

**Land off
Greenbrow Road,
Wythenshawe**

TRANSPORT STATEMENT

Report prepared for
Seva Patidar Ltd

March 2022

Report Reference 1777/2



ASHLEY HELME
ASSOCIATES



Transport Statement

Land off Greenbrow Road, Wythenshawe

Client: Seva Patidar Ltd

Report Ref: 1777/2

Status: Final

Date: March 2022

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Transport Statement

Land off Greenbrow Road, Wythenshawe

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1 Introduction

- 1.1 Ashley Helme Associates Limited (AHA) are appointed by Seva Patidar Ltd to prepare a Transport Statement (TS) report to support the planning application for a proposed development on land off Greenbrow Road, Wythenshawe (henceforth referred to as the Site). The location of the Site is indicated on Figure 1.1, in the context of the local highway network.
- 1.2 The Site is presently occupied by an indoor children's play centre. The existing building will be converted and extended as part of the proposed development. The proposed development will comprise:
- Convenience Store 418sqm convenience store;
 - Retail Unit 1 66sqm non-food retail;
 - Retail Unit 2 80sqm non-food retail.
- 1.3 Nisa will occupy the convenience store. The proposed non-food retail units are speculative and the precise use and occupiers are not known at this stage.
- 1.4 The issues addressed within this TS fall broadly into the following areas:
- Accessibility by non-car modes, and
 - The vehicular traffic impact on the operational performance of the local highway network.
- 1.5 The local highway network is described in Chapter 2. The proposed Site access arrangements are outlined in Chapter 3.
- 1.6 The accessibility of the Site by choice of mode is considered in Chapter 4.
- 1.7 The traffic impact of the proposed development is assessed in Chapter 5. The summary and conclusions of the TS are presented in Chapter 6.



2 Highway Network

2.1 The application Site is located to the east of Greenbrow Road and south of Simonsway.

2.2 The Site benefits from an existing vehicular access on Greenbrow Road.

2.3 Existing Conditions

2.3.1 Greenbrow Road

2.3.1.1 Greenbrow Road is a single carriageway road and is subject to a 20mph speed limit in the vicinity of the Site. Greenbrow Road forms the minor arm of a priority-controlled junction with Simonsway.

2.3.1.2 Greenbrow Road measures circa 7.3m wide along the Site frontage. There is street lighting and footway present on both sides of the road. The footway on the Site side of the road measures circa 2.0m wide.

2.3.1.3 Greenbrow Road is a bus route and there are bus stops located in close proximity to the Site. The northbound bus stop is located opposite the Site frontage. The bus stop comprises a shelter, timetable information and low floor access. The southbound bus stop is located to the south of the Site and a shelter and timetable information is provided.

2.3.2 Simonsway

2.3.2.1 Simonsway is a single carriageway road and is subject to a 20mph speed limit in the vicinity of the Greenbrow Road. There is change of speed limit on Simonsway, circa 20m east of the Greenbrow Road junction. The speed limit changes to 30mph for eastbound travel.

2.3.2.2 Simonsway measures circa 7.5m wide in the vicinity of the Site. There is shared footway/cycleway present on both sides of the road and street lighting is present.

2.3.2.3 There is a zebra crossing on Simonsway located circa 20m west of the Greenbrow Road junction. The zebra crossing provides segregated crossing facilities for cyclists.

2.3.2.4 Simonsway becomes Tuffley Road circa 40m west of the Greenbrow Road junction. Simonsway and Tuffley Road are bus routes and bus stops are provided within a circa 150m walk from the Site. The eastbound bus stop takes the form of a flag and pole arrangement. Bus cage markings are present on the carriageway. The same arrangements are provided at the westbound bus stop on Simonsway.



2.4 Accident History

- 2.4.1 The Crashmap website has been interrogated for the latest available five-year accident records on Greenbrow Road and Simonsway in the vicinity of the Site. The accident data covers the 5-year period from 2017 to 2021. The Crashmap data is included in Appendix A.
- 2.4.2 The Crashmap accident data shows that there were no recorded accidents in the vicinity of the Site on Greenbrow Road.
- 2.4.3 There were four recorded accidents on Simonsway in the vicinity of the Site. The accidents occurred to the west of the Greenbrow Road junction, in the vicinity of the zebra crossing. Three of the accidents were classified as slight in severity and one accident was classified as serious.
- 2.4.4 Whilst all accidents are regrettable, the fact remains that more often than not an accident has unique isolated cause/characteristics, providing no basis for identifying or requiring remedial/mitigation works. It is concluded that there is **no** recurring accident problem/pattern that raises concern or that gives rise to the need for remediation measures.



3 Proposed Site Access Arrangements

3.1 Access Proposals

- 3.1.1 It is proposed that vehicular access to the Site is formed on Greenbrow Road.

3.2 Design Considerations

- 3.2.1 'Manual for Streets'(MfS) and the complementary 'Manual for Streets 2' (MfS2) provide guidance on the geometric criteria for the design of residential roads. These represent the most current national guidance and advice. Much of the content of the initial MfS is explicitly incorporated within the MfS2, and there is consistency between MfS and MfS2.

- 3.2.2 A key role of MfS2 is to consider the application of the principles and parameters identified in MfS to a wider context of road and junction conditions. The exploration of this, during the course of the preparation of MfS2, included undertaking new research. The results of the MfS2 original research inform the conclusions and guidance presented in MfS2.

- 3.2.3 MfS2 explicitly states that:

*"...most MfS advice can be applied to a highway regardless of speed limit. **It is therefore recommended that as a starting point for any scheme affecting non-trunk roads, designers should start with MfS.**"* (para 1.3.2)

3.3 Site Access Geometry

- 3.3.1 The existing children's play centre is served by a vehicular access on Greenbrow Road. It is proposed to improve the existing access to serve the proposed development.

- 3.3.2 The proposed access arrangements are indicated on Drg No 1777/01/A.

- 3.3.3 The main features of the Site access junction are as follows:

- 6.0m wide access,
- 2.4m x 25m visibility splays,
- 6.0m corner radii.



- 3.3.4 The proposed convenience store frontage is served by existing footway and a sealed surface will extend beyond the back of footway to the proposed store entrance.

3.4 Parking Standards

- 3.4.1.1 Parking standards for Manchester City Council are contained in Appendix B of the Core Strategy Development Plan Document. The parking standards are maximum standards for car parking and minimum standards for cycle parking. The parking standards are provided based on two areas:

- District Centres
- Areas not within the city centre or district centre.

- 3.4.1.2 The parking standards for areas not within city centre or district centre are considered for the proposed development.

- 3.4.1.3 The standards for car parking and cycle parking relevant to the proposed development are:

<i>A1 Food Retail:</i>	Vehicles	1 space per 14sqm
	Vehicles (disabled)	3 spaces or 6% of total
	Cycles	1 space per 140sqm (2 space minimum)
<i>A1 Non-food Retail</i>	Vehicles	1 space per 20sqm
	Vehicles (disabled)	3 bays or 6% of total
	Cycles	1 space per 200sqm (2 space minimum)

- 3.4.1.4 Based on the above standards, the maximum car parking provision for the proposed uses would be as follows:

<i>A1 Food Retail (418sqm):</i>	Vehicles	30 spaces (inc disabled)
<i>A1 Non-food Retail (146sqm):</i>	Vehicles	7 spaces (inc disabled)

- 3.4.1.5 The proposed development provides a total of 33no parking spaces, including 3no disabled spaces. This falls within the maximum standards. The proposed development is located within a sustainable location with very frequent bus services calling in the vicinity of the Site and a large residential area within a 2km catchment. Thus, it is concluded that the parking provision is suitable for the proposed development.



- 3.4.1.6 The proposed development is required to provide a minimum of 4no cycle spaces based on the Manchester parking standards. The proposed site layout plans show the provision of a cycle store for 6no cycles. This provides positive encouragement for visitors and employees to travel by cycle.

3.5 Swept Path Analysis

- 3.5.1 The proposed development will generate HGV deliveries. The applicant has confirmed that deliveries are by an 8.0m rigid vehicle. A refuse vehicle will also serve the proposed development. It is not known at this stage whether the refuse servicing will take place from the Greenbrow Road carriageway or from within the proposed car park. For the purposes of swept path analysis, the refuse vehicle is assumed to enter the proposed car park.
- 3.5.2 Drg Nos 1777/SP/03 & 04 shows the swept path analysis of an 8.0m rigid vehicle. This demonstrates that there is sufficient space for the vehicle to turn within the Site, and align to the servicing hatches, and return to the Greenbrow Road carriageway in forward gear.
- 3.5.3 Drg No 1777/SP/05 shows the swept path analysis of a 10.6m refuse vehicle. This demonstrates that there is sufficient space for the refuse vehicle to turn within the Site and exit in forward gear.

3.6 Summary

- 3.6.1 It is considered that the proposed Site access arrangements provide a suitable means of serving the proposed development.



4 Accessibility By Non-Car Modes

4.1 Walk

4.1.1 It is established and acknowledged that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres.

4.1.2 The CIHT provides guidance about journeys made on foot. It does not provide a definitive view of distances, but does suggest a preferred maximum distance of 2000m for walk commuting trips. A 400m distance corresponds to a walk time of five minutes, based upon typical normal walking speed. Figure 4.1 presents the 5, 10, 15, 20 and 25-minute walk time isochrones for the Site, (ie reflecting 400m, 800m, 1200m, 1600m and 2000m distances).

4.1.3 The 'walkable neighbourhood' concept is set out in MfS1 and endorsed in MfS2. MfS1 explains that:

*"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is **not an upper limit** and walking offers the greatest potential to replace short car trips, particularly those under 2 km."* (MfS1 para 4.4.1)

4.1.4 Figure 4.1 also shows that there is a large residential area within a 2000m (a 25 minute) walk of the Site. It is demonstrated that there is opportunity for residents of Newall Green and parts of Benchill to walk to the proposed convenience store. Similarly, Wythenshawe Hospital and parts of Roundthorn Industrial Estate are within a 2000m walk of the Site.

4.2 Cycle

4.2.1 It is recognised that cycling also has potential to substitute for short car trips, particularly those under 5 kilometres and to form part of a longer journey by public transport.

4.2.2 *Gear Change, A Bold Vision for Cycling and Walking* (DfT, 2020) states:

"58% of car journeys in 2018 were under 5 miles. And in urban areas, more than 40% of journeys were under 2 miles in 2017. For many people, these journeys are perfectly suited to cycling and walking." (Page 11)



- 4.2.3 Figure 4.2 indicates the 2km and 5km cycle isochrones for the Site, reflecting typically 10 minute and 25-minute journeys. Review of Figure 4.2 highlights that Newall Green, Benchill and Wythenshawe Hospital are within a 2km cycle ride of the Site. Baguley, Northenden, Gatley, Heald Green, Manchester Airport, Hale Barns, Hale and Timperley are located within a 5km cycle ride of the Site.
- 4.2.4 There is a network of cycle routes within the vicinity of the Site. There is shared footway/cycleway on Simonsway/Tuffley Road. Figure 4.3 shows the Transport for Greater Manchester designated cycle routes in the vicinity of the Site. The cycle routes connect the Site to large residential areas, local schools, Wythenshawe town centre and employment locations such as Wythenshawe Hospital, Roundthorn Industrial Estate and Wythenshawe Police Station. This provides very good opportunity for residents and employees from the above locations to undertake journeys to/ from the Site by cycle.

4.3 Bus

- 4.3.1 The proposed development affords opportunity for development generated public transport journeys to be made by bus.
- 4.3.2 The closest bus stop to the Site is located on Greenbrow Road, along the Site frontage. The northbound bus stop benefits from a shelter with timetable information and low floor access. Similarly, the southbound bus stop, located circa 120m south of the Site, has a shelter and timetable information. There are additional bus stops located on Firbank Road and Tuffley Road, to the west of the Site. These bus stops are located within a circa 100m and 150m walk of the Site. The bus stops on Firbank Road and Tuffley Road are served by additional bus services to the stops on Greenbrow Road.
- 4.3.3 Table 4.1 summarises the scheduled bus services calling on Greenbrow Road, Firbank Road and Tuffley Road, within 400m of the Site. Table 4.1 also includes the frequency of the services.
- 4.3.4 The bus services provide links to Wythenshawe, Baguley, Altrincham, Gatley, Cheadle, Stretford, Stockport, Manchester city centre and the Trafford Centre amongst other locations. The services within 400m of the Site provide 10 buses per hour in each direction on a typical weekday, representing 20 buses per hour in both directions. There is very good bus service provision in the vicinity of the Site enabling employees and customers of the Site to travel to/from a wide range of destinations by bus.



4.4 Metrolink

4.4.1 Martinscroft Metrolink station is located within a circa 1250m (circa 15 to 16 minute) walk of the Site.

4.4.2 Martinscroft station is on the Manchester Airport to Victoria line. The service typically operates during the following time periods:

Monday to Saturday	0600 to 0000,
Sunday	0700 to 0000.

4.4.3 The Metrolink services operate on a 12-minute frequency. Additional services are typically provided at peak travel times to correspond with the typical commuting periods.

4.4.4 The services calling at Martinscroft connect with key interchanges on the network providing for opportunity to connect with other lines serving locations such as Media City UK, The Trafford Centre, Manchester Airport, Didsbury, Ashton-under-Lyne, Oldham and Rochdale.

4.4.5 The Metrolink services provide excellent opportunity for a employees and customers of the proposed development to undertake travel to a range of destinations by tram.

4.5 Summary

4.5.1 Transport sustainability is a principle underlying the proposed development. Encouraging walk, cycle and public transport journeys is recognised as important, and the existing infrastructure provides very good opportunity for journeys to and from the Site to be undertaken by sustainable modes.



5 Traffic Flows

5.1 Peak Periods

- 5.1.1 The times when the combination is greatest of traffic generated by the proposed development and existing highway network traffic are the weekday AM and PM peak hours. It is acknowledged that the retail use is also likely to generate traffic movements at the weekend. However, peak hour traffic flows on the local highway network are typically lower at the weekend than during the week. Therefore, TS quantitative analysis is focussed on the AM and PM peak hours.

5.2 Existing Play Centre

- 5.2.1 The Site is presently occupied by an indoor children's play centre. The application Site has an area of 0.22 hectares. This provides the context for assessing the traffic impact of the proposed development.
- 5.2.2 AHA does not have available AM and PM peak hour traffic survey data for the indoor play centre. However, it is reasonable to assume that vehicular traffic is generated by the facility. Therefore, in the absence of any specific traffic flow data, TRICS is interrogated to establish suitable trip generation rates for the play centre.
- 5.2.3 The criteria adopted for the play centre is as follows:
- Play centres,
 - Site Area 0.18-1.23 Hectares,
 - All surveys 2013 or more recent,
 - Any sites in London, Ireland and Northern Ireland manually removed from the database, on the basis that they may have significantly different trip patterns than the Site.
- 5.2.4 On this basis, 1 site is identified and the results of the TRICS interrogation are included in Appendix B.
- 5.2.5 TRICS calculates average trip rates for a specified database of Site entries. Additionally, TRICS can rank trip rates for a specified database and identify the 85%ile rank order rates. However, TRICS explicitly states that the 85%ile statistic is not reliable for a database with less than 20



entries; in this circumstance TRICS advises against use of 85thile rates. Therefore, average trip rates are adopted in this instance.

5.2.6 There is no TRICS data available for the hour 0800-0900. Data is available for the PM peak hour (1700-1800). The adopted PM peak hour trip rates (vehicles/hour/hectare) are:

	ARR	DEP	2-WAY
PM	36.842	31.579	68.421

5.2.7 The consequent estimate of traffic generated by the children's play centre in the PM peak hour is:

	ARR	DEP	2-WAY
PM	8	7	15

5.3 Generated Traffic: Proposed Convenience Store

5.3.1 The proposed development comprises a 418sm convenience store. It is necessary to estimate the traffic generated by the proposed convenience store to assess the traffic impact of the proposed development.

5.3.2 TRICS is interrogated to establish suitable trip generation rates for the proposed convenience store. The criteria adopted for the interrogation is as follows:

- Convenience Store,
- 300 to 600 sqm,
- Suburban and neighbourhood centre locations,
- All surveys 2013 or more recent,
- Any sites in London, Ireland and Northern Ireland manually removed from the database, on the basis that they may have significantly different trip patterns than the Site.

5.3.3 On this basis, 4 sites are identified and the results of the TRICS interrogation are included in Appendix C.

5.3.4 The adopted AM & PM peak hour trip rates (vehicles/hour/100sm GFA) for the convenience store are:

	ARR	DEP	2-WAY
AM	6.759	6.890	13.649



PM	7.612	7.874	15.486
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- 5.3.5 The consequent estimate of traffic generated by the proposed convenience store (418sm) in the AM & PM peak hours is:

	ARR	DEP	2-WAY
AM	28	28	56
PM	32	33	65

5.4 Pass-By trips

- 5.4.1 Due to the nature of the proposed development, there is likely to be an element of pass-by traffic arriving and departing the Site during the AM & PM peak hours.

- 5.4.2 For this assessment, it is assumed that the proposed development will generate a 50/50 split between new traffic and pass-by traffic at the Site.

- 5.4.3 The consequent estimate of new and pass-by traffic generated by the proposed development in the AM & PM peak hours is:

		ARR	DEP	2-WAY
NEW	AM	14	14	28
	PM	16	16	32
PASS-BY	AM	14	14	28
	PM	16	17	33.

5.5 Generated Traffic: Non-food Retail Units

- 5.5.1 The proposed development comprises two small non-food retail units with a combined floor area of 146sm. The units are speculative at this stage and hence the occupier and precise use is unknown. However, it is anticipated that the operational hours of the two non-food retail units will be between 0900 and 1700. Thus, the proposed units would not be expected to generate traffic movements in the AM & PM peak hours.



5.6 Net Impact

- 5.6.1 The net impact of **new** traffic generated by the proposed development, taking into account the traffic generated by play centre use, is:

AM	+28
PM	+17

- 5.6.2 It is concluded that this level of **new traffic** is unlikely to materially alter the performance of the local highway network.

5.7 Summary

- 5.7.1 The proposed development is estimated to generate a net increase of **28** vehicle trips (2-way) in the AM peak hour and **32** vehicle trips (2-way) in the PM peak hour. This represents, on average, only about one vehicle movement associated with the proposed development every 2 minutes in both the AM and PM peak hours.
- 5.7.2 It is concluded that the proposed development has **no material traffic impact** on existing junctions and hence, further quantitative analysis is **not** required.



6 Summary & Conclusions

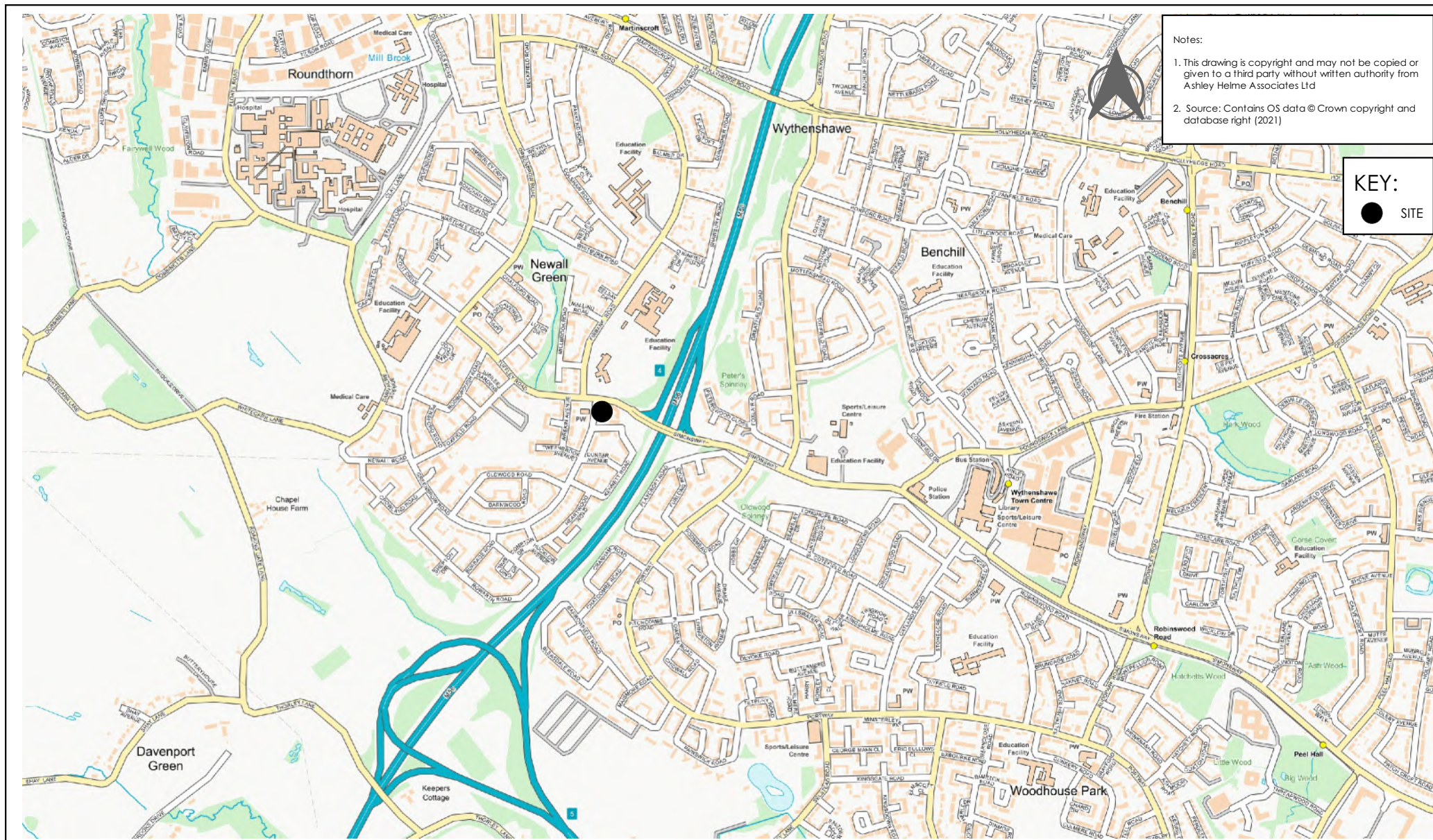
- 6.1 Ashley Helme Associates Limited are appointed by Seva Patidar Ltd to prepare a Transport Statement (TS) report to support the planning application for a proposed development on land off Greenbrow Road, Wythenshawe.
- 6.2 The Site is presently occupied by an indoor children's play centre. The existing building will be converted and extended as part of the proposed development. The proposed development will comprise:
- Convenience Store 418sqm convenience store;
 - Retail Unit 1 66sqm non-food retail;
 - Retail Unit 2 80sqm non-food retail.
- 6.3 It is proposed that vehicular access to the Site is from Greenbrow Road. There is an existing car park access on Greenbrow Road and the proposed access is in a similar location but is has been widened to accommodate HGV deliveries. The proposed access arrangements are presented on Drg No 1777/01/A. It is demonstrated that the proposed access arrangements are suitable for the proposed development.
- 6.4 The proposed car park complies with Council parking standards. Swept path analysis demonstrates that an 8.0m rigid box van and 10.6m refuse vehicle are able to enter and leave the car park in forward gear.
- 6.5 The accessibility of the Site by non-car modes is reviewed and it is demonstrated that there is very good opportunity for visitors and residents of the Site to undertake trips on foot, by cycle and by public transport. This is fully in accordance with national and local policy aims and objectives.
- 6.6 Comprehensive analysis is undertaken of the traffic impact of the proposed development on the local highway network. It is concluded that the proposed development will **not** have a material traffic impact on the existing highway network.
- 6.7 A comprehensive appraisal of the transport impacts of the proposed development is undertaken. It is demonstrated that the proposed development:
- Provides suitable parking provision,
 - Offers sufficient space for both 8.0m rigid vehicles and 10.6m refuse vehicles to service the site,



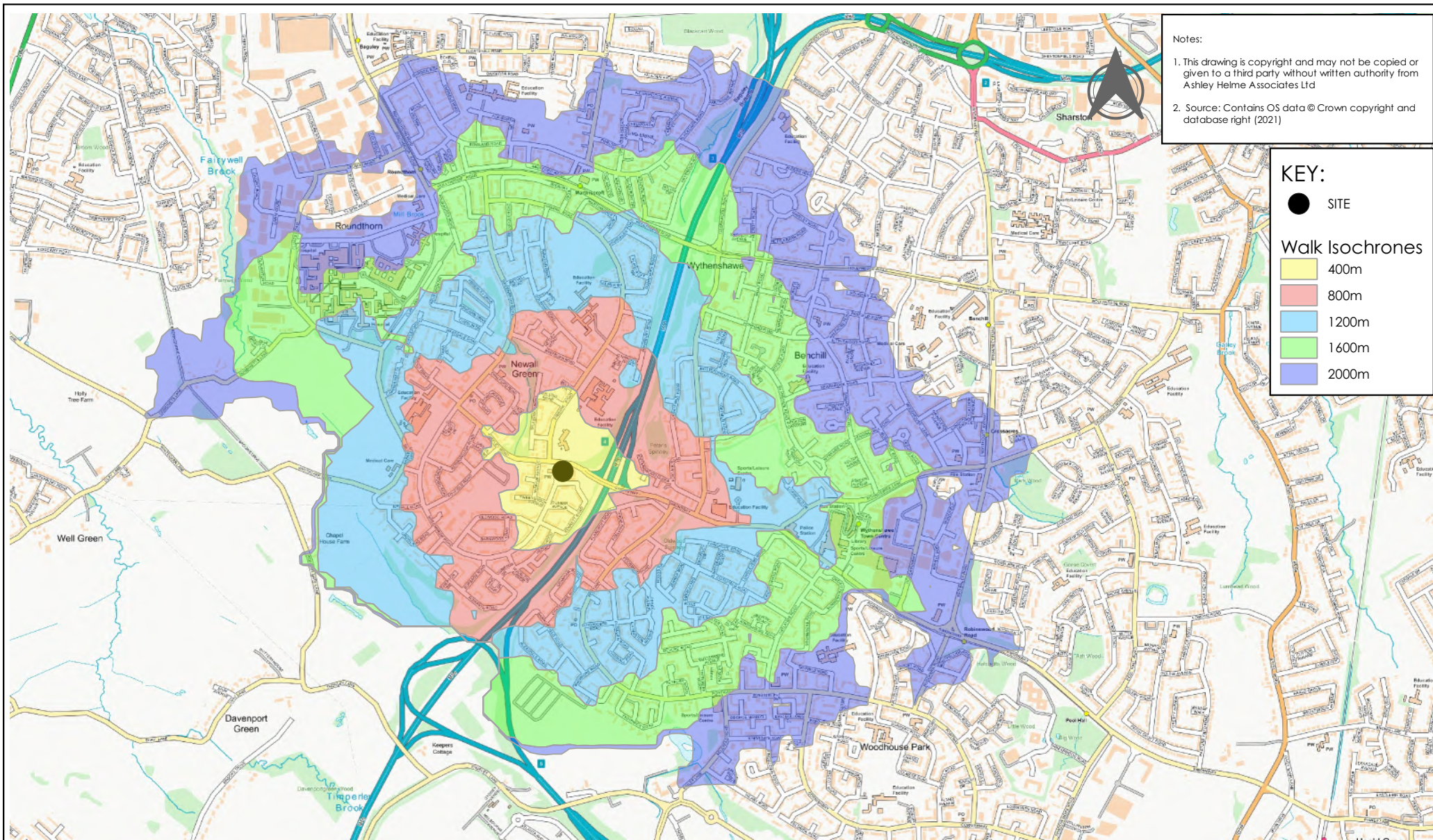
- Benefits from existing infrastructure with good opportunities for accessibility by non-car modes of transport,
- Would have no material traffic impact on the existing junctions and that further quantitative analysis is not required.

6.8 It is concluded that the proposed development is in accordance with national and local transport policies, and that there are no transport/highways reasons for refusal of planning permission.

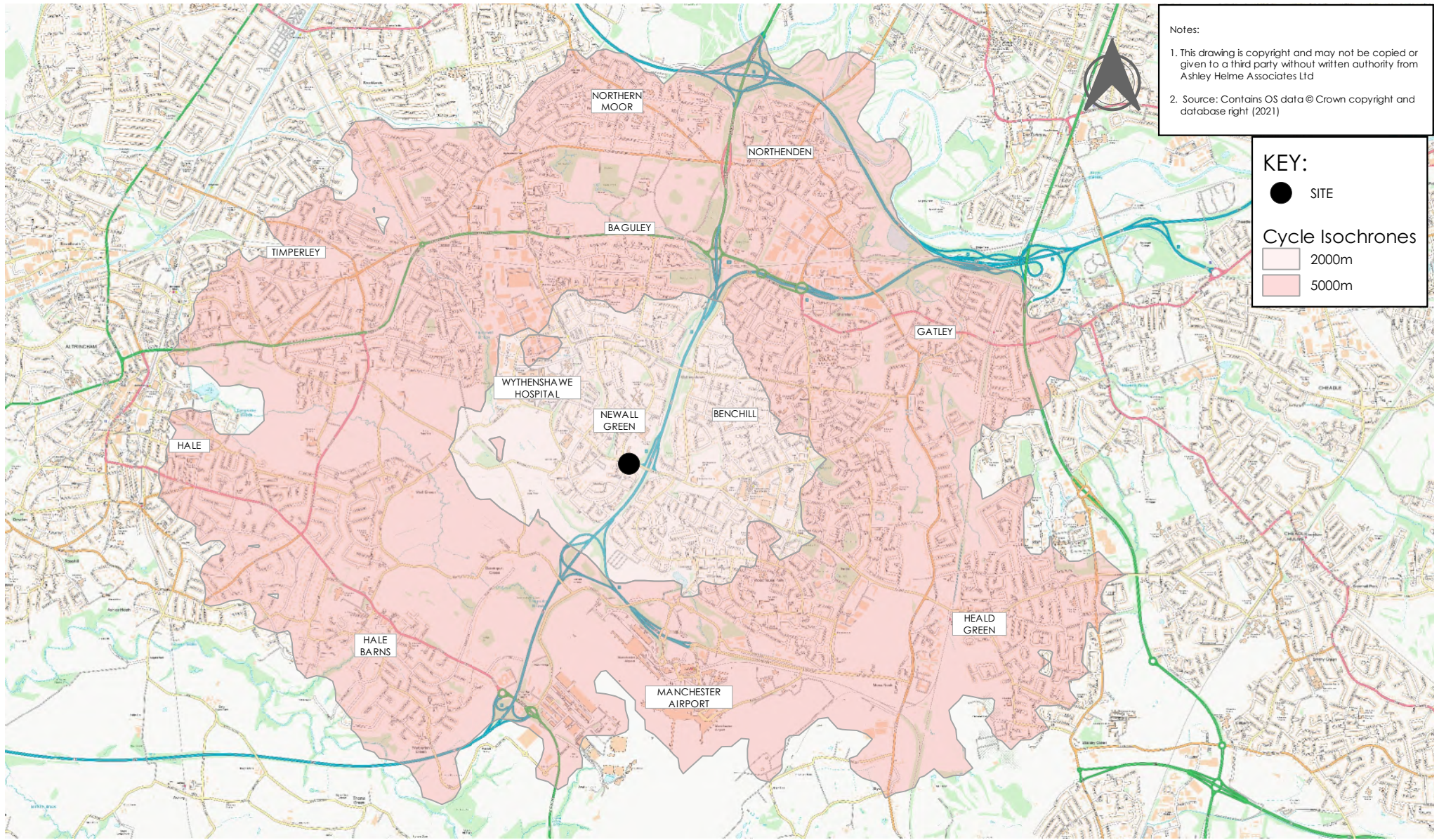
Figures



Project: GREENBROW ROAD, WYTHENSHAW	Title: LOCATION PLAN	FIGURE 1.1		
Client: SEVA PATIDAR LTD		Date: OCTOBER 2021	Scale: NTS	



Project: GREENBROW ROAD, WYTHENSHAW	Title: WALK ISOCHRONES	FIGURE 4.1		 ASHLEY HELME ASSOCIATES
Client: SEVA PATIDAR LTD		Date: OCTOBER 2021	Scale: NTS	



Project:
GREENBROW ROAD, WYTHENSHAW

Client:
SEVA PATIDAR LTD

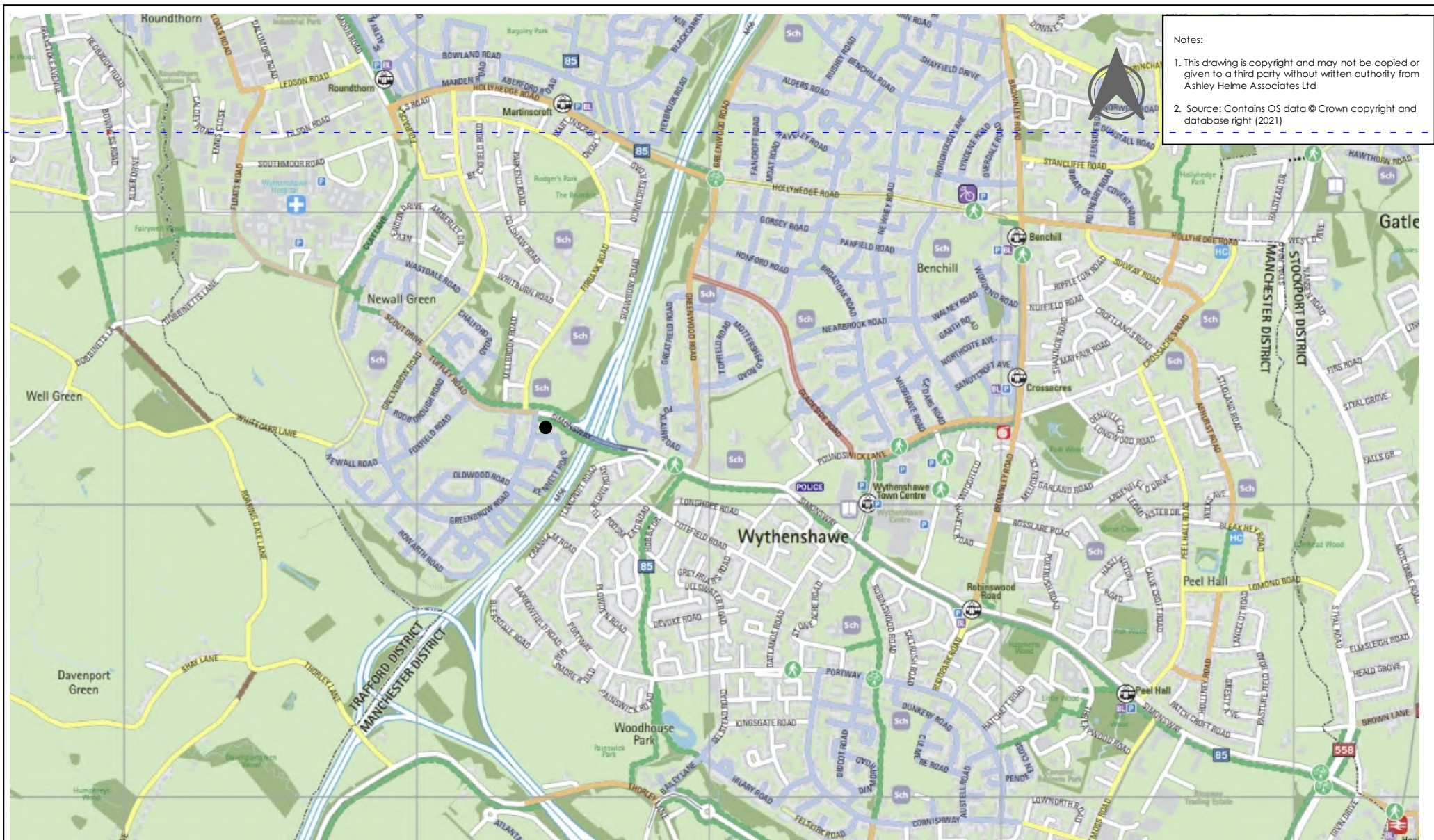
Title:
CYCLE ISOCHRONES

FIGURE 4.2

Date:
OCTOBER 2021

Scale:
NTS





Project: GREENBROW ROAD, WYTHENSHAW	Title: TFGM CYCLE ROUTES	FIGURE 4.3		 ASHLEY HELME ASSOCIATES
Client: SEVA PATIDAR LTD		Date: OCTOBER 2021	Scale: NTS	

Tables

BUS NUMBER	ROUTE	FREQUENCY			OPERATOR
		MONDAY-SATURDAY DAY	EVE	SUN	

Services calling on Greenbrow Road on Site frontage					
11	Altrincham – Gatley – Cheadle – Edgeley - Stockport	20 mins	60 mins	30 mins	SC
101	Wythenshawe – Baguley – Moss Side – Piccadilly Gardens	15 mins	30 mins	20/30 mins	SC

Services calling on Firbank Road within 100m of Site (a circa 1 minute walk)					
18	Eccles – Trafford Centre – Stretford – Wythenshawe – Manchester Airport	60 mins	60 mins	60 mins	D
130	Macclesfield – Henbury – Wilmslow – Wythenshawe Hospital	60 mins	-	-	DG

Services calling on Tuffley Road within 120m of Site (a circa 1 to 2 minute walk)					
368	Manchester Airport – Cheadle Hulme – Edgeley – Stockport	60 mins	1 trip		SC

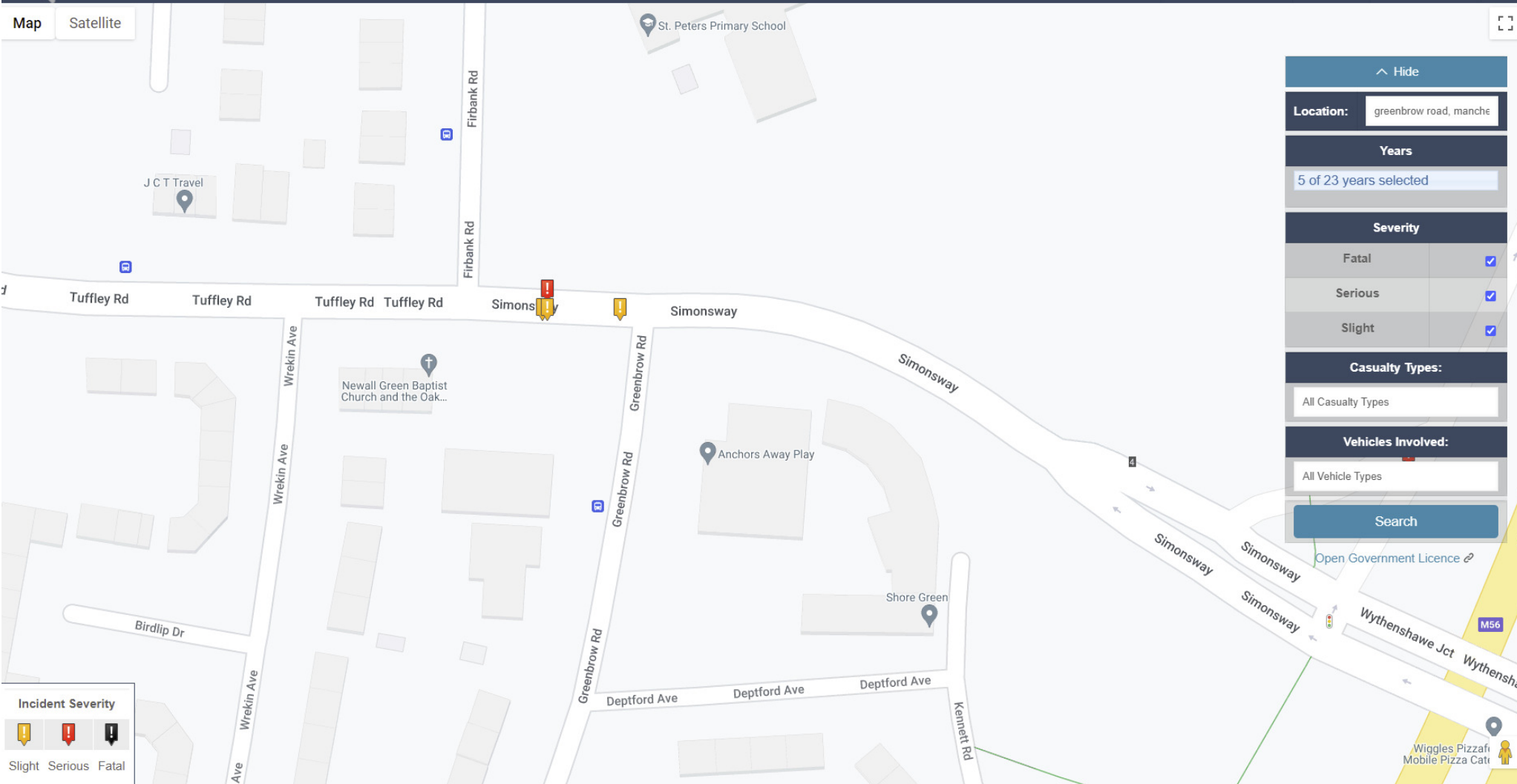
Key:
SC Stagecoach
D Daimond
DG D&G Bus

Source:
www.tfgm.com, www.stagecoachbus.com,

Table 4.1 Bus Services & Frequencies

A Crashmap Accident Records

Map Satellite



Incident Severity

Slight Serious Fatal

Hide

Location: greenbrow road, manche

Years

5 of 23 years selected

Severity

Fatal	☒
Serious	☒
Slight	☒

Casualty Types:

All Casualty Types

Vehicles Involved:

All Vehicle Types

Search

Open Government Licence

B TRICS: Existing Play Centre

Calculation Reference: AUDIT-733101-211029-1027

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : U - PLAY CENTRE
TOTAL VEHICLES

Selected regions and areas:

05 EAST MIDLANDS
LE LEICESTERSHIRE 1 days

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

Primary Filtering selection:

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

Parameter: Site area
Actual Range: 0.19 to 0.19 (units: hect)
Range Selected by User: 0.18 to 1.23 (units: hect)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 07/10/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday 1 days

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

Selected survey types:

Manual count 1 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

E(d) 1 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

50,001 to 100,000 1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 1 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	LE-07-U-01	PLAY CENTRE	LEICESTERSHIRE
	EVINGTON VALLEY ROAD		
	LEICESTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Site area:	0.19 hect	
	Survey date: TUESDAY	04/11/14	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 07 - LEISURE/U - PLAY CENTRE
TOTAL VEHICLES
Calculation factor: 1 hect
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	0.19	15.789	1	0.19	5.263	1	0.19	21.052
10:00 - 11:00	1	0.19	78.947	1	0.19	21.053	1	0.19	100.000
11:00 - 12:00	1	0.19	68.421	1	0.19	57.895	1	0.19	126.316
12:00 - 13:00	1	0.19	47.368	1	0.19	52.632	1	0.19	100.000
13:00 - 14:00	1	0.19	36.842	1	0.19	47.368	1	0.19	84.210
14:00 - 15:00	1	0.19	57.895	1	0.19	47.368	1	0.19	105.263
15:00 - 16:00	1	0.19	73.684	1	0.19	47.368	1	0.19	121.052
16:00 - 17:00	1	0.19	57.895	1	0.19	110.526	1	0.19	168.421
17:00 - 18:00	1	0.19	36.842	1	0.19	31.579	1	0.19	68.421
18:00 - 19:00	1	0.19	5.263	1	0.19	52.632	1	0.19	57.895
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			478.946			473.684			952.630

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	0.19 to 0.19 (units: hect)
Survey date range:	01/01/13 - 07/10/17
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

C TRICS: Proposed Convenience Store

Calculation Reference: AUDIT-733101-211029-1057

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : O - CONVENIENCE STORE
TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 305 to 539 (units: sqm)
Range Selected by User: 300 to 600 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 07/04/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Friday	2 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Neighbourhood Centre (PPS6 Local Centre)	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	4
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This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:
E(a)

4 days

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

Population within 500m Range:
All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
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This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	4 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	4 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	4 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CF-01-O-02 HEOL-Y-DERI CARDIFF RHIWBINA Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 350 sqm Survey date: FRIDAY 07/10/16	CO-OPERATIVE	CARDIFF	Survey Type: MANUAL
2	NY-01-O-03 FOREST ROAD NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 305 sqm Survey date: MONDAY 19/09/16	CO-OPERATIVE	NORTH YORKSHIRE	Survey Type: MANUAL
3	TW-01-O-02 ETHEL TERRACE SUNDERLAND CASTLETOWN Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 330 sqm Survey date: FRIDAY 07/04/17	CO-OPERATIVE	TYNE & WEAR	Survey Type: MANUAL
4	WY-01-O-02 AINSTY ROAD WETHERBY Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 539 sqm Survey date: MONDAY 26/09/16	CO-OPERATIVE	WEST YORKSHIRE	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	3.099	3	398	3.099	3	398	6.198
07:00 - 08:00	4	381	5.184	4	381	4.987	4	381	10.171
08:00 - 09:00	4	381	6.759	4	381	6.890	4	381	13.649
09:00 - 10:00	4	381	4.987	4	381	4.987	4	381	9.974
10:00 - 11:00	4	381	5.052	4	381	5.118	4	381	10.170
11:00 - 12:00	4	381	4.593	4	381	4.856	4	381	9.449
12:00 - 13:00	4	381	4.724	4	381	4.528	4	381	9.252
13:00 - 14:00	4	381	4.987	4	381	4.790	4	381	9.777
14:00 - 15:00	4	381	6.299	4	381	6.234	4	381	12.533
15:00 - 16:00	4	381	6.037	4	381	5.774	4	381	11.811
16:00 - 17:00	4	381	5.840	4	381	5.906	4	381	11.746
17:00 - 18:00	4	381	7.612	4	381	7.874	4	381	15.486
18:00 - 19:00	4	381	7.612	4	381	7.349	4	381	14.961
19:00 - 20:00	4	381	5.315	4	381	5.118	4	381	10.433
20:00 - 21:00	4	381	3.937	4	381	4.331	4	381	8.268
21:00 - 22:00	4	381	2.822	4	381	3.084	4	381	5.906
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			84.859			84.925			169.784

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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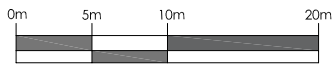
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Parameter summary

Trip rate parameter range selected:	305 - 539 (units: sqm)
Survey date range:	01/01/13 - 07/04/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Drawings



Notes:

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4. Based upon digitised OS plan, accuracy can not be guaranteed until checked with topographical survey

Existing zebra crossing with segregated cycle crossing provision

Shared footway/cycleway

Existing dropped kerbs and tactile paving

Existing bus stop

Introduce dropped kerbs and tactile paving

GREENBROW ROAD

GREENBROW ROAD

DEPTFORD AVENUE

SIMONSWAY

SIMONSWAY

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Project GREENBROW ROAD, WYTHENSHAW

Client SEVA PATIDAR LTD

Drawing No 1777/01

Rev A

Title PROPOSED ACCESS ARRANGEMENTS

Date MAR 2022

Scale 1:500@A4

Key:

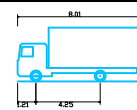
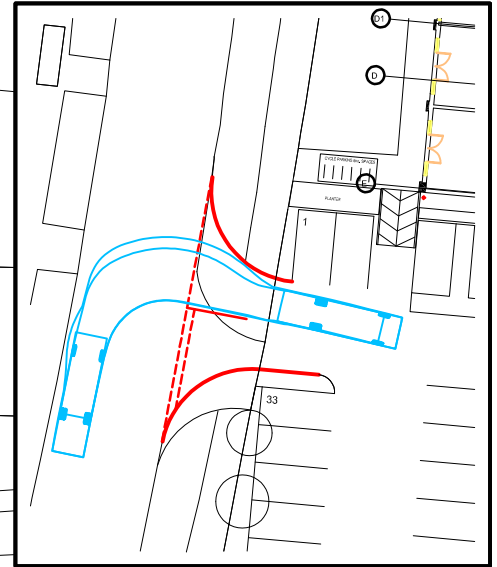
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- Proposed kerbline
- Proposed road markings
- Existing road markings
- Tactile paving



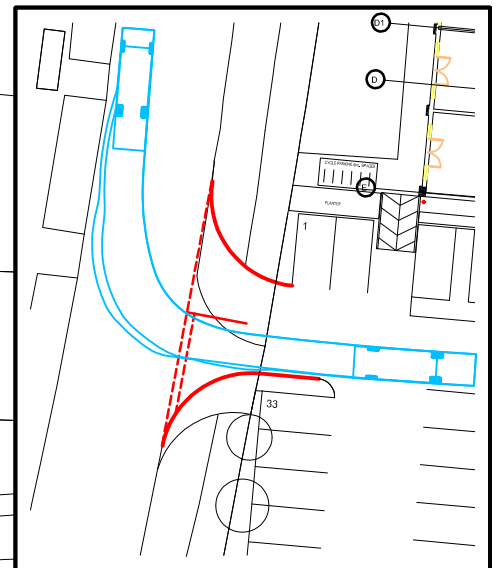
GREENBROW ROAD

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7.5t Box Van
Overall Length 8.010m
Overall Width 2.400m
Overall Body Height 2.856m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.400m



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Project GREENBROW ROAD, WYTHENSHAW

Client SEVA PATIDAR LTD

Drawing No 1777/SP/03

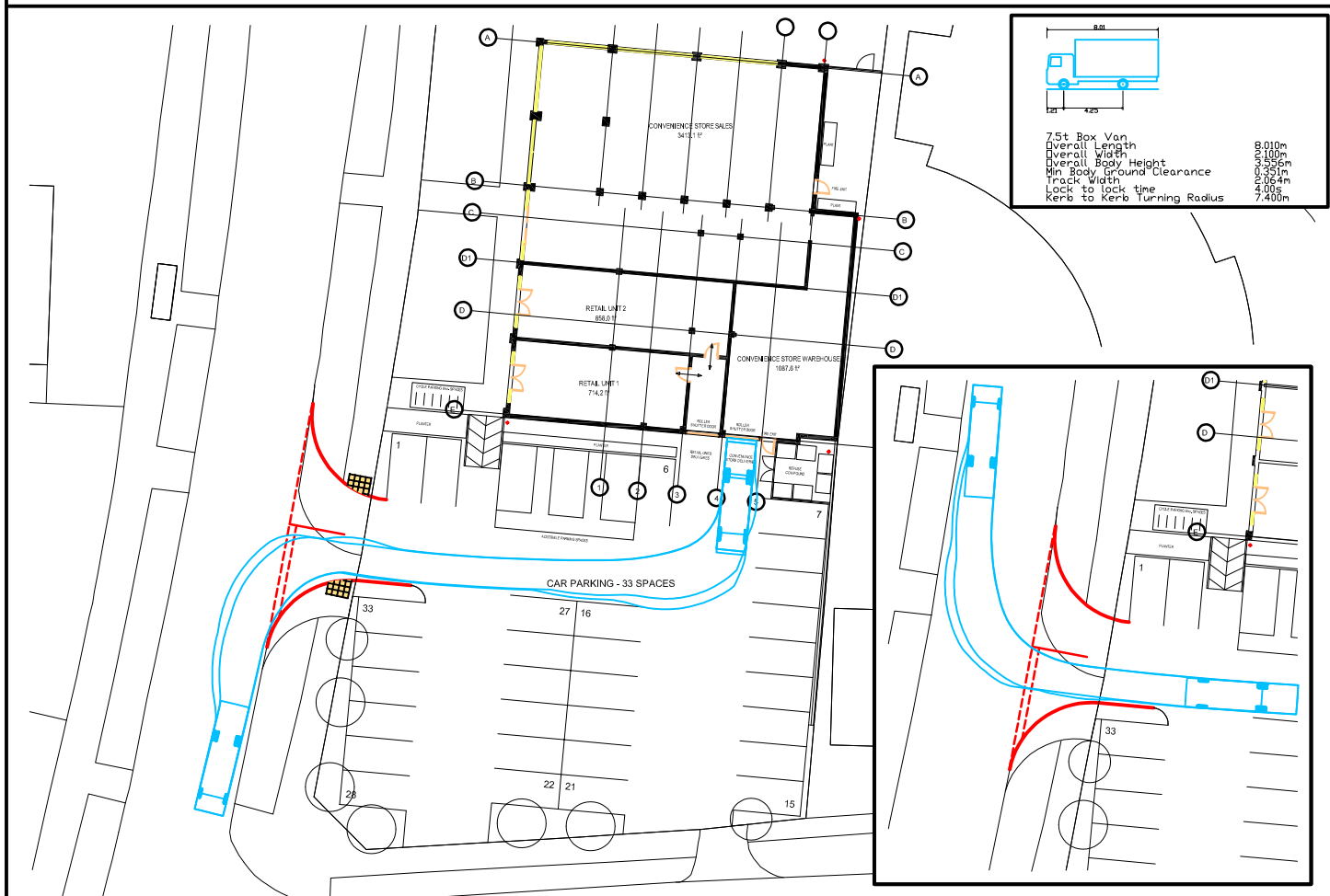
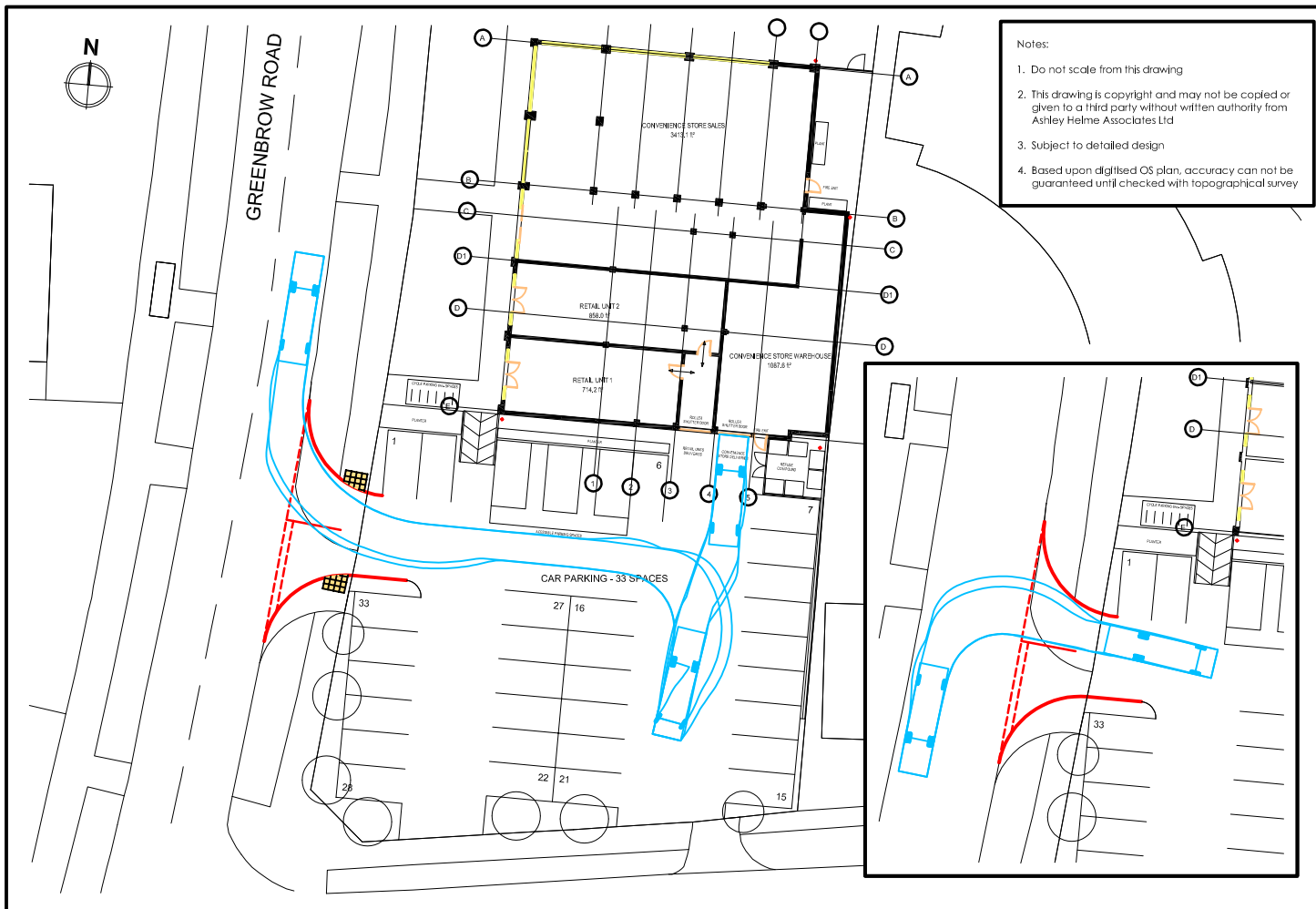
Rev

Title SWEPT PATH ANALYSIS: 7.5t BOX VAN

Date MAR 2022

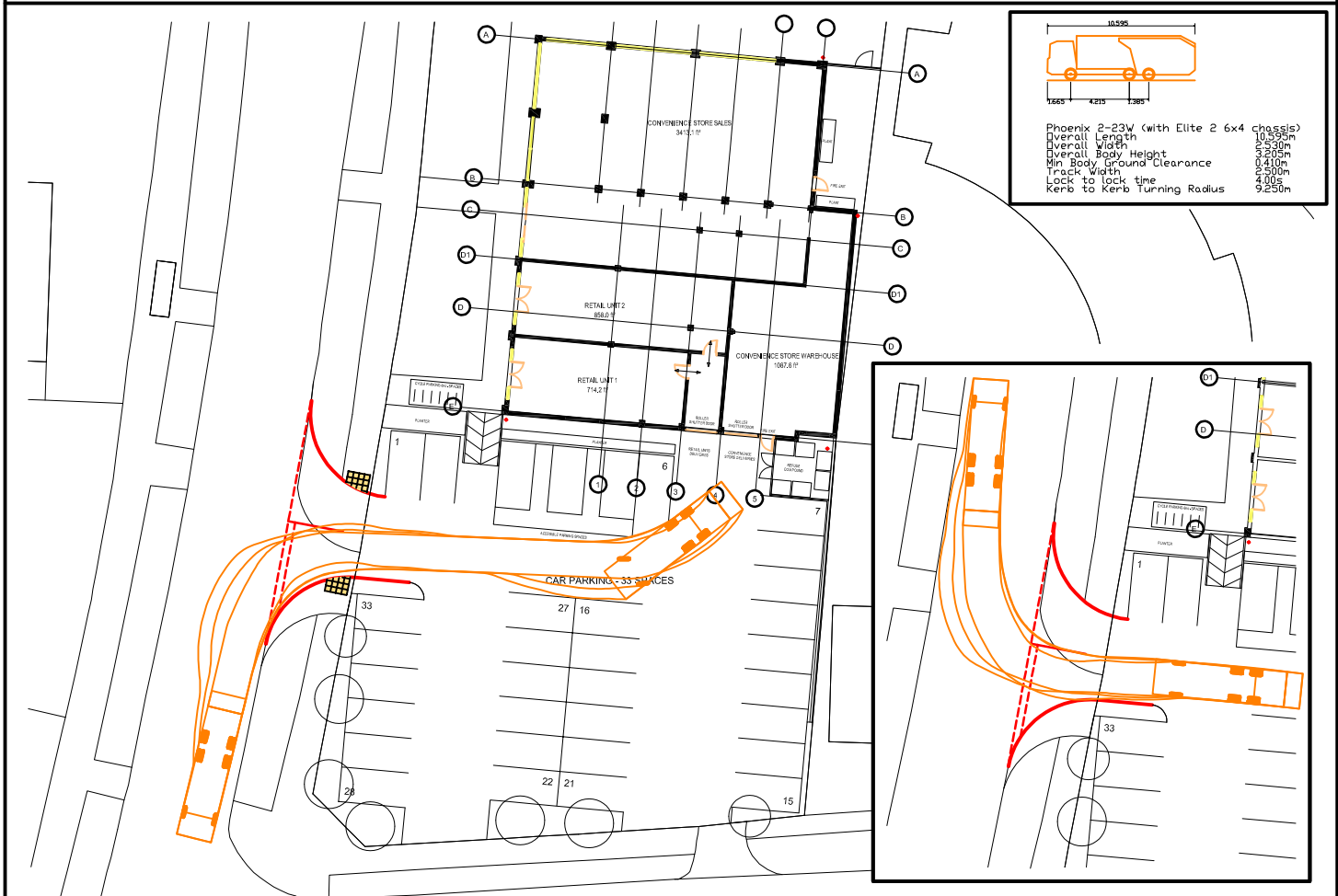
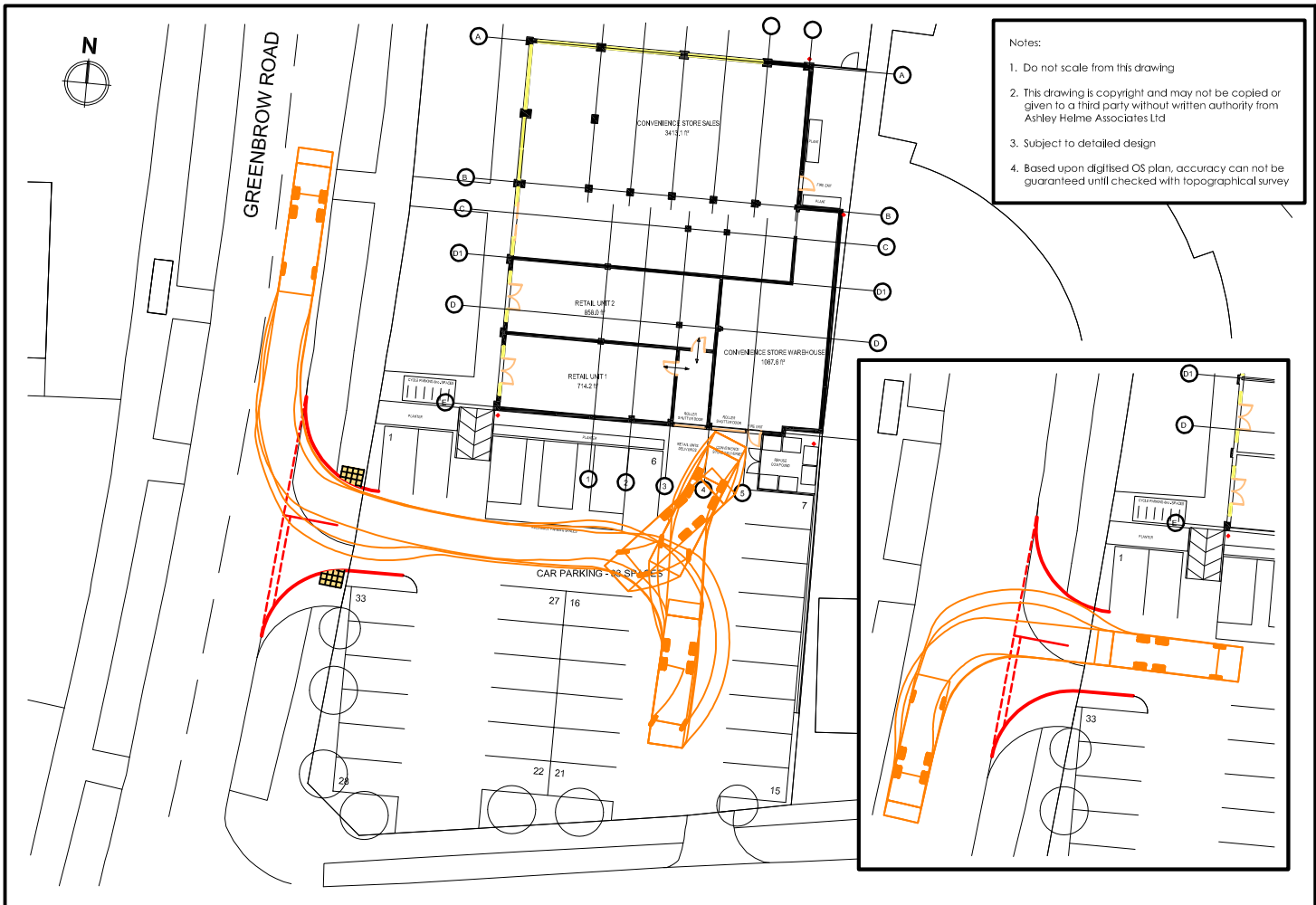
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Project	GREENBROW ROAD, WYTHENSHAW	Client	SEVA PATIDAR LTD	Drawing No	1777/SP/04	Rev	
Title	SWEPT PATH ANALYSIS: 7.5t BOX VAN	Date	MAR 2022	Scale	1:500@A4	 ASHLEY HELME ASSOCIATES	



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Project	GREENBROW ROAD, WYTHENSHAW	Client	SEVA PATIDAR LTD	Drawing No	1777/SP/05	Rev	
Title	SWEPT PATH ANALYSIS: 10.6m REFUSE VEHICLE	Date	MAR 2022	Scale	1:500@A4		