

Lysander

Ruscote Avenue, Oxford - Van Storage

November 2021

vectos.

Contents

1	Introduction	1
2	Existing Conditions	2
3	Policy Context	14
4	Development Proposals	18
5	Trip Generation	28
6	Summary and Conclusions	36

Figures

Figure 2.1	_	Local Site Location
Figure 2.2	_	Oxfordshire County Council Interactive PROW Map Insert
Figure 2.3	_	2km Walking Isochrone
Figure 2.4	_	Banbury Cycle Infrastructure
Figure 2.5	_	5km and 8km Cycling Isochrones
Figure 2.6	_	Insert from Crashmap
Figure 2.7	_	Total Number of Collisions (2006-2019)
Figure 3.1	_	Existing Strategic Employment Site Allocation
Figure 4.1	_	Van Storage Parking Accumulation
Figure 4.2	_	Inter-Site Travel

Appendices

Appendix A	 OCC Consultation Response
Appendix B	 Site Layout Plan
Appendix C	 Swept Path Analysis
Appendix D	 Highway Impact Methodology

1 Introduction

- 1.1 Vectos has been commissioned by Lysander ('the Applicant') to provide highways and transport advice to support a planning application for the proposed development of land to the east of Ruscote Avenue. The site lies within the administrative boundaries of Cherwell District Council (CDC) and Oxfordshire County Council (OCC). The site forms part of the wider Jacob Douwe Egberts (JDE) site.
- 1.2 The site is located approximately 1.8km south-west of an existing last mile Distribution Centre, which is located to the east of Southam Road (A423). The proposals have been brought forward to accommodate operational Van Storage associated with this existing last mile Distribution Centre.
- 1.3 It is noteworthy that the scheme represents an uplift in the number of van storage spaces to that which is subject to a live application on part of the site (App ref: 21/00503/FUL). It is equally noteworthy that OCC in its capacity as local highway authority has already recommended that scheme for approval, subject to planning obligations and conditions being satisfied.
- 1.4 As has been accepted by OCC with respect to application 21/00503/FUL, the proposed development will improve the existing operations of the last mile Distribution Centre on Southam Road to facilitate a reduction in overall journeys and improve the sustainability of the operation by encouraging more sustainable modes of transport. For example, the proposals will assist with drivers being able to commute by non-car modes of transport and will promote the use of car sharing. Therefore, the proposals are consistent with the principles of freight consolidation.
- 1.5 As with application 21/00503/FUL, access to the site will be achieved from an existing priority junction onto Southam Road. This is shared with a neighbouring Waitrose Service vehicle entrance, which has been designed to accommodate large HGVs and has been accepted by OCC pursuant to application 21/00503/FUL as providing a safe and suitable point of access for a van storage facility.
- 1.6 This Transport Statement (TS) has been prepared to support the submission of the full planning application and the remainder of the report is structured as follows:
 - Section 2 Existing Conditions;
 - Section 3 Policy Context;
 - Section 4 Development Proposals;
 - Section 5 Trip Generation; and
 - Section 6 Summary and Conclusions.

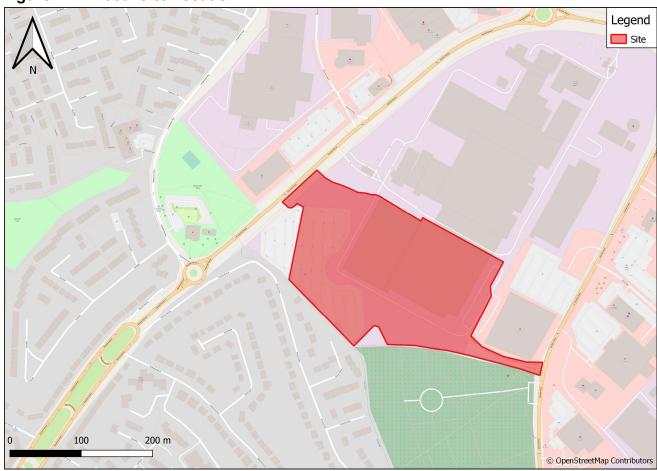
2 Existing Conditions

2.1 This section of the TS provides an overview of the current accessibility of the site in terms of sustainable travel, and a high-level review of the local highway network.

Site Location

- 2.2 The site is located to the north of Banbury town centre and forms part of the existing Jacobs Douwe Egberts site situated between Southam Road (A361) to the east of the site and Ruscote Avenue (A422) to the west of the site. The site is located within the administrative boundaries of Cherwell District Council (CDC) and Oxford County Council (OCC).
- 2.3 **Figure 2.1** shows the site location within a local context.

Figure 2.1 – Local Site Location



2.4 The application site is currently occupied by a warehouse and car park which form part of the wider JDE site. Access to the car park and warehouse is achieved both via Ruscote Avenue and Southam Road, respectively.

Planning History

- 2.1 The Southam Road access was constructed as part of the nearby Waitrose application (App ref: 15/00831/F). The access road was further extended as part of the most recent change of use application (App ref: 18/01246/F).
- 2.2 The most recent permission at this site was granted consent with conditions in December 2018 for the change of use of the warehouse that occupies part of the site from Class B8 to B1c/B2/B8, including internal and external alterations, demolition of ancillary structures and a new access to Southam Road (App ref: 18/01246/F).
- 2.3 In February 2021 a further application (App ref: 21/00503/FUL) was submitted with respect to the same warehouse that comprised the *'use of the site for the storage of operational vehicles, elevational alterations, associated parking, vehicle barriers, guard hut and associated infrastructure'.*Whist this application is yet to be determined, it is noteworthy that it has been recommended for approval by OCC, subject to conditions, in its capacity as local highway authority.
- 2.4 A copy of the OCC response is provided at **Appendix A**. It is clear from this that there is a recognition of the overall benefits that van storage has, and that the principle of this use has already been accepted in this location. The proposed enlargement of the facility pursuant to application 21/00503/FUL is therefore also considered to be acceptable in principle.

Accessibility by Non-Car Modes

- 2.5 The site is located within an existing industrial area, with bus provision and walking and cycling options available to encourage sustainable travel. The following text summarises the existing sustainable transport infrastructure that serves the site.
- 2.6 Access for pedestrians and cyclists via Southam Road would be made achievable via the recent application (21/00503/FUL).

Walking

- 2.7 An existing footway connects the site to the east with Southam Road where footways are present on both sides of the carriageway. This would connect the van storage site with the wider pedestrian network. Street lighting is provided along Southam Road at regular intervals.
- 2.8 A signalised toucan crossing is present approximately 120m north of the site access onto Southam Road with tactile paving and dropped kerbs. This provides safe crossing to the eastern side of the carriageway for both pedestrians and cyclists.
- 2.9 Similarly, a pelican crossing is provided approximately 300m south of the site access and an island crossing with a pedestrian refuge is present of the site access enabling safe crossing to the northern side of the carriageway.
- 2.10 South of the site is a Public Right of Way (PRoW) 120/100 in the form of a footpath as shown on **Figure 2.2**. This footpath provides an alternate route, not though the site, to both Ruscote Avenue and Southam Road.

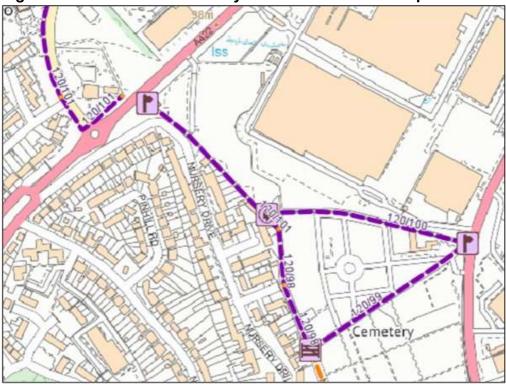


Figure 2.2 – Oxfordshire County Council Interactive Map Inset

2.11 It is commonly accepted that a distance of 2km is the reasonable distance over which walking might replace car trips. A plan illustrating the 2km walking isochrone from the site is provided at **Figure 2.3**.

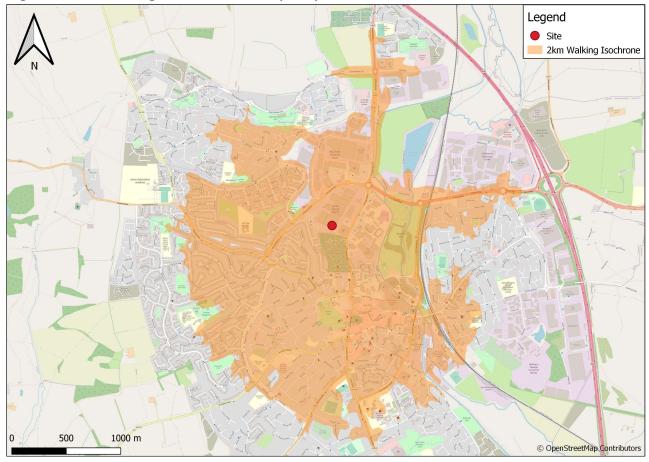


Figure 2.3 - Walking Isochrone Plan (2km)

2.12 **Figure 2.3** demonstrates that a number of local residential areas are located within a 2km walking distance.

Cycling

- 2.13 The cycling infrastructure on Southam Road consists of a shared footway/cycleway on the western side of the carriageway with an on-road cycle lane on the eastern side of the carriageway. These cycle lanes extend south to the town centre.
- 2.14 National Cycle Route (NCR) 5 is located approximately 2.7km cycle distance south of the site at the A361 to the south of Easington. NCR 5 provides local cycle access to nearby villages such as Bloxham and North Newington.
- 2.15 An extract of the cycle infrastructure in Banbury is provided in **Figure 2.4**.

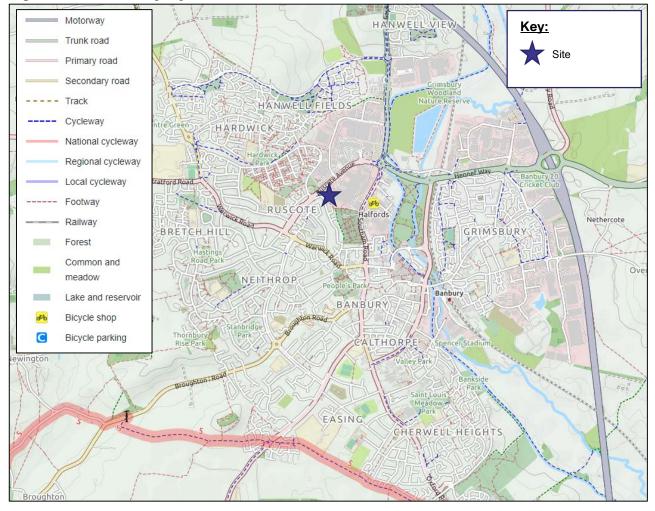


Figure 2.4 - Banbury Cycle Infrastructure

2.16 It is commonly accepted that cycling has the potential to replace short car trips, particularly those under 8 km, and to form part of a longer journey by public transport. A plan illustrating the 5km and 8km cycling isochrones from the site is provided at **Figure 2.5**.

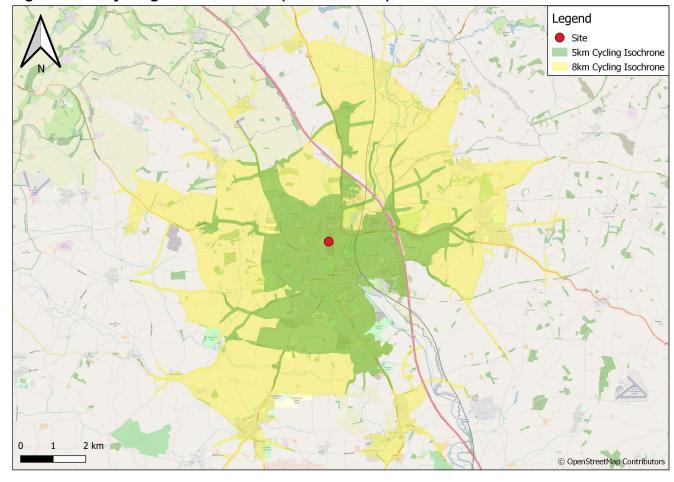


Figure 2.5 – Cycling Isochrone Plan (5km and 8km)

2.17 Figure 2.5 demonstrates that local residential areas including settlements outside of Banbury can be accessed within 5km. It can also be seen that the wider Banbury area is accessible within an 8km cycle from the site location.

Public Transport

Bus Services

- 2.18 Two bus services are located along Southam Road, approximately 100m south of the van storage site access onto Southam Road. Both stops provide a pole and flag arrangement with timetable information.
- 2.19 Further services are accessible along Longelandes Way, which can be accessed via PRoW 120/100 which runs to the south of the site as shown in **Figure 2.2** followed by a signal-controlled crossing across Ruscote Avenue followed by a shared footway/cycleway through Musketeer Park.
- 2.20 A summary of the services accessible from these stops are set out in **Table 2.1**.

Table 2.1 - Bus Services Summary

Provider	No.	Route	First	Last	Frequency (per hour)			
			Bus	Bus	M – F	S	S	
	В9	Banbury Gateway- Hardwick	06:25	23:20	4	4	1	
Stagecoach		Hardwick-Banbury Gateway	06:42	23:37				
	501/ 502	Banbury – Leamington	12:18	13:48	No	1	No	
					Service	Service	Service	
		Leamington – Banbury	10:03	11:14		per day		
	В3	Banbury – Bodicote & Longford Park	07:07	19:32	2	2	No Service	

*Note: Services may be reduced due to COVID-19

- 2.21 The services set out above indicate approximately 6 services per hour accessible from the site, with 1 service per hour provided on Sundays.
- 2.22 Services 501, 502 and B3 call at or adjacent to Banbury bus station located 400m (5-minute walk) northwest of Banbury railway station. In this regard, there is the potential for people to access the site by a rail-bus trip.
- 2.23 It was stated as part of application 21/00503/FUL bus infrastructure improvements with OCC and CDC would be explored in more detail, namely two Premium Route bus stop pole flag/information cases and two shelters. Following which a Unilateral Undertaking has been agreed between the Applicant and OCC, totalling £16,000.00 for improvements to said bus infrastructure.

Rail Services

- 2.24 Banbury railway station is located approximately 1.5km south east of the site, approximately 20-minutes on foot and a 6-minute cycle. The station sits on the Chiltern Mainline and is managed by Chiltern Railways.
- 2.25 A summary of the rail services to these destinations have been provided in **Table 2.2**.

Table 2.2 - Rail Services Summary

Destination	Route	First	Last	Frequency (per hour)			
		Train	Train	Weekday	Saturday	Sunday	
London Marylebone	Banbury – Bicester North – High Wycombe – London Marylebone	05:17	22:36	3	1-2	1-2	
Birmingham Moor Street	Banbury – Leamington Spa – Warwick – Solihull – Birmingham Moor Street	06:06	00:03	2	2	2	
Reading	Banbury – Oxford – Reading	06:52	22:54	1-2	1-2	1	
Manchester Piccadilly	Banbury – Leamington Spa – Coventry – Birmingham New Street – Wolverhampton – Manchester Piccadilly	06:57	20:57	1	1	1	

2.26 The services set out above indicate regular services departing to London Marylebone, Birmingham Moor Street, Reading and Manchester Piccadilly. Locally they serve the nearby settlements of Kings Sutton, Learnington Spa and Bicester North.

Local Highway Network

Ruscote Avenue

2.27 Ruscote Avenue (A422) runs in a broadly north/south alignment in the vicinity of the western border of the site. Ruscote Avenue is a two-way single carriageway road subject to a 30-mph speed limit.

Southam Road

2.28 Southam Road (A361) in the vicinity of the site is a two-way single carriageway road subject to a 30-mph speed limit. It runs in a north-south alignment to the east of the site. Southam Road continues north as the A423 towards the existing Distribution Centre and is subject to a 40-mph speed limit.

Hennef Way

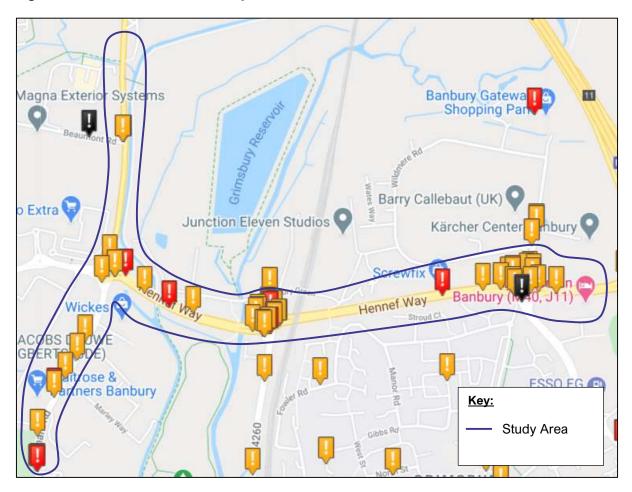
2.29 Hennef Way (A422) runs in an east/west alignment to the north east of the site which forms the main strategic connection from the A361 and A422 roundabout towards the M40 to the east. Hennef Way is a two-way dual-carriageway subject to a 50-mph speed limit.

Highway Safety

- 2.30 Road safety analysis has been reviewed from previous planning applications in the area (Ref: 19/00128/HYBRID, 17/01044/F, 11/01878/OUT, 11/01870/F), which assessed collision data from 2006 2018.
- 2.31 Over this period, there was 1 fatal collision that occurred on the Hennef Way/Ermont Way roundabout in 2015, involving a cyclist and a HGV. The reports for planning reference

- 19/00128/HYBRID and 17/01044/F highlighted this collision, and both clarified that the junction does not represent a material concern. The accident was attributed to a failure to look properly and the cyclist possibly being under the influence of substances as well as using their phone.
- 2.32 In each of these reports it was concluded that none of the collisions in the 2006 2018 period could be attributed to the highway layout.
- 2.33 In its capacity as Local Highway Authority, Oxfordshire County Council (OCC) provided a Consultation response in February 2012 to the Transport Assessment submitted as part of the supporting documents for the 11/01878/OUT planning application. When commenting on the TA OCC stated that:
 - "A review of the accident data for the area has been carried out, which found incidents had occurred; looking at the information provided the incidents involved were down to driver error rather then the characteristics of the highway network."
- 2.34 For the purposes of this application a further review has been undertaken using the CrashMap website (https://www.crashmap.co.uk/search) to establish if there have been any material changes in the time that has elapsed since February 2012. This is summarised below.
- 2.35 CrashMap, an online collisions records database, has been interrogated to understand whether there has been a material increase in the rate of collisions over the years assessed as part of the planning applications referenced above as well as the most recent years available. Figure 2.6 is an extract from CrashMap showing the study area including the collisions that have occurred within the local road network within the latest 5-year time period (2015-2019).

Figure 2.6 - Insert from CrashMap

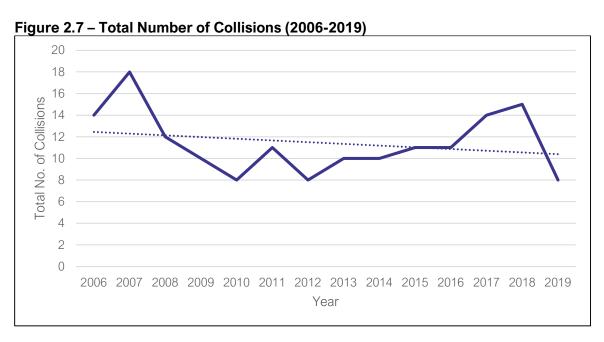


2.36 The collisions that occurred within the study area between 2006 and 2019 by year and severity are presented in **Table 2.3**.

Table 2.3 - Crashmap Data for 2006-2019 Collisions

Year	Severity						
	Slight	Serious	Fatal	Total			
2019	7	1	0	8			
2018	13	2	0	15			
2017	11	3	0	14			
2016	11	0	0	11			
2015	7	3	1	11			
2014	8	2	0	10			
2013	10	0	0	10			
2012	7	1	0	8			
2011	9	2	0	11			
2010	7	1	0	8			
2009	8	2	0	10			
2008	10	1	1	12			
2007	13	5	0	18			
2006	13	1	0	14			
Total	134	24	2	160			

- 2.37 **Table 2.3** shows that the yearly rate of accidents is 11.4 accidents per year. 9.6 slight accidents per year on average, 1.7 serious per year on average and 0.14 fatal accidents per year on average.
- 2.38 It can also be seen from the table and **Figure 2.7** that there is no material change in collision rates over this 14-year period.



2.39 Based on the information above and the assessments undertaken to-date it is considered that the conclusions previously reached by OCC remain valid; namely, the local highway network does not present any road safety issues.

2.40 The above road safety analysis is consistent with what was reviewed as part of application 21/00503/FUL, where the conclusions drawn from this exercise have already been reviewed and accepted by OCC Highways Officers.

Summary

- 2.41 This section has demonstrated that the site is accessible via alternative sustainable modes of transport other than the private car. The site benefits from being in an established employment area in proximity to a network of footways, bus services and rail services.
- 2.42 A collision review has demonstrated that the highway network in the vicinity of the site is not subject to any highway safety issues, a conclusion in which has already been accepted by OCC Highways Officers.

3 Policy Context

National Policy

National Planning Policy Framework (July 2021)

- 3.1 The National Planning Policy Framework (NPPF) was originally published by the Ministry of Housing, Communities and Local Government in March 2012. Since then, the NPPF has been updated in July 2018, February 2019 and the most recent version was updated and published in July 2021.
- 3.2 The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.
- 3.3 The three overarching objectives to achieve sustainable development outlined within the NPPF include:
 - "a) an economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
 - b) a social objective to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
 - c) an environmental objective to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."
- 3.4 Chapter 9 covers the promotion of 'Sustainable Transport' and states in relation to parking standards:
 - "If setting local parking standards for residential and non-residential development, policies should take into account:
 - a) the accessibility of the development;
 - b) the type, mix and use of development;
 - c) the availability of and opportunities for public transport;
 - d) local car ownership levels; and

- e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles."
- 3.5 It goes on to state that:
 - "Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."
- 3.6 In relation to the development proposals, the NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
 - "a) appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location;
 - b) safe and suitable access to the site can be achieved for all users;
 - c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
 - d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."
- 3.7 Guidance is provided on the consideration of proposals. It is mentioned that:
 - "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."
- 3.8 Within the above context it is stated that all applications for developments should:
 - "a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second so far as possible to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
 - b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

- c) create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- e) to be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."
- 3.9 With regard to the necessary documentation to be provided it is stated that:
 - "All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

Local Policy

Cherwell District Council Development Plan Documents

3.10 Planning applications within Cherwell are assessed against the saved policies of the Adopted Cherwell Local Plan 1996 and the Adopted Cherwell Local Plan 2011-2031 Part 1 (July 2015). A summary of the policies which are relevant to the proposals are as follows:

Adopted Cherwell Local Plan 1996

- 3.11 Policy TR1 The Council will require satisfaction that highways improvements and traffic measures will be provided before permitting development.
- 3.12 Policy TR7 Development likely to generate significant traffic flows will be required to have access to major through routes and principle roads.

Adopted Cherwell Local Plan 2011-2031

- 3.13 Policy PSD1: Presumption in Favour of Sustainable Development A proactive approach to development proposals to reflect the presumption in favour of sustainable development will be adopted so proposals can be approved wherever possible.
- 3.14 Policy SLE4: Improved Transport and Connections Development will be required to provide financial contributions to mitigate the transport impacts of development and should facilitate the use of sustainable modes of transports.
- 3.15 Policy ESD1: Mitigating and Adapting to Climate Change Deliver development that seeks to reduce the need to travel and encourage sustainable travel.
- 3.16 Policy INF1: Infrastructure Development proposals will be required to demonstrate that infrastructure requirements can be met including the provision of transport facilities.

Cherwell Local Plan 2011-2031 Part 1 (incorporating Policy Bicester 13 re-adopted on 19 December 2016)

- 3.17 Cherwell Local Plan was adopted in July 2015 and sets out the Council's long-term spatial vision up until the period of 2031.
- 3.18 The site has been identified within the Cherwell Local Plan Policies Map as an Existing Strategic Employment Site as shown in **Figure 3.1**.



Figure 3.1 – Existing Strategic Employment Site Allocation

3.19 Given the proposed Van Storage scheme will support an established business, it is considered that the proposals are compliant with this local plan allocation. Further details of the planning principles of the site are provided in the Planning Statement prepared by DWD.

4 Development Proposals

4.1 This section of the report sets out the development proposals of the site which comprise the:

"Use of the site for the storage of operational vehicles, together with elevational and site alterations, associated parking, welfare facilities, vehicle barrier and associated infrastructure."

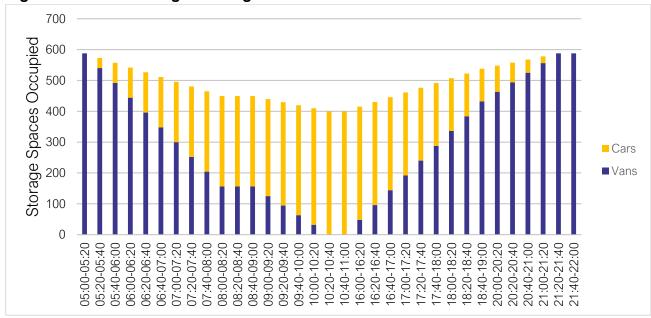
Site Layout

- 4.2 The site boundary includes 432 Van Storage spaces, reduced from 448, which were previously associated with application 21/00503/FUL and the provision of a further 156 Van Storage spaces. This will therefore provide a total of 588 van storage spaces across the site.
- 4.3 The site boundary includes the provision of 48 cycle parking spaces which include 42 unchanged from application 21/00503/FUL and the provision of an additional cycle shelter. In addition to this, 1 dedicated staff car parking space is provided together with 22 motorcycle spaces. The site layout for the proposed development is provided at **Appendix B**.

Staff Parking

- 4.4 All van drivers commuting to the site by car would park in a Van Storage space once vans are removed for use, so all car parking requirements will be accommodated on-site. In order to demonstrate this, the analysis undertaken in support of application 21/00503/FUL has been replicated to consider the cumulative impacts of the enlarged van storage site.
- 4.5 The accumulation graph provided **Figure 4.1** clearly shows there will be no overspill of car parking onto surrounding roads. As each Van Storage space becomes available, car parking spaces increase.



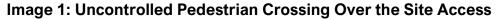


Vehicular Access

- 4.6 The existing two-way access taken from Southam Road will be retained as part of the development proposals. This access is shared with Waitrose service vehicles, and was deemed to provide a safe and suitable point of access for the operational Van Storage scheme pursuant to application 21/00503/FUL).
- 4.7 Swept path analysis has been provided at **Appendix C** to demonstrate that vehicles are able to travel through the enlarged van storage facility safely.
- 4.8 In addition, the site access is considered suitable for the anticipated vehicles at the proposed site for the following reasons:
 - The largest vehicles to access the Van Storage site will be vans, no HGVs will be accessing
 the site. The site access is already utilised by vans and/or larger vehicles associated with
 the Waitrose.
 - This access will remain unchanged from the most recently approved application (App ref: 18/01246/F) where the access was found to provide safe and suitable access to the proposed vehicles at the site. Indeed, the submitted evidence includes the swept path analyses of a HGV safely entering and exiting the site access, which is much larger than the vehicles associated with the proposed development.
- 4.9 As such, given both points above it is considered that the access can safely accommodate the vehicles of the proposed enlarged Van Storage site. Also, as an existing access there is no need to check the design against current guidance, and it has already been confirmed above that the access does not have a poor safety record. Indeed, OCC raised no objections with regards to access in its response pertaining to application 21/00503/FUL.

Pedestrian Access

- 4.10 Pedestrian access will be achieved by Southam Road.
- 4.11 Although the trips that would occur between the Van Storage site and Distribution Centre would be undertaken in vans only, the site is located in an established commercial area that is well served by both pedestrian and cycle infrastructure. For example, within the vicinity of the site there are five crossing facilities all with dropped kerbs and tactile paving:
 - The first crossing is shown within Image 1 and forms an uncontrolled pedestrian crossing over the site access with a refuge island.





 A signalised toucan crossing is present approximately 120m north of the site access on Southam Road with tactile paving and dropped kerbs, shown on Image 2. This provides safe crossing to the eastern side of the carriageway for both pedestrians and cyclists.

Image 2: Signalised Toucan Crossing 120m North of the Site Access



 Similarly, a pelican crossing is provided approximately 300m south of the site access as shown in Image 3.

Image 3: Pelican Crossing 300m South of the Site Access



 A signalised pelican crossing is present approximately 80m southwest of the pedestrian site access on Ruscote Avenue with tactile paving and dropped kerbs, shown on **Image 4**.
 This provides safe crossing to the western side of the carriageway for both pedestrians and cyclists.



Image 4: Pelican Crossing 80m Southwest of the Pedestrian Site Access

4.12 This confirms that the site is well served by pedestrian infrastructure that will encourage and facilitate workers travelling to the site on foot.

Cycle Parking

- 4.13 CDC and OCC have no set specific standards for cycle parking as such the level of cycle provision has had regard to 2011 Census data.
- 4.14 The modal split for the expected van drivers has been calculated from the *WU03EW Location of usual residence and place of work by method of travel to work (MSOA level)* dataset obtained from the NOMIS database. The data comprised the Middle Super Output Area (MSOA) Cherwell 003 which is the location of the current destination of travel of existing van driver employees.
- 4.15 The resultant number of workers commuting to/from the site by different modes is shown in **Table** 4.1.

Table 4.1 – Modal Split and Number of Workers

Method of Travel to Work	Percentage	Worker Numbers
Underground, metro, light rail or tram	0%	0
Train	1%	7
Bus, minibus or coach	2%	9
Taxi	1%	5
Motorcycle, scooter or moped	1%	6
Driving a car or van	68%	399
Passenger in a car or van	6%	35
Bicycle	5%	32
On foot	16%	92
Other	0%	2
Total	100%	588

4.16 **Table 4.1** indicates that 5% of all van drivers would commute to the site via bicycle which equates to 32 employees. There are 48 cycle parking spaces proposed on site, which can accommodate the anticipated demand and also provide future scope for an increased take up of sustainable travel to and from the site.

Motorcycle Parking

- 4.17 CDC and OCC do not detail specific motorcycle parking for commercial developments. In lieu of this, Census data has been used to inform the provision at the proposed development.
- 4.18 **Table 4.1** indicates that 1% of all van drivers would commute to the site via motorcycle which equates to 6 van drivers. As such, the 22 motorcycle spaces that have been provided at the site is more than sufficient in catering for the expected level of demand.

Future Site Operation

Overall Strategy

- 4.19 Before outlining how the Van Storage site will operate, it should be noted that it is not in the interest of the intended operator for drivers to be waiting or queuing at the Distribution Centre as this reduces the efficiency of the use of the vans. By including Van Storage to allow freight consolidation and more tightly managed deliveries within the operation reduces the potential for any disruption on the highway network around the Distribution Centre.
- 4.20 The way that this is managed is outlined below as follows:

Overarching Principle

- The Van Storage parking is associated with the existing last mile Distribution Centre on Southam Road. It is to store vans that are already on the network and travelling to the last mile Distribution Centre, but are parked in off-site locations.
- Van Storage has been accepted by other highway authorities as being a positive contribution to freight consolidation i.e. ensuring the vans are all used efficiently and ensuring the optimum loading for each van.
- The advantages of the Van Storage area is that the operation of the vans can be controlled more effectively. It also facilitates the operator introducing their own van fleet and moving towards having an electric van fleet.
- Van Storage allows the whole operation to be managed in a tighter way by linking all van movements to loading slots to avoid any risk of queuing.
- As the Van Storage sites are close to the related Distribution Centre there is more certainty about when they will arrive and where they will arrive from.

Drivers Arriving

- Drivers are aware of the time they need to pick up their van. They also know which van they will be driving.
- The van drivers either have their van keys or collect them from the security hut when they arrive.
- Those that arrive by car will either park in any empty space (swap spaces) or stop their car
 in the aisle and then park it in the vacated Van Storage space. This takes a very short time.
- Those that cycle or travel by motorcycle can go straight to their van after they have parked their cycle or motorcycle.
- Those who walk can go straight to their van after they have entered the site.
- If a driver does arrive early to pick up a van they can wait within the Van Storage site.
- The departures from the Van Storage site are directly related to when the vans are needed at the Distribution Centre.
- Vans do not keep returning to the site to be reloaded through the day but make a single delivery run. Each delivery route being planned depends on where parcels need to be delivered to and when they need to be delivered to ensure the most efficient delivery pattern. This is to optimise the loading of vans and minimise overall delivery mileage.
- Each driver will know the time their van is scheduled to be loaded at the Distribution Centre
 and the time it takes to travel there. They can therefore time their departure from the Van
 Storage area to arrive for their designated loading time.

 The drivers arriving at the Van Storage will be staggered in line with the staggered loading times at the Distribution Centre.

Drivers Leaving

- This is the reverse of the above. When drivers have finished their daily delivery run they return their van to the storage area and if they have driven, they then pick up their car.
 This is staggered as drivers will finish their delivery runs at different times which relate to the time their delivery run started.
- 4.21 As such staff working at the Distribution Centre (in the warehouse) are unrelated to the Van Storage site. Staff at the Distribution Centre working in the Warehouse will continue to travel to and from the Distribution Centre by various modes and park at the Distribution Centre. Staff working within the Warehouse would not increase as a result of the Van Storage site.
- 4.22 It is also important to note that the vehicles associated with the proposed development are already present on the highway network. The one key difference being these vehicles being private and/or owned by a contractor. In this regard, there will not be a net increase in activity on the wider network, rather there is a redistribution of traffic at the local level. This is shown in detail within this note.
- 4.23 Indeed, this was recognised by OCC Highway's Officer's in the response included at **Appendix A** in relation to the van storage site proposals from application 21/00503/FUL, whereby it was stated that:

"vehicles associated with the development are already present on the network. In this regard, there will not be a net increase in activity on the wider network, rather a redistribution of traffic at the local level."

Inter-site Travel

4.24 The route that drivers will follow between the Van Storage site off Southam Road and the existing last-mile Distribution Centre is shown in **Figure 4.2**. Drivers will be required to route north along Southam Road (A361 and A423) via the Southam Road/A422 roundabout. This equates to a journey time of approximately 2 minutes.



Figure 4.2 - Inter-Site Travel

Reduce Emissions

Zero Carbon Emissions

- 4.25 The occupier is committed to driving sustainability across its operations, from utilising renewable energy sources, responsibly sourcing goods/materials, to switching to reusable packaging.
- 4.26 The proposals will align with the occupier's ambitions to utilise 100% renewable energy across its operations and ensure at least 50% of all its shipments achieve net zero carbon emissions by 2030.

Euro 6

4.27 Euro 6 is the latest standards introduced by the European Commission to regulate the level of pollutants released from the tailpipes of vehicle engines. Euro 6 aims to reduce the levels of harmful

- emissions including nitrogen oxide (NOx), carbon monoxide, and particulate matter i.e. soot from diesel engines.
- 4.28 Different emissions standards have been set for petrol and diesel engines. The permitted level of NOx emitted from a diesel engine has been drastically reduced by 55% from 180mg/km to just 80mg/km. In contrast, the NOx limit for petrol engines has not been altered from the Euro 5 standards and remains at 60mg/km.
- 4.29 The occupier will operate their own fleet of vans at the site, and this allows them to control the standard of the vehicles being used. As stated above, the Occupier is committed to reducing the emissions from their own fleet and is working towards all vans being compliant with the Euro 6 standards for emissions.

Promoting Sustainable Transport

4.30 The intended end user of the site is committed to encouraging a reduction in single occupancy vehicle trips as part of its wider sustainability strategy outlined above with respect to its vehicle fleet. Indeed, it operates Travel Plans and Travel Plan Statements across its estate. In accordance with the feedback provided by OCC through the course of pre-application discussions, a Framework Travel Plan Statement (FTPS) has been produced to support this application. The FTPS outlines the measures that will be adopted by the intended end user to encourage drivers to make use of the sustainable transport networks outlined in **Section 2**.

Wider Site Proposals

- 4.31 The development forms part of a wider site known as Jacob Douwe Egberts (JDE).
- 4.32 It should be noted that the landlord for this wider site is submitting an application in due course for a Starbucks Drive-Thru Café to the west of the proposed Van Storage; the demolition of an existing office building and the erection of a surface level car park providing 215 replacement car parking spaces to the north of the proposed Van Storage.
- 4.33 Access to this development will be taken from the existing vehicle access on Ruscote Avenue. It should be noted that whilst the re-provided car park will have less spaces than the current situation, the TS that will support the JDE application will show that this is still adequate to meet expected demands associated with the JDE site.
- 4.34 These proposals will affect the overall impact of the proposed van storage on the surrounding highway network as discussed in the section below.

5 Trip Generation

5.1 This section sets out the anticipated traffic generation of the proposed development from both a commuting and operational perspective.

Commuting Trips

- 5.2 The trips generated from the proposed site will be made up of commuting trips and operational trips. As stated in **Section 4**, for commuting related trips, modal split of works traveling to and from the site has been derived from the 2011 census data 'WU03EW Location of usual residence and place of work by method of travel to work'. This has been calculated for the surrounding area in which the site is contained (MSOA Cherwell 003).
- 5.3 The census shows that 68% of workers in the local area travel to work by car. Notwithstanding this, surveys undertaken at other sites across the UK operated by the occupier of the nearby last-mile Distribution Centre, show lower levels of car use for commuting purposes. Indeed, this is typically in the range of 40% to 50%. In this regard, the analyses presented below are considered to be robust and represent a worst-case scenario.
- 5.4 To determine proposed commuting trips, the proposed number of workers have been assessed on the basis that 588 van drivers will commute to the site via car to pick up their vans prior to the start of their shifts. An additional worker will remain on-site at the security gate. This results in a total of 589 workers.
- 5.5 The modal split and resultant number of workers commuting to/from the site by different modes is shown in **Table 5.1**.

Table 5.1 – Modal Split and Number of Workers

Method of Travel to Work	Percentage	Worker Numbers
Underground, metro, light rail or tram	0%	0
Train	1%	7
Bus, minibus or coach	2%	9
Taxi	1%	5
Motorcycle, scooter or moped	1%	6
Driving a car or van	68%	400
Passenger in a car or van	6%	35
Bicycle	5%	32
On foot	16%	92
Other	0%	2
Total	100%	589

- 5.6 Commuting movements have been added to operational movements to determine total proposed trip generation. This equates to 400 commuting trips by car, 6 commuting trip by motorcycle, and 588 operational (delivery van) movements.
- 5.7 As set out in **Section 4**, the site boundary includes a total of 588 van storage spaces across the site.
- As set out within the TS that supported application 21/00503/FUL and replicated in the sections below, the movements associated with the original application were forecast to occur between 06:00-09:00 during the AM peak and 16:00-19:00 during the PM peak.
- 5.9 In relation to the principle of trips associated with application 21/00503/FUL, OCC Highway's Officer's concluded in the response included at **Appendix A** that:
 - "vehicles associated with the development are already present on the network. In this regard, there will not be a net increase in activity on the wider network, rather a redistribution of traffic at the local level."
- 5.10 This statement is also applicable to the enlarged van storage site.
- 5.11 It is worthy to note that for the movements associated with the additional 156 Van Storage spaces, journeys between the Van Storage site and the last-mile Distribution Centre are expected to occur between 09:00-11:00 and 20:00-22:00, therefore all movements are taking place outside of the typical network peaks of between 08:00-09:00 and 17:00-18:00.
- 5.12 Therefore, although the new application will be submitted as an enlarged facility, it is worthy to note that the movements considered acceptable pursuant to application 21/00503/FUL have already been assessed. The additional movements associated with the enlarged facility are expected to occur outside of the typical network AM and PM peak hours.

Operational Trips

Morning Peak

- 5.13 Activity at the existing last mile Distribution Centre, that the proposed development will serve, typically commences at 06:00. Vehicles are scheduled to depart in twenty-minute windows, with an area provided on-site for vehicles to wait prior to loading of vehicles. The Southam Road Distribution Centre has capacity for 144 vans at any one time, with 72 loading bays and 72 holding bays.
- 5.14 Currently, vans that are intended to be stored at the proposed development already arrive at and depart from the Distribution Centre based on the trip generation shown in **Table 5.2**.

Table 5.2 – Operational Trip Generation (Morning)

Time	Distribution Centre						
	Arriving (at a Waiting Area)	Internal movement (to Loading Area)	Departing				
05:00-05:20							
05:20-05:40	48						
05:40-06:00	48	48					
06:00-06:20	48	48	48				
06:20-06:40	48	48	48				
06:40-07:00	48	48	48				
07:00-07:20	48	48	48				
07:20-07:40	48	48	48				
07:40-08:00	48	48	48				
08:00-08:20	48	48	48				
08:20-08:40		48	48				
08:40-09:00			48				
09:00-09:20	31	31					
09:20-09:40	31	31	31				
09:40-10:00	31	31	31				
10:00-10:20	31	31	31				
10:20-10:40	32	32	31				
10:40-11:00			32				
AM Total	588	588	588				

^{*}Blue Text – Movements associated with 156 van storage spaces

- 5.15 In **Table 5.2**, vans are shown to arrive at the site between 05:20-10:40. These vans have originated from the wider network to arrive at the site. The vans then depart between 06:00-11:00 to deliver their parcels.
- 5.16 With the Van Storage site in place the number of arrivals and departures at the Distribution Centre will remain the same in the AM peak. The only difference is that a proportion of the vans will route from the Van Storage site rather than the wider network. The relationship between the Van Storage trips and Distribution Centre trips are outlined in **Table 5.3**.

^{*}Orange Text – Movements associated with application 21/00503/FUL, revised to take account of reduced number of spaces

Table 5.3 – Commuting and Operation Trips (Morning)

Time	Van	Storage Sit	е	Di	stribution Centre	•
	Arriving (By Non-car modes)	Arriving (By car)	Departing (as Vans)	Arriving (to Waiting Area)	Internal movement (to Loading Area)	Departing
05:00-05:20				ĺ		
05:20-05:40	15	33	48	48		
05:40-06:00	15	33	48	48	48	
06:00-06:20	15	33	48	48	48	48
06:20-06:40	15	33	48	48	48	48
06:40-07:00	15	33	48	48	48	48
07:00-07:20	15	33	48	48	48	48
07:20-07:40	15	33	48	48	48	48
07:40-08:00	15	33	48	48	48	48
08:00-08:20	15	33	48	48	48	48
08:20-08:40					48	48
08:40-09:00						48
09:00-09:20	10	21	31	31	31	
09:20-09:40	10	21	31	31	31	31
09:40-10:00	10	21	31	31	31	31
10:00-10:20	10	21	31	31	31	31
10:20-10:40	10	22	32	32	32	31
10:40-11:00						32
AM Total	189	399	588	588	588	588

- 5.17 **Table 5.3** shows that with the Van Storage sites in place, a proportion of van drivers will now commute to the area via either car or via sustainable modes of travel as opposed to vans.
- 5.18 As set out above, this is based on the most recently published Census data which has a higher proportion of single occupancy vehicle trips than is typically associated with the intended end user. In this regard, the above is conservative and representative of a worst-case scenario.
- 5.19 This is particularly evident given the above is a theoretical exercise that shows how the Van Storage site and associated Distribution centre on Southam Road (A423) would operate if the Van Storage Site was at full capacity. In reality, there will be daily variations that occur that mean the flows presented will not always reach this level. Our assessment should thus be viewed as a worst-case assessment.

Evening Peak

5.20 As noted above, vehicular activity associated with the proposed development will see the reverse of the morning arrival and departure profiles. However, it should be noted that 20% of vans currently return to the Distribution Centre in the evening to return undelivered goods. The trip generation for this is set out in **Table 5.4**.

Table 5.4 – Operational Trip Generation (Evening)

Time	Distribution Centre					
	Arriving (as Vans)	Departing (as Cars)				
16:00-16:20	48	33				
16:20-16:40	48	33				
16:40-17:00	48	33				
17:00-17:20	48	33				
17:20-17:40	48	33				
17:40-18:00	48	33				
18:00-18:20	48	33				
18:20-18:40	48	33				
18:40-19:00	48	33				
20:00-20:20	31	21				
20:20-20:40	31	21				
20:40-21:00	31	21				
21:00-21:20	31	21				
21:20-21:40	32	22				
21:40-22:00						
PM Total	588	399				

5.21 With the Van Storage sites in place all vans will now return, albeit with 20% still returning to the Distribution Centre and the remaining 80% routing directly to the Van Storage sites. The relationship between the Van Storage trips and Distribution Centre trips is outlined in **Table 5.5**.

Table 5.5 – Commuting and Operation Trips (Evening)

Time	Distribu	tion Centre	Van Storage			
	Arriving (Vans)	Departing (Vans)	Arriving (Vans)	Departing (By car)	Departing (By Non- car modes)	
16:00-16:20	10	10	48	33	15	
16:20-16:40	10	10	48	33	15	
16:40-17:00	10	10	48	33	15	
17:00-17:20	10	10	48	33	15	
17:20-17:40	10	10	48	33	15	
17:40-18:00	10	10	48	33	15	
18:00-18:20	10	10	48	33	15	
18:20-18:40	10	10	48	33	15	
18:40-19:00	10	10	48	33	15	
20:00-20:20	6	6	31	21	10	
20:20-20:40	6	6	31	21	10	
20:40-21:00	6	6	31	21	10	
21:00-21:20	6	6	31	21	10	
21:20-21:40	6	6	32	22	10	
21:40-22:00						
PM Total	118	118	588	399	189	

5.22 In the same way as the morning movements, the traffic flows at the Distribution Centre remain unchanged.

5.23 It should be noted that van trips will already be present on the wider network and thus do not constitute new trips in their own right.

Total Proposed Trip Generation

5.24 **Table 5.6** shows the number of vehicle trips expected to be generated by the enlarged Van Storage site. It should be noted that no HGVs are expected to be generated from the development sites as all delivery vehicles will consist of LGVs.

Table 5.6 – Total Proposed Vehicle Trip Generation

Time	Cars			LGVs (Vans)			Total		
	Arr.	Dep.	Two- way	Arr.	Dep.	Two- way	Arr.	Dep.	Two- way
0500 - 0600	66		66		96	96	66	96	162
0600 – 0700	98		98		144	144	98	144	242
0700 – 0800	98		98		144	144	98	144	242
0800 – 0900	33		33		48	48	33	48	81
0900 – 1000	63		63		93	93	63	93	156
1000 – 1100	43		43		63	63	43	63	106
1100 – 1200									
1200 – 1300	1	1	2				1	1	2
1300 – 1400									
1400 – 1500									
1500 – 1600									
1600 – 1700		98	98	144		144	144	98	242
1700 – 1800		98	98	144		144	144	98	242
1800 – 1900		99	99	144		144	144	99	243
1900 – 2000									
2000 – 2100		63	63	93		93	93	63	156
2100 – 2200		43	43	63		63	63	43	106
Daily (24hr)	401	401	803	588	588	1176	989	989	1979

- 5.25 **Table 5.6** shows the enlarged Van Storage site is expected to generate 1,979 two-way vehicle movements across the course of a day, of which 1,176 will be LGVs associated with deliveries. It is worthy to note that 1,509 of the daily trips have already been considered acceptable by OCC when considering application 21/00503/FUL. However, due to the reduction in van storage spaces associated with the previous application the 1,509 trips have been reduced to 1,455 vehicular trips.
- 5.26 **Table 5.6** also demonstrates that the additional vehicle movements expected to be attributed to the enlarged Van Storage site occur outside the morning and evening peak travel periods (i.e. 08:00 0900 and 17:00 18:00). They are also shown to not overlap with the vehicle movements associated with application 21/00503/FUL, which have already been considered acceptable.
- 5.27 An on-site security guard is expected to work two shifts, the first between 05:00 12:00, and the second between 12:00 19:00. A shift changeover is expected to take place between 12:00 13:00, equating to 4 daily two-way movements.

- 5.28 The site access as a result of these proposals is considered to continue to function with ample capacity as identified within application 21/00503/FUL. This is based on:
 - The proposed trips associated with the additional storage bays would occur outside of the peaks, as such the trips would not be combined with trips associated with the storage bays that have already been found to be acceptable as part of application 21/00503/FUL.
 - This is evident as modelling undertaken as part of application 21/00503/FUL showed the site access to operate with spare capacity during the peak hours.
 - The background flows would be lower outside of the peaks and the expected trips associated with the additional storage bays per hour are lower than those assessed for the storage bays that were considered pursuant to application 21/00503/FUL.

Wider Site Impact

- 5.29 As noted in Section 2, the development forms part of a wider site known as Jacob Douwe Egberts (JDE). As noted in Section 4, the landlord for this wider site is preparing two separate applications that will be submitted concurrently to this application. One for a replacement employee parking area for JDE (Site 2- Replacement Car Park Application) on JDE land to the north. This will provide replacement car parking following the demolition of an existing vacant office building. The second for the erection of a drive thru cafe.
- 5.30 The impact of the proposed development will be outlined in detail within a separate TS prepared by DTA. Based on the evidence presented by DTA it is clear that the effects of the wider JDE redevelopment proposals will not have an impact on the conclusions reached with respect to application 21/00503/FUL and/or above on the basis:
 - A Starbucks Drive-Thru Café will mainly comprise pass-by trips and as such would result in a negligible increase in trips on the highway network.
 - There will be a net reduction in available car parking spaces as a result of the existing surface level car park (i.e. 260 spaces) being relocated to provide 215 spaces on the site of an existing office building.
 - The removal of an existing office building will reduce the trip generation from the JDE wider site.
 - The net impact of the wider JDE proposals will result in an overall reduction in vehicle traffic in the peak travel periods and across the course of a day. In the morning and evening peak travel periods DTA has established there will be net reductions of approximately 80 and 65 vehicles respectively.
- 5.31 In light of the above, and given the additional storage spaces will attract traffic outside of the network peaks, there is not a need to revisit detailed capacity analyses presented in support of application 21/00503/FUL. Indeed, that work continues to provide a robust approach for the reasons outlined in the Highway Impact Assessment technical note, previously submitted and re-provided at **Appendix**

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D, and the fact that it does not take into account the peak reductions in vehicle trips as a result of the wider JDE proposals.

5.32 Therefore, it is considered that the proposed enlarged van storage site will not have a severe impact upon the highway network.

6 Summary and Conclusions

- 6.1 Vectos has been commissioned by Lysander to provide highways and transport advice to support a planning application for the proposed development of land to the east of Ruscote Avenue in the administrative boundary of Cherwell District Council (CDC).
- 6.2 The proposals have been brought forward to accommodate operational Van Storage associated with an existing last-mile Distribution Centre to the east of Southam Road (A423). Vehicular access to the site will be achieved from an existing priority junction onto Southam Road, which is shared with a neighbouring Waitrose Service vehicle access and designed to accommodate vehicles that are larger than the types of vehicles that will access the proposed development.
- 6.3 The proposals, which comprise 588 Van Storage spaces, 1 dedicated staff car parking space, 22 motorcycle spaces and 48 cycle parking spaces, represent an increase in the number of van storage bays over and above that associated with a similar facility that is subject to a live application on part of the site (App ref: 21/00503/FUL). It is noteworthy that application 21/00503/FUL has been recommended for approval by OCC, which confirms that the principle of van storage facilities in this location are acceptable.
- 6.4 In summary, this TS confirms the proposed development:
 - Follows the same principles for what has been recently accepted by OCC Highway's Officers under application 21/00503/FUL, in:
 - provides opportunities for sustainable transport modes to be taken up in addition to the bus infrastructure improvements secured as part of application 21/00503/FUL;
 - ensures safe and suitable access to the site can be achieved for all users;
 - the current JDE car parking that will be replaced by the proposed development will be relocated on the wider JDE estate, subject to a separate concurrent application; and
 - would not result in significant impacts from the development on the transport network or on highway safety.
- 6.5 As such, there would not be an unacceptable impact on highway safety, and the level of the residual cumulative impacts on the road network would not be severe.
- 6.6 Therefore, in conjunction with the recommendation for approval by the OCC Highway's Officer for application 21/00503/FUL, there are no reasons why the enlarged facility should also not be accepted on highways and transportation grounds.