



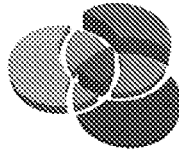
**A259 ROUNDSTONE BYPASS
ROAD, ANGMERING**

Proposed Car Showroom

**Transport Assessment
Prepared on behalf of Caffyns Plc**

CAFF/15/2564/TA01

October 2015



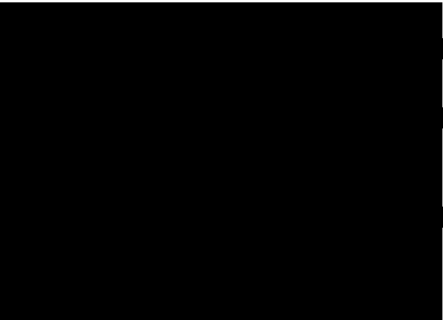
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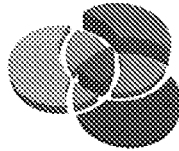
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PLANS

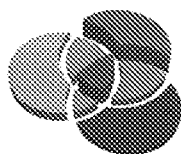
Plan 01 Site Location and Accessibility Plan

DRAWINGS

2015/2564/001 – Proposed Access Arrangements (Dual Carriageway Option A)
2013/2564/002 – Vehicle Swept Path Analysis (Dual Carriageway Option A)
2015/2564/003 – Proposed Access Arrangements (Single Carriageway Option B)
2013/2564/004 – Vehicle Swept Path Analysis (Single Carriageway Option B)
2013/2564/005 – Roundstone Lane / Service Road Junction Visibility and Swept Path Analysis
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APPENDICES

Appendix A – Proposed Carriageway Widening
Appendix B – Personal Injury Accident Data and Analysis
Appendix C – ATC Speed Surveys Eastbound A259
Appendix D – Radar Speed Survey Roundstone Lane / A259 Roundabout Approach
Appendix E – Proposed Site Layout
Appendix F – Stage 1 Road Safety Audit
Appendix G – TRICS Data
Appendix H – Agricultural Nursery Traffic Survey Data.



1 INTRODUCTION

1.1 Scope of Transport Assessment

- 1.1.1 Russell Giles Partnership (RGP) is instructed by Caffyns Plc ('the applicant') to prepare a Transport Assessment in association with the proposed development of an Audi vehicle showroom and repair workshop on land to the north of the A259 (Roundstone Bypass), Angmering in West Sussex.
- 1.1.2 The application site encompasses an area of 11,196sqm located on land to the north-east of the A259 / B2140 Roundstone Lane Roundabout, circa 1.9 kilometres to the south-east of Angmering village centre.
- 1.1.3 The 'L-shaped' site is currently comprised of two detached residential dwellings fronting the A259, a redundant agricultural nursery glasshouse and a service road, which provides access to the neighbouring retail park east of the site. The location of the proposed development is demonstrated in **Figure 1.1**.

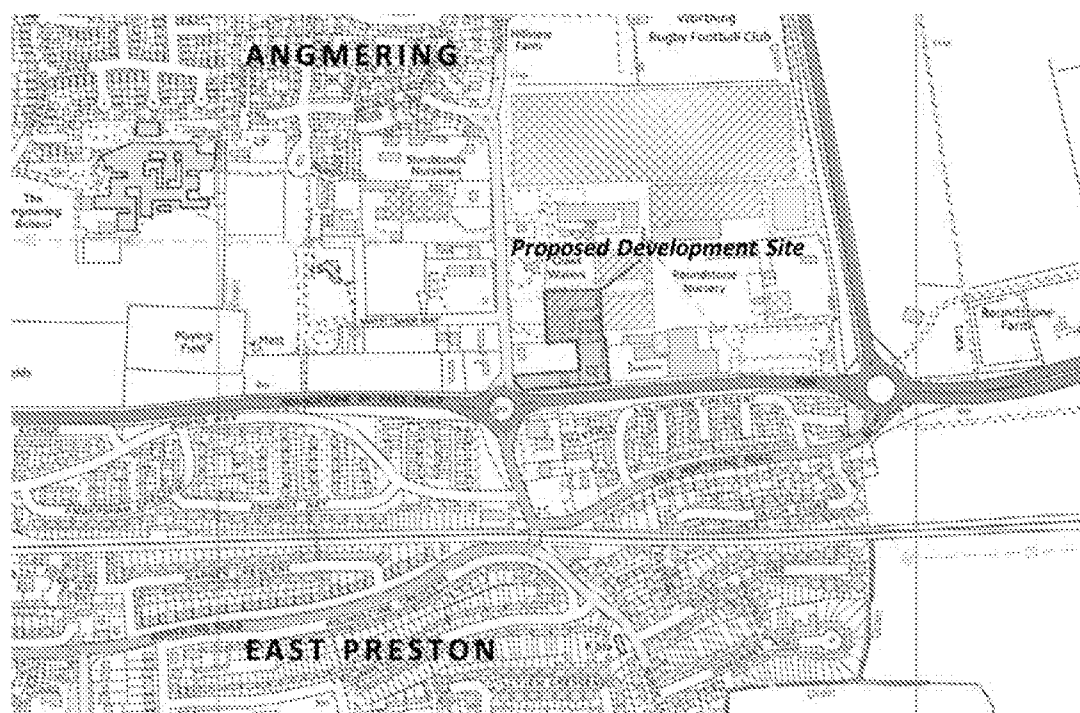
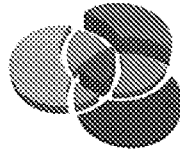


Figure 1.1 Site Location

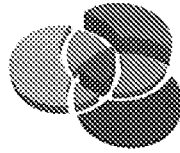
- 1.1.4 The development proposals involve the demolition of the agricultural nursery and the two existing dwellings (known as Appletree Cottage and Heanton), which would be replaced by a new vehicle showroom and workshop with a floor area of 1,968sqm. The site would be served via the existing access point to Appletree cottage and Heanton, which would be upgraded to serve the proposed use.



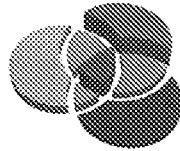
- 1.1.5 The development has been assessed within the context of the forthcoming widening of the A259 which runs across the southern boundary of the site. The existing single carriageway section of A259 between B2140 Station Road roundabout and A280 Angmering Bypass roundabout (1.42km length) would be widened to dual carriageway standard. The proposed widening has an estimated completion date of 2019.
- 1.1.6 The widening of the A259 is intended to create additional capacity on the single carriageway section of A259 which currently acts as a bottleneck causing congestion during peak commuting hours. The proposed widening of the carriageway is demonstrated in Parsons Brinckenhoff Drawing HW-SK-251 which is attached at **Appendix A** of this report.
- 1.1.7 Pre-application consultation discussions were conducted with the Local Highway Authority, West Sussex County Council (WSCC) on 07 May 2015 through which a scope of works was established and the principles of the proposed vehicle showroom development agreed. The proposals were also discussed at a presentation to the Parish Council on 1st September 2015.
- 1.1.8 This document has been prepared in accordance with relevant national and local planning policies including the National Planning Policy Framework, Arun District Council's Local Plan Saved Policies. Further to this, reference is made to the Department for Transport's (DfT's) 'Manual for Streets (2007) and WSCC's 'Transport Assessment Methodology' (2007) and 'Local Design Guidance' (2008) documents.
- 1.1.9 The proposed development site has been the subject of a number of planning applications. Please refer to Section 3 (Planning History) in the Planning Statement for more details.

1.2 Report Structure

- 1.2.1 The remainder of this report is comprised of the following sections:
- (i) **Section 2** provides a review of current national and local planning policies to demonstrate how the transport planning and highway related aspects of the development proposals accord with policy principles.
 - (ii) **Section 3** presents an overview of the baseline conditions including a description of the site's location in context with the local area and highway network; consideration of the site's accessibility by a variety of travel modes; a review of traffic survey data and the results of a study examining highway safety based on recorded Personal Injury Accidents.
 - (iii) **Section 4** considers the principal design aspects of the development proposals including access, internal layout, parking provision, servicing and delivery arrangements.



- (iv) **Section 5** assesses the vehicular traffic generating potential of the development proposal and its associated impact on the local highway network.
- (v) **Section 6** summarises the main conclusions of the report.



2 POLICY CONTEXT

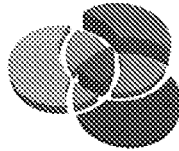
2.1 Introduction

- 2.1.1 This section of the report sets out current and emerging national and local planning policies. The assessment provided subsequently within this TA in **Sections 3, 4, and 5** demonstrates how the development proposals are compliant with the core principles / objectives of national and local planning policies as set out in this section.

2.2 National Planning Policy

National Planning Policy Framework (March 2012)

- 2.2.1 The National Planning Policy Framework (NPPF) was published in March 2012 and details the Government's strategic planning policies for development and growth within England. It sets out a presumption in favour of sustainable development and urges local planning authorities to support proposals that facilitate the use of sustainable modes of transport. The document broadly covers all aspects of planning policy and those relevant to transport are detailed in Paragraphs 29 to 41.
- 2.2.2 In particular, the NPPF reinforces the notion that transport policies can provide an important role in facilitating sustainable development and contributing to wider sustainability and health objectives. Most notably, Paragraph 29 recommends that *"the transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel."*
- 2.2.3 Paragraph 32 states "all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:
- (i) the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
 - (ii) safe and suitable access to the site can be achieved for all people; and
 - (iii) improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."
- 2.2.4 Paragraph 34 states "developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas."



2.2.5 Furthermore, Paragraph 35 suggests “plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- (i) Accommodate the efficient delivery of goods and supplies;
- (ii) Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- (iii) Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- (iv) Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- (v) Consider the needs of people with disabilities by all modes of transport.”

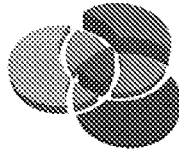
2.3 Local Planning Policy

2.3.1 Local planning policies relevant to the development proposals are set out in Arun District Council’s (ADC’s) current and emerging Local Plan documents.

Arun District Council Local Plan “Saved” Policies (April 2013)

2.3.2 ADC’s current Local Plan was adopted on the 17th April, 2003 and covers the period up to 2011. The document sets out a number of statements, which are used as a basis for assessing various development proposals, particularly in context with the key principles of sustainable development that seek to strike the balance between the need for development and the protection of scarce resources.

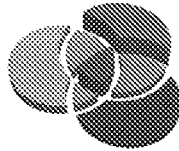
2.3.3 After the commencement of the Planning and Compulsory Purchase Act on the 27th September 2004, a number of the policies were “saved” for a three year period. However, after 2007, the Secretary of State granted consent for the Arun District Local Plan policies to be saved under the provisions of the Act. Until the adoption of Arun District’s emerging Local Plan document, which is expected to occur in 2015, ‘The current 2003 Local Plan continues to act as the principal Development Plan Document, in which all development proposals are assessed against.



2.3.4 The following “Saved” Policies of ADC’s current Local Plan are considered to be of relevance to the mixed-use development proposals.

- (i) **GEN7 – The Form of New Development:** “Planning permission will only be granted for schemes displaying high quality design and layout. Development proposals involving new buildings or significant extensions or alterations must be accompanied by an illustrated written analysis of the site and its immediate setting, together with its relationship with the relevant townscape, landscape, wildlife and movement characteristics of the wider area. Development will be permitted provided it:
- i.* Makes efficient use of land or buildings and, in the case of new residential development, achieves net densities of at least 30 dwellings per hectare;
 - ii.* Demonstrates that it responds positively to the identified characteristics and resources of the site and the area to create attractive places and spaces with the need of people in mind and respects and enhances local distinctiveness;
 - iii.* Promotes sustainable development, including the effective use and conservation of energy and reducing the need to travel, particularly by private car;
 - iv.* Does not have an unacceptable adverse impact on adjoining occupiers, land, uses or property and, where relevant, facilitates the development of adjoining sites;
 - v.* Takes account of any unacceptable adverse impacts that may arise from adjoining land uses or property;
 - vi.* Retains significant open or wooded areas which, in their own right, make a material contribution to the local environment;
 - vii.* Allows for the safe movement of pedestrian and vehicles, giving priority to pedestrians;
 - viii.* Provides for vehicle parking in accordance with Policy GEN12 and Appendix 2 and open space in accordance with Policy GEN20.

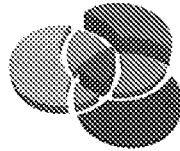
2.3.5 In all cases, the District Council will expect a high standard of design and layout and all applicants will be encouraged to improve the visual amenities of the particular locality in scale, external appearance, hard and soft landscaping and materials.”



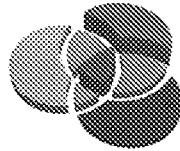
- (i) **GEN12 – Parking in New Development:** “The Local Planning Authority will base its consideration of the need for on-site parking provision on its parking standards contained within this Plan. Provision of parking in excess of these standards will not be allowed. The Local Planning Authority may seek a lower provision than required by the standards for developments proposed in town centres and other areas accessible by other means of transport. In considering the extent of reduced on-site parking provision, the Council will have regard to environmental and highway safety issues, together with the following factors:-
- i.* The availability, type and proximity of public parking;
 - ii.* The availability of alternative means of transport;
 - iii.* Potential highway safety problems;
 - iv.* Potential environmental harm arising from parking demand being met elsewhere;
 - v.* The extent and nature of nature of parking restrictions in force on highways in the vicinity;
 - vi.* The scale of development proposed; and
 - vii.* The suitability of “specific use” and “personal” conditions attached to planning permissions.”
- (ii) **GEN15 – Cycling and Walking:** “The Council will continue to work with West Sussex County Council and others to encourage and support the development of safe cycle and footpath networks. Where appropriate, new development will be required to provide safe and attractive facilities for cyclists and pedestrians, both within the site and in the form of links to the surrounding area.”

Angmering Neighbourhood Plan 2014-2029

- 2.3.6 In accordance with the Neighbourhood Planning Regulations 2012, the Localism Act 2011, the Planning & Compulsory Purchase Act 2004 and the European Directive 2001/42 on Strategic Environmental Assessment, Angmering Parish Council has prepared a Neighbourhood Plan.
- 2.3.7 Following adoption of the Angmering Parish Neighbourhood Plan (APNP), which has recently passed the Examination process, the document will complement ADC's emerging Local Plan 2011-2031 and the “Saved” policies of the current Local Plan.



- 2.3.8 The purpose of the APNP is to provide additional guidance for various development proposals within the area comprising Angmering Parish. It sets out clear policies and objectives for planning and controlling land use and development change over the Plan period 2014 to 2029. The vision as set out in Section 4 of the document aims to create *“a sustainable and vibrant rural community with a superior quality of life, supported by an infrastructure, housing development, education and employment opportunities commensurate with local needs.”*
- 2.3.9 In the context of the Plan, ‘sustainable’ is defined as:
- (i) ‘A place that retains its character and identify with both connections to the past and a vision for the future’.
 - (ii) ‘A range of homes which respond to local people’s needs both now and in the future’.
 - (iii) ‘A range of facilities designed to offer something for everyone from young to old’.
 - (iv) ‘Jobs available locally so people can work as well as live in their neighbourhood’.
 - (v) ‘Interesting and imaginative buildings and spaces rather than homogenous development’.
 - (vi) ‘Protecting Angmering’s environment and landscape setting; including that of the SDNP’.
- 2.3.10 Regarding ‘Traffic and Movement’ the objective as outlined in Section 9 is to “reduce local journeys by car by improving existing pavements, pedestrian and cycle routes, as well as providing new ones and safe routes to schools. Reduce the pressure on village roads from through traffic, and seek to address the impact of lack of parking spaces in the village centre and Angmering station.”
- 2.3.11 TM1: Local Highways states “proposals for new development shall demonstrate that adequate and satisfactory provision has been made to mitigate the impact of the traffic generated both during development and on completion.
- (i) New developments which seek to provide an access road from Roundstone Lane onto the A280 by-pass to reduce through traffic in the Conservation Area will be considered favourably.
 - (ii) Proposals for development that generate traffic are required to demonstrate that the level of traffic which has to travel through the village conservation area, is minimised through the provision, where possible of improved vehicular and pedestrian access to key locations in the village, particularly the schools and the railway station.”



3 BASELINE CONDITIONS

3.1 Introduction

- 3.1.1 This section of the report provides a summary of the baseline conditions including an overview of the site's location in context with the local area and highway network; a review of existing transport infrastructure / services by mode; and an assessment of highway safety based on the level of recorded personal injury accidents.

3.2 Site Location and Description

- 3.2.1 The application site encompasses an L-shaped area of land covering 2.55 acres located off the northern side of the A259, to the south-east of Angmering. **Plan 01** attached shows the location of the site in context with the highway network, public transport infrastructure / services and local amenities.
- 3.2.2 The site boundaries are formed by the A259 to the south, Haskins Roundstone Garden Centre to the east, a disused nursery building to the north, and existing residential dwelling known as Kelston House and Roundstone Lane to the west.
- 3.2.3 Vehicular access to the existing residential dwellings is via a simple priority junction off the northern side of the A259 circa 90 metres to the east of the A259 / Roundstone Lane Roundabout (see **Figures 3.1** and **3.2**).

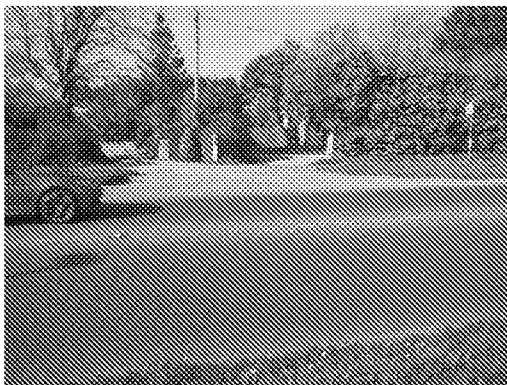
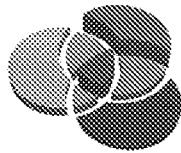


Figure 3.1: Existing vehicular access to Appletree Cottage and Heanton, located off the northern side of the A259 Roundstone Bypass Road.



Figure 3.2: View of existing vehicular access looking in a westerly direction towards the A259 Roundstone Bypass Road / Roundstone Lane junction.



3.3 Local Highway Network

- 3.3.1 The A259 runs across the site's southern boundary and comprises of single lane two-way carriageway measuring 8.5m wide in the vicinity of the site. The A259 is flanked by a 1.2m wide footway on the northern side of the carriageway. The A259 / Roundstone Lane Roundabout Junction is located 90m to the west of the site. The A259 is subject to a 50mph speed limit although the volume of traffic using the A259 means speeds substantively less than this in the vicinity of the site.
- 3.3.2 Roundstone Lane runs along the site's western boundary and is comprised of a single lane two-way carriageway road measuring circa 6 metres in width. Roundstone Lane is subject to a 30 mph posted speed limit. The western side of Roundstone Lane provides street lighting and a c.1.5m footway.
- 3.3.3 A service access to the retail park east of the site is served from Roundstone Lane approximately 70 metres to the north of the A259 / Roundstone Lane roundabout junction. The service road access takes the form of a simple priority junction with Roundstone Lane. The service road passes through the development site.



Figure 3.3 Roundstone Bypass

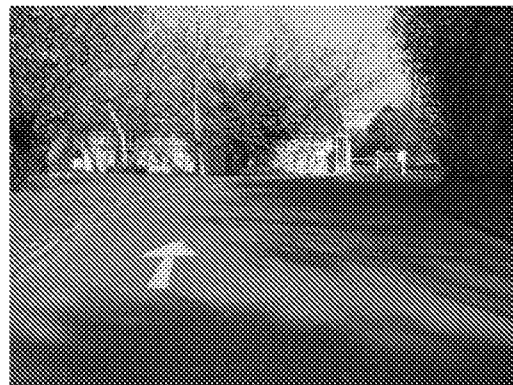
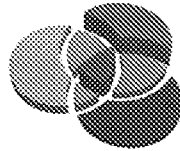


Figure 3.4 Service Road

3.4 Wider Highway Network

- 3.4.1 The A259 forms a busy south coast route connecting Emsworth in Hampshire to Folkestone in Kent, which on a local level facilitates access to Chichester, Bognor Regis, Littlehampton, Ferring, Worthing, Lancing, Shoreham-by-Sea and Portslade, running parallel with the A27.
- 3.4.2 To the east of the application site, the A259 connects with the A280 Angmering Bypass, heading in a north easterly direction where it connects with the A27, forming part of the Strategic Road Network (SRN).



3.5 Accessibility Credentials

Accessibility Overview

- 3.5.1 To demonstrate how the proposals comply with the core objectives contained in the NPPF, most notably the requirement for new developments, which generate significant vehicular movements to be located in areas where the need to travel would be minimised and opportunities for encouraging alternatives to the private car can be maximised, this section of the report describes the existing provision of transport infrastructure and services by mode, which would be available to future end-users (i.e. Caffyns staff and visitors).

Pedestrian / Cycle Accessibility

- 3.5.2 Pedestrian access to the existing site is served from footways flanking the A259. The wider footway network provides a continuous link into Angmering and East Preston and is supported by formal crossing points using dropped kerb and tactile paving. The crossing points across the A259 south of the site are supported by pedestrian refuge islands facilitating movements across the major carriageway. The pedestrian infrastructure in the vicinity of the development site is demonstrated in **Figures 3.4 and 3.5**.



Figure 3.5: Footway infrastructure on the A259



Figure 3.6: Crossing Facilities on the A259

- 3.5.3 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 recommends a preferred maximum walking distance of 2 kilometres for commuting journeys. As shown on **Plan 01** the local settlements of Angmering and East Preston are accessible on-foot from the application site based on the CIHT guidance.

Cycle Infrastructure

- 3.5.4 The South Coast Cycle Route (S.C.C.R.) is located c. 200m south of the development site, providing cycle links to Littlehampton, East Preston, Rustington and a connection to the National Cycle Network Route (NCNR) 2, 6km to the west. The proximity of cycle routes relative to the proposed development site is demonstrated in **Figure 3.6**.

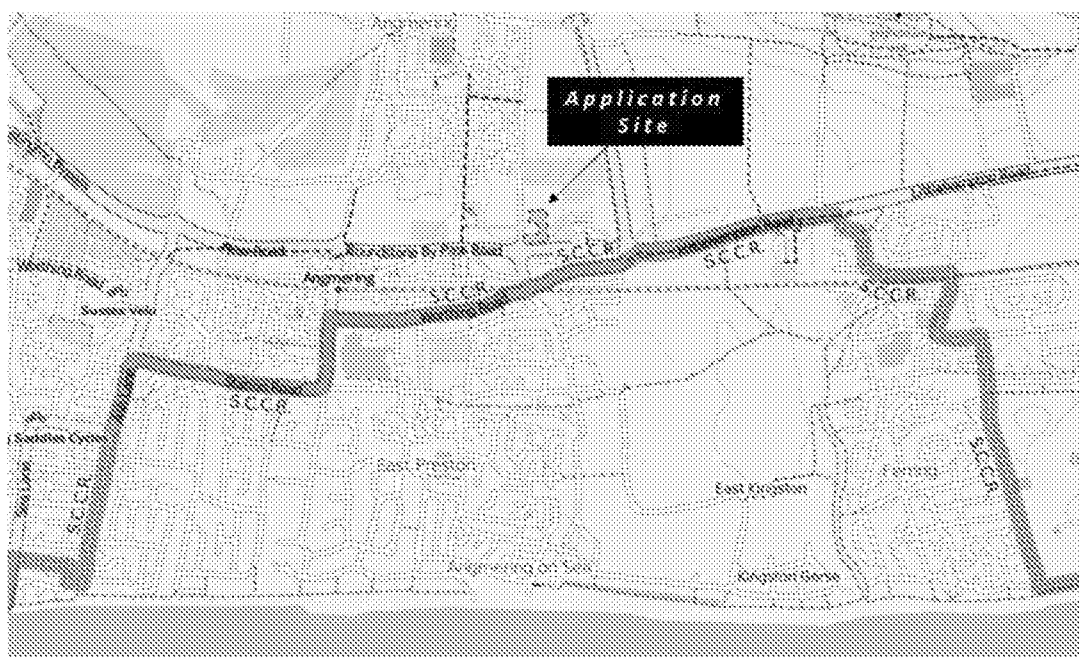
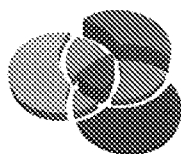


Figure 3.7: Roundstone Bypass

- 3.5.5 The CIHT's publication 'Cycle Friendly Infrastructure' (1996), suggests that reasonably fit individuals can comfortably cycle a distance of 8 kilometres to workplace destinations. As shown in **Plan 01** the settlements of Angmering, Littlehampton, Durrington and East Preston are accessible by bicycle from the application site. It is also noted that Angmering rail station is situated 1.3 kilometres from the proposed development site.

Accessibility by Bus

- 3.5.6 The application site benefits from being within desirable walking distance of 5 bus stops served by 4 bus services, which operate on a frequent basis. The bus services provide links to a host of local destinations including Brighton, Littlehampton, Shoreham-by-Sea and Worthing.
- 3.5.7 The nearest bus stop is located adjacent to the Haskins Roundstone Garden Centre c. 240 metres to the east of the application. This stop is served by Stagecoach South's No. 9 bus service and facilitates direct access to Angmering, Littlehampton, Shoreham-by-Sea and Worthing. As shown in **Figure 3.8** this stop benefits from sheltered seating and timetable information.
- 3.5.8 Additional bus services including Stagecoach South's principal route (No. 700) are available and accessible from bus stops located along Roundstone Lane and Old Worthing Road, within the CIHT's desirable walking distance. Details of all bus services including frequency and route summaries, accessible within walking distance of the application site are presented in **Figure 3.10**.

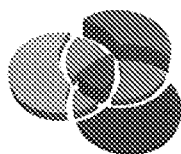


Figure 3.8: View of Haskins Roundstone Garden Centre Bus Stop

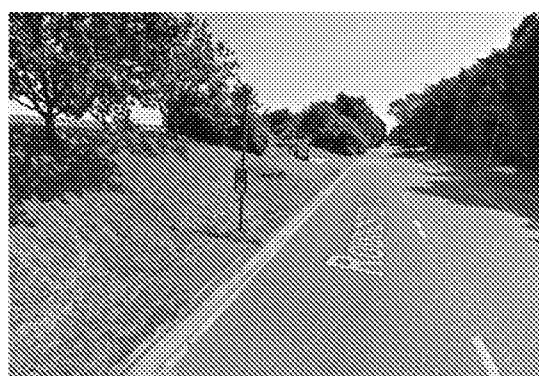


Figure 3.9: View of Bramley Lane / Bramley Way Bus Stops

SERVICE NO.	BUS STOPS	ROUTE SUMMARY	TYPICAL DAYTIME FREQUENCY
8	Rowan Way, Bramley Lane, Opp Bramely Way	Worthing Pier - South Ferring	Mon-Sat: every hour Sun: no service
9	Roundstone Garden Centre, Bramley Lane, Opp Bramely Way	Shoreham by Sea - Worthing - Angmering - Littlehampton	Mon-Sat: every hour Sun: no service
700	Opp Arlington Crescent, Adj Arlington Crescent, Opp Saxon Close, Adj Saxon Close	Brighton - Worthing - Littlehampton - Arundel	Mon-Sat: every 10 minutes Sun: every 20 minutes
X5	Opp Arlington Crescent, Adj Arlington Crescent, Opp Saxon Close, Adj Saxon Close	Littlehampton - Holmbush Centre	Thu: 1 in / outbound service Sat /Sun: no service

Figure 3.10 Bus Services Available from Local Bus Stops

Accessibility by Rail

- 3.5.9 The nearest rail station is located off the eastern side of the B2140 Station Road in Angmering, approximately 1.1 kilometres (14 minute walk time) to the west of the application site. Angmering Station is on the West Coastway Line managed by Southern trains and provides frequent services to local and regional destinations including Brighton, Chichester, Clapham Junction, Gatwick Airport, Havant, London Victoria, Portsmouth, Southampton and Worthing. A summary of train services available from Angmering Station is summarised in **Figure 3.11**.



ROUTE / PRINCIPAL DESTINATIONS SERVED	TYPICAL DAYTIME FREQUENCY			TYPICAL JOURNEY TIME
	MON – FRI	SAT	SUN	
Angmering to Brighton via Worthing – Lancing – Shoreham-by-Sea – Southwick – Portslade – Hove	2 trains per hour	2 trains per hour	2 trains per hour	31- 35 mins
Angmering to Littlehampton	2 trains per hour	2 trains per hour	1 train per hour	10 mins
Angmering to London Victoria via Goring-by-Sea – Durrington-on-Sea – West Worthing – Worthing – Shoreham-by-Sea – Portslade – Hove – Preston Park – Burgess Hill – Haywards Heath – Gatwick Airport – East Croydon – Clapham Junction	2 trains per hour	2 trains per hour	1 train per hour	1 hour and 37 mins
Angmering to Portsmouth & Southsea via Barnham – Chichester – Southbourne – Emsworth – Havant – Fratton	1 train per hour	N / A	1 train per hour	46 mins
Angmering to Southampton Central via Ford – Barnham – Chichester – Emsworth – Havant – Cosham – Fareham – Swanwick	1 train per hour	1 train per hour	1 train per hour	1 hour and 13 mins

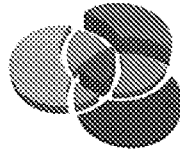
Figure 3.11 Rail Services Available from Angmering Rail Station

3.6 Highway Safety Study

- 3.6.1 In order to establish the level of safety on the local highway network surrounding the application site, Personal Injury Accident (PIA) data for the five year period ending 9th April 2015 was obtained from Sussex Police. PIAs are classified as 'slight', 'serious' and 'fatal' depending on the severity of the injuries sustained.
- 3.6.1 A map showing the extent of the study area and a detailed summary of each recorded PIA is attached at **Appendix B** of this report. Patterns displayed in the PIA data can be assessed with regard to the proximity, frequency, severity and causation factors to establish whether there are any underlying highway design issues on the local road network.
- 3.6.2 A total of 25 PIAs including 5 'serious' and 20 'slight' incidents were recorded over the five year period. As shown in **Figure 3.12** approximately 40% of all recorded PIAs were comprised of vehicular collisions. An additional 48% involved collisions between vehicles / motorcycles.

COLLISION TYPE	NO.	%
Vehicle / Vehicle	10	40
Vehicle / Motorcycle	1	4
Vehicle / Cycle	10	40
Vehicle / Pedestrian	1	4
Vehicle	1	4
Cycle / Vehicle (Goods <3.5T)	1	4
Cycle / Motorcycle	1	4
Total	25	100

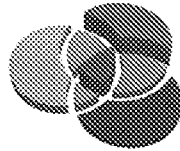
Figure 3.12: Summary of PIA Collision Type



- 3.6.3 In terms of location, a significant number (14) of PIAs occurred within the vicinity of the two roundabout junctions east and west of the application site. A total of 9 PIAs, all of which were classified as being 'slight' in nature occurred at or near to the A259 / Roundstone Lane Roundabout. A total of 5 PIAs including 2 'serious' and 3 'slight' occurred at the A259 / A280 / B2140 Roundabout east of the site.
- 3.6.4 It is noteworthy that all 4 of the PIAs classified as 'serious' were comprised of collisions between vehicles and cyclists. 2 of these occurred at the A259 / A280, B2140 Roundabout. The Police report identifies that each of the incidents involve driver failure to observe the cyclists. The other 2 'serious' PIAs involving cyclists took place along the A280 circa 190 metres to the north of the A259 / A280 / B2140 Roundabout. The cause of the incidents was due drivers failing to observe cyclists when undertaking manoeuvres.
- 3.6.5 There are no incidents in the vicinity of the site frontage or at the existing site access on to the A259. A single 'slight' incident has occurred at the rear service access although the incident circumstances involve a right turning vehicle failing to observe an oncoming motor cyclist and is accordingly attributed to human error in the police report.
- 3.6.6 The recorded PIA incidents do not suggest any pattern in terms of distribution, frequency, severity or causation factor that can be related to outstanding highway safety issues on the local road network.

3.7 Traffic Survey Data

- 3.7.1 RGP commissioned The Safety Forum to conduct an Auto Traffic Count survey to gauge the east bound vehicle speeds and traffic volumes on the A259 in the vicinity of the proposed site frontage.
- 3.7.2 The survey identified high traffic volumes with an average eastbound daily traffic flow of 16395 eastbound vehicle movements. The survey also revealed low average eastbound vehicle speeds on the A259 of 21.7mph and an 85th percentile design speed of 28.9mph. The ATC data output is attached at **Appendix C**.
- 3.7.3 A Radar speed survey was undertaken immediately east of the A259 / Roundstone Lane Roundabout in order to establish approach speeds to the proposed access location on the A259. The Radar survey was undertaken on the 20th of July between 13:00 – 16:00pm during free flow traffic conditions in order to obtain a robust 85th percentile design speeds. The surveys revealed an approach speed of 31.9mph. The results of the survey results are attached at **Appendix D**.



4 PROPOSED DEVELOPMENT

4.1 Overview

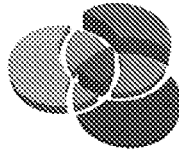
- 4.1.1 The development proposes the provision of an Audi vehicle showroom and servicing workshop. The proposal would replace two existing properties and a horticultural glass house on the site. The site would provide a reformed frontage access on to the A259 and would link to the existing service road that runs through the site. The rear service road would continue to serve the adjacent retail park. The proposed development layout is demonstrated in **Appendix E**.

4.2 Proposed Access Arrangements

- 4.2.1 The proposed development's primary access would be served from the site's southern boundary adjoining the A259. The access would be positioned in the approximate location of the existing residential access, although the position has been slightly altered to tie in with the proposed showrooms internal layout.
- 4.2.2 Due to uncertainty surrounding the completion date of the A259 dualling, the site's primary access arrangements have been designed to accommodate both the existing single lane form of the carriageway and the forthcoming dual carriageway. The access design is such that only a minor alteration of the access position would be required to accommodate the additional eastbound lane. The two access scenarios are shown in **Drawings 2015/2564/001 and 2015/2564/003**.
- 4.2.3 A secondary access would adjoin the service road to the rear of the site. The service road is a private carriageway which also serves the adjacent garden centre service yard and retail park. The secondary access would be retained for delivery vehicle and emergency vehicle access only. It is proposed that HGV deliveries would enter the site from the A259 via the primary access, and would egress via the rear service access.

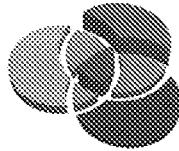
4.3 Design Audit

- 4.3.1 This section of the Technical Note considers the proposed access in terms of its' compliance with national design guidance document 'Design Manual for Roads and Bridges' (DMRB). The proposed access has been designed in accordance with DMRB volume TD 41/95 entitled "*Vehicular Access to All-Purpose Trunk Roads*".
- 4.3.2 The DMRB 41/95 guidance outlines safe and suitable access design standards to enable individual sites to be safely access from trunk roads such as the A259. The guidance allows for a tailored design considering the baseline traffic flows on the A259, vehicle speeds on the A259, the access's anticipated intensity of use, carriageway gradients and proportion of HGVs on the A259 and using the access.



Primary Access - Geometric Design

- 4.3.3 In accordance with DMRB TD 41/95 the primary access's geometric form has been determined through establishing a number of key design parameters from the aforementioned traffic surveys and a vehicle trip assessment (see **Section 3.8**) which are as follows:-
- (i) A design speed of 50 mph (**80.5kph**). The ATC traffic surveys revealed an 85th percentile speed of 28.9mph, however it is recognised that the dualling of the A259 carriageway is likely to increase the 85th percentile speeds.
 - (ii) An Annual Average Daily Traffic (AADT) flow of **16,395** vehicles across a seasonally neutral day, with a <1% proportion of which being HGV's.
 - (iii) An anticipated trip generation of 287 vehicle movements per day of which c.138 would be turn left in and c.149 would turn left out (the detailed TRICS trip generation assessment is provided in section).
 - (iv) A topographical survey has revealed that gradients in the vicinity of the primary access are slight and not a material concern.
- 4.3.4 **Drawings 2015/2564/001** and **2015/2564/003** attached hereto illustrates the proposal to provide a left-in left-out vehicle access to serve the site. The access is separated at the bellmouth by a channelising island which would merge into a 6m wide access road allowing two-way vehicle movements.
- 4.3.5 To facilitate the movement of large car transporter deliveries into the site, the inbound arm of the junction would be 'curve widened' and use a larger 25m corner radii. It is intended that large delivery vehicles would enter via the primary access and exit via the existing service road adjoining Roundstone Lane.
- 4.3.6 Chevrons are in place to infer a narrower carriageway width along the inbound arm of the access to ensure suitable vehicle positioning on entry to the site without over-swing of the channelising island, which doubles as a refuge for pedestrians crossing the access.
- 4.3.7 The outbound arm of the junction would only be required to accommodate car sized vehicles and LGV's, and would therefore use a smaller 6m corner radii to facilitate vehicle movements on to the A259. A vehicle tracking exercise demonstrating vehicle movements through the access is shown in **Drawings 2015.2564.002** and **2015.2564.004**.
- 4.3.8 The implementation of a diverge or merging taper lane would not be required in accordance with the DMRB TD41/95 section 2.31 and 2.34, which is detailed in **Figure 4.1** and **4.2** for reference;



2.31 Nearside diverge tapers allow left turning trunk road traffic to slow down and leave the trunk road without impeding following through traffic. This is important where the major road traffic is heavy and fast. They shall be provided at direct accesses where the trunk road design speed is 85kph or above and the volume of left turning traffic is greater than 450 vehicles AADT and there is a high proportion (greater than 20%) of large or slow moving vehicles either turning or continuing on the trunk road, or the gradient of the trunk road is greater than 4%. Nearside diverge tapers may also be applicable where there is high seasonal use by large or slow moving vehicles. They may be omitted if there are difficult site constraints.

Figure 4.1 DMRB Diverge Taper Requirements

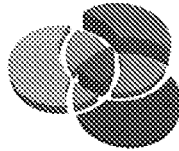
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Figure 4.2 DMRB Merge Taper Requirements

- 4.3.9 In accordance with the DMRB guidance the proposed access would not require diverge or merge taper lanes to support the access based on the design parameters identified in **Section 4.3.3**.

Primary Access - Visibility Requirements

- 4.3.10 Due to the primary access's left-in / left-out status visibility from the access on to the A259 need only be considered in the primary direction (looking right) from the proposed access. During pre-application meetings WSCC highway officers identified that vehicle approach speeds from the west will be reduced by the negotiation the A259 / Roundstone Lane roundabout junction c.90m east of the access and that visibility requirements should be based upon the approach speed coming off of the roundabout.
- 4.3.11 As identified in **Section 3.8** the 85th percentile approach speeds measured on the roundabout were recorded at 31.9mph during a speed survey undertaken in free flow traffic conditions. It is worth noting that the geometry of the roundabout would not alter as part of the proposed A259 improvements, meaning that vehicle negotiation speeds would remain relatively consistent before and after the improvements works are carried out.
- 4.3.12 The recorded approach speed requires a stopping site distance of 72.4m based on DMRB TD 9/93 calculation coefficients. Visibility measured in the primary direction accordingly achieves the necessary a splay of 4.5m x 72.4m measured to the kerb line. The required and maximum achievable visibility splays are demonstrated in **Drawings 2015/2564/001 and 2015/2564/003**.

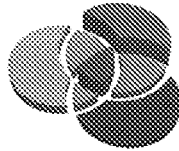


Pedestrian Access

- 4.3.13 Pedestrian access to the proposed development site would be provided via a short section footway flanking proposed vehicle access tying in with the existing footways on the northern side of the Roundstone By-Pass. The footway would be 2.0m wide and leads directly to the main showroom entrance, thereby providing safe and convenient access. Dropped kerbing would be used to link the footways flanking the show room to the vehicle forecourt.
- 4.3.14 The proposed left-in / left-out access is supported by dropped kerbing and tactile paving to facilitate pedestrian movements across the access. The channelising island would double as a pedestrian refuge reducing the crossing distance for pedestrians. The pedestrian infrastructure is shown in **Drawings 2015/2564/001** and **2015/2564/003**.

Servicing Access

- 4.3.15 As previously identified the proposed servicing arrangements would require car transporter deliveries to enter the site via the proposed frontage access served from the A259 and egress via the existing service road onto Roundstone Lane. This arrangement allows deliveries to enter and exit the site in a forward gear without requiring turning manoeuvres on site minimising disruption on site during servicing. The servicing arrangement also removes the requirement for large slow moving car transporters to egress on to the A259. Smaller LGV deliveries would use the frontage access only.
- 4.3.16 The applicant has identified that car transporter deliveries would take place 1 – 2 times per day. As previously identified the existing service road which cuts through the site is already used by HGV's accessing the adjacent garden centre and retail park service yard east of the proposed development. The proposed development would therefore have a negligible impact upon the existing use of the service road adding a maximum of 2 additional HGV movements per day.
- 4.3.17 The site's primary access road would adjoin the existing service road towards the north of the site via a simple priority junction and provides suitable visibility relative to the low speeds on the service road. A vehicle tracking exercise demonstrating a maximum legal articulated vehicle movements through the sites internal carriageways and egressing via the existing service road is shown in **Drawing 2015.2564.006**.
- 4.3.18 The service roads alignment would be altered as part of the proposal and would require vehicles accessing the adjacent garden centre and retail park service yard to negotiate a slight dogleg. A vehicle tracking exercise has been undertaken to demonstrate that the alteration to the carriageway alignment would not restrict HGV movements (up to maximum legal articulated vehicle in size) to and from the adjacent retail park as shown in **Drawing 2015.2564.006**.



- 4.3.19 Vehicles using the service road would be restricted to a 5mph speed limit which would be signed and marked on the carriageway. Additional traffic calming in the form of speed humps would be provided to ensure low vehicle speeds through the site. A low wall aligning the access road would not exceed 0.6m in height ensuring that indivisibility is maintained between oncoming vehicles negotiating the service road through the site.

Roundstone Lane / Service Road Junction

- 4.3.20 The service roads junction with Roundstone Lane would be unaltered by the proposed development. The achievable visibility from the existing service road / Roundstone Lane junction achieves in excess of the 2.4m x 43m required for 30mph roads in accordance with 'Manual for Streets' MfS design guidance. A vehicle tracking exercise has also been undertaken demonstrating large car transporter manoeuvres through the existing service road access in **Drawing 2015.2564.005**.

Emergency Access

- 4.3.21 The geometric design of the primary access and rear service access would allow fire tenders (the largest emergency vehicle) to comfortably negotiate the access points. A vehicle tracking exercise demonstrating manoeuvres in and out of the site by fire tenders is shown in **Drawing 2015.2564.007**.

4.4 Internal layout

- 4.4.1 The site would be served by a primary access road linking the frontage access and existing service access road. The customer parking facilities would branch from the internal carriageway at the southwest corner of the site. Workshop parking and staff parking areas would be served from the service road which passes through the site to the north.
- 4.4.2 All parking facilities within the site provide standard parking bay dimensions of 2.4m x 4.8m and use 6.0m aisle widths in accordance with MfS guidelines. A vehicle tracking exercise demonstrating manoeuvres in and out of spaces is provide in **Drawings 2015.2564.002** and **2015.2564.004**.
- 4.4.3 The northern half of the site would be gated to prevent customer access to the service road and work shop areas. The segregation of northern and southern half of the site means that customers visiting the site for repairs, services, and MOTs, would be required to leave their vehicles in a designated drop-off / collection area located centrally between the showroom and workshop.
- 4.4.4 Staff would collect customer vehicles from the designated drop-off / collection area and take them to the workshop / service parking area at the rear of the site via a secondary service road running along the east boundary of the site. This arrangement is demonstrated in **Drawing 2015.2564.006**.



4.5 Stage 1 Road Safety Audit

- 4.5.1 The proposed highway design has been subject to an independent Stage 1 Road Safety Audit (RSA). The Safety Forum (TSF) were appointed by RGP to conduct the Stage 1 RSA on the 22 September 2015.
- 4.5.2 The Stage 1 RSA identified 2 issues and recommendations based on **Drawings 2015.2564.001, 2015.2564.002, 2015.2564.003, 2015.2564.004, 2015.2564.005, 2015.2564.006 and 2015.2564.007** which are summarised in **Figure 3.2**. A copy of the Stage 1 RSA including the 'Designer's Response' is attached at **Appendix F**.

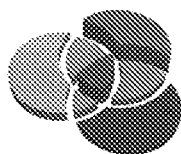
Location	Summary	Description	Recommendations
Opposite the primary vehicle access.	Risk of turning conflict – Option 1.	It may not be possible to construct a vehicle access to serve all vehicles and prevent erroneous right-turns by car, motorcycle and bicycles into the proposed access. The westbound A259, on the approach to the Roundstone Roundabout was seen and is known to have capacity problems that could encourage this manoeuvre and could well be done from a standstill or overtaking manoeuvre. Given the limited forward visibility to oncoming traffic and potential high speed and volume of eastbound traffic, errant road users could collide with vehicles on the A259, the risk of serious injury arising from vehicle to vehicle conflict is high.	Take measures to prevent errant right turns both into and out of the development site.
At both vehicle accesses	Potential of unwanted conflicts caused by rat-running – Options 1 & 2.	The route created by the junction of the proposed access to the existing access road (serving the rear of the development and 'Haskins') provides the opportunity for road users, who would otherwise queue on the approaches to the Roundstone By-Pass to pass along the route in either direction. Similarly vehicles of any size using the rear access road could misuse the A259 access. The resultant potential increase in traffic could create unwanted or avoidable conflicts at either development junction. As the rear service road will serve at least two separate premises, the likelihood of gates being closed is minimal.	Include measures to prevent or deter rat-running or, relocate or specify separate gates for each premises.
At the rear service access.	Visibility Splays below SSD - Options 1 & 2.	The visibility towards approaching traffic on the B2140 Roundstone Lane at the existing rear access is limited by mature vegetation on the eastern verge. Reduced visibility coupled with increased turning manoeuvres could bring about vehicle / vehicle collisions at the access.	Arrange for removal of vegetation from within the visibility splay.

Figure 3.2 Stage 1 Road Safety Audit Summary

4.6 Car and Cycle Parking Provision

Car Parking

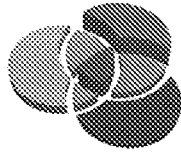
- 4.6.1 WSCC parking standards provide two separate standards for vehicle showrooms and workshops. The required WSCC parking standards provision and proposed parking provision are summarised below in **Figure 4.3**.



Land Use	WSCC Standard	WSCC Parking Provision requirements	Proposed Parking Provision
Showroom	1 space per 30 sqm of internal and outside gross car display area.	35 (1054sqm)	155 (Plus 38 spaces for used car display)
Workshop	1 space per 45sqm for staff and 3 spaces per service bay (or 25sqm).	19 staff + 39 Customer (841sqm + 13 service bays)	
Total	-	93	

Figure 4.3 Parking Provision

- 4.6.2 The proposed developments' parking provision would be in excess of WSCCs parking standards providing a total of 155 spaces (this figure excludes the used car display spaces). The site would provide 13 customer spaces, 138 service spaces and 17 staff spaces. It is recognised that there is limited opportunity to park on the local road network in the vicinity of the site, the over provision is therefore provided to negate the requirement for vehicles to park on surrounding roads or use the adjacent retail park's car park.
- 4.6.3 The 17 space staff parking allocation has been based on site specific information provided by the applicant who identified that the site would be staffed by up to 30 members of staff at anyone time. The 17 staff bays would be clearly marked to discourage there use for other purposes (i.e. storage of car stock and customer vehicles). There is flexibility as to the use of the 138 service bays, which could be used for staff overspill in exceptional circumstances.
- 4.6.4 The applicant has implemented a policy across all its showrooms that requires a proportion of staff to travel to work in demonstration vehicles to reduce staff parking demand. This policy would be in place at the proposed showroom. The applicant also has a policy to recruit staff locally to benefit the local economy. This policy is beneficial from a highways perspective in that local staff are more likely to travel by non-car modes to the site, further reducing the staff parking demand.
- 4.6.5 The 13 space customer parking allocation has been based upon the parking provision at other Caffyns showrooms, which provide similar levels of customer parking relative to the size of the showroom. The applicant has identified that customer parking at their other showrooms is lightly used.
- 4.6.6 The largest parking demand is associated with the storage of car stock and workshop customer's vehicles. As previously identified the workshop's customer vehicles would be dropped off in the designated drop-off point (rather than using the customer parking bays) and subsequently taken through to the service parking area at the rear of the site by staff.



Cycle Parking

- 4.6.7 The site's showroom and workshop land use (Sui Generis) is not covered in WSCC's cycle parking standards. The cycle parking provision has therefore been based on site specific information provided by the applicant. It has been identified that up to 12 of the total 31 employees at the existing Caffyns Audi site in Broadwater Road, Worthing (which this development will replace) commute by cycle.
- 4.6.8 As previously identified the proposed site would be staffed by approximately 30 members of staff at any one time. To accommodate the 30 staff members' cycle parking requirements at the same ratio as the Broadwater Road site, a provision of 12 staff cycle spaces is required. To accommodate this demand and allow for potential growth in cycle use 7 Sheffield Stands (14 spaces) would be provided.
- 4.6.9 In addition to staff cycle parking a nominal provision of 2 Sheffield Stands (4 spaces) would be provided to accommodate potential customer cycle use and conveniently located at the site frontage adjacent to the customer car park. It is considered that customers are unlikely to travel by bicycle when buying cars especially as most customer trips to show rooms are not local.



5 TRIP GENERATION AND IMPACT

5.1 Overview

5.1.1 A trip rate comparison has been drawn between the proposed vehicle showroom and the existing residential dwellings and agricultural nursery in order to establish the net trip generation associated with the proposal and the likely impact on local road network.

5.1.2 In order to quantify the levels of traffic flows that are likely to be associated with the proposed development and existing residential dwellings, the TRICS database (version 2015c) has been interrogated. The TRICS database contains traffic survey data from similar developments and has been filtered to include only representative data sets.

Proposed Show Room Trip Generation

5.1.3 The following filtering parameters have been applied to the TRICS data to establish the proposed show room's vehicular trip rates:-

- i.* Land Use – Vehicle Show Room (includes repair garage)
- ii.* Regions – England (excluding Greater London, Ireland and Scotland).
- iii.* Scale of Site – up to 4000sqm.
- iv.* Date Range – 2006 Onwards.
- v.* Count Type – Manual.
- vi.* Selected Days – Weekdays.
- vii.* Selected Locations – Edge of Town, Suburban Area.

5.1.4 A summary of trip generation associated with the proposed car sales garage is shown in **Figure 5.1** whilst the TRICS data output is attached at **Appendix G**.

	TRICS Trip Rates Vehicle Showroom 184sqm (per Day)		
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	0.945	0.533	1.478
PM Peak Hour (17:00-18:00)	0.396	0.598	0.994
Total Daily Traffic	7.369	7.888	15.257
	TRICS Vehicle Trip Generation		
AM Peak Hour (08:00-09:00)	19	10	29
PM Peak Hour (17:00-18:00)	8	12	20
Daily Traffic	145	155	300

Figure 5.1: Anticipated Trip Generation – Proposed Vehicle Show Room



- 5.1.5 The proposed development is anticipated to generate in the region of 300 vehicle trips across the day, with 29 trips during the AM peak period (0800hrs – 0900hrs) and 20 trips during the PM peak period (1700hrs – 1800hrs). The peak intensity of use would equate in a vehicle movement arriving / departing from the site every c.2 minutes during the AM peak hour period.

Existing Site Trip Generation

- 5.1.6 The following filtering parameters applied to the TRICS data to establish the existing residential dwellings vehicular trip rate are as follows:-

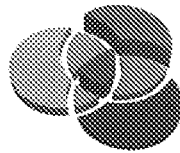
- i. Land Use – Residential (Houses Privately Owned).
- ii. Regions – England (excluding Greater London).
- iii. Number of Units - 10-30 units.
- iv. Date Range – 2000 Onwards.
- v. Count Type – Manual.
- vi. Selected Days – Weekdays.
- vii. Selected Locations – Edge of Town, Suburban Area.

- 5.1.7 A summary of trip generation associated with the existing residential dwellings is shown in **Figure 5.2**. The TRICS data outputs are attached at **Appendix G**.

	TRICS Trip Rate per Dwelling (2)		
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	0.139	0.378	0.517
PM Peak Hour (17:00-18:00)	0.364	0.167	0.531
Total Daily Traffic	2.307	2.381	4.688
TRICS vehicle Trip Generation			
AM Peak Hour (08:00-09:00)	1	1	1
PM Peak Hour (17:00-18:00)	1	1	1
Daily Traffic	5	5	9

Figure 5.2: Anticipated Trip Generation – Existing Dwelling

- 5.1.8 The TRICS database does not provide representative trip data for agricultural nurseries. In order to establish the vehicle trip generation associated with such a site a traffic survey at a similar nursery site has been used.
- 5.1.9 The survey was undertaken at Greenleaf, Gunnersbury Park, Brentford on Monday the 18th of October 2012. The raw survey data is attached at **Appendix H**, whilst a summary of the results is provided **Figure 5.3**.



	Existing Trip Rates Per 100sqm (315sqm proportion in development area only)		
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	0.056	0.194	0.250
PM Peak Hour (17:00-18:00)	0.111	0.333	0.444
Total Daily Traffic	1.444	1.833	3.278
Vehicle Trip Generation			
AM Peak Hour (08:00-09:00)	2	7	8
PM Peak Hour (17:00-18:00)	4	11	15
Daily Traffic	49	62	110

Figure 5.3: Anticipated Trip Generation – Existing Nursery

- 5.1.10 The existing site (agricultural nursery and residential trips combined) is anticipated to generate in the region of 119 vehicle trips across the day, with 9 trips during the AM peak period (0800hrs – 0900hrs) and 16 trips during the PM peak period (1700hrs – 1800hrs). The peak intensity of use would equate in a vehicle movement arriving / departing from the site every c.4 minutes during the PM peak hour period.

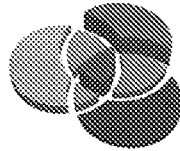
Net Traffic Impact

- 5.1.11 The existing and proposed land uses have been compared in **Figure 5.4**, which shows the net change in vehicle trips on the local road network.

	Net Vehicle Trip Generation		
	ARRIVALS	DEPARTURES	TOTAL
AM Peak Hour (08:00-09:00)	+16	+2	+20
PM Peak Hour (17:00-18:00)	+3	0	+4
Daily Traffic	+91	+88	+181

Figure 5.4: Anticipated Trip Generation – Net Change

- 5.1.12 The proposed development is anticipated to generate in the region of 168 additional daily vehicle trips on the local road network, with an additional 15 trips during the AM peak period (0800hrs – 0900hrs) and an additional 3 trips during the PM peak period (1700hrs – 1800hrs). The peak increase in vehicle trips equates to an additional vehicle movement arriving / departing from the site every c.3 minutes during the AM peak hour period.
- 5.1.13 The site results in a net increase of daily vehicle movements and the AM and PM peak periods – the proportional impact of which considered in the context of the A259's baseline traffic flows would be minor. This quantum of vehicle trips is therefore not considered to have a detrimental impact on the local road network particularly within the context of the improvements proposed along the A259 corridor which will increase the capacity and efficiency of the network.

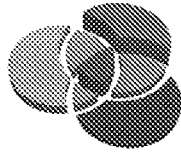


6 SUMMARY AND CONCLUSIONS

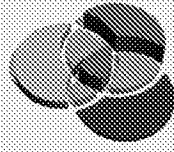
6.1.1 This Transport Assessment has been prepared by RGP on behalf of Caffyns Plc in support of a development proposal involving the erection of a new car showroom on land to the north of the A259 Roundstone Bypass, Angmering, West Sussex.

6.1.2 summary, the report demonstrates:

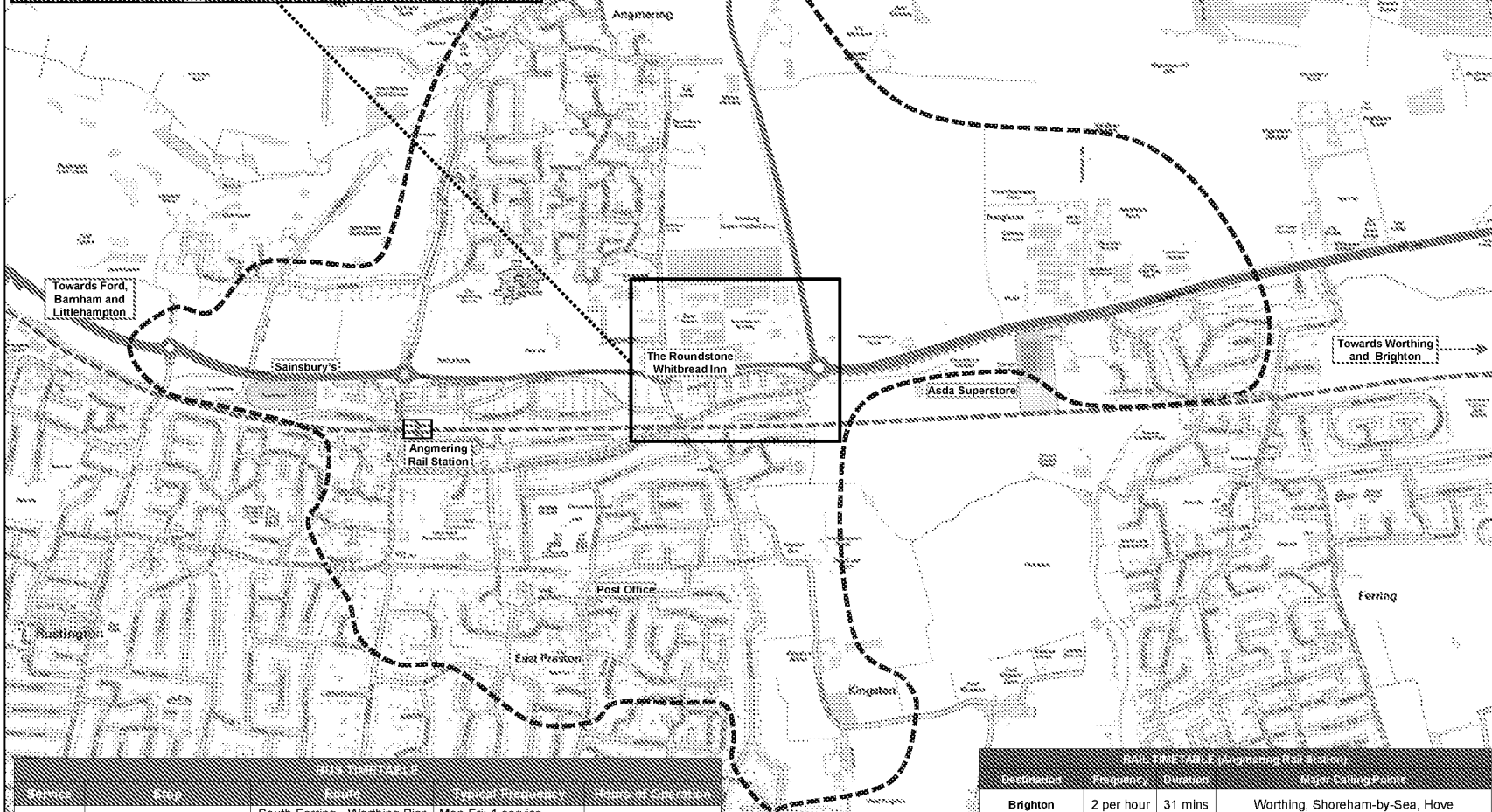
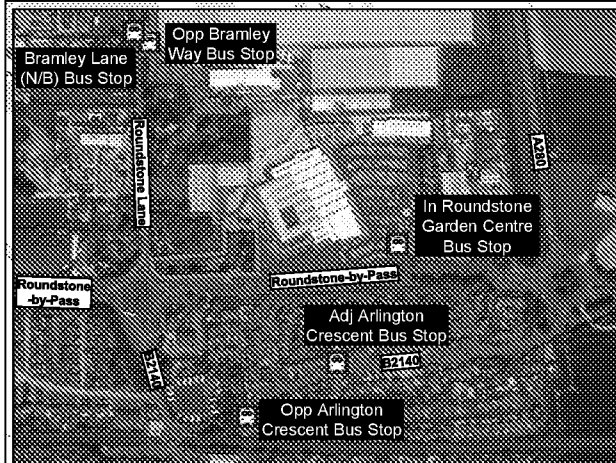
- (i) The application site is highly accessible by sustainable means of travel including public transport and the 'active' modes of walking and cycling, thereby complying with the core aims of the NPPF and Policies of ADC's current Local Plan and of the emerging Local Plan.
- (ii) The development has been assessed within the context of the forthcoming widening of the A259 Roundstone Bypass which runs across the southern boundary of the site. The existing single carriageway section of A259 between B2140 Station Road roundabout and A280 Angmering Bypass roundabout (1.42km length) would be widened to dual carriageway standard.
- (iii) Due to uncertainty surrounding the completion date of the A259 dualling, the site's primary access arrangements have been designed to accommodate both the existing single lane form and the forthcoming dual carriageway.
- (iv) The proposed left-in / left-out frontage access would be provided in accordance with DMRB 41/95 'Access to All-purpose Trunk Roads'. The design accordingly provides access with geometries tailored to the baseline traffic flows, vehicle speeds, gradients, the proportion of HGV's on the carriageway, the sites anticipated trip generation and achieves the necessary visibility.
- (v) The proposed servicing arrangements would require HGV deliveries to enter the site via the frontage access and egress via the existing service road to the rear of the site. The arrangement allows deliveries to enter and exit the site in a forward gear without requiring turning manoeuvres on site. This arrangement means that slow moving HGVs are not required to egress on to the A259.
- (vi) Alterations to the service road associated with the development proposal would not alter the operation of the road and its use by the adjacent retail park's delivery vehicles.
- (vii) The proposed development would provide parking in excess of WSCC parking standards providing a total of 155 spaces. The site would provide 13 staff and customer spaces 17 staff spaces and 138 service spaces. The over provision in parking negates the requirement for vehicles to park on the surrounding road network or in the adjacent retail park's car park.



- (viii) The site results in a net increase of daily vehicle movements and the AM and PM peak periods – the proportional impact of which would be minor when considered in the context of the A259's baseline traffic flows would be minor. The quantum of vehicle trips is not considered to have a detrimental impact on the local road network particularly within the context of the improvements proposed along the A259 corridor which will increase the capacity and efficiency of the network.



PLANS

**LEGEND**

- SITE LOCATION
- RAIL STATION
- RAILWAY
- LOCAL BUS STOPS
- SOUTH COAST CYCLE ROUTE
- 2KM WALK ISOCHRONE
- LOCAL AMENITIES



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Client: Caffyns PLC

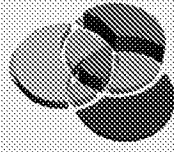
Project: Caffyns - Worthing Audi

Title: Site Location and Accessibility Plan

Plan No: Plan 01	Job No: 15/2546	Date: April 2015	Scale: NTS
Drawn By: RAA	Checked By: ALB	Approved By: PMR	Rev: -

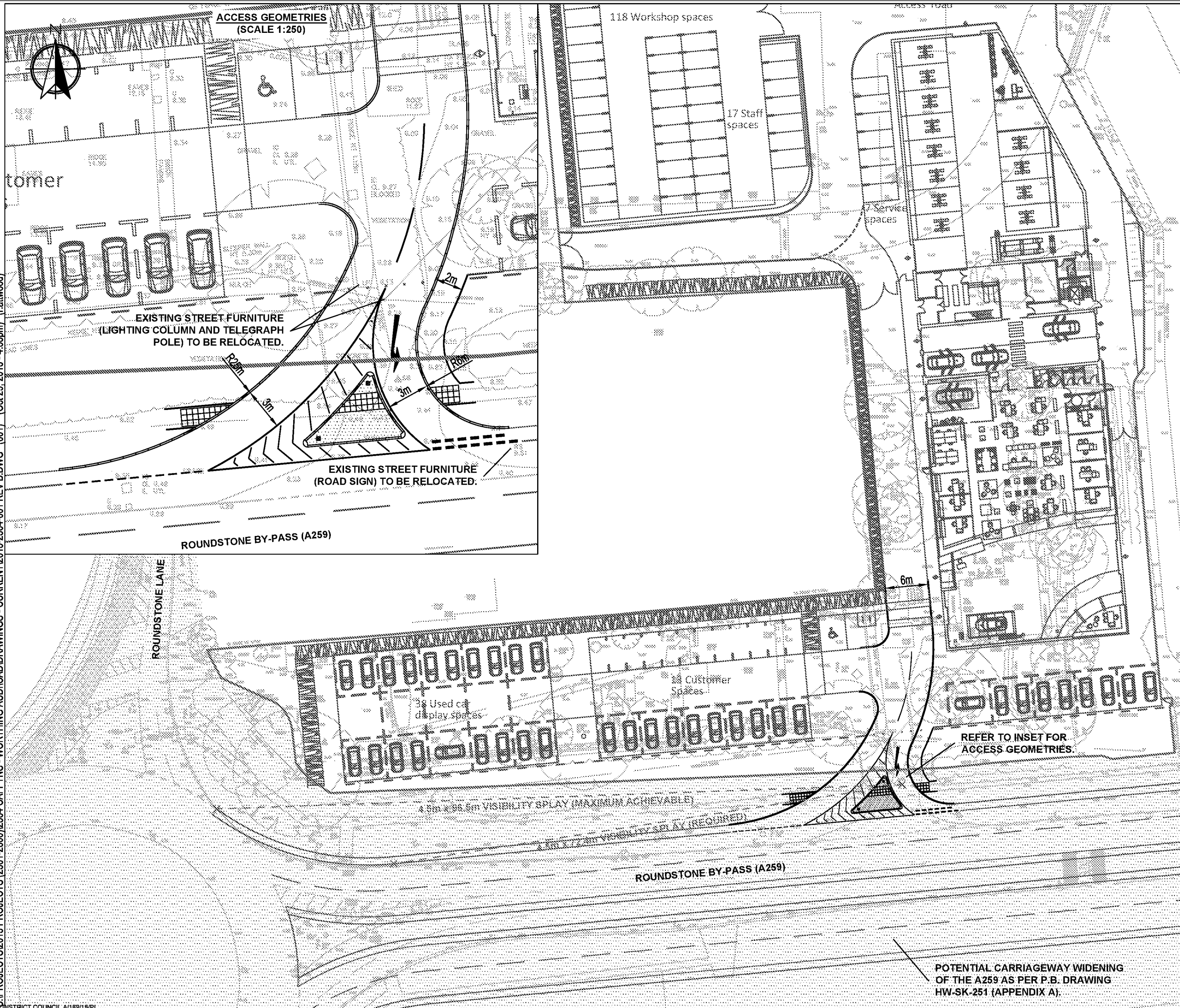
BUS TIMETABLE				
Service	Stop	Route	Frequency	Notes
8	Bramley Way/Lane	South Ferring - Worthing Pier (School)	Mon-Fri: 1 service outbound and inbound	Mon-Fri: 08.34, 15.38
9	Roundstone Garden Centre, Bramley Way/Lane	Littlehampton - Angmering - Worthing - Shoreham-by-Sea	Mon-Fri: every hour	Mon-Fri: 07.05-19.13 Sat: 08.00-19.13
700	Arlington Crescent	Brighton - Worthing - Littlehampton - Arundel	Mon-Sat: every 10 mins Sun: every 20 mins	Mon-Fri: 05.55-22.49 Sat: 06.20-22.49 Sun: 07.43-21.12
X6	Arlington Crescent	Littlehampton - Holmbush Centre (Pick-up/set-down)	Thu: 1 service outbound and inbound	Thu: 10.05, 13.44

RAIL TIMETABLE (Angmering Rail Station)			
Destination	Frequency	Duration	Major Calling Points
Brighton	2 per hour	31 mins	Worthing, Shoreham-by-Sea, Hove
Littlehampton	2 per hour	10 mins	-
London Victoria	2 per hour	97 mins	Worthing, Shoreham-by-Sea, Hove, Haywards Heath, Gatwick Airport, Clapham Junction
Portsmouth	1 per hour	50 mins	Barnham, Chichester, Havant
Southampton	1 per hour	73 mins	Ford, Barnham, Chichester, Havant, Fareham



DRAWINGS

PROJECTS\2015 PROJECTS\2501-2600\2564 CAFFYNS - WORTHING AUDI\DRAWINGS - CURRENT\2015-2564-001 REV B.DWG (001) (Oct 29, 2015 - 4:35pm) (rathwood)



LEGEND

EXTENT OF HIGHWAY BOUNDARY

SITE BOUNDARY

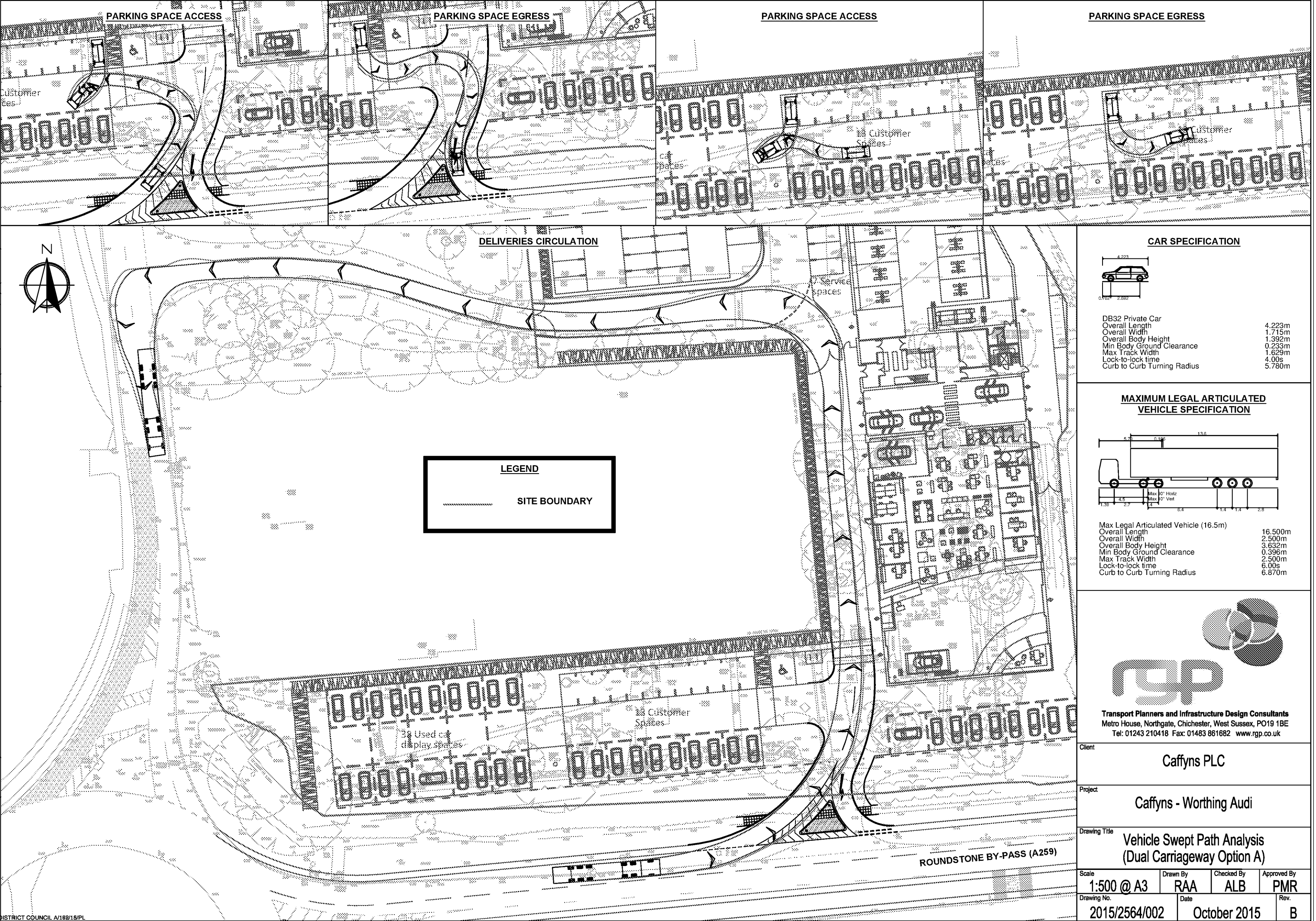


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Client	Caffyns PLC			
Project	Caffyns - Worthing Audi			
Drawing Title	Proposed Access Arrangements (Dual Carriageway Option A)			
Scale	1:500 @ A3	Drawn By	RAA	Checked By
			ALB	Approved By
			PMR	
Drawing No.	2015/2564/001	Date	October 2015	Rev.
				B

POTENTIAL CARRIAGEWAY WIDENING
OF THE A259 AS PER P.B. DRAWING
HW-SK-251 (APPENDIX A).

S:\PROJECTS\2015 PROJECTS (2501-2600)\2564 CAFFYNS - WORTHING AUDI\CAD\DRAWINGS - CURRENT\2015-2564-002 REV B.DWG (002) (Oct 29, 2015 - 4:37pm) (r.ratwood)



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

MAXIMUM LEGAL ARTICULATED VEHICLE SPECIFICATION	
Max Legal Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Max Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	6.870m



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Tel: 01243 210418 Fax: 01483 861682 www.rgp.co.uk

Client	Caffyns PLC		
Project	Caffyns - Worthing Audi		
Drawing Title	Vehicle Swept Path Analysis (Dual Carriageway Option A)		
Scale	1:500 @ A3	Drawn By	RAA
		Checked By	ALB
		Approved By	PMR
Drawing No.	2015/2564/002	Date	October 2015
		Rev.	B