



Windroos Nursery, Littlehampton
Independent Transport Review

Arun District Council

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1 Introduction

1.1 INTRODUCTION

1.1.1 WSP has been appointed by Arun District Council (ADC) to provide an independent review of the transport implications associated with proposals for a residential development on the Windroos Nursery in Littlehampton (Planning Application Reference FP/133/08).

1.1.2 This report explains the background to the outline planning application (OPA) submitted by Stuart Lyons (Haulage) Ltd and provides an assessment of the transport environment for the development in light of the proposed access arrangements. In the process, the following documents have been reviewed:

- Transport Assessment (dated July 2010, by Upton McGougan Ltd)
- Transport and Access Feasibility Report (dated July 2010, by Upton McGougan Ltd)
- Right Turn Lane Design Check Response (dated September 2009, December 2009 and July 2010 by Upton McGougan Ltd)
- Framework Travel Plan (dated July 2010, by Upton McGougan Ltd)
- Email correspondence between the applicant and WSCC (August – October 2010)

1.1.3 In addition, this review has been informed by the “Traffic Distribution Technical Note” produced by Paul Basham Associates (PBA) in October 2010 in response to objections to the HA. This has not been formally reviewed given the specific nature of the comments raised and the Agency’s issue of a TR110 direction allowing ADC to determine the application.

1.2 SITE LOCATION AND EXISTING USE

1.2.1 The proposed development site is located along the northern side of the A259 Worthing Road at Toddington, north of Littlehampton.

1.2.2 To the west of the site is a newly constructed residential development (George Wimpey / Laing Homes site) whilst, to the east, the site is bounded by the access road to the Bodyshop factory.

1.2.3 The site is currently occupied by a haulage business and two residential dwellings, and is accessed off Worthing Road via two informal priority junctions off the A259 Worthing Road.

1.2.4 The A259 connects to the B2187 to the east of the proposed development site via a five arm roundabout (‘Bodyshop roundabout’). The A259 to the west this location is composed of a two-way single carriageway whilst to the east of the roundabout the A259 continues as a dual carriageway. The arms of the roundabout are, starting with the northernmost arm and moving in a clockwise direction:

- Bodyshop Factory Access
- A259 (east, dual carriageway)
- B2187 Worthing Road
- B2187 Horsham Road (towards Littlehampton town centre)
- A259 Worthing Road (west)

1.3 DEVELOPMENT PROPOSALS AND PLANNING HISTORY

1.3.1 The proposals are for the demolition of the existing commercial building and the construction of 91 dwellings with associated landscaping and car parking.

1.3.2 The policy framework for the development is characterised by its inclusion in the 'Development Brief for Land at Toddington' which was adopted in October 2003, following its allocation for housing within the ADC Local Plan (Site 7).

1.3.3 Vehicular access to the development is proposed via a ghost island priority junction with outbound movement restricted to left turns only. This is in apparent contradiction to the Development Brief which was based on the provision of access from the adjacent residential site.

1.3.4 It is understood that third party land constraints do not currently allow this to take place. As a result, a new 'stand-alone' transport strategy has been put forward in support of the development.

1.3.5 An OPA was submitted to ADC in July 2010 by Stuart Lyons (Haulage) Ltd. Following submission of the application, a number of statutory authorities were consulted by ADC, including the Highways Agency (HA) and West Sussex County Council (WSCC) on transport and highway matters.

1.3.6 The HA has provided initial comments to the planning application in a letter to the planning officer at ADC on 31 August 2010, which focussed mainly on the impact of any additional traffic on the A27. The issue of a TR110 in October 2010 offering 'no objection' is taken as sanction of the proposals in terms of its strategic context.

1.3.7 Similarly, WSCC as lead highway authority raised no objection to the application on all transport grounds including design, capacity and safety.

1.3.8 However, it is in the interest of satisfying ADC committee members that this report will revisit the basis for the decision reached with a view to validating or otherwise dismissing the applicant's position.

1.4 REVIEW STRUCTURE

This review has been set out in the following sections:

- On-site observations
- Policy Review
- Existing Trip Generation
 - Basis for Comparison
 - Validation
- Proposed Access Arrangements
 - Proposed Access
 - Alternative Access Option
- Car Parking
- Framework travel plan
- Summary and Conclusions

2 Transport Review

2.1 INTRODUCTION

2.1.1 It is understood that ADC committee members are considering before them the proposals submitted by Lyons Haulage for the re-development of the Windroos Nursery Site in Littlehampton for the provision of a total of 91 dwellings.

2.1.2 Following consideration by ADC of all of the information submitted a decision on the OPA has been deferred by members pending an independent review of transportation matters. This defines the purpose of this report.

2.2 ON-SITE OBSERVATIONS

2.2.1 A site visit was undertaken by WSP in the afternoon of 17 November which extended into the PM peak hour.

2.2.2 It was observed that heavy eastbound traffic was being experienced along the A259 (single carriageway) with one of the resultant factor being delays to vehicles at the exit of the new residential development to the west of the proposed development site.

2.2.3 It was further observed that some delays at the Bodyshop roundabout occurred on the B2187 Worthing Road and the B2187 Horsham Road arms whilst the A259 dual carriageway experienced heavy but steadily moving traffic. The A259 Worthing Road (west) also experienced delays whilst almost no queues were observed at the access to the Bodyshop factory despite the onset of the PM peak which is traditionally associated with a greater number of commuting trips.

2.2.4 The observed delays are considered to be consistent with the expected traffic flows with the main throughput of traffic on being the strategic A259 with, in relative terms, more delays on the side arms commensurate with their status and role within the overall local highway network hierarchy.

2.2.5 The existing means of access to the Windroos Nursery is by way of a priority junction, informally arranged so as to provide separate western entrance and eastern exit points. The standard of construction of this access is poor having suffered from extensive wear and tear as a result of the movement of large vehicles in and out of the site.

2.2.6 Any improvement to this junction as part of the re-development should seek to rationalise the existing arrangement around a clear and well-defined residential road access, the design of which should be in line with the Manual for Street (MfS) for the internal site roads and the Design Manual for Roads and Bridges (DMRB) for the mainline carriageway in recognition of the status of the A259 as a County strategic road.

2.3 POLICY REVIEW

2.3.1 The assumption within the over-arching Development Brief (2003) is that the whole of the 'Land at Toddington' development site would gain access to the A259 Worthing Road via an improved and relocated Toddington Lane junction.

2.3.2 The presumption relating to the closure of the existing Windroos Nursery access, suggested within this document, was in part justified by the wish to avoid rat-running through the new residential development (i.e. the joined-up site). However, it is understood that provision was made in the Development Brief to allow a limited number of housing to be accessed off a reconfigured Windroos Nursery access provided that there would not be any intensification of use at this location.

2.3.3 The material consideration in respect of the continued use of the Windroos Nursery access is centered on the qualification within the Development Brief that it should be for “a temporary period” ahead of a connection to the remainder of the Land at Toddington development.

2.3.4 On the basis that the temporary nature of this access was intrinsically linked to the (then) assumed deliverability of a connection with the wider development (which it transpires cannot be delivered without recourse to ransom), it is WSP’s view that it would be entirely within the spirit of the original Development Brief for the proposed temporary access off the A259 reconfiguration to be considered as a long-term feature. This would be subject to any future controls required to minimise rat-running should the ransom issued be overcome at a later date.

2.3.5 Indeed, it is entirely reasonable to conclude that had these constraints come to light in the formulation of the Development Brief that access to the development off the A259 Worthing Road would have been considered acceptable, provided it met with the restrictions on capacity and rat-running which had justified the ‘in principle’ acceptance.

2.3.6 The crucial test is therefore considered be the extent to which the new dwellings proposed by the applicant would generate a level of vehicular trip generation which is in line with the consented use of the existing facility and, if not, what would the level of development need to be in order to confirm whether or not the impact of the development on the A259 corridor would be material.

2.4 TRIP GENERATION

BASIS FOR COMPARISON

2.4.1 The existing trip generation presented in the Transport Assessment submitted by the applicant was calculated by means of a traffic count survey. This was carried out to determine the level of vehicular generation associated with the existing facilities under the terms of their extant use.

2.4.2 The data presented has, by its definition of “daily” been assumed to cover a full 24-hour period(s). The presentation of this information was differentiated between mean average and maximum trip generation, as summarised in Table 2.1 below:

Table 2.1 Summary of Traffic Movements from Commercial Development (as per applicant survey)

Survey Data	Mean		Maximum	
	Arrivals	Departures	Arrivals	Departures
Total Vehicles	167	167	184	184
... of which, HGVs	104	104	121	121
Total (PCUs)	271	271	305	305
Total Two-way (PCUs)	542		610	

2.4.3 The Table above suggests that between 167 and 184 vehicles service the Windroos Nursery daily, leading to maximum of 368 vehicular movements per day. A Passenger Car Unit (PCU) factor of 2 has been applied to all HGV movement, resulting in a total maximum of 610 PCU-trips per day.

2.4.4 The TRICS data used to establish the residential trip generation from the re-developed site seems reasonable. In terms of the comparison shown in Table 9 of the TA, it is considered that only a comparison based on the average is relevant given that this is the basis for the TRICS calculations. On this basis, it is recognised that the equivalence has been estimated at 106 dwellings even though the reported site capacity, design and OPA is for 91 dwellings.

2.4.5 The use of PCUs to underpin the comparison is standard practice in transport modelling in assessing the impact of vehicles on the capacity of junctions in view of the allowances made for the greater use of space (e.g. in queuing terms) occupied by a singular HGV compared to a car.

2.4.6 If the objective of the trip generation comparison is to gain an appreciation of the level of movements, irrespective of the type of vehicles, then the use of PCUs would effectively increase the number of movements from the commercial development relative to any other land-uses whose trip generation would be primarily composed of car trips (e.g. residential development). This would be of particular relevance if concerns had been expressed in terms of the environmental impacts of the scheme and/or road safety.

2.4.7 On the basis that the Development Brief expressed its consideration of the development from the perspective of the capacity of the A259, a comparison based on PCUs can be considered acceptable.

VALIDATION

2.4.8 It is noted that the traffic count survey was undertaken directly by the applicant. This could complicate the independent validation of the count information. Ideally, a third-party enumeration company should have been commissioned to provide an authoritative account of the traffic situation.

2.4.9 In an attempt to validate the count information provided by the applicant, the TRICS database (Version 2010(b) v6.6.2) was consulted in order to compare the trip generation of the Windroos Nursery development with other related commercial developments.

2.4.10 The TRICS database contains 17 commercial warehousing sites within the chosen parameters (all of England excluding London, weekday surveys, 06 Dec 2000 – 17 June 2009), of which three had fewer than 50 employees and eight had more than 100 employees.

2.4.11 Six sites were selected for the trip generation calculation based on the combined average ratios. Only one site was surveyed for a full 24 hour period whilst the remaining five sites were surveyed for the 12 hour period between 0700 and 1900.

2.4.12 The vehicular trip rates obtained vary from 2.28 to 3.98 trips per employee over a 12 hour period (0700-1900), with an average trip rate of 3.034 trips per employee. Based on a worst-case estimate of 60 employees, Table 2.2 summarises the expected trip generation for the site using both methodologies.

Table 2.2 Comparison of Trip Generation (in vehicle trips)

Time Period	Existing Trips (from TA)	Existing Trips (TRICS)	Residential Trips	Difference (Trips)
24hr Daily (average)	334	333	464	+129
AM Peak (0800-0900)	-	16	51	+35
PM peak (1700-1800)	-	15	49	+34

2.4.13 Table 2.1 shows that the estimated trip generation for the existing site is similar to the baseline data provided by the applicant. However, on the basis of net trips generated, it also suggests that the reported vehicular generation of the site would be greater with a residential rather than a commercial development on the site.

2.4.14 However, as is pointed out in the TA, the majority of trips generated by the existing haulage business are HGV trips, which have then been converted to PCU. Whilst it is accepted that the method of comparing PCU trip generation provides an acceptable assessment of the development's daily impact, this should also consider peak hour capacities (i.e. 0800-0900 and 1700-1800).

2.4.15 Table 2.3 shows a trip generation comparison of PCUs for each respective land-use during the peak periods of traffic.

Table 2.3 Comparison of Average Trip Generation (in PCUs)

Time Period	Existing Trips (from TA)	Existing Trips (PCUs)	Residential Trips (PCUs)	Difference (PCUs)
24hr Daily (average)	542	541	478	-64
AM Peak (0800-0900)	-	26	53	+27
PM peak (1700-1800)	-	24	50	+26

* Assuming 3% HGV proportion for residential development

2.4.16 The comparison of PCUs presented in the TA was done on the basis of daily trips. Against this benchmark, the TRICS validation data suggests that a trip saving would be made across the day but that the residential development would generate approximately 25 more trips in the peak hours.

2.4.17 On the basis of this increase, it is not clear without recourse to a junction capacity test whether or not the capacity of the A259 would be affected. However, representing less than 1 additional vehicle every two minutes in the peak hours, the technical argument is likely to support the case that the impact of the residential development is unlikely to be significant in real terms.

2.4.18 The argument is therefore purely a planning-related one relating to the development's adherence to the Development Brief relating to 'non-intensification' of trips from the continued use of the Windroos Nursery access. On the basis of the peak hour impact, the analysis undertaken would suggest that a development quantum closer to half of the 106 dwellings would be consistent with policy¹. However, if ADC is satisfied with a comparison based on the number of trips across the day then the proposed development quantum and its associated trip generation would be judged to be satisfactory against the extant use/consent.

2.5 ACCESS ARRANGEMENTS

PROPOSED ACCESS

2.5.1 The design of the proposed development access (Site Access Option 5) has been reviewed taking on board the outcome of discussions in the Road Safety Audit (RSA) and design decisions reached in the production of the final Design Check Report² (July 2010).

2.5.2 The proposed design is for a right-turn ghost island priority junction, with the A259 acting as the main carriageway and the access to the development being the priority arm. The westbound right-turn lane provides for entry into the site. Entry and a left-turn only exit are provided in the eastbound direction.

2.5.3 A cursory check of highway boundary information indicates that the proposed design can be delivered within WSCC or applicant controlled land without recourse to any third party land.

2.5.4 The junction has been designed to a 40mph (64KPH) speed limit as opposed to a 70kph Design Speed. As indicated by the speed surveys the average 85th percentile speed is 37.5mph and, for this reason, it has been deemed acceptable to base the design of the right turn lane on 60KPH Design Standards (TD42/95).

2.5.5 Table 2 in the RSA Designers Response under item 3.5 raises a safety issue with regard to the potential for unsafe overtaking manoeuvres to take place. The audit suggested that the designer provide either a physical island or extended hatching to the west of the proposed access in order to protect vehicles turning into the site. The designer did not accept this as a problem, stating existing layouts of other similar junctions along the Worthing road as evidence that this recommendation can be disregarded. The Safety Auditor appears to have responded to this with the same previous recommendation.

2.5.6 Although similar junctions along the Worthing Road do not have such measures in place, referral to other surrounding junctions should not necessarily be used as reason alone for not accepting recommendations in a road safety audit. The location of this proposed access being on the approach to a controlled pedestrian crossing and roundabout would alone warrant the need for added measures to ensure over taking manoeuvres cannot take place. There also does not seem to be any reasons as to why the recommendations could not be implemented with minimal impact.

¹ The proposal is for 91 dwellings but the applicant's assessment of equivalence has been calculated based on 106 dwellings.

² Previous iterations of design reports had considered a number of other junction forms. This review has considered the 'preferred' configuration only.

2.5.7 This difference of opinion would seem to remain and it is recommended that this be investigated further at the detailed design and technical approval stages. It may also be that a specialist traffic safety organisation would come up with an innovative way of overcoming the issue raised.

2.5.8 It is also noted that there is no zig-zag markings provided on the approach to the controlled pedestrian crossing to the east of the proposed junction. Subject to a closer inspection, they may be an opportunity for the applicant to remedy the situation in connection with the proposed access design to provide a comprehensive solution for this section of the A259 corridor.

ALTERNATIVE ACCESS OPTION

2.5.9 In response to ADC's request, WSP has reviewed the option to provide an access to the development via the Bodysshop access road. This would be as an alternative to the proposed right-turn ghost island priority junction with the A259.

2.5.10 In technical terms, there would be no restrictions to the delivery of this alternative point of access subject to the third party land constraints present in this area.

2.5.11 The only issue in respect of serving the development off the Bodysshop access road would be the traffic loadings on the roundabout and the potential for long-term rat-running. These issues are addressed below.

Bodysshop Roundabout

2.5.12 In an attempt to quantify the impact of the development on the Bodysshop roundabout, the trip distribution estimates provided in the supplementary report "Technical Note on Traffic Distribution" (by Paul Basham Associates) has been used to establish that 45% of all development traffic would wish to travel along the A259 west, whilst 45% would wish to travel along the A259 east. The remaining 10% would travel via the B2187 Worthing Road (2%) and the B2187 Horsham Road (8%).

2.5.13 The continued use of the Windroos Nursery access would result in all outbound development traffic having to negotiate the roundabout to the east along Worthing Road (with approximately 45% of traffic doing a U-turn at the roundabout in order to travel west along the A259). In the PM peak hour, only 55% of all inbound development traffic would have to use the roundabout whilst the remaining 45% would enter the development from the west without impacting on the roundabout.

2.5.14 Providing access to the development via the Bodysshop access road would result in all development traffic using the roundabout to access the development. Although likely to be manageable, there would be a slightly higher impact on the roundabout than under the applicant's proposals.

Rat-Running

2.5.15 In both scenarios, the provision of a new separate access to the development to the south/east will bring into question the issue of rat-running should the intention ever be realised at a later date to link Site 7 with the remainder of the Toddington Lane development.

2.5.16 The internal layout of the development should be designed in such a way to minimise this potential by restricting carriageway widths and introducing appropriate design 'events' to act as effective traffic management measures.

2.5.17 In this context, it is considered that the direct access to Worthing Road via a reconfigured Windroos Nursery access would provide a more constrained junction form in accommodating any significant increases in traffic which could occur as a result of rat-running than the Bodyshop access approach to the roundabout, the relative capacity (and available routing) of which would be likely to attract disproportionately more traffic. It would also limit the use of estate roads by Bodyshop employee traffic and thus help to re-enforce the position of A259 Worthing Road as the main strategic road in the area.

Summary

2.5.18 Taking account of traffic capacity and the long-term potential for greater development linkages, it is WSP's view that the upgraded access off the A259 Worthing Road proposed by the applicant is preferable to providing access to the development via the existing Bodyshop road access, although this would be technically feasible.

2.6 ROAD SAFETY

2.6.1 The analysis presented in the TA appears to be insufficient although an acknowledgement is made that the recent improvement to the A259 corridor, which provides access to the development, is considered by WSCC and the applicant to be too recent to allow a meaningful statistical assessment to be carried out.

2.6.2 It is agreed that the personal safety information situation for the corridor be reviewed in tandem with subsequent Road Safety Audits of the proposed site access.

2.7 CAR PARKING

2.7.1 According to the TA, car parking at the proposed development is to be provided in accordance with ADC maximum parking standards. In line with this, the applicant presented a summary table showing the maximum quantum of car parking to be 203 spaces. The suggestion is made that the design allowance of 197 car parking spaces is less than this maximum.

2.7.2 On closer inspection of TA Table 7 in light of ADC's standards, it would appear that the average car parking ratio of 1.7 spaces per unit associated with the 2-bed flats was not correctly applied and that the higher rate of 2.2 spaces per unit for the 2-bed houses was used instead. Table 2.4 below shows the correct apportionment.

Table 2.4. Car Parking Analysis

Type	Number of Units	Table 7 of TA		This Review	
		ADC Ratio	Max Parking	Parking Standards (ADC local plan)	Total Number of Spaces
1 bed flat	6	1.2	7.2	1.2	7.2
2 bed flat	13	2.2	28.6	1.7	22.1
2 bed house	18		39.6	2.2	39.6
3 bed house	45		99.0	2.2	99.0
4 bed house	9	3.2	28.8	3.2	28.8
Total	91		203.2		197

2.7.3 Crucially, the maximum allowable number of spaces is 197, the same as is being proposed by the applicant. On this basis, the apparent discrepancy does not lead to any difference in the overall provision.

2.7.4 It should also be noted that the ADC standards refer to a 'maximum' and that a lower number of spaces could enhance the sustainability of the development, subject to demonstrating that car parking demand is self-contained within the site and does not lead to any over-spill problems.

2.7.5 The current car parking quantum is effectively based on the assumption that all spaces are *de facto* 'allocated'. Depending on further calculations, shared parking could reduce the overall requirement for car parking by maximising the use of spaces by different residents and at different times of the day.

2.7.6 In September 2010, WSCC published a new document entitled "Guidance for Car Parking in New Residential Developments". The calculations in that document are based on the DCLG Research Paper of the same name published in 2007. It advocates the use of census-based car ownership data to determine the demand for car parking in the interest of sustainability by not over-providing spaces.

2.7.7 Whilst this application uses ADC's own parking standards and pre-dates the publication of WSCC's latest guidance, it may nonetheless be sensible for the applicant to undertake a sense-check against the requirements of this guidance.

2.7.8 Irrespectively, a planning condition should be placed on the application requesting the applicant to demonstrate how allocation/non-allocation of spaces will work with the layout of the development on a zone-by-zone basis (i.e. that the location of the dwellings and car parking has been thought through). ADC may be satisfied that this would be covered by reserved matters application relating to the design of the site.

2.8 FRAMEWORK TRAVEL PLAN

2.8.1 A Framework Travel Plan (FTP) was prepared by Upton McGougan to support the planning application (July 2010). The document has been reviewed in reflection of its status as a framework document pending the production of a full travel plan once the occupier of the site is known.

2.8.2 Whilst the FTP sets out general objectives of the travel planning process it does not identify individual targets and a monitoring schedule associated with them. Instead the FTP suggests that a survey is to be carried out after three months of full occupation to establish travel behaviour including travel patterns and mode choice. Irrespectively of this, ADC should seek a commitment to a monitoring strategy to be carried out at least 1, 3, 5 years after first occupation.

2.8.3 It is acknowledged that it is difficult to provide detailed measures and targets at the planning stage, however WSP would stress that an attempt should be made to influence travel behaviour from first occupation rather than change residents' behaviour after the suggested three month period should it become apparent that travel patterns are not as desired. Indeed, it is widely known that once travel patterns become established from the outset it is more difficult to change them at a later date.

2.8.4 As a minimum, a planning condition should be placed on the application on the production and agreement of a full Residential Travel Plan (RTP) prior to occupation. This should consider measures to facilitate the use of walking, cycling³ and public transport as alternative to the private car. Resident's travel will be shaped from the moment they move to their new property and so it is crucial that they are offered measures that will improve the choices on offer. Simply promoting existing services and facilities may not be sufficient to achieve this.

2.8.5 An appreciation for how people in the area travel now (e.g. using Census journey-to-work) would be beneficial in guiding the implementation of the RTP. More importantly, given that the access strategy is based on a general acceptance that there would be equivalence between the number of trips generated by the old and new land uses, this could act a useful target against which to monitor the impact of the development and establish the need for more intensive travel planning measures to encourage the use of sustainable modes of transport.

³ Including agreeing the cycling parking requirements of the development.

3 Conclusions

3.1.1 WSP has been commissioned by ADC to provide an independent review of a number of transport related documents submitted by Stuart Lyons (Haulage) Ltd in support of an OPA for the re-development of the Windroos Nursery site located off the A259 in Littlehampton

3.1.2 The proposals are for the demolition of the existing commercial building and the construction of 91 dwellings with associated landscaping and car parking.

3.1.3 In undertaking the review, the following conclusions have been reached:

- The rationale for the development is supported by an adopted Development Brief, whose purpose was to deliver comprehensive sustainable development;
- The Development Brief was based upon an access strategy whereby the development (Site 7) would be served off Toddington Lane along with the adjacent residential development;
- The principle of providing an upgraded junction from the A259 Worthing Road is technically feasible and in line with the Development Brief's suggestion for (albeit at the time temporary) access, provided it met with the restrictions on capacity and rat-running;
- The crucial test should be made in respect of equivalence between the trip generation associated with the existing commercial and new residential land-uses.
- The trip generation submitted by the applicant does not benefit from sufficient independent validation (i.e. survey undertaken by a recognised enumerator) in order for it to form the basis for the trip generation analysis. No data has also been provided regarding the peak hour situation.
- Using TRICS information, this review has shown that, across the day, the trip impact equivalence has been satisfied but that the comparison during the peak periods suggests an increase in trips resulting from the residential development.
- WSP is satisfied that this impact is unlikely to be material and should be manageable in the context of the capacity of the local highway network. Therefore, the issue remains simply a planning question of alignment with the original Development Brief policy.
- An assessment of car parking provision has also been made with reference to ADC and WSCC standard and the requirement for this to be considered in further detail as part of agreement on the detailed design of the masterplan.
- A review of the road safety information provided in connection with the submitted highway design for the A259 access to the development confirms that it meets all suitable design standard (against the results of the speed survey) subject to it meeting the audit recommendations,
- One issue remains in respect of the Design Check Report, being the requirement for a central island. It would be prudent to address this further as part of the detailed design, RSA Stage 2 and technical approval process.
- A review of alternative access options has been carried out and this confirms that the access off the A259 would be preferable to access from the Bodyshop access from the perspective of capacity and to minimise the potential for rat-running.

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- The proposed Framework Travel Plan does not form a basis on which to determine, assess and monitor the impact of the development. It is recommended that a full Residential Travel Plan be submitted to the council and agreed prior to occupation.

3.1.4 Whilst WSP is broadly satisfied with the transport case made for the development. ADC may nonetheless wish to request that the applicant submit further information if it deems it necessary in providing greater levels of comfort.

- An independent traffic survey to confirm the position presented in respect of the Transport Assessment.
- A sensitivity check of car parking using WSCC's recent car parking guidance (September 2010).
- Provide an update on the personal road safety situation given greater time lapse since the completion of the A259 corridor improvements. This could be captured with subsequent Road Safety Audits of the proposed access.

3.1.5 In addition to those conditions already specified by WSCC, we suggest the following be included with the application:

- A full Residential Travel Plan (RTP) should be produced and agreed with the council prior to first occupation. This should include detailed measures, targets and monitoring framework to ensure residents are able to make informed and sustainable choices in the way they travel.

Purpose: The merits and access strategy of the development are based upon an acceptance of equivalence between the trip generation of pre-existing and new land uses in relation to the impact on the A259. Targets within the RTP would allow this to be monitored and remedied.

- As part of the approval on the detailed design of the masterplan, the applicant would need to provide a car parking management strategy to underpin the proposed design.

Purpose: to ensure the correct allocation of allocated / non-allocated spaces in the interest of ensuring the delivery of a sustainable development. This could be treated under a reserved matters application relating to obtaining a satisfactory fix on the layout.

3.1.6 It has been assumed that all other points made in the production of this note would be picked up as part of the detailed design stage, technical approval and masterplan development processes.

Appendices, Figures & Tables