Transport Assessment

Beaches Yard,
Horton Road,
West Drayton

Prepared for
Harvest Land Management

By

Stuart Michael Associates Limited

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STUART MICHAEL ASSOCIATES
CONSULTING ENGINEERS

Coombe House
Coombe Square
Thatcham
Berkshire
RG19 4JF

T: 01635 867711
F: 01635 861715
E: mail@stuartmichael.co.uk
W: www.stuartmichael.co.uk

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STUART MICHAEL ASSOCIATES
CONSULTING ENGINEERS

Stuart Michael Associates Ltd. Registered in England and Wales. Registration Number: 3739154
Registered Office: Coombe House, Coombe Square, Thatcham, Berkshire RG19 4JF.
Telephone: 01635 867711 Facsimile: 01635 861715.

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1.0 INTRODUCTION

1.1 Stuart Michael Associates (SMA) has been appointed by Harvest Land Management (the 'Applicant') to prepare a Transport Assessment (TA) in support of a Planning Application for the redevelopment of mixed-use storage and residential site into a warehouse development on land at Horton Road, West Drayton. The plan showing the proposed site layout is shown in **Appendix A**.

1.2 The development proposes the construction of a 4,080.7m^2 multi-level warehouse, 447m^2 office space, 717.5m^2 yard space, loading bays, and a basement car park on land approximately two miles north of Heathrow Airport.

1.3 The site is located at Beaches Yard, Horton Road, West Drayton. The site is bordered by Horton Road to the south. To the west, the site is bordered by a private access road. To the north and east, the site is bordered by Stockley Country Park. The M4 Junction 4 is located to the south of the site. The location of the site is shown in **Figure 1.1**.

1.4 The site is accessed via a private access road. The private road provides access to neighbouring commercial land uses and Uxbridge Football Club. The site is currently accessed from the private road via four separate private vehicular accesses.

1.5 The development proposes the formalisation of the existing access arrangements, to provide safe accesses for users of all modes of transport, including pedestrians and cyclists. A 1.5m footway is proposed on the western boundary of the site, which will increase accessibility for pedestrians.

1.6 The site layout shows that a maximum of 45 car parking spaces and 38 bicycle parking spaces would be provided, including 4 disabled parking bays.

Report Outline

1.7 The remainder of this transport assessment is set out as follows:

Section 2: Provides a summary of the relevant planning policy;

Section 3: Examines the existing conditions of the site and local area, including the local highway network, accessibility for non-motorised users, highway safety and vehicular accessibility;

Section 4: Describes the proposed development, access arrangements and parking provision;

Section 5: provides an assessment of the likely number of trips generated by the proposed development; *and*

Section 6: Gives a summary of the report and draws its conclusions from the assessment.

2.0 POLICY

2.1 This section summarises the key national and local policies that relate to the proposed development

National Policy

National Planning Policy Framework (July 2021)

2.2 The **National Planning Policy Framework (NPPF)** was revised on 20th July 2021. At the heart of the NPPF is a presumption in favour of sustainable development.

2.3 With regard to promoting sustainable transport, it is recognised that when assessing sites that may be allocated for development in plans; or specific applications for development, it should be ensured that:

- safe and suitable access to the site can be achieved for all users;
- the design of streets, parking areas, other transport elements and the content of associated standards reflect current national guidance, including the National Design Guide and the National Model Design Code 46; *and*
- 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. (NPPF, paragraph 110).

2.4 Development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. (NPPF, paragraph 111).

National Planning Practice Guidance – Travel Plans, Transport Assessments and Statements in decision making

2.5 The National Planning Practice Guidance (NPPG) contains updated planning practice guidance in an online format. This updated approach allows for the review of a number of topics easily, providing up-to-date guidance. The NPPG has a specific section on Travel Plans, Transport Statements and Transport Assessments and states that Travel Plans should where possible, be considered in parallel to development proposals and readily integrated into the design and occupation of the new site rather than retrofitted after occupation.

Local Policy

2.6 The **London Plan** (2021) sets out the approach and serves as a blueprint for guiding future development and sustainable, inclusive growth of London. The following policies are relevant to the development proposals.

2.7 **Policy T1**: development proposals should facilitate the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041. And should ensure most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated.

2.8 **Policy T2**: development proposals should deliver land use that facilitate residents making shorter, regular trips by walking or cycling and promote and demonstrate the application of the Mayor's Healthy Streets Approach. This includes reducing the dominance of vehicles on London's streets and maintain permeability by foot and cycle and connecting to local walking and cycling networks as well as public transport.

2.9 **Policy T4**: development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity. The development proposals should ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), are assessed. The assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new developments.

2.10 **Policy T5**: development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle.

2.11 **Policy T6 (including T6.2** & **T6.5**): Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity.

2.12 **Policy T7**: development proposals should include freight strategies. These should seek to mitigate the impact of the development proposals (a Deliveries and Services Plan has been produced to support this).

2.13 The London Borough of Hillingdon's latest **Local Plan Part One (Strategic Policies) and Part Two (Development Management Policies and Site Allocations and Designations)**, adopted in November 2012 and January 2020 respectively, contains the Travel Planning Strategy for the Borough. The transport vision for the Local Plan strategy up to 2026 is:

> *"To provide a sustainable transport system that addresses whole length journeys, reduces car dependency, supports the economy, encourages active travel and improves quality of life."*

2.14 In order to deliver this transport vision, LBH has developed strategic Core Policies that will be used. The Core Policies reflect the local priorities set out in the Mayor's Transport Strategy (MTS) and the overarching national transport priorities.

2.15 The Core Transport policies relevant to the proposed development are provided below:

2.16 **Policy T1: Accessible Local Destinations** of the Local Plan refers to promoting developments that encourage active travel. This states: "*The Council will steer development to the most appropriate locations in order to reduce their impact on the transport network. All development should encourage access by sustainable modes and include good cycling and walking provision. The Council will ensure access to local destinations which provide services and amenities. The Council will promote active travel through improvements to Hillingdon's public rights of way.*"

2.17 **Policy T2: Public Transport Interchanges** of the Local Plan refers to improving local public transport facilities in Yiewsley and throughout the wider Transport for London (TfL) network. This states: "*The Council will facilitate improved public transport interchanges at Uxbridge, Hayes, West Drayton, Heathrow Airport, West Ruislip and other locations as appropriate in the future. These interchanges will accommodate measures to encourage subsequent shorter journeys to be completed on foot or by cycle.*"

2.18 The **Local Plan Part Two** supports the above policies, specifically by **Policy DMT 4: Public Transport.** This states:

2.19 **Policy DMT 4: Public Transport**: The Council will support and promote the enhancement of public transport facilities, including at key interchanges that address the needs of the Borough.

2.20 Further transport guidance is provided in the London Borough of Hillingdon Third Implementation Plan (LIP3) 2019-2041 (Adopted March 2019).

2.21 The documents outline in detail plans to increase the number of walking and cycling trips in the Borough.

2.22 Paragraph 8.25 states that all development proposals require good connectivity for pedestrians and cycling, seamlessly integrating with existing infrastructure.

3.0 EXISTING SITUATION

3.1 The site is located in West Drayton, approximately 2 miles north of Heathrow Airport. . The site is located at Beaches Yard, Horton Road, West Drayton. The site is bordered by Horton Road to the south. To the west, the site is bordered by a private access road. To the north and east, the site is bordered by Stockley Country Park. The M4 Junction 4 is located to the south of the site. The location of the site is shown in **Figure 1.1.**

3.2 Currently the site is accessed by a private road extending from Horton Road. This road has a carriageway width of 7.5 metres. A public footpath (Footpath Y3) runs along the western side of the private road.

3.3 The site covers an area of 4370m^2 of which circa 3400m^2 is utilised for the purpose of open storage (including vehicle storage and mobile homes). The site also accommodates five permanent chalets.

3.4 The site is notionally split into two main areas, with the southern part of the site accommodating the five permanent chalets, mobile homes and open storage (associated with fun fairs). The northern part of the site has historically been utilised for vehicle storage associated with Addison Lee who operates from a separate site that is located on the opposite side of the Horton Road private road.

3.5 The southern section of the site also has planning consent for the maintenance and breaking repair of fairground equipment.

3.6 A site visit undertaken on Tuesday 9th August 2022 confirmed that the northern portion of the site is currently being used for the storage of a large number of Addison Lee private hire vehicles. The southern portion of the site currently has residents living within the static caravans and has fairground machinery on the site. The site visit confirmed that the site is currently operational and as such generates a number of vehicle movements throughout the day.

3.7 The site visit also confirmed that the private access road is accessed by a wide range of vehicles including cars, mini-bus, vans, coaches and HGVs.

Local Road Network

3.8 The site will be accessed via the existing private access from Horton Road. Horton Road is typically 6.8 metres wide and benefits from footways on both sides of the carriageway.

3.9 Horton Road is a local distributor road that runs broadly on an east-west axis and provides direct access to adjacent commercial and residential land uses. Horton Road provides access to West Drayton High Street and mainline rail station (to the west) and the A408 Stockley Road (to the east).

3.10 Stockley Road provides access to Junction 4 of the M4 Motorway, facilitating access to the A4 to the south. Heathrow Airport is a major destination accessible via this route from the site. To the east, the M4 travels to central London. To the west, the M4 travels to south Wales via Slough, Reading, Swindon and Bristol.

3.11 Horton Road in proximity to the site is subject to a 30mph speed limit.

Access by Foot/ Cycle

3.12 As stated in Paragraph 3.3, an existing footway is provided on both sides of Horton Road and on the western side of the private access road. This continuous footway provides connections to the town centre and the canal towpath, as well as surrounding industrial and residential areas.

3.13 A review of the local highway network confirms that the road network in proximity to the site is conducive for use by cyclists. Circa 50m east of the private road which serves access to the site is Weston Walk; a cycle route that provides access to the Grand Union Canal Walk cycle route. Further cycle routes are provided throughout Stockley Country Park to the east of the site which provides access to the educational and recreational facilities located to the north of the site.

3.14 East of the site, there is a shared foot and cycleway on the northern side of Horton Road, continuing to the Stockley Park roundabout.

3.15 Furthermore, the Grand Union Canal cycle route runs circa 460m south of the site, connecting Leicester to London along the canal's length.

3.16 The local area is supported by a good pedestrian and cycle network. This facilitates safe and convenient movement on foot and cycle between the site and the surrounding area.

3.17 **Table 3.1** provides a summary of all of the key facilities in proximity to the site.

Table 3.1: Walking and Cycling Journey Distance and Time to Key Trip Destinations and Compliance with Preferred Maximum Walking/Cycling Distances

Facility	Distance (metres)	Walk Time (minutes)	Within Preferred Maximum	Cycle Time (minutes)	Within Preferred Maximum
Horton Close Bus Stop	145	1m44s	✓	0m26s	✓
West Drayton Train Station	1300	15m29s	✓	3m56s	✓
Iceland Food	1300	15m29s	✓	3m56s	✓
West Drayton Post Office	1460	17m23s	✓	4m25s	✓
Aldi	1480	17m37s	✓	4m29s	✓
Yiewsley Recreation Ground	1490	17m44s	✓	4m31s	✓
Tesco	1730	20m36s	✓	5m14s	✓

3.18 The site is in proximity to a wide range of existing facilities, a plan showing the site and these local facilities are provided in **Figure 3.1**.

Public Transport

Bus Services

3.19 A public bus service is available from within excellent walking distance of the development. The nearest bus service is located close to the site on Horton Road, at Horton Close Bus Stop (145m) which makes travel by bus an extremely convenient and easy option. The Horton Close bus stop is shown in **Figure 3.1**.

3.20 This bus stop is served by the 350 bus service operated by Transport for London, which is summarised in **Table 3.2**. The Horton Close bus stop is located on the route originating from Heathrow Terminal 5 and terminating at Fairey Corner. The service operating in the opposite direction can be accessed at the Stone Close bus stops, located 265m west of the site.

Table 3.2: A summary of existing bus routes within proximity of the site

		Mon-Fri		Sat		Sun	
Bus Service	**Route**	**Operating Hours**	**Frequency**	**Operating Hours**	**Frequency**	**Operating Hours**	**Frequency**
350	Hayes – Heathrow Terminal 5	03:35-23:55	3 per hour	03:25-23:55	3 per hour	03:35-23:55	3 per hour
	Heathrow Terminal 5 - Hayes	04:05-00:30	3 per hour	04:05-00:30	3 per hour	04:05-00:30	3 per hour

3.21 Further to this, several additional services operate from West Drayton Railway Station which is located approximately 1.3km west of the site. These services are summarised in **Table 3.3**.

Table 3.3: A summary of existing bus routes operating from West Drayton Railway Station

			Weekday		Saturday		Sunday	
Service No.	**Route**	**Operator**	**Operating Hours**	**Typical Frequency**	**Operating Hours**	**Typical Frequency**	**Operating Hours**	**Typical Frequency**
222	Uxbridge Bus Station-Hounslow Bus Station	Metroline	00:04-00:31	2 per hour	00:04-00:33	2 per hour	00:03-00:30	2 per hour
222	Hounslow Bus Station-Uxbridge Bus Station	Metroline	00:00-00:26	2 per hour	00:00-00:28	2 per hour	00:00-00:25	2 per hour
698	West Drayton Station-Ickenham Station	London Sovereign	07:22-08:32	1 per hour	N/A	N/A	N/A	N/A
698	Ickenham Station-West Drayton Station	London Sovereign	14:55-16:00	1 per hour	N/A	N/A	N/A	N/A
U3	Uxbridge Station-Heathrow Central Bus Station	Metroline	04:20-00:31	3 per hour	04:20-00:31	3 per hour	04:20-00:31	3 per hour
U3	Heathrow Central Bus Station-Uxbridge Station	Metroline	00:00-00:21	3 per hour	00:00-00:21	3 per hour	00:00-00:21	3 per hour
U5	Uxbridge-Hayes	Abellio London	00:00-00:18	5 per hour	00:00-00:19	4 per hour	00:00-00:19	3 per hour
U5	Hayes-Uxbridge	Abellio London	00:10-00:30	5 per hour	00:10-00:28	4 per hour	00:10-00:28	3 per hour

Rail Services

3.22 West Drayton Railway Station is located approximately 1.3km west of the site. The station is managed by TfL. The Railway Station can be accessed via the 350 bus service.

3.23 The station is served by trains operating to London Paddington, Reading and Maidenhead. Rail services run frequently with trains departing approximately every 15 minutes to London Waterloo and Reading as shown in **Table 3.4**.

Table 3.4: Rail Services from West Drayton Railway Station

Destination	**Journey Time**	**Frequency**
London Paddington	23 mins	4 per hour
Reading	37 mins	4 per hour
Didcot Parkway	61 mins	1 per hour

3.24 West Drayton Railway Station is also serviced by the Elizabeth Line. Here, half-hourly services can be accessed to Reading and London Paddington.

3.25 Major redevelopment works were completed at the station in 2021 to improve the ticket hall and accessibility in preparation for the frequent Crossrail Elizabeth Line services.

3.26 Crossrail services began operating from West Drayton Railway Station in May 2022, providing increased capacity for passengers travelling between Reading and Paddington.

PTAL Score

3.27 PTAL (Public Transport Access Level) is a measure of connectivity to the public transport network. For any given point in London, PTALs combine walk time to the network (stations, bus stops) with service wait time at these stops to give an overall accessibility index. There are six accessibility levels (1=poor, 6=excellent).

3.28 The PTAL is based on a range of factors relating to public transport accessibility. It considers how close a location is to bus stops and train stations and the frequency and number of services from these public transport access points.

3.29 The site's location scores a PTAL of 2 using TfL's methodology and calculation parameters. A copy of the PTAL report is attached in **Appendix B.**

Summary

3.30 It is considered that the site is located in a sustainable location, conveniently accessible by all travel modes. The site is within acceptable walking distance of a range of facilities and amenities. The high-quality connections offered by both the nearby bus stops and rail stations further reduce the need to drive.

3.31 As such it is considered that employees of the site would walk, cycle or use public transport or a mixture of transport methods to access the site. this will lower the reliance on car trips to the site.

Road Safety

3.32 An initial review of injury accidents within the vicinity of the site has been undertaken. The road safety study included a study of a 150m stretch of Horton Road on either side of the site's private access road. The data was obtained from crashmaps.co.uk, which revealed that there appears to have been a single recorded injury accident that has occurred within the study area, within the most recent 5-year period available (2017-2021). The incident occurred in 2020, just east of the Horton Road/private road junction (within 50 meters of the junction). The location is shown in **Figure 3.2** and the accident report is included in **Appendix C**. The incident involved a minor collision between two cars and resulted in one casualty, slight in severity.

Personal Injury Accident (PIA) Summary

3.33 Given the foregoing assessment and only one accident being reported within the last 5 years, it is considered that, there are no underlying safety or design issues on the surrounding highway network and should not be a reason to prevent the development proposals.

4.0 DEVELOPMENT PROPOSALS

4.1 This Transport Assessment considers the traffic impacts of the proposed industrial development in the form of a Warehouse development on land north of Heathrow Airport. The proposed site layout is shown in **Appendix A**.

4.2 The development proposals include the redevelopment of the site to create a single commercial warehouse building including three internal floors. The development will provide a 1771.8m^2 basement car park with 45 vehicle parking spaces and 38 cycle spaces. There will be 5718.7m^2 of warehouse space, shared between the ground and first floor. The proposals also include 717.5m^2 for a loading bay (ground floor) and a further 222.1m^2 for loading and unloading on the ground floor and 143.4 m^2 on the first floor. The second floor will provide 480.5m^2 of office space for use as part of the warehouse operations.

Proposed Access Arrangements

4.3 The development proposals will formalise access to the site for all modes of transport, from the private access road. **Drawing 6969.001D** sets out the access arrangements. An access will be provided for use by HGVs to access the Loading Bay. Cars and pedestrians/cyclists will use the separate accesses shown on the site masterplan.

4.4 Access the basement car park will be via a ramp, with barriers controlled by RFID card, sticker or key fob scanned at the entrance to open the barrier gates.

4.5 Access to the cycle parking will be via a separate ramp into the basement.

4.6 As shown in **Drawing 6969.001D** double yellow lines will be provided on both sides of the private road. To prevent parking on the private road an ensure access to the site and the adjoining business is maintained at all times.

4.7 The provision of the double yellow lines, will increase safety for pedestrians and all types of vehicle as there will no longer be parked cars on the road, which currently cause vehicles to have to travel head on into oncoming traffic. The removal of the parked cars will greatly improve the road for cyclists and any pedestrians who need to cross to access the site.

4.8 Currently the cars that are parked along the private road opposite the sites frontage are owned by the current landowner of the site. As such once Harvest Land Management (the Applicant) take control of the site, the current owner will remove all of these vehicles.

4.9 The double yellow lines will ensure that access to Uxbridge Football Club and the Addison Lee unit, via the private access road is maintained at all times.

4.10 In addition to the access works it is proposed that the developer would also resurface the private footway and adjoining footway. The extent of the resurfacing works would be agreed at the final planning stage and would be secured by a planning condition.

4.11 The developer is also willing to negotiate with the relevant bodies to provide street lighting along the private access road. This measure would be secured by a planning condition.

Swept Path Analysis

4.12 Autotrack swept path analysis of the proposed access is shown on **Drawings 6969.002D**.

4.13 The drawings show a standard car, 11.2m refuse vehicle and a 16.5m articulated vehicle entering and exiting the site in a forward gear via the proposed access arrangements. Further Autotrack swept path analysis for the car park is shown in **Drawing 6969.003D.**

Internal Site Layout

4.14 The development proposes that the loading bay will include a vehicle turntable for HGVs which will enter the site in forwarding gear and rotate on the turntable before exiting the site.

4.15 Cars will use the ramps located at the site access to access the basement car park. There will be a separate lanes on the ramp for vehicles entering and leaving the car park. Vehicles will leave and enter the site in forwarding gear. A lift and stairs will be provided for pedestrians. For cyclists ramps will be provided to cycle parking allowing use for large or modified cycles.

4.16 In the event that the lift is not in operation, pedestrians will be able to use the stairs to access the other levels. Users that require ramped access will be able to use the cycle ramp.

4.17 Barriers will control access to the basement carpark. In the event the barriers break, the control of traffic in an out of the site will be overseen by employees of the site, who will be able to manually open and close the barriers. The staff will be in constant communication to ensure that the vehicles can enter and exit the site so that traffic does not queue back into the highway.

Proposed Car and Cycle Parking Provision

4.18 Relevant parking guidance is set out within Hillingdon's Local Plan Part 2 – Development Management Policies (January 2020). The maximum required parking provisions are set out in **Table 4.1** below.

Table 4.1. London Borough of Hillingdon's Parking Standards

Land Use	Floor Area	Car Parking Standard	Maximum Car Parking Required	Cycle Parking Standard	Cycle Parking Required
B2-B8 INDUSTRIAL	7282.2m^2 total warehouse operation	2 spaces + 1 space per 50-100sqm of floor space	73 spaces	1 space per 500sqm	15 spaces

4.19 As shown, a maximum of 73 spaces could be provided inline with Hillingdon's parking standards.

4.20 The London Plan Policy T6.2, Table 10.4, sets out car parking standards for the Outer London Opportunity Areas for Office developments of which is applicable to this development. The standards request a maximum of up to 1 space per 600 sq.m. gross internal area (GIA), this equates to 12 spaces. Due to the disparity in parking standards between Hillingdon Council and the London Plan it is proposed that a total of 45 spaces are provided.

4.21 The site is ideally located for access via public transport, walking or cycling. The site is in close proximity to a number of attractive footpaths and bridleways. Also, the nearest bus stop is located a short 145m distance from the site. The 350 bus serves this bus stop regularly, three times an hour. Based on the high accessibility of the site, it is considered that a majority of visitors to the site will either travel via public transport, on foot or by bike, meaning that less car parking is required. Further, supplying reduced car parking will deter site users from using their cars and encourage them to consider other, more sustainable options for travel.

4.22 London Borough of Hillingdon's parking standards dictate that at least 5% would require EV chargers, 10% would be for blue badge holders, and 5% for brown badge holders. The London Plan requires 5% of total parking should be disabled and a further 5% should be larger spaces. As Hillingdon Council's standards are greater it is proposed that the parking provision for disabled spaces will be provided in line with these standards.

4.23 Where space in the parking area has been freed up by reduced car parking, more cycling parking can be provided. A total of 15 cycle parking spaces are required, however, the development proposes 38 cycle parking spaces. This increased cycle parking capacity is

based on the premise that the site's location and accessibility will mean that there will be a high demand for travelling to/from the site via bicycle.

4.24 To maintain access by bicycle for cyclists of all abilities spacing between the cycle stands will be 1m to ensure all cycles can securely park any pedal cycle.

4.25 A maintenance bay will be provide for cyclists to work on their bicycles when necessary. A changing room and showers will also be made accessible for all employees who require them.

4.26 Furthermore, as detailed in the accompanying Workplace Travel Plan, a range of measures will be implemented to encourage employees of the site to travel by sustainable travel modes. Consequently, this reduced capacity can be justified on the basis that a majority of site visitors will access the site via walking, cycling or public transport as opposed to a car.

HGV Traffic

4.27 The loading bay will include five spaces for goods vehicles to load/unload, four of these will be suitable for HGVs. As the occupant of the site has yet to be determined four loading bays have been provided as it is deemed a suitable amount for the size of the development.

4.28 All deliveries will be overseen by a banksman or similarly qualified employee, this will ensure that HGVs don't wait on the private road and cause vehicles to back up onto the public highway.

4.29 HGVs will be able to turn within the confines of the site by using the turntable, in the yard area.

4.30 The majority of the HGVs will travel to and from the site via the M4, as such the majority of the HGVs will turn right in and left out of the private access road on their way to the site. There will be rare occurrences when HGVs arrive from the west or need to turn right out onto Horton Road, to travel to/ from the nearby industrial units.

Construction Traffic

4.31 During construction any vehicles associated with the construction of the new accommodation units will be managed to minimise traffic disruption and impact on local amenities. A Construction Logistics Plan has been prepared in support of this planning application. The CLP sets out in detail the measures taken to minimise the impact of the construction of the site.

5.0 DEVELOPMENT GENERATED TRIPS

Existing Trip Generation

5.1 The site is currently operational, and as such has a number of vehicles, entering and leaving the site throughout the day. As such, a comparison of the existing trip generation and the proposed trip generation has been undertaken.

5.2 The site covers an area of 4370m^2 of which circa 3400 m^2 is utilised for the purpose of open storage (including vehicle storage and mobile homes). The site also accommodates five permanent chalets (static homes).

5.3 To assess the proposed development's impact on the local highway network, the trip generation for the established residential and commercial storage land uses has been established. A summary of the trip rates and trip generation of the existing site uses are summarised below in **Table 5.1** and **Table 5.2.** The TRICS outputs for both land uses are attached as **Appendix D**.

Table 5.1 – Existing Trip Rates

Mode of Travel	08:00-09:00			17:00-18:00			Daily		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Residential									
Total Vehicles	0.186	0.266	0.452	0.167	0.144	0.311	1.748	1.823	3.571
Commercial									
Total Vehicles	0.406	0.101	0.507	0.165	0.458	0.623	2.435	2.58	5.015

Table 5.2 – Existing Trip Generation

Mode of Travel	08:00-09:00			17:00-18:00			Daily		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Residential									
Total Vehicles	1	1	2	1	1	2	9	9	18
Commercial									
Total Vehicles	14	3	17	6	16	22	83	88	171
Combined Trips									
Total Vehicles	15	4	19	7	17	24	92	97	89

5.4 As Table 5.2 confirms the site in its current form generates a number of vehicles movements, including in the typical AM and PM commuter peak periods.

Proposed Development Traffic Generation

5.5 Development trip generation for the warehouse development has been calculated using the trip rates taken from the TRICS database. The TRICs outputs are displayed in **Appendix D**.

5.6 The TRICS rate have been calculated using warehouse sites that closely match both the development proposals and the location of the site.

5.7 **Tables 5.3 and 5.4** summarise the anticipated multi-modal trip rates and trip generation for the Warehouse. The office space and loading area will be used for operations associated with the warehouse so have been included in the trip generation for the entire site which has a GFA of 7282.2m^2.

Table 5.3 – Development Generated Trip Rates for 7282.2m^2 of Operational Warehouse Space

Mode of Travel	08:00-09:00			17:00-18:00			Daily		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Commercial									
Walk	0.038	0.012	0.050	0.014	0.046	0.060	0.248	0.256	0.504
Cycle	0.010	0.000	0.010	0.004	0.011	0.015	0.066	0.062	0.128
Public Transport	0.092	0.005	0.097	0.052	0.092	0.144	0.391	0.384	0.775
Car	0.265	0.026	0.291	0.096	0.373	0.469	1.358	1.520	2.878
OGVs	0.031	0.037	0.068	0.030	0.037	0.067	0.511	0.503	1.014

Table 5.4 – Development Trip Generation for 7282.2m^2 of Operational Warehouse Space

Mode of Travel	08:00-09:00			17:00-18:00			Daily		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Walk	3	1	4	1	3	4	18	19	37
Cycle	1	0	1	0	1	1	5	4	9
Public Transport	7	0	7	4	7	11	28	28	56
Car	19	2	21	7	27	34	99	111	210
OGVs	2	3	5	2	3	5	37	37	74
Total motorised Vehicles	21	5	26	9	30	39	136	148	284

5.8 As Table 5.2 shows, it is anticipated that the majority of development-generated trips will be via private car – 54% of total trips. A high proportion of trips are expected to be made by foot – 10% and 15% of daily trips are expected to be made by public transport.

5.9 Based on the development generated trips, the HGV movements will be spread throughout the day, this will have a minimal impact on the highway network and should not cause any disruption in either safety or capacity terms.

Proposed Development Impact on the Highway Network

5.10 To understand the impact of the development proposals on the local highway network a comparison of the existing land use trip generation to the proposed development generated vehicle movements this is summarised in **Table 5.5.**

Table 5.5 – Proposed Development Impact Assessment

Mode of Travel	08:00-09:00			17:00-18:00			Daily		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Existing Land Use									
Total Vehicles	15	4	19	7	17	24	92	97	89
Proposed Land Use									
Total Vehicles	21	5	26	9	30	39	136	148	284
Development Impact									
Total Vehicles	6	1	7	2	13	15	44	51	95

5.11 As displayed in Table 5.4, the development is anticipated to result in an additional 7 two-way trips by car in the AM peak period (08:00-09:00) and 15 in the PM peak period (17:00-18:00). Therefore, the proposed development will generate a relevantly low level of additional car movements on to the local highway network, and it is likely that these additional movements will be absorbed into the daily fluctuation of traffic on the local highway network.

5.12 To mitigate any impact the development has on the local highway network the development proposals will provide a Travel Plan that will provide measures that will encourage use of sustainable transport modes.

Summary

5.13 Due to relatively low levels of anticipated trips generated by the proposed development it is considered that further capacity assessments or mitigation measures other than those already set out, are not considered necessary. And the anticipated development generated vehicle movements in both the AM peak period (08:00-09:00) and PM peak

period (17:00-18:00) are expected to be absorbed in the daily fluctuations of traffic on the local road network.

6.0 TRAVEL PLAN

6.1 Travel Plans provide a package of measures to efficiently and sustainably manage the transport impact of development proposals through delivery of a range of sustainable transport measures.

6.2 The principal objective of a Travel Plan document is to focus primarily on encouraging employees to the site to travel by alternative modes of transport than the private car, through a range of measures and incentives over the life of the plan (typically five years or one year after occupation).

6.3 Through the successful implementation of the measures identified within a Travel Plan, it is anticipated that this would act as a mechanism for delivering a reduction in private car use and increase in sustainable transport modes (walking, cycling and public transport) whilst also promoting a healthy living environment.

6.4 The Travel Plan produced to accompany this application, identifies a range of potential measures/incentives that could be offered and modal shift that could be achieved through their implementation. These measures include the following:

- Organising companywide car sharing;
- Cycle to work scheme;
- Distribution of Travel Information Packs;
- Distribution of additional printed material;
- Inductions with each employee, to identify existing travel patterns, place of employment and potential to change travel behaviour;
- Secure cycle parking facilities including showers/ changing rooms and maintenance area.

7.0 PROPOSED SUSTAINABLE TRANSPORT METHODS

Healthy Streets and Vision Zero

7.1 As set out in Section 2.0, the London Plan requires all new developments to be compatible with the Mayor's Healthy Street Criteria. Development proposals should deliver land use that facilitate residents making shorter, regular trips by walking or cycling and reduce car dominance. The Mayor's aim is that by 2041 all Londoners will be able to undertake at least the 20 minutes of active travel each day needed to stay healthy. It also requires better management of freight so the impact of moving goods, carrying out servicing and supporting construction on London's streets is lessened.

7.2 The Mayor also has a long-term vision to reduce road danger so that no deaths or serious injuries occur on London's streets.

7.3 The development proposals are in line with the both the Mayor's Healthy Street Criteria and the Vision Zero goal.

7.4 The development will provide both long and short term cycle parking in line with the London Plan's requirements. This will ensure that employees and any visitors to the development can cycle to the site and securely store the bicycles. To further encourage cycling the development will provide shower and changing facilities for all cyclists (and any pedestrians that require these facilities).

7.5 A bicycle maintenance station will also be provided, that will give cyclists piece of mind that if minor repairs such as a puncture occur there is a safe location to fix their bikes.

7.6 As Section 3.0 sets out the site benefits from good existing cycling and walking facilities along with being in close proximity to a frequent bus service. Through the provision of a Travel Plan employees at the development will be made aware of the benefits of using sustainable transport modes, and maps will indicate how easy it is to access these from the site.

7.7 An Active Travel Zone Assessment (ATZ) has been undertaken for the site this has assessed areas in proximity to the site that will be of regular use by employees that could be improved. The measures in this ATZ assessment will further help to encourage walking and cycling.

7.8 By formalising the access, as opposed to the current arrangement of multiple accesses, safety for other users of the private access road and the employees of the development will be improved. This will ensure that the development is actively working towards the Mayor's Vision Zero.

7.9 Improved visibility at the proposed site access, will increase safety for vehicles exiting the site compared to the current access arrangements.

7.10 The Developer is willing to liaise with the relevant Authority to provide street lighting on the access road in proximity to the site, this will further increase safety for all users.

7.11 The provision of double yellow lines will prevent vehicles parking on the road, this will increase the safe vehicle flow.

7.12 As such it is considered that the development is in line with both of the Mayor's Healthy Streets and Vision Zero requirements.

8.0 SUMMARY AND CONCLUSION

Summary

8.1 This Transport Assessment (TA) has been prepared by Stuart Michael Associates, consulting engineers, on behalf of Harvest Land Management (the 'Applicant') in support of a Planning Application for the construction of proposed warehouse development in the form of a warehouse on land off Horton Road, West Drayton. The proposed site layout is shown in **Appendix A**.

8.2 Currently the site is accessed via Horton Road. The site covers an area of 4370m^2, of which circa 3400m^2 is utilised for open storage (including vehicle storage, machinery maintenance and mobile homes). The site also accommodates five permanent chalets (static homes).

8.3 The development proposals include the redevelopment of the site to create a single commercial warehouse building including three internal floors. The development will provide a 1778.1m^2 basement car park with 45 vehicle parking spaces and 38 cycle spaces. There will be 5718.7m^2 of warehouse space, shared between the ground and first floor. The proposals also include 717.5m^2 for a loading bay (ground floor) and a further 222.1m^2 for loading and unloading on the ground floor and 143.4 m^2 on the first floor. The second floor will provide 480.5m^2 of office space for use as part of the warehouse operations.

8.4 Nearby facilities in the surrounding area are within suitable walking and cycle distance from the centre of the site. This includes a range of retail facilities such as an Iceland Food and a post office, as well public transport services. There is a bus stop within less than a 2-minute walk from the site whilst West Drayton Train Station is located 1.3km to the southwest.

8.5 The potential trip generation for the development has been calculated using trip rates derived from the TRICS database. Based on the trip rates and subsequent trip generation assessment (**Table 5.5**), of total vehicle trip generation it is anticipated that the development could generate an additional 7 two-way total vehicle movements during the AM peak (08:00-09:00), with 15 two-way total vehicle movements during the PM peak (17:00-18:00), compared to what the existing residential and storage uses on the site currently generate. As a result, it can be estimated that the development will have minimal impact on existing traffic flows at peak traffic times.

Conclusion

8.6 Taking all of this into account it is concluded that the proposed development will have no significant adverse transport impacts in terms of queues or delays at junctions or in terms of highway safety.

8.7 It should also be concluded that the proposed development is in a sustainable location, within walking and/or cycling distance of the retail, health and recreation facilities, as well as local schools and public transport facilities, and would offer the opportunity for travel by alternative modes to the private car.

FIGURES

DRAWINGS

APPENDICES

Appendix A – Proposed Site Layout

Appendix B – PTAL Summary Report

Appendix C – PIA Data

Appendix D – TRICS Data