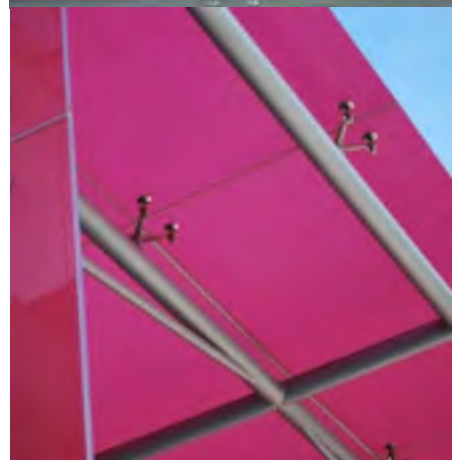
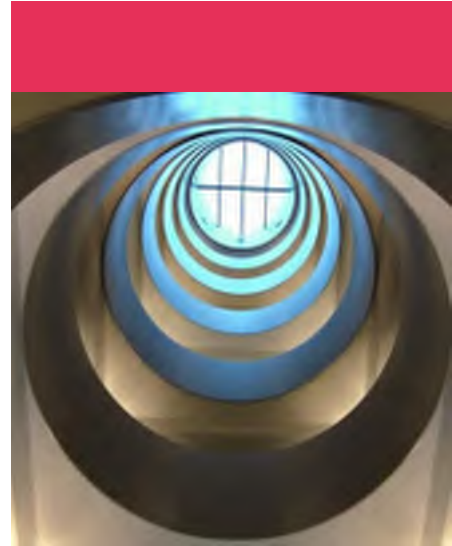


Crab Tree Lane, Openshaw Transport Statement

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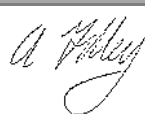


Control Sheet

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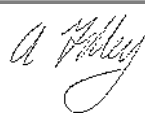
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Appendix A – Proposed Site Layout

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1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed by MCI Developments to provide transport and highways advice in relation to a planning application for 115 dwellings on land to the east of Crabtree Lane in Openshaw to the east of Manchester city centre.
- 1.1.2 The proposed scheme will provide a mix of 1 / 2 bedroom apartments and 2/3/4 bedroom houses on brownfield land.
- 1.1.3 The proposed site layout is provided in **Appendix A**.

1.2 Purpose of the Report

- 1.2.1 This Transport Statement (TS) has been prepared to inform Highway Officers at Manchester City Council (MCC) as the Local Highway Authority (LHA) of the development proposals and their potential impact on the surrounding area from a traffic and transportation perspective.
- 1.2.2 The TS is supported by a range of appendices, with access drawings showing visibility splays and swept path assessments. Additionally, the TS is supported by an Interim Travel Plan (Document Reference: **079458-CUR-00-XX-RP-TP-002**) with measures and initiatives to encourage active and sustainable travel.

1.3 Scope of the Report

- 1.3.1 The scope of this report has been broadly agreed with Officers at MCC and is consistent with the guidance and recommendations set out in Local and National planning policy.
- 1.3.2 On this basis, the TS contains the following:
 - Details of the existing use and the development proposals, together with a proposed site layout plan;
 - A review of highway safety within the vicinity of the site for the most recent five years;
 - An audit of accessibility by all modes of travel including walking, cycling, and public transport;
 - Drawings showing the site access proposals, vehicle tracking and visibility splays;
 - Information regarding traffic generation and impact on the surrounding highway network; and
 - A review of the relevant local and national transport planning policy.

1.4 Structure of the Report

- 1.4.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the existing site and its location. This includes the local highway network and facilities for pedestrians, cyclists and public transport users.
- 1.4.2 **Section 2** also reviews the local area in terms of highways safety by way of obtaining records of accidents adjacent to the site over the most recent five-year period available.
- 1.4.3 **Section 3** gives an overview of the development proposals including details on proposed access, parking provision, and a servicing and refuse strategy.
- 1.4.4 **Section 4** considers the site's accessibility by sustainable modes of transport, including walking, cycling and public transport.
- 1.4.5 **Section 5** outlines the traffic forecasting methodology used to establish the likely traffic generation associated with the development proposals and the highway impact.
- 1.4.6 **Section 6** summarises key national and local transport planning policy, and **Section 7** provides a report summary and conclusion.

2.0 Existing Situation

2.1 Site Location

- 2.1.1 The site is located on Crabtree Lane in Openshaw immediately to the east of the existing Clayton Industrial Estate. It is situated approximately 5.5km east of St Peter's Square in Manchester City Centre, 2km east of the Etihad Campus and 5.2km west of Ashton-under-Lyne.
- 2.1.2 The A662 Ashton New Road is situated 220m to the north of the site, separated by the Ashton Canal, with the A635 Ashton old Road located approximately 720m to the south of the site. Both routes run on an east/west alignment and connect Openshaw with Manchester city centre to the west and Ashton-under Lyne to the east.
- 2.1.3 **Figure 2.1** below and **Plan 079458-CUR-00-XX-DR-TP-06001-P01** to the rear of the report show the site in a regional context relating to the surrounding highway network.



Figure 2.1 – Site Location in relation to the Regional Highway Network
(Source: OS Maps)

- 2.1.4 In a more local context, the site is bound by Ashton Canal to the north, brownfield land and the Higher Openshaw Community School to the east, several residential properties, Eastern By-Pass and a stretch of green space to the south, and Crabtree Lane, a mast and an industrial estate to the west.

- 2.1.5 **Figure 2.2** below and **Plan 079458-CUR-00-XX-DR-TP-06002-P01** to the rear of the report show the site in a local context relating to the local highway network.

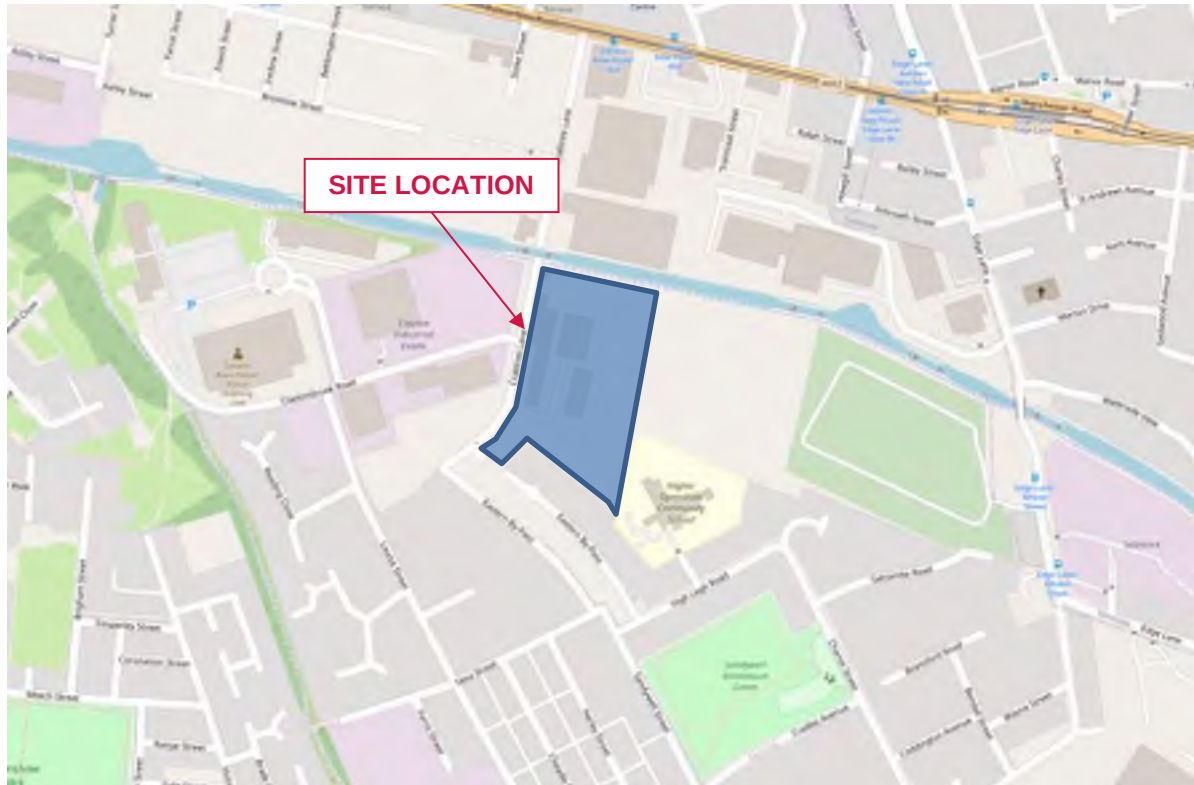


Figure 2.2 – Site location in relation to the Local Highway Network
(Source: OS Maps)

2.2 Existing Use and Access

- 2.2.1 The existing site is currently occupied by a collection of redundant industrial units each in varying states of disrepair. With the site boundary, there are separate areas of hardstanding and overgrown vegetation.
- 2.2.2 The site has frontage along Crabtree Lane which provided direct access into the site. there are two existing gated entrances to the site along with direct frontage access into the buildings from Crabtree Lane.
- 2.2.3 From almost all points in Greater Manchester (and further afield), Google Maps Route Planner recommends that vehicular traffic access the site from Ashton Old Road to Louisa Street, then Claytonbrook Road, and finally Crabtree Lane. Users coming from parts of Clayton and Droylsden should use Edge Lane, to Wheler Street and Old Lane before joining the other route on Louisa Street.

2.3 Surrounding Highway Network

2.3.1 **Figure 2.3** provides an extract of the adopted highway boundary plan supplied by MCC which covers the local highway network in the vicinity of the proposed development site.

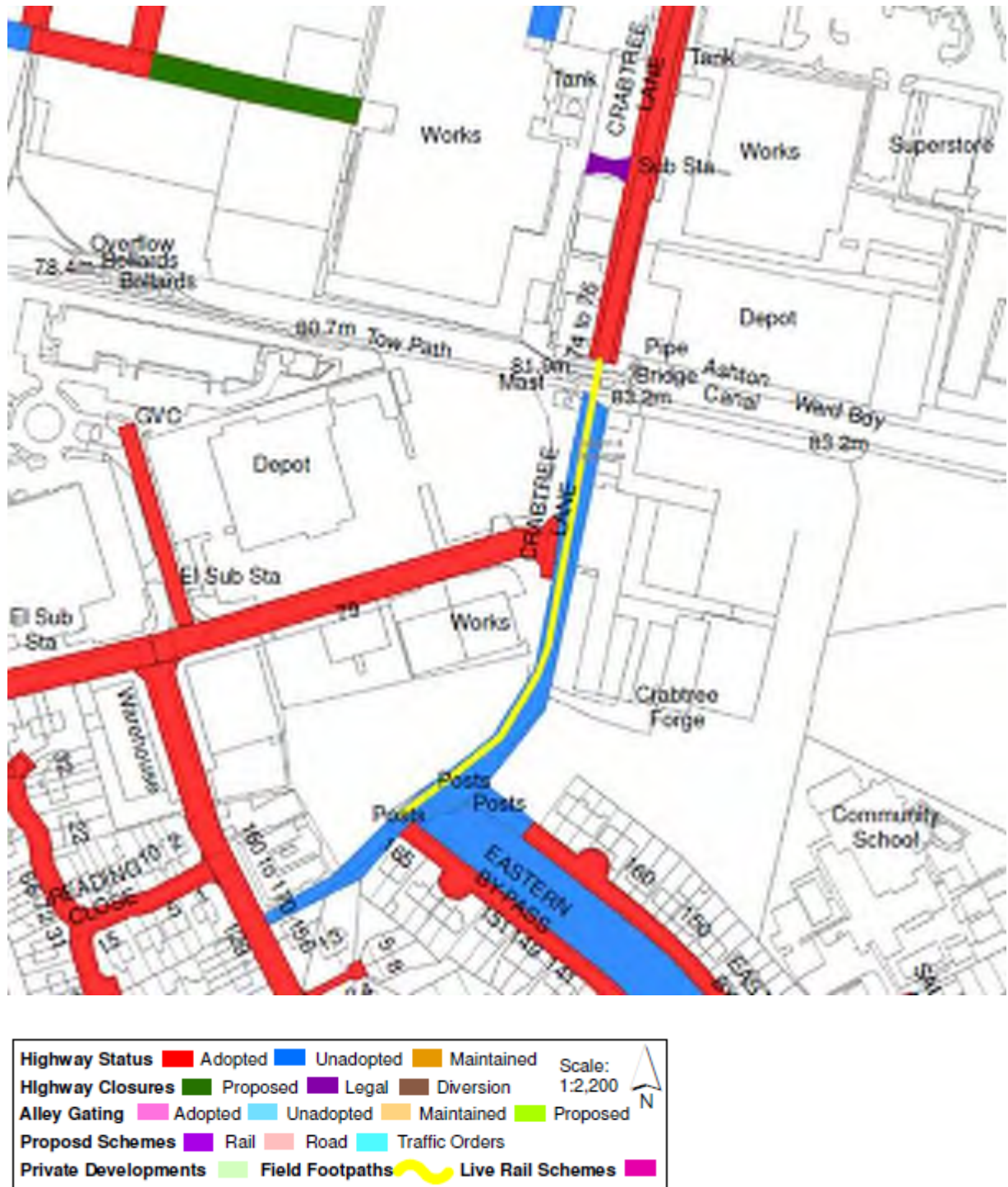


Figure 2.3 – Extent of Adopted Highway
(Source: Manchester City Council)

Crabtree Lane (south of the canal)

- 2.3.2 To the south of the Ashton Canal, Crabtree Lane extends for approximately 180m in a southerly direction along the full site frontage. There are bollards at both the southern and northern ends of the road.
- 2.3.3 The information contained within Figure 2.3 confirms that this length of Crabtree Lane is currently unadopted and not publicly maintained. there is however, a "Field Footpath" which runs along Crabtree Lane which connects Eastern by-pass in the south to the Ashton Canal.
- 2.3.4 The road ranges from 9m to 11m in width with dense, overgrown vegetation along both sides of Crabtree Lane.
- 2.3.5 There are no footways on either side of the road for the majority of its length, however, the road is well-lit by regular streetlights on both sides.
- 2.3.6 A pedestrian footbridge is provided at the northern extent of Crabtree Lane facilitated continues access on foot and bicycle to the north of the site.

Crabtree Lane (north of the canal)

- 2.3.7 As noted, there is a bridge allowing pedestrians access across the Ashton Canal to the northern side of Crabtree Lane which extends approximately 200m to the north terminating at a priority-controlled junction with Ashton New Road. Figure 2.3 confirms that this length of Crabtree Lane is adopted.
- 2.3.8 The pavements are typically 2m wide on both sides of the road. There are some dropped kerbs, but no tactile paving except at the junction with Ashton New Road.
- 2.3.9 The road is subject to a 20mph speed limit and benefits from streetlighting along both sides.

Claytonbrook Road

- 2.3.10 Claytonbrook Road is an adopted highway that provides access to the wider Clayton Industrial Estate and is approximately 7.5m wide with 2m wide pavements on both sides.
- 2.3.11 There are footways and streetlighting provided along the full length of the road, which is also subject to a 20mph speed limit.

Louisa Street

- 2.3.12 Louisa Street extends for approximately 680m in a south-easterly direction between the junctions with Claytonbrook Road and Ashton Old Road.
- 2.3.13 There is extensive on-street parking on the eastern side of the road, with single and double yellow lines along most of the western side.

2.3.14 The road varies slightly between a width of 6.5m to 7.5m, with pavements of approximately 2m wide. There are dropped kerbs, but limited tactile paving.

A635 Ashton Old Road

2.3.15 The road is approximately 12m wide with at least one lane in each direction and a central reservation.

2.3.16 The footways range between 2m and 4m in width with dropped kerbs and tactile paving at crossings.

2.3.17 The road is well-lit by streetlights at regular intervals.

2.3.18 There is a pedestrian crossing to the east of the Louisa Street/ Ashton Old Road junction with push-button operated traffic lights, dropped kerbs and tactile paving.

2.4 Access for Mobility and Visually Impaired Users

2.4.1 There are very limited facilities for mobility and visually impaired users in the immediate vicinity of the site.

2.5 Highway Safety

2.5.1 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from the TfGM reported road accidents database for the most recent five years (2016 – 2021 inclusive). The details of the search are contained in **Figure 2.4**. A breakdown of the information is summarised in **Table 2.1**:

Junction/Link	Slight	Serious	Fatal	Totals
Claytonbrook Road/ Louisa Street	1	0	0	1
Louisa Street/ Old Lane	1	0	0	1
Louisa Street/ Ashton Old Road	5	1	0	6
Wheler Street	2	0	0	2
Edge Lane	4	0	0	4
Total	13	1	0	14

Table 2.1 – Personal Injury Accident Data Summary

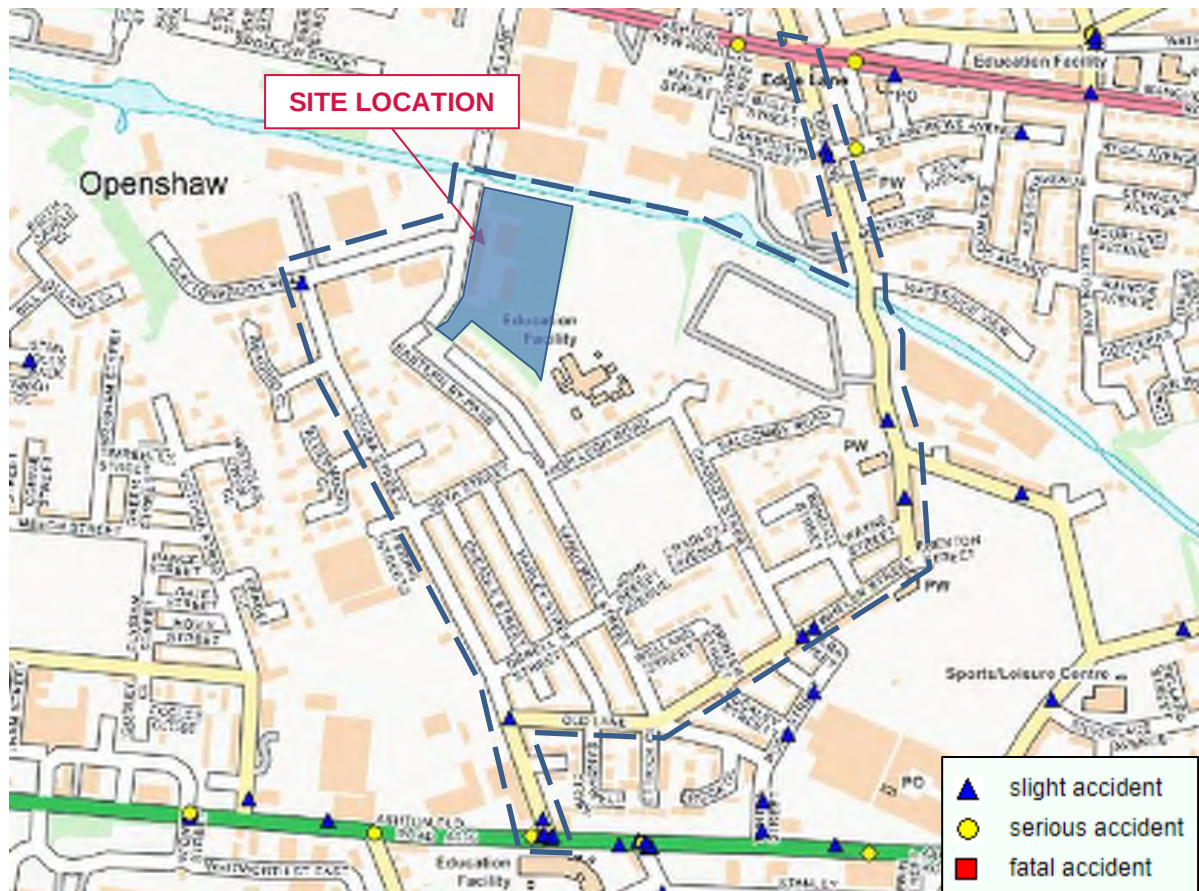


Figure 2.4 – Area Assessed for Personal Injury Accident Data (5 years)
(Source: TfGM)

- 2.5.2 There has been a total of 14 accidents in the latest five-year period available, comprising 13 ‘slight’ incidents and 1 ‘serious’ incident. There were no fatal incidents recorded in the vicinity of the site.
- 2.5.3 The 6 accidents located around the Louisa Street/ Ashton Old Road junction are spread out evenly among the most recent years, with no accidents in 2015, 2017 and 2020, three ‘slight’ incidents in 2018, two in 2019, and one ‘serious’ incident in 2019. Considering these findings and the temporal nature of the study, it can be concluded that the accidents are not related to the features of the highway at this junction.
- 2.5.4 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions. It is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed development.

3.0 Development Proposals

3.1 Overview of Proposals

3.1.1 This report is prepared in support of the redevelopment of circa 2.09 ha of land at Crabtree Lane in Openshaw. This will deliver a total of 115 residential dwellings, consisting of:

- 45 apartments, comprising a mixture of 1 and 2 bedrooms; and
- 70 houses, comprising a mixture of 2, 3, and 4 bedrooms

3.1.2 The scheme is intended to be built in one stage but is capable of being constructed over two phases: in this case Phase 1 would consist of 100 dwellings across the majority of the site, while Phase 2 would consist of 15 dwellings in a triangular area at the south of the site. This Transport Statement assesses both phases as one for completeness.

3.1.3 The proposed site layout is provided in **Appendix A**.

3.2 Proposed Access

Crabtree Lane

3.2.1 As noted previously, Crabtree Lane is currently unadopted and provides no dedicated pedestrian infrastructure.

3.2.2 It is therefore proposed as part of the application proposals to upgrade Crabtree Lane to adoptable standards and deliver a 6.0m wide carriageway plus 2.0m wide footways along the full frontage of the proposed development. This would also entail the relocation of existing lampposts and trimming/management of dense vegetation if a footway is provided on the western side of Crabtree Lane.

3.2.3 The full extent of highway works are included on the proposed site layout contained in **Appendix A**.

3.2.4 Once completed, the adoptable highway network will extend up to, and include, the proposed development.

3.2.5 The posted speed limit of 20mph would be extended to include the proposed development which will provide a natural extension to the existing local highway network.

Vehicular Access

3.2.6 The proposed site access strategy has been developed in consultation with officers at MCC.

3.2.7 Following the submission of a preliminary draft scheme layout for pre-application discussions in April 2021, the number of vehicular access points into the site was increased from a single access to two separate access points via Crabtree Lane.

- 3.2.8 The possibility of creating a vehicular link between Crabtree Lane and Eastern by-pass to the south was explored, at the request of Highway Officers at MCC. However, given the current unadopted status of Crabtree Lane and the northern extents of Eastern By-pass, plus the potential third party land implications, the option was not considered viable.
- 3.2.9 The access junctions are located to the approximately 27m north and 55m south of the existing Claytonbrook Road/Crabtree Lane priority-controlled junction respectively. The proposed access strategy assists in creating a permeable development which also provides a secondary point of access should either junction become obstructed for any reason in the event of an emergency.
- 3.2.10 The proposed site access strategy is illustrated in drawing number **079458-CUR-00-XX-DR-TP-75002-P03** and confirms that unobstructed visibility splays of 2.4m x 25m are achievable in both directions along Crabtree Lane at both points of access. These splays are commensurate with Manual for the Streets (MfS) standards for roads with a 20mph speed limit.
- 3.2.11 This internal access roads have been designed to adoptable standards and includes a 5.5m-wide carriageway with a 2m-wide footway on both sides of the road throughout the scheme. There would also be dropped kerbs and tactile paving at the junctions where the access road meets Crabtree Lane to facilitate pedestrian access.

Pedestrian and Cycle Access

- 3.2.12 The pedestrian and cycle access to the proposed development site will be enhanced as part of the upgrade works to Crabtree Lane. There will be 2.0m-wide footways throughout the internal road network and Crabtree Lane with dropped kerbs and tactile paving at junctions.
- 3.2.13 Pedestrians and cyclists would enter the site in a similar manner to other vehicles whilst also benefitting from the existing linkages at the northern and southern extents of Crabtree Lane that provide connections to the wider built-up residential areas.
- 3.2.14 There are dead ends for vehicular traffic at the northern and southern ends of Crabtree Lane with new bollards to be installed between the turning area and Eastern Bypass, but pedestrians and cyclists will be able to continue along Eastern Bypass, Ashton Canal, and across the bridge to the northern section of Crabtree Lane. Therefore, vehicular traffic on the surrounding roads will be limited and walking and cycling will likely be more attractive for some trips, particularly to the primary school, surrounding residential properties, allotments and the various amenities, including a large Aldi within a 500m walk, along Ashgton New Road and Ashton Old Road.
- 3.2.15 The proposed pedestrian and cycle access strategy will provide vulnerable road users with an alternative access route away from the adjacent Clayton Industrial Estate.

3.3 Proposed Parking

- 3.3.1 Car and cycle parking for the development is provided in accordance with the Manchester Residential Quality Guidance, adopted in 2017, which requires proposals to *“incorporate sufficient car parking in an appropriate location that does not harm pedestrian movement”* and *“provide secure cycle parking for residents and visitors, which is safe and convenient”*. The guide does not specify exact numbers of car and cycle parking spaces for residential developments.

Car Parking

- 3.3.2 Each apartment (1- and 2-bedroom) will be provided with 1 car parking space, for a total of 45 spaces.
- 3.3.3 Each 2-bedroom house within the proposed development will have access to minimum of one car parking space.
- 3.3.4 3-bedroom houses would have parking provision for two vehicles and 4-bedroom houses would have off-street parking for up to three vehicles.
- 3.3.5 Each dwelling within the proposed development site will have access to EV charging points as part of the proposed development parking strategy.
- 3.3.6 It is considered that this parking provision is in accordance with local transport policies, with respect to the nature of the site and realistic needs of the end users, and the proximity of the site to sustainable modes of transport.

Cycle Parking

- 3.3.7 Secure cycle parking facilities will be provided within the curtilage of each house.
- 3.3.8 Three dedicated cycle parking stores will be provided within the parking court for the 45 apartments. Cycle parking at a ratio of one space per apartment will be provided.
- 3.3.9 This is one of the many initiatives to encourage more people to travel by sustainable modes (in addition to other measures outlined in the accompanying Interim Travel Plan (Document Reference: **079458-CUR-00-XX-RP-TP-002**).

3.4 Proposed Servicing Arrangements

- 3.4.1 It is proposed that service and refuse vehicles would enter the site via either access junction on Crabtree Lane. **Drawing 079458-CUR-00-XX-DR-TP-05002-P02** at the rear of this report shows the swept path analysis of a large refuse vehicle manoeuvring within the site, utilising the turning heads provided and exiting the site in a forward gear.

4.0 Accessibility by Sustainable Modes of Travel

4.1 Introduction

4.1.1 A key element of national and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. It is important to ensure that developments are not isolated but are located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

4.1.2 The accessibility of the proposed development is considered in this context for the following modes of travel:

- Pedestrian Accessibility;
- Cycle Accessibility; and
- Public Transport Accessibility.

4.2 Pedestrian Accessibility

4.2.1 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled '*Providing for Journeys on Foot*' (2000) suggests walking distances which are relevant to this planning application. These are reproduced in **Table 4.1**:

CIHT Category	Town Centers (m)	Commuting/School/ Sightseeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

Table 4.1 – CIHT Recommended Walking Distances

4.2.2 To assist in summarising the accessibility of the site by foot, an indicative pedestrian catchment plan has been produced. **Plan 079458-CUR-00-XX-DR-TP-06003-P01** shows distances of 500m, 1000m and 2000m which are termed 'Desirable', 'Acceptable' and the 'Preferred Maximum' by the CIHT for commuting trips; which are considered a good approximation for trips associated with the development.

4.2.3 Future residents of Crab Tree Lane could access the neighbouring industrial estate, a primary school, Sandywell Millennium Green, a large Aldi supermarket, pub, chemist, and a Subway within a 500m walk.

- 4.2.4 Located within a 500m – 1000m walk residents could access more residential properties, primary schools, a playing field, post office, petrol and EV charger station, convenience stores and supermarkets, restaurants and hot food takeaways, a place of worship, and Lime Square Retail Park.
- 4.2.5 Within 1000m – 2000m of the site residents could further access more residential areas, schools, supermarkets, restaurants, takeaways, places of worship, parks, the National Cycling Centre, Gorton rail station, a veterinary clinic, pharmacy, bowling and boxing clubs, and New Smithfield Market.
- 4.2.6 It is considered that the site is situated within a highly accessible area, with a number of complimentary uses within walking distance.
- 4.2.7 20-minute neighbourhoods are places where residents can walk or cycle from their home to many key facilities and destinations within 20 minutes (i.e. 10 minutes, or 800m if walking, each way). The National Design Guide (DLUHC, 2021) states that well-designed places are walkable, which is defined as *“local facilities within walking distance, generally considered to be no more than a 10-minute walk (800m radius)”*.
- 4.2.8 Neighbourhoods with at least 40 dwellings per hectare are or can become 20-minute neighbourhoods, according to Sustrans' Walking and Cycling Index 2021. This development will provide 115 dwellings within an approximately 2.09-hectare area. This equates to 55 dwellings per hectare, so the development is compatible with the 20-minute neighbourhood concept.
- 4.2.9 As part of the development proposals, the pedestrian infrastructure along Crabtree Lane will be enhanced and improve connectivity to the wider built-up area.

4.3 Cycle Accessibility

- 4.3.1 Cycling is a cheap, efficient, and healthy way to travel. Cycling also provides a predictable arrival time which depending on location, can be quicker than driving or using public transport, and is subject to fewer delays.
- 4.3.2 In order to assist in assessing the accessibility of the site by cycle, **Plan 079458-CUR-00-XX-DR-TP-06004-P01** presents 5.5km and 8km cycle catchments for the site, along with the National Cycle Network Routes available within these ranges.
- 4.3.3 The average person in England cycled 16 times for a total distance of 54 miles in 2019, according to the Department for Transport's walking and cycling statistics. This equates to an average of 3.38 miles/ 5.43km per trip, which is rounded to a 5.5km catchment.
- 4.3.4 8km (5-miles) is considered the maximum acceptable cycling distance for most people and is based on the 2019 National Travel Survey statistics, which demonstrates that 82% of cycling trips were under 5 miles (8km). The National Model Design Code – Part 2 (DLUHC, 2021) also references this distance,

expressing “the aim that walking and cycling should be the first choice for short local journeys, particularly those of 5 miles or less.”

- 4.3.5 Within 5.5km of the site residents could cycle to all Openshaw, Failsworth, Longsight, Gorton, Reddish, and parts of Manchester City Centre, including the Northern Quarter, Gay Village and Manchester Piccadilly rail station. The 8km catchment encompasses the rest of Manchester City Centre including all major transport links as west as Salford Central, along with Levenshulme, Cheetham Hill, Moston, Ashton-under-Lyne and Dukinfield.
- 4.3.6 In close proximity to the site, off Claytonbrook Road, residents could access NCN Route 60, a mainly traffic-free route between East Manchester and North Manchester. Within 5.5km of the site, Route 60 can be used to access NCN Routes 66 – Manchester to Spurn Head in Yorkshire, via Bradford, Leeds, York, and Kingston upon Hull – and 6 – which runs in sections from London to Preston. Residents could also access the still under construction NCN Route 55 within the larger 8km catchment, running in sections from Ironbridge to Preston.
- 4.3.7 The local cycle network in the vicinity of the site is shown in **Figure 4.1** below:

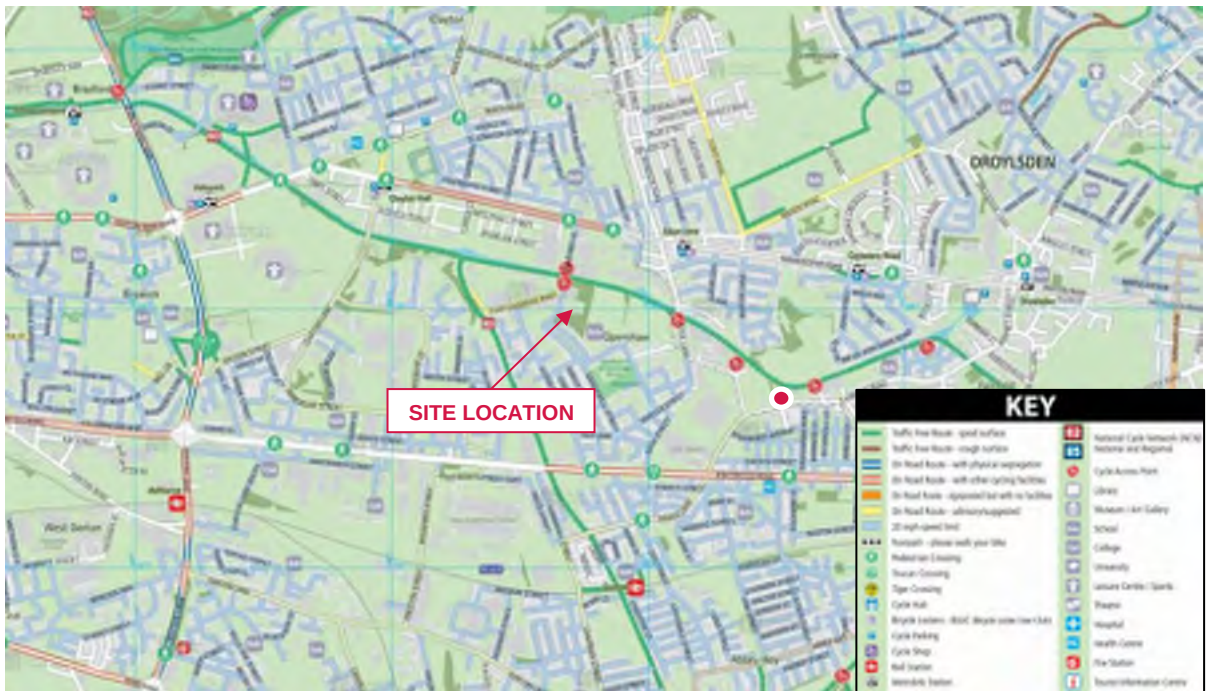


Figure 4.1 – Local Cycle Network
(Source: TfGM)

- 4.3.8 The local cycle network shown above is also a part of Greater Manchester's cycling and walking infrastructure proposal, named the "Bee Network". The Bee Network comprises signed routes that mark the most direct and pleasant way to navigate an area on foot or by bike. There are no proposed Bee Network improvements in the vicinity of the site as it is already well-served by traffic-free section of NCN Routes and the traffic-free route along Ashton Canal.

- 4.3.9 The site is therefore ideally placed to take advantage of the cycle connections around East Manchester and in summary, it is considered that cycling is a highly realistic mode of travel to and from the site.

4.4 Public Transport Accessibility

- 4.4.1 The site is well situated to take advantage of existing public transport infrastructure to Manchester city centre and other areas of Greater Manchester.

- 4.4.2 **Plan 079458-CUR-00-XX-DR-TP-06005-P01** demonstrates the areas accessible via public transport within 20, 40 and 60 minutes of the site. These include:

- 20 minutes – Openshaw, Clayton, Droylsden;
- 40 minutes – Manchester Piccadilly, Manchester Oxford Road, Deansgate, Salford Central, Manchester Victoria, Moston, Ashton-under-Lyne, Fairfield, Ashburys; and
- 60 minutes – Lostock, Bolton, Mills Hill, Greenfield, Broadbottom, Hazel Grove, Romiley, Stockport, Levenshulme, Macclesfield, Wilmslow, Gatley, Manchester Airport, East Didsbury, Trafford Park, Stretford, Warrington Central, Eccles.

- 4.4.3 Developed by Transport for Greater Manchester (TfGM), Greater Manchester Accessibility Levels (GMAL) are a measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), considering walk access time, service availability, and average waiting time. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region.

- 4.4.4 The accessibility index score is categorised into eight levels (1 to 8), where level 8 represents a high level of accessibility (described as 'excellent') and level 1 a low level of accessibility (described as 'very poor'). The site is in an area with a GMAL rating of 5 and is considered appropriately situated to take advantage of existing public transport infrastructure within Openshaw.

- 4.4.5 The National Model Design Code – Part 2 (DLUHC, 2021) states: *"Generally, people are prepared to walk further to a railway station or tram stop (10 minutes) [800m walking distance] than to a bus stop (5 minutes) [400m walking distance]."* These distances are also cited in the CIHT document *'Planning for Walking'* (2015).

- 4.4.6 Accessibility by bus, rail and Metrolink are considered further below, with a local public transport network map included in **Figure 4.2** below:



Figure 4.2 – Public Transport Network in the vicinity of the Site
(Source: TfGM)

Bus Accessibility

- 4.4.7 Further CIHT guidance – from ‘*Buses in Urban Developments*’ (2018) – indicates that a bus stop should be located within the following walking distances from a new development based on its location and the number and frequency of services:

Situation	Maximum Walking Distance (m)
Core bus corridors with two or more high-frequency services	500
Single high-frequency routes (every 12 minutes or better)	400
Less frequent routes	300
Town/city centres	250

Table 4.2 – CIHT Maximum Suggested Walking Distances to Bus Stops

- 4.4.8 The nearest bus stop to the site is located at a c. 430m walk north of the site. The walking distance is slightly over the recommended 400m distance; however, the walking time to these bus stops would be less than 6 minutes from the site (assuming a walking speed of 80m/min) and the stops are within the 500m ‘Desirable’ walking distance for commuting trips.

- 4.4.9 **Table 4.3** details the services that call at this stop, and their associated frequencies:

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
216	Manchester – Clayton – Ashton – Stalybridge	10 mins	10 mins	15 mins
230	Manchester – Clayton – Droylsden – Ashton	30 mins	30 mins	Hourly

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
231	Manchester – Clayton – Droylsden – Hartshead – Ashton	30 mins	30 mins	Hourly
704	Harpurhey – Newton Heath – Clayton – Wright Robinson College	Once per day	-	-
713	Newton Heath – Gorton – St Peter's High School	Once per day	-	-

Table 4.3 – Summary of Bus Service Frequencies in the vicinity of the Site

- 4.4.10 These stops provide frequent access to Manchester City Centre, East Manchester, and areas of Greater Manchester, as well as larger public transport interchanges across the town (such as Piccadilly Gardens) all 7 days of the week.
- 4.4.11 It is noted that the provision of bus services will change over time in response to current circumstances. The bus times are accurate at the time of writing, whereas up-to-date bus times can be found on Stagecoach and Transdev's websites: <https://www.stagecoachbus.com/timetables>, <https://www.transdevbus.co.uk/rosso/services>.
- 4.4.12 It is considered that the site is accessible by bus.

Rail Accessibility

- 4.4.13 The Gorton rail station is located at a c. 1,650m walk from the site. This lies outside the DLUHC recommended distance; however, it is within the 2,000m 'Preferred Maximum' walking distance for commuting trips, as defined by the CIHT, and is accessible by cycle.
- 4.4.14 There is step-free access across the whole station in the form of ramps to the platforms, which, in turn, can be accessed from Lees Street. There is a ticket office which is manned part-time. There is no cycle storage, but Northern Rail offers space for up to two bikes on all trains for no extra charge on a first-come, first-serve basis.
- 4.4.15 A summary of rail services from the rail station is outlined in **Table 4.4**:

Service	Service Frequency		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester Piccadilly to Hadfield Calling at: Manchester Piccadilly, Ashburys, Gorton, Guide Bridge, Flowery Field, Newton for Hyde, Godley, Hattersley, Broadbottom, Dinting, Glossop, Hadfield.	Hourly	Hourly	Hourly
Manchester Piccadilly to Rose Hill Marple Calling at: Manchester Piccadilly, Ashburys, Gorton, Fairfield, Guide Bridge, Hyde North, Hyde Central, Woodley, Romiley, Rose Hill Marple.	Hourly	Hourly	No services

Table 4.4 – Summary of Rail Services calling at Gorton

- 4.4.16 The trains that service Gorton rail station run regularly 7 days a week to a number of different locations and residential areas within East Manchester and Greater Manchester; this provides access for residents of the site and is a viable alternative to private car use.
- 4.4.17 It is noted that the provision of rail services will change over time in response to current circumstances. The rail frequencies are accurate at the time of writing, whereas up-to-date rail times can be found on Northern Rail's website: <https://www.northernrailway.co.uk/stations/GTO>.

Metrolink (Light Rail) Accessibility

- 4.4.18 The nearest Metrolink station is Edge Lane, located c. 800m walk from the site – within the DLUHC recommended distance. There is step-free access to all platforms in the form of ramps. Edge Lane is on the edge of Zone 2 of the Metrolink network.
- 4.4.19 The following service calls at this station: **Blue Line** – Eccles to Ashton-under-Lyne. All lines run at a frequency of every 12 minutes between 06:00 – 00:00 on Mondays to Saturdays, and 07:00 – 00:00 on Sundays.
- 4.4.20 The Metrolink frequencies are accurate at the time of writing, whereas up-to-date times can be found on the Metrolink website at: <https://tfgm.com/public-transport/tram/tram-schedule>.

4.4.21 Users can change at Piccadilly, St Peter's Square and Cornbrook to access the entire Metrolink network, including accessing additional services to East Didsbury, Rochdale, Manchester Airport and the Trafford Centre, as shown in the Metrolink map in **Figure 4.3**.

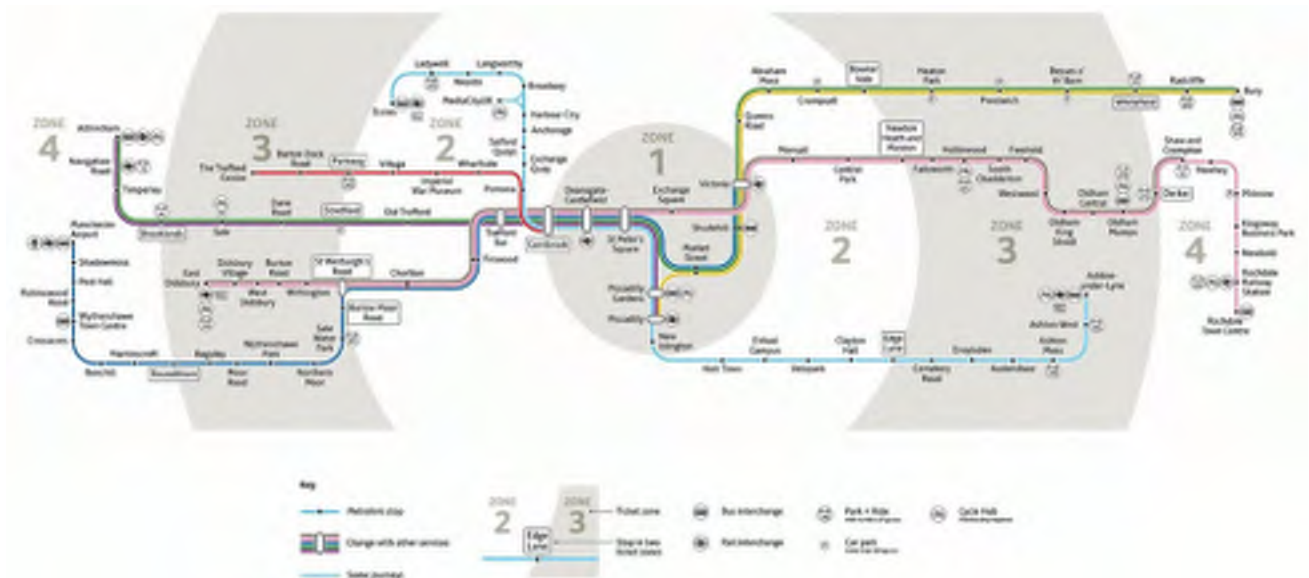


Figure 4.3 – TfGM Metrolink Network Map
(Source: TfGM, 2022)

4.4.22 It is considered the site is accessible by Metrolink (light rail).

4.5 Summary

4.5.1 It is considered the site is accessible by sustainable modes of transport, which are also usable by those with limited mobility and are wheelchair accessible. The surrounding area exhibits excellent levels of pedestrian and cycling infrastructure, and there are a number of public transport opportunities within acceptable walking distance of the site.

5.0 Traffic Forecasting

5.1 Introduction

- 5.1.1 This section of the report details the methodology used to predict the traffic demand associated with the proposed residential development.
- 5.1.2 In order to undertake the highway impact, the TRICS database has been interrogated. TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development. The database contains multi-modal surveys of varying land uses in multiple destinations across the UK, including residential uses.

5.2 Forecasted Trip Generation

- 5.2.1 To derive the trip rates associated with proposed development, the 'Residential' category of the TRICS has been interrogated using the following criteria;
- C3 residential use excluding sites in Greater London and Ireland;
 - Mixed Private Housing (Flats and houses);
 - Sites located in 'Suburban Areas', 'Edge of Town' and 'Neighbourhood Centre' locations; and
 - Sites with 15 - 250 dwellings.
- 5.2.2 The peak generation period for a development of this type was identified as:
- AM 08:00 – 09:00; and
 - PM 17:00 – 18:00.
- 5.2.3 The trip generation during the peak hours from the Proposed Development is calculated within **Table 5.1**. Full TRICS outputs are included in **Appendix B**.

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Trip Rate (per dwelling)	0.068	0.202	0.270	0.183	0.105	0.288
Total Trips (115 dwellings)	8	23	<u>31</u>	21	12	<u>33</u>

Table 5.1 – Trip Rates for the Proposed Development

- 5.2.4 The above table demonstrates the proposed development could generate approximately 31 two-way trips in the AM peak and 33 two-way trips in the PM peak period, based on the 115 dwellings to be constructed.

5.3 Distribution of Development Trips

- 5.3.1 Based on the likely distribution of the trips from the site, using Journey to Work Data from 2011 Census (see **Appendix C**), it is considered that there will be a broadly 80%/20% distribution of traffic between Ashton Old Road and Ashton New Road respectively.
- 5.3.2 As a worst case, the maximum number of peak hour trips emerging onto Ashton Old Road or Ashton New Road would equate to one additional movement every two minutes. In reality, traffic will disperse across the surrounding highway network and would not be concentrated at a single key junction.
- 5.3.3 Due to the low levels of development traffic travelling along these key routes in the peak hour periods, no further assessment has been undertaken.

5.4 Summary

- 5.4.1 The Proposed Development would not result in a material or discernible worsening in highway performance.
- 5.4.2 In light of the above, it is reasonable to conclude that the Proposed Development would not have severe residual impact on the surrounding highway network in accordance with NPPF.

6.0 Transport Planning Policy

6.1 Introduction

- 6.1.1 The following section sets out key local and national transport planning policies, and how the proposals relate to them.

6.2 National Planning Policy Framework (2021)

- 6.2.1 NPPF sets out the current national transport planning policy and outlines the important role that transport policies have to play in facilitating sustainable development.

- 6.2.2 Paragraph 11 states that:

“Plans and decisions should apply a presumption in favour of sustainable development.”

- 6.2.3 For decision taking this means granting permission unless:

“...any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies.”

- 6.2.4 Section 9 of the NPPF is entitled *Promoting Sustainable Transport* and outlines the important role that transport policies have to play in facilitating sustainable development. The section states that:

“The planning system should actively manage patterns of growth ...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.”

- 6.2.5 The document emphasises the need for developments to offer a choice of sustainable modes of transport to *“reduce congestion and emissions, and improve air quality and public health”* and provide *“safe and suitable access”* for all users.

- 6.2.6 Paragraph 110 of the NPPF states that in assessing sites that may be allocated for development in plans, or specific applications in 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; 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.”*

6.2.7 The development proposals have shown that safe and suitable access to the site can be achieved, and it is not anticipated that the proposals would result in any significant impacts on the highway network.

6.2.8 Paragraph 111 of the NPPF states 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”

6.2.9 The trip generation analysis confirms that the proposed residential development would not generate significant volumes of traffic during the AM and PM peak hour periods. Given the number of alternative routes available to access the Crabtree Lane development, the cumulative impact on the road network is not considered to be severe.

6.2.10 Paragraph 112 of the NPPF states that applications for development should:

- *“give priority 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;*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport; and*
- *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.”*

6.2.11 The proposed development is situated in an accessible location. There is good walking and cycling infrastructure adjacent to the site, and public transport is accessible within an acceptable walking and cycling distance.

6.2.12 The proposed development accords with the general principles of the NPPF.

6.3 National Planning Practice Guidance (NPPG)

6.3.1 In addition to the NPPF, National Planning Practice Guidance (NPPG) has been developed by the Department for Communities and Local Government (DCLG; now the DLUHC) in 2014. Within this document there is a specific section that clarifies the over-arching principles on Travel Plans, Transport Assessments and Transport Statements. The guidance states that:

“Travel Plans, Transport Assessments and Statements can positively contribute to:

- *Encouraging sustainable travel;*
- *Lessening traffic generation and its detrimental impacts;*
- *Reducing carbon emissions and climate impacts;*

- *Creating accessible, connected, inclusive communities;*
- *Improving health outcomes and quality of life;*
- *Improving road safety; and*
- *Reducing the need for new development to increase existing road capacity or provide new roads.”*

6.3.2 The guidance on Transport Assessments and Statements re-iterates the circumstances in which either document would usually be required. It is clear that a development of the size and nature of this development requires a Transport Statement. It also clarifies the process for establishing a scope for what the documents should contain. The NPPG has been considered in the production of this TS and the accompanying Interim / Framework Travel Plan (Document Reference: **079458-CUR-00-XX-RP-TP-002**).

6.3.3 As outlined above, this TS demonstrates that the site is accessible by active and sustainable modes of travel, and that safe and suitable access can be gained to the development. The development proposals therefore apply the principles set out in the NPPG and will seek to create a sustainable development and make a positive contribution to the local area.

6.4 Manchester Core Strategy (2012 – 2027)

6.4.1 The Manchester Core Strategy promotes similar principles to the NPPF. It contains three specific “Transport” policies, comprising:

- Policy T1 – Sustainable Transport;
- Policy T2 – Accessible Areas of Opportunity and Need; and
- Policy T3 – Strategic Integration.

6.4.2 Policy T1 focuses on sustainable transport and access for all. The accessibility of the site would encourage users of the proposed development to travel by sustainable modes.

6.4.3 Policy T2 of the Manchester Core Strategy states:

“The Council will actively manage the pattern of development to ensure that [outside the City Centre] ... all new development should provide appropriate car parking facilities, taking account of the guidance in appendix B... In all parts of the City proposals should have regard to the need for disabled and cycle parking, in line with appendix B.”

6.4.4 It is considered the proposed parking provision is reflective of the highly accessible nature of the development, whilst considering the realistic requirements of the users. The development would benefit from sustainable transport links across the city centre. Appendix B does not specify parking requirements for residential developments.

- 6.4.5 Policy T3 is in relation to strategic integration of developments with the sustainable transport network. The proposed development would not prejudice the implementation of any of the strategic integration projects.

6.5 Greater Manchester Transport Strategy 2040

- 6.5.1 In 2021 TfGM updated the 2040 Vision for Transport to deliver a transport system which enables residents, businesses and visitors in Greater Manchester to travel to a wide range of different destinations and opportunities, and where sustainable transport can be a viable and attractive alternative to the car.

- 6.5.2 Under Policy 3, the Transport Strategy states that TfGM will “maintain a programme of interventions designed to encourage people to make sustainable journeys. We will support this through journey planning tools and information to encourage travel behaviour change and mode shift, and in order to make the most efficient use of available capacity (particularly during peak periods).” Such interventions comprise:

- *“Reducing the carbon and environmental cost of journeys;*
- *New ways of working which make the best use of the transport network;*
- *Maximising the benefit of new, integrated transport infrastructure and services;*
- *Delivering public health benefits through enabling more active travel;*
- *Supporting town and city centre economic vitality and sustainability;*
- *Improving access to key services and jobs;*
- *Maximising sustainable travel in new developments; and*
- *Becoming more resilient to disruption.”*

- 6.5.3 The above measures and additional initiatives have also been provided in greater detail in the accompanying Interim Travel Plan (**Document Reference 079458-CUR-00-XX-RP-TP-002-V02_ITP**).

- 6.5.4 Under Policy 4, TfGM will also “continue to work with planning authorities and developers to ensure the accessibility of new development by sustainable modes and to reduce the impact on the highway network”. This will be in accordance with the principles of:

- *“Reducing the need to travel by car, and the distance travelled;*
- *Maximising accessibility by sustainable modes;*
- *Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;*
- *Maximising opportunities to provide additional public transport; and*
- *Designing to encourage active travel.”*

- 6.5.5 It is considered that the development proposals will not adversely impact the transport network, and instead would support the emerging Transport Strategy by enhancing opportunities for sustainable travel by integrating into existing infrastructure.

6.6 Manchester Residential Quality Guidance

- 6.6.1 In 2017, MCC adopted the Manchester Residential Quality Guidance which sets out the standards of design for residential developments in the city. It is structured around nine components to ensure high-quality developments: make it happen, make it a home, make it future proof, make it practical, make it Manchester, make it bring people together, make it animate street and spaces, make it easy to get around, make it work with the landscape.

- 6.6.2 The guidance does not require a specific level of car parking as *"there is no 'one size fits all' approach to car parking and it should be considered on a case-by-case basis"*.

- 6.6.3 MCC stipulates in the document that development proposals:

- *"Incorporate sufficient car parking in an appropriate location that does not harm pedestrian movement;*
- *Provide secure cycle parking for residents and visitors, which is safe and convenient and within the envelope of the building;*
- *Provide sufficient bin storage to accord with MCC's standards and is conveniently located with minimal impact on the streetscene; and*
- *Have considered where temporary stopping could be accommodated"*

6.7 Conclusions

- 6.7.1 It is considered that the proposed development is in line with national and local transport policies and guidance. The site is located within an area which has a range of existing local facilities and plenty of sustainable travel choices.

7.0 Summary and Conclusions

7.1 Summary

- 7.1.1 Curtins has been appointed by MCI Developments to provide transport and highways advice in relation to a planning application for 115 dwellings on land to the east of Crabtree Lane in Openshaw to the east of Manchester city centre.
- 7.1.2 The proposed scheme will provide a mix of 1/2 bedroom apartments and 2/3/4 bedroom houses on brownfield land.
- 7.1.3 A review of baseline conditions and highway safety in the vicinity of the site has been undertaken. It is not considered that there is an existing highway safety issue that is likely to be exacerbated by the proposed development.
- 7.1.4 Relevant details of the proposed site layout, access, parking facilities, and servicing arrangements have been provided.
- 7.1.1 The site is accessible by sustainable modes of transport. The surrounding area exhibits good levels of pedestrian and cycling infrastructure, and there are several public transport opportunities within acceptable walking distance of the site.
- 7.1.2 The impact of the development traffic on the wider highway network has been demonstrated to be minor and it is reasonable to conclude that the impact is not significant or severe in the context of the NPPF.
- 7.1.3 Additionally, measures are proposed in the accompanying Interim Travel Plan to increase the level of walking, cycling and public transport use to and from the site, and to reduce reliance on the private car.
- 7.1.4 A review of relevant local and national transport planning guidance has been undertaken. It is considered that the proposed development conforms with such policy.

7.2 Conclusions

- 7.2.1 From a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval.

Plans



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Project:
CRABTREE LANE - OPENSHAW

Drg Title:
SITE LOCATION
REGIONAL VIEW

Status:
PRELIMINARY

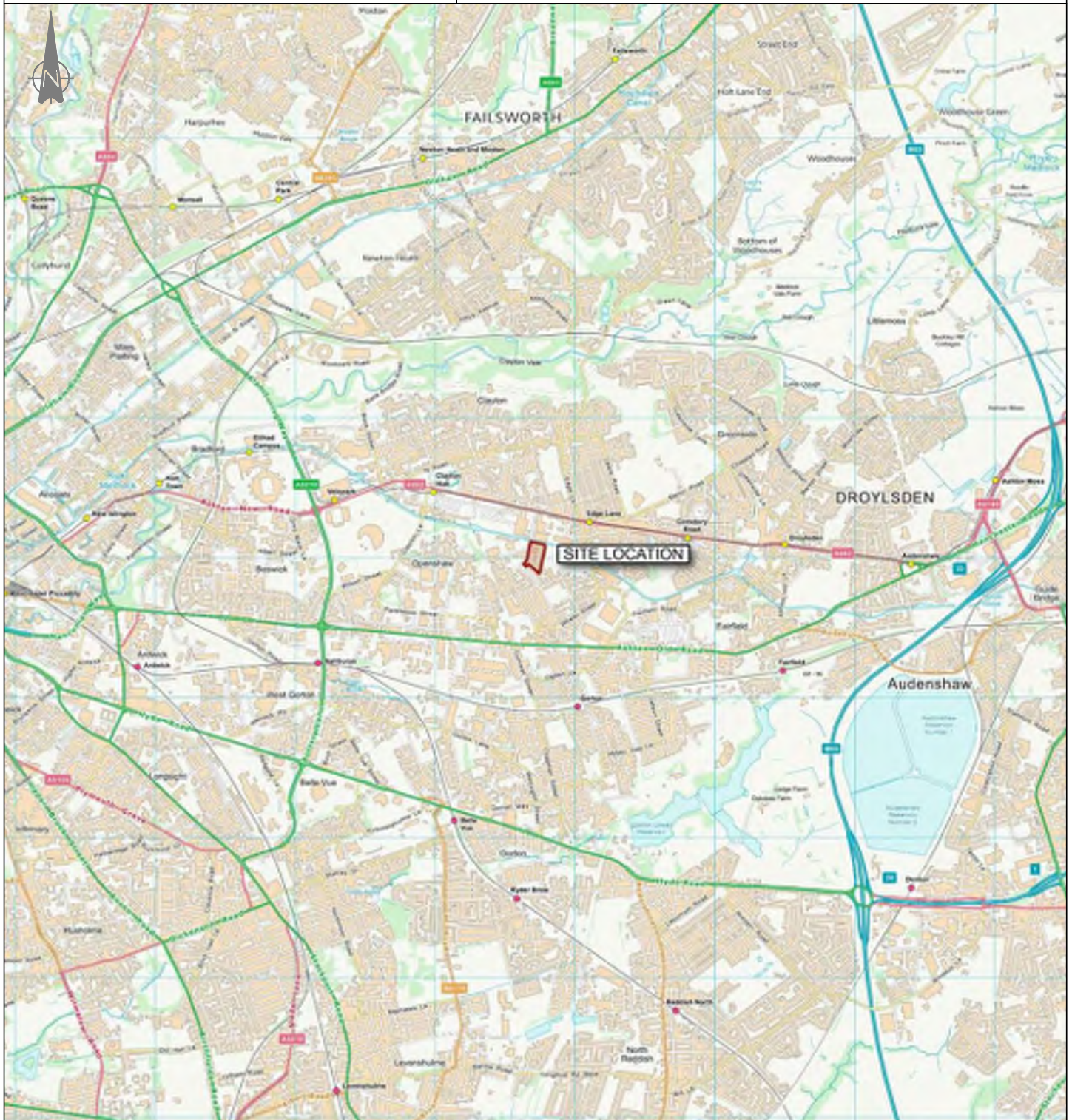
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Designed By: JM Date: 07/10/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

79458 - CUR - 00 - XX - DR - TP - 06001 - P01



KEY:  Site



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Project:
CRABTREE LANE - OPENSHAW

Drg Title:
SITE LOCATION
LOCAL VIEW

Status:
PRELIMINARY

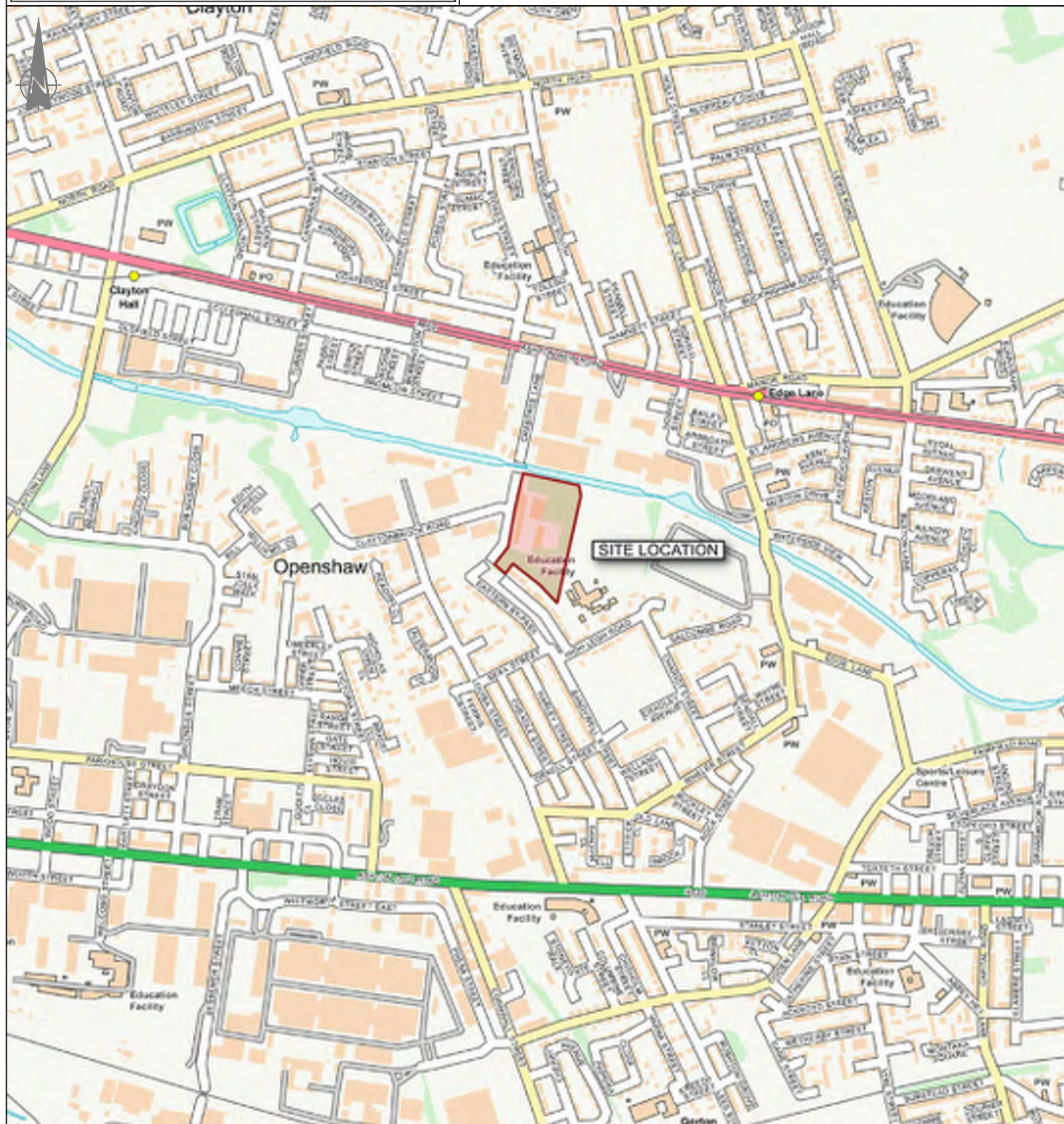
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Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY: Site

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Project:
CRABTREE LANE - OPENSHAW

Drg Title:
ACCESSIBILITY
INDICATIVE WALKING CATCHMENT

Status:
PRELIMINARY

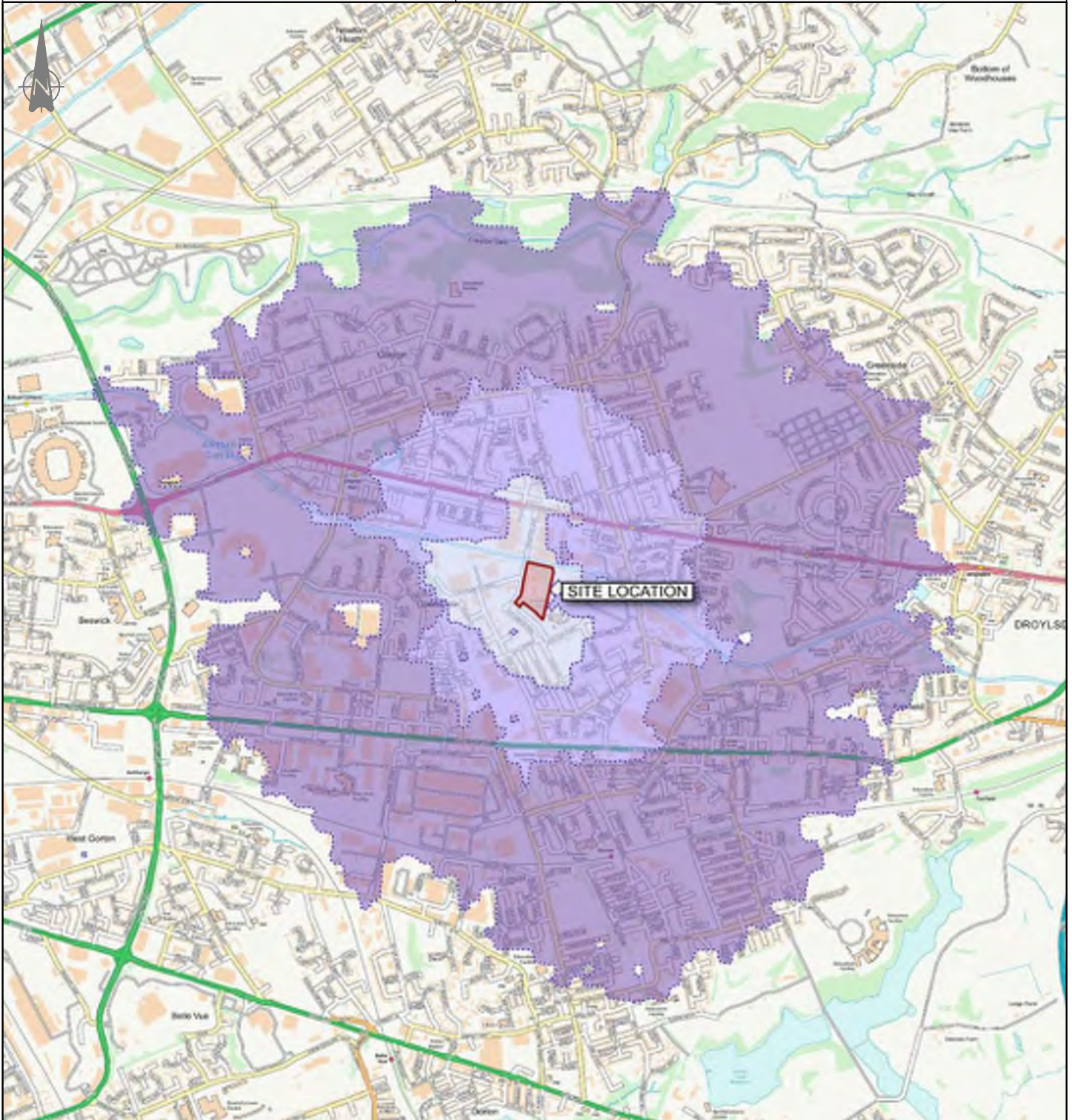
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Designed By: JM Date: 07/10/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY:  Site

Walking Catchment:

-  500m
-  1000m
-  2000m

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Project:
CRABTREE LANE - OPENSHAW

Drg Title:
ACCESSIBILITY
INDICATIVE CYCLE CATCHMENT

Status:
PRELIMINARY

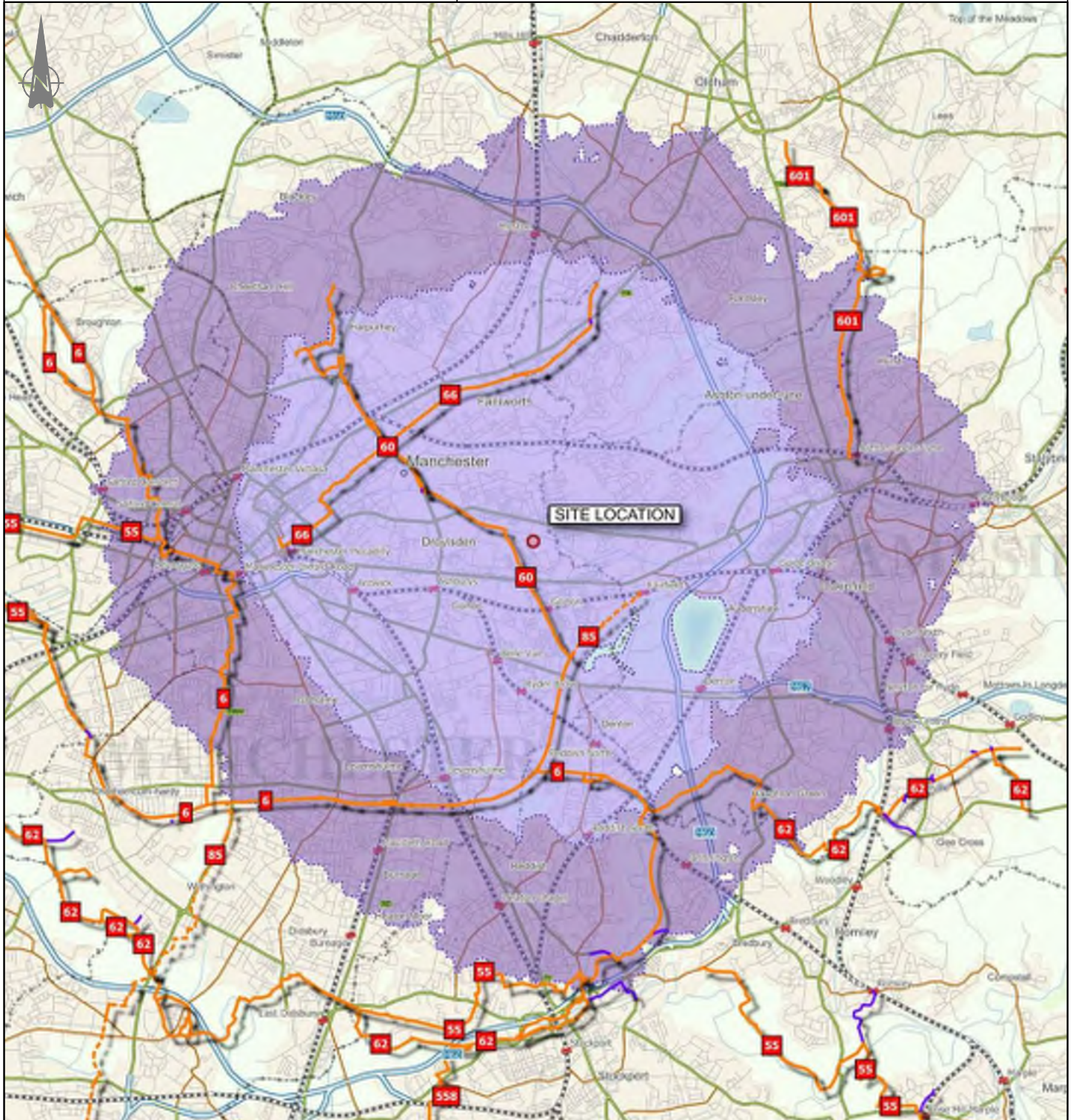
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Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

79458 - CUR - 00 - XX - DR - TP - 06004 - P01



KEY:

○ Site

Cycle Catchment:

5500m

8000m

Cycle Network:

Route not on Cycle Network

National Cycle Network

Regional Cycle Network

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Project:
CRABTREE LANE - OPENSHAW

Drg Title:
ACCESSIBILITY
INDICATIVE PUBLIC
TRANSPORT CATCHMENT

Status:
PRELIMINARY

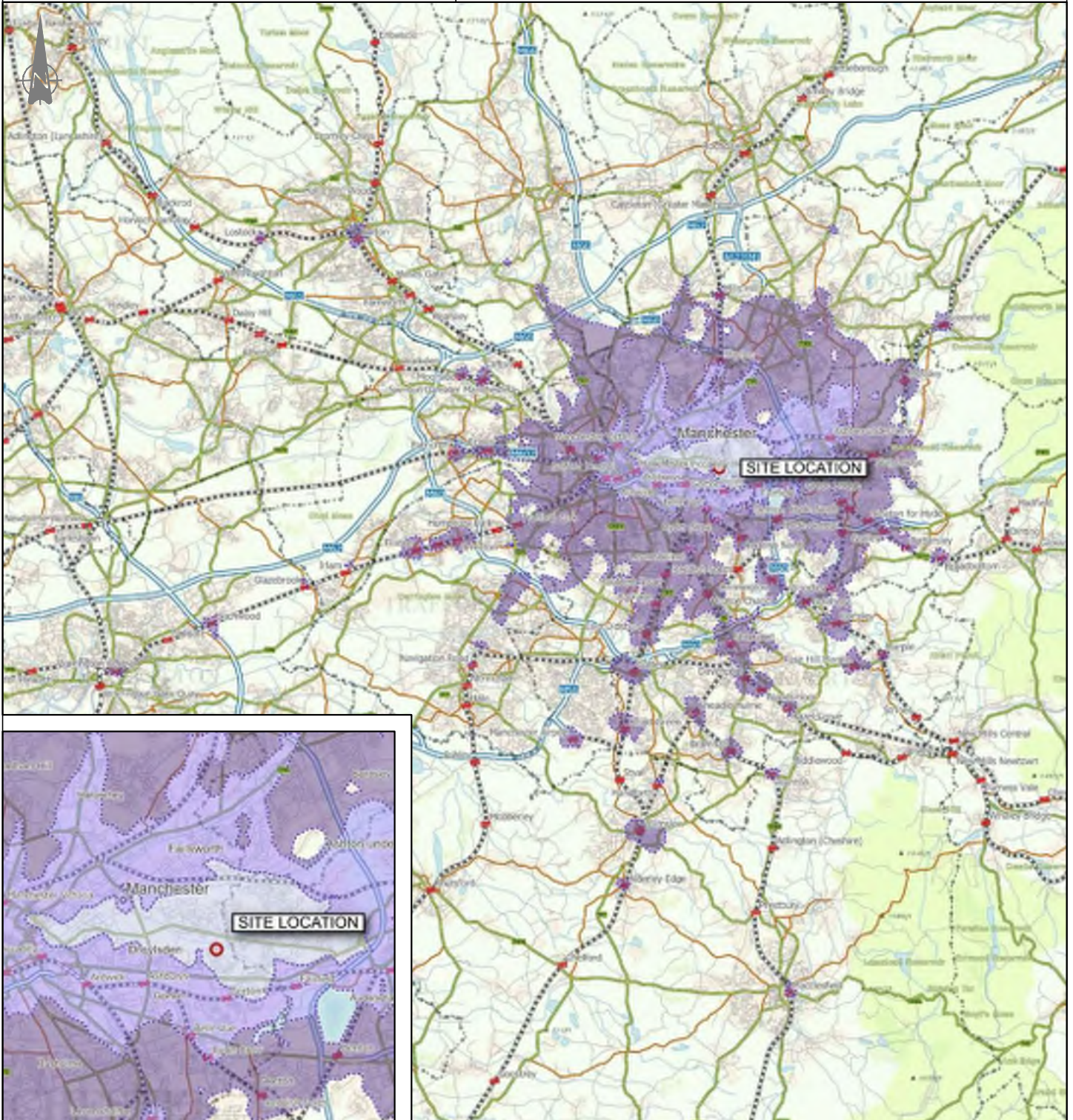
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Designed By: JM Date: 07/10/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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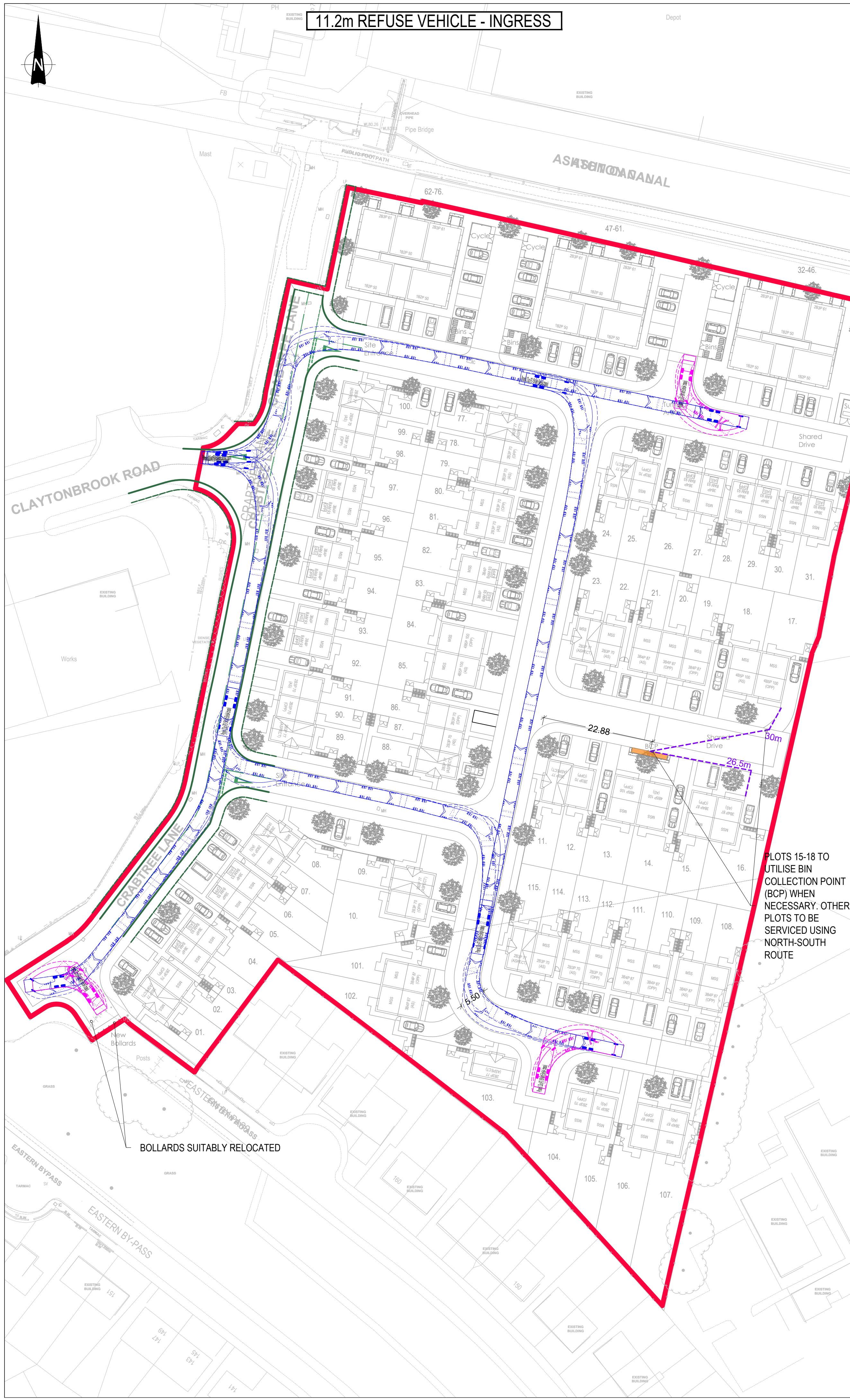


KEY: Site Public Transport Catchment:
20 minutes
40 minutes
60 minutes

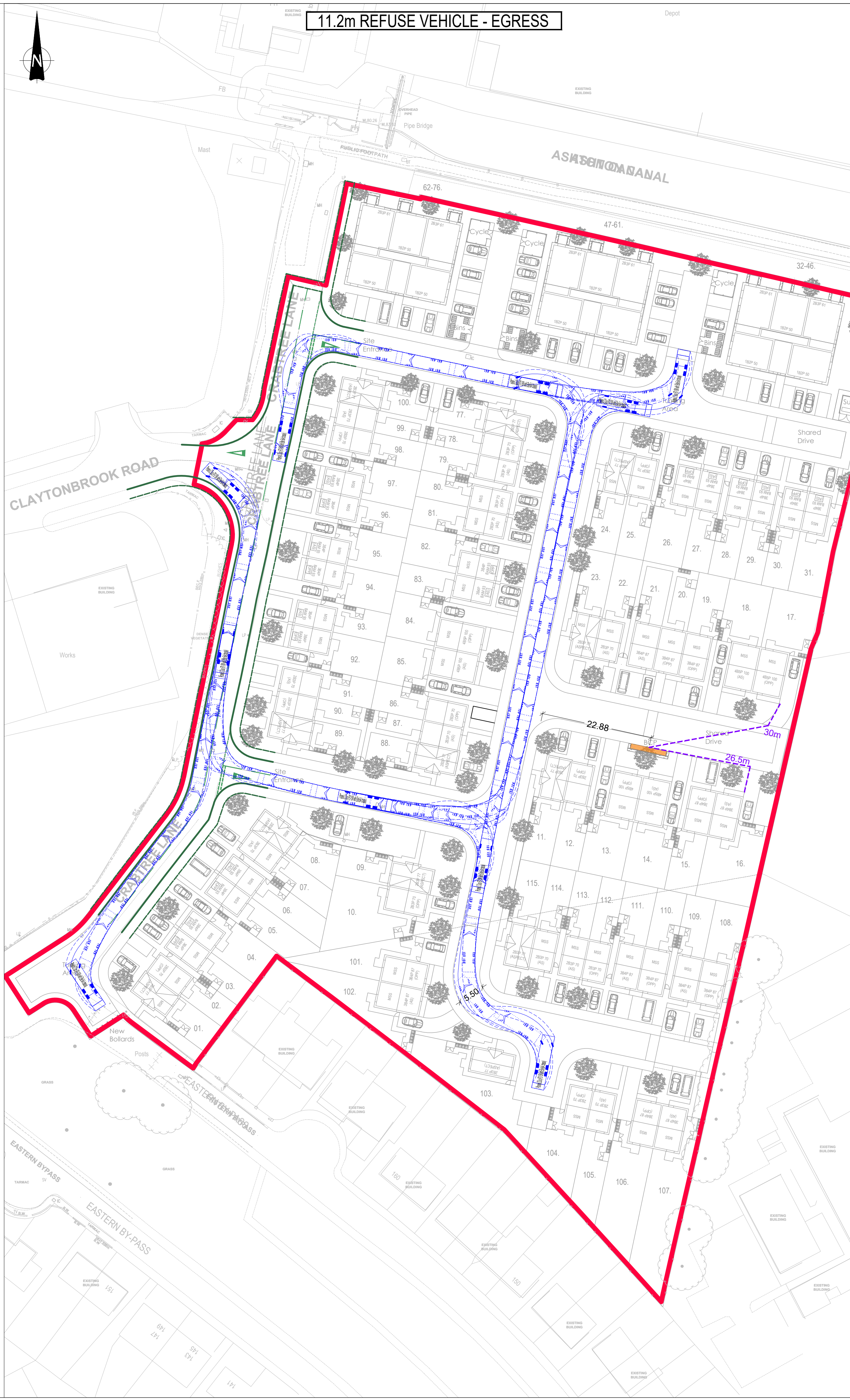
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Drawings

11.2m REFUSE VEHICLE - INGRESS



11.2m REFUSE VEHICLE - EGRESS

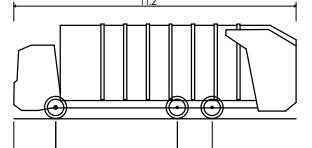


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- DRAWING BASED ON ARCHITECT'S LAYOUT.
DRAWING REFERENCE: Crabtree Lane/Proposed Site Layout

KEY: ● BIN PRESENTATION/ COLLECTION POINT
--- RESIDENT BIN DRAG ROUTE

VEHICLE PROFILE:



Phoenix 2 Duo (P2-15W with Elite 64 chassis)
Overall Length 11.500m
Overall Width 2.550m
Overall Body Height 3.750m
Min Body Ground Clearance 0.340m
Track Width 2.000m
Lock to Lock Time 2.00m
Kerb to Kerb Turning Radius 9.500m

P03	Site layout & redline boundary updated	18/07/22	JM	AT
P02	Site layout & swept path analysis updated	29/06/22	JM	AT
Rev:	Description:	Date:	By:	Chkd:



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Status: PRELIMINARY

Project: CRABTREE LANE - OPENSRAW

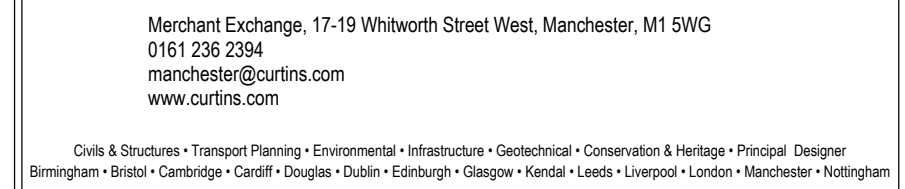
Orig Title: SWEPT PATH ANALYSIS
11.2m REFUSE VEHICLE

Size:	Date:	Drawn By:	Designed By:	Checked By:			
A1	20/08/21	JM	JM	AT			
Scale: 1:500							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
79458 - CUR - 00 - XX - DR - TP - 05001 - P03							



1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.
5. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES.
6. DRAWING BASED ON ARCHITECT'S LAYOUT.
DRAWING REFERENCE: Crabtree Lane/Proposed Site Layout

P04	Site layout & redline boundary updated	18/07/22	JM	AT
P03	Site layout updated, access junctions updated to suit	29/06/22	JM	AT
P02	Site layout updated, topographical information added, proposed 6m carriageway updated	31/03/22	JM	AT
Rev:	Description:	Date:	By:	Chkd:



Status:

Project: CRABTREE LANE - OPENSHAW

Size:		Date:		Drawn By:		Designed By:		Checked By:	
A1		28/03/21		JM		JM		AT	
Scale: 1:500									
Project No:		Originator:		Volume:		Level:		Type:	
Role:		Category / Number:		Rev:					

Appendix A – Proposed Site Layout

Site A - Accomodation Schedule				Site Area = 1.71 Hectares	
Housetype	Sq.m	Sq.ft	Total No.	Total Sq.m	Total Sq.ft
1B2P Apartment	50	538	27	1350	14531
2B3P Apartment	61	657	18	1098	11819
2B3P Aspect House	77	829	12	924	9946
2B3P House	70	753	21	1470	15823
3B4P House	87	936	13	1131	12174
3B4P House	93	1001	18	1674	18019
4B5P House	107	1152	6	642	6910
Total No.			115	8289	89223

All Units Comply with Manchester's Space Standards



REV	DATE	DRAWN	DESCRIPTION	ARCH CHECK	ENG CHECK
-----	------	-------	-------------	------------	-----------

TITLE

PROPOSED SITE LAYOUT



M.C.I. Developments Ltd.
15 Beecham Court,
Smithy Brook Road,
Wigan, WN3 6PR
tel: 08448871467
fax: 08448871468
web: www.mcidevelopments.com
email: admin@mcidevelopments.com

PROJECT CRABTREE LANE, OPENSRAW

DRN BY	SHW	SCALE	JOB REF	DRAWING NUMBER	REV
DATE	JULY.2022	1:500 @ A1	-	Crabtree Lane/Proposed Site Layout	-

Appendix B – TRICS output

Calculation Reference: AUDIT-148301-211011-1012

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)
 TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	4 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
09	NORTH	
	CB CUMBRIA	2 days
	TW TYNE & WEAR	1 days
10	WALES	
	CO CONWY	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: No of Dwellings
 Actual Range: 15 to 178 (units:)
 Range Selected by User: 15 to 250 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 23/05/19

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

Selected survey days:

Monday	2 days
Tuesday	4 days
Wednesday	2 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	11 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:

Town Centre	1
Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	3

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.

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

Secondary Filtering selection:

Use Class:

C3 11 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	3 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	4 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	3 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	6 days
1.1 to 1.5	3 days
1.6 to 2.0	1 days
2.1 to 2.5	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:

Yes	1 days
No	10 days

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

PTAL Rating:

No PTAL Present	11 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CA-03-K-01	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
	WEASANHAM LANE		
	WISBECH		
	FENLAND		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	100	
	Survey date: MONDAY	07/09/15	Survey Type: MANUAL
2	CA-03-K-02	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
	ALDERMANS DRIVE		
	PETERBOROUGH		
	Town Centre		
	Residential Zone		
	Total No of Dwellings:	40	
	Survey date: TUESDAY	16/12/14	Survey Type: MANUAL
3	CA-03-K-03	FLATS & TERRACED	CAMBRIDGESHIRE
	YORK STREET		
	CAMBRIDGE		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	178	
	Survey date: WEDNESDAY	20/09/17	Survey Type: MANUAL
4	CA-03-K-04	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
	FORDHAM ROAD		
	SOHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	65	
	Survey date: WEDNESDAY	11/07/18	Survey Type: MANUAL
5	CB-03-K-01	FLATS & TERRACED	CUMBRIA
	BRIDGE LANE		
	CARLISLE		
	Edge of Town		
	Industrial Zone		
	Total No of Dwellings:	66	
	Survey date: THURSDAY	12/06/14	Survey Type: MANUAL
6	CB-03-K-02	SEMI-DETACHED & FLATS	CUMBRIA
	NATLAND ROAD		
	KENDAL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	15	
	Survey date: TUESDAY	21/06/16	Survey Type: MANUAL
7	CO-03-K-01	MIXED HOUSES & FLATS	CONWY
	LIDDELL DRIVE		
	LLANDUDNO		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	15	
	Survey date: TUESDAY	27/03/18	Survey Type: MANUAL
8	NE-03-K-01	BLOCK OF FLATS	NORTH EAST LINCOLNSHIRE
	LADYSMITH ROAD		
	CLEETHORPES		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	67	
	Survey date: TUESDAY	06/05/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NT-03-K-02	MIXED HOUSES	NOTTINGHAMSHIRE
	CASTLE BRIDGE ROAD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	132	
	Survey date: MONDAY	07/11/16	Survey Type: MANUAL
10	ST-03-K-03	MIXED HOUSING & FLATS	STAFFORDSHIRE
	CLAREMONT ROAD		
	WOLVERHAMPTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: FRIDAY	09/05/14	Survey Type: MANUAL
11	TW-03-K-01	MIXED HOUSES & FLATS	TYNE & WEAR
	SHELLEY DRIVE		
	GATESHEAD		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	131	
	Survey date: THURSDAY	23/05/19	Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.035	11	76	0.128	11	76	0.163
08:00 - 09:00	11	76	0.068	11	76	0.202	11	76	0.270
09:00 - 10:00	11	76	0.072	11	76	0.114	11	76	0.186
10:00 - 11:00	11	76	0.086	11	76	0.091	11	76	0.177
11:00 - 12:00	11	76	0.093	11	76	0.087	11	76	0.180
12:00 - 13:00	11	76	0.097	11	76	0.100	11	76	0.197
13:00 - 14:00	11	76	0.097	11	76	0.096	11	76	0.193
14:00 - 15:00	11	76	0.090	11	76	0.115	11	76	0.205
15:00 - 16:00	11	76	0.131	11	76	0.086	11	76	0.217
16:00 - 17:00	11	76	0.131	11	76	0.118	11	76	0.249
17:00 - 18:00	11	76	0.183	11	76	0.105	11	76	0.288
18:00 - 19:00	11	76	0.141	11	76	0.088	11	76	0.229
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.224			1.330			2.554

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: 15 - 178 (units:)
 Survey date range: 01/01/13 - 23/05/19
 Number of weekdays (Monday-Friday): 11
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.001	11	76	0.001	11	76	0.002
08:00 - 09:00	11	76	0.006	11	76	0.008	11	76	0.014
09:00 - 10:00	11	76	0.007	11	76	0.008	11	76	0.015
10:00 - 11:00	11	76	0.006	11	76	0.005	11	76	0.011
11:00 - 12:00	11	76	0.004	11	76	0.004	11	76	0.008
12:00 - 13:00	11	76	0.004	11	76	0.004	11	76	0.008
13:00 - 14:00	11	76	0.002	11	76	0.004	11	76	0.006
14:00 - 15:00	11	76	0.004	11	76	0.004	11	76	0.008
15:00 - 16:00	11	76	0.006	11	76	0.004	11	76	0.010
16:00 - 17:00	11	76	0.005	11	76	0.006	11	76	0.011
17:00 - 18:00	11	76	0.007	11	76	0.007	11	76	0.014
18:00 - 19:00	11	76	0.005	11	76	0.005	11	76	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.060			0.117

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.001	11	76	0.002	11	76	0.003
08:00 - 09:00	11	76	0.001	11	76	0.000	11	76	0.001
09:00 - 10:00	11	76	0.001	11	76	0.002	11	76	0.003
10:00 - 11:00	11	76	0.002	11	76	0.002	11	76	0.004
11:00 - 12:00	11	76	0.001	11	76	0.001	11	76	0.002
12:00 - 13:00	11	76	0.002	11	76	0.001	11	76	0.003
13:00 - 14:00	11	76	0.004	11	76	0.002	11	76	0.006
14:00 - 15:00	11	76	0.001	11	76	0.002	11	76	0.003
15:00 - 16:00	11	76	0.000	11	76	0.000	11	76	0.000
16:00 - 17:00	11	76	0.000	11	76	0.000	11	76	0.000
17:00 - 18:00	11	76	0.000	11	76	0.000	11	76	0.000
18:00 - 19:00	11	76	0.000	11	76	0.000	11	76	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.012			0.025

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.000	11	76	0.000	11	76	0.000
08:00 - 09:00	11	76	0.001	11	76	0.001	11	76	0.002
09:00 - 10:00	11	76	0.000	11	76	0.000	11	76	0.000
10:00 - 11:00	11	76	0.000	11	76	0.000	11	76	0.000
11:00 - 12:00	11	76	0.000	11	76	0.000	11	76	0.000
12:00 - 13:00	11	76	0.000	11	76	0.000	11	76	0.000
13:00 - 14:00	11	76	0.000	11	76	0.000	11	76	0.000
14:00 - 15:00	11	76	0.001	11	76	0.001	11	76	0.002
15:00 - 16:00	11	76	0.001	11	76	0.001	11	76	0.002
16:00 - 17:00	11	76	0.000	11	76	0.000	11	76	0.000
17:00 - 18:00	11	76	0.000	11	76	0.000	11	76	0.000
18:00 - 19:00	11	76	0.000	11	76	0.000	11	76	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.000	11	76	0.016	11	76	0.016
08:00 - 09:00	11	76	0.004	11	76	0.032	11	76	0.036
09:00 - 10:00	11	76	0.008	11	76	0.012	11	76	0.020
10:00 - 11:00	11	76	0.005	11	76	0.016	11	76	0.021
11:00 - 12:00	11	76	0.010	11	76	0.018	11	76	0.028
12:00 - 13:00	11	76	0.013	11	76	0.008	11	76	0.021
13:00 - 14:00	11	76	0.013	11	76	0.014	11	76	0.027
14:00 - 15:00	11	76	0.013	11	76	0.017	11	76	0.030
15:00 - 16:00	11	76	0.017	11	76	0.011	11	76	0.028
16:00 - 17:00	11	76	0.012	11	76	0.013	11	76	0.025
17:00 - 18:00	11	76	0.012	11	76	0.008	11	76	0.020
18:00 - 19:00	11	76	0.018	11	76	0.010	11	76	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.125			0.175			0.300

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.018	11	76	0.115	11	76	0.133
08:00 - 09:00	11	76	0.050	11	76	0.186	11	76	0.236
09:00 - 10:00	11	76	0.054	11	76	0.094	11	76	0.148
10:00 - 11:00	11	76	0.057	11	76	0.067	11	76	0.124
11:00 - 12:00	11	76	0.075	11	76	0.069	11	76	0.144
12:00 - 13:00	11	76	0.080	11	76	0.082	11	76	0.162
13:00 - 14:00	11	76	0.079	11	76	0.080	11	76	0.159
14:00 - 15:00	11	76	0.078	11	76	0.098	11	76	0.176
15:00 - 16:00	11	76	0.116	11	76	0.072	11	76	0.188
16:00 - 17:00	11	76	0.118	11	76	0.099	11	76	0.217
17:00 - 18:00	11	76	0.162	11	76	0.087	11	76	0.249
18:00 - 19:00	11	76	0.134	11	76	0.078	11	76	0.212
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.021			1.127			2.148

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.014	11	76	0.008	11	76	0.022
08:00 - 09:00	11	76	0.010	11	76	0.005	11	76	0.015
09:00 - 10:00	11	76	0.010	11	76	0.008	11	76	0.018
10:00 - 11:00	11	76	0.019	11	76	0.017	11	76	0.036
11:00 - 12:00	11	76	0.010	11	76	0.011	11	76	0.021
12:00 - 13:00	11	76	0.008	11	76	0.012	11	76	0.020
13:00 - 14:00	11	76	0.011	11	76	0.007	11	76	0.018
14:00 - 15:00	11	76	0.005	11	76	0.007	11	76	0.012
15:00 - 16:00	11	76	0.007	11	76	0.007	11	76	0.014
16:00 - 17:00	11	76	0.007	11	76	0.012	11	76	0.019
17:00 - 18:00	11	76	0.011	11	76	0.008	11	76	0.019
18:00 - 19:00	11	76	0.002	11	76	0.005	11	76	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.114			0.107			0.221

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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	76	0.000	11	76	0.001	11	76	0.001
08:00 - 09:00	11	76	0.000	11	76	0.001	11	76	0.001
09:00 - 10:00	11	76	0.000	11	76	0.000	11	76	0.000
10:00 - 11:00	11	76	0.001	11	76	0.000	11	76	0.001
11:00 - 12:00	11	76	0.004	11	76	0.002	11	76	0.006
12:00 - 13:00	11	76	0.002	11	76	0.001	11	76	0.003
13:00 - 14:00	11	76	0.001	11	76	0.002	11	76	0.003
14:00 - 15:00	11	76	0.001	11	76	0.002	11	76	0.003
15:00 - 16:00	11	76	0.001	11	76	0.002	11	76	0.003
16:00 - 17:00	11	76	0.001	11	76	0.001	11	76	0.002
17:00 - 18:00	11	76	0.002	11	76	0.002	11	76	0.004
18:00 - 19:00	11	76	0.000	11	76	0.001	11	76	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.015			0.028

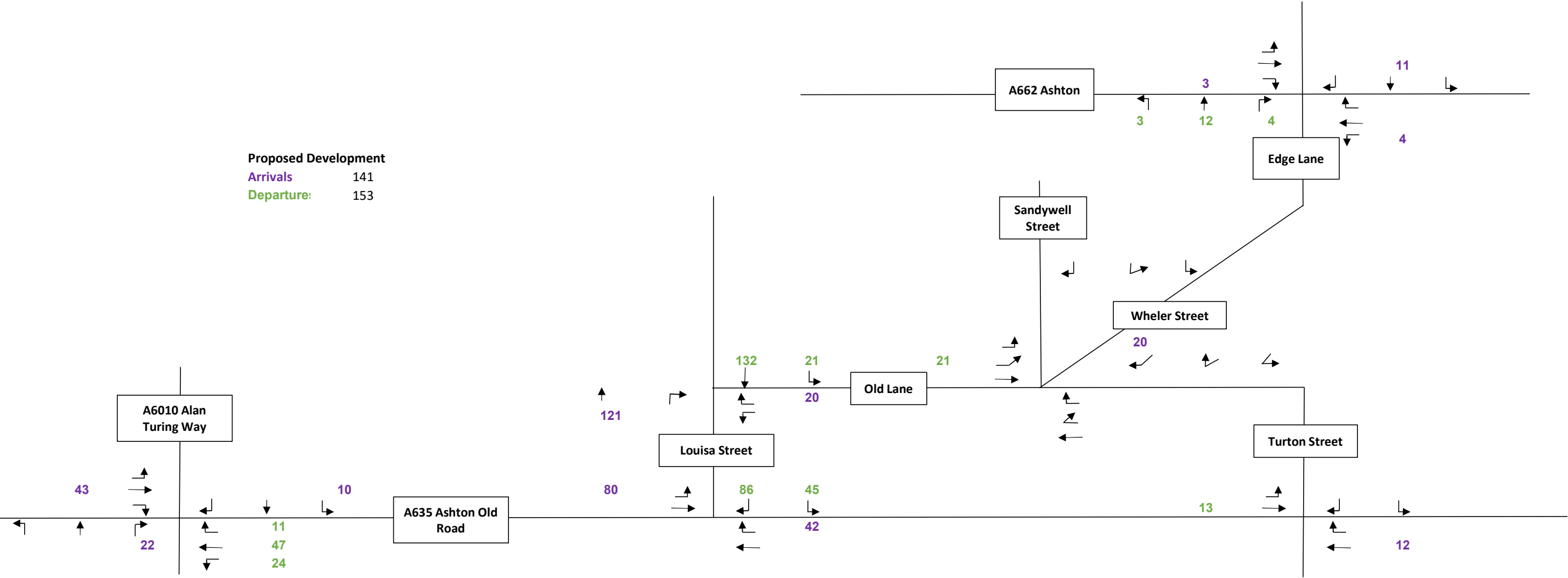
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

Appendix C – Journey to Work Census Data – Trip Distribution

Proposed Development

Arrivals	141
Departure:	153



Our Locations

Birmingham

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