

One Park Place
Manchester
Transport Assessment
231005/SK22359/TA01(-03)

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Project	Document	Rev	Description	Authorised by	Signed	Date
SK22359	TA	00	Draft for Team Comment	L Speers	LGS	15/09/2023
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SK22359	TA	03	Updated Landscape Layout	L Speers	LGS	05/10/2023

1 Introduction

- 1.1 SK has been appointed to prepare a Transport Assessment (TA) that assesses the implications of residential development at 1 Park Place in Manchester City Centre.
- 1.2 The development proposes the demolition of the existing building on site and the erection of a part 25 and part 15 storey residential building comprising 154 units with ground floor commercial units (Class E), associated residents amenity space, cycle parking, substation, servicing and associated landscaping works. The landscape layout is attached as Appendix A.
- 1.3 The assessment has been undertaken in line with the following policy and assessment guidance:
 - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places
 - Department for Levelling Up, Housing & Communities (2021), Planning Practice Guidance
 - Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework
 - Manchester City Council (2021), City Centre Transport Strategy to 2040
 - Manchester City Council (2018), Great Ducie Street Strategic Regeneration Framework
 - Manchester City Council (2012), Core Strategy
 - Transport for Greater Manchester (2017), Greater Manchester Transport Strategy 2040
 - Transport for Greater Manchester (2013), Transport for Sustainable Communities
 - TRICS (2022), TRICS Good Practice Guidance 2023
 - TRICS (2021), TRICS Guidance Note on the Practical Implications of Decide and Provide Approach
 - TRICS (2019), TRICS Guidance Note on Changes in Travel Behaviour

2 Baseline Situation

Site Location

- 2.1 Figure 2.1 shows that the site is located on the northern edge of the city centre.
- 2.2 The site sits within the Great Ducie Street Strategic Regeneration Framework (SRF) area. The SRF¹ states that:

‘Notwithstanding the above, the site’s location immediately at the edge of Manchester city centre adjacent to Victoria Station and the Manchester Arena, positions the SRF area as an outstanding opportunity to further support the positive growth trajectory of Manchester that has been established in recent years...

...As available land within the traditional city centre is filled, a significant amount of recent growth and neighbourhood regeneration has been taking place within adjoining areas. The SRF area is an important opportunity in this regard, underpinned by the fact that it shares many of the city centre’s locational advantages in terms of employment opportunities, accessibility to the local, regional, and national network of public transport and the lifestyle attraction of the city centre’s leisure and cultural uses.’

Baseline Site Use

- 2.3 The site is currently occupied by an industrial unit with a floor area of 761sqm. Hardstanding is provided on the boundary of the site for parking and servicing. A service yard is provided to the rear of the property.
- 2.4 Vehicle access to the site is provided from two kerbed priority junctions on Park Place to the buildings service shutters, and a further kerbed priority junction is provided on Park Place to the gated service yard to the rear. Vehicle access is also provided from a dropped kerb crossover on Cheetham Hill Road.
- 2.5 The site is brownfield site that is currently occupied by an industrial unit. This is the baseline against which the impact of the development should be assessed.
- 2.6 TRICS has been used to establish the traffic associated with an industrial use in this location and the output is attached as Appendix B, with a summary provided in Table 2.1.

¹ Deloitte (2018), Great Ducie Street Strategic Regeneration Framework

	Vehicle Trip Rates (per 100sqm)			Base Site Use Total Traffic Flows		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.541	0.137	0.678	4	1	5
PM Peak Hour	0.123	0.794	0.917	1	6	7
Daily	2.601	2.759	5.36	20	21	41
	OGV Trip Rates (per 100sqm)			Base Site Use OGV Traffic Flows		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.021	0.021	0.042	0	0	0
PM Peak Hour	0.000	0.000	0.000	0	0	0
Daily	0.145	0.165	0.310	1	1	2

Table 2.1: Baseline Traffic Flows

Local Highway Network Audit

- 2.7 Park Place is an existing service road serving the small number of properties along its frontage, including the proposal site, and providing access to surface car parking at its western end. The road is circa 75m in length. It is 6.6m wide with footways of between 2m – 2.5m along either side. Marked parking bays are provided along the southern side of the road, with perpendicular parking to the rear of the footway on property frontages on the northern side with associated continuous dropped kerb provision.
- 2.8 At its eastern end Park Place meets the A665 Cheetham Hill Road at a priority junction arrangement. Dropped kerbs are present at the junction, but tactile paving is not.
- 2.9 Cheetham Hill Road forms part of the Key Route Network and routes north-south on the eastern boundary of the site providing access between north Manchester and the city centre. Wide footways are provided on both sides of the carriageway and street lighting is present. The road is subject to a 30mph speed limit. Signalised crossings are provided to the north of the site at the junction with Lord Street and to the south of the site at the junction with New Bridge Street.

Traffic Regulation Order Review

- 2.10 Traffic Regulation Orders (TRO) are present on Cheetham Hill Road and in the immediate vicinity of the site these are double yellow lines prohibiting parking at any time.
- 2.11 Park Place is subject to TRO in the form of single yellow lines and white lined parking bays.
- 2.12 Waiting on the single yellow lines is prohibited between 8am and 6pm (Monday to Friday) and 8am to 12.30pm (Saturday). The white lined bays permit parking for two hours (no return in one hour) between 8am and 6pm (Monday to Friday) and 8am to 12.30pm (Saturday).
- 2.13 Two lengths of white lined parking bay are present on the Park Place site frontage.
- 2.14 There are no loading controls on Park Place in the vicinity of the site.

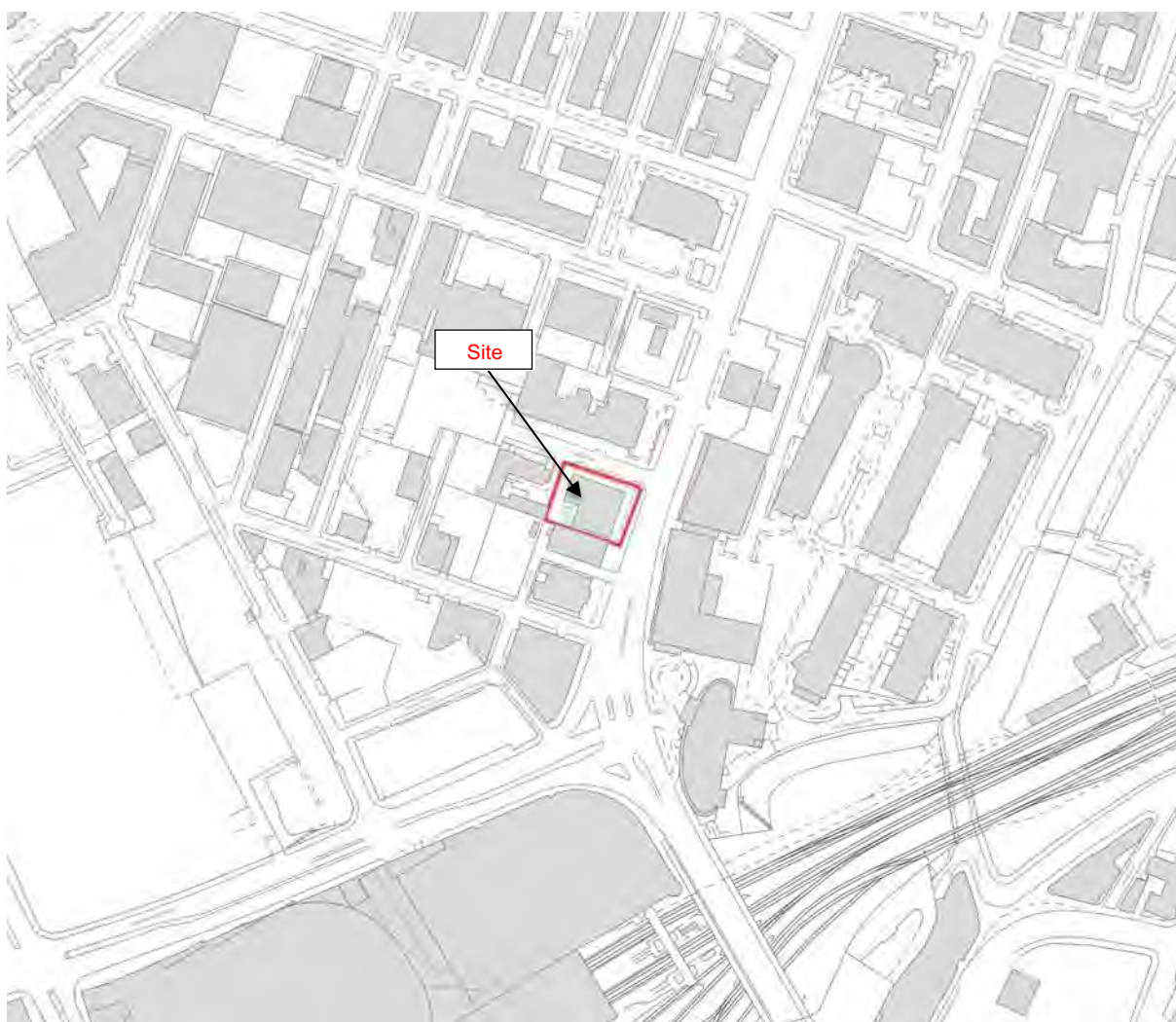


Figure 2.1: Site Location
[source: Hodder & Partners]

Cheetham Hill Road Traffic Flows

- 2.15 The Department for Transport (DfT) has a traffic count point (ref: 7428)² on Cheetham Hill Road, just to the north of the site. Table 2.2 provides details of the Annual Average Daily Traffic (AADT) and peak hour flows using the road.

Direction	AADT	08:00-09:00	17:00-18:00
Northbound	8117	321	1019
Southbound	8363	886	529
Total	16480	1207	1548

Table 2.2: Cheetham Hill Road Traffic Flows (in vehs)
[source: DfT]

Road Safety Patterns

- 2.16 The TfGM database³ has been used to establish collision patterns over the most recent five-year period available. The database states that the current data available is five years to March 2023.

² <https://roadtraffic.dft.gov.uk/manualcountpoints/7428>

³ <https://www.gmtu.gov.uk>

- 2.17 Figure 2.2 shows that there have been no accidents on Park Place or at the Park Place / Cheetham Hill Road junction during the five-year period assessed.
- 2.18 Two accidents occurred on the Cheetham Hill Road to the north of the Park Place junction during the period assessed. The accidents were both classified as slight and occurred in 2016 and 2018. None of the accidents involved a cyclist. The accident in 2018 involved a pedestrian.
- 2.19 A single accident occurred on Cheetham Hill Road to the south of the Park Place junction during the period assessed. The accident was classified as slight and occurred in 2019. The accident did not involve a pedestrian or cyclist.
- 2.20 The accident data does not indicate a prevalent accident issue on the roads fronting the site. Table 2.2 shows that Cheetham Hill Road carries 16,480 vehicles per day and the level and severity of accidents is in keeping with what would be expected for this type of road.

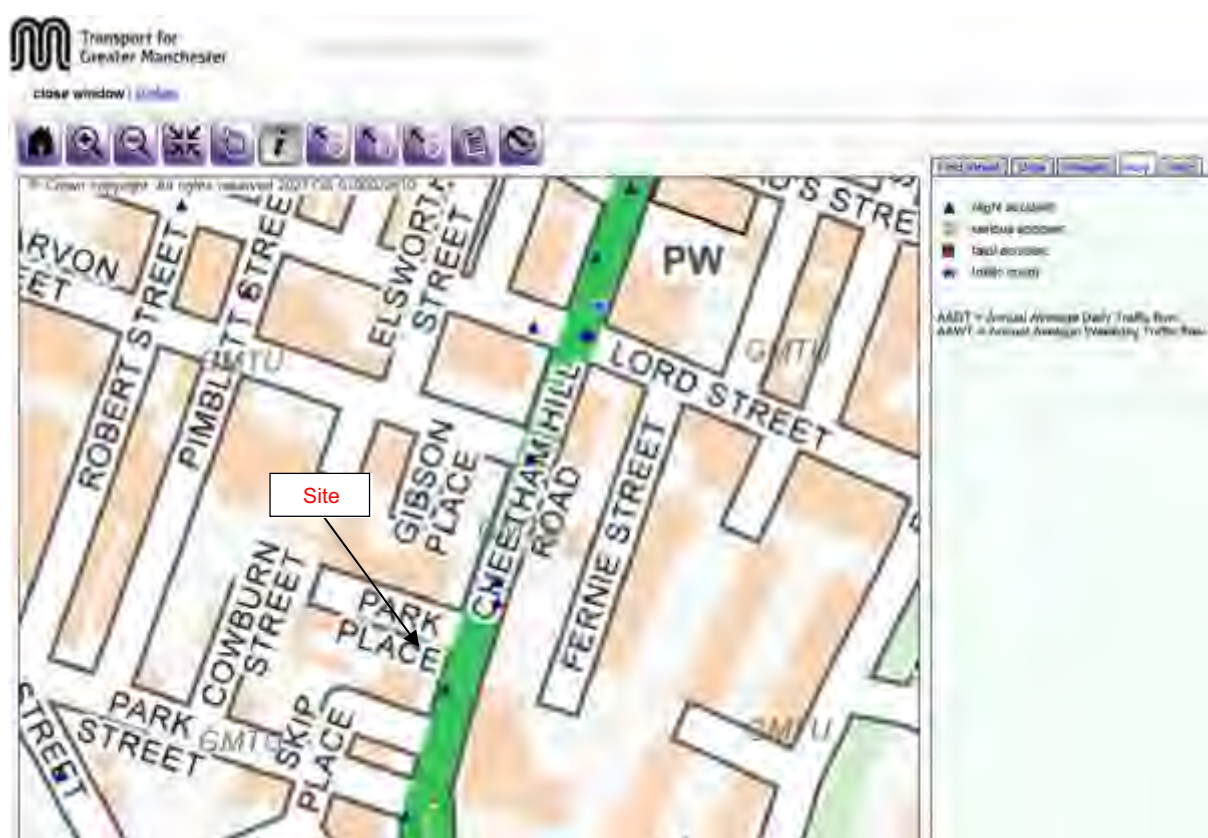


Figure 2.2: Road Safety
[source: TfGM]

3 Development Proposal

Overview

- 3.1 The landscape layout attached as Appendix A.
- 3.2 The development proposes the demolition of the existing building on site and the erection of a part 25 and part 15 storey residential building comprising 154 units with ground floor commercial units (Class E), associated residents amenity space, cycle parking, substation, servicing and associated landscaping works.

Land Use Schedule

- 3.3 Table 3.1 shows the dwelling types proposed.

Bedrooms	Number of Dwellings
1 bedroom	46
2 bedrooms	95
3 bedrooms	13
Total Dwellings	154

Table 3.1: Dwelling Types
[source: Hodder & Partners]

- 3.4 The proposed development provides resident amenity space comprised of a semi-private courtyard, private terrace, reception area, and post-storage area.
- 3.5 Two commercial units are proposed at ground / mezzanine level with a total floor area of 372sqm.

Site Access

- 3.6 The residential entrance to the building will be on Cheetham Hill Road and access to the commercial units will be off Park Place and Cheetham Hill Road. Access to the cycle stores will be taken from the service access route.
- 3.7 The footway bounding the site will be resurfaced and redundant accesses closed and reinstated. Dropped kerbs are provided at the junction of Cheetham Hill Road / Park Place, but tactile paving is missing. The applicant will fund the provision of tactile paving at this location and at the junction of Park Place / service access route. The proposed modifications are shown on the plan in Appendix C.

Parking Provision

- 3.8 Cycle parking will be provided within a secure store in the building at a rate of 1 space per unit (154 spaces). Two external cycle stands (four spaces) will also be provided externally for visitors.
- 3.9 The site is car free and the suitability of this is examined in Section 5.
- 3.10 The Council's parking policy allows Blue Badge holders to park for free and unlimited duration in street parking bays across the city. The site relates well to existing parking bays where disabled residents could park. There are currently two short lengths of marked parking bay on the Park Place site frontage, these will be reconfigured to provide three marked spaces comprising a loading bay for cars / LGV, one disabled bay and one car club bay. The applicant will fund the modifications required to the existing Traffic Regulation Orders (TRO) to accommodate these spaces. The proposed bays and TRO modifications are shown in Appendix C.

Delivery & Servicing Management Plan

- 3.11 Refuse collection vehicles and larger delivery vehicles will use the existing area on the western side of the building which utilises a shared access from Park Place. The service area provides a turning head which vehicles will reverse into from Park Place, as will have been the case for the former use of the building. A banksman will be used for reversing manoeuvres for large vehicles. Swept Path Analysis has been undertaken of the manoeuvre and is attached as Appendix D.
- 3.12 Residents will be advised of the large vehicle delivery location for use when larger goods will be delivered to the site via the Travel Pack that will be issued as part of the Travel Plan set out in Appendix E. The Travel Plan sets out a Management Strategy that will be used at the site to manage larger deliveries.
- 3.13 MCC refuse collection arrangements for the local area have been examined based on a nearby high-rise residential use at Jefferson Place (M4 4AZ). This shows that collection of blue bins and brown bins occurs every two weeks (alternate Fridays for each type) and that domestic waste is collected once a week on a Wednesday.

- 3.14 A loading bay is proposed on the Park Place frontage of a size that will accommodate day-to-day deliveries to residents, such as food deliveries, post, Amazon and take-aways. These delivery movements are undertaken in smaller vehicles (cars, light goods vehicles, and motorbikes). These vehicle types would be able to utilise available free space within the marked bays on Park Place, designating an additional length for small loading vehicles will ensure that some of this space is reserved for delivery activities. A post / parcel storage area is provided in the reception area and residents will be advised of this as part of the Food and Parcel Management Strategy set out in the Travel Plan. Analysis has been made of capacity of the loading bay and this is set out in Section 5.

Travel Plan

- 3.15 The site will be supported by a Travel Plan that includes measures to promote and support active and sustainable resident travel. An Interim Travel Plan has been prepared for the planning application and this is attached as Appendix E. The Interim Travel Plan sets out the measures that will be adopted at the site, including management and monitoring mechanisms.

Construction Traffic Management Plan

- 3.16 A Draft Construction Management Plan has been prepared and is submitted separately with the planning application. The document sets out a number of measures that will be adopted during the construction phase and will be included in the full Construction Management Plan. The requirement to prepare a full Construction Management Plan will be a condition of planning.
- 3.17 The Draft Plan states that construction at the site will start at the end of February 2024 and finish early November 2026, a total construction phase of 141 weeks. This is a longer construction period than estimated originally in the TA Scoping Report.
- 3.18 The Draft Plan includes measures relating to traffic and transport, such as:
- Commitment to undertake a highways dilapidation survey including photographs and commentary on the condition of roads / footways on construction vehicle routes around the site.
 - Details of the construction management team and contact details, including commitment to providing a telephone number for the site contractor displayed in a publicly accessible location.
 - Details of the construction phasing and timescales, and hours of construction on site.
 - Preliminary identification of hoarding locations and vehicle access points to the site.
 - Commitment to provide a Traffic and Pedestrian Management Plan at key areas around the site with additional safety signage to inform the public on safe access routes around the site.
 - Preliminary identification of large vehicle routes to the site.
 - Details of the 'just in time' delivery method that will be adopted with delivery vehicles only coming to site when called in by communication.
 - Commitment to only allow loading / unloading within the site.
 - Commitment to use site marshals and banksmen to guide large vehicles into the loading / unloading position.
 - Details of measures will be used to control the emission of dust and dirt, including wheel washing, dust suppression measures and vehicle sheeting.
- 3.19 The assessment has been updated using the new construction period information and is based on the TRICS advice⁴, as set out in the TA Scoping Report. The TRICS method forecasts that the development will generate 31 car / LGV movements (62 trips two-way) per day and 8 HGV movements (16 HGV two-way) per day. The forecast is the maximum number of vehicles that could be generated, on an average day it is expected that the development will generate fewer HGV trips.
- 3.20 A limited amount of parking will be provided at the Site Welfare area, but only certain staff will be permitted to park in this location. The site is located in an accessible location in the city centre and given this staff have the opportunity to access the site by sustainable modes of travel. Staff choosing to drive will be advised that they will be required to pay for parking in one of a number of

⁴ TRICS (2008), Construction Traffic Research Report

public car parks serving the city centre. The contractor will be required to provide site staff with details of TfGM journey planning software and parking locations.

4 Accessibility Assessment

Walking & Cycling Audit

- 4.1 There is a 2m+ footway on the site-side of Park Place. Dropped kerbs are present at the Cheetham Hill Road / Park Place junction, but no tactile paving is present.
- 4.2 Cheetham Hill Road has a 3.5m wide footway adjacent to the site and 2.3m wide footway on the opposite (eastern) side. Cheetham Hill Road is the principal pedestrian route from the site to the city centre. The footways continue southbound providing a suitable width provision.
- 4.3 Signalised crossings are provided 100m to the south of the site at the junction with New Bridge Street, including a toucan crossing. A signalised crossing is also provided 150m to the north of the site at the junction with Lord Street.
- 4.4 A cycle route is provided on the south of Cheetham Hill Road. Advanced cycle stop lines are also provided at the junctions to the north and south of the site at the Cheetham Hill Road junctions with Lord Street and New Bridge Street.
- 4.5 Figure 4.1 shows the Greater Manchester Cycle Network and Figure 4.2 shows the Bee Network. This shows that the site relates well to the existing network and that a new route will be provided from Lord Street to New Islington which will improve connectivity along the north-eastern edge of the city centre.
- 4.6 The site is also located within the [Cycle Hire Scheme Zone⁵](https://beryl.cc/scheme/greater-manchester). Bikes are operated by Beryl and are available to hire via a dedicated phone app. The scheme launched in Summer 2022 providing pedal bikes and e-bikes across Manchester, Salford, and Trafford.
- 4.7 The existing walking and cycling infrastructure provide opportunities for active trips to / from the site. The proposed development includes 100% resident cycle parking, visitor cycle parking, and localised enhancements to pedestrian infrastructure.

⁵ <https://beryl.cc/scheme/greater-manchester>

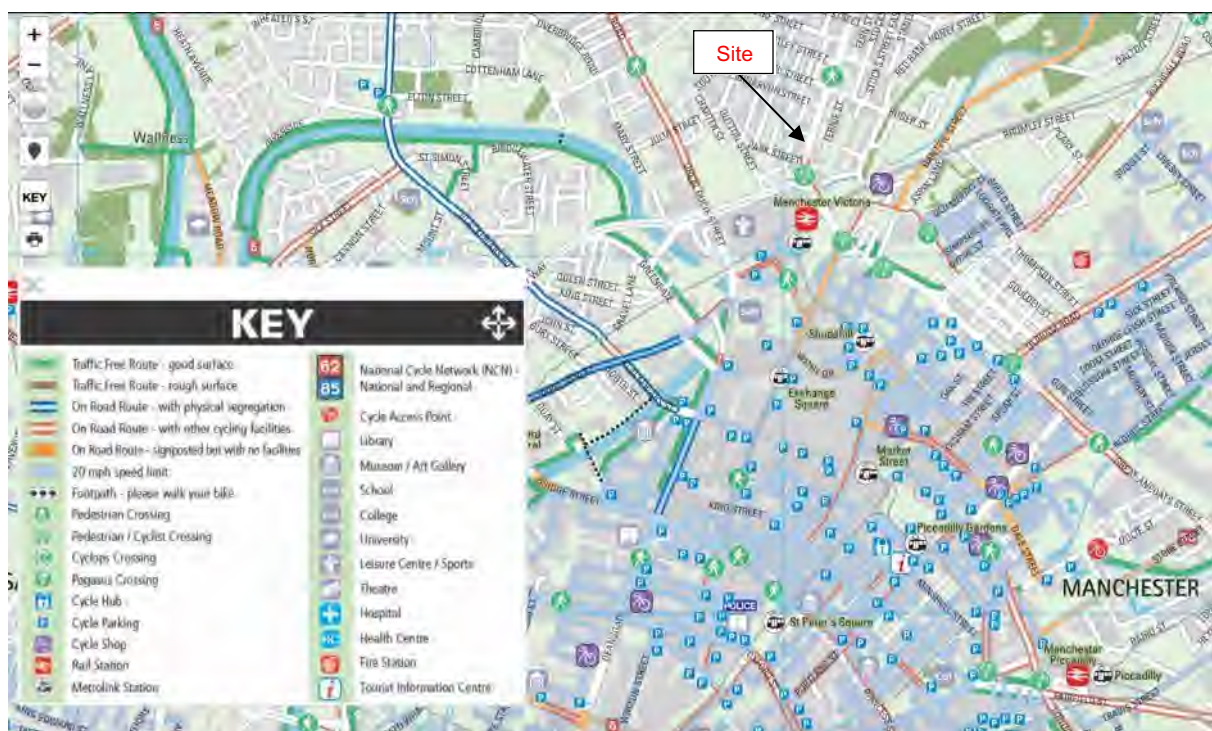


Figure 4.1: Greater Manchester Cycle Network
[source: TfGM]

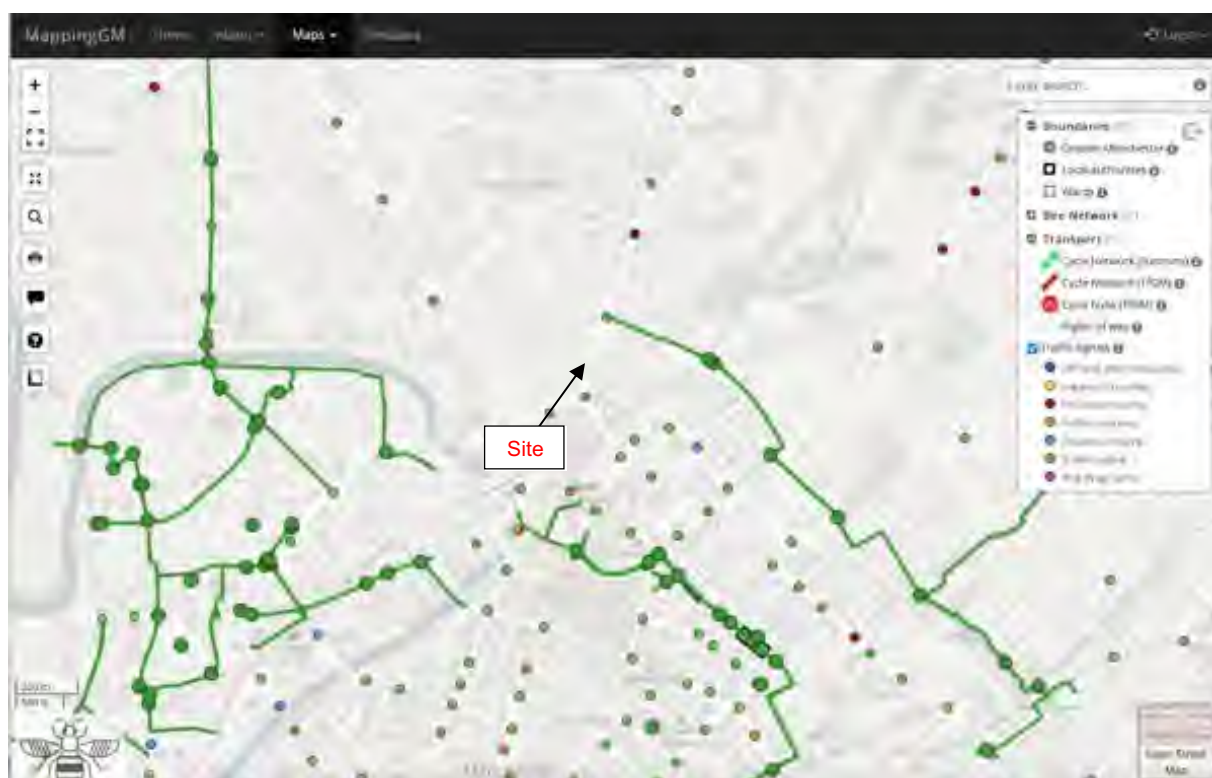


Figure 4.2: Bee Network
[source: Mapping GM]

Public Transport Audit

- 4.8 The nearest bus stops to the site are located close to the site on Cheetham Hill Road. The northbound bus stop has a shelter, flagpole, timetable information and raised bus boarder. The southbound bus stop is of recent construction and has a flagpole, timetable information and raised bus boarder. Controlled crossings are in place to allow access to services on the opposite side of the road.

4.9 Table 4.1 provides a summary of the buses serving the stops.

No.	Route	Weekday (Buses per hour / each way)			Weekend (Buses per hour / each way)	
		Peak	Day	Evening	Saturday	Sunday
41	Middleton – Bowker – City Centre – Sale	3	3	1	3	2
135	Manchester – Moston – Middleton	6	7	6	6	6

Table 4.1: Bus Services
[source: TfGM]

- 4.10 Table 4.1 shows that the site is served by typically 20 buses per hour on a weekday and at least 18 buses per hour at the weekend. Services are also available in the evening.
- 4.11 The site is located close to Victoria Station (450m away), which can be used to access mainline trains offering comprehensive service coverage of Greater Manchester and Northwest destinations.
- 4.12 Metrolink tram services can be accessed at Victoria station (450m away) and Shudehill Interchange (750m away). The tram services provide high-frequency services to other areas of the city centre, Altrincham, Eccles, East Didsbury, Media City, Ashton, the Airport, Rochdale, Bury, Salford Quays and the Trafford Centre.
- 4.13 The above confirms that the site is well served by existing public transport services. Local public transport services and ticketing arrangements will be promoted to residents via the Travel Plan.

Car Club Infrastructure

- 4.14 While the site is car free there may be occasions when residents require the use of a car. The city centre sustainable transport strategy provides for these instances with a network of car club vehicles serving the city.
- 4.15 Car clubs provide an alternative to car ownership that complements the sustainable transport system in Greater Manchester. Car clubs enable members to benefit from pay-as-you-go low cost, convenient and greener motoring, and a more sustainable pattern of living that provides access for ad-hoc vehicle use and negates the requirement to own and store a car.
- 4.16 [Enterprise Car Club](https://www.enterprisecarclub.co.uk/gb/en/home.html)⁶ has vehicles parked across the city. The nearest existing car club vehicles to the site are located on Chapel Street, Parsonage Gardens and High Street. The proposed development includes the provision of a new car club bay on Park Place and applicant funded modifications to TRO.

Access to Amenities

- 4.17 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km, which equates to a walk time of 25 minutes based on an average (all-age) walk speed of 80m / min. TfGM supports developments that meet 15-Minute City principles, whereby residents can access a range of services and amenities within a short walk or cycle of their home. Figure 4.3 shows a 15-minute and 25-minute walk time from the site.
- 4.18 Figure 4.3 shows that the site is within a 15-minute walk of the Victoria station / AO Arena area, Manchester Arndale, Shudehill, the Northern Quarter, Angel Meadows, New Cross and the

⁶ <https://www.enterprisecarclub.co.uk/gb/en/home.html>

Manchester College Campus. The site is within a 25-minute walk of the city centre core retail area (Market Street), Piccadilly Gardens, Albert Square, and City Centre Salford.

- 4.19 The assessment shows that the site is well placed for access to city centre employment, cultural, retail and leisure destinations. The assessment confirms the conclusions of the Great Ducie Street SRF⁷, which states that:

'The SRF area... shares many of the city centre's locational advantages in terms of employment opportunities, accessibility to the local, regional, and national network of public transport and the lifestyle attraction of the city centre's leisure and cultural uses.'

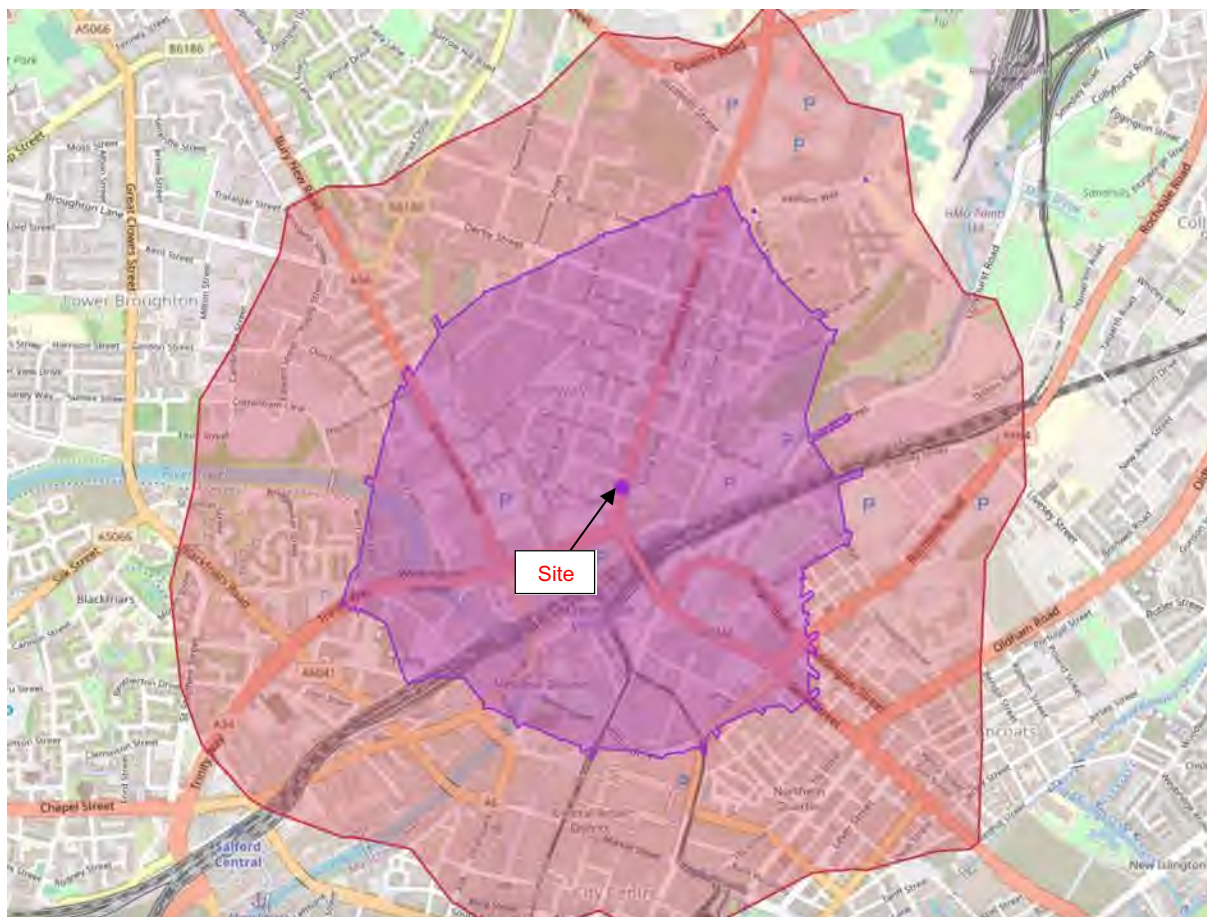


Figure 4.3: 15-Minute & 25-Minute Walking Isochrone

Greater Manchester Accessibility Level

- 4.20 A Greater Manchester Accessibility Level (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM. This tool measures accessibility by public transport of a point of interest and provides a rate between 1 and 8, where 1 is a poor level of accessibility and 8 is an exceptional level of accessibility.
- 4.21 Figure 4.4 shows that the site has a GMAL rate of 8 and a score of 51.32. The site has the highest GMAL rate and a very high score. The assessment confirms that the site is accessible by public transport.

⁷ Deloitte (2018), Great Ducie Street Strategic Regeneration Framework

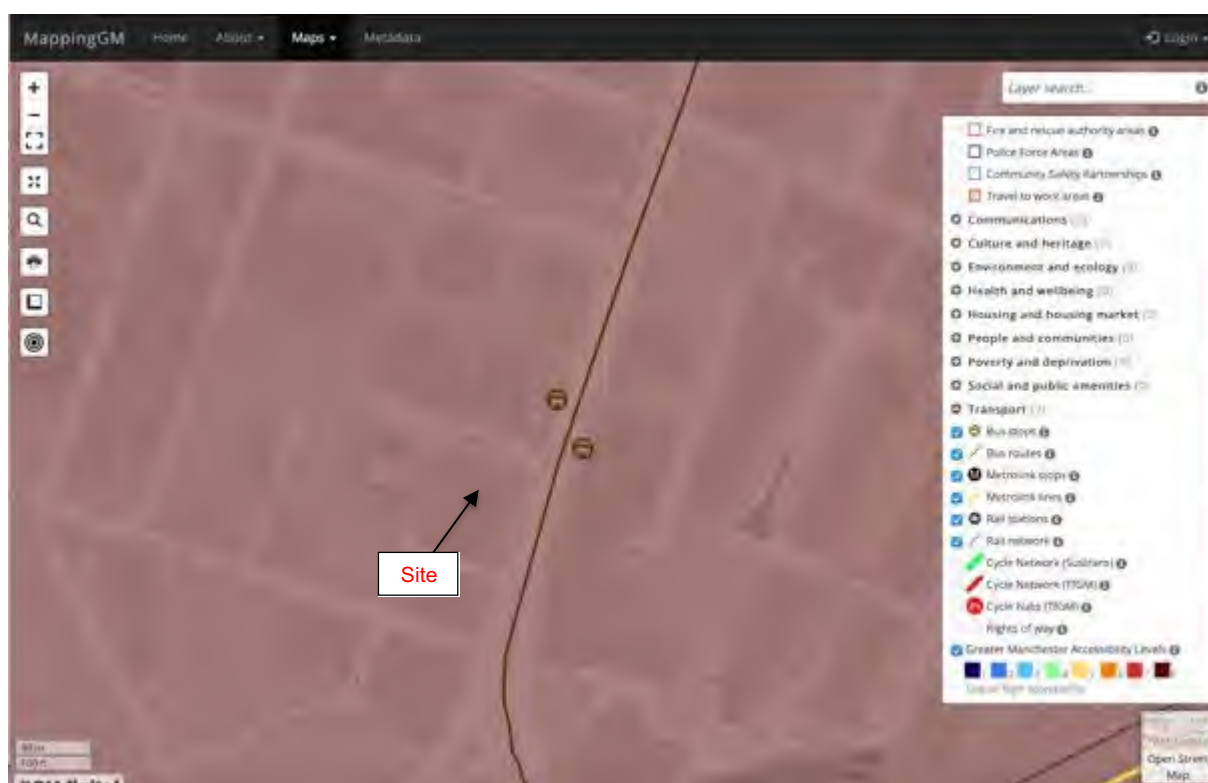


Figure 4.4: GMAL
[source: Mapping GM]

Summary & Policy Compliance

- 4.22 Evidence suggests that people can, and will, live active and low-carbon lifestyles in developments that are located with easy access to services and well served public transport nodes. This is supported by the Council's City Centre Transport Strategy⁸ which states that:

'The most successful cities of the future will be those offering the best quality of life and a range of job and leisure opportunities, reducing the need to travel by locating homes close to jobs and services, and enabling ease of local travel by walking, cycling, public transport and new zero- carbon forms of micro-mobility.'

- 4.23 The assessment shows that the site is well located in the above regard, with the site well located close to city centre destinations to enable people to live without relying on a private car to undertake their daily trips and well served by existing active and sustainable travel routes. The proposed development therefore offers the opportunity for active travel and public transport to become the natural first choice for daily activities, thereby offering a place-based solution to help towards a net zero future.
- 4.24 Paragraph 110 of NPPF⁹ supports developments that allow appropriate opportunities for sustainable transport modes to be taken up. The proposal accords with this requirement.

5 Impact Assessment

Trip Generation Method

- 5.1 TRICS guidance¹⁰ sets out the method that should be used when deriving a suitable sample set for a development proposal. At section 4 of the guidance (replicated below) it specifically states

⁸ Manchester City Council (2021) City Centre Transport Strategy to 2040

⁹ Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework

¹⁰ TRICS (2022) TRICS Good Practice Guidance 2023

that the forecast should be based on adjustments to locational and accessibility qualities, rather than regions.

'Bearing in mind the results of our research, with hard data now being available, it is not considered good practice to exclude survey sites within the TRICS database on the sole basis of such sites being located in a specific region.'

- 5.2 The TRICS software reinforces this by including the following warning on the region selection page:

'The TRICS Good Practice Guide provides guidance on the selection/deselection of sites by area and region. It is preferred that selection/deselection of sites is undertaken by considering various local factors, including location type, population levels, car ownership, etc, with the deselection of regions not taking place without these factors being considered. Research undertaken by TRICS investigated potential variations in trip generation by region, with the results suggesting that there were not any conclusive differences when picking out various regions and areas. Cross-region data inclusion should therefore be the norm rather than the exception, with the correct filtering of various data field criteria being of most importance.'

- 5.3 In line with this, no adjustment has been made to the regions in the sample. Instead, the locational parameters have been set to reflect the site's characteristics and the accessibility parameters have been set to ensure that the sample includes sites with the same or worse level of accessibility as the site.
- 5.4 The site has a GMAL rate of 8 and a score level of 51.32. A score level of above 25 equates to a PTAL rate of 6b (the highest PTAL). There are four Greater London sites in the sample which all have lower levels of accessibility than the site. The PTAL rates in the sample are one site with PTAL 3, two sites with PTAL 5 and one site with PTAL 6a.
- 5.5 A 2019 TRICS report¹¹ reviewed trends in travel behaviour over the past three decades or so and concluded that there was a consistent trend in vehicle trip reductions for residential uses that are reflected in site data held on the TRICS database. A 2021 TRICS report¹² states that changes in vehicle use is in part to do with changes in perceptions of car ownership by younger generations, reductions in driving license take-up by younger generations and are subsequently driving less than previous generations as they age, socio-economic conditions affecting travel choices with a decline in disposable income affecting travel choice, higher density living in urban centres influencing car ownership and changes in commuter patterns with more people working from home or not having a fixed work location.
- 5.6 In addition to the above, guidance from CIHT¹³ published in 2019 states that local authorities can no longer build themselves out of congestion and that support should be given to new approaches to transport planning that do not rely heavily on historic car dominated travel patterns and 'predict and provide' methods that have ultimately led to a dominance of car infrastructure and perpetuating problems with congestion. CIHT now supports 'provide and decide' planning whereby a development is designed to deliver the types of travel choices wanted, rather than relying on historic data that will just replicate historic issues. This advice is echoed in the TRICS research report published in 2021¹⁴.
- 5.7 The trip generation method has been developed in line with this guidance and research and seeks to reflect the transport characteristics of the development and fact that the site will appeal to residents who do not own a private car.
- 5.8 As the site is car free it will therefore generate vehicle associated with delivery / refuse collection and taxi movements. TRICS now enables users to select sites that have specific service movement surveys, and these survey sites have been selected for the trip generation.

¹¹ TRICS (2019), TRICS Guidance Note on Changes in Travel Behaviour

¹² TRICS (2021), Guidance Note on the Practical Implications of the Decide and Provide Approach

¹³ Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places

¹⁴ TRICS (2021), Guidance Note on the Practical Implications of the Decide and Provide Approach

Traffic Assessment

- 5.9 The TRICS output is attached as Appendix C with a summary of the trip rates and trips provided in Tables 5.1 and 5.2.

	Person Trip Rates (per unit)			LGV Trip Rates (per unit)		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.094	0.544	0.638	0.008	0.01	0.018
PM Peak Hour	0.408	0.198	0.606	0.011	0.004	0.015
Daily	2.976	2.913	5.889	0.124	0.125	0.249
	OGV Trip Rates (per unit)			Taxi Trip Rates (per unit)		
	In	Out	Total	In	Out	Total
AM Peak Hour	0	0	0	0.007	0.006	0.013
PM Peak Hour	0	0	0	0.005	0.005	0.01
Daily	0.012	0.012	0.024	0.071	0.071	0.142

Table 5.1: Development Trip Rates

	Person Trips			LGV Trips		
	In	Out	Total	In	Out	Total
AM Peak Hour	14	84	98	1	2	3
PM Peak Hour	63	30	93	2	1	2
Daily	458	449	907	19	19	38
	OGV Trips			Taxi Trips		
	In	Out	Total	In	Out	Total
AM Peak Hour	0	0	0	1	1	2
PM Peak Hour	0	0	0	1	1	2
Daily	2	2	4	11	11	22

Table 5.2: Development Trips

- 5.10 The assessment shows that the development will not be associated with a significant level of traffic during the critical peak network hours, or across the day. When considered in the context of the baseline use of the site, the proposal will not significantly change the traffic flows associated with the site.
- 5.11 The assessment confirms that the development will not have an impact on highway operation or road safety.

Parking Assessment

- 5.12 MCC's parking standards are set out in the Core Strategy. MCC does not maintain any parking standards for residential land uses, but Appendix B of the Core Strategy does state that:

'Standards for car parking are maximums and may be subject to a further reduction when consideration is given to accessibility of particular site.'

5.13 Policy T2 of the Core Strategy states that developments in the city centre should:

‘... provide a level of car parking which reflects the highly accessible nature of the location.’

5.14 The SRF¹⁵ states that the parking requirements for development in the area will be assessed on a plot-by-plot basis and should be assessed against the public transport accessibility of the site.

5.15 CIHT¹⁶ guidance states that developments should be designed for people, rather than cars, to help to embed sustainable trip making from the outset. The guidance also sets out advice on strategies for urban contexts that acknowledge the fact that many people choose to live in central urban areas to reduce the need to own, store and maintain a private vehicle. This CIHT guidance supports a reduction in parking levels in these locations to support increased use of sustainable modes. in this CIHT states that:

‘The range and quality of opportunities for active and public transport can reduce the need for car parking to the same standards as may be necessary elsewhere.’

5.16 CIHT guidance also supports a move away from ‘predict and provide’ solutions whereby transport and infrastructure is planned based on previous patterns of movement, which tends to be car dominated. DfT’s Transport Decarbonisation and Circular 01 / 2022¹⁷ also set out a requirement to move away from transport planning based on predicting future demand on historic patterns of car use (‘predict and provide’) towards planning that sets out an outcome communities want to achieve based on solutions to deliver these outcomes (known as ‘vision and validate’ / ‘provide and decide’). The interpretation of this is a requirement to not base future development on historic patterns of car use or ownership, but rather plan for the type of living and travel choices desired in an area.

5.17 The advice above is reflected in that adopted by TfGM and the 10 Greater Manchester Authorities¹⁸, which states that:

‘Urban densification generally leads to more demand for public transport and active travel... Urban densification therefore offers a major opportunity to reduce car dependence.’

5.18 Research and guidance support reduced levels of parking in appropriate locations to assist with reducing a reliance on the private car, easing congestion effects and thereby improving conditions for other road users, improving health, and contributing towards net zero targets.

5.19 The TS shows that the site occupies a location that is suitable for car free living and existing active and sustainable travel infrastructure are already in place to support this. The site has a GMAL of 8, which is the highest level of accessibility in Greater Manchester. To review the suitability of this level of accessibility for car free living a review has been made of other car free developments across the city.

¹⁵ Deloitte (2018), Great Ducie Street Regeneration Framework

¹⁶ Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places

¹⁷ Department for Transport (2021) Decarbonising Transport: A Better, Greener Britain

¹⁸ TfGM (2017), Greater Manchester Transport Strategy 2040

Site	Area	No. of Units	GMAL
Proposal Site	Great Ducie Street SRF	154	8
Waterhouse Gardens Phase 1	Boddingtons Brewery SRF	461	8
Port Street	Ancoats	135	8
Crusader Works	Piccadilly	201	8
Bendix Street	New Cross	161	8
Oldham Street	New Cross	144	8

Table 5.3: Consented Car Free Schemes

- 5.20 Table 5.3 shows that the site has the same level of accessibility as other car free residential developments located in the outer areas of city centre.
- 5.21 Parking near to the site is controlled by existing TRO on the streets adjacent to the site. These controls will assist in removing the practicability of a resident storing a car on-street.
- 5.22 Disabled residents will be permitted to park in existing street bays for unlimited duration and without charge when displaying a Blue Badge. In addition, the proposed includes modifications are proposed to existing TRO to provide disabled and car club bays.

Loading Bay Assessment

- 5.23 As shown above, the development will attract day-to-day movements associated with deliveries of post, Amazon, food, and take-aways. These deliveries are undertaken using smaller vehicles, such as motorcycles, cars and light goods vehicles. A loading bay is provided on street of a size that will accommodate these movements and visitor cycle parking is provided externally. A post / parcel storage area is provided in the reception area. A Management Strategy is set out in the Travel Plan in Appendix E.
- 5.24 Designating a length of the external marked bays for loading will ensure that a section of the space is reserved for delivery activity. A probability distribution has been used to test the likelihood of these vehicle types being present at the same time. The calculation is attached as Appendix G and is based on 19 delivery arrivals per day, which is the maximum daily arrivals forecast from the method set out above, and an average dwell time of just under 14m15s, the typical C3 delivery dwell time identified by Transport for London (TfL)¹⁹.

No. of Vehicles in Loading Bay	Probability
0	0.7233
1	0.2343
2	0.0380
3	0.0041
4	0.0003
5	0.0000
6	0.0000

Table 5.4: Probability of Vehicles Being Present at the Same Time

- 5.25 The second column shows that there is a 72% probability of the loading bay being empty, a 23% probability of the loading bay being occupied by one vehicle and a less than a 4% probability of two vehicles being present at the same time. Based on this the combination of service area and small vehicle loading bay is sufficient to meet the requirements of the development.

¹⁹ TfL (2017), Kerbside Loading Guidance

Summary & Policy Compliance

- 5.26 Evidence presented in the TS shows homes in city centre locations enable people to live more active and sustainable lives, without relying on the private car. This is reflected in the traffic forecast for the development which will have no impact on highway operation and road safety.
- 5.27 The site layout has been designed to create a people-focused development that uses the space available in the most efficient way to promote and support sustainable movement patterns. In line with this, the proposal is car-free. Modifications to local TRO are proposed to provide disabled and car club bays. These modifications will be funded by the applicant.
- 5.28 An assessment has been undertaken of the suitability of the site for car-free living. The assessment confirms that the site provides a suitable location for residents to live without owning a car. TRO on the local streets will prevent overspill parking.
- 5.29 The parking level at the site will assist in meeting local and national policy that seeks to reduce dependence on car use, improve air quality and achieve carbon savings.
- 5.30 Paragraph 111 of NPPF²⁰ states that developments should only be prevented on highway grounds if there would be an unacceptable impact on highway safety or where residual cumulative impacts would be severe. The assessment shows that the proposal will not have negative effects on highway operation or road safety.

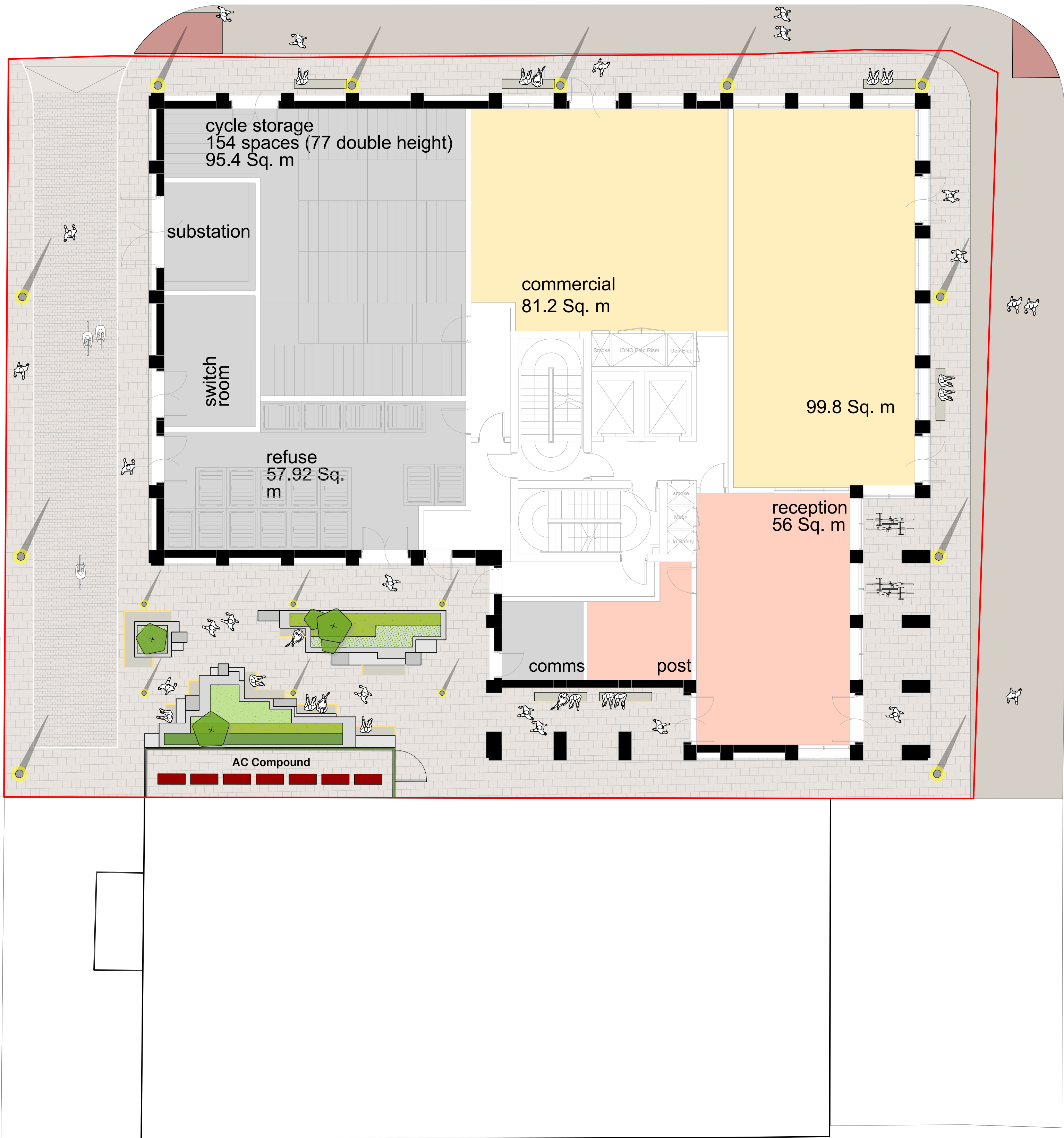
6 Conclusions

- 6.1 SK has been appointed to prepare a TA that examines the impact of constructing a car free residential development on Park Place in Manchester city centre.
- 6.2 The scope of the assessment has been undertaken in line with standard appraisal methods and in line with local and national guidance.
- 6.3 The assessment confirms that the site occupies an accessible location which provides opportunities for residents to access extensive amenities in the city centre. The site is also shown to have a very high level of accessibility by public transport, with a GMAL of 8. Measures are included in the proposal to support active and sustainable living practices, including a high level of cycle parking, localised pedestrian route enhancements, resident amenity facilities to reduce the need to travel, and a Travel Plan.
- 6.4 Appropriate infrastructure is provided to enable the site to be serviced and to accommodate refuse collection.
- 6.5 The assessment confirms that the site is a suitable location for living without a car and that there will be no negative highways effects from the proposal. Localised TRO modifications are proposed on Park Place to allow the provision of disabled and car club bays.
- 6.6 A traffic assessment has been undertaken and this shows that the proposal will be associated with an insignificant level of trips during the peak hours. It is also shown that there are no accident hotspots on the site frontage.

²⁰ Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework

Appendix A

PARK PLACE



REFERENCE IMAGE: Stepped Concrete Planter Edge



REFERENCE IMAGE: Pedestrian Priority Service Road



REFERENCE IMAGE: Greenscreen Fence

NOTES:
1. Do not scale from this drawing.
2. Always work to noted dimensions.
3. All dimensions are in millimetres unless otherwise stated.
4. All setting out, levels and dimensions to be agreed on site.
5. The dimensions of all materials must be checked on site before being laid out.
6. This drawing must be read with the relevant specification clauses and detail drawings.
7. Order of construction and setting out to be agreed on site.

KEY	
	Lawn
	Vegetable beds
	Planting 1
	Planting 2
	Sedum Greenroof
	Paving flags
	Paving setts
	Pedestrian Asphalt
	Vehicular Asphalt
	Decking
	Tactile paving
	Dutch entrance Kerb
	40mm Upstand Kerb
	Stepped Concrete Planter Edge
	Steel Planter Edge
	Proposed Tree
	Proposed Multi-stem
	Proposed Hedge
	Proposed Green Screen
	Moveable furniture
	Seating
	Table
	Sun lounger
	Outdoor games table
	Illuminated Handrail
	Gate
	Green roof shelter
	Light Column
	Lighting Bollards
	Strip Lighting
	Cycle Stand

P03	05/10/23	GF Layout Update	MN	SR
P02	27/09/23	Highway Update	MN	SR
P01	19/09/23	Planning Issue	MN	SR

Revision	Date	Description	Drawn	Apprvd.
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Client	Hodder + Partners			land studio
Project	One Park Place Manchester			
Drg Title	Groundfloor Landscape General Arrangement			
Created on	Created by	Approved by		
19/09/23	MN	SR		
Scale	Size	Workstage		
1:100	A1	Stage 3		
Drg No.	Suitability		Revision	
368-LST-XX-XX-DR-L-0102	S2		P03	

Appendix B

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

TOTAL VEHICLESSelected regions and areas:

03 SOUTH WEST
 GS GLOUCESTERSHIRE 1 days
08 NORTH WEST
 LC LANCASHIRE 1 days

Primary Filtering selection:

Parameter: Gross floor area
 Actual Range: 6604 to 8000 (units: sqm)
 Range Selected by User: 150 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 29/09/22

Selected survey days:

Wednesday 1 days
 Thursday 1 days

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

Selected Locations:

Edge of Town Centre 2

Selected Location Sub Categories:

Industrial Zone 1
 Built-Up Zone 1

Inclusion of Servicing Vehicles Counts:

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

Secondary Filtering selection:Use Class:

Not Known 2 days

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

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

Population within 5 miles:

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

Car ownership within 5 miles:

0.6 to 1.0 2 days

Secondary Filtering selection (Cont.):

<u>Travel Plan:</u>	
No	2 days
<u>PTAL Rating:</u>	
No PTAL Present	2 days

LIST OF SITES relevant to selection parameters

1	GS-02-C-01	HEALTH PRODUCTS		GLOUCESTERSHIRE
		ST CATHERINE STREET		
		GLOUCESTER		
		Edge of Town Centre		
		Built-Up Zone		
		Total Gross floor area:	6604 sqm	
		Survey date: WEDNESDAY	26/05/04	Survey Type: MANUAL
2	LC-02-C-02	RECYCLING CO.		LANCASHIRE
		ESSEX STREET		
		PRESTON		
		RED SCAR IND ESTATE		
		Edge of Town Centre		
		Industrial Zone		
		Total Gross floor area:	8000 sqm	
		Survey date: THURSDAY	10/05/12	Survey Type: MANUAL

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

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	7302	0.705	2	7302	0.048	2	7302	0.753
08:00 - 09:00	2	7302	0.541	2	7302	0.137	2	7302	0.678
09:00 - 10:00	2	7302	0.253	2	7302	0.151	2	7302	0.404
10:00 - 11:00	2	7302	0.212	2	7302	0.144	2	7302	0.356
11:00 - 12:00	2	7302	0.116	2	7302	0.171	2	7302	0.287
12:00 - 13:00	2	7302	0.123	2	7302	0.151	2	7302	0.274
13:00 - 14:00	2	7302	0.151	2	7302	0.157	2	7302	0.308
14:00 - 15:00	2	7302	0.110	2	7302	0.130	2	7302	0.240
15:00 - 16:00	2	7302	0.157	2	7302	0.226	2	7302	0.383
16:00 - 17:00	2	7302	0.096	2	7302	0.472	2	7302	0.568
17:00 - 18:00	2	7302	0.123	2	7302	0.794	2	7302	0.917
18:00 - 19:00	2	7302	0.014	2	7302	0.178	2	7302	0.192
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.601			2.759			5.360

Parameter summary

Trip rate parameter range selected:	6604 - 8000 (units: sqm)
Survey date date range:	01/01/00 - 29/09/22
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

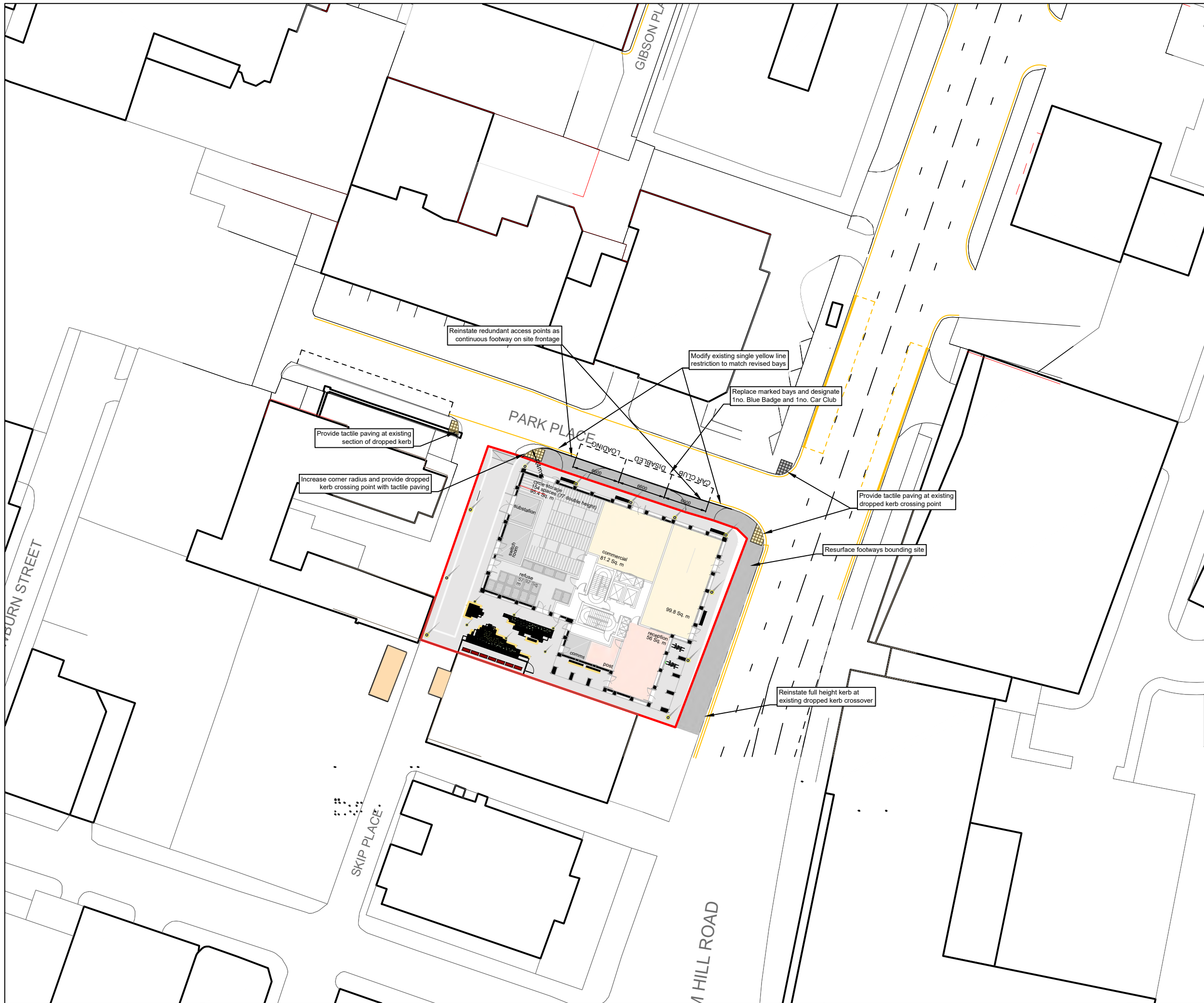
OGVS

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 - 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	2	7302	0.027	2	7302	0.007	2	7302	0.034
08:00 - 09:00	2	7302	0.021	2	7302	0.021	2	7302	0.042
09:00 - 10:00	2	7302	0.000	2	7302	0.027	2	7302	0.027
10:00 - 11:00	2	7302	0.041	2	7302	0.027	2	7302	0.068
11:00 - 12:00	2	7302	0.021	2	7302	0.034	2	7302	0.055
12:00 - 13:00	2	7302	0.014	2	7302	0.000	2	7302	0.014
13:00 - 14:00	2	7302	0.000	2	7302	0.000	2	7302	0.000
14:00 - 15:00	2	7302	0.000	2	7302	0.021	2	7302	0.021
15:00 - 16:00	2	7302	0.021	2	7302	0.014	2	7302	0.035
16:00 - 17:00	2	7302	0.000	2	7302	0.014	2	7302	0.014
17:00 - 18:00	2	7302	0.000	2	7302	0.000	2	7302	0.000
18:00 - 19:00	2	7302	0.000	2	7302	0.000	2	7302	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.145			0.165			0.310

Appendix C



THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES

Layout subject to detailed design and confirmation of statutory undertakers' equipment.

Revision Details	By	Check	Date	Suffix
Updated with landscape scheme	JAT	LGS	05.10.23	C
Bay arrangement updated	JAT	LGS	27.09.23	B
Site layout updated	JAT	LGS	21.09.23	A

Drawing Number
SK22359-001

One Park Place, Manchester

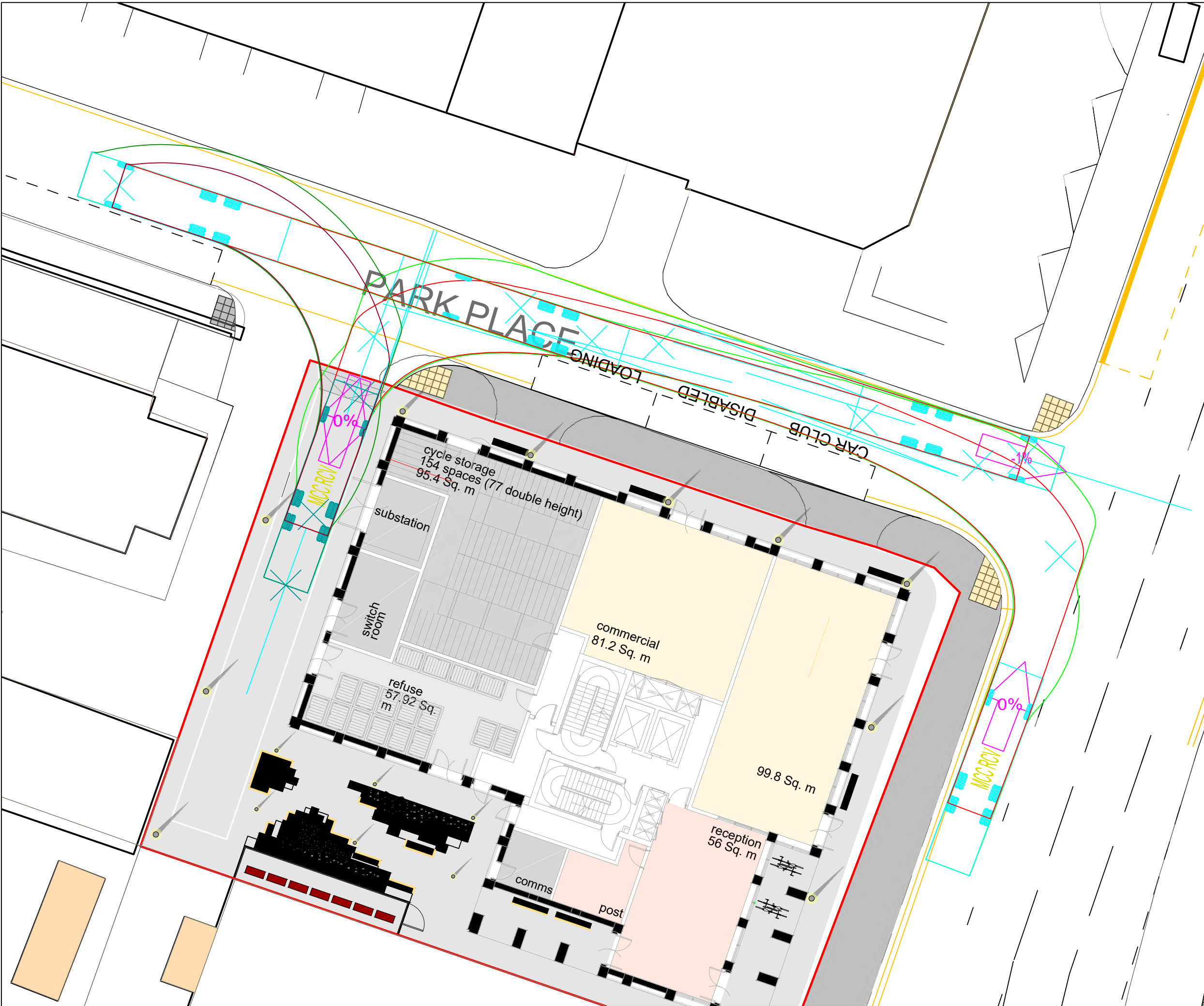
Drawing Title
Proposed external footway improvements & TRO modifications

Scale at A3
1:500

Drawn	Approved
JAT	LGS

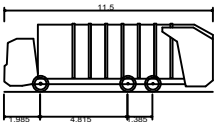
Check	Date
LGS	14.08.23

Appendix D



THIS DRAWING MAY BE USED ONLY FOR
THE PURPOSE INTENDED AND ONLY
WRITTEN DIMENSIONS SHALL BE USED

NOTES
Vehicle Profile



MCC RCV	11.500m
Overall Length	2.550m
Overall Width	3.751m
Overall Body Height	0.304m
Min Body Ground Clearance	2.500m
Track Width	2.00 sec
Lock to Lock Time	9.700m
Wall to Wall Turning Radius	

Revision Details	By	Date	Suffix
Updated with landscape scheme	JAT LGS	05.10.23	C
Revision Details	By	Date	Suffix
Bay arrangement updated	JAT LGS Check	27.09.23	B
Revision Details	By	Date	Suffix
Site layout updated	JAT LGS Check	21.09.23	A

Drawing Number
SK22359-002

One Park Place, Manchester

Drawing Title
Swept Path Analysis
MCC Specification Refuse
Collection Vehicle

Scale at A3
1:200

Drawn JAT	Approved LGS
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Check LGS	Date 14.08.23
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Appendix E

One Park Place
Manchester
Interim Travel Plan
230927/SK22359/ITP01(-01)

Contents

	Page
1 Introduction	1
2 Travel Plan Process, Benefits & Objectives	1
3 Site Location & Highway Network	4
4 Accessibility Audit	5
5 Plan Management	10
6 Measures Toolkit	11
7 Monitoring & Review Mechanisms	13
8 Action Plan & Funding	16

Project	Document	Rev	Description	Authorised by	Signed	Date
SK22359	ITP01	00	Draft for comment	L Speers	LGS	15/09/2023
SK22359	ITP01	01	Updated Draft	L Speers	LGS	27/09/2023

1 Introduction

Background

- 1.1 SK has been appointed to prepare an Interim Travel Plan to accompany a full planning application for a residential-led mixed use development at 1 Park Place in Manchester City Centre fringe area.
- 1.2 The development proposes the demolition of the existing building on site and the erection of a part 25 and part 15 storey residential building comprising 154 units with ground floor commercial units (Use Class E), associated residents amenity space, cycle parking, substation, servicing and associated landscaping works.
- 1.3 A Transport Assessment (TA) has been prepared for the planning application and this should be referred to for full details of the development proposals and the transport implications. Details of the development relevant to the Travel Plan are summarised below.

Development Overview

- 1.4 The landscape layout is attached as Appendix A in the TA.
- 1.5 The proposed development will deliver 154 apartments. Resident amenity space is providing and comprises of a semi-private courtyard, private terrace, reception area, and post-storage area.
- 1.6 Two commercial units are proposed at ground / mezzanine level with a total floor area of 372sqm.
- 1.7 The residential entrance to the building will be on Cheetham Hill Road and access to the commercial units will be off Park Place and Cheetham Hill Road. Access to the cycle stores will be taken from the service access route.
- 1.8 The footway bounding the site will be resurfaced and redundant accesses closed and reinstated. Dropped kerbs are provided at the junction of Cheetham Hill Road / Park Place, but tactile paving is missing. The applicant will fund the provision of tactile paving at this location and at the junction of Park Place / service access route. The proposed modifications are shown on the plan in Appendix C of the TA.
- 1.9 Cycle parking will be provided within a secure store located on the ground floor of the building at a rate of 1 space per unit (154 spaces). Two external cycle stands (four spaces) will be provided externally for visitors.
- 1.10 The site is car free and the suitability of this is examined in Section 5 of the TA.
- 1.11 The Council's parking policy allows Blue Badge holders to park for free and unlimited duration in street parking bays across the city. The site relates well to existing parking bays where disabled residents could park. There are currently two short lengths of marked parking bay on the Park Place site frontage, these will be reconfigured to provide three marked spaces including one disabled bay and one car club bay. The applicant will fund the modifications required to the existing Traffic Regulation Orders (TRO) to accommodate these spaces. The proposed bays and TRO modifications are shown in Appendix C of the TA.
- 1.12 Servicing is proposed using the existing area on the western side of the building which utilises a shared access from Park Place. Service vehicles will be required to reverse in from Park Place which also facilitates turning.
- 1.13 A swept path showing a refuse vehicle reversing into position is attached as Appendix D of the TA.

2 Travel Plan Process, Benefits & Objectives

Travel Plan Process

- 2.1 The Travel Plan draws on the following guidance and best practice:
 - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places

- Department for Transport (2007), Making Residential Travel Plans Work
- Department for Transport (2009), Good Practice Guidelines: Delivering Travel Plans through the Planning Process
- Manchester City Council (2012), Core Strategy
- Manchester City Council (2021), City Centre Transport Strategy to 2040
- Department for Levelling Up, Housing & Communities (2021), Planning Practice Guidance
- Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework
- Transport for Greater Manchester (2013), Transport for Sustainable Communities
- Transport for Greater Manchester (2017), Greater Manchester Transport Strategy 2040

2.2 Paragraph 113 of NPPF states that all developments that generate a significant amount of movement should be accompanied by a Travel Plan. The glossary of NPPF¹ describes a Travel Plan as:

‘A long-term management strategy for an organization or site that seeks to deliver sustainable transport objectives and is regularly reviewed.’

- 2.3 A Travel Plan is a tool for managing access to a site that sets out a management strategy that seeks to promote sustainable travel choices and reduce single occupancy car use to achieve stated objectives. It should contain a package of measures designed to meet the objective to reduce single-occupancy car use generated from the site by supporting sustainable modes of transport, where practicable.
- 2.4 A Travel Plan should include a mixture of site infrastructure, strategy, marketing, and communication measures to assist the plan to meet defined objectives. Within a Travel Plan there is a need to set targets and indicators, the purpose of which is to monitor change and review policies overtime to allow it to meet the needs of the users of a site.
- 2.5 A Travel Plan should also outline the existing accessibility of the site, infrastructure measures included as part of the development, and management and policy measures for adoption at the site to promote use of sustainable modes.
- 2.6 This version of the Travel Plan has been prepared for the planning application to set out the principles that will be adopted in the full Travel Plan for the site. The requirement to prepare a full Travel Plan will be a condition of planning.

Travel Plan Pyramid

2.7 The Department of Transport² (DfT) states that:

‘... it can be helpful to view a travel plan for a new development as a pyramid of measures and actions, which is constructed from the ground up, with each new layer building on the last and all set within the context of the outcomes sought.’

- 2.8 The DfT pyramid is shown in Figure 2.1.
- 2.9 At the bottom of the pyramid is the location of the site and characteristics of access to the site by all modes of travel. The location of the development provides the foundation for good accessibility, and this is examined in Section 3 and 4 of the Plan.
- 2.10 At the next level the physical aspects of the proposed development are set out to allow acknowledgement of that some Travel Plan measures are built-in to the layout to influence travel, such as pedestrian access measures and car and cycle parking provision. These aspects are set out in Section 1 and 6.

¹ Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework

² Department for Transport (2009), Good Practice Guidelines: Delivering Travel Plans through the Planning Process

- 2.11 The remaining levels outline the management, promotion and strategy measures that are to be adopted as part of the Travel Plan to reinforce the site location, infrastructure proposals and access opportunities. These are set out in Sections 5 and 6 of the Plan.
- 2.12 Section 7 sets out the monitoring plan which details how and when the travel plan will be reviewed. This includes how and when surveys will be undertaken, and the targets that will be set to meet the stated objectives.
- 2.13 Section 8 provides a summary of the actions identified in the Travel Plan along with timescales for implementation and funding / budget details.



Figure 2.1: Travel Plan Pyramid
[source: DfT]

Travel Plan Benefits

- 2.14 Travel Plans result in a variety of health, financial, environmental and site operation benefits, which are set out below.
- 2.15 Reduced levels of single occupancy car use can lead to an improvement in air quality both surrounding the site and across the wider area. In addition, increases in active travel have very real impact on health as moderate physical activity can help prevent obesity, mental health issues, cancer, high blood pressure and cardiovascular disease.
- 2.16 The financial benefits of Travel Plans include personal cost savings from using more cost-effective modes of travel and indirect and wider cost savings relating to reduced illness and reduced accident rates.
- 2.17 The environmental benefits of Travel Plans include reduced carbon emissions and air quality issues.
- 2.18 Travel Plans also bring societal benefits including a happier and healthier community, and more social interaction.

Objectives

- 2.19 The objectives of the Travel Plan are to:
 - Objective 1:** To increase trips by active / sustainable modes of travel.
 - Objective 2:** To reduce the number of single occupancy private car trips.

3 Site Location & Local Highway Network

Site Location

- 3.1 Figure 3.1 shows that the site is located on the northern edge of the city centre.
- 3.2 The site sits within the Great Ducie Street Strategic Regeneration Framework (SRF) area. The SRF³ states that:

'Notwithstanding the above, the site's location immediately at the edge of Manchester city centre adjacent to Victoria Station and the Manchester Arena, positions the SRF area as an outstanding opportunity to further support the positive growth trajectory of Manchester that has been established in recent years...

...As available land within the traditional city centre is filled, a significant amount of recent growth and neighbourhood regeneration has been taking place within adjoining areas. The SRF area is an important opportunity in this regard, underpinned by the fact that it shares many of the city centre's locational advantages in terms of employment opportunities, accessibility to the local, regional, and national network of public transport and the lifestyle attraction of the city centre's leisure and cultural uses.'

- 3.3 The site is currently occupied by an industrial unit with a floor area of 761sqm. Hardstanding is provided on the boundary of the site for parking and servicing. A service yard is provided to the rear of the property.
- 3.4 Vehicle access to the site is provided from two kerbed priority junctions on Park Place to the buildings service shutters, and a further kerbed priority junction is provided on Park Place to the gated service yard to the rear. Vehicle access is also provided from a dropped kerb crossover on Cheetham Hill Road.

Local Highway Network Audit

- 3.5 Park Place is an existing service road serving the small number of properties along its frontage, including the proposal site, and providing access to surface car parking at its western end. The road is circa 75m in length. It is 6.6m wide with footways of between 2m – 2.5m along either side. Marked parking bays are provided along the southern side of the road, with perpendicular parking to the rear of the footway on property frontages on the northern side with associated continuous dropped kerb provision.
- 3.6 At its eastern end Park Place meets the A665 Cheetham Hill Road at a priority junction arrangement. Dropped kerbs are present at the junction, but tactile paving is not.
- 3.7 Cheetham Hill Road forms part of the Key Route Network and routes north-south on the eastern boundary of the site providing access between north Manchester and the city centre. Wide footways are provided on both sides of the carriageway and street lighting is present. The road is subject to a 30mph speed limit. Signalised crossings are provided to the north of the site at the junction with Lord Street and to the south of the site at the junction with New Bridge Street.

Traffic Regulation Order

- 3.8 Traffic Regulation Orders (TRO) are present on Cheetham Hill Road and in the immediate vicinity of the site these are double yellow lines prohibiting parking at any time.
- 3.9 Park Place is subject to TRO in the form of single yellow lines and white lined parking bays.
- 3.10 Waiting on the single yellow lines is prohibited between 8am and 6pm (Monday to Friday) and 8am to 12.30pm (Saturday). The white lined bays permit parking for two hours (no return in one hour) between 8am and 6pm (Monday to Friday) and 8am to 12.30pm (Saturday).
- 3.11 Two lengths of white lined parking bay are present on the Park Place site frontage.
- 3.12 There are no loading controls on Park Place in the vicinity of the site.

³ Deloitte (2018), Great Ducie Street Strategic Regeneration Framework

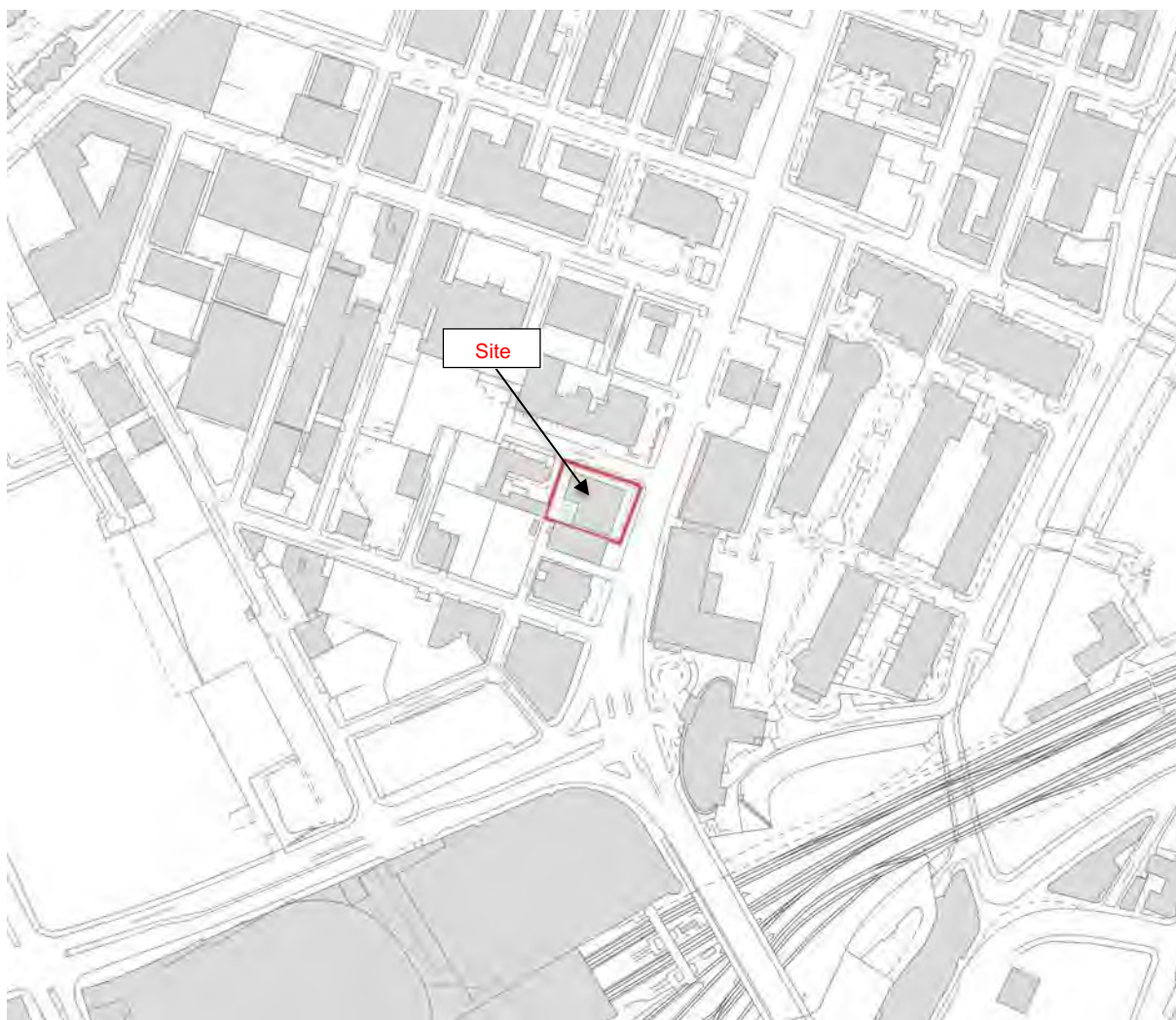


Figure 3.1: Site Location
[source: Hodder & Partners]

Traffic & Road Safety Data

- 3.13 Section 2 of the TS contains existing traffic flow and road safety data.

4 Accessibility Audit

Active Travel Routes: Walking

- 4.1 There is a 2m+ footway on the site-side of Park Place. Dropped kerbs are present at the Cheetham Hill Road / Park Place junction, but no tactile paving is present.
- 4.2 Cheetham Hill Road has a 3.5m wide footway adjacent to the site and 2.3m wide footway on the opposite (eastern) side. Cheetham Hill Road is the principal pedestrian route from the site to the city centre. The footways continue southbound providing a suitable width provision.
- 4.3 Signalised crossings are provided 100m to the south of the site at the junction with New Bridge Street, including a toucan crossing. A signalised crossing is also provided 150m to the north of the site at the junction with Lord Street.

Active Travel Routes: Cycling

- 4.4 A cycle route is provided on the south of Cheetham Hill Road. Advanced cycle stop lines are also provided at the junctions to the north and south of the site at the Cheetham Hill Road junctions with Lord Street and New Bridge Street.
- 4.5 Figures 4.1 and 4.2 shows the [cycle network](https://tfgm.pindarcreative.co.uk)⁴ and [Bee Network](https://mappinggm.org.uk/bee-network/)⁵ routes serving the site. These show that the site relates well to the existing network and that a new route will be provided from Lord Street to New Islington which will improve connectivity along the north-eastern edge of the city centre.
- 4.6 The site is also located within the [Cycle Hire Scheme Zone](https://beryl.cc/scheme/greater-manchester)⁶. Bikes are operated by Beryl and are available to hire via a dedicated phone app. The scheme launched in Summer 2022 providing pedal bikes and e-bikes across Manchester, Salford, and Trafford.

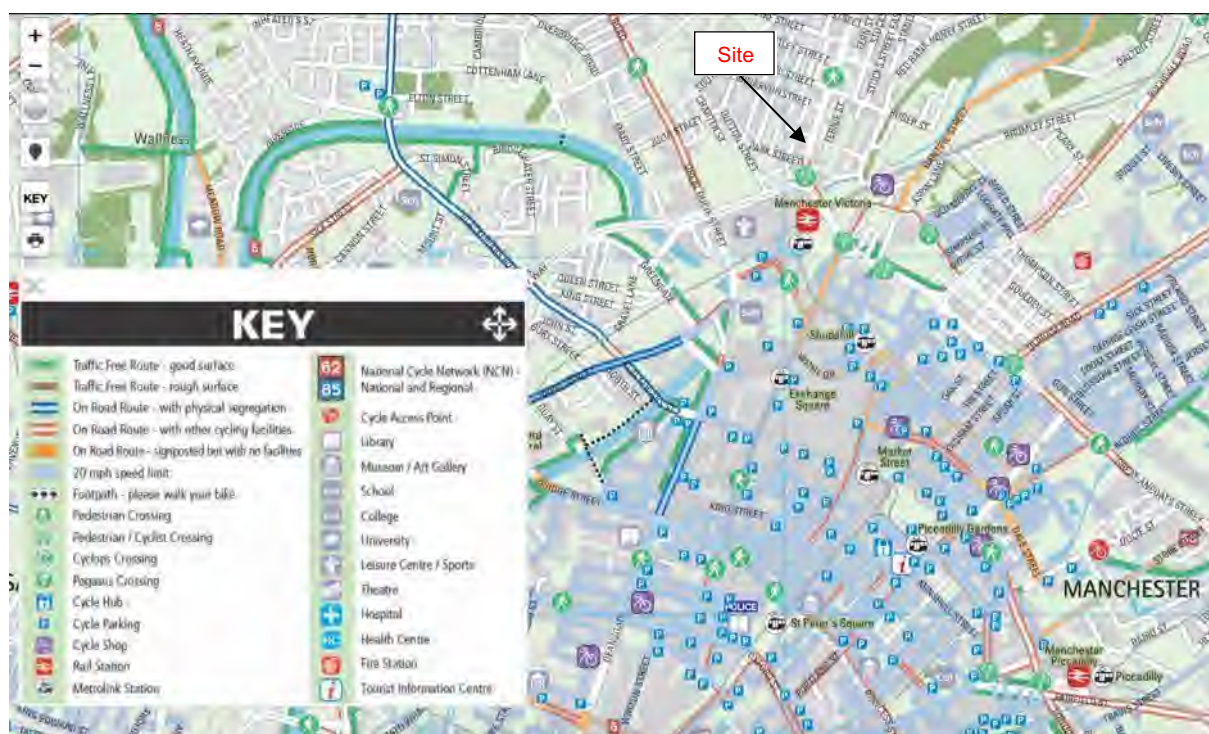


Figure 4.1: Greater Manchester Cycle Network
[source: TfGM]

⁴ <https://tfgm.pindarcreative.co.uk>

⁵ <https://mappinggm.org.uk/bee-network/>

⁶ <https://beryl.cc/scheme/greater-manchester>

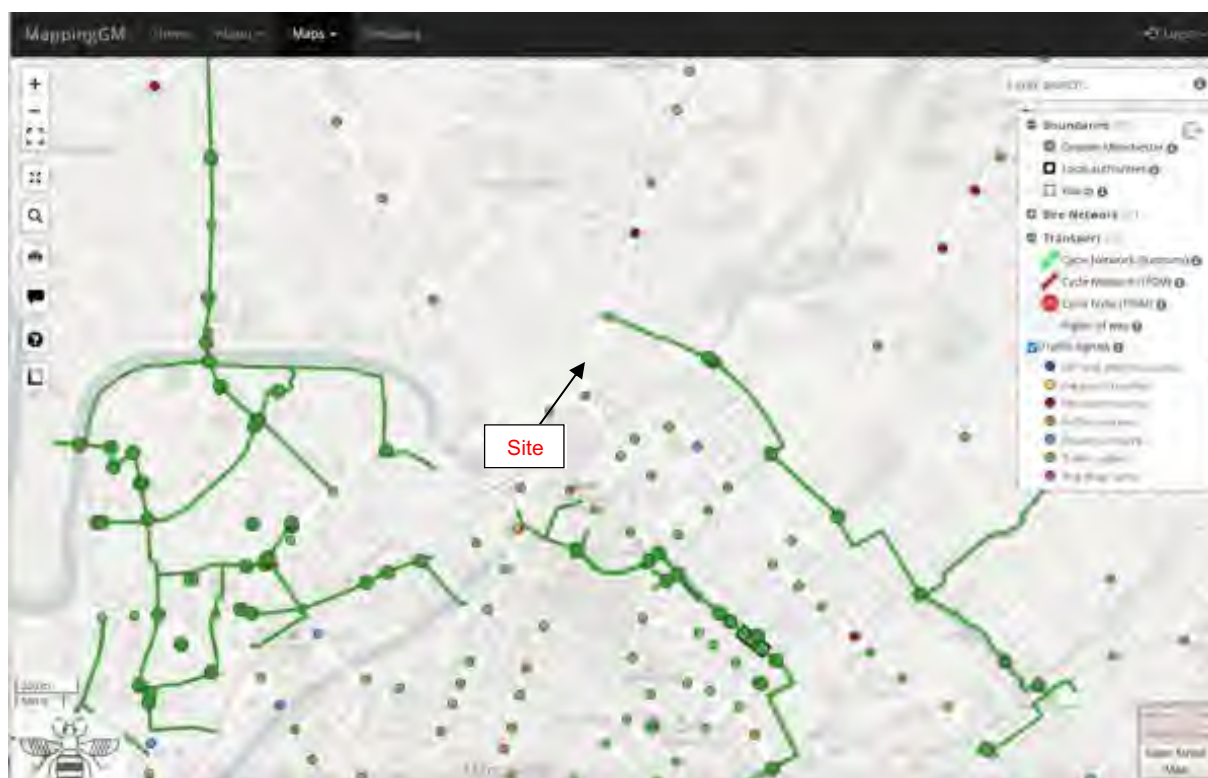


Figure 4.2: Bee Network
[source: Mapping GM]

Public Transport Audit

- 4.7 The nearest bus stops to the site are located close to the site on Cheetham Hill Road. The northbound bus stop has a shelter, flagpole, timetable information and raised bus boarder. The southbound bus stop is of recent construction and has a flagpole, timetable information and raised bus boarder. Controlled crossings are in place to allow access to services on the opposite side of the road.
- 4.8 The site is also served by public service buses. Details of these services is provided in Table 4.1 and timetables are available from the [TfGM website](https://tfgm.com/bus/timetables)⁷.

No.	Route	Weekday (Buses per hour / each way)			Weekend (Buses per hour / each way)	
		Peak	Day	Evening	Saturday	Sunday
41	Middleton – Bowker – City Centre – Sale	3	3	1	3	2
135	Manchester – Moston – Middleton	6	7	6	6	6

Table 4.1: Bus Services
[source: TfGM]

- 4.9 Table 4.1 shows that the site is served by typically 20 buses per hour on a weekday and at least 18 buses per hour at the weekend. Services are also available in the evening.

⁷ <https://tfgm.com/bus/timetables>

- 4.10 The site is located close to Victoria Station (450m away), which can be used to access [mainline trains](#)⁸ offering comprehensive service coverage of Greater Manchester and Northwest destinations.
- 4.11 [Metrolink tram services](#)⁹ can be accessed at Victoria station (450m away) and Shudehill Interchange (750m away). The tram services provide high-frequency services to other areas of the city centre, Altrincham, Eccles, East Didsbury, Media City, Ashton, the Airport, Rochdale, Bury, Salford Quays and the Trafford Centre.

Car Club Infrastructure

- 4.12 While the site is car free there may be occasions when residents require the use of a car. The city centre sustainable transport strategy provides for these instances with a network of car club vehicles serving the city.
- 4.13 Car clubs provide an alternative to car ownership that complements the sustainable transport system in Greater Manchester. Car clubs enable members to benefit from pay-as-you-go low cost, convenient and greener motoring, and a more sustainable pattern of living that provides access for ad-hoc vehicle use and negates the requirement to own and store a car.
- 4.14 [Enterprise Car Club](#)¹⁰ has vehicles parked across the city. The nearest existing car club vehicles to the site are located on Chapel Street, Parsonage Gardens and High Street.

Accessibility Assessment

- 4.15 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km, which equates to a walk time of 25 minutes based on an average (all-age) walk speed of 80m / min. TfGM supports developments that meet 15-Minute City principles, whereby residents can access a range of services and amenities within a short walk or cycle of their home. Figure 4.3 shows a 15-minute and 25-minute walk time from the site.
- 4.16 Figure 4.3 shows that the site is within a 15-minute walk of the Victoria station / AO Arena area, Manchester Arndale, Shudehill, the Northern Quarter, Angel Meadows, New Cross and the Manchester College Campus. The site is within a 25-minute walk of the city centre core retail area (Market Street), Piccadilly Gardens, Albert Square, and City Centre Salford.
- 4.17 The assessment shows that the site is well placed for access to city centre employment, cultural, retail and leisure destinations. The assessment confirms the conclusions of the Great Ducie Street SRF¹¹, which states that:

‘The SRF area... shares many of the city centre’s locational advantages in terms of employment opportunities, accessibility to the local, regional, and national network of public transport and the lifestyle attraction of the city centre’s leisure and cultural uses.’

⁸ <https://tfgm.com/public-transport/train>

⁹ <https://tfgm.com/public-transport/tram>

¹⁰ <https://www.enterpriseclub.co.uk/gb/en/home.html>

¹¹ Deloitte (2018), Great Ducie Street Strategic Regeneration Framework

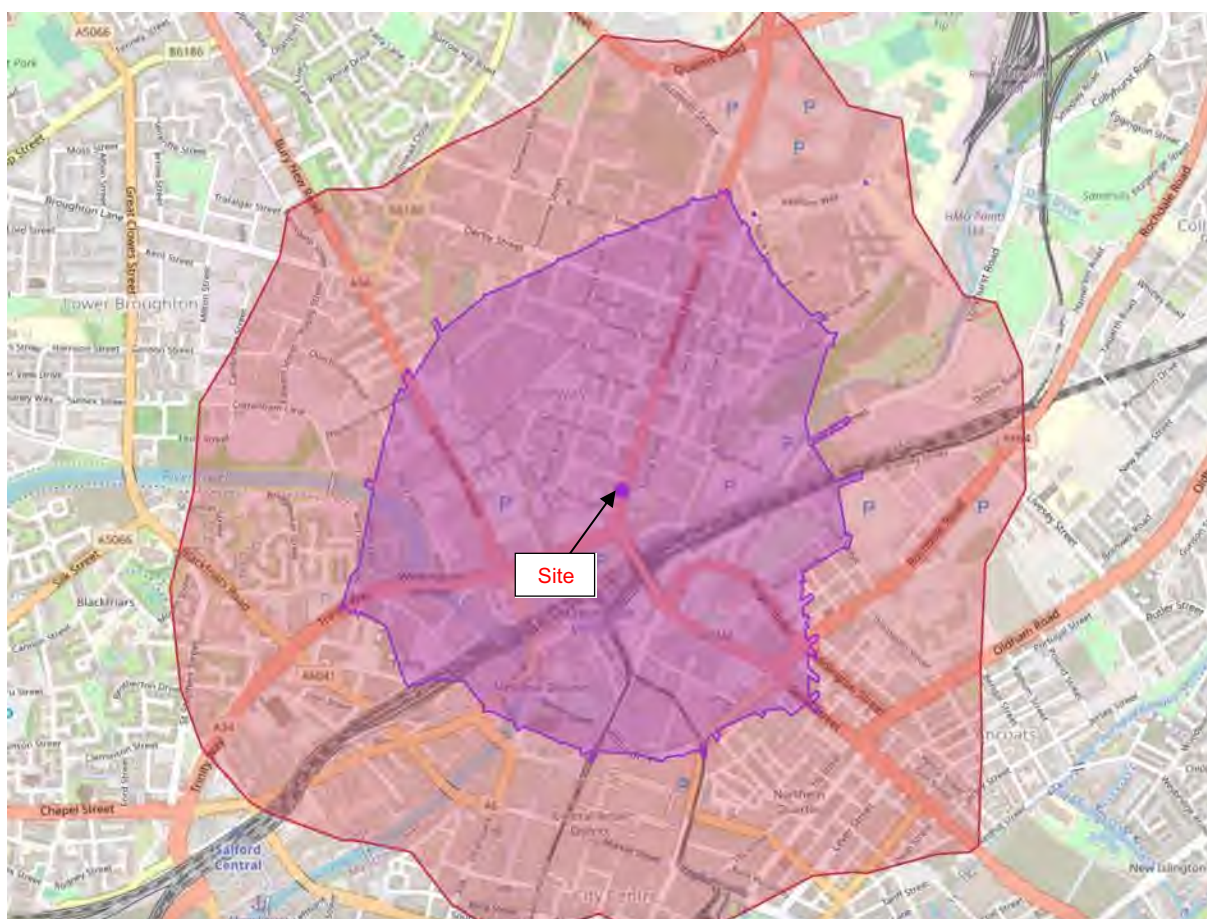


Figure 4.3: 15-Minute & 25-Minute Walking Isochrone

- 4.18 A [Greater Manchester Accessibility Level](#)¹² (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM. This tool measures accessibility by public transport of a point of interest and provides a rate between 1 and 8, where 1 is a poor level of accessibility and 8 is an exceptional level of accessibility.
- 4.19 Figure 4.4 shows that the site has a GMAL rate of 8 and a score of 51.32. The site has the highest GMAL rate and a very high score. The assessment confirms that the site is accessible by public transport.

¹² <https://www.gmtu.gov.uk/gmbusroute/GMAL%20Calculation%20Guide.pdf>

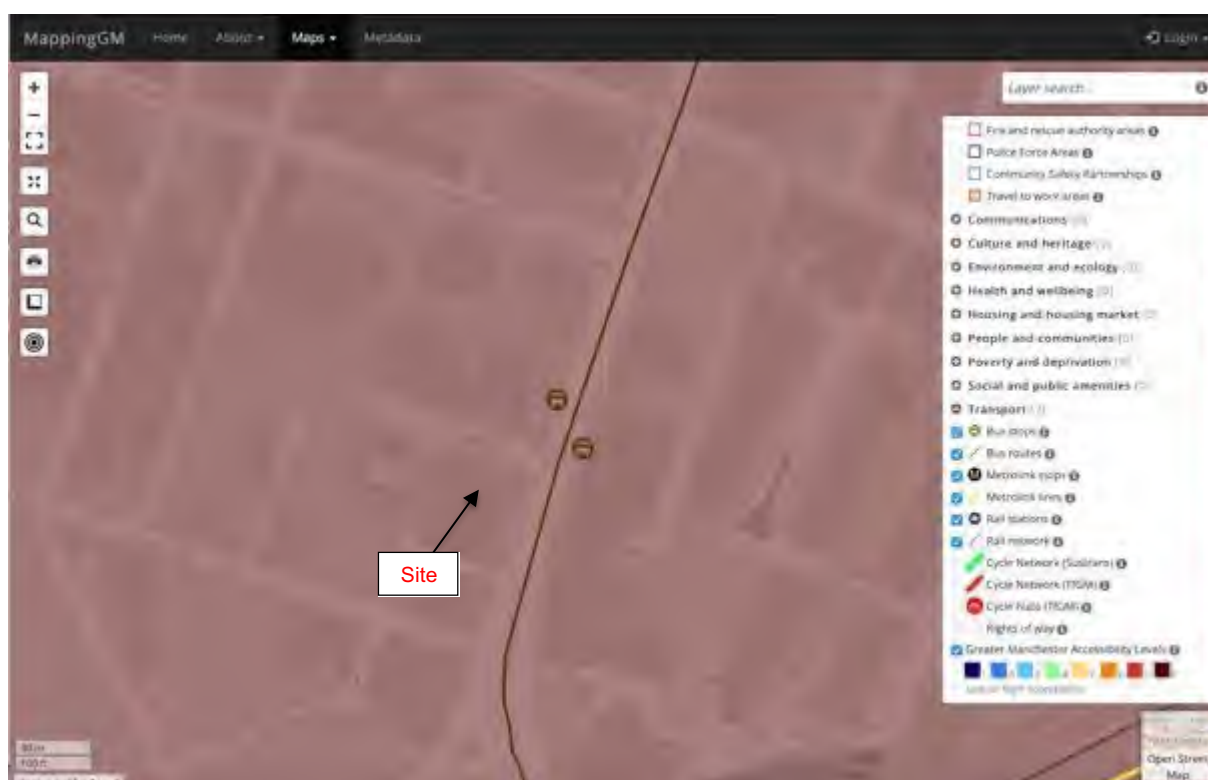


Figure 4.4: GMAL
[source: Mapping GM]

5 Travel Plan Management

Management Structure

- 5.1 An effective Travel Plan needs a clear hierarchy of responsibility. The applicant has been closely involved in the development of the Travel Plan and is committed to its successful implementation.
- 5.2 The applicant will continue to have an overseeing role in the progress of the Plan and is committed to funding the resources required for its implementation.
- 5.3 The applicant will appoint a Travel Plan Co-ordinator prior to occupation of the development.

Travel Plan Co-ordinator

- 5.4 Travel Plan Co-ordinators play an important role in developing, managing, and promoting Travel Plans. A Travel Plan Co-ordinator for the site will be identified prior to occupation.
- 5.5 The Travel Plan Co-ordinator will be responsible for the day-to-day running of the Travel Plan and will also develop, implement, market, and monitor the Travel Plan's effectiveness.
- 5.6 In summary, the Travel Plan Co-ordinator's main responsibilities are:
 - Implementing the Plan measures.
 - Providing a point of contact for residents and the Council.
 - Publicising and raising awareness of local and national initiatives.
 - Preparing and issuing the travel packs.
 - Providing regular updates to residents on changes to local services and facilities.
 - Monitoring and surveying travel patterns.
 - Periodically reporting to the Council.
- 5.7 Should the Travel Plan Co-ordinator at the site change then the applicant will provide the Council with the replacement's full contact details in a timely manner.

Future Management & Handover Arrangements

- 5.8 Should the interest in the site be sold, the responsibility for the Travel Plan implementation will transfer to the successor in title. If this should be the case, then full contact details of the new site owner and the new Travel Plan Co-ordinator will be provided to the Council in a timely manner to allow the Travel Plan to continue uninterrupted at the site.

6 Measures Toolkit

Communication Measures

- 6.1 Good communication is a vital component of the Travel Plan to ensure that residents are fully aware of the options available to them. The measures set out in the Travel Plan will be continually and clearly communicated to residents to maximise effectiveness and encourage greater levels of take-up. The communications strategy is a vital component of the Travel Plan as it will be used to ensure that residents are aware of the travel options and initiatives available to them and will be the means of communicating the progress of the Plan. The Travel Plan Co-ordinator will be responsible for marketing and promoting the Travel Plan and providing and disseminating information to residents.
- 6.2 The Travel Plan Co-ordinator will be responsible for marketing and promoting the Travel Plan. The following measures will be used to promote and market the Travel Plan:
1. Distribution of promotional materials / updates to residents.
 2. Preparation and issue of travel packs for residents.

Information Resources

- 6.3 Travel packs are an important means of disseminating information and making sure that residents are aware of the travel choices available to them.
- 6.4 The travel packs will be issued to residents when they move in. The travel packs will contain the following types of information:
1. Travel Plan Co-ordinator contact details.
 2. Information on on-line and phone app journey planning software.
 3. Information on cycle and walking routes.
 4. Information on bus routes and frequencies.
 5. Information on bus ticketing arrangements.
 6. Information on the building's delivery arrangements.

Journey Planning

- 6.5 Residents will be encouraged to familiarise themselves with the following journey planning resources:
- [TfGM journey planning software](https://tfgm.com/plan-a-journey)¹³
 - [Public transport maps](https://tfgm.com/maps)¹⁴
 - [Active Travel route software](https://beeactive.tfgm.com)¹⁵
 - [Walking and cycling route maps](https://tfgm.pindarcreative.co.uk)¹⁶
 - Links to [Google Play](https://play.google.com/store/apps/details?id=com.tfgm.beenetwork)¹⁷ and [Apple Store](https://apps.apple.com/gb/app/bee-network/id1669705230)¹⁸ Bee Network app
- 6.6 The Travel Plan Co-ordinator will also offer a personal travel planning service to help residents that require it.

¹³ <https://tfgm.com/plan-a-journey>

¹⁴ <https://tfgm.com/maps>

¹⁵ <https://beeactive.tfgm.com>

¹⁶ <https://tfgm.pindarcreative.co.uk>

¹⁷ <https://play.google.com/store/apps/details?id=com.tfgm.beenetwork>

¹⁸ <https://apps.apple.com/gb/app/bee-network/id1669705230>

Active Travel Measures

6.7 Active travel provides the following benefits:

- **Builds activity into your daily routine.**
It'll help to meet the government guidelines which recommend young people get at least 60 minutes of physical activity every day and that adults should get at least 150 minutes of moderate activity per week.
- **Boost your mental health and wellbeing.**
According to the Mental Health Foundation physical activity increases mental alertness and helps to reduce stress and anxiety.
- **Fewer cars equals cleaner air.**
You experience five times higher pollution levels in a car than walking or on a bike.
- **Save your family money.**
Not only will less money be spent on petrol, but money can also be saved on gym or fitness centre fees.
- **You'll arrive feeling ready to start the day.**
People who walk and cycle arrive at work more relaxed and alert than those who travel by car.

6.8 Section 4 confirms that the site relates well to existing active travel routes. The Travel Plan Co-ordinator will provide information on these routes to residents via the travel pack.

6.9 The proposed development will provide localised enhancements to pedestrian access routes, 100% resident cycle parking, visitor cycle parking and resident amenities on site.

6.10 The Travel Plan Co-ordinator will be responsible for raising awareness of the health benefits of active travel using the travel pack.

6.11 The Travel Plan Co-ordinator will provide walking and cycling safety tips by providing residents with resources provided by [TfGM](#)¹⁹, [GMWalking](#)²⁰, [Sustrans](#)²¹ and [Cycling UK](#)²².

6.12 TfGM provides [cycle training sessions](#)²³ for adults and family groups. This scheme will be promoted to residents.

6.13 The Travel Plan Co-ordinator will provide information to residents on how they can try cycling, without committing to the purchase of a bike. Resources that will be used include the [Beryl Bike Hire Scheme](#)²⁴, [TfGM's Bike Libraries](#)²⁵ lending scheme, and a [number of charities](#)²⁶ that provide bike loan services.

6.14 To maintain interest and momentum in active travel, the Travel Plan Co-ordinator will promote tools that can be used by residents to set themselves personal walking challenges, such as the [NHS Active 10](#)²⁷ app and [TfGM's 10 for 10 Challenge](#)²⁸. The Travel Plan Co-ordinator will also promote events to encourage increased cycling such as [Love to Ride](#)²⁹ to encourage new cycling journeys. As part of this bike riders log their mileage online, which contributes to a business leader board and gives riders the chance to win prizes.

Public Transport Measures

6.15 Section 4 shows that the site is well located for access to frequent bus services on Cheetham Hill Road and train / tram services at Victoria station. The Travel Plan Co-ordinator will provide information on these routes to residents via the travel pack.

¹⁹ <https://beeactive.tfgm.com>

²⁰ <https://gmwalking.co.uk>

²¹ www.sustrans.org.uk/

²² www.cyclinguk.org/

²³ <https://beeactive.tfgm.com/cycling/courses-and-bike-maintenance/>

²⁴ <https://beryl.cc/scheme/greater-manchester>

²⁵ <https://beeactive.tfgm.com/cycling/bike-libraries/>

²⁶ <https://beeactive.tfgm.com/cycling/get-a-bike/>

²⁷ <https://www.nhs.uk/better-health/get-active/>

²⁸ <https://beeactive.tfgm.com/10-for-10/>

²⁹ <https://www.lovetoride.net/gm>

- 6.16 The Travel Plan Co-ordinator will make sure that all residents are aware of ticketing arrangements available to residents using information from [TfGM ticketing information](#)³⁰.
- 6.17 The following ticketing incentives are currently offered in Greater Manchester:
- [Bus Travel](#)³¹
Adult single fares are capped at £2 and day tickets capped at £5. Weekly adult tickets are available for £21. Individual bus operators may provide their own weekly bus ticket but the 7 Day Any Bus Adult travelcard allows travel all week with any operator in Greater Manchester.
 - [Tram Travel](#)³²
The Clipper ticket provides 10 days' travel for the price of 9 with journeys that can be taken over 56 days. The Contactless Early Bird Bonus saves money on travel before 7am on weekdays. Weekly Contactless is capped at £31 even if you travel in all zones.
 - [Train Travel](#)³³
The Flexi Season Ticket offers 8 days of travel in 28 days – anytime between two named stations.

Sustainable Vehicle Measures

- 6.18 Recognising the sustainable location of the site, the development is car-free.
- 6.19 The applicant is funding the costs of modifying TRO to accommodate two disabled parking spaces and two car club spaces.
- 6.20 Information on the [Enterprise Car Club](#)³⁴ will be provided to residents in the travel packs. The applicant will fund modifications to TRO on Park Place to provide a car club space.

Delivery Management Measures

- 6.21 Residential developments attract deliveries that can be split into two categories:
- **Day-to-Day Deliveries**
Deliveries in small vehicles that are associated with post, Amazon, food shopping and take-aways.
 - **Infrequent Deliveries**
Deliveries of larger goods, such as white goods and furniture.
- 6.22 A small vehicle loading bay will be provided on street on Park Place to accommodate the day-to-day deliveries for use by cars / LGV. A post / parcel storage area is provided in the reception area of the building where deliveries can be stored for residents. Appropriate signage will be used, if permitted, to direct delivery drivers to the main entrance. Residents will be advised of the delivery arrangements via the travel pack.
- 6.23 Larger delivery vehicles will be able to use the site loading area to the west of the building. Residents will be required to inform the building management team if they have arranged a large delivery and will be advised of any time restrictions on the use of the delivery area. Residents will be required to be in the building to receive larger deliveries. Residents will be advised of the large good delivery arrangements via the travel pack.
- 6.24 The Travel Plan Co-ordinator will regularly engage with residents regarding the delivery process and will periodically monitor the process to ensure it is meeting requirements.

7 Monitoring & Review Mechanisms

Baseline Travel Patterns

- 7.1 Surveying and monitoring travel patterns is an important tool in measuring the progress of the Travel Plan and success of the Plan in terms of meeting the declared objectives and targets.

³⁰ <https://tfgm.com/tickets-and-passes/find-a-ticket>

³¹ <https://tfgm.com/get-on-board>

³² <https://tfgm.com/tickets-and-passes/ways-to-pay/smart-card>

³³ <https://www.northernrailway.co.uk/tickets/flexi>

³⁴ <https://www.enterpriseclub.co.uk/gb/en/home.html>

- 7.2 Baseline resident travel surveys will be undertaken within six months of occupancy the development. The travel surveys will be undertaken using a simple questionnaire that will collect the following information:
1. Home location
 2. Work location
 3. Usual mode of travel to work
 4. Household car and cycle ownership
- 7.3 The results from the first survey will be used to set the targets for the Travel Plan and to update the measures, if required. The updated Travel Plan will be submitted to the Council within three months of completion of the baseline / first surveys.

Monitoring Surveys

- 7.4 Surveys will be undertaken every two years for a period of five years (baseline / year one, year three and year five). Following each survey period, a short monitoring report will be issued to the Council for discussion. The monitoring report will be issued within three months of each survey period. Survey results will also be shared with residents by email update.

Exercise	Key Information	Frequency	Responsibility
Issue of travel packs	Dissemination of travel information and travel survey to residents	On occupation	Travel Plan Co-ordinator
Baseline resident surveys	Data to be used to establish baseline trip patterns and to allow appropriate targets to be set	Within 6 months of occupation / final Travel Plan to be submitted within 3 months of survey completion (Year 1)	Travel Plan Co-ordinator
Updated Travel Plan	Travel Plan updated with survey and targets firmed up	Within 3 months of the survey / audit	Travel Plan Co-ordinator
Monitoring resident surveys	Data to be used to establish progress of the Plan and review success of measures	Year 3 and Year 5	Travel Plan Co-ordinator
Preparation of Monitoring Report	Set out mode share, targets, and any changes proposed to the Plan	3 months after each monitoring survey period	Travel Plan Co-ordinator

Table 7.1: Monitoring Plan

- 7.5 In addition to monitoring resident travel patterns, the Travel Plan Co-ordinator will periodically review the Delivery Management Strategy measures and will engage with residents on the process. Following each monitoring period the Travel Plan Co-ordinator will make amendments to the process as required, and will advise residents of any changes by email.

Targets

- 7.6 Targets are measurable goals against which the progress of the Travel Plan can be assessed. Targets should be SMART – Specific, Measurable, Achievable, Realistic and Time-Related.
- 7.7 The targets are split into two different types, Output Targets and Outcome Targets. Output Targets are non-quantifiable and action-based that need to be achieved in a set time period. Outcome Targets are quantifiable and will be based on the results of the travel surveys.
- 7.8 The following Output Targets have been set for the Travel Plan:
- Appoint Travel Plan Co-ordinator on occupation.
 - Provide contact details of Travel Plan Co-ordinator to the Council on occupation.
 - Provide the travel pack to all new households on occupation.
 - Undertake the baseline travel surveys within 6 months of occupation.

- Update the Travel Plan and issue to the Council within 3 months of survey.
- Undertake monitoring travel surveys in years 3 and 5.
- Prepare a monitoring report and issue to the Council within 3 months of each monitoring survey.

- 7.9 The Outcome Target for the Travel Plan is to increase the proportion of site residents travelling by sustainable modes and reduce single occupancy car trips from the baseline mode share. The baseline mode share will be established on completion of the baseline / year one surveys and at this point a quantitative target will be set.
- 7.10 Preliminary Outcome Targets are set out in Table 7.2.

Provision of Travel Packs

Specific	The Travel Plan Co-ordinator will provide residents with a travel pack. These resources will be kept up to date.
Measurable	Verified as part of the monitoring reports.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	The travel packs will be provided to individual households.
Timebound	Ongoing.

Undertake Resident Surveys

Specific	Resident travel patterns will be periodically monitored.
Measurable	Will be recorded as part of the baseline and monitoring survey programme.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	Yes.
Timebound	Ongoing.

Increase the Proportion of Residents Traveling to Work Sustainably

Specific	Increase the proportion of residents travelling by walking, cycling, public transport and car sharing.
Measurable	Verified using the baseline and monitoring surveys. Quantifiable targets to be set following baseline surveys.
Achievable	Location and accessibility level of the site coupled with development infrastructure will make it highly likely that residents will travel sustainably.
Realistic	Yes.
Timebound	During lifetime of the Plan.

Reduce the Proportion of Residents Traveling to Work by Single Occupancy Car Trip

Specific	Reduce the proportion of residents travelling by single occupancy car trip.
Measurable	Verified using the baseline and monitoring surveys. Quantifiable targets to be set following baseline surveys.
Achievable	Location and accessibility level of the site coupled with development infrastructure will make it highly likely that residents will travel sustainably.
Realistic	Yes.
Timebound	During lifetime of the Plan.

Table 7.2: Preliminary Travel Plan SMART Targets

8 Interim Action Plan & Funding

- 8.1 The applicant is committed to the implementation and successful delivery of the Travel Plan's measures to meet the stated objectives.
- 8.2 The applicant has confirmed that it will fund the costs associated with the operation and implementation of the full Travel Plan. The applicant will also fund the Travel Plan Co-ordinator's costs.

Measure	Action	Responsibility	Target Delivery / Method
Management / Monitoring	Appoint Travel Plan Co-ordinator	Applicant	Prior to occupation
	Confirm Travel Plan Co-ordinator details to Council	Applicant	On occupation
	Provide / maintain travel pack	Travel Plan Co-ordinator	Prior to occupation / on-going with regular updates
	Baseline / Year 1 surveys	Travel Plan Co-ordinator	In line with monitoring programme
	Travel Plan update	Travel Plan Co-ordinator	Within 3 months of baseline survey
	Monitoring surveys	Travel Plan Co-ordinator	On-going in line with monitoring programme
	Monitoring Reports	Travel Plan Co-ordinator	Within 3 months of baseline survey
Active Travel	Provide development walking and cycling infrastructure	Applicant	On occupation
	Promote and support walking by distributing information set out in Section 6	Travel Plan Co-ordinator	Travel pack – on occupation / on-going
	Promote and support cycling by distributing information set out in Section 6	Travel Plan Co-ordinator	Travel pack – on occupation / on-going
Public Transport	Offer personalised journey planning for residents	Travel Plan Co-ordinator	On occupation / on-going
	Promote and support public transport by distributing information set out in Section 6. Regular review of services and ticketing	Travel Plan Co-ordinator	Travel pack – on occupation / on-going
Sustainable Vehicles	Provide car club and disabled parking space	Applicant	On occupation
	Promote measures set out in Section 6	Travel Plan Co-ordinator	Travel pack – on occupation / on-going
Delivery Management	Provide TRO modifications	Applicant	On occupation
	Promote the strategy set out in Section	Travel Plan Co-ordinator	Travel pack – on occupation / on-going
	Periodically review the strategy and advise residents of any amendments	Travel Plan Co-ordinator	On-going

Table 8.1: Action Plan

Appendix F

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL TAXIS

Selected regions and areas:

01 GREATER LONDON	
BE BEXLEY	1 days
BM BROMLEY	1 days
IS ISLINGTON	1 days
WF WALTHAM FOREST	1 days
02 SOUTH EAST	
CT CENTRAL BEDFORDSHIRE	3 days
HF HERTFORDSHIRE	1 days
PO PORTSMOUTH	1 days

Primary Filtering selection:

Parameter: No of Dwellings
Actual Range: 62 to 190 (units:)
Range Selected by User: 50 to 493 (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: 01/01/00 to 20/10/22

Selected survey days:

Monday	1 days
Tuesday	5 days
Wednesday	1 days
Thursday	2 days

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	1
Edge of Town Centre	8

Selected Location Sub Categories:

Development Zone	1
Residential Zone	4
Built-Up Zone	3
No Sub Category	1

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	13 days - Selected
Servicing vehicles Excluded	21 days - Not Selected

Secondary Filtering selection:

Use Class:

C3	9 days
----	--------

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	7 days
50,001 to 100,000	1 days
100,001 or More	1 days

Population within 5 miles:

50,001 to 75,000	2 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days
500,001 or More	4 days

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	5 days
1.1 to 1.5	3 days

Travel Plan:

Yes	3 days
No	6 days

PTAL Rating:

No PTAL Present	5 days
3 Moderate	1 days
5 Very Good	2 days
6a Excellent	1 days

LIST OF SITES relevant to selection parameters

1	BE-03-C-01	BLOCKS OF FLATS		BEXLEY
	CROOK LOG			
	BEXLEYHEATH			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	79		
	Survey date: WEDNESDAY	19/09/18		Survey Type: MANUAL
2	BM-03-C-01	BLOCKS OF FLATS		BROMLEY
	RINGER'S ROAD			
	BROMLEY			
	Town Centre			
	Built-Up Zone			
	Total No of Dwellings:	160		
	Survey date: MONDAY	12/11/18		Survey Type: MANUAL
3	CT-03-C-01	BLOCKS OF FLATS		CENTRAL BEDFORDSHIRE
	WING ROAD			
	LEIGHTON BUZZARD			
	LINSLADE			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	175		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
4	CT-03-C-02	BLOCKS OF FLATS		CENTRAL BEDFORDSHIRE
	STANBRIDGE ROAD			
	LEIGHTON BUZZARD			
	Edge of Town Centre			
	Residential Zone			
	Total No of Dwellings:	62		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
5	CT-03-C-03	BLOCKS OF FLATS		CENTRAL BEDFORDSHIRE
	COURT DRIVE			
	DUNSTABLE			
	Edge of Town Centre			
	No Sub Category			
	Total No of Dwellings:	146		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
6	HF-03-C-03	BLOCK OF FLATS		HERTFORDSHIRE
	SHENLEY ROAD			
	BOREHAMWOOD			
	Edge of Town Centre			
	Built-Up Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	14/11/19		Survey Type: MANUAL
7	IS-03-C-08	BLOCK OF FLATS		ISLINGTON
	CITY ROAD			
	ISLINGTON			
	Edge of Town Centre			
	Development Zone			
	Total No of Dwellings:	190		
	Survey date: THURSDAY	20/10/22		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	PO-03-C-01	BLOCKS OF FLATS	PORTSMOUTH
	CROSS STREET		
	PORTSMOUTH		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	90	
	Survey date: TUESDAY	05/06/18	Survey Type: MANUAL
9	WF-03-C-01	BLOCKS OF FLATS	WALTHAM FOREST
	ERSKINE ROAD		
	WALTHAMSTOW		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	97	
	Survey date: TUESDAY	05/11/19	Survey Type: MANUAL

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL 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	9	121	0.003	9	121	0.004	9	121	0.007
08:00 - 09:00	9	121	0.007	9	121	0.006	9	121	0.013
09:00 - 10:00	9	121	0.004	9	121	0.006	9	121	0.010
10:00 - 11:00	9	121	0.005	9	121	0.005	9	121	0.010
11:00 - 12:00	9	121	0.006	9	121	0.006	9	121	0.012
12:00 - 13:00	9	121	0.006	9	121	0.006	9	121	0.012
13:00 - 14:00	9	121	0.004	9	121	0.004	9	121	0.008
14:00 - 15:00	9	121	0.002	9	121	0.002	9	121	0.004
15:00 - 16:00	9	121	0.002	9	121	0.002	9	121	0.004
16:00 - 17:00	9	121	0.006	9	121	0.006	9	121	0.012
17:00 - 18:00	9	121	0.005	9	121	0.005	9	121	0.010
18:00 - 19:00	9	121	0.003	9	121	0.003	9	121	0.006
19:00 - 20:00	4	132	0.008	4	132	0.008	4	132	0.016
20:00 - 21:00	4	132	0.010	4	132	0.008	4	132	0.018
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	0.071			0.071			0.142		

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL 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	9	121	0.004	9	121	0.004	9	121	0.008
08:00 - 09:00	9	121	0.000	9	121	0.000	9	121	0.000
09:00 - 10:00	9	121	0.002	9	121	0.002	9	121	0.004
10:00 - 11:00	9	121	0.001	9	121	0.000	9	121	0.001
11:00 - 12:00	9	121	0.003	9	121	0.003	9	121	0.006
12:00 - 13:00	9	121	0.000	9	121	0.001	9	121	0.001
13:00 - 14:00	9	121	0.000	9	121	0.000	9	121	0.000
14:00 - 15:00	9	121	0.002	9	121	0.002	9	121	0.004
15:00 - 16:00	9	121	0.000	9	121	0.000	9	121	0.000
16:00 - 17:00	9	121	0.000	9	121	0.000	9	121	0.000
17:00 - 18:00	9	121	0.000	9	121	0.000	9	121	0.000
18:00 - 19:00	9	121	0.000	9	121	0.000	9	121	0.000
19:00 - 20:00	4	132	0.000	4	132	0.000	4	132	0.000
20:00 - 21:00	4	132	0.000	4	132	0.000	4	132	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 3.14

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	9	121	0.054	9	121	0.367	9	121	0.421
08:00 - 09:00	9	121	0.094	9	121	0.544	9	121	0.638
09:00 - 10:00	9	121	0.099	9	121	0.199	9	121	0.298
10:00 - 11:00	9	121	0.138	9	121	0.176	9	121	0.314
11:00 - 12:00	9	121	0.122	9	121	0.157	9	121	0.279
12:00 - 13:00	9	121	0.177	9	121	0.176	9	121	0.353
13:00 - 14:00	9	121	0.161	9	121	0.163	9	121	0.324
14:00 - 15:00	9	121	0.138	9	121	0.118	9	121	0.256
15:00 - 16:00	9	121	0.299	9	121	0.168	9	121	0.467
16:00 - 17:00	9	121	0.283	9	121	0.170	9	121	0.453
17:00 - 18:00	9	121	0.408	9	121	0.198	9	121	0.606
18:00 - 19:00	9	121	0.466	9	121	0.236	9	121	0.702
19:00 - 20:00	4	132	0.356	4	132	0.152	4	132	0.508
20:00 - 21:00	4	132	0.181	4	132	0.089	4	132	0.270
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.976			2.913			5.889

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL 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	9	121	0.003	9	121	0.009	9	121	0.012
08:00 - 09:00	9	121	0.008	9	121	0.010	9	121	0.018
09:00 - 10:00	9	121	0.010	9	121	0.005	9	121	0.015
10:00 - 11:00	9	121	0.014	9	121	0.014	9	121	0.028
11:00 - 12:00	9	121	0.014	9	121	0.016	9	121	0.030
12:00 - 13:00	9	121	0.017	9	121	0.019	9	121	0.036
13:00 - 14:00	9	121	0.008	9	121	0.012	9	121	0.020
14:00 - 15:00	9	121	0.005	9	121	0.005	9	121	0.010
15:00 - 16:00	9	121	0.010	9	121	0.007	9	121	0.017
16:00 - 17:00	9	121	0.014	9	121	0.015	9	121	0.029
17:00 - 18:00	9	121	0.011	9	121	0.004	9	121	0.015
18:00 - 19:00	9	121	0.004	9	121	0.003	9	121	0.007
19:00 - 20:00	4	132	0.004	4	132	0.004	4	132	0.008
20:00 - 21:00	4	132	0.002	4	132	0.002	4	132	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.124			0.125			0.249

Appendix G

One Park Place, Manchester: Loading Bay Calculation

	Taxi Trips			Car / LGV Servicing Trips			HGV Servicing Trips			Total Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Daily	11	11	22	19	19	38	2	2	4	32	32	64

Loading / Delivery Location

	Location	Daily Arrivals
Refuse / OGV	On-site	2
LGV / Cars	Street Loading Bay	19

Probability Test: Street Loading Bay (Daily)

Average C3 Dwell (mins)	00:14:15	TfL (2017) 'Kerbside Loading Guidance'
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	Vehicles	Hours
Daily Arrival Rate	19	14

	Seconds	λ	ϵ
Dwell Time	855	0.32395	2.71828

Number of Vehicles in Loading Bay	Probability	%
0	p(0)	0.7233 72.33%
1	p(1)	0.2343 23.43%
2	p(2)	0.0380 3.80%
3	p(3)	0.0041 0.41%
4	p(4)	0.0003 0.03%
5	p(5)	0.0000 0.00%
6	p(6)	0.0000 0.00%

Refuse Collection Frequency

Based On:	Jefferson Place, M4 4AZ
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Type	Frequency	Collection Day	Pattern
Blue Bin	2 weeks	Friday	Week 1
Brown Bin	2 weeks	Friday	Week 2
Domestic Waste	1 week	Wednesday	Week 1 & 2