

Corn Exchange, Manchester

Supplementary Transport Statement

March 2014

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Comments

Comments

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A. Transport Statement

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1. Introduction

Background

1.1. WTD have been appointed by CIP Property (AIPT) Ltd to conduct a supplementary Transportation and Highway study in support of the proposals to extend the range of permissible uses on the Lower Ground Floor of the Corn Exchange, to include A3 uses.

1.2. CIP Property (AIPT) Ltd submitted a planning a application for changes of use and associated refurbishment and reconfiguration of the Corn Exchange to incorporate retailing and leisure proposals within the following use classes: use A1 at the lower ground floor, A1 and A3 at the upper ground floor and A3 at the first floor - together with new shopfronts and associated access points into the Corn Exchange, reconfigured entrances, glazed extensions at the ground floor to the Fennel Street elevations, public realm / landscaping works to the surrounding street and spaces on all three sides of the building, highways and servicing arrangements, introduction of new canopies to the upper ground floor units of Hanging Ditch and Cathedral Street, external seating areas for use associated with the proposed restaurants (class A3), and associated works

1.3. This application, with reference 103221/FO/2013/C1 was submitted in July 2013, and planning permission was subsequently granted in October 2013.The breakdown of the various elements in the agreed application are as follows:

A1 (Food retail):	3,114sqm
A3 (Café / Restaurant):	6,816sqm
Mall area:	909sqm
Existing B1 (Offices)	To be retained
Total Area =	12,191sqm

1.4. Waterman Transport and Development Limited (WTD) were appointed by CIP Property (AIPT) Ltd to provide the highway and transportation advice in support of this planning application. WTD produced a Transport Statement dated July 2013 with reference number TS/RM/10750 as part of the application documents.

1.5. The application site is located off Hanging Ditch / Fennel Street / Cathedral Street, Manchester and the building has an approximate existing total GFA of 12,256sqm consisting of A1 (non-food retail) and A3.

1.6. As the application site is currently operational, the nett impact of the development will be considered in terms of potential trip generations of the proposed development less the trips generated by the existing development.

Purpose of the Report

1.7. This Supplementary Transport Statement (STS) is submitted in support of the planning application to extend the range of permissible uses on the Lower Ground Floor of the Corn Exchange, to include A3 uses and should be read in conjunction with the initial TS submitted in support of the extant consent.

1.8. This STS has been prepared to demonstrate to Manchester City Council (MCC) as the Local Highway Authority (LHA) that the highway impact of the proposed change of use will not be detrimental.

1.9. The features and characteristics of the development listed below were explored in great detail in

the TS produced in support of the initial application and remain unchanged. This reported is presented in **Appendix A.**

- Existing Conditions;
- Transport Policy;
- Highway Safety;
- Access Proposals;
- Parking Strategy; and
- Accessibility by Sustainable Modes

1.10. This STS therefore outlines the changes to the development scheme as a result of the change of use in terms of highways and transportation.

1.11. A separate Service Strategy document has been produced as part of the development proposals and this should be read in conjunction with this TS.

Scope of Report

1.12. This STS has been prepared in accordance with current DfT guidance for Transport Assessments produced in March 2007.

Report Structure

1.13. Following this introduction, Section 2 of the report describes development proposals.

1.14. Section 3 presents the predicted level of traffic generated by the proposed change of use and the methodology taken to assess the proposal in terms of multimodal trips produced.

1.15. The report is summarised and concluded in Section 4.

2. Development Proposals

Development Description

2.1. The proposals involve a planning application to extend the range of permissible uses to include A3 (café/restaurant) uses on the Lower Ground Floor (therefore allowing the flexibility to bring forward either A1 (retail) uses forward in line with the extant consent, or A3 uses in line with this planning application.

2.2. The proposed breakdown of the various elements to be provided on site following the change of use are as follows:

- A3 (Café / Restaurant): 9462 sqm
- Landlord Space: 2511sqm
- Atrium 665sqm
- Existing B1 (Offices) To be retained
- Total Area 12,638sqm

2.3. Due to the internal units layout within the reconfigured Corn Exchange servicing to units 3 and 4 cannot occur internally from servicing off the Fennel Street layby. It is proposed that a servicing area be created on the corner of Cathedral Street / Hanging Ditch to allow for a delivery vehicle to park up while allowing room for other service vehicles to pass. Servicing for these units will be restricted to before 7:30 am.

2.4. The Figures below show the revised layout for the development at Lower Ground Floor, Ground Floor and First Floor levels produced by 5plus Architects.



Figure 1: Proposed Lower Ground Floor Plan



Figure 2: Proposed Upper Ground Floor Plan



Figure 3: Proposed First Floor Plan

3. Predicted Trip Demand

Introduction

3.1. This section describes the forecasting of traffic generated by the proposed development. The busiest time periods presented is the Saturday Peak period.

3.2. As previously discussed, the proposals intended to provide approximately 12,638 of (A3) use and to retain the current B1 office space. The development site is currently operational and provides a total of 12,257sqm consisting of A1 (non-food retail), A3 and B1 uses.

3.3. It is therefore reasonable to assume that the impact of the development will be the nett of the existing and proposed traffic generations in accordance with current DfT guidance on Transport Assessments.

Trip Generations

3.4. The TRICS (2014a) database has been interrogated for developments similar to the existing development. The TRICS database contains traffic survey data for a range of land uses and is the industry recognised tool for calculating traffic generations for developments.

3.5. For a robust assessment, the identified peak hour generation for the proposed development will be compared with the corresponding hour for existing development.

3.6. In this analysis a number of sites across the UK have been interrogated excluding sites from Greater London and Ireland. Also, only sites from town centre locations were selected and due to the limited survey data available for Mixed Shopping Centre sites, only two survey sites were available for the existing development; KC-01-M-01 Maidstone, Kent and NL-01-M-01 Coatbridge, North Lanarkshire and one survey site available for the proposed development; DS-06-B-01 Corn Market, Derbyshire.

3.7. The TRICS output showed the peak period for the proposed development to be 13:00 – 14:00. The trips generated by the proposed development for this hour will therefore be compared with that generated for the existing development in the same hour.

3.8. The average per peak hour multi-modal trip rates for the existing development presented in Table 5 and the resulting trip generations in Table 6, with the full TRICS outputs presented in **Appendix B**.

Table 1: Average Multimodal Trip Rates per 100sqm – Existing Development – 12,257sqm

Saturday Peak Period (13:00 – 14:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	2.838	0.778	2.342	0.008	7.083
Departure	3.326	0.439	2.540	0.008	7.307
Two-way	6.164	1.217	4.882	0.016	14.390

Table 2: Average Multimodal Trip Generation– Existing Development – 12,257sqm

Saturday Peak Period (10:00 – 11:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	348	95	287	1	868
Departure	408	54	311	1	898
Two-way	756	149	598	2	1764

3.9. Tables 5 and 6 indicate that the existing site has the potential to generate two-way multimodal trips of 756vehicles, 149 public transport, 598 pedestrians and 2 cyclists or the equivalent of 1,796 total people movements during the Saturday Peak period.

Proposed Development Trip Generations

3.10. The proposed will provide approximately 12,638sqm of, A3 and the retained B1 office space. TRICS has been used to derive trip rates for A3 developments similar in nature to the proposed development. Table 7 shows the multimodal trip rates with the full TRICS output provided in **Appendix B**.

3.11. Table 7 shows the trip rates for the proposed development with the associated trips presented in Table 8.

Table 3: Average Multimodal Trip Rates per 100sqm – Proposed A3 Development – 12638sqm

Saturday Peak Period (13:00 – 14:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	2.824	2.118	0.00	0.00	9.412
Departure	2.588	2.118	0.706	0.00	9.412
Two-way	5.412	4.236	0.706.	0.00	18.824

Table 4: Average Multimodal Trips – Proposed A3 Development – 12638sqm

Saturday Peak Period (13:00 – 14:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	357	268	0	0	1189
Departure	327	268	89	0	1189
Two-way	684	535	89	0	2379

3.12. Table 8 shows that the proposed development will generate 684 two way vehicle movements, 535 public transport two way movements, 89 pedestrian movements and 2379 two way people movement.

3.13. Table 9 shows the nett difference between the existing and proposed development.

Table 5: Difference between Existing and Proposed Development Trips

Saturday Peak Period (13:00 – 14:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	9	172	-287	-1	321
Departure	-81	214	-222	-1	294
Two-way	-72	386	-509	-2	615

3.14. Table 9 highlights that in comparison to the potential trip generation of the existing site; the proposed change of use and reconfiguration could potentially generate 72 less car trips and 615 more person trips. This is due to the fact the vehicle occupancy for the proposed development is higher than the existing development, as shown in the TRICS output.

3.15. However, as previously noted, there are a limited number of applicable sites available on the TRICS database and based on the proposed site's city centre location, the pedestrianised areas surrounding the site and the high accessibility by sustainable transport modes, it is likely that the modal split percentage of vehicles would be considerably lower than estimated, whereas those for public transport and cyclists would be significantly higher in reality.

3.16. Also, trip generations for both the existing and proposed development are based on the Corn Exchange being the primary generator of the trips, whereas it is likely that trips to the application site will be part of linked trips to other amenities in the local area, such as the Arndale Shopping Centre and the Printworks.

3.17. Therefore, the proposed analysis provides an onerous and robust assessment of the likely trips to be generated onto the network by the proposed development.

4. Summary and Conclusion

Summary

4.1. WTD have been appointed by CIP Property (AIPT) Ltd to conduct a supplementary Transportation and Highway study in support of the proposals to extend the range of permissible uses on the Lower Ground Floor of the Corn Exchange, to include A3 uses.

4.2. The application site is located off Hanging Ditch / Fennel Street / Cathedral Street, Manchester and the building has an approximate existing total GFA of 12,257sqm.

4.3. As the application site is currently occupied, the nett impact of the development was considered in terms of potential trip generations.

4.4. The existing site has the potential to generate two-way multimodal trips of 756 vehicles trips, 149 public transport trips, 598 pedestrians and 2 cyclists or the equivalent of 1,764 total people movements during the Saturday Peak period.

4.5. The proposed development generates 72 less vehicle movements and 615 more people movements

4.6. This report also highlights that there are a limited number of applicable sites available on the TRICS database and based on the proposed site's city centre location, the pedestrianised areas surrounding the site and the high accessibility by sustainable transport modes, it is likely that the modal split percentage of vehicles would be considerably lower than that estimated, whereas those for public transport and cyclists would be significantly higher in reality.

4.7. Also, trip generations for both the existing and proposed development are based on the Corn Exchange being the primary generator of the trips, whereas it is likely that trips to the application site will be part of linked trips to other amenities in the local area, such as the Arndale Shopping Centre and the Printworks.

Conclusions

4.8. It can be concluded that the proposed development scheme can be delivered in line with local, regional and national transportation policy, and it will be designed to accommodate pedestrian and cyclist movements.

4.9. It is considered reasonable that the proposed development utilises existing public car parking facilities in the local areas due to its city centre location as well as it highly accessible location by sustainable transport modes.

4.10. It is reasonable to conclude based on the above that the proposed analysis provides an onerous and robust assessment of the likely nett trips to be generated onto the network by the proposed development and the proposals would therefore not have a severe impact on the surrounding highway network.

4.11. Based on the above positive findings the proposals for the change of use and associated refurbishment and reconfiguration of the Corn Exchange site are considered acceptable in highway and transportation terms.

4.12. Appendices WTD have been appointed by CIP Property (AIPT) Ltd to conduct a supplementary Transportation and Highway study in support of the proposals to extend the range of permissible uses on the Lower Ground Floor of the Corn Exchange, to include A3 uses.

APPENDICES

A. Transport Statement



Corn Exchange, Manchester

Transport Statement

July 2013

Waterman Transport & Development Limited
2ND Floor , South Central, 11 Peter Street, Manchester, M2 5QR
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Client Name: CIP Property(AIP) Ltd
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TRN -10750-SA-06-01	Existing Site Location
05045 B1_02_2000	Existing Upper Ground Floor Layout Plan
05045 B1_00_0200	Proposed Site Plan
05045 B1_02_2200	Proposed Upper Ground Floor Layout Plan
TRN-10750-SA-06-02	Pedestrian Catchment
TRN -10750-SA-06-03	Cycle Catchment
TRN -10750-SA-06-04	Local Cycle Routes
TRN -10750-SA-06-05	Local Public Transport Facilities
TRN -10750-SA-06-06	Local Car Parking Facilities

Appendices

A. Scoping Discussions and Correspondence
B. Rail Network Map
C. TRICS Output

1. Introduction

Background

1.1. Waterman Transport and Development Limited (WTD) has been appointed by CIP Property (AIPT) Ltd to provide highway and transportation advice in support of the planning application for the change of use and associated refurbishment and reconfiguration of the Corn Exchange to incorporate, food and beverage located on the Ground and First Floors with a high quality food retail operator on the Lower Ground Floor within the following Use Classes Use A1 at the Lower Ground Floor, A1 and A3 at the upper Ground Floor and A3 at the First Floor-together with new shopfronts and associated access points into the Corn Exchange, reconfigured entrances, glazed extensions at the ground floor to the Fennel Street Elevation, public realm /landscaping works to the surrounding streets and spaces on all three sides of the building, highways and servicing arrangements, introduction of new canopies to the Upper Ground Floor Units of Hanging Ditch and Cathedral Street, external seating areas, and associated works.

1.2. The application site is located off Hanging Ditch / Fennel Street / Cathedral Street, Manchester and the building has an approximate existing total GFA of 12,256sqm consisting of A1 (non-food retail) and A3.

1.3. As part of the proposals the existing A1 (non-food) element will be removed and the proposals will provide 12,191sqm of A1 food retail, A3 restaurants and cafes with the existing level of B1 offices space being retained. The proposed development will utilise the existing pedestrian site accesses off Fennel Street, Cathedral Street and Hanging Ditch with servicing / refuse access from Fennel Street retained.

1.4. As the application site is currently occupied, the nett impact of the development will be considered in terms of potential trip generations.

Purpose of the Report

1.5. This Transport Statement (TS) is submitted in support of the planning application for the change of use and associated refurbishment and reconfiguration of the Corn Exchange to incorporate food and beverage located on the Ground and First Floors with a high quality food retail operator on the Lower Ground Floor following Use Classes: Use A1 at the Lower Ground Floor, A1 and A3 at the upper Ground Floor and A3 at the First Floor-together with new shopfronts and associated access points into the Corn Exchange, reconfigured entrances, glazed extensions at the ground floor to the Fennel Street Elevation, public realm /landscaping works to the surrounding streets and spaces on all three sides of the building, highways and servicing arrangements, introduction of new canopies to the Upper Ground Floor Units of Hanging Ditch and Cathedral Street, external seating areas, and associated works.

1.6. A separate Service Strategy document has been produced as part of the development proposals and this should be read in conjunction with this TS.

1.7. This report has been prepared to demonstrate to Manchester City Council (MCC) as the Local Highway Authority (LHA) the possible impact of the proposed development on the highway network.

1.8. In addition, this report examines access to the site by sustainable modes of walking, cycling and public transport.

Scope of Report

1.9. Following scoping discussion with the highway officer at Manchester City Council (MCC) this document has been prepared in line with the Department for Transport's 'Guidance on Transport Statements' published in 2007.

1.10. During the scoping process, MCC requested that due to the location of the site and type of development, a Transport Statement be provided.

1.11. Through this process agreement was reached on a number of key matters which the council advised were of concern to them and these are included in this report. The scope therefore includes the following key highways and transportation aspects of the development proposals:

- A review of the location of the site in relation to the surrounding urban area and local highway network;
- Details of the existing local highway network conditions including pedestrian and cycling facilities;
- Details of the existing on-site conditions;
- Details of the development proposals;
- Details on the proposed developments' servicing strategy;
- A sustainability appraisal of the proposal site in terms of accessibility on foot, by cycle and by public transport;
- Details of the highway proposals and any impact on local multimodal movements.

Report Structure

1.12. Following this introduction, Section 2 of the report describes the site and its relative location, including the surrounding transport infrastructure including highways, public transport facilities, cycling and pedestrian facilities.

1.13. The proposals are assessed in the context of transport planning policy in Section 3.

1.14. Section 4 then considers the development proposals including the proposed access, parking provision.

1.15. Section 5 presents a summary of the Servicing Strategy for the development proposals.

1.16. Section 6 assesses the accessibility of the site by sustainable modes of travel.

1.17. Section 7 presents the predicted level of traffic generated by the proposed development and the methodology taken to assess the proposal in terms of multimodal trips produced.

1.18. The report is summarised and concluded in Section 8.

2. Existing Conditions

Site Location and Existing Use

2.1. The application site is located off Hanging Ditch / Fennel Street / Cathedral Street, Manchester and the building has an approximate existing total GFA of 12,256sqm consisting of A1 (non-food retail) and A3 uses.

2.2. The application site is bound to the north by Fennel Street, to the east and south by the Hanging Ditch, and to the west by Cathedral Street. Pedestrians / cyclists can access the site via Hanging Ditch, Fennel Street and Cathedral Street with servicing access via Fennel Street.

2.3. In addition, the site is located close to Manchester Arndale which is one of the UK's largest inner-city shopping centres and within the heart of Manchester City Centre with over 240 shops and major department stores. Directly opposite the site is the Printworks with its 19-screen Odeon cinema complex with over 15 bars, restaurants and clubs

2.4. The site is shown from a local perspective on Drawing TRN-10750-SA-06-01 and drawing 0545 B1_02_2000 produced by 5plus Architects showing details the existing Upper Ground Floor Layout.

Surrounding Highway Network

2.5. The area around the application site is defined as a pedestrian zone and is protected by rising bollards allowing access to the area for servicing between the hours of 05:00 and 11:00 daily. These rising bollards are located at the entrance to Fennel Street, the end of Cataeton Street and just to the south of the entrance to Chethams, and at the eastern end of Cathedral Yard.

2.6. A one way system operates around the Corn Exchange, westerly along Fennel Street, southerly along Cathedral Street and easterly along Exchange Square finally exiting back on Corporation Street. Along both Fennel Street and Exchange Square the highway is flush with the footways which are identified by bollards segregating vehicles from pedestrians. This provides the primary service route for the Corn Exchange with a service layby along the building frontage on Fennel Street.

2.7. Long Millgate operates as a two way road with access and egress onto Todd Street with bollards prevent access from Fennel Street to Long Millgate. This is the existing service route for Chethams as well as the Urbis. Service vehicles for the businesses along Cateaton Street also exit via Exchange Square onto Corporation Street.

Highway Safety

2.8. During scoping discussions it was agreed with the Local Highway Officer at Manchester City Council that analysis of existing road accident data in the vicinity of the site is not required, therefore, it has not been assessed as part of this Transport Statement.

3. Transportation Planning Policy

Background

3.1. The following sections outline the relevant planning policies in respect of the proposed development. This report demonstrates how the proposals comply with these planning policies in relation to transportation.

National Planning Policy Framework (NPPF)

3.2. In March 2012, the Department for Communities and Local Government published the 'National Planning Policy Framework' (NPPF) document which replaces the National Planning Policy Guidance notes and Planning Policy Statements, in particular that of PPG13, relating to transport.

3.3. The NPPF constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications.

3.4. Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. It suggests that encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

3.5. In addition, paragraph 32 of the NPPF states that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- *"the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *Safe and suitable access to the site can be achieved for all people; and*
- *Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe."*

3.6. Paragraph 35 of the NPPF states:

"Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- *Accommodate the efficient delivery of goods and supplies;*
- *Give priority to pedestrian and cycle movement, and have access to high quality public transport facilities;*
- *Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
- *Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
- *Consider the needs of people with disabilities by all modes of transport."*

3.7. Furthermore, paragraph 36 of the NPPF states:

"A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."

3.8. NPPF states that planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey length for employment, shopping, leisure, education and other activities.

3.9. As will be discussed in greater detail in Section 5 of this report, the proposed development is located in an area that is easily accessible by various modes of sustainable transport such as walking, cycling and public transport.

3.10. It is therefore considered that the development proposals achieve the aims set out within NPPF.

Manchester Core Strategy Development Plan 2012 – 2027

3.11. The Core Strategy was adopted by Manchester City Council on 11th July 2012. It is the key document in Manchester's Local Development Framework and covers a period of 15 years from 2012 to 2027. It describes Manchester today and outlines the Council's vision for Manchester in 2027 along with the planning policies which will be used to deliver that vision. Manchester's Local Development Framework is a collection of planning documents and also includes:

- The Local Development Scheme, the programme for document production;
- The Statement of Community Involvement which sets out how consultation will be undertaken and in what format;
- Development Plan Documents (to be developed following adoption of the Core Strategy),for example on Houses in Multiple Occupation; and
- Supplementary Planning Documents (SPDs) which give more detail to policies in the Core Strategy or in any other future Development Plan Documents

3.12. The main strategy establishes a Vision for Manchester in 2027 and outlines Strategic Objectives. It also includes a range of policies under each objective that the Council feels will ultimately deliver the Vision.

3.13. The Vision laid out within Core Strategy relating to transportation states that by 2027 Manchester will be:

- a successful sustainable and accessible City in the front rank of cities in Europe and the world;
- meeting the challenge of climate change at the forefront of environmental initiatives and improvements and continuing to deliver sustainable development and a more effective Green Infrastructure;
- a City with an increased and sustainable healthy population and a community which both benefits from and drives the City's productivity upwards;
- a City with thriving district centres, which have a distinct local character and provide a good range of accessible public services, retail and local facilities
- a City which is supported by transport infrastructure which provides sustainable and efficient links locally, within the City, and more widely, between the Regional Centre and workers across the City Region. It will also have strong national and international connections made possible by its world class airport

3.14. The transportation related Spatial Objectives set out within the Core Strategy that will help achieve this vision are:

- **SO1 Spatial Principles** – Provide a framework within which the sustainable development of the City can contribute to halting climate change. Within the context of mitigation and adaptation to climate change, the framework will guide the scale and distribution of economic, housing, transport, environmental, health, education and other service and infrastructure investment across the City.
- **S05 Transport** – Improve the physical connectivity of the City, through sustainable and accessible transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation. Access to the facilities and opportunities of the Regional Centre and Manchester Airport, from residential areas will be particularly important, as will improving links between the City and city regions across the country via high speed rail links and internationally via Manchester Airport.
- **S06. Environment** – Protect and enhance both the natural and built environment of the City and ensure the sustainable use of natural resources, in order to mitigate and adapt to climate change, support biodiversity and wildlife, improve air, water and land quality, recreational opportunities and provide networks of high quality green infrastructure, ensuring that the City is inclusive and attractive to residents, workers, investors and visitors. The development of networks of green infrastructure across the City and City Region, together with protecting and enhancing townscape character and securing a high standard of design in all development proposals, will promote healthy, low-carbon lifestyles, contribute to a sense of wellbeing, and help to facilitate the sustainable and inclusive growth of the City.

3.15. Furthermore, from these Strategic Objectives, numerous policies are presented that relate to the various key areas, in terms of transportations, this is considered within **Policy CC5** which states:

"The Transport Strategy for Manchester City Centre will be delivered to ensure that transport is managed in a way which supports the projected growth of the City Centre. Developers should work with public transport providers to ensure that all users are able to access development by sustainable means, especially taking account of times when developments are likely to be busiest.

Proposals will be supported that improve pedestrian safety, improve air quality and increase the scope for accessible public realm improvements, for example improvements to:

- *remove buses and private cars from St Peter's Square;*
- *create a new pedestrian priority zone initially the area bounded by Deansgate, Peter Street / Oxford Street, Portland Street, Piccadilly North, Manchester Arndale, Corporation Street and Exchange Square; and*
- *close Victoria Street in the Medieval Quarter to traffic and create a new public realm around the Cathedral and Chethams.*

The Council will seek to ensure that development includes adequate parking provision for cars and bicycles. This should be based on the parking standards described in Appendix B."

Greater Manchester's third Local Transport Plan (2011/12 – 2015/16)

3.16. Greater Manchester's third Local Transport Plan (2011/12 – 2015/16) identifies Greater Manchester as the most important economic centre in the UK outside London, with significant opportunities for future growth.

3.17. The third Local Transport Plan (LTP3) contains the policies of the Integrated Transport Authority

(Transport for Greater Manchester) for the provision of safe, integrated, efficient and economic transport to, from and within their area.

3.18. The objectives of LTP3 are as follows;

- to ensure that the transport network supports the Greater Manchester economy to improve the life chances of residents and the success of business;
- to ensure that carbon emissions from transport are reduced in line with UK Government targets in order to minimise the impact of climate change;
- to ensure that the transport system facilitates active, healthy lifestyles and a reduction in the number of casualties; and that other adverse health impacts are minimised;
- to ensure that the design and maintenance of the transport network and provision of services supports sustainable neighbourhoods and public spaces and provides equality of transport opportunities; and
- to maximise value for money in the provision and maintenance of transport infrastructure and services.

Policy Summary

Greater detail will be provided in latter sections of this report, however, the proposed development will enhance the public realm surrounding the site as well as improving the access through the site for pedestrians, cyclists and those with impaired mobility. Furthermore, the proposed development will utilise existing local public car parking and located in an area that is highly accessible by sustainable modes of travel such as walk, cycle, bus, tram and train which will ensure it is in adherence with local and national policy.

4. Development Proposals

Development Description

4.1. The proposals are for the change of use and associated refurbishment and reconfiguration of the Corn Exchange located off Fennel Street / Cathedral Street / Handing Ditch in Manchester. The existing building provides A1 (non-food retail), A3 (restaurant / café) and ancillary B1 (offices) and as part of the development proposals this will be replaced with a new A1 (food retail) element as well as A3 (restaurant / café) uses.

4.2. The proposed breakdown of the various elements to be provided on site are:

- A1 (Food retail): 3,114sqm
- A3 (Café / Restaurant): 6,816sqm
- Mall area: 909sqm
- Existing B1 (Offices) To be retained
- Total Area = 12,191sqm

4.3. As part of the change of use and associated refurbishment and reconfiguration, it is proposed that the existing pedestrian accesses off Fennel Street, Cathedral Street and Hanging Ditch will be retained with improved access for those with impaired mobility via the Fennel Street and Hanging Ditch Access. The existing servicing accesses off Fennel Street will also be retained.

4.4. The proposed Site Plan is presented as Drawing 0545 B1_00_0200 with Drawing 0545 B1_02_2200 showing the Upper Ground Floor Plan for the proposed scheme. Both drawings have been produced by 5plus Architects.

Development Site Access

4.5. As stated, the existing pedestrian accesses will be retained as part of the reconfiguration with the Fennel Street and Hanging Ditch accesses providing improved access for those with impaired mobility.

4.6. The existing one way system that currently operates along Fennel Street from Corporation Street, along Cathedral Street and turn north along Cateaton Street finally existing on to Deansgate will also be utilised as part of the proposals. Hanging Ditch will be closed off to through traffic only open for maintenance and emergency vehicles.

4.7. In addition, the proposals will improve the public realm areas around the application site which will enhance the ease of access for pedestrians / cyclists as well as tie into existing pedestrian / cyclists desire lines in that area. Some of the works proposed are the removal of bollards along Hanging Ditch and raising the ground level as well as providing flush surface on Cathedral Street similar to Fennel Street and Hanging Ditch.

4.8. The restriction on vehicles entering this area will be reduced from 11am to 10am and it is also intended that seating will be provided by the proposed restaurants along Fennel Street and Cathedral Street.

4.9. The existing servicing access via Fennel Street will be retained as part of the proposed reconfiguration with some minor improvements being included; further details of the proposed servicing arrangements are provided in section 5 of this report as well as detailed information being provided in the standalone Servicing Strategy document.

Parking Strategy

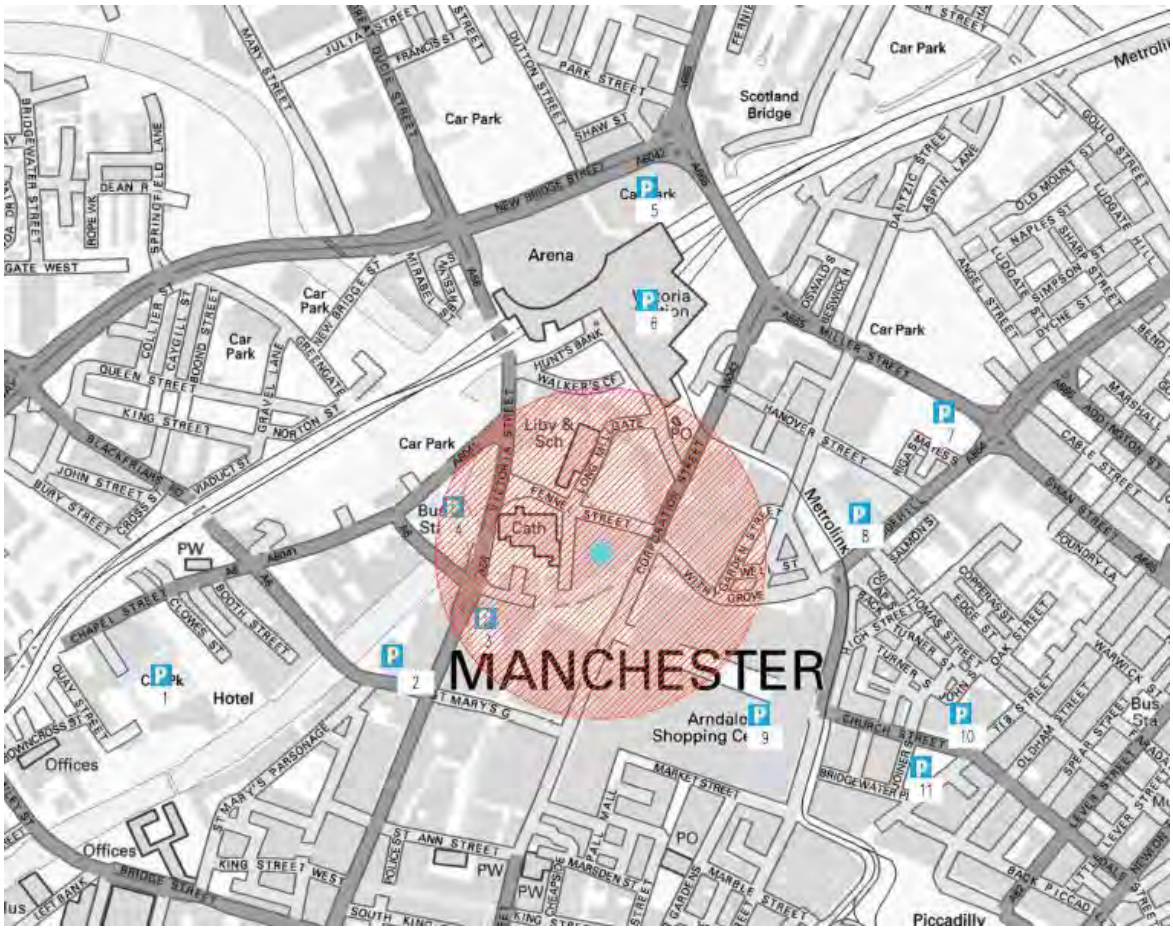
4.10. Appendix B of MCC's Core Strategy presents the parking standards for the Manchester City Council area and this states that "maximum standards for car parking do not apply to the City Centre as each development in the City Centre will be considered on a case by case basis".

4.11. As the proposed scheme is located within the Corn Exchange area of Manchester City Centre and within an area that has been earmarked for future development in public realm, pedestrianised zones and sustainable transport infrastructure, no onsite car parking facilities will be provided as part of the reconfiguration, in turn, ensuring it is in-line with the future vision for Manchester City as set out within local policy documents.

4.12. Instead the proposals will utilise its location within an area that is highly accessible by numerous sustainable travel modes and its proximity to numerous local public car parks within reasonable walking distances of the application site; further details of the sites accessibility is provided in Section 6 of this report.

4.13. Figure 1 indicates the various car parking locations within easy walking distance of the Corn Exchange site. This is also presented in Drawing TRN-10750-SA-06-06.

Figure 1: Existing Local Car Parking Facilities


MANCHESTER
Arena
Car Park
Scotland Bridge
Hotel
Offices
Offices
Liby & Sch
Cath
Arndale Shopping C
Piccadilly
Metrolink
NEW BRIDGE STREET
PARK STREET
DUTTON STREET
DUKE STREET
MARY STREET
FRANCIS ST
SHAW ST
QUEEN STREET
KING STREET
GRAVEL LANE
NORTON ST
HUNTS BANK
WALKER'S CT
CORPORATION STREET
FENNEL STREET
HANVER STREET
MILLER STREET
CHURCH STREET
MARKET STREET
ST ANN STREET
KING STREET WEST
BRIDGE STREET
CHAPEL STREET
BOOTH STREET
QUAY STREET
DOWNCROSS ST
ST MARY'S PARSONAGE
ST MARY'S G
JOHN STREET
BLACKFRIARS RD
VIADUCT ST
BURY STREET
CROSS ST
GATE WEST
BRIDGEWATER STREET
SPRINGFIELD LANE
COLLIER ST
CAVELL ST
BOOND STREET
GREENGATE
NEW BRIDGE ST
HIRAEL ST
OAKSMA
DANTZIC STREET
ASPIN LANE
OLD MOUNT
NAPLES ST
LUDGATE HILL
LUDGATE
ANGEL STREET
SIMPSON STREET
DYCHE ST
GOULD STREET
OSWALD S
WESWICK
MARSHALL
CABLE STREET
BYRON STREET
FOUNDRY LA
SALMON ST
BRIDGE ST
CORBERAS ST
EDGE ST
THOMAS STREET
BACK TURNER ST
TURNER ST
JOHN
OLDHAM
WARWICK ST
SPEAR STREET
LEVER STREET
BACK PICCAD
MARBLE STREET
GARDEN
MARSDEN ST
POLICE ST
PW
PO
Bus Sta
Car Park
Car Park
Car Park

4.14. Figure 1 provides an indication of just a small number of publicly available car parks within easy walking distance of the site and includes:

1)	Chaper Wharf	280 spaces
2)	Market Place	340 spaces
3)	Marks & Spencer	150 spaces
4)	Unknown	Unknown
5)	Manchester Arena	958 spaces
6)	Victoria Station	332 spaces
7)	Shudehill	Unknown
8)	Arndale Shopping Centre	1383 spaces
9)	Church Street	700 spaces
10)	Tib Street	93 spaces

4.15. The list of available car parks is not exhaustive but highlights that up to 10 car parks are available to users of the site ranging from 93 space car parks to 1383 space car parks.

4.16. The above alone indicates that up to 4,236 spaces are available within 800m of the site. The most significant of which is available at the Arndale Shopping Centre adjacent to the site which provides 1,383 spaces.

4.17. Therefore, based on the quantity and proximity of local car parking facilities in relation to the Corn Exchange site, it is considered that there is adequate parking provision to accommodate the proposed change of use and associated refurbishment and reconfiguration and within easy walking distance.

5. Servicing Strategy

5.1. A separate detailed Servicing Strategy document has been prepared in relation to this planning application and should be read in conjunction with this Transport Statement.

5.2. The Servicing Strategy document states that the proposed strategy will mirror the existing situation with service vehicles utilising a one way system to circulate around the Corn Exchange, entering Fennel Street and off Corporation Street, utilising the layby for deliveries before continuing and turning left onto Cathedral Street. This approach will not change other than the layby on Fennel Street being relocated to the other side of the road.

5.3. At the end of Cathedral Street existing service vehicles would generally turn left and drive up Hanging Ditch / Exchange Square before exiting once again onto Corporation Street. As a result of the reconfigurations this would change to only allow the service vehicles to turn right onto Cateaton Street and exit onto Deansgate.

5.4. It is anticipated that the change of use and associated refurbishment and reconfiguration of the Corn Exchange and the construction of the Tram stop in Exchange Square would increase pedestrian movements along this route. Therefore, it is proposed that this area is opened up by removing the bollards that currently demarcate the road, creating a more pedestrian friendly environment.

5.5. Due to the need to utilise the servicing layby for outdoor seating and tables the current servicing period currently controlled by rising bollards at the end of Fennel Street and Cateaton Street will be altered as part of the proposals. The proposals will see this altered so bollards drop at 5am (same as existing) and rise at 10am, rather than 11am. This will provide an hour's buffer between servicing within the pedestrianized zone and businesses putting out the seating and tables at 11am.

5.6. Servicing during the construction period would be split with all construction traffic using Fennel Street and entering the site compound before exiting along Long Millgate past Chethams School and exiting onto Todd Street.

5.7. No servicing other than that to the offices within Corn Exchange will be required during the construction works. The existing servicing will be retained for these offices, as well as the businesses along Cateaton Street, exiting along Hanging Ditch and onto Corporation Street.

5.8. Access to the rear of the Cathedral will be via Long Millgate during the construction period.

6. Accessibility by Sustainable Transport Modes

Introduction

6.1. As set out in Section 3, a key element of local, regional and national policy is to ensure new developments are located in areas where alternative modes of travel are available. It is also important to ensure that developments are not isolated but are located close to complementary land uses.

6.2. In this regard it is important to consider the spatial relationship between the site and various land uses and the ability to access these uses by non-car modes of transport.

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

- On foot;
- By cycle; and
- By public transport.

Accessibility by Foot

6.4. Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution for Highways and Transportation (CIHT) document entitled *'Providing for Journeys on Foot'* suggests walking distances. These are reproduced in Table 1.

Table 1: Suggested Acceptable Walking Distances

	Town Centres (m)	Commuting/School/ Sightseeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Source: 'Providing for Journeys on Foot', CIHT

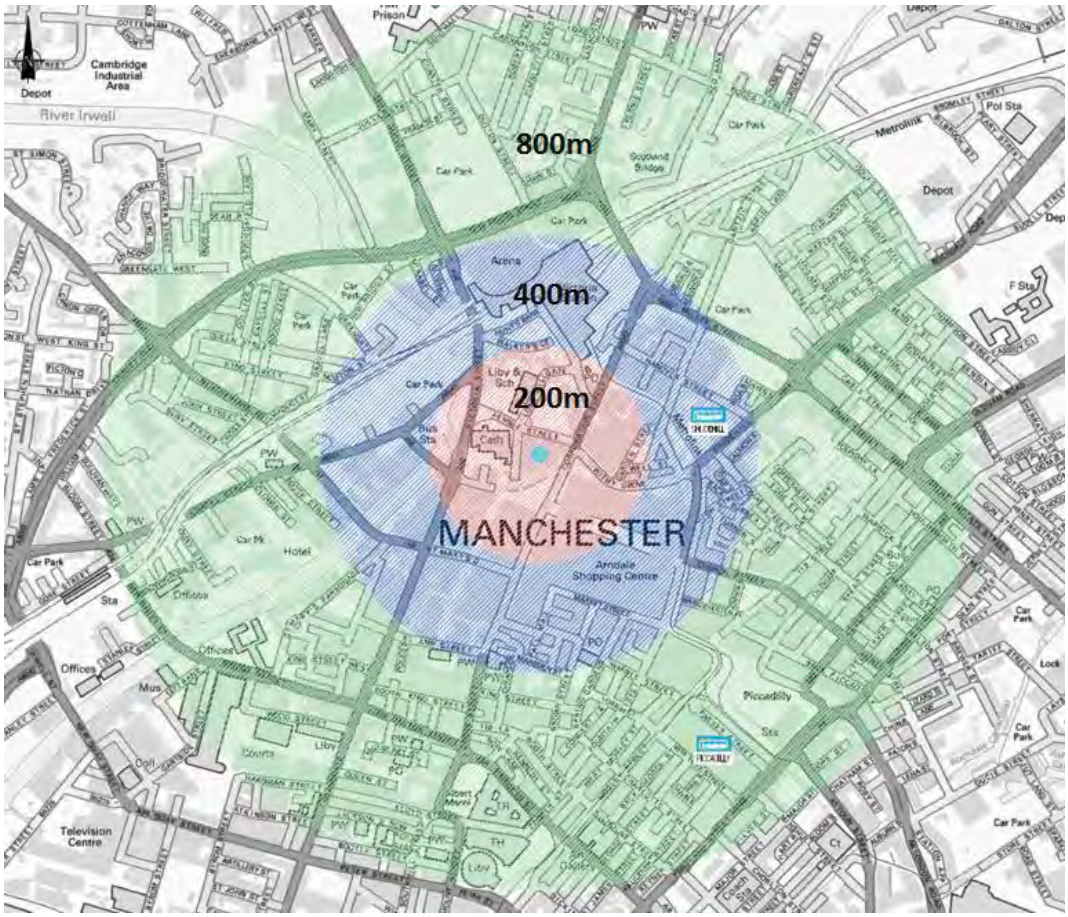
6.5. To assist in summarising the accessibility of the site by foot, a pedestrian catchment plan has been included as Drawing TRN-10750-SA-06-02. This presents catchments of 200m, 400m and 800m from the site. These distances represent approximate walking times of 2.5, 5 and 10 minutes respectively when walking at a leisurely 5 kilometres per hour. These distances are termed *'Acceptable'* and the *'Preferred Maximum'* by the IHT for general walk related trips.

6.6. The application site is located close to Manchester Arndale which is one of the UK's largest inner-city shopping centres and within the heart of Manchester City Centre with over 240 shops and major department stores. Directly opposite the site is the Printworks with its 19-screen Odeon cinema complex with over 15 bars, restaurants and clubs.

6.7. Due to the site's location within the Manchester Inner Ring Road and its proximity to a vast number of prominent retail and employment areas, accessibility to the site for pedestrians is expected to be to a significantly high standard.

6.8. Figure 2 presents a snapshot of Drawing TRN-10750-SA-06-02 which highlights the various proposed walk catchments discussed above.

Figure 2: Corn Exchange walk catchments.



6.9. Figure 2 identifies the Corn Exchange site (cyan dot), the three walk catchment areas of 200m, 400m and 800m as well as the major public transport interchanges of Shudehill and Piccadilly Gardens.

6.10. In addition, the majority of Manchester City Centre is within a 2,000m walk of the Corn Exchange site, ensuring accessibility to a wide range of key complementary facilities including further commercial, retail and leisure / entertainment destinations is achievable.

6.11. Manchester City Centre's continuing regeneration has facilitated the introduction of high quality public realm, footways, street lighting and strategically placed pedestrian crossings across the city.

6.12. Moreover, many of the surrounding areas streets are one-way with 20mph or less speed restriction, as well numerous areas in the vicinity of the site being pedestrianised which helps provide a pedestrian friendly environment.

6.13. The pedestrian zone surrounding the site is protected by rising bollards allowing access to the area for servicing between the hours of 05:00 and 11:00 daily. These rising bollards are located at the entrance to Fennel Street, the end of Cataeton Street and just to the south of the entrance to Chethams, and at the eastern end of Cathedral Yard. Along both Fennel Street and Exchange Square the highway is flush with the footways which are identified by bollards segregating vehicles from pedestrians.

6.14. The proposed scheme will also improve the public realm areas around the application site which will enhance the ease of access for pedestrians / cyclists as well as tie into existing pedestrian / cyclists desire lines in that area. Some of the works proposed are the removal of bollards along Hanging Ditch and raising the ground level as well providing a flush surface on Cathedral Street similar to Fennel Street and Hanging Ditch. The restriction on vehicles entering this area will be reduced from 11am to 10am. it is also intended that seating will be provided by the proposed restaurants along Fennel Street and Cathedral Street

6.15. It is therefore considered that the proposed development will be highly accessible on foot.

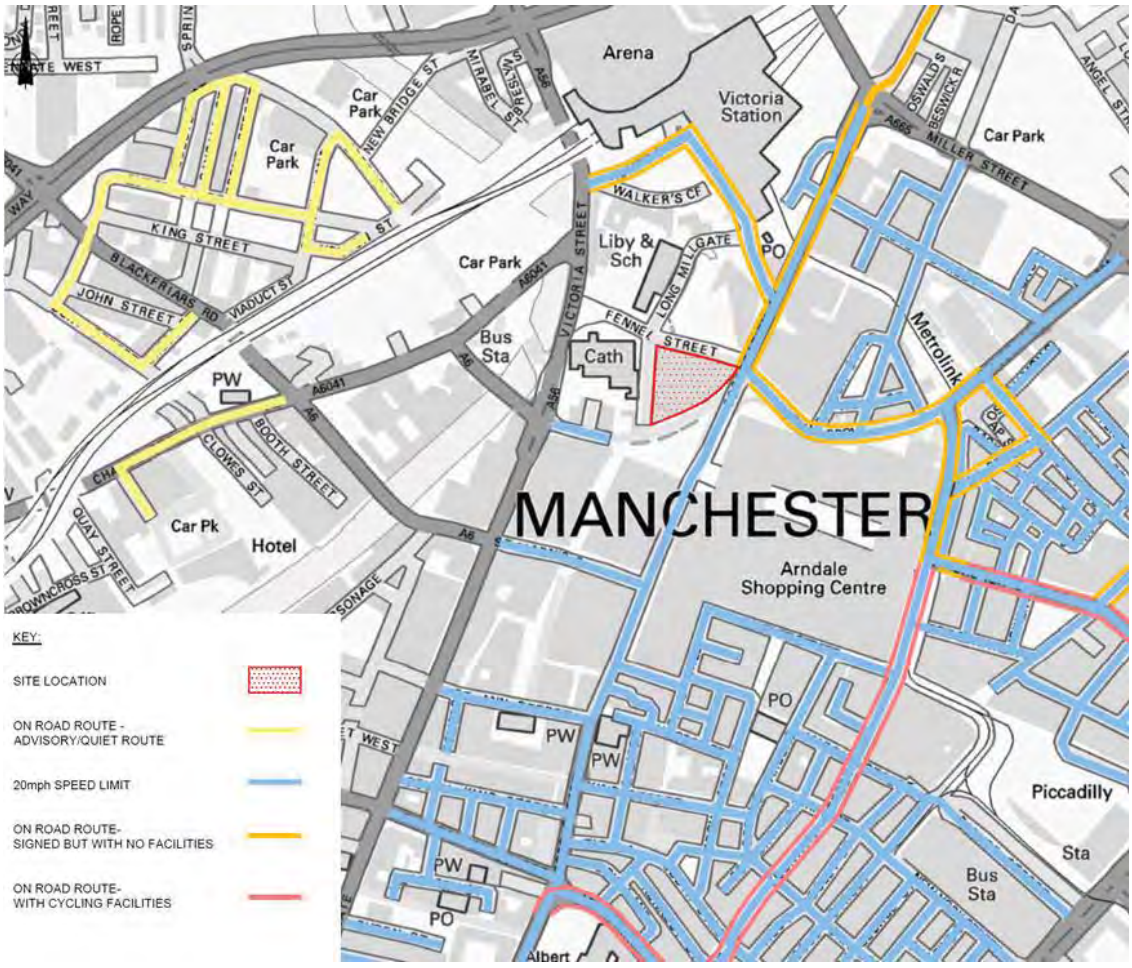
Accessibility by Cycle

6.16. The accessibility of the site by cycle is illustrated in Drawing TRN-10750-SA-06-03 which presents a 5km cycle catchment for the site. This catchment equates to a 25 minute cycle time, when cycling at a leisurely speed of 12 kilometres per hour.

6.17. Drawing TRN-10750-SA-06-03 also shows that the 5km cycle catchment for the site encompasses all of Manchester City Centre's "outer ring road" and its immediate surrounding areas, many of which are densely populated residential areas.

6.18. Furthermore, the local cycle route network is reproduced in Drawing TRN-10750-SA-06-04 and highlighted in Figure 3.

Figure 3: Local Cycle Routes



6.19. It can be seen that a the site is well served by cycle routes as well as many of the surrounding streets having a 20mph speed limit which provides a cycle friendly environment.

6.20. In addition to those routes presented in figure 2, there are many other routes provided in the wider area surrounding the site, including the National Cycle Network (NCN) routes 60 and 66.

6.21. In conclusion, the proposed development will offer high accessibility by cycle and cycling is considered to be a realistic alternative to private car use.

Accessibility by Public Transport

6.22. Guidance set out in the Chartered Institution of Highways and Transportation (CIHT) document 'Guidelines for Planning for Public Transport in Development' states that the acceptable walking distance to a bus stop is 400m and 800m for a Rail Station.

Accessibility by Bus

6.23. Drawing TRN-10750-SA-06-05 presents the location of public transport facilities in relation to the proposed site. This identifies that the site benefits from 19 existing bus stops within walking distance of the site as well as the Shudehill bus station.

6.24. Greater Manchester offers a comprehensive network of bus services which link significant areas of Salford, Wigan, Bolton, Bury, Rochdale, Oldham, Ashton-under-Lyne, Stockport, Altrincham and beyond with Manchester city centre. Furthermore, areas of regional importance including MediaCityUK and Manchester Airport are well connected by high frequency bus services.

6.25. Due to the site's proximity to the Shudehill bus station where vast bus services to many these destinations locations are provided, Table 2 presents the free Metroshuttle services and frequencies that operates around Manchester City Centre.

Table 2: Summary of free Metroshuttle Bus Services

Service No.	Route	Frequency		
		Mon – Fri	Sat	Sun
1	Piccadilly Station, Piccadilly Gardens, Coach Central, Mosley St Metrolink Stop, Spinningfields, Deansgate, Arndale Centre, MMU (Aytoun Campus).	6	10	10
2	Shudehill Interchange, Printworks, Arndale Centre, Victoria Station, MEN Arena, Castlefield, Deansgate Station, MMU (All Saints Campus), Oxford Road Station.	10	10	10
3	Piccadilly Station, Piccadilly Gardens, Central Coach Station, St. Peter's Square Metrolink Stop, Salford Central Station	10	10	10

Source: www.traveline.com

6.26. As it can be seen from Table 2 the free Metroshuttle Bus services offer high frequency services to the vast majority of Manchester town centre and public transport hubs. Service 2 directly serves the site and services 1 and 3 are also within easy walking distance. These services provide a minimum total of approximately 18 services per hour Monday – Sunday.

6.27. It is therefore considered that the bus service provides a high level of service around Manchester City Centre and to rest of the Greater Manchester Area.

Accessibility by Metrolink / Rail

6.28. CIHT's guidance described in the document *'Planning for Public Transport in Development'* states that 800m is recognised as an acceptable distance for people to walk to and from rail station.

6.29. There are a number of Metrolink stops located throughout Manchester city centre. These offer frequent services to the main public transport interchange locations such as Piccadilly Station, Piccadilly Gardens, Victoria Station and Shudehill Interchange. Furthermore, many of the Metrolink stops are located close to prominent employment areas, shopping areas, and entertainment and leisure facilities.

6.30. The 4 Metrolink stops of Victoria, Shudehill, St. Peter's Square and Piccadilly Gardens are all within an 800m walk distance from the application site. Victoria is identified as a line and rail interchange, Shudehill as a bus interchange and Piccadilly Gardens as a line and bus interchange as well as a cycle hub.

6.31. These Metrolink stops offer frequent services to public transport interchange locations as well as locations in the Greater Manchester area. A summary of the services and their frequencies operating from Metrolinik stops within 800m of Corn Exchange are provided in Table 3.

Table 3: Summary of Tram Services

Service	Mon – Fri	Sat	Sun and Bank Holidays
Altrincham – Bury	12 minutes	12 minutes	12 minutes
Altrincham – Piccadilly	12 minutes	12 minutes	12 minutes
Bury – Droylsden	12 minutes	12 minutes	12 minutes
East Didsbury – Rochdale Railway Station	12 minutes	12 minutes	12 minutes
Eccles – Piccadilly	12 minutes	12 minutes	12 minutes

Source: www.tfgm.com

6.32. The tram network is currently undergoing a programme of expansion which has already seen trams extended into East Didsbury, Droylsden, Rochdale and Oldham.

6.33. Over the coming years several of these lines will be extended to included new destinations as well as the new line to Manchester airport which is scheduled for summer 2016. By 2016 the expansion programme will mean Greater Manchester will have the largest tram network in the UK.

6.34. Manchester City Council is also currently working on proposals for a second Metrolink route across the city centre. This will provide additional capacity and flexibility and allow greater penetration into the city centre, providing access to more businesses, retail and leisure outlets. The proposals form part of MCC and TfGM's wider transport strategy for Manchester city centre.

6.35. The proposed Metrolink Second City Crossing (2CC) runs from Deansgate-Castlefield stop, (formerly G-Mex), through St Peter's Square, along Princess Street, Cross Street and Corporation Street (Exchange Square) rejoining the existing Metrolink line just outside Victoria Station.

6.36. As part of the 2CC, it is proposed that a tram stop will be built in Exchange Square directly in front of the application site. This will further enhance accessibility to the site by sustainable travel modes.

6.37. Corn Exchange is also easily accessible by train as Victoria rail station located a leisurely 4 minute walk just north of the site. Also, Piccadilly rail station is located within a 14 minute linked trip of the site and offers an exceptional transport interchange as well as being the main rail hub for the North West. Its role as the primary choice for rail travel is further enhanced by the large number of high speed services throughout the day linking Manchester to London with a typical journey time of little over 2 hours (possibly less following HS2 announcement).

6.38. Rail services to / from Manchester are complemented by further stations at Salford Central, Deansgate and Oxford Road.

6.39. Rail linkages are provided to all major cities from the Midlands to the North of England including Scotland. There are frequent services to Newcastle, Liverpool, Birmingham, Leeds and Glasgow.

6.40. Manchester Airport also benefits from extensive rail services to / from Manchester city centre with up to 10 services per hour throughout the entire day.

6.41. The extent of the light rail and heavy rail network through Manchester is presented in **Appendix B**.

6.42. Therefore, based on the aforementioned it is considered that the site is highly accessible by both light and heavy rail.

Journey Travel Times

6.43. The Corn Exchange site clearly benefits from many years of physical infrastructure improvement schemes which make Manchester City Centre one of the most accessible locations outside of London for access by public transport.

6.44. Table 4 provides an indication of the average journey times which can be expected to the surrounding areas of Greater Manchester by bus, train and tram which include the initial walk from the site.

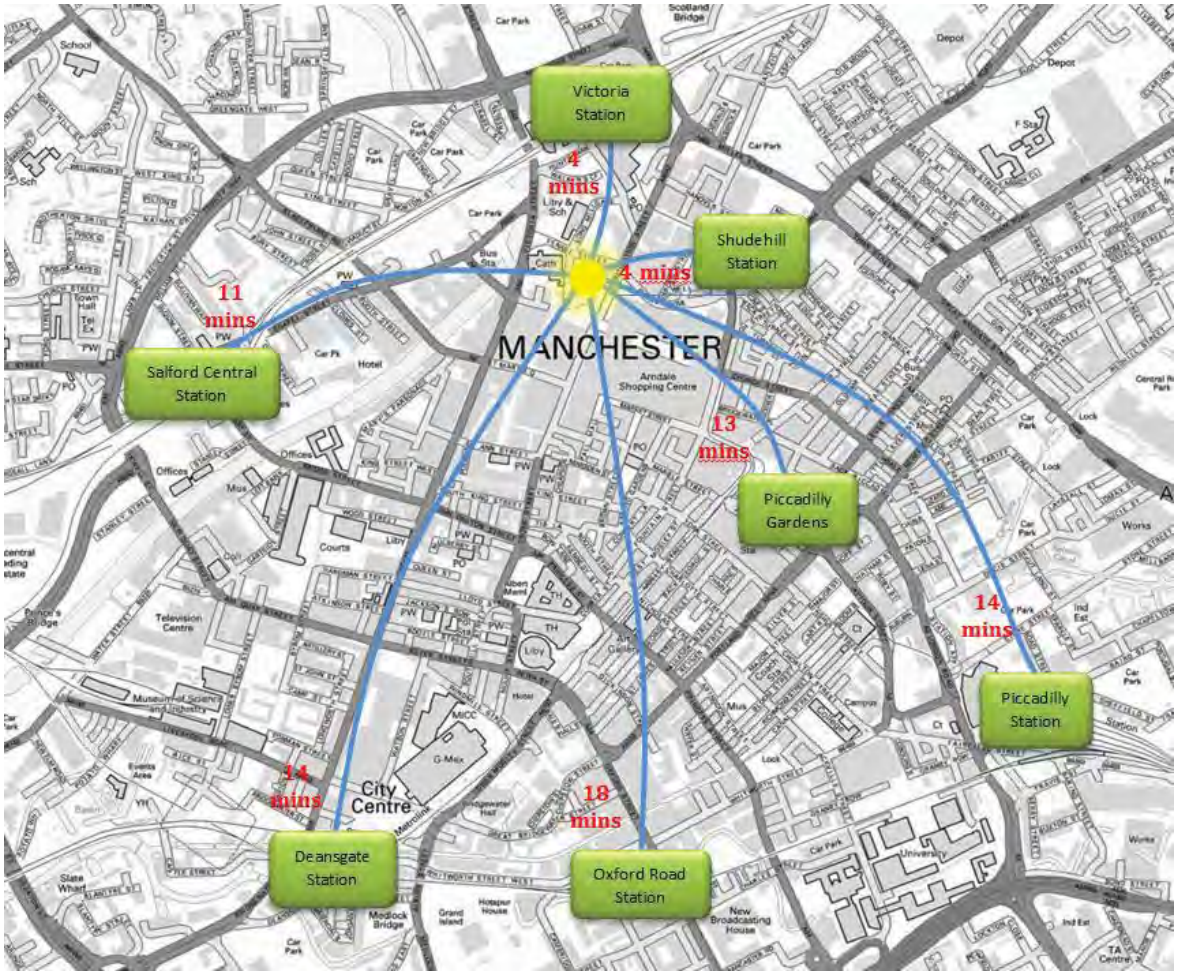
Table 4: Average Journey Times by Mode To / From Manchester City Centre (Includes Journey Time from Proposed Site)

Location	Tram (mins)	Bus (mins)	Train (mins)
Altrincham	37	70	52
Ashton-under-Lyne	24 in the future (estimated)	45	16
Bolton	-	61	27
Bury	30	43	-
Manchester Airport	45 in the future (estimated)	80	44
MediaCityUk	39	31	46
Oldham	47	51	-
Rochdale	67	74	24
Stockport	-	52	33
Wigan	-	94	45

6.45. Many of the locations are accessible by two or more modes (bus, train and tram). Modal choice to Ashton-under-Lyne and Manchester Airport will be improved over the coming years as the Metrolink network expands.

6.46. Figure 4 highlights that the major public transport hubs and stations are all within an 18 minute journey from the Corn Exchange site either directly on foot or as part of a linked journey involving bus or tram.

Figure 4: Transport Hub Locations.



Future Transport Opportunities

Cross City Bus Travel

6.47. One of TfGM's objectives is to improve transport connections along three of the region's busiest roads to the north, south and west of Greater Manchester. TfGM is currently working in partnership with Manchester, Rochdale and Salford councils to identify how to improve these important corridors. The plans include introducing highway, bus priority and congestion management measures, together with significant improvements for pedestrians and cyclists.

Figure 5: Cross City Routes



6.48. These new developments will enable bus services to run across Manchester city centre from Middleton and Salford corridors and access Oxford Road, without passengers needing to change buses.

6.49. The Cross City proposals would undoubtedly require investment towards a new, dedicated public transport hub on the western side of the city centre to facilitate movements to / from Salford. It is considered that whilst no specific scheme has been identified as yet, Salford Central rail station represents an ideal location to facilitate such a facility.

Summary

6.50. This section demonstrates that the site is highly accessible and the proposed scheme will benefit from a range of sustainable modes of travel.

6.51. The accessibility of the site by sustainable modes has been assessed in detail, with the most significant findings set out below:

- The site is located in a pedestrianised area of Manchester City Centre with a high standard of pedestrian facilities and infrastructure. The major public transport hubs of Victoria Station, Shudehill Station and Piccadilly Gardens are location within an 800m walk catchment of the site;
- The proposed development will enhance the public realm in the immediate vicinity of the site as well as improve access to the development for pedestrians, cyclists and those with impaired mobility;
- All of Manchester City Centre's "outer ring road" and its immediate surrounding areas, many of

which are densely populated residential areas, are within a 5km cycle catchment of the application site;

- The site is well served by cycle routes as well as many of the surrounding streets having a 20mph speed limit which provides a cycle friendly environment and within the wider area of the site, access to the National Cycle Network (NCN) routes 60 and 66 is achievable;
- There are 19 existing bus stops within walking distance of the site as well as the Shudehill bus station which offers a comprehensive network of bus services which link significant areas of Salford, Wigan, Bolton, Bury, Rochdale, Oldham, Ashton-under-Lyne, Stockport, Altrincham and beyond with Manchester city centre;
- The site is directly served by the free Metroshuttle Bus Service number 2 as well services 1 and 3 being accessible within a 400m walk catchment. These provide a minimum total of approximately 18 services per hour Monday – Sunday;
- The 4 Metrolink stops of Victoria, Shudehill, St. Peter's Square and Piccadilly Gardens are all within an 800m walk distance from the application site. These Metrolink stops offer frequent services to public transport interchange locations as well as locations in the Greater Manchester area;
- The proposed Metrolink Second City Crossing (2CC) runs from Deansgate-Castlefield stop, (formerly G-Mex), through St Peter's Square, along Princess Street, Cross Street and Corporation Street (Exchange Square) rejoining the existing Metrolink line just outside Victoria Station. As part of the 2CC, it is proposed that a tram stop will be built in Exchange Square directly in front of the application site. This will further enhance accessibility to the site by sustainable travel modes;
- Manchester City Centre's major public transport hubs and stations are all within an 18 minute journey from the Corn Exchange site either directly on foot or as part of a linked journey involving bus or tram; and
- MCC's future proposed Cross City Bus Scheme would enable bus services to run across Manchester city centre from Middleton and Salford corridors and access Oxford Road, without passengers needing to change buses. This has the potential to improve accessibility of the site to other areas of Greater Manchester.

7. Predicted Trip Demand

Introduction

7.1. This section describes the forecasting of traffic generated by the proposed development. The busiest time periods presented is the Saturday Peak period.

7.2. As previously discussed, it is proposed that approximately 12,119sqm of (A1), (A3) and the retained B1 office space will be provided on site. As development site is currently operational and providing a total of 12,257sqm consisting of A1 (non-food retail), A3 and B1 uses, it is therefore proposed that the impact of the development will be the nett of the existing and proposed traffic generations in accordance with current DfT guidance on Transport Assessments. This approach was agreed with MCC Highway Officer during scoping discussions.

Existing Development Trip Generations

7.3. The TRICS (2013a) database has been interrogated for retail developments similar to the proposed development. The TRICS database contains traffic survey data for a range of land uses and is the industry recognised tool for calculating traffic generations for new developments.

7.4. In this analysis a number of sites across the UK have been interrogated excluding sites from Greater London and Ireland. Also, only sites from town centre locations were selected and due to the limited survey data available for Mixed Shopping Centre sites, only two survey sites were available; KC-01-M-01 Maidstone, Kent and NL-01-M-01 Coatbridge, North Lanarkshire.

7.5. The average per peak hour multi-modal trip rates for the existing development presented in Table 5 and the resulting trip generations in Table 7, with the full TRICS outputs presented in Appendix C.

Table 5: Average Multimodal Trip Rates per 100sqm – Existing Development – 12,257sqm

Saturday Peak Period (10:00 – 11:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	3.889	0.463	3.244	0.017	8.357
Departure	3.136	0.165	2.424	0.000	6.297
Two-way	7.025	0.628	5.668	0.017	14.654

Table 6: Average Multimodal Trip Generation per 100sqm – Existing Development – 12,257sqm

Saturday Peak Period (10:00 – 11:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	477	57	398	2	1,024
Departure	384	20	297	0	772
Two-way	861	77	695	2	1,796

7.6. Tables 5 and 6 indicate that the existing site has the potential to generate two-way multimodal trips of 861 vehicles, 77 public transport, 695 pedestrians and 2 cyclists or the equivalent of 1,796 total people movements during the Saturday Peak period.

Proposed Development Trip Generations

7.7. The proposed will provide approximately 12,191sqm consisting of A1 (food retail), A3 and the retained B1 office space. Therefore, the proposed development will result in nett decrease of approximately 66sqm.

7.8. Using the trip rates stated in Table 5, the proposed nett decrease in trips generated by the proposed increase in GFA is presented in Table 7.

Table 7: Average Multimodal Trip Generation per 100sqm – Proposed Development Nett Decrease – 66sqm

Saturday Peak Period (10:00 – 11:00)	Vehicles	Public Transport Users	Pedestrians	Cyclists	Total People
Arrival	3	1	2	0	6
Departure	2	0	2	0	4
Two-way	5	1	4	0	10

7.9. Table 7 highlights that in comparison to the potential trip generation of the existing site; the proposed change of use and reconfiguration could potentially generate similar levels of trips.

Multimodal Split Percentages

7.10. Based on the two-way trip rates and trip generations presented above for the existing and proposed development, the resulting multimodal split percentages are:

- 57% Vehicles (of which 16.3% are car passengers);
- 38.6% Pedestrians;
- 4.3% Public Transport;
- 0.1% Cyclists;

7.11. However, as previously noted, there are a limited number of applicable sites available on the TRICS database and based on the proposed site's city centre location, the pedestrianised areas surrounding the site and the high accessibility by sustainable transport modes, it is likely that the modal split percentage of vehicles would be considerably lower than estimated, whereas those for public transport and cyclists would be significantly higher in reality.

7.12. Also, trip generations for both the existing and proposed development are based on the Corn Exchange being the primary generator of the trips, whereas it is likely that trips to the application site will be part of linked trips to other amenities in the local area, such as the Arndale Shopping Centre and the Printworks.

7.13. Therefore, the proposed analysis provides an onerous and robust assessment of the likely trips to be generated onto the network by the proposed development.

8. Summary and Conclusion

Summary

8.1. Waterman Transport and Development Limited has been appointed by CIP Property(AIP) Ltd to provide highway and transportation advice in support of the proposals for the change of use and associated refurbishment and reconfiguration of the Corn Exchange to incorporate, food and beverage located on the ground and first floor and high quality food retail operator on the lower ground within the following Use Classes Use A1 at the Lower Ground Floor, A1 and A3 at the upper Ground Floor and A3 at the First Floor-together with new shopfronts and associated access points into the Corn Exchange, reconfigured entrances, glazed extensions at the ground floor to the Fennel Street Elevation, public realm /landscaping works to the surrounding streets and spaces on all three sides of the building, highways and servicing arrangements, introduction of new canopies to the Upper Ground Floor Units of Hanging Ditch and Cathedral Street, external seating areas, and associated works.

8.2. The application site is located off Hanging Ditch / Fennel Street / Cathedral Street, Manchester and the building has an approximate existing total GFA of 12,257sqm consisting of A1 (non-food retail), A3 and B1 uses.

8.3. The proposed development will utilise the existing pedestrian site accesses off Fennel Street, Cathedral Street and Hanging Ditch with servicing / refuse access from Fennel Street retained.

8.4. The existing pedestrian accesses will be retained as part of the reconfiguration with the Fennel Street and Hanging Ditch accesses providing improved access for those with impaired mobility.

8.5. The proposed scheme will improve the public realm areas around the application site which will enhance the ease of access for pedestrians / cyclists as well as tie into existing pedestrian / cyclists desire lines in that area. Some of the works proposed are the removal of bollards along Hanging Ditch and raising the ground level as well as providing a flush finish on Cathedral Street.

8.6. The existing servicing access via Fennel Street will be retained as part of the proposed reconfiguration with some minor improvements being included, however, further details of the proposed servicing arrangements have been provided as part of the standalone document entitled Service Management Strategy.

8.7. The Corn Exchange is located within an area of Manchester City Centre that has been earmarked for future development in public realm, pedestrianised zones and sustainable transport infrastructure. Therefore, no onsite car parking facilities will be provided as part of the change of the change of use and reconfiguration proposals, in turn, ensuring it is in-line with the future vision for Manchester City Centre as set out within local policy documents.

8.8. The site will utilise its location within an area that is highly accessible by numerous sustainable travel modes and its proximity to numerous local public car parks within reasonable walking distances of the application site.

8.9. At least 10 car parking sites are available to users of the Corn Exchange, providing approximately 4,236 car parking spaces within an 800m walk catchment of the site. The most significant of which is available at the Arndale Shopping Centre adjacent to the site which provides 1,383 spaces.

8.10. It is considered that the site is highly accessible by the sustainable travel modes of walk, cycle, bus, tram and train as:

- The site is located in a pedestrianised area of Manchester City Centre with a high standard of pedestrian facilities and infrastructure. The major public transport hubs of Victoria Station, Shudehill Station and Piccadilly Gardens are location within an 800m walk catchment of the site.
- The proposed development will enhance the public realm in the immediate vicinity of the site as well as improve access to the development for pedestrians, cyclists and those with impaired mobility.
- All of Manchester City Centre's "outer ring road" and its immediate surrounding areas, many of which are densely populated residential areas, are within a 5km cycle catchment of the application site. The site is well served by cycle routes as well as many of the surrounding streets having a 20mph speed limit which provides a cycle friendly environment and within the wider area of the site, access to the National Cycle Network (NCN) routes 60 and 66 is achievable;
- There are 19 existing bus stops within walking distance of the site as well as the Shudehill bus station which offers a comprehensive network of bus services which link significant areas of Salford, Wigan, Bolton, Bury, Rochdale, Oldham, Ashton-under-Lyne, Stockport, Altrincham and beyond with Manchester city centre. Also, the site is directly served by the free Metroshuttle Bus Service number 2 as well services 1 and 3 being accessible within a 400m walk catchment. These provide a minimum total of approximately 18 services per hour Monday - Sunday;
- The 4 Metrolink stops of Victoria, Shudehill, St. Peter's Square and Piccadilly Gardens are all within an 800m walk distance from the application site. These Metrolink stops offer frequent services to public transport interchange locations as well as locations in the Greater Manchester area. In addition, the proposed Metrolink Second City Crossing (2CC) runs from Deansgate - Castlefield stop, (formerly G-Mex), through St Peter's Square, along Princess Street, Cross Street and Corporation Street (Exchange Square) rejoining the existing Metrolink line just outside Victoria Station. As part of the 2CC, it is proposed that a tram stop will be built in Exchange Square directly in front of the application site. This will further enhance accessibility to the site by sustainable travel modes;
- Manchester City Centre's major public transport hubs and stations are all within an 18 minute journey from the Corn Exchange site either directly on foot or as part of a linked journey involving bus or tram; and
- MCC's future proposed Cross City Bus Scheme would enable bus services to run across Manchester city centre from Middleton and Salford corridors and access Oxford Road, without passengers needing to change buses. This has the potential to improve accessibility of the site to other areas of Greater Manchester.

8.11. As the application site is currently occupied, the nett impact of the development was considered in terms of potential trip generations.

8.12. The existing site has the potential to generate two-way multimodal trips of 861 vehicles trips, 77 public transport trips, 695 pedestrians and 2 cyclists or the equivalent of 1,796 total people movements during the Saturday Peak period.

8.13. The proposed development could potentially generate similar levels of trips to the existing development

8.14. Therefore, the estimated multimodal split percentages for the existing and proposed site are 57% Vehicles (of which 16.3% are car passengers), 38.6% Pedestrians, 4.3% Public Transport and 0.1% Cyclists.

8.15. This report also highlights that there are a limited number of applicable sites available on the TRICS database and based on the proposed site's city centre location, the pedestrianised areas surrounding the site and the high accessibility by sustainable transport modes, it is likely that the modal split percentage of vehicles would be considerably lower than that estimated, whereas those for public transport and cyclists would be significantly higher in reality.

8.16. Also, trip generations for both the existing and proposed development are based on the Corn Exchange being the primary generator of the trips, whereas it is likely that trips to the application site will be part of linked trips to other amenities in the local area, such as the Arndale Shopping Centre and the Printworks.

Conclusions

8.17. It can be concluded that the proposed development scheme can be delivered in line with local, regional and national transportation policy, and it will be designed to accommodate pedestrian and cyclist movements.

8.18. It is considered reasonable that the proposed development utilises existing public car parking facilities in the loca areas due to its city centre location as well as it highly accessible location by sustainable transport modes.

8.19. It is reasonable to conclude based on the above that the proposed analysis provides an onerous and robust assessment of the likely nett trips to be generated onto the network by the proposed development and the proposals would therefore not have a severe impact on the surrounding highway network.

8.20. Based on the above positive findings the proposals for the change of use and associated refurbishment and reconfiguration of the Corn Exchange site are considered acceptable in highway and transportation terms.

Drawings



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KEY:

SITE LOCATION

Rev	Date	Description	By

Amendments

Project

TRIANGLE

Title

SITE LOCATION

Client

Waterman

2nd Floor South Central 11 Peter Street Manchester M2 5QR

t 0161 839 8392 f 03333 444 501

mail@watermangroup.com www.watermangroup.com

Drawing Status

INFORMATION

Designed by	FF	Checked by	SK	Project No
Drawn by	JT	Date	JUN-13	CRN10750
Scales @ A3 work to figured dimensions only	NTS			Computer File No

Publisher	Zone	Category	Number	Revision
CIV	SA	06	001	-

File Path

A3-Waterman-S



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KEY PLAN:



REV:	DATE:	DETAILS:

5plus architects

5th Floor
Grange House
17-27 John Dalton Street
Manchester
M2 6FW

+44 (0)161 834 0552

www.5plusarchitects.com

PROJECT:
Corn Exchange,
Manchester

TITLE:
Existing Upper Ground Floor Layout Plan

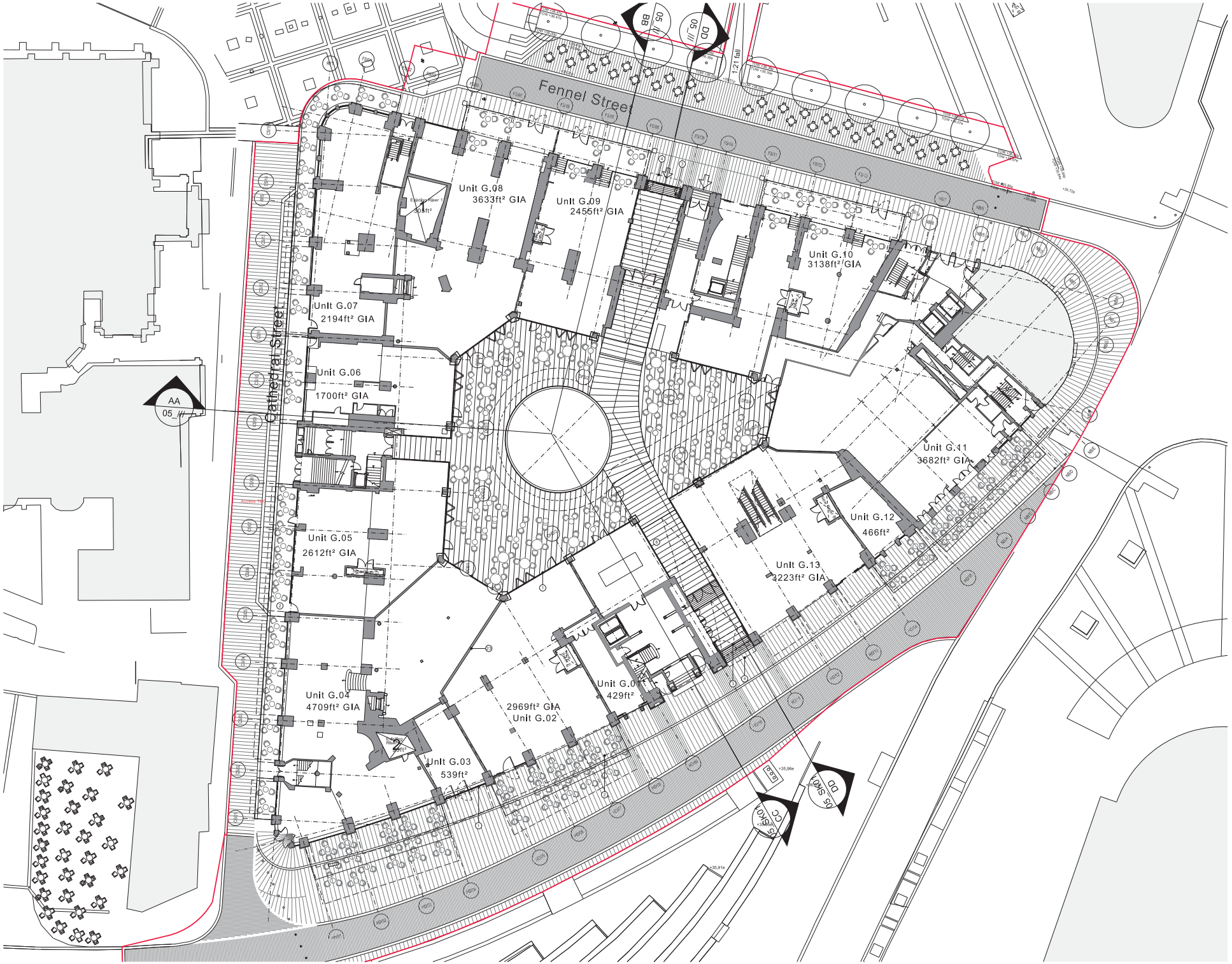
SCALE	DATE:	DRAWN:	CHECKED:
1:200 @ A1	03/11/11	ATa	ATh

STATUS:
INFORMATION

DRAWING NO: 05045 B1_02_2000

REV:

Architecture | Masterplanning | Interiors | Graphics | Branding



Materials legend

1. Metal frame window system
2. Retractable canopy
3. Metal entrance door
4. Canopy
5. Window frames to match existing
6. Structural glazing system
7. Structural frame
8. Internal stone paving
9. Glass balustrade
10. Balustrade fixing plate
11. Pendant lighting
12. Rainwater goods
13. Column base detail to accommodate displacement vent
14. Column head
15. New plasterboard with ?? detail
16. New bulkhead below walkway to accommodate heaters and lighting
17. Internal automatic opening door
18. New floor

Notes

19. Zone for signage
20. Tenant fit out item (indicative)
21. Existing structure to be investigated further as part of detail design
22. Design intent - detail to be developed as part of detail design
23. Demise lines are indicative and subject to change refer to tenant design guide

KEY PLAN

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www.5plusarchitects.com

PROJECT
Corn Exchange,
Manchester

TITLE
Proposed Upper Ground Floor Layout Plan

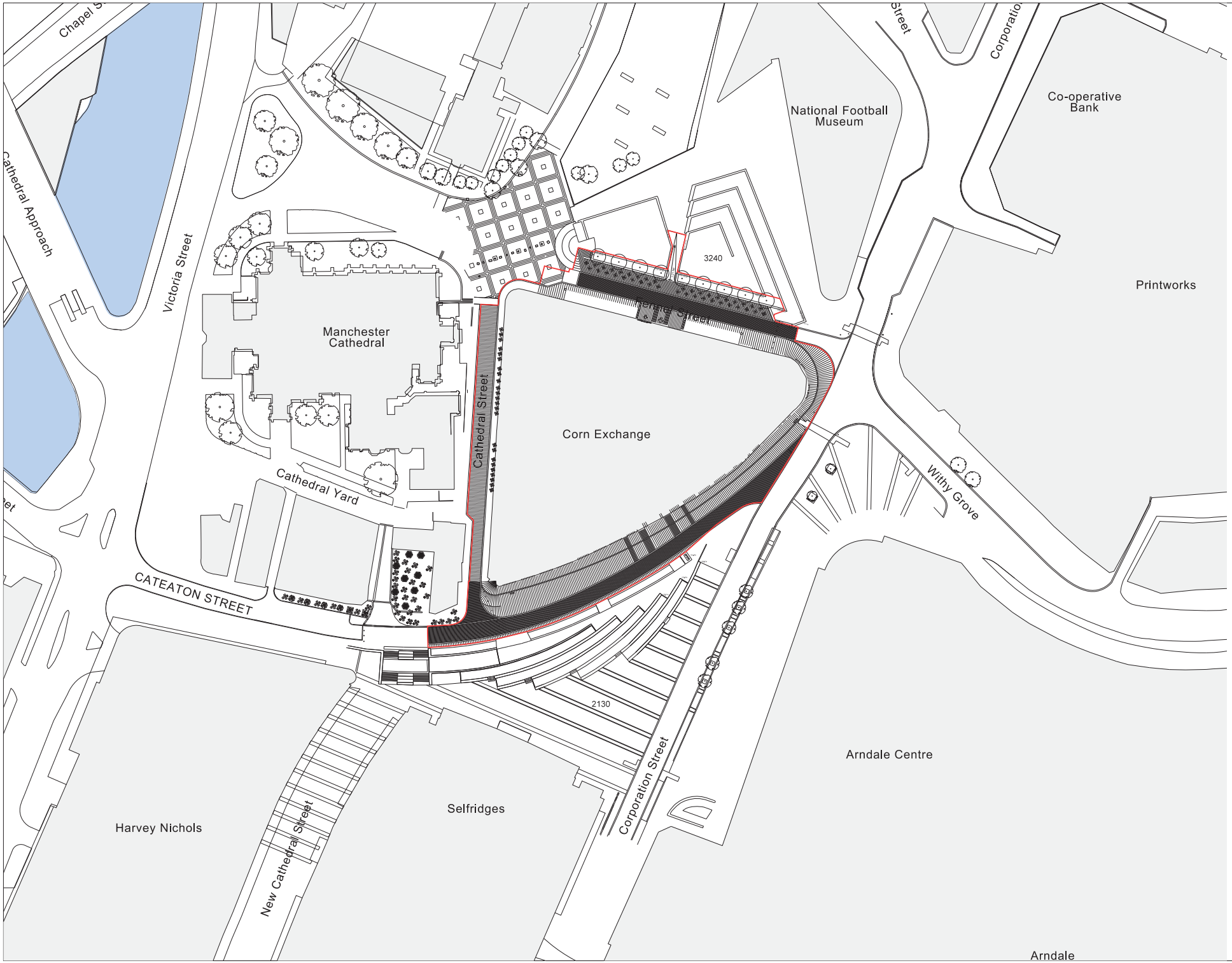
SCALE	DATE:	DRAWN:	CHECKED:
1:200 @ A1	23/07/13	KG	AT

STATUS
PLANNING

DRAWING NO: 05045 B1_02_2200

REV:

Architecture | Masterplanning | Interiors | Graphics | Branding



KEY PLAN

REV: | DATE: | DETAILS:

NORTH

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PROJECT:
Corn Exchange,
Manchester

TITLE:
Proposed Site Plan

SCALE	DATE:	DRAWN:	CHECKED:
1:500 @ A1	23/07/13	ATa	ATh

STATUS:
PLANNING

DRAWING NO: 05045 B1_00_0200

REV:

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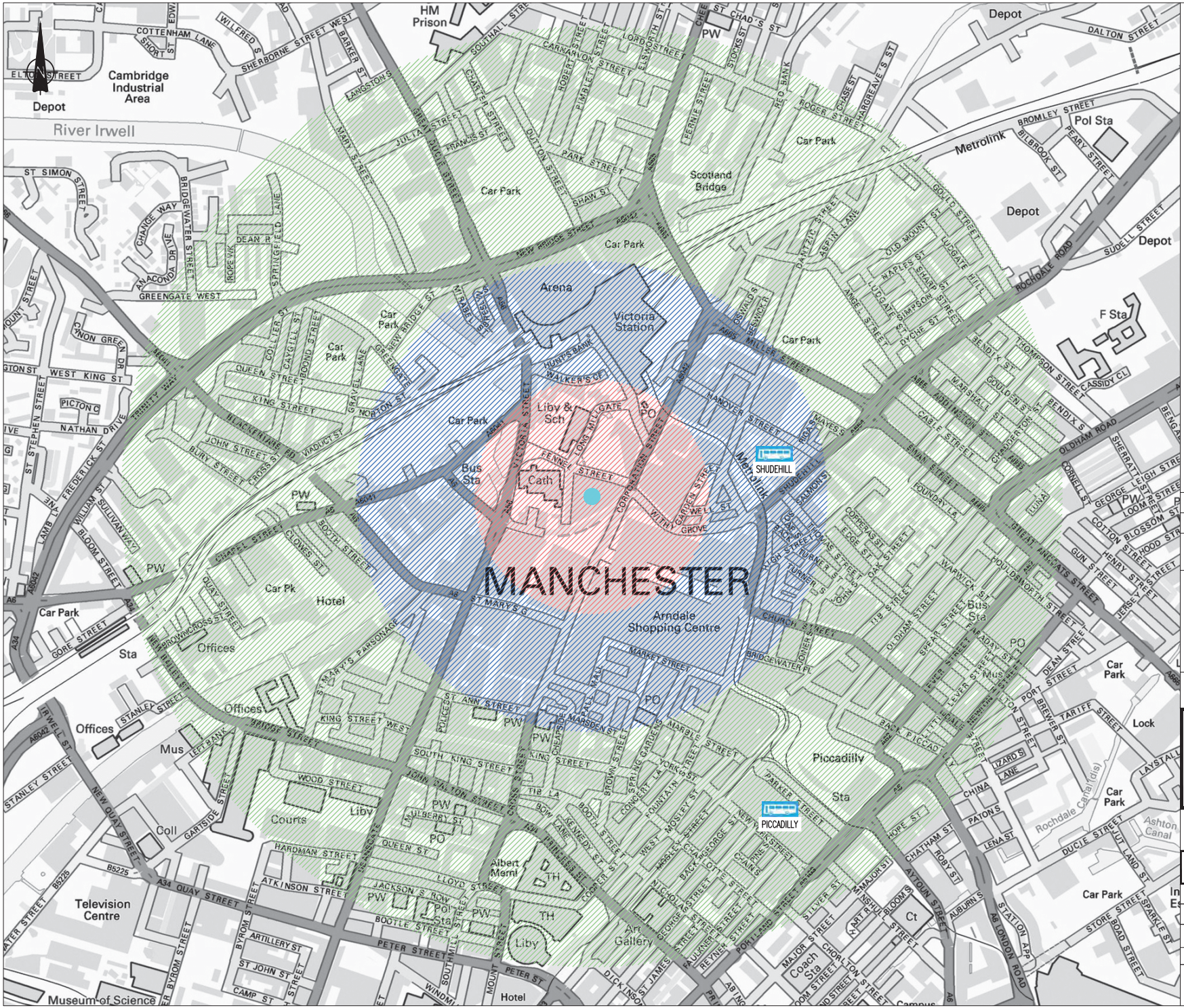

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KEY:

SITE LOCATION / CENTRE OF SITE

200m CATCHMENT

400m CATCHMENT

800m CATCHMENT

Rev	Date	Description	By

Amendments

Project

TRIANGLE

Title

WALKING CATCHMENT

Client

Waterman

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Drawing Status

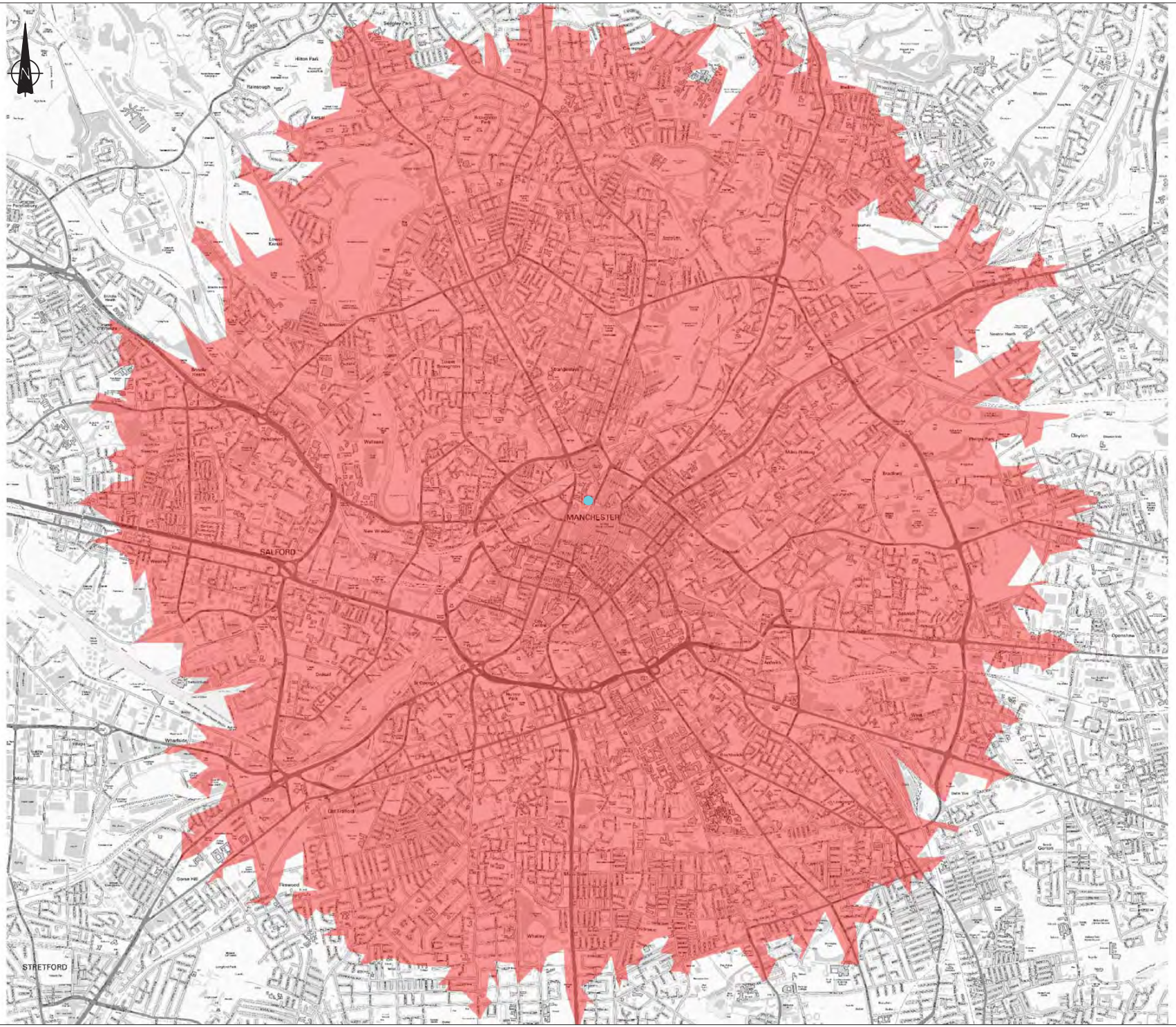
INFORMATION

Designed by	FF	Checked by	SK	Project No
Drawn by	JT	Date	JUN-13	CRN10750
Scales @ A3 work to figured dimensions only	NTS			Computer File No

Publisher	Zone	Category	Number	Revision
CIV	SA	06	002	-

File Path

A3-Waterman-S



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KEY:

SITE LOCATION / CENTRE OF SITE

5 km CATCHMENT

Rev	Date	Description	By

Amendments

Project

TRIANGLE

Title

CYCLING CATCHMENT

Client

Waterman

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Drawing Status

INFORMATION

Designed by	FF	Checked by	SK	Project No	CRN10750
Drawn by	JT	Date	JUN-13		
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Publisher	Zone	Category	Number	Revision
CIV	SA	06	003	-

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KEY:

SITE LOCATION

ON ROAD ROUTE - ADVISORY/QUIET ROUTE

20mph SPEED LIMIT

ON ROAD ROUTE- SIGNED BUT WITH NO FACILITIES

ON ROAD ROUTE- WITH CYCLING FACILITIES

Rev	Date	Description	By

Amendments

Project: TRIANGLE

Title: CYCLE ROUTES

Client:

Waterman

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Drawing Status: INFORMATION

Designed by	FF	Checked by	SK	Project No
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Publisher	Zone	Category	Number	Revision
CIV	SA	06	004	-

File Path

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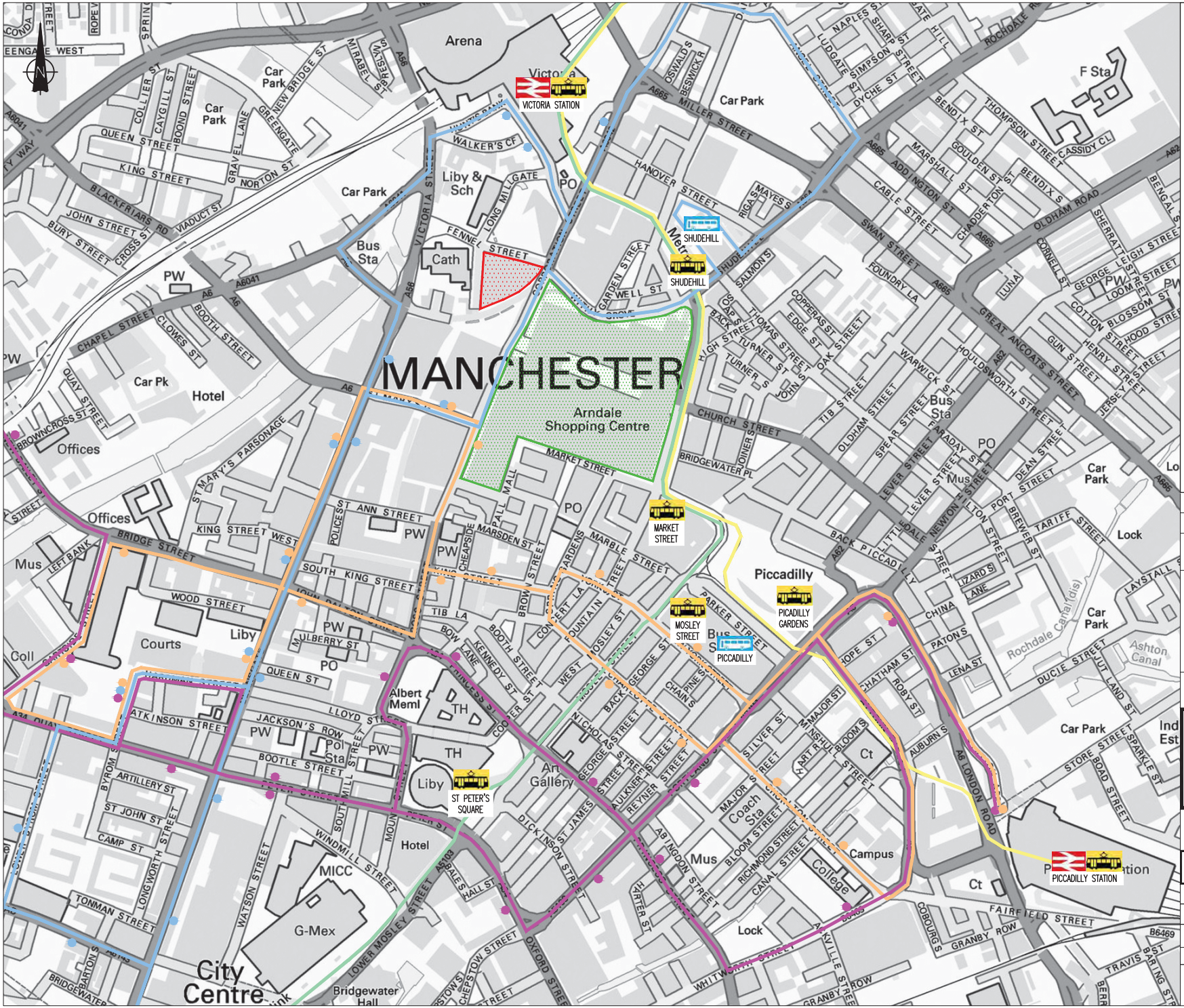

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KEY:

- SITE LOCATION
- METROSHUTTLE 1
- METROSHUTTLE 2
- METROSHUTTLE 3
- TRAIN STATIONS
- METROLINK STATIONS
- BUS STATIONS
- METROSHUTTLE STOPS
- METROLINK (EAST DIDSBURY-ROCHDALE)
- METROLINK (ALTRINCHAM-BURY)
- METROLINK (BURY-DROYLSDEN)
- ARNDALE SHOPPING CENTRE

Rev	Date	Description	By
		Amendments	

Project: TRIANGLE

Title: PUBLIC TRANSPORT INFORMATION

Client:

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Drawing Status: INFORMATION

Designed by	FF	Checked by	SK	Project No
Drawn by	JT	Date	JUN-13	CRN10750
Scales @ A3 work to figured dimensions only	NTS			Computer File No

Publisher	Zone	Category	Number	Revision
CIV	SA	06	005	-

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KEY:

SITE LOCATION / CENTRE OF SITE

400m CATCHMENT

CAR PARK DETAILS:

1.	Chaper Wharf	280 spaces
2.	Market Place	340 spaces
3.	Marks & Spencer	150 spaces
4.		
5.	Manchester Arena	958 spaces
6.	Victoria Station	332 spaces
7.	Shudehill	Not known
8.	Shudehill Interchange	777 spaces
9.	Arndale Shopping Centre	1383 spaces
10.	Church Street	700 spaces
11.	Tib Street	93 spaces

Rev	Date	Description	By

Amendments

Project: TRIANGLE

Title: LOCAL CAR PARK FACILITIES

Client:

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Drawing Status: INFORMATION

Designed by: FF	Checked by: SK	Project No: CRN10750	
Drawn by: JT	Date: JUN-13		
Scales @ A3 work to figured dimensions only: NTS		Computer File No	

Publisher	Zone	Category	Number	Revision
CIV	SA	06	006	-

File Path

A3-Waterman-S

APPENDICES

A. Scoping Discussions and Correspondence

Frempong, Frederick A

From: l.worthington1@manchester.gov.uk
Sent: 26 June 2013 07:48
To: Frempong, Frederick A
Subject: Re: Corn Exchange-Scoping Discussions

Frederick,

The outlioned scope appears acceptable in principle. I would add that the swept-path plots for servicing vehicles should be included as should a description of how the loading bay/seating area along Fennel Street will be operated.

Regards,

Lee Worthington
Development Assessor

Highways, Citywide Support part of Neighbourhood Services
Manchester City Council
Hammerstone Road Depot
Gorton
Manchester
M18 8EQ

Tel: 0161 234 5153
E-mail: l.worthington1@manchester.gov.uk

"Frempong, Frederick A"
<frederick.frempong@watermangroup.com>

25/06/2013 19:03

To "l.worthington1@manchester.gov.uk" <l.worthington1@manchester.gov.uk>
cc "Scotchford, Heath" <heath.scotchford@watermangroup.com>
Subject Corn Exchange-Scoping Discussions

Lee

Following our telephone conversations yesterday, I have summarised our discussions below for your comments and agreement.

- It was agreed that junction assessments are not required and that Transport Statement will be sufficient to show the Transport implications of the development.
- We will use average trip rates derived from TRICS to estimate the trip generations for both the existing development and the proposed redevelopment of the site. As the site is currently in use, the impact of the development will be the nett of the existing and proposed traffic generations in accordance with current DfT guidance on Transport Assessments.
- WTD would provide a servicing strategy detailing servicing times and expected number of service vehicles.
- Details of proposals on Fennel Street will be included as part of the Transport Statement.
- WTD will provide a detail description of the accessibility of the site including distances from the site to existing car parks.
- It was agreed that analysis of existing road accident, be not included in the Transport Statement.

I will be grateful if you can confirm that this email can be assumed as the basis for the Scope of the Transport required for this development.

Thank you in advance for your anticipated assistance.

Regards

Frederick Frempong
Senior Engineer
Waterman Transport & Development Ltd.

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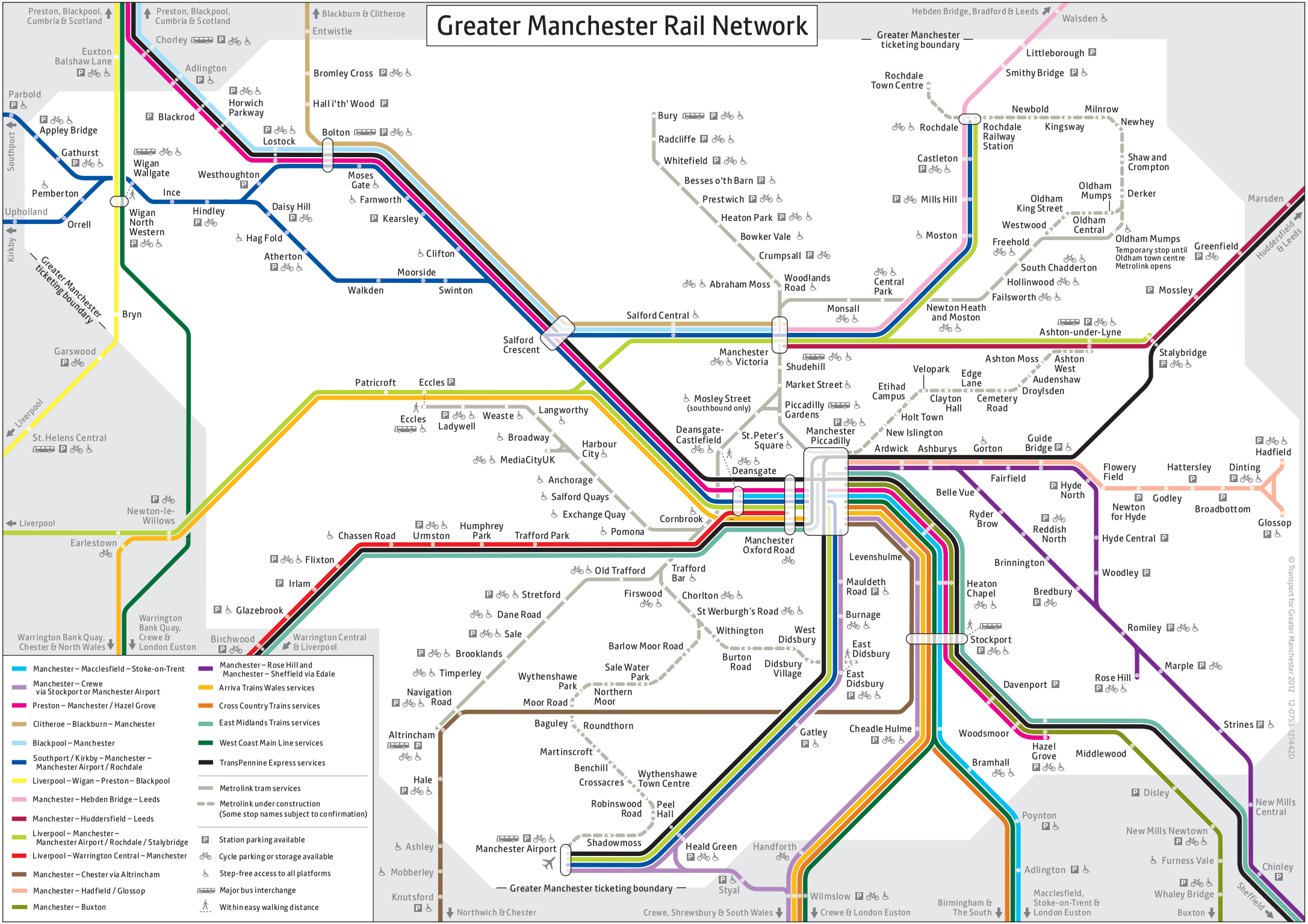
B. Rail Network Map


Greater Manchester Rail Network
Preston, Blackpool, Cumbria & Scotland
Preston, Blackpool, Cumbria & Scotland
Blackburn & Clitheroe
Entwistle
Hebden Bridge, Bradford & Leeds
Walsden
Greater Manchester ticketing boundary
Littleborough
Smithy Bridge
Rochdale Town Centre
Euxton Balshaw Lane
Chorley
Adlington
Bromley Cross
Hall i'th' Wood
Parbold
Appley Bridge
Blackrod
Horwich Parkway
Lostock
Bolton
Rochdale
Rochdale Railway Station
Newbold
Kingsway
Milnrow
Newhey
Shaw and Crompton
Derker
Oldham Mumps
Oldham Mumps Temporary stop until Oldham town centre Metrolink opens
Oldham King Street
Oldham Central
Westwood
Freehold
Greenfield
Marsden
Huddersfield & Leeds
Southport
Gathurst
Wigan Wallgate
Westhoughton
Moses Gate
Farnworth
Kearsley
Pemberton
Ince
Wigan North Western
Hindley
Daisy Hill
Hag Fold
Atherton
Clifton
Moorside
Walkden
Swinton
Upholland
Orrell
Kirkby
Bryn
Garswood
Liverpool
St. Helens Central
Newton-le-Willows
Liverpool
Earlestown
Warrington Bank Quay, Chester & North Wales
Warrington Bank Quay, Crewe & London Euston
Bury
Radcliffe
Whitefield
Besses o'th Barn
Prestwich
Heaton Park
Bowker Vale
Crumpsall
Abraham Moss
Woodlands Road
Central Park
Mills Hill
Moston
Castleton
Mossley
Ashton-under-Lyne
Stalybridge
Hadfield
Salford Central
Salford Crescent
Manchester Victoria
Shudehill
Monsall
Newton Heath and Moston
Failsworth
Hollinwood
South Chadderton
Ashton Moss
Ashton West
Audenshaw
Droylsden
Velopark
Edge Lane
Etihad Campus
Clayton Hall
Cemetery Road
Holt Town
New Islington
Ardwick
Ashburys
Gorton
Guide Bridge
Market Street
Piccadilly Gardens
Mosley Street (southbound only)
Deansgate-Castlefield
St. Peter's Square
Manchester Piccadilly
Deansgate
Patricroft
Eccles
Ladywell
Weaste
Langworthy
Broadway
MediaCityUK
Harbour City
Anchorage
Salford Quays
Exchange Quay
Pomona
Cornbrook
Chassen Road
Urmston
Humphrey Park
Trafford Park
Manchester Oxford Road
Flixton
Irlam
Glazebrook
Old Trafford
Trafford Bar
Stretford
Firswood
Chorlton
Dane Road
St Werburgh's Road
Sale
Withington
West Didsbury
Brooklands
Barlow Moor Road
Timperley
Sale Water Park
Burton Road
Didsbury Village
East Didsbury
Wythenshawe Park
Northern Moor
Moor Road
Navigation Road
Birchwood
Warrington Central & Liverpool
Levenshulme
Mauldeth Road
Burnage
Heaton Chapel
Stockport
Fairfield
Hyde North
Belle Vue
Ryder Brow
Reddish North
Brinnington
Bredbury
Hyde Central
Woodley
Flowery Field
Hattersley
Dinting
Newton for Hyde
Godley
Broadbottom
Glossop
Romiley
Marple
Rose Hill
Davenport
Strines
Baguley
Roundthorn
Gatley
Cheadle Hulme
Woodsmoor
Hazel Grove
Middlewood
Bramhall
Altrincham
Martinscroft
Benchill
Crossacres
Wythenshawe Town Centre
Hale
Robinswood Road
Peel Hall
Manchester Airport
Shadowmoss
Heald Green
Handforth
Styal
Poynton
Disley
New Mills Central
New Mills Newtown
Furness Vale
Whaley Bridge
Chinley
Buxton
Sheffield
Ashley
Mobberley
Knutsford
Northwich & Chester
Greater Manchester ticketing boundary
Crewe, Shrewsbury & South Wales
Wilmslow
Crewe & London Euston
Birmingham & The South
Adlington
Macclesfield, Stoke-on-Trent & London Euston
Manchester – Macclesfield – Stoke-on-Trent
Manchester – Crewe via Stockport or Manchester Airport
Preston – Manchester / Hazel Grove
Clitheroe – Blackburn – Manchester
Blackpool – Manchester
Southport / Kirkby – Manchester – Manchester Airport / Rochdale
Liverpool – Wigan – Preston – Blackpool
Manchester – Hebden Bridge – Leeds
Manchester – Huddersfield – Leeds
Liverpool – Manchester – Manchester Airport / Rochdale / Stalybridge
Liverpool – Warrington Central – Manchester
Manchester – Chester via Altrincham
Manchester – Hadfield / Glossop
Manchester – Buxton
Manchester – Rose Hill and Manchester – Sheffield via Edale
Arriva Trains Wales services
Cross Country Trains services
East Midlands Trains services
West Coast Main Line services
TransPennine Express services
Metrolink tram services
Metrolink under construction (Some stop names subject to confirmation)
Station parking available
Cycle parking or storage available
Step-free access to all platforms
Major bus interchange
Within easy walking distance
© Transport for Greater Manchester 2012 12-0753-121442D

C. TRICS Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : M - MIXED SHOPPING MALLS
MULTI-MODAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	KC	KENT	1 days
11	**SCOTLAND**		
	NL	NORTH LANARKSHIRE	1 days

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

Filtering Stage 2 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:	Gross floor area
Actual Range:	3960 to 8125 (units: sqm)
Range Selected by User:	3960 to 14693 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 24/11/12

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:

Saturday	2 days

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

Selected survey types:

Manual count	2 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 undertaking using machines.

Selected Locations:

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:

High Street	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.

Filtering Stage 3 selection:

Use Class:

A1	2 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®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

25,001 to 50,000	2 days

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

Population within 5 miles:

125,001 to 250,000	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	1 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	2 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.

LIST OF SITES relevant to selection parameters

1 **KC-01-M-01** **SHOPPING MALL** **KENT**
HIGH STREET

MAIDSTONE
Town Centre
High Street
Total Gross floor area: 8125 sqm
Survey date: SATURDAY *24/11/12* *Survey Type: MANUAL*

2 **NL-01-M-01** **SHOPPING MALL** **NORTH LANARKSHIRE**
MAIN STREET

COATBRIDGE
Town Centre
High Street
Total Gross floor area: 3960 sqm
Survey date: SATURDAY *28/06/08* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.695	2	6043	0.008	2	6043	0.703
09:00 - 10:00	2	6043	3.351	2	6043	1.903	2	6043	5.254
10:00 - 11:00	**2**	**6043**	**3.889**	2	6043	3.136	**2**	**6043**	**7.025**
11:00 - 12:00	2	6043	3.715	2	6043	3.277	2	6043	6.992
12:00 - 13:00	2	6043	3.144	2	6043	2.689	2	6043	5.833
13:00 - 14:00	2	6043	2.838	**2**	**6043**	**3.326**	2	6043	6.164
14:00 - 15:00	2	6043	2.160	2	6043	2.739	2	6043	4.899
15:00 - 16:00	2	6043	1.696	2	6043	2.516	2	6043	4.212
16:00 - 17:00	2	6043	0.960	2	6043	2.218	2	6043	3.178
17:00 - 18:00	2	6043	0.199	2	6043	0.687	2	6043	0.886
18:00 - 19:00	2	6043	0.000	2	6043	0.108	2	6043	0.108
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			22.647			22.607			45.254

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
09:00 - 10:00	**2**	**6043**	**0.124**	2	6043	0.083	**2**	**6043**	**0.207**
10:00 - 11:00	2	6043	0.091	2	6043	0.083	2	6043	0.174
11:00 - 12:00	2	6043	0.058	**2**	**6043**	**0.091**	2	6043	0.149
12:00 - 13:00	2	6043	0.050	2	6043	0.050	2	6043	0.100
13:00 - 14:00	2	6043	0.058	2	6043	0.050	2	6043	0.108
14:00 - 15:00	2	6043	0.033	2	6043	0.033	2	6043	0.066
15:00 - 16:00	2	6043	0.050	2	6043	0.074	2	6043	0.124
16:00 - 17:00	2	6043	0.033	2	6043	0.033	2	6043	0.066
17:00 - 18:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
18:00 - 19:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.505			0.497			1.002

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	**2**	**6043**	**0.008**	**2**	**6043**	**0.008**	**2**	**6043**	**0.016**
09:00 - 10:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
10:00 - 11:00	2	6043	0.008	2	6043	0.008	2	6043	0.016
11:00 - 12:00	2	6043	0.008	2	6043	0.008	2	6043	0.016
12:00 - 13:00	2	6043	0.000	2	6043	0.008	2	6043	0.008
13:00 - 14:00	2	6043	0.008	2	6043	0.008	2	6043	0.016
14:00 - 15:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
15:00 - 16:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
16:00 - 17:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
17:00 - 18:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
18:00 - 19:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.040			0.080

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
09:00 - 10:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
10:00 - 11:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
11:00 - 12:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
12:00 - 13:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
13:00 - 14:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
14:00 - 15:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
15:00 - 16:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
16:00 - 17:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
17:00 - 18:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
18:00 - 19:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
09:00 - 10:00	**2**	**6043**	**0.033**	2	6043	0.025	2	6043	0.058
10:00 - 11:00	2	6043	0.017	2	6043	0.000	2	6043	0.017
11:00 - 12:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
12:00 - 13:00	2	6043	0.017	2	6043	0.008	2	6043	0.025
13:00 - 14:00	2	6043	0.008	2	6043	0.008	2	6043	0.016
14:00 - 15:00	2	6043	0.008	2	6043	0.008	2	6043	0.016
15:00 - 16:00	2	6043	0.025	**2**	**6043**	**0.041**	**2**	**6043**	**0.066**
16:00 - 17:00	2	6043	0.000	2	6043	0.025	2	6043	0.025
17:00 - 18:00	2	6043	0.000	2	6043	0.008	2	6043	0.008
18:00 - 19:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.124			0.123			0.247

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.943	2	6043	0.008	2	6043	0.951
09:00 - 10:00	2	6043	4.377	2	6043	2.300	2	6043	6.677
10:00 - 11:00	2	6043	4.634	2	6043	3.707	2	6043	8.341
11:00 - 12:00	**2**	**6043**	**5.056**	2	6043	4.270	**2**	**6043**	**9.326**
12:00 - 13:00	2	6043	4.212	2	6043	3.558	2	6043	7.770
13:00 - 14:00	2	6043	3.955	**2**	**6043**	**4.319**	2	6043	8.274
14:00 - 15:00	2	6043	3.111	2	6043	3.856	2	6043	6.967
15:00 - 16:00	2	6043	2.400	2	6043	3.748	2	6043	6.148
16:00 - 17:00	2	6043	1.324	2	6043	3.128	2	6043	4.452
17:00 - 18:00	2	6043	0.240	2	6043	0.918	2	6043	1.158
18:00 - 19:00	2	6043	0.000	2	6043	0.132	2	6043	0.132
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			30.252			29.944			60.196

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	1.663	2	6043	0.091	2	6043	1.754
09:00 - 10:00	2	6043	3.169	2	6043	2.962	2	6043	6.131
10:00 - 11:00	**2**	**6043**	**3.244**	2	6043	2.424	2	6043	5.668
11:00 - 12:00	2	6043	1.531	2	6043	2.342	2	6043	3.873
12:00 - 13:00	2	6043	2.822	2	6043	2.507	2	6043	5.329
13:00 - 14:00	2	6043	2.342	2	6043	2.540	2	6043	4.882
14:00 - 15:00	2	6043	3.111	**2**	**6043**	**3.302**	**2**	**6043**	**6.413**
15:00 - 16:00	2	6043	2.085	2	6043	2.971	2	6043	5.056
16:00 - 17:00	2	6043	2.060	2	6043	2.077	2	6043	4.137
17:00 - 18:00	2	6043	0.712	2	6043	1.539	2	6043	2.251
18:00 - 19:00	2	6043	0.000	2	6043	0.025	2	6043	0.025
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			22.739			22.780			45.519

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.041	2	6043	0.000	2	6043	0.041
09:00 - 10:00	2	6043	0.281	2	6043	0.083	2	6043	0.364
10:00 - 11:00	2	6043	0.455	2	6043	0.165	2	6043	0.620
11:00 - 12:00	2	6043	0.654	2	6043	0.645	2	6043	1.299
12:00 - 13:00	2	6043	0.703	**2**	**6043**	**0.778**	**2**	**6043**	**1.481**
13:00 - 14:00	**2**	**6043**	**0.778**	2	6043	0.439	2	6043	1.217
14:00 - 15:00	2	6043	0.645	2	6043	0.496	2	6043	1.141
15:00 - 16:00	2	6043	0.356	2	6043	0.728	2	6043	1.084
16:00 - 17:00	2	6043	0.033	2	6043	0.488	2	6043	0.521
17:00 - 18:00	2	6043	0.017	2	6043	0.058	2	6043	0.075
18:00 - 19:00	2	6043	0.000	2	6043	0.017	2	6043	0.017
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.963			3.897			7.860

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL TRAIN PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
09:00 - 10:00	**2**	**6043**	**0.017**	2	6043	0.000	**2**	**6043**	**0.017**
10:00 - 11:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
11:00 - 12:00	2	6043	0.017	2	6043	0.000	2	6043	0.017
12:00 - 13:00	2	6043	0.008	**2**	**6043**	**0.008**	2	6043	0.016
13:00 - 14:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
14:00 - 15:00	2	6043	0.008	2	6043	0.000	2	6043	0.008
15:00 - 16:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
16:00 - 17:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
17:00 - 18:00	2	6043	0.000	2	6043	0.008	2	6043	0.008
18:00 - 19:00	2	6043	0.000	2	6043	0.008	2	6043	0.008
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.058			0.024			0.082

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL COACH PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
09:00 - 10:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
10:00 - 11:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
11:00 - 12:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
12:00 - 13:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
13:00 - 14:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
14:00 - 15:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
15:00 - 16:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
16:00 - 17:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
17:00 - 18:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
18:00 - 19:00	2	6043	0.000	2	6043	0.000	2	6043	0.000
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	0.041	2	6043	0.000	2	6043	0.041
09:00 - 10:00	2	6043	0.298	2	6043	0.083	2	6043	0.381
10:00 - 11:00	2	6043	0.463	2	6043	0.165	2	6043	0.628
11:00 - 12:00	2	6043	0.670	2	6043	0.645	2	6043	1.315
12:00 - 13:00	2	6043	0.712	**2**	**6043**	**0.786**	**2**	**6043**	**1.498**
13:00 - 14:00	**2**	**6043**	**0.778**	2	6043	0.439	2	6043	1.217
14:00 - 15:00	2	6043	0.654	2	6043	0.496	2	6043	1.150
15:00 - 16:00	2	6043	0.356	2	6043	0.728	2	6043	1.084
16:00 - 17:00	2	6043	0.033	2	6043	0.488	2	6043	0.521
17:00 - 18:00	2	6043	0.017	2	6043	0.066	2	6043	0.083
18:00 - 19:00	2	6043	0.000	2	6043	0.025	2	6043	0.025
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.022			3.921			7.943

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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3960	0.000	1	3960	0.000	1	3960	0.000
08:00 - 09:00	2	6043	2.656	2	6043	0.099	2	6043	2.755
09:00 - 10:00	2	6043	7.878	2	6043	5.370	2	6043	13.248
10:00 - 11:00	**2**	**6043**	**8.357**	2	6043	6.297	**2**	**6043**	**14.654**
11:00 - 12:00	2	6043	7.265	2	6043	7.257	2	6043	14.522
12:00 - 13:00	2	6043	7.762	2	6043	6.860	2	6043	14.622
13:00 - 14:00	2	6043	7.083	2	6043	7.307	2	6043	14.390
14:00 - 15:00	2	6043	6.885	**2**	**6043**	**7.662**	2	6043	14.547
15:00 - 16:00	2	6043	4.866	2	6043	7.489	2	6043	12.355
16:00 - 17:00	2	6043	3.417	2	6043	5.718	2	6043	9.135
17:00 - 18:00	2	6043	0.968	2	6043	2.532	2	6043	3.500
18:00 - 19:00	2	6043	0.000	2	6043	0.182	2	6043	0.182
19:00 - 20:00	1	8125	0.000	1	8125	0.000	1	8125	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			57.137			56.773			113.910

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.

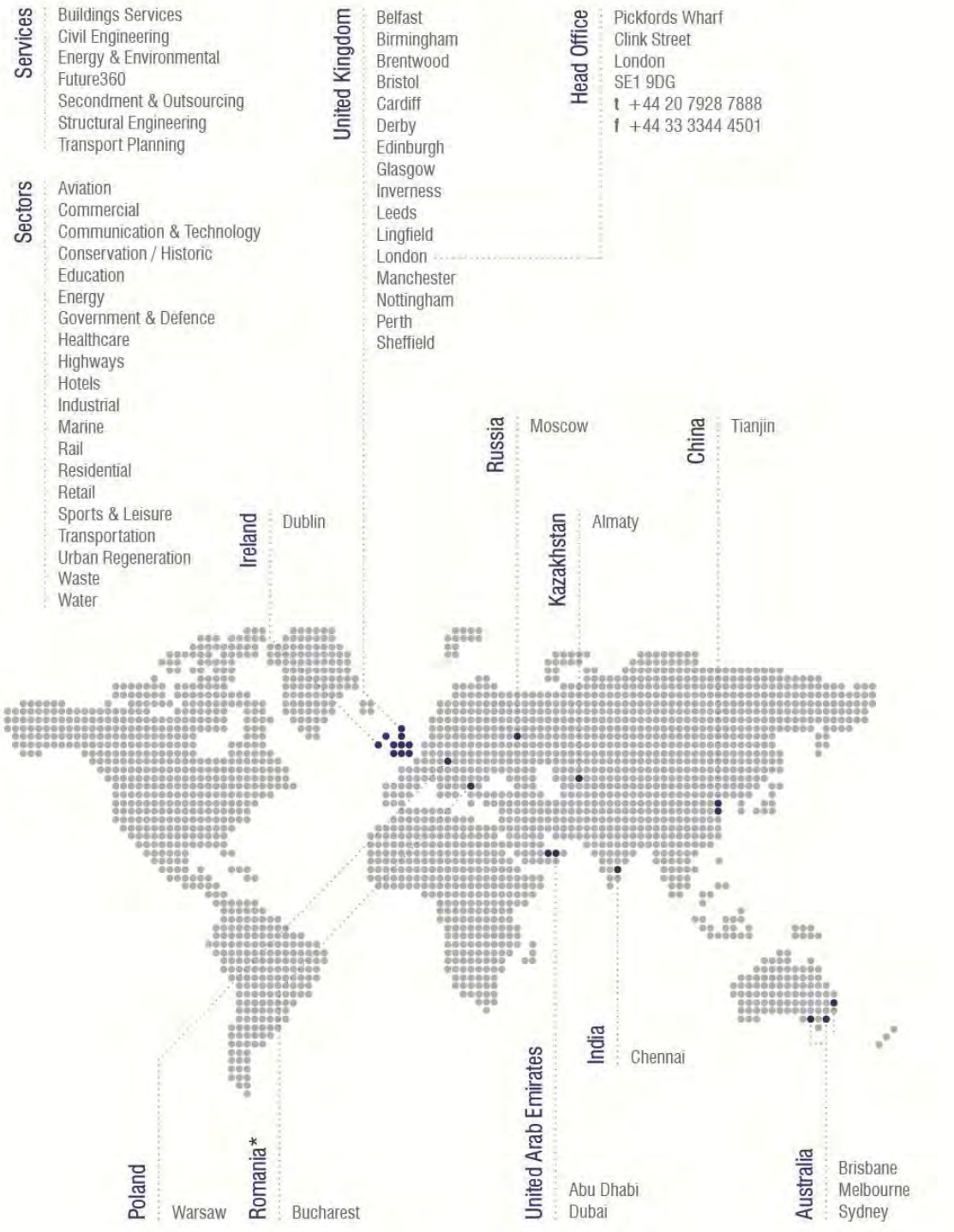
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*

Parameter summary

Trip rate parameter range selected:	3960 - 8125 (units: sqm)
Survey date date range:	01/01/05 - 24/11/12
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Waterman



*Project Office

B. TRICS Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : B - RESTAURANTS
MULTI-MODAL VEHICLES

Selected regions and areas:
05 EAST MIDLANDS
DS DERBYSHIRE 1 days

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

Filtering Stage 2 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: Gross floor area
Actual Range: 425 to 425 (units: sqm)
Range Selected by User: 178 to 2400 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/00 to 23/11/09

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:
Saturday 1 days

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

Selected survey types:
Manual count 1 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 undertaking using machines.

Selected Locations:
Town Centre 1

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:
Built-Up Zone 1

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.

Filtering Stage 3 selection:

Use Class:
A3 1 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®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:
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:
125,001 to 250,000 1 days

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

Car ownership within 5 miles:
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 1 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.

LIST OF SITES relevant to selection parameters

1 DS-06-B-01 LITTLE FRANKIES DERBYSHIRE
CORN MARKET

DERBY
Town Centre
Built-Up Zone
Total Gross floor area: 425 sqm
Survey date: SATURDAY *20/06/09* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.706	1	425	0.235	1	425	0.941
12:00 - 13:00	1	425	1.882	1	425	0.941	1	425	2.823
13:00 - 14:00	**1**	**425**	**2.824**	1	425	2.588	1	425	5.412
14:00 - 15:00	1	425	2.118	**1**	**425**	**2.824**	1	425	4.942
15:00 - 16:00	1	425	0.941	1	425	1.412	1	425	2.353
16:00 - 17:00	1	425	1.412	1	425	0.941	1	425	2.353
17:00 - 18:00	1	425	1.412	1	425	0.706	1	425	2.118
18:00 - 19:00	1	425	0.706	1	425	1.882	1	425	2.588
19:00 - 20:00	1	425	2.824	1	425	2.824	**1**	**425**	**5.648**
20:00 - 21:00	1	425	1.412	1	425	1.176	1	425	2.588
21:00 - 22:00	1	425	2.588	1	425	2.588	1	425	5.176
22:00 - 23:00	1	425	0.471	1	425	1.176	1	425	1.647
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			19.296			19.293			38.589

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	1	425	0.000	1	425	0.000	1	425	0.000
13:00 - 14:00	1	425	0.000	1	425	0.000	1	425	0.000
14:00 - 15:00	1	425	0.000	1	425	0.000	1	425	0.000
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.235	1	425	0.235	1	425	0.470
19:00 - 20:00	**1**	**425**	**2.118**	**1**	**425**	**2.118**	**1**	**425**	**4.236**
20:00 - 21:00	1	425	1.176	1	425	1.176	1	425	2.352
21:00 - 22:00	1	425	2.118	1	425	2.118	1	425	4.236
22:00 - 23:00	1	425	0.235	1	425	0.235	1	425	0.470
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			5.882			5.882			11.764

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	1	425	0.000	1	425	0.000	1	425	0.000
13:00 - 14:00	1	425	0.000	1	425	0.000	1	425	0.000
14:00 - 15:00	1	425	0.000	1	425	0.000	1	425	0.000
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.000	1	425	0.000	1	425	0.000
19:00 - 20:00	1	425	0.000	1	425	0.000	1	425	0.000
20:00 - 21:00	1	425	0.000	1	425	0.000	1	425	0.000
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	1	425	0.000	1	425	0.000	1	425	0.000
13:00 - 14:00	1	425	0.000	1	425	0.000	1	425	0.000
14:00 - 15:00	1	425	0.000	1	425	0.000	1	425	0.000
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.000	1	425	0.000	1	425	0.000
19:00 - 20:00	1	425	0.000	1	425	0.000	1	425	0.000
20:00 - 21:00	1	425	0.000	1	425	0.000	1	425	0.000
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	1	425	0.000	1	425	0.000	1	425	0.000
13:00 - 14:00	1	425	0.000	1	425	0.000	1	425	0.000
14:00 - 15:00	1	425	0.000	1	425	0.000	1	425	0.000
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.000	1	425	0.000	1	425	0.000
19:00 - 20:00	1	425	0.000	1	425	0.000	1	425	0.000
20:00 - 21:00	1	425	0.000	1	425	0.000	1	425	0.000
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	2.588	1	425	0.235	1	425	2.823
12:00 - 13:00	1	425	4.000	1	425	2.353	1	425	6.353
13:00 - 14:00	1	425	7.294	1	425	6.588	**1**	**425**	**13.882**
14:00 - 15:00	1	425	4.471	**1**	**425**	**7.529**	1	425	12.000
15:00 - 16:00	1	425	1.412	1	425	2.118	1	425	3.530
16:00 - 17:00	1	425	4.235	1	425	2.118	1	425	6.353
17:00 - 18:00	1	425	3.529	1	425	1.647	1	425	5.176
18:00 - 19:00	1	425	1.882	1	425	6.353	1	425	8.235
19:00 - 20:00	**1**	**425**	**8.235**	1	425	2.588	1	425	10.823
20:00 - 21:00	1	425	0.941	1	425	2.824	1	425	3.765
21:00 - 22:00	1	425	1.412	1	425	7.529	1	425	8.941
22:00 - 23:00	1	425	0.000	1	425	1.647	1	425	1.647
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			39.999			43.529			83.528

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.235	1	425	0.000	1	425	0.235
11:00 - 12:00	1	425	0.235	1	425	0.000	1	425	0.235
12:00 - 13:00	1	425	1.647	1	425	0.000	1	425	1.647
13:00 - 14:00	1	425	0.000	1	425	0.706	1	425	0.706
14:00 - 15:00	1	425	0.706	1	425	0.235	1	425	0.941
15:00 - 16:00	1	425	0.471	1	425	0.235	1	425	0.706
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.471	1	425	0.235	1	425	0.706
18:00 - 19:00	1	425	0.706	1	425	0.235	1	425	0.941
19:00 - 20:00	1	425	1.176	1	425	0.941	1	425	2.117
20:00 - 21:00	**1**	**425**	**2.588**	1	425	0.941	**1**	**425**	**3.529**
21:00 - 22:00	1	425	0.000	**1**	**425**	**2.118**	1	425	2.118
22:00 - 23:00	1	425	0.000	1	425	0.941	1	425	0.941
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			8.235			6.587			14.822

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.235	1	425	0.000	1	425	0.235
10:00 - 11:00	1	425	1.176	1	425	0.000	1	425	1.176
11:00 - 12:00	1	425	0.706	1	425	0.706	1	425	1.412
12:00 - 13:00	**1**	**425**	**2.118**	1	425	0.941	1	425	3.059
13:00 - 14:00	1	425	1.882	1	425	1.647	**1**	**425**	**3.529**
14:00 - 15:00	1	425	0.235	**1**	**425**	**2.824**	1	425	3.059
15:00 - 16:00	1	425	0.235	1	425	0.706	1	425	0.941
16:00 - 17:00	1	425	0.706	1	425	0.000	1	425	0.706
17:00 - 18:00	1	425	0.941	1	425	0.706	1	425	1.647
18:00 - 19:00	1	425	0.471	1	425	0.235	1	425	0.706
19:00 - 20:00	1	425	0.235	1	425	0.000	1	425	0.235
20:00 - 21:00	1	425	0.706	1	425	0.000	1	425	0.706
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			9.646			7.765			17.411

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL TRAIN PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	**1**	**425**	**1.176**	**1**	**425**	**0.706**	**1**	**425**	**1.882**
13:00 - 14:00	1	425	0.235	1	425	0.471	1	425	0.706
14:00 - 15:00	1	425	0.000	1	425	0.235	1	425	0.235
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.000	1	425	0.000	1	425	0.000
19:00 - 20:00	1	425	0.000	1	425	0.000	1	425	0.000
20:00 - 21:00	1	425	0.000	1	425	0.000	1	425	0.000
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			1.411			1.412			2.823

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL COACH PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.000	1	425	0.000	1	425	0.000
10:00 - 11:00	1	425	0.000	1	425	0.000	1	425	0.000
11:00 - 12:00	1	425	0.000	1	425	0.000	1	425	0.000
12:00 - 13:00	1	425	0.000	1	425	0.000	1	425	0.000
13:00 - 14:00	1	425	0.000	1	425	0.000	1	425	0.000
14:00 - 15:00	1	425	0.000	1	425	0.000	1	425	0.000
15:00 - 16:00	1	425	0.000	1	425	0.000	1	425	0.000
16:00 - 17:00	1	425	0.000	1	425	0.000	1	425	0.000
17:00 - 18:00	1	425	0.000	1	425	0.000	1	425	0.000
18:00 - 19:00	1	425	0.000	1	425	0.000	1	425	0.000
19:00 - 20:00	1	425	0.000	1	425	0.000	1	425	0.000
20:00 - 21:00	1	425	0.000	1	425	0.000	1	425	0.000
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			0.000			0.000			0.000

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

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

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.235	1	425	0.000	1	425	0.235
10:00 - 11:00	1	425	1.176	1	425	0.000	1	425	1.176
11:00 - 12:00	1	425	0.706	1	425	0.706	1	425	1.412
12:00 - 13:00	**1**	**425**	**3.294**	1	425	1.647	**1**	**425**	**4.941**
13:00 - 14:00	1	425	2.118	1	425	2.118	1	425	4.236
14:00 - 15:00	1	425	0.235	**1**	**425**	**3.059**	1	425	3.294
15:00 - 16:00	1	425	0.235	1	425	0.706	1	425	0.941
16:00 - 17:00	1	425	0.706	1	425	0.000	1	425	0.706
17:00 - 18:00	1	425	0.941	1	425	0.706	1	425	1.647
18:00 - 19:00	1	425	0.471	1	425	0.235	1	425	0.706
19:00 - 20:00	1	425	0.235	1	425	0.000	1	425	0.235
20:00 - 21:00	1	425	0.706	1	425	0.000	1	425	0.706
21:00 - 22:00	1	425	0.000	1	425	0.000	1	425	0.000
22:00 - 23:00	1	425	0.000	1	425	0.000	1	425	0.000
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			11.058			9.177			20.235

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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00	1	425	0.235	1	425	0.000	1	425	0.235
10:00 - 11:00	1	425	1.412	1	425	0.000	1	425	1.412
11:00 - 12:00	1	425	3.529	1	425	0.941	1	425	4.470
12:00 - 13:00	1	425	8.941	1	425	4.000	1	425	12.941
13:00 - 14:00	1	425	9.412	1	425	9.412	**1**	**425**	**18.824**
14:00 - 15:00	1	425	5.412	**1**	**425**	**10.824**	1	425	16.236
15:00 - 16:00	1	425	2.118	1	425	3.059	1	425	5.177
16:00 - 17:00	1	425	4.941	1	425	2.118	1	425	7.059
17:00 - 18:00	1	425	4.941	1	425	2.588	1	425	7.529
18:00 - 19:00	1	425	3.059	1	425	6.824	1	425	9.883
19:00 - 20:00	**1**	**425**	**9.647**	1	425	3.529	1	425	13.176
20:00 - 21:00	1	425	4.235	1	425	3.765	1	425	8.000
21:00 - 22:00	1	425	1.412	1	425	9.647	1	425	11.059
22:00 - 23:00	1	425	0.000	1	425	2.588	1	425	2.588
23:00 - 24:00	1	425	0.000	1	425	0.000	1	425	0.000
Total Rates:			59.294			59.295			118.589

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.

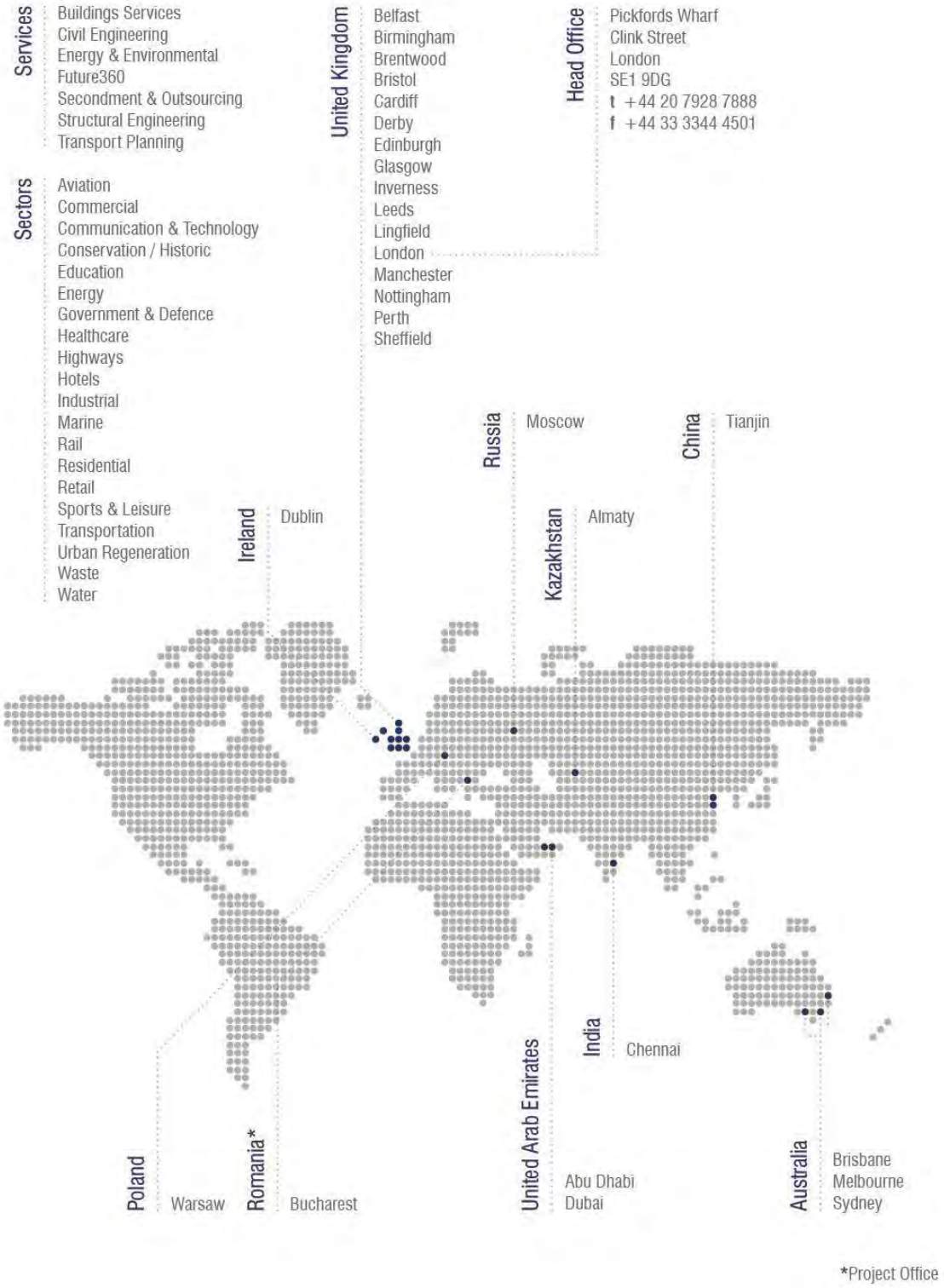
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*

Parameter summary

Trip rate parameter range selected:	425 - 425 (units: sqm)
Survey date date range:	01/01/00 - 23/11/09
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	1
Number of Sundays:	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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Waterman



*Project Office