



meraki alliance

Highways, Transportation & Safety Consulting

Northern Trust – Sandbrook Park Phase 2, Rochdale

Transport Statement

Meraki Alliance Ltd

Unit 1 Waterside

Old Boston Road

Wetherby

LS22 5NB

[Tel:+44](tel:+441617966296302) (0) 7966296302



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Transport Statement

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Northern Trust – Sandbrook Park Phase 2, Rochdale

Transport Statement

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1 Introduction

1.1 Overview

- 1.1.1 Meraki Alliance has been commissioned by Northern Trust to prepare a Transport Statement (TS) to support a planning application for provision of 16,614sqft (1544sqm) of new build B2/B8 industrial units within the existing Sandbrook Business Park located in the Rochdale. The planning and highways authority is Rochdale Borough Council (RBC).
- 1.1.2 Sandbrook Business Park is located within a mixed commercial and residential area, immediately north-east of Sandbrook Park Shopping Centre and c.1.9km south-west of Rochdale Train Station. It has been active for a number of years and is accessed via a purpose built network of roads, including Sandbrook Way, and junctions which were built to provide access to the existing development and other future development within the area.
- 1.1.3 Sandbrook Way meets with the A664 Rochdale Bypass and the A627(M) at a signal controlled junction to the south-west of the industrial estate. The A664 Rochdale Bypass provides a route into Rochdale and onto the A58 Manchester Road which [provides a direct route into Manchester city centre. The A627(M) provides a route into Oldham town centre and onto the M62 Motorway.
- 1.1.4 As shown on the site layouts attached at **Appendix 1** the development is proposed over a 5.4h site and the 1544sqm of industrial development will be split over four blocks (A to D) each containing a mix of B2/B8 industrial units.
- 1.1.5 The development site will be accessed via two purpose built priority junctions taken from Sandbrook Way, the first serving blocks A and B and the second serving blocks C and D.
- 1.1.6 Blocks A and B, which contain a total of seven B2/B8 units (three in block A and four in block B) and will have a total GFA of 920sqm which will be supported by provision of 25 car parking spaces, three of which will be marked for disabled use. A cycle shelter will also be provided down the side of Block A and an area for motorcycle parking is also proposed to the rear of block B.
- 1.1.7 Blocks C and D, will be single hybrid units and will have a total GFA of 624sqm will be supported by provision of 25 car parking spaces, two of which will be marked for disabled use. A cycle shelter will also be provided in front of Block D.

- 1.1.8 Swept path analyses has been undertaken in both areas of the site to demonstrate that a large car can successfully manoeuvre the parking spaces, a 3.5tonne panel van can successfully manoeuvre the individual units service areas and a refuse vehicle can successfully manoeuvre the two areas of the site. A copy of the drawings are attached at **Appendix 2**.
- 1.1.9 The speed limit on Sandbrook Way, from which the site is accessed, is 30mph and as such, as per the guidance set out within the Manual for Street, a visibility splay of 2.4x43m is recommended at the site access points. However, given the proposals are industrial use, we have applied the guidance set out within the Design Manual for Road and Bridges, which recommend a visibility splay of 2.4m x 90m at the site access points. As demonstrated on the drawing attached at **Appendix 3**, the alignment and location of the proposed and existing access roads determine the level of visibility achievable at the proposed site access points as there is a 90degree bend to the right and a dead end to the left. As such, the visibility demonstrated is fit for purpose.
- 1.1.10 The development benefits from segregated pedestrian walkways around the individual units and on both sides of the site access points, which link into the footways provided on both sides of the Sandbrook Way.
- 1.1.11 This TS demonstrates that the site is in a location which offers employees and visitors sustainable travel options when accessing the site, can be safely and appropriately accessed and that the traffic generated by the development has a negligible impact upon the surrounding transport networks.

2 Policy

2.1 Introduction

- 2.1.1 Relevant transport policies and guidance have been reviewed at both a national and a local level to assist in this assessment and in the shaping of the new development. These are reviewed in turn below.

2.2 National Planning Policy Framework – July 2021

- 2.2.1 The revised NPPF was published in July 2021 and represents the Government's latest approach to planning policy.

- 2.2.2 The NPPF states that:

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- a) the potential impacts of development on transport networks can be addressed;
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.

The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

2.2.3 The NPPF also states that when considering development proposals:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that.

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- b) safe and suitable access to the site can be achieved for all users;
- c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and
- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

2.2.4 It also sets out that:

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

2.2.5 It also states that:

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

2.3 Rochdale Borough Transport Strategy

2.3.1 The Rochdale Borough Transport Strategy is a framework to guide the development of transport improvements across the borough for the period up to 2026. It identifies priority schemes and projects that are deliverable, but their timing is dependent on the availability of resources. It's a fluid document that will be used to lobby for transport improvements and support bids for transport funding and the action plan can be adjusted in line with resource availability.

2.3.2 The strategy was initially published in June 2010, but due to its success, key short term schemes being sought in the action plan have been constructed have a financial commitment, therefore a refreshed strategy has been published in March 2014. It brings forward an updated action plan and updated transport policies strengthening the emphasis on delivering economic growth.

2.3.3 The Transport Strategy aims to deliver a transport vision that: "By 2026, Rochdale Borough will have a safe, affordable, sustainable, reliable, accessible and integrated transport network that offers travel choice for all, serves its communities, tackles air quality and climate change, enhances social inclusion, public health and supports the regeneration and economic growth of the local area."

2.3.4 The strategy is critical in enabling the council and its partners to achieve its economic, social, regeneration and environmental objectives. It will primarily support, guide and be developed further through the Greater Manchester Transport Fund, future Greater Manchester Local Transport Plans and the Local Development Framework (LDF). It will also support the delivery of other corporate strategies and programmes, including the Sustainable Communities Strategy, the Borough Renaissance Masterplan and the borough's Economic Development, Infrastructure and Investment and Health Strategies. It will also contribute to the delivery of the Greater Manchester Strategy transport priorities and consider the travel impacts of building new schools and the

"Healthy Futures" re-organisation of specialist hospital services across Greater Manchester. The Transport Strategy is also a key document in lobbying for further improvements to the local public transport network.

2.4 Greater Manchester Transport Strategy – January 2021

2.4.1 Our vision is for Greater Manchester to have 'World class connections that support long-term, sustainable economic growth and access to opportunity for all'. Our approach to achieving this was set out in the Greater Manchester Transport Strategy 2040: Our Vision. The four key elements of our Vision, which represent the goals of our Strategy, are set out below.

- Supporting sustainable economic growth.
- Protecting our environment.
- Improving quality for all.
- Developing an innovation city region.

2.4.2 Our GM Transport Strategy 2040 focuses principally on creating an integrated, well-co-ordinated transport system which supports a wide range of different travel needs. The Strategy supports our city-region's long-term environmental ambition for carbon neutrality by 2038 and the Greater Manchester Clean Air Plan, which aims to bring NO2 emissions within legal limits as quickly as possible. It highlights our intention to make best use of powers included in the Bus Services Act (as well as our existing powers) to give effect to our Vision for Bus and provides an overview of our plans to establish Greater Manchester as a modern, pedestrian and cycle-friendly city-region, including through the Bee Network. However, there are some modal principles which cut across the entire strategy and define our specific aspirations for bus, rail, Metrolink, active travel and highways.

2.4.3 Our Greater Manchester-wide priorities and principles, which apply across the whole of the transport strategy, are summarised below.

- Fully integrated, high capacity public transport system to support a rapidly growing City Region Providing appropriate, well designed, permeable and direct routes for all modes of transport, so that new developments clearly link to existing routes for the convenience of all users;

- A reliable and resilient multi-modal highway network that supports efficient movement of people and goods to, from and across Greater Manchester;
- A comprehensive network of on-and off-road walking and cycling routes to key local destinations and for leisure.

2.5 Section Summary

- 2.5.1 One of the key aims of local policy is to focus on the accessibility of a site by modes other than the private car to ensure that new development is located where a range of transport modes can access it. The development of sites which offer alternatives to the use of the private car should be encouraged.
- 2.5.2 The site is ideally located to assist in delivering these aims and aspirations and has potential, through the implementation of the site Travel Plan to deliver a highly sustainable development in transport terms.
- 2.5.3 It can therefore be concluded that the development proposals fully conform to the main aims and aspirations of the wider and economic objectives of national and local policy.

3 Existing Sustainable Transport Provision

3.1 Introduction

- 3.1.1 As identified in Section 1.2 above, the Government's objectives are to ensure that developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised.
- 3.1.2 Travel by non-car modes is encouraged at the site and as outlined in Section 1.0, the development benefits from secure covered cycle parking and segregated pedestrian footways which link into the footways provided on both sides of the Sandbrook Way.
- 3.1.3 This section outlines the existing walking, cycling and public transport facilities within the vicinity of the development site and describes the accessibility of the site in terms of its proximity residential developments.

3.2 Walking and Cycling

- 3.2.1 Walking is recognised as the most important mode of travel at a local level and it offers the greatest potential to replace short car trips, particularly those trips under two kilometres. The 2.0 kilometre walking catchment area from the centre of the site include numerous residential settlements and the facilities associated with a town centre including Sandbrook Park Shopping Centre and Rochdale Train Station, thus providing the opportunity for potential employees to walk to work and access local facilities.
- 3.2.2 The development benefits from segregated pedestrian walkways around the individual units and on both sides of the site access points, which link into the footways provided on both sides of the Sandbrook Way.
- 3.2.3 Cycling also has the potential to substitute for short car trips, particularly those that are less than five kilometres. As such, all areas and facilities within a reasonable walking distance can also be considered to be within a reasonable cycling distance. In addition, the 5.0 kilometre cycling catchment area from the centre of the site includes a vast area of residential settlements and the facilities associated with a town centre which provides the opportunity for potential employees to cycle to and from work and access local facilities. In addition, Rochdale Interchange is also within the 5.0km cycling catchment area.
- 3.2.4 Two secure covered cycle parking shelters will be provided on site, one at the side of block A and one in front of block D.

3.3 Public Transport

- 3.3.1 There is a bus stop located at Sandbrook Park Shopping Centre located on Sandbrook Way c.600m walking distance from the centre of the site, however services from this location are limited. The nearest bus stops regularly served are located on Manchester Road c.800m from the site. These bus stops are served by bus numbers 17, 17A, 471, 880 providing regular services between the site and Rochdale as well as the surrounding towns and villages.
- 3.3.2 Furthermore, Rochdale Train Station is located within the 2.0km walking catchment, 1.9km walking distance from the site and Rochdale Interchange is located within the 5.0km cycling catchment, 3.6km cycling distance from the site. As such, there are a wealth of additional rail and bus services available for employees to utilise.

3.4 Summary

- 3.4.1 The site is within a reasonable walking and cycling distance of residential developments, as such there are lots of potential employees who live within walking and cycling distance of the site. In addition, there are local facilities within walking cycling distance which could be utilised by employees, including Sandbrook Park Shopping Centre.
- 3.4.2 Secure, covered cycle parking is provided on site as well as lockers and changing / shower facilities within the individual units.
- 3.4.3 There are bus stops located within a reasonable walking distance of the site providing regular services between the site and Rochdale and the surrounding towns and villages. In addition, Rochdale Train Station is within the 2.0km walking catchment and Rochdale Interchange is within the 5.0km cycling catchment. Thus, providing a sustainable transport option for employees living locally or further afield.
- 3.4.4 In summary it is considered that the site is in a sustainable location with a host of facilities available for employees to utilise should they wish, both on and off site.

4 Highways Impact

- 4.1.1 In accordance with the government's Guidance on Transport Assessment, the trip generation of the development has been assessed in order to consider impact and access to the site by a range of modes.
- 4.1.2 Total vehicle rates obtained from the TRICs database for 'Employment – Industrial Unit' have been utilised to determine the potential trip generation of the proposed development, based on the total 1,544sqm proposed. The total vehicle trip rates derived are summarised in **Table 4.1** and a copy of the TRICs outputs are attached at **Appendix 4**.

Table 3.1: Total Vehicle Trip Rates and Generation

Period	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Trip Rates (per 100sq2m)	0.702	0.152	0.054	0.609
Trip Generation	11	2	1	9

- 4.1.3 In order to derive the trip generation by mode, journey to work mode split data for the **Rochdale 015 Middle Super Output Area (MSOA)**, in which the development site is situated has been obtained from the National Statistics website. A copy of the mode split data is attached at **Appendix 5** and a summary is provided in **Table 4.2**.

Table 4.2: National Statistics Mode Split Data for Rochdale 015 MSOA

Mode	Percentage
Pedestrian	17.2%
Bicycle	0.5%
Motorcycle	0.2%
Car Driver	58.2%
Car Passenger	9.1%
Bus	8.8%
Train	6.0%
Total	100%

- 4.1.4 Using the modal split data in **Table 4.2** and the total vehicle trips in **Table 4.1**, the morning and evening peak hour trips for each mode have been calculated and are shown in **Table 4.3**.

Table 4.3: Trip Generation by Mode

Period	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Pedestrian	3	1	1	3
Bicycle	0	0	0	0
Motorcycle	0	0	0	0
Car Driver	11	2	1	9
Car Passenger	2	0	0	1
Bus	2	0	0	1
Train	1	0	0	1
Total	19	3	2	15

- 4.1.5 The development is forecast to generated circa 13 two-way vehicular trips during the AM Peak hour on the highway network and ten two-way vehicular trips during the PM Peak hour. This equates to an increase in traffic flows on the local highway network of approximately one vehicle every five minutes during the AM peak hour and one every six minutes during the AM and PM Peak hour. The proposals would also generate vehicular flows throughout the day when the highway network is not at its peak.
- 4.1.6 As the roads serving the development were purpose built to serve the existing development and any future developments it is concluded that the highway network immediately surrounding the sites is more than adequate to serve the proposed development.
- 4.1.7 Furthermore, taking account of daily fluctuations in traffic flows it is considered that the vehicular trips forecast to be generated by the proposals will not have a negligible impact on the local highway network.

5 Summary and Conclusions

- 5.1.1 Meraki Alliance has been commissioned by Northern Trust to prepare a Transport Statement (TS) to support a planning application for provision of 16,614sqft (1544sqm) of new build B2/B8 industrial units within the existing Sandbrook Business Park located in the Rochdale. The planning and highways authority is Rochdale Borough Council (RBC).
- 5.1.2 Sandbrook Business Park is located within a mixed commercial and residential area, immediately north-east of Sandbrook Park Shopping Centre and c.1.9km south-west of Rochdale Train Station. It has been active for a number of years and is accessed via a purpose built network of roads, including Sandbrook Way, and junctions which were built to provide access to the existing development and other future development within the area.
- 5.1.3 Sandbrook Way meets with the A664 Rochdale Bypass and the A627(M) at a signal controlled junction to the south-west of the industrial estate. The A664 Rochdale Bypass provides a route into Rochdale and onto the A58 Manchester Road which [provides a direct route into Manchester city centre. The A627(M) provides a route into Oldham town centre and onto the M62 Motorway.
- 5.1.4 The development is proposed over a 5.4h site and the 1544sqm of industrial development will be split over four blocks (A to D) each containing a mix of B2/B8 industrial units.
- 5.1.5 The development site will be accessed via two purpose built priority junctions taken from Sandbrook Way, the first serving blocks A and B and the second serving blocks C and D.
- 5.1.6 Blocks A and B, which contain a total of seven B2/B8 units (three in block A and four in block B) and will have a total GFA of 920sqm which will be supported by provision of 25 car parking spaces, three of which will be marked for disabled use. A cycle shelter will also be provided down the side of Block A and an area for motorcycle parking is also proposed to the rear of block B.
- 5.1.7 Blocks C and D, will be single hybrid units and will have a total GFA of 624sqm will be supported by provision of 25 car parking spaces, two of which will be marked for disabled use. A cycle shelter will also be provided in front of Block D.

- 5.1.8 It is concluded that the development fully conforms to the main aims and aspirations of the wider and economic objectives of national and local policy.
- 5.1.9 This TS has shown that the proposals include safe means of access for all road users, adequate parking provision and manoeuvring space.
- 5.1.10 This TS demonstrates that the site is in a location which offers employees sustainable travel options when accessing the site and it can be safely and appropriately accessed.
- 5.1.11 The development is forecast to generated circa 13 two-way vehicular trips during the AM Peak hour on the highway network and ten two-way vehicular trips during the PM Peak hour. This equates to an increase in traffic flows on the local highway network of approximately one vehicle every five minutes during the AM peak hour and one every six minutes during the AM and PM Peak hour. The proposals would also generate vehicular flows throughout the day when the highway network is not at its peak.
- 5.1.12 As the roads serving the development were purpose built to serve the existing development and any future developments it is concluded that the highway network immediately surrounding the sites is more than adequate to serve the proposed development.
- 5.1.13 Furthermore, taking account of daily fluctuations in traffic flows it is considered that the vehicular trips forecast to be generated by the proposals will not have a negligible impact on the local highway network.
- 5.1.14 Overall, it is considered that the site is a suitable location for the development and there are no highways or transport concerns.

Appendix 1 – Proposed Site Layouts

Appendix 2 – Swept Path Analyses



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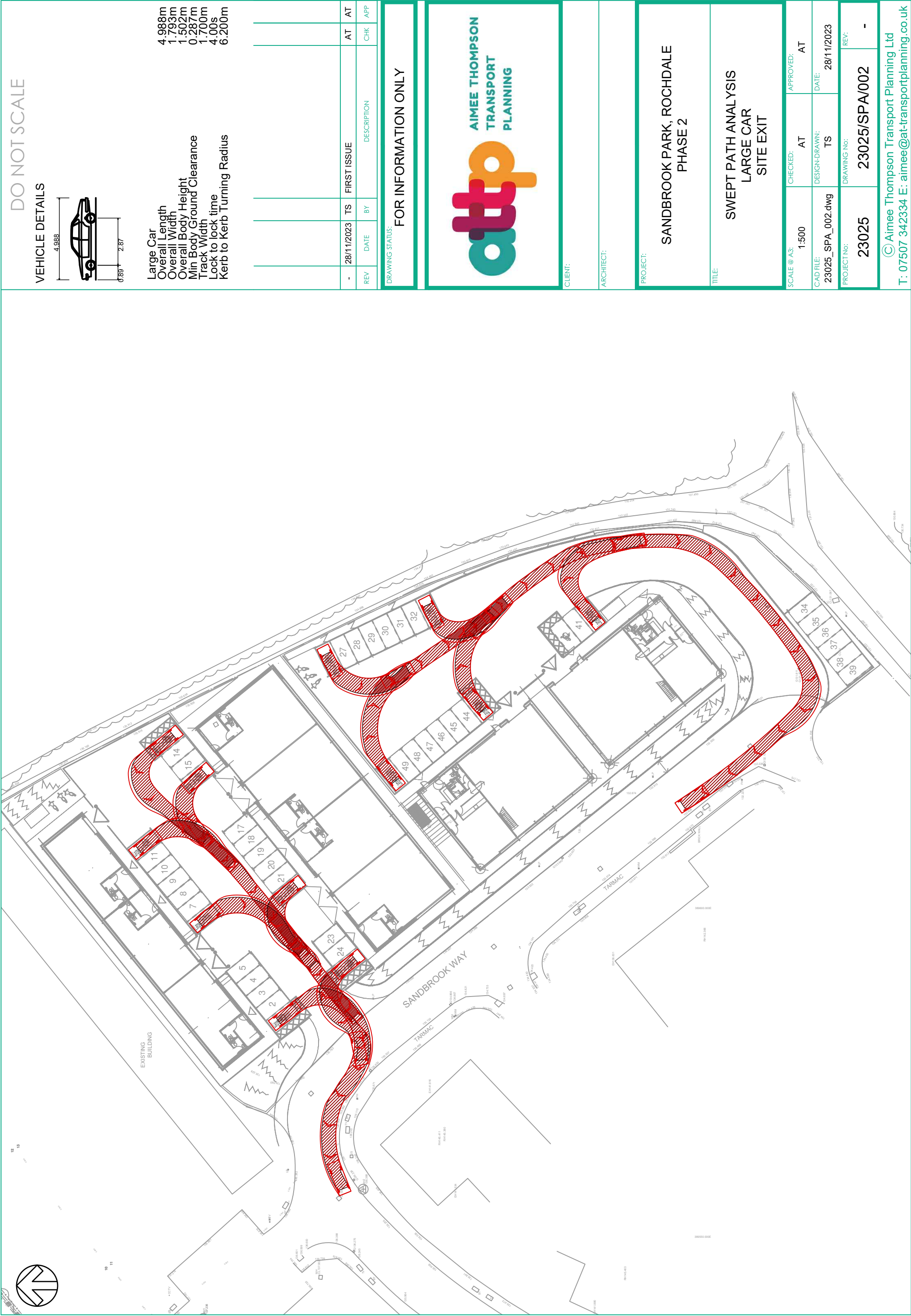
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SANDBROOK WAY

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ARCHITECTURE

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SANDBROOK PARK, ROCHDALE
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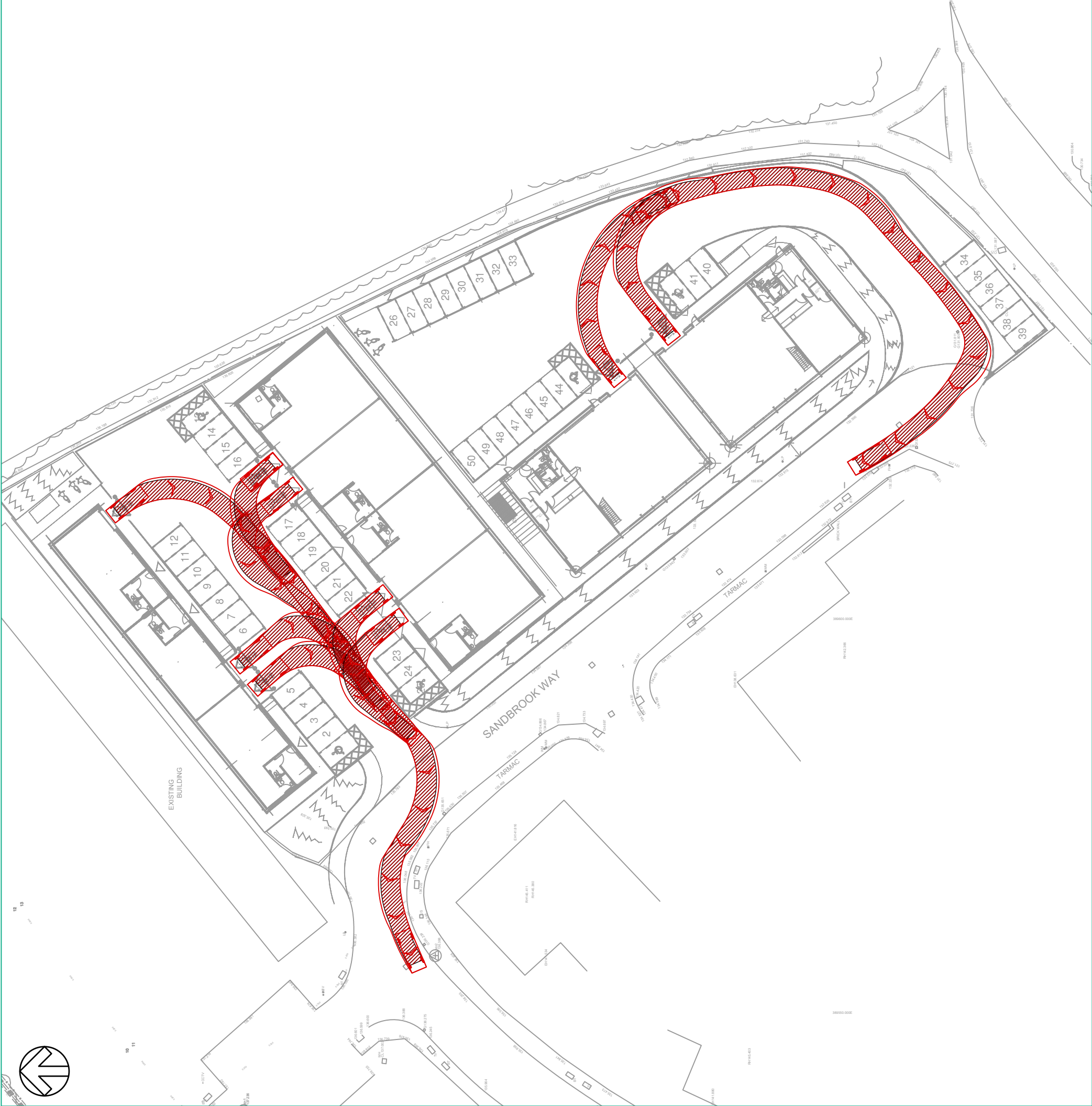
SWEPT PATH ANALYSIS
3.5T PANEL VAN
SITE ENTRY

DATE: 28/11/2023

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T: 07507 342334 E: aimee@at-transportplanning.co.uk



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Appendix 3 – Site Access Visibility Splays

Appendix 4 – TRICs Data

Category : C - INDUSTRIAL UNIT
TOTAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS	
	WK	WARWICKSHIRE
		1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY	WEST YORKSHIRE
		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:	9216 to 13350 (units: sqm)
Range Selected by User:	4000 to 15000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 10/11/21

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	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	2 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
Edge of Town	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:

Industrial Zone	2
-----------------	---

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

Not Known

2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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:

5,001 to 10,000

1 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:

75,001 to 100,000

1 days

500,001 or More

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

1 days

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

2 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

2 days

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

LIST OF SITES relevant to selection parameters

1	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
2	WY-02-C-02	FLUID SYSTEMS	WEST YORKSHIRE
	BROWN LANE WEST		
	LEEDS		
	HOLBECK		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	13350 sqm	
	Survey date: MONDAY	19/10/15	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
CF-02-C-02	Only 10% 9 - 5
WM-02-C-04	Employee No's low

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	9216	0.011	1	9216	0.000	1	9216	0.011
05:30 - 06:00	1	9216	0.087	1	9216	0.000	1	9216	0.087
06:00 - 06:30	2	11283	0.124	2	11283	0.000	2	11283	0.124
06:30 - 07:00	2	11283	0.151	2	11283	0.000	2	11283	0.151
07:00 - 07:30	2	11283	0.261	2	11283	0.018	2	11283	0.279
07:30 - 08:00	2	11283	0.199	2	11283	0.000	2	11283	0.199
08:00 - 08:30	2	11283	0.195	2	11283	0.004	2	11283	0.199
08:30 - 09:00	2	11283	0.053	2	11283	0.004	2	11283	0.057
09:00 - 09:30	2	11283	0.066	2	11283	0.027	2	11283	0.093
09:30 - 10:00	2	11283	0.031	2	11283	0.035	2	11283	0.066
10:00 - 10:30	2	11283	0.018	2	11283	0.018	2	11283	0.036
10:30 - 11:00	2	11283	0.022	2	11283	0.009	2	11283	0.031
11:00 - 11:30	2	11283	0.027	2	11283	0.044	2	11283	0.071
11:30 - 12:00	2	11283	0.013	2	11283	0.018	2	11283	0.031
12:00 - 12:30	2	11283	0.031	2	11283	0.053	2	11283	0.084
12:30 - 13:00	2	11283	0.062	2	11283	0.084	2	11283	0.146
13:00 - 13:30	2	11283	0.058	2	11283	0.062	2	11283	0.120
13:30 - 14:00	2	11283	0.009	2	11283	0.049	2	11283	0.058
14:00 - 14:30	2	11283	0.031	2	11283	0.022	2	11283	0.053
14:30 - 15:00	2	11283	0.040	2	11283	0.040	2	11283	0.080
15:00 - 15:30	2	11283	0.013	2	11283	0.160	2	11283	0.173
15:30 - 16:00	2	11283	0.035	2	11283	0.106	2	11283	0.141
16:00 - 16:30	2	11283	0.018	2	11283	0.434	2	11283	0.452
16:30 - 17:00	2	11283	0.009	2	11283	0.146	2	11283	0.155
17:00 - 17:30	2	11283	0.009	2	11283	0.058	2	11283	0.067
17:30 - 18:00	2	11283	0.004	2	11283	0.022	2	11283	0.026
18:00 - 18:30	2	11283	0.013	2	11283	0.004	2	11283	0.017
18:30 - 19:00	2	11283	0.000	2	11283	0.000	2	11283	0.000
19:00 - 19:30	1	9216	0.000	1	9216	0.000	1	9216	0.000
19:30 - 20:00	1	9216	0.000	1	9216	0.000	1	9216	0.000
20:00 - 20:30	1	9216	0.000	1	9216	0.000	1	9216	0.000
20:30 - 21:00	1	9216	0.000	1	9216	0.000	1	9216	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.590			1.417			3.007

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:	9216 - 13350 (units: sqm)
Survey date date range:	01/01/15 - 10/11/21
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix 5 – Mode Split Data

QS701EW - Method of travel to work

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population	All usual residents aged 16 to 74
units	Persons
date	2011
area type	2011 super output areas - middle layer
area name	E02001146 : Rochdale 015

Method of Travel to Work	Total	%
Train	161	6.0%
Bus, minibus or coach	238	8.8%
Motorcycle, scooter or moped	6	0.2%
Driving a car or van	1,569	58.2%
Passenger in a car or van	245	9.1%
Bicycle	13	0.5%
On foot	464	17.2%
Total	2,696	100.0%

