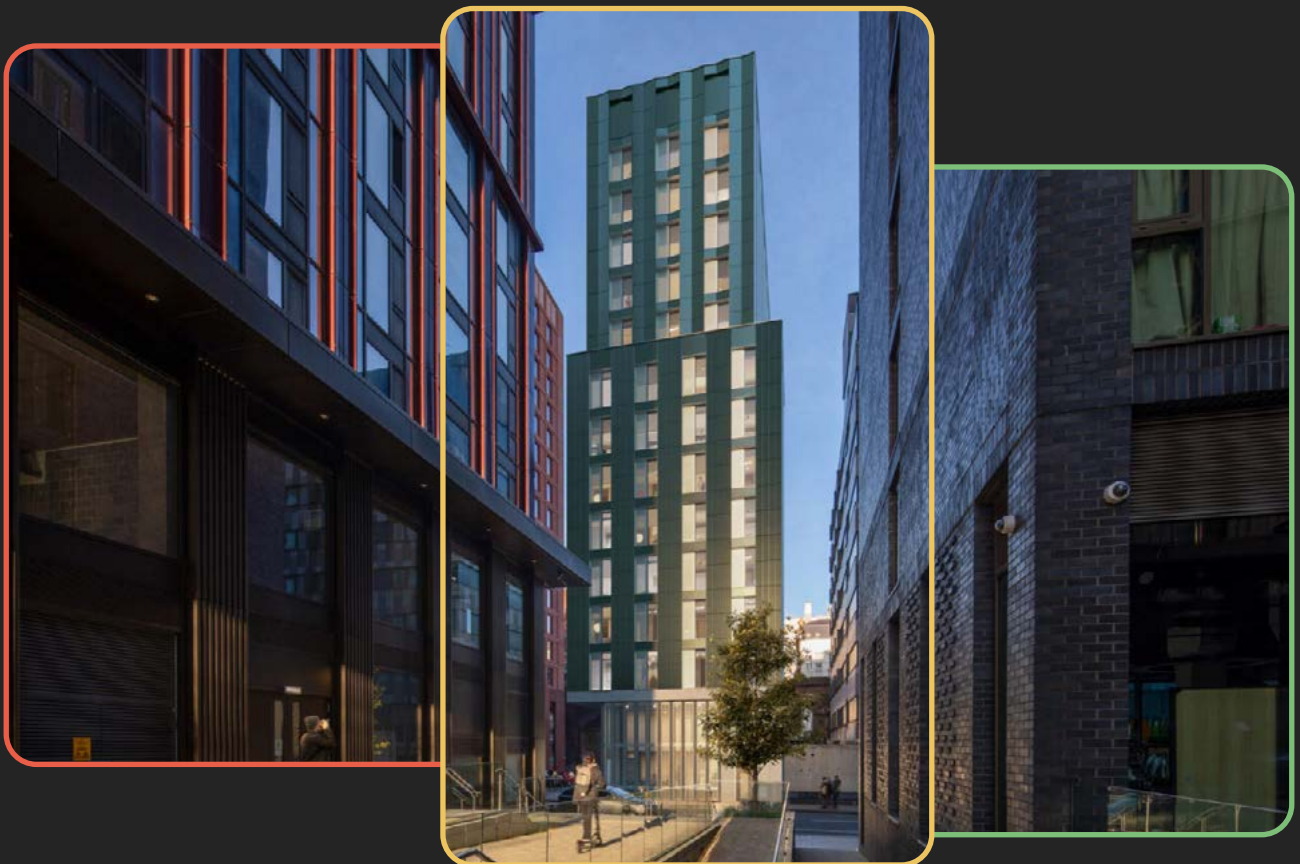


Charles Street

Transport Statement



Charles Street PBSA

Transport Statement

Curtins Ref: 084709-CUR-XX-XX-T-TP-00002

Revision: P03

Issue Date: 12 December 2023

Client Name: Jadebricks (Charles Street) Ltd

Control Sheet

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This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
Alex Fry BA (Hons) GradCIHT Graduate Transport Planner		12 December 2023
David Dominguez HND Cert MCIHT Principal Transport Planner		12 December 2023
Reviewed	Signature	Date
Aaron Tilley HNC CMILT FCIHT Associate		12 December 2023
Authorised	Signature	Date
Aaron Tilley HNC CMILT FCIHT Associate		12 December 2023

Table of Contents

1.0	Introduction.....	1
1.1	Background	1
1.2	National Policy.....	1
1.3	Purpose of the Report	2
1.4	Scope of the Report	2
1.5	Structure of the Report.....	2
2.0	Existing Situation	4
2.1	Site Location.....	4
2.2	Existing Use and Access.....	4
2.3	Surrounding Highway Network.....	5
2.4	Highway Safety	6
3.0	Development Proposals	7
3.1	Overview of Proposals	7
3.2	Proposed Access	7
3.3	Proposed Parking.....	7
3.4	Proposed Servicing Arrangements	9
3.5	Student Move In / Out Management Strategy.....	10
3.6	Delivery Management Strategy	11
4.0	Accessibility by Sustainable Modes of Travel	14
4.1	Introduction.....	14
4.2	Pedestrian Accessibility	16
4.3	Cycle Accessibility.....	18
4.4	Public Transport Accessibility	20
4.5	Summary	26
5.0	Building Research Establishment Environmental Assessment Method (BREEAM).....	27
6.0	Traffic Forecasting and Highway Impact	30
6.1	Introduction.....	30
6.2	Modal Split.....	30
6.3	Traffic Generation – Move-In/Out Day	32
6.4	Traffic Generation – Typical Day.....	33
6.5	Highway Impact Conclusions	35
7.0	Waste Management Strategy	36
7.1	Introduction.....	36

7.2	Waste Management Policy	36
7.3	Waste Forecasting	36
7.4	Waste Management Strategy.....	37
7.5	Conclusions	38
8.0	Summary and Conclusions	39
8.1	Summary	39
8.2	Conclusions	39

Figures

Figure 2.1	– Site Location	4
Figure 2.2	– Area Assessed for Collision Data (5 years).....	6
Figure 4.1	– University of Manchester Campus	14
Figure 4.2	– Manchester Metropolitan University Campus.....	15
Figure 4.3	– Manchester City Centre	16
Figure 4.4	– Local Cycle Network.....	19
Figure 4.5	– City Centre Bee Network	20
Figure 4.6	– City Centre Public Transport Network	21
Figure 4.7	– University Free Travel Zone	23
Figure 4.8	– Free Bus Route and Timetable.....	24
Figure 4.9	– TfGM Metrolink Network Map.....	25
Figure 6.1	– TRICS Modal Split	34

Tables

Table 4.1	– CIHT Recommended Walking Distances.....	16
Table 4.2	– Number and Type of Existing Accessible Amenities within 500m of the Site	17
Table 4.3	– CIHT Maximum Suggested Walking Distances to Bus Stops.....	22
Table 5.1	– BREEAM Credits Targeted	29
Table 6.1	– Mode of Travel to University for MMU Students	31
Table 6.2	– Mode of Travel to University for UoM Students	31
Table 6.3	– Proposed Residential TRICS Multi-Modal Trip Rates.....	34
Table 6.4	– Proposed Residential TRICS Multi-Modal Trip Generation	35
Table 7.1	– Development Weekly Waste Volume Forecast.....	37

Plans

Plan 084709-CUR-XX-XX-G-TP-06001 – Location Plan – Regional
Plan 084709-CUR-XX-XX-G-TP-06002 – Location Plan – Local
Plan 084709-CUR-XX-XX-G-TP-06003 – Accessibility – Pedestrian Catchment Plan
Plan 084709-CUR-XX-XX-G-TP-06004 – Accessibility – Cycle Catchment Plan
Plan 084709-CUR-XX-XX-G-TP-06005 – Accessibility – Public Transport Plan

Drawings

Drawing 084709-CUR-XX-00-D-TP-05001 – (Swept Path Analysis) Refuse Strategy
Drawing 084709-CUR-XX-00-D-TP-06001 – Waste Management Strategy

Appendices

Appendix A – Proposed Site Layout
Appendix B – TRICS Output
Appendix C – MCC's Waste Pro Forma

1.0 Introduction

1.1 Background

1.1.1 Curtins has been appointed by Jadebricks (Charles Street) Ltd to provide transport and highways advice in relation to a planning application for a purpose-built student accommodation (PBSA) scheme at Charles Street/York Street near Oxford Road in Manchester city centre.

1.1.2 The proposed scheme will provide 107 beds. The full development description is as follows;

“Full planning permission for the erection of a 15-storey purpose-built student accommodation building, including site preparation works, works over the public highway and associated works.”

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

1.2 National Policy

1.2.1 Paragraph 111 of the National Planning Policy Framework (2023) states that:

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

1.2.1 In addition to the NPPF, National Planning Practice Guidance (NPPG) clarifies the over-arching principles on Travel Plans, Transport Assessments and Transport Statements, provides potential benefits of the documents, and re-iterates the circumstances in which either document would usually be required.

1.2.2 The NPPG has been considered in the production of this Transport Statement (TS) and the accompanying Interim Travel Plan (Document Reference: **084709-CUR-XX-XX-T-TP-00003**).

1.2.3 As demonstrated throughout this report, there are no identified existing highway safety issues, the development will be largely car-free, prioritising and encouraging more sustainable modes of travel, and there will be no vehicular trips generated during the network peak hours.

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

1.3 Purpose of the Report

- 1.3.1 This TS has been prepared to inform Highway Officers at Manchester City Council (MCC) as the Local Highway Authority (LHA) of the development proposals and their potential impact on the surrounding area from a traffic and transportation perspective. It also addresses waste management.
- 1.3.2 The TS is supported by a range of appendices, with access drawings showing swept path assessments. Additionally, the TS is supported by an Interim Travel Plan (Document Reference: **084709-CUR-XX-XX-T-TP-00003**) with measures and initiatives to encourage active and sustainable travel.

1.4 Scope of the Report

- 1.4.1 The scope of this report is consistent with the guidance and recommendations set out in Local and National planning policy.
- 1.4.2 A pre-application scoping response was received from MCC Highways on 1st November 2023. This covered MCC's view on oversailing, loss / relocation of on-street parking bays, trip generation, the accessibility of the site, car and cycle parking, Student Move In/Move Out Strategy, servicing and access requirements, waste collection, road safety, mitigation (if necessary), public realm, travel planning, and a Construction Management Plan.
- 1.4.3 On this basis, the TS contains the following:
- Details of the existing use and the development proposals, together with a proposed site layout plan;
 - A review of highway safety within the vicinity of the site for the most recent five years;
 - An audit of accessibility by all modes of travel including walking, cycling, and public transport;
 - Drawings showing the site access proposals, vehicle tracking and visibility splays;
 - Details of proposed parking arrangements and justification for the provision;
 - Details of future vehicular trips and commentary on any highway impacts; and
 - A review of the relevant local and national transport planning policy.

1.5 Structure of the Report

- 1.5.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the existing site and its location. This includes the local highway network and facilities for pedestrians, cyclists, and public transport users.
- 1.5.2 **Section 2** also reviews the local area in terms of highways safety by way of obtaining records of collisions adjacent to the site over the most recent five-year period available.

- 1.5.3 **Section 3** gives an overview of the development proposals including details on proposed access, parking provision, and a servicing and refuse strategy.
- 1.5.4 **Section 4** considers the site's accessibility by sustainable modes of transport, including walking, cycling and public transport.
- 1.5.5 **Section 5** assesses the proposed development's compliance against BREEAM standards.
- 1.5.6 **Section 6** outlines the traffic forecasting methodology used to establish the likely traffic generation associated with the development proposals, and the highway impact.
- 1.5.7 **Section 7** details the waste management strategy.
- 1.5.8 **Section 8** provides a report summary and conclusion.

2.0 Existing Situation

2.1 Site Location

2.1.1 The site is located in Manchester city centre, a short distance from Oxford Road, and is bounded by a railway viaduct to the north, Bracken House (residential flats with nursery at ground floor) to the east, and roads (Charles Street and York Street) to the south and west.

2.1.2 **Figure 2.1** below shows the site in a local context relating to the local highway network:

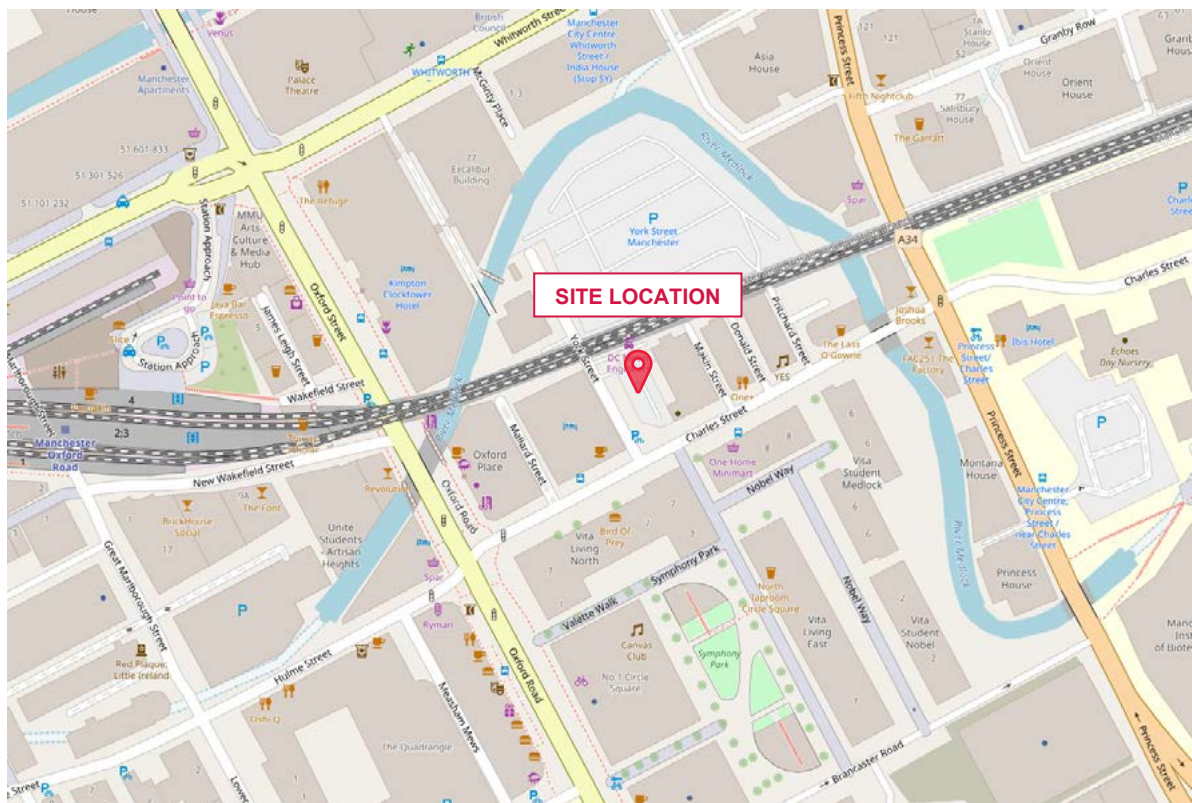


Figure 2.1 – Site Location

(Source: OpenStreetMap, 2023)

2.1.3 **Plan 084709-CUR-XX-XX-G-TP-06001** to the rear of the report illustrates the location of the site in relation to the surrounding areas, and **Plan 084709-CUR-XX-XX-G-TP-06002** to the rear of the report shows the site in a more local context relating to the local highway network.

2.2 Existing Use and Access

2.2.1 The existing site is currently fenced-off with hoardings for construction purposes with the vehicular site access via York Street. It was previously a small pay-and-display car park.

2.3 Surrounding Highway Network

Charles Street

- 2.3.1 Charles Street runs for c. 370m in an east-west alignment, linking Oxford Road, Princess Street, and Sackville Street. The road is c. 9m-wide with one lane of traffic and a painted on-road cycle lane in each direction. There are single yellow lines along most of both sides of the road (the rest is covered by double yellow lines). The road falls within Manchester's Controlled Parking Zone where parking is not allowed on single yellow lines between 08:00 – 20:00, but there is no signage to detail these restrictions. Google Street View imagery shows vehicles parking on the single yellow lines / cycle lanes.
- 2.3.2 There are footways in excess of 2m wide along both sides of the road between Oxford Road and Princess Street, and on the southern side of the road between Princess Street and Sackville Street (where there is no footway on the northern side).
- 2.3.3 There are dropped kerbs across all minor arms of the minor junctions, and tactile paving on some. Signalised crossings (with dropped kerbs and tactile paving) are present across all arms of the junctions with Oxford Road and Princess Street. At the junction with Sackville Street, on the other hand, dropped kerbs only are provided across the western Charles Street arm, and there are no crossing facilities across either Sackville Street arms. Nonetheless, Sackville Street south of the junction is one-way southbound, reducing the level of traffic and thereby making for a safer crossing environment for pedestrians and cyclists.
- 2.3.4 The road is subject to a 20mph speed limit.

York Street

- 2.3.5 York Street extends for c. 90m to the north of Charles Street, providing access to a series of on-street car parking bays located along both sides of the carriageway. Pay-and-display car parking is available along most of the length of the road, with the remainder subject to double yellow restrictions.
- 2.3.6 Near to the junction, the road is c. 6m-wide due to a kerb build out on approach to Charles Street, although it soon widens to c. 9.5m for most of its length. There are footways in excess of 2m wide along both sides of the road.
- 2.3.7 There are existing cycle parking facilities in the form of three 'Sheffield' type cycle hoops at the corner of Charles Street/York Street.
- 2.3.8 At the northern extent of York Street, it is noted that a large number of bins are left on-street in advance of refuse collections which takes up much of the carriageway space.
- 2.3.9 The road is subject to a 20mph speed limit.

2.4 Highway Safety

- 2.4.1 Collision data for the highway network adjacent to the site has been obtained from the TfGM reported road incidents database for the most recent five years (up to 31st March 2023). The details of the search are contained in **Figure 2.3** and a breakdown of the information is contained in **Table 2.1**:

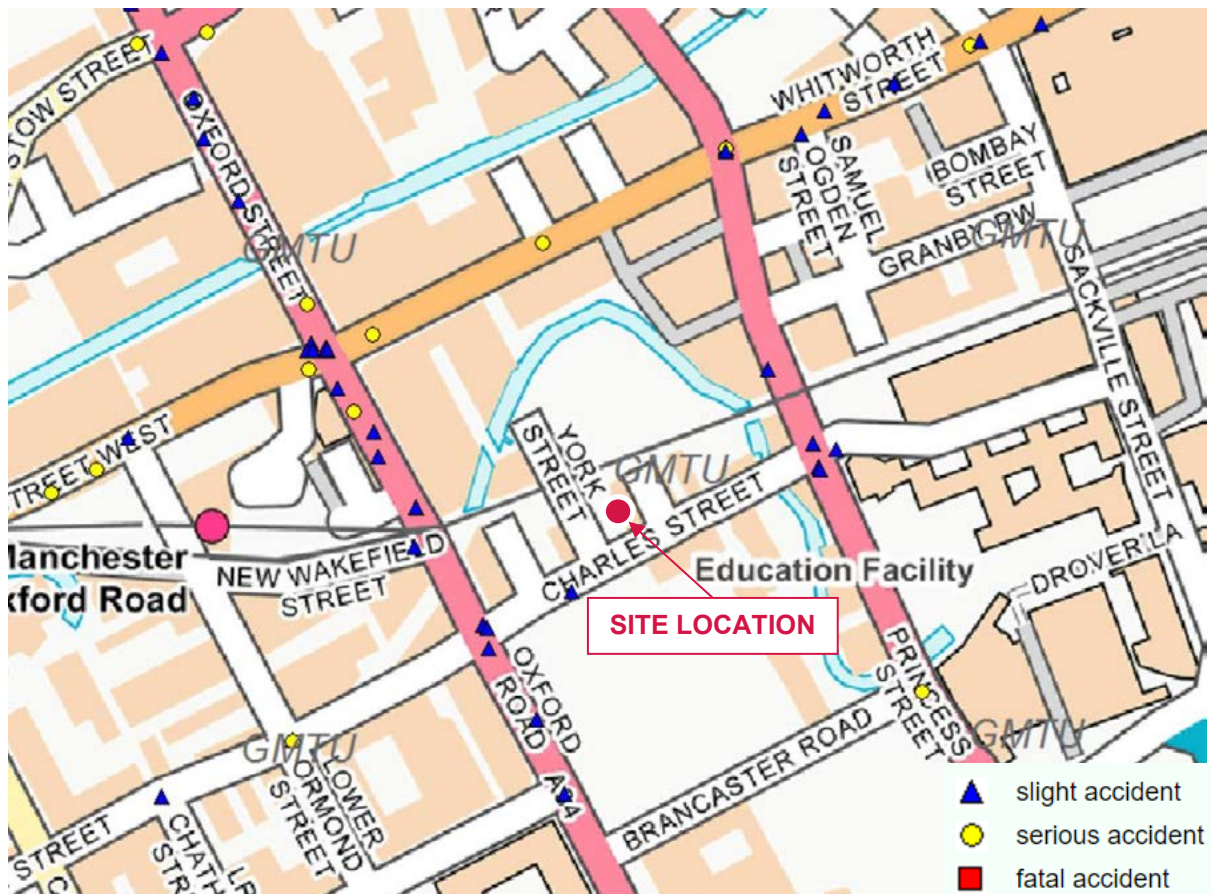


Figure 2.2 – Area Assessed for Collision Data (5 years)
(Source: TfGM, 2023)

- 2.4.2 There has been a singular 'slight' severity collision along Charles Street, but none in the immediate vicinity of the site or the junction with York Street.
- 2.4.3 There have also been a few 'slight' incidents at the junctions between Charles Street and Oxford Road, and Princess Street. There have been more collisions along Oxford Road, which is likely largely attributable to the high pedestrian and vehicular traffic flows.
- 2.4.4 No fatal incidents have been recorded.
- 2.4.5 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions. It is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed development.

3.0 Development Proposals

3.1 Overview of Proposals

- 3.1.1 The proposed development will provide a PBSA scheme comprising 107 beds, all of which will be 1-bed studios, on a plot of land bounded by Charles Street and York Street, near Oxford Road.
- 3.1.2 The proposed site layout is provided in **Appendix A**.

3.2 Proposed Access

- 3.2.1 There will be three accesses into the building from York Street: one each for the entrance lobby, cycle store, and bin store.
- 3.2.2 There will be no vehicular access into the site; vehicles will instead be able to pull up on York Street.
- 3.2.3 There is currently a c. 10m long Pay & Display (P&D) parking bay along York Street which provides space for two vehicles to parallel park. This would be replaced by a dedicated loading bay to serve the development and one on-street disabled parking bay for public use.
- 3.2.4 Curtins have commenced engagement with MCC to identify and agree suitable locations to relocate the existing P&D parking bays. In a note submitted on 16th November 2023, Curtins proposed several alternative locations within the surrounding area where the existing parking bays could be relocated. The potential relocation options are currently being considered and anticipated to form part of a suitably worded planning condition should the application be granted planning consent,

3.3 Proposed Parking

Guidance

- 3.3.1 The Manchester Residential Design Guide (2017) has been considered in determining the provision of car and cycle parking. This states:

“For apartment schemes within the city centre, there are a number of variables that will affect parking demand within a particular development. In particular these are the tenure and price point of a development. ... the emerging build to rent sector is very much targeted at a younger demographic attracted to the city centre lifestyle and who have a higher potential and tendency to view car ownership as more of a constraint than a requirement.

In these scenarios, higher levels of cycle parking provision and car clubs will be appropriate. Clearly, car parking demand will also be influenced by the availability of public transport.

In accordance with the 'comply or justify' approach of this document, the following standards are required:

- *City Centre - Developments will be required to provide where possible, an appropriate level of car parking within the constraints of site specific circumstances and other requirements."*

3.3.2 The MCC Air Quality and Planning Technical Guidance (2022) recommends that in residential schemes with unallocated parking at least 20% of car parking spaces are equipped with active EV chargers, while the rest are inactive with the necessary cabling for future activation.

Cycle Parking

3.3.3 There will be 28 cycle parking spaces provided in the form of two-tier racks – equating to 26% provision relative to the 107 student beds. Cyclists will have direct access to the cycle store from York Street.

3.3.4 Whilst the site does indeed benefit from a highly sustainable location, it is anticipated that the majority of movements to/from the site will be on foot, as reflected in the modal splits presented in **Section 6**.

3.3.5 The 2019 University of Manchester survey indicates that c. 14% of students commute by cycle – lower than the level of provision proposed for this development. In the late 2021 survey of Artisan Heights (a recent, nearby student flats development) most of the 92 respondents studied at the University of Manchester and almost all walked to their place of work / study with none cycling. If they were unable to travel by their primary mode, 12% would cycle – still lower than the proposed level of parking for Charles Street.

3.3.6 As outlined by the accompanying Interim Travel Plan (Document Reference: **084709-CUR-XX-XX-T-TP-00003**) there will be a target to eliminate car trips to the site, offset by an increase in walking and cycling.

3.3.7 Furthermore, the proposed cycle parking provision is similar to or exceeds the following similar city centre student residential schemes which have been approved by MCC.

- Kincardine Court (Unite) (planning ref: 124472/FO/2019): 50 cycle parking spaces for 329 students (equating to 15% provision) and 10 for visitors and staff;
- 1 Great Marlborough Street (Student Castle) (091920/FO/2009/C1): 1 space per 20 bedrooms (equating to 5% provision); and
- Artisan Heights, 1 – 5 New Wakefield Street (Unite) (119380/FO/2018): 150 cycle parking spaces for 603 student flats (equating to 25% provision).

Car Parking

3.3.8 The proposed development will be car-free, which is considered appropriate given its highly sustainable location (as demonstrated throughout **Section 4**). Tenancies and student contracts will be enforced to

ensure that this is the case. All residents would receive correspondence prior to occupation advising that there is no opportunity for on-site parking.

- 3.3.9 A car-free provision is not unusual for a student accommodation site, particularly those benefiting from excellent transport links and a highly sustainable location, such as Charles Street, which is situated in close proximity to numerous University and city centre facilities.
- 3.3.10 Furthermore, the excellent accessibility of the site for pedestrians, cyclists and public transport users would contribute to keep the site car trip generation at minimum levels.
- 3.3.11 As mentioned in **Section 3.2**, the proposed development would provide one on-street disabled parking bay for public use.

Off-Site Car Parking

- 3.3.12 Near to the site, there are the York Street and Pritchard Street Arches surface car parks accessible from Pritchard Street. York Street car park has 240 spaces, while the latter has c. 5 spaces.

Car Club

- 3.3.13 It is acknowledged that many staff and residents that do not own a car may require the use of a car on certain occasions. The Enterprise Car Club offers a cost-effective, hassle-free, and greener alternative to car ownership and traditional vehicle hire in Manchester. The car club allows users to view the availability of cars at designated parking bays throughout the city via a mobile application, where they can unlock and start driving their selected car on the spot.
- 3.3.14 Cars can be reserved by the hour, day or even longer. The price of the journey depends upon the vehicle type, the duration of the reservation and the miles driven, but starts at around £8.33 an hour with a £6 monthly membership fee on the Under 22 Plan.
- 3.3.15 At the time of writing, the nearest Car Club bays are located at Samuel Ogden Street, a c. 300m walk from the site. There are further Car Club bays at Chepstow Street car park (c. 500m), Whitworth Street W (c. 600m) and John Dalton Street (c. 600m)
- 3.3.16 It is considered that the Car Club could therefore be a highly attractive facility for staff and residents who require occasional private car use, therefore minimising the highway impact.

3.4 Proposed Servicing Arrangements

- 3.4.1 **Drawing 084709-CUR-XX-00-D-TP-05001** at the rear of this report demonstrates the refuse strategy for either an 8.4m or 9.0m vehicle.
- 3.4.2 As with current properties along York Street, it is envisaged that refuse vehicles would enter York Street via Charles Street and undertake a turn within the carriageway in order to enter the dedicated loading

bay along the site frontage. The proposed development bin store has been purposefully positioned within the development to allow ease of access from York Street.

- 3.4.3 It is noted that the proposed bay does not interfere with access to adjacent properties.
- 3.4.4 It is envisioned that deliveries (e.g. from supermarkets, Amazon and Royal Mail) and taxis would use the proposed loading bay. Deliveries and taxi collections are generally infrequent and short stay in nature.
- 3.4.5 As noted previously, Charles Street falls within Manchester's Controlled Parking Zone where parking is not allowed on single yellow lines between 08:00 – 20:00. It is expected that outside of these hours some pick-up/drop-off movements will take place on Charles Street,

3.5 Student Move In / Out Management Strategy

- 3.5.1 As the operator is not known at this stage, it is not possible to be definitive as policies and practices will vary among operators. This section is, therefore, informed by Curtins' recent experience supporting applications for PBSA in Manchester city centre.
- 3.5.2 The arrival and departure of future residents of the Site can be defined within three distinct categories:
- Student arrival at the start of the academic year;
 - Student arrival and departure at the end of terms during the academic year; and
 - Student departure at the end of the academic year.
- 3.5.3 The proposed development comprises 107 beds, which will be available for occupation at the start of a new term each year.
- 3.5.4 It is recognised that there is a need to minimise disruption during student arrivals and to ensure minimal disruption to traffic flows along York Street, Charles Street, and other surrounding local routes.
- 3.5.5 Any requirement for the temporary use of the proposed loading bay/disabled bay during this period will be agreed with Manchester City Council in advance.
- 3.5.6 Prior to arrival, residents will likely be asked to book and confirm their arrival arrangements, move in procedure, with details subsequently provided of travel arrangements from key airports, the main line train stations, and bus/tram routes.
- 3.5.7 It is expected that a maximum of 75% would arrive on the check in weekend, with the remainder arriving on the days before and after. The arrivals on the check-in weekend may reduce depending on flights from overseas.

- 3.5.8 This equates to c. 40 students arriving per day on the Saturday and Sunday. As a worst-case scenario, it is assumed all of these would be by car / taxi.
- 3.5.9 Based on recent experience, there could be c. 12 slots available per hour over a 12-hour period. This is based on two vehicles utilising the proposed loading bay on York Street within a designated 10 minute period. On-site baggage handlers with luggage trolleys to help unload all belongings may be made available, who would assist in taking luggage to the reception area/relevant room.
- 3.5.10 Future residents would be requested to arrive at the site at their allocated time and provided their period to unload belongings (using the loading bay and potentially the disabled parking provision if permitted by MCC) onto trolleys before departing to park for a longer period elsewhere.
- 3.5.11 Most students, particularly domestic ones, are expected to be accompanied by family members. The length of the time family stay can vary widely, from less than an hour to all day.
- 3.5.12 To ensure move in is managed effectively, additional staffing resources may be employed to manage usage of loading bays/parking and for directing residents to the accommodation.
- 3.5.13 On-site attendants could notify each vehicle when their allotted time has been reached. Once their allotted time is reached, cars will be directed to a local car park such as the Euro Car Park accessed from Pritchard Street.
- 3.5.14 It is noted that check out will be managed in a similar fashion to the check in process. However, move out is more gradual over a period of days or even weeks. Some students will head home for the summer, whether this is domestic or internationals. The Site teams will communicate with the residents prior to check out and request their check out time and date.

3.6 Delivery Management Strategy

- 3.6.1 Curtins has consulted with MCC in order to develop an initial management strategy for food and parcel deliveries to the Site.
- 3.6.2 It is recognised that the future operator will establish their own management operation for food and parcel deliveries; however, it was agreed via scoping discussions with MCC that an initial strategy is to be prepared.
- 3.6.3 The guidance provided by MCC is included in italics, and the proposed measures and initiatives are subsequently included.
- 1. *“Designate a Delivery Drop-off Point: Work with the management or housing staff of the development to establish a designated drop-off point for deliveries. This could be a specific lobby area or a central location easily accessible to delivery drivers”.* As part of the development proposals, it is noted that future residents may order online food deliveries, takeaway food, and

shopping. Delivery vehicles will be expected to use the loading bay provided and take shopping/parcels to the reception area for collection. It is considered that the loading bay provides adequate provision for the likely number of vehicles envisaged to serve the Site (see **Section 6**). Furthermore, in specific relation to food takeaways and Amazon, a high proportion of deliveries are undertaken via bicycles/cargo bicycles in the city centre and can therefore park in the public realm avoiding usage of the loading bay.

- *“Display Signage: If permitted, put up clear signage in the development's common areas to guide delivery drivers to the drop-off point. This will help prevent confusion and ensure timely deliveries”.* Signage will be considered in key areas to direct delivery drivers towards reception/walled garden. The building management will monitor this and make amendments where necessary to aid confusion and delivery times.
- *“Inform Residents: If possible, notify all residents of the new delivery process. Inform them about the designated drop-off point and any specific rules or guidelines they need to follow when receiving deliveries”.* As part of the Welcome Pack, residents will be informed to collect deliveries from reception and the process for collections.
- *“Set Delivery Hours: Establish specific delivery hours for residents of the development where possible. This could help manage the flow of deliveries, especially during peak times”.* Food/parcel deliveries would be spread throughout the day, with the majority of e-commerce deliveries likely to occur outside of typical peak hours. Furthermore, the nature of e-commerce deliveries ensures that if there are multiple deliveries for the units at the development, this would likely be undertaken efficiently to minimise the number of trips. For example, Amazon would likely deliver all parcels to the development as part of the 'Last Mile Delivery' service from the associated depot.
- *“Regularly Review the Process: Periodically review how the drop-off process is working. Gather feedback from residents, delivery drivers, and staff to identify any areas for improvement and make necessary adjustments”.* Surveys conducted as part of the Travel Plan will include a review of the drop-off process and conclude any improvement recommendations.
- *“Consider a Delivery Holding Area: If feasible, set up a secure delivery holding area within the development. This can be especially helpful for residents who may not be immediately available to receive their orders”.* A parcel holding area will be provided and the reception area in the building will act as the delivery area for residents.
- *“Monitor Security Concerns: Ensure that the delivery process does not compromise the security and safety of the residents of the development. Address any security concerns promptly and collaborate with building management to implement appropriate measures”.* Parcel deliveries

will be required to report to reception and not individual rooms. Residents would be required to meet any food deliveries at the designated meeting area within the walled garden.

- *“Encourage Feedback: Encourage residents to provide feedback on their delivery experiences. This will help you assess the efficiency of the process and identify any potential issues that need to be addressed”.* Feedback of deliveries will be included within surveys completed as part of the Full Travel Plan.

4.0 Accessibility by Sustainable Modes of Travel

4.1 Introduction

4.1.1 A key element of national and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

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

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

4.1.3 As the development will be student accommodation, residents will be most frequently visiting the various amenities in Manchester and Salford city centres, the Oxford Road corridor, and the universities. The figures below present campus maps for the University of Manchester and Manchester Metropolitan University and a map of Manchester city centre.

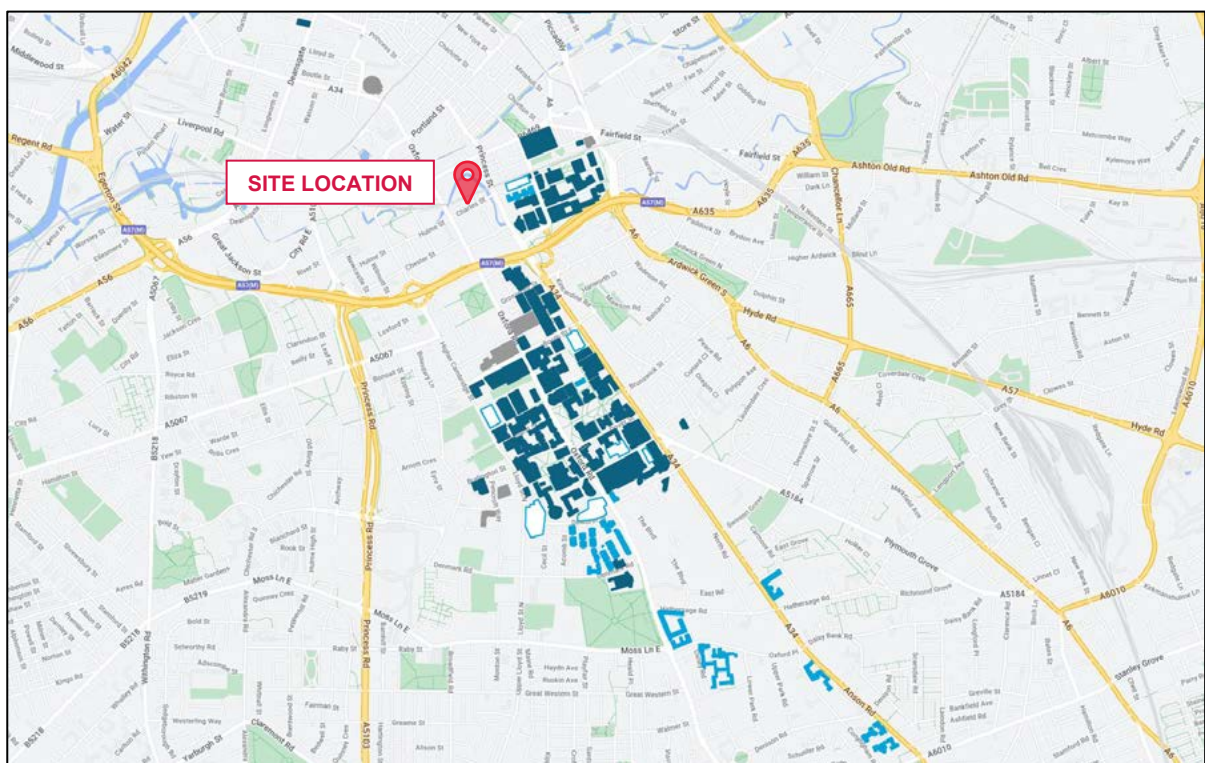


Figure 4.1 – University of Manchester Campus
(Source: UoM and Google Maps, 2022)

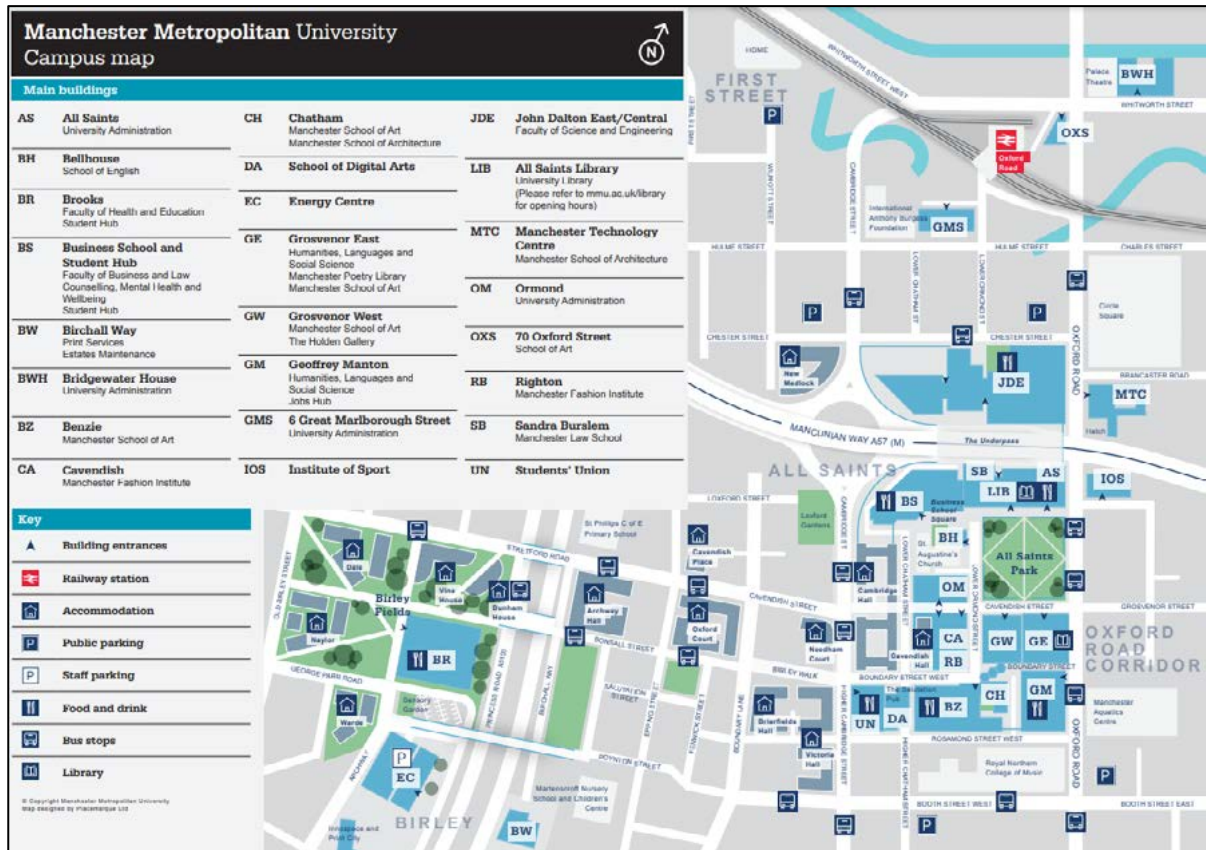


Figure 4.2 – Manchester Metropolitan University Campus

(Source: MMU)

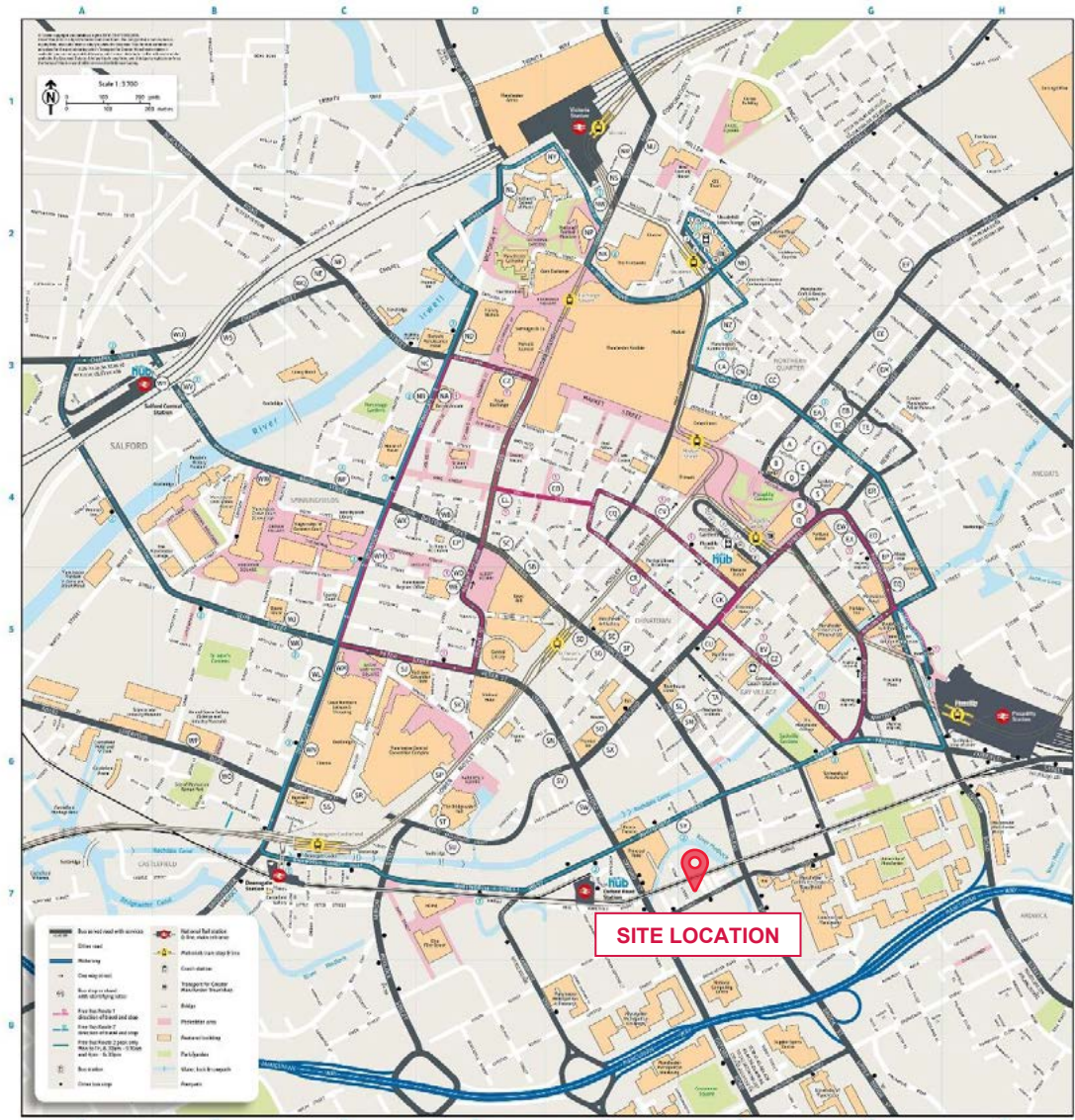


Figure 4.3 – Manchester City Centre
(Source: TfGM, 2016)

4.2 Pedestrian Accessibility

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

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

Table 4.1 – CIHT Recommended Walking Distances

- 4.2.2 The average pedestrian travels at a speed of 79m per minute (1.31m/s) (as calculated for 2019 from dataset NTS0303), which is rounded to 80m per minute. Based on this, the typical pedestrian could travel 500m, 1,000m and 2,000m in approximately 6 minutes, 12.5 minutes, and 25 minutes, respectively.
- 4.2.3 Guidance from the Building Research Establishment Environmental Assessment Method (BREEAM) UK New Construction 2018 consultation states that Transport Assessments and Travel Plans should include reporting on the number and type of amenities within 500m of the site (based on current Tra 02 criteria) to obtain credits. The number and type of existing accessible amenities within 500m of the site can be summarised in **Table 4.2** below:

No.	Amenity	BREEAM Criteria / Type	Proximity to Site (m)
1	Circle Square (comprising shops, restaurants, open space, and gym)	Appropriate food outlet Access to an outdoor open space Access to a recreation or leisure facility for fitness or sports	0-250
2	Oxford Road (comprising restaurants, supermarkets, bars, hotels, post office, gym, All Saints Park)	Appropriate food outlet Access to cash Publicly available postal facility Access to an outdoor open space Access to a recreation or leisure facility for fitness or sports	100-500

Table 4.2 – Number and Type of Existing Accessible Amenities within 500m of the Site

- 4.2.4 Most notably, the site is adjacent to Circle Square which comprises a mix of residential, commercial and retail elements, along with a public square. It is considered that the majority of everyday facilities and goods can be accessed within the 500m desirable walking distance of the site.
- 4.2.5 There are also number of residential properties within 500m walking distance of the site.
- 4.2.6 There is a mix of uses on Charles Street, including a number of public houses and bars to the eastern end, and residential use at its junction with Oxford Road. The Grade II listed Lass O’Gowrie pub is located on Charles Street. Along and adjacent to Oxford Road there are a number of additional facilities and services available within the 500m catchment including cafés, restaurants, bars, take-aways, public houses, convenience stores, retail outlets, places of worship, high street banks, All Saints Park, hotels and gym / leisure facilities.
- 4.2.7 Additionally, the Oxford Road rail station is within a 500m walk of the site and the many bus stops along Oxford Road host a wide variety of bus services all across Greater Manchester.
- 4.2.8 Further services and facilities are also accessible within the 1,000m catchment. In addition to those already discussed, these include the Manchester Central Library and Manchester Town Hall to the north, along with Whitworth Street and Portland Street with their associated leisure facilities and residential apartments. Manchester Aquatics Centre, the University of Manchester, Royal Northern

College of Music, and the rest of the Manchester Metropolitan University campus lie towards the south of the site.

- 4.2.9 Also within this catchment is the Chinatown district, and St Peter's Square in turn, which features a variety of restaurants, cafes, shops, and bars. The Manchester Central Convention Complex and the Bridgewater Hall is also approximately 1km to the north-west of the site.
- 4.2.10 Within 2km of the site there are multiple restaurants, bars, small retail outlets, gyms and private healthcare clinics located within the Central Business District of Manchester. Castlefield, Spinningfields and the Piccadilly area, with residential apartments and key facilities, are also located within 2km north of the site. Access to larger supermarkets and Manchester Royal Infirmary is also achievable towards the south of the site.
- 4.2.11 Odeon Cinemas and the Great Northern Warehouse Complex is situated to the north-west of the site and has restaurants and leisure facilities, and adjacent to this, there is also Deansgate where restaurants, bars, convenience stores, retail stores, gym/health facilities and leisure facilities are located.
- 4.2.12 There is already a high pedestrian footfall in the area, and so high-quality pedestrian facilities exist along the main roads as discussed in **Section 2.4**. It is considered that the site is situated within a highly accessible area, with a number of complimentary land uses within walking distance.

4.3 Cycle Accessibility

- 4.3.1 Cycling is a cheap, efficient, and healthy way to travel. Cycling also provides a predictable arrival time which, depending on location, can be quicker than driving or using public transport, and is subject to fewer delays.
- 4.3.2 In order to assist in assessing the accessibility of the site by cycle, **Plan 084709-CUR-XX-XX-G-TP-06004** presents 5.5km and 8km cycle catchments for the site, along with the National Cycle Network Routes available within these ranges.
- 4.3.3 The average cyclist travels at approximately 12mph, according to CD195 of the Design Manual for Roads and Bridges, so they could travel 5 miles in approximately 25 minutes.
- 4.3.4 The average cycling trip length was 5,300m in 2019 and 5,730m in 2022 (see National Travel Survey dataset NTS9910a). The average length has been between 5.0km and 6.0km every year from 2012/13 to 22, except 2014/15 and 2020. Cycling trip lengths are greater in rural than urban areas (NTS9910b).
- 4.3.5 LTN 1/20 characterises 5 miles / 8km as “*an achievable distance to cycle for most people*”. This aligns with National Travel Survey statistics which demonstrate that 82% and 80% of cycling trips were under 5 miles / 8km in 2019 and 2022, respectively.

- 4.3.6 The 5.5km catchment encompasses most of Manchester, as well as parts of Salford and Trafford. The 8km catchment extends to Blackley to the north, Fairfield and Denton to the east, Didsbury to the south, and Trafford Park to the west.
- 4.3.7 Charles Street and York Street, like most roads in the city centre, are subject to a 20mph speed limit.
- 4.3.8 The local cycle network in the vicinity of the site is shown in **Figure 4.1** below:



Figure 4.4 – Local Cycle Network
(Source: TfGM, 2022)

- 4.3.9 The local cycle network shown above is also a part of Greater Manchester's cycling and walking infrastructure proposal, named the "Bee Network". The Bee Network comprises signed routes that mark the most direct and pleasant way to navigate an area on foot or by bike.
- 4.3.10 **Figure 4.8** shows the existing and proposed Beeways in the vicinity of the site which allow residents to benefit from better safety and quality of travel:

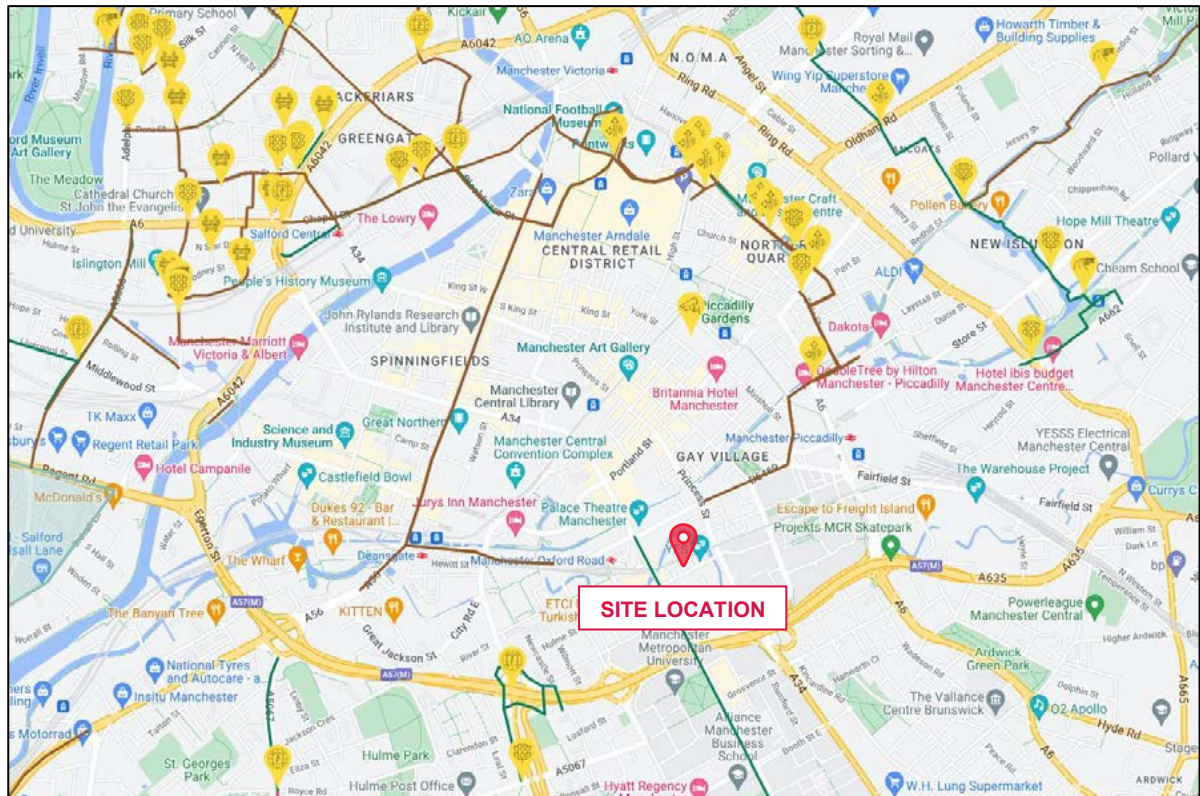


Figure 4.5 – City Centre Bee Network
(Source: TfGM, 2022)

- 4.3.11 Most notably, Manchester City Council is developing plans to improve the ‘City Centre Triangle’ with improved, physically segregated cycling facilities. TfGM describes it as: *“part of a key route linking various radial routes across and around the regional centre connecting to major trip attractors. This scheme aims to create an easier, safer and more attractive route for people to move between Piccadilly, Victoria and Deansgate stations, and to link into other walking and cycling routes. It focuses on areas not already covered by other walking and cycling improvement schemes (along Deansgate, and in the Northern Quarter).”*
- 4.3.12 Transport for Greater Manchester and Beryl, working in partnership with Manchester City Council, Salford City Council and Trafford Council, have launched Greater Manchester's first publicly operated, self-service, 24/7 cycle hire scheme.
- 4.3.13 The closest cycle hire stands are currently on Princess Street and Oxford Road.
- 4.3.14 Furthermore, the development will provide 28 secure cycle parking spaces to encourage cycling. The site is therefore ideally placed to take advantage of the cycle connections around Greater Manchester.

4.4 Public Transport Accessibility

- 4.4.1 Developed by Transport for Greater Manchester (TfGM), Greater Manchester Accessibility Levels (GMAL) are a measure of the accessibility of a point to both the conventional public transport network

(i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), considering walk access time, service availability, and average waiting time. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region.

- 4.4.2 The accessibility index score is categorised into eight levels (1 to 8), where level 8 represents a high level of accessibility (described as 'excellent') and level 1 a low level of accessibility (described as 'very poor'). The site is located in an area with a GMAL rating of 8 and is considered appropriately situated to take advantage of existing public transport infrastructure.
- 4.4.3 The National Model Design Code – Part 2 (DLUHC, 2021) states: *"Generally, people are prepared to walk further to a railway station or tram stop (10 minutes) [800m walking distance] than to a bus stop (5 minutes) [400m walking distance]."* These distances are also cited in the CIHT document 'Planning for Walking' (2015). This equates to a walking speed of 80m per minute (1.34m/s) – equivalent to the average walking speed of 79m per minute (1.31m/s) in 2019 that can be calculated from the National Travel Survey statistics (Table NTS0303).
- 4.4.4 Accessibility by bus, rail and Metrolink are considered further below, with a local public transport network map included in **Figure 4.10** below:

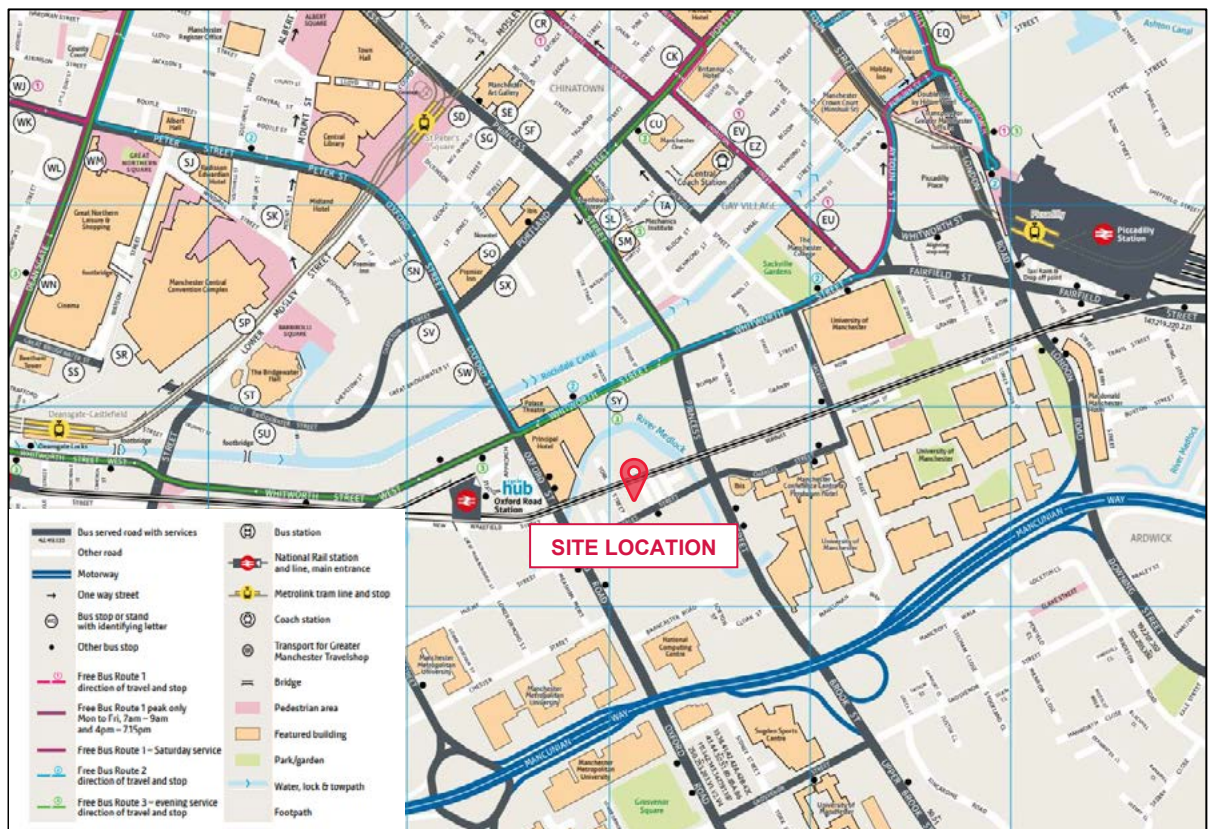


Figure 4.6 – City Centre Public Transport Network
(Source: TfGM, 2016)

4.4.5 **Plan 084709-CUR-XX-XX-G-TP-06005** demonstrates the areas accessible via public transport within 20, 40 and 60 minutes of the site. The locations accessible within the above times include:

- 20 minutes – all of Manchester city centre, Salford Crescent, south Manchester;
- 40 minutes – north Manchester, Salford, Trafford, Ashton-under-Lyne, Stockport, Warrington, Bolton; and
- 60 minutes – Macclesfield, Stoke-on-Trent, Crewe, Liverpool, Preston, Lancaster, Huddersfield, Glossop.

Bus Accessibility

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

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

Table 4.3 – CIHT Maximum Suggested Walking Distances to Bus Stops

4.4.7 Route 147 stops along Charles Street near the site. Students of the University of Manchester receive free travel on route 147 between the Sackville Street Campus (North) and Oxford Road Campus (South). The free service area is shown below:

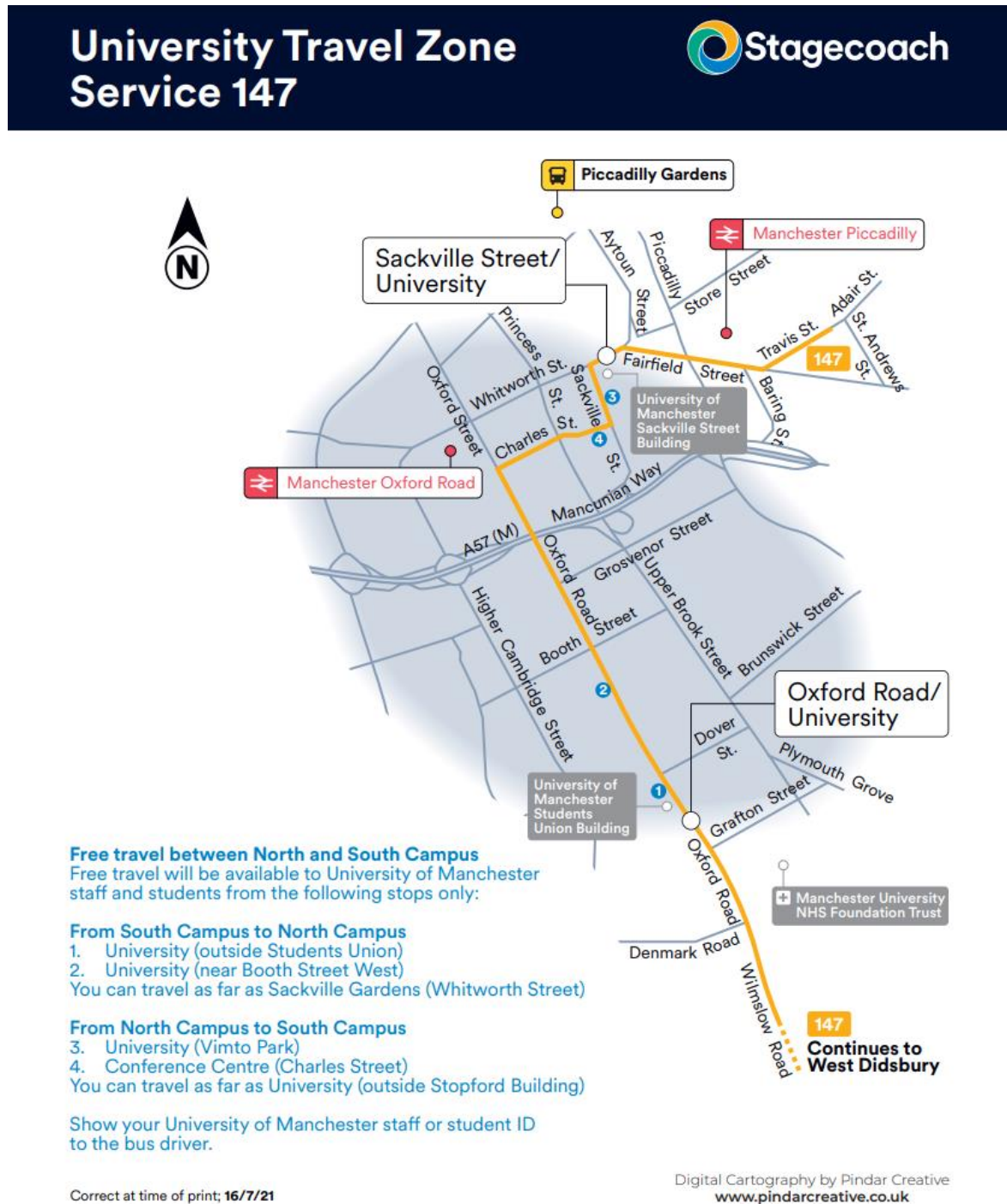


Figure 4.7 – University Free Travel Zone
(Source: Stagecoach, 2021)

- 4.4.8 Within a c. 150m walk of the site, there are 25 northbound bus routes available on Oxford Road (at 'Chester Street (Stop C)'), and 23 southbound routes (at 'Oxford Road Station (Stops A and B)')
- 4.4.9 There are many more bus services available slightly further afield. The 'Portland Buildings (Stop SX)' bus stop on Portland Street, where the Free Bus Route 1 stops, for example, is a c. 500m walk from

the site. The free bus is a service providing direct access across key city centre locations. The free bus routes and frequencies are detailed in **Figure 4.3** below:

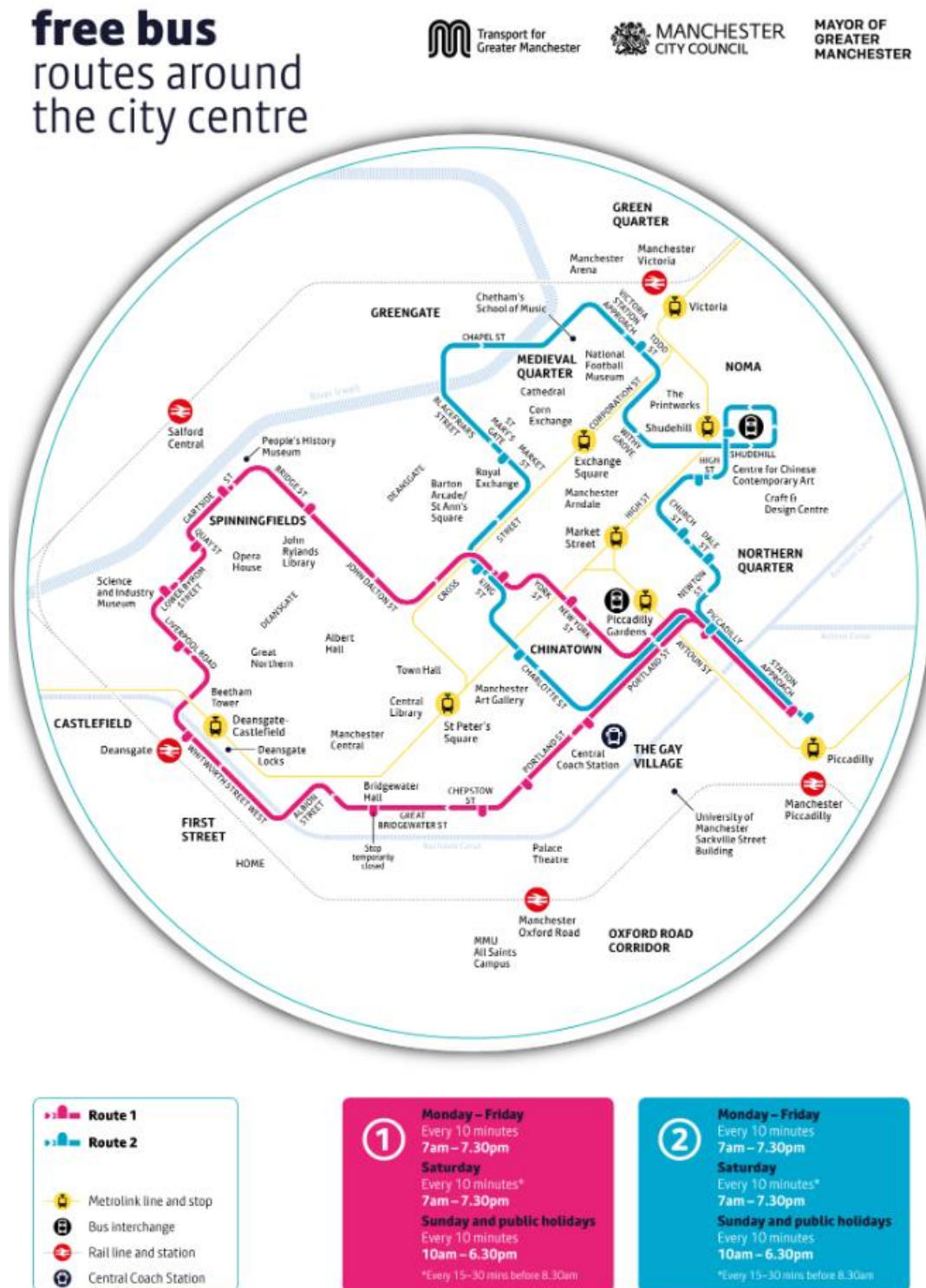


Figure 4.8 – Free Bus Route and Timetable
(Source: TfGM, 2023)

4.4.10 It is considered that the site is accessible by bus.

Rail Accessibility

- 4.4.11 Manchester Oxford Road is located within a c. 300m walk of the site, while Manchester Piccadilly and Deansgate can be reached within 1,000m, and Manchester Victoria within 2,000m.
- 4.4.12 Piccadilly is the primary station in Manchester and third-busiest station in the UK outside of London. It hosts long-distance intercity and cross-country services to national destinations including London, Birmingham, Nottingham, Glasgow, Edinburgh, Cardiff, Bristol, Exeter, Plymouth, Reading, Southampton, and Bournemouth; regional services to destinations in Northern England including Liverpool, Leeds, Sheffield, Newcastle, and York; and local commuter services around Greater Manchester.
- 4.4.13 Many services from Piccadilly also stop at Oxford Road, including trains to Manchester Airport, Liverpool, Blackpool, and Llandudno.
- 4.4.14 It is considered that the site is highly accessible by rail.

Metrolink (Light Rail) Accessibility

- 4.4.15 The nearest Metrolink station is St Peter's Square, located at a c. 700m walk from the site. Deansgate-Castlefield, Piccadilly Gardens, and Piccadilly are all c. 1,000m from the site.
- 4.4.16 All lines run at a frequency of every 12 minutes. The Green and Grey Lines operate 07:00 – 20:00 on Mondays to Fridays, and 09:00 – 18:30 on Saturdays, while all others operate between 06:00 – 00:00 on Mondays to Saturdays, and 07:00 – 00:00 on Sundays.
- 4.4.17 These stops provide access to the entire Metrolink network, as shown by the route map below:

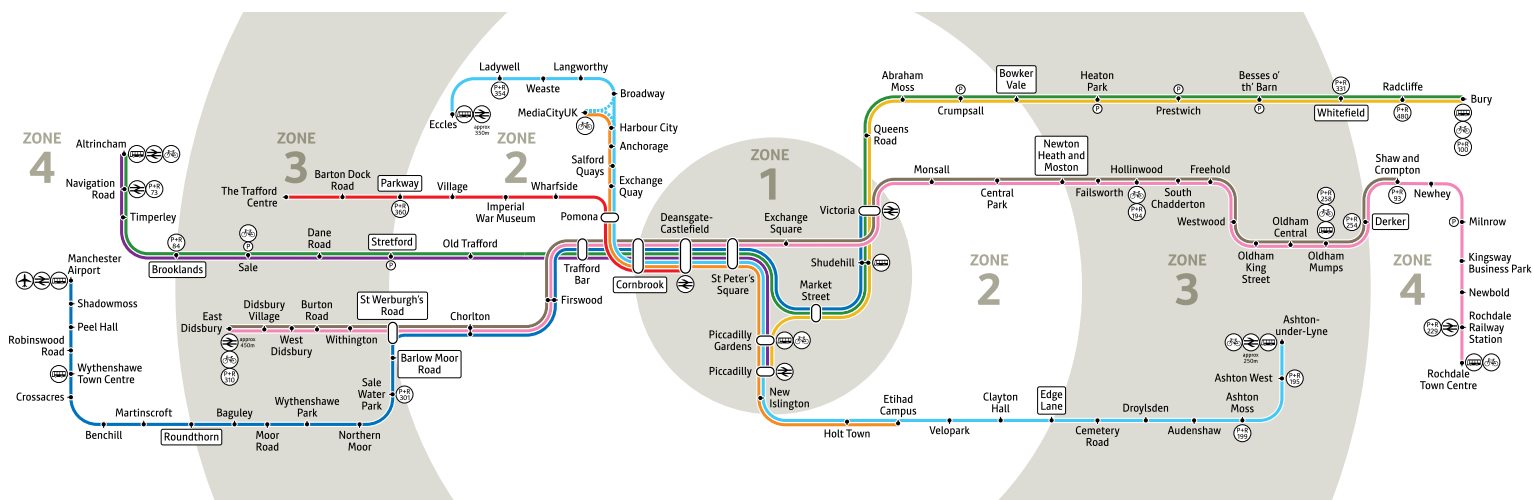


Figure 4.9 – TfGM Metrolink Network Map
(Source: TfGM, 2023)

- 4.4.18 In summary, it is considered the site is highly accessible by Metrolink (light rail).

BREEAM Public Transport Accessibility Index (AI)

- 4.4.19 Guidance from BREEAM UK New Construction 2018 states that Transport Assessments and Travel Plans should include reporting on the public transport accessibility (i.e. Tra 01 – proximity to train, bus etc. stops and frequency of services) to obtain credits. This includes calculation of the Accessibility Index (AI) of the site.
- 4.4.20 The methodology for calculating the AI uses Transport for London's Public Transport Accessibility Level (PTAL) method, itself based on a methodology developed in 1992 by the London Borough of Hammersmith and Fulham. The GMAL methodology is also derived from the PTAL approach but modified to consider flexible transport service provision (Local Link) and to reflect local service provision levels (different accessibility levels) within Greater Manchester.
- 4.4.21 Based on previous experience and guidance from the BREEAM Knowledge Base, it is considered that GMAL index scores can be used interchangeably as the AI of the site to demonstrate compliance against BREEAM.
- 4.4.22 The site is located in an area with a GMAL rating of 8 as mentioned earlier, with a further GMAL index score of 91. This is understood to be the AI of the site.
- 4.4.23 It can be observed that the site's AI of 91 demonstrates that the site is highly accessible by public transport.

4.5 Summary

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

5.0 Building Research Establishment Environmental Assessment Method (BREEAM)

5.1.1 The development would be assessed against BREEAM UK New Construction 2018 standards and would seek to demonstrate compliance by obtaining a suitable number of credits. The assessment categories pertaining to traffic and transport, the relevant sections of this report where compliance has been assessed, and the credits they obtain, are summarised in **Table 5.1** below:

BREEAM Category	Description	Signposts	No. of Credits
Tra 01	<u>Transport Assessment and Travel Plan:</u>		2
	1. No later than Concept Design stage, undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan, which can demonstrably be used to influence the site layout and built form.	This document	
	2. The site-specific travel assessment (or statement) shall cover as a minimum:		
	If relevant, travel patterns and attitudes of existing building or site users towards cycling, walking and public transport, to identify relevant constraints and opportunities;	N/A (see para 5.1.3)	
	Predicted travel patterns and transport impact of future building or site users;	Section 6 of TS	
	Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors;	Section 2 of TS	
	Reporting of the number and type of existing accessible amenities within 500m of the site;	Section 4 of TS	
	Disabled access accounting for varying levels and types of disability, including visual impairment;	Section 2 of TS	
	Calculation of the existing public transport Accessibility Index (AI); and	Section 4 of TS	
	Current facilities for cyclists.	Section 2 of TS	
	3. Following a transport assessment (in accordance with the requirements set out in criteria 2), develop a site-specific travel plan that provides a long-term management strategy which encourages more sustainable travel. The travel plan includes measures to increase or improve more sustainable modes of transport and movement of people and goods during the building's operation.	Interim Travel Plan (ITP) provided in doc 084709-CUR-XX-XX-T-TP-00003	
	4. If the occupier is known, involve them in the development of the travel plan.	TBC	
	5. Demonstrate that the travel plan will be implemented and supported by the building's management in operation.	Section 8 of ITP	
Tra 02	<u>Sustainable Transport Measures:</u>		
	1. Prerequisite: Achieve criteria 3–5 in the Tra 01 Transport Assessment and Travel Plan credit.	This document	
	2. Identify the sustainable transport measures as per Table 7.4 in BREEAM guidance.		<i>Points:</i>

BREEAM Category	Description	Signposts	No. of Credits
	The existing AI calculated in Tra 01 ≥ 8;	Section 4 of TS; AI is 91	1
	- Demonstrate an increase over the existing Accessibility Index through negotiation with local bus, train, or tram companies to increase the frequency of the local service provision for the development; OR - Demonstrate an increase over the existing Accessibility Index. This could be through provision of a diverted bus route, a new or enhanced bus stop, or other similar solutions; OR - Provide a dedicated service, such as a bus route or service.	Not achieved	0
	Provide a public transport information system in a publicly accessible area, to allow building users access to up-to-date information on the available public transport and transport infrastructure. This may include signposting to public transport, cycling, walking infrastructure or local amenities;	Section 6 of ITP	1
	Provide electric recharging stations of a minimum of 3kW for at least 10% of the total car parking capacity for the development;	Not achieved; development is car-free	0
	- Set up a car sharing group or facility to facilitate and encourage building users to car share; AND - Raise awareness of the sharing scheme with marketing and communication materials; AND - Provide priority spaces for car sharers for at least 5% of the total car parking capacity for the development; AND - Locate priority parking spaces nearest the development entrance used by the sharing scheme participants.	Not achieved; development is car-free	0
	- During preparation of the brief, the design team consults with the local authority (LA) on the state of the local cycling network and public accessible pedestrian routes, to focus on whichever the LA deems most relevant to the project, and how to improve it; AND - Agree and implement one proposition chosen with the local authority. The proposition supported by the development is additional to existing local plans and has a significant impact on the local cycling network or on pedestrian routes open to the public.	Not achieved	0
	Install compliant cycle storage spaces to meet the minimum levels set out in Table 7.5;	Not achieved	0
	The above has been achieved; provide at least two compliant cyclists' facilities for the building users (showers, changing facilities, lockers, drying spaces);	Not achieved; although residents will have access to washing and changing spaces	0
	Existing amenities: At least three existing accessible amenities are present;	Section 4 of TS	1
	Enhanced amenities: Ensure a minimum of one new accessible amenity, in accordance with Table 7.6 on page 191, for the relevant Building Group, is provided; OR	Not achieved	0

BREEAM Category	Description	Signposts	No. of Credits
	Ensure a more than one new accessible amenity, in accordance with Table 7.6 on page 191, for the relevant Building Group, is provided.		
	Implement one site-specific improvement measure, not covered by the options already listed in this issue, in line with the recommendations of the travel plan. Submit this for review by BRE.	Section 6 of ITP, pending BRE review (see para 5.1.3)	TBC
	3. Award credits according to the existing Accessible Index (AI) of the project, and the total number of points achieved for the options implemented, see Table 7.3 of BREEAM guidance.	Site AI: 91 Points achieved under criteria 2: 3	6
Total Transport Credits Obtained			8

Table 5.1 – BREEAM Credits Targeted

5.1.2 Other relevant considerations in a BREEAM-compliant report include the following, with the compliance of the proposed development to these considerations outlined next to the criteria:

- **Lighting, landscaping and shelter to create pleasant pedestrian and public transport waiting areas** – There will be an entrance lobby within the building;
- **Restrictions or charging for car parking** – There will be no dedicated car parking;
- **Pedestrian and cyclist friendly (for all types of user regardless of the level of mobility or visual impairment) with the provision of cycle lanes, safe crossing points, direct routes, appropriate tactile surfaces, good lighting and signposting to other amenities, public transport nodes and adjoining off-site pedestrian and cycle routes** – The site does not encompass any external spaces;
- **Provision of suitable taxi drop-off or waiting areas** – There will be a loading bay; and
- **Ensure rural buildings have appropriate access to transport to serve the local community adequately (where procured to do so, e.g. community centre)** – Not applicable as development in city centre.

5.1.3 A key part of the Interim Travel Plan (ITP) will be monitoring, whereby travel surveys will be distributed to staff and students at the development, in order to understand travel habits. Recipients will be encouraged to participate, and the surveys would extract key information such as place of study / residence, usual mode of travel and reason for modal choice, attractiveness of and barriers to active and sustainable modes of travel, and any incentives that could encourage them to travel more sustainably. The findings will provide information on reasons for travel patterns and attitudes of site users to identify relevant constraints and opportunities.

6.0 Traffic Forecasting and Highway Impact

6.1 Introduction

- 6.1.1 The following section contains trip generation analysis based on the proposed development during the weekday AM and PM peak hours.
- 6.1.2 In order to undertake the assessment, the TRICS database has been used. TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development. The database contains multi-modal surveys of varying land uses in multiple destinations across the UK, including student accommodation.

6.2 Modal Split

- 6.2.1 Manchester Metropolitan University and the University of Manchester have both undertaken surveys of how students travel to campus in recent years with high numbers of responses. The results from these surveys will, however, be somewhat impacted by some students commuting from outside the city centre, so the results from a travel survey of a recent city centre student residential scheme have also been provided.

Manchester Metropolitan University

- 6.2.2 MMU derives modal splits from student enrolment surveys given to students at the beginning of each academic year which ask how they travel to university from their term time address.
- 6.2.3 Annually, the University releases an Environmental Sustainability Statement (covering 1st August to 31st July) which reports on the progress towards goals, including increasing the proportion of students that commute by active travel. This has remained relatively consistent over time: 48.1% in 2017/18, 50.4% in 2018/19, 47% in 2019/20, and 51.8% in 2020/21. The results for the 2019/20 and 2020/21 academic years, those affected by the Covid-19 pandemic, do not appear significant different to pre-pandemic years.
- 6.2.4 Regarding underperformance on the target for student active travel in 2019/20 for 2020/21, the statement says: *“This target is unachievable because over 50% of Manchester Metropolitan’s students commute from home rather than the more traditional model of living ‘away’ from home. These students tend to use public transport due to longer commutes, which makes walking and cycling impractical.”*
- 6.2.5 This suggests that as the site is in the city centre, a much higher proportion of residents would travel by walking and cycling, and a much lower proportion would travel by car and public transport.

- 6.2.6 Active travel is the only student travel-related target, so the University does not typically report on the proportion of students commuting by other modes (or split apart the proportion for walking and cycling). In the 2020/21 Statement, however, the University mentioned that 92.4% of students commute by either active travel or public transport, which can be used to calculate the proportion of trips undertaken by public transport and car (which is assumed to be all the remaining trips) in that year. The 2021/22 Statement reported the carbon emissions from commuting, rather than the modal split.
- 6.2.7 AECOM also produced a Travel Plan for MMU following the 2014/15 academic year which provides a more detailed breakdown by mode of students' travel patterns.
- 6.2.8 A summary of students' mode of travel to MMU for 2014/15 (from the Travel Plan) and 2020/21 (from the Environmental Sustainability Statement) is provided in **Table 6.1** below:

Mode of Travel	2014/15	2020/21
Car Driver	13%	7.6%
Car Passenger	1%	
Bus	43%	40.6%
Train	12%	
Tram	3%	
Cycle	4%	51.8%
Walk	24%	

Table 6.1 – Mode of Travel to University for MMU Students

University of Manchester

- 6.2.9 AECOM produced the University of Manchester Commuter Travel Survey in 2019 to measure the environmental impact of staff and students travel habits. 1,130 out of 40,241 students (2.8%) responded to on-campus interviews and an online survey, giving the following modal split for students' travel to university:

Mode of Travel	Percent
Car	5%
Bus	37%
Train	5%
Tram	2%
Cycle	14%
Walk	38%

Table 6.2 – Mode of Travel to University for UoM Students

- 6.2.10 The 'car' category is expected to have included car drivers, car passengers, and taxi trips.

- 6.2.11 The most recent travel surveys for both universities are very similar with active travel accounting for 52% of trips for both, public transport for 41% at MMU and 44% at UoM, and car for 8% at MMU and 5% at UoM.
- 6.2.12 The UoM campus is located closest to the site, so the majority of residents are likely to study there rather than MMU, and the modal split shows a greater proportion of students commuting by active travel than detailed modal split for MMU, so it is a much closer approximation of travel from a city centre site.

Artisan Heights

- 6.2.13 Artisan Heights is a less than 200m / 2-minute walk to the west of the site at 1 – 5 New Wakefield Street, off Oxford Road. The Unite Students development, built in 2020, provides 603 beds.
- 6.2.14 A survey was distributed to residents by Curtins in late October 2021 to discharge a planning condition, with 92 responses received. The key findings can be summarised as follows:
- All but one resident studied at Manchester Metropolitan University (55%) or the University of Manchester. Three-fifths of UoM students studied at the South Campus;
 - 68% of residents travel less than a mile (1.6km) to their place of work / study, and 24% within 1 to 2 miles (1.6km to 3.2km);
 - Almost all residents (95%) walk to their place of work / study, with small proportions travelling by train (2%), bus (1%), taxi (1%), or as a car passenger (1%). None of the 92 respondents travelled by tram, cycle, or as a car driver; and
 - No students in the sample primarily commute by cycle, but 12% would switch to cycling if they were unable to travel by their primary mode.
- 6.2.15 Given the proximity of the sites, the same land use, and the development likely being built only a few years apart, Artisan Heights is considered to be a good proxy for Charles Street, and that once it is constructed the results gained from future travel surveys of Charles Street would likely be similar to those summarised above.

6.3 Traffic Generation – Move-In/Out Day

- 6.3.1 As outlined in **Section 3**, residents will be asked to book confirm their arrival arrangements and move in procedure. They are provided with details of travel arrangements from key airports, the main line train stations, and bus/tram routes.
- 6.3.2 It is expected that a maximum of 75% of students would arrive on the check in weekend, with the remainder arriving on the days before and after. This would equate to c. 38 trips per day on the Saturday and Sunday.

6.3.3 It is noted that there would be an uplift in vehicular traffic during the main move in weekend, but this would be spread across the day, would not occur during traditional highway peak periods, and would only occur for 5-6 days per year.

6.3.4 Moving out is noted to be a more gradual process, taking days or even weeks.

6.4 Traffic Generation – Typical Day

6.4.1 The TRICS database has been used to forecast traffic on a typical day. TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development. The database contains multi-modal surveys of varying land uses in multiple destinations across the UK, including residential land uses.

6.4.2 The level of trips generated by the existing uses of the site have been estimated using multi-modal peak hour trip rates obtained from surveys of sites of a similar size and nature. The full search criteria used in the TRICS database are presented in **Appendix B**, applying the following criteria:

- Land Use: Student Accommodation;
- Regions: Great Britain; and
- Location Type: 'Town Centre' and 'Edge of Town Centre'

6.4.3 One survey was excluded for being undertaken at a time of Covid-19 restrictions, and an earlier survey of the same site was used.

6.4.4 All six surveys were undertaken on weekdays.

6.4.5 Five of the surveyed sites are in London (all of which have a PTAL of between 4 (Good) and 6b (Excellent)), while one was in Derby. As outlined by **Sections 4** and **6.2**, the site is highly accessible by all modes of transport, and the vast majority of trips by students are expected to be by sustainable modes of transport – particularly walking. As such, it is considered appropriate to use surveys from London, especially given the lack of alternative data.

6.4.6 The all-day modal split derived from the selected TRICS surveys is illustrated below. Nearly half of trips would be by foot, followed by public transport, and with a small proportion of vehicle and cycle trips. The proportion of trips by vehicle is similar to the UoM survey, and higher than MMU and Artisan Heights. These surveys differed slightly from the TRICS surveys in that two were for universities as a whole (rather than student accommodation), and they solely covered study-related travel so did not record non-car vehicles or journeys for other purposes.

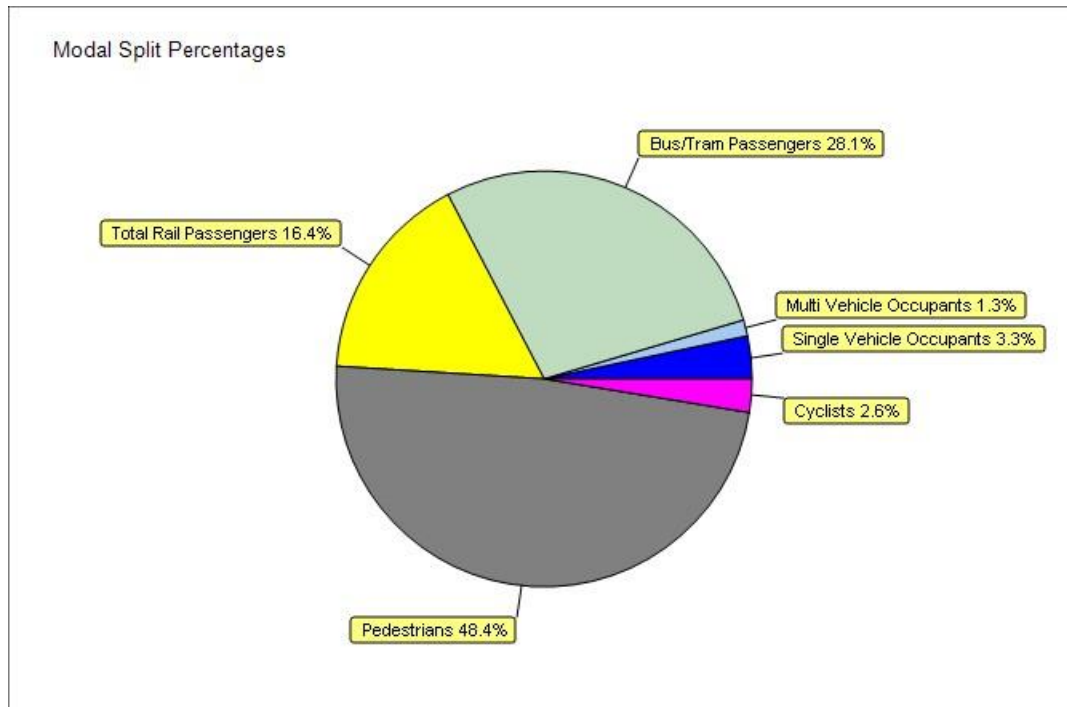


Figure 6.1 – TRICS Modal Split

6.4.7 The following **Table 6.3** summarises the trip rates (per 1 bed) for the peak hours and whole day, whereas **Table 6.4** summarises the development trip generation for 107 beds:

Mode	AM 08:00-09:00			PM 17:00-18:00			Daily		
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	0.002	0.002	0.004	0.002	0.002	0.004	0.043	0.046	0.089
OGVs	0	0	0	0	0	0	0	0	0
Of which ... Servicing Vehicles	0.001	0	0.001	0.001	0.001	0.002	0.022	0.019	0.041
Cars	0.001	0.001	0.002	0	0	0	0.004	0.006	0.01
Taxis	0	0	0	0.001	0.001	0.002	0.019	0.019	0.038
Pedestrians	0.005	0.047	0.052	0.04	0.03	0.07	0.381	0.418	0.799
Public Transport	0.005	0.056	0.061	0.043	0.017	0.06	0.346	0.368	0.714
Cyclists	0.001	0.002	0.003	0.002	0.001	0.003	0.019	0.019	0.038

Table 6.3 – Proposed Residential TRICS Multi-Modal Trip Rates

Mode	AM 08:00-09:00			PM 17:00-18:00			Daily		
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total
Total Vehicles	0	0	<u>0</u>	0	0	<u>0</u>	5	5	<u>10</u>
Of which...									
OGVs	0	0	0	0	0	0	0	0	0
Servicing Vehicles	0	0	0	0	0	0	2	2	4
Cars	0	0	0	0	0	0	0	1	1
Taxis	0	0	0	0	0	0	2	2	4
Pedestrians	1	5	<u>6</u>	4	3	<u>7</u>	41	45	<u>85</u>
Public Transport	1	6	<u>7</u>	5	2	<u>6</u>	37	39	<u>76</u>
Cyclists	0	0	<u>0</u>	0	0	<u>0</u>	2	2	<u>4</u>

Table 6.4 – Proposed Residential TRICS Multi-Modal Trip Generation

- 6.4.8 The above tables demonstrate the proposed development could be expected to not generate any vehicular trips in the AM and PM peak periods. Almost all trips would be by foot or public transport.
- 6.4.9 Based on the expected daily TRICS trip rates, throughout the course of a typical day, the proposed Development could generate 10 two-way trips; mainly associated with servicing vehicles and cars.
- 6.4.10 With respect to servicing vehicles, TRICS includes all vehicles that arrive at and depart from a site that perform a servicing function. Examples of such functions include delivery vehicles picking up or dropping off items, plumbers, electricians, fast food deliveries, waste disposal and recycling vehicles.
- 6.4.11 It is important to note that the criteria for inclusion of a vehicle within the Servicing Vehicles count is the function of the vehicle during each trip and not just the type of vehicle, so if a vehicle is undertaking a servicing function at a site during a survey it will be included in the Servicing Vehicles count.
- 6.4.12 As such, the TRICS assessment is considered robust as it considers all likely traffic generation associated with the proposed development.

6.5 Highway Impact Conclusions

- 6.5.1 It is not considered the Proposed Development would have a material impact on the surrounding highway network considering the land use, scale of development, and absence of on-site car parking.
- 6.5.2 In addition, there is noted to be 4 servicing vehicles required to serve the site per day; as the majority of these movements will be short-term movements (food deliveries, takeaway food, and e-commerce deliveries), it is concluded that the proposed loading bay will cater for the forecast demand.

7.0 Waste Management Strategy

7.1 Introduction

- 7.1.1 This section of the TS has been prepared to consider the potential refuse and recyclable waste volumes of the proposed development, including organic waste. This section also provides details of the collection arrangements.

7.2 Waste Management Policy

- 7.2.1 Manchester City Council has recently issued an update on their local waste management guidance 'GD 04 Waste Storage and Collection Guidance for New Developments Version: 7.00' in September 2023, which contains minimum standards to be considered for the storage and collection of waste. This guidance follows the recommendations set on the Waste Management Plan for England, strongly encouraging and promoting high levels of quality recycling.
- 7.2.2 The note states that all planning applications for new developments and conversions must include a WMS that includes:
- An estimated storage area for the waste produced by the development;
 - Details of internal and external stores for both waste and recycling; and
 - Location of the proposed collection point and details of the route the collection will take.
- 7.2.3 The following sections provide additional information on each of the above points whilst the pro forma document, contained at the rear of the guidance note, is included as **Appendix B**. This guidance has also been used to forecast the likely space required for waste and recycling containers.

7.3 Waste Forecasting

- 7.3.1 MCC's GD04 Version 7.00 document provides advice on student accommodation schemes. The document considers that every fortnight each room will generate 55 litres of general waste, plus at least 22 litres of pulpable recycling and at least 22 litres for comingled recycling. Food waste is based on 5 litres per room. This totals 104 litres per bedroom every two weeks, which equates to 52l per room per week.
- 7.3.2 Based on the requirements summarised above, **Table 7.1** forecasts the weekly waste volume generated by the proposed development:

Student Accommodation Use	
Waste Stream	Waste Volume (107 beds)
Non-recyclable Waste (Black bin)	2,942.5 l
Paper, cardboard, and carton Recycling (Blue bin)	1,177 l
Plastic, glass, tins, and cans recycling (Brown bin)	1,177 l
Organic Recycling (Green bin)	267.5 l
Proposed Development Total	5,564 l

Table 7.1 – Development Weekly Waste Volume Forecast

7.4 Waste Management Strategy

- 7.4.1 Given the potential volumes involved for the uses of the proposed development, the most suitable containers for the general waste and recycling streams would be 1,100 l Eurobins for the three main streams and 240l bin for organic recycling.
- 7.4.2 Bin collections will be undertaken by a private company, and the frequency has been calculated to be two-times-a-week for robustness. However, this will be updated following occupation and based on actual waste volumes.
- 7.4.3 Based on the waste collection frequencies summarised above and the estimated waste volumes on **Table 7.1**, the development will be provided with 4 x 1,100l Eurobins and 1 x 240l bin, distributed as follows:
- Non-recyclable Waste: 2 x 1,100l bins;
 - Paper, cardboard, and carton Recycling: 1 x 1,100l bin;
 - Plastic, glass, tins, and cans recycling: 1 x 1,100l bin; and
 - Organic Recycling: 1 x 240l bin.
- 7.4.4 The waste storage room is conveniently located at ground floor and has been sized to accommodate and operate the number of bins required. The waste storage areas will be well lit and ventilated, including access to a water feed. The floor will comprise an easily cleaned surface and adequate drainage will be provided.
- 7.4.5 The management company would be responsible for monitoring the recycling rates and promote actively high recycling rates within the residents. The management company would also be responsible for keeping the waste storage facilities clean and safe, cleaning the bins on a regular basis, and arranging for replacing damaged bins when necessary.
- 7.4.6 The collection point will be located along York Street, adjacent to the proposed development. The private contractor will collect the bins directly from the waste store and will transport them to the collection point.

- 7.4.7 **Drawing 084709-CUR-XX-00-D-TP-06001** shows the location of the proposed waste store, location of the collection point and loading bay, with **Drawing 084709-CUR-XX-00-D-TP-05001** showing the swept path analysis of an 8.4m and 9.0m refuse vehicle.

7.5 Conclusions

- 7.5.1 The development will be provided with a waste store room at ground floor, conveniently located for both residents and collection crews. The store will accommodate a total of 4 x 1,100l bins and 1 x 240l bin. This is considered sufficient based on MCC's latest GD04 guidance waste volumes estimations and private collections twice a week.

8.0 Summary and Conclusions

8.1 Summary

- 8.1.1 Curtins has been appointed by Jadebricks (Charles Street) Ltd to provide transport and highways advice in relation to a planning application for a purpose-built student accommodation (PBSA) scheme at Charles Street/York Street near Oxford Road in Manchester city centre.
- 8.1.2 A review of baseline conditions and highway safety in the vicinity of the site has been undertaken. It is not considered that there is an existing highway safety issue that is likely to be exacerbated by the proposed development.
- 8.1.3 Relevant details of the proposed site layout, access, parking facilities, and servicing arrangements have been provided.
- 8.1.1 The site is accessible by sustainable modes of transport. The surrounding area exhibits good levels of pedestrian and cycling infrastructure, and there are several public transport opportunities within acceptable walking distance of the site.
- 8.1.2 It is not considered the proposed development would have a material impact on the surrounding highway network considering the absence of any standard car parking bays. Notwithstanding this, a robust sensitivity test using surveys from the TRICS database has been undertaken to confirm this assertion.
- 8.1.3 Additionally, measures are proposed in the accompanying Interim Travel Plan to increase the level of walking, cycling and public transport use to and from the site, and to reduce reliance on the private car.
- 8.1.4 A review of relevant national transport planning guidance has been undertaken. It is considered that the proposed development conforms with such policy.
- 8.1.5 The development will be provided with a waste store room at ground floor, conveniently located for both residents and collection crews. The store will accommodate a total of 4 x 1,100l bins and 1 x 240l bin. The development will be served by private collections twice a week.

8.2 Conclusions

- 8.2.1 It is Curtins' view that from a highways and transport perspective there are no highways and transportation reasons why the development proposals should not be granted planning approval.

Plans

Curtins

Merchant Exchange, 17-19 Whitworth St. W Manchester M1 5WG
0161 236 2394
manchester@curtins.com
www.curtins.com

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Project:
CHARLES STREET - MANCHESTER

Drg Title:
SITE LOCATION
REGIONAL VIEW

Status:
PRELIMINARY

Drawn By: JM Checked By: AT

Designed By: JM Date: 17/11/23

Scale: NTS

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

84709 - CUR - XX - XX - G - TP - 06001 - P01



KEY:  Site

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\\ma-fs-1\Projects\084001 - 085000\084709 - TPMA Charles Street\Q4-Production\4A-Models-Drawings\TPICAD\061



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Project:
CHARLES STREET - MANCHESTER

Drg Title:
SITE LOCATION
LOCAL VIEW

Status:
PRELIMINARY

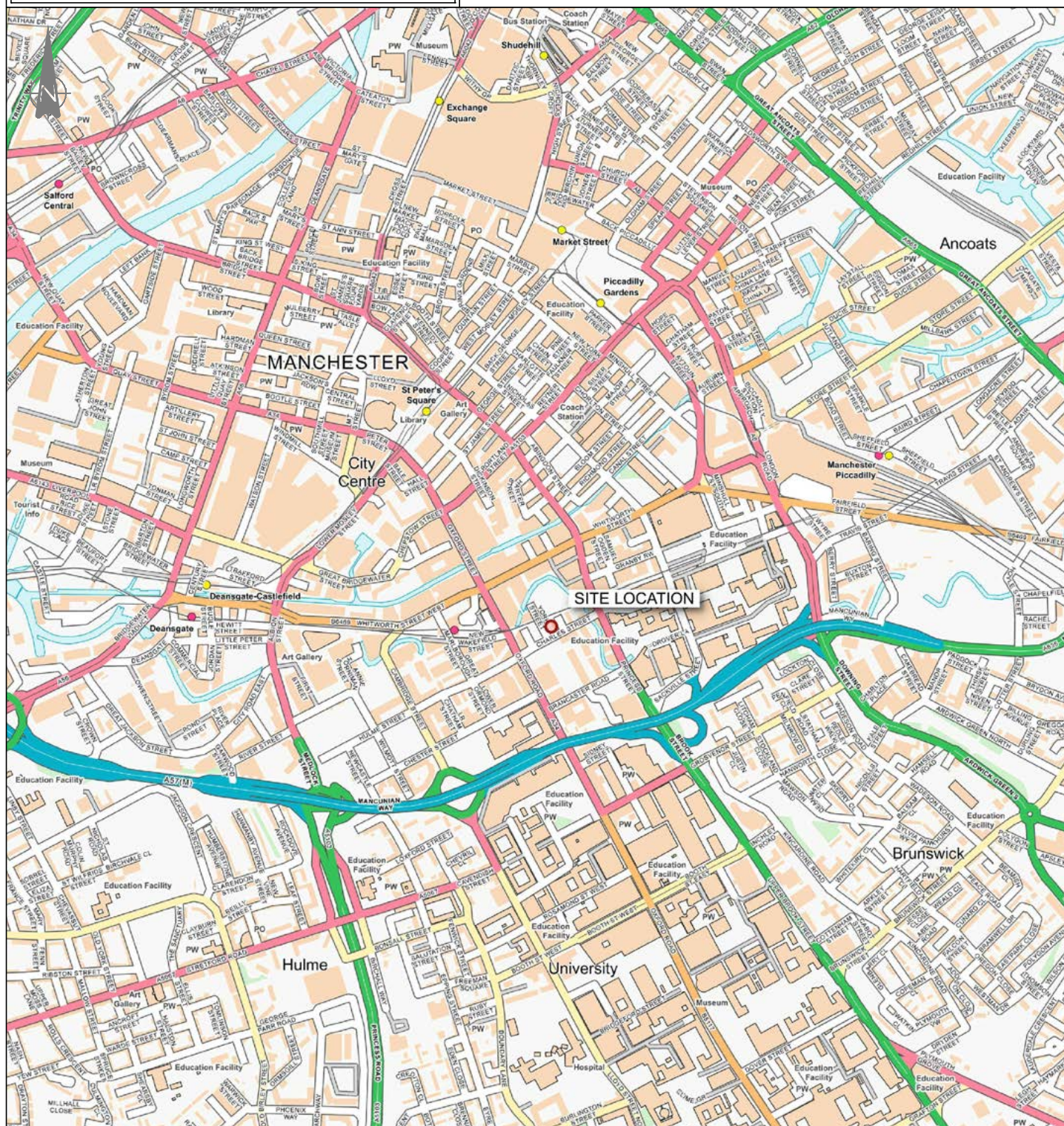
Drawn By: JM Checked By: AT

Designed By: JM Date: 17/11/23

Scale: NTS

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

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KEY:  Site

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Project:
CHARLES STREET - MANCHESTER

Drg Title:
ACCESSIBILITY
INDICATIVE WALKING CATCHMENT

Status:
PRELIMINARY

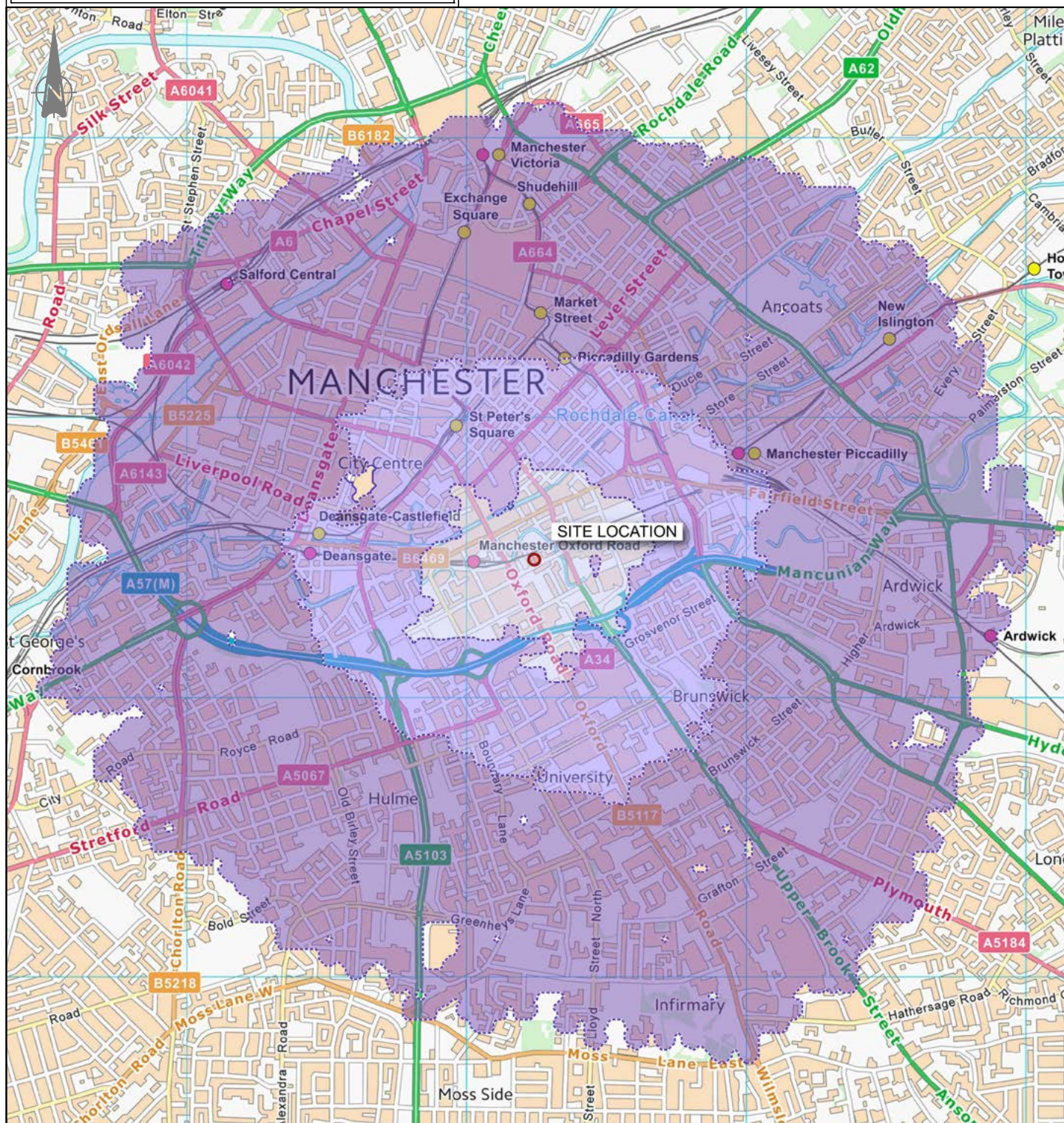
Drawn By: JM Checked By: AT

Designed By: JM Date: 17/11/23

Scale: NTS

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

84709 - CUR - XX - XX - G - TP - 06003 - P01



KEY:

○ Site

Walking Catchment:

500m
1000m
2000m

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Project:
CHARLES STREET - MANCHESTER

Drg Title:
ACCESSIBILITY
INDICATIVE CYCLE CATCHMENT

Status:
PRELIMINARY

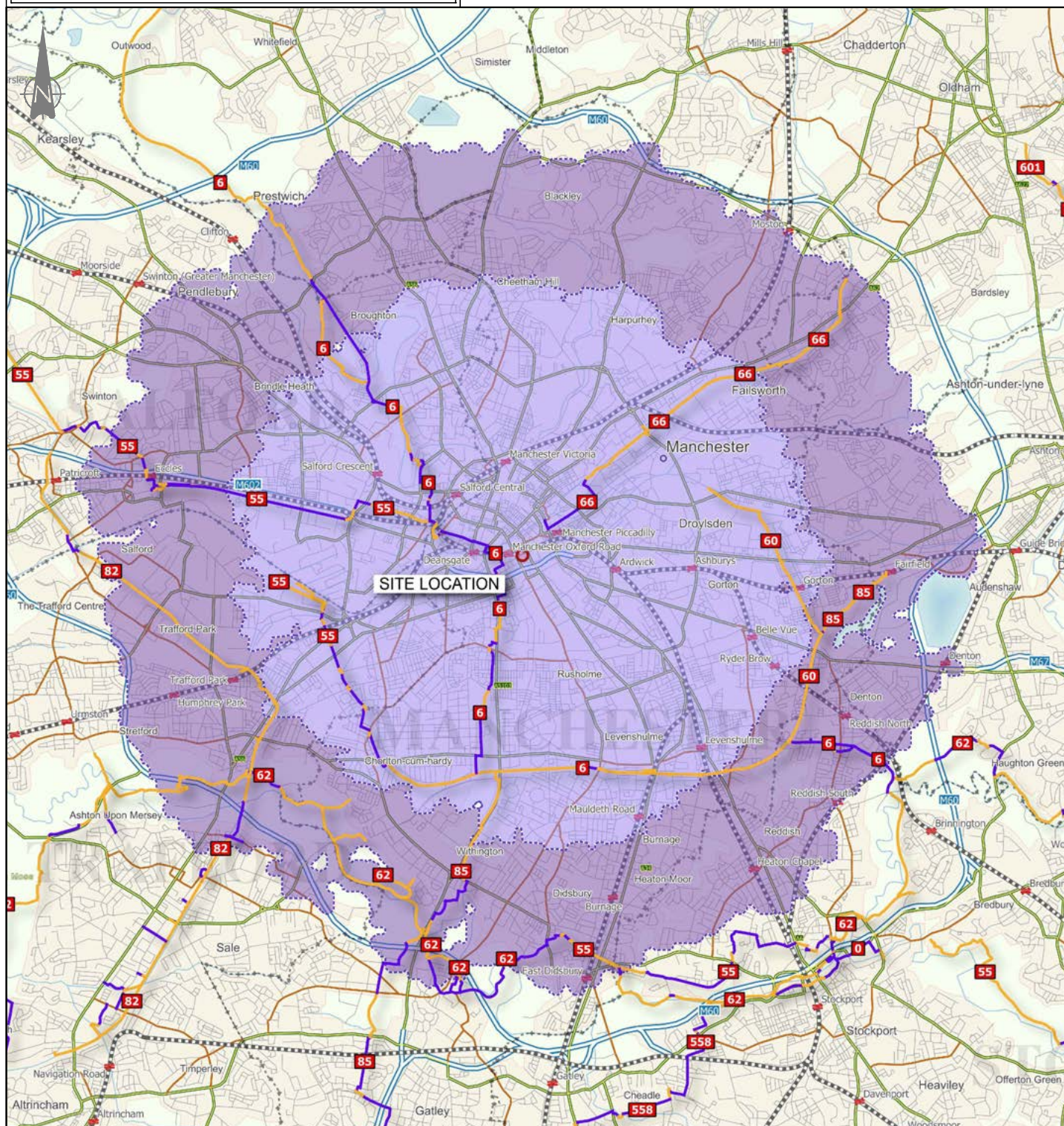
Drawn By: JM Checked By: AT

Designed By: JM Date: 17/11/23

Scale: NTS

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

84709 - CUR - XX - XX - G -TP - 06004 - P01



KEY:
● Site
National Cycle Network:
— On Road Cycle Route
— Traffic-free Cycle Route

Cycle Catchment:
5500m
8000m

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Project: CHARLES STREET - MANCHESTER

Drg Title: ACCESSIBILITY
INDICATIVE PUBLIC
TRANSPORT CATCHMENT
WEEKDAY AM - OUTBOUND

Status: PRELIMINARY

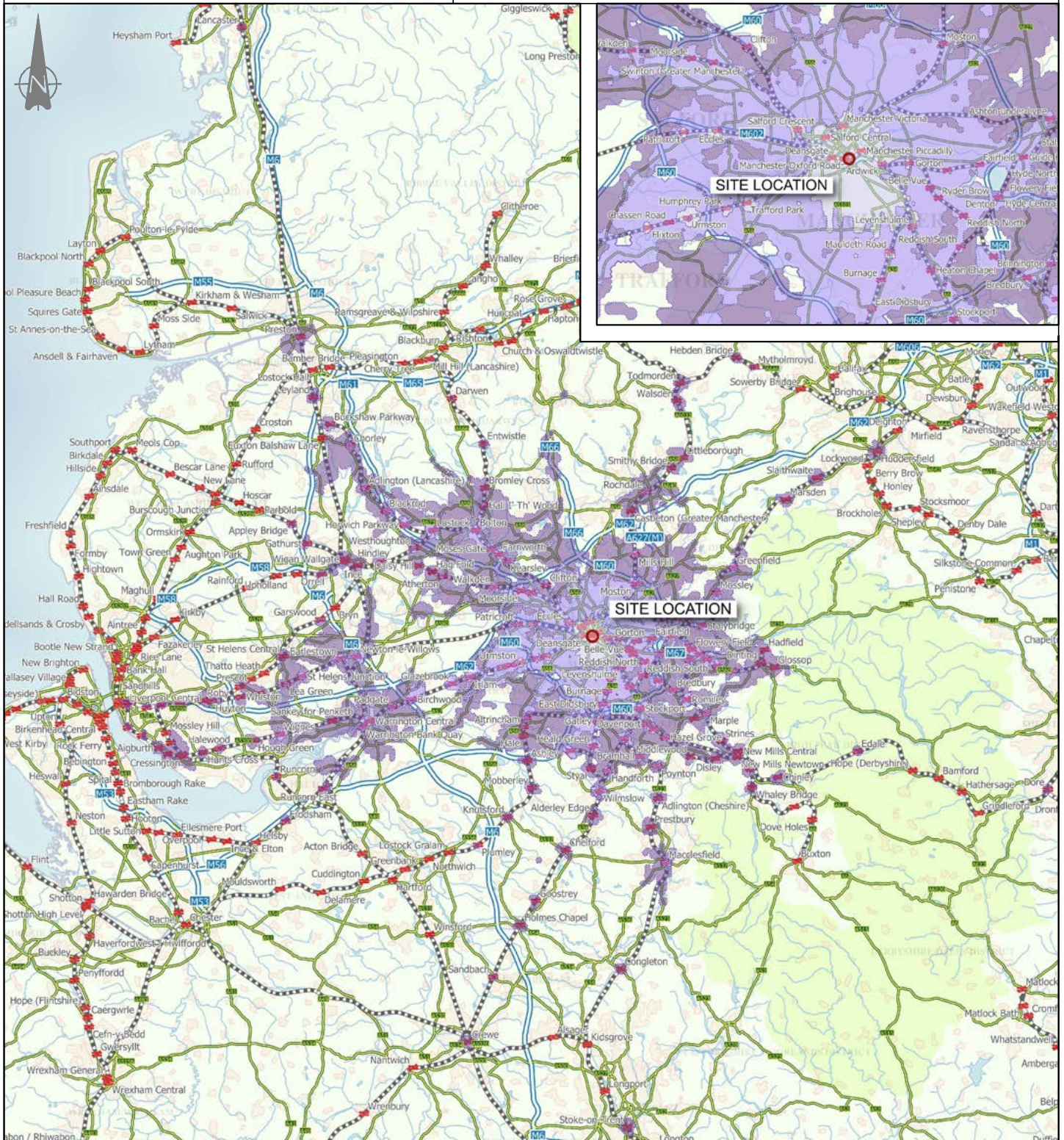
Drawn By: JM Checked By: AT

Designed By: JM Date: 17/11/23

Scale: NTS

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

84709 - CUR - XX - XX - G - TP - 06005 - P01

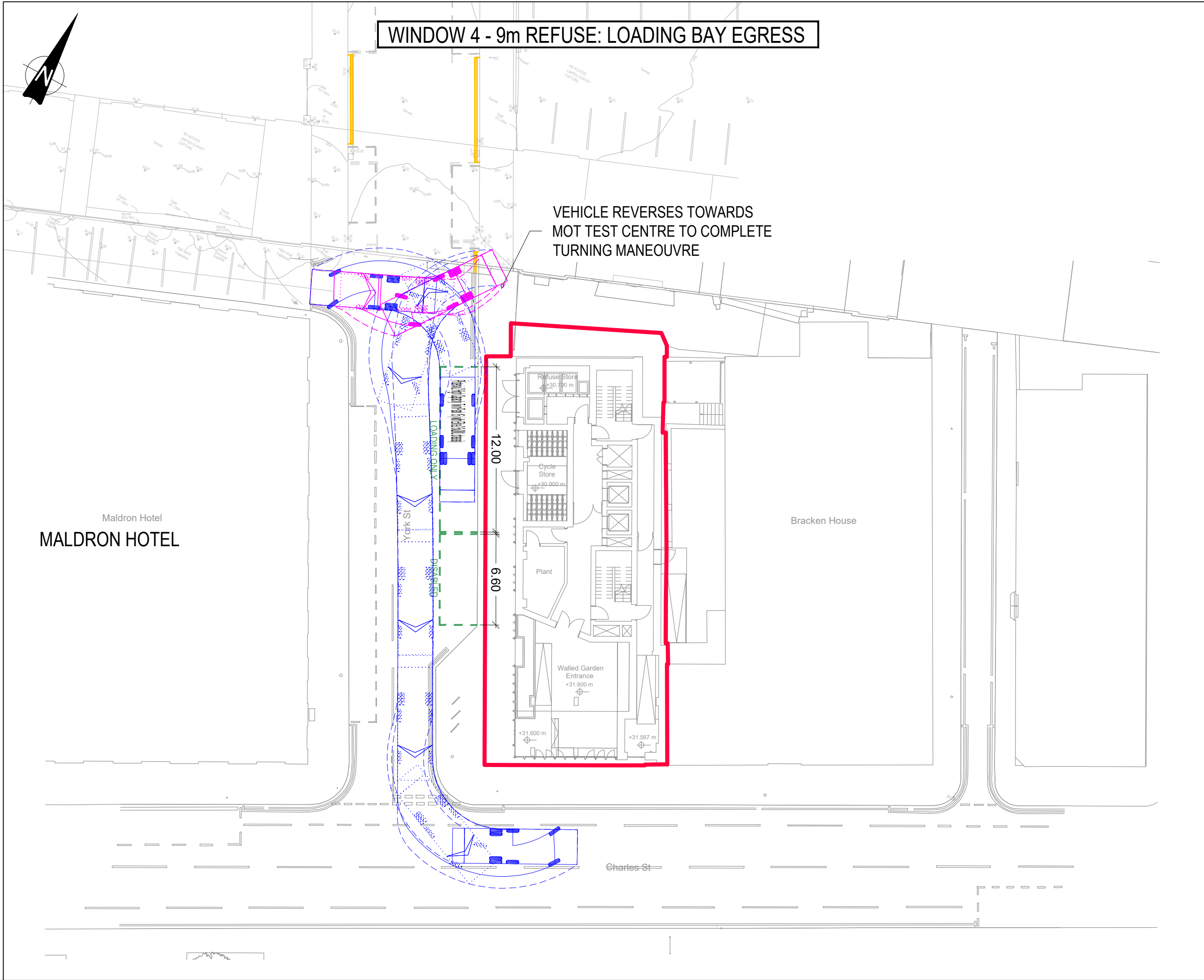
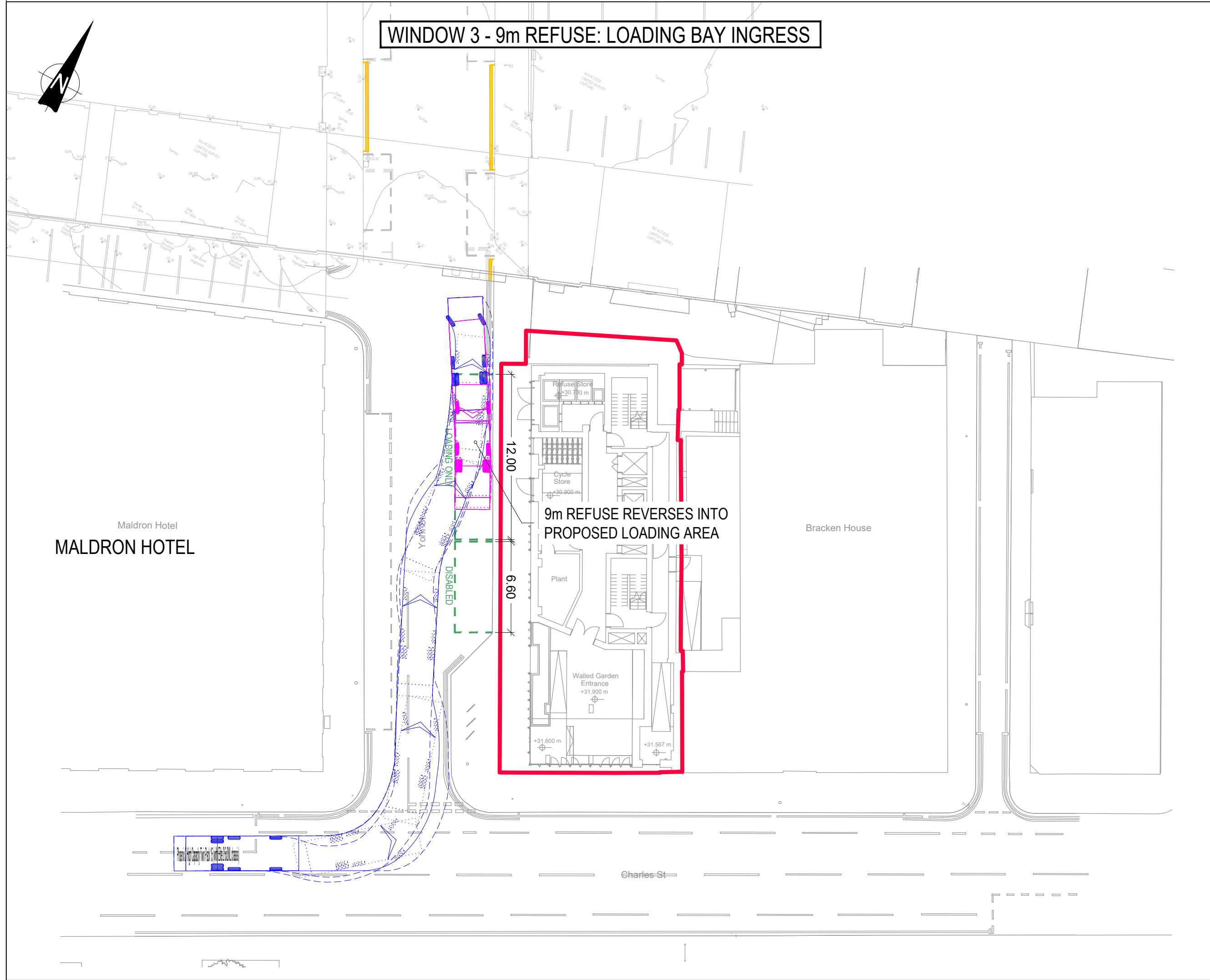
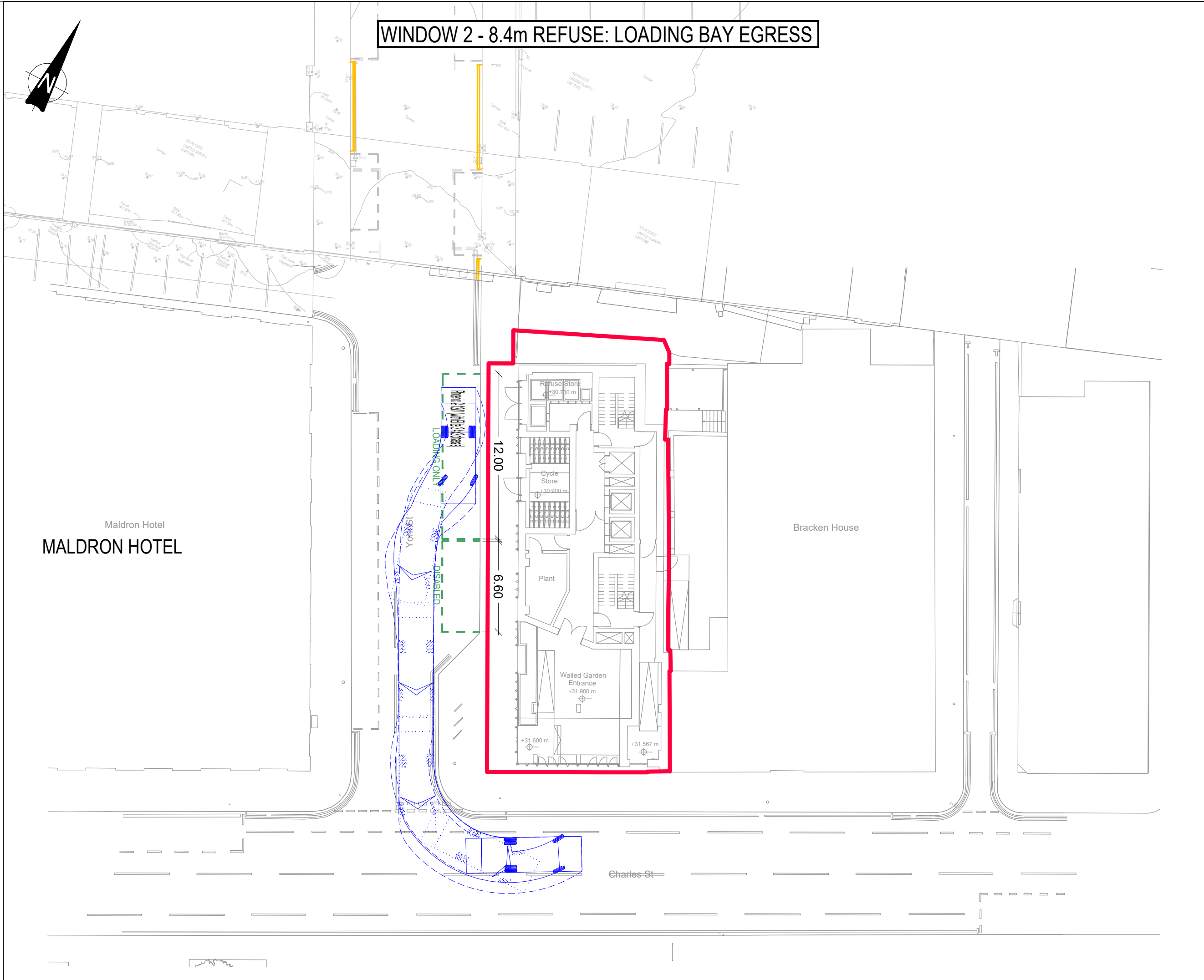
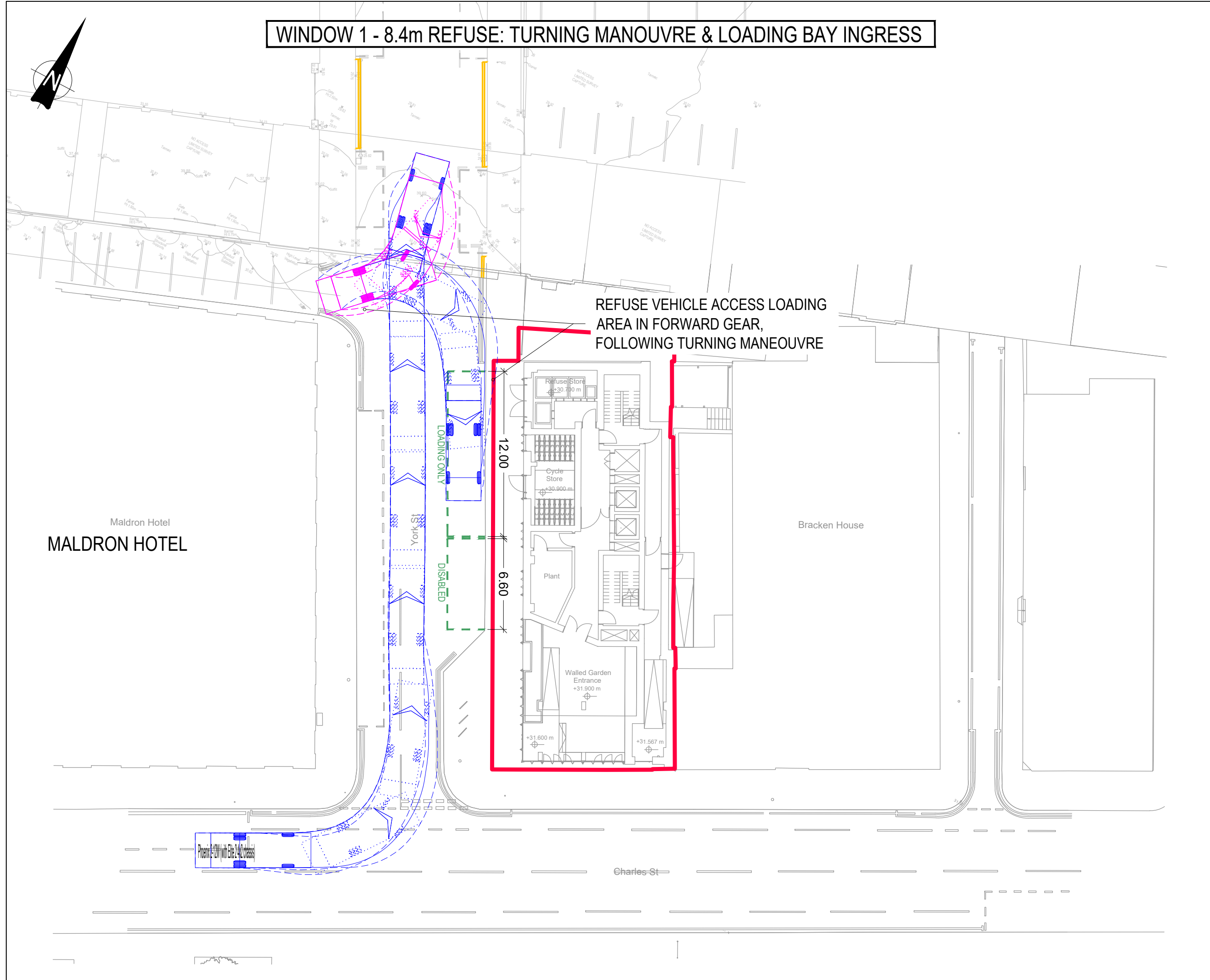


KEY:

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

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Drawings



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- FOR GENERAL NOTES REFER TO DRAWING.
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- TOPOGRAPHICAL SURVEY INFORMATION FROM 2018 & 2023 UTILISED.
- SITE LAYOUT BASED ON ARCHITECTS LAYOUT.
SIMPSON HAUGH REFERENCE: '10489-SHP-ZZ-A-B5D8-G200-PL-00-001'

KEY: — RED LINE BOUNDARY --- PROPOSED ROAD MARKINGS

VEHICLE PROFILE:

Phoenix 2-12W (with Elite 2-4x2 chassis)

Overall Length	8.370m
Overall Width	2.530m
Overall Body Height	3.250m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.500m

Phoenix 2 High Capacity Twin Pack 15 (with Elite 2 6x2ML chassis)

Overall Length	8.370m
Overall Width	2.530m
Overall Body Height	3.250m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.500m

P02	Site layout updated	06/12/23	JM	AT
P02	Site layout and redline boundary added	30/11/23	JM	AT
Rev:	Description:	Date:	By:	Chk:

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0161 236 2394
manchester@curtins.com
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Status: **PRELIMINARY**

Project: **CHARLES STREET**

Orig Title: **SWEPT PATH ANALYSIS
YORK ST - REFUSE STRATEGY
8.4m & 9m REFUSE VEHICLES**

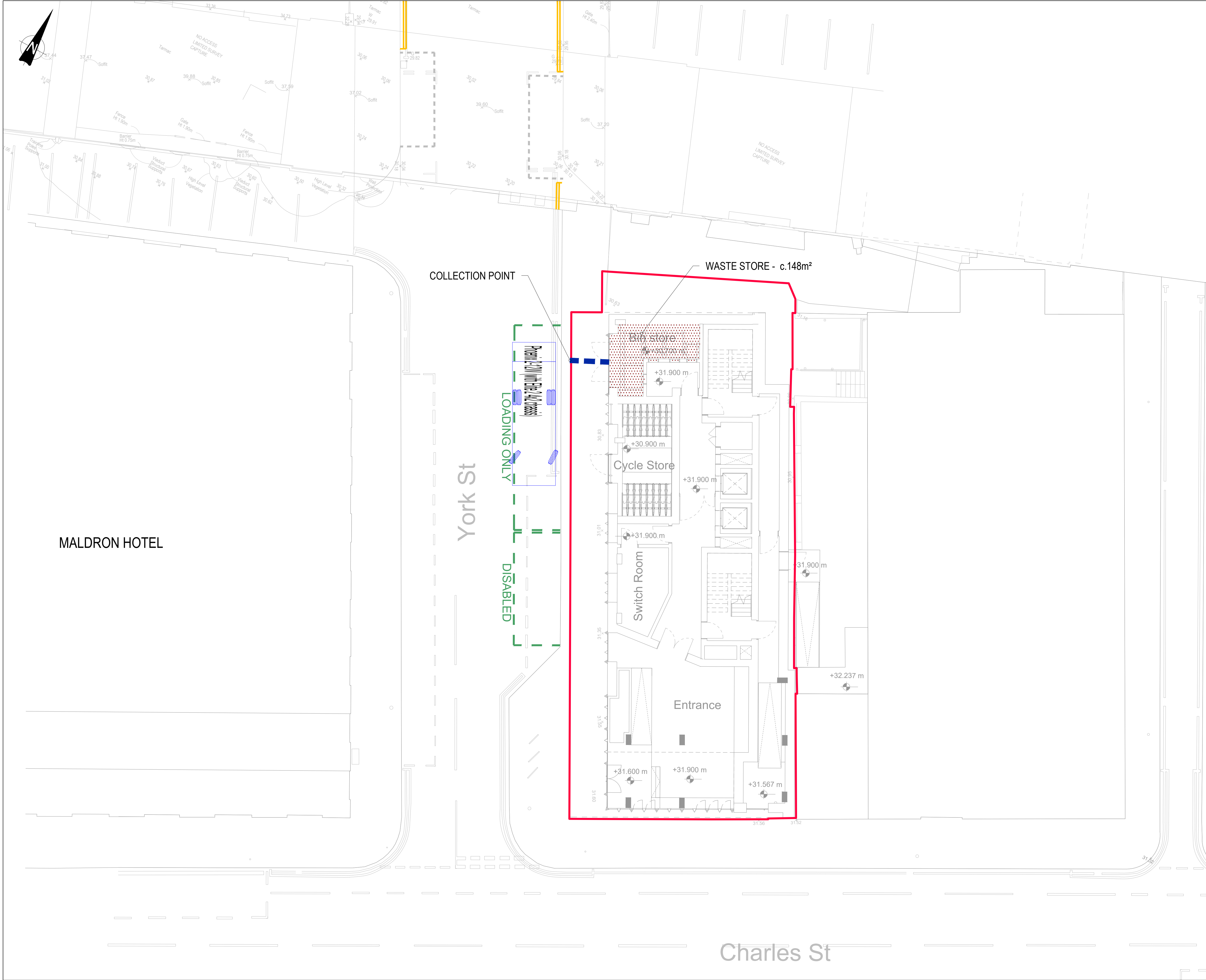
Drawn By JM	Designed By JM	Checked By AT
Date 14/11/23		Scales @ A1 1:250

Project No - Originator - Function - Spatial - Form - Discipline - Number

84709 - CUR - XX - 00 - D - TP- 05001

Revision
P03

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4. FOR GENERAL NOTES REFER TO DRAWING.

5. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES

6. TOPOGRAPHICAL SURVEY INFORMATION FROM 2018 & 2023 UTILISED.

7. SITE LAYOUT BASED ON ARCHITECT'S LAYOUT. SIMPSON HAUGH REFERENCE: '10489-SHP-Z1-A-G200-SK-00-001'

KEY:

RED LINE BOUNDARY

PROPOSED ROAD MARKINGS

WASTE STORE

BIN ROUTE

VEHICLE PROFILE:

Phoenix 2-12W (with Elite 2-4x2 chassis)

Overall Length 8.395m

Overall Width 2.550m

Overall Body Height 3.300m

Min Body Ground Clearance 0.600m

Track Width 2.600m

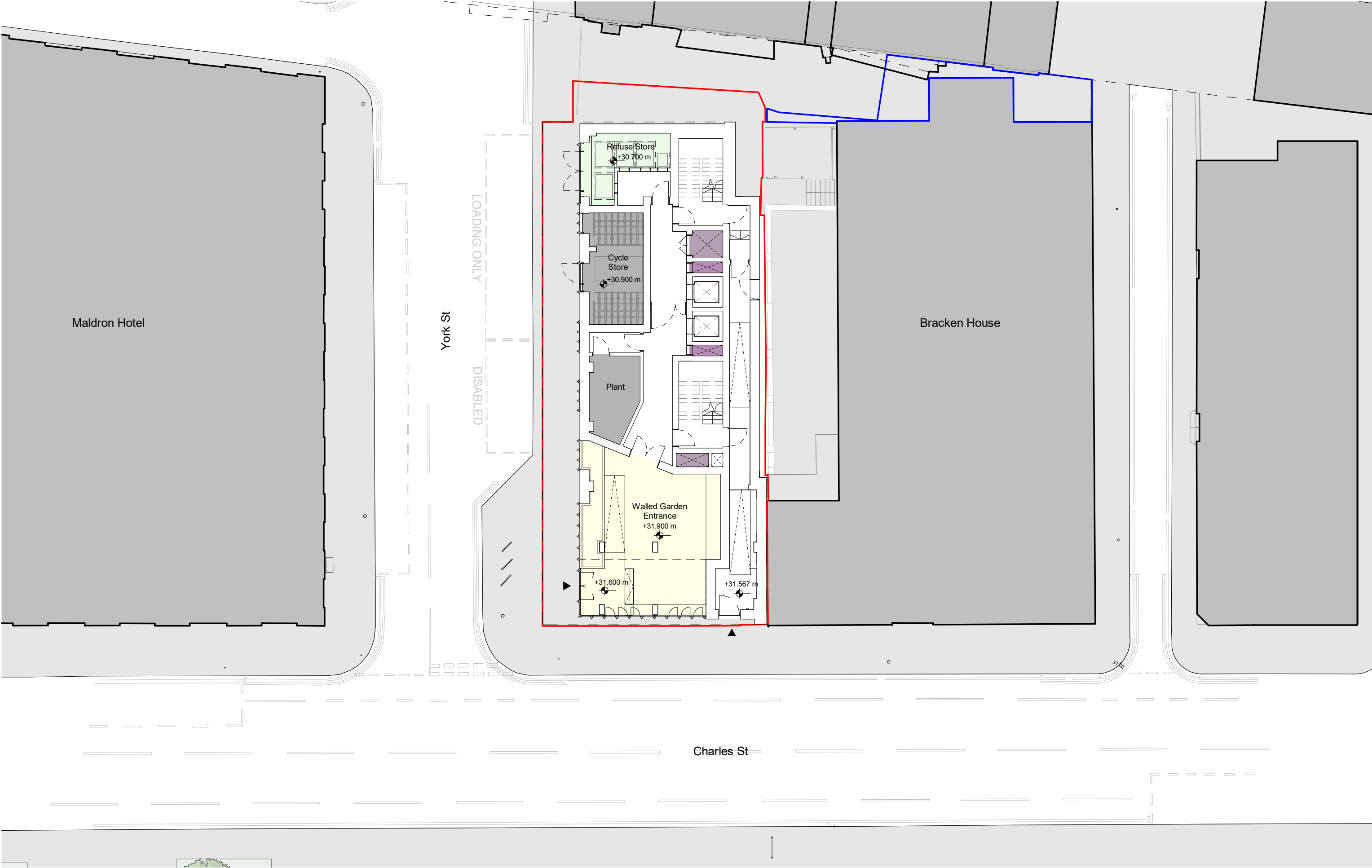
Lock to 90° time 4.00s

Kerb to Kerb Turning Radius 7.300m

Rev:	Description:	Date:	By:	Chkd:		
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Status:	PRELIMINARY					
Project:	CHARLES STREET					
Orig Title:	WASTE MANAGEMENT STRATEGY					
Drawn By	JM	Designed By	JM	Checked By	AT	
Date		30/11/23		Scales @ A1		1:100
Project No - Originator - Function - Spatial - Form - Discipline - Number						Revision
84709 - CUR - XX - 00 - D -TP- 06001						P01

\\ms-b-11\Projects\84709 - 065000\84709 - TPM\Charles Street\QA\Production\A4-Models Drawings\TPC\006

Appendix A – Proposed Site Layout



This drawing is copyright
Do not scale off dimensions.
All dimensions to be checked on
site by contractor.
Contractor to report any
dimensional discrepancies,
errors or omissions prior to
commencing on site.

NOTE:
DO NOT SCALE OFF DRAWING REFER TO INDICATED
DIMENSIONS ONLY.
DRAWING TO BE READ IN CONJUNCTION WITH SHP
SPECIFICATION.
INDICATIVE DETAILS TO ILLUSTRATE VISUAL INTENT ONLY. ALL
TO CONTRACTORS DESIGN.
ALL DETAILS TO BE COORDINATED WITH ADJACENT TRADES
AND SE AND M+E ENGINEER DETAILS.
THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE
SPECIFIED PERFORMANCE CRITERIA.



Rev	Date	Description
P01	2023-12-05	PLANNING ISSUE
P02	2023-12-11	PLANNING UPDATE

Project Title
**Charles Street
Manchester**

Status
Planning

Drawing Title
**General Arrangement
Plan
Ground Floor**

Project No 10489	Scale 1 : 200 @ A3
SHP Drawing Code 10489-SHP-ZZ-A-B5D8-G200-PL-00-001	Revision P02



Manchester
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London
+44 (0)20 7549 4000

Appendix B – TRICS Output

Calculation Reference: AUDIT-148301-231108-1135

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : G - STUDENT ACCOMMODATION
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	CN CAMDEN	1 days
	HM HAMMERSMITH AND FULHAM	1 days
	KI KINGSTON	2 days
	LB LAMBETH	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days

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

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of residents
 Actual Range: 200 to 1100 (units:)
 Range Selected by User: 15 to 1100 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 25/06/21

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

Selected survey days:

Tuesday 2 days
 Wednesday 3 days
 Thursday 1 days

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

Selected survey types:

Manual count 6 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre 2
 Edge of Town Centre 4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 2
 Built-Up Zone 4

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

Inclusion of Servicing Vehicles Counts:

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

Secondary Filtering selection:

Use Class:

C3 6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	4 days
50,001 to 100,000	2 days

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

Population within 5 miles:

250,001 to 500,000	3 days
500,001 or More	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

No PTAL Present	1 days
4 Good	1 days
5 Very Good	1 days
6a Excellent	2 days
6b (High) Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1	CN-03-G-01	STUDENT FLATS	CAMDEN
	SAINT PANCRAS WAY KING'S CROSS		
	Edge of Town Centre Built-Up Zone		
	Total Number of residents:	571	
	Survey date: TUESDAY	14/11/17	Survey Type: MANUAL
2	DY-03-G-02	STUDENT ACCOMMODATION	DERBY
	CATHEDRAL ROAD DERBY		
	Town Centre Built-Up Zone		
	Total Number of residents:	350	
	Survey date: WEDNESDAY	25/09/19	Survey Type: MANUAL
3	HM-03-G-01	STUDENT FLATS	HAMMERSMITH AND FULHAM
	PADDENSWICK ROAD HAMMERSMITH		
	Edge of Town Centre Residential Zone		
	Total Number of residents:	235	
	Survey date: THURSDAY	31/10/19	Survey Type: MANUAL
4	KI-03-G-01	STUDENT FLATS	KINGSTON
	PENRHYN ROAD KINGSTON UPON THAMES		
	Edge of Town Centre Built-Up Zone		
	Total Number of residents:	200	
	Survey date: WEDNESDAY	12/06/19	Survey Type: MANUAL
5	KI-03-G-02	STUDENT FLATS	KINGSTON
	CAMBRIDGE ROAD KINGSTON UPON THAMES NORBITON		
	Edge of Town Centre Residential Zone		
	Total Number of residents:	300	
	Survey date: WEDNESDAY	26/06/19	Survey Type: MANUAL
6	LB-03-G-02	STUDENT FLATS	LAMBETH
	WESTMINSTER BRIDGE RD LAMBETH		
	Town Centre Built-Up Zone		
	Total Number of residents:	1100	
	Survey date: TUESDAY	27/11/18	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HM-03-G-02	Covid-19 restrictions

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 20.37

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	491	0.001	5	491	0.001	5	491	0.002
08:00 - 09:00	5	491	0.002	5	491	0.002	5	491	0.004
09:00 - 10:00	5	491	0.001	5	491	0.000	5	491	0.001
10:00 - 11:00	5	491	0.003	5	491	0.003	5	491	0.006
11:00 - 12:00	5	491	0.003	5	491	0.004	5	491	0.007
12:00 - 13:00	5	491	0.004	5	491	0.005	5	491	0.009
13:00 - 14:00	5	491	0.005	5	491	0.004	5	491	0.009
14:00 - 15:00	5	491	0.004	5	491	0.005	5	491	0.009
15:00 - 16:00	5	491	0.004	5	491	0.004	5	491	0.008
16:00 - 17:00	5	491	0.002	5	491	0.003	5	491	0.005
17:00 - 18:00	5	491	0.002	5	491	0.002	5	491	0.004
18:00 - 19:00	5	491	0.004	5	491	0.004	5	491	0.008
19:00 - 20:00	5	491	0.004	5	491	0.004	5	491	0.008
20:00 - 21:00	5	491	0.004	5	491	0.005	5	491	0.009
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.043			0.046			0.089

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	200 - 1100 (units:)
Survey date date range:	01/01/15 - 25/06/21
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL TAXIS
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	491	0.000	5	491	0.000	5	491	0.000
08:00 - 09:00	5	491	0.000	5	491	0.000	5	491	0.000
09:00 - 10:00	5	491	0.000	5	491	0.000	5	491	0.000
10:00 - 11:00	5	491	0.001	5	491	0.001	5	491	0.002
11:00 - 12:00	5	491	0.002	5	491	0.002	5	491	0.004
12:00 - 13:00	5	491	0.002	5	491	0.002	5	491	0.004
13:00 - 14:00	5	491	0.001	5	491	0.001	5	491	0.002
14:00 - 15:00	5	491	0.000	5	491	0.000	5	491	0.000
15:00 - 16:00	5	491	0.002	5	491	0.002	5	491	0.004
16:00 - 17:00	5	491	0.001	5	491	0.001	5	491	0.002
17:00 - 18:00	5	491	0.001	5	491	0.001	5	491	0.002
18:00 - 19:00	5	491	0.003	5	491	0.003	5	491	0.006
19:00 - 20:00	5	491	0.002	5	491	0.002	5	491	0.004
20:00 - 21:00	5	491	0.004	5	491	0.004	5	491	0.008
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.019			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL OGVS
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	491	0.000	5	491	0.000	5	491	0.000
08:00 - 09:00	5	491	0.000	5	491	0.000	5	491	0.000
09:00 - 10:00	5	491	0.000	5	491	0.000	5	491	0.000
10:00 - 11:00	5	491	0.000	5	491	0.000	5	491	0.000
11:00 - 12:00	5	491	0.000	5	491	0.000	5	491	0.000
12:00 - 13:00	5	491	0.000	5	491	0.000	5	491	0.000
13:00 - 14:00	5	491	0.000	5	491	0.000	5	491	0.000
14:00 - 15:00	5	491	0.000	5	491	0.000	5	491	0.000
15:00 - 16:00	5	491	0.000	5	491	0.000	5	491	0.000
16:00 - 17:00	5	491	0.000	5	491	0.000	5	491	0.000
17:00 - 18:00	5	491	0.000	5	491	0.000	5	491	0.000
18:00 - 19:00	5	491	0.000	5	491	0.000	5	491	0.000
19:00 - 20:00	5	491	0.000	5	491	0.000	5	491	0.000
20:00 - 21:00	5	491	0.000	5	491	0.000	5	491	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
MULTI-MODAL CYCLISTS
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	6	459	0.000	6	459	0.000	6	459	0.000
08:00 - 09:00	6	459	0.001	6	459	0.002	6	459	0.003
09:00 - 10:00	6	459	0.001	6	459	0.004	6	459	0.005
10:00 - 11:00	6	459	0.000	6	459	0.002	6	459	0.002
11:00 - 12:00	6	459	0.001	6	459	0.003	6	459	0.004
12:00 - 13:00	6	459	0.001	6	459	0.001	6	459	0.002
13:00 - 14:00	6	459	0.002	6	459	0.001	6	459	0.003
14:00 - 15:00	6	459	0.002	6	459	0.001	6	459	0.003
15:00 - 16:00	6	459	0.003	6	459	0.001	6	459	0.004
16:00 - 17:00	6	459	0.001	6	459	0.000	6	459	0.001
17:00 - 18:00	6	459	0.002	6	459	0.001	6	459	0.003
18:00 - 19:00	6	459	0.003	6	459	0.002	6	459	0.005
19:00 - 20:00	6	459	0.001	6	459	0.000	6	459	0.001
20:00 - 21:00	6	459	0.001	6	459	0.001	6	459	0.002
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.019			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	6	459	0.004	6	459	0.013	6	459	0.017
08:00 - 09:00	6	459	0.005	6	459	0.047	6	459	0.052
09:00 - 10:00	6	459	0.007	6	459	0.037	6	459	0.044
10:00 - 11:00	6	459	0.010	6	459	0.038	6	459	0.048
11:00 - 12:00	6	459	0.016	6	459	0.031	6	459	0.047
12:00 - 13:00	6	459	0.023	6	459	0.033	6	459	0.056
13:00 - 14:00	6	459	0.030	6	459	0.039	6	459	0.069
14:00 - 15:00	6	459	0.027	6	459	0.032	6	459	0.059
15:00 - 16:00	6	459	0.041	6	459	0.027	6	459	0.068
16:00 - 17:00	6	459	0.040	6	459	0.021	6	459	0.061
17:00 - 18:00	6	459	0.040	6	459	0.030	6	459	0.070
18:00 - 19:00	6	459	0.041	6	459	0.026	6	459	0.067
19:00 - 20:00	6	459	0.041	6	459	0.020	6	459	0.061
20:00 - 21:00	6	459	0.056	6	459	0.024	6	459	0.080
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.381			0.418			0.799

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	6	459	0.004	6	459	0.014	6	459	0.018
08:00 - 09:00	6	459	0.005	6	459	0.056	6	459	0.061
09:00 - 10:00	6	459	0.009	6	459	0.042	6	459	0.051
10:00 - 11:00	6	459	0.013	6	459	0.039	6	459	0.052
11:00 - 12:00	6	459	0.018	6	459	0.027	6	459	0.045
12:00 - 13:00	6	459	0.024	6	459	0.032	6	459	0.056
13:00 - 14:00	6	459	0.025	6	459	0.034	6	459	0.059
14:00 - 15:00	6	459	0.025	6	459	0.026	6	459	0.051
15:00 - 16:00	6	459	0.033	6	459	0.020	6	459	0.053
16:00 - 17:00	6	459	0.033	6	459	0.015	6	459	0.048
17:00 - 18:00	6	459	0.043	6	459	0.017	6	459	0.060
18:00 - 19:00	6	459	0.033	6	459	0.019	6	459	0.052
19:00 - 20:00	6	459	0.036	6	459	0.014	6	459	0.050
20:00 - 21:00	6	459	0.045	6	459	0.013	6	459	0.058
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.346			0.368			0.714

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 20.37

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	6	459	0.009	6	459	0.028	6	459	0.037
08:00 - 09:00	6	459	0.012	6	459	0.106	6	459	0.118
09:00 - 10:00	6	459	0.017	6	459	0.083	6	459	0.100
10:00 - 11:00	6	459	0.024	6	459	0.081	6	459	0.105
11:00 - 12:00	6	459	0.038	6	459	0.066	6	459	0.104
12:00 - 13:00	6	459	0.051	6	459	0.069	6	459	0.120
13:00 - 14:00	6	459	0.062	6	459	0.079	6	459	0.141
14:00 - 15:00	6	459	0.056	6	459	0.063	6	459	0.119
15:00 - 16:00	6	459	0.081	6	459	0.051	6	459	0.132
16:00 - 17:00	6	459	0.077	6	459	0.038	6	459	0.115
17:00 - 18:00	6	459	0.087	6	459	0.049	6	459	0.136
18:00 - 19:00	6	459	0.081	6	459	0.050	6	459	0.131
19:00 - 20:00	6	459	0.082	6	459	0.037	6	459	0.119
20:00 - 21:00	6	459	0.106	6	459	0.040	6	459	0.146
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.783			0.840			1.623

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL CARS
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	491	0.000	5	491	0.000	5	491	0.000
08:00 - 09:00	5	491	0.001	5	491	0.001	5	491	0.002
09:00 - 10:00	5	491	0.001	5	491	0.000	5	491	0.001
10:00 - 11:00	5	491	0.000	5	491	0.001	5	491	0.001
11:00 - 12:00	5	491	0.000	5	491	0.001	5	491	0.001
12:00 - 13:00	5	491	0.000	5	491	0.001	5	491	0.001
13:00 - 14:00	5	491	0.000	5	491	0.000	5	491	0.000
14:00 - 15:00	5	491	0.001	5	491	0.001	5	491	0.002
15:00 - 16:00	5	491	0.000	5	491	0.000	5	491	0.000
16:00 - 17:00	5	491	0.001	5	491	0.001	5	491	0.002
17:00 - 18:00	5	491	0.000	5	491	0.000	5	491	0.000
18:00 - 19:00	5	491	0.000	5	491	0.000	5	491	0.000
19:00 - 20:00	5	491	0.000	5	491	0.000	5	491	0.000
20:00 - 21:00	5	491	0.000	5	491	0.000	5	491	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.006			0.010

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION
 MULTI-MODAL Servicing Vehicles
 Calculation factor: 1 RESIDE
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	491	0.001	5	491	0.001	5	491	0.002
08:00 - 09:00	5	491	0.001	5	491	0.000	5	491	0.001
09:00 - 10:00	5	491	0.001	5	491	0.000	5	491	0.001
10:00 - 11:00	5	491	0.002	5	491	0.001	5	491	0.003
11:00 - 12:00	5	491	0.001	5	491	0.002	5	491	0.003
12:00 - 13:00	5	491	0.002	5	491	0.003	5	491	0.005
13:00 - 14:00	5	491	0.003	5	491	0.002	5	491	0.005
14:00 - 15:00	5	491	0.002	5	491	0.002	5	491	0.004
15:00 - 16:00	5	491	0.002	5	491	0.002	5	491	0.004
16:00 - 17:00	5	491	0.002	5	491	0.002	5	491	0.004
17:00 - 18:00	5	491	0.001	5	491	0.001	5	491	0.002
18:00 - 19:00	5	491	0.001	5	491	0.001	5	491	0.002
19:00 - 20:00	5	491	0.002	5	491	0.001	5	491	0.003
20:00 - 21:00	5	491	0.001	5	491	0.001	5	491	0.002
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.019			0.041

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix C – MCC Waste Pro Forma



Appendix E - Waste Management Strategy (v7.00 from September 2023)

Planning Application Number:

Date Submitted:

Estimated volumes / m2 required by the development

Will this property be used as a House in Multiple Occupation (HMO)?	No
If this property will be used as an HMO, how many people do you intend to accommodate (5+)?	

Low Rise Domestic

Waste Types	Capacity required (litres)	Number of bins required (per household)	Confirm what is to be provided (and whether the developer or the resident will be responsible for ordering these)
General refuse	140 standard / 240 in certain circumstances	1 x wheeled bin (possibly more for HMO)	
Pulpable Recycling	240	1 x wheeled bin (possibly more for HMO)	
Mixed Recycling	240	1 x wheeled bin (possibly more for HMO)	
Garden Waste	240	1 x wheeled bin (possibly more for HMO)	
Food Waste	23	1 x 23 litre caddy (Possibly more for HMO)	

High Rise Apartment Developments

0.43m² has been provided per apartment for the containers, with extra space for residents to access each container and space for staff to manoeuvre each container for collection. (different for purpose-built student accommodation – see guidance)	Student accommodation: The store will accommodate a total of 4 x 1,100l bins and 1 x 240l bin. This is considered sufficient based on MCC's latest GD04 guidance waste volumes estimations and twice a week private collections. See section 7 of the Transport Statement for details.
Is it as easy, or easier, for residents to recycle, as it is for them to dispose of general waste?	Yes

Commercial Developments

Please state number of bins you propose, showing calculations where appropriate.

General Waste - Dry recycling (include material type details) - Food Waste - Industrial Waste - Other -	
Has / will a contract be obtained with a licenced waste carrier?	Yes

Mixed Use Developments

Are the stores for residential and commercial waste completely separate from each other, with residents having no access to the commercial store and the commercial units having no access to the residential store?	Yes
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Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

See section 7 of the Transport Statement for details.

Storage Areas for Waste Containers (Residential and Commercial)

Please provide details of container stores, attaching plans if appropriate.

See section 7 of the Transport Statement for details.

Ensure all bins in the store are accessible	☒
Ensure recycling facilities are as easy to access as general refuse	☒

Please confirm details of waste store ventilation and hygiene / cleaning proposals

Ventilation - See section 7 of the Transport Statement for details.
Hygiene -

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g., resident / management company

Private collection company. See section 7 of the Transport Statement for details.

Please ensure that you have attached:

Detailed plans of bin stores	☒
Location plans showing stores	☒
Location plans showing the proposed collection point and the route the collection vehicle will take (please refer to the Road, Vehicle and Waste Operative Access Specification – paying particular attention to turning space and reversing)	☒

Please ensure that you have completed this form in accordance with the latest version of GD04 Waste Storage and Collection Guidance for New Developments – v.7 September 2023

Our Locations

Birmingham

2 The Wharf
Bridge Street
Birmingham
B1 2JS
T. 0121 643 4694
birmingham@curtins.com

Bristol

Quayside
40-58 Hotwell Road
Bristol
BS8 4UQ
T. 0117 302 7560
bristol@curtins.com

Cambridge

50 Cambridge Place
Cambridge
CB2 1NS
T. 01223 631 799
cambridge@curtins.com

Cardiff

3 Cwrt-y-Parc
Earlswood Road
Cardiff
CF14 5GH
T. 029 2068 0900
cardiff@curtins.com

Douglas

Varley House
29-31 Duke Street
Douglas
Isle of Man
IM1 2AZ
T. 01624 624 585
douglas@curtins.com

Dublin

11 Pembroke Lane
Dublin 2
D02 CX82
Ireland
T. +353 1 507 9447
dublin@curtins.com

Edinburgh

1a Belford Road
Edinburgh
EH4 3BL
T. 0131 225 2175
edinburgh@curtins.com

Glasgow

Queens House
29 St Vincent Place
Glasgow
G1 2DT
T. 0141 319 8777
glasgow@curtins.com

Kendal

Units 24 & 25 Riverside Place
K Village
Lound Road
Kendal
LA9 7FH
T. 01539 724 823
kendal@curtins.com

Leeds

Ground Floor
Rose Wharf
78-80 East Street
Leeds
LS9 8EE
T. 0113 274 8509
leeds@curtins.com

Liverpool

51-55 Tithebarn Street
Liverpool
L2 2SB
T. 0151 726 2000
liverpool@curtins.com

London

40 Compton Street
London
EC1V 0BD
T. 020 7324 2240
london@curtins.com

Manchester

Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG
T. 0161 236 2394
manchester@curtins.com

Nottingham

32-34 Stoney Street
Nottingham
NG1 1LL
T. 0115 941 5551
nottingham@curtins.com