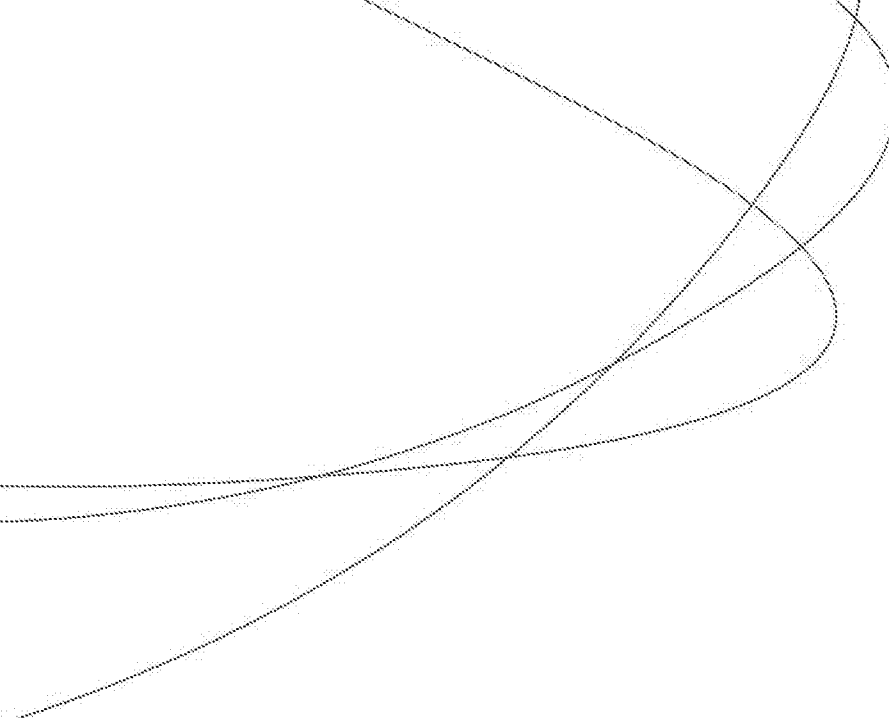




Proposed Residential Development

REPORT OF THE CHAIRMAN

Prepared on behalf of Seward
Properties Limited

SEAW/16/3446/TS01

November 2014

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Proposed Residential Development

Document: Transport Statement

Client: Seaward Properties Limited

Reference: SEAW/16/3446/TS01

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PLANS

Plan 01 Site Accessibility Plan

DRAWINGS

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2016/3446/002	Swept Path Analysis 1
2016/3446/003	Swept Path Analysis 2

APPENDICES

Appendix A	Site Layout
Appendix B	WSCC Car Parking Demand Calculator
Appendix C	TRICS Trip Generation Data

1 INTRODUCTION

1.1 Scope of Transport Statement

1.1.1 This Transport Statement has been prepared by Russell Giles Partnership (RGP) on behalf of Seaward Properties Limited in association with a development proposal involving the erection of 5 residential units together with the creation of a new access, associated car parking and soft landscaping on open land south of Lake Lane in Barnham, West Sussex.

1.1.2 The application site comprises a triangular shaped area of undeveloped land encompassing 0.03 hectares, off the southern side of Lake Lane, approximately 700 metres to the north-east of Barnham village centre. The sites location and context is shown in **Figure 1.1**.



Figure 1.1: Site Location

1.1.3 In assessing the transport planning and highways impact of the development proposals, this report has been prepared in accordance with relevant national and local planning policies. Design work has been undertaken in accordance with the Department for Transport's (DfT's) 'Design Manual for Roads and Bridges' (DMRB), 'Manual for Streets' (MfS and MfS2) publications and WSCC's 'Transport Assessment Methodology' (2007).

1.2 Report Structure

1.2.1 The remainder of this report is comprised of the following sections:

- (i) **Section 2** presents a review of the baseline conditions including a description of the site's location in context with the local area and highway network; a consideration of the site's accessibility by a variety of travel modes; and the results of a study examining highway safety.
- (ii) **Section 3** considers the principal design aspects of the development proposals including the access, parking, servicing and delivery arrangements in light of relevant national and local guidance.
- (iii) **Section 4** assesses the traffic generating potential of the development proposals to establish the impact on the local highway network.
- (iv) **Section 5** summarises the main conclusions of the report.

2 SITE DESCRIPTION AND ACCESSIBILITY CREDENTIALS

2.1 Site Description

- 2.1.1 The application site comprises a triangular shaped parcel of undeveloped land covering 286 square metres, located off the southern side of Lake Lane, approximately 700 metres to the north-east of Barnham village centre.
- 2.1.2 The site boundaries are formed by Lake Lane to the north, Pollards Nursery to the east and south, and several private dwellings (Milestones, Maytrees and Toll Cottages) to the west. The location of the application site in context with the local area and surrounding highway network is shown on **Plan 01** and **Figure 2.1**.

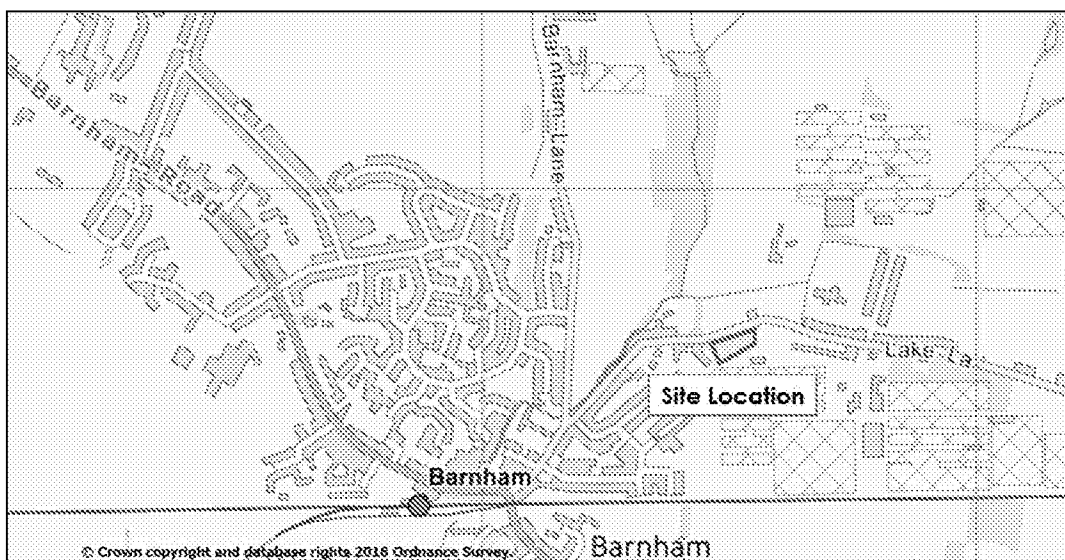


Figure 2.1: Site Location

- 2.1.3 Vehicular access to the site is via a gated vehicle crossover measuring circa 4.7 metres in width, located off the southern side of Lake Lane. The access traverses a drainage ditch that runs alongside the site's northern frontage with Lake Lane. The existing access is demonstrated in **Figure 2.2**.



Figure 2.2: Existing Access

2.2 Local Highway Network

2.2.1 Lake Lane is a lit, single two-way carriageway measuring circa 4.7 metres in width in the vicinity of the site. It is subject to a 30mph posted speed restriction with sections of intermittent footway on either side. As well as providing a link to the B2132 Yapton Lane approximately 1.6 kilometres to the east, the western end of Lake Lane connects with Barnham Lane via a give-way priority junction circa 400 metres to the south-west. Lake Lane's carriageway features are demonstrated in **Figure 2.3** and **2.4**.

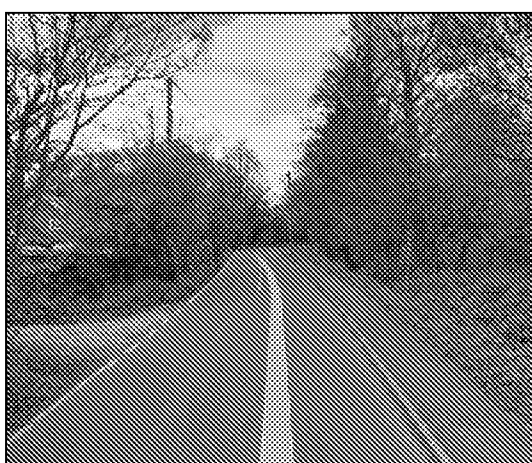


Figure 2.3: Lake Lane Heading East



Figure 2.4: Lake Lane Heading West

2.2.2 Barnham Lane adjoins the B2233 Yapton Road which runs in a north-west to south-east direction and connects to the eastbound section of the A27 Arundel Road to the north via Eastergate and the A259 Crookthorn Lane to the south. The local road network is shown in **Figure 2.5**.

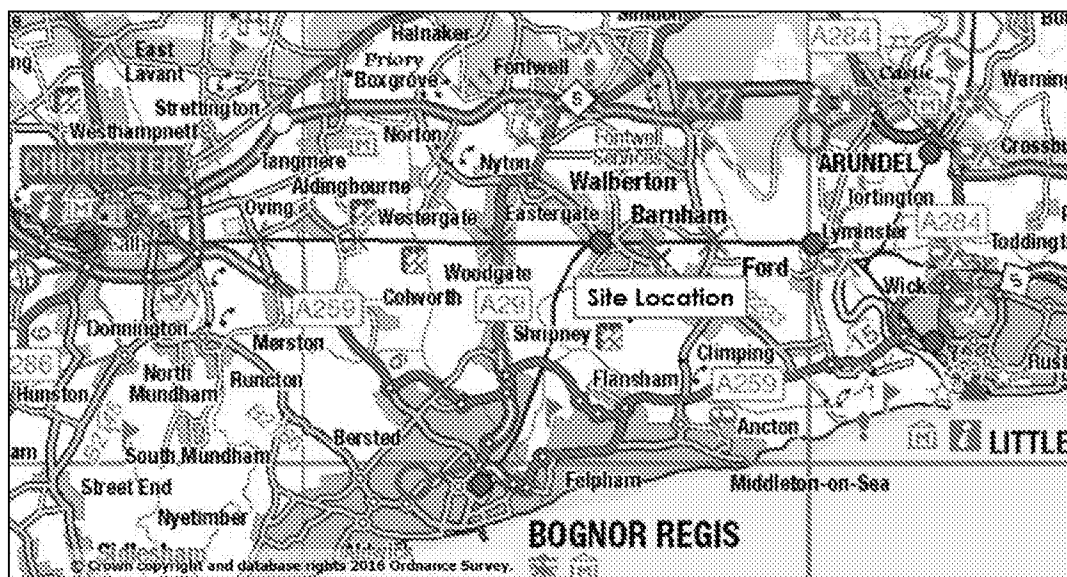


Figure 2.5: Local Road Network

2.3 Accessibility Credentials

Pedestrian / Cycle Accessibility

- 2.3.1 Pedestrian access is via a 1.6 metre wide, lit footway located on the southern side of Lake Lane, which extends circa 40 metres to the west where it terminates, prior to continuing on the opposite side of the carriageway outside a dwelling known as Bluebell Wood approximately 30 metres to the west. The footway extends to Green Acres circa 150 metres to the east of the crossover where it terminates and continues along the northern side.
- 2.3.2 In addition to the intermittent network of footways, a Public Right of Way (Footpath No. 324) commences from the southern side of Lake Lane and heads in a south westerly direction through the application site. The footpath is approximately 0.67 kilometres in length and provides a direct route to the northern side of the B2233 Yapton Road, between two dwellings known as Sunny Bank and Broadlands via the Goodacres cul-de-sac and across the 'West Coastway' Line.
- 2.3.3 The Chartered Institute of Highways and Transportation's (CIHT's) publication 'Providing for Journeys on Foot' (2000) states that the average length of a walk journey is 1 kilometre. It further suggests a preferred maximum walking distance of 2 kilometres for commuting / school journeys and 1.2 kilometres for other journey destinations.
- 2.3.4 With reference to the CIHT's publication entitled 'Cycle Friendly Infrastructure' (1996), it is suggested that reasonably fit individuals can comfortably cycle a distance of 8 kilometres to workplace destinations.

Accessibility by Bus

- 2.3.5 The Chartered Institute of Highways and Transportation (CIHT's) 'Planning for Public Transport in Developments' (1999) states a desirable distance of 400 metres for new developments to be accessible by public transport services.
- 2.3.6 The nearest bus stop is Lake Lane (SW and NE Bound) circa 500 metres to the south-west of the application site comprised of flagpoles and timetable information. Whilst slightly beyond the CIHT's recommended distance is still realistically accessible on-foot by existing and proposed households living along Lake Lane. Further services are available from Barnham Station circa 700m from the application site.
- 2.3.7 As shown on **Figure 2.6**, these stops are served by a total of 5 bus services operated by Compass Travel and Stagecoach South. The No. 66 and service operates on a relatively frequent basis providing access to the local settlements of Arundel, Bognor Regis and Chichester. The No. 228, 602 and 665 services provide services during the school term and provide access to and from the local educational establishments including St Philip Howard School, Chichester High School and, Ormiston Six Villages Academy.

Service No.	Route Summary	Typical Daytime Frequency	Operating Hours
66	Bognor Regis -- Yapton -- Bognor Regis	Mon-Fri: Every 60-120 min Sat: Every 60-120 min	Mon-Fri: 07:48 -- 16:53 Sat: 07:52 -- 16:53
85A	Arundel -- Fontwell -- Chichester	Mon-Fri: Every 120 min Sat: Every 120 min	Mon-Sat: 10:15 -- 14:15
228	Ormiston Six Villages Academy -- Yapton -- Arundel -- Tangmere	1 inbound service per school day	Mon-Fri: 15:54
602	Rustington - Littlehampton - Arundel - St Philip Howard School	1 in / outbound service per school day	Mon-Fri: 08:28, 15:16
665	Littlehampton - Westergate - Chichester High School	1 in / outbound service per school day	Mon-Fri: 07:51, 14:55

Figure 2.6: Summary of Local Bus Services Available from Lake Lane/ Barnham Station

Accessibility by Rail

- 2.3.8 Barnham rail station is located off the southern side of the B2233 Barnham Road, approximately 750 metres to the south-west of the application site. It is situated on the 'West Coastway Line' that runs between Brighton and Portsmouth and also facilitates interchange with rail services operating along the 'Arun Valley Line' and the branch lines to Bognor Regis and Littlehampton.

2.3.9 Details of all rail services operated by Southern to a range of destinations including Bognor Regis, Littlehampton, Portsmouth, Brighton, Southampton and London Victoria, are shown in **Figure 2.7**.

Destination	Route Summary	Typical Daytime Frequency			Typical Journey Time
		Mon – Fri	Sat	Sun	
Bognor Regis	Barnham – Bognor Regis	4 trains per hour	4 trains per hour	2 trains per hour	6 – 8 minutes
Littlehampton	Barnham – Ford – Littlehampton	2 trains per hour	2 trains per hour	1 train per hour	9 minutes
Portsmouth and Southsea	Barnham – Chichester – Southbourne – Emsworth – Havant – Fratton – Portsmouth & Southsea	3 trains per hour	3 trains per hour	3 trains per hour	31 – 47 minutes
Brighton	Barnham – Angmering – Worthing – Lancing – Shoreham-by-Sea – Portslade – Hove – Brighton	2 trains per hour	2 trains per hour	3 trains per hour	40 – 45 minutes
Southampton	Barnham – Chichester – Emsworth – Havant – Cosham – Fareham – Swanwick – Southampton	2 trains per hour	2 trains per hour	1 train per hour	1 hr 22 min
London Victoria	Barnham – Arundel – Chicks Hospital – Crawley – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	4 trains per hour	4 trains per hour	2 trains per hour	1 hr 27 min – 1 hr 43 min

Figure 2.7: Summary of Rail Services Available from Barnham Rail Station

2.3.10 Cycle parking facilities comprising 20 covered cycle racks are located adjacent to the main ticket hall building, enabling rail commuters to travel by cycle and rail as part of a multi-modal journey.

Accessibility to Local Facilities / Services

2.3.11 With reference to ADC's Local Plan (2011 – 2031), Barnham is defined as one of six villages located to the west of the district. It is located near to the villages of Westergate and Eastergate and as a consequence benefits from having access to a range of amenities catering for the everyday needs of existing households.

2.3.12 As shown in **Figure 2.8** the majority of these amenities are accessible on-foot and by cycle, within the recommended distances as advocated in the CIHT's publication.

Journey Purpose	Destination	Distance	Walk Journey Time (min)	Cycle Journey Time (min)
Convenience	Barnham Post Office	850 metres	10	2
Education	Barnham Primary School	1.2 kilometres	14	3
	St Philip Howard Catholic High School	1.4 kilometres	17	4
	Yapton C of E Primary School	2.6 kilometres	31	7
	Walberton & Binsled C Of E Primary School	2.8 kilometres	34	9
	Orniston Six Villages Academy	3.1 kilometres	37	10
Employment	Fordingbridge Industrial Park	1.9 kilometres	22	5
	Orchard Business Park	2.4 kilometres	29	7
Health Care	Chantry House Dental Practice	1.7 kilometres	20	5
	The Croft Surgery	1.8 kilometres	21	5
Retail	Barnham Superfayre	450 metres	6	1
	The Co-operative Food	850 metres	10	2
Sports & Leisure	The Murrell Arms	750 metres	9	3
	Eastergate Sports Ground	2.9 kilometres	N / A	8
	Six Villages Sports Centre	3.4 kilometres	N / A	11
	Aldingbourne Tennis Club	3.7 kilometres	N / A	11
	Avisford Park Golf Club	3.8 kilometres	N / A	11

Figure 2.8: Summary of Local Facilities/ Services Available in Barnham

2.4 Summary

- 2.4.1 The application site is located on the north-eastern edge of Barnham and as a consequence benefits from being accessible to public transport services, which provide frequent connections to a host of local and regional destinations as well as a range of amenities available on-foot and by cycle in Barnham village centre and the surrounding villages of Eastergate and Westergate.
- 2.4.2 Consequently, in accordance with the core principles of the NPPF, future households would be afforded opportunities to travel by sustainable modes for several journey purposes.

3 DEVELOPMENT PROPOSALS

3.1 Overview

- 3.1.1 The development proposals comprise the erection of 5 residential units (Use Class C3), the creation of a new vehicular access off the southern side of Lake Lane together with associated car parking and soft landscaping. The proposed site layout plan is attached at **Appendix A** of this report.

3.2 Proposed Access Arrangements

- 3.2.1 As shown on **Drawing No. 2016/3446/001** vehicular and pedestrian access to the site would be via the creation of a new crossover measuring circa 4.8 metres in width, located off the southern side of Lake Lane.
- 3.2.2 The proposed crossover would be designed in accordance with WSCC's Standard Detail Drawing S278/38/07 Revision C. The existing crossover situated immediately to the west would be closed. A short section of footway measuring 6.4 metres in width would be reinstated.

Visibility / Sight Line Requirements

- 3.2.3 Guidance on the visibility splay requirements for existing and proposed junctions and accesses is set out in the DfT's 'MFS2' 'Wider Application of the Principles' (Sept 2010). Following the guidance set out in 'MFS2', based on the 30mph limit, visibility splays of 43 metres are required in both directions.
- 3.2.4 In compliance with MFS, visibility splays have been measured both to the right (leading traffic direction) and left (trailing traffic direction) achieving the necessary splay of 2.4m x 43 metres, measured to the kerb line. Consequently, car drivers exiting from the proposed vehicle crossover would have sufficient time to see and be seen by other road users.
- 3.2.5 As shown on **Drawing No. 2016/3446/002** it is evident that a standard sized vehicle can enter and exit the proposed access arrangement in a safe and convenient manner.

Internal Layout

- 3.2.6 The internal road adjoining the Lake Lane and running adjacent to plot 1 and 2 would have a carriageway width of 4.8 metres allowing two cars to pass in opposing directions. A turning head adjacent to plot 2 allows refuse vehicles to perform turn manoeuvres within the site and enter and exit the site in a forward gear. Past plot 3 the carriageway narrows to 3.7m in width serving plots 4 and 5.

- 3.2.7 The internal layout of the proposed development would be designed to reflect the shared surface principles, as promoted within the MfS guidance. MfS design guidance suggests that shared surfaces are appropriate where carriageways form cul-de-sacs, where the volume of traffic is below 100 vehicles per hour, and where parking is controlled or it takes place in designated areas.

3.3 Proposed Parking Arrangement

Car Parking

- 3.3.1 Car parking standards applicable to residential (Use Class C3) development proposals were previously set out in WSCC's Supplementary Planning Guidance (SPG) entitled 'Guidance on Car Parking in Residential Developments' (2003). However, since September 2010 WSCC have published revised guidance on determining the parking requirements for new residential developments, based on using a 'Car Parking Demand Calculator'.
- 3.3.2 This tool enables transport planning practitioners to determine the predicted parking demand of a specific development proposal, by way of manually entering data on the location (census ward), dwelling type (house or flat), household size (no. of habitable rooms), and number of allocated / unallocated parking spaces for a particular site.
- 3.3.3 When entering the relevant inputs into the 'Car Parking Demand Calculator', the total parking demand for the development proposals is calculated to be 14 car parking spaces including 12 allocated to each residential unit and 2 unallocated visitor / overspill bay. A copy of the outputs derived from WSCC's 'Car Parking Demand Calculator' is attached at **Appendix B** of this report.
- 3.3.4 As shown on the site's indicative layout plan, a total of 12 allocated spaces would be provided as part of the development proposals, with the majority provided off-street in driveways and garages. There would be sufficient room for 2+ visitors to park on-street without obstructing vehicle manoeuvres around the site. Visitors / overspill parking is likely to occur across the driveways of the properties being visited. The provision is consistent with the outputs of WSCC's 'Car Parking Demand Calculator' and therefore considered appropriate.

Cycle Parking

- 3.3.5 Cycle parking standards for new residential developments are also specified in WSCC's 'Guidance for Parking in New Residential Developments' document (September 2010). This guidance emphasises the importance of providing 'good' cycle storage facilities, which take account of dwelling size and type as well as have regards to existing levels of cycle ownership. The recommended cycle parking standards are presented in **Figure 3.1**.

Type	Size	Cycle Provision (Per Unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5 + rooms (3 + bed)	2 spaces
Flats	Up to 3 rooms (1+2 bed)	0.5 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3 + bed)	1 space

Figure 3.1: Cycle Parking Standards

- 3.3.6 In accordance with the above standards, sufficient space for the storage of cycles would be provided within the curtilage of each residential unit in garden sheds.

3.4 Proposed Delivery and Servicing Arrangements

- 3.4.1 The internal roads have been designed to allow a refuse vehicle to enter and exit the site. A turning head adjacent to plot 2 provides space for a refuse vehicle to perform a 3-point turn within the in the constraints of the site.
- 3.4.2 A vehicle swept path analysis has been undertaken to ensure a refuse vehicle (the largest vehicle requiring access to the site) can negotiate the turn into the site as well as perform a 3-point turn. This is demonstrated in **Drawing 2016/3446/003**.

4 TRAFFIC GENERATION AND IMPACT

4.1 Introduction

4.1.1 This section of the report considers the vehicular traffic generating potential of the residential development proposals and associated impact on the local highway network throughout a typical weekday as well as during the AM (08:00 – 09:00) and PM (17:00–18:00) peak hour periods.

4.1.2 As previously mentioned in **Section 1** of this report, the application site is currently comprised of open undeveloped land that does not exhibit any vehicular traffic generating characteristics. Consequently, this assessment considers all vehicular movements generated by the development proposals to be new to the local highway network.

4.2 Proposed Traffic Generation

4.2.1 In order to establish the anticipated vehicular trip rates associated with the development proposals, the Trip Rate Information Computer System (TRICS) database (c) version 7.3.3 was interrogated to identify comparable sites under the land use category '03 – Residential A – Houses Privately Owned'.

4.2.1 To further ensure that the sites selected for the TRICS assessment are representative of the development proposals, the following search parameters were applied:

- (i) Land Use – Residential (Houses Privately Owned).
- (ii) Regions – England (excluding Greater London).
- (iii) Number of Units – 6-30 units (10-27 actual range).
- (iv) Date Range – 2008 onwards.
- (v) Count Type – Manual.
- (vi) Selected Days – Weekdays only.
- (vii) Selected Locations – Suburban Area, Edge of Town.

4.2.2 The anticipated trip rates and corresponding vehicular movements are presented in **Figure 4.1** below, while a copy of the TRICS output is attached at **Appendix C** of this report.

TRICS TRIP RATE PER DWELLING			
Time Period	Arrivals	Departures	Total Two-Way
AM Peak Hour (08:00 – 09:00)	0.144	0.347	0.491
PM Peak Hour (17:00 – 18:00)	0.398	0.136	0.534
Daily (07:00 – 19:00)	2.533	2.441	4.974
TRICS Vehicular Generation			
AM Peak Hour (08:00 – 09:00)	1	2	2
PM Peak Hour (17:00 – 18:00)	2	1	3
Daily (07:00 – 19:00)	13	12	25

Figure 4.1: Anticipated Trip Rates and Vehicular Generation

- 4.2.3 The TRICS assessment demonstrates that the residential development proposals are anticipated to generate in the region of 25 additional two-way vehicular movements per day, with circa 2 - 3 trips during the AM and PM peak hour periods respectively. This equates to approximately 1 extra vehicular movement every 30 minutes on the local highway network.
- 4.2.4 This increase is considered to be immaterial and would not have a 'severe' impact on the local highway network or cause demonstrable harm to the conditions of amenity, capacity and safety.

5 SUMMARY AND CONCLUSIONS

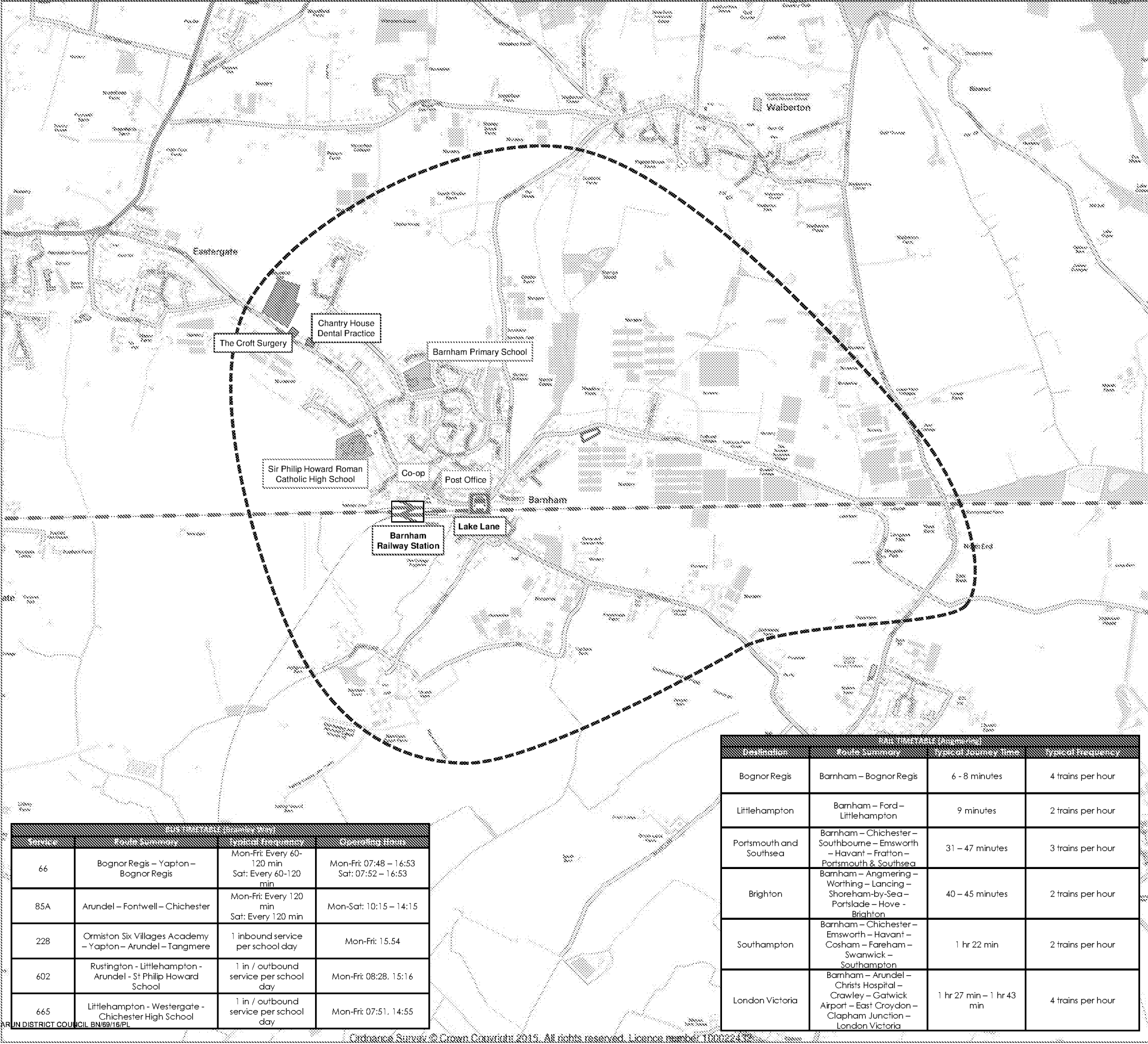
5.1.1 This Transport Statement has been prepared by Russell Giles Partnership (RGP) on behalf of Seaward Properties Limited in association with a development proposal involving the erection of 5 residential units on undeveloped land south of Lake Lane in Barnham, West Sussex.

5.1.2 The findings from this report are as follows:

- (i) The site is located accessibly within walking distance of Barnham and its associated services and amenities. Bus and rail services are available within a desirable walking distances providing links to local towns.
- (ii) The proposed development would be comprised of 5 privately owned 3 to 4 bed residential dwellings. The existing access on the southern side of Lake Lane would be reformed to serve the development.
- (iii) Visibility from the proposed access achieves the required visibility splays in accordance with MfS design guidance. The required visibility splays are demonstrated in **Drawing 2016/3370/002**.
- (iv) The proposed development would generate a total of 25 new trips on the local road network, 2 within the AM peak and 3 within the PM peak. This is not considered to cause a 'severe' impact on the highway network.
- (v) The proposed provision of on-site car parking spaces accords with WSCC's 'Car Parking Demand Calculator'.

5.1.3 On the basis of the evidence presented within this report, ADC as the Local Planning Authority and WSCC as Local Highway Authority are respectfully requested to confirm that the development proposals are acceptable from a transport planning and highways perspective.

PLANS



LEGEND

- SITE LOCATION
- RAIL STATION
- RAILWAY
- BUS STOPS
- CYCLE ROUTES
- NATIONAL CYCLE ROUTE
- 2KM WALK ISOCHRONE
- RETAIL
- EDUCATION
- HEALTH CARE
- INDUSTRIAL

BUS TIMETABLE (Mainline Way)			
Service	Route Summary	Typical Frequency	Operating times
66	Bognor Regis – Yapton – Bognor Regis	Mon-Fri: Every 60-120 min Sat: Every 60-120 min	Mon-Fri: 07:48 – 16:53 Sat: 07:52 – 16:53
85A	Arundel – Fontwell – Chichester	Mon-Fri: Every 120 min Sat: Every 120 min	Mon-Sat: 10:15 – 14:15
228	Ormiston Six Villages Academy – Yapton – Arundel – Tangmere	1 inbound service per school day	Mon-Fri: 15:54
602	Rustington - Littlehampton - Arundel - St Philip Howard School	1 in / outbound service per school day	Mon-Fri: 08:28, 15:16
665	Littlehampton - Westergate - Chichester High School	1 in / outbound service per school day	Mon-Fri: 07:51, 14:55

RAIL TIMETABLE (Mainline)			
Destination	Route Summary	Typical Journey Time	Typical Frequency
Bognor Regis	Barnham – Bognor Regis	6 - 8 minutes	4 trains per hour
Littlehampton	Barnham – Ford – Littlehampton	9 minutes	2 trains per hour
Portsmouth and Southsea	Barnham – Chichester – Southbourne – Emsworth – Havant – Fratton – Portsmouth & Southsea	31 – 47 minutes	3 trains per hour
Brighton	Barnham – Angmering – Worthing – Lancing – Shoreham-by-Sea – Portslade – Hove – Brighton	40 – 45 minutes	2 trains per hour
Southampton	Barnham – Chichester – Emsworth – Havant – Cosham – Fareham – Swanwick – Southampton	1 hr 22 min	2 trains per hour
London Victoria	Barnham – Arundel – Chicks Hospital – Crawley – Gatwick Airport – East Croydon – Clapham Junction – London Victoria	1 hr 27 min – 1 hr 43 min	4 trains per hour



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Client: Wilmington Homes

Project: Angmering Rugby Club

Title: Site Location & Accessibility Plan

Plan No: Plan 01	Job No: 3353	Date: October 16	Scale: NTS
Drawn By: EJD	Checked By: ???	Approved By: ???	Rev: -

APPENDIX A

- Notes
1. Do not scale from this drawing, except for planning purposes. Use figured dimensions only.
 2. All dimensions must be checked on site prior to commencement of work.
 3. Where applicable this drawing is to be read in conjunction with other consultants' drawings.
 4. Surrounding houses plotted from OS and superimposed onto the top survey.



Project		For		Studio Lack Architecture	
Land at Lake Lane Barnham		Seaward Properties Ltd.		Studio Lack Ltd	
		Date	Oct 2016	Scale	1/500 @ A4 size
				17 Beech Avenue, Chichester	
Drawing	Site Layout-Landscaping	Drawing number		01243 782686 nicholas.lack@live.com	
		30A			

APPENDIX B

This parking demand tool has been compiled by West Sussex County Council. If you have queries relating to the information provided or require additional information please contact darryl.hemmings@westsussex.gov.uk.

Please input the ward name for your development location below by double clicking in the box or click box and use the drop down menu to the right of the box. The spreadsheet will automatically show the District and Ward of this location. If the ward is not known please input postcode into the Ward Finder. The tool will allow input up to 3 wards in the boxes below. Please refer to notes for more details.

Ward 1	Barnham
District	Arun
Ward 2	Yapton
District	Arun
Ward 3	Arundel
District	Arun
Ward Tempro Factor 2009-2026	1.053854
District Tempro Factor 2009-2026	1.067644



west
sussex
county
council

Ward Finder

Postcode		Ward	
----------	--	------	--

Note:

No special provision need be made for visitors where at least half of the total parking provision is with a development is unallocated. In other circumstances, it may be appropriate to allow for additional demand for visitor parking of up to 0.2 spaces per dwelling.

In areas of parking constraint, levels of provision below predicted demand may be applicable.

The tool is expressed as number of Rooms (Per Unit). If data is not available in this format and number of Bedrooms is used this will need to be converted. A general guide for conversion is as follows but in some cases.

Houses	Flats
1 bed = 3 rooms	Studio = 1 room
2 bed = 4 rooms	1 bed = 2 rooms
3 bed = 5 rooms	2 bed = 3 rooms
4 bed = 6 rooms	3 bed = 4 rooms
5 bed = 7 rooms	4 bed = 5 rooms

Garages will count as 1 space when allocating spaces.

Ward data used can be checked by the user by referring to the District-Ward Data Tables. The Ward Data Tables highlight if the Census data does not include data for certain dwelling sizes. In such cases ownership values have been obtained using the nearest sized dwelling with same tenure and where necessary, if no data is available for a private house with 1 room then data for a private house with 2 rooms has been used. The Car Ownership Data is highlighted in purple where such an approach has been used. Where Census data contains small samples for certain sized dwellings this is highlighted in red if the sample size is less than 50 in the Total Demand column. In such cases, other wards should be selected to achieve a larger sample size.

Report Summary Table

DEVELOPMENT MIX				
Ref.	Unit Type	Unit Tenure	Habitable Rooms (Per Unit)	No. of Units (Total)
A	Houses	Private	6	2
B	Houses	Private	5	3
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
Total				5

ALLOCATED PARKING
Spaces (Per Unit)
3+
2

APPENDIX C

RGP Mill Pool House Godalming

Licence No: 728001

Calculation Reference: AUDIT-728001-161115-1107

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
 Actual Range: 10 to 27 (units:)
 Range Selected by User: 6 to 30 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 16/09/15

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:

Tuesday	2 days
Wednesday	3 days
Thursday	1 days

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

Selected survey types:

Manual count	6 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:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	5

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	5
No Sub Category	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.

RGP Mill Pool House Godalming

Licence No: 728001

Filtering Stage 3 selection:Use Class:

C3

6 days

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

Population within 1 mile:

1,001 to 5,000

2 days

5,001 to 10,000

2 days

10,001 to 15,000

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

2 days

25,001 to 50,000

2 days

50,001 to 75,000

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

4 days

1.1 to 1.5

2 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

6 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.

LIST OF SITES relevant to selection parameters

1	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
2	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
3	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
4	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
5	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
6	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.

RGP Mill Pool House Godalming

Licence No: 728001

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

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	6	20	0.042	6	20	0.195	6	20	0.237
08:00 - 09:00	6	20	0.144	6	20	0.347	6	20	0.491
09:00 - 10:00	6	20	0.144	6	20	0.186	6	20	0.330
10:00 - 11:00	6	20	0.203	6	20	0.153	6	20	0.356
11:00 - 12:00	6	20	0.161	6	20	0.144	6	20	0.305
12:00 - 13:00	6	20	0.169	6	20	0.178	6	20	0.347
13:00 - 14:00	6	20	0.144	6	20	0.136	6	20	0.280
14:00 - 15:00	6	20	0.212	6	20	0.246	6	20	0.458
15:00 - 16:00	6	20	0.339	6	20	0.331	6	20	0.670
16:00 - 17:00	6	20	0.297	6	20	0.220	6	20	0.517
17:00 - 18:00	6	20	0.398	6	20	0.136	6	20	0.534
18:00 - 19:00	6	20	0.280	6	20	0.169	6	20	0.449
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.533			2.441			4.974

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.

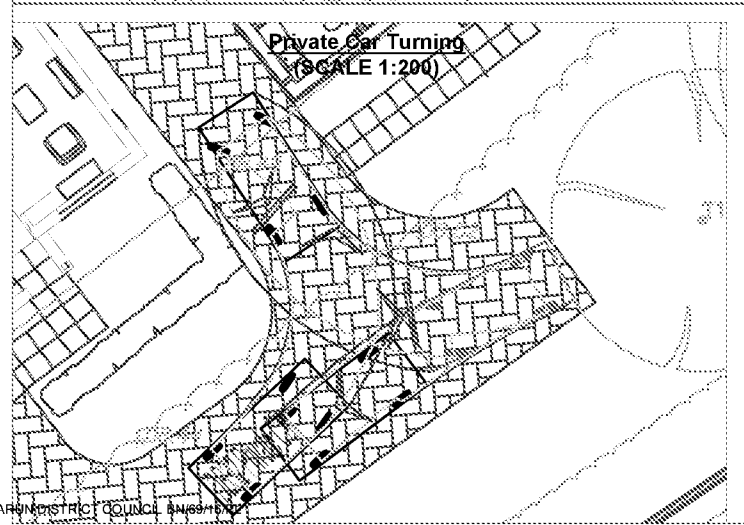
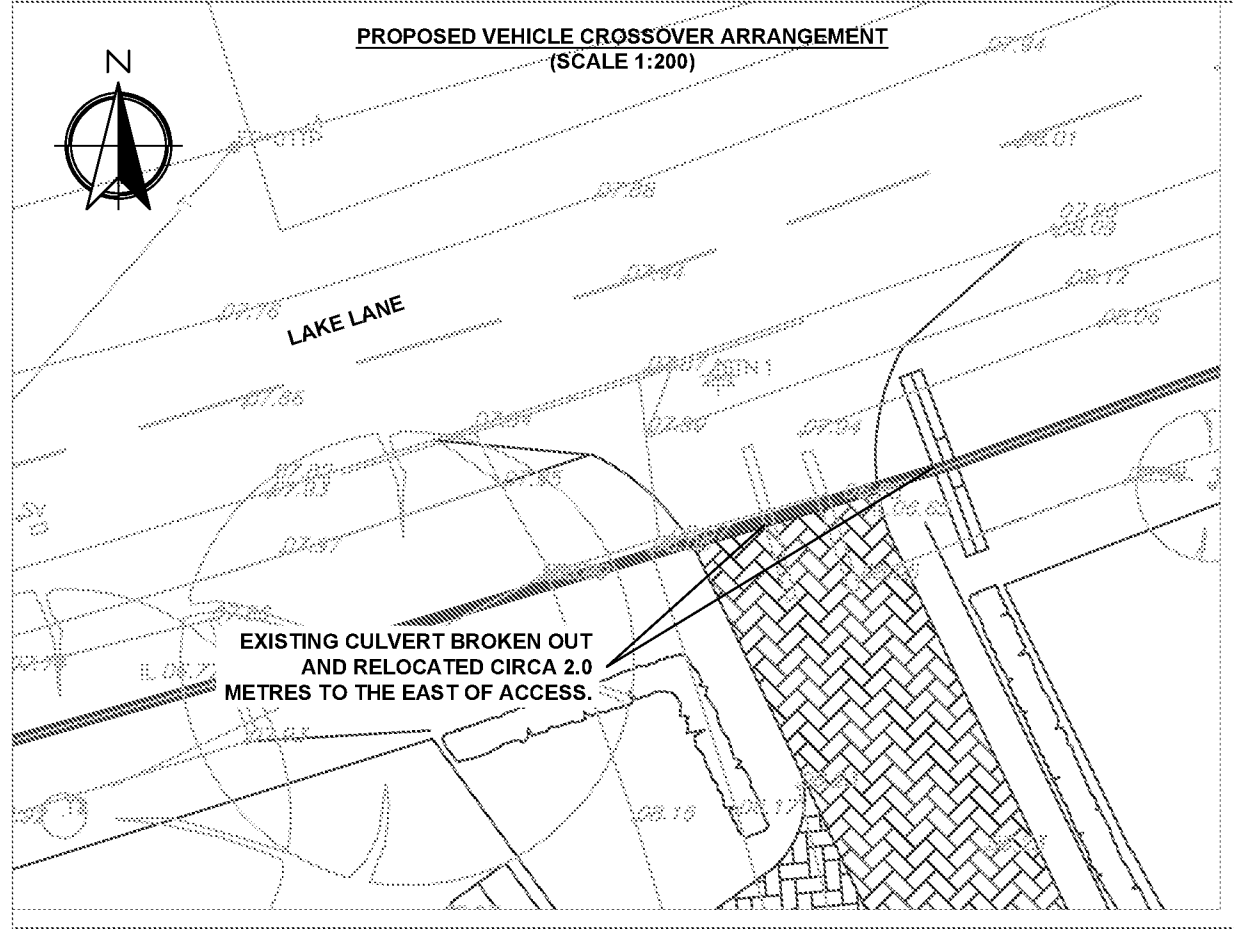
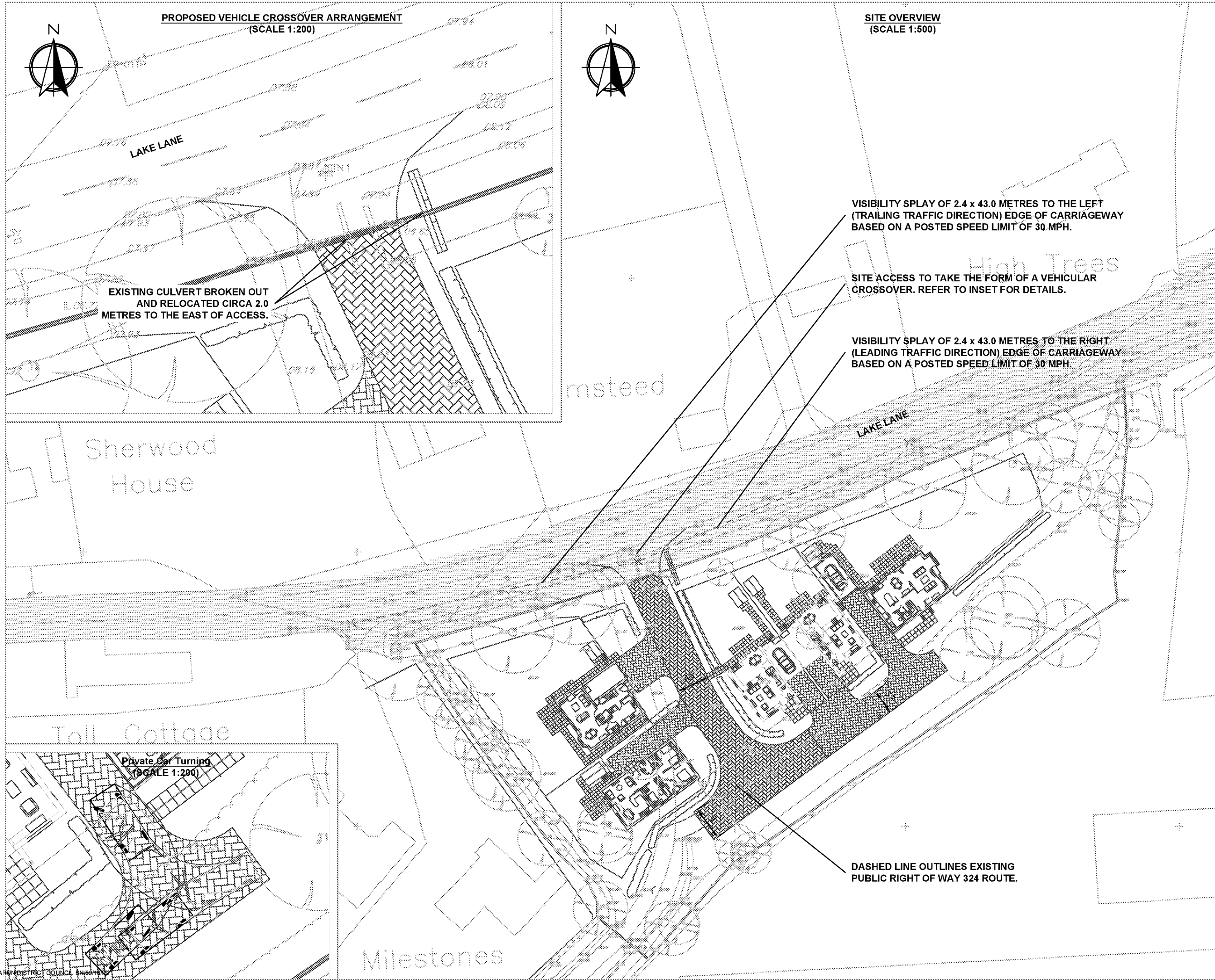
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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: 10 - 27 (units:)
 Survey date range: 01/01/08 - 16/09/15
 Number of weekdays (Monday-Friday): 6
 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.

DRAWINGS



NOTES

LEGEND

EXTENT OF HIGHWAY BOUNDARY

SITE BOUNDARY

DB32 Private Car

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Max Track Width

Lock to lock time

Kerb to Kerb Turning Radius

4.223m

1.715m

1.392m

0.233m

1.629m

4.00s

5.780m

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Seaward Properties Limited

Project

Land at Lake Lane, Barnham

Drawing Title

Proposed Access Arrangement and Visibility Splays

Scale

Varies @ A3

Drawn by

SMO

Checked by

ALB

Approved by

PMR

Date

November 2016

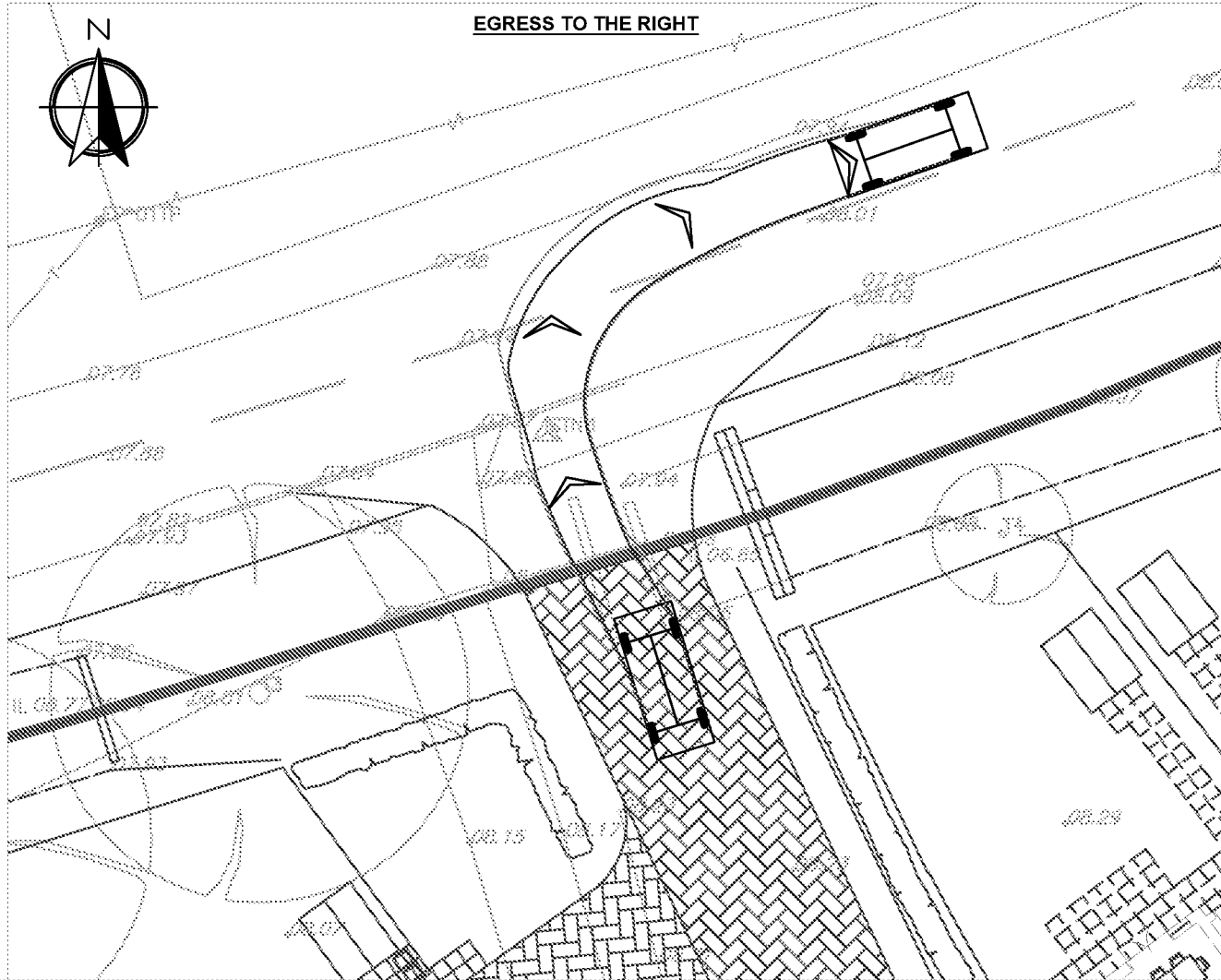
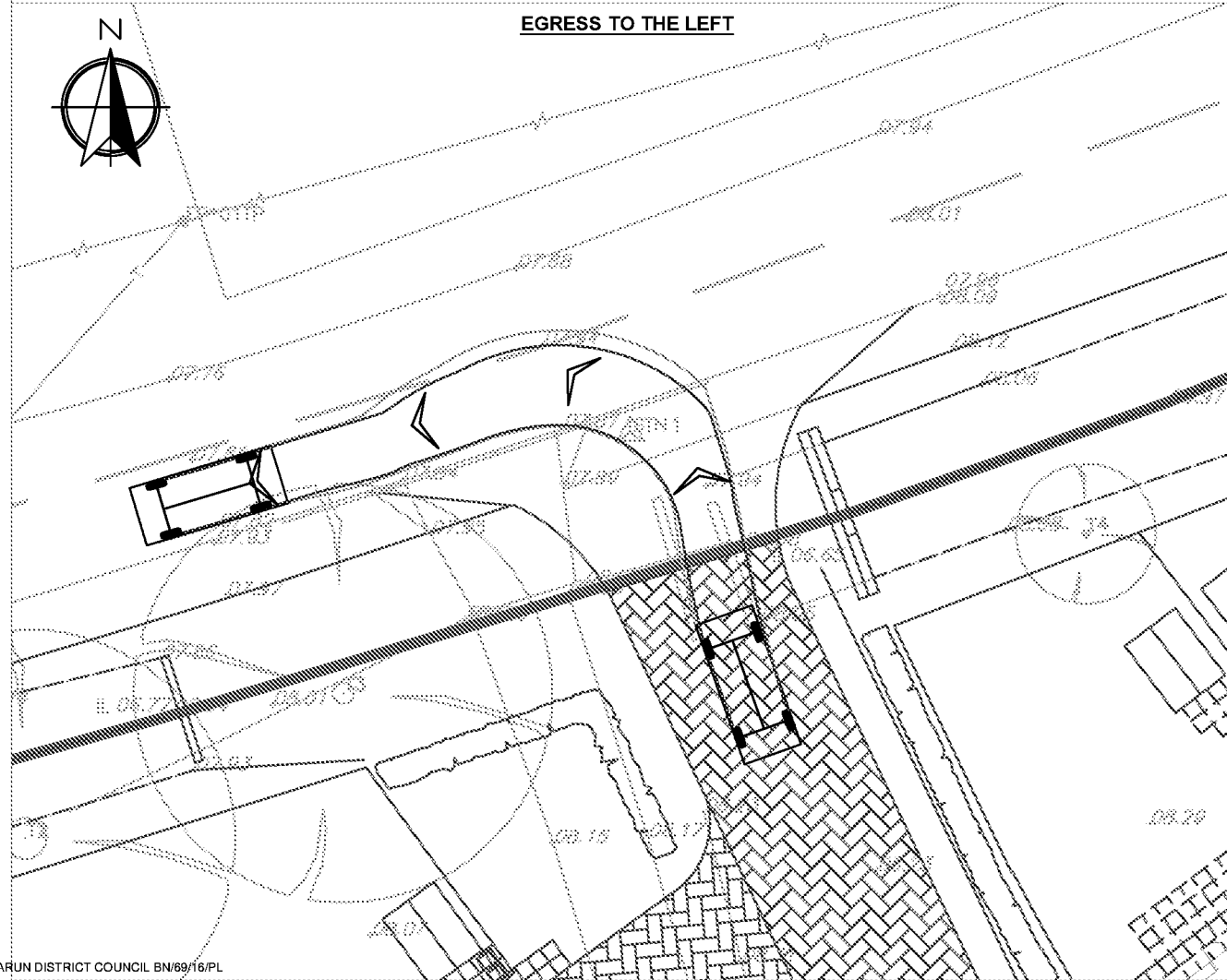
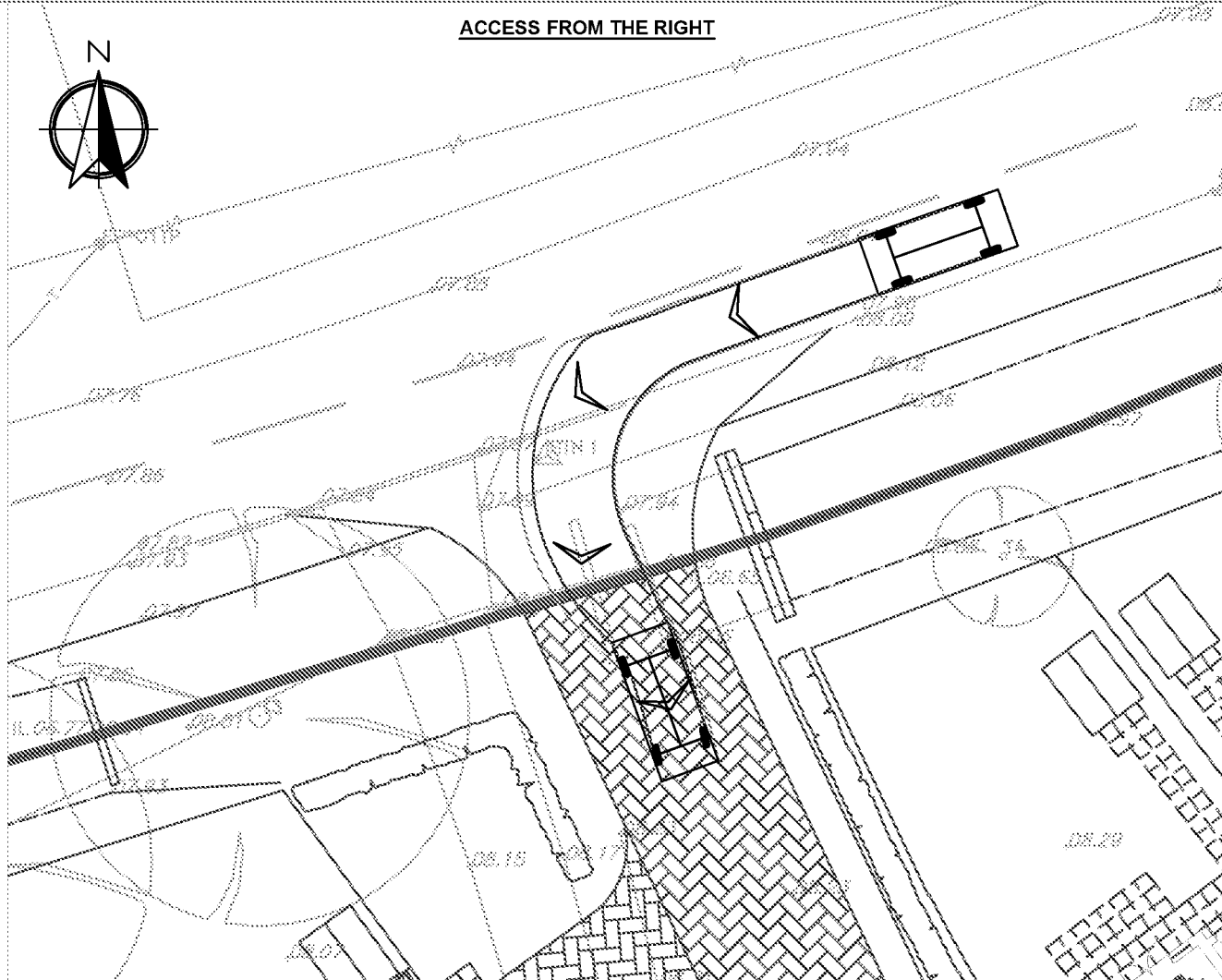
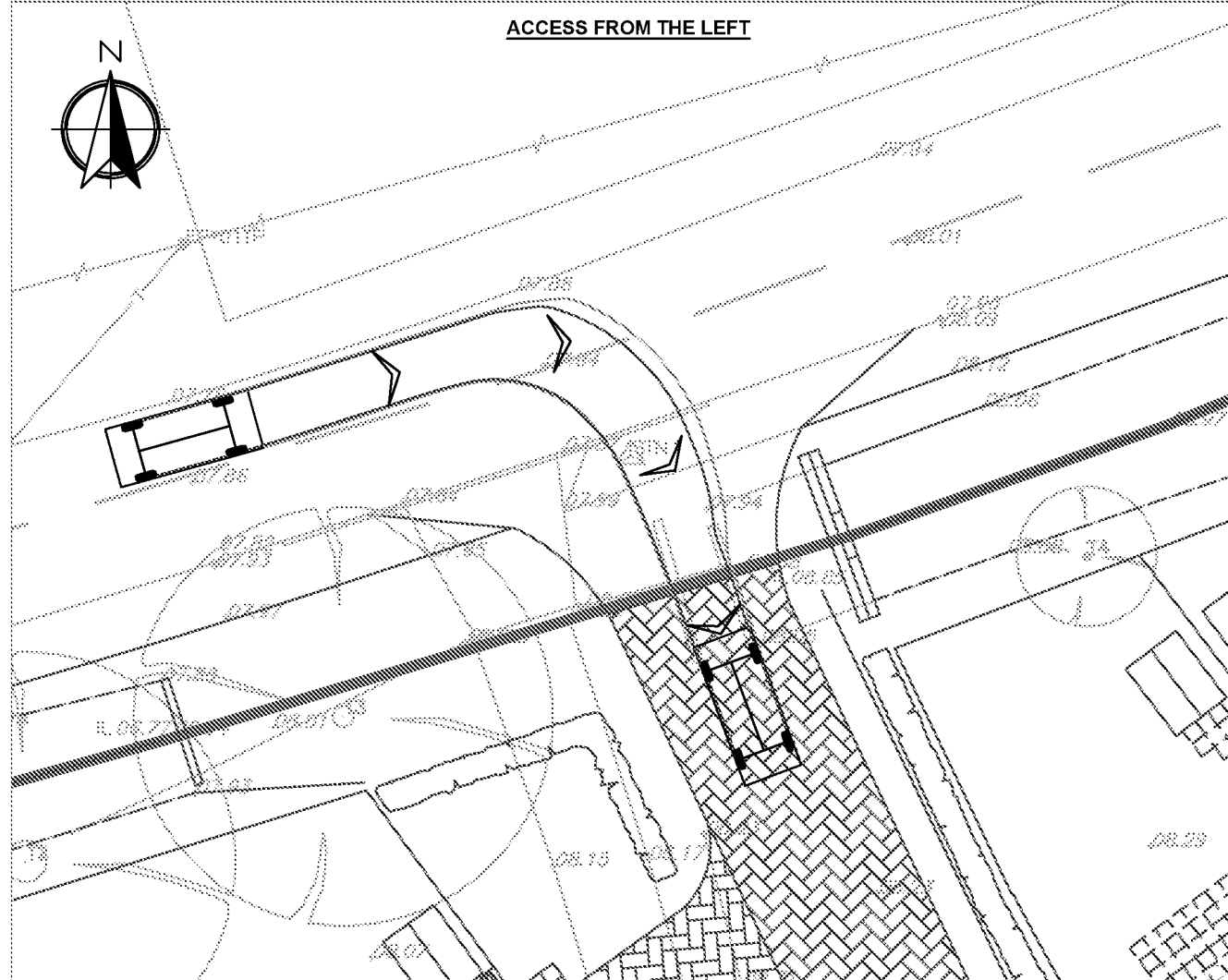
Drawing No.

2016/3446/001

Rev

-

ARUN DISTRICT COUNCIL 01243 416415



NOTES

LEGEND

SITE BOUNDARY

CAR SPECIFICATION

DB32 Private Car

Overall Length	4.223m
Overall Width	1.715m
Overall Body Height	1.392m
Min Body Ground Clearance	0.233m
Max Track Width	1.629m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.780m

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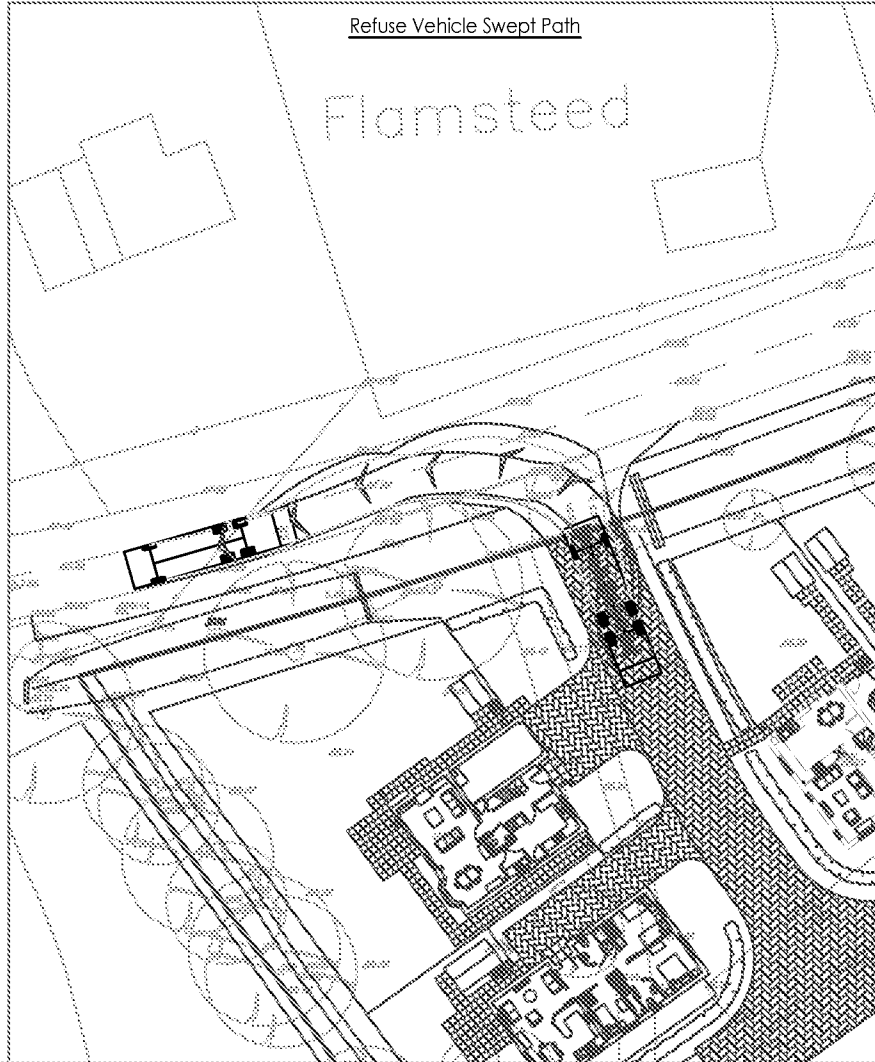
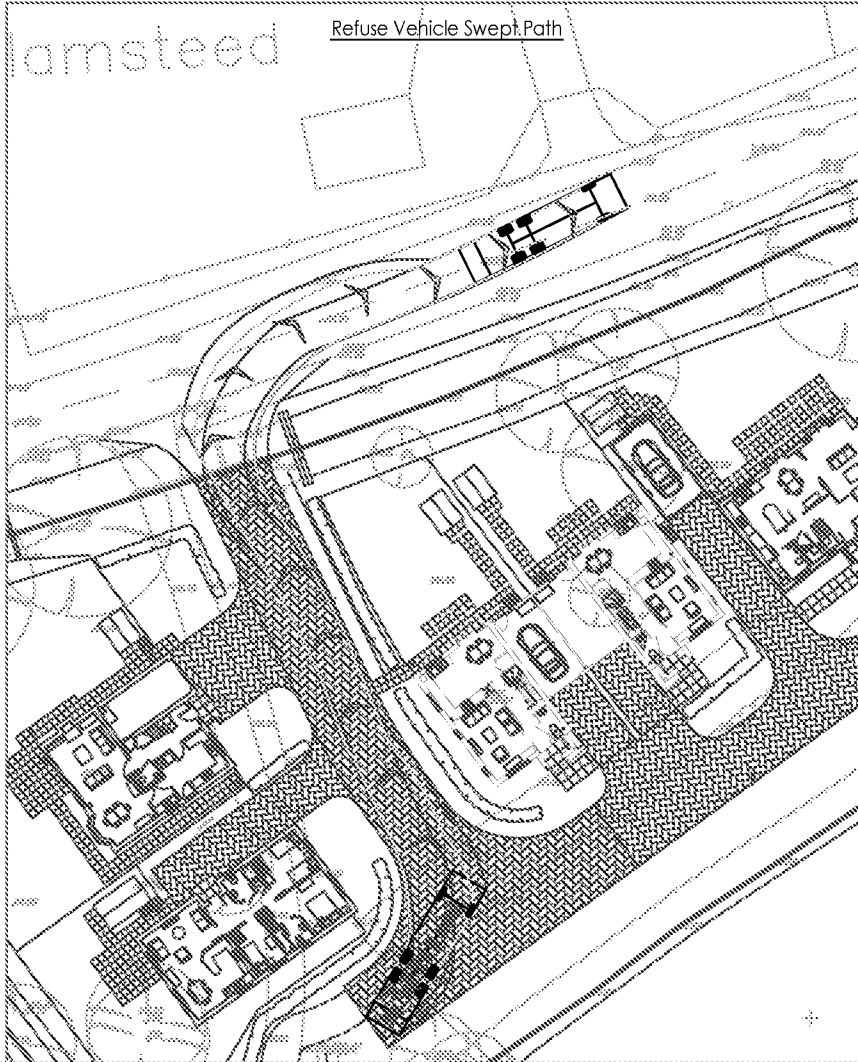
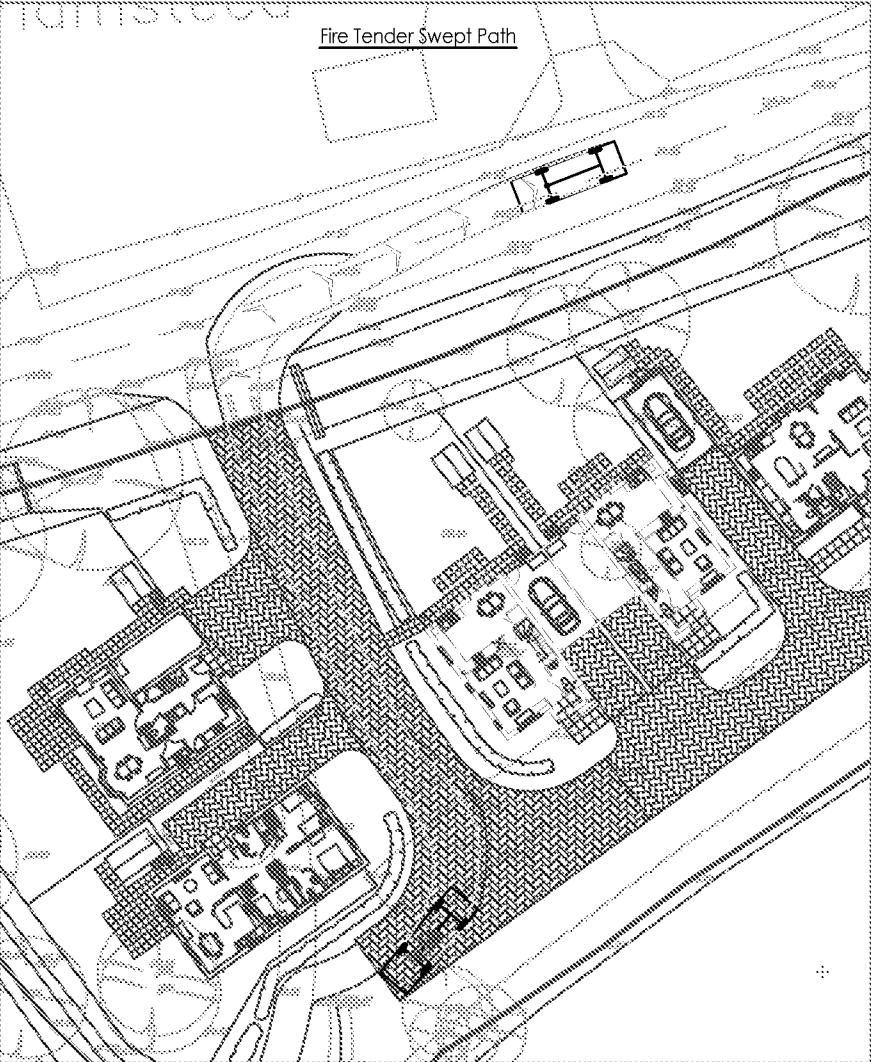
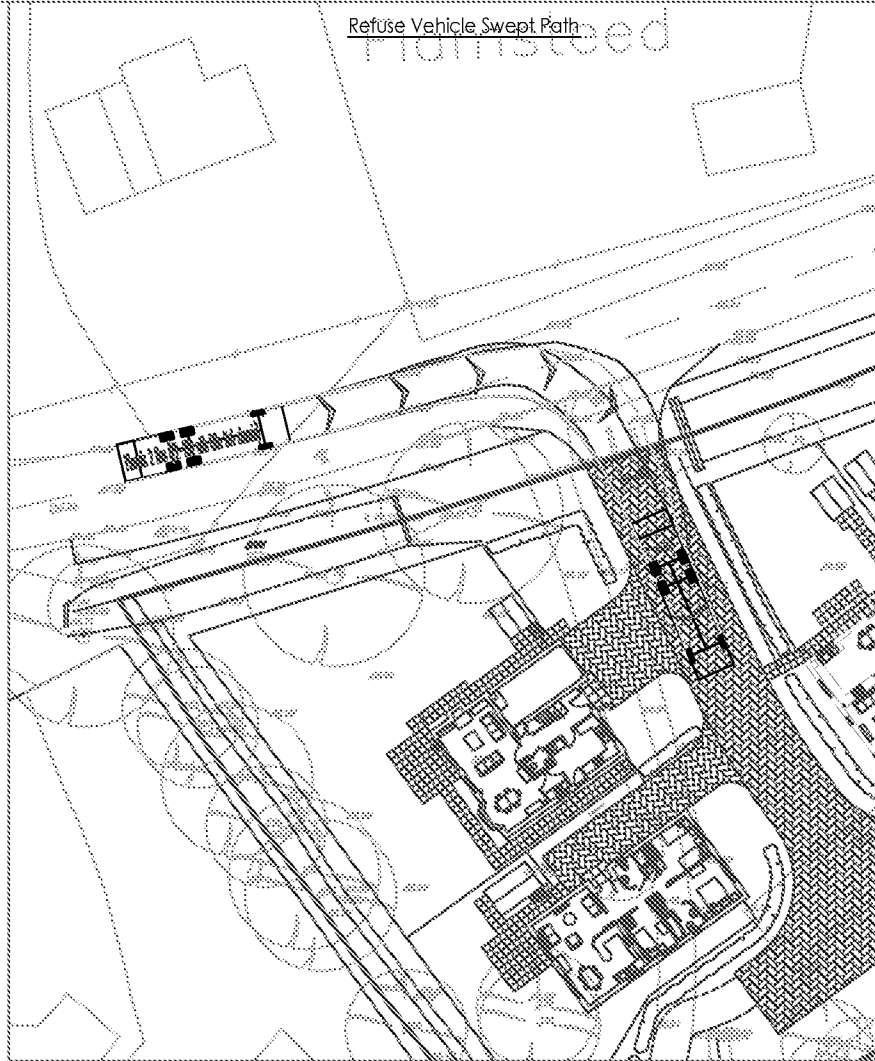
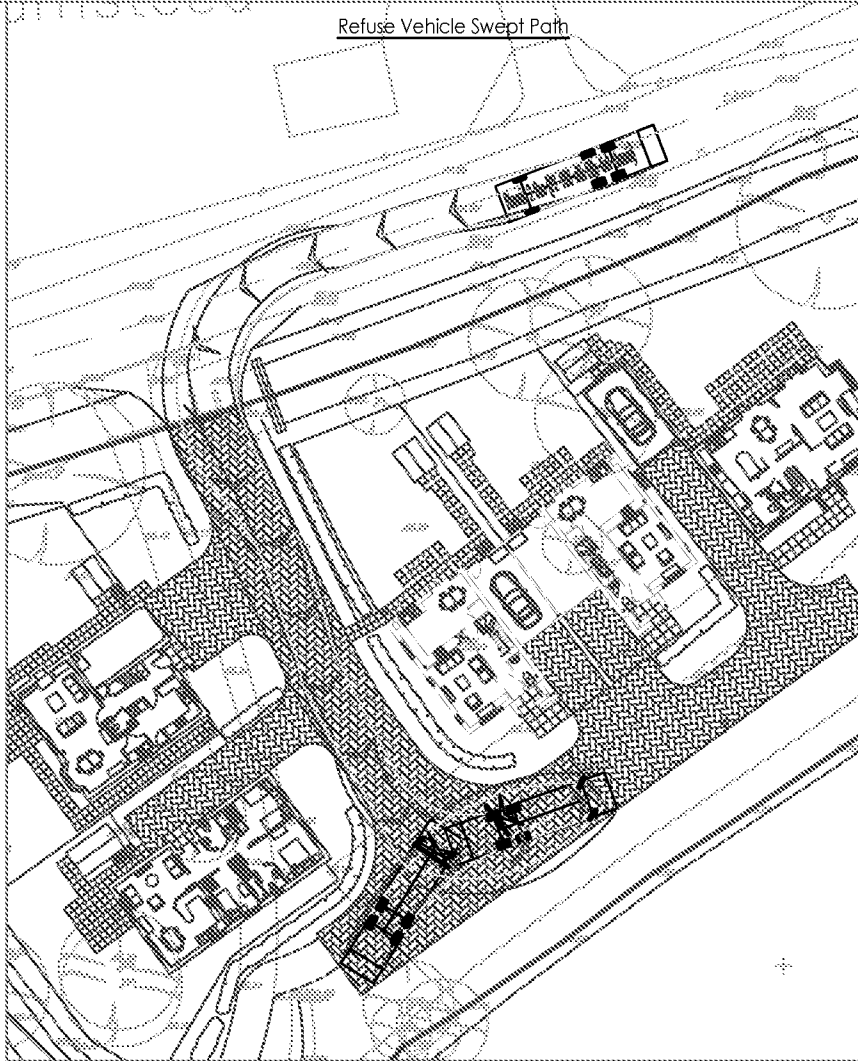
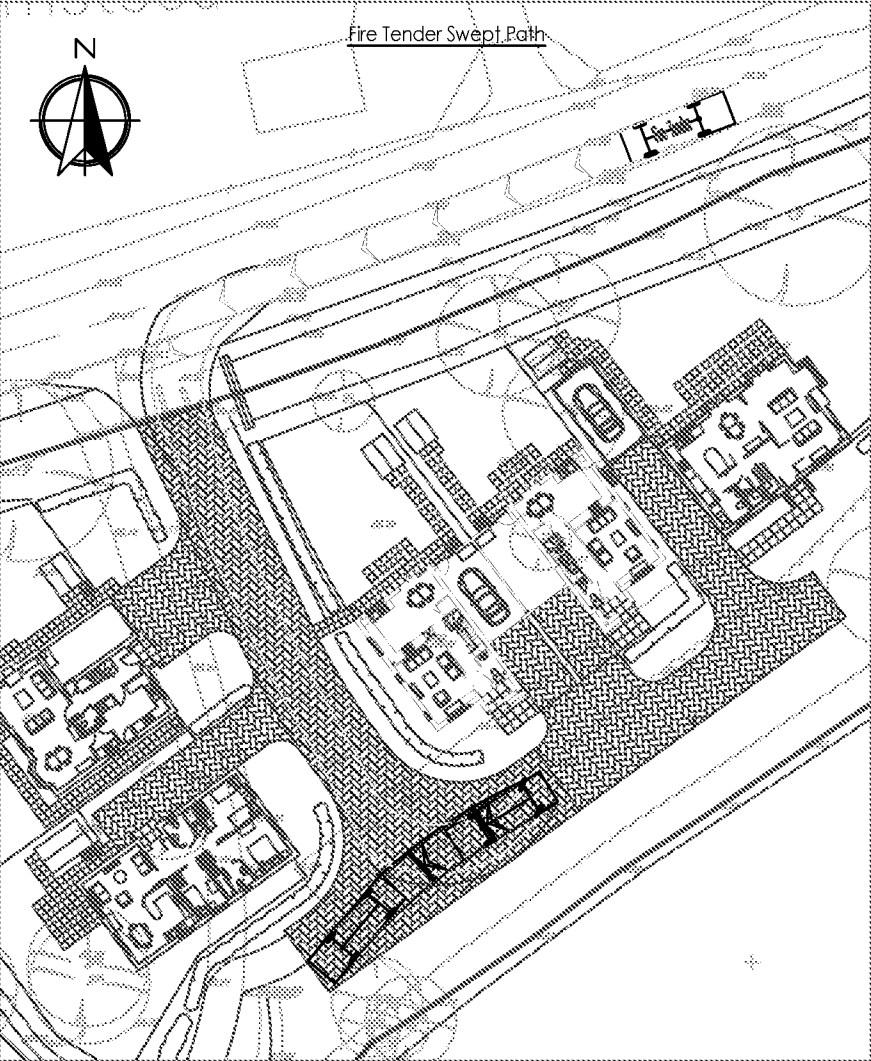
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Seaward Properties Limited

Project
Land at Lake Lane, Barnham

Drawing Title
Swept Path Analysis 1

Scale	1:500	Drawn by	SMO	Checked by	ALB	Approved by	PMR
Date	November 2016	Drawing No.	2016/3346/002	Rev	-	-	-



NOTES

LEGEND

SITE BOUNDARY

Vehicle Specification

7.334m

2.286m

2.286m

2.286m

2.286m

6.00s

8.000m

Fire Tender

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Track Width

Lock to lock time

Kerb to Kerb Turning Radius

7.334m

2.286m

2.286m

2.286m

2.286m

6.00s

8.000m

Vehicle Specification

11.2

2.50m

2.50m

2.50m

2.50m

4.00s

9.500m

Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Track Width

Lock to lock time

Kerb to Kerb Turning Radius

11.2

2.50m

2.50m

2.50m

2.50m

4.00s

9.500m

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Seaward Properties Limited

Land at Lake Lane, Barnham

Swept Path Analysis 2

Scale

1:500

Drawn By

SMO

Checked By

ALB

Approved By

PMR

Scale

November 2016

Drawing No

2016/3446/003

Rev

ARUN DISTRICT COUNCIL BN26 16PL