

TRANSPORT STATEMENT

Williams Tarr Construction Limited

Proposed Industrial Extension, Halewood

August 2022

VN222384

Transport Statement

vectos.co.uk

Report control

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Project: Proposed Industrial Extension, Halewood

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1 Introduction

Background

- 1.1 Vectos has been instructed by Williams Tarr Construction Limited to provide highways and transportation advice in relation to an extension of an existing industrial development off Renaissance Way in Halewood.
- 1.2 The site is located within an existing industrial park, located south of the built up area of Halewood, and north of the built up area of Speke. It is currently occupied by the company Seqirus, one of the world's largest influenza vaccine companies. It is one of a number of sites operated by Seqirus within the existing industrial park.
- 1.3 The proposed development seeks to provide an extension (approximately 430sqm) to their existing building for new egg incubator capacity which supports manufacturing for Seqirus. The extension will result in a loss of parking on the site but will not generate significant numbers of additional trip movements.

Pre-Application Discussions

- 1.4 Initial pre-application discussions have been coordinated with Knowsley Council (KC) as the Local Planning and Local Highway Authority.
- 1.5 In a response provided in May 2022, KC has identified that as the site is within an allocated industrial area, the proposed development would be acceptable in principle. The response also noted that there would be no objection in principle with regards to highways and transport given that the development will not generate significant numbers of additional trip movements. A Transport Statement has been requested and KC have confirmed that formal junction capacity assessments would not be required.

Scope of Report

- 1.6 This Transport Statement has been prepared in accordance with guidance provided by the Department for Transport's (DfT) 'Travel Plans, Transport Assessment and Statements' (2014) document, as well as paying due notice to the DfT's now superseded 'Guidance on Transport Assessments' document. Following this introduction, the report provides the following information:
 - **Section 2 Baseline Conditions** – discusses the existing site location, the surrounding highway network and reviews the accident record on the immediate highway network;
 - **Section 3: Accessibility by Sustainable Modes of Travel** – describes the accessibility of the site by foot, cycle, bus and rail;
 - **Section 4: Development Proposals and Trip Impact** – sets out the development proposals, including access and parking, as well as outlining the trip generation of the proposed development; and
 - **Section 5: Summary and Conclusions** – Summarises the findings of the Transport Statement and provides the report conclusions.

2 Baseline Conditions

Development Site and Location

- 2.1 The site is located within a large industrial estate, located to the south of Halewood and north of Speke. The surrounding area to the north/south includes the residential area of Halewood and to the east/west there are a variety of industrial sites relating to medicine, vehicle, train, and bus manufacturing.
- 2.2 The site location in the wider context is shown in **Plan 1** while the site location in the local context is shown in **Plan 2**. An ariel view of the exact site location is shown in **Figure 2.1**.



Figure 2.1: Site Location

- 2.3 The site is currently occupied by the company Seqirus. They focus on egg-based bulk manufacturing within their Liverpool location, which then leads to seasonal influenza vaccines that are distributed across the northern and southern hemispheres.
- 2.4 Seqirus is made up of a number of different sites in the industrial estate and they all operate 24 hours a day. The main locations within the vicinity of the proposed development site are identified in **Figure 2.2**. The proposed development site is identified as Site 6.



Figure 2.2: Seqirus Site Main Unit Locations

- 2.5 The main access to the development site is from North Road/ Renaissance Way. A separate pedestrian only access is provided.
- 2.6 Within the site, car parking and servicing are separated. The service yard is located to the west of the building with car parking located to the east of the building. There is car parking space for 111 vehicles within the site.

Baseline Parking Utilisation Data

- 2.7 A snapshot parking survey has been provided by Seqirus which displays the existing average parking demand on the site.
- 2.8 The data supplied demonstrates the existing capacity and average spaces occupied based on a count in the morning and afternoon period covering four separate weeks commencing 6th June, 13th June, 20th June and 27th June 2022
- 2.9 The data provided by Seqirus also presents parking information for the other three sites within the vicinity. A summary of the data collected is shown below in **Table 2.1** and **Table 2.2**.

Site Number	Parking Capacity	Average No. of Spaces Occupied			
		Week Commencing			
		06/06/22	13/06/22	20/06/22	27/06/22
Site 2	132	13	17	15	19
Site 4	139	139	139	139	139
Site 6	111	80	94	89	75
Site 7	106	33	31	36	28
Total	488	265	281	279	261

Table 2.1: Seqirus Car Park Utilisation Data AM Period

Site Number	Parking Capacity	Average No. of Spaces Occupied			
		Week Commencing			
		06/06/22	13/06/22	20/06/22	27/06/22
Site 2	132	13	23	17	29
Site 4	139	139	139	139	139
Site 6	111	80	106	91	111
Site 7	106	33	40	40	57
Total	488	265	308	287	336

Table 2.2: Seqirus Car Park Utilisation Data PM Period

- 2.10 As seen in **Table 2.1** and in **Table 2.2**, within both the AM and PM period the parking within the site is sufficient for the current demands.
- 2.11 In addition, the assessment of parking across all four sites in the vicinity suggests that there is significant spare capacity when parking for Seqirus is considered as a whole.

Surrounding Highway Network

- 2.12 Renaissance Way/ North Road serves as the main connection between the industrial estate and the wider highway network using the A561. It is subject to a 20mph speed limit and has a width of around 7 metres.
- 2.13 For most of the surrounding roads in the vicinity of the site, and throughout Renaissance Way/ North Road, footways are lit on both sides of the carriageway. There is also a shared foot/cycleway for much of the network within the industrial park, including along the site frontage. Dropped kerbs and tactile paving are provided at junctions.
- 2.14 Further south of the site, approximately 670 metres down is the A561. This is a dual carriageway road and is the main east to west route, providing connection with Speke, Liverpool, Widnes, Runcorn and Warrington.

- 2.15 To the west to the site, approximately 500 metres away is Woodend Avenue which is connected by a priority-controlled junction from Shaw Road. This road is subject to a 30 mph speed limit with central hatching and dedicated right turning facilities at junctions. Woodend Avenue provides the main north-south connection for local destinations such as Speke, Hunts Cross, Halewood, Woolton and Belle Vale. There are footways on both sides of the carriageway with street lighting and crossing refuges at regular intervals.

Accident Data Record

- 2.16 Accident data has been reviewed for the most recent five-year period between 2017 to 2021. **Figure 2.3** below shows the Crashmap search results for the highway network in the immediate vicinity of the site.

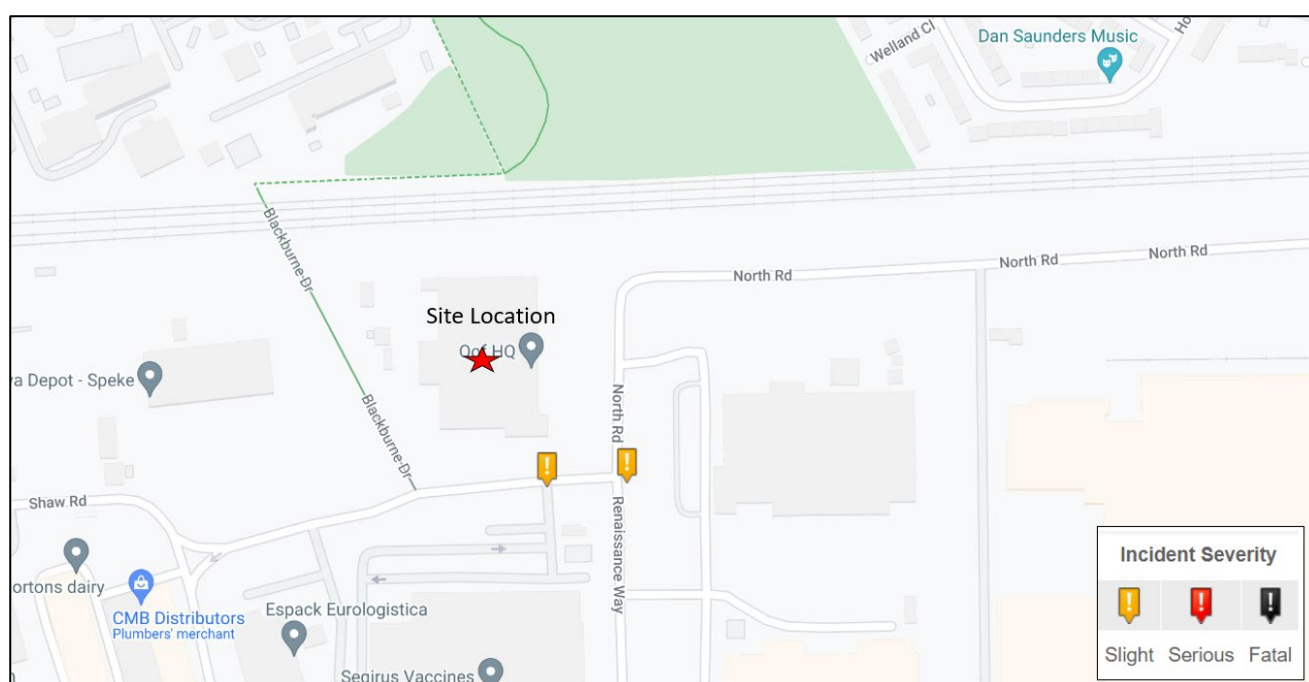


Figure 2.3: Accident Data from Crashmap.co.uk

- 2.17 **Figure 2.3** illustrates that there have been only two accidents classed with the severity of slight within the immediate vicinity of the site within the last 5 years. These accidents were in the year of 2018.
- 2.18 Based on the information available, it is considered that there are no known blackspots or highway design features that might contribute to the occurrence of accidents on the local highway network.

3 Accessibility by Sustainable Travel Modes

Active Travel Accessibility

Walking

- 3.1 The Institution of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot' (2000) contains suggested acceptable walking distances for pedestrians without mobility impairment for some common facilities. The guidelines suggest that an acceptable walking distance for commuting/ school purposes is 1 kilometre, with a preferred maximum distance of 2 kilometres. Walking can also be promoted as part of a multi-modal journey, particularly with public transport.
- 3.2 The more recent CIHT document 'Planning for Walking' (2015) affirms this by stating that 80% of journeys shorter than a mile (approximately 1.6 kilometres) are made wholly on foot.
- 3.3 An analysis of the pedestrian routes in the area has been completed to identify areas situated within 1- and 2-kilometre catchments; this is presented in **Plan 3**. This highlights a number of residential areas to the north and south of the site being within acceptable walking distances.
- 3.4 The site is well located to encourage journeys to be undertaken on foot. The surrounding area is predominantly industrial in nature but with a 20mph speed limit. Pedestrian movements in the vicinity of the site are supported by a network of street lit footways on both sides of the carriageway.
- 3.5 Pedestrian crossings, both controlled and uncontrolled, are provided at key junctions within the local highway network to facilitate movement.
- 3.6 Heading west of the site there is a public foot/cycle path under the name of Blackburne Drive. This includes a bridge over the railway tracks which will allow users connection with the nearby residential areas and to amenities such as Halewood shopping centre.
- 3.7 The bus is also located only a short walking distance away which is useful for multimodal journeys.

Cycling

- 3.8 Cycling is an increasingly popular mode of transport and is an effective mode for short trips. The Department for Transport's (DfT) Local Transport Note 1/20 identifies that many utility cycle journeys are under 3 miles (5 km) although for commuters a trip distance of over 5 miles (8 km) is not uncommon.
- 3.9 **Plan 4** presents an initial 5km catchment which incorporates additional residential areas around Hunts Cross, Woolton, Garston and Hale.
- 3.10 As previously noted, there is good cycle infrastructure surrounding the building as there is a shared cycle path which leads to A561, providing a connection with Hough Green, Appleton and Runcorn.
- 3.11 The foot/cycle path through Blackburne Drive passes over the railway tracks using a bridge. It connects with residential areas in Halewood and further industrial units to the north and northeast.

Shared Travel Accessibility

Bus

- 3.12 The nearest bus stop is located on Woodend Avenue, which is approximately 500 metres from the site. The northbound stop and the southbound stop provide a flagpole stand with a timetable. There is also a bus stop located on the A561 Speke Boulevard in which includes further variety in services.
- 3.13 **Table 3.1** provides a summary of the key bus services that operate on Woodend Avenue and the A561 Speke Boulevard.

Service No.	Route	Approximate Frequency (services per hour)					
		Mon – Fri				Sat	Sun
		AM Peak	Midday	PM Peak	Evening		
3 / 3A	Huyton Industrial Estate - Halewood/Liverpool John Lennon Airport	1	1	1	1	1	-
80 / 80A	Liverpool - Speke Liverpool - John Lennon Airport	2	2	2	-	2	-
81A	Liverpool John Lennon Airport - Bootle	2	2	2	-	2	-
82	Liverpool - Liverpool South Parkway or Speke	7	6	6	3	4	4
89	St Helens - Liverpool John Lennon Airport	3	3	3	3	2	2

Table 3.1: Bus Service Frequency per Hour

Rail

- 3.14 The nearest railway station is at Hunts Cross. This is approximately 1.9 kilometres away which equates to a 22 minute walk or 7 minute cycle time.
- 3.15 Operated by Merseyrail, there are services every 7 to 15 minutes, providing accessibility to locations such as Southport, Liverpool and Manchester. There are designated areas for cyclists on all trains.

4 Development Proposals

Development Scale

- 4.1 The development proposals seek to add an extension of approximately 430sqm (GEA) to the existing industrial unit of 5,250 sqm. It is noted that an additional 357sqm is provided at Level 1 but this is a services distribution zone only. **Plan 5** illustrates the proposed site layout.

Site Access

- 4.2 Vehicle access to the site will be achieved from a priority-controlled junction from Renaissance Way/ North Road. This junction is the current existing site access and will remain unchanged.

Parking

- 4.3 There will be a total of 25 car parking spaces removed from the 111 spaces available for the site in order to fit the new extension to the building.
- 4.4 As previously noted, Seqirus have provided survey data which analyses the current parking situation within the site which highlighted that for the majority of the time, the parking supply is sufficient for the development demand, often with spaces available.
- 4.5 Although the remaining spaces will still generally be sufficient for the development demands, there is a potential for some parking displacement.
- 4.6 Existing parking restrictions mean that this is unlikely to occur on the highway network and therefore there would not be an adverse impact on highway safety.
- 4.7 The Seqirus survey data highlights that there is space available to accommodate any displaced parking at Site 7 which is only a short distance from the site. Additional parking is also available at the other Seqirus sites within the industrial park.

Servicing

- 4.8 There are no proposed changes to the service yard within the site. Vehicles will still be able to enter, turn and exit in forward gear, as per existing operations.

Trip Impact

- 4.9 Seqirus have provided the following information of what the new extension vehicle trip use will include, this is shown below:
- There is no increase in the number of external farm deliveries to the Site 6, with the addition 60,000 eggs will be easily accommodated within the current delivery model.
 - Potential increase of 2 van deliveries per day from Site 6 to Site 4. The existing is currently on 15 deliveries total per day and this therefore meaning that the new schedule could be up to 17 deliveries per day.

- 4.10 The information provided reveals that there could be an increase of 2 additional vehicles due to having 2 extra deliveries per day, which is very low in terms of additional trips and these are unlikely to occur at peak times. This marginal increase will not significantly alter the characteristics of the local highway network in the vicinity of the site.

Sensitivity Analysis

- 4.11 If the site was assessed on the basis that the development was a standard industrial storage unit (i.e B8) purposes with the extension included, a TRICS assessment would help to determine the extra trip generation over and above that already accepted for the existing unit.
- 4.12 Using the TRICS database, the following selections have been interrogated using the Main and Sub Land use of 'Employment/C – Industrial Unit' and a range for sites with similar location and accessibility characteristics. The average trip generation associated with the proposed development is summarised in **Table 4.1**, with full outputs provided in **Appendix A**.

Time Period	Trip Rate (per 100m ²)			Number of Trips * (430m ²)		
	Arr	Dep	2-way	Arr	Dep	2-way
Morning Peak (08:00 -09:00)	0.381	0.064	0.445	2	0	2
Evening Peak (17:00-18:00)	0.048	0.319	0.367	0	1	2

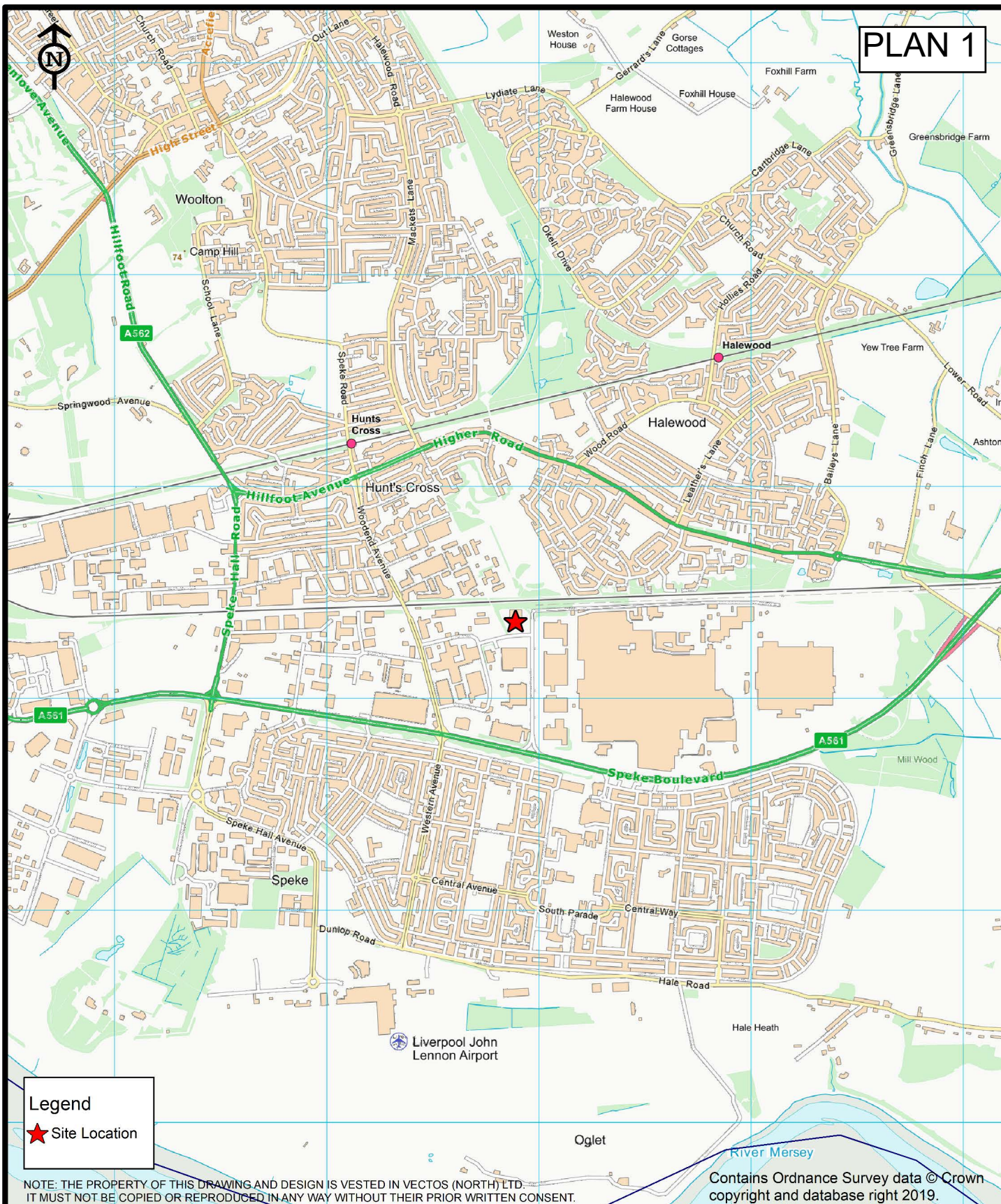
Table 4.1: TRICS Forecast Peak Hour Vehicle Trips

- 4.13 **Table 4.1** indicates that the proposed extension development has the potential to generate 1-2 two-way vehicle trips during the AM and PM peak periods.
- 4.14 Based on the small increase in development trip movements and extent of existing infrastructure in the vicinity, it is considered that the trip movements associated with the sensitivity analysis would not change the characteristics of the local highway network in the vicinity of the site.

5 Summary and Conclusions

- 5.1 Vectos have been commissioned by Williams Tarr Construction Limited to advise on the potential transport matters associated with a proposed industrial extension in Halewood.
- 5.2 The development proposals comprise of an additional extension to an existing industrial unit.
- 5.3 The following conclusions can be drawn from this Transport Assessment:
 - There are no known accident blackspots on the highway network in the vicinity of the site;
 - The proposed development is considered to be accessible for pedestrians, cyclists and public transport users;
 - The site layout, access and servicing arrangements are appropriate and suitable; and
 - The development will experience a low trip generation, and as such will not have an adverse impact upon the safe or efficient operation of the local highway network.
- 5.4 Overall, the information presented leads to the judgement that the proposed development would not result in a severe residual impact on the local highway network and there would be no additional road safety concerns.

Plans



Legend

★ Site Location

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CLIENT:

Williams Tarr Construction Limited

PROJECT TITLE:

Proposed Industrial Extension, Halewood

DRAWING TITLE:

Site Location (Wider Context)

vectos. | PART OF **SLR**

Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 228 1008 e:manchester@vectos.co.uk

DRAWN:

AT

CHECKED:

PW

DATE

August 2022

SCALE:

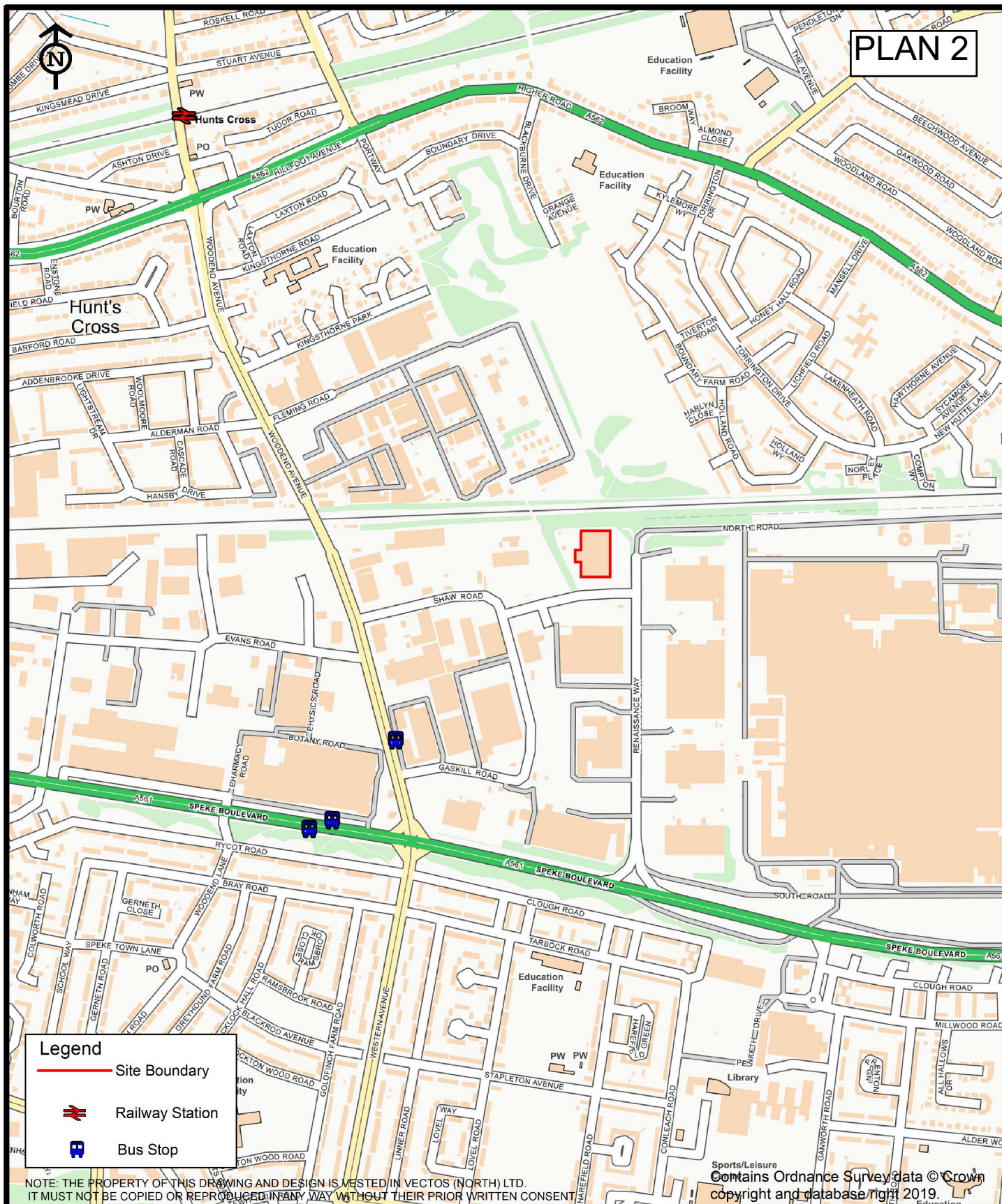
1:25,000 at A4

DRAWING NO:

VN222384-G100

REVISION:

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CLIENT:

Williams Tarr Construction Limited

PROJECT TITLE:

Proposed Industrial Extension, Halewood

DRAWING TITLE:

Site Location (Local Context)

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DRAWN:

AT

CHECKED:

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DATE

August 2022

SCALE:

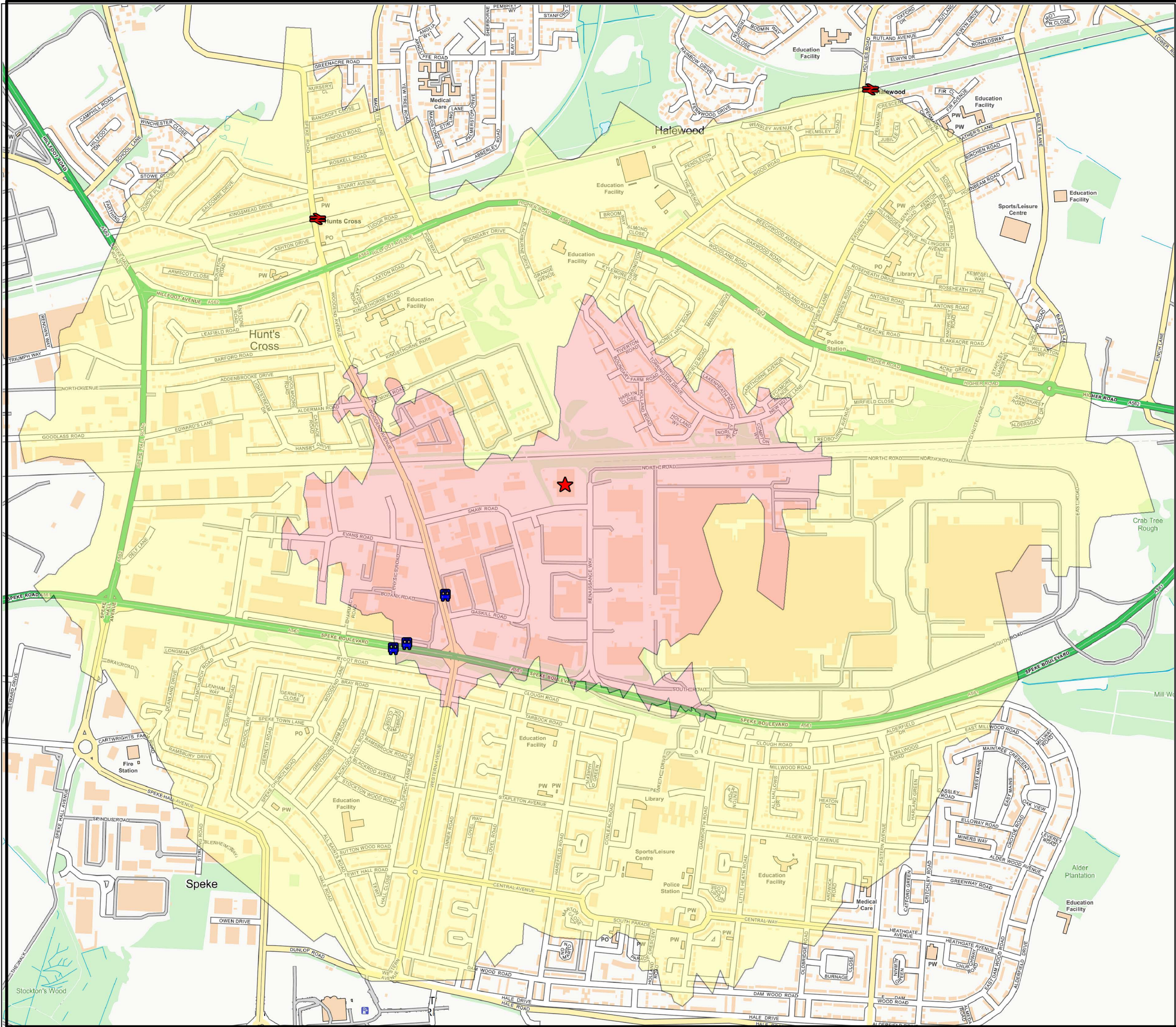
1:10,000 at A4

DRAWING NO:

VN222384-G101

REVISION:

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- Legend
- ★ Site Location
 - 🚉 Railway Station
 - 🚌 Bus Stop
- Walking Catchment
- 0 - 1 km
 - 1 km - 2 km

PLAN 3

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Williams Tarr Construction Limited

PROJECT TITLE:
Proposed Industrial Extension, Halewood

DRAWING TITLE:
Walking Catchment

SCALE:
N.T.S

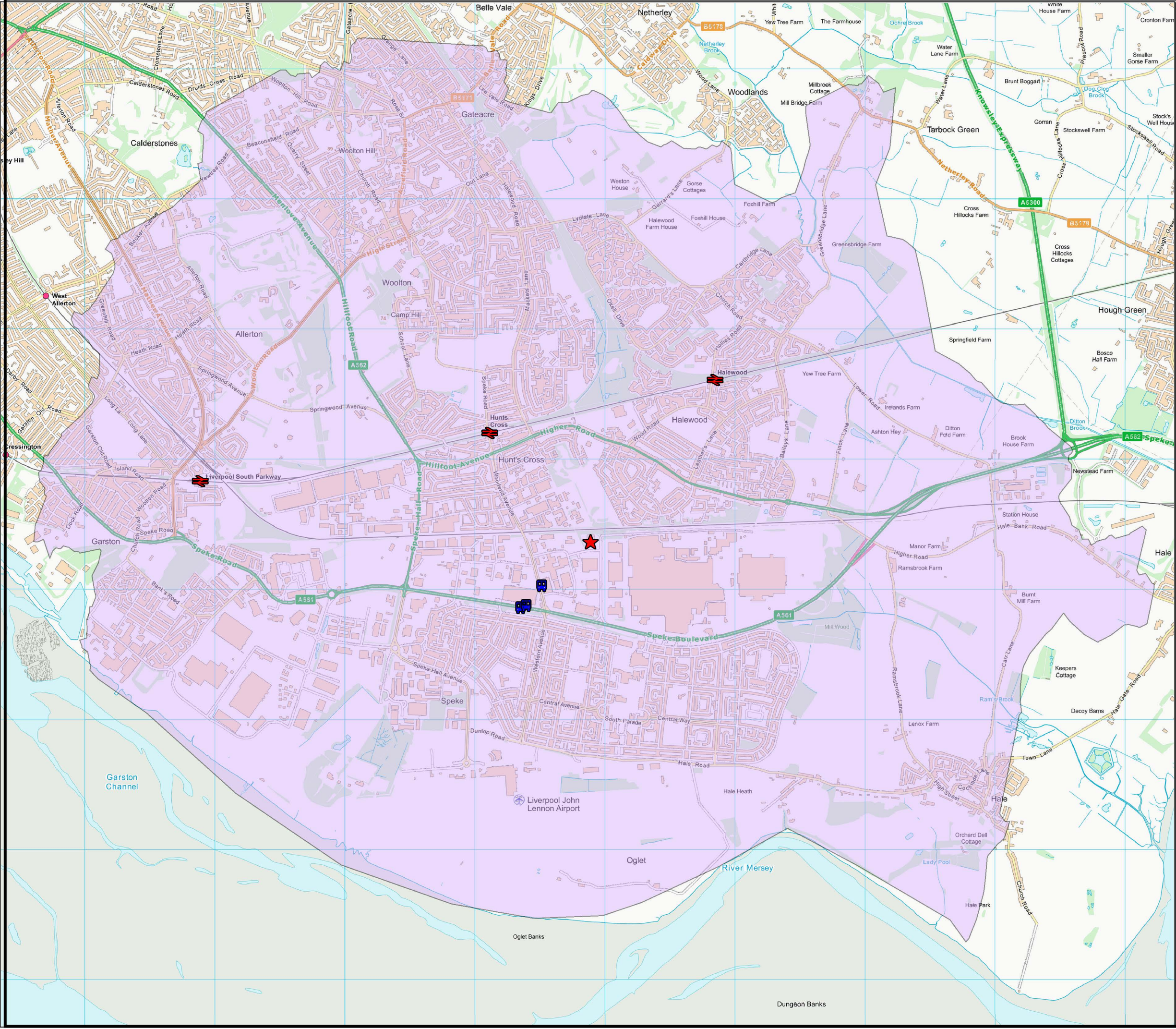
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REVISION:



PLAN 4

Legend

★

Site Location

🚉

Railway Station

🚌

Bus Stop

CyclingCatchment

0 - 5 km

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PROJECT TITLE:

Proposed Industrial Extension,
Halewood

DRAWING TITLE:

Cycling Catchment

SCALE:

N.T.S

DRAWN:

AT

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PW

DATE:

August 2022

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VN222384-G103

REVISION:

General Notes

Do not scale from this drawing. Only work to written dimensions.

All site dimensions shall be verified by the Contractor on site prior to commencing any works.

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LEGEND

Planning Application Boundary



P3	Building position adjusted to align with existing columns and incubators	2022.10.12	NP	RCT
P2	Revised as per comments	2022.09.14	NP	RCT
P1	Issued for Planning	2022.09.09	NP	RCT
Rev.	Description	Date	ISS	APP

Scale: 1 : 500 @ A1
Status: S2 Information
Drawn By: NP
Checked By: RCT
Date: 2022.09.09

Client: Seqirus
Project: Seqirus Site 6 - Incubator Extension

Sheet Name: Proposed Site Plan

Appendix A

Calculation Reference: AUDIT-715001-220805-0843

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	LC LANCASHIRE	1 days
09	NORTH	
	CB CUMBRIA	2 days
11	SCOTLAND	
	SR STIRLING	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: 260 to 9216 (units: sqm)
 Range Selected by User: 150 to 14000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 22/11/21

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
Tuesday	2 days
Wednesday	2 days
Thursday	3 days
Friday	1 days

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

Selected survey types:

Manual count	10 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:

Edge of Town	10
--------------	----

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:

Industrial Zone	9
Development 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:

Not Known 10 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®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	4 days
10,001 to 15,000	2 days
20,001 to 25,000	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
50,001 to 75,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	3 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	2 days
1.1 to 1.5	8 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 10 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 10 days

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

LIST OF SITES relevant to selection parameters

1	BR-02-C-02	STAINLESS FITTINGS	BRISTOL CITY
	SOUTH LIBERTY LANE		
	BRISTOL		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1475 sqm	
	Survey date: TUESDAY	22/09/15	Survey Type: MANUAL
2	CB-02-C-01	DOMINO'S PIZZA	CUMBRIA
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
3	CB-02-C-02	STEEL FABRICATION	CUMBRIA
	BLACKDYKE ROAD		
	CARLISLE		
	KINGSTOWN IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	715 sqm	
	Survey date: FRIDAY	15/10/21	Survey Type: MANUAL
4	CH-02-C-02	INDUSTRIAL MATERIALS	CHESHIRE
	JUPITER DRIVE		
	CHESTER		
	CHESTER W. EMP. PARK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	8100 sqm	
	Survey date: WEDNESDAY	19/11/14	Survey Type: MANUAL
5	CH-02-C-03	OFFICE FURNITURE	CHESHIRE
	BRUNEL ROAD		
	MACCLESFIELD		
	LYME GREEN BUS. PARK		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	6658 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
6	HC-02-C-01	ENGINEERING COMPANY	HAMPSHIRE
	JAYS CLOSE		
	BASINGSTOKE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3000 sqm	
	Survey date: THURSDAY	16/06/16	Survey Type: MANUAL
7	LC-02-C-04	POWDER COATINGS	LANCASHIRE
	CHORLEY ROAD		
	BLACKPOOL		
	LITTLE CARLETON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1010 sqm	
	Survey date: THURSDAY	20/06/19	Survey Type: MANUAL
8	NF-02-C-03	SHEET METAL CONTRACTOR	NORFOLK
	ELVIN WAY		
	NORWICH		
	HELLESDON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	260 sqm	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SR-02-C-01	SPECIALIST MODEL MAKING	STIRLING
	BORROWMEADOW ROAD		
	STIRLING		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2350 sqm	
	Survey date: MONDAY	16/06/14	Survey Type: MANUAL
10	WK-02-C-01	MACHINE ENGINEERING	WARWICKSHIRE
	CASTLE MOUND WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	9216 sqm	
	Survey date: WEDNESDAY	10/11/21	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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BD-02-C-01	Survey Undertaken during covid-19
CH-02-C-04	Survey Undertaken during covid-19
GS-02-C-02	Survey Undertaken during covid-19
LC-02-C-05	Survey undertaken during covid-19
VG-02-C-01	Survey undertaken during covid-19

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

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	2	6083	0.099	2	6083	0.000	2	6083	0.099
06:00 - 07:00	3	4839	0.076	3	4839	0.007	3	4839	0.083
07:00 - 08:00	10	3573	0.411	10	3573	0.056	10	3573	0.467
08:00 - 09:00	10	3573	0.381	10	3573	0.064	10	3573	0.445
09:00 - 10:00	10	3573	0.213	10	3573	0.123	10	3573	0.336
10:00 - 11:00	10	3573	0.179	10	3573	0.143	10	3573	0.322
11:00 - 12:00	10	3573	0.084	10	3573	0.118	10	3573	0.202
12:00 - 13:00	10	3573	0.151	10	3573	0.174	10	3573	0.325
13:00 - 14:00	10	3573	0.185	10	3573	0.224	10	3573	0.409
14:00 - 15:00	10	3573	0.101	10	3573	0.132	10	3573	0.233
15:00 - 16:00	10	3573	0.067	10	3573	0.185	10	3573	0.252
16:00 - 17:00	10	3573	0.059	10	3573	0.305	10	3573	0.364
17:00 - 18:00	10	3573	0.048	10	3573	0.319	10	3573	0.367
18:00 - 19:00	10	3573	0.036	10	3573	0.168	10	3573	0.204
19:00 - 20:00	2	6083	0.049	2	6083	0.049	2	6083	0.098
20:00 - 21:00	2	6083	0.025	2	6083	0.033	2	6083	0.058
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.164			2.100			4.264	

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:	260 - 9216 (units: sqm)
Survey date range:	01/01/14 - 22/11/21
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

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.

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Appendix A

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