

# Technical Note

## Project: The Lawns, Cambridge

To: Case Officer  
Cc: Applicant  
File Ref: 20211201-TN—Revision A-The Lawns

From: Callum Turner  
Reviewed: Michael Jakacki  
Date: 01/12/2021

**EAS**

Unit 23 The Maltings  
Stanstead Abbots  
Hertfordshire SG12 8HG

Tel 01920 871 777  
e: [contact@eastp.co.uk](mailto:contact@eastp.co.uk)  
[www.eastp.co.uk](http://www.eastp.co.uk)

Subject: Access Feasibility Study

## 1 Introduction

- 1.1 EAS have been appointed by Gonville and Caius College (The Applicant) to provide transport consultancy services in relation to the prospective planning application for the residential development at land to the north of The Cambridge Lawn Tennis Club.
- 1.2 The site lies within Cambridge City Council jurisdiction, which is the Local Planning Authority (LPA) and Cambridgeshire County Council (CCC), which are the local Highway Authority.
- 1.3 The purpose of this Technical Note is to provide a general assessment of the site access arrangements to serve a potential residential development, and to provide indication of any access related limitations to the quantum of proposed development.

## 2 Site Conditions

### Site and Nearby Land Uses

- 2.1 The existing development site is a green fields site with virtually no established vehicular access. Currently the only access to the site can be gained from the south from The Cambridge Lawn Tennis Club. The approximate site boundary is shown in Figure 1 below.
- 2.2 The site is boarded by a residential development at North and West. The southern boundary is shared with The Cambridge Lawn Tennis Club, while the eastern boundary is limited by the Emanuel College Sports Grounds.
- 2.3 The Lawns, which is the name of an access road connecting adjacent residential development of 11 residential units to the Clerk Maxwell Road on the west, provides opportunity to provide a vehicular and pedestrian connection to the site from the west.
- 2.4 Further afield, across Clerk Maxwell Road there is a large University of Cambridge campus with number of college buildings and related car parks. One of the university park and cycle car parks is accessed directly off Clerk Maxwell Road.
- 2.5 The Clerk Maxwell Road itself is a 7.6 metres wide road connection A1303 (Maddingly Road) with one of the main off road cycle routes providing connection across the city and university campuses.
- 2.6 Clerk Maxwell Road is subject to 20 mph speed limit and a parking restriction limited to the junction protection only. The road provides access to the cycle and ride car park,

approximately 25 residential properties (The Lawns and Perry Close) and Cocks and Hens Cambridge Tennis Club grounds.



Figure 1 – Aerial image of the site – Approximate site boundary shown.

- 2.7 No formal traffic surveys were undertaken, however during the site visit in an usual morning peak time it was noted that the Clerk Maxwell Road junction with A1303 operates well and without any issues and can accommodate all types of vehicles. The carriageway is keenly used for parking due to lack of any restrictions and proximity of university campus. It was also noted that Clerk Maxwell Road is used by large number of cyclists connection to and from the east-west cycle corridor route, located at the southern end of the road.
- 2.8 The wider transport network in the site vicinity shows A1303 connection to M11 just 1300 metres to the west, with Madingley Road Park and Ride site being located just 900m west. This road network arrangement does not leave any doubt that the A1303 is a major road with significant capacity and traffic levels.
- 2.9 The public transport within the site is reasonably well developed. The nearest bus stops are located at the JJ Thompson Avenue (approximately 320 m from The Lawns, accessible by a university campus walkway), which provides access to university bus services, while the stops located on A1303 (approximately 600 metres from The Lawns) provide access to another 4 regular services.

### Road Safety Record

2.10A review of CrashMap accident record does not show any injury accidents taking place on The Lawns within last 22 years. Within last 5 years (up to 2020) there was only one recorded accident within the site vicinity and it was located on the junction between A1303 and Clerk Maxwell Road.

2.11The obtained accident record shows that a collision occurred between a car and a cyclist, while cyclist was slowing down or stopping to make a right turn, he was hit by the following passenger car causing the rider to fall and sustain slight injury. The most probable reason of such collision would be lack of attention or distraction while driving or possibly not maintaining a safe distance. None of those would indicate any design flaws within the existing junction which would influence its operational safety. The accident report is contained in **Appendix A**.

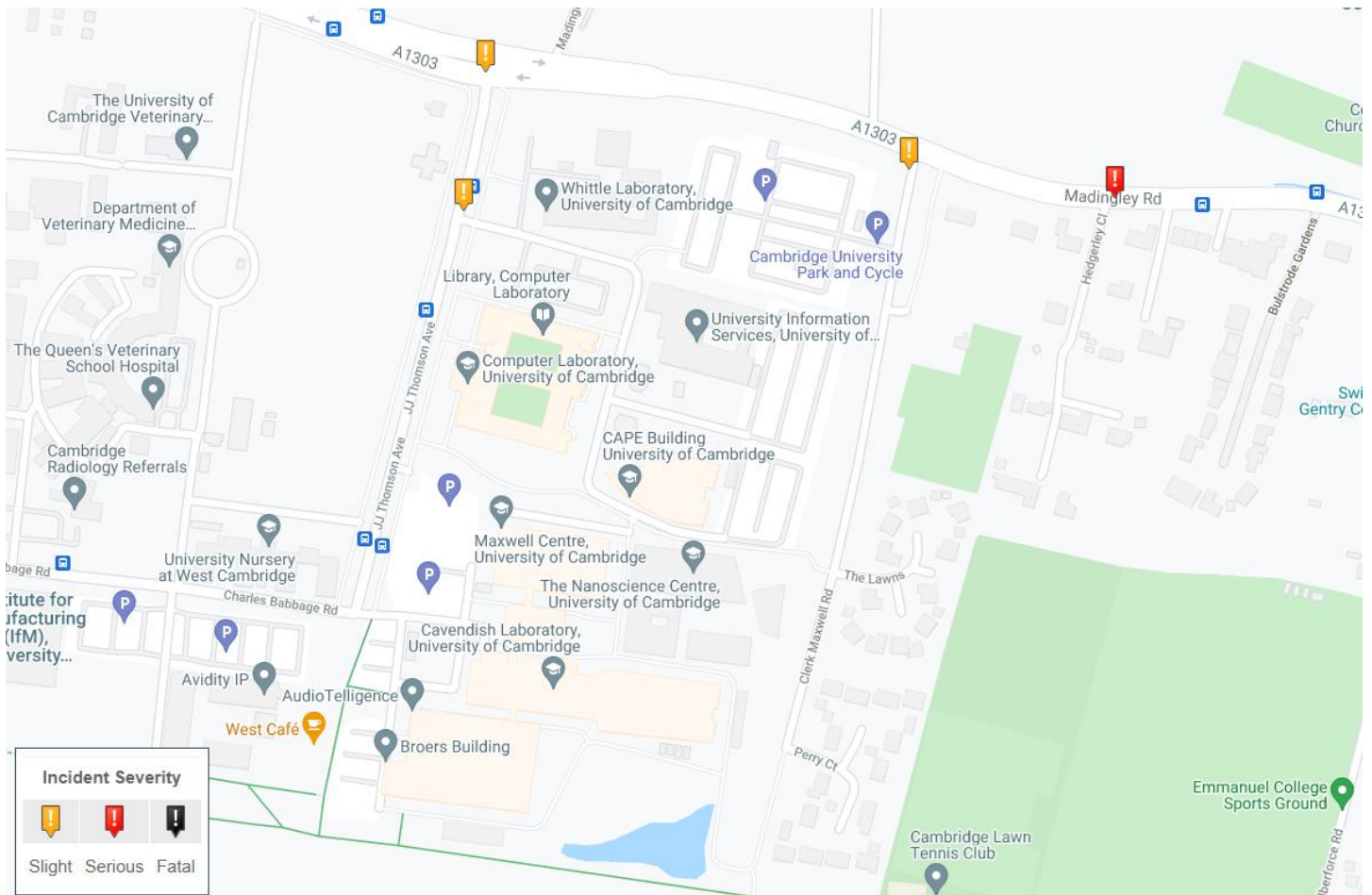


Figure 2 – CrashMap view of accident locations within last 5 years (up to 2020 inclusive)

## 3 Proposed Development

### Site Proposal

3.1 It is proposed to develop the site to provide residential accommodation. The exact quantum, mix and form is yet to be confirmed; however this study looks at any quantum limitations related to the physical site access layout.

- 3.2 The proposed development would gain access from The Lawns, where a part of the turning head was left unobstructed by any development with providing future access to the site in mind.
- 3.3 The site layout will be developed to provide access for private vehicles, emergency services and refuse vehicles, this means providing a carriageway connection and turning space within the site to allow for vehicles to enter and exit the site in forward gear.
- 3.4 The proposed site will connect to The Lawns with a 5.4 metre wide carriageway (to match the existing) with 2 metre footways on both sides. It is envisaged that any internal roads would maintain a minimum of 5.4 metre wide carriageway with a dedicated footway along at least one of the sites or a 6 metre wide shared surface areas (with shared surface arrangements providing access to only a limited number of units).
- 3.5 The proposed parking provisions would be in line with the Cambridge City Council requirements. Proposed site access layout is shown in **Appendix B**.
- 3.6 The Lawns / Clerk Maxwell Road access junction was clearly designed to accommodate much larger development. It can accommodate 2.4 by 100m to the north and 2.4 by 60 m to the south, visibility splays which is in excess of the 25m visibility splay required for 20 mph speed limit or 43m required for 30 mph, by Manual for Streets standards. The junction and the road itself can easily accommodate private vehicular traffic and the required service and emergency vehicle movements. **Appendix C** shows the visibility splay drawing, while **Appendix D** shows the swept path analysis drawings.

### Predicted Trip Generation

- 3.7 The TRICS database was interrogated to find surveys of similar sites, from which existing and proposed trip generation can be estimated.
- 3.8 To estimate existing trip generation, sites that met the following criteria were selected:
- Multi-modal survey;
  - Privately owned houses (03/A);
  - Located in England outside of Greater London;
  - Situated in 'Edge of town centre' or 'Suburban area' locations;
  - Carried out on a weekday in the last five years;
  - With 6 to 100 unit size.
- 3.9 Eleven surveys were found that met the criteria, from which trip rates associated with the residential use can be estimated. The privately owned houses land use was used due to the fact that this typical use is related to the highest car ownership levels and vehicular trip rates out of all residential uses and while the mix of form and tenure is yet to be confirmed for the site, the used trip rates would provide "worst case scenario" assessment thus providing most robust case.
- 3.10 Table 1 below provides multi-modal trip rates for the proposed use of the site. The full TRICS output is included at **Appendix E**.

*Table 1 – Multi-modal trip rates for C3 house use of the site (from TRICS)*

Trip rates:	08:00 - 09:00			17:00 - 18:00			07:00 - 21:00		
	In	Out	Total	In	Out	Total	In	Out	Total
Total people	0.207	0.855	1.062	0.642	0.337	0.979	4.182	4.357	8.539
Vehicles	0.137	0.407	0.544	0.368	0.184	0.552	2.306	2.393	4.699
Cars	0.102	0.382	0.320	0.348	0.166	0.514	2.001	2.086	4.087
Vehicle occupants	0.145	0.562	0.707	0.509	0.256	0.765	3.008	3.096	6.104
Public transport users	0.006	0.094	0.1	0.051	0.010	0.061	0.277	0.301	0.578
Pedestrians	0.057	0.174	0.231	0.078	0.063	0.141	0.810	0.871	1.681
Cyclists	0	0.025	0.025	0.014	0.004	0.018	0.089	0.090	0.179
OGVs	0.004	0.004	0.008	0	0	0	0.028	0.028	0.056

3.11 Based on the above table 50 residential units proposed on site would generate approximately 427 two way daily people trips, which would result in 234 vehicle movements (115 arrivals and 120 departures) throughout an entire day. Looking at the peak times the predicted vehicle movements would be in region of 27 (7 arrivals, 20 departures) during the morning peak and 28 (19 arrivals, 9 departures) during the afternoon peak.

3.12 Therefore, based on above assumptions, it is expected that the site will generate up to 20 two-way trips during a day, which would be considered a robust assumption. Only 2 to 3 one-way trips are expected to take place in the morning and afternoon network peak times.

## 4 Predicted Transport Impact

### Overall Trip Generation

- 4.1 When adding the predicted traffic generation to the existing traffic movements on The Lawns the predicted increase would most likely at least quadruple the existing traffic accessing the road. However it has to be highlighted that the road with 5.4 metre wide carriageway and 2 metre wide footways was clearly designed to accommodate more than 11 exiting units.
- 4.2 Even the hierarchy of the access road with clearly separated carriageway and footways along the “spine” of The Lawns connection the access junction to the dead end of a turning head while the access to the existing houses is via “side road” shared surface arrangements, shows clear intention in the original design to provide connection and accommodate future development on the site.
- 4.3 Therefore based on the exiting road design and the junction layouts, it can be clearly seen that the proposed site quite easily accommodate a development of for example 50 units, where the additional 30 movements per peak hour can be easily accommodated.
- 4.4 The discussed 30 movements during a peak hour can be translated as 2 vehicles per minute, which while possibly being a significant increase for The Lawns traffic generation, is very unlikely to have any impact on the Clerk Maxwell Road/A1303 junction traffic flows or even the flows in the northern part of Clerk Maxwell Road, where the university park and cycle car park is located.

- 4.5 Based on the on-site road operation observation, the existing road geometry, the accident record and undertaken analysis, it could be concluded that the proposed residential development can be accommodated on The Lawns without any significant impact on its safety or operation and its size would be virtually limited only by the non-transport related policies/restrictions.

## 5 Conclusions

- 5.1 The existing arrangements on The Lawns and Clerk Maxwell Road includes a wide single carriageway with 2 metre footway along at least one side of the road.
- 5.2 Based on the evidence provided in this Technical Note, the proposed residential development at land to the east of The Lawns in Cambridge is expected to be accommodated within the existing access arrangements without detrimental effect on the road safety and operational capacity.
- 5.3 The proposed development is likely to generate some additional trips, which in relation to surrounding road network traffic flows would be expected to be marginal and not to have significant impact on its operation.
- 5.4 Based upon the above, it is concluded that there are no highway safety or capacity issues that should prevent this development from being consented.

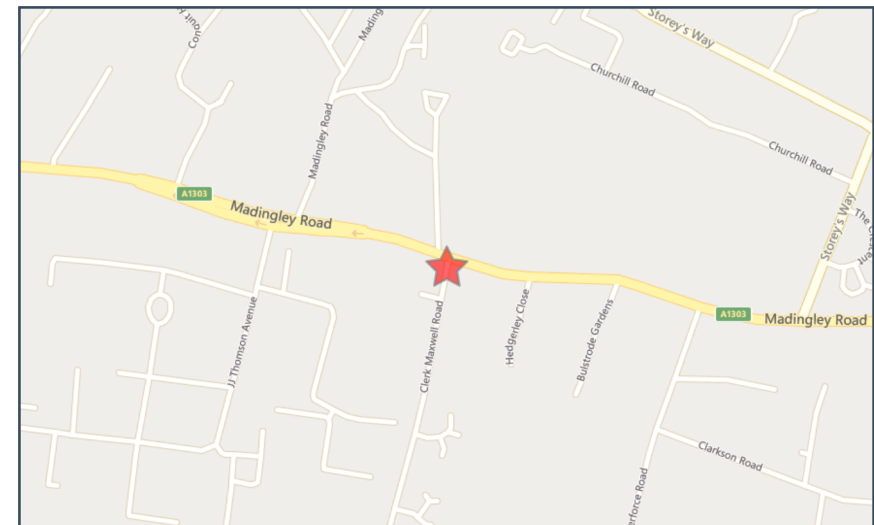
Appendix – A



**Validated Data**

**Crash Date:** Wednesday, October 05, 2016    **Time of Crash:** 5:20:00 PM    **Crash Reference:** 2016350120421

<b>Highest Injury Severity:</b>	Slight	<b>Road Number:</b>	U0	<b>Number of Casualties:</b>	1
<b>Highway Authority:</b>	Cambridgeshire			<b>Number of Vehicles:</b>	2
<b>Local Authority:</b>	Cambridge City			<b>OS Grid Reference:</b>	543275 259168
<b>Weather Description:</b>	Fine without high winds				
<b>Road Surface Description:</b>	Dry				
<b>Speed Limit:</b>	30				
<b>Light Conditions:</b>	Daylight: regardless of presence of streetlights				
<b>Carriageway Hazards:</b>	None				
<b>Junction Detail:</b>	T or staggered junction				
<b>Junction Pedestrian Crossing:</b>	No physical crossing facility within 50 metres				
<b>Road Type:</b>	Single carriageway				
<b>Junction Control:</b>	Give way or uncontrolled				



For more information about the data please visit: [www.crashmap.co.uk/home/Faq](http://www.crashmap.co.uk/home/Faq)  
To subscribe to unlimited reports using CrashMap Pro visit [www.crashmap.co.uk/Home/Premium\\_Services](http://www.crashmap.co.uk/Home/Premium_Services)





**Validated Data**

**Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)		9 Female	46 - 55	Vehicle is in the act of turning right	Front	Commuting to/from work	None	None
2	Pedal cycle		-1 Male	26 - 35	Vehicle is waiting to proceed normally but is held up	Back	Commuting to/from work	None	None

**Casualties**

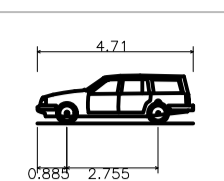
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
	2	1 Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: [www.crashmap.co.uk/home/Faq](http://www.crashmap.co.uk/home/Faq)

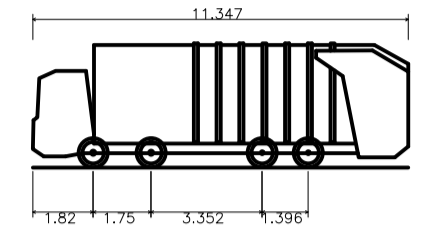
To subscribe to unlimited reports using CrashMap Pro visit [www.crashmap.co.uk/Home/Premium\\_Services](http://www.crashmap.co.uk/Home/Premium_Services)

# Appendix – B

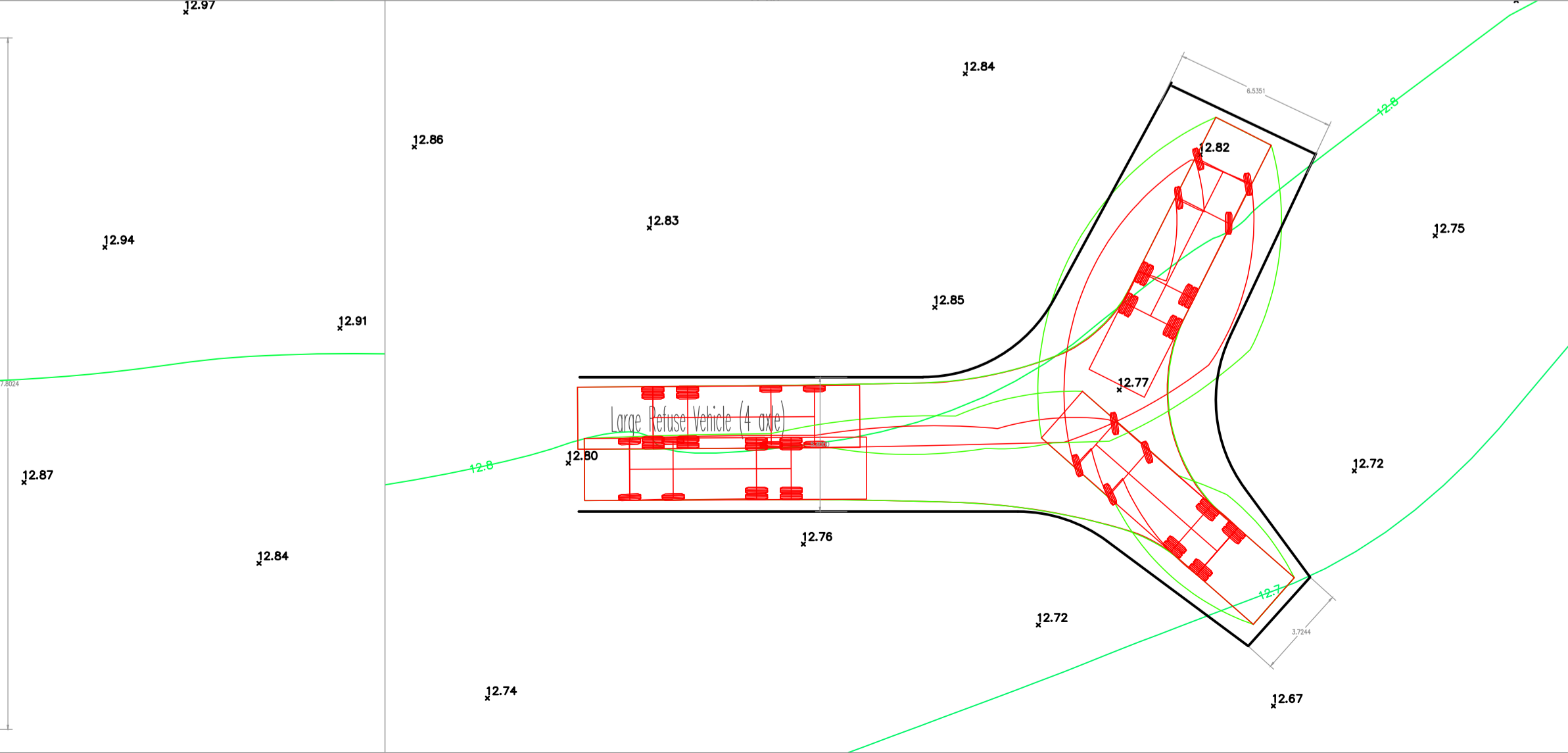
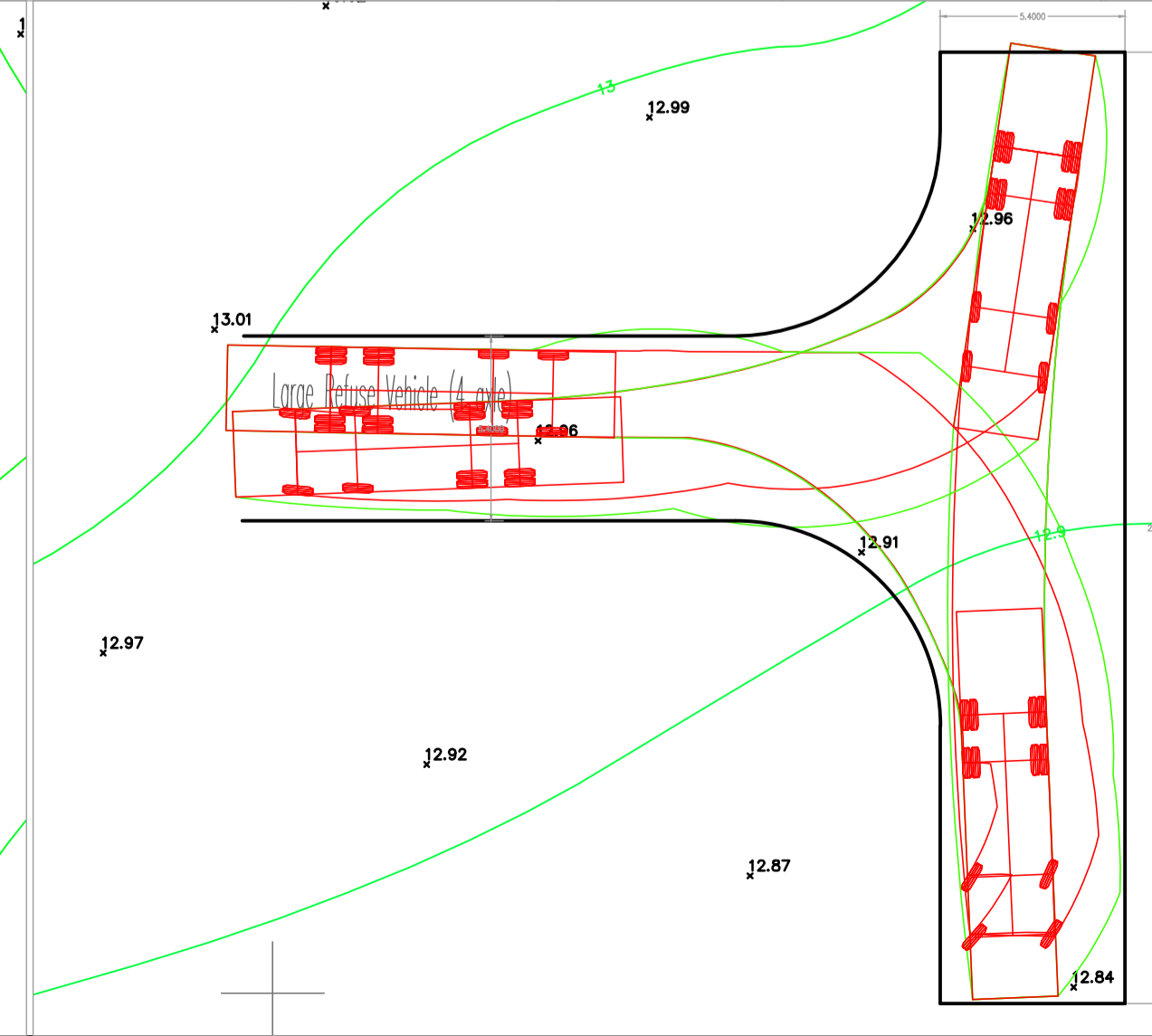
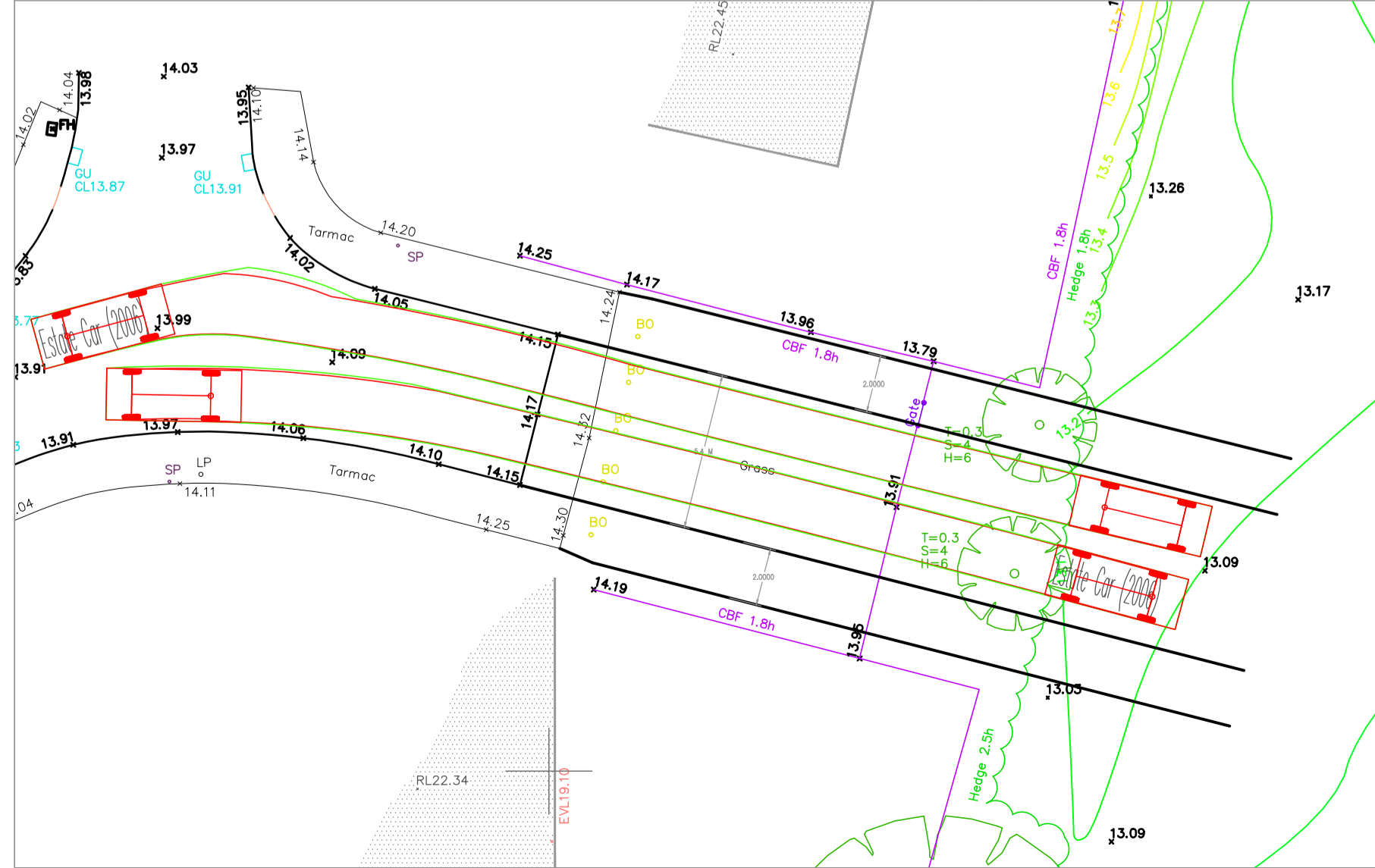
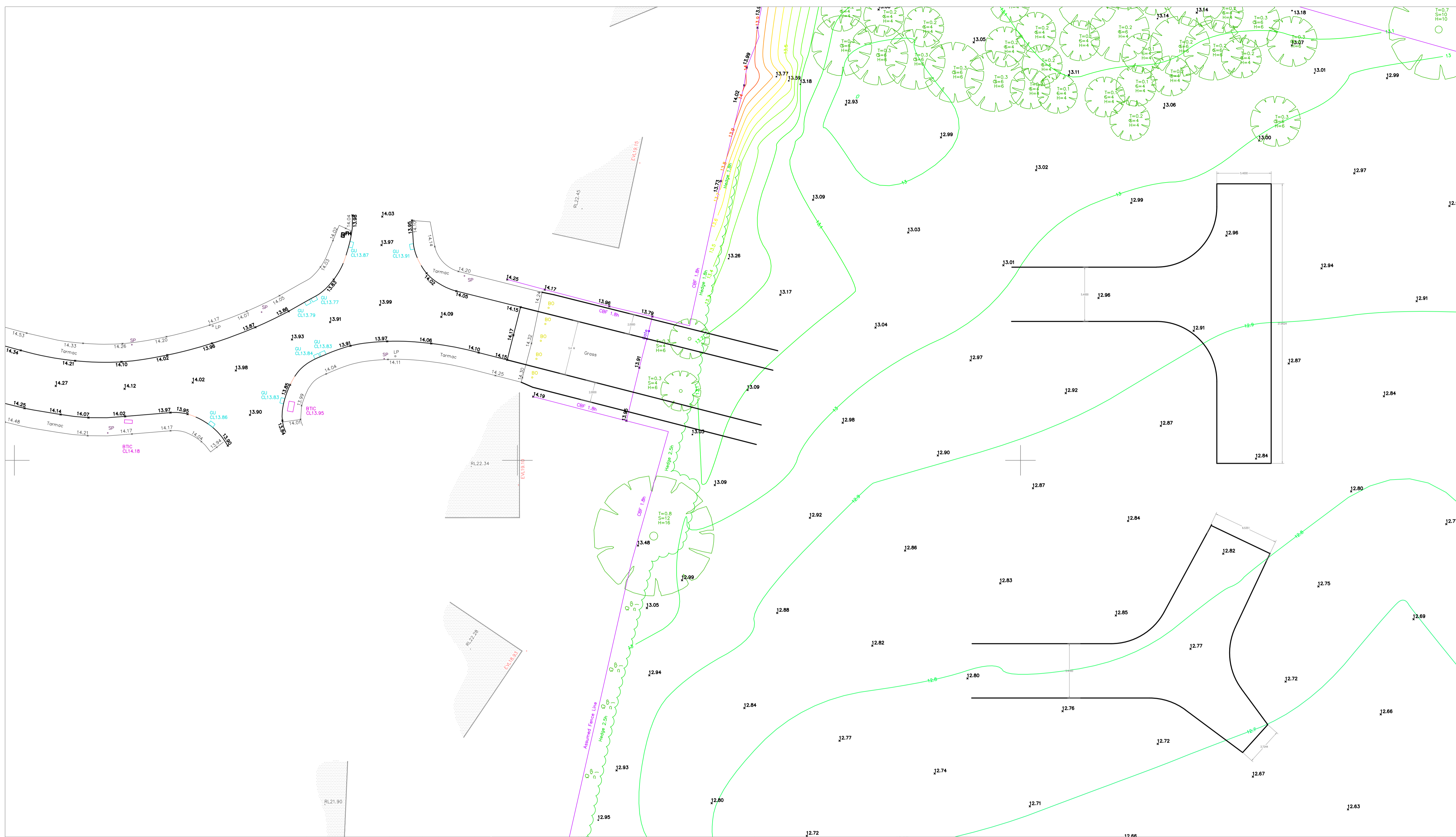
**NOTES:**  
 1 - DO NOT SCALE THIS DRAWING ON PRINT OR ELECTRONICALLY. WORK FROM FIGURED DIMENSIONS ONLY.  
 2 - DO NOT USE FOR CONSTRUCTION




Estate Car (2006)  
 Overall Length 4.710m  
 Overall Width 1.904m  
 Overall Body Height 1.442m  
 Min Body Ground Clearance 0.207m  
 Max Track Width 1.750m  
 Lock to lock time 4.00s  
 Kerb to Kerb Turning Radius 5.950m



Large Refuse Vehicle (4 axle)  
 Overall Length 11.347m  
 Overall Width 2.500m  
 Overall Body Height 3.751m  
 Min Body Ground Clearance 0.304m  
 Track Width 2.300m  
 Lock to lock time 6.00s  
 Wall to Wall Turning Radius 11.330m



REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS: PELIMINARY					
 Unit 108, The Maltings, Stanstead Abbots, Hertfordshire, SG12 8HG Tel: 01920 871777 www.eastp.co.uk					
CLIENT: GONVILLE AND CAIUS COLLEGE					
ARCHITECT: BIDWELLS					
PROJECT: THE LAWS CAMBRIDGE					
TITLE: PROPOSED SITE ACCESS AND INTERNAL TURNING HEADS PELIMINARY LAYOUT					
SCALE @ A1: 1:200		DESIGN-DRAWN: MJ		DATE: 30/11/2021	
PROJECT NO: 3204		DRAWING NO: SK01			

Appendix – C

**NOTES:**  
 1 - DO NOT SCALE THIS DRAWING ON PRINT OR ELECTRONICALLY. WORK FROM FIGURED DIMENSIONS ONLY.  
 2 - DO NOT USE FOR CONSTRUCTION

2.4 BY 100M ACHIEVABLE VISIBILITY SPLAY

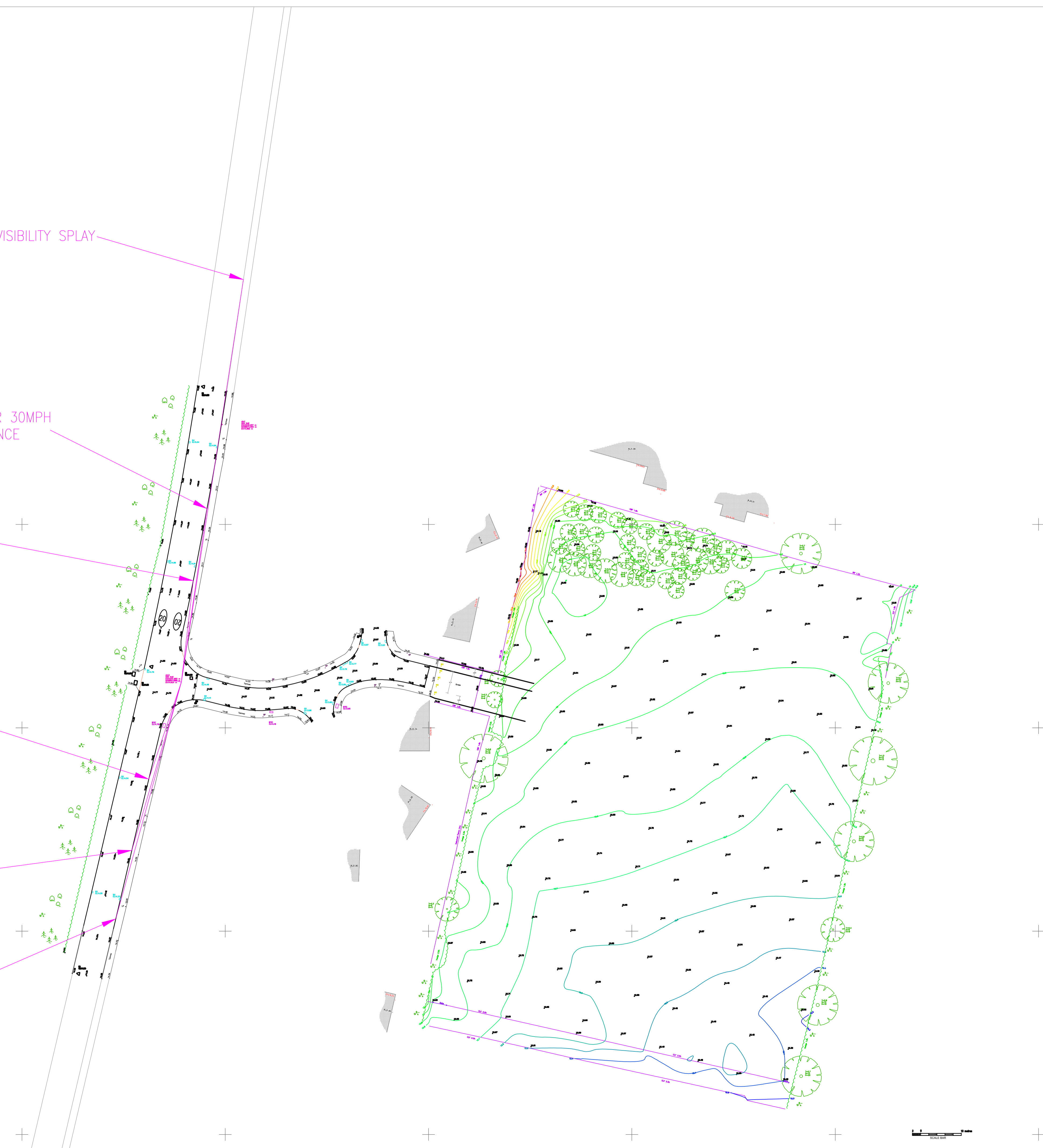
2.4 BY 43M VISIBILITY SPLAY FOR 30MPH  
 IN ACCORDANCE WITH MFS GUIDANCE


2.4 BY 25M VISIBILITY SPLAY FOR 20MPH  
 IN ACCORDANCE WITH MFS GUIDANCE

2.4 BY 25M VISIBILITY SPLAY FOR 20MPH  
 IN ACCORDANCE WITH MFS GUIDANCE

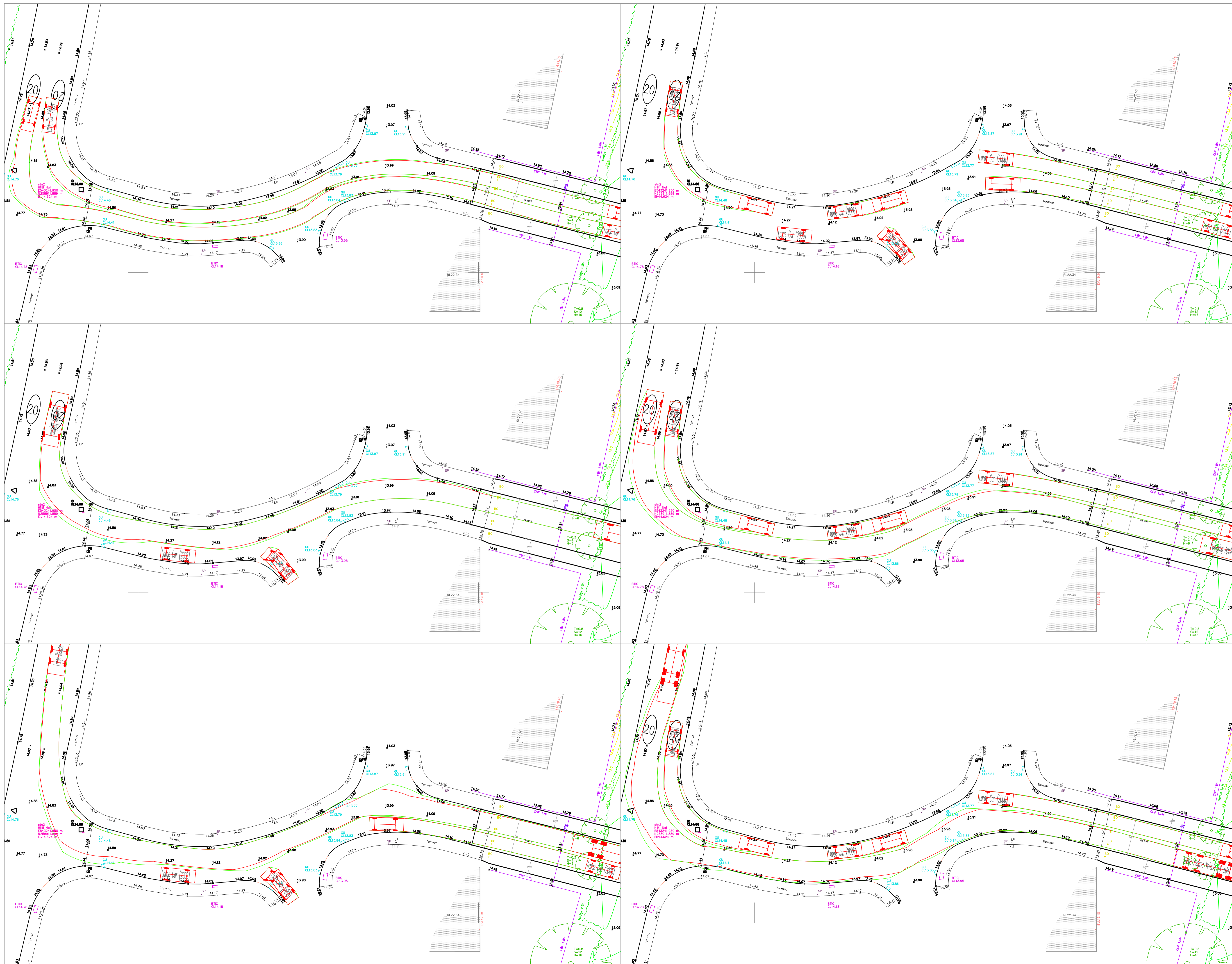
2.4 BY 43M VISIBILITY SPLAY FOR 30MPH  
 IN ACCORDANCE WITH MFS GUIDANCE

2.4 BY 60M ACHIEVABLE VISIBILITY SPLAY



REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS: <b>PELIMINARY</b>					
 Unit 108, The Millings, Stanstead Abbots, Hertfordshire, SG12 8HG Tel: 01920 871777 www.eastp.co.uk					
CLIENT: <b>GONVILLE AND CAIUS COLLEGE</b>					
ARCHITECT: <b>BIDWELLS</b>					
PROJECT: <b>THE LAWNS CAMBRIDGE</b>					
TITLE: <b>THE LAWNS VISIBILITY SPLAYS</b>					
SCALE @ A1:	DESIGN-DRAWN:	DATE:			
<b>1:500</b>	<b>MJ</b>	<b>30/11/2021</b>			
PROJECT No:	DRAWING No:				
<b>3204</b>	<b>SK03</b>				

Appendix – D




**NOTES:**  
 1 - DO NOT SCALE THIS DRAWING ON PRINT OR ELECTRONICALLY. WORK FROM FIGURED DIMENSIONS ONLY.  
 2 - DO NOT USE FOR CONSTRUCTION

Large Car (2006)  
 Overall Length 5.079m  
 Overall Width 1.892m  
 Overall Body Height 1.520m  
 Min Body Ground Clearance 0.310m  
 Track Width 1.831m  
 Lock to lock time 4.00s  
 Kerb to Kerb Turning Radius 5.900m

Pumping Appliance  
 Overall Length 7.900m  
 Overall Width 2.500m  
 Overall Body Height 3.300m  
 Min Body Ground Clearance 0.140m  
 Track Width 2.500m  
 Lock to lock time 6.00s  
 Kerb to Kerb Turning Radius 7.750m

Large Refuse Vehicle (4 axle)  
 Overall Length 11.347m  
 Overall Width 2.500m  
 Overall Body Height 3.751m  
 Min Body Ground Clearance 0.304m  
 Track Width 2.500m  
 Lock to lock time 6.00s  
 Wait to Wait Turning Radius 11.350m

REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS: PELIMINARY					
 Unit 108, The Maltings, Stanstead Abbots, Hertfordshire, SG12 8HG Tel: 01920 871777 www.eastp.co.uk					
CLIENT: GONVILLE AND CAIUS COLLEGE					
ARCHITECT: BIDWELLS					
PROJECT: THE LAWNS CAMBRIDGE					
TITLE: PROPOSED SITE ACCESS AND THE LAWNS SWEEP PATH ANALYSIS					
SCALE @ A1: 1:250		DESIGN-DRAWN: MJ		DATE: 30/11/2021	
PROJECT NO: 3204		DRAWING NO:		SK02	

# Appendix - E



## TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	KC KENT	1 days
03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	
	CH CHESHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	1 days

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

## Primary 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: No of Dwellings  
 Actual Range: 10 to 89 (units: )  
 Range Selected by User: 6 to 100 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 08/06/21

*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	2 days
Tuesday	4 days
Wednesday	1 days
Thursday	4 days

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

Selected survey types:

Manual count	11 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 undertaken using machines.*

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	8

*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.*

*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 11 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	3 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	2 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	3 days
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	4 days
1.1 to 1.5	7 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	3 days
No	8 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	11 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES		CAMBRI DGESHI RE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>			
	<i>Survey Type: MANUAL</i>			
2	CB-03-A-05 MACADAM WAY PENRITH	DETACHED/TERRACED HOUSING		CUMBRIA
	Edge of Town Centre Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 21/06/16</i>			
	<i>Survey Type: MANUAL</i>			
3	CH-03-A-11 LONDON ROAD NORTHWICH LEFTWICH	TOWN HOUSES		CHESHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 24 <i>Survey date: THURSDAY 06/06/19</i>			
	<i>Survey Type: MANUAL</i>			
4	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED		DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 28/03/17</i>			
	<i>Survey Type: MANUAL</i>			
5	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS		HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 <i>Survey date: TUESDAY 19/11/19</i>			
	<i>Survey Type: MANUAL</i>			
6	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS		KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i>			
	<i>Survey Type: MANUAL</i>			
7	NY-03-A-12 RACECOURSE LANE NORTHALLERTON	TOWN HOUSES		NORTH YORKSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 47 <i>Survey date: TUESDAY 27/09/16</i>			
	<i>Survey Type: MANUAL</i>			
8	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>			
	<i>Survey Type: MANUAL</i>			

LIST OF SITES relevant to selection parameters (Cont.)

9	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 73 <i>Survey date: THURSDAY 09/05/19</i>		
10	WL-03-A-02 HEADLANDS GROVE SWINDON	SEMI DETACHED	WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 <i>Survey date: THURSDAY 22/09/16</i>		
11	WM-03-A-05 COUNDON ROAD COVENTRY	TERRACED & DETACHED	WEST MIDLANDS
	Edge of Town Centre Residential Zone Total No of Dwellings: 89 <i>Survey date: MONDAY 21/11/16</i>		

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.070	11	46	0.270	11	46	0.340
08:00 - 09:00	11	46	0.137	11	46	0.407	11	46	0.544
09:00 - 10:00	11	46	0.153	11	46	0.174	11	46	0.327
10:00 - 11:00	11	46	0.123	11	46	0.153	11	46	0.276
11:00 - 12:00	11	46	0.137	11	46	0.157	11	46	0.294
12:00 - 13:00	11	46	0.168	11	46	0.168	11	46	0.336
13:00 - 14:00	11	46	0.164	11	46	0.166	11	46	0.330
14:00 - 15:00	11	46	0.172	11	46	0.213	11	46	0.385
15:00 - 16:00	11	46	0.241	11	46	0.196	11	46	0.437
16:00 - 17:00	11	46	0.313	11	46	0.160	11	46	0.473
17:00 - 18:00	11	46	0.368	11	46	0.184	11	46	0.552
18:00 - 19:00	11	46	0.260	11	46	0.145	11	46	0.405
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.306			2.393			4.699

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 89 (units: )
Survey date range:	01/01/16 - 08/06/21
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.000	11	46	0.000
08:00 - 09:00	11	46	0.008	11	46	0.008	11	46	0.016
09:00 - 10:00	11	46	0.008	11	46	0.006	11	46	0.014
10:00 - 11:00	11	46	0.004	11	46	0.004	11	46	0.008
11:00 - 12:00	11	46	0.006	11	46	0.008	11	46	0.014
12:00 - 13:00	11	46	0.002	11	46	0.000	11	46	0.002
13:00 - 14:00	11	46	0.008	11	46	0.008	11	46	0.016
14:00 - 15:00	11	46	0.000	11	46	0.002	11	46	0.002
15:00 - 16:00	11	46	0.008	11	46	0.008	11	46	0.016
16:00 - 17:00	11	46	0.002	11	46	0.002	11	46	0.004
17:00 - 18:00	11	46	0.000	11	46	0.000	11	46	0.000
18:00 - 19:00	11	46	0.004	11	46	0.004	11	46	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.050			0.050			0.100

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.002	11	46	0.002	11	46	0.004
08:00 - 09:00	11	46	0.004	11	46	0.004	11	46	0.008
09:00 - 10:00	11	46	0.008	11	46	0.006	11	46	0.014
10:00 - 11:00	11	46	0.002	11	46	0.004	11	46	0.006
11:00 - 12:00	11	46	0.002	11	46	0.000	11	46	0.002
12:00 - 13:00	11	46	0.000	11	46	0.000	11	46	0.000
13:00 - 14:00	11	46	0.004	11	46	0.002	11	46	0.006
14:00 - 15:00	11	46	0.004	11	46	0.004	11	46	0.008
15:00 - 16:00	11	46	0.002	11	46	0.004	11	46	0.006
16:00 - 17:00	11	46	0.000	11	46	0.002	11	46	0.002
17:00 - 18:00	11	46	0.000	11	46	0.000	11	46	0.000
18:00 - 19:00	11	46	0.000	11	46	0.000	11	46	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.028			0.028			0.056

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.000	11	46	0.000
08:00 - 09:00	11	46	0.004	11	46	0.004	11	46	0.008
09:00 - 10:00	11	46	0.000	11	46	0.000	11	46	0.000
10:00 - 11:00	11	46	0.000	11	46	0.000	11	46	0.000
11:00 - 12:00	11	46	0.000	11	46	0.000	11	46	0.000
12:00 - 13:00	11	46	0.000	11	46	0.000	11	46	0.000
13:00 - 14:00	11	46	0.000	11	46	0.000	11	46	0.000
14:00 - 15:00	11	46	0.002	11	46	0.002	11	46	0.004
15:00 - 16:00	11	46	0.004	11	46	0.004	11	46	0.008
16:00 - 17:00	11	46	0.002	11	46	0.002	11	46	0.004
17:00 - 18:00	11	46	0.000	11	46	0.000	11	46	0.000
18:00 - 19:00	11	46	0.000	11	46	0.000	11	46	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.012			0.012			0.024

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.



TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.010	11	46	0.025	11	46	0.035
08:00 - 09:00	11	46	0.000	11	46	0.025	11	46	0.025
09:00 - 10:00	11	46	0.002	11	46	0.010	11	46	0.012
10:00 - 11:00	11	46	0.010	11	46	0.002	11	46	0.012
11:00 - 12:00	11	46	0.006	11	46	0.002	11	46	0.008
12:00 - 13:00	11	46	0.004	11	46	0.002	11	46	0.006
13:00 - 14:00	11	46	0.004	11	46	0.000	11	46	0.004
14:00 - 15:00	11	46	0.004	11	46	0.004	11	46	0.008
15:00 - 16:00	11	46	0.025	11	46	0.002	11	46	0.027
16:00 - 17:00	11	46	0.014	11	46	0.004	11	46	0.018
17:00 - 18:00	11	46	0.004	11	46	0.008	11	46	0.012
18:00 - 19:00	11	46	0.006	11	46	0.006	11	46	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.089			0.090			0.179

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.080	11	46	0.319	11	46	0.399
08:00 - 09:00	11	46	0.145	11	46	0.562	11	46	0.707
09:00 - 10:00	11	46	0.174	11	46	0.221	11	46	0.395
10:00 - 11:00	11	46	0.157	11	46	0.215	11	46	0.372
11:00 - 12:00	11	46	0.157	11	46	0.194	11	46	0.351
12:00 - 13:00	11	46	0.207	11	46	0.209	11	46	0.416
13:00 - 14:00	11	46	0.200	11	46	0.198	11	46	0.398
14:00 - 15:00	11	46	0.213	11	46	0.252	11	46	0.465
15:00 - 16:00	11	46	0.376	11	46	0.243	11	46	0.619
16:00 - 17:00	11	46	0.440	11	46	0.225	11	46	0.665
17:00 - 18:00	11	46	0.509	11	46	0.256	11	46	0.765
18:00 - 19:00	11	46	0.350	11	46	0.202	11	46	0.552
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>3.008</b>			<b>3.096</b>			<b>6.104</b>

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.014	11	46	0.082	11	46	0.096
08:00 - 09:00	11	46	0.057	11	46	0.174	11	46	0.231
09:00 - 10:00	11	46	0.059	11	46	0.065	11	46	0.124
10:00 - 11:00	11	46	0.037	11	46	0.084	11	46	0.121
11:00 - 12:00	11	46	0.078	11	46	0.055	11	46	0.133
12:00 - 13:00	11	46	0.059	11	46	0.063	11	46	0.122
13:00 - 14:00	11	46	0.068	11	46	0.072	11	46	0.140
14:00 - 15:00	11	46	0.072	11	46	0.037	11	46	0.109
15:00 - 16:00	11	46	0.141	11	46	0.092	11	46	0.233
16:00 - 17:00	11	46	0.092	11	46	0.051	11	46	0.143
17:00 - 18:00	11	46	0.078	11	46	0.063	11	46	0.141
18:00 - 19:00	11	46	0.055	11	46	0.033	11	46	0.088
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.810			0.871			1.681

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.008	11	46	0.027	11	46	0.035
08:00 - 09:00	11	46	0.006	11	46	0.061	11	46	0.067
09:00 - 10:00	11	46	0.010	11	46	0.031	11	46	0.041
10:00 - 11:00	11	46	0.031	11	46	0.020	11	46	0.051
11:00 - 12:00	11	46	0.014	11	46	0.018	11	46	0.032
12:00 - 13:00	11	46	0.018	11	46	0.023	11	46	0.041
13:00 - 14:00	11	46	0.010	11	46	0.006	11	46	0.016
14:00 - 15:00	11	46	0.014	11	46	0.016	11	46	0.030
15:00 - 16:00	11	46	0.029	11	46	0.022	11	46	0.051
16:00 - 17:00	11	46	0.022	11	46	0.004	11	46	0.026
17:00 - 18:00	11	46	0.023	11	46	0.010	11	46	0.033
18:00 - 19:00	11	46	0.022	11	46	0.000	11	46	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.207			0.238			0.445

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.022	11	46	0.022
08:00 - 09:00	11	46	0.000	11	46	0.029	11	46	0.029
09:00 - 10:00	11	46	0.000	11	46	0.006	11	46	0.006
10:00 - 11:00	11	46	0.000	11	46	0.002	11	46	0.002
11:00 - 12:00	11	46	0.000	11	46	0.000	11	46	0.000
12:00 - 13:00	11	46	0.002	11	46	0.000	11	46	0.002
13:00 - 14:00	11	46	0.000	11	46	0.000	11	46	0.000
14:00 - 15:00	11	46	0.000	11	46	0.000	11	46	0.000
15:00 - 16:00	11	46	0.000	11	46	0.000	11	46	0.000
16:00 - 17:00	11	46	0.008	11	46	0.000	11	46	0.008
17:00 - 18:00	11	46	0.027	11	46	0.000	11	46	0.027
18:00 - 19:00	11	46	0.027	11	46	0.000	11	46	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.064			0.059			0.123

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.000	11	46	0.000
08:00 - 09:00	11	46	0.000	11	46	0.004	11	46	0.004
09:00 - 10:00	11	46	0.000	11	46	0.000	11	46	0.000
10:00 - 11:00	11	46	0.000	11	46	0.000	11	46	0.000
11:00 - 12:00	11	46	0.000	11	46	0.000	11	46	0.000
12:00 - 13:00	11	46	0.000	11	46	0.000	11	46	0.000
13:00 - 14:00	11	46	0.000	11	46	0.000	11	46	0.000
14:00 - 15:00	11	46	0.002	11	46	0.000	11	46	0.002
15:00 - 16:00	11	46	0.004	11	46	0.000	11	46	0.004
16:00 - 17:00	11	46	0.000	11	46	0.000	11	46	0.000
17:00 - 18:00	11	46	0.000	11	46	0.000	11	46	0.000
18:00 - 19:00	11	46	0.000	11	46	0.000	11	46	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.006			0.004			0.010

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.008	11	46	0.049	11	46	0.057
08:00 - 09:00	11	46	0.006	11	46	0.094	11	46	0.100
09:00 - 10:00	11	46	0.010	11	46	0.037	11	46	0.047
10:00 - 11:00	11	46	0.031	11	46	0.022	11	46	0.053
11:00 - 12:00	11	46	0.014	11	46	0.018	11	46	0.032
12:00 - 13:00	11	46	0.020	11	46	0.023	11	46	0.043
13:00 - 14:00	11	46	0.010	11	46	0.006	11	46	0.016
14:00 - 15:00	11	46	0.016	11	46	0.016	11	46	0.032
15:00 - 16:00	11	46	0.033	11	46	0.022	11	46	0.055
16:00 - 17:00	11	46	0.029	11	46	0.004	11	46	0.033
17:00 - 18:00	11	46	0.051	11	46	0.010	11	46	0.061
18:00 - 19:00	11	46	0.049	11	46	0.000	11	46	0.049
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.277			0.301			0.578

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.112	11	46	0.476	11	46	0.588
08:00 - 09:00	11	46	0.207	11	46	0.855	11	46	1.062
09:00 - 10:00	11	46	0.245	11	46	0.333	11	46	0.578
10:00 - 11:00	11	46	0.235	11	46	0.323	11	46	0.558
11:00 - 12:00	11	46	0.254	11	46	0.268	11	46	0.522
12:00 - 13:00	11	46	0.290	11	46	0.297	11	46	0.587
13:00 - 14:00	11	46	0.282	11	46	0.276	11	46	0.558
14:00 - 15:00	11	46	0.305	11	46	0.309	11	46	0.614
15:00 - 16:00	11	46	0.575	11	46	0.358	11	46	0.933
16:00 - 17:00	11	46	0.575	11	46	0.284	11	46	0.859
17:00 - 18:00	11	46	0.642	11	46	0.337	11	46	0.979
18:00 - 19:00	11	46	0.460	11	46	0.241	11	46	0.701
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			4.182			4.357			8.539

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.



TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.068	11	46	0.252	11	46	0.320
08:00 - 09:00	11	46	0.102	11	46	0.382	11	46	0.484
09:00 - 10:00	11	46	0.112	11	46	0.143	11	46	0.255
10:00 - 11:00	11	46	0.090	11	46	0.125	11	46	0.215
11:00 - 12:00	11	46	0.114	11	46	0.135	11	46	0.249
12:00 - 13:00	11	46	0.151	11	46	0.147	11	46	0.298
13:00 - 14:00	11	46	0.131	11	46	0.129	11	46	0.260
14:00 - 15:00	11	46	0.147	11	46	0.180	11	46	0.327
15:00 - 16:00	11	46	0.209	11	46	0.157	11	46	0.366
16:00 - 17:00	11	46	0.288	11	46	0.141	11	46	0.429
17:00 - 18:00	11	46	0.348	11	46	0.166	11	46	0.514
18:00 - 19:00	11	46	0.241	11	46	0.129	11	46	0.370
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.001			2.086			4.087

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.014	11	46	0.014
08:00 - 09:00	11	46	0.020	11	46	0.010	11	46	0.030
09:00 - 10:00	11	46	0.022	11	46	0.020	11	46	0.042
10:00 - 11:00	11	46	0.027	11	46	0.020	11	46	0.047
11:00 - 12:00	11	46	0.014	11	46	0.014	11	46	0.028
12:00 - 13:00	11	46	0.016	11	46	0.020	11	46	0.036
13:00 - 14:00	11	46	0.022	11	46	0.027	11	46	0.049
14:00 - 15:00	11	46	0.020	11	46	0.022	11	46	0.042
15:00 - 16:00	11	46	0.018	11	46	0.022	11	46	0.040
16:00 - 17:00	11	46	0.020	11	46	0.010	11	46	0.030
17:00 - 18:00	11	46	0.018	11	46	0.018	11	46	0.036
18:00 - 19:00	11	46	0.016	11	46	0.010	11	46	0.026
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.213			0.207			0.420

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.000	11	46	0.002	11	46	0.002
08:00 - 09:00	11	46	0.000	11	46	0.000	11	46	0.000
09:00 - 10:00	11	46	0.004	11	46	0.000	11	46	0.004
10:00 - 11:00	11	46	0.000	11	46	0.000	11	46	0.000
11:00 - 12:00	11	46	0.002	11	46	0.000	11	46	0.002
12:00 - 13:00	11	46	0.000	11	46	0.002	11	46	0.002
13:00 - 14:00	11	46	0.000	11	46	0.000	11	46	0.000
14:00 - 15:00	11	46	0.000	11	46	0.004	11	46	0.004
15:00 - 16:00	11	46	0.000	11	46	0.002	11	46	0.002
16:00 - 17:00	11	46	0.002	11	46	0.004	11	46	0.006
17:00 - 18:00	11	46	0.002	11	46	0.000	11	46	0.002
18:00 - 19:00	11	46	0.000	11	46	0.002	11	46	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.010			0.016			0.026

*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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL Bus Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	11	46	0.006	11	46	0.002	11	46	0.008
08:00 - 09:00	11	46	0.000	11	46	0.004	11	46	0.004
09:00 - 10:00	11	46	0.000	11	46	0.004	11	46	0.004
10:00 - 11:00	11	46	0.000	11	46	0.000	11	46	0.000
11:00 - 12:00	11	46	0.002	11	46	0.000	11	46	0.002
12:00 - 13:00	11	46	0.002	11	46	0.000	11	46	0.002
13:00 - 14:00	11	46	0.000	11	46	0.000	11	46	0.000
14:00 - 15:00	11	46	0.002	11	46	0.002	11	46	0.004
15:00 - 16:00	11	46	0.002	11	46	0.004	11	46	0.006
16:00 - 17:00	11	46	0.000	11	46	0.000	11	46	0.000
17:00 - 18:00	11	46	0.002	11	46	0.006	11	46	0.008
18:00 - 19:00	11	46	0.008	11	46	0.000	11	46	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.024			0.022			0.046

*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.*