

TRANSPORT STATEMENT

Union Living Ltd

UNION TOWER 2, ST JOHN'S, MANCHESTER

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VN201609

Transport Statement

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Dwg VN201609-TR102A	Large Refuse Vehicle Swept Path
Dwg VN91382-G101	Walking Catchment
Dwg VN91382-G103	Cycle Catchment
Dwg VN91382-G102	Bus Services

Appendices

Appendix A	Basement Ground, Mezzanine & 01 Level Plans
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1 INTRODUCTION

Introduction

- 1.1 This Transport Statement has been prepared by Vectos on behalf of Union Living Ltd in support of the development of Union, Tower 2 (T2), St John's. This co-living development is part of the St John's development area located in Manchester City Centre and proposed amendments to the approved scheme are described below. From a Transport Planning point of view the change is not significant but this Transport Statement has been updated to reflect the revised proposals to ensure consistency.

Planning History

- 1.2 Planning consent for a 36-storey tower on the site was granted in 2017 under planning reference 114385/FO/2016, for 305 residential apartments along with retail uses at ground floor. Further planning consent was granted for a revised application for a 36-storey building with one level of basement, to accommodate 372 Co-Living units (806 beds), 2000m² of Co-Work space over three floors, public and private amenity space and ground floor flexible amenity / commercial space (LPA Ref 126648/FO/2020).
- 1.3 The proposed amendments include the following components:
- New extension to form new commercial area at ground floor and mezzanine level, with new entrance to commercial unit;
 - Introduction of a terrace with outdoor seating to the north and west elevation and canopy incorporated to the north of the new commercial extension. The canopy to the south elevation has also been reduced in length;
 - Relocation of post room;
 - Mezzanine level reduced to plant rooms only;
 - Introduction of a roof terrace amenity space for residents at level 1 to the roof of the proposed new commercial extension;
 - Ground Floor to Level 01 floor to floor height reduced by approximately 1.0m;
 - Windows to Level 01 increased in height; and
 - Silver/grey grid - frame to main tower revised at Level 01 on south and west elevation.
- 1.4 The key changes that form a consideration in this report are an extended ground floor commercial unit assumed to be a Food & Beverage (F&B) outlet, reduced amenity at the Mezzanine level and Resident's amenity space on the roof terrace of the ground floor unit.
- 1.5 As previously approved, the site will benefit from 336 cycle parking spaces for the Co-Living residents with 10 spaces allocated for the Co-Working space as well as 12 cycle parking spaces in the public realm and has a Service Area to the north. The development will not provide any car parking for its occupants.

Site Overview

- 1.6 The Site comprises previously developed land. **Figure 1.1** illustrates the location of the Site within the context of Manchester city centre. The red line boundary plan for the application shown in **Dwg 6555-P-B500-P-00-001**.
- 1.7 It lies to the west of Water Street and south of the Manchester & Salford Junction Canal head and to the west of the Manchester Goods Yard (MGY) development site. MGY is being developed as an eleven-storey mixed use building under planning reference 121511/FO/2018, approved in December 2018.

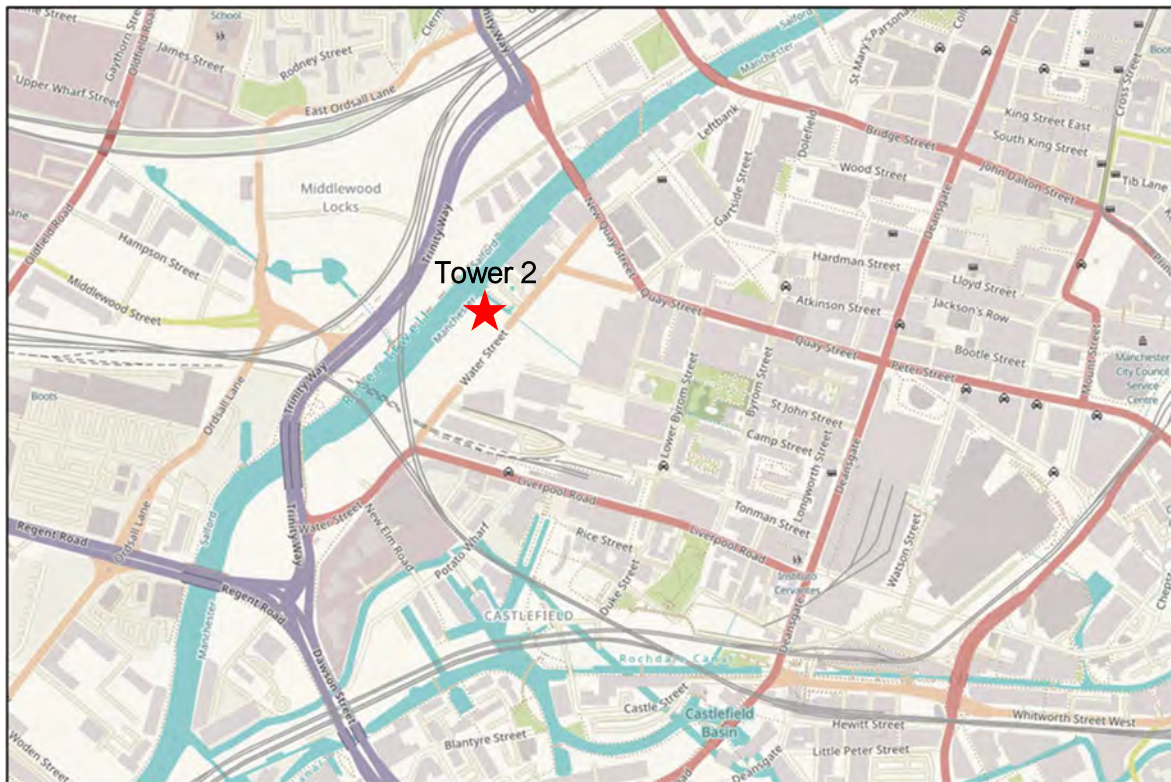
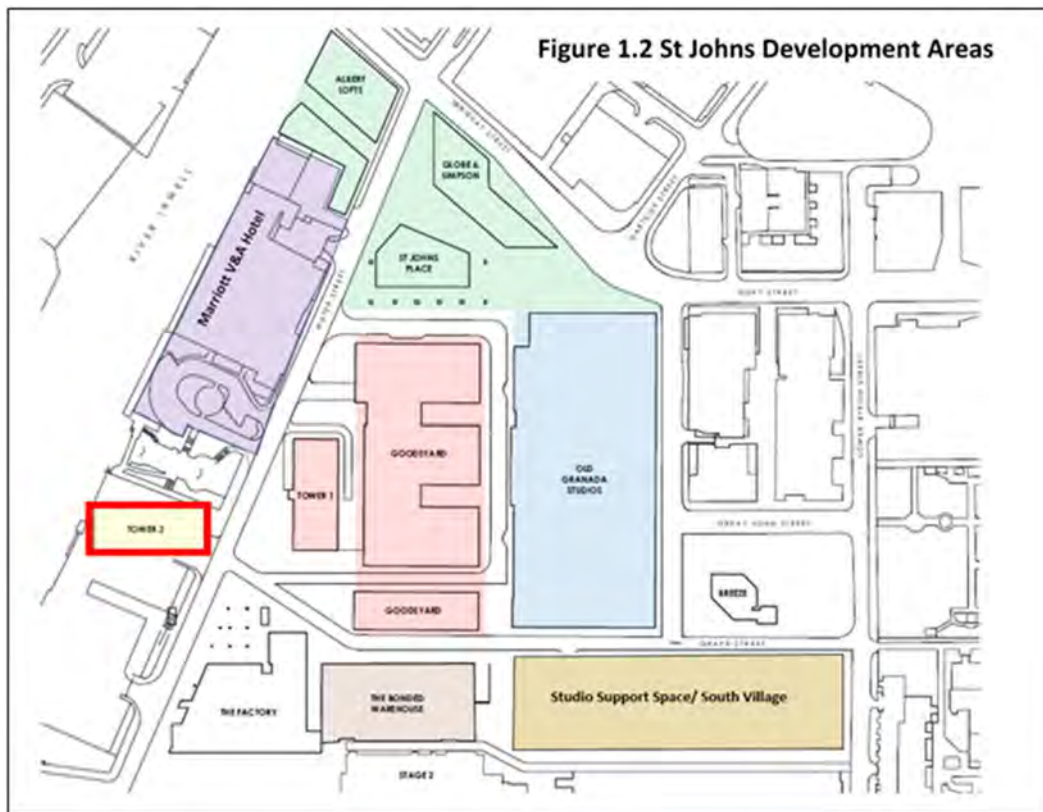


Figure 1.1. Site Location (local context)

1.8 St Johns includes a number of distinct areas are described in **Figure 1.2** and summarised below:



- 1.9 **Bonded Warehouse** has been reconfigured as an 'enterprise hub for small to medium sized businesses. Over six levels the aim is for the lower levels of cafes, shops and restaurants fusing together with the creative studios/event spaces, and co-working spaces above.
- 1.10 **Old Granada Studios (OGS)** incorporates a 200 bed Hotel bars and restaurants in the renovated Granada House Building on Atherton Street, the reused Granada Studios, a New Build offering workspace and unique workspace containers at the entrance to the 'M1 Arcade' for small creative businesses.
- 1.11 **St Johns Place** at the North of the Masterplan incorporates Globe & Simpson, a media/technology office building of 65,000 sq ft of workspace over nine floors, along with Albert Lofts and St Johns Place Tower. These last two buildings are expected to come forward focussed on office/commercial developments rather than previously approved residential/hotel development.
- 1.12 **Manchester Good Yard (MGY)** at the heart of St Johns will provide office space for Booking.com plus ground floor restaurants and retail opportunities. South of MGY is No. 1 Grape Street with planning approval for an office development with ancillary restaurants/retail. MGY will provide parking for between c. 345-354 parking spaces including a link to Globe & Simpson basement parking and potentially in the future to St Johns Place Basement parking.
- 1.13 **South Village** has planning permission for 65 bespoke apartments but with the demand for studio space the former Coronation Street has been reused to support studio activities.
- 1.14 **Breeze Studios** is a currently used as Studio space with no development plans.

- 1.15 **Stage 2** is occupied by the Crystal Maze and there are no development plans at present.
- 1.16 The Site lies adjacent to, or in close proximity to, a number of Listed structures and non-designated heritage assets, including the Grade I Listed Liverpool Road Station and Goods Warehouse, Grade II Listed Colonnaded Railway Viaduct, Grade II Listed Zig Zag Viaduct, Grade II Listed Victoria and Albert Hotel and the Bonded Warehouse.

Report Scope

- 1.17 This report considers the transport and highway implications of the proposed changes to the approved development scheme and brings the previous supporting transport analysis up to date in terms of policy guidance, site accessibility and analysing the most recent road accident data for the surrounding highway network. The report therefore specifically provides information in relation to the following:
- Access and provision for pedestrians and pedal cyclists;
 - Public transport accessibility;
 - Trip Generation by all transport modes;
 - Parking; and
 - Servicing.
- 1.18 This application is also supported by an updated Travel Plan and Waste and Servicing Strategy Report, also prepared by Vectos.
- 1.19 This report demonstrates that the proposed scheme is consistent with the wider St John's Masterplan and the Transport Strategy for the area. Consultations have been held and are ongoing with highways officers from MCC and Transport for Greater Manchester (TfGM).

Report Structure

- 1.20 Following this introductory chapter, this Transport Statement comprises a further seven chapters as follows;
- Chapter Two gives the Policy Context for development;
 - Chapter Three discusses the existing nature of the Site, its access and traffic conditions;
 - Chapter Four outlines the development proposals;
 - Chapter Five presents the accessibility of the Site by sustainable modes of transport;
 - Chapter Six forecasts the travel demands for the development; and
 - Chapter Seven presents a summary and conclusions to this report.

2 POLICY CONTEXT

National Planning Policy Framework

- 2.1 The latest National Planning Policy Framework (NPPF) was published in July 2021 by the Ministry of Housing, Communities and Local Government, replacing the previous versions published in 2012, 2018 and 2019. The NPPF sets out the government's planning policies for England and how these are expected to be applied. At the heart of the Framework is a presumption in favour of sustainable development.
- 2.2 As part of promoting sustainable transport, paragraph 110 of the revised NPPF states that in assessing applications for development, it should be ensured that:
- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.*
 - b) safe and suitable access to the site can be achieved for all users;*
 - c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
 - d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*
- 2.3 Paragraph 111 goes on to state 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'.
- 2.4 Finally, the NPPF notes that all developments that will generate significant amounts of movement should be required to provide a Travel Plan. Accordingly, a framework Travel Plan has been prepared and submitted alongside this TA in support of this application, which will form the basis of a long-term management strategy for the site, delivering sustainable transport objectives.

Manchester Core Strategy (2012)

- 2.5 Manchester's Core Strategy was adopted on 11 July 2012 and is the key document in the Manchester Local Plan. It sets out the long-term strategic policies for Manchester's future development and forms the framework that planning applications will be assessed against. The relevant policies that influence transport are described below.
- Policy T1 Sustainable Transport aims to deliver a sustainable high quality and integrated transport system to encourage a modal shift away from the car.
 - Policy T2 Accessible Areas of Opportunity & Need states that the council will actively manage the pattern of development to ensure that new development is located to ensure good access to the City's main economic drivers and is easily accessible by walking, cycling and public transport.

- Policy T2 also states that ‘Within the City Centre, developments provide a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development.
- Policy DM1 Development Management states that all development should be fully accessible to disabled people and access to new development should be accessible to sustainable transport modes.

- 2.6 These policies are supported by supplementary planning documents which give more detail to policies in the Core Strategy.
- 2.7 Manchester adopted its ‘Guide to Development in Manchester SPD and Planning Guidance’ (April 2007), ‘Providing for Housing Choice SPD and Planning Guidance’ (September 2008). The Guide to Development in Manchester is effectively a hybrid document acting as both a Supplementary Planning Document and planning guidance. The document sets out the City Council’s stance on a wide range of issues. It provides guidance on Urban Design, Accessibility, Environmental Standards, Street Hierarchy and Parking. The development aims to conform to that guidance.
- 2.8 The National and Local Policy context as well as the Development Framework will form the basis of the Transport and Access Strategy for the Site.

Guide to Development in Manchester Supplementary Planning Document (SPD)

- 2.9 This document brings together the development principles that will apply to new developments in Manchester. Paragraph 2.22 of the document states that in order to reduce reliance on the car, residents and workers should be within easy walking distance of facilities such as clinics, corner shops, newsagents and public transport.
- 2.10 The proposed development is well aligned with this goal, being located close to a range of different facilities. The guidance goes on to describe the need for Travel Plans in new developments, stating that a Travel Plan is a package of measures and actions aimed at reducing the need to travel by car by providing alternative choices and encouraging walking, cycling, and public transport use. At the planning stage consideration should be given to the proximity of the development to existing travel facilities and services, site layout, suitable density, cycling, pedestrian facilities and potential for parking restraint.
- 2.11 Such an exercise has been completed for this development and informs part of this report along with the accompanying Travel Plan.

Greater Manchester Transport Strategy 2040

- 2.12 Transport for Greater Manchester (TfGM) has developed a 2040 Transport Strategy that sets out ambitions for a radical new approach to planning Manchester's transport system in support of long-term needs and aspirations.
- 2.13 The vision is for Greater Manchester to have 'World class connections that support long - term, sustainable economic growth and access to opportunity for all. The Transport Vision aims are as follows:
- Supporting Sustainable Economic growth;
 - Protecting Our Environment;
 - Improving Quality of Life for All; and
 - Developing an Innovative City Region.

City Centre Transport Strategy 2021

- 2.14 The City Centre Transport Strategy (CCTS) for Manchester, including Salford Central areas, was adopted March 2021. The central aim is to set an ambitious goal for 90% of all trips to the city centre to be made on foot, by cycle or using public transport by 2040 in the morning peak. For travel within the city centre, there is an aspiration that walking will become an even more important mode of travel.
- 2.15 To achieve this, it will be necessary to consider how to reduce the negative impacts of vehicles, how to make the environment a more pleasant place for pedestrians and cyclists, how to best make use of highly valuable city centre space and ensure the City Centre continues to thrive as the hub for economic growth. To achieve this, based on predicted levels of growth, the plan is for:
- almost a doubling of Rail and Metrolink trips in the morning peak;
 - a 50% increase in bus trips into the city centre in the morning peak;
 - more than doubling the number of people walking and cycling into the city in the morning peak; and
 - a reduction in car trips.
- 2.16 The practical measures in the CCTS that are particularly relevant to the Union Living Tower 2 development are the predominance of public transport or active travel measures to access day to day activities. By creating a development with no parking set in a quality landscaped space with quality cycle parking provision the development conforms to the vision and goals as set out in these aspirations.

3 EXISTING CONDITIONS

Site Context

- 3.1 The Union Tower 2 site has previously operated as a surface car park associated with ITV Granada Studios and is currently used as a construction site compound. An aerial view of the Site as formerly used by ITV is given in **Figure 3.1**.



Figure 3.1: Aerial View of Site While Operating as ITV Car Park (2011)

- 3.2 The Site comprises developed land located entirely within the Castlefield Conservation Area and forms part of a wider Masterplan and Strategic Regeneration Framework for the area, which is known as St. John's. Parts of the St John's masterplan development are being constructed at the time of writing, including the Factory development to the south of the site and the Manchester Goods Yard development to the east of the site. Immediately to the north of the Site lies the Manchester & Salford Junction Canal head and beyond that the Grade II Listed Victoria and Albert Hotel. The River Irwell forms the western boundary of the site.
- 3.3 The Site lies to the south of the Spinningfields commercial district of Manchester City Centre, an exemplar of City Centre economic regeneration and the largest City Centre office scheme in the UK.
- 3.4 Continuing south of the Site is Castlefield, an established residential district, set within the City's legacy industrial infrastructure and buildings, and infused with leisure, retail and heritage attractions.
- 3.5 To the east of the Site is the St. John Street district, a mixed-use district characterised by Georgian buildings used as residences and space for professional businesses including legal, accountancy and medical professions.
- 3.6 Immediately beyond the St. John Street district is the south Deansgate area, which comprises retail facilities, leisure attractions and the City Centre's conference facilities.

- 3.7 There are a number of current mixed-use regeneration initiatives underway on the Salford side of the River Irwell, including Salford Central and Middlewood Locks (both mixed use schemes including office, retail and residential).

Local Highway Network

- 3.8 **Water Street** borders the Site to the east and provides a single lane in each direction, with a footway provided along either side of the road. It is subject to a 20mph speed limit and provides some on-street parking bays with double yellow parking restrictions otherwise in place. It connects New Quay Street to the north (via a signal-controlled junction) with Liverpool Road to the south (via a priority junction).
- 3.9 Various changes are being implemented to highways in the local area as part of the Factory development and the St John's masterplan works, being delivered under a Section 278 agreement. Those works are described later in **Chapter 4**.

Local Highway Improvements

- 3.10 Just to the north of Tower 2, **Water Street** will be narrowed from 7.5m to 6m to provide additional trees and public realm space in front of Tower 1. In this location there are two on-street drop-off bays that are time limited to 20mins (no return within 40 mins). There will be six on-street parking bays provided on Water Street to the north of the Marriott Hotel. These pay and display parking bays are around 100m north of T2 and disabled drivers can also park in these locations for free. Around 220m to the south on Water Street are 10 disabled parking bays.
- 3.11 To the south of T2 the alignment of Water Street passes by Festival Square and Factory, a major new cultural venue for Manchester. When construction finishes at Factory and opens up to audiences, it is proposed that Water Street will be formally closed to through traffic with a Prohibition of Driving Order (PoD) as part of the Factory works. A key aspect is that only vehicles serving Factory will be able head south along Water Street and into Festival Square. Water Street will rise up to a raised table and there will be automatic bollards access controls to manage vehicle movements. This PoD and the associated highway works are to be delivered by others.
- 3.12 That access strategy for Water Street will mean that all servicing vehicles to and from T2 would arrive via the north. With Water Street to be stopped up to through traffic, a turning facility is required. While designed as circle, it will not operate as a standard roundabout as larger vehicles accessing Factory or T2 will carry on the current Water Street alignment and not circulate round. The central island is designed to be run over apart from the area accommodating the tree located there.
- 3.13 Alongside these highway works there is proposed new **footway links** along the **River Irwell** tying in with the new Factory Square and the new river crossing at the Ordsall Chord footway/cycleway bridge and T2 helps facilitate that by providing the link through to the canal head to the north of the site.
- 3.14 The western section of **Quay Street** has been stopped up as part of the public realm works that are being delivered with the St John's regeneration masterplan. It has historically been the point of access into the ITV Granada Studios site. This road closure allows the creation of St Johns Place a new Square and two new commercial buildings.

- 3.15 **New Quay Street** As part of the St Johns improvements works the signals at Quay Street/Gartside Street will be upgraded to improve pedestrian and cycle crossing facilities and provide additional capacity.
- 3.16 On **Atherton Street** there is a minor change to the on-street parking in order to create a drop-off facility for the OGS hotel.

Baseline Traffic Conditions

- 3.17 The traffic operation of Water Street has changed significantly due to the construction works associated with Factory and will continue to do so once Factory is complete. In effect Water Street becomes a cul-de-sac so the only traffic in the southern section are service vehicles accessing Manchester Goods Yard, Factory and T1/T2 as well as Taxis and drop-off activity. It is expected that the busiest periods would be for drop-off and pick-up times associated with an event at Factory noting that there will be parking and no waiting restrictions in place.

Review of Personal Injury Accident Data

- 3.18 The previous assessment of road traffic accidents in the area to support the Factory planning application concluded that there were few accidents in the immediate area which would indicate an accident blackspot. The latest accident data over the last three years has been examined and presented in **Figure 3.4** below.

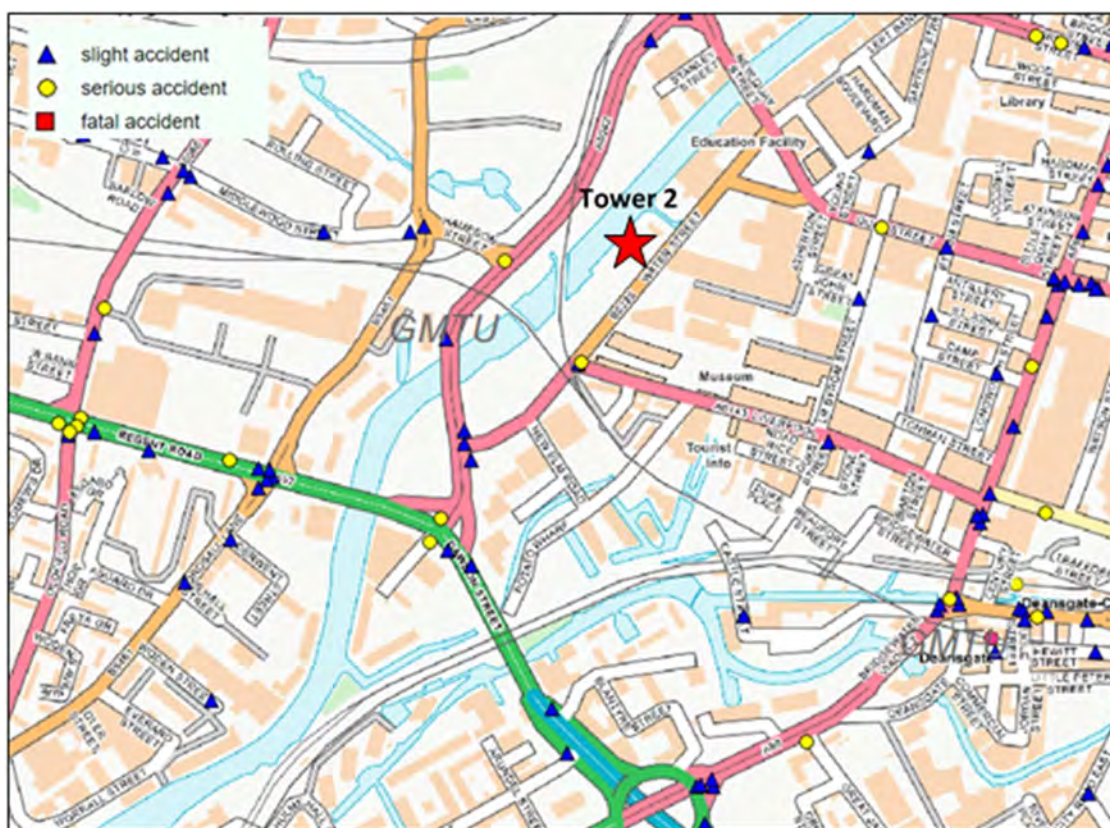


Figure 3.4 Recent 3 Year Traffic Accident Plot (source gmtu.gov.uk)

- 3.19 There has been one slight accident and one serious accident at the junction of Liverpool Road and Water Street and two more slight accidents on Liverpool Road. One serious accident was recorded at the junction of Quay Street with Lower Byrom Street, two further accidents on Quay Street with Byrom Street and one at the junction of Byrom Street and St John Street. Elsewhere there are accidents on the Inner Relief Road notably at junctions but there have been no fatal accidents in the area in this time period. Overall, given the traffic volumes, there is no evidence of underlying highway safety issues or existing accident blackspots in the vicinity of the site.

Car Parking

- 3.20 Should occupants require parking, there are nearly 4,000 spaces of public parking available within a 10-minute walk of the Site and over 5,500 spaces within a 15-minute walk, as detailed in **Table 3.1**:

Table 3.1 Car parking Spaces within a 10 & 15-minute walk of the Site

Car Parking Spaces within a 10 Minute Walk of the Site	
Spinningfields NCP	680
New Bailey, Salford NCP	605
Salford Stanley Street NCP	635
Great Northern 1&2 NCP	1200
Bridge Street NCP	73
Deansgate Euro Car Parks	40
Bridgewater Street	70
Manchester Central NCP	700
Total	3973
Additional Car Parking Spaces within a 15 Minute Walk of the Site	
Chapel Wharf	208
King Street	554
Deansgate (Blackfriars Street)	340
Blackfriars	200
M&S	155
Cleminson Street	70
Wilton Space	140
Stone Street	12
Bridgewater Hall	288
Park Avenue	112
Silvercroft Street	83
Total	6165

4 DEVELOPMENT PROPOSALS

Introduction

- 4.1 Planning consent for a 36-storey tower on the site was granted in 2017 under planning reference 114385/FO/2016, for 305 residential apartments along with retail uses at ground floor. Further planning consent was granted for a revised application for a 36-storey building with one level of basement, to accommodate 372 Co-Living units (806 beds), 2000m² of Co-Work space over three floors, public and private amenity space and ground floor flexible amenity / commercial space (LPA Ref 126648/FO/2020).
- 4.2 The proposed amendments include the following components:
- Western terrace overlooking the River Irwell replaced by new commercial unit 'Green Room', new terrace provided on the northern elevation overlooking the basin. The Riverside walkway is retained and widened compared to the approved scheme;
 - Introduction of a terrace with outdoor seating to the north and west elevation and canopy incorporated to the north of the new commercial extension. The canopy to the south elevation has also been reduced in length;
 - Relocation of post room;
 - Mezzanine level reduced to plant rooms only;
 - Introduction of a resident's amenity roof terrace at level 1 to the roof of the proposed new commercial extension;
 - Ground Floor to Level 01 floor to floor height reduced by approximately 1.0m;
 - Windows to Level 01 increased in height; and
 - Silver/grey grid - frame to main tower revised at Level 01 on south and west elevation.
- 4.3 The site will benefit from 336 cycle parking spaces for the Co-Living residents and Co-Workers as well as 12 cycle parking spaces in the public realm and has a Service Area to the north. The development will not provide any parking for its occupants.
- 4.4 The scheme will provide 3 and 4 bed shared apartments (Trios and Duos) which are aimed at long-term residential occupation with minimum 6 months tenancies. These are considered most likely to form a primary residence and will only be available on tenancies from 6-months upwards in length. They will be attractive to new city residents who want to build a friendship and professional network so prefer co-living; to larger groups of friends who want to move in as a collective; and city corporates who want to house graduate scheme staff in the same location.
- 4.5 The Studios and 1 bed apartments are expected to attract more short-term demand and will be available on short term lets up to a maximum stay of 6-months. These will be targeted at businesses and institutions looking to house employees and contractors who may only be in Manchester for a short period of time and want a more social experience than a hotel or aparthotel; project workers on fixed-term contracts (particularly characteristic of the creative industries), travelling lecturers and academics, and city workers who want private space but want to be part of the wider Union community.

- 4.6 The Co-Work space offering of 2000m² will be available for residents and the wider business community that will provide flexible business facilities to accommodate informal hot-desking to more formal board meetings including welcome reception, the option of a registered address with mail service, super-fast connectivity, a coffee shop, toilets, printing services, inclusive cleaning and maintenance.
- 4.7 The proposed layouts for the Basement Ground and Mezzanine levels are given in **Appendix A**.
- 4.8 The change in floor areas is relatively limited in floor area once the Mezzanine area reduction is accounted for. The proposed floor area compared to the approved layout is given below:

APPROVED SCHEME	LOBBY/RECEPTION	FLEXIBLE AMENITY /COMMERCIAL	COMMERCIAL F&B	AMENITY	ROOF TERRACE
GROUND	166sqm	341sqm			
MEZZANINE		274sqm			
LEVEL 01				654sqm	
TOTAL	166sqm	615sqm		654sqm	

PROPOSED SCHEME	LOBBY/RECEPTION	FLEXIBLE AMENITY /COMMERCIAL	COMMERCIAL F&B	AMENITY	ROOF TERRACE
GROUND	166sqm	84sqm	511sqm		
MEZZANINE					
LEVEL 01				654sqm	230sqm
TOTAL	166sqm	84sqm	511sqm	654sqm	230sqm

- 4.9 It can be seen that internally there is a reduction in the flexible amenity space at Ground Floor level to just 84m² and the removal of the Flexible/Amenity space at the Mezzanine level. The previous application assumed the ground floor Flexible Amenity space was an F&B unit 341m² in size and this amendment increases that by 170m² to 511m².
- 4.10 We have assumed for robustness that the Residents Amenity Roof Terrace space is included in the Flexible Amenity/Commercial which overall increases by 40m² to 968m².
- 4.11 Finally, in forecasting the level of servicing activity we have excluded the Lobby/Reception area from the calculations.
- 4.12 These small changes result in a small change in servicing activity which is described later.

Tower 2 External Layout

- 4.13 Externally there is a change in the public realm around building amended to integrate with the new extended building footprint. The proposed ground floor and external public realm plan for T2 is shown in **Figure 4.1**.



Figure 4.1 Landscaping Proposals

- 4.14 The nature of the changes are as follows:
- Layout of canal basin amended. Existing ramp to canal basin retained, together with additional stepped access.
 - Stepped terrace access to the south replaced with terrace and ramped access from Water Street.
 - Western terrace overlooking river replaced by Green Room, new terrace provided on northern elevation overlooking the basin.
 - The Riverside walkway is retained and widened compared to the approved scheme.
 - Trees reduced to accommodate extended building footprint and provide better circulation around the site in anticipation of future development of T3.
 - Final tree locations are now confirmed after the second wind tunnel assessment.
 - The Vehicular access has been designed to integrate with updated road layout arising from MCC/Allied London proposals for the Factory and Festival Square. Formal approval for layout to be secured by MCC/Allied London.

- 4.15 This layout provides a service area to the north of the building where large vehicles can reverse in and unload or collect waste. It is expected that regular larger vehicles would be timed to stagger their activities and most activity will happen early in the morning. Access into this service area will be controlled by automatic bollards to prevent fly parking with CCTV and a comms unit and regular vehicles benefitting from Automatic Number Plate Recognition.
- 4.16 There is scope for smaller couriers/vans to reverse into the area before the bollards and service from there. The service area will be shared with pedestrians and cyclists so any vehicles reversing will need to be mindful of this. There is scope for access by regular large service vehicles to be timed so that vehicle arrivals are staggered.
- 4.17 The tracking of a large refuse vehicle (11.5m) reversing into this service area is shown in **Dwg VN201609-TR102A**. It can be seen that the vehicle runs over the central island of the turning circle.

Cycle Strategy

- 4.18 Cycle parking demand generated by the proposed development is expected to be lower than a typical residential development due to the shorter term of tenancies. Notwithstanding this, the proposed development will provide 336 secure cycle parking spaces for use by occupants plus 12 spaces located in the public realm for visitors. The cycle parking spaces will be located within the basement of the building and will comprise of a two-tier rack system to maximise the provision within the available space.
- 4.19 10 Cycle Spaces will be allocated for Co-Work occupiers. The level provided for Co-Workers is compliant with council cycle parking standards. The residential demand for cycle use is influenced by short term occupancies but is given at a high level aimed to encourage cycle use.
- 4.20 The allocation of cycle parking spaces will be kept under review via the Travel Plan as there will be overlap between the Residential and Co-Work occupiers.
- 4.21 Occupants can simply go to their apartment to access shower and changing facilities, therefore no separate changing / shower provision is required for residents. Shower and changing facilities will be provided for the occupiers of the Co-Work Space.
- 4.22 The 12 proposed cycle parking spaces in the public realm will be convenient for visitors. The cycle stands in the public realm are proposed to be of the Sheffield Stand type with a tapping rail. The location of the external cycle parking spaces in the public realm will respond to the amended landscaping plan and it is proposed that this is conditioned once the optimum location is identified.
- 4.23 The wider St Johns development offers additional cycle parking across the estate.

- 4.24 T2 will benefit from the cycle infrastructure improvements being delivered as part of the wider St John's regeneration works. These enhancements to the cycling experience will include:
- New 'Quiet Street' cycle markings on the Water Street carriageway to encourage cyclists to travel within the carriageway space;
 - Improved cycle facilities at the New Quay Street / Gartside Street junction;
 - A new Pedestrian/Cycle crossing of the River Irwell delivered as part of the Ordsall Chord to the south; and
 - Increased permeability of the area for cyclists, through new public squares and traffic calmed streets.

Improvements to the Pedestrian Environment and External Areas

- 4.25 The St John's Masterplan will deliver a quality pedestrian environment. Priority will be given to pedestrians through the provision of shared streets. There will be pedestrian alleyways and courtyards which will provide access without restricting movement. A permeable street pattern will aid pedestrian movement and promote meandering. There will be pedestrian linkages to connect to the wider area and also the waterfront areas. The overall landscaping plan for St Johns is shown below in.
- 4.26 In the vicinity of the Site, there will be significant enhancements to pedestrian accessibility including:
- Riverside Walkway and Access to the Canal Basin;
 - New public squares, Festival Square & Factory Square to the south of the Site; and
 - Landscaping and street lighting to create safe and pleasant pedestrian spaces.
- 4.27 Within the wider St John's area, improvements to the pedestrian environment will include increased permeability of the area through new traffic-calmed routes and public spaces and crossing facilities at the New Quay Street / Gartside Street junction.
- 4.28 The external areas are also subject to this application, and these have been designed in coordination with the wider masterplan. The external layout is shown in the Design and Access Statement and would be of a high quality considering the needs of all users including those that are visually or mobility impaired.

Car Parking

- 4.29 No car parking will be provided within the Site. As described in the following section, the site is located in a highly accessible location for rail, tram, bus, cycling and walking.
- 4.30 It is considered that young professionals choosing to live in the city centre will not expect to have a car parking space and will therefore choose to live in this location with the expectation of using sustainable modes of travel rather than a private car. Providing a zero-car development for these tenure types is therefore considered appropriate for this location.

- 4.31 This car-free strategy accords with Policy T2 of the Manchester City Council Core Strategy, which states that new development within the city centre, should provide *‘a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development.’*
- 4.32 If needed, we have shown in Section 3 that considerable public parking is available within a short walk of the Site offering the chance for occupants to lease from NCP or other providers a long-term parking space. If short term access to a car is required, then there a number of Enterprise Car Club cars are also located within an easy walk of the Site.

5 SUSTAINABLE ACCESS FOR THE WIDER AREA

Introduction

- 5.1 The accessibility of the proposed development by sustainable modes is considered in detail within this section.

Accessibility by Walking

- 5.2 The St John's site is very well located for access to all the amenities of the Regional Centre on foot. Industry guidance suggests a maximum walking distance for commuting trips at 2 kilometres (about a 25-minute walk) while an 800-metre walking distance is given as the preferred maximum distance for shopping trips. A 2km walk covers all of the city centre and many nearby residential areas of Salford and Trafford such as Ordsall and Castlefield while within 800m lies the retail areas of The Avenue, King Street and St Anne's Square.
- 5.3 Given the city centre location, pedestrian accessibility to the surrounding area is very good. Existing pedestrian links are present around the site which lead to the primary routes towards the centre of Manchester along Liverpool Road and Quay Street. All footways in the surrounding area are lit and there are appropriate crossing facilities across all the main highways.
- 5.4 Many local facilities are situated within the immediate vicinity of the Site, including a Sainsbury's and Tesco Local store, banking facilities and a wide range of retail, cafes and restaurants allowing occupiers and visitors to access a wide range of services and amenities without the need to travel elsewhere. The range of amenities located within a 10-minute walk of the site is given in **Dwg VN91382-G101**. Within a 20-minute walk, practically all of the city centre can be reached.
- 5.5 Water Street will be traffic-calmed with raised pedestrian crossing tables and road narrowing under the Factory where there is a dropped kerbed crossing. Pedestrians travelling north can cross Quay Street at the existing crossing facility and head north along Left Bank where a recently built footbridge offers a link across the River Irwell to Salford Central (see **Figure 5.1**). This footbridge provides a direct and accessible link from the site to the major transport hub of Salford Central which will be described in more detail later.



Figure 5.1 Irwell Pedestrian Footbridge

- 5.6 To the south, a replacement footbridge for Princes Bridge has been constructed and will connect St John's with Salford including the Middlewood Locks development and the Regent Road Retail Park.
- 5.7 Access to the River Irwell will be opened up with a riverside walkway and an aspiration to connect Spinningfields all the way south to the Trinity Islands development by Regent Road. T2 provides a key link in that route by providing the link through to the canal head to the north of the site.
- 5.8 The area will benefit from quality signage to direct pedestrians on the most appropriate route.
- 5.9 High quality public realm will be provided for pedestrians around the Site. In St Johns, there will be a core network of traffic free streets, alleys and courtyards both at ground floor and at higher levels offering quality permeability through the public realm space throughout the St John's masterplan area. This includes a new square, St John's Place to the north, Factory Square and Festival Square to the south offering high quality spaces to enjoy. On Water Street to the west there is a new raised pedestrian crossing table to help pedestrians cross Water Street.

Accessibility by Cycle

- 5.10 Cycling has the potential to replace short car journeys, particularly those under 5 kilometres. At a leisurely cycle speed of 10 miles per hour this would equate to a journey of around 25 minutes covering the whole of the City Centre and much of the surrounding conurbation. The extent of the 25-minute cycle isochrone is shown in **Dwg VN91382-G103**.
- 5.11 There are a number of designated cycle routes and facilities in the area as well as a network of quiet streets which are convenient for cyclists, and these are shown in **Figure 5.2**.

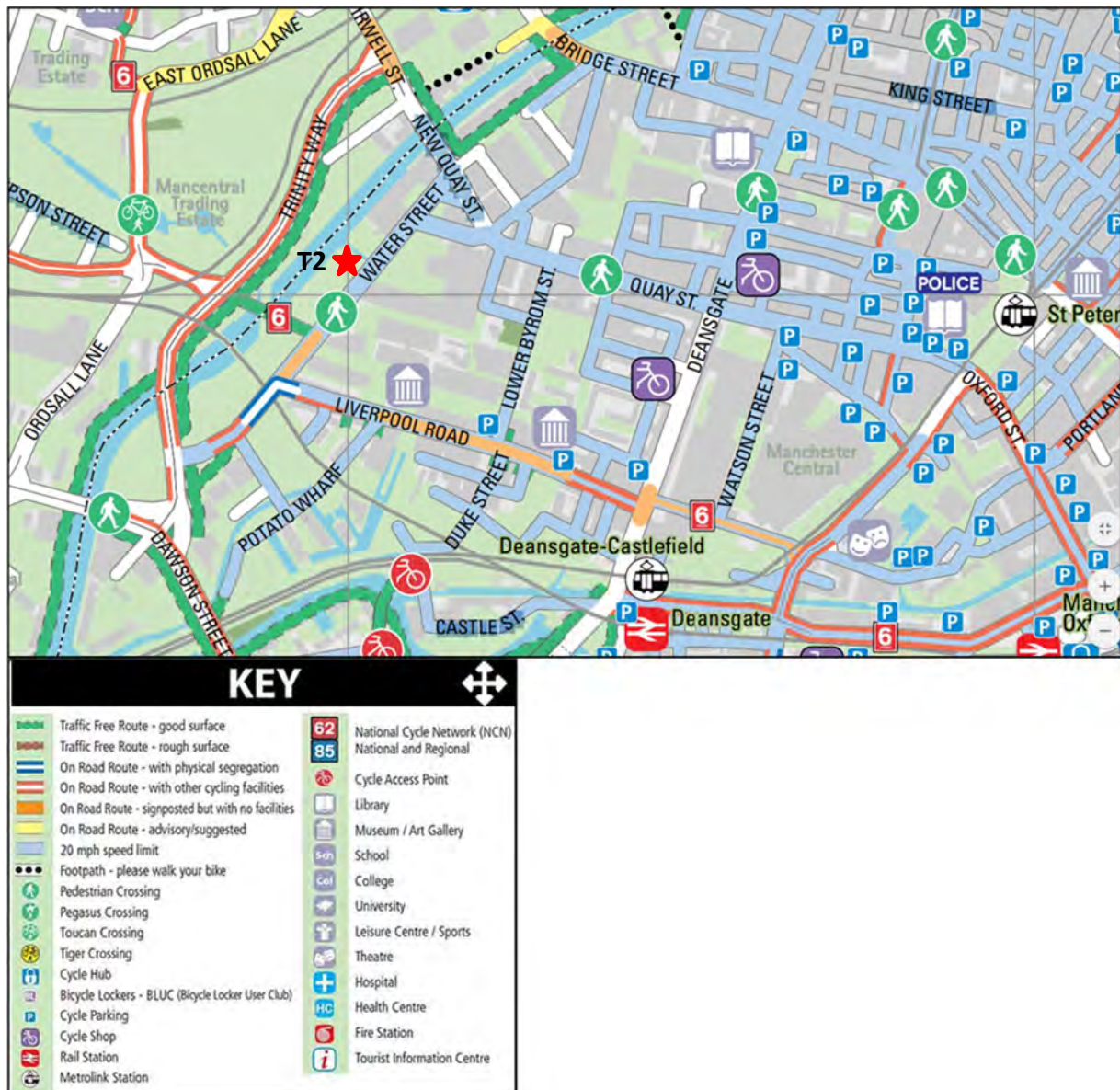


Figure 5.2: Local Cycle Infrastructure

- 5.12 It can be seen from **Figure 5.2** that the Site is well located in relation to existing cycle routes and facilities. The 20mph speed limit in place along surrounding roads in the city centre help to create a more cycle-friendly environment, and National Cycle Network Route 6 passes close to the Site along Liverpool Road, which provides an on-road cycle route.
- 5.13 Part of Water Street is also designated as an on-road route, and this will be extended past the Site as part of the St John's redevelopment works, as described in the previous chapter. There is also a traffic-free cycle route with a good surface running broadly parallel to the River Irwell, which will provide a convenient route for occupants and visitors to the proposed development.
- 5.14 Salford Central, Piccadilly and Victoria Rail Stations are located within a short cycle from the Site which makes it possible for multi modal journeys by bicycle and train.

Bee Network Proposals

- 5.15 The aspirations for improvements to pedestrian and cycle connections that form part of the Bee Network have also been reviewed, referencing TfGM's Bee Network interactive network map. The Bee Network is a proposal for Greater Manchester to have the UK's largest joined up network for walking and cycling. It is a decade-long plan to connect every neighbourhood in the city region starting with 1,000 miles of walking and cycling network planned as well as 1,400 new crossing points proposed. The network will consist of signed routes 'beeways' that mark the most direct and pleasant way to navigate a neighbourhood on foot or by bike and the initiative is being supported by the Greater Manchester Local Authorities and TfGM.
- 5.16 There are proposals to create a network of Beeways linking the site with the rest of the City Centre as shown in **Figure 5.3**. It is expected that these will tackle issues of severance for cyclists in particular.

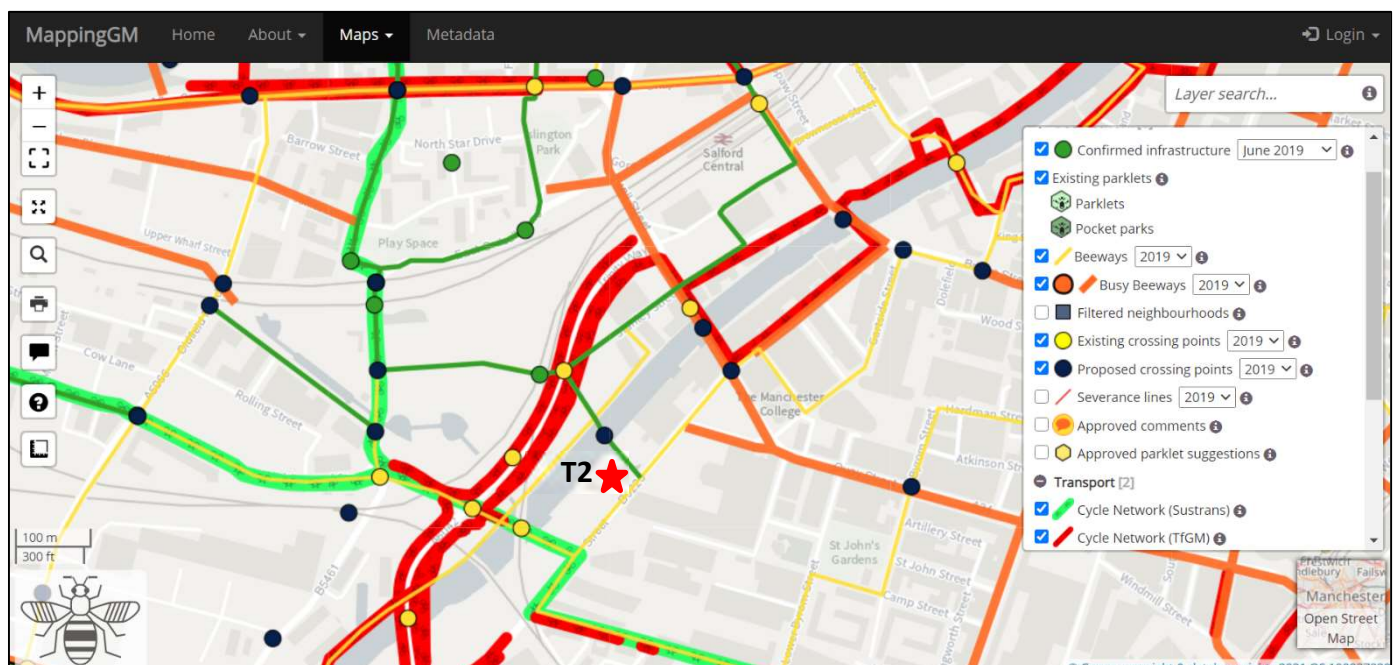


Figure 5.3. Bee Network Proposals

- 5.17 It can be seen from **Figure 5.3** that there are proposals for a new footway/cycleway bridge linking Middlewood Locks and St Johns just north of the site. The bridge has secured funding from the Greater Manchester Combined Authority's Cycling & Walking Challenge Fund. This money will allow the design to be developed further before a planning application is submitted.

Enterprise Car Club

- 5.18 Enterprise Car Club operates all over Manchester and offers a low-cost alternative to owning a car. There are two Enterprise Car Club cars located on Duke Street, just a five-minute walk from the Site, and two at St Mary's Parsonage, around 8 minutes' walk from the Site. There are numerous other Enterprise Car Club locations conveniently located within the city centre. Users have a variety of charging options depending on the nature of use with hourly rates from £4.60 plus a mileage charge.

Accessibility by Public Transport

- 5.19 Access by public transport represents a key mode choice to the Site. The Travel Plan will help make that travel choice easier and cheaper through a number of initiatives. These are explained in TfGM's Travel Choices website and include extra discounts on season tickets, 'Get Me There' smart cards, Journey Planning Apps and use of the Personalised Travel Planning service.

Free Bus

- 5.20 The Freebus services cover most of the city centre and provide convenient access to major activity centres in the city. Its bus services cover most of the city centre and provide convenient access to major activity centres in the City. The buses are highly branded and are instantly recognisable and run on a 10 or 12 minute frequency. High quality stops are provided along the service routes with clear branded images on bus stop plates. While services are currently affected by lockdown it is assumed that they will in the future return to pre-Covid operations.
- 5.21 All Freebus services connect to the main transport interchanges and the routes are shown overleaf in **Figure 5.4**. It can be seen that Route 1 gets close to Tower 2, stopping on Gartside Street with a loop in the peak hours to serve Salford Central and at weekends it travels along Lower Byrom Street with a stop on Liverpool Road for the Museum of Science and Industry.

Figure 5.4: Free Bus Route Map

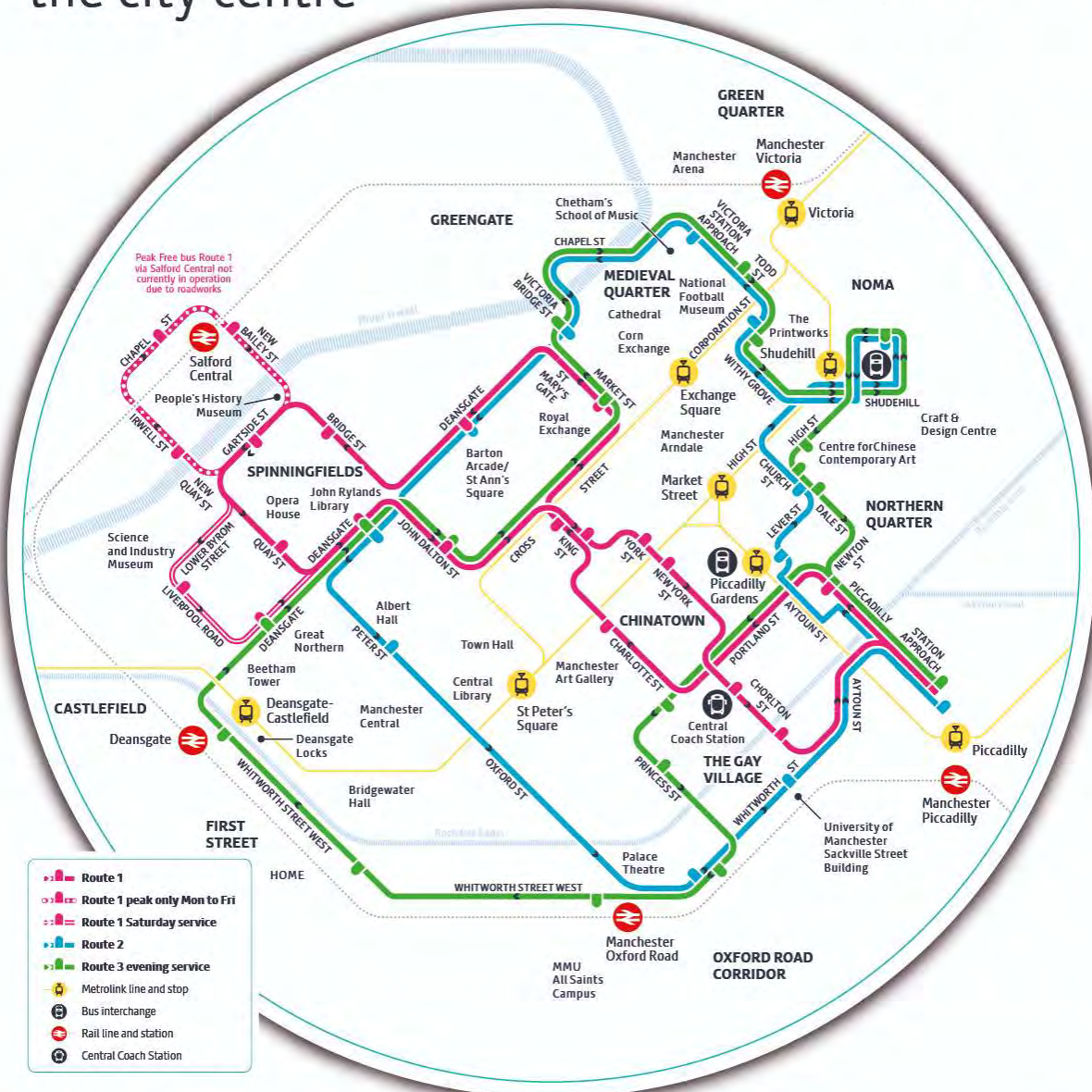
free bus routes around the city centre



Salford City Council



MAYOR OF GREATER MANCHESTER



1

Monday – Friday
Every 10 minutes:
7am – 7:15pm
Peak route only:
7am – 9am and 4pm – 7:15pm
Saturday
Every 10 minutes:
8:20am – 7:15pm
Sunday and public holidays
Every 12 minutes:
11am – 6pm

2

Monday – Friday
Every 10 minutes:
6:30am – 7:10pm
Every 20 minutes:
7:10pm – 11:30pm
Saturday
Every 10 minutes:
8:30am – 7:30pm
Every 15 minutes:
7:30pm – 11:30pm
Sunday and public holidays
Every 12 minutes:
9:54am – 6:44pm

3

Monday – Friday
Every 20 minutes:
7:25pm – 11:25pm
Saturday
Every 15 minutes:
7:28pm – 11:30pm

Scheduled Bus Services

- 5.22 Other significant bus services are available within a short walk of the Site. On Liverpool Road there are two bus services the 33 and 63 that serve Salford, Eccles and Brookhouse/Worsley every 15-20 minutes with evening services finishing at 23:08. There are a considerable number of bus services within 400m of the Site on Bridge Street running past every few minutes including the new Leigh Guided Busway part of the Cross City Bus package that connects Leigh, Salford and passing through the city centre along Oxford Road to terminate at Manchester Central Hospital. There are more services on Deansgate and more still just beyond a 400m walk from the Site.
- 5.23 The routes of all those bus services within 400m are shown in **Dwg VN201609-G102**.
- 5.24 It can therefore be concluded that the existing bus services operating in the vicinity of the Site provide the opportunity for many trips between the Site and the surrounding area to be made by bus. The development is therefore considered to be accessible by this mode of travel.

Accessibility by Rail

- 5.25 The Site is conveniently located for access to a number of rail stations. Salford Central Station is the closest, located immediately to the northwest of the development, just a 5-minute walk away. As described previously, Salford Central station is now much more accessible on foot via the new footbridge across the River Irwell from Spinningfields. Services from Salford connect to local and regional destinations including Leeds, Rochdale, Wigan, Stalybridge, Blackburn and Manchester Victoria.
- 5.26 Deansgate Railway Station is located to the south, a 7-8 minute walk away and its last service is at 23:31 to Liverpool calling at all stops including Urmston, Irlam, Warrington and Widnes. Manchester Piccadilly Station is accessible by a longer walk but is readily accessible by Fee Bus and access to further regional and national services is provided from this station. The comprehensive network by Rail for the Manchester Conurbation is given in **Figure 5.5** overleaf.

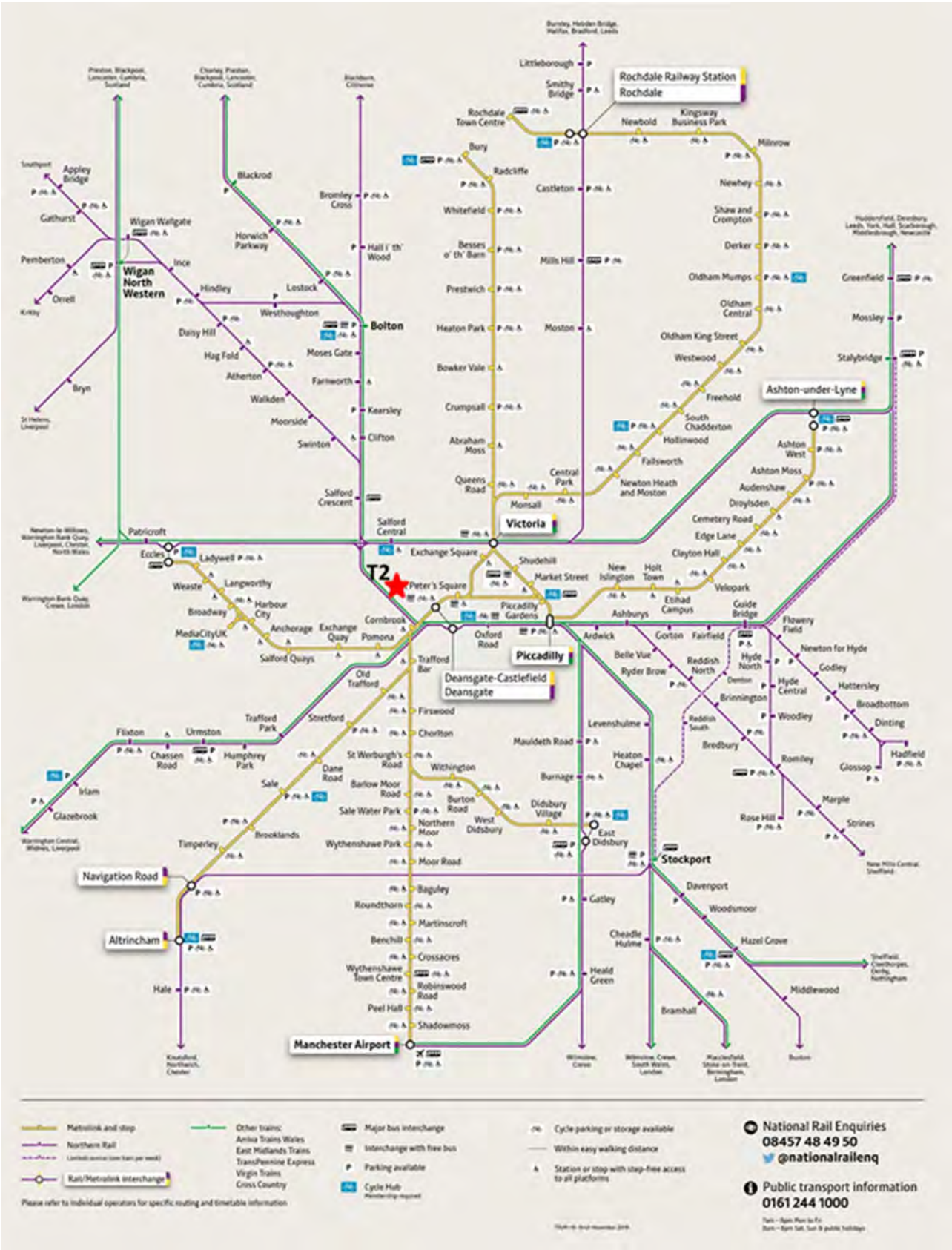


Figure 5.5 Rail & Metrolink Network Map

Accessibility by Metrolink

- 5.27 The existing Metrolink services currently cover a broad area of Manchester and its outlying residential districts. A plan showing the destinations and Metrolink stops are also shown in **Figure 5.5**. Deansgate Castlefield is the closest Metrolink stop for access to the Site, and this stop has been upgraded to allow for the Second City Crossing and is around an 880m walk from the site.
- 5.28 Circa. fifteen trams in each direction stop at Deansgate-Castlefield and also at St Peter's Square (1000m away) and in the peak hour, including the following services:
- Bury (via Manchester Victoria);
 - Oldham & Rochdale (via Manchester Victoria);
 - Ashton-Under-Lyne (via Manchester Piccadilly);
 - East Didsbury;
 - Manchester Airport (with a change at Cornbrook);
 - Altrincham;
 - Eccles and Media City.
- 5.29 The Metrolink will offer excellent public transport connectivity for occupants and visitors to the Site.

Summary

- 5.30 The Site occupies a highly sustainable location, accessible by a range of sustainable travel modes, and well-placed to facilitate access on foot to a wide variety of everyday facilities, amenities, employment locations, leisure destinations and transport hubs.

6 DEVELOPMENT TRIP FORECASTS

Union Tower 2, St John's Trip Forecasts

- 6.1 Given the absence of car parking spaces for occupiers of Union Tower 2 and the highly sustainable city centre location, the scheme is unlikely to generate a significant number of vehicle trips to the Site except for waste and servicing trips and pick up / drop off activity e.g. taxi trips.
- 6.2 To forecast the trip movements expected to arise from the development, TRICS multi-modal trip rates have been utilised. As there are no co-living schemes in the TRICS database, private apartment trip rates have been assessed as a proxy. The trip rates have been derived from a sample of sites within the database that were derived using the following search criteria:
- Land use: Residential, Flats Privately Owned
 - Regions: UK excluding London
 - Location: Town Centre and Edge of Town Centre
 - Weekday surveys only
- 6.3 The resulting total person trip rates and trip forecasts are presented in **Table 6.1**, with the full TRICS outputs provided at **Appendix B**.

Table 6.1 Total Person Peak Hour Trip Forecasts

Mode	Peak Hour	Proposed Apartments Total Person Trips					
		Trip Rates			Trip Generation (372 units)		
		Arr	Dep	2-Way	Arr	Dep	2-Way
Total People	AM	0.100	0.526	0.626	37	196	233
	PM	0.489	0.220	0.709	182	82	264

- 6.4 Established city centre mode share data from the 2011 Census has then been considered in the assessment of the potential number of trips generated by the development for each travel mode, although as these generic modal share figures do not reflect the car-free nature of the scheme, an adjustment has been applied to account for the much lower share of car trips at the proposed development.

- 6.5 The modal share values from the 2011 Census are presented in Table 6.2, along with the adjusted figures for the Site.

Table 6.2 Modal Share Forecasts

Mode	City Centre Share	Union Tower 2 Modal Share	Union Tower 2 Trips
Pedestrian	49%	52%	1116
Tram	4%	7%	150
Train	11%	14%	301
Bus	12%	15%	322
Car (Driver)	19%	1%	21
Car (Passenger)	1%	4%	86
Cycle	3%	6%	129
Other	1%	1%	21

- 6.6 It can be seen from **Table 6.2** that the great majority of trips by people at the development are forecast to be undertaken via sustainable travel modes, with just 5% of people travelling either as a driver in a car (and parking off site) or a passenger e.g. taxi.
- 6.7 In practice, any vehicle trips would be expected to comprise servicing trips utilising the service road to the rear, and taxi / drop off and pick up trips. There may also be an element of car club trips generated by the occupants.
- 6.8 The proposed extended Commercial Unit or the flexible amenity /commercial floorspace on the ground or first floor levels floor of the development will be ancillary to the co-living scheme, and a number of potential uses could occupy the space. It is considered that many trips to the commercial unit will be generated by people from St Johns or Factory or pedestrians that walk over from nearby city centre districts or by taxi reflecting that the development is car-free and would be predominantly trips by sustainable travel modes.

Service Vehicle Forecasts

- 6.9 The estimated waste and servicing vehicle trips generated by Union T2 have been based upon information from the TRICS database and are consistent with the trips rates used for the wider St Johns masterplan which is described more fully in the Transport Statement. In this we have taken a robust assumption that the flexible commercial and amenity space will generate service trips but not the reception lobby or the roof terrace.
- 6.10 The forecasts are split between light goods vehicles (LGVs), primarily vans and other heavier goods vehicles (OGVs) that are in excess of 7.5tonnes. Many deliveries are coordinated with deliveries to other premises and the post/courier and waste operations can serve all the individual land uses within a building as well as making multiple drops as vehicles move from one building to the next. For this reason, the number of deliveries overall has been reduced by one third to avoid double counting of delivery activity based on rates of multiple drops from a study of activity of commercial premises along Regent Road, London.
- 6.11 A summary of the servicing trips is described in **Table 6.3** below:

Table 6.3. Servicing Trip Forecasts – Union Tower 2, St John's

	Tower 2 Light Vehicles		Tower 2 Heavy Goods Vehicles	
	ARR	DEP	ARR	DEP
Time Range				
00:00-01:00	0.0	0.0	0.0	0.0
01:00-02:00	0.0	0.0	0.0	0.0
02:00-03:00	0.0	0.0	0.0	0.0
03:00-04:00	0.0	0.0	0.0	0.0
04:00-05:00	0.0	0.0	0.0	0.0
05:00-06:00	0.0	0.0	0.0	0.0
06:00-07:00	0.0	0.0	0.0	0.0
07:00-08:00	0.2	1.5	0.2	0.2
08:00-09:00	1.2	0.2	0.2	0.0
09:00-10:00	1.0	1.5	1.0	1.0
10:00-11:00	2.7	2.5	0.9	1.2
11:00-12:00	2.2	2.7	0.1	0.1
12:00-13:00	4.4	2.5	1.1	0.9
13:00-14:00	4.2	4.2	0.4	0.9
14:00-15:00	3.0	3.7	0.7	0.2
15:00-16:00	1.8	1.9	0.2	0.2
16:00-17:00	2.7	3.3	0.3	0.5
17:00-18:00	1.7	0.9	0.2	0.2
18:00-19:00	1.0	1.4	0.1	0.0
19:00-20:00	0.3	0.3	0.0	0.0
20:00-21:00	0.4	0.1	0.0	0.0
21:00-22:00	0.0	0.0	0.0	0.0
22:00-23:00	0.0	0.0	0.0	0.0
23:00-24:00	0.0	0.0	0.0	0.0
Daily Trip Rates:	26.9	26.7	5.7	5.6

- 6.12 It can be seen that we forecast just under 6 HGVs a day and just under 27 light goods vehicles. The activity occurs throughout the daytime hours with the busiest hour around lunchtime. The deliveries for residents are the largest proportion of servicing activity and this influences the timing of deliveries towards the middle part of the day.
- 6.13 Compared to the approved proposals this amendment results in two extra HGV movements serving the site per day but there is a reduction of around 4 LGVs accessing the site per day. This difference is due to the change in the assumed allocation of land use between Flexible Commercial Space, an F&B occupier and Amenity space.
- 6.14 These deliveries in the context of deliveries to the wider St Johns area is described in **Figure 6.1** for the Daily Flows.
- 6.15 These trips are negligible in relation to the vehicle flows on the wider highway network and do not require specific assessment of the traffic implications of T2. As such, no further highway capacity assessments are necessary for this development.

7 SUMMARY AND CONCLUSION

Summary

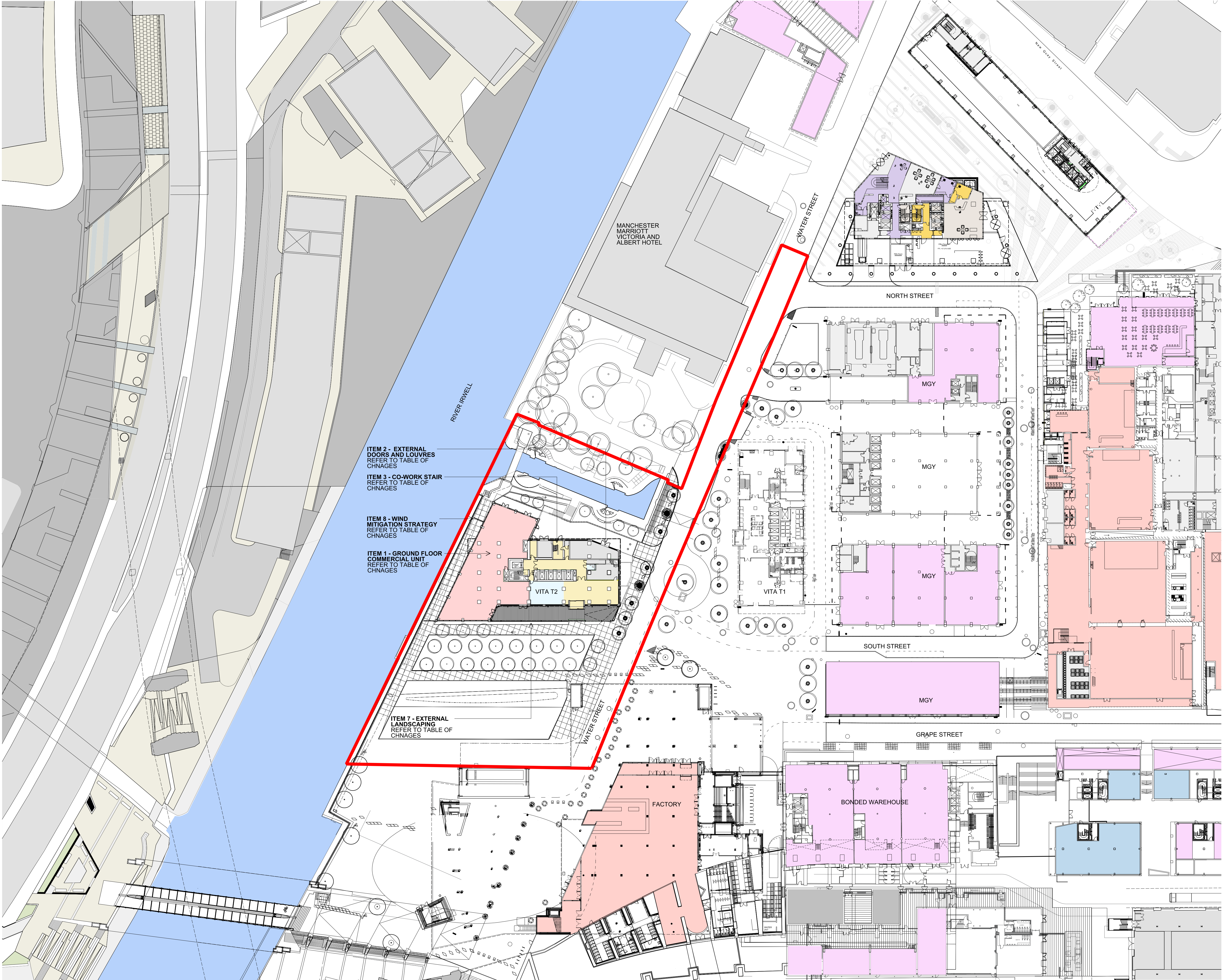
- 7.1 This Transport Statement has been prepared by Vectos in support of an amendment to a consented planning approval at the Union Tower 2 (T2) development, to provide an extended ground floor commercial unit alongside improvements to the public realm alongside other minor amendments. The extended ground floor unit is assumed to be occupied by a Food and Beverage unit.
- 7.2 Planning consent was granted for a 36-storey building with one level of basement, to accommodate 372 Co-Living units (806 beds), 2000m² of Co-Work space over three floors, public and private amenity space and ground floor flexible amenity / commercial space (LPA Ref 126648/FO/2020).
- 7.3 The proposed amendments to that scheme include the following components:
- New extension to form new commercial area at ground floor and mezzanine level, with new entrance to commercial unit;
 - Introduction of a terrace with outdoor seating to the north and west elevation and canopy incorporated to the north of the new commercial extension. The canopy to the south elevation has also been reduced in length;
 - Relocation of post room;
 - Mezzanine level reduced to plant rooms only;
 - Introduction of a resident's amenity roof terrace at level 1 to the roof of the proposed new commercial extension;
 - Ground Floor to Level 01 floor to floor height reduced by approximately 1.0m;
 - Windows to Level 01 increased in height; and
 - Silver/grey grid - frame to main tower revised at Level 01 on south and west elevation.
- 7.4 The changes result in a small change in the areas of the Flexible Commercial/Amenity Space. Previously we had assumed an F&B unit on the ground floor, and this will increase by around 170m².
- 7.5 The Flexible Amenity space at Ground Floor level reduces to 84m² and the Flexible/Amenity space at the Mezzanine level is removed. The Residents Amenity space on the Roof Terrace is an additional 230m² space available.
- 7.6 These changes have a marginal effect on servicing activity with slightly fewer Light Goods Vehicles and a couple of extra Heavy Goods Vehicles per day.
- 7.7 As previously approved, the site will benefit from 336 cycle parking spaces for the Co-Living residents with 10 spaces allocated for the Co-Working space as well as 12 cycle parking spaces in the public realm and has a Service Area to the north. The development will not provide any car parking for its occupants given its excellent location for access by modes other than the car and the availability of parking nearby.

- 7.8 The Union Tower 2 living concept will provide a mix of apartment types with Studios and 1 bed apartments which are expected to attract more short-term demand and will be available on short term lets up to a maximum stay of 6-months. These will be targeted at businesses and institutions looking to house employees and contractors who may only be in Manchester for a short period of time and want a more social experience as part of the wider Union community. T2 will also provide 3 and 4 bed shared apartments (Trios and Duos) which are aimed at long-term residential occupation with minimum 6 months tenancies.
- 7.9 The Co-Work space offering will be available for residents and the wider business community, and this will provide flexible business facilities to accommodate informal hot-desking to more formal board meetings with quality office services, a coffee shop, toilets as well as inclusive cleaning and maintenance.
- 7.10 The development will provide 326 cycle parking spaces for Co-Living occupiers and 10 cycle parking spaces for the Co-Work occupiers and 12 cycle parking spaces located in the public realm.
- 7.11 The baseline transport conditions in the vicinity of the Site have been reviewed including an updated assessment of the road safety record. This has concluded that there are no highway safety issues in the vicinity of the site that would need to be addressed as part of this scheme.
- 7.12 The site is located in a highly accessible location within the city centre and is well-placed to facilitate access on foot/bicycle to a wide variety of everyday facilities, amenities, employment locations, leisure destinations and public transport hubs including Salford Central and Deansgate Castlefield.
- 7.13 Given the absence of car parking spaces within the proposed development, and the highly sustainable city centre location, the scheme is not forecast to generate many vehicle trips except for waste and servicing trips and pick up / drop off activity e.g. taxi trips.
- 7.14 A trip forecasting exercise has been undertaken, and as there is no parking on site, the great majority of trips by people at the development are forecast to be undertaken via sustainable travel modes. The changes in servicing trips are minor with an increase of 2 HGV movements per day and a reduction of 4 LGV movements per day and are negligible in the context of the vehicle flows on the surrounding streets.

Conclusion

- 7.15 It is considered that the proposed development is consistent with aspirations for the St John's Masterplan. It is in a sustainable location and the transport and public realm measures implemented with the development will enhance the sustainable transport outcomes for those accessing the development.
- 7.16 This proposal does not adversely affect the operation of the highway or transport network and meets the criteria set out in National and Local Policy for sustainable development, and therefore it is considered that the scheme is acceptable in highways and transportation terms.

PLANS



General Notes
Do not scale from drawing. Use marked dimensions.
To be read in conjunction with all other Consultant's drawings.
The Architect to be immediately notified of any discrepancies.
Copyright on this drawing retained by the Architect.

PLANNING APPLICATION
BOUNDARY

TABLE OF CHANGES FOR PLANNING AMMENDMENTS:
PLAN

NOTE: REFER TO 6555 VITA T2_401_SCHEDULE
OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN
CONSISTENT
PLANNING DRAWINGS, AS PER APPLICATION
REF 126648/FO/2020 AND RESUBMITTED
PROPOSED

1 - GROUND FLOOR COMMERCIAL UNIT
GROUND FLOOR FOOTPRINT DEVELOPED TO
INCLUDE
COMMERCIAL UNIT

2 - EXTERNAL DOORS AND LOUVRES
INTRODUCED AND RECONFIGURED TO

GROUND
FLOOR AND MEZZANINE LEVEL

3 - CO WORKING STAIRCASE
NEW STAIR CASE INTRODUCED SERVING AS A

SECOND
MEANS OF ESCAPE

4 - BIN CHUTE
REMOVED AND REPLACED WITH INTERNAL
STORE

5 - BMU AMENDED
STATIC ROOF-MOUNTED MAINTENANCE UNIT
(BMU)

AMENDED TO MOBILE PERIMETER
TRACK-MOUNTED

TYPE BMU WHICH WHEN PARKED IS FULLY
CONCEALED

6 - INTERNAL PLANT
PLANT RECONFIGURED AT MEZZANINE LEVEL

INTRODUCTION OF NEW INTERNAL PLANT
ROOMS TO

LOWER ROOFLEVEL STAIR ACCESS TO UPPER
ROOF

LEVEL ALSO INDICATED

7 - EXTERNAL LANDSCAPING
LANDSCAPING UPDATED TO ALIGN WITH
LATEST

PROPOSALS

8 - WIND MITIGATION STRATEGY
ADDITIONAL TREES, CANOPY, WALKWAY

ARCHES,
BALUSTRADES AND SCREENS INTRODUCED
FOLLOWING

WIND MITIGATION ANALYSIS

9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED
PERIMETER BALUSTRADE

E	20210105	JG	GS	JR	ISSUED FOR PLANNING
D	20200328	GS	GS	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
A	20200315	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
No.	Date	Dwn	Chk	App	Revision or reason for issue

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Project Title
T2 VITA LIVING, ST. JOHNS

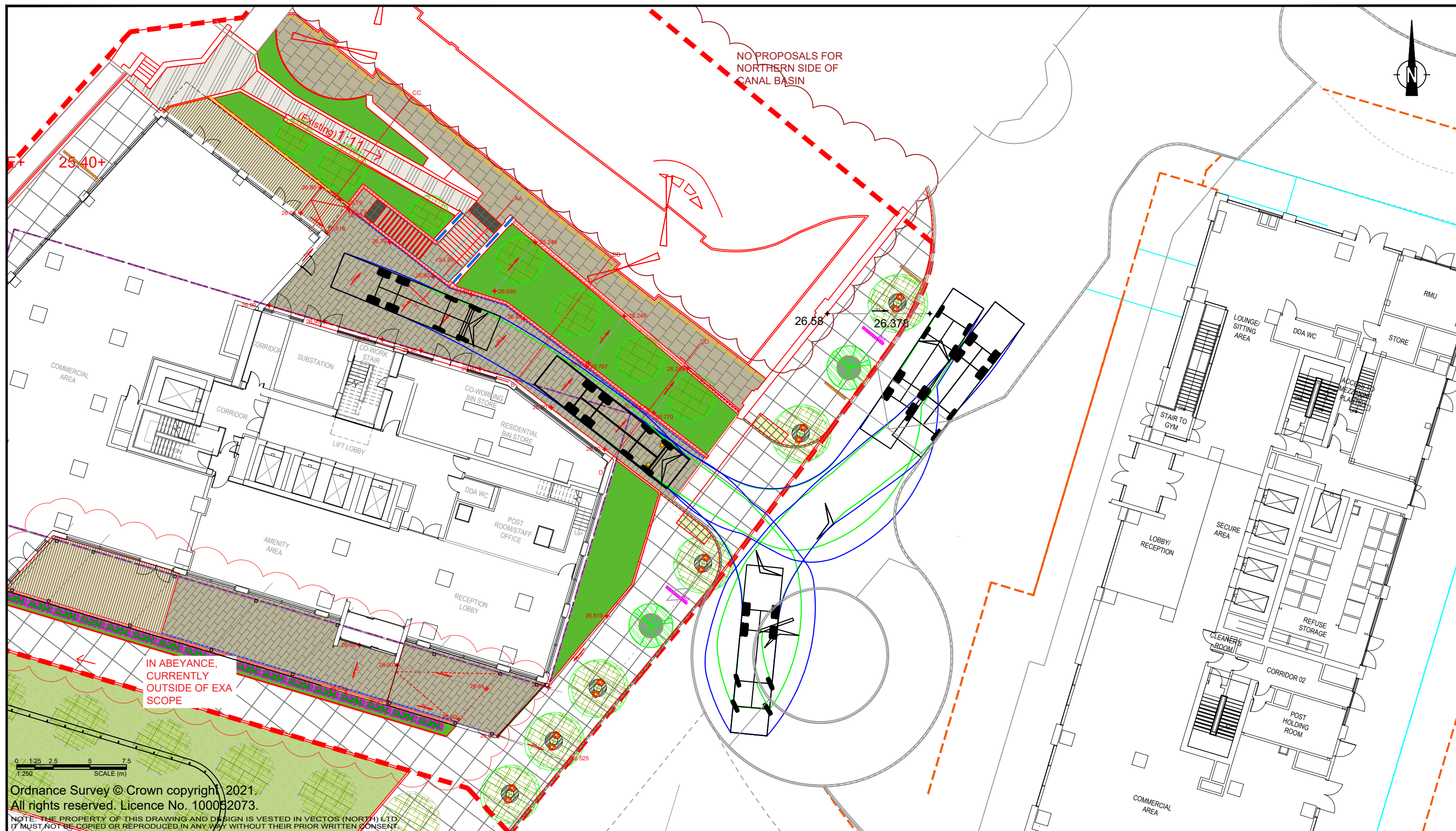
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Scale / North Point
1:1000 @ A3
0 5 10 15 25m
1:500 @ A1
0 5 10 15 25m

Drawing Title
**LEVEL 00
PROPOSED SITE PLAN**

Drawing Number
6555-P-B500-P-00-001
Drawing Status
PLANNING

Revision
E



REV.	DETAILS	DRAWN	CHECKED	DATE
A	Layout updated	WD	GD	05.01.22

Notes:

- This is not a construction drawing and is intended for illustrative purposes only.
- White lining is indicative only.

11.5m Large Refuse Vehicle (4 axle)

Overall Length 11.500m
Overall Width 3.751m
Overall Body Height 0.304m
Min Body Ground Clearance 2.500m
Track Width 6.00s
Lock to lock time 11.330m
Wall to Wall Turning Radius

Tower 2, St Johns

Swept Path Analysis - Large Refuse Vehicle

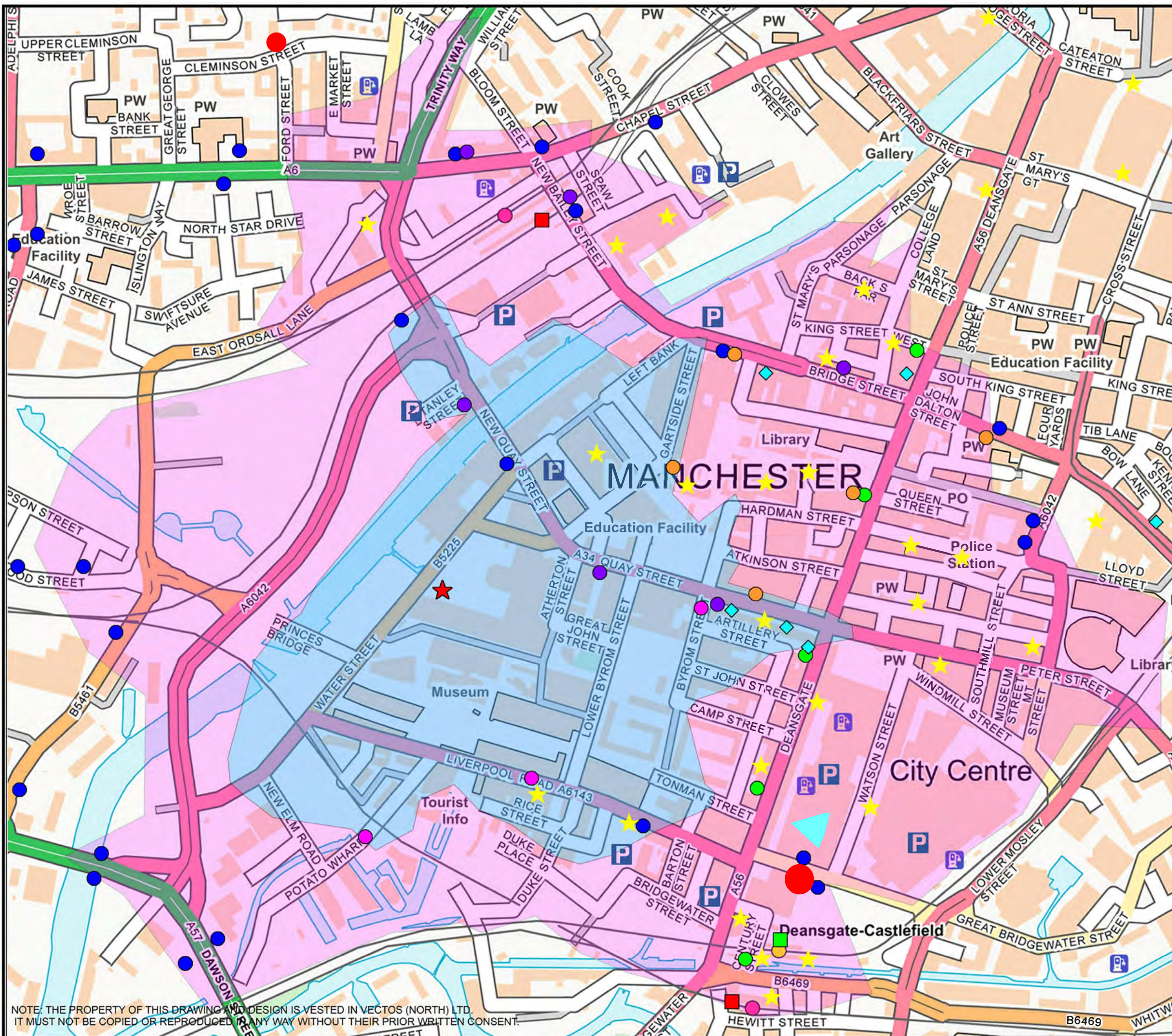
DRAWN: WD	CHECKED: GD	DATE: 23.12.21	SCALES: 1:250 at A3
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DRAWING NUMBER: VN201609-TR102	REVISION: A
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Legend

- ★ Site Location
- 5 Minute Walk Isochrone
- 10 Minute Walk Isochrone
- P Public Car Park
- Existing Coach Parking
- Bus Stop
- Free Bus Route 1 Bus Stop
- Free Bus Route 2 Bus Stop
- Free Bus Route 2 (Peak Only) Bus Stop
- Rail Stations
- Tram Station
- ATM
- Foodstore

This is not a construction drawing and is intended for illustrative purposes only.

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CLIENT:
Union Living Manchester 1 Ltd

PROJECT TITLE:
Union, St John's, Manchester

DRAWING TITLE:
Pedestrian Accessibility Plan

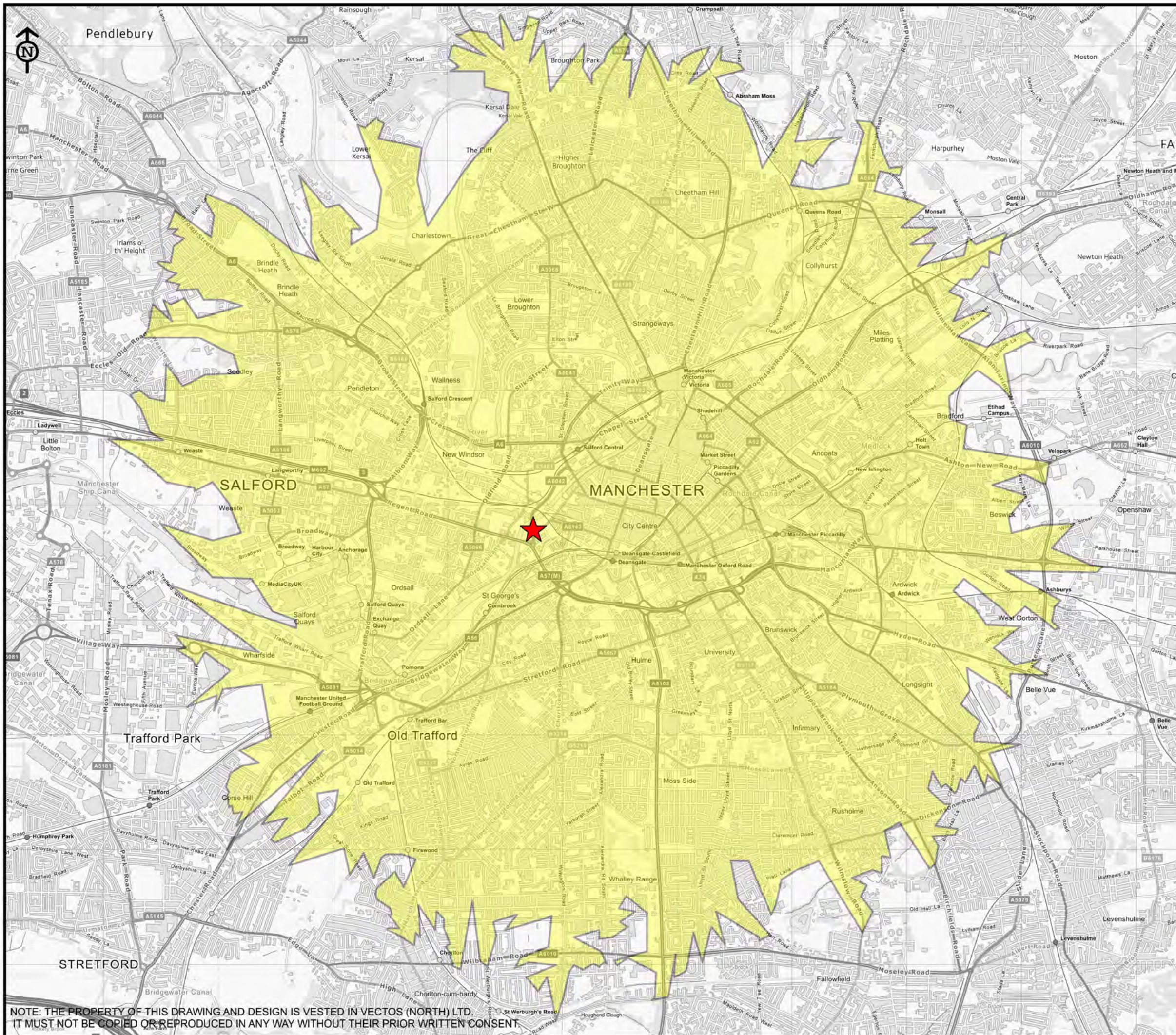
SCALE:
N.T.S

DRAWN: TA	CHECKED: TR	DATE: Sept. 2019
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Oxford Place, 61 Oxford Street, Manchester M1 6EQ
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DRAWING NO: VN91382-G101	REVISION:
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Legend

-  Site Location
-  5km Cycle Catchment

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CLIENT:

Union Living Manchester 1 Ltd

PROJECT TITLE:

Union, St John's, Manchester

DRAWING TITLE:

5km Cycle Catchment

SCALE:

N.T.S

DRAWN:

TA

CHECKED:

TR

DATE:

Sep. 2019



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DRAWING NO:

VN91382-G103

REVISION:

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Appendix A

Scheme Plans – Basement, Ground, Mezzanine & 01 levels



AREA USE KEY	
	BACK OF HOUSE/PLANT
	CIRCULATION
	RISERS/ VOIDS
	STORAGE

TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN
NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED PLANNING DRAWINGS, AS PER APPLICATION REF 126648/FO/2020 AND RESUBMITTED PROPOSED MMA APPLICATION DRAWINGS:

- 1 - GROUND FLOOR COMMERCIAL UNIT**
GROUND FLOOR FOOTPRINT DEVELOPED TO INCLUDE COMMERCIAL UNIT
- 2 - EXTERNAL DOORS AND LOUVRES**
INTRODUCED AND RECONFIGURED TO GROUND FLOOR AND MEZZANINE LEVEL
- 3 - CO WORKING STAIRCASE**
NEW STAIR CASE INTRODUCED SERVING AS A SECOND MEANS OF ESCAPE
- 4 - BIN CHUTE**
REMOVED AND REPLACED WITH INTERNAL STORE
- 5 - BMU AMENDED**
STATIC ROOF-MOUNTED MAINTENANCE UNIT (BMU) AMENDED TO MOBILE PERIMETER TRACK-MOUNTED TYPE BMU WHICH WHEN PARKED IS FULLY CONCEALED
- 6 - INTERNAL PLANT**
PLANT RECONFIGURED AT MEZZANINE LEVEL
INTRODUCTION OF NEW INTERNAL PLANT ROOMS TO LOWER ROOF LEVEL STAIR ACCESS TO UPPER ROOF LEVEL ALSO INDICATED
- 7 - EXTERNAL LANDSCAPING**
LANDSCAPING UPDATED TO ALIGN WITH LATEST PROPOSALS
- 8 - WIND MITIGATION STRATEGY**
ADDITIONAL TREES, CANOPY, WALKWAY ARCHES, BALUSTRADES AND SCREENS INTRODUCED FOLLOWING WIND MITIGATION ANALYSIS
- 9 - ROOF TERRACE**
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20211014	JG	ML	JR	ISSUED FOR PLANNING

General Notes
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Project Title
T2 VITA LIVING, ST. JOHNS

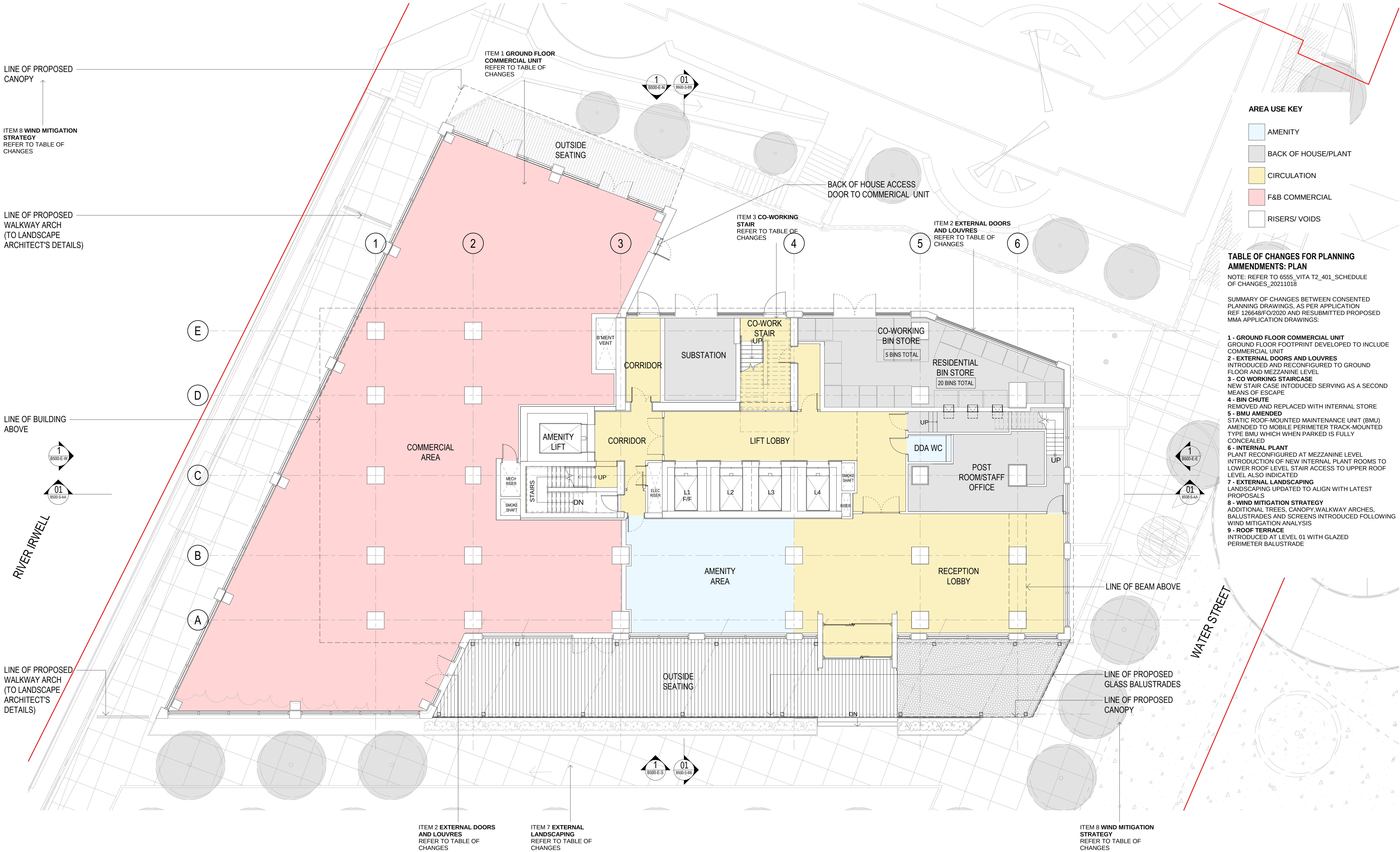
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1:200 @ A3

Drawing Title
BASEMENT LEVEL GA PLAN

Drawing Number
6555-P-B500-P-B

Revision
D

Drawing Status
PLANNING



AREA USE KEY

- AMENITY
- BACK OF HOUSE/PLANT
- CIRCULATION
- F&B COMMERCIAL
- RISERS/ VOIDS

TABLE OF CHANGES FOR PLANNING AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE OF CHANGES_20211018

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- 9 - ROOF TERRACE**
INTRODUCED AT LEVEL 01 WITH GLAZED PERIMETER BALUSTRADE

No.	Date	Dwn	Chk	App	Revision or reason for issue
A	20200313	PT	PT	JR	ISSUED FOR INFORMATION - DESIGN FREEZE First Issue
B	20200320	PT	PT	JR	ISSUED FOR PLANNING
C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20200327	GS	ML	JR	ISSUED FOR PLANNING
E	20211014	JG	ML	JR	ISSUED FOR PLANNING
F	20211117	JG	GS	JR	ISSUED FOR PLANNING

KEY:
PLANNING APPLICATION BOUNDARY

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Project Title
T2 VITA LIVING, ST. JOHNS

Scale / North Point
1:100 @ A1 0 1 2 3 5M
1:200 @ A3

Drawing Title
GROUND FLOOR PLAN

Drawing Number
6555-P-B500-P-00

Drawing Status
PLANNING

Revision
F

AREA USE KEY

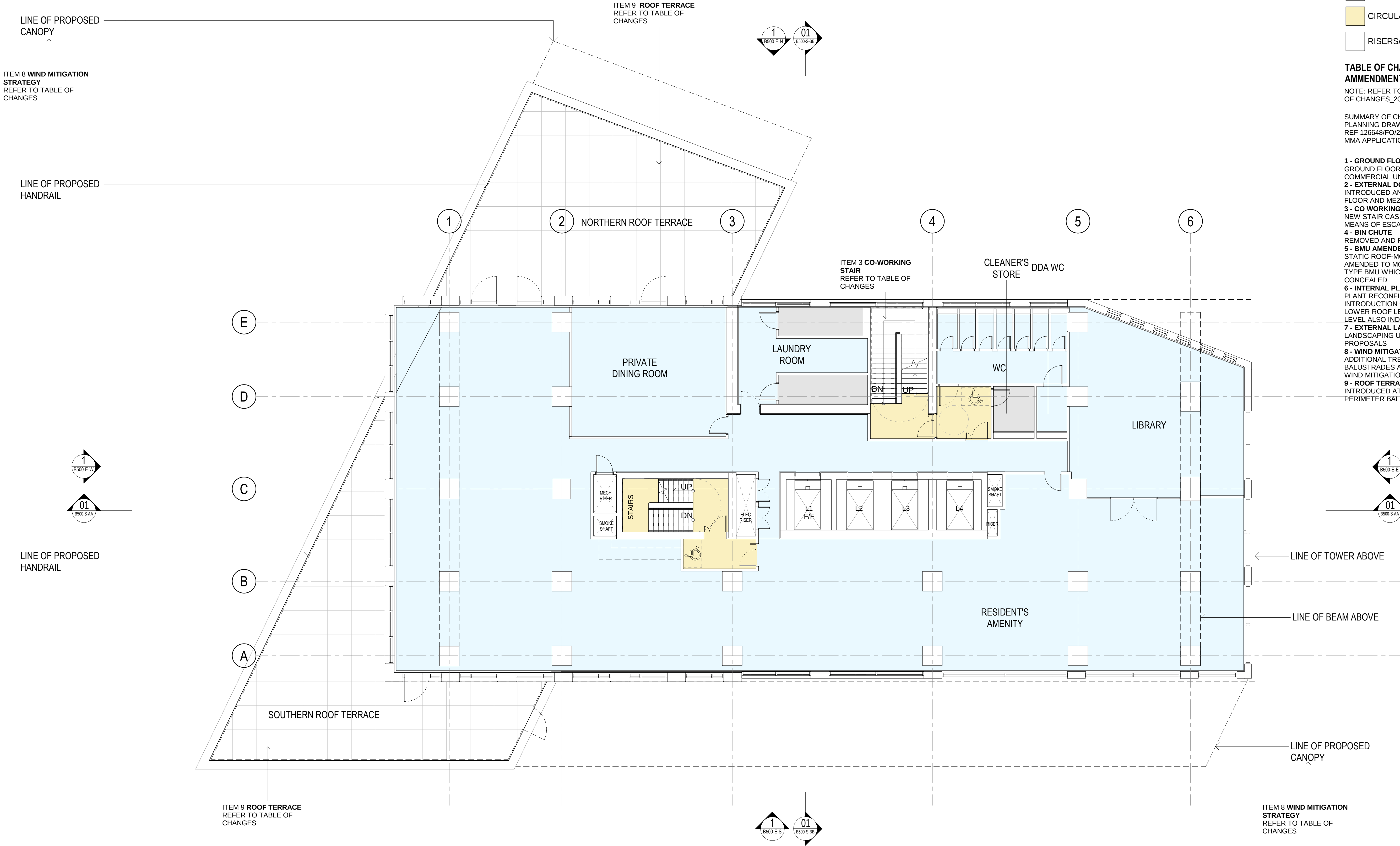
- AMENITY
- BACK OF HOUSE/PLANT
- CIRCULATION
- RISERS/ VOIDS

TABLE OF CHANGES FOR PLANNING
AMMENDMENTS: PLAN

NOTE: REFER TO 6555_VITA T2_401_SCHEDULE
OF CHANGES_20211018

SUMMARY OF CHANGES BETWEEN CONSENTED
PLANNING DRAWINGS, AS PER APPLICATION
REF 126648/FO/2020 AND RESUBMITTED PROPOSED
MMA APPLICATION DRAWINGS:

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LANDSCAPING UPDATED TO ALIGN WITH LATEST
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ADDITIONAL TREES, CANOPY,WALKWAY ARCHES,
BALUSTRADES AND SCREENS INTRODUCED FOLLOWING
WIND MITIGATION ANALYSIS
- 9 - ROOF TERRACE
INTRODUCED AT LEVEL 01 WITH GLAZED
PERIMETER BALUSTRADE



No.	Date	Dwn	Chk	App	Revision or reason for issue
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C	20200327	PT	PT	JR	ISSUED FOR PLANNING
D	20211014	JG	ML	JR	ISSUED FOR PLANNING
E	20211117	JG	ML	JR	ISSUED FOR PLANNING

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Project Title
T2 VITA LIVING, ST. JOHNS

Scale / North Point
1:100 @ A1 0 1 2 3 5M
1:200 @ A3

Drawing Title
LEVEL 01 GA PLAN

Drawing Number
6555-P-B500-P-01

Revision
E

Drawing Status
PLANNING

Appendix B

Multi Modal Residential TRICS Forecast

Calculation Reference: AUDIT-715001-190913-0913

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	3 days
	EX ESSEX	2 days
	HC HAMPSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	2 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	CO CONWY	1 days
11	SCOTLAND	
	SA SOUTH AYRSHIRE	1 days
	SR STIRLING	2 days

Secondary Filtering selection:

Parameter: Number of dwellings
 Actual Range: 6 to 175 (units:)
 Range Selected by User: 6 to 184 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 13/11/18

Selected survey days:

Monday	1 days
Tuesday	7 days
Wednesday	2 days
Thursday	4 days
Friday	1 days

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	3
Edge of Town Centre	12

Selected Location Sub Categories:

Residential Zone	6
Built-Up Zone	7
No Sub Category	2

Secondary Filtering selection:

Use Class:

C3	15 days
----	---------

Population within 1 mile:

10,001 to 15,000	4 days
15,001 to 20,000	2 days
25,001 to 50,000	9 days

Secondary Filtering selection (Cont.):

Population within 5 miles:

50,001 to 75,000	6 days
75,001 to 100,000	3 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	2 days

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	10 days

Travel Plan:

Yes	1 days
No	14 days

PTAL Rating:

No PTAL Present	15 days
-----------------	---------

LIST OF SITES relevant to selection parameters

1	BD-03-C-01	BLOCKS OF FLATS		BEDFORDSHIRE
	WING ROAD			
	LEIGHTON BUZZARD			
	LINSLADE			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	175		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
2	BD-03-C-02	BLOCKS OF FLATS		BEDFORDSHIRE
	STANBRIDGE ROAD			
	LEIGHTON BUZZARD			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	62		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
3	BD-03-C-03	BLOCKS OF FLATS		BEDFORDSHIRE
	COURT DRIVE			
	DUNSTABLE			
	Edge of Town Centre			
	No Sub Category			
	Total Number of dwellings:	146		
	Survey date: TUESDAY	15/05/18		Survey Type: MANUAL
4	CB-03-C-01	BLOCK OF FLATS		CUMBRIA
	KING STREET			
	CARLISLE			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	40		
	Survey date: THURSDAY	12/06/14		Survey Type: MANUAL
5	CO-03-C-01	BLOCKS OF FLATS		CONWY
	MOSTYN BROADWAY			
	LLANDUDNO			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	37		
	Survey date: MONDAY	26/03/18		Survey Type: MANUAL
6	EX-03-C-01	FLATS		ESSEX
	WESTCLIFF PARADE			
	SOUTHEND-ON-SEA			
	WESTCLIFF			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	6		
	Survey date: TUESDAY	22/10/13		Survey Type: MANUAL
7	EX-03-C-02	BLOCK OF FLATS		ESSEX
	WESTCLIFF PARADE			
	SOUTHEND-ON-SEA			
	WESTCLIFF			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	94		
	Survey date: TUESDAY	22/10/13		Survey Type: MANUAL
8	GM-03-C-02	BLOCK OF FLATS		GREATER MANCHESTER
	WHITWORTH STREET W.			
	MANCHESTER			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	154		
	Survey date: THURSDAY	13/10/11		Survey Type: MANUAL
9	GM-03-C-03	BLOCK OF FLATS		GREATER MANCHESTER
	FAIRFIELD STREET			
	MANCHESTER			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	20		
	Survey date: FRIDAY	14/10/11		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10	HC-03-C-01 CROSS STREET PORTSMOUTH	BLOCKS OF FLATS		HAMPSHIRE
	Edge of Town Centre Built-Up Zone Total Number of dwellings:		90	
	Survey date: TUESDAY		05/06/18	Survey Type: MANUAL
11	NF-03-C-01 PAGE STAIR LANE KING'S LYNN	BLOCKS OF FLATS		NORFOLK
	Edge of Town Centre Built-Up Zone Total Number of dwellings:		51	
	Survey date: THURSDAY		11/12/14	Survey Type: MANUAL
12	SA-03-C-01 RACECOURSE ROAD AYR	BLOCK OF FLATS		SOUTH AYRSHIRE
	Edge of Town Centre Residential Zone Total Number of dwellings:		51	
	Survey date: TUESDAY		16/09/14	Survey Type: MANUAL
13	SF-03-C-01 STATION HILL BURY ST EDMUNDS	BLOCKS OF FLATS		SUFFOLK
	Edge of Town Centre Built-Up Zone Total Number of dwellings:		85	
	Survey date: THURSDAY		18/12/14	Survey Type: MANUAL
14	SR-03-C-01 FORTHESIDE WAY STIRLING	FLATS		STIRLING
	Edge of Town Centre No Sub Category Total Number of dwellings:		80	
	Survey date: WEDNESDAY		18/06/14	Survey Type: MANUAL
15	SR-03-C-02 ROSEBERRY TERRACE STIRLING	FLATS		STIRLING
	Edge of Town Centre Residential Zone Total Number of dwellings:		48	
	Survey date: WEDNESDAY		18/06/14	Survey Type: MANUAL

Vectos (North) Limited 3rd Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

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

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.038	15	76	0.126	15	76	0.164
08:00 - 09:00	15	76	0.054	15	76	0.158	15	76	0.212
09:00 - 10:00	15	76	0.060	15	76	0.072	15	76	0.132
10:00 - 11:00	15	76	0.068	15	76	0.082	15	76	0.150
11:00 - 12:00	15	76	0.072	15	76	0.090	15	76	0.162
12:00 - 13:00	15	76	0.109	15	76	0.090	15	76	0.199
13:00 - 14:00	15	76	0.076	15	76	0.093	15	76	0.169
14:00 - 15:00	15	76	0.069	15	76	0.081	15	76	0.150
15:00 - 16:00	15	76	0.088	15	76	0.063	15	76	0.151
16:00 - 17:00	15	76	0.123	15	76	0.073	15	76	0.196
17:00 - 18:00	15	76	0.152	15	76	0.090	15	76	0.242
18:00 - 19:00	15	76	0.158	15	76	0.096	15	76	0.254
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.067			1.114			2.181

Parameter summary

Trip rate parameter range selected:	6 - 175 (units:)
Survey date date range:	01/01/11 - 13/11/18
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.003	15	76	0.004	15	76	0.007
08:00 - 09:00	15	76	0.003	15	76	0.003	15	76	0.006
09:00 - 10:00	15	76	0.001	15	76	0.002	15	76	0.003
10:00 - 11:00	15	76	0.002	15	76	0.002	15	76	0.004
11:00 - 12:00	15	76	0.008	15	76	0.008	15	76	0.016
12:00 - 13:00	15	76	0.006	15	76	0.006	15	76	0.012
13:00 - 14:00	15	76	0.005	15	76	0.005	15	76	0.010
14:00 - 15:00	15	76	0.001	15	76	0.001	15	76	0.002
15:00 - 16:00	15	76	0.004	15	76	0.004	15	76	0.008
16:00 - 17:00	15	76	0.006	15	76	0.005	15	76	0.011
17:00 - 18:00	15	76	0.005	15	76	0.004	15	76	0.009
18:00 - 19:00	15	76	0.004	15	76	0.005	15	76	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.049			0.097

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Licence No: 715001

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

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.003	15	76	0.003	15	76	0.006
08:00 - 09:00	15	76	0.001	15	76	0.000	15	76	0.001
09:00 - 10:00	15	76	0.003	15	76	0.004	15	76	0.007
10:00 - 11:00	15	76	0.000	15	76	0.000	15	76	0.000
11:00 - 12:00	15	76	0.001	15	76	0.000	15	76	0.001
12:00 - 13:00	15	76	0.001	15	76	0.002	15	76	0.003
13:00 - 14:00	15	76	0.001	15	76	0.001	15	76	0.002
14:00 - 15:00	15	76	0.001	15	76	0.001	15	76	0.002
15:00 - 16:00	15	76	0.000	15	76	0.000	15	76	0.000
16:00 - 17:00	15	76	0.000	15	76	0.000	15	76	0.000
17:00 - 18:00	15	76	0.000	15	76	0.000	15	76	0.000
18:00 - 19:00	15	76	0.000	15	76	0.000	15	76	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL CYCLISTS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.002	15	76	0.008	15	76	0.010
08:00 - 09:00	15	76	0.003	15	76	0.013	15	76	0.016
09:00 - 10:00	15	76	0.003	15	76	0.004	15	76	0.007
10:00 - 11:00	15	76	0.002	15	76	0.006	15	76	0.008
11:00 - 12:00	15	76	0.005	15	76	0.004	15	76	0.009
12:00 - 13:00	15	76	0.002	15	76	0.006	15	76	0.008
13:00 - 14:00	15	76	0.002	15	76	0.001	15	76	0.003
14:00 - 15:00	15	76	0.004	15	76	0.000	15	76	0.004
15:00 - 16:00	15	76	0.005	15	76	0.004	15	76	0.009
16:00 - 17:00	15	76	0.003	15	76	0.001	15	76	0.004
17:00 - 18:00	15	76	0.011	15	76	0.004	15	76	0.015
18:00 - 19:00	15	76	0.004	15	76	0.001	15	76	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.052			0.098

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.045	15	76	0.185	15	76	0.230
08:00 - 09:00	15	76	0.067	15	76	0.265	15	76	0.332
09:00 - 10:00	15	76	0.073	15	76	0.096	15	76	0.169
10:00 - 11:00	15	76	0.088	15	76	0.112	15	76	0.200
11:00 - 12:00	15	76	0.090	15	76	0.122	15	76	0.212
12:00 - 13:00	15	76	0.141	15	76	0.133	15	76	0.274
13:00 - 14:00	15	76	0.107	15	76	0.112	15	76	0.219
14:00 - 15:00	15	76	0.087	15	76	0.107	15	76	0.194
15:00 - 16:00	15	76	0.134	15	76	0.088	15	76	0.222
16:00 - 17:00	15	76	0.188	15	76	0.097	15	76	0.285
17:00 - 18:00	15	76	0.234	15	76	0.122	15	76	0.356
18:00 - 19:00	15	76	0.259	15	76	0.132	15	76	0.391
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.513			1.571			3.084

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.015	15	76	0.059	15	76	0.074
08:00 - 09:00	15	76	0.022	15	76	0.126	15	76	0.148
09:00 - 10:00	15	76	0.041	15	76	0.090	15	76	0.131
10:00 - 11:00	15	76	0.059	15	76	0.056	15	76	0.115
11:00 - 12:00	15	76	0.051	15	76	0.060	15	76	0.111
12:00 - 13:00	15	76	0.083	15	76	0.076	15	76	0.159
13:00 - 14:00	15	76	0.075	15	76	0.070	15	76	0.145
14:00 - 15:00	15	76	0.076	15	76	0.061	15	76	0.137
15:00 - 16:00	15	76	0.087	15	76	0.073	15	76	0.160
16:00 - 17:00	15	76	0.109	15	76	0.109	15	76	0.218
17:00 - 18:00	15	76	0.144	15	76	0.083	15	76	0.227
18:00 - 19:00	15	76	0.100	15	76	0.064	15	76	0.164
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.862			0.927			1.789

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL BUS/TRAM PASSENGERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.001	15	76	0.036	15	76	0.037
08:00 - 09:00	15	76	0.007	15	76	0.085	15	76	0.092
09:00 - 10:00	15	76	0.006	15	76	0.031	15	76	0.037
10:00 - 11:00	15	76	0.011	15	76	0.012	15	76	0.023
11:00 - 12:00	15	76	0.012	15	76	0.010	15	76	0.022
12:00 - 13:00	15	76	0.022	15	76	0.023	15	76	0.045
13:00 - 14:00	15	76	0.013	15	76	0.026	15	76	0.039
14:00 - 15:00	15	76	0.020	15	76	0.011	15	76	0.031
15:00 - 16:00	15	76	0.061	15	76	0.017	15	76	0.078
16:00 - 17:00	15	76	0.035	15	76	0.013	15	76	0.048
17:00 - 18:00	15	76	0.053	15	76	0.011	15	76	0.064
18:00 - 19:00	15	76	0.039	15	76	0.010	15	76	0.049
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.280			0.285			0.565

Vectos (North) Limited 3rd Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.001	15	76	0.030	15	76	0.031
08:00 - 09:00	15	76	0.002	15	76	0.037	15	76	0.039
09:00 - 10:00	15	76	0.000	15	76	0.011	15	76	0.011
10:00 - 11:00	15	76	0.005	15	76	0.006	15	76	0.011
11:00 - 12:00	15	76	0.001	15	76	0.006	15	76	0.007
12:00 - 13:00	15	76	0.006	15	76	0.008	15	76	0.014
13:00 - 14:00	15	76	0.002	15	76	0.005	15	76	0.007
14:00 - 15:00	15	76	0.004	15	76	0.001	15	76	0.005
15:00 - 16:00	15	76	0.010	15	76	0.001	15	76	0.011
16:00 - 17:00	15	76	0.016	15	76	0.005	15	76	0.021
17:00 - 18:00	15	76	0.047	15	76	0.002	15	76	0.049
18:00 - 19:00	15	76	0.018	15	76	0.001	15	76	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.112			0.113			0.225

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.000	15	76	0.000	15	76	0.000
08:00 - 09:00	15	76	0.000	15	76	0.000	15	76	0.000
09:00 - 10:00	15	76	0.000	15	76	0.000	15	76	0.000
10:00 - 11:00	15	76	0.000	15	76	0.002	15	76	0.002
11:00 - 12:00	15	76	0.009	15	76	0.001	15	76	0.010
12:00 - 13:00	15	76	0.000	15	76	0.000	15	76	0.000
13:00 - 14:00	15	76	0.000	15	76	0.000	15	76	0.000
14:00 - 15:00	15	76	0.000	15	76	0.000	15	76	0.000
15:00 - 16:00	15	76	0.001	15	76	0.000	15	76	0.001
16:00 - 17:00	15	76	0.000	15	76	0.000	15	76	0.000
17:00 - 18:00	15	76	0.000	15	76	0.000	15	76	0.000
18:00 - 19:00	15	76	0.000	15	76	0.000	15	76	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.003			0.013

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.002	15	76	0.066	15	76	0.068
08:00 - 09:00	15	76	0.009	15	76	0.122	15	76	0.131
09:00 - 10:00	15	76	0.006	15	76	0.041	15	76	0.047
10:00 - 11:00	15	76	0.016	15	76	0.020	15	76	0.036
11:00 - 12:00	15	76	0.022	15	76	0.017	15	76	0.039
12:00 - 13:00	15	76	0.028	15	76	0.031	15	76	0.059
13:00 - 14:00	15	76	0.015	15	76	0.032	15	76	0.047
14:00 - 15:00	15	76	0.024	15	76	0.012	15	76	0.036
15:00 - 16:00	15	76	0.072	15	76	0.018	15	76	0.090
16:00 - 17:00	15	76	0.051	15	76	0.018	15	76	0.069
17:00 - 18:00	15	76	0.100	15	76	0.012	15	76	0.112
18:00 - 19:00	15	76	0.056	15	76	0.011	15	76	0.067
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.401			0.400			0.801

Vectos (North) Limited 3rd Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.063	15	76	0.318	15	76	0.381
08:00 - 09:00	15	76	0.100	15	76	0.526	15	76	0.626
09:00 - 10:00	15	76	0.123	15	76	0.231	15	76	0.354
10:00 - 11:00	15	76	0.164	15	76	0.195	15	76	0.359
11:00 - 12:00	15	76	0.169	15	76	0.203	15	76	0.372
12:00 - 13:00	15	76	0.254	15	76	0.246	15	76	0.500
13:00 - 14:00	15	76	0.198	15	76	0.215	15	76	0.413
14:00 - 15:00	15	76	0.190	15	76	0.181	15	76	0.371
15:00 - 16:00	15	76	0.299	15	76	0.182	15	76	0.481
16:00 - 17:00	15	76	0.350	15	76	0.226	15	76	0.576
17:00 - 18:00	15	76	0.489	15	76	0.220	15	76	0.709
18:00 - 19:00	15	76	0.420	15	76	0.207	15	76	0.627
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.819			2.950			5.769

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL Servicing Vehicles
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	76	0.005	15	76	0.004	15	76	0.009
08:00 - 09:00	15	76	0.004	15	76	0.004	15	76	0.008
09:00 - 10:00	15	76	0.003	15	76	0.003	15	76	0.006
10:00 - 11:00	15	76	0.000	15	76	0.001	15	76	0.001
11:00 - 12:00	15	76	0.004	15	76	0.003	15	76	0.007
12:00 - 13:00	15	76	0.003	15	76	0.004	15	76	0.007
13:00 - 14:00	15	76	0.001	15	76	0.001	15	76	0.002
14:00 - 15:00	15	76	0.001	15	76	0.001	15	76	0.002
15:00 - 16:00	15	76	0.004	15	76	0.004	15	76	0.008
16:00 - 17:00	15	76	0.003	15	76	0.004	15	76	0.007
17:00 - 18:00	15	76	0.002	15	76	0.001	15	76	0.003
18:00 - 19:00	15	76	0.002	15	76	0.003	15	76	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

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