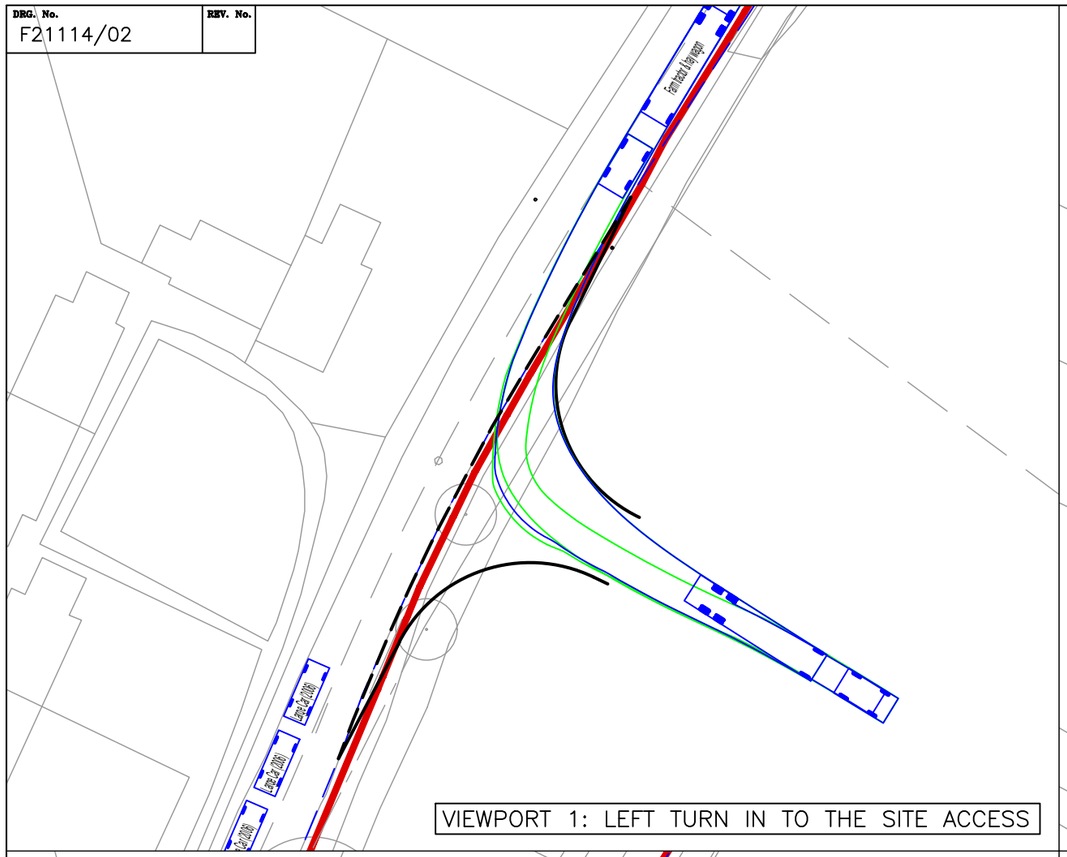
t 0115 9602919
f 0115 9648201
e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
WM	04.08.21
CHECKED BY	
NAME (PRINT)	DATE
RT	04.08.21

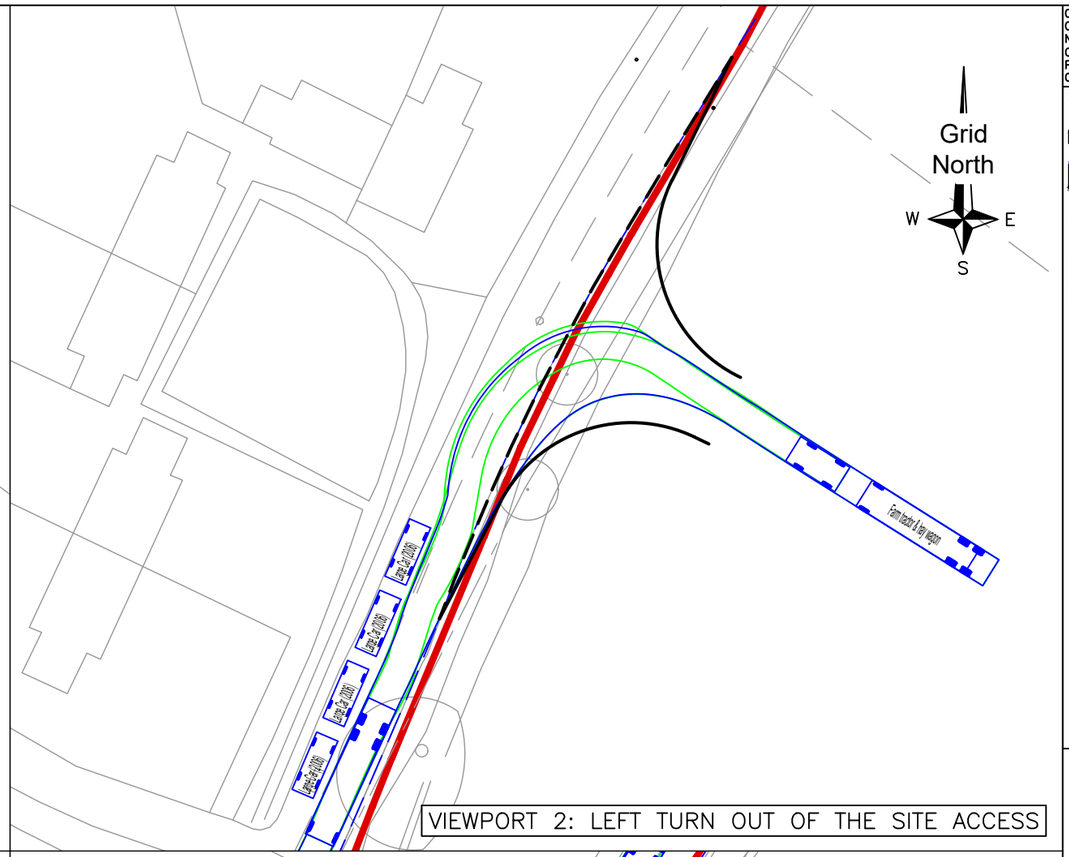
SCALE 1:1000@A3 | STATUS PRELIMINARY

DRG. NO. F21114/01 | REV

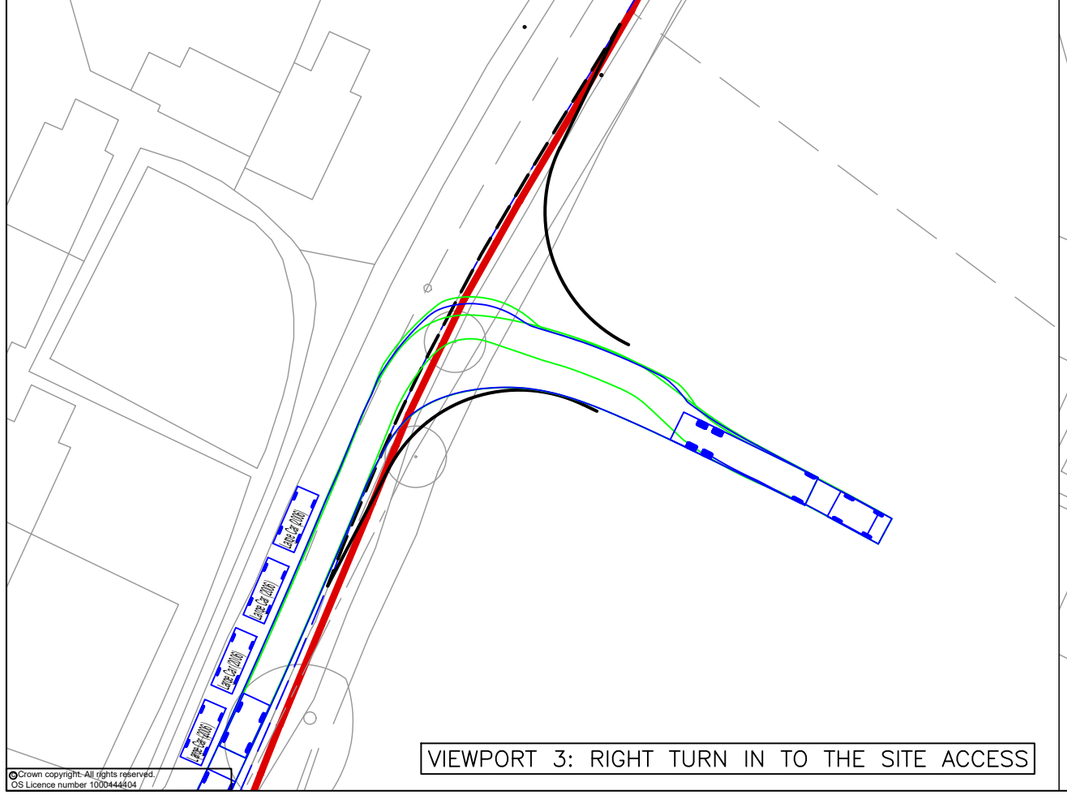
DRG. No. F21114/02 | REV. No.



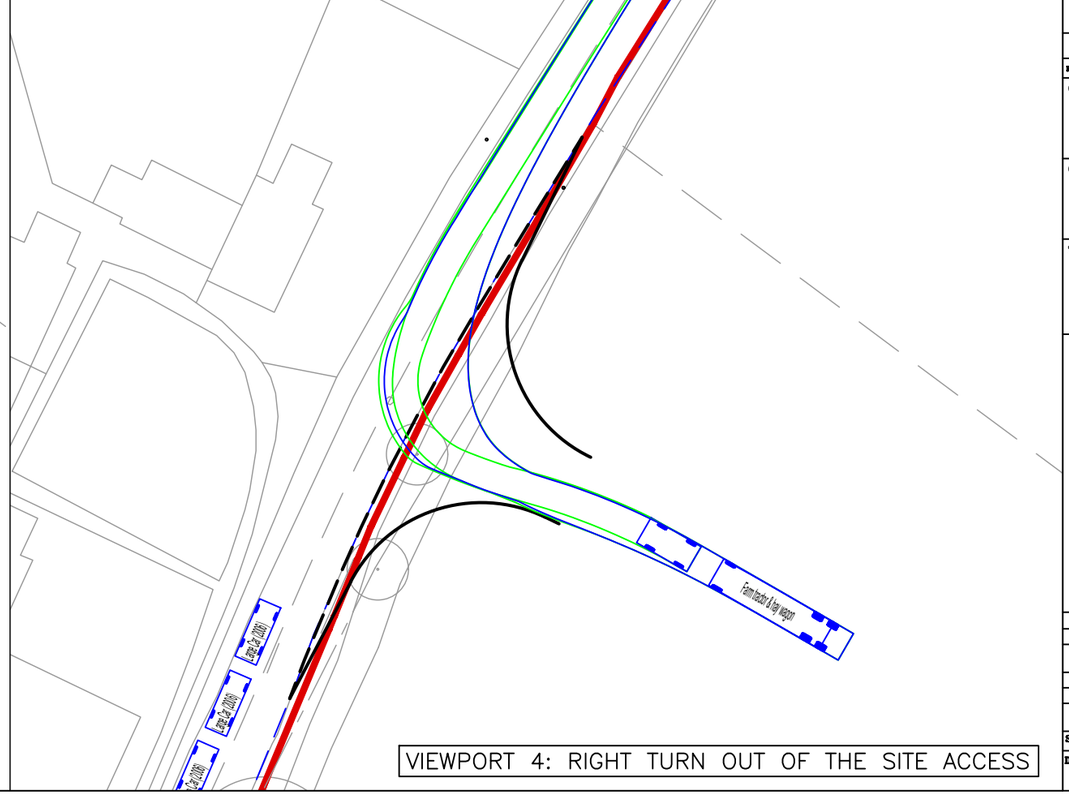
VIEWPORT 1: LEFT TURN IN TO THE SITE ACCESS



VIEWPORT 2: LEFT TURN OUT OF THE SITE ACCESS

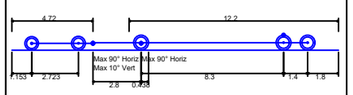


VIEWPORT 3: RIGHT TURN IN TO THE SITE ACCESS



VIEWPORT 4: RIGHT TURN OUT OF THE SITE ACCESS

NOTES:



Farm tractor & hay wagon	
Overall Length	19.020m
Overall Width	2.500m
Overall Body Height	0.438m
Min Body Ground Clearance	0.398m
Max Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.620m

REV.	DATE	DESCRIPTION	DRN	CHK'D

CLIENT

RUANE CONSTRUCTION LTD

CONTRACT

ALBURY ROAD,
LITTLE HADHAM

TITLE

SWEPT PATH ASSESSMENT
(TRACTOR AND HAY WAGON)

BANCROFT CONSULTING

Bancroft Consulting Ltd
Jarodale House
7 Gregory Boulevard
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NG7 6LB

t 0115 9602919
f 0115 9648201
e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
WM	04.08.21
CHECKED BY	
NAME (PRINT)	DATE
RT	04.08.21

SCALE 1:500@A3 | STATUS PRELIMINARY

DRG. NO. F21114/02 | REV

APPENDIX E – HCC FORMAL COMMENTS DATED 23 NOVEMBER 2021 (3/21/0588/FUL)

Mark Youngman
Development Management Group Manager
Hertfordshire County Council
Postal Point CHO242
County Hall
Pegs Lane
Hertford
SG13 8DE

Response to Planning application from Hertfordshire County Council (T and CP GDP Order 2015)

Director of Planning
East Herts District Council
Wallfields
Pegs Lane
Hertford
Hertfordshire
SG13 8EQ

District ref: 3/21/0588/FUL
HCC ref: EH/6457/2021
HCC received: 11 November 2021
Area manager: Matthew Armstrong
Case officer: Paul Marshall

Location
CHURCH END FARM CHURCH END LITTLE HADHAM WARE SG11 2DY

Application type
Full Application

Proposal
AMENDED PROPOSAL
New agricultural field entrance off Albury Road

Decision
Notice is given under article 18 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 that the Hertfordshire County Council as Highway Authority does not wish to restrict the grant of permission subject to the following conditions:

CON1) Prior to the first occupation of the development hereby permitted the vehicular access shall be completed and thereafter retained as shown on drawing number F21114/01 in accordance with details/specifications to be submitted to and approved in writing by the Local Planning Authority in consultation with the highway authority. Prior to use appropriate arrangements shall be made for surface water to be intercepted and disposed of separately so that it does not discharge from or onto the highway carriageway.

Reason: To ensure satisfactory access into the site and avoid carriage of extraneous material or surface water from or onto the highway in accordance with Policy 5 of Hertfordshire's Local Transport Plan (adopted 2018).

HCC as Highway Authority recommends inclusion of the following Advisory Note (AN) to ensure that any works within the highway are carried out in accordance with the provisions of the Highway Act 1980.

AN1) Storage of materials: The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence. Further information is available via the County Council website at: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/business-licences/business-licences.aspx or by telephoning 0300 1234047.

AN2) Obstruction of highway: It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available via the County Council website at: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/business-licences/business-licences.aspx or by telephoning 0300 1234047.

AN3) Debris and deposits on the highway: It is an offence under section 148 of the Highways Act 1980 to deposit compost, dung or other material for dressing land, or any rubbish on a made-up carriageway, or any or other debris on a highway to the interruption of any highway user. Section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development and use thereafter are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. Further information is available by telephoning 0300 1234047.

AN4) Works within the highway (section 278): The applicant is advised that in order to comply with this permission it will be necessary for the developer of the site to enter into an agreement with Hertfordshire County Council as Highway Authority under Section 278 of the Highways Act 1980 to ensure the satisfactory completion of the access and associated road improvements. The construction of such works must be undertaken to the satisfaction and specification of the Highway Authority, and by a contractor who is authorised to work in the public highway. Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and requirements. Further information is available via the County Council website at: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx or by telephoning 0300 1234047.

COMMENTS
The proposals are for a new agricultural field entrance off Albury Road. Albury Road is maintainable by the highway authority and is unclassified and provides a local access function in the road hierarchy. The vehicle speeds past this site are limited to 30 mph. There have been no recorded accidents in a rolling 5-year period.

Policy Review:
The key documents used to assess the application are
- Manual for Streets 2007
- National Planning Policy Framework (July 2021);
- Hertfordshire County Council's (HCC) Local Transport Plan-4 [2018-2031, May2018]

- Roads in Hertfordshire Design Guide 3rd Edition -2011

PLANNING HISTORY
The application site has extensive previous planning history

DRAWINGS
The Highway Authority note the submission of materials in support of the planning application, including drawing numbers: F21114 / 01, 221003 PL 00 A- B, and Planning Statement

TRACKING
Drawing F21112/02 (Viewpoint 2 left turn out of the site) the tracked vehicle continues to impinge on the area opposite the proposed access often used for parking. In reviewing this again and taking account of the 85th percentile speeds (raw data) I am now of the opinion a refusal based on the likely low frequency of an agricultural vehicle not being able to turn left onto Albury Road due to a parked vehicle would be inappropriate.

SPEED SURVEY / ATC
It is recognised that the speed survey could not be completed due to the road works which is unfortunate. The applicant has provided the raw speed data to enable a more in-depth review of the speed data. I am satisfied that the 85th percentile speeds are within the posted speed limits. In respect of the ATC counters southbound position being slightly further north, as I mentioned in my previous comments. The raw speed data has demonstrated this would have made a difference, however, not enough to base a refusal on.

VISIBILITY SPLAYS
It is recognised the visibility splays are based on the ATC data and the 85th percentile speeds. However, the northern section of Albury Road is a 60mph speed limit and would therefore be measured against DMRB standards of 215m for a 60mph carriageway. However, the 85th percentile has demonstrated southbound and northbound speeds are below the posted speed limits. Therefore, a visibility splay of 99 meters to the north is acceptable (see drawing Number F21114/01) with the proviso that the applicant maintains the vegetation to keep the visibility splay continuously at 99 meters.

CONCLUSION
The above now represents an adequate and safe agricultiural access from Albury Road. However, I would like to repeat again that the applicant states as part of the reason for a new access was the following:

Section 2.3 of the Planning Statement
“due to the realignment of the Albury Road following the Little Hadham A120 bypass scheme, the turning into this field from the Albury Road is now too steep to manoeuvre agricultural vehicles and risks the machinery tipping over”

The Highway Authority Major Projects Team have stated that the applicant has not contacted them to request any changes to the permitted scheme in respect of the problem the realignment of Albury Road has caused to the existing access. Should the landowner have requested changes then HCC

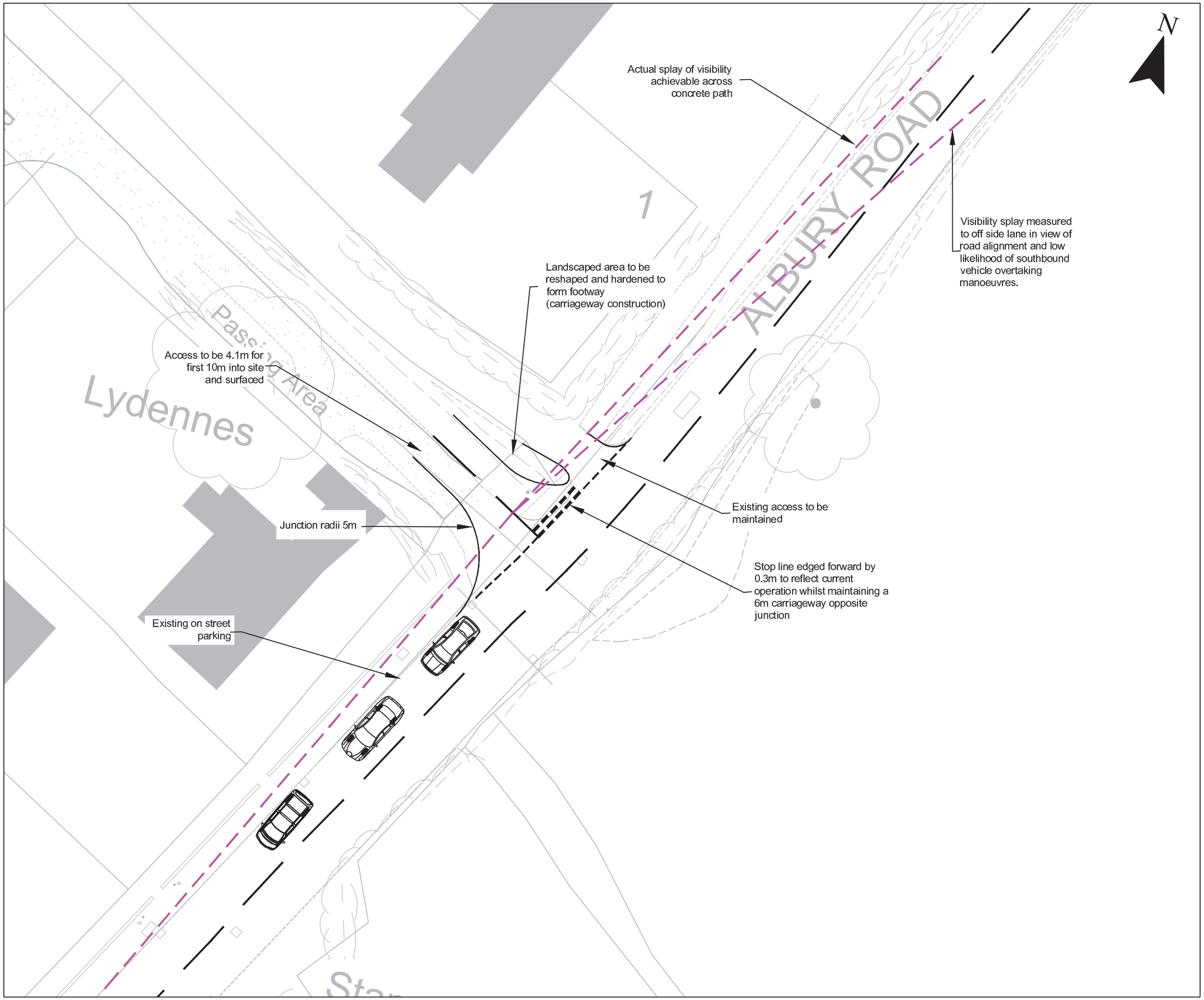
would have considered any reasonable adjustments to the scheme. This may well have mitigated the need for a new access.

Hertfordshire County Council as Highway Authority has considered that the proposal would not have an unreasonable impact on the safety and operation of the adjoining highways and consequently have no objections on highway grounds subject to the above recommended planning conditions and highway informative.

Signed
Paul Marshall

24 November 2021

APPENDIX F – LIME KILN PLACE APPROVED ACCESS DRAWING (13/17/1399/FUL)



NOTES

Rev A - 'Actual' visibility Splay to the north added
Rev B - Notes amended

LEGEND

2.4m x 43m Visibility splay

SLR global environmental solutions
WATERHOUSE BUSINESS CENTRE
UNIT 77, 2 CROMAR WAY
CHELMSFORD
ESSEX CM1 2QE
T: 01245 392170
F: 01245 392171
www.slrconsulting.com

LITTLE HADHAM

TRANSPORT

PROPOSED ACCESS

SK01b

Scale: 1:250 @ A3

Date: APRIL 2017

SK01b.dwg

APPENDIX G – TRICS OUTPUT DATA (EXTRACTED FROM THE 2018 REPORT AND PREVIOUSLY AGREED WITH HCC)

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	2 days
10	WALES		
	PS	POWYS	1 days
11	SCOTLAND		
	HI	HIGHLAND	1 days
	PK	PERTH & KINROSS	1 days

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

Secondary Filtering 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 36 (units:)
Range Selected by User:	9 to 36 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 13/11/15

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	4 days
Tuesday	5 days
Wednesday	6 days
Thursday	5 days
Friday	3 days

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

Selected survey types:

Manual count	23 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.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	1

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.

Selected Location Sub Categories:

Residential Zone	20
Village	1
No Sub Category	2

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.

Secondary Filtering selection:

Use Class:

C3	23 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	8 days
10,001 to 15,000	6 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	2 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	3 days
25,001 to 50,000	4 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
100,001 to 125,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	4 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	9 days
1.1 to 1.5	14 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.

Travel Plan:

Yes	1 days
No	22 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.

PTAL Rating:

No PTAL Present	23 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CH-03-A-05 DETACHED CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

2 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

3 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
HURDSFIELD
MACCLESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY 24/11/14 Survey Type: MANUAL

4 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

5 HC-03-A-17 HOUSES & FLATS HAMPSHIRE
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

6 HI-03-A-13 HOUSING HIGHLAND
KINGSMILLS ROAD

INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY 21/05/09 Survey Type: MANUAL

7 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

9 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

10 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY

THETFORD
Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

11 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

12 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET

YORK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

13 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

14 PK-03-A-01 DETAC. & BUNGALOWS PERTH & KINROSS
TULLYLUMB TERRACE
GORNHILL
PERTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD

WELSHPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

16 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

17 SH-03-A-03 DETATCHED SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

18 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD

SHREWSBURY
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

19 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
NORTHFIELD
BRIDGWATER
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

20 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
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

21 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22	TW-03-A-03	MIXED HOUSES		TYNE & WEAR
	STATION ROAD			
	BACKWORTH			
	NEAR NEWCASTLE			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Number of dwellings:		33	
	Survey date: FRIDAY		13/11/15	Survey Type: MANUAL
23	WK-03-A-02	BUNGALOWS		WARWICKSHIRE
	NARBERTH WAY			
	POTTERS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		17	
	Survey date: THURSDAY		17/10/13	Survey 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.

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00
15th Percentile = No. 20 HC-03-A-17 Tot: 0.306
85th Percentile = No. 4 WK-03-A-02 Tot: 0.941

Median Values		Mean Values	
Arrivals:	0.188	Arrivals:	0.206
Departures:	0.438	Departures:	0.428
Totals:	0.626	Totals:	0.634

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	PK-03-A-01	DETAC. & BUNGA	PERTH	PERTH & KINROSS	36	Wed	11/05/11	0.861	0.667	1.528	3.36
2	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.400	0.933	1.333	3.00
3	HI-03-A-13	HOUSING	INVERNESS	HIGHLAND	9	Thu	21/05/09	0.556	0.444	1.000	3.11
4	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.588	0.353	0.941	2.06
5	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.138	0.759	0.897	2.79
6	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.235	0.588	0.823	3.71
7	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	0.212	0.545	0.757	4.00
8	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.200	0.500	0.700	3.00
9	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	0.250	0.417	0.667	1.33
10	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.500	0.643	2.86
11	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	0.455	0.637	4.73
12	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.188	0.438	0.626	2.38
13	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.000	0.565	0.565	6.26
14	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	0.182	0.333	0.515	3.97
15	PS-03-A-02	DETACHED/SEMI-	WELSHPOOL	POWYS	28	Mon	11/05/15	0.179	0.321	0.500	2.32
16	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.087	0.391	0.478	1.96
17	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.148	0.296	0.444	2.37
18	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.045	0.364	0.409	1.09
19	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.048	0.286	0.334	1.14
20	HC-03-A-17	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	0.000	0.306	0.306	3.78
21	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	0.000	0.222	0.222	4.17
22	NF-03-A-03	DETACHED HOUSE	THETFORD	NORFOLK	10	Wed	16/09/15	0.100	0.100	0.200	3.70
23	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	0.000	0.063	0.062	2.00

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	2 days
10	WALES		
	PS	POWYS	1 days
11	SCOTLAND		
	HI	HIGHLAND	1 days
	PK	PERTH & KINROSS	1 days

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

Secondary Filtering 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 36 (units:)
Range Selected by User:	9 to 36 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 13/11/15

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	4 days
Tuesday	5 days
Wednesday	6 days
Thursday	5 days
Friday	3 days

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

Selected survey types:

Manual count	23 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.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	1

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.

Selected Location Sub Categories:

Residential Zone	20
Village	1
No Sub Category	2

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.

Secondary Filtering selection:

Use Class:

C3	23 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	8 days
10,001 to 15,000	6 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	2 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	3 days
25,001 to 50,000	4 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
100,001 to 125,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	4 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	9 days
1.1 to 1.5	14 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.

Travel Plan:

Yes	1 days
No	22 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.

PTAL Rating:

No PTAL Present	23 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CH-03-A-05 DETACHED CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

2 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

3 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
HURDSFIELD
MACCLESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY 24/11/14 Survey Type: MANUAL

4 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

5 HC-03-A-17 HOUSES & FLATS HAMPSHIRE
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

6 HI-03-A-13 HOUSING HIGHLAND
KINGSMILLS ROAD

INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY 21/05/09 Survey Type: MANUAL

7 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

9 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

10 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY

THETFORD
Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

11 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

12 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET

YORK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

13 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

14 PK-03-A-01 DETAC. & BUNGALOWS PERTH & KINROSS
TULLYLUMB TERRACE
GORNHILL
PERTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD

WELSHPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

16 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

17 SH-03-A-03 DETATCHED SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

18 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD

SHREWSBURY
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

19 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
NORTHFIELD
BRIDGWATER
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

20 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
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

21 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22	TW-03-A-03	MIXED HOUSES		TYNE & WEAR
	STATION ROAD			
	BACKWORTH			
	NEAR NEWCASTLE			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Number of dwellings:		33	
	Survey date: FRIDAY		13/11/15	Survey Type: MANUAL
23	WK-03-A-02	BUNGALOWS		WARWICKSHIRE
	NARBERTH WAY			
	POTTERS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		17	
	Survey date: THURSDAY		17/10/13	Survey 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.

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS Time Range: 17:00-18:00
15th Percentile = No. 20 LN-03-A-03 Tot: 0.318
85th Percentile = No. 4 CH-03-A-05 Tot: 0.765

Median Values		Mean Values	
Arrivals:	0.448	Arrivals:	0.364
Departures:	0.103	Departures:	0.202
Totals:	0.551	Totals:	0.565

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.700	0.600	1.300	3.00
2	PK-03-A-01	DETAC. & BUNGA	PERTH	PERTH & KINROSS	36	Wed	11/05/11	0.639	0.611	1.250	3.36
3	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.545	0.273	0.818	4.73
4	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	0.353	0.412	0.765	3.71
5	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	0.500	0.250	0.750	1.33
6	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	0.609	0.130	0.739	6.26
7	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	0.478	0.261	0.739	1.96
8	HI-03-A-13	HOUSING	INVERNESS	HIGHLAND	9	Thu	21/05/09	0.333	0.333	0.666	3.11
9	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	0.333	0.273	0.606	4.00
10	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	0.389	0.167	0.556	4.17
11	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.407	0.148	0.555	2.37
12	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	0.448	0.103	0.551	2.79
13	HC-03-A-17	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	0.306	0.222	0.528	3.78
14	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.063	0.500	2.38
15	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.286	0.214	0.500	2.86
16	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	0.333	0.152	0.485	3.97
17	NF-03-A-03	DETACHED HOUSE	THETFORD	NORFOLK	10	Wed	16/09/15	0.400	0.000	0.400	3.70
18	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.200	0.200	0.400	3.00
19	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	0.286	0.048	0.334	1.14
20	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.273	0.045	0.318	1.09
21	PS-03-A-02	DETACHED/SEMI-	WELSHPOOL	POWYS	28	Mon	11/05/15	0.107	0.071	0.178	2.32
22	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	0.000	0.063	0.062	2.00
23	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	0.000	0.000	0.000	2.06

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	2 days
10	WALES		
	PS	POWYS	1 days
11	SCOTLAND		
	HI	HIGHLAND	1 days
	PK	PERTH & KINROSS	1 days

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

Secondary Filtering 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 36 (units:)
Range Selected by User:	9 to 36 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 13/11/15

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	4 days
Tuesday	5 days
Wednesday	6 days
Thursday	5 days
Friday	3 days

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

Selected survey types:

Manual count	23 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.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	1

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.

Selected Location Sub Categories:

Residential Zone	20
Village	1
No Sub Category	2

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.

Secondary Filtering selection:

Use Class:

C3	23 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	8 days
10,001 to 15,000	6 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	2 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	3 days
25,001 to 50,000	4 days
50,001 to 75,000	3 days
75,001 to 100,000	5 days
100,001 to 125,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	4 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	9 days
1.1 to 1.5	14 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.

Travel Plan:

Yes	1 days
No	22 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.

PTAL Rating:

No PTAL Present	23 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CH-03-A-05 DETACHED CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

2 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

3 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
HURDSFIELD
MACCLESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY 24/11/14 Survey Type: MANUAL

4 GM-03-A-10 DETACHED/SEMI GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

5 HC-03-A-17 HOUSES & FLATS HAMPSHIRE
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

6 HI-03-A-13 HOUSING HIGHLAND
KINGSMILLS ROAD

INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY 21/05/09 Survey Type: MANUAL

7 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

9 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

10 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY

THETFORD
Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

11 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

12 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET

YORK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

13 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

14 PK-03-A-01 DETAC. & BUNGALOWS PERTH & KINROSS
TULLYLUMB TERRACE
GORNHILL
PERTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD

WELSHPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

16 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

17 SH-03-A-03 DETATCHED SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

18 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD

SHREWSBURY
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

19 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
NORTHFIELD
BRIDGWATER
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

20 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
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

21 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 TW-03-A-03 MIXED HOUSES TYNE & WEAR
STATION ROAD
BACKWORTH
NEAR NEWCASTLE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 33
Survey date: FRIDAY 13/11/15 Survey Type: MANUAL

23 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
POTTERS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: THURSDAY 17/10/13 Survey 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.

Bancroft Consulting Jarodale House, Sherwood Nottingham Licence No: 539501

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS Time Range: 07:00-19:00
15th Percentile = No. 20 LN-03-A-03 Tot: 2.909
85th Percentile = No. 4 TW-03-A-03 Tot: 6.454

Median Values		Mean Values	
Arrivals:	2.435	Arrivals:	2.511
Departures:	2.348	Departures:	2.610
Totals:	4.783	Totals:	5.121

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	PK-03-A-01	DETAC. & BUNGA	PERTH	PERTH & KINROSS	36	Wed	11/05/11	4.056	3.944	8.000	3.36
2	HI-03-A-13	HOUSING	INVERNESS	HIGHLAND	9	Thu	21/05/09	3.778	4.111	7.889	3.11
3	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	3.364	4.000	7.364	4.73
4	TW-03-A-03	MIXED HOUSES	NEAR NEWCASTLE	TYNE & WEAR	33	Fri	13/11/15	3.242	3.212	6.454	4.00
5	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	3.063	3.313	6.374	2.38
6	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	3.000	3.267	6.267	3.00
7	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	3.074	3.148	6.222	2.37
8	SH-03-A-03	DETATCHED	SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	3.000	3.100	6.100	3.00
9	CH-03-A-09	TERRACED HOUSE	MACCLESFIELD	CHESHIRE	24	Mon	24/11/14	2.917	3.083	6.000	1.33
10	CH-03-A-05	DETACHED	CREWE	CHESHIRE	17	Tue	14/10/08	2.706	3.294	6.000	3.71
11	NY-03-A-07	DETACHED & SEM	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Tue	18/10/11	2.870	2.304	5.174	1.96
12	NY-03-A-11	PRIVATE HOUSIN	BOROUGHBRIDGE	NORTH YORKSHIRE	23	Wed	18/09/13	2.435	2.348	4.783	6.26
13	SM-03-A-01	DETACHED & SEM	BRIDGWATER	SOMERSET	33	Thu	24/09/15	2.394	2.333	4.727	3.97
14	NF-03-A-03	DETACHED HOUSE	THETFORD	NORFOLK	10	Wed	16/09/15	2.400	2.300	4.700	3.70
15	WK-03-A-02	BUNGALOWS	COVENTRY	WARWICKSHIRE	17	Thu	17/10/13	2.294	2.294	4.588	2.06
16	GM-03-A-10	DETACHED/SEMI	MANCHESTER	GREATER MANCHESTER	29	Wed	12/10/11	2.069	2.241	4.310	2.79
17	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	2.000	2.286	4.286	2.86
18	PS-03-A-02	DETACHED/SEMI-	WELSHPOOL	POWYS	28	Mon	11/05/15	2.107	2.071	4.178	2.32
19	SF-03-A-05	DETACHED HOUSE	BURY ST EDMUNDS	SUFFOLK	18	Wed	09/09/15	1.722	1.889	3.611	4.17
20	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	1.318	1.591	2.909	1.09
21	HC-03-A-17	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	36	Thu	12/11/15	1.472	1.389	2.861	3.78
22	NY-03-A-08	TERRACED HOUSE	YORK	NORTH YORKSHIRE	21	Mon	16/09/13	1.476	1.381	2.857	1.14
23	SH-03-A-06	BUNGALOWS	SHREWSBURY	SHROPSHIRE	16	Thu	22/05/14	1.000	1.125	2.125	2.00

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

Site Reference:	TW-03-A-03
Created:	Version: 7.3.3 14/04/16
Latitude/Longitude:	55.04274, -1.52761
Land Use Type:	03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Region/Area	NORTHTYNE & WEAR
Version/Creation Date:	7.3.3 14/04/16
Description:	MIXED HOUSES
Street:	STATION ROAD
District:	BACKWORTH
Town:	NEAR NEWCASTLE
Post Code:	NE27 0SH
Planning Authority:	
Location:	Neighbourhood Centre (PPS6 Local Centre)
Location Sub Category:	Village
Use Class:	C3
Population within 500m:	909
Population within 1 Mile:	5,001 to 10,000
Population within 5 Miles:	250,001 to 500,000
Car ownership within 5 Miles:	0.6 to 1.0

Public Transport Provision Summary

Day	Period	Total buses/trams within 400m	Total Trains within 1000m	Total Services
Monday-Friday	0700-1900	64		64
Monday-Friday	0700-1000	14		14
Monday-Friday	1600-1900	14		14
Saturday	0700-1900	62		62
Sunday	0700-1900	18		18

Is site associated with a travel plan:	No
If not, are there any plans to implement a Travel Plan in the future?	No
Is survey data available before the implementation of the Travel Plan?	
Is the location of the site hilly or flat:	Flat
Urban Regeneration:	No
Site area	1.82 hect
Number of dwellings	33
Housing Density	20.89
No. of developments for this Site:	1
No. of survey Days for this Site:	1

Comments

This site is located in the village of Backworth, between Newcastle and Whitley Bay. The B1322 passes through the village, heading west towards the junction with the A19 and south towards the junction with the A186.
The site is bordered by further residential streets to the east, with Backworth Park Primary School to the west and open land to the south. To the north is the village's main street, Church Road.

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
4. If yes to question 3, where it is necessary to cross a road between the development and the stop, is there a conveniently placed crossing facility? : Yes

Design features encouraging non-car modes

12. Pedestrians

The site has footpaths leading to the wider community.

13. Pedal cycles

None

14. Public transport

The site is located within easy walking distance of bus stops leading to the wider community.

Design features encouraging non-car modes

Road Network Distance to Local Developments	
Year of Analysis	2016
Nearest Primary School	0.6 kilometres
Nearest Secondary School	4.4 kilometres
Nearest Local Shop/Corner Shop	0.6 kilometres
Nearest Main Supermarket	1.6 kilometres
Nearest Doctors Surgery	2.1 kilometres
Nearest Hospital with Minor Injuries/A & E	6.1 kilometres
Nearest Sports/Leisure Centre	4.2 kilometres

Census Data	
Year of Census	2011
Census Output Area/Data Zone	E00166161
Number of people employed within Census Output Area	145
Number of households within Census Output Area	125
Number of people living within Census Output Area	275
Area of Census Output Area (hectares)	242.00
Population density within Census Output Area (per hectare)	1.10

Site reference:	TW-03-A-03
Trade name:	CLAVERLEY DRIVE
Site area (h/a):	1.82
Site area excluding public open spaces (h/a):	1.58
Open since	1990
Occupied dwellings	33
Unoccupied dwellings	0
Total dwellings	33
Housing Density	20.89
Privately owned units	33
Non-Privately owned units	0
Name of nearest site	RIDLEY GARDENS
Distance to nearest similar site	2 Km
Average Bedrooms Per Unit	3.39
No of units with 1 bedroom	0
No of units with 2 bedrooms	0
No of units with 3 bedrooms	20
No of units with 4+ bedrooms	13
Total bedrooms	112
Unit Density	18.1

Residential unit types

	Private	Non-Private	Total
Detached houses	15	0	15
Semi-detached houses	6	0	6
Terraced houses	0	0	0
Bungalows	12	0	12
Flats (in houses)	0	0	0
Flats (in blocks)	0	0	0
Town Houses	0	0	0
Other (specify below)			

Other:

On-Site parking

Total no. of parking spaces	132
Parking Spaces Per Hectare	72.527
Parking Spaces Per dwelling	4.000
Arrivals Per Parking Space	0.81

Number of spaces

On-Street	45
Driveway	54
Garages	33
Communal parking spaces	0

General Comments on Parking

All properties on site have their own drive and may have their own garages as well.

Types of servicing vehicle parking taking place

on-site (internal, within specified bays or otherwise)
Yes
off-site (on-street, in designated loading/servicing bays)
No
off-site (in restricted areas e.g. double yellow lines)
No

Off-Site parking details

Is there off-site parking available
Yes
Off-Site parking included in the counts
Yes
Free On-Street parking available nearby
Yes
If yes, considered easy to find a space
Yes
If prepared to pay, easy to find somewhere to park off-site all day
Yes

Parking restrictions

Area subject to parking restrictions (controlled parking zone - CPZ)
No

Off-Street parking

Off-Street parking available NO

Park & Ride

Park & Ride Type Facility providing relevant means of accessing the site
No

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Survey type: Manual Count
AM weather: Cold and Light Rain
PM weather: Cold and Light Rain
Initial car park occupancy: 34 Final car park occupancy: 35
BRACKETED ACCUMULATION FIGURES ARE NOT ABSOLUTE
Parking Capacity 27% (132 On-Site Spaces)

Data proportions in %

Motor cars	80	Motor cycles	0	Public service	0
Light goods	12	OGV (1)	3	OGV (2)	1
				Taxis	4

Time	Arr 107	Dep 106	Totals	Parking Accum
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	4	7	11	31
08:00-09:00	7	18	25	20
09:00-10:00	5	9	14	16
10:00-11:00	10	9	19	17
11:00-12:00	7	8	15	16
12:00-13:00	11	9	20	18
13:00-14:00	10	10	20	18
14:00-15:00	12	4	16	26
15:00-16:00	8	14	22	20
16:00-17:00	16	6	22	30
17:00-18:00	11	9	20	32
18:00-19:00	6	3	9	35
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Comments

No PSV's or motorcycles visited the site during this survey.
OGV's visiting the site parked in the general parking area on site.

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: OGV

Data proportions in % OGV (1) 75 OGV (2) 25

1 occupant per OGV is assumed, and included in the vehicle occupants count

Time	Arr 4	Dep 4	Totals	Accumulation
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	1	1	2	(0)
08:00-09:00	1	1	2	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	2	2	4	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	0	0	0	(0)
13:00-14:00	0	0	0	(0)
14:00-15:00	0	0	0	(0)
15:00-16:00	0	0	0	(0)
16:00-17:00	0	0	0	(0)
17:00-18:00	0	0	0	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Taxis

Time	Arr 4	Dep 4	Totals	Accumulation
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	0	0	0	(0)
08:00-09:00	0	0	0	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	1	1	2	(0)
13:00-14:00	1	0	1	(1)
14:00-15:00	1	1	2	(1)
15:00-16:00	0	1	1	(0)
16:00-17:00	1	0	1	(1)
17:00-18:00	0	1	1	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Cars

Time	Arr 86	Dep 85	Totals	Accumulation
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	2	5	7	(-3)
08:00-09:00	4	15	19	(-14)
09:00-10:00	5	9	14	(-18)
10:00-11:00	8	7	15	(-17)
11:00-12:00	6	7	13	(-18)
12:00-13:00	7	5	12	(-16)
13:00-14:00	8	9	17	(-17)
14:00-15:00	11	3	14	(-9)
15:00-16:00	7	12	19	(-14)
16:00-17:00	14	5	19	(-5)
17:00-18:00	8	5	13	(-2)
18:00-19:00	6	3	9	(1)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: LGV

Time	Arr 13	Dep 13	Totals	Accumulation
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	1	1	2	(0)
08:00-09:00	2	2	4	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	1	1	2	(0)
12:00-13:00	3	3	6	(0)
13:00-14:00	1	1	2	(0)
14:00-15:00	0	0	0	(0)
15:00-16:00	1	1	2	(0)
16:00-17:00	1	1	2	(0)
17:00-18:00	3	3	6	(0)
18:00-19:00	0	0	0	(0)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Site reference: TW-03-A-03 Survey date: 13/11/15 Day of week: Friday

Vehicles surveyed: Cycles

Time	Arr 2	Dep 1	Totals	Accumulation
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	0	0	0	(0)
08:00-09:00	0	0	0	(0)
09:00-10:00	0	0	0	(0)
10:00-11:00	0	0	0	(0)
11:00-12:00	0	0	0	(0)
12:00-13:00	0	0	0	(0)
13:00-14:00	0	1	1	(-1)
14:00-15:00	0	0	0	(-1)
15:00-16:00	0	0	0	(-1)
16:00-17:00	1	0	1	(0)
17:00-18:00	0	0	0	(0)
18:00-19:00	1	0	1	(1)
19:00-20:00				
20:00-21:00				
21:00-22:00				
22:00-23:00				
23:00-24:00				

Calculation Reference: AUDIT-539501-170106-0128

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:
09 NORTH
TW TYNE & WEAR 1 days

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

Secondary Filtering 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: 33 to 33 (units:)
Range Selected by User: 9 to 36 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 13/11/15

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:
Friday 1 days

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

Selected survey types:
Manual count 1 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.

Selected Locations:
Neighbourhood Centre (PPS6 Local Centre) 1

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.

Selected Location Sub Categories:
Village 1

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.

Secondary Filtering selection:

Use Class:
C3 1 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:
5,001 to 10,000 1 days

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

Population within 5 miles:
250,001 to 500,000 1 days

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

Car ownership within 5 miles:
0.6 to 1.0 1 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.

Travel Plan:
No 1 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.

PTAL Rating:
No PTAL Present 1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 TW-03-A-03 MIXED HOUSES TYNE & WEAR
STATION ROAD
BACKWORTH
NEAR NEWCASTLE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 33
Survey date: FRIDAY 13/11/15 Survey 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CH-03-A-05	x
CH-03-A-08	x
CH-03-A-09	x
GM-03-A-10	x
HC-03-A-17	x
HI-03-A-13	x
LN-03-A-03	x
MS-03-A-03	x
NF-03-A-01	x
NF-03-A-03	x
NY-03-A-07	x
NY-03-A-08	x
NY-03-A-11	x
PK-03-A-01	x
PS-03-A-02	x
SF-03-A-05	x
SH-03-A-03	x
SH-03-A-06	x
SM-03-A-01	x
ST-03-A-05	x
TW-03-A-02	x
WK-03-A-02	x

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		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.121	1	33	0.212	1	33	0.333
08:00 - 09:00	1	33	0.212	1	33	0.545	1	33	0.757
09:00 - 10:00	1	33	0.152	1	33	0.273	1	33	0.425
10:00 - 11:00	1	33	0.303	1	33	0.273	1	33	0.576
11:00 - 12:00	1	33	0.212	1	33	0.242	1	33	0.454
12:00 - 13:00	1	33	0.333	1	33	0.273	1	33	0.606
13:00 - 14:00	1	33	0.303	1	33	0.303	1	33	0.606
14:00 - 15:00	1	33	0.364	1	33	0.121	1	33	0.485
15:00 - 16:00	1	33	0.242	1	33	0.424	1	33	0.666
16:00 - 17:00	1	33	0.485	1	33	0.182	1	33	0.667
17:00 - 18:00	1	33	0.333	1	33	0.273	1	33	0.606
18:00 - 19:00	1	33	0.182	1	33	0.091	1	33	0.273
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.242			3.212			6.454

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.030	1	33	0.030	1	33	0.060
13:00 - 14:00	1	33	0.030	1	33	0.000	1	33	0.030
14:00 - 15:00	1	33	0.030	1	33	0.030	1	33	0.060
15:00 - 16:00	1	33	0.000	1	33	0.030	1	33	0.030
16:00 - 17:00	1	33	0.030	1	33	0.000	1	33	0.030
17:00 - 18:00	1	33	0.000	1	33	0.030	1	33	0.030
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.120			0.240

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.030	1	33	0.030	1	33	0.060
08:00 - 09:00	1	33	0.030	1	33	0.030	1	33	0.060
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.061	1	33	0.061	1	33	0.122
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.121			0.121			0.242

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.030	1	33	0.030
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.030	1	33	0.000	1	33	0.030
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.030	1	33	0.000	1	33	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.060			0.030			0.090

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.061	1	33	0.152	1	33	0.213
08:00 - 09:00	1	33	0.121	1	33	0.455	1	33	0.576
09:00 - 10:00	1	33	0.152	1	33	0.273	1	33	0.425
10:00 - 11:00	1	33	0.242	1	33	0.212	1	33	0.454
11:00 - 12:00	1	33	0.182	1	33	0.212	1	33	0.394
12:00 - 13:00	1	33	0.212	1	33	0.152	1	33	0.364
13:00 - 14:00	1	33	0.242	1	33	0.273	1	33	0.515
14:00 - 15:00	1	33	0.333	1	33	0.091	1	33	0.424
15:00 - 16:00	1	33	0.212	1	33	0.364	1	33	0.576
16:00 - 17:00	1	33	0.424	1	33	0.152	1	33	0.576
17:00 - 18:00	1	33	0.242	1	33	0.152	1	33	0.394
18:00 - 19:00	1	33	0.182	1	33	0.091	1	33	0.273
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.605			2.579			5.184

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.030	1	33	0.030	1	33	0.060
08:00 - 09:00	1	33	0.061	1	33	0.061	1	33	0.122
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.030	1	33	0.030	1	33	0.060
12:00 - 13:00	1	33	0.091	1	33	0.091	1	33	0.182
13:00 - 14:00	1	33	0.030	1	33	0.030	1	33	0.060
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.030	1	33	0.030	1	33	0.060
16:00 - 17:00	1	33	0.030	1	33	0.030	1	33	0.060
17:00 - 18:00	1	33	0.091	1	33	0.091	1	33	0.182
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.393			0.393			0.786

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	1	33	0.000	1	33	0.000	1	33	0.000
08:00 - 09:00	1	33	0.000	1	33	0.000	1	33	0.000
09:00 - 10:00	1	33	0.000	1	33	0.000	1	33	0.000
10:00 - 11:00	1	33	0.000	1	33	0.000	1	33	0.000
11:00 - 12:00	1	33	0.000	1	33	0.000	1	33	0.000
12:00 - 13:00	1	33	0.000	1	33	0.000	1	33	0.000
13:00 - 14:00	1	33	0.000	1	33	0.000	1	33	0.000
14:00 - 15:00	1	33	0.000	1	33	0.000	1	33	0.000
15:00 - 16:00	1	33	0.000	1	33	0.000	1	33	0.000
16:00 - 17:00	1	33	0.000	1	33	0.000	1	33	0.000
17:00 - 18:00	1	33	0.000	1	33	0.000	1	33	0.000
18:00 - 19:00	1	33	0.000	1	33	0.000	1	33	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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:	33 - 33 (units:)
Survey date date range:	01/01/08 - 13/11/15
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	22

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.

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