

**PROPOSED STUDENT ACCOMMODATION DEVELOPMENT,
TURKISH CENTRE**

7-9 DOLPHIN STREET, ARDWICK, MANCHESTER

Transport Statement

Prepared on behalf of:

Manchester Turkish Community Association



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1.0 INTRODUCTION

1.1 Overview

- 1.1.1 AXIS has been appointed by the Manchester Turkish Community Association to provide highways and transport advice in relation to a full planning application for a student residential accommodation development located at Nos. 7-9 Dolphin Street, Ardwick, Manchester.
- 1.1.2 The most recently approved application for the Site's redevelopment is planning application reference 115958/FO/2017, which was approved by Manchester City Council (MCC) on 16th August 2017. This application was to erect a new 2-storey building providing community services (hereafter referred to as Turkish Community Centre) and associated parking on a previously vacant plot of land. The Turkish Community Centre was previously located at Capricorn House, Nos. 58-60 Higher Ardwick, a 5 minutes' walk (approximately 400 metres) from Dolphin Street. This move did not generate any additional traffic on the local highway network as the travel patterns associated with the Turkish Community Centre were already well established in the area. As such, the existing use of the site will not be reconsidered as part of the proposed development.
- 1.1.3 The latest planning application that is the subject of this Transport Statement (TS) seeks approval for the erection of a first and second floor side extension to form a 3- storey building relating to the existing Turkish Community Centre. The extension will provide 15 student accommodation / study rooms with ancillary facilities, while retaining the existing car and cycle parking provision associated with the Turkish Community Centre.
- 1.1.4 With respect to the above, this TS has therefore been prepared to inform MCC, which is the Local Planning Authority (LPA) and Local Highway Authority (LHA), of the anticipated highway and transport-related implications associated with the latest proposal.

1.2 Report Structure

1.2.1 The structure of this report is as follows:-

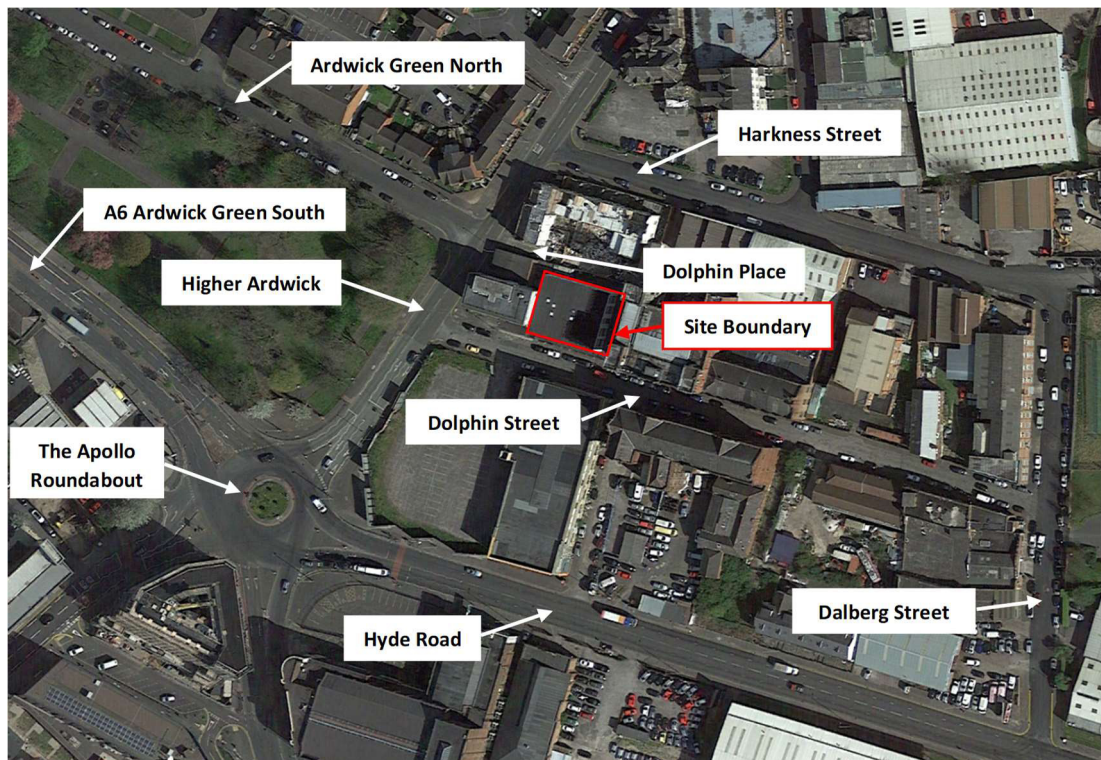
- **Chapter 2** provides a description of the existing conditions around the site, including reference to the site's planning history, the access arrangements, and the local highway network;
- **Chapter 3** provides an analysis of the accessibility of the site by non-car modes of transport;
- **Chapter 4** provides a description of the proposed development, including a description of the parking levels, site access arrangements and servicing arrangements;
- **Chapter 5** forecasts the trip generating potential of the proposed development; and
- **Chapter 6** summarises the report and concludes that there are no transportation or highway-related reasons why the proposed development should not be granted planning permission.

2.0 EXISTING CONDITIONS

2.1 Site Location and Existing Use

- 2.1.1 The site is located at Nos.7-9 Dolphin Street in Ardwick, Manchester, M12 6BG. The site is bounded by Dolphin Place to the north, the Manchester Turkish Mosque to the east, Dolphin Street to the south and a 4-storey office building to the west (situated on the corner of Dolphin Street and Higher Ardwick). The location of the site is shown in **Figure 2.1**.

Figure 2.1 – Site Location



(Source: Google Earth Pro)

- 2.1.2 The site currently comprises a Use Class D2 building, known as the Turkish Community Centre and an off-street parking area for 9 vehicles. The building fronts onto Dolphin Street and is set-back from the edge of the footway. The site has a fence along its Dolphin Street boundary; the vehicular and pedestrian access gates are situated next to each other on Dolphin Street, as shown in **Figure 2.2**.

Figure 2.2 – Dolphin Street Frontage and Access



(Source: Google Maps)

2.2 Site Planning History

- 2.2.1 In August 2017, full planning permission for a community centre on the site was granted by MCC under reference no. 115958/FO/2017. This approved (and now built) scheme features a 2-storey building of 415sqm per floor, with a total of 830sqm floorspace which provides services to the community with classes and general meeting space. The approved scheme also includes 9 off-street car parking spaces and 7 secure cycle spaces. This is the most recently approved application at the site, and the existing layout is contained in **Appendix A** of this report.
- 2.2.2 It is noted that no significant highway-related issues were raised by MCC in respect of the approved scheme at the site.

2.3 Local Highway Network

Dolphin Street

- 2.3.1 Dolphin Street is a 30mph two-way road. It forms junctions with Higher Ardwick to the west and Dalberg Street to the east, shown in **Figure 2.3**. It is approximately 6.5 metres in width, with footways on both sides of the road and is furnished with street lighting.

Figure 2.3 – Dolphin Street Junctions with Higher Ardwick (right) and Dalberg Street (left)



(Source: Google Maps)

Higher Ardwick

- 2.3.2 Higher Ardwick is a 30mph two-way road. It forms the northern arm of the roundabout with Ardwick Green South (A6) to the west, Hyde Road to the east, Brunswick Street to the south-west and Stockport Road (A6) to the south-east. It is approximately 7 metres in width, with footways on both sides of the road. It is furnished with street lighting and pelican crossing on its approach to The Apollo roundabout, shown in **Figure 2.4**.

Figure 2.4 – Higher Ardwick with Pelican Crossing (near The Apollo Roundabout)



(Source: Google Maps)

Dolphin Place

- 2.3.3 Dolphin Place is a cul-de-sac, approximately 45 metres in length and approximately 2 metres in width. It forms a junction with Higher Ardwick to the west, shown in **Figure 2.5**.

Figure 2.5 – Dolphin Place Access Road



(Source: Google Maps)

Harkness Street

- 2.3.4 Harkness Street is a 30mph two-way road. It forms a junction with Higher Ardwick to the west. To the east it forms a junction with a commercial property access (Parkdale Contractors Ltd.) and Dalberg Street. It is approximately 7 metres in width, with footways on both sides of the road and is furnished with street lighting, shown in **Figure 2.6**.

Figure 2.6 – Harkness Street



(Source: Google Maps)

Dalberg Street

- 2.3.5 Dalberg Street is a 30mph two-way road. To the north it forms a junction with a commercial property (Parkdale Contractors Ltd.) and Harkness Street. To the South it forms a junction with Dolphin Street. It is approximately 8 metres in width, with footways on both sides of the road and is furnished with street lighting, shown in **Figure 2.7**.

Figure 2.7 – Dalberg Street



(Source: Google Maps)

The Apollo Roundabout

- 2.3.6 The site is situated to the northeast of the Apollo roundabout. The Apollo roundabout is a five-arm roundabout which acts as one of the main gateways into the south-eastern part of Manchester City Centre, and collects traffic heading to/from the A6 Corridor (i.e. south towards Stockport) and the A57 corridor (i.e. east towards Hyde).
- 2.3.7 There are two entry lanes on each arm of the junction, and there are also pelican crossings across each arm near to each give way line at the roundabout, shown in **Figure 2.8**. All arms of the junction are well lit with street lighting and are subject to a mandatory 30mph speed limit.

Figure 2.8 – The Apollo Roundabout looking towards Higher Ardwick

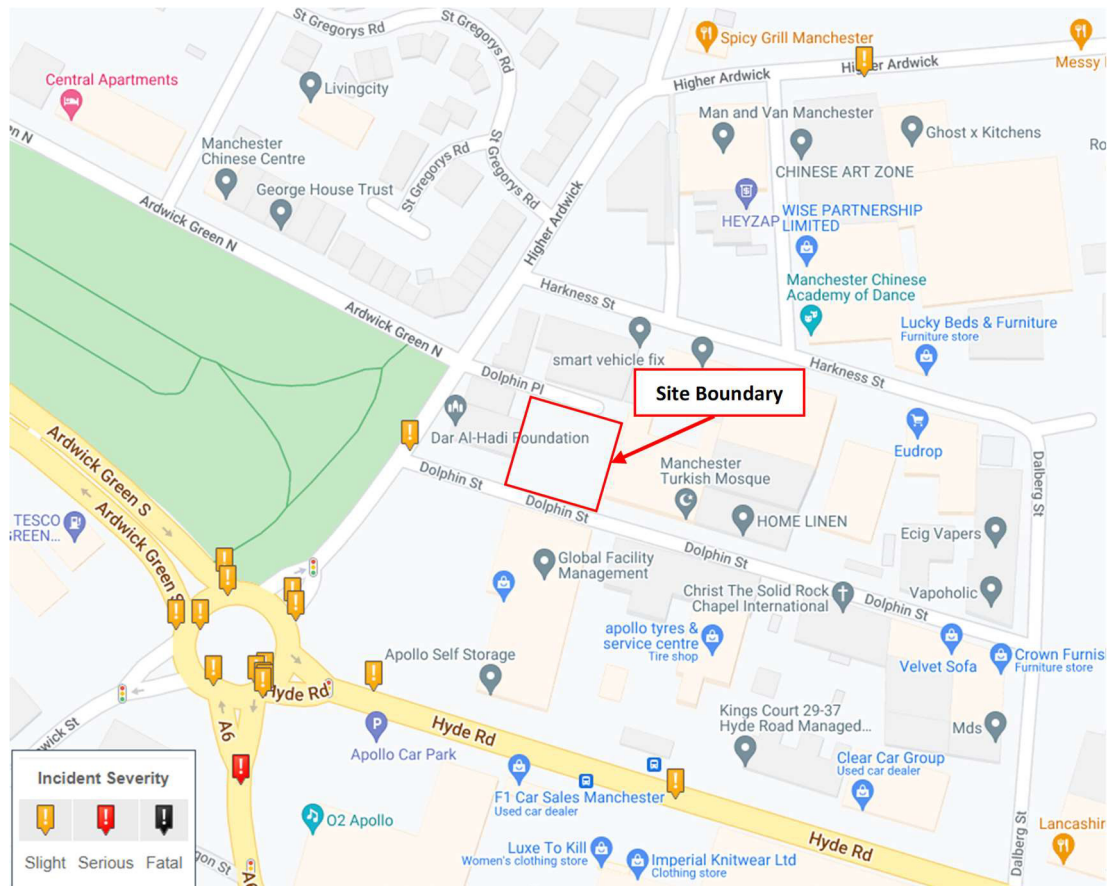


(Source: Google Maps)

2.4 Highway Safety

2.4.1 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from the online CrashMap resource (www.crashmap.co.uk). Data was extracted for the most recently available three-year period which is 2018 to 2020 inclusive. The location and severity of the incidents are shown in **Figure 2.9**.

Figure 2.9 – Location of Incidents



(Source: CrashMap)

2.4.2 **Figure 2.9** shows that 17 incidents have occurred on the wider road network during the assessed period, with 16 incidents resulting in 'slight' injury and 1 incident resulting in 'serious' injury. When considered volumetrically this equates to 6 incidents per year on average. The incidents record is not considered to be particularly onerous, especially given that 82% of the accidents occurred on or near The Apollo Roundabout and none occurred on Dolphin Street. Therefore, it is considered that the existing incident record does not present a material concern in the context of the proposed development.

3.0 ACCESSIBILITY BY SUSTAINABLE MODES OF TRAVEL

3.1 Introduction

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

3.1.2 Paragraph 105 of the National Planning Policy Framework (NPPF) states: *“...Significant development should be focussed on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduced congestion and emissions, and improve air quality and public health...”*

3.1.3 Accordingly, and to demonstrate the site’s compliance with the above, this section of the report examines the accessibility of the site by non-car modes of transport through consideration of the following:

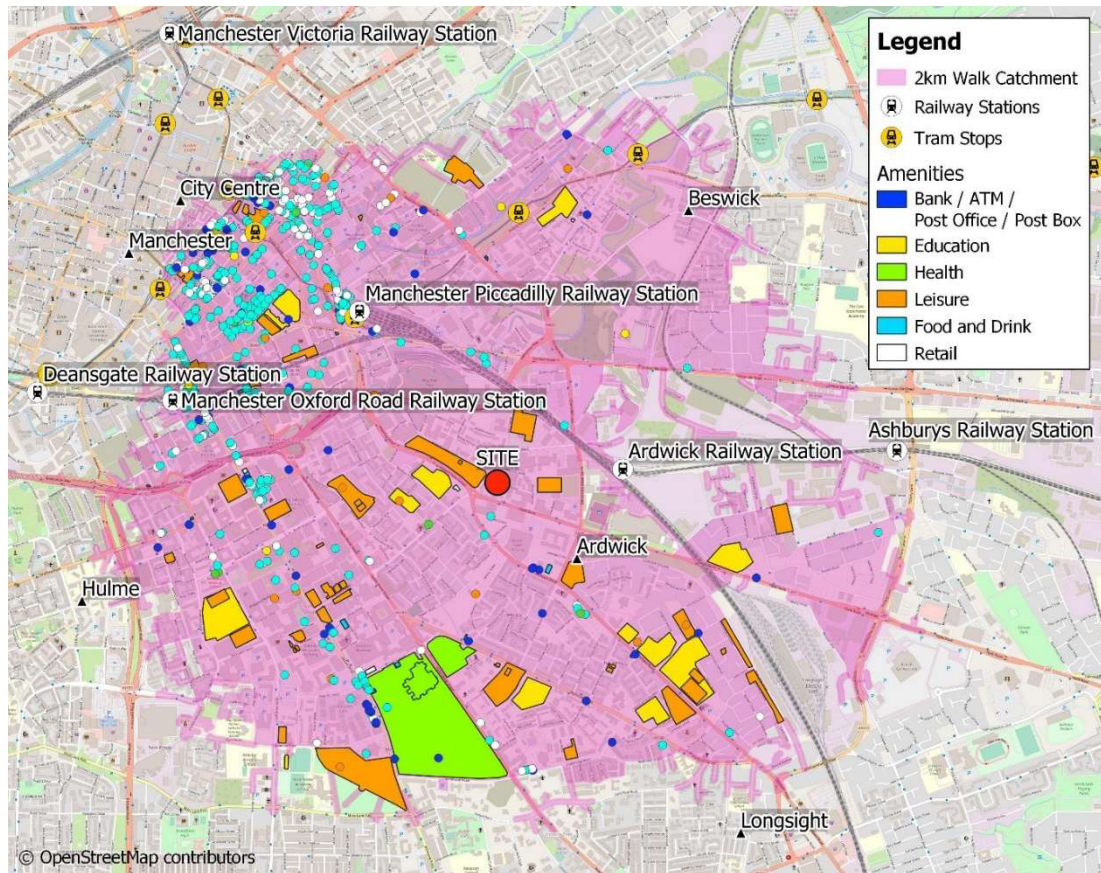
- Accessibility on foot;
- Accessibility by cycle; and
- Accessibility by public transport.

3.2 Pedestrian Accessibility

3.2.1 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. It is generally accepted that walking has the greatest potential to reduce short car trips, particularly those under 2km.

3.2.2 To assist in summarising the accessibility of the site on foot, an indicative pedestrian catchment plan has been produced and is illustrated in **Figure 3.1**.

Figure 3.1 – 2km Walking Catchment



- 3.2.3 **Figure 3.1** demonstrates that the site is within walking distance of a considerable portion of Manchester City Centre and the employment, education and leisure-related amenities contained within it. In addition, numerous bus stops, tram stops and railway stations are located within walking distance of the site.
- 3.2.4 Manchester Piccadilly Railway Station and tram stop can be accessed within a 15- minute walk (1km) of the site, whilst the National Express Coach Station is located within a 20-minute walk (1.6km) from the site located on Chorlton Street. In addition, Piccadilly Gardens interchange can be accessed within a 25-minute walk (1.9km) from the site, demonstrating that the site is well located for the utilisation of public transport within the city centre.
- 3.2.5 There are also a number of retail land uses located within a 5-minute walk (approximately 300m) south of the site along Ardwick Green South and Polygon Street that could be used by prospective residents of the proposed development. These include a fast-food takeaway, two local grocery stores and a health store.

3.2.6 Furthermore, the surrounding area benefits from a good level of pedestrian infrastructure including wide footways and street lighting.

3.2.7 As mentioned in **Section 2.3** and shown in **Figure 2.4**, there are pelican crossings situated across all five arms of the nearby Apollo roundabout. These crossings are well-located to provide convenient access to / from the local grocery stores. Natural surveillance is also provided by the surrounding residential, retail and commercial land uses which front the streets in the immediate vicinity of the site.

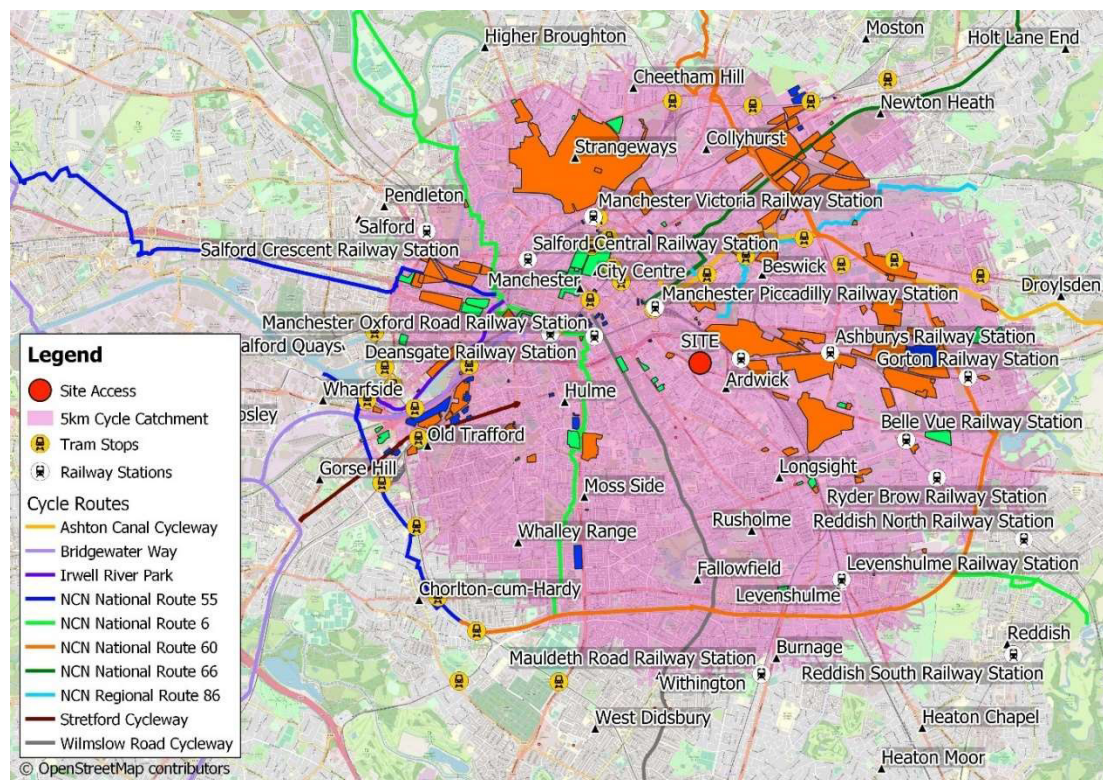
3.2.8 With regards to the above, the site is therefore highly accessible on foot.

3.3 Cycle Accessibility

3.3.1 It is generally accepted that cycling provides a realistic and healthy alternative to the private car for journeys up to 5km as a whole, or as part of a longer journey by public transport.

3.3.2 In order to determine the accessibility of the site by cycle, **Figure 3.2** shows a 5km cycle catchment from the centre of the site.

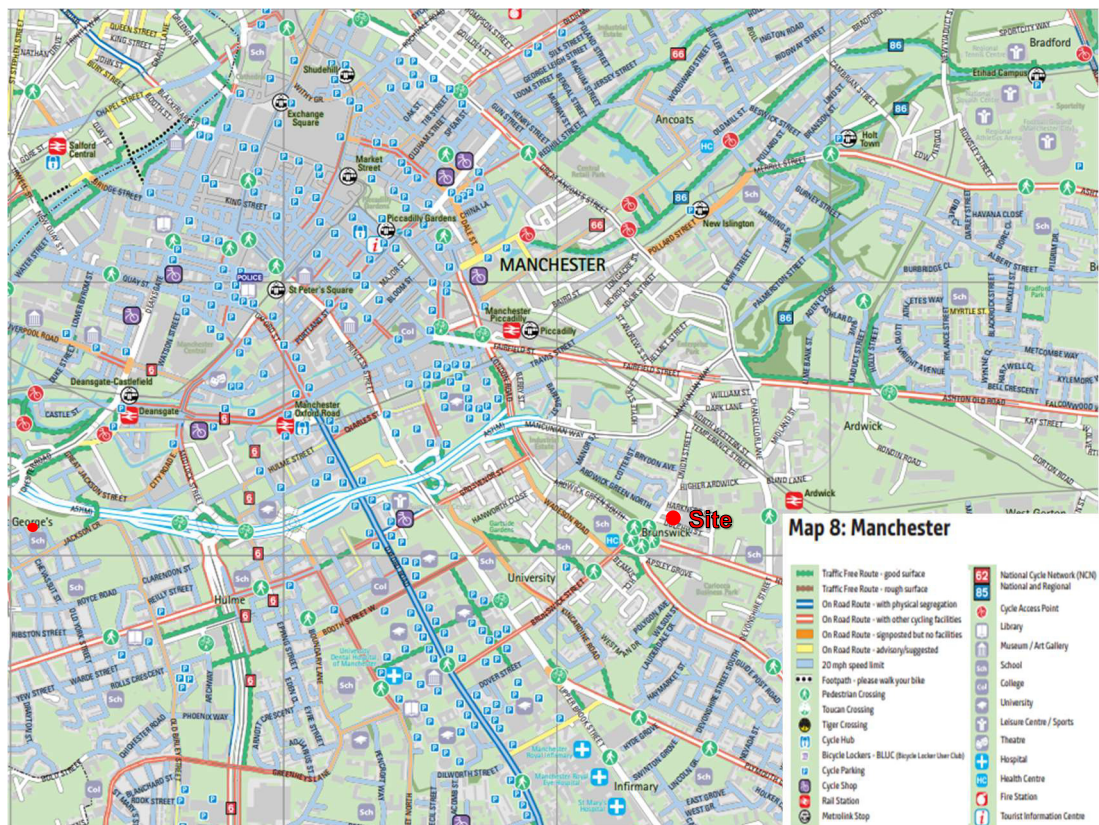
Figure 3.2 – 5km Cycle Catchment



3.3.3 The above plan shows that the whole of Manchester City Centre can be accessed within the 5km cycle catchment. Furthermore, the areas of Rusholme, Gorton and parts of Salford, amongst others, can also be accessed within a reasonable cycle distance.

3.3.4 **Figure 3.3** illustrates the local cycle routes and facilities located close to the site from the Transport for Greater Manchester (TfGM) online Cycle Map 8 for Manchester.

Figure 3.3 – TfGM Online Cycle Map (extract of Map 8: Manchester)



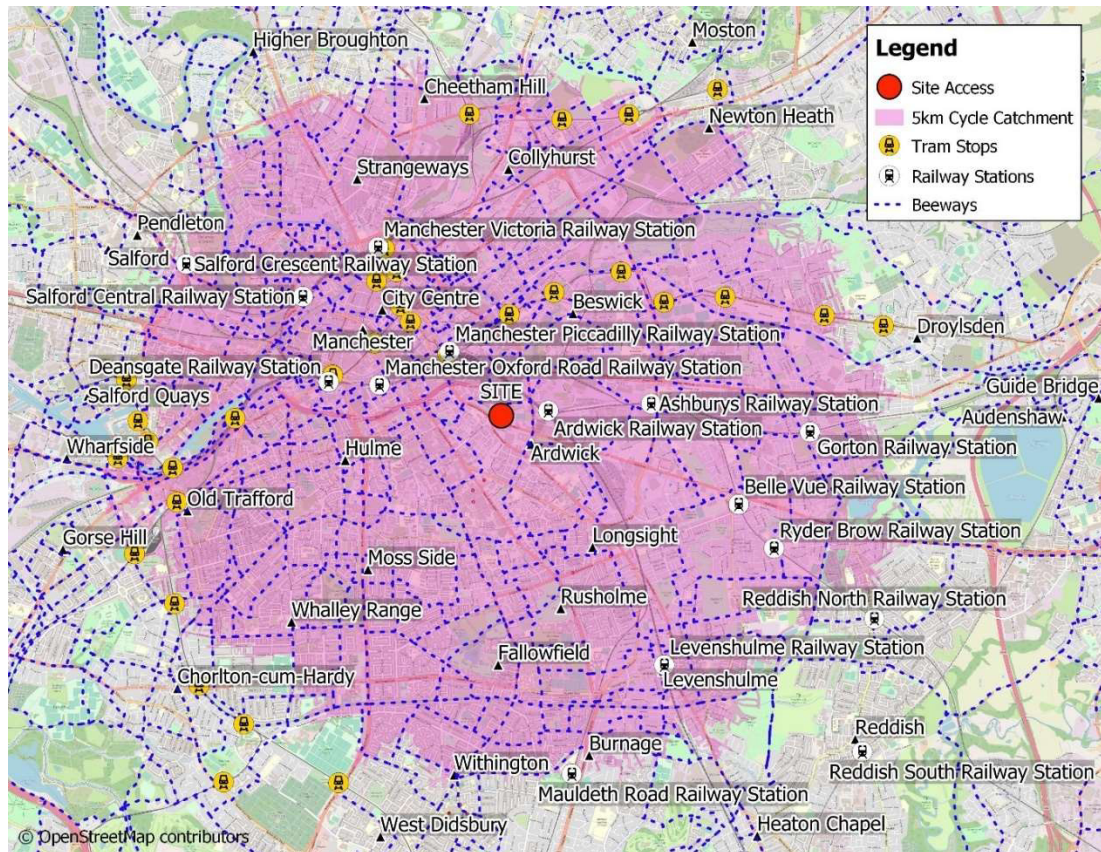
3.3.5 There are a number of on-road cycle routes around the site on Brunswick Street, Stockport Road and Hyde Road. The cycle route on Brunswick Street runs in a north-east / south-west direction south-west of the site and connects with Oxford Road adjacent to Manchester University. Along Stockport Road, there are cycle route facilities up to the junction with Plymouth Grove West, whilst the cycle route along Hyde Road commences from the Apollo roundabout and terminates where the road meets Pottery Lane to the east.

3.3.6 There are also cycle route facilities along Ardwick Green South towards Manchester city centre. This route passes under the Mancunian Way and onto London Road.

From here, the route passes Manchester Piccadilly Railway Station and connects with Route 66 of the National Cycle Network (NCN).

- 3.3.7 Route 66 is a largely traffic-free route which commences at Manchester Piccadilly Railway Station and runs alongside the Rochdale Canal, utilising canal towpaths and disused railways. Route 66 crosses Route 60 of the NCN at Miles Platting, near to Phillips Park. Route 60 is made up of a combination of on-road and traffic-free sections along its length and commences from Cheetham Hill and travels in a southerly direction to Ravensthorpe, passing through Openshaw and Fallowfield. This route provides further connections to Routes 6 and 62 of the NCN.
- 3.3.8 Wadeson Road, to the west of the site, is classified as an on-road signed cycle route. This route provides a connection towards Manchester City Centre by connecting to Sackville Street via a good quality traffic-free route between these two roads, which also passes under the Mancunian Way. Further to this, there are also many advisory traffic-free and on-road cycle routes available within close proximity to the site, including local routes which form part of the NCN network. These advisory routes provide good quality links throughout the area and make up parts of Greater Manchester's cycle routes.
- 3.3.9 **Figure 3.4** illustrates the Beeways located close to the site. The Bee Network promotes active travel by delivering fully segregated cycling and walking routes on busy roads (referred to as 'Busy Beeways'), and road signage and formal crossings on quieter routes (referred to as 'Beeways').

Figure 3.4 – TfGM Bee Network Map



- 3.3.10 With regards to the above, the site is therefore well located to encourage prospective students to access the site by cycle.

3.4 Accessibility by Public Transport

Accessibility by Bus

- 3.4.1 Guidance within the CIHT document “*Guidelines for Planning for Public Transport in Development*” recommends that the walk distance to a bus stop from a new development should ideally be 300m, or a maximum of 400m. The nearest bus stops (Apollo and Apollo Theatre) to the site are situated on Hyde and Stockport Roads respectively, located 299m from the development site, and are therefore just within the CIHT’s lower 300m walk distance threshold.
- 3.4.2 Details of the bus services and maximum frequencies which serve these stops are summarised in **Table 3.1** and **Table 3.2**.

Table 3.1 – Bus Services and Frequencies, Hyde Road

Service	Route	Maximum Frequency of Services		
		Monday - Friday	Saturday	Sunday
201	Manchester - Hyde/Hattersley	Every 10 minutes	Every 10 minutes	Every 30 minutes
202	Manchester – Hyde/Gee Cross	Every 30 minutes	Every 30 minutes	Every 1 hour
203	Manchester – Stockport via Reddish	Every 10 minutes	Every 10 minutes	Every 15 minutes
205	Manchester – Hyde/Gee Cross	Every 20 minutes	Every 20 minutes	Every 30 minutes

Table 3.2 – Bus Services and Frequencies, Stockport Road

Service	Route	Maximum Frequency of Services		
		Monday - Friday	Saturday	Sunday
192	Manchester – Hazel Grove	Every 5 minutes	Every 5 minutes	Every 5 minutes

- 3.4.3 A review of **Table 3.1** and **Table 3.2** shows that there is a very high frequency of bus services stopping close to the site, which provide convenient access to locations such as Hyde, Stockport, Longsight and Hazel Grove, amongst others.

Accessibility by Rail and Tram

- 3.4.4 Manchester provides an extensive network of train services that serve both the local area and destinations further afield. The development site is within a 15-minute walk from Manchester Piccadilly, which is a major gateway station in the north-west.
- 3.4.5 Manchester Piccadilly provides local services to East Didsbury, Eccles, Salford and Ashton-Under-Lyne on a 30-minute frequency during the day and an hourly frequency in the evening. Manchester Piccadilly also provides frequent services to London, Birmingham, Newcastle and Edinburgh at a 30-minute frequency or better, as well as numerous other destinations across the country.
- 3.4.6 In addition, Manchester Victoria Railway Station is the second largest railway station serving Manchester City Centre, located within a circa 2.6km walk distance from the application site. It provides local services to north and east Manchester and also frequent services to Huddersfield, Wigan and Blackburn at a 30-minute frequency or better, as well as services to Southport and Kirkby at an hourly frequency. A direct

connection to Victoria Railway Station can be made when utilising the Bury Metrolink tram line from Piccadilly Railway Station.

3.4.7 All Metrolink trams currently operate services every 12 minutes. The nearest Metrolink stop to the site is Manchester Piccadilly. This stop is directly served by the Altrincham – Piccadilly service, the Ashton-under-Lyne – Eccles service, the Bury – Piccadilly service, and the Ashton-under-Lyne – MediaCityUK service.

3.4.8 The TfGM website provides a range of online tools which help users to plan their journeys via tram, such as live arrival / departure times, up to date maps of the Metrolink network, and live travel updates and disruptions.

3.5 Accessibility Summary

3.5.1 Overall, the site is considered to be extremely well located in terms of its accessibility by all of the major non-car modes of transport.

4.0 DEVELOPMENT PROPOSALS

4.1 General

4.1.1 The development proposed as part of this planning application relates to the erection of a first and second floor side extension to form a 3-storey building relating to the existing Turkish Community Centre. The extension will provide 15 new student accommodation / study rooms (C2 use) and ancillary facilities. The proposed student accommodation will augment the community facilities that the existing Turkish Community Centre provides. The existing 9 car parking spaces will be retained as well as 20 safe, secure and weatherproof cycle storage spaces that is located to the rear of the property.

4.1.2 The proposed site layout plans are contained in **Appendix B**.

4.2 Site Access Arrangements

4.2.1 The existing vehicular and pedestrian access from Dolphin Street will remain.

4.3 Proposed Car Parking Provision

4.3.1 No dedicated parking is to be provided and, instead, much greater emphasis is placed upon the use of more sustainable forms of transport such as walking, cycling and public transport.

4.3.2 By actively deterring cars and promoting sustainable transport modes in this way, this approach complements MCC's aspirations to become a carbon neutral city by 2038.

4.3.3 *Appendix B* of the Manchester City Council Core Strategy (2012-2027) outlines the appropriate maximum parking standards for new developments, however the document does not provide parking standards for C2 residential land uses.

4.3.4 Nevertheless, the document does state that:

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

4.3.1 In light of the above, Paragraph 107 of the National Planning Policy Framework (NPPF) states the following:

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

a) the accessibility of the development;

b) the type, mix and use of development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.”

4.3.2 With regards to the above, parking provision for new development should be considered on a case-by-case basis in relation to the nature and location of the development.

4.3.3 The following subsections of this report therefore seek to demonstrate that the lack of parking for a student residential scheme should be acceptable at this location, and sets out the initiatives that will be implemented as part of the proposed development in order to minimise the traffic and highway-related impacts of the development on the surrounding highway network. Such initiatives are focussed on reducing car ownership amongst prospective students and encouraging the use of sustainable non-car transport modes.

Local Car / Van Ownership Levels

4.3.4 The 2011 census data has been interrogated to determine the existing local car ownership levels for the Ardwick Ward (GSS code E05000688), within which the site falls. This will therefore give an indication of how many cars might be owned by occupants of the proposed development.

4.3.5 **Figure 4.1** shows the area covered by this local area and **Table 4.1** summarised the local car or van ownership levels for Ardwick.

Figure 4.1 – 2011 Census Data Catchment

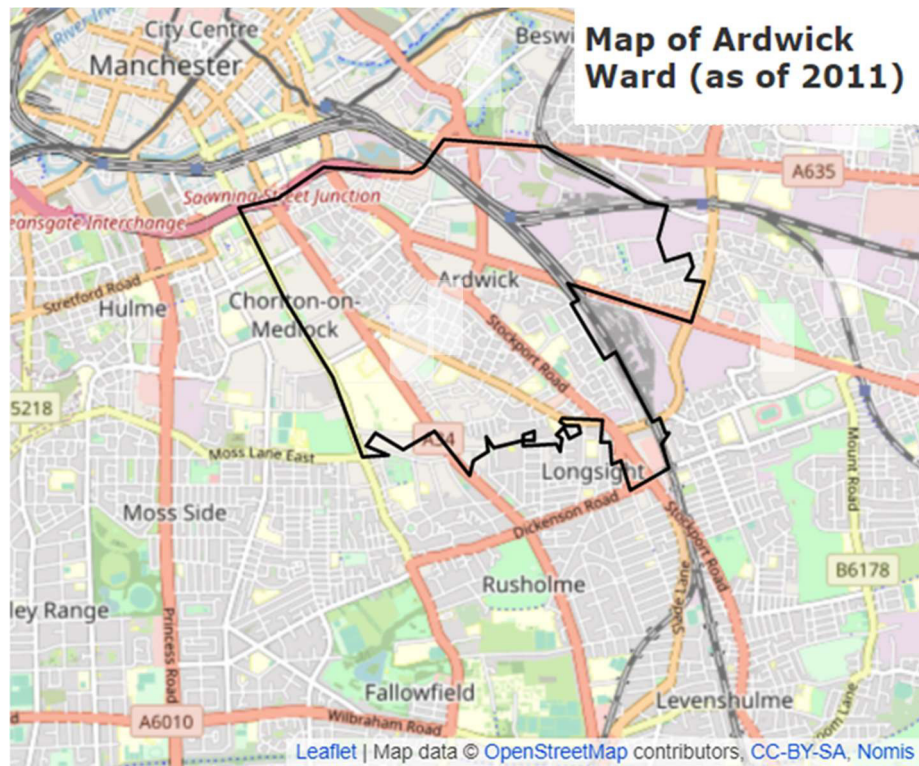


Table 4.1 – 2011 Census Data – Local Car or Van Ownership Levels

Car or van availability

	Households	
	Ardwick Ward (as of 2011)	
	count	%
All households	6,436	100.0
No cars or vans in household	4,076	63.3
1 car or van in household	1,961	30.5
2 cars or vans in household	355	5.5
3 cars or vans in household	29	0.5
4 or more cars or vans in household	15	0.2
sum of all cars or vans in the area	2,854	-

- These figures are missing.

Source: ONS - 2011 Census (KS404EW)

- 4.3.6 The data demonstrates that car ownership is comparatively low with only around 0.367 cars owned per household.

- 4.3.7 It should, however, be noted that car ownership at the development is likely to be even lower than the pre-existing surrounding levels, given that the scheme comprises C2 use student accommodation, as opposed to the C3 use dwellinghouses which predominantly make up the housing stock in the local census output area. The tenure of the development will therefore be different to the surrounding houses and should comprise a considerably lower car ownership level, if any at all.
- 4.3.8 Notwithstanding the above, the census data strongly suggests that the prevailing baseline demand for car ownership / parking is already very low in the local area.

Accessibility of the Site by Sustainable Travel Modes

- 4.3.9 As outlined in **Chapter 3** of this report, the site is situated within in a highly accessible location with excellent opportunities for the use of sustainable transport, including walking, cycling and public transport.
- 4.3.10 In these circumstances, the requirement for car ownership is considerably reduced. This is evidenced in the previous subsection, which demonstrates that car ownership in the local area is less than 37% of individuals having access to a privately owned car or can within their household.

Proposed Initiatives to Reduce Car Ownership and Encourage the use of Sustainable and Alternative Modes of Travel to the Private Car

- 4.3.11 Without prejudice to the above, it is proposed that initiatives will be implemented as part of the proposed development in order to ensure that car ownership amongst prospective students is kept to a minimum and, in turn, to encourage the uptake of more sustainable modes of travel. These measures and initiatives are summarised as follows:
- All prospective students would be made aware that there is no off-street car parking available.
 - There are 20 safe, secure and weatherproof cycle storage spaces that will be located to the rear of the property.
 - Travel information packs would be prepared and distributed to all new students upon first occupation.

Commuting Patterns

- 4.3.12 It is expected that occupants of the proposed student accommodation at the Turkish Community Centre will be students at Manchester Metropolitan University (MMU) or The University of Manchester. Both these tertiary institutions are located within a 15-minute walking and 5-minute cycling distance.

4.4 Cycle Parking

- 4.4.1 The existing 20 safe, secure and weatherproof cycle storage spaces located to the rear of the property would be retained.
- 4.4.2 In light of the recent Covid-19 pandemic, the UK Government and many local authorities have responded quickly to the opportunities presented by the pandemic to provide significant funding towards new cycling infrastructure, with hope that one benefit of the pandemic might be to effect a permanent change in travel behaviour by such measures.
- 4.4.3 The level of cycle parking provision therefore directly contribute to this new policy direction.

4.5 Servicing

- 4.5.1 The servicing arrangements associated with the proposed development will be the same as the existing arrangements for the Turkish Community Centre. Bins are collected weekly by a private waste collection company; additional collections can be arranged for an extra charge.
- 4.5.2 Waste collection and servicing will take place directly from Dolphin Street and this is considered to be suitable for this purpose by virtue that the Turkish Community Centre and adjacent properties are all serviced from Dolphin Street. The bin stores are located close to Dolphin Street to allow for easy collection.

5.0 FORECAST TRIP GENERATION

5.1 Introduction

5.1.1 This Chapter of the report sets out the traffic generation forecast associated with the proposed development and takes account that the existing 9 car parking spaces will be retained as well as 20 safe, secure and weatherproof cycle storage spaces that will be located to the rear of the property.

5.1.2 The trip generation forecast has been considered for a typical weekday during the AM peak (08:00-09:00) and PM peak (16:00-17:00) periods. The daily trips are estimated from 06:00-22:00, to capture the maximum movements that may take place over a day.

5.2 Person Trip Generation

5.2.1 To estimate the number of trips generated by the proposed student accommodation (C2 Use Class), the TRICS (Trip Rate Info Computer System) was interrogated to identify suitable survey sites that are comparable with the 15 new student accommodation / study rooms proposed at the Turkish Community Centre. The associated person trip generation has been estimated using average total people trip rates derived from the TRICS database (v7.8.4). The parameters used for the interrogation of multi-modal survey sites are set out in **Table 5.1** and the outputs are contained in **Appendix C**.

Table 5.1 – TIRCS Trip Rate Calculation Selection Parameters

Parameter Field	Filtering Selection Criteria by Peak Period
Land Use Category	03 - Residential
Land Use Sub-Category	G – Student Accommodation
Regions	United Kingdom, excluding London and NI
Parameter	Number of Residents
Actual Range	197-350
Range Selected by User	15-50
Data Range	01/01/2013 - 25/09/2019

Parameter Field	Filtering Selection Criteria by Peak Period
Survey Days	Wednesday and Thursday
Location	Town Centre and Edge of Town Centre
Use Class	C3
Calculation Factor	1 Resident

- 5.2.2 Due to the fact that the proposed development will effectively be car-free, it is not anticipated that the proposed development would generate material levels of vehicular traffic movement, other than those associated with refuse collection vehicles (circa once per week) and sporadic delivery vehicles.
- 5.2.3 As such, a normal comparison with the TRICS-based trip rates may not yield representative traffic forecasts, because the TRICS-based comparator sites have a higher level of available parking provision, furthermore they are based on Use Class C3 survey sites. No data is available for Use Class C2 for multi-modal trips.
- 5.2.4 The available vehicle trip data for Use Class C2 is pre-2014 and is not deemed to be fully representative of the proposed development. The traffic generation forecasts have therefore been based on an alternative methodology whereby the total vehicle trip rates derived from TRICS, see **Table 5.2** below, have been redistributed proportionally to the other non-vehicular modes of transport (**Table 5.3**). In turn, this will present traffic forecasts that are much more reflective of the likely multi-modal traffic that would actually be generated by this particular development. The full methodology is contained in **Appendix D**.

Table 5.2 – TRICS Multi-modal Trip Rates (per 1 Resident)

		Vehicles	Cycles	Pedestrians	Public Transport	Total
AM Peak Hour (08:00-09:00)	In	0	0	0	0	0
	Out	0	0	0	0	0
PM Peak Hour (16:00-17:00)	In	0	0	0	0	0
	Out	0	0	0	0	0

		Vehicles	Cycles	Pedestrians	Public Transport	Total
Daily (06:00-22:00)	In	0	0	1	1	2
	Out	0	0	1	1	2

NB: The figures in Table 5.2 are subject to rounding errors.

5.2.5 Review of **Table 5.2** shows that the proposed residential development is forecast to generate a total of 0 two-way person trips in the weekday AM peak hour and 0 two-way total person trips in the weekday PM peak hour. The figures are subject to rounding errors.

5.2.6 With regards to the above, **Table 5.3** sets out the total trip generating potential of the proposed development (15 units) during the weekday AM and PM peak hours.

Table 5.3 – Total Trip Generation of the Proposed Development (15 Residents)

		Vehicles	Cycles	Pedestrians	Public Transport	Total
AM Peak Hour (08:00-09:00)	In	0	0	0	0	0
	Out	0	0	2	2	4
PM Peak Hour (16:00-17:00)	In	0	0	2	1	3
	Out	0	0	1	0	1
Daily (06:00-22:00)	In	0	0	14	10	25
	Out	0	0	13	10	24

NB: The figures in Table 5.3 are subject to rounding errors.

5.2.7 **Table 5.3** demonstrates that the proposed development is forecast to generate a total of 4 two-way person trips in the AM peak hour and 4 two-way person trips in the PM peak hour, on average.

5.2.8 The proposed development is not forecast to give rise to any additional vehicle trips. The existing site access arrangements are therefore deemed appropriate for the proposed development.

5.2.9 Similarly, the proposed development is therefore considered to be acceptable from a trip generation and traffic impact perspective and no junction capacity assessments on the local road network are deemed to be necessary.

6.0 SUMMARY AND CONCLUSIONS

- 6.1.1 AXIS has been appointed by Manchester Turkish Community Association to provide highways and transport advice in relation to a full planning application for a student residential accommodation development located at Nos. 7-9 Dolphin Street, Ardwick, Manchester.
- 6.1.2 This planning application seeks approval for the erection of a first and second floor side extension to form a 3-storey building relating to the existing Turkish Community Centre. The extension will provide 15 student accommodation / study rooms with ancillary facilities, while retaining the existing 9 off-street car parking spaces associated with the Turkish Community Centre. Safe, secure and weatherproof cycle storage is provided at the rear of the building for 20 cycles.
- 6.1.3 The accessibility of the site has been assessed in terms of its accessibility by walking, cycling and public transport. Overall, the site is considered to be very well located, given its location on the periphery of Manchester City Centre and its potential to encourage a large number of trips by non-car modes of transport.
- 6.1.4 Notwithstanding the above, the report demonstrates that the proposed development would not cause detriment to the safety or operation of the local highway network with regards to overspill parking, based on the expectation that prospective residents will likely not own cars. This has been informed by a review of the proposed tenure, the site's excellent accessibility by non-car modes of travel, in addition to an analysis of local census data on car ownership levels and local residential modal splits.
- 6.1.5 This TS also sets out a list of initiatives that are proposed to be implemented at the site in order to remove the need for car ownership amongst students and encourage the use of sustainable and alternative modes of transport to the private car.
- 6.1.6 The servicing arrangements associated with the proposed development will be the same as the existing arrangements for the Turkish Community Centre. Bins are collected weekly by a private waste collection company; additional collections can be arranged for an extra charge.
- 6.1.7 Waste collection and servicing will take place directly from Dolphin Street and this is considered to be suitable for this purpose by virtue that the Turkish Community

Centre and adjacent properties are all serviced from Dolphin Street. The bin stores are located close to Dolphin Street to allow for easy collection from Dolphin Street.

6.1.8 This TS has considered the traffic generation forecasts associated with the proposed development. The proposed development is forecast to generate a total of 4 two-way person trips in the weekday AM peak hour and 4 two-way person trips in the weekday PM peak hour.

6.1.9 The proposed student accommodation will effectively be car-free and does not give rise to any additional vehicle trips. The existing site access arrangements are therefore deemed appropriate for the proposed development.

6.1.10 Similarly, the proposed development is therefore considered to be acceptable from a trip generation and traffic impact perspective and no junction capacity assessments on the local road network are deemed to be necessary.

6.2 Conclusions

6.2.1 With regards to the evidence presented within this report, the proposals are considered to pass the test set out in Paragraph 111 of the National Planning Policy Framework which states that developments should only be prevented or refused if the traffic impacts on the road network would be 'severe'.

6.2.2 Based on the information presented in this report, it is considered that there should be no reason to withhold planning permission from a transport perspective.

APPENDIX A – EXISTING SITE PLANS



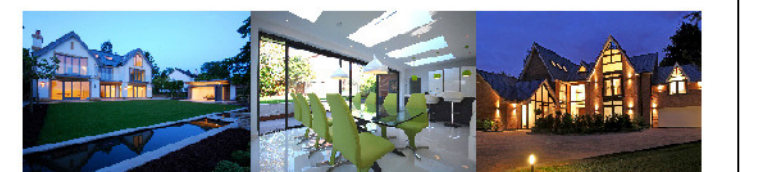
EXISTING ELEVATIONS

PROPOSED EXTENSION TO
TURKISH COMMUNITY CENTRE
DOLPHIN STREET, MANCHESTER, M12 6BG

Drwg. No: 2021 / 10 / 07 REV: 8TH JAN 2022

Date: 8TH JAN 2022 Scale 1:100 @ A1

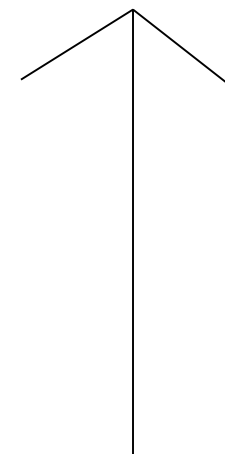
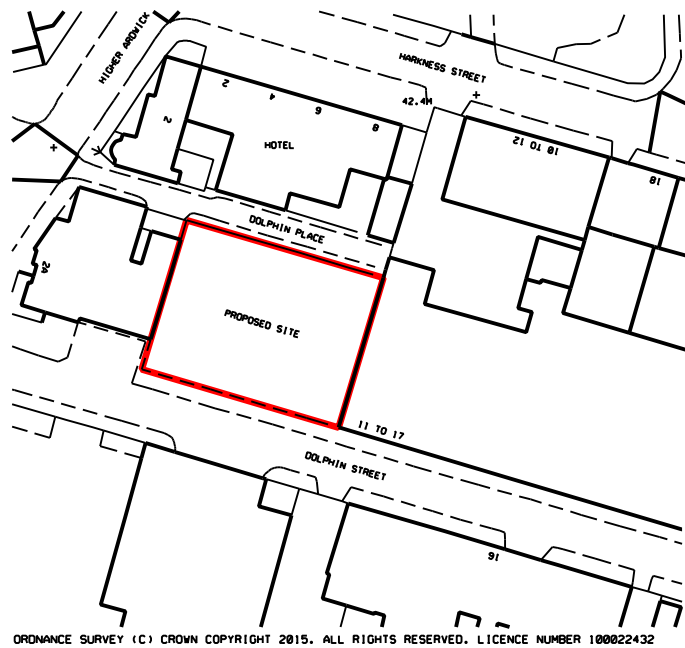
m t architectural consultants limited



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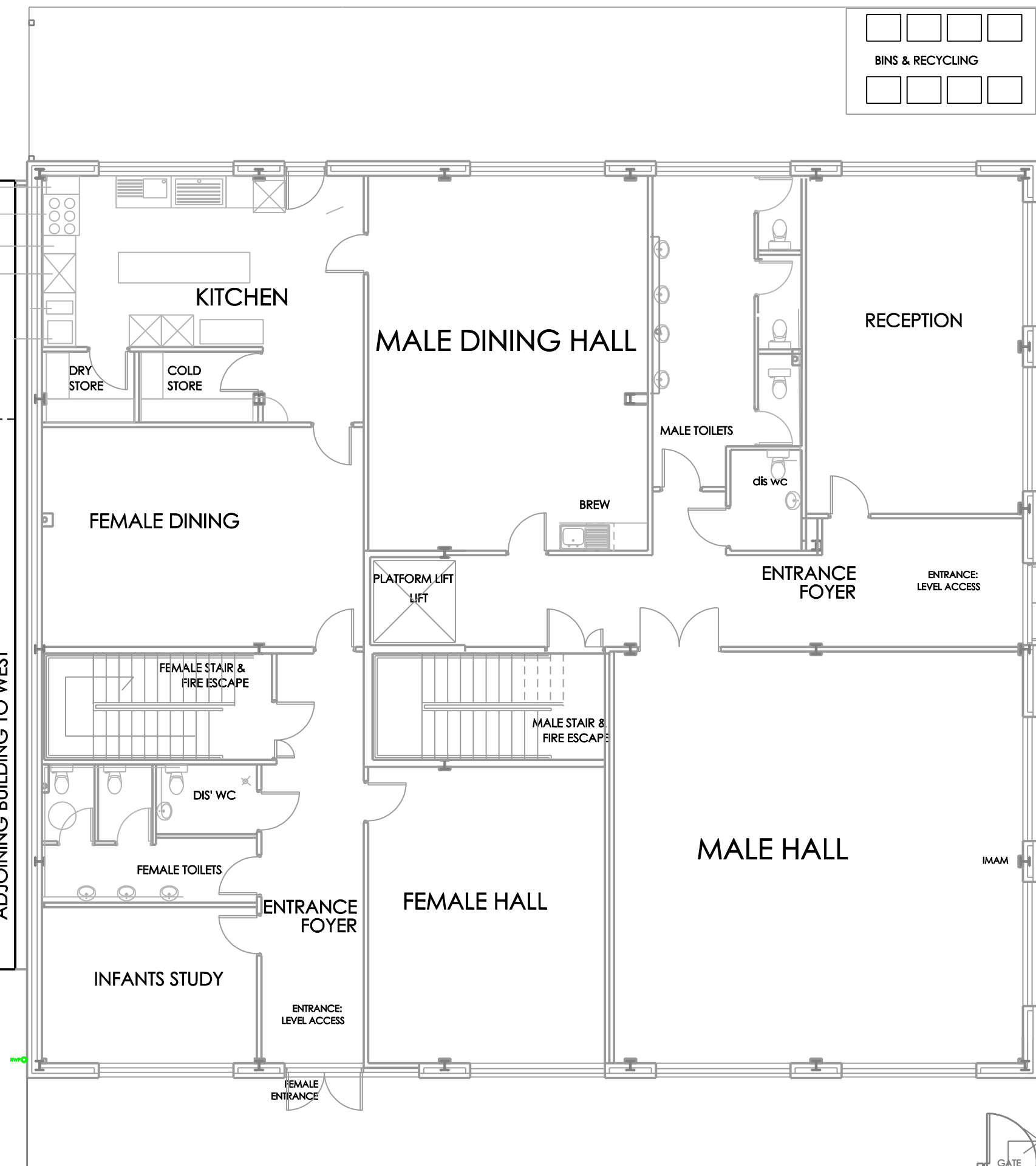
NORTH

SCALE 1 : 1250 AT A4
 DRAWING 2021/10/01
 REV 8TH JAN 2022



EXISTING FIRST FLOOR PLAN
221 SQM PROPOSED EXTENSION

FRONT BOUNDARY LINE



EXISTING GROUND FLOOR PLAN

EXISTING VEHICLE ACCESS

EXISTING CAR PARKING

ENTRANCE FROM CAR PARKING

9

8

7

6

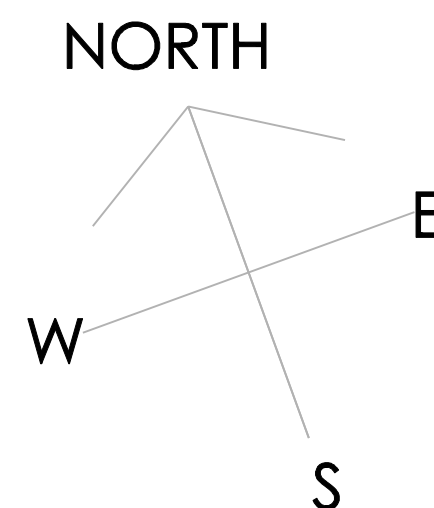
5

4

3

2

1



EXISTING PLANS

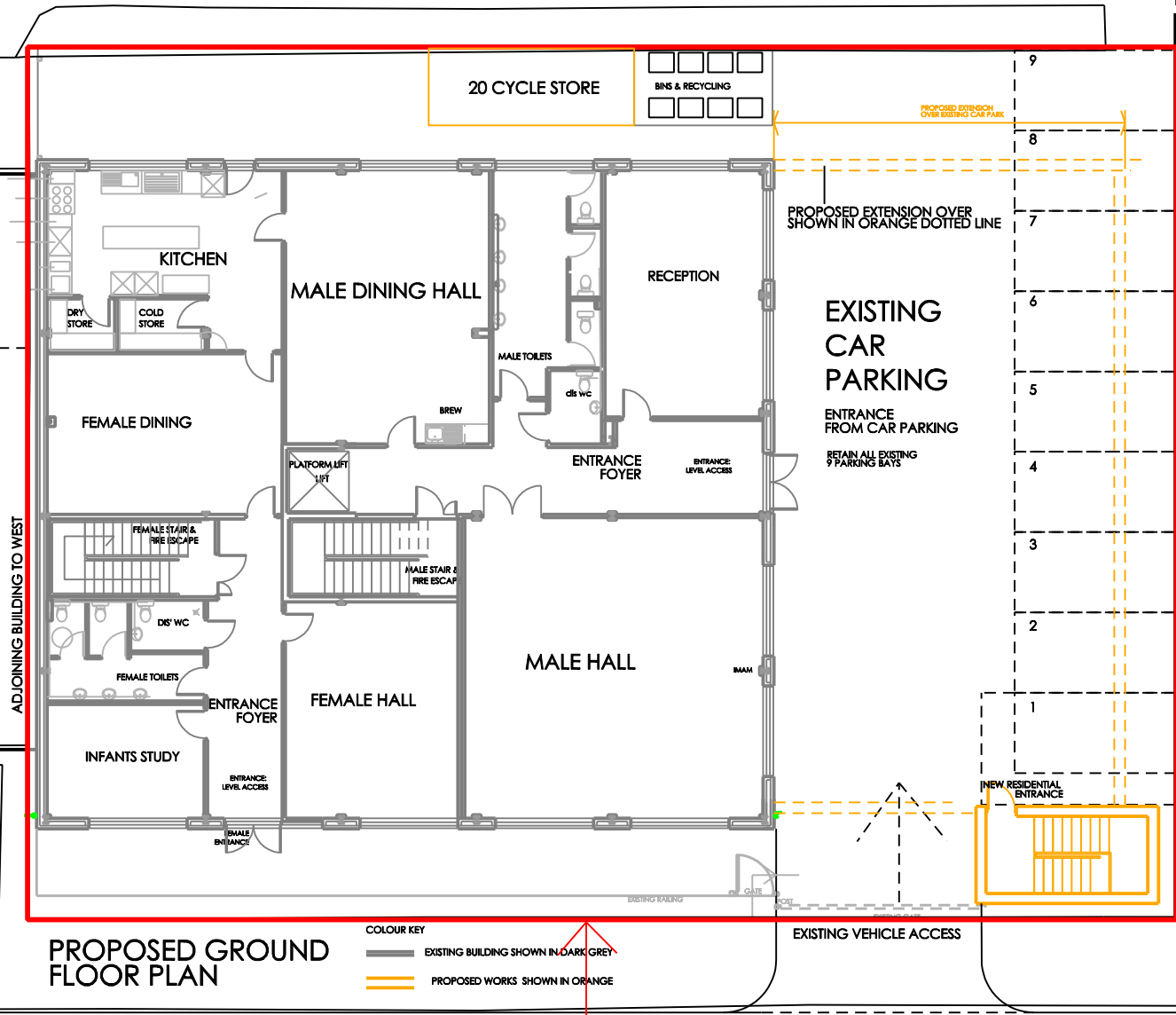
PROPOSED TURKISH COMMUNITY CENTRE
DOLPHIN STREET, MANCHESTER, M12 6BG

Drwg. No: 2021/ 10 / 06 REV 8TH JAN 2022
Date : 8TH JAN 2022 Scale 1:100 @ A1



APPENDIX B – PROPOSED SITE PLANS

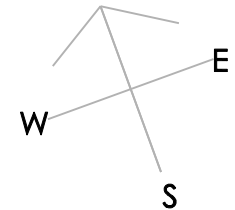
DOLPHIN PLACE



SITE BOUNDARY EDGED RED

DOLPHIN STREET

NORTH



PROPOSED SITE PLAN

BLACK LINES ON PLAN INDICATE EXISTING TO BE RETAINED.
ORANGE LINES ON PLAN INDICATE PROPOSED WORKS.

PROPOSED EXTENSION TO
TURKISH COMMUNITY CENTRE
DOLPHIN STREET, MANCHESTER, M12 6BG

Drwg. No: 2021 / 10 / 03 REV: 6TH JAN 2022

Date: 6TH JAN 2022 Scale: 1:200 @ A4

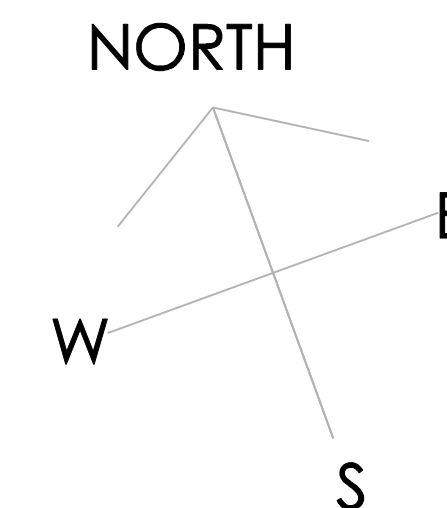
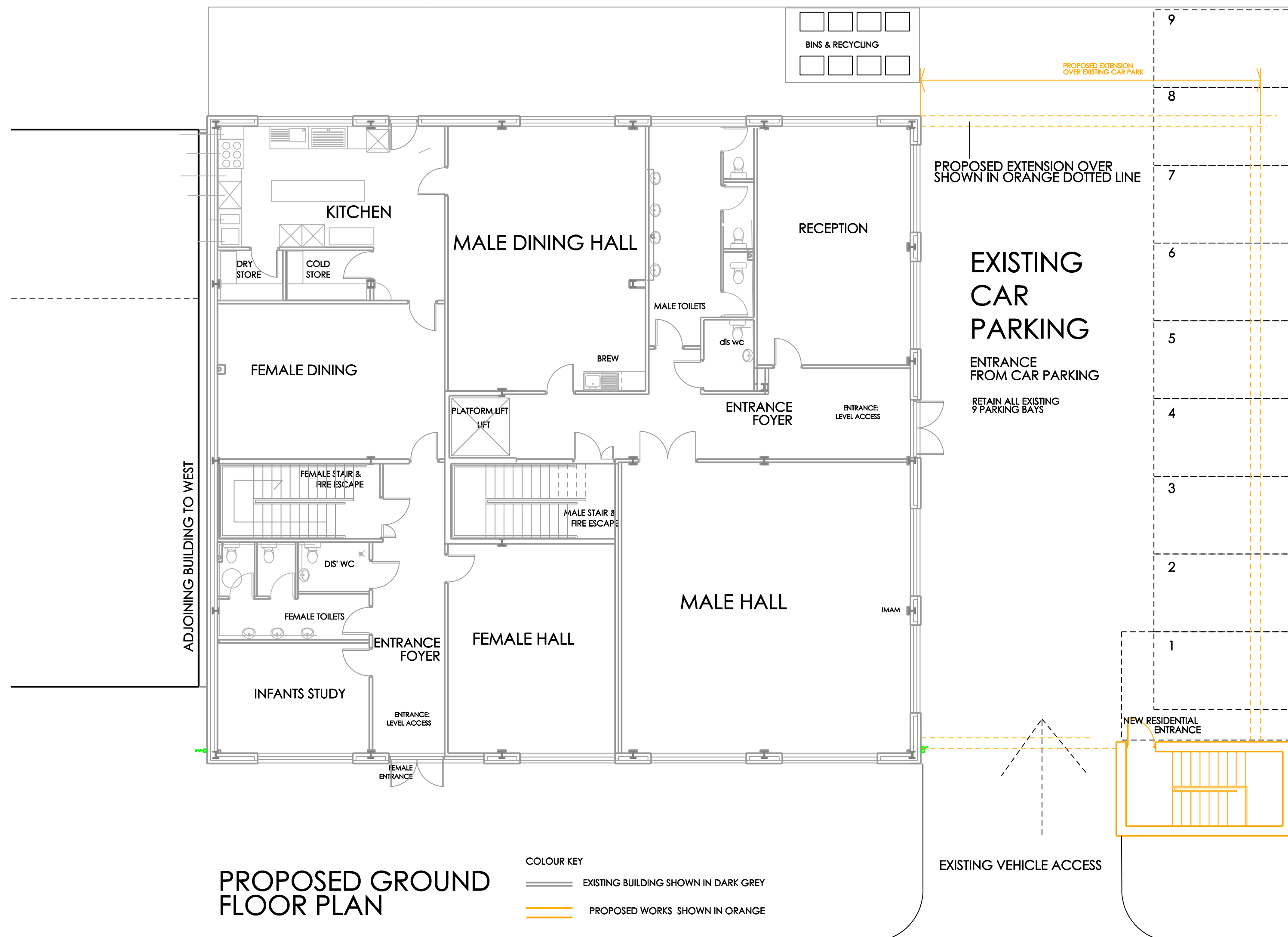
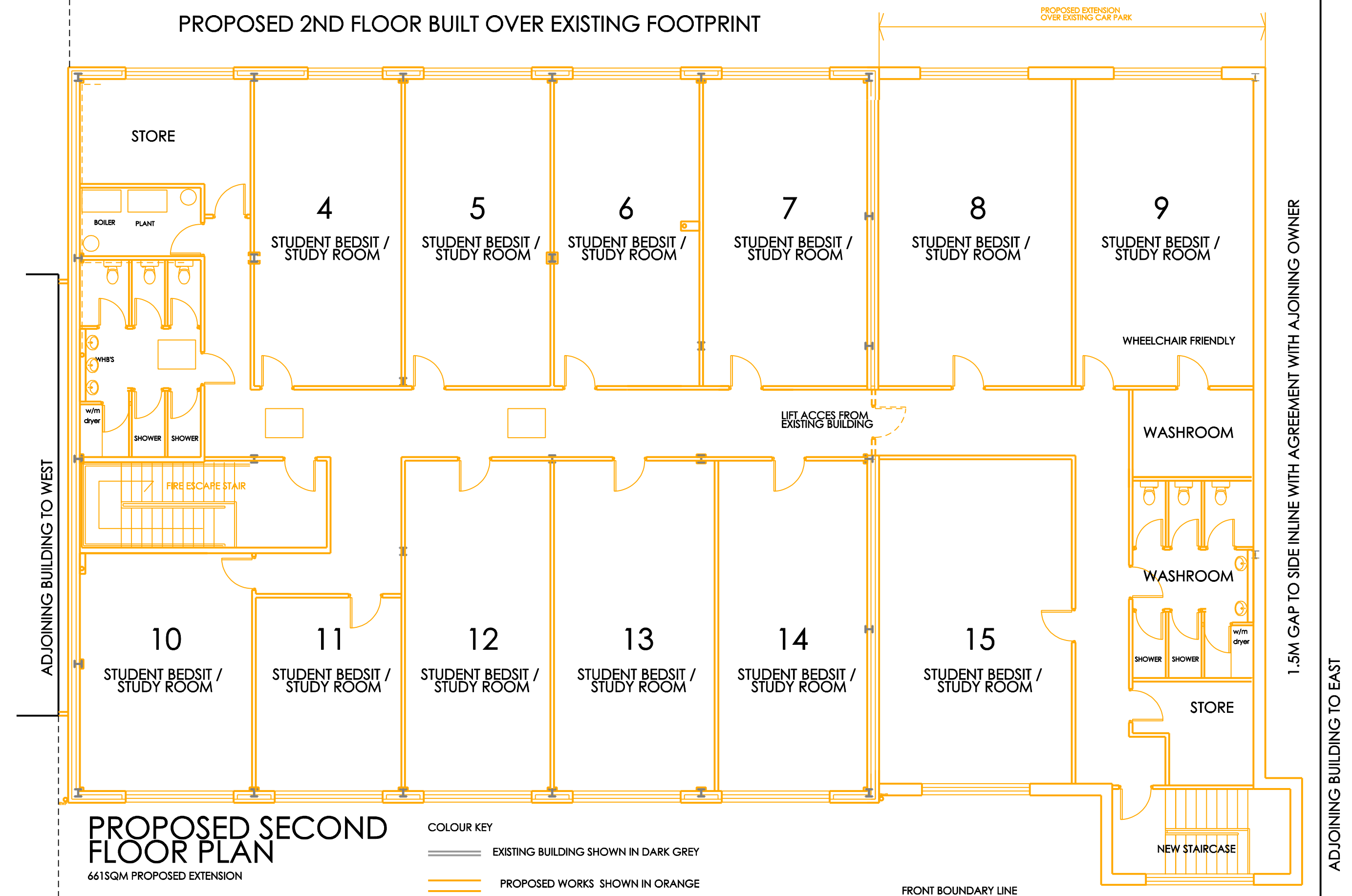
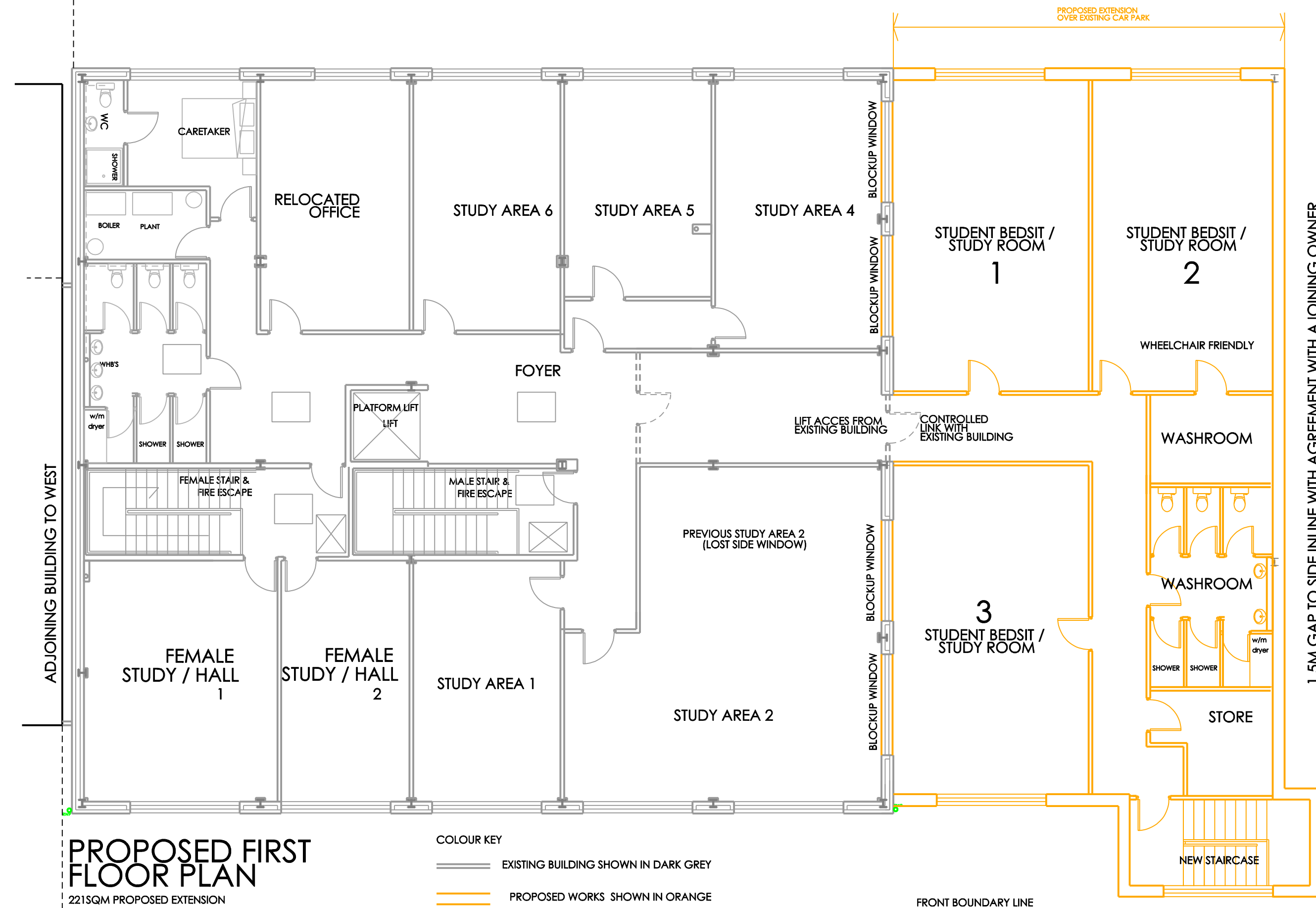
Mark Thorley design limited



Mark Thorley MCIAL, MSAI, MRPIWS

Chartered Architectural Technologist, Party wall surveyor, Architectural function.

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Email: mark.thorley@markthorleydesign.com
Website: www.markthorleydesign.com



PROPOSED PLANS

BLACK LINES ON PLAN INDICATE EXISTING TO BE RETAINED.
 ORANGE LINES ON PLAN INDICATE PROPOSED WORKS.

PROPOSED TURKISH COMMUNITY CENTRE
 9 DOLPHIN STREET, MANCHESTER, M12 6BG

Drwg. No: 2021/ 10 / 04
 Date : 8TH JAN 2022

REV' 8TH JAN 2022
 Scale 1:100 @ A1

m t architectural consultants limited

Mark Thorley MCIAT, MSAI, MFPWS

Chartered Architectural Technologist, Party Wall Surveyor & Architectural Illustrator.

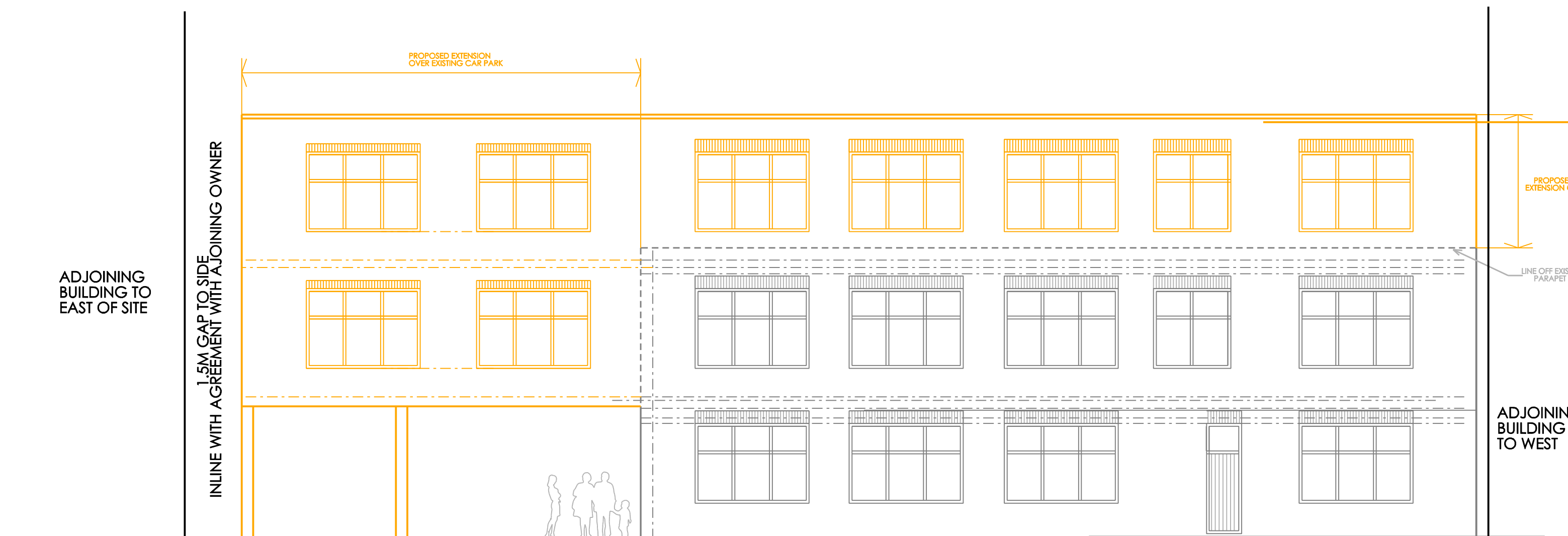
Mobile : 07986 453541
 email : mark@marc-thorley.com
 website : www.markthorleydesign.com



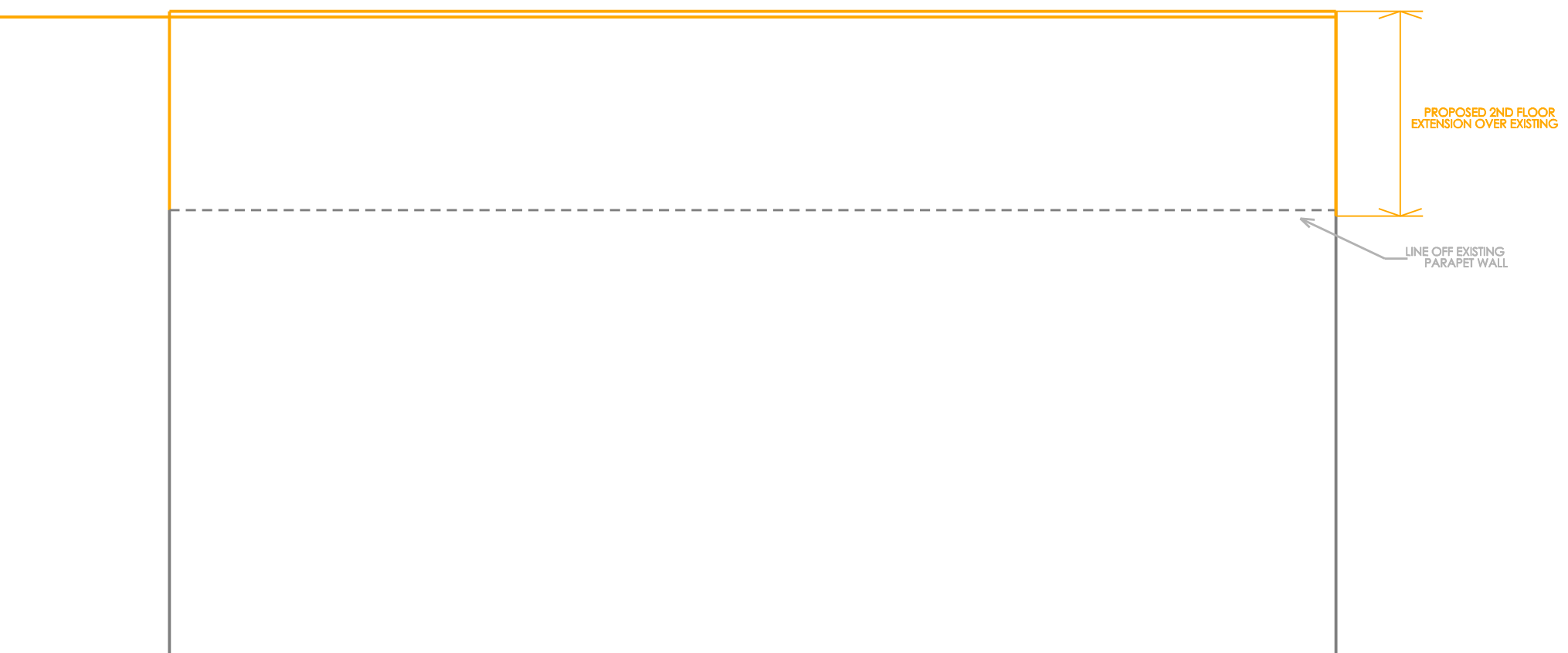
PROPOSED FRONT ELEVATION



PROPOSED SIDE ELEVATION (EAST SIDE)



PROPOSED REAR ELEVATION
FACING DOLPHIN PLACE



PROPOSED SIDE ELEVATION (WEST SIDE)

PROPOSED ELEVATIONS

BLACK LINES ON PLAN INDICATE
EXISTING TO BE RETAINED

ORANGE LINES ON PLAN INDICATE
PROPOSED WORKS

PROPOSED EXTENSION TO
TURKISH COMMUNITY CENTRE
DOLPHIN STREET, MANCHESTER, M12 6BG

Drwg. No: 2021 / 10 / 05 REV' 8TH JAN 2022

Date: 8TH JAN 2022 Scale 1:100 @ A1

m t architectural consultants limited



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APPENDIX C – TRICS OUTPUT (RESIDENTIAL – STUDENT ACCOMMODATION)

Axis 76 Water Lane Wilmslow

Licence No: 339901

Filtering Summary

Land Use	03/G	RESIDENTIAL/STUDENT ACCOMMODATION
Selected Trip Rate Calculation Parameter Range	15-50 RESIDE	
Actual Trip Rate Calculation Parameter Range	197-350 RESIDE	
Date Range	Minimum: 01/01/13	Maximum: 25/09/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Wednesday	1
	Thursday	2
Main Location Types selected	Town Centre	1
	Edge of Town Centre	2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	10,001 to 15,000	1
	25,001 to 50,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	250,001 to 500,000	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-339901-220226-0236

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : G - STUDENT ACCOMMODATION

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	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: 197 to 350 (units:)
 Range Selected by User: 15 to 50 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 25/09/19

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

Selected survey days:

Wednesday	1 days
Thursday	2 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	1
Edge of Town Centre	2

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	1
Built-Up Zone	2

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

Secondary Filtering selection:

Use Class:

C3 3 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	1 days

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

Travel Plan:

No 3 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 3 days

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

LIST OF SITES relevant to selection parameters

1	DS-03-G-02	STUDENT ACCOMMODATION	DERBYSHIRE
	CATHEDRAL ROAD		
	DERBY		
	Town Centre		
	Built-Up Zone		
	Total Number of residents:	350	
	Survey date: WEDNESDAY	25/09/19	Survey Type: MANUAL
2	DV-03-G-04	STUDENT ACCOMMODATION	DEVON
	BONHAY ROAD		
	EXETER		
	Edge of Town Centre		
	Residential Zone		
	Total Number of residents:	241	
	Survey date: THURSDAY	28/11/13	Survey Type: MANUAL
3	WK-03-G-02	STUDENT FLATS	WARWICKSHIRE
	RAGLAN STREET		
	COVENTRY		
	Edge of Town Centre		
	Built-Up Zone		
	Total Number of residents:	197	
	Survey date: THURSDAY	17/10/13	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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

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): 27.71

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.001	3	263	0.000	3	263	0.001
08:00 - 09:00	3	263	0.004	3	263	0.001	3	263	0.005
09:00 - 10:00	3	263	0.003	3	263	0.001	3	263	0.004
10:00 - 11:00	3	263	0.005	3	263	0.006	3	263	0.011
11:00 - 12:00	3	263	0.003	3	263	0.000	3	263	0.003
12:00 - 13:00	3	263	0.001	3	263	0.005	3	263	0.006
13:00 - 14:00	3	263	0.005	3	263	0.004	3	263	0.009
14:00 - 15:00	3	263	0.003	3	263	0.003	3	263	0.006
15:00 - 16:00	3	263	0.004	3	263	0.004	3	263	0.008
16:00 - 17:00	3	263	0.003	3	263	0.004	3	263	0.007
17:00 - 18:00	3	263	0.000	3	263	0.006	3	263	0.006
18:00 - 19:00	3	263	0.000	3	263	0.000	3	263	0.000
19:00 - 20:00	3	263	0.004	3	263	0.004	3	263	0.008
20:00 - 21:00	3	263	0.005	3	263	0.005	3	263	0.010
21:00 - 22:00	2	219	0.007	2	219	0.011	2	219	0.018
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.054			0.102

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: 197 - 350 (units:)
 Survey date date range: 01/01/13 - 25/09/19
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

Axis 76 Water Lane Wilmslow

Licence No: 339901

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.000	3	263	0.000	3	263	0.000
08:00 - 09:00	3	263	0.001	3	263	0.001	3	263	0.002
09:00 - 10:00	3	263	0.000	3	263	0.000	3	263	0.000
10:00 - 11:00	3	263	0.000	3	263	0.000	3	263	0.000
11:00 - 12:00	3	263	0.000	3	263	0.000	3	263	0.000
12:00 - 13:00	3	263	0.000	3	263	0.000	3	263	0.000
13:00 - 14:00	3	263	0.003	3	263	0.003	3	263	0.006
14:00 - 15:00	3	263	0.000	3	263	0.000	3	263	0.000
15:00 - 16:00	3	263	0.001	3	263	0.000	3	263	0.001
16:00 - 17:00	3	263	0.000	3	263	0.000	3	263	0.000
17:00 - 18:00	3	263	0.000	3	263	0.000	3	263	0.000
18:00 - 19:00	3	263	0.000	3	263	0.000	3	263	0.000
19:00 - 20:00	3	263	0.001	3	263	0.000	3	263	0.001
20:00 - 21:00	3	263	0.001	3	263	0.001	3	263	0.002
21:00 - 22:00	2	219	0.007	2	219	0.002	2	219	0.009
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.007			0.021

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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.000	3	263	0.000	3	263	0.000
08:00 - 09:00	3	263	0.000	3	263	0.001	3	263	0.001
09:00 - 10:00	3	263	0.000	3	263	0.000	3	263	0.000
10:00 - 11:00	3	263	0.000	3	263	0.000	3	263	0.000
11:00 - 12:00	3	263	0.003	3	263	0.003	3	263	0.006
12:00 - 13:00	3	263	0.000	3	263	0.000	3	263	0.000
13:00 - 14:00	3	263	0.000	3	263	0.001	3	263	0.001
14:00 - 15:00	3	263	0.001	3	263	0.000	3	263	0.001
15:00 - 16:00	3	263	0.001	3	263	0.000	3	263	0.001
16:00 - 17:00	3	263	0.000	3	263	0.000	3	263	0.000
17:00 - 18:00	3	263	0.000	3	263	0.001	3	263	0.001
18:00 - 19:00	3	263	0.000	3	263	0.001	3	263	0.001
19:00 - 20:00	3	263	0.000	3	263	0.000	3	263	0.000
20:00 - 21:00	3	263	0.000	3	263	0.000	3	263	0.000
21:00 - 22:00	2	219	0.000	2	219	0.000	2	219	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.007			0.012

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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.000	3	263	0.006	3	263	0.006
08:00 - 09:00	3	263	0.006	3	263	0.126	3	263	0.132
09:00 - 10:00	3	263	0.006	3	263	0.038	3	263	0.044
10:00 - 11:00	3	263	0.022	3	263	0.065	3	263	0.087
11:00 - 12:00	3	263	0.034	3	263	0.048	3	263	0.082
12:00 - 13:00	3	263	0.043	3	263	0.043	3	263	0.086
13:00 - 14:00	3	263	0.063	3	263	0.051	3	263	0.114
14:00 - 15:00	3	263	0.082	3	263	0.066	3	263	0.148
15:00 - 16:00	3	263	0.104	3	263	0.070	3	263	0.174
16:00 - 17:00	3	263	0.121	3	263	0.041	3	263	0.162
17:00 - 18:00	3	263	0.127	3	263	0.077	3	263	0.204
18:00 - 19:00	3	263	0.142	3	263	0.084	3	263	0.226
19:00 - 20:00	3	263	0.047	3	263	0.047	3	263	0.094
20:00 - 21:00	3	263	0.080	3	263	0.066	3	263	0.146
21:00 - 22:00	2	219	0.039	2	219	0.030	2	219	0.069
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.916			0.858			1.774

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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

TRIP RATE for Land Use 03 - RESIDENTIAL/G - STUDENT ACCOMMODATION

MULTI-MODAL BUS/TRAM PASSENGERS

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.001	3	263	0.003	3	263	0.004
08:00 - 09:00	3	263	0.005	3	263	0.060	3	263	0.065
09:00 - 10:00	3	263	0.005	3	263	0.016	3	263	0.021
10:00 - 11:00	3	263	0.004	3	263	0.014	3	263	0.018
11:00 - 12:00	3	263	0.015	3	263	0.016	3	263	0.031
12:00 - 13:00	3	263	0.029	3	263	0.034	3	263	0.063
13:00 - 14:00	3	263	0.024	3	263	0.033	3	263	0.057
14:00 - 15:00	3	263	0.036	3	263	0.018	3	263	0.054
15:00 - 16:00	3	263	0.046	3	263	0.023	3	263	0.069
16:00 - 17:00	3	263	0.033	3	263	0.014	3	263	0.047
17:00 - 18:00	3	263	0.041	3	263	0.019	3	263	0.060
18:00 - 19:00	3	263	0.024	3	263	0.029	3	263	0.053
19:00 - 20:00	3	263	0.036	3	263	0.016	3	263	0.052
20:00 - 21:00	3	263	0.020	3	263	0.020	3	263	0.040
21:00 - 22:00	2	219	0.000	2	219	0.000	2	219	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.319			0.315			0.634

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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.001	3	263	0.004	3	263	0.005
08:00 - 09:00	3	263	0.008	3	263	0.069	3	263	0.077
09:00 - 10:00	3	263	0.005	3	263	0.018	3	263	0.023
10:00 - 11:00	3	263	0.006	3	263	0.016	3	263	0.022
11:00 - 12:00	3	263	0.015	3	263	0.016	3	263	0.031
12:00 - 13:00	3	263	0.033	3	263	0.036	3	263	0.069
13:00 - 14:00	3	263	0.028	3	263	0.036	3	263	0.064
14:00 - 15:00	3	263	0.039	3	263	0.019	3	263	0.058
15:00 - 16:00	3	263	0.049	3	263	0.027	3	263	0.076
16:00 - 17:00	3	263	0.033	3	263	0.016	3	263	0.049
17:00 - 18:00	3	263	0.047	3	263	0.020	3	263	0.067
18:00 - 19:00	3	263	0.024	3	263	0.029	3	263	0.053
19:00 - 20:00	3	263	0.037	3	263	0.019	3	263	0.056
20:00 - 21:00	3	263	0.024	3	263	0.020	3	263	0.044
21:00 - 22:00	2	219	0.000	2	219	0.000	2	219	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.349			0.345			0.694

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.

Axis 76 Water Lane Wilmslow

Licence No: 339901

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	1	241	0.000	1	241	0.000	1	241	0.000
07:00 - 08:00	3	263	0.001	3	263	0.000	3	263	0.001
08:00 - 09:00	3	263	0.003	3	263	0.000	3	263	0.003
09:00 - 10:00	3	263	0.001	3	263	0.001	3	263	0.002
10:00 - 11:00	3	263	0.005	3	263	0.005	3	263	0.010
11:00 - 12:00	3	263	0.003	3	263	0.000	3	263	0.003
12:00 - 13:00	3	263	0.001	3	263	0.005	3	263	0.006
13:00 - 14:00	3	263	0.001	3	263	0.000	3	263	0.001
14:00 - 15:00	3	263	0.003	3	263	0.003	3	263	0.006
15:00 - 16:00	3	263	0.001	3	263	0.003	3	263	0.004
16:00 - 17:00	3	263	0.003	3	263	0.004	3	263	0.007
17:00 - 18:00	3	263	0.000	3	263	0.005	3	263	0.005
18:00 - 19:00	3	263	0.000	3	263	0.000	3	263	0.000
19:00 - 20:00	3	263	0.003	3	263	0.004	3	263	0.007
20:00 - 21:00	3	263	0.004	3	263	0.004	3	263	0.008
21:00 - 22:00	2	219	0.000	2	219	0.009	2	219	0.009
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.043			0.072

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 D – RESIDENTIAL TRIP GENERATION METHODOLOGY

1. The search criteria used to obtain the trip rates for the approved residential development is set out as follows:

Land Use:	Residential
Sub-Land Use:	Student Accommodation
Survey type:	Multi-modal sites only
Regions:	All except Greater London and Ireland / Northern Ireland
Selection by:	Number of residents
Periods:	Weekdays only
Locations:	Town Centre, 'Edge of Town Centre' sites only

2. Application of the above criteria results in the following multi-modal trip rates (per 1 reside):

MULTI-MODAL TRIP RATES (PER 1 RESIDE)						
Mode	WEEKDAY AM PEAK 08:00 - 09:00		WEEKDAY PM PEAK 16:00 - 17:00		DAILY 06:00 - 22:00	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicles	0.004	0.001	0.003	0.004	0.048	0.054
Cyclists	0.000	0.001	0.000	0.000	0.005	0.007
Pedestrians	0.006	0.126	0.121	0.041	0.916	0.858
Public Transport Users	0.013	0.129	0.066	0.030	0.668	0.660
Total	0.023	0.257	0.190	0.075	1.637	1.579

3. The table below sets out the resultant trip generation forecasts when these trip rates are applied to the proposal for 15 student rooms.

MULTI-MODAL TRIP RATES APPLIED TO PROPOSAL FOR						
Mode	WEEKDAY AM PEAK 08:00 - 09:00		WEEKDAY PM PEAK 16:00 - 17:00		DAILY 06:00 - 22:00	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicles	0	0	0	0	1	1
Cyclists	0	0	0	0	0	0
Pedestrians	0	2	2	1	14	13
Public Transport Users	0	2	1	0	10	10
Total	0	4	3	1	25	24

4. However, due to the fact that the proposed residential development will effectively be 'car free', the comparison with the TRICS-based trip rates from those sites will not yield representative traffic forecasts because the TRICS-based comparator sites have a higher level of available parking provision.

Therefore, the total vehicular trip rates derived from TRICS have been redistributed proportionally to the other non-vehicular modes of transport.

5. To do so, the weekday peak hour and daily trip rates for the non-vehicular modes of transport are set out as a proportion of the total non-vehicular trip rates as follows:

PROPORTIONS						
Mode	WEEKDAY AM PEAK 08:00 - 09:00		WEEKDAY PM PEAK 16:00 - 17:00		DAILY 06:00-22:00	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Cyclists	0.0%	0.4%	0.0%	0.0%	0.3%	0.5%
Pedestrians	31.6%	49.2%	64.7%	57.7%	57.6%	56.3%
Public Transport Users	68.4%	50.4%	35.3%	42.3%	42.0%	43.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6. When the vehicular trip generation forecasts are redistributed in accordance with the above proportions, the forecast multi-modal trip generation of the proposed development is therefore as follows:

TOTAL FORECAST MULTI-MODAL TRIP GENERATION						
Mode	WEEKDAY AM PEAK 08:00 - 09:00		WEEKDAY PM PEAK 16:00 - 17:00		DAILY 06:00-22:00	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Vehicles	0	0	0	0	0	0
Cyclists	0	0	0	0	0	0
Pedestrians	0	2	2	1	14	13
Public Transport Users	0	2	1	0	10	10
Total	0	4	3	1	25	24



Forecast Multi-Modal Trip Generation - Proposed Residential Use

Student Accommodation Development, 7-9 Dolphin Street, Ardwick, Manchester

Mar-22

Job Number - 3181-01

Appendix D