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**Class R Change of Use to Light Industrial (Class E (g)(iii))
Cockpit Farm, Knowle Lane, Fair Oak**

Introduction

This highway technical note has been commissioned by Alderberry Homes Ltd in support of a planning application submission to Eastleigh Borough Council for a Class R change of use at Cockpit Farm, Knowle Lane, Fair Oak. The location of the site is shown below.



Access to the site is gained via Knowle Lane, an unclassified public highway with the identification number U517. The site forms part of Cockpit Farm which was previously operating as a poultry farm for egg production.

Knowle Lane is a rural access road which links the B3354 Botley Road to the west with the B3037 Mortimer's Lane to the north. In the vicinity of the site the road has two lanes with no pedestrian facilities and no street lighting. The road is subject to a posted speed limit of 30mph.

Planning History

A previous application for a Class R Change of Use was submitted under reference PN/22/92314 which sought a conversion and change of use of part of the agricultural building to an Office.

A further application was also submitted under reference PN/22/92315 for a change of use of the agricultural building to a residential use for 5 dwellings.

Both applications were approved, subject to a number of standard planning conditions.

A subsequent application for a redevelopment to provide 6 dwellings was submitted under reference F/23/94713. Although this was subsequently refused, Hampshire County Council as Highway Authority were consulted and raised no highway objections subject to standard conditions being imposed.

Proposed Development

This application seeks a change of use to 500sqm of Class E(g)(iii) Light Industrial use.

Access and Visibility

Knowle Lane is subject to a 30-mph speed limit and on-site observations have shown that traffic is travelling at or around the posted speed limit. To the south of the site is a bend which limits traffic speeds, indeed a highway sign located on the northern approach advises drivers of a maximum speed of 20mph.

In accordance with the advice contained within Manual for Streets and the HCC document Technical Guidance 3, visibility splays of 2.4m by 43.0m would be required to serve the development.

The site benefits from an existing access where good visibility is available due to the wide highway verge that fronts the site and is demonstrated below.



Drawing numbered NJC-001 is included as [Appendix 1](#) to this note which shows the existing site access together with visibility splays of 2.3m by 43.0m in both the northerly and southerly directions. In reality though, far greater splays are available across the site frontage. .

Traffic Impact

In order to determine the likely traffic impact that the proposed dwellings will generate, the TRICS database v7.10.2 has been interrogated.

In selecting suitable comparison sites, the following criteria was utilised:

- Land Use – Employment – Industrial Unit
- Size – 260 sqm to 715 sqm
- Date Range 01/01/12 to 21/04/22

- Location – Edge of Town

The trip rates and likely traffic impact is given in the table below, whilst the TRICS Data is included as [Appendix 2](#) to this Note.

TRICS Trip Industrial Unit			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.517	0.474	0.991
PM Peak Hour	0.172	0.431	0.603
Daily Traffic	5.300	5.197	10.497

TRICS Vehicle Trip Generation Based on 500sqm			
AM Peak Hour	2.59 (3)	2.37(2)	5
PM Peak Hour	0.86 (1)	2.16 (2)	3
Daily Traffic	26.5 (27)	25.9 (26)	53

From the above TRICS data it can be seen that the proposed change of use is likely to generate just 5 traffic movement in the AM Peak, 3 movements in the PM peak period, and an average of 53 daily two-way traffic movements.

When the previous Class Q and Class R applications were considered, the Highway Technical Note accompanying the application included likely traffic generation data for the proposed 5 residential units together with the 500sqm of Office development which was accepted by the Highway Authority. This data is shown below.

TRICS Vehicle Trip Generation Based on 5 Residential Units and 500sqm of Commercial			
AM Peak Hour	10	2	12
PM Peak Hour	2	20	22
Daily Traffic	56	57	113

It can be seen that when compared to the likely traffic that the two approved schemes would generate, the development now proposed would see a significant decrease in traffic as a result.

Car Parking

The development comprises of 500 sqm of Commercial development, although EBC do not have any formal parking standards for such a use. Historically a ratio of 1 space per 45sqm was used, which in this case would result in a total of 11 spaces. This development includes 12 spaces, which is deemed to be appropriate.

Servicing

Day to day servicing is likely to be undertaken by a 7.5T box van, or smaller Transit type vehicles and drawing numbered NJC-002 is included as [Appendix 3](#) which shows the swept path tracking of such a vehicle.

The drawings clearly demonstrate that such a vehicle can enter the site from both the northerly and southerly directions, turn within the curtilage and leave in forward gear.

Summary and Conclusion

This Highway Technical Note has been produced in support of a planning application for a Class R change of use at Cockpit Farm, Knowle Lane.

Adequate visibility is available at the site access junction with Knowle Lane, commensurate with the posted speed limit and in accordance with Technical Guidance 3.

If permitted, the site will result in 5 traffic movements in the AM peak, 3 movements in the PM peak period and a total of 53 traffic movements throughout the day.

Adequate car and cycle parking is being provide in accordance with the EBC current standards.

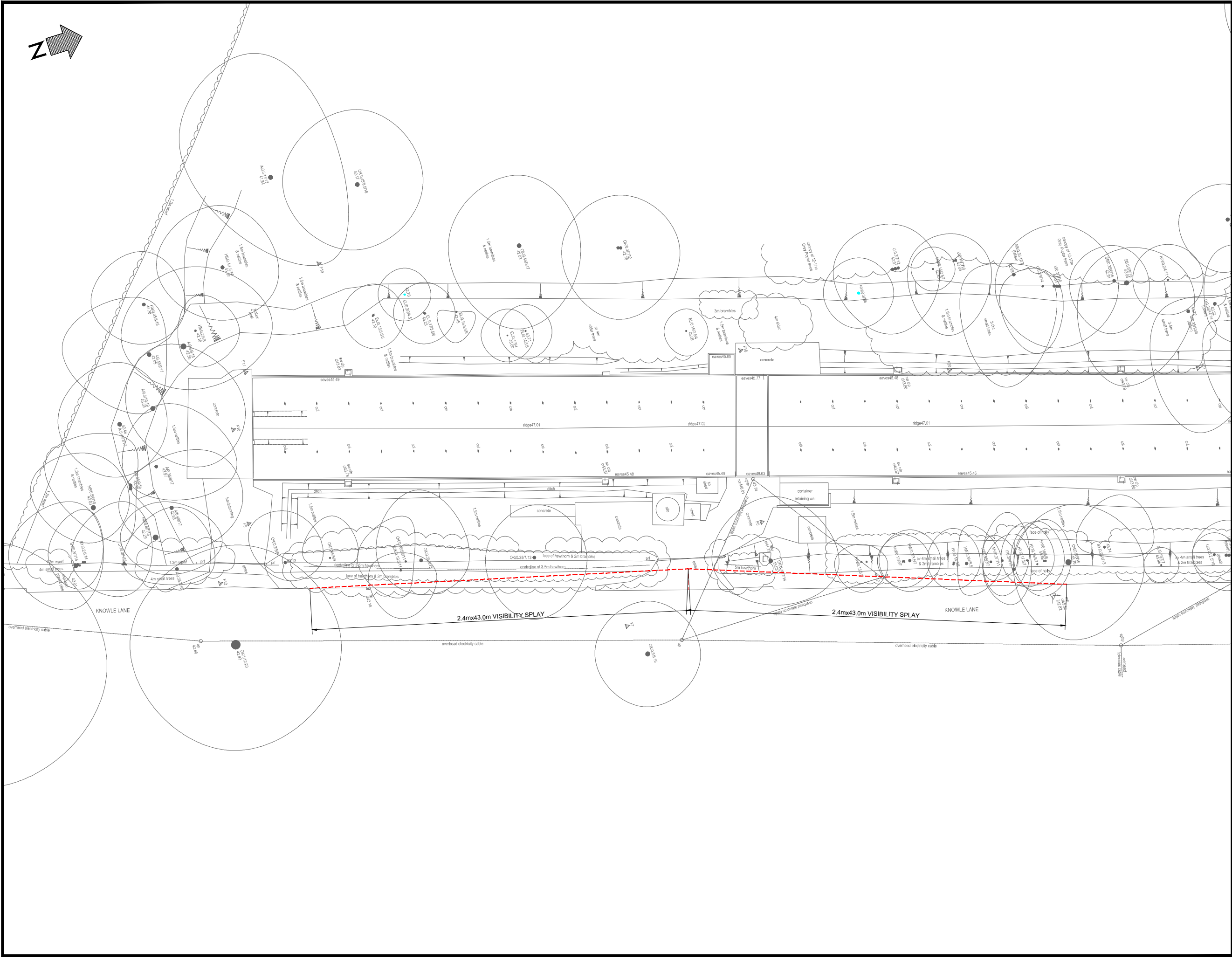
Adequate provision for the servicing of the site has been made, based on the largest vehicle likely to be generated.

It is therefore considered that the application would not cause any demonstrable harm to highway safety.

Nick Culhane July 2023

Appendix 1

Access and Visibility



Client

 **Nick Culhane**
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Project

CLASS R
COCKPIT FARM, KNOWLE
LANE

Drawing Title

ACCESS AND VISIBILITY SPLAYS

Drawing Status

FOR INFORMATION

Date	Scale	Size
OCT 2021	1:200	A1
Drawing No.	Rev	
NJC-001	-	

Appendix 2

TRICS Data

Calculation Reference: AUDIT-405201-230724-0725

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	RE READING	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
09	NORTH	
	CU CUMBERLAND	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: Gross floor area
Actual Range: 260 to 715 (units: sqm)
Range Selected by User: 260 to 715 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 21/04/22

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:

Thursday	3 days
Friday	1 days

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

Selected survey types:

Manual count	4 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	4
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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:

Industrial Zone	4
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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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 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	3 days
1.1 to 1.5	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 4 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 4 days

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

LIST OF SITES relevant to selection parameters

The 'browse and select' feature in TRICS was used to choose the sites to be included in this selected set. The TRICS user browsed the full list of sites for this land use category and selected directly from this list.

1	CU-02-C-01	STEEL FABRICATION	CUMBERLAND
	BLACKDYKE ROAD		
	CARLISLE		
	KINGSTOWN IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	715 sqm	
	Survey date: FRIDAY	15/10/21	Survey Type: MANUAL
2	LC-02-C-06	STEEL FABRICATION	LANCASHIRE
	TOLLGATE ROAD		
	BURSCOUGH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	700 sqm	
	Survey date: THURSDAY	21/04/22	Survey Type: MANUAL
3	NF-02-C-03	SHEET METAL CONTRACTOR	NORFOLK
	ELVIN WAY		
	NORWICH		
	HELLESDON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	260 sqm	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
4	RE-02-C-01	SHEET METAL FABRICATION	READING
	COMMERCIAL ROAD		
	READING		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	645 sqm	
	Survey date: THURSDAY	22/11/12	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.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
 TOTAL VEHICLES
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	700	0.000	1	700	0.000	1	700	0.000
05:30 - 06:00	1	700	0.000	1	700	0.000	1	700	0.000
06:00 - 06:30	1	700	0.143	1	700	0.000	1	700	0.143
06:30 - 07:00	1	700	0.286	1	700	0.143	1	700	0.429
07:00 - 07:30	4	580	0.172	4	580	0.000	4	580	0.172
07:30 - 08:00	4	580	0.603	4	580	0.129	4	580	0.732
08:00 - 08:30	4	580	0.172	4	580	0.172	4	580	0.344
08:30 - 09:00	4	580	0.345	4	580	0.302	4	580	0.647
09:00 - 09:30	4	580	0.216	4	580	0.172	4	580	0.388
09:30 - 10:00	4	580	0.302	4	580	0.172	4	580	0.474
10:00 - 10:30	4	580	0.259	4	580	0.216	4	580	0.475
10:30 - 11:00	4	580	0.345	4	580	0.345	4	580	0.690
11:00 - 11:30	4	580	0.216	4	580	0.172	4	580	0.388
11:30 - 12:00	4	580	0.172	4	580	0.086	4	580	0.258
12:00 - 12:30	4	580	0.172	4	580	0.259	4	580	0.431
12:30 - 13:00	4	580	0.259	4	580	0.172	4	580	0.431
13:00 - 13:30	4	580	0.086	4	580	0.172	4	580	0.258
13:30 - 14:00	4	580	0.129	4	580	0.172	4	580	0.301
14:00 - 14:30	4	580	0.259	4	580	0.086	4	580	0.345
14:30 - 15:00	4	580	0.216	4	580	0.259	4	580	0.475
15:00 - 15:30	4	580	0.259	4	580	0.259	4	580	0.518
15:30 - 16:00	4	580	0.216	4	580	0.560	4	580	0.776
16:00 - 16:30	4	580	0.129	4	580	0.431	4	580	0.560
16:30 - 17:00	4	580	0.086	4	580	0.129	4	580	0.215
17:00 - 17:30	4	580	0.086	4	580	0.172	4	580	0.258
17:30 - 18:00	4	580	0.086	4	580	0.259	4	580	0.345
18:00 - 18:30	4	580	0.086	4	580	0.086	4	580	0.172
18:30 - 19:00	4	580	0.000	4	580	0.129	4	580	0.129
19:00 - 19:30	1	700	0.000	1	700	0.143	1	700	0.143
19:30 - 20:00	1	700	0.000	1	700	0.000	1	700	0.000
20:00 - 20:30	1	700	0.000	1	700	0.000	1	700	0.000
20:30 - 21:00	1	700	0.000	1	700	0.000	1	700	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			5.300			5.197			10.497

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.

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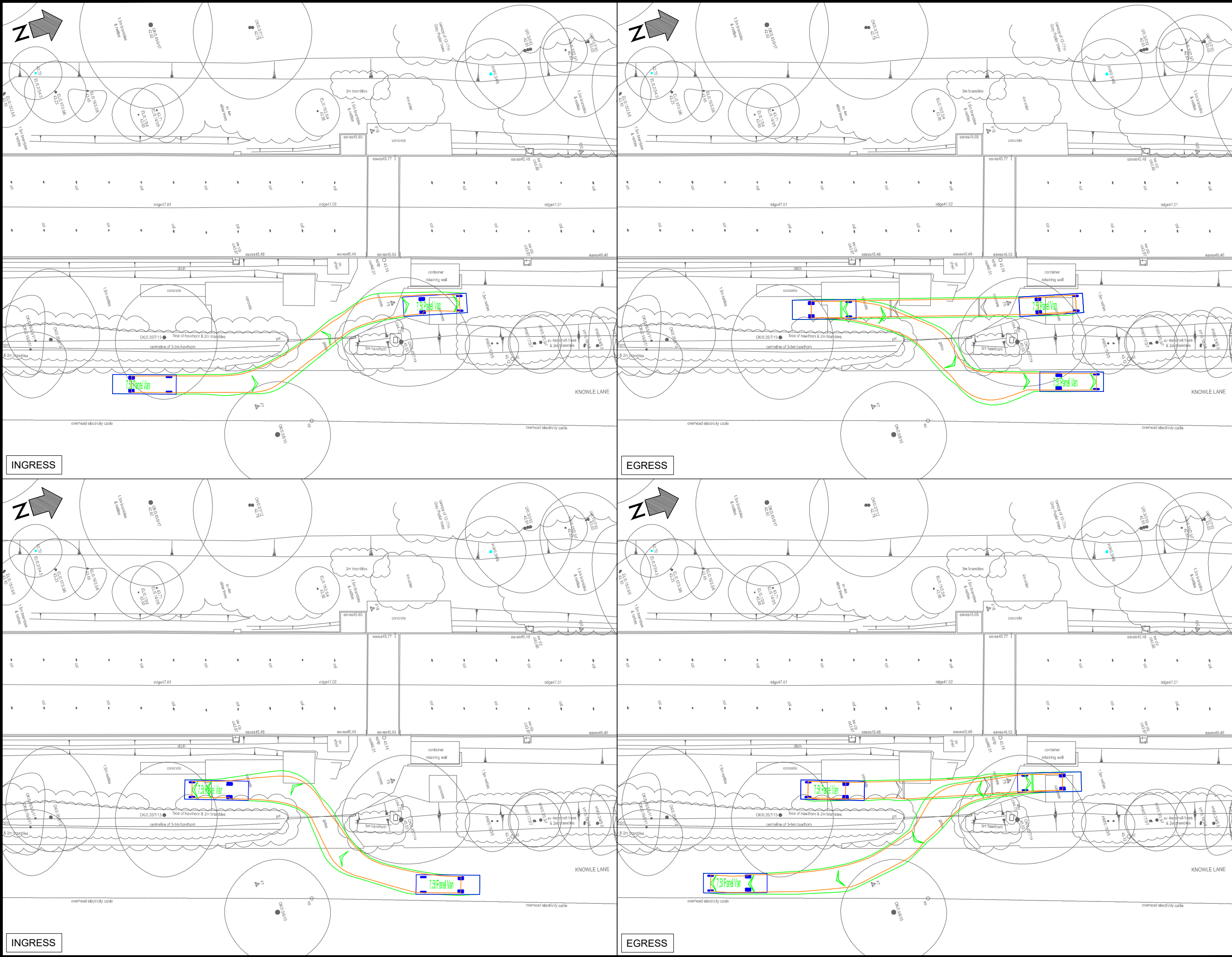
Parameter summary

Trip rate parameter range selected:	260 - 715 (units: sqm)
Survey date range:	01/01/12 - 21/04/22
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Appendix 3

Swept Path Tracking



VEHICLE DETAILS:	
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	1.885m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7.400m
Design speed 5kph for all Forward movements Design speed 2.5kph for all Reverse movements	

Client		
Project		
CLASS R OCKPIT FARM, KNOWLE LANE		
Drawing Title		
SWEEP PATH TRACKING DELIVERY VEHICLE		
Drawing Status		
FOR INFORMATION		
Date	Scale	Size
OCT 2021	1:200	A1
Drawing No.	Rev	
NJC-002	-	