

**PROPOSED WAREHOUSE UNIT WITH ANCILLARY OFFICES
WATERFOLD BUSINESS PARK, BURY**

TPIF (Portfolio No.1) LLP
Transport Statement

October 2024

Proposed Warehouse Unit with Ancillary Office

Waterfold Business Park, Bury

TRANSPORT STATEMENT

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1.0 INTRODUCTION

1.1 Appointment of Connect Consultants

- 1.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by TPIF (Portfolio No.1) LLP in relation to the ongoing planning application (LPA reference 23/01294/FUL) for a proposed warehouse unit in Waterfold Park in Bury, Greater Manchester.
- 1.1.2 This Transport Statement (TS) is a revision of the previously submitted TS, dated October 2023 and produced by Connect, in response to changes to the design of the internal site layout.

1.2 Site Location

- 1.2.1 The proposal site forms an existing distribution centre with site composition including the following:
- Warehouse – 4,857 sq.m. Gross Internal Area (GIA)
 - Three-storey Office – 7,080 sq.m. GIA
 - On-site car park comprising 400 spaces.
- 1.2.2 The site is located in the southern section of Waterfold Park, which comprises a mix of office and warehouse uses, as well as a carvery pub and a hotel. It is accessed via the Waterfold arm of the Heap Bridge Interchange northeast of the site, which affords access onto the M66 via Junction 2.
- 1.2.3 The proposal site is bound to the north by office and warehouse units, to the east by the M66, to the south by a track and undeveloped land, and to the west by the River Roch.
- 1.2.4 There are no recent preceding planning applications relevant to the current application.
- 1.2.5 Figure 1.1 below identifies the proposal site boundary within the context of the local area.

Figure 1.1 – Site in its Local Context



Source: Google. N.B. the proposal site boundary is denoted by a red line.

1.3 Development Proposals

- 1.3.1 The development proposals are shown on the plan provided at Appendix 1. The proposals include the redevelopment of existing premises, comprising full demolition; erection of new building for Class B8 purposes with ancillary offices; installation of external plant and gatehouse; hardstanding for servicing and parking; attenuation pond; and boundary enclosure.
- 1.3.2 The proposed development will measure 18,337 sq.m. GIA, which is unchanged from the previous proposals.
- 1.3.3 Access into the site will continue to be via the south arm of the mini roundabout adjacent to the northeast corner of the site. Internal roads will facilitate access into the on-site car park and into the service yard, which will be secured via a gatehouse.
- 1.3.4 The existing facility on the site has a GIA of 11,937 sq.m of which 60% are offices, which means that the office element cannot be considered ancillary to the warehouse element. Conversely, the proposal is for a large warehousing unit with ancillary offices. Therefore, while the proposals result in a significant increase in GIA, the change of emphasis from offices to warehouse space means that the proposed development would be less trip intensive than the existing site use.

1.4 Current Planning Application

- 1.4.1 The ongoing planning application for which this TS relates was validated by Rochdale Borough Council (RBC) on 21st December 2023 (LPA reference 23/01294/FUL).
- 1.4.2 A previous TS (October 2023) and Travel Plan (October 2023), both produced by Connect, were submitted to support the application.

- 1.4.3 Pre-app advice was provided by RBC in the form of a consultation report, dated 30th March 2023, which included brief comments on highways.

1.5 Planning Policy

- 1.5.1 This report section provides a brief overview of the national planning policy context and objectives.

National Planning Policy Framework (NPPF), December 2023

- 1.5.2 The National Planning Policy Framework (NPPF) was first published on the 27th March 2012. A revised NPPF was published on 19th December 2023. It sets out the Government's planning policies for England and sets out a framework for local authorities to produce their own local plans.
- 1.5.3 The key purpose of the NPPF is to contribute to the achievement of sustainable development. It sets out three overarching interdependent objectives as, a) an economic objective, b) a social objective, and c) an environmental objective.
- 1.5.4 At its heart, the NPPF maintains its presumption in favour of sustainable development.
- 1.5.5 Paragraphs 114 – 117 address how development proposals are to be considered:

"114. 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; and*
- c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

"115. 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."

"116. 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."

"117. 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."

National Highways Circular 01/2022

- 1.5.6 The document titled 'Strategic Road network and the delivery of sustainable development' (Circular 01/2022) updated 23rd December 2022, is the policy of the Secretary of State in relation to the Strategic Road Network (SRN). It sets out the way in which National Highways will engage with the development industry, public bodies and communities to assist the delivery of sustainable development.
- 1.5.7 It notes at paragraph 12 that new development should be facilitating a reduction in the need to travel by private car and should be focused on locations that are or can be made sustainable.
- 1.5.8 It encourages developers to promote non-car travel and to enable a reduction in travel by private car as a priority over capacity enhancements and new connections to the SRN.
- 1.5.9 Paragraph 48 provides details of the 'vision':

"Where a transport assessment is required, this should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision. Where such development has not been identified in an up-to-date development plan (or an emerging plan that is at an advanced stage), developers should demonstrate that the development would be located in an area of high accessibility by sustainable transport modes and would not create a significant constraint to the delivery of any planned improvements to the transport network or allocated sites."

- 1.5.10 Paragraph 49 sets out the expectations for a development's Transport Assessment:

"A transport assessment for consideration by the company must also consider existing and forecast levels of traffic on the SRN, alongside any additional trips from committed developments that would impact on the same sections (link or junction) as the proposed development. Assumptions underpinning projected levels of traffic should be clearly stated to avoid the default factoring up of baseline traffic. The scenario(s) to be assessed, which depending on the development and local circumstances may include sensitivity testing, should be agreed with the company; where a scenario with particularly high or low growth is proposed, this should be supported by appropriate evidence. Planned improvements to the SRN or local road network should also be considered in any assessment where there is a high degree of certainty that this will be delivered."

1.5.11 Paragraph 50 specifies the requirements of assessment scenarios:

"An opening year assessment to include trips generated by the proposed development, forecasted growth and committed development shall be carried out to establish the residual transport impacts of a proposed development. For multi-phase developments, additional assessments shall be provided based on the opening of each phase."

1.5.12 Paragraph 51 sets out the expectations in terms of delivery of identified transport improvements:

"There a transport assessment indicates that a development would have an unacceptable safety impact or the residual cumulative impacts on the SRN would be severe, the developer must identify when, in relation to the occupation of the development, transport improvements become necessary."

Rochdale Borough Council Adopted Core Strategy (October 2016)

1.5.13 The Rochdale Borough Council adopted Core Strategy sets out the long term spatial strategy for future development of Rochdale Borough. The relevant policies relating to transportation and highways, highlighted by RBC in their pre app advice, are summarised below.

- Policy DM1 – General development requirements:

"All development proposals, including changes of use of land and buildings, extensions and alterations, will be expected to demonstrate that they:

a. Are of high quality design and take the opportunity to enhance the quality of the area;

b. Are compatible with surrounding land uses, both in terms of its impact upon those uses and the impact of the surrounding land uses upon the amenities of future residents / users;

d. Mitigate against any impacts due to noise, air, dust, light and odour pollution, traffic generation or inadequate access, where such mitigation is identified as being necessary;

e. Provide satisfactory vehicular access with adequate parking, manoeuvring, and servicing arrangements taking into account of the proposed use and location..."

- Policy T2 – Improving accessibility:

"We will improve accessibility by locating development where good access to public transport is available or can be provided, backed by measures to reduce the need for travel and effective provision for cyclists, pedestrians and people with impaired mobility. Development will be appropriately located to minimise the need to travel by car and the number and length of car trips made to access local amenities. Transport improvements will focus access to priority regeneration areas, e.g. town centres, housing regeneration areas and economic growth corridors. We will do this by:

a. Requiring development and infrastructure proposals to satisfy the Council's accessibility hierarchy. This requires transport user needs to be considered and addressed in the following priority order:

- i. People with impaired mobility and pedestrians;*
- ii. Cyclists;*
- iii. Public transport (Bus, Heavy and Light Rail) and "clean fuelled" vehicles;*
- iv. Taxi, private hire vehicles;*
- v. Powered two wheeled vehicles;*
- vi. Commercial traffic for local access;*
- vii. Shopping, visitors / tourist and off peak traffic; and*
- viii. Long stay and peak time commuter traffic.*

In all circumstances, the safety, accessibility and amenity of those who live or have business in the area will have priority, while providing reliable journey times for those travelling through. A home zone approach, with 20mph zones installed where feasible, around schools, colleges, local community facilities and in residential areas to provide safer routes and access for vulnerable road users, improving safety in residential communities. Initiatives will incorporate "smarter choice" measures to provide incentives to change travel behaviour, through reallocation of road space, parking policies / control and fiscal measures in favour of sustainable travel.

b. We will require Transport Assessments (TA) and Travel Plans (TP) for:

- i. Residential developments of 80 units or more;*
- ii. All schools and Further Education Institutions (including extensions);*
- iii. Developments located in, or having an impact on, Air Quality Management Areas (AQMA);*
- iv. Areas where the Council has defined initiatives or targets to reduce traffic, restrict development growth, promote public transport, walking and cycling or measures to promote low emissions and tackle poor air quality;*
- v. Areas where the local transport infrastructure is inadequate e.g. sub-standard roads, poor pedestrian / cycle access or public transport provision; and*
- vi. Areas where additional development traffic is likely to increase accidents or conflicts between motorised and non-motorised users, particularly children, the elderly or people with impaired mobility*

c. We will also expect developments to be supported by a Transport Assessment (TA) and Travel Plan (TP) if forecast trips exceed the indicative thresholds set out in DfT Guidance on Transport Assessments or any of the following thresholds:

- i. 100 or more vehicle movements per day (24 hours);*
- ii. 60 or more person trips in any peak hour (between 07-00 & 10-00 and / or 16-00 & 19-00);*
- iii. 30 or more vehicle movements in any hour;*

- iv. More than 20 Heavy Goods Vehicles (over 7.5 tonnes) movements per day;*
 - v. Any goods vehicle movement between midnight and 6am;*
 - vi. Any significant abnormal loads; and*
 - vii. 50 or more car parking spaces are proposed.*
 - d. We will require a Transport Statement for smaller developments that exceed the guidance on Transport Assessment thresholds or:*
 - i. Generate 50 to 99 vehicle movements per day (24 hours);*
 - ii. Generate 30 to 59 person trips in any peak hour (between 07-00 & 10-00 and / or 16-00 & 19-00);*
 - iii. Generate 20 to 29 vehicle movements in any single hour;*
 - iv. Generate up to 20 Heavy Goods Vehicles (over 7.5 tonnes);*
 - v. Propose 10 to 49 parking spaces; or*
 - vi. Consist of 50 to 79 residential units.*
 - e. We will ensure that development allocations and submitted proposals are as far as possible accessible for all (including people with impaired mobility), applying the accessibility criteria set out in Appendix 4 or any future thresholds agreed for Greater Manchester. Developers should work in partnership with the Council from initial conception to completion and monitoring. To achieve this, developers should ensure access between communities and jobs, shops, schools and colleges, leisure and health facilities are convenient;*
 - f. We will require developments to provide parking in compliance with the Council's Car Parking Standards (see Appendix 5); and*
 - g. We will expect development proposals to financially contribute to transport improvements where additional traffic movements cannot be accommodated on the existing network. Such contributions will support:*
 - i. Measures to secure modal shift and sustainable travel / behavioural change initiatives;*
 - ii. Improvements to public transport and related infrastructure;*
 - iii. Other traffic management and local safety measures and/or removal or restriction of parking provision; and*
 - iv. Improvements to the highway infrastructure, in combination with (i), (ii) and (iii) when those have been demonstrated to be insufficient;*
- Developers will contribute to essential transport infrastructure to service their proposals and to measures to alleviate any additional congestion resulting from their proposals on existing bottlenecks."*

1.6 Car Parking Policy

1.6.1 NPPF Chapter 9 *Promoting sustainable transport* sets out at paragraph 111 that,

"If setting local parking standards for residential and non-residential development, policies should take into account:

- a) the accessibility of the development;*
- b) the type, mix and use of development;*
- c) the availability of and opportunities for public transport;*
- d) local car ownership levels; and*
- e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles."*

1.6.2 Paragraph 112 states,

"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."

Adopted Local Parking Standards

- 1.6.3 The parking standards pertinent to the proposed development are set out in Appendix 5 of the RBC adopted Core Strategy (October 2016).
- 1.6.4 The RBC Core Strategy does not include specifically defined standards for Electric Vehicle (EV) charging provision and so reference has instead been made to the Greater Manchester Combined Authority report 'Electric Charging Infrastructure Strategy', which forms part of the Greater Manchester Transport Strategy 2040.

1.7 Report Overview

- 1.7.1 The remainder of this report is divided into four further sections, which are as follows:-

Section 2.0 Site Transport Context

- 1.7.2 This section of the report provides details of the site context, including its accessibility by all relevant transport modes.

Section 3.0 Proposed Development

- 1.7.3 The various components of the development proposal, including the site access arrangements and parking provision, are described within this section of the report.

Section 4.0 Traffic Assessment

- 1.7.4 This report section provides an assessment of the vehicular attraction of the proposed development and its traffic effects.

Section 5.0 Summary & Conclusions

- 1.7.5 A summary and the conclusions of the report are provided in this section.

2.0 SITE TRANSPORT CONTEXT

2.1 Introduction

- 2.1.1 This section of the report considers the accessibility of the site in terms of a range of transport modes.

2.2 Pedestrian Access

- 2.2.1 The Department for Transport's (DfT) document titled 'Manual for Streets' dated 2007 provides guidance in relation to walk distances. Section 4.4 gives the following advice:-

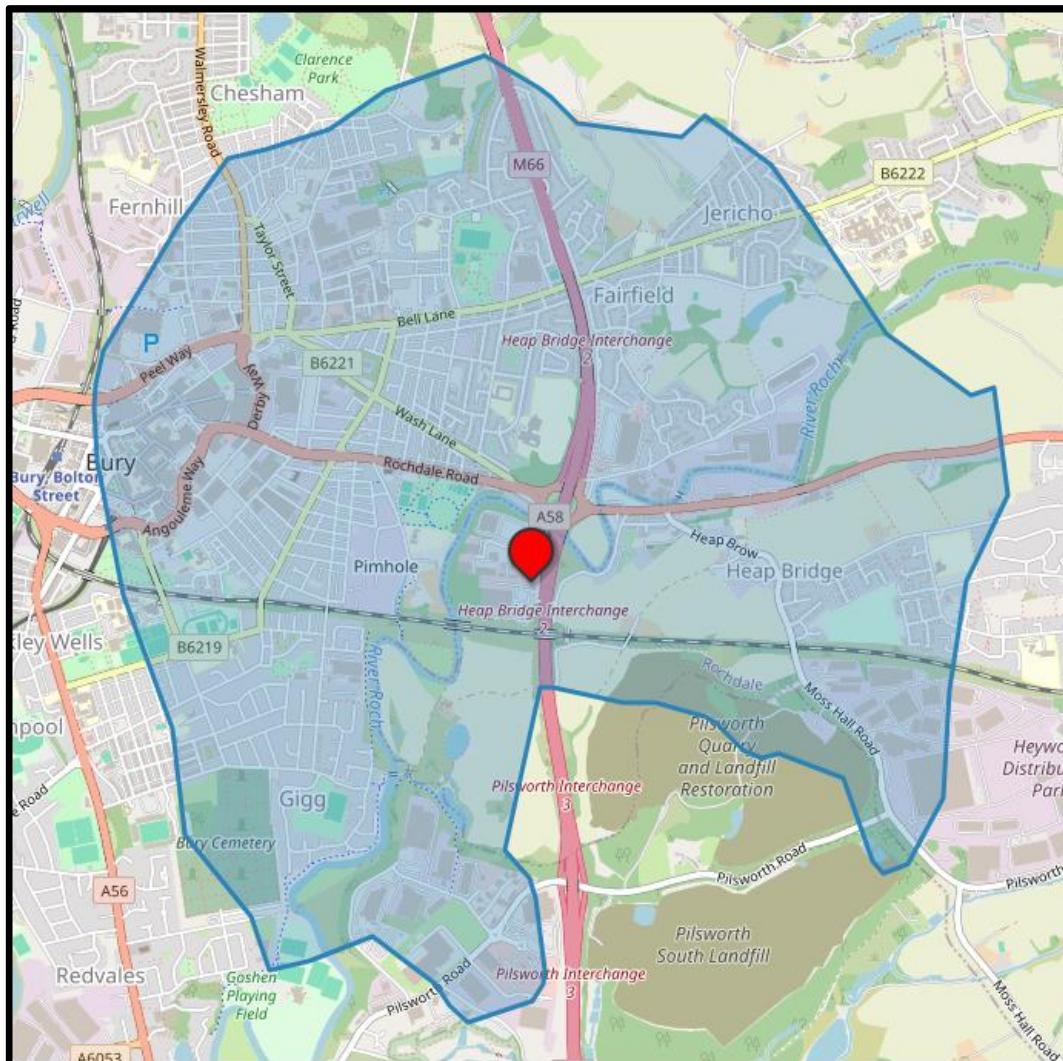
"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".

- 2.2.2 The CIHT document 'Planning for Walking' (April 2015) reiterates the advice presented in 'Manual for Streets'. Section 6.4 of 'Planning for Walking' states the following:

"Walking neighbourhoods are typically characterised as having a range of facilities within 10 minutes' walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating. Developers should consider the safety of the routes (adequacy of surveillance, sight lines and appropriate lighting) as well as landscaping factors (indigenous planting, habitat creation) in their design."

- 2.2.3 Furthermore, 'Planning for Walking' indicates that approximately 80% of journeys shorter than 1 mile (1.6km) are made wholly on foot.
- 2.2.4 Table 3.2 of The Institute of Highways and Transportation (IHT) guidance document titled 'Providing for Journeys on Foot' identifies a maximum walk distance of 2.0km for commuter, school and sightseeing walk trips, 800m for town centre walk trips and 1.2km for trips elsewhere.
- 2.2.5 The actual distance that people will be prepared to walk will vary depending on the trip purpose and other factors such as the presence of road crossings, terrain, and the attractiveness of the environment.
- 2.2.6 Based on a maximum walk distance of 2km for staff, the indicative walk catchment is shown at Figure 2.1 below in the form of a 2km isochrone.

Figure 2.1 – 2km Walk Catchment



Source: OpenRouteService.

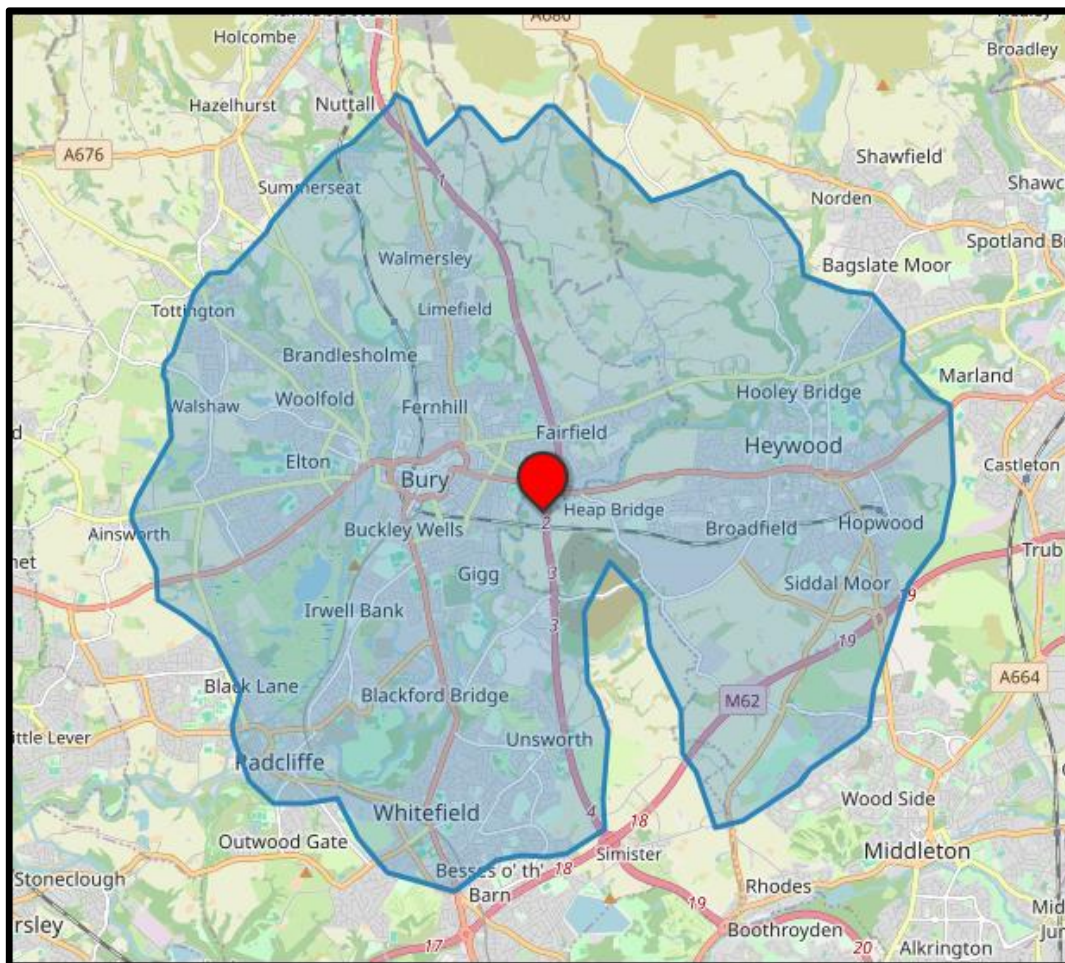
- 2.2.7 The walk catchment above indicates that there are a significant number of residences within the 2km staff walk catchment area.
- 2.2.8 Pedestrians are able to access the site via Waterfold Park's primary access road, which features footways and uncontrolled crossing facilities.
- 2.2.9 The main pedestrian access route into Waterfold Park is via a footway flanking the west side of the access road connected to the Heap Bridge Interchange. The footway links onto the south side of the A58 Rochdale Road via a residential road. The A58 Rochdale Road provides a direct route into the centre of Bury to the west and into the wider pedestrian network of Bury. The road can be crossed via a signal crossing at the Wash Lane junction, as well as a signal crossing further west.
- 2.2.10 The Heap Bridge Interchange can be traversed east-west via a footway which runs along the roundabout's north side. The M66 northbound on-slip road can be crossed via an uncontrolled crossing and the M66 southbound off-slip road can be crossed via a signal-controlled crossing.

- 2.2.11 Pedestrian access into the site from the south and east is facilitated via a footpath which runs along the eastern and southern boundaries of the site, and is accessed adjacent to the mini roundabout at the northeast corner of the site. The footpath provides a route to/from Heywood in the east via an underpass through the M66 and a route into south Bury via a public right of way.
- 2.2.12 In light of the local pedestrian facilities, the site is well connected to the local pedestrian network with opportunities for staff to walk to work.

2.3 Cycling

- 2.3.1 The 2022 National Travel Survey table NTS0303 identifies average journey lengths by cycle in England of c.5.8km. The CIHT document titled 'Planning for Cycling' (October 2014) indicates that 80% of cycling trips are less than five miles (8km) and 40% are less than two miles (3.2km). This suggests that cycling can offer an alternative to car travel particularly for trips of less than 6km.
- 2.3.2 Based on a maximum cycle distance of 6km, the indicative cycle catchment is shown at Figure 2.2 below in the form a 6km isochrone.

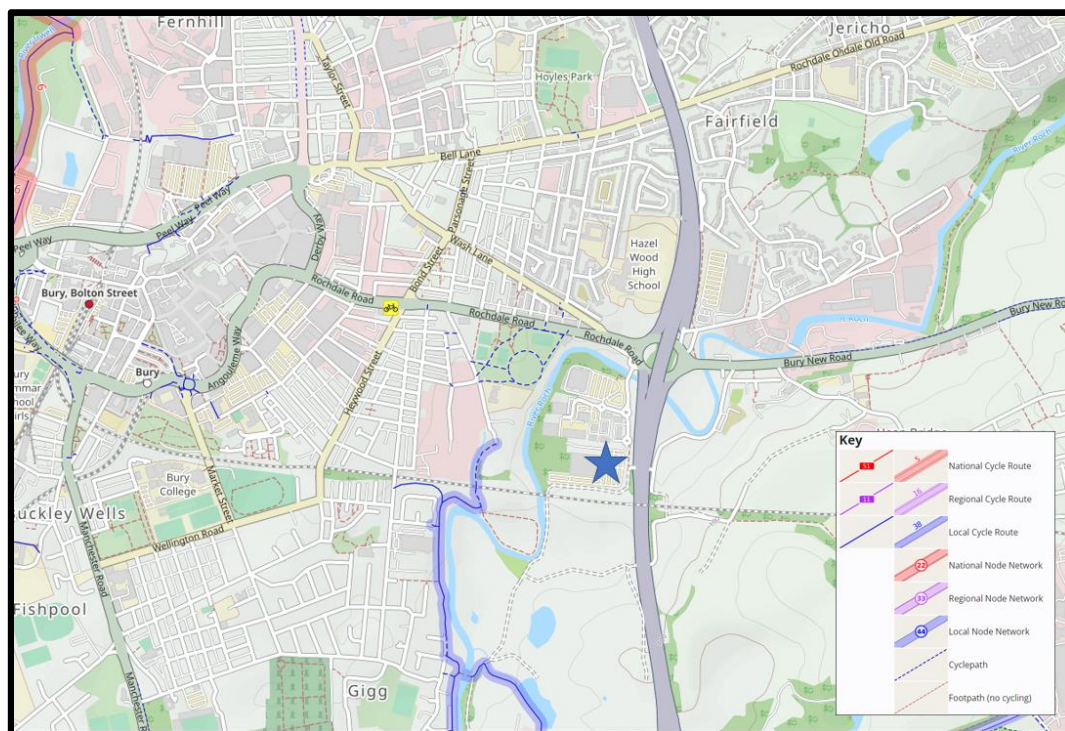
Figure 2.2 – Cycle Catchment Area



Source: OpenRouteService.

- 2.3.3 The 6km cycle catchment includes all of Bury, as well as surrounding areas including Heywood, Radcliffe, and Tottington. This provides a significant local population within cycle distance of the site.
- 2.3.4 Figure 2.3 below shows a cycle map for Bury and the surrounding areas taken from OpenStreetMap, showing local and national cycle ways in the area.

Figure 2.3 – Bury Cycle Map



Source: OpenStreetMap. N.B. the proposal site is denoted by a blue star.

- 2.3.5 An unnamed Local Cycle Route is accessible south of the site, providing a route into south Bury.
- 2.3.6 Much of the surrounding cycle network comprises lightly-trafficked residential roads that are conducive to cycling, and allow for travel throughout the urban area of Bury and beyond.
- 2.3.7 Considering that the roads local to the site are urban in character, and that the site is within cycle distance of a substantial residential area, cycling provides an opportunity to access the site by a sustainable mode of transport.

2.4 Bus Access

- 2.4.1 The publication 'Planning for Public Transport in Developments' produced by the Institution of Highways and Transportation (IHT) specifies that new developments should be located within 400m of the nearest bus stop.
- 2.4.2 The nearest bus stops to the proposal site are situated on the A58 Rochdale Road approximately 510m and 590m walking distance north of the site for westbound and eastbound services, respectively. The westbound bus stop benefits from a bus shelter and the eastbound bus stop benefits from a flag-and-pole with timetable information.

- 2.4.3 The bus stops lie just outside of the IHT recommended walk distance, but this is likely to be considered immaterial by staff undertaking commuter journeys.
- 2.4.4 The above bus stops and their indicative walk routes to/from the site access are shown at Figure 2.4 below.

Figure 2.4 – Bus Stop Locations



Source: Google. The proposed site access is denoted by a blue star.

- 2.4.5 The routes that service the bus stops above and their approximate service frequencies are set out at Table 2.1 below.

Table 2.1 – Bus Stop Frequency

Service	Bus Stop	Route	Approximate Frequency		
			Monday – Friday	Saturday	Sunday
94	Adj Openshaw Park	Higher Crumpsall – Bury	One every hour	One every hour	One every 2 hours
	Opp Openshaw Park	Bury – Higher Crumpsall	One every hour	One every hour	One every 2 hours
163	Adj Openshaw Park	Piccadilly Gardens – Bury	Every 12 mins	Every 12 mins	Every 15 mins
	Opp Openshaw Park	Bury – Piccadilly Gardens	Every 12 mins	Every 12 mins	Every 15 mins
471	Adj Openshaw Park	Rochdale – Bolton	Every 12 mins	Every 12 mins	Every 20 mins
	Opp Openshaw Park	Bolton - Rochdale	Every 12 mins	Every 12 mins	Every 20 mins
475	Adj Openshaw Park	Heywood – Bury	One every hour	One every hour	No service
	Opp Openshaw Park	Bury – Heywood	One every hour	One every hour	No service

2.4.6 Table 2.1 shows that the two nearest bus stops to the site provide frequent and regular Monday to Sunday services to a variety of destinations, including Bury, Rochdale, Bolton and Manchester.

2.4.7 Having regard to the frequency of buses and the areas that the existing local buses serve, the site is accessible by public transport.

2.5 Highways Access

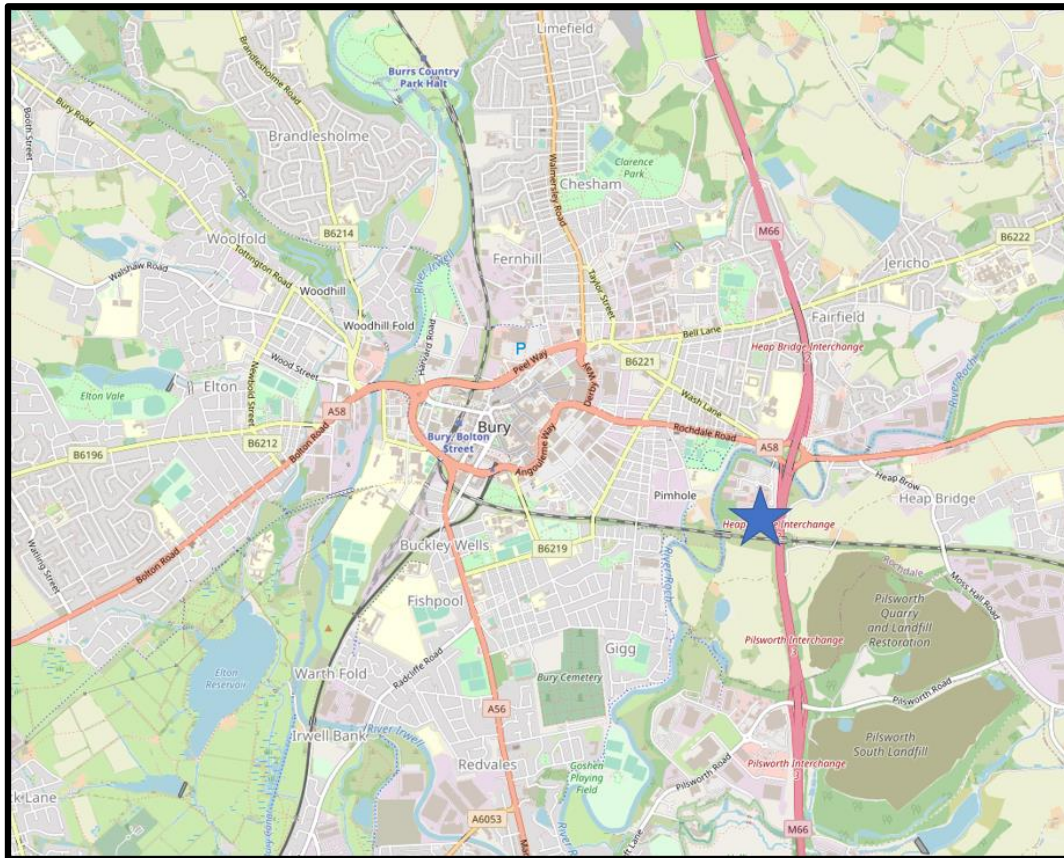
2.5.1 The proposal site is accessed via a mini roundabout forming part of one of Waterfold Park's internal spine roads. Waterfold Park is itself accessed via the Waterfold arm of the Heap Bridge Interchange, a signal-controlled roundabout which provides northbound and southbound entry/exit onto the M66.

2.5.2 The A58 Rochdale Road arm of the roundabout provides a direct route into the centre of Bury and into the town's wider road network. The A58 Bury New Road arm affords access into Heywood and Rochdale to the east.

2.5.3 Heap Bridge Interchange provides access onto the Strategic Road Network via the M66. North on the M66 are routes into Rawtenstall, Accrington, Blackburn, and Burnley; and south on the M66 is access onto the M60 and M62 via Simister Island (Junction 4), from which routes into Middleton, Prestwich, Oldham, and Manchester are facilitated.

2.5.4 Figure 2.5 below shows the site in its local highway context.

Figure 2.5 – Highway Network



Source: OpenStreetMap. N.B. the proposal site is denoted by a blue star.

2.5.5 Overall, the site has a prominent location in relation to the local road network from which it is readily accessible.

2.6 Section Conclusion

2.6.1 The proposal site is surrounded by a pedestrian network that includes a number of crossing facilities, and a residential catchment within walking distance of the site. Bury and much of the surrounding area is conducive to cycling and the bus stops local to the site are served by frequent bus services, which provide access to/from a variety of destinations. The proposal site also has a prominent location relative to the local highway network. Overall, the site has an acceptable level of accessibility by all relevant transport modes.

3.0 PROPOSED DEVELOPMENT

3.1 Introduction

- 3.1.1 This report is based on a scheme comprising the redevelopment of existing premises, comprising full demolition; erection of new building for Class B8 purposes with ancillary offices; installation of external plant and gatehouse; hardstanding for servicing and parking; attenuation pond; and boundary enclosure.
- 3.1.2 The proposed site composition will include the following, the floor areas of which remain unchanged from the previous proposals presented in the 2023 TS:
- Warehouse and Gatehouse – 16,942.37 sq.m. GIA
 - Office – 1,394.64 sq.m. GIA
 - Total GIA – 18,337 sq.m.
- 3.1.3 The proposals will result in an increase of c.12,085 sq.m. of warehouse GIA and a decrease of c.5,685 sq.m. of office GIA when compared with the existing distribution centre use.
- 3.1.4 As the proposed office element comprises a proportionately marginal floor area when compared with the total floor area, the office element is considered ancillary for the purposes of assessing parking provision and traffic effect.
- 3.1.5 The proposals include the reconfiguration and rationalisation of the on-site car park, which will decrease the number of car parking spaces from 400 to 182 spaces (an increase of 2 spaces compared to the previous proposals), of which 11 spaces will be designated for disabled users (same as previous proposals), and 35 spaces will be Electric Vehicle (EV) charging bays (a decrease of 7 spaces from the previous proposals).
- 3.1.6 A cycle store will be provided capable of securing up to 24 cycles and 5 motorcycle spaces will also be provided (both same as the previous proposals).
- 3.1.7 The servicing yard will feature 44 dedicated HGV spaces (2 less than previously), 2 spaces for stacking/staging (9 less than previously), 20 delivery bays (same as previously), and 4 level access doors (same as previously).
- 3.1.8 The proposed site layout is identified on the plan provided at Appendix 1.

3.2 Proposed Site Access Arrangements

- 3.2.1 The proposal site will continue to be accessed via the south arm of the mini roundabout at the northeast corner of site.
- 3.2.2 The warehouse building is fronted on its north side by the service yard, which is accessed by HGVs via a gatehouse located at the northeast corner of the site. The car park is accessed straight on after entering the site. A fire tender access road runs along the south and west sides of the warehouse, accessed from the service yard and from the car park, which enables fire appliance access to all sides of the warehouse.
- 3.2.3 On-site footways and crossing facilities enable pedestrian access to the entrances of the building.
- 3.2.4 The site access arrangements are also shown at Appendix 1.

3.3 Servicing

- 3.3.1 Servicing of the site will take place at the service yard fronting the north side of the warehouse building. HGVs will enter the site via the main access, immediately turn right and enter the service yard via a secured gatehouse. Exit from the site is in the reverse direction.
- 3.3.2 The proposed site layout has been assessed for service vehicle manoeuvres based on the required turning movements of the largest service vehicle (FTA 18.5m articulated goods vehicle) with details of the swept path analysis provided at Appendix 2. The track plots show that the service route through the site is satisfactory and that service vehicles would be able to manoeuvre within the site, enabling them to arrive and depart to/from the site in forward gear.

3.4 Parking

- 3.4.1 The parking standards pertinent to the proposed development are set out in Appendix 5 of the RBC adopted Core Strategy (October 2016).
- 3.4.2 The parking provision has been proposed to both suit the operational needs of the likely end user and to reflect the site's land use class, which falls under Use Class B8 with the office element ancillary. The standards will therefore be referenced based on the total proposed floor area of a 'Store or distribution (B8)' use.
- 3.4.3 The RBC car, cycle and motorcycle parking standards are set out at Figure 3.1 below.

Figure 3.1 – RBC Parking Standards

Development Type	Maximum Standard for Car Parking Provision	Minimum Standard for Cycle Space Provision	Minimum Standard for Powered Two Wheeled Vehicle Parking Provision
B8: STORAGE/ DISTRIBUTION			
Storage / Distribution Warehousing	1 space per 100m ²	1 space per 850m ² (min 2 spaces)	1 space per 4,000m ² (min 2 spaces).

Source: RBC Core Strategy Appendix 5 (October 2016)

- 3.4.4 The car parking standards indicate a maximum of one space per 100 sq.m., which equates to 183 spaces for the proposed development ($18,337 \div 100 = 183.4$). The proposed development includes 182 spaces, which is one space short of maximum standards and is therefore acceptable.
- 3.4.5 The cycle parking standards indicate a minimum of one space per 850 sq.m. with a minimum of two spaces, which equates to 22 cycle spaces for the proposed development ($18,337 \div 850 = 21.6$). The proposed development includes 24 covered cycle spaces, which accords with local standards.
- 3.4.6 The motorcycle parking standards indicate a minimum of one space per 4,000 sq.m. with a minimum of two spaces, which equates to 5 motorcycle spaces for the proposed development ($18,337 \div 4,000 = 4.6$). The proposed development includes 5 motorcycle spaces, which accords with local standards.
- 3.4.7 The disabled parking standards indicate a minimum of 6% of total capacity for car parks with 12 to 200 spaces, which equates to 11 disabled spaces for the proposed development ($182 \times 6\% = 10.9$). The proposed development includes 11 disabled spaces, which accords with local standards.

3.4.8 The Transport for Greater Manchester report 'Electric Vehicle Charging Infrastructure Strategy', which forms part of the Greater Manchester Transport Strategy 2040, states the following in regards to EV charging provision in new developments:

"New developments within GM [Greater Manchester] should make adequate provision of EVCI to meet demand and encourage and accelerate the transition to EVs. To achieve this, new developments should be required to provide a minimum number of active EV charge points and offer enough passive provision to enable efficient expansion as demand increases. Each Local Planning Authority will develop their own Local Plan policies relating to the provision of EVCI in new development. The recommendations set out in the table below are intended to aid policy development and act as supplementary guidance."

3.4.9 As RBC have not published their own standards on EV charging provision, the recommendations set out in the Greater Manchester Transport Strategy will instead be referenced, which are shown at Figure 3.2 below.

Figure 3.2 – Greater Manchester EV Charging Standards

Development type		Active provision	Passive provision
Residential	Within property-based parking e.g. driveway and/or garage	1 per dwelling	-
	Designated off-street residential parking	1 per dwelling	-
	With non-designated off-street parking	10% of spaces	20% of spaces
Commercial	Office / general industrial	10% of spaces	20% of spaces
	Retail uses	10% of spaces	20% of spaces
	Sports centres, gyms and leisure facilities	10% of spaces	20% of spaces
Other	Education & non-residential institutions	10% of spaces	20% of spaces
	Petrol filling and motorway service stations	10% of spaces	20% of spaces

Source: 'Electric Vehicle Charging Infrastructure Strategy', Greater Manchester Combined Authority.

3.4.10 The GM standards indicate a guideline of 10% of total capacity dedicated to active EV charging spaces and 20% passive spaces adapted for future EV connectivity. This equates to 18 active EV spaces ($182 \times 10\% = 18.2$) and 36 passive EV spaces ($182 \times 20\% = 36.4$) for the proposed development. The proposals include 35 active EV spaces and no passive EV spaces, which exceed the GM guidelines for active spaces and has been proposed commensurate to the expected EV demand of the site. The EV demand will be monitored through the Travel Plan monitoring process.

3.4.11 Although RBC do not prescribe a set of standards for HGV parking, 44 HGV spaces are being provided on-site, along with docking bays and level access doors which could be used as spaces when not in use for loading. This ensures that the flow of HGVs departing the site can be controlled and that there is capacity on-site to ensure no overspill of HGV demand onto the local highway network.

3.5 Section Conclusion

- 3.5.1 Swept path analysis demonstrates that the proposed site access and internal site layout are suitable for their intended use.
- 3.5.2 The proposed car parking provision lies within the maximum standards and thus accords with local standards.
- 3.5.3 The proposed disabled, cycle and motorcycle parking provision accord with the local standards.
- 3.5.4 The proposed EV charging provision exceeds the GM guidelines for active EV charging spaces and have been proposed to accommodate the expected EV demand of the site. The EV demand will be monitored.
- 3.5.5 The provision of HGV parking on-site enables control over the flow of HGVs departing the site and allows for capacity on-site to ensure no overspill of HGV demand onto the local highway network.

4.0 TRAFFIC ASSESSMENT

4.1 Introduction

4.1.1 This section of the report provides details of the potential traffic effect of the proposed development.

4.2 Existing Trip Attraction

4.2.1 The existing distribution centre comprises 4,857 sq.m. of warehouse floor area and 7,080 sq.m. of office floor area, which means that the office element cannot be considered ancillary to the warehouse element. As such, the warehouse and office elements have been assessed individually with the traffic impact of the existing site calculated as the sum of the two elements.

4.2.2 The potential traffic impact of the existing site has been determined with reference to the latest version of the TRICS database (version 7.11.3), based on the key selection criteria set out at Table 4.1 below. The TRICS outputs are provided at Appendix 3.

4.2.3 It should be noted that the TRICS warehouse sites include ancillary offices and so there will be a slight overestimation in the trip attraction with the combination of the individual warehouse (with ancillary office) and office elements.

Table 4.1 – TRICS Key Selection Criteria – Warehouse (Commercial) and Office

Land use and trip rate selection		
Select Land Use By:	Full list Of Active Main/Sub Land Uses	Full list Of Active Main/Sub Land Uses
Main Land Use:	02 – EMPLOYMENT	02 – EMPLOYMENT
Sub Land Use:	F – WAREHOUSING (COMMERCIAL)	A – OFFICE
Calculation Options:	Vehicle Trip Rates	Vehicle Trip Rates
Regions:	England excluding Greater London	England excluding Greater London
Primary filtering		
Trip Rate Parameters:	Gross Floor Area	Gross Floor Area
Range:	1,000 to 12,000 sq.m.	1,000 to 12,000 sq.m.
Selected Dates:	01/01/15 to 19/10/23	01/01/15 to 11/11/22
Week days to include:	Weekdays	Weekdays
Location Types to include:	Edge of Town	Edge of Town
Secondary filtering		
Population < 1 Mile:	All available	All available
Population < 5 Miles:	All available	All available
Covid-19 surveys removed?	Yes	Yes

4.2.4 The resultant average trip rates and trip numbers, during the assumed network weekday AM and PM peak hours of 08:00-09:00 and 17:00-18:00, are set out at Table 4.2 below, which are compared with the trip rates and trip numbers used in the 2023 TS.

Table 4.2 – TRICS Summary – Existing Site Trips

Element	Transport Statement	Trip Rates per 100 sq.m.			Trip Numbers		
		Arr	Dep	Tot	Arr	Dep	Tot
Warehouse (4,857 sq.m.) – Car/Van/Motorcycle Trips	AM 08:00-09:00						
	2023 TS	0.235	0.097	0.332	11	5	16
	2024 TS	0.200	0.079	0.279	10	4	14
	PM 17:00-18:00						
	2023 TS	0.062	0.276	0.338	3	13	16
	2024 TS	0.050	0.230	0.280	2	11	14
Warehouse (4,857 sq.m.) – HGV Trips	AM 08:00-09:00						
	2023 TS	0.054	0.095	0.149	3	5	7
	2024 TS	0.049	0.084	0.133	2	4	6
	PM 17:00-18:00						
	2023 TS	0.099	0.062	0.161	5	3	8
	2024 TS	0.084	0.053	0.137	4	3	7
Office (7,080 sq.m.)	AM 08:00-09:00						
	2023 TS	2.212	0.154	2.366	157	11	168
	2024 TS	2.212	0.154	2.366	157	11	168
	PM 17:00-18:00						
	2023 TS	0.106	2.087	2.193	8	148	155
	2024 TS	0.106	2.087	2.193	8	148	155

4.2.5 The total existing site trips assessed in the 2023 TS and this TS are shown at Table 4.3 below.

Table 4.3 – Total Existing Site Trips

Trips	AM 08:00-09:00			PM 17:00-18:00		
	Arr	Dep	Tot	Arr	Dep	Tot
2023 TS						
Car/Van/Motorcycle Trips	168	16	184	11	161	172
HGV Trips	3	5	7	5	3	8
Total Trips	171	20	191	15	164	180
2024 TS						
Car/Van/Motorcycle Trips	166	15	181	10	159	169
HGV Trips	2	4	6	4	3	7
Total Trips	169	19	188	14	162	176

4.2.6 Given that the differences between the 2023 TS and 2024 TS trips are negligible, the 2023 TS trips will continue to be used in this assessment to represent the existing site trip attraction.

4.3 Proposed Trip Attraction

- 4.3.1 The previous TS based the proposed trip attraction on the existing warehouse trip rates, as the office element is considered ancillary. As shown at Table 4.2, given that the warehouse trips assessed in the 2023 TS are higher than those assessed in this TS, the 2023 TS warehouse trip rates have been used to represent the proposed trip attraction.
- 4.3.2 This means that the existing and proposed trip attraction figures, and the resultant net traffic effect, remain unchanged from the previous TS.
- 4.3.3 The AM and PM peak hour trip numbers, based on a total proposed GIA of 18,337 sq.m., are shown at Table 4.4 below.

Table 4.4 – TRICS Summary – Proposed Trip Attraction

Peak	Trip Rates per 100 sq.m.			Trip Numbers (based on 18,337 sq.m.)		
	Arr	Dep	Tot	Arr	Dep	Tot
Car/Van/Motorcycle Trips						
AM 08:00-09:00	0.235	0.097	0.332	43	18	61
PM 17:00-18:00	0.062	0.276	0.338	11	51	62
HGV Trips						
AM 08:00-09:00	0.054	0.095	0.149	10	17	27
PM 17:00-18:00	0.099	0.062	0.161	18	11	30
Total Trips						
AM 08:00-09:00	0.289	0.192	0.481	53	35	88
PM 17:00-18:00	0.161	0.338	0.499	30	62	92

4.4 Net Traffic Effect

- 4.4.1 The net traffic effect of the proposed development has been calculated as the difference between the proposed trips at Table 4.4 and the existing trips at Table 4.3, the results of which are presented at Table 4.5 below.

Table 4.5 – Net Traffic Effect

Vehicle Type	Scenario	AM 08:00-09:00			PM 17:00-18:00		
		Arr	Dep	Tot	Arr	Dep	Tot
Cars/Vans/ Motorcycles	Existing	168	16	184	11	161	172
	Proposed	43	18	61	11	51	62
	Net	-125	2	-123	1	-111	-110
HGVs	Existing	3	5	7	5	3	8
	Proposed	10	17	27	18	11	30
	Net	7	13	20	13	8	22
Total Vehicles	Existing	171	20	191	15	164	180
	Proposed	53	35	88	30	62	92
	Net	-118	15	-103	14	-102	-88

N.B. some mathematical rounding has taken place.

- 4.4.2 The proposed development is expected to result in a net reduction of 123 and 110 car/van/motorcycle trips during the AM and PM peak hours, respectively; and a net increase of 20 and 22 HGV trips during the AM and PM peak hours, respectively.
- 4.4.3 Although there is a net increase in HGV trips, there is a net decrease in total vehicular trips and the equivalent Passenger Car Units (1 car = 1 PCU; 1 HGV = 2.3 PCUs) still results in net decreases of 77 and 60 total PCUs during the AM and PM peaks, respectively.
- 4.4.4 In summary, the proposed development is expected to result in a net decrease in the total number of vehicular trips on the local network, including on the SRN, and thus the traffic impact cannot be considered severe, in accordance with the NPPF.

4.5 Collision Analysis

- 4.5.1 Although the proposals are expected to result in a net decrease in traffic on the network, the local collision statistics have nonetheless been analysed.
- 4.5.2 Collision data has been obtained from Crashmap for the five year period 2018-2022. A plan showing the locations and levels of severity of the recorded personal injury collisions over this period within a defined study area is provided at Figure 4.1 below.

Figure 4.1 – Collision Study Area



Source: Crashmap.co.uk. N.B. the proposal site is denoted by a blue star.

- 4.5.3 The collision map above indicates that there have been no locations where more than five collisions in five years have occurred (i.e more than one per year), and so there is no evidence to suggest a pattern of collisions that could be attributed to a road layout deficiency, nor one which is likely to be materially worsened by the development proposals.

4.6 Section Conclusion

- 4.6.1 The proposed development is expected to result in a net decrease in the total number of vehicular trips on the local network, including on the SRN, and thus the traffic impact cannot be considered severe, in accordance with the NPPF.
- 4.6.2 There is no evidence to suggest a pattern of collisions that could be attributed to a road layout deficiency, nor one which is likely to be materially worsened by the development proposals.
- 4.6.3 Considering the expected net reduction in traffic, no further assessment has been undertaken of junction capacity.

5.0 SUMMARY AND CONCLUSIONS

5.1 Summary

5.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by TPIF (Portfolio No.1) LLP in relation to their proposed warehouse unit in Waterfold Park in Bury. The report is summarised as follows:-

- The site is accessible by a choice of travel modes and will reduce reliance on the private car consistent with national and local planning policy.
- The proposed development is well conceived in terms of its access arrangements, composition and layout.
- The proposed car, cycle, motorcycle and disabled parking provision accords with local standards.
- It has been demonstrated that the servicing arrangements will be able to accommodate delivery traffic.
- The traffic assessment included in this report is based on a realistic traffic impact scenario and demonstrates that the proposals are expected to result in a net reduction in traffic, which cannot be constituted as a severe impact in accordance with the NPPF.
- The proposed traffic effect of the development is not expected to materially worsen any potential occurrence or pattern of collisions on the local highway network.

5.2 Conclusions

5.2.1 The proposal is shown to accord with local planning policies and with Paragraphs 114 and 116 of the NPPF.

5.2.2 Overall, the scale of residual impact cannot be considered to be severe when viewed in the context of the NPPF planning test (NPPF paragraph 115).

APPENDIX 1 – PROPOSED SITE LAYOUT



Planning Site Plan
1 : 1000

Area Schedule:			
Warehouse:	16,814m ²	180,953ft ²	
GF Core:	104,57m ²	1,123,45ft ²	
2 SL Offices:	951,54m ²	10,351ft ²	
2 SL Hub-Offices:	433m ²	4,632ft ²	
Gatehouse:	24m ²	259ft ²	
TOTAL (GIA):	16,337m²	197,383ft²	

Car Spaces	
182	
Including 11 Enlarged accessible spaces with 25 spaces provided with electric charging facilities.	

Cycle Spaces	
24	
Motorcycle Spaces:	
5	

Dock Doors:	
including 4 Euro-dock doors	20
Level Access:	4
Trailers Spaces (17x3.5m):	
Stacking/Staging Spaces:	44

Existing Site Levels	
Proposed Site Levels	

Planning - Site Area Schedule		
Name	Area (Hectares)	Area (Acres)
Demise Line	4.92 hectare	12.15 acres
Net Dev Area	3.54 hectare	8.76 acres
Red Line Boundary	4.98 hectare	12.3 acres

Boundaries	
Red Line Boundary	
Demise Line	
Security Fence	

3m high Acoustic Fence



01 WASTE MANAGEMENT STORE
Concrete base with 2.4m high timber palisade fencing with galvanized structure and green roof.



02 BICYCLE STORE
Urban Engineering 'Series A' or similar and approved Polycarbonate transparent sheets with polyester powder coated steel frame.
Colour: White (BS0055) Sheffield steel cycle racks or similar and approved to accommodate 10 cycles per shelter.
Alternative option green roof cycle store.



03 BOUNDARY SECURITY FENCE
Typical Paladin Fencing:
The perimeter of the service yards will be provided with 2.4m high paladin fencing. Post and panels to be black finish. Fences to be suitably set back from vehicular areas to reduce risk of accidental impact. Fencing / landscaping to be co-ordinated such that a maximum gap beneath fence is 100mm.



04 KNEE RAIL FENCING
Made from softwood guaranteed for 25 years. Galvanized strap for longer life 5 year treatment guarantee
Height 1.20m with planed finish.



05 DOCK APRON RETAINING WALL
External retaining walls to the sides of the dock access will be also of fair faced concrete. Ammo barrier galvanneal mild steel and handrailing is to be provided adjacent to the retaining wall to level access ramps. The barrier uprights are to be surface fixed to the concrete.



06-07 VEHICLE AND PEDESTRIAN GATES
To security sensitive areas near the main access road, vehicle gate is to be black steel paladin, 2.4m high to BS 1722-12:2006 (including concrete foundations). Gates to hinge open and be able to be held in the open position by providing bolt sleeves. Posts to be square section powder coated black steel with capped tops, cast in concrete bases.



08 MANUAL BARRIER
Manual car park barrier to be provided as indicated. Posts to be square section powder coated black steel with capped tops, cast in concrete bases.

Ref	Date	By	Description
P1	14/09/21	ELP	Issue for comments
P2	14/09/21	ELP	Issue for comments
P3	20/09/21	ELP	Issue for comments
P4	20/09/21	ELP	Issue for comments
P5	20/09/21	ELP	Issue for comments
P6	20/09/21	ELP	Issue for comments
P7	20/09/21	ELP	Issue for comments
P8	20/09/21	ELP	Issue for comments
P9	20/09/21	ELP	Issue for comments
P10	20/09/21	ELP	Issue for comments
P11	20/09/21	ELP	Issue for comments
P12	20/09/21	ELP	Issue for comments
P13	20/09/21	ELP	Issue for comments
P14	20/09/21	ELP	Issue for comments
P15	20/09/21	ELP	Issue for comments

Parking Schedule 01		
Description	Actual	
Accessible Parking	11	
Car Parking	127	
Charging Parking	35	
HGV Parking	44	
Motorcycle Parking	5	
Shared Parking	9	

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Waterford Business Park,
Bury

Drawing Name:
Site Plan

Drawing Stage: **Planning**

Status: **SD**

SGP File Ref: 22-244-SGP-ZZ-ZZ-RP-4-131001

22-244-SGP-ZZ-ZZ-RP-4-131001

Drawing Number: 22-244-SGP-ZZ-ZZ-RP-4-131001

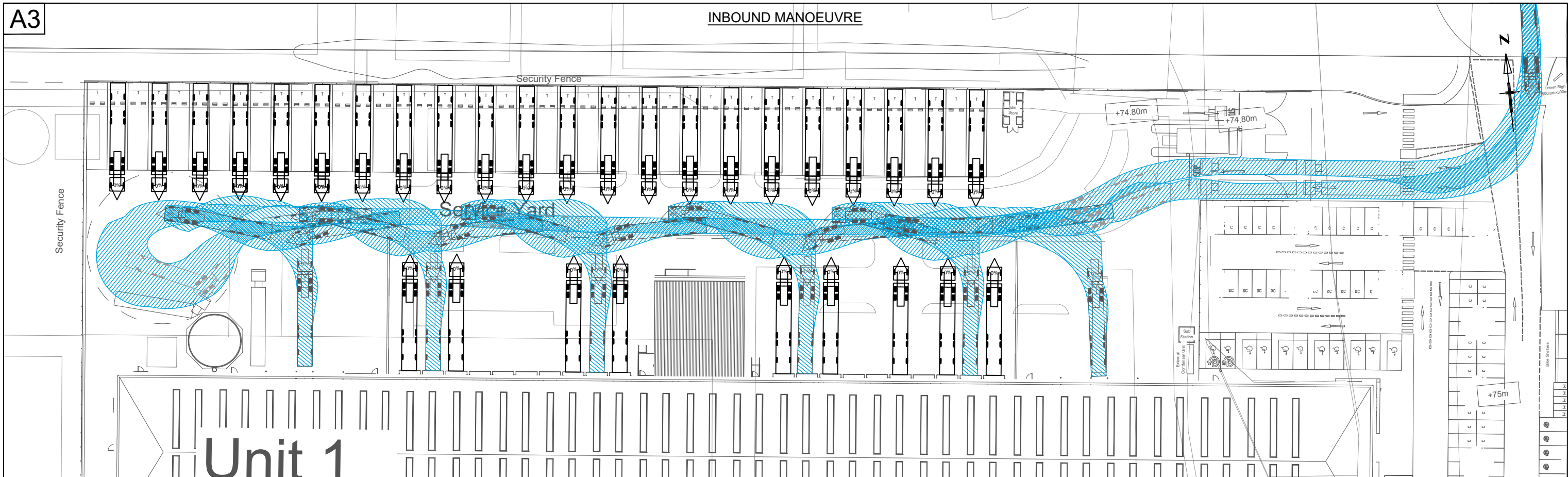
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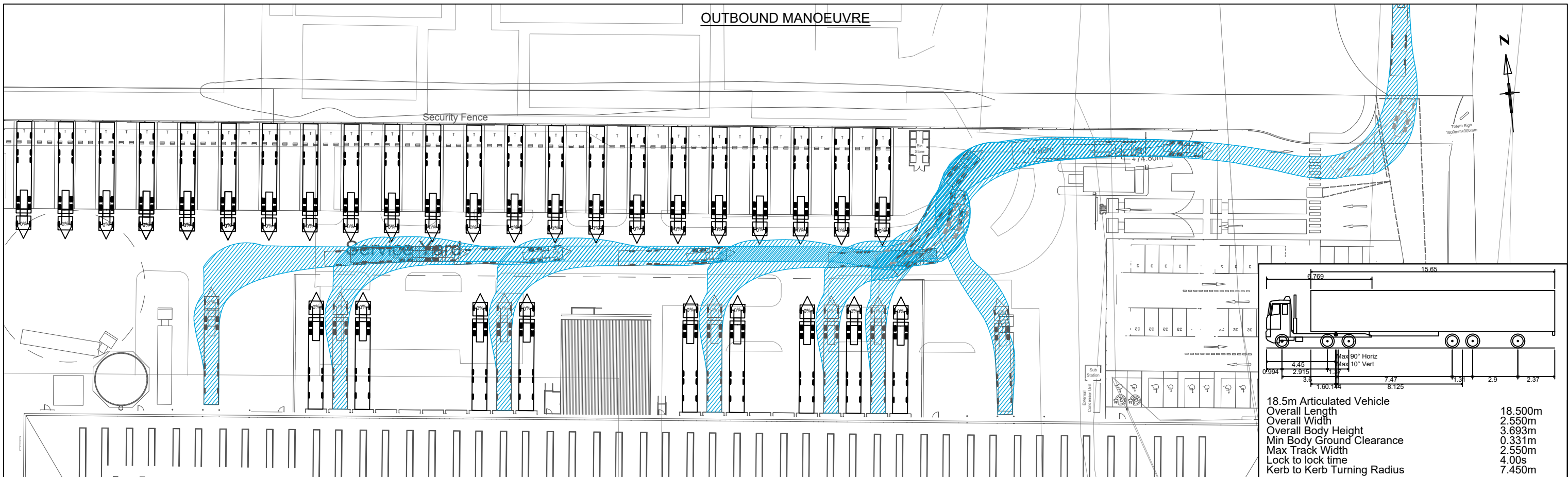
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APPENDIX 2 – SWEPT PATH ANALYSIS

INBOUND MANOEUVRE



OUTBOUND MANOEUVRE



18.5m Articulated Vehicle	
Overall Length	18.500m
Overall Width	2.550m
Overall Body Height	3.693m
Min Body Ground Clearance	0.331m
Max Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.450m

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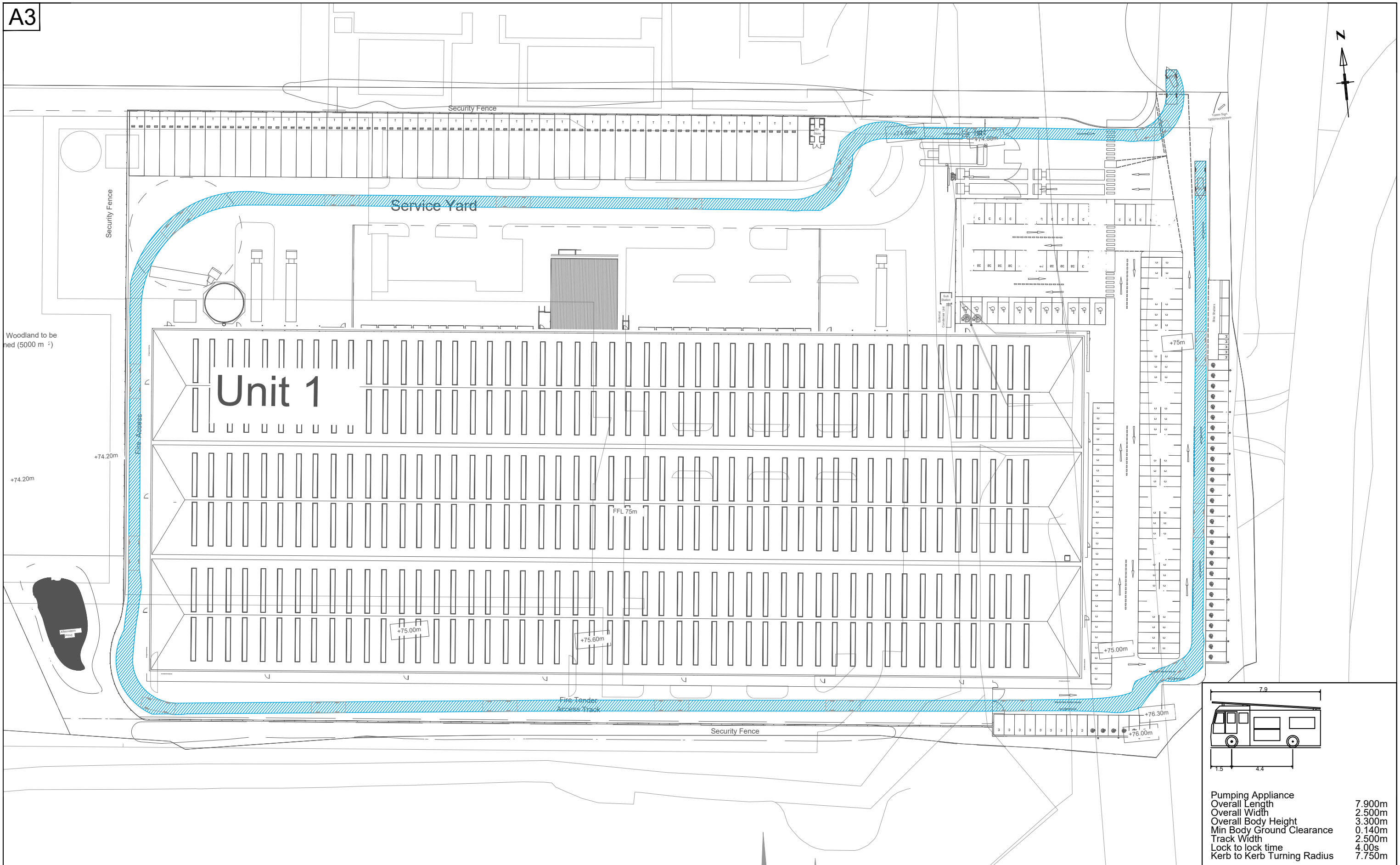
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client
TRITAX
project
PROPOSED DEVELOPMENT
WATERFOLD PARK
BURY

title
SWEEP PATH ANALYSIS
18.5M ARTICULATED VEHICLE

date	OCTOBER 2024	drawn by	T.A.S	checked by	S.J.J
scale	N.T.S	status	PLANNING		
drawing number	22174-TR001	rev.	A		



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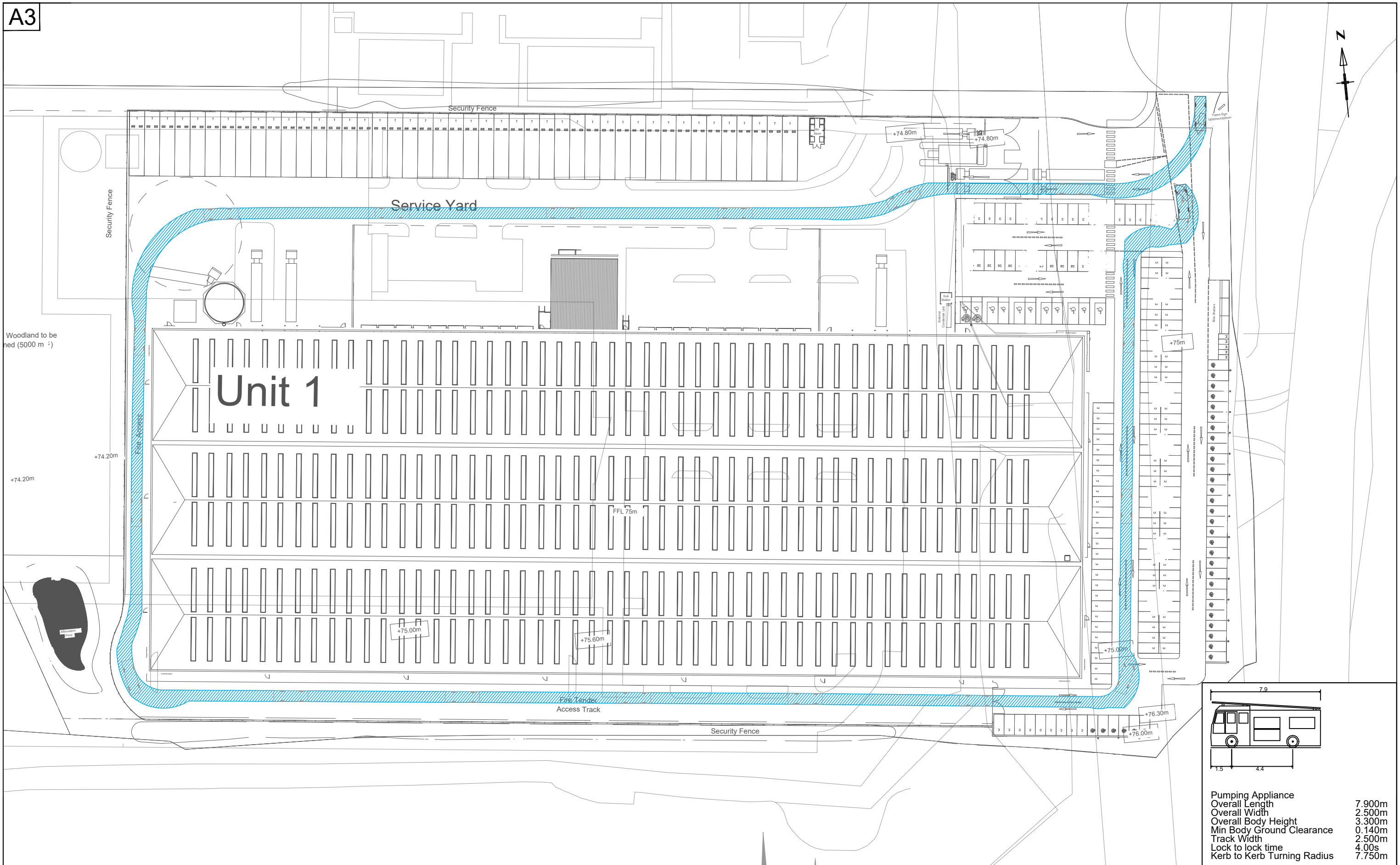
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client
TRITAX
project
PROPOSED DEVELOPMENT
WATERFOLD PARK
BURY

title
SWEPT PATH ANALYSIS
FIRE TENDER

date OCTOBER 2024	drawn by T.A.S	checked by S.J.J
scale N.T.S	status PLANNING	
drawing number 22174-TR002	rev.	



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WATERFOLD PARK
BURY

title
SWEPT PATH ANALYSIS
FIRE TENDER

date OCTOBER 2024	drawn by T.A.S	checked by S.J.J
scale N.T.S	status PLANNING	
drawing number 22174-TR003	rev.	

APPENDIX 3 – TRICS OUTPUTS

Calculation Reference: AUDIT-142301-240927-0940

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	MW MEDWAY	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	BD BRADFORD	1 days
	NY NORTH YORKSHIRE	1 days

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

Connect Consultants 78 Broad Street Chipping Sodbury

Licence No: 142301

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: 1750 to 11200 (units: sqm)
 Range Selected by User: 1000 to 12000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 04/10/23

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	3 days
Wednesday	1 days
Thursday	1 days
Friday	3 days

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

Selected survey types:

Manual count	8 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	8
--------------	---

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	7
Commercial 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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:**Use Class:**

n/a	1 days
B8	7 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	3 days
15,001 to 20,000	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	2 days
75,001 to 100,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	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	2 days
1.1 to 1.5	6 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	8 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	8 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BD-02-F-01 STAITHGATE LANE BRADFORD NEWHALL Edge of Town Industrial Zone Total Gross floor area: 10446 sqm Survey date: THURSDAY 14/03/19	DISTRIBUTION COMPANY BRADFORD	Survey Type: MANUAL
2	DS-02-F-01 PARK ROAD HOLMEWOOD Edge of Town Industrial Zone Total Gross floor area: 7000 sqm Survey date: WEDNESDAY 04/10/23	LOGISTICS DEPOT DERBYSHIRE	Survey Type: MANUAL
3	EX-02-F-01 BRUNEL WAY COLCHESTER SEVERALLS INDUSTRIAL PK Edge of Town Industrial Zone Total Gross floor area: 6560 sqm Survey date: FRIDAY 18/05/18	SPORTS SUPPLEMENTS ESSEX	Survey Type: MANUAL
4	HC-02-F-03 WARSASH ROAD PARK GATE Edge of Town Industrial Zone Total Gross floor area: 3665 sqm Survey date: MONDAY 27/09/21	PPE DISTRIBUTION HAMPSHIRE	Survey Type: MANUAL
5	MW-02-F-02 MILLS ROAD AYLESFORD QUARRY WOOD Edge of Town Industrial Zone Total Gross floor area: 11200 sqm Survey date: FRIDAY 22/09/17	COMMERCIAL WAREHOUSING MEDWAY	Survey Type: MANUAL
6	NY-02-F-01 GRIMBALD CRAG CLOSE KNARESBOROUGH Edge of Town Industrial Zone Total Gross floor area: 1750 sqm Survey date: MONDAY 19/06/23	REMOVALS SERVICE NORTH YORKSHIRE	Survey Type: MANUAL
7	SF-02-F-03 CENTRAL AVENUE IPSWICH WARREN HEATH Edge of Town Industrial Zone Total Gross floor area: 4700 sqm Survey date: FRIDAY 18/09/15	ROAD HAULAGE SUFFOLK	Survey Type: MANUAL
8	WM-02-F-02 SOVEREIGN ROAD BIRMINGHAM KINGS NORTON Edge of Town Commercial Zone Total Gross floor area: 3625 sqm Survey date: MONDAY 09/11/15	LOGISTICS FIRM WEST MIDLANDS	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
BO-02-F-01	Covid-19

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
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	2	8723	0.063	2	8723	0.034	2	8723	0.097
05:30 - 06:00	2	8723	0.149	2	8723	0.069	2	8723	0.218
06:00 - 06:30	2	8723	0.109	2	8723	0.092	2	8723	0.201
06:30 - 07:00	2	8723	0.241	2	8723	0.057	2	8723	0.298
07:00 - 07:30	8	6118	0.141	8	6118	0.080	8	6118	0.221
07:30 - 08:00	8	6118	0.190	8	6118	0.084	8	6118	0.274
08:00 - 08:30	8	6118	0.100	8	6118	0.098	8	6118	0.198
08:30 - 09:00	8	6118	0.151	8	6118	0.067	8	6118	0.218
09:00 - 09:30	8	6118	0.106	8	6118	0.063	8	6118	0.169
09:30 - 10:00	8	6118	0.090	8	6118	0.057	8	6118	0.147
10:00 - 10:30	8	6118	0.065	8	6118	0.065	8	6118	0.130
10:30 - 11:00	8	6118	0.094	8	6118	0.078	8	6118	0.172
11:00 - 11:30	8	6118	0.072	8	6118	0.090	8	6118	0.162
11:30 - 12:00	8	6118	0.082	8	6118	0.067	8	6118	0.149
12:00 - 12:30	8	6118	0.090	8	6118	0.078	8	6118	0.168
12:30 - 13:00	8	6118	0.080	8	6118	0.059	8	6118	0.139
13:00 - 13:30	8	6118	0.072	8	6118	0.088	8	6118	0.160
13:30 - 14:00	8	6118	0.100	8	6118	0.074	8	6118	0.174
14:00 - 14:30	8	6118	0.072	8	6118	0.100	8	6118	0.172
14:30 - 15:00	8	6118	0.086	8	6118	0.094	8	6118	0.180
15:00 - 15:30	8	6118	0.086	8	6118	0.147	8	6118	0.233
15:30 - 16:00	8	6118	0.076	8	6118	0.096	8	6118	0.172
16:00 - 16:30	8	6118	0.090	8	6118	0.186	8	6118	0.276
16:30 - 17:00	8	6118	0.051	8	6118	0.121	8	6118	0.172
17:00 - 17:30	8	6118	0.078	8	6118	0.176	8	6118	0.254
17:30 - 18:00	8	6118	0.061	8	6118	0.112	8	6118	0.173
18:00 - 18:30	7	5992	0.038	7	5992	0.136	7	5992	0.174
18:30 - 19:00	7	5992	0.031	7	5992	0.072	7	5992	0.103
19:00 - 19:30	1	10446	0.057	1	10446	0.182	1	10446	0.239
19:30 - 20:00	1	10446	0.038	1	10446	0.067	1	10446	0.105
20:00 - 20:30	1	10446	0.019	1	10446	0.048	1	10446	0.067
20:30 - 21:00	1	10446	0.086	1	10446	0.038	1	10446	0.124
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:			2.864			2.875			5.739

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:	1750 - 11200 (units: sqm)
Survey date date range:	01/01/15 - 04/10/23
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
OGVS
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	2	8723	0.011	2	8723	0.017	2	8723	0.028
05:30 - 06:00	2	8723	0.034	2	8723	0.052	2	8723	0.086
06:00 - 06:30	2	8723	0.023	2	8723	0.057	2	8723	0.080
06:30 - 07:00	2	8723	0.029	2	8723	0.040	2	8723	0.069
07:00 - 07:30	8	6118	0.029	8	6118	0.049	8	6118	0.078
07:30 - 08:00	8	6118	0.018	8	6118	0.037	8	6118	0.055
08:00 - 08:30	8	6118	0.020	8	6118	0.051	8	6118	0.071
08:30 - 09:00	8	6118	0.029	8	6118	0.033	8	6118	0.062
09:00 - 09:30	8	6118	0.018	8	6118	0.027	8	6118	0.045
09:30 - 10:00	8	6118	0.025	8	6118	0.010	8	6118	0.035
10:00 - 10:30	8	6118	0.031	8	6118	0.033	8	6118	0.064
10:30 - 11:00	8	6118	0.037	8	6118	0.027	8	6118	0.064
11:00 - 11:30	8	6118	0.039	8	6118	0.047	8	6118	0.086
11:30 - 12:00	8	6118	0.022	8	6118	0.020	8	6118	0.042
12:00 - 12:30	8	6118	0.047	8	6118	0.029	8	6118	0.076
12:30 - 13:00	8	6118	0.027	8	6118	0.014	8	6118	0.041
13:00 - 13:30	8	6118	0.016	8	6118	0.031	8	6118	0.047
13:30 - 14:00	8	6118	0.035	8	6118	0.020	8	6118	0.055
14:00 - 14:30	8	6118	0.029	8	6118	0.012	8	6118	0.041
14:30 - 15:00	8	6118	0.027	8	6118	0.027	8	6118	0.054
15:00 - 15:30	8	6118	0.037	8	6118	0.033	8	6118	0.070
15:30 - 16:00	8	6118	0.037	8	6118	0.025	8	6118	0.062
16:00 - 16:30	8	6118	0.043	8	6118	0.041	8	6118	0.084
16:30 - 17:00	8	6118	0.029	8	6118	0.020	8	6118	0.049
17:00 - 17:30	8	6118	0.041	8	6118	0.016	8	6118	0.057
17:30 - 18:00	8	6118	0.043	8	6118	0.037	8	6118	0.080
18:00 - 18:30	7	5992	0.019	7	5992	0.024	7	5992	0.043
18:30 - 19:00	7	5992	0.026	7	5992	0.007	7	5992	0.033
19:00 - 19:30	1	10446	0.010	1	10446	0.048	1	10446	0.058
19:30 - 20:00	1	10446	0.010	1	10446	0.010	1	10446	0.020
20:00 - 20:30	1	10446	0.019	1	10446	0.029	1	10446	0.048
20:30 - 21:00	1	10446	0.010	1	10446	0.019	1	10446	0.029
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:			0.870			0.942			1.812

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
CARS
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	2	8723	0.046	2	8723	0.011	2	8723	0.057
05:30 - 06:00	2	8723	0.115	2	8723	0.017	2	8723	0.132
06:00 - 06:30	2	8723	0.075	2	8723	0.023	2	8723	0.098
06:30 - 07:00	2	8723	0.201	2	8723	0.011	2	8723	0.212
07:00 - 07:30	8	6118	0.076	8	6118	0.010	8	6118	0.086
07:30 - 08:00	8	6118	0.147	8	6118	0.027	8	6118	0.174
08:00 - 08:30	8	6118	0.065	8	6118	0.018	8	6118	0.083
08:30 - 09:00	8	6118	0.094	8	6118	0.016	8	6118	0.110
09:00 - 09:30	8	6118	0.053	8	6118	0.022	8	6118	0.075
09:30 - 10:00	8	6118	0.037	8	6118	0.010	8	6118	0.047
10:00 - 10:30	8	6118	0.010	8	6118	0.012	8	6118	0.022
10:30 - 11:00	8	6118	0.035	8	6118	0.022	8	6118	0.057
11:00 - 11:30	8	6118	0.016	8	6118	0.025	8	6118	0.041
11:30 - 12:00	8	6118	0.025	8	6118	0.020	8	6118	0.045
12:00 - 12:30	8	6118	0.022	8	6118	0.033	8	6118	0.055
12:30 - 13:00	8	6118	0.031	8	6118	0.025	8	6118	0.056
13:00 - 13:30	8	6118	0.035	8	6118	0.033	8	6118	0.068
13:30 - 14:00	8	6118	0.045	8	6118	0.037	8	6118	0.082
14:00 - 14:30	8	6118	0.027	8	6118	0.065	8	6118	0.092
14:30 - 15:00	8	6118	0.043	8	6118	0.053	8	6118	0.096
15:00 - 15:30	8	6118	0.031	8	6118	0.096	8	6118	0.127
15:30 - 16:00	8	6118	0.031	8	6118	0.055	8	6118	0.086
16:00 - 16:30	8	6118	0.016	8	6118	0.116	8	6118	0.132
16:30 - 17:00	8	6118	0.022	8	6118	0.094	8	6118	0.116
17:00 - 17:30	8	6118	0.020	8	6118	0.137	8	6118	0.157
17:30 - 18:00	8	6118	0.012	8	6118	0.067	8	6118	0.079
18:00 - 18:30	7	5992	0.017	7	5992	0.103	7	5992	0.120
18:30 - 19:00	7	5992	0.002	7	5992	0.060	7	5992	0.062
19:00 - 19:30	1	10446	0.048	1	10446	0.134	1	10446	0.182
19:30 - 20:00	1	10446	0.019	1	10446	0.048	1	10446	0.067
20:00 - 20:30	1	10446	0.000	1	10446	0.019	1	10446	0.019
20:30 - 21:00	1	10446	0.057	1	10446	0.010	1	10446	0.067
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:			1.473			1.429			2.902

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
 LGVS
 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	2	8723	0.000	2	8723	0.006	2	8723	0.006
05:30 - 06:00	2	8723	0.000	2	8723	0.000	2	8723	0.000
06:00 - 06:30	2	8723	0.006	2	8723	0.006	2	8723	0.012
06:30 - 07:00	2	8723	0.011	2	8723	0.006	2	8723	0.017
07:00 - 07:30	8	6118	0.029	8	6118	0.016	8	6118	0.045
07:30 - 08:00	8	6118	0.018	8	6118	0.016	8	6118	0.034
08:00 - 08:30	8	6118	0.014	8	6118	0.029	8	6118	0.043
08:30 - 09:00	8	6118	0.025	8	6118	0.016	8	6118	0.041
09:00 - 09:30	8	6118	0.035	8	6118	0.014	8	6118	0.049
09:30 - 10:00	8	6118	0.029	8	6118	0.037	8	6118	0.066
10:00 - 10:30	8	6118	0.022	8	6118	0.020	8	6118	0.042
10:30 - 11:00	8	6118	0.020	8	6118	0.029	8	6118	0.049
11:00 - 11:30	8	6118	0.016	8	6118	0.018	8	6118	0.034
11:30 - 12:00	8	6118	0.035	8	6118	0.027	8	6118	0.062
12:00 - 12:30	8	6118	0.020	8	6118	0.016	8	6118	0.036
12:30 - 13:00	8	6118	0.016	8	6118	0.020	8	6118	0.036
13:00 - 13:30	8	6118	0.020	8	6118	0.025	8	6118	0.045
13:30 - 14:00	8	6118	0.020	8	6118	0.016	8	6118	0.036
14:00 - 14:30	8	6118	0.016	8	6118	0.022	8	6118	0.038
14:30 - 15:00	8	6118	0.016	8	6118	0.008	8	6118	0.024
15:00 - 15:30	8	6118	0.018	8	6118	0.016	8	6118	0.034
15:30 - 16:00	8	6118	0.008	8	6118	0.014	8	6118	0.022
16:00 - 16:30	8	6118	0.025	8	6118	0.022	8	6118	0.047
16:30 - 17:00	8	6118	0.000	8	6118	0.006	8	6118	0.006
17:00 - 17:30	8	6118	0.014	8	6118	0.016	8	6118	0.030
17:30 - 18:00	8	6118	0.004	8	6118	0.006	8	6118	0.010
18:00 - 18:30	7	5992	0.002	7	5992	0.010	7	5992	0.012
18:30 - 19:00	7	5992	0.002	7	5992	0.005	7	5992	0.007
19:00 - 19:30	1	10446	0.000	1	10446	0.000	1	10446	0.000
19:30 - 20:00	1	10446	0.010	1	10446	0.010	1	10446	0.020
20:00 - 20:30	1	10446	0.000	1	10446	0.000	1	10446	0.000
20:30 - 21:00	1	10446	0.019	1	10446	0.010	1	10446	0.029
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:			0.470			0.462			0.932

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MOTOR CYCLES
 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	2	8723	0.006	2	8723	0.000	2	8723	0.006
05:30 - 06:00	2	8723	0.000	2	8723	0.000	2	8723	0.000
06:00 - 06:30	2	8723	0.000	2	8723	0.000	2	8723	0.000
06:30 - 07:00	2	8723	0.000	2	8723	0.000	2	8723	0.000
07:00 - 07:30	8	6118	0.002	8	6118	0.000	8	6118	0.002
07:30 - 08:00	8	6118	0.004	8	6118	0.000	8	6118	0.004
08:00 - 08:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
08:30 - 09:00	8	6118	0.002	8	6118	0.000	8	6118	0.002
09:00 - 09:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
09:30 - 10:00	8	6118	0.000	8	6118	0.000	8	6118	0.000
10:00 - 10:30	8	6118	0.002	8	6118	0.000	8	6118	0.002
10:30 - 11:00	8	6118	0.002	8	6118	0.000	8	6118	0.002
11:00 - 11:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
11:30 - 12:00	8	6118	0.000	8	6118	0.000	8	6118	0.000
12:00 - 12:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
12:30 - 13:00	8	6118	0.006	8	6118	0.000	8	6118	0.006
13:00 - 13:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
13:30 - 14:00	8	6118	0.000	8	6118	0.000	8	6118	0.000
14:00 - 14:30	8	6118	0.000	8	6118	0.000	8	6118	0.000
14:30 - 15:00	8	6118	0.000	8	6118	0.006	8	6118	0.006
15:00 - 15:30	8	6118	0.000	8	6118	0.002	8	6118	0.002
15:30 - 16:00	8	6118	0.000	8	6118	0.002	8	6118	0.002
16:00 - 16:30	8	6118	0.002	8	6118	0.002	8	6118	0.004
16:30 - 17:00	8	6118	0.000	8	6118	0.000	8	6118	0.000
17:00 - 17:30	8	6118	0.000	8	6118	0.004	8	6118	0.004
17:30 - 18:00	8	6118	0.000	8	6118	0.000	8	6118	0.000
18:00 - 18:30	7	5992	0.000	7	5992	0.000	7	5992	0.000
18:30 - 19:00	7	5992	0.000	7	5992	0.000	7	5992	0.000
19:00 - 19:30	1	10446	0.000	1	10446	0.000	1	10446	0.000
19:30 - 20:00	1	10446	0.000	1	10446	0.000	1	10446	0.000
20:00 - 20:30	1	10446	0.000	1	10446	0.000	1	10446	0.000
20:30 - 21:00	1	10446	0.000	1	10446	0.000	1	10446	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:			0.026			0.016			0.042

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.*

Calculation Reference: AUDIT-142301-240927-0942

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
TOTAL VEHICLES

<u>Selected regions and areas:</u>		
02	SOUTH EAST	
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	PB PETERBOROUGH	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	AK WAKEFIELD	1 days
09	NORTH	
	DA DARLINGTON	1 days

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

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Licence No: 142301

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: 1230 to 5700 (units: sqm)
 Range Selected by User: 1000 to 12000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 11/11/22

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
Tuesday	2 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	6 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	6
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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:

Commercial Zone	1
Development Zone	1
Residential Zone	1
No Sub Category	3

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	X days - Selected
Servicing vehicles Excluded	10 days - Selected

Secondary Filtering selection:**Use Class:**

Not Known	6 days
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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

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	3 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	4 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	3 days
1.6 to 2.0	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	6 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	6 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AK-02-A-01 PIONEER WAY CASTLEFORD WHITWOOD Edge of Town No Sub Category Total Gross floor area: 1230 sqm Survey date: TUESDAY 23/05/17	OFFICES WAKEFIELD
2	DA-02-A-02 ALDERMAN BEST WAY DARLINGTON Edge of Town No Sub Category Total Gross floor area: 3530 sqm Survey date: THURSDAY 18/10/18	ENGINEERING COMPANY DARLINGTON Survey Type: MANUAL
3	NF-02-A-05 YARMOUTH ROAD NORWICH Edge of Town Residential Zone Total Gross floor area: 3697 sqm Survey date: MONDAY 12/09/22	COUNCIL OFFICES NORFOLK Survey Type: MANUAL
4	PB-02-A-04 LYNCH WOOD PETERBOROUGH Edge of Town Commercial Zone Total Gross floor area: 4040 sqm Survey date: WEDNESDAY 19/10/16	OFFICES PETERBOROUGH Survey Type: MANUAL
5	WL-02-A-01 THE CRESCENT AMESBURY SUNRISE WAY Edge of Town Development Zone Total Gross floor area: 2500 sqm Survey date: TUESDAY 18/09/18	PET INSURANCE COMPANY WILTSHIRE Survey Type: MANUAL
6	WS-02-A-06 YEOMAN ROAD WORTHING Edge of Town No Sub Category Total Gross floor area: 5700 sqm Survey date: WEDNESDAY 18/05/22	SOUTHERN WATER OFFICES WEST SUSSEX 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
EC-02-A-04	Covid-19
NM-02-A-01	Covid-19
SF-02-A-03	Covid-19
WO-02-A-03	Covid-19

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Licence No: 142301

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

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									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3450	0.217	6	3450	0.039	6	3450	0.256
07:30 - 08:00	6	3450	0.715	6	3450	0.053	6	3450	0.768
08:00 - 08:30	6	3450	1.077	6	3450	0.072	6	3450	1.149
08:30 - 09:00	6	3450	1.135	6	3450	0.082	6	3450	1.217
09:00 - 09:30	6	3450	0.904	6	3450	0.063	6	3450	0.967
09:30 - 10:00	6	3450	0.309	6	3450	0.072	6	3450	0.381
10:00 - 10:30	6	3450	0.159	6	3450	0.072	6	3450	0.231
10:30 - 11:00	6	3450	0.082	6	3450	0.043	6	3450	0.125
11:00 - 11:30	6	3450	0.101	6	3450	0.058	6	3450	0.159
11:30 - 12:00	6	3450	0.063	6	3450	0.072	6	3450	0.135
12:00 - 12:30	6	3450	0.111	6	3450	0.324	6	3450	0.435
12:30 - 13:00	6	3450	0.213	6	3450	0.300	6	3450	0.513
13:00 - 13:30	6	3450	0.256	6	3450	0.280	6	3450	0.536
13:30 - 14:00	6	3450	0.246	6	3450	0.121	6	3450	0.367
14:00 - 14:30	6	3450	0.116	6	3450	0.179	6	3450	0.295
14:30 - 15:00	6	3450	0.121	6	3450	0.217	6	3450	0.338
15:00 - 15:30	6	3450	0.135	6	3450	0.271	6	3450	0.406
15:30 - 16:00	6	3450	0.024	6	3450	0.242	6	3450	0.266
16:00 - 16:30	6	3450	0.082	6	3450	0.502	6	3450	0.584
16:30 - 17:00	6	3450	0.068	6	3450	0.628	6	3450	0.696
17:00 - 17:30	6	3450	0.029	6	3450	1.440	6	3450	1.469
17:30 - 18:00	6	3450	0.077	6	3450	0.647	6	3450	0.724
18:00 - 18:30	5	3893	0.041	5	3893	0.447	5	3893	0.488
18:30 - 19:00	5	3893	0.036	5	3893	0.134	5	3893	0.170
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
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:			6.317			6.358			12.675

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:	1230 - 5700 (units: sqm)
Survey date range:	01/01/15 - 11/11/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	4

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
OGVS
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									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
07:30 - 08:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
08:00 - 08:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
08:30 - 09:00	6	3450	0.005	6	3450	0.000	6	3450	0.005
09:00 - 09:30	6	3450	0.000	6	3450	0.005	6	3450	0.005
09:30 - 10:00	6	3450	0.010	6	3450	0.010	6	3450	0.020
10:00 - 10:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
10:30 - 11:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
11:00 - 11:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
11:30 - 12:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
12:00 - 12:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
12:30 - 13:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
13:00 - 13:30	6	3450	0.005	6	3450	0.005	6	3450	0.010
13:30 - 14:00	6	3450	0.005	6	3450	0.000	6	3450	0.005
14:00 - 14:30	6	3450	0.005	6	3450	0.005	6	3450	0.010
14:30 - 15:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
15:00 - 15:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
15:30 - 16:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
16:00 - 16:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
16:30 - 17:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
17:00 - 17:30	6	3450	0.000	6	3450	0.000	6	3450	0.000
17:30 - 18:00	6	3450	0.000	6	3450	0.000	6	3450	0.000
18:00 - 18:30	5	3893	0.000	5	3893	0.000	5	3893	0.000
18:30 - 19:00	5	3893	0.000	5	3893	0.000	5	3893	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
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:			0.030			0.025			0.055

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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