



SEPTEMBER
2015

Transport Statement

Proposed Trade Park, former Be Modern Premises,
Western Approach, South Shields NE33 5QZ

Iceni Projects Limited on behalf of
Travis Perkins (Properties) Ltd

September 2015

ICENI PROJECTS LIMITED
ON BEHALF OF TRAVIS
PERKINS (PROPERTIES)
LTD

Iceni Projects Ltd
Flitcroft House 114-116 Charing Cross Rd, London WC2H 0JR
T 020 3640 8508 F 020 3435 4228 W iceniprojects.com

Transport Statement
PROPOSED TRADE PARK, FORMER BE MODERN
PREMISES, WESTERN APPROACH, SOUTH SHIELDS
NE33 5QZ

CONTENTS

1. INTRODUCTION.....	3
2. THE SITE AND SURROUNDINGS.....	5
3. TRANSPORTATION POLICY.....	8
4. PROPOSED DEVELOPMENT.....	15
5. TRAFFIC GENERATION.....	20
6. CONCLUSIONS.....	24

APPENDICES

- A1. SITE LOCATION PLAN
- A2. BUS INFORMATION
- A3. CYCLE ROUTE MAP
- A4. SITE LAYOUT PLAN
- A5. SWEPT PATH ANALYSES
- A6. TRICS DATA

1. INTRODUCTION

1.1 Icen Projects Ltd has been appointed by Travis Perkins (Properties) Ltd to provide highway advice in regard to the development of a Trade Park at the former Be Modern premises, Western Approach, South Shields. The proposal seeks to part demolish, refurbish and change the use of the site from a factory (Class B2) to a mix of commercial uses comprising a *sui generis* builders' merchant, *sui generis* tile merchant, B1(c)/B2/B8 units (with trade counters and ancillary showrooms) and ancillary A1/A3 units (café/sandwich shop). A Site Location Plan is attached at Appendix A1.

1.2 Specifically, full planning permission is sought for the following development:

“Partial demolition of existing industrial building (Class B2) and associated refurbishment including replacement cladding and change of use to provide a mix of commercial uses: Unit 1 (sui generis builders' merchant for the display, sale, storage of building timber and plumbing supplies, plant and tool hire including outside display and storage); Units 2 to 6 (Class B1(c), B2 and B8 with trade counters and ancillary showrooms and sui generis tile merchants); and Units 7 and 8 (Class A1 café/sandwich shop); with associated car parking and servicing arrangements and ancillary works (existing accesses retained).”

1.3 In the interests of sustainable development the proposal seeks to retain and refurbish the original steel portal framed building. Following demolition of the western and eastern elevations, the building will be re-clad to facilitate a multi-tenanted commercial building which can be best described as a Trade Park. Following the granting of planning permission, therefore, the buildings will host a Travis Perkins branch, up to five B1(c)/B2/B8/*sui generis* tile merchant units, the majority of which are likely to be part of the Travis Perkins Group, and two smaller A1/A3 units likely to be occupied by complementary café/takeaway food operators with Greggs a likely occupier of one of them.

1.4 The methodology used in the preparation of this Transport Statement (TS) principally follows the guidance contained in the National Planning Policy Guidance document 'travel plans, transport assessments and statements in decision-taking' as well as the Department for Transport (DfT) 'Guidance on Transport Assessment' document dated March 2007.

1.5 The report is arranged as follows:

- Section 2 provides a description of the existing site conditions including site use, local highway network, existing levels of public transport provision, cycling and walking.
- Section 3 provides a description of the development proposals, including development type, site access, parking and servicing.
- Section 4 provides a review of the transportation policy relevant to the proposal.

- Section 5 examines the traffic generation characteristics of the consented and proposed developments to determine the relative impacts of the proposal.
- Section 6 provides a summary and draws conclusions.

1.6 The results of this assessment clearly show that the proposed development can be adequately accommodated on the site without detriment to road capacity and safety.

2. THE SITE AND SURROUNDINGS

Site Location

- 2.1 The application site is located at Western Approach, South Shields, NE33 5QZ. The site is in a predominantly commercial/industrial area and is bounded by a neighbouring commercial property to the north, Western Approach to the east, Tudor Road to the south and Wilson Street to the west.
- 2.2 Vehicular access to the site is via Tudor Road with service access via dropped kerb accesses to the rear of the building on Wilson Street.
- 2.3 The site has a GFA of 6,648m² and was most recently occupied by Be Modern Ltd, manufacturers and suppliers of fireplaces and mantelpieces for use as a B2 general industrial use as well as ancillary office space.

Existing Highway Network

- 2.4 Western Approach is a dual carriageway road subject to a 30mph speed limit approximately 14.6m in width with well-lit footways up to 2m wide on both sides of the road. Double yellow lines are in place on the majority of the road prohibiting parking at any time and a bus layby is located adjacent to and opposite the site.
- 2.5 Western Approach links with the Station Road/Crossgate/Maxwell Street roundabout to the north and the A184 and A19 to the south, linking with Newcastle and the A1 to the west, providing direct access to the strategic route network.
- 2.6 Tudor Road is a 7m wide single carriageway road with footways up to 2m wide on both sides of the road. In the vicinity of the site there are no waiting restrictions on the northern side of the road and single yellow lines on the southern side prohibiting parking from Monday to Saturday 8am-6pm. Tudor Road links with Western Approach at its eastern end via a left-in/left-out priority junction and with Commercial Road at its western end via a priority junction with a ghost right turn lane.
- 2.7 Wilson Street is an 8m wide cul-de-sac, which serves as the service access for the site. There are footways up to 2m wide on both sides for most of its length and no waiting restrictions in place.

Public Transport

Bus Services

- 2.8 The nearest bus stops served by regular bus services are located on Western Approach adjacent to the site, served by 5 regular daily services. The services provide up to 17 buses per hour during the

day. A further service is accessible within 325m of the site providing an hourly service. The services provide a link to the local Metro stations and the Shields Ferry. Table 2.1 below details the routes that can be accessed from the nearby stops and a bus map is included at Appendix A2.

Table 2.1 Bus Services

Service	Route	Frequency
8	South Shields – Marsden – South Shields	6 per hour
12	Mile End Road – The Lonnen	2 per hour
12A	Watson Avenue – Mile End Road	4 per day
17	South Shields – Whiteleas – South Shields	6 per hour
E2	South Shields – Whitburn – Sunderland	3 per hour
TB503	Boldon Asda – Cotswold Estate – Simonside – South Shields	1 per hour

Rail

- 2.9 Chichester Metro station is located within 640m (8 minute walk/2 minute cycle) of the site. The station is on the South Shields to St James via The Coast line running at a frequency of 5 trains per hour. There are 8 stations within 20 minutes of this station providing a very good opportunity for staff living along the line to travel by Metro to work.

Shields Ferry

- 2.10 The Shields Ferry is accessible within 900m (11 minute walk/3 minute cycle) of the site and operates a daily passenger service across the river Tyne between North and South Shields. The service operates at a frequency of two ferries per hour and with a 7 minute journey time provides North Shields residents with a good opportunity to work in South Shields, combining the ferry with foot or cycle as part of a multi modal journey

Cycling

- 2.11 While Western Approach and Tudor Road are not designated cycle routes they link with National Cycle Routes 14 (via Commercial Road), 1 (via Station Road) and both of these routes link with route 72, which provides a link to North Shields via the Shields Ferry. These routes link to the town centre, Metro stations and surrounding residential areas to south and east. A cycle map is included at Appendix A3.

Pedestrians

- 2.12 Pedestrian access to the site is good as there are a large number of dwellings within a reasonable walking distance of the site.
- 2.13 Footways approximately 2m wide are provided along all roads surrounding the site. A pedestrian refuge is provided across Western Approach and Tudor Road at the junction of the two roads providing access to the south and east of the site. The roads are all well-lit and the footways and crossings are in a generally good condition.

Summary

- 2.14 It has been shown that the application site is located in a sustainable location with good footway and cycle links, and is close to regular bus and Metro services, which supply good area coverage. In addition to bus and rail service, the Shields Ferry provides another option for people living to the north of the River Tyne to travel to the site via sustainable modes. The pedestrian routes surrounding the site are suitable for all users and while Western Approach and Tudor Road are not cycle routes they link with National Cycle routes accessible via Commercial Road and Western Approach. In conclusion, the proposed development provides opportunities to use modes other than the car and will provide staff with an alternative mode of travel.

3. TRANSPORTATION POLICY

- 3.1 This section summarises the relevant transport policies as they relate to the development site on a National, Regional and Local level.

National Planning Policy Framework (NPPF) – March 2012

- 3.2 The National Planning Policy Framework (NPPF), which was adopted in March 2012, sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. As a result of this policy being adopted, all Planning Policy Guidance and Planning Policy Statements have been superseded, including PPG13 (Transport), which was formerly used as a basis for national transport policy. As such, any detailed policy guidance previously provided within PPG13 will no longer act as the default policy where no policy has been set by the local authority. All detailed transport policies will now be found within Unitary Development Plan and Local Development Framework documents adopted by each local authority.
- 3.3 While no longer policy, there are two key aspects within PPG13 which are still of relevance when determining a site's level of sustainable travel access. Paragraph 74 states with regard to walking that:

“Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under two kilometres. Walking also forms an often forgotten part of all longer journeys by public transport and car.”

- 3.4 Paragraph 77 goes on to state that:

“Cycling also has potential to substitute for short car trips, particularly those under five kilometres, and to form part of a longer journey by public transport”

3.5 It is considered that the walking and cycling distances referred to in PPG13 remain valid and should not be overlooked when determining the walking and cycling accessibility of development sites.

3.6 With regard to transport policy, the NPPF states in Paragraph 32 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 development are severe.”

3.7 Paragraphs 34 to 36 go on to say that:

“Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.

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 movements, 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.

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 The NPPF also supports the development of a mix of uses within all areas in order to encourage travel by non-car modes and to reduce the length of journeys being undertaken for employment, shopping, leisure, education and other activities.
- 3.9 The site is well connected to the pedestrian and cycle networks and within close proximity to public transport services.
- 3.10 The site is also located close to a mix of uses, with residential, retail, leisure and commercial uses located close to the site all within a reasonable walking distance, thus providing the opportunity for linked trips.
- 3.11 Section 5 of this Statement will show that the level of traffic generation is likely to be less than the previous use and that the impact of the proposed change of use will not therefore be ‘significant’.

National Planning Policy Guidance (NPPG) – March 2014

- 3.12 Information contained as part of the National Planning Policy Guidance (NPPG), provides advice for travel plans, transport assessments and statements in decision-taking.

“Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.”

- 3.13 This report follows the advice within the guidance and accords with providing the information which should be included as part of a Transport Assessment.
- 3.14 The proposed development conforms with the NPPF policies being well located to the existing pedestrian network linking with the surrounding area and public transport facilities. The proposed development site is also well located to encourage cycle accessibility being within a short distance of and linking with local cycle routes.
- 3.15 Furthermore, the proposed use will generate a low number of new vehicular movements on the highway network and, as such, any impact on the surrounding highway network will be negligible. This is discussed in more detail in Section 7 of this report.

South Tyneside Core Strategy

- 3.16 The South Tyneside Core Strategy was adopted on 28th June 2007 and sets out the planning strategy for the future development and use of land and buildings in the borough. The following policy is pertinent in transport terms.
- 3.17 The proposed development is accessible by foot, cycle bus, rail as well as linking to the passenger ferry meaning that there are numerous opportunities for sustainable travel to the site. Car and cycle parking will be provided in accordance with the adopted standards and the development accords well with the policy.

Policy A1 Improving Accessibility

“The Council will support public transport, walking and cycling initiatives that maximise the accessibility of new development being focused at:

A regeneration areas along the riverside corridor, including South Shields, Jarrow and Hebburn town centres; and Priority will also be given to improving accessibility, particularly by encouraging and promoting public transport improvements, both within the Borough and between the Borough and:

B the A19 Economic Growth Corridor (including employment areas at Boldon Colliery, Doxford Park, North Tyneside and South East Northumberland); and

C other destinations in the Tyne and Wear City Region, such as Newcastle and Sunderland city centres, Newcastle Central Station and Newcastle International Airport.

The key growth areas within South Tyneside are shown on the Key Diagram.

Transport Assessments will be required for any major development proposal.

Parking standards will apply to new development, and will be set out in a Supplementary Planning Document.”

South Tyneside Development Management Policies

- 3.18 The South Tyneside Development Management Policies were adopted on 1st December 2011 and provide detailed policies which will deliver the objectives of the Core Strategy. The following policy is pertinent in transport terms.

Policy DM1 Management of Development

“In determining all applications under the planning Acts we will ensure that, where relevant:

G the impact of the development is acceptable in relation to highway capacity and safety or includes proposals to mitigate any adverse impacts;

H new development provides site layouts that facilitate convenient and safe routes between facilities, and prioritises movement by pedestrians and cyclists;

I the needs of all users for access around sites and into buildings for public use are considered as an integral part of the development;

J the development is designed to achieve lower carbon emissions, and to be energy efficient and maximise the use of renewable and low carbon energy sources, having greater resilience to the likely affects of climate change, including higher summer temperatures and increased prevalence of flood events. Where relevant, development should incorporate green spaces to mitigate the heating of urban areas and should create and support opportunities for sustainable forms of transport, drainage and waste management;”

- 3.19 Again, the proposed development is accessible by foot, cycle bus, rail as well as linking to the passenger ferry meaning that there are numerous opportunities for sustainable travel to the site. Car and cycle parking will be provided in accordance with the adopted standards and the site has been designed to take account of pedestrian and cycle access to and within the site. As such, the development accords well with the policy.

Summary

- 3.20 In terms of sustainability, it is clear that the site benefits from having good accessibility to existing bus and train services providing access to Aylesbury and surrounding towns and villages, giving staff in particular a realistic alternative to the private car.
- 3.21 The site benefits from good walking and cycling facilities and is located within easy distance of local facilities and services as well as surrounding residential areas and public transport facilities.
- 3.22 As such, the site location is considered to accord to the relevant Local and Central Government Policy Guidelines in terms of being in a suitable location and accessible by modes other than the

private car. The operational characteristics of the proposed development including traffic generation, parking and servicing provision, also accord with the relevant policies as identified within Sections 4 and 5.

4. PROPOSED DEVELOPMENT

4.1 A full description of the proposed development scheme is contained within the planning application submission documents. The following description is pertinent in transport terms. A site layout plan is included at Appendix A4.

4.2 The development proposal consists of

“Partial demolition of existing industrial building (Class B2) and associated refurbishment including replacement cladding and change of use to provide a mix of commercial uses: Unit 1 (sui generis builders’ merchant for the display, sale, storage of building timber and plumbing supplies, plant and tool hire including outside display and storage); Units 2 to 6 (Class B1(c), B2 and B8 with trade counters and ancillary showrooms and sui generis tile merchants); and Units 7 and 8 (Class A1 café/sandwich shop); with associated car parking and servicing arrangements and ancillary works (existing accesses retained).”

4.3 The proposed development will have a total ground floor GFA of 3,484m² comprising:

- a *sui generis* unit to be occupied by Travis Perkins;
- B1(c)/B2/B8 units with trade counters and ancillary showrooms;
- *sui generis* tile merchants; and
- A1/A3 units

4.4 It should also be noted that some of the units will have mezzanine:

- Unit 1 – 426m²
- Unit 2 – 210m²
- Unit 4 – 221m²
- Unit 6 – 226m²
- Unit 7 – 96m²

4.5 These mezzanines can be installed without the need for planning permission (given they only affect the interior of the building and are not therefore defined as ‘development’) and while they may result in a slight uplift in trips this will be negligible. This is discussed in more detail in Section 5 of this report.

4.6 The site will include car, cycle and motorcycle parking as detailed below:

- 18 van parking spaces
- 9 car parking spaces
- 3 disabled car spaces
- 25 staff car parking spaces
- 32 staff cycle parking spaces
- 12 customer cycle parking spaces
- 9 motorcycle parking spaces

Access

4.7 The existing vehicular access on Tudor Road will be retained as the vehicle and cycle access and will also be used as the service access for the two A1/A13 units. Service access for Travis Perkins and the terrace of trade units will be via Wilson Street.

4.8 The main pedestrian access will be via a new access from Western Approach as well as access being provided via Tudor Road and Wilson Street (staff only).

Parking

4.9 The South Tyneside Supplementary Planning Document 6 Parking Standards do not contain standards for a builders' merchants on the basis that it is classed as sui generis. However, as the use is accepted to be similar to B8 use the same parking standards have been applied for the proposed development. The parking standards require the following in relation to the proposed development:

- Disabled parking bays should be provided at a rate of 6% of the total provision, rounded up to the nearest whole space.
- A minimum of 1.0 x 2.0 metres needs to be required per motorcycle. However, it is not desirable to mark individual bays. Motorcycle parking should be provided at a rate of 5% of the car parking spaces
- A1 Shops (< 500m² GFA) – 1 car space per 30m² GFA and 2 cycle parking spaces per 100m² of GFA.
- A3 Restaurants, snack bars, cafés – 1 car space per 10m² GFA and 2 cycle parking spaces per 50m² of GFA
- B1(c) Light industry – 1 car space per 30m² GFA and 2 cycle parking spaces per 50m² of GFA

- B2 General industrial – 1 car space per 45m² GFA and 2 cycle parking spaces per 200m² of GFA
- B8 Storage or distribution – 1 car space per 180m² GFA and 2 cycle parking spaces per 500m² of GFA

4.10 Based on the standards, the following requirements apply to the development:

- A1 Shops (< 500m² GFA) – 13 cars and 8 cycles
- A3 Restaurants, snack bars, cafés – 38 cars and 15 cycles
- B1(c) Storage or distribution – 68 cars and 81 cycles
- B2 Storage or distribution – 45 cars and 20 cycles
- B8 Storage or distribution – 11 cars and 8 cycles
- Travis Perkins (B8 standards) – 6 cars and 4 cycles

4.11 This equates to the following for the different units on the site:

- A1/A3 – maximum 38 cars and minimum 15 cycles
- B1(c)/B2/B8 – maximum 68 cars and minimum 81 cycles
- Travis Perkins – maximum 6 cars and minimum 4 cycles
- Total – maximum 112 cars and 100 cycles

4.12 While these standards apply to the uses being applied for, it should be noted that all but 2 of the units have known occupiers, with four of the B1(c)/B2/B8 units being occupied by companies within the Travis Perkins Group which are B8 trade counter uses and one of the A1/A3 units will be occupied by Greggs (A1 sandwich shop). Given that the site will be largely occupied by Travis Perkins and related B8 occupiers it is likely that the final unit will be occupied by a similar operator, especially as the size of the unit does not lend itself to many B1(c) or B2 uses. If all units apart from the A1/A3 units are considered to be B8 then a maximum of 17 cars and minimum of 12 cycles would be permitted, considerably lower than the worst case of all units being occupied by a B1(c) occupier.

4.13 Further to this, the A1/A3 units will not attract many single purpose car trips, rather they will be visited by people visiting and working at the other units on the site and will attract lunch time trade from people working at other businesses located on Tudor Road. As such, they will not require parking anywhere near the maximum that would be permitted if the full space proposed were to be occupied

by a single restaurant. Units in a location as this will attract predominantly transitory trade and will have little or no seating so will not require parking in the same way that a restaurant would.

- 4.14 Based on this, the proposed provision of 55 spaces is considered appropriate and consistent with other Travis Perkins and their subsidiaries' branches nationally. The nature of Travis Perkins' customer base is such that a high proportion of trade is made up of bulk orders rather than a large number of smaller purchases typical of a DIY store. As such, the number of parking spaces required for customers is low; this is also true of the trade counter uses to be located on the site. This provision is based on extensive experience of Travis Perkins' operation, with the benefit of local operational knowledge.
- 4.15 With regard to disabled parking, the standards require 6% of the parking to be for disabled drivers. It is proposed to provide 3 disabled car parking spaces, which represents 6% of the total parking provision proposed.

Cycle Parking

- 4.16 The parking standards require a minimum of 100 cycle spaces based on the worst case, however, due to the nature of the goods sold (i.e. building, plumbing and heating materials) and the trade customers who will visit the site, the number of customers cycling will be very low.
- 4.17 In order to encourage staff to cycle and provide for ad hoc customers cycling to the site a total of 32 spaces will be provided for staff with 4 located to the rear of each unit and a further 8 will be provided within the customer parking area should any customers cycle to the site. This level is below the minimum requirement of the standards, however, there will be no benefit in providing cycle parking to meet the minimum requirements based on only A3 and B1(c) units being located at the site along with Travis Perkins for the reasons already identified above. Even if 10% of staff cycled to the site, which is a very high mode share for this area, this would not equate to anywhere near 100 spaces as this would assume that 1,000 staff would be employed at the site or 2,000 staff based on a more realistic 5% cycling to work. Even the proposed 32 spaces is generous as even assuming 10% of staff will cycle to work, the provision of 32 spaces equates to an equivalent of 320 staff working at the site, which again is unrealistic. However, in order to provide convenient parking for each unit it and to encourage staff to cycle 4 spaces per unit in the form of 2 Sheffield stands is considered appropriate.

Refuse Collections and Servicing

- 4.18 Access to the site for refuse and service vehicles will continue to be via Wilson Street. In order to ensure that all delivery vehicles can access the service yard areas for all units a swept path analysis has been undertaken which shows that all areas can be accessed by a 16.5m articulated lorry via Wilson Street. As the largest legal vehicles can access each unit it follows that refuse and emergency

vehicles will also be able to access each unit as required. A drawing showing the swept path analysis is included at Appendix A5.

5. TRAFFIC GENERATION

5.1 This section considers the likely traffic generation of the site based on the existing and proposed site uses.

Extant Development

5.2 As mentioned previously, the most recent uses of the site was as a B2 general industrial use. As such, trip rates have been calculated from similar sites available on the TRICS database to establish the amount of traffic such units could generate. Suitable sites were chosen of a comparable size and location type (suburban/edge of town) and located within a commercial/industrial zone. These sites provide vehicular trip rates for a typical weekday for the existing unit. The TRICS output relating to the chosen sites is included in Appendix A6.

5.3 The employment AM Peak (08:00-09:00) and PM Peak (17:00-18:00) as well as the Travis Perkins PM peak (16:00-17:00) periods have been assessed for the existing use when generating the trip rates for the extant use of the site. The peak hour trip rates and gross traffic generation applicable to the site are summarised in Table 5.1 below.

Table 5.1 Extant Traffic Generation

Use		AM Peak (08:00-09:00)			PM Travis Perkins Peak (16:00-17:00)			PM B2 Employment Peak (17:00-18:00)		
		Arrive	Depart	Two-way	Arrive	Depart	Two-way	Arrive	Depart	Two-way
B2	Trip Rate	0.941	0.140	1.081	0.106	0.336	0.442	0.079	0.756	0.835
	Trips	63	9	72	7	22	29	5	50	55

Notes: 1. Vehicle trip rate per 100m² GFA.
2. Existing B2 Unit 6,648m² GFA

5.4 It can be seen from Table 5.1 that the existing use on the site has the potential to generate between 55 and 72 two-way trips in the 'typical' network peak periods.

Proposed Development

5.5 Table 5.2 shows the trip generation for the proposed builders' merchant unit, based on a survey undertaken at the existing Travis Perkins Branch in Aylesbury on Tuesday 30th September 2014. This is considered to be robust as the new branch will offer the same range of goods and service as the existing one. The proposed builders' merchants will employ up to 15 people, including delivery drivers.

Table 5.2 Gross Traffic Generation – Proposed Builders’ Merchant Unit

	AM Peak (08:00-09:00)			PM Travis Perkins Peak (15:45-16:45)			PM B2 Employment Peak (17:00-18:00)		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way	Arrive	Depart	Two-way
Trips	16	14	30	12	10	22	0	4	4

Notes: Trips based on observed trips at the existing Aylesbury branch

5.6 Table 5.3 shows the estimated trips for the other units to be located on the site. Given that there are already known B8 and A1 occupiers for all but two of the units these uses have been used as a basis of the trip generation as it is likely that other operators on the site would be similar. Again, similar sites in terms of size and location have been selected from TRICS.

Table 5.3 Proposed Traffic Generation

Use		AM Peak (08:00-09:00)			PM Travis Perkins Peak (16:00-17:00)			PM B2 Employment Peak (17:00-18:00)		
		Arrive	Depart	Two-way	Arrive	Depart	Two-way	Arrive	Depart	Two-way
B8	Trip Rate	0.400	0.122	0.522	0.278	0.348	0.626	0.087	0.278	0.365
	Trips	8	2	11	6	7	13	2	6	7
A3	Trip Rate	0.400	0.000	0.400	3.172	2.718	5.890	5.372	5.502	10.874
	Trips	2	0	2	12	10	22	20	21	41
TP	Trips	16	14	30	12	10	22	0	4	4
Total	Trips	26	16	43	30	27	57	22	31	53

Notes: 1. Vehicle trip rate per 100m² GFA.
 2. Proposed B8 Units 2,031m² GFA
 3. Proposed A3 Units 375m²

5.7 Based on the data contained in Tables 5.1 to 5.3 it can be seen that estimated trips for the proposed use are lower than the extant use in each of the peaks considered with the exception of the Travis Perkins peak when the proposed use is estimated to generate an additional 16 two-way trips. It should be noted, however, that it has been assumed that the A3 units on the site would generate all single purpose trips and no discount has been made for linkage between Travis Perkins and the other B8 units. If a discount was made to account for this there would be little or no uplift in trips in the Travis Perkins peak either.

5.8 Table 5.4 shows the effect on the proposed trips if we assume that 50% of the A3 trips and 10% of the Travis Perkins and B8 trips are linked during the periods being considered.

Table 5.4 Proposed Traffic Generation

Use	AM Peak (08:00-09:00)			PM Travis Perkins Peak (16:00-17:00)			PM B2 Employment Peak (17:00-18:00)		
	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips
B8	11	1	10	13	1	12	7	1	6
TP	30	3	27	22	2	20	4	0	4
A3	2	1	1	22	11	11	41	20	21
Total	43	5	38	57	14	43	52	21	31

Notes: 1. B8 and TP 10% linked trips
2. A3 50% linked trips

5.9 Based on the robust linked trip assessments it is estimated that there would be 38 new trips in the AM peak, 43 in the Travis Perkins peak and 31 in the PM peak, this represents 34 fewer trips than the extant in the AM, 14 more in the Travis Perkins and 24 fewer in the PM peak periods.

5.10 On this basis, it is clear that the proposed use will generate a negligible increase in trips during the Travis Perkins peak and fewer trips during the typical network peaks.

5.11 As outlined in section 4 some of the units will include mezzanines, which do not require planning permission. The total area of the mezzanines that could be implemented is 1,179m², equivalent to an increase in floor area of 34%. Taking account of each of the potential mezzanines that could be provided in the individual units, the Travis Perkins unit could increase by 426m² (42%), the B1(c)/B2/B8 units could increase by 657m² (32%) and the A1/A3 units could increase by 96m² (26%).

5.12 Tables 5.5 and 5.6 show the uplift in trips that would arise assuming that the mezzanines resulted in a pro rata uplift in trips, which is considered to be very robust as outlined above.

Table 5.5 Proposed Traffic Generation Including Mezzanines – AM Peak

Use	Proposed Trips			Mezzanine Trips			Total Trips		
	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips
B8	11	1	10	4	0	3	15	1	13
TP	30	3	27	13	1	11	43	4	38
A3	2	1	1	1	0	0	3	1	1
Total	43	5	38	17	2	15	60	7	53

Table 5.6 Proposed Traffic Generation Including Mezzanines – PM Peak

Use	Proposed Trips			Mezzanine Trips			Total Trips		
	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips	Total Trips	Linked Trips	New Trips
B8	7	1	6	2	0	2	9	1	8
TP	4	0	4	2	0	2	6	0	6
A3	41	20	21	10	5	5	51	25	26
Total	52	21	31	14	5	9	66	26	40

- 5.13 Based on Tables 5.5 and 5.6 it is estimated that based on the worst case assumption of a pro rata uplift in trips there would be 53 two-way trips in the AM peak and 40 in the PM peak, which represents 19 fewer than the extant trips in the AM and 15 fewer in the PM peak.
- 5.14 With regard to HGV movements, the proposed Travis Perkins branch will have 3 no 18 ton rigid 6-wheel lorries, each with a hiab loading facility and 1 no 5 ton 4-wheel 'beavertail' toolhire vehicle and these will be the only Travis Perkins vehicles delivering to customers from the site. Each of the 18 ton lorries will make up to three delivery circuit drops per day (9 delivery trips in total), whereas the tool hire vehicle will typically make up to 5 per day. This means there will be a typical maximum of 14 movements (28 two-way) per day associated with Travis Perkins deliveries, with fewer than this on Saturdays when the branch will close at 12pm. In addition to this there will be 1-3 external deliveries to the site meaning there will be up to 17 HGV movements (34 two-way) associated with the branch.
- 5.15 There are many different occupiers that could operate from the existing site which would have a varying number of associated HGV movements, however, many of these could generate similar levels of HGV movements throughout the day. For example, over an 8 hour working day (09:00-17:00) an average of two HGVs per hour equates to 32 two-way movements. Many B2 uses operate longer hours than this so could generate higher HGV flows than this depending on the nature of their business. Considering Gatehouse Way as a whole, the number of HGV movements associated with all units will be high and the additional movements are unlikely to be discernible from daily fluctuations on the road.
- 5.16 In summary, the change in use from employment/vehicle hire use to a builders' merchant is likely to result in a negligible uplift in trips overall that will not be discernible from daily fluctuations on the network.

6. CONCLUSIONS

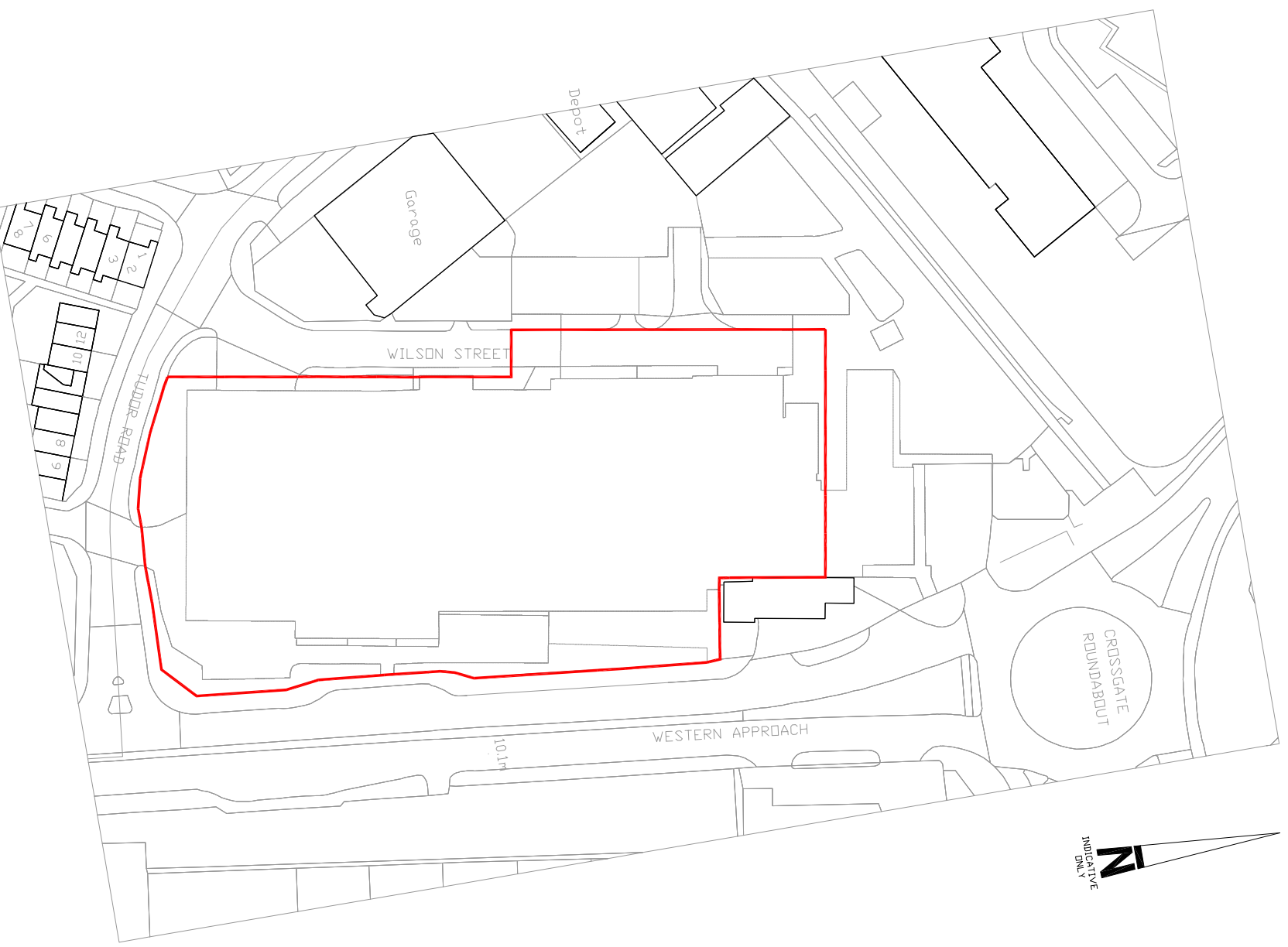
- 6.1 Icen Projects Ltd has been appointed by Travis Perkins (Properties) Ltd to provide highway advice in regard to their Trade Park proposals at the former Be Modern premises, Western Approach, South Shields. The proposal seeks to part demolish, refurbish and change the use of the site from a B2 use to provide a mixed use development comprising a sui generis builders' merchant, B1(c)/B2/B8/sui generis tile merchant units and complementary A1/A3 units.
- 6.2 The existing site has a GFA of 6,648m² and was most recently occupied by Be Modern Ltd, manufacturers and suppliers of fireplaces and mantelpieces for use as a B2 general industrial use as well as ancillary office space.
- 6.3 The proposed development will have a total ground floor GFA of 3,484m² comprising:
- a *sui generis* unit to be occupied by Travis Perkins;
 - B1(c)/B2/B8 units with trade counters and ancillary showrooms;
 - *sui generis* tile merchants; and
 - A1/A3 units
- 6.4 It should also be noted that some of the units will have mezzanine:
- Unit 1 – 426m²
 - Unit 2 – 210m²
 - Unit 4 – 221m²
 - Unit 6 – 226m²
 - Unit 7 – 96m²
- 6.5 Mezzanines will be installed in some of the units, but these do not require planning consent as they relate to internal changes which are not defined as 'development'. Notwithstanding, our evidence has demonstrated that the network can accommodate the trips arising from this additional floorspace, negating the requirement for any unnecessary floorspace control.
- 6.6 The site will include car, cycle and motorcycle parking as detailed below:
- 18 van parking spaces

- 9 car parking spaces
- 3 disabled car spaces
- 25 staff car parking spaces
- 32 staff cycle parking spaces
- 12 customer cycle parking spaces
- 9 motorcycle parking spaces

- 6.7 The existing vehicular access in Tudor Road will be retained as the vehicle and cycle access and will also be used as the service access for the two A1/A13 units. Service access for Travis Perkins and the remaining trade units will be via Wilson Street.
- 6.8 Swept path analyses have been undertaken which show that all vehicles accessing the site can do so safely, entering and exiting the site in forward gear.
- 6.9 Bus, rail and ferry services are within a reasonable walking distance of the site meaning that there are opportunities for staff to access the site by public transport. Due to the majority of customers being trade customers, almost none will arrive by public transport.
- 6.10 Pedestrian access to the site is good as there are a large number of dwellings within a reasonable walking distance of the site. The residential areas surrounding the site are within 2km and the surrounding roads benefit from formal crossing facilities.
- 6.11 While Western Approach and Tudor Road are not designated cycle routes they link with National Cycle Routes 14 (via Commercial Road), 1 (via Station Road) and both of these routes link with route 72, which provides a link to North Shields via the Shields Ferry. These routes link to the town centre, Metro stations and surrounding residential areas to south and east.
- 6.12 The proposed development is likely to generate a lower number of peak hour trips to the extant use of the site and, as such, there will be a lesser impact on the surrounding highway network than other uses or occupiers that could occupy the site. The development peak will generate slightly more trips, however, this would not be discernible from daily fluctuations on the network.
- 6.13 In conclusion the proposed change of use of the site is compatible with and supports national and local transport policies and would not give rise to any adverse transport impact. It is therefore considered that there is no highway related reason why the development proposal should not be granted planning consent.

A1. SITE LOCATION PLAN

COPYRIGHT NOTICE:
 This drawing is the copyright of the Architects and may not be reproduced or used except by written permission.



Site Location Plan - 1:1250
 Drawing No. 6962P-20

P4 10.09.15 SG Updated in line with Quod's comments
 P3 07.09.15 SG Updated in line with Quod's comments
 P2 19.08.15 SG Updates as per clients comments
 P1 18.08.15 SG Updates as per clients comments

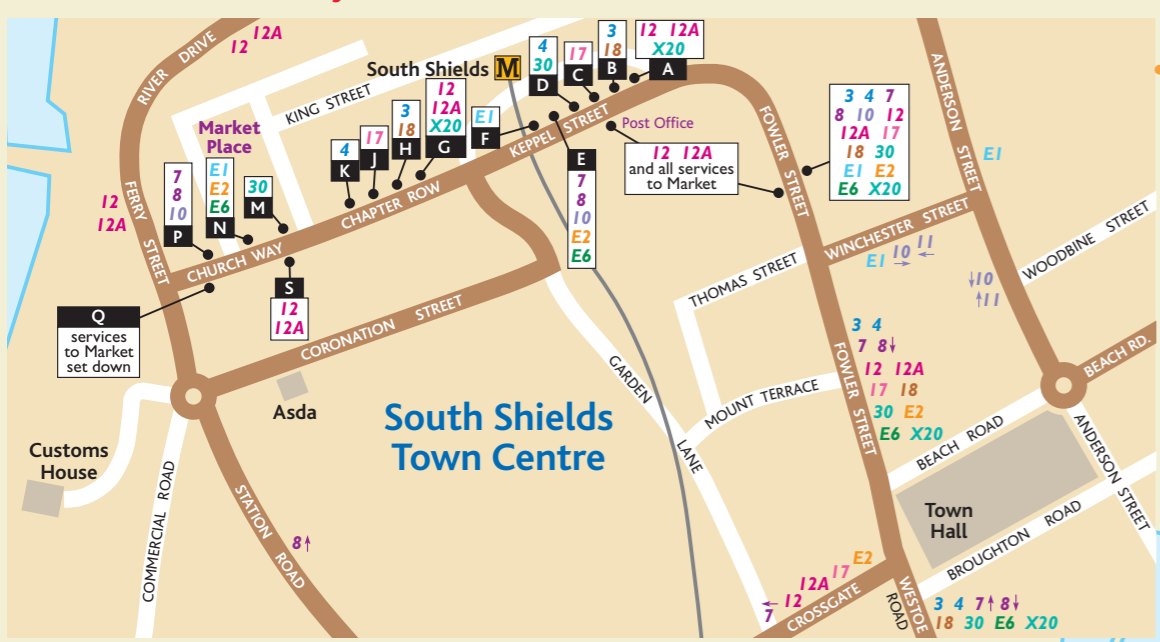


Pera Innovation Park, Nottingham Road
 Melton Mowbray, LE13 0PB
 Telephone: 01664 563 288 Fax: 01664 503 360
 E-Mail: info@nssparchitects.co.uk Web: www.nssparchitects.co.uk
 Project:
 Proposed Trade Park
 Western Approach
 South Shields
 Travis Perkins

Scale	Drawn	Checked	Date
1/1250	djm	job	06-07-2015
Drawing No.	Revision		
6962P-20	P4		

A2. BUS INFORMATION

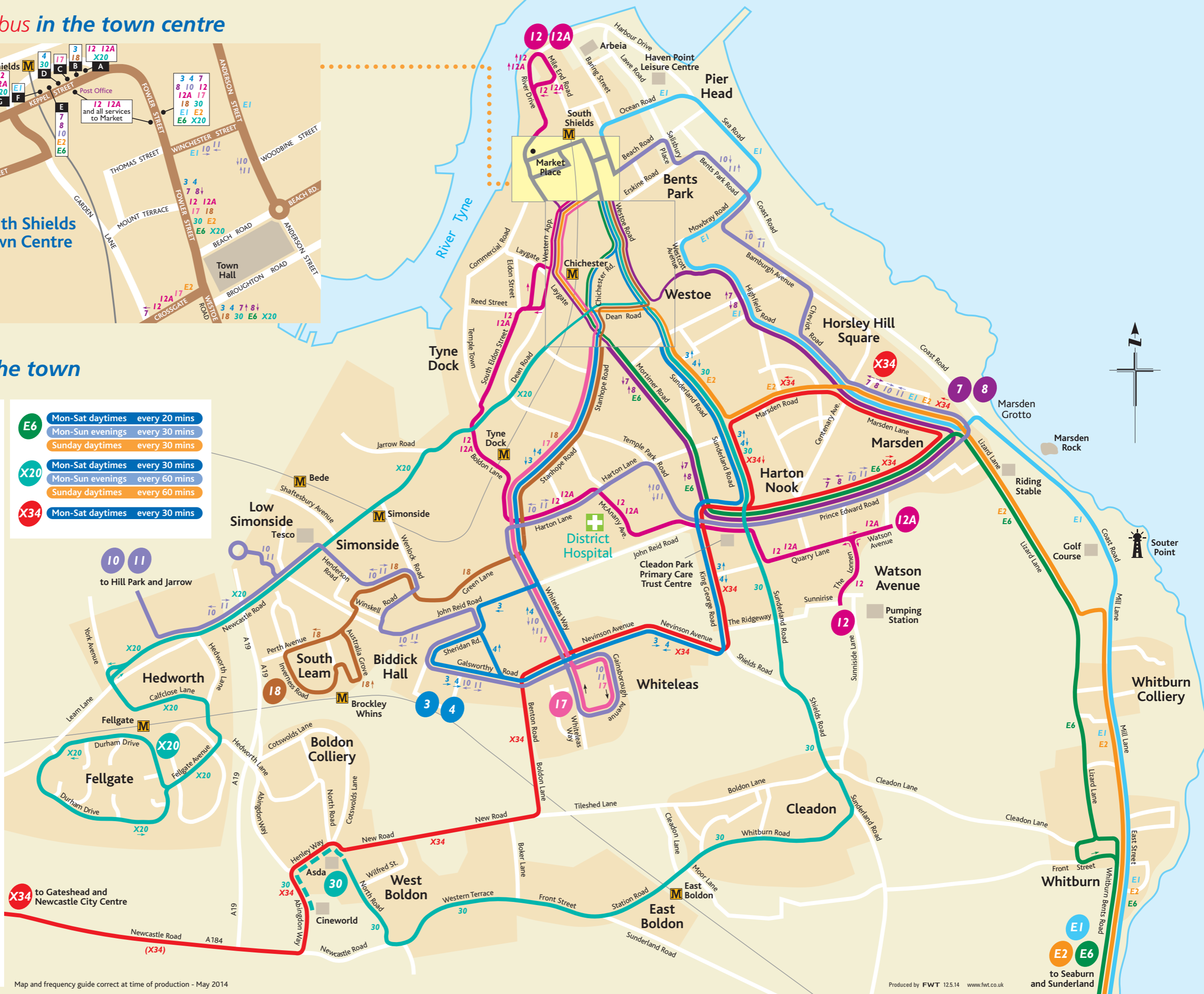
Where to catch your bus in the town centre



How often around the town

- 3** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 4** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 7** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 8** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 10** Mon-Sat daytimes every 30 mins
Mon-Sun evenings every 60 mins
Sunday daytimes every 30 mins
- 11** Mon-Sat daytimes every 30 mins
Mon-Sun evenings every 60 mins
Sunday daytimes every 30 mins
- 12** Mon-Sat daytimes every 30 mins
Mon-Sun evenings every 60 mins
Sunday daytimes every 30 mins
- 12A** Combined frequencies shown
- 17** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 18** Mon-Sat daytimes every 10 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- 30** Mon-Sat daytimes every 30 mins
Mon-Sun evenings every 60 mins
Sunday daytimes every 60 mins
Evening and Sunday buses continue to Cineworld
- E1** Mon-Sat daytimes every 20 mins
Mon-Sun evenings every 30 mins
Sunday daytime every 30 mins
- E2** Mon-Sat daytimes every 20 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins

- E6** Mon-Sat daytimes every 20 mins
Mon-Sun evenings every 30 mins
Sunday daytimes every 30 mins
- X20** Mon-Sat daytimes every 30 mins
Mon-Sun evenings every 60 mins
Sunday daytimes every 60 mins
- X34** Mon-Sat daytimes every 30 mins



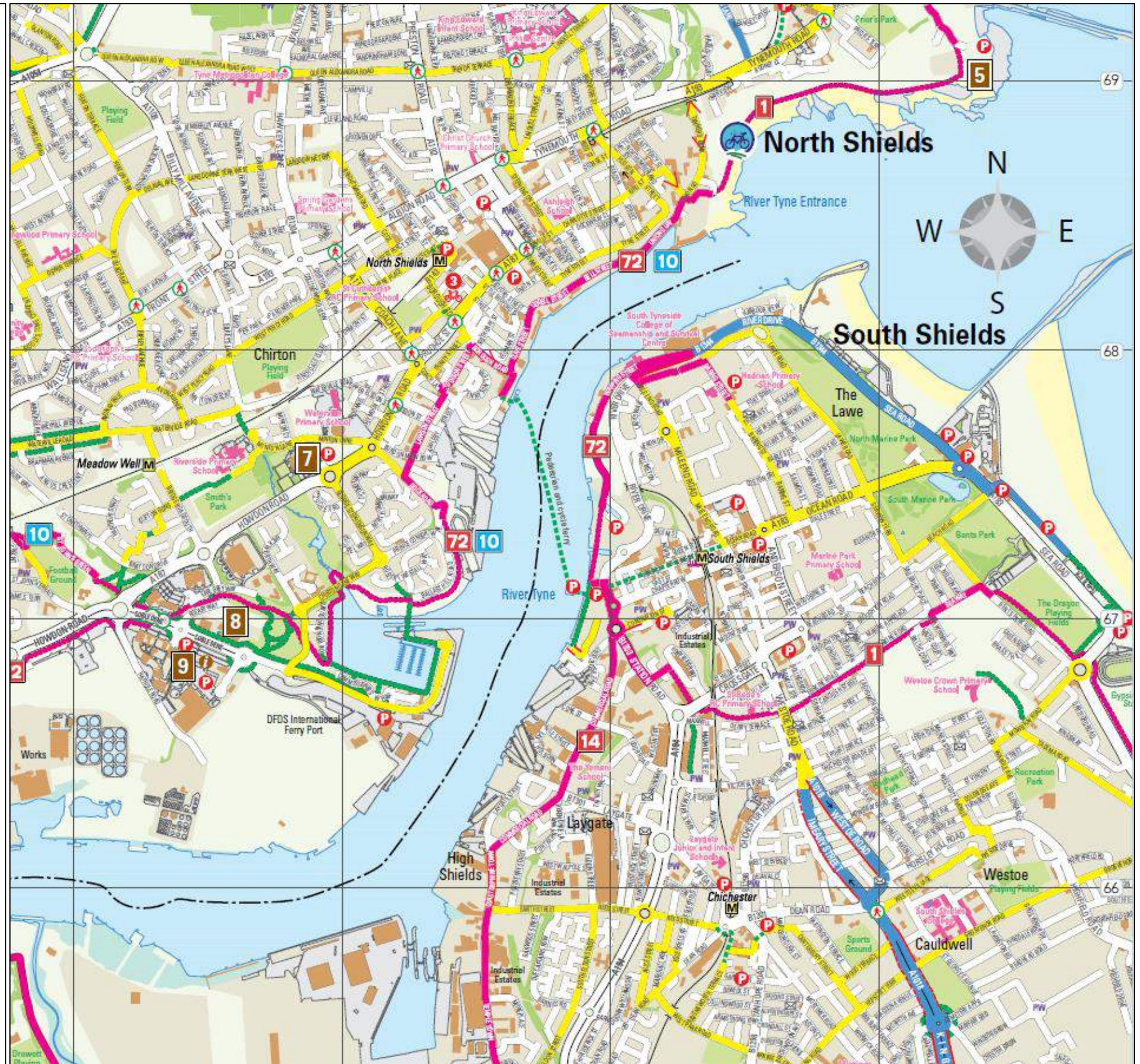
Map and frequency guide correct at time of production - May 2014

E1
E2 **E6**
to Seaburn and Sunderland

A3. CYCLE ROUTE MAP

Key & signs

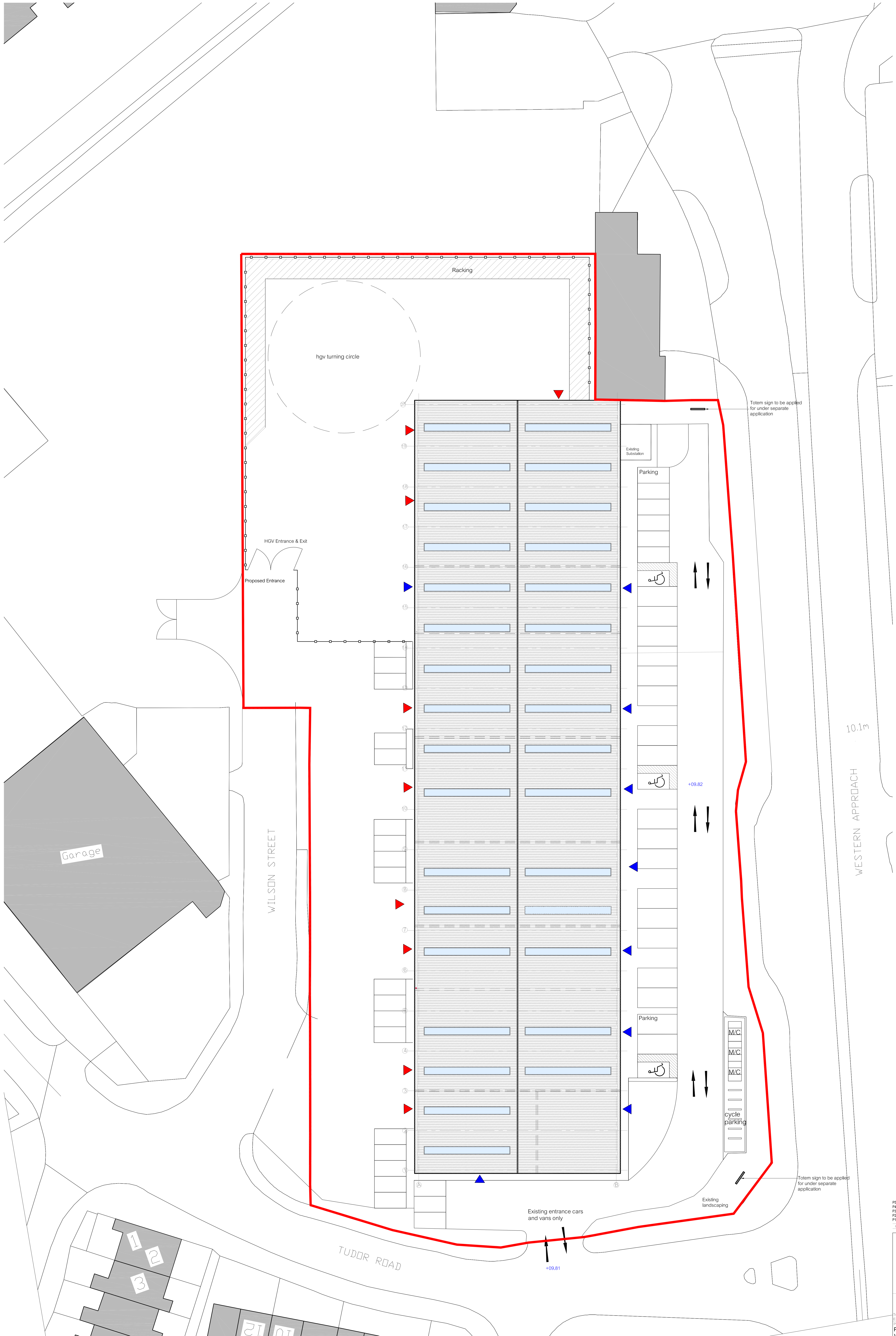
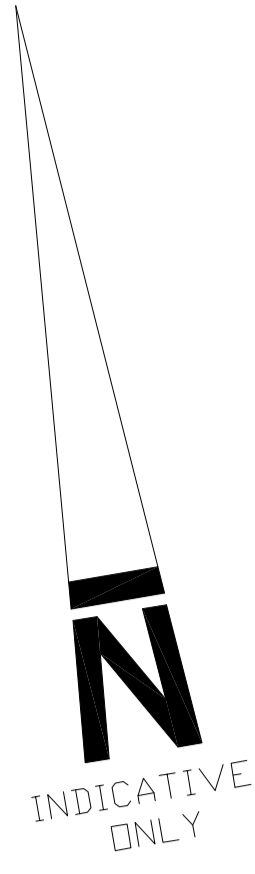
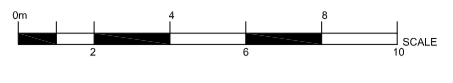
- | | | | |
|--|---|--|---|
| | National Cycle Network off-road cycle path | | No entry |
| | National Cycle Network on-road route | | Motor vehicles prohibited (cycles permitted) |
| | Traffic-free path | | No cycling |
| | Path or footway where you should walk your bike | | Shared route for cyclists & pedestrians |
| | Mountain bike only | | Route to be used by cycles only |
| | Signposted on-road cycle route | | Segregated cycle & pedestrian route |
| | Advisory route | | Buses & cycles only |
| | Cycle lane | | Signposted on-road cycle route |
| | Bus lane | | With flow bus & cycle lanes |
| | Other roads | | With flow cycle lanes |
| | One way street (shown on advisory routes only) | | City Centre 3 |
| | Steep hill (arrow points down hill) | | Signposted on-road cycle route to place shown |
| | Council boundary line | | |
| | National Cycle Network | | |
| | Regional Cycle Network | | |
| | North Sea Cycle Route | | |
| | Cycle shop | | |
| | Cycle parking | | |
| | Toucan crossing | | |
| | Pedestrian crossing | | |
| | Level crossing | | |
| | Metro station | | |
| | Place of worship | | |
| | Library | | |
| | Bus station | | |
| | Post office | | |
| | Buildings | | |
| | School, college or university | | |
| | Tourist attraction | | |
| | Tourist Information Centre | | |



A4. SITE LAYOUT PLAN

KEY

- Total Site Area = 9920+0.031m
- Entrance to Warehouse
- Entrance to Site



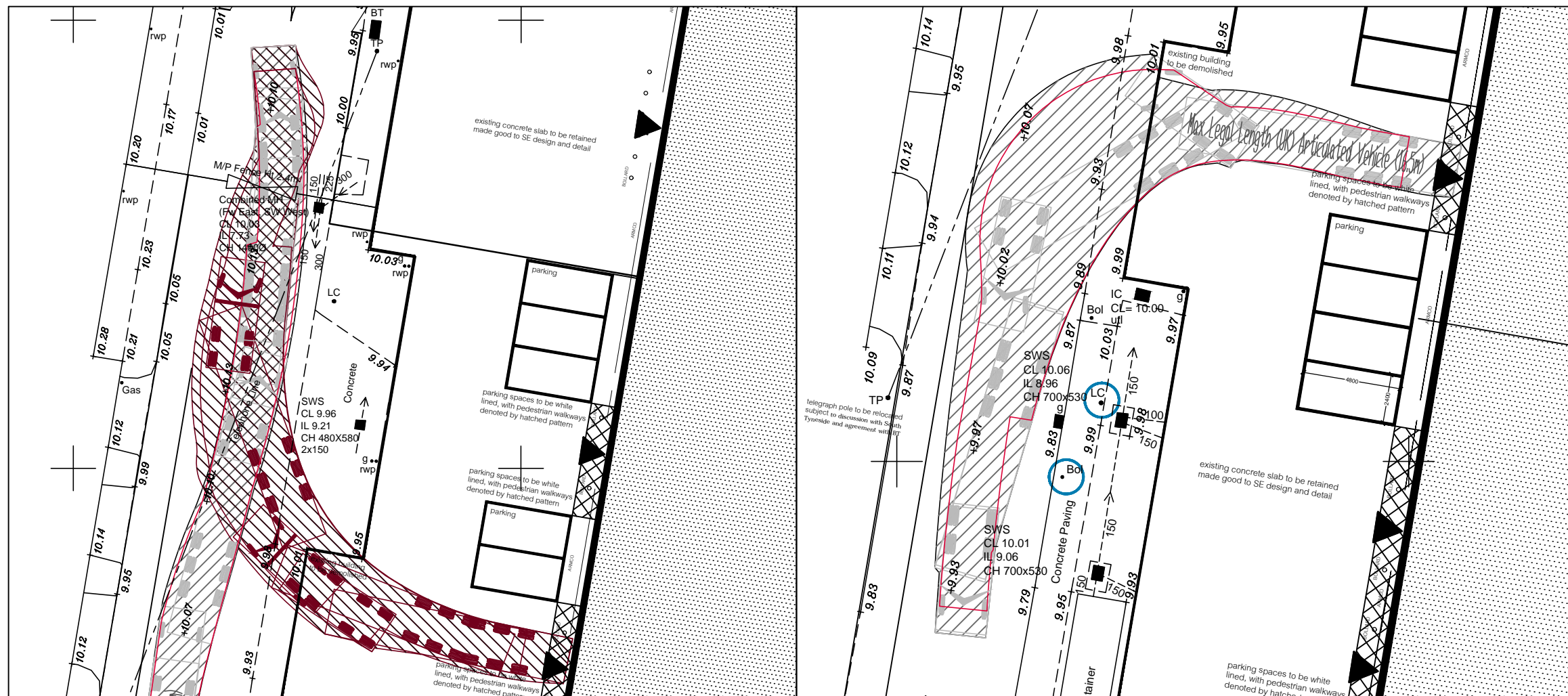
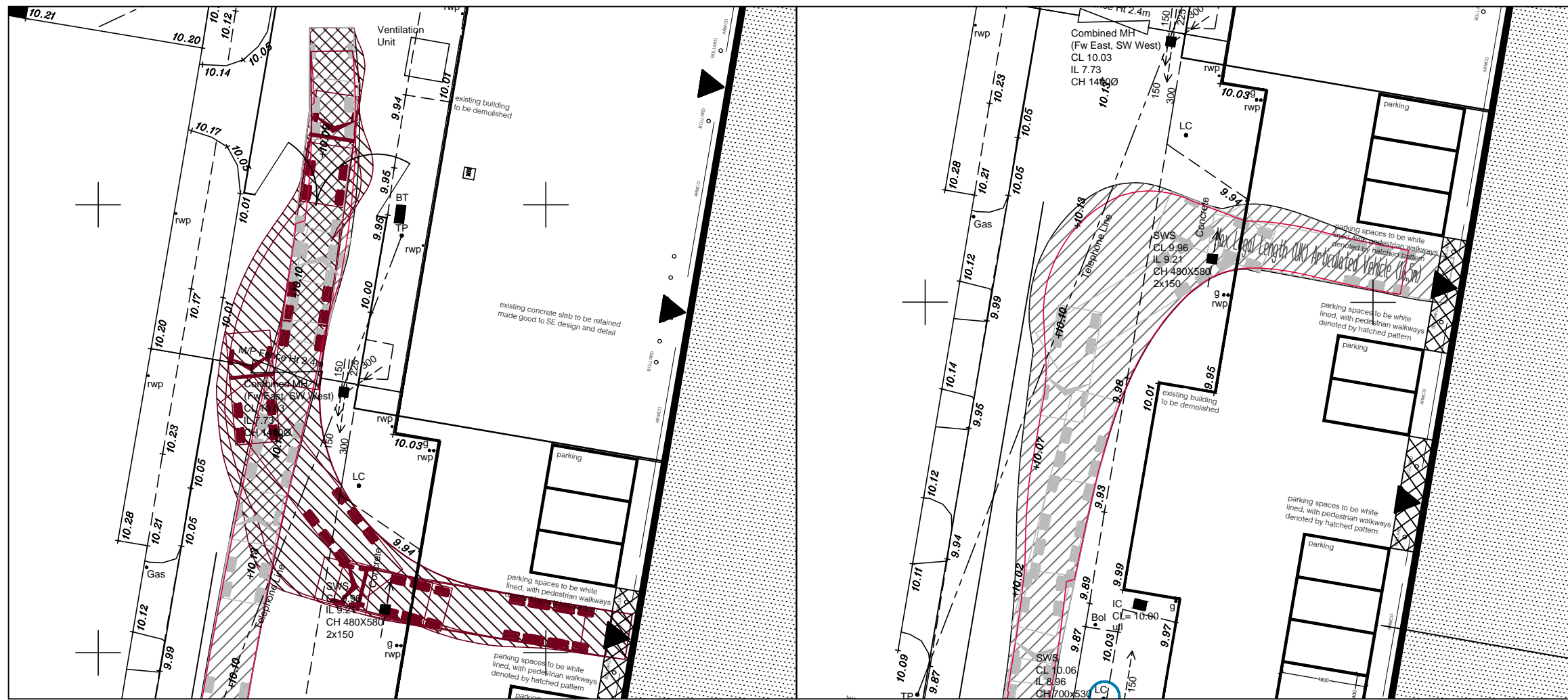
P5 10.09.15 SG Updated in line with Quora's comments
 P4 07.09.15 SG Updated in line with Quora's comments
 P3 18.08.15 SG Updates as per clients comments
 P2 17.08.15 SG Updates as per clients comments
 P1 12.08.15 SG Updates as per clients comments

hosp architects
 Pera Innovation Park, Nottingham Road
 Melton Mowbray, LE13 0PB
 Telephone: 01664 563 288 Fax: 01664 563 360
 Email: info@hosparchitects.co.uk Web: www.hosparchitects.co.uk

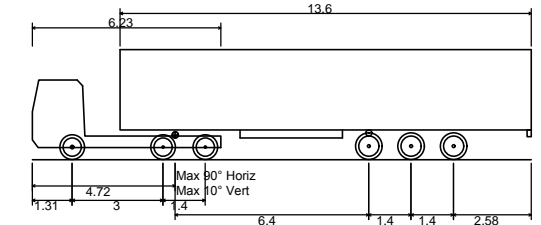
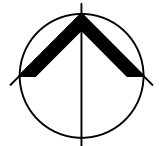
Proposed Trade Park
 Western Approach
 South Shields

File: 6962P-21
 Proposed Site Plan
 Scale: 1/200
 Date: 14-07-2015
 Checked: dtm
 P5

A5. SWEEP PATH ANALYSES



Notes;
 1. This drawing is based upon drawing number 6962-T -011 supplied by HSSP Architects and Icen Projects Ltd. shall not be liable for any inaccuracies or deficiencies.



Max Legal Length (UK) Articulated Vehicle (16.5m)
 Overall Length 16.500m
 Overall Width 2.550m
 Overall Body Height 3.632m
 Min Body Ground Clearance 0.396m
 Max Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 6.870m

A	15.09.15	Revised Layout	RB	SP	SP
Rev	Date	Amendments	Drawn	Chk	App

Icen Projects
 Flitcroft House
 114-116 Charing Cross Road
 London, WC2H 0JR



T 020 3640 8508
 F 020 3435 4228
 mail@icenprojects.com



Client
 Travis Perkins

Project
 Western Approach, South Shields

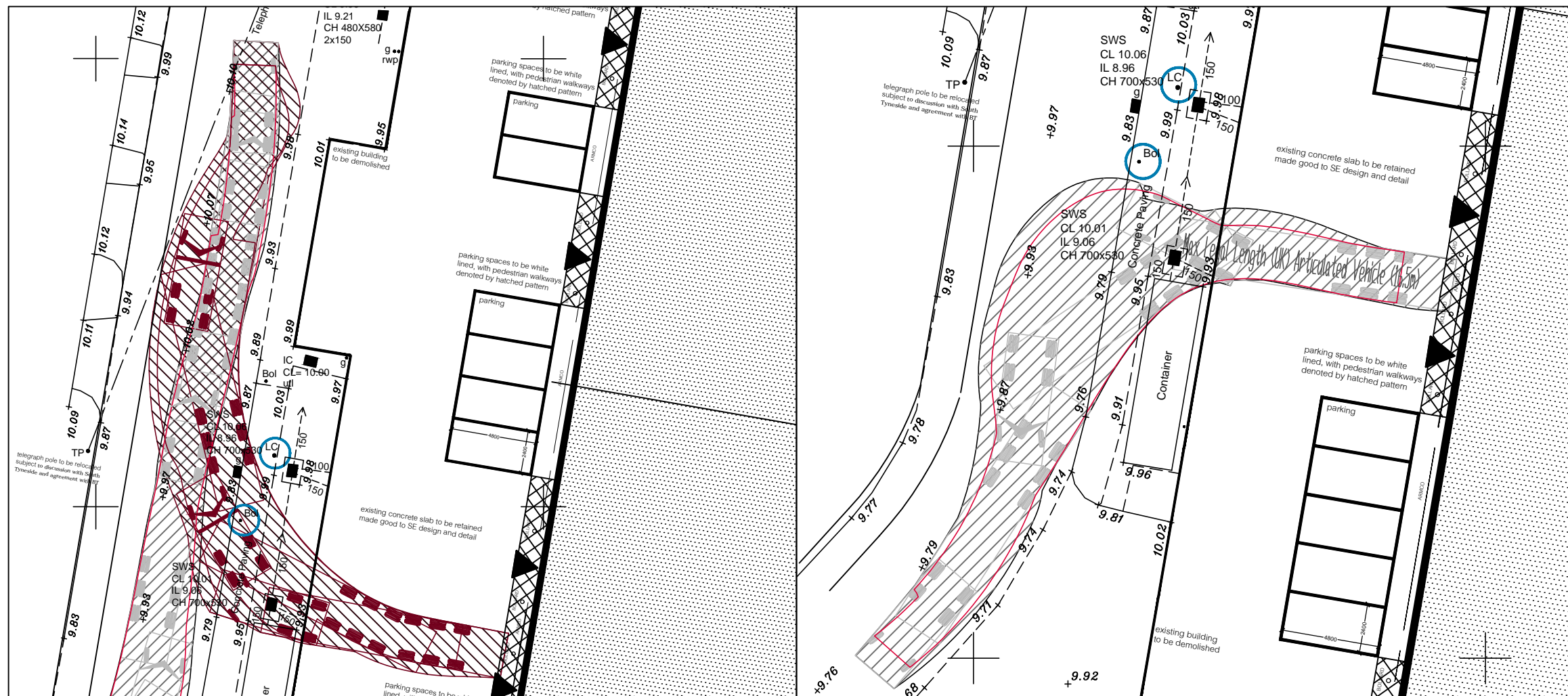
Title
 Swept Path Analysis
 Max Legal Length (UK) Articulated Vehicle (16.5m)

Drawn By	Checked By	SP	Approved By	SP
RB	02.09.2015		02.09.2015	

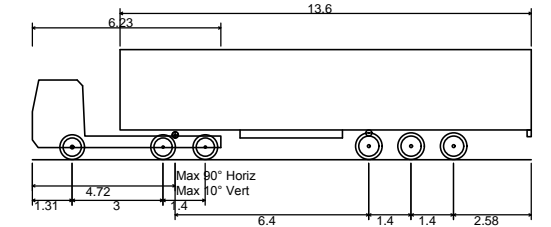
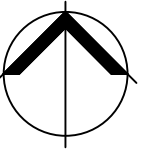
Scale @ A3	Date
NTS	02.09.2015

Project No.	Drawing No.	Rev.
15-T067	01.1	A

Icen Projects accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.



Notes;
 1. This drawing is based upon drawing number 6962-T-011 supplied by HSSP Architects and Icen Projects Ltd. shall not be liable for any inaccuracies or deficiencies.



Max Legal Length (UK) Articulated Vehicle (16.5m)
 Overall Length 16.500m
 Overall Width 2.550m
 Overall Body Height 3.632m
 Min Body Ground Clearance 0.396m
 Max Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 6.870m

Rev	Date	Amendments	Drawn	Chk	App
A	15.09.15	Revised Layout	RB	SP	SP

Icen Projects
 Flitcroft House
 114-116 Charing Cross Road
 London, WC2H 0JR



T 020 3640 8508
 F 020 3435 4228
 mail@icenisprojects.com



Client

Travis Perkins

Project

Western Approach, South Shields

Title

Swept Path Analysis

Max Legal Length (UK) Articulated Vehicle (16.5m)

Drawn By	Checked By	SP	Approved By	SP
RB	02.09.2015		02.09.2015	

Scale @ A3	Date
NTS	02.09.2015

Project No.	Drawing No.	Rev.
15-T067	01.2	A

A6. TRICS DATA

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : G - TAKE-AWAY SHOPS (eg. fish bars etc)
 VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	LB LAMBETH	1 days
02	SOUTH EAST	
	HF HERTFORDSHIRE	1 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
11	SCOTLAND	
	FA FALKIRK	1 days
17	ULSTER (NORTHERN IRELAND)	
	DE DERRY	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: 100 to 500 (units: sqm)
 Range Selected by User: 100 to 500 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 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:

Monday	2 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	2
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	3
Retail Zone	1
Built-Up Zone	2

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

Filtering Stage 3 selection:

Use Class:

A3	1 days
A4	1 days
A5	4 days

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

Population within 1 mile:

15,001 to 20,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
100,001 to 125,000	1 days
250,001 to 500,000	1 days
500,001 or More	3 days

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

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	1 days
1.1 to 1.5	2 days
1.6 to 2.0	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	6 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	DE-06-G-01 FOYLE STREET	CHINESE		DERRY
	LONDONDERRY Town Centre Retail Zone			
	Total Gross floor area:		416 sqm	
	Survey date: WEDNESDAY		11/11/09	Survey Type: MANUAL
2	FA-06-G-01 MAGGIE'S WOOD LOAN	DOMINOS PIZZA		FALKIRK
	FALKIRK Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:		200 sqm	
	Survey date: THURSDAY		26/04/07	Survey Type: MANUAL
3	GM-06-G-01 WELLINGTON RD SOUTH	SUBWAY		GREATER MANCHESTER
	STOCKPORT Edge of Town Centre Built-Up Zone			
	Total Gross floor area:		500 sqm	
	Survey date: MONDAY		23/11/09	Survey Type: MANUAL
4	HF-06-G-01 COURTLANDS DRIVE	CHIP SHOP		HERTFORDSHIRE
	WATFORD Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Gross floor area:		100 sqm	
	Survey date: MONDAY		14/07/08	Survey Type: MANUAL
5	LB-06-G-01 BELVEDERE ROAD	NOODLE BAR		LAMBETH
	WATERLOO WATERLOO Town Centre Built-Up Zone			
	Total Gross floor area:		229 sqm	
	Survey date: FRIDAY		21/11/08	Survey Type: MANUAL
6	NR-06-G-01 OCCUPATION ROAD	CHIP SHOP		NORTHAMPTONSHIRE
	CORBY Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Gross floor area:		100 sqm	
	Survey date: WEDNESDAY		19/11/08	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 06 - HOTEL, FOOD & DRINK/G - TAKE-AWAY SHOPS (eg. fish bars etc)

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	500	0.000	1	500	0.000	1	500	0.000
08:00 - 09:00	1	500	0.400	1	500	0.000	1	500	0.400
09:00 - 10:00	1	500	0.800	1	500	1.000	1	500	1.800
10:00 - 11:00	1	500	1.000	1	500	0.400	1	500	1.400
11:00 - 12:00	5	269	1.338	5	269	1.190	5	269	2.528
12:00 - 13:00	5	269	5.279	5	269	4.907	5	269	10.186
13:00 - 14:00	5	269	4.089	5	269	3.717	5	269	7.806
14:00 - 15:00	5	269	2.602	5	269	2.677	5	269	5.279
15:00 - 16:00	6	258	1.748	6	258	1.683	6	258	3.431
16:00 - 17:00	6	258	3.172	6	258	2.718	6	258	5.890
17:00 - 18:00	6	258	5.372	6	258	5.502	6	258	10.874
18:00 - 19:00	6	258	4.919	6	258	5.631	6	258	10.550
19:00 - 20:00	6	258	4.531	6	258	4.531	6	258	9.062
20:00 - 21:00	6	258	3.689	6	258	3.819	6	258	7.508
21:00 - 22:00	5	209	4.880	5	209	5.072	5	209	9.952
22:00 - 23:00	5	209	2.871	5	209	3.349	5	209	6.220
23:00 - 24:00	4	211	0.118	4	211	0.118	4	211	0.236
Total Rates:			46.808			46.314			93.122

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: 100 - 500 (units: sqm)
 Survey date date range: 01/01/07 - 23/11/09
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-751001-150807-0821

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST	
	CW CORNWALL	1 days
	DC DORSET	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
11	SCOTLAND	
	FI FIFE	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: 4200 to 10200 (units: sqm)
 Range Selected by User: 3500 to 11000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 06/11/12

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:

Monday	1 days
Tuesday	2 days
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	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:

Industrial Zone	5
No Sub Category	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:

B1 6 days

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

Population within 1 mile:

5,001 to 10,000 1 days
10,001 to 15,000 2 days
15,001 to 20,000 2 days
25,001 to 50,000 1 days

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

Population within 5 miles:

50,001 to 75,000 2 days
75,001 to 100,000 1 days
125,001 to 250,000 2 days
250,001 to 500,000 1 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 4 days
1.1 to 1.5 2 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 6 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	CW-02-C-01 WILSON WAY POOL CAMBORNE Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 10200 sqm Survey date: FRIDAY 08/06/07	FOOD DISTRIBUTION	CORNWALL	Survey Type: MANUAL
2	DC-02-C-07 MERCERY ROAD WEYMOUTH Edge of Town No Sub Category Total Gross floor area: 5467 sqm Survey date: MONDAY 07/07/08	NEW LOOK	DORSET	Survey Type: MANUAL
3	FI-02-C-01 HALBEATH PLACE DUNFERMLINE Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 4900 sqm Survey date: FRIDAY 20/04/07	REFRIGERATION	FIFE	Survey Type: MANUAL
4	LC-02-C-02 ESSEX STREET RED SCAR IND ESTATE PRESTON Edge of Town Centre Industrial Zone Total Gross floor area: 8000 sqm Survey date: THURSDAY 10/05/12	RECYCLING CO.	LANCASHIRE	Survey Type: MANUAL
5	WM-02-C-01 FORGE LANE MINWORTH SUTTON COLDFIELD Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 4200 sqm Survey date: TUESDAY 25/11/08	METAL BEARINGS	WEST MIDLANDS	Survey Type: MANUAL
6	WM-02-C-03 DOWNING STREET SMETHWICK Edge of Town Industrial Zone Total Gross floor area: 5070 sqm Survey date: TUESDAY 06/11/12	INDUSTRIAL GLASS	WEST MIDLANDS	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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
 VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	6306	0.433	6	6306	0.058	6	6306	0.491
08:00 - 09:00	6	6306	0.941	6	6306	0.140	6	6306	1.081
09:00 - 10:00	6	6306	0.256	6	6306	0.140	6	6306	0.396
10:00 - 11:00	6	6306	0.132	6	6306	0.098	6	6306	0.230
11:00 - 12:00	6	6306	0.103	6	6306	0.103	6	6306	0.206
12:00 - 13:00	6	6306	0.167	6	6306	0.214	6	6306	0.381
13:00 - 14:00	6	6306	0.402	6	6306	0.241	6	6306	0.643
14:00 - 15:00	6	6306	0.174	6	6306	0.370	6	6306	0.544
15:00 - 16:00	6	6306	0.095	6	6306	0.145	6	6306	0.240
16:00 - 17:00	6	6306	0.106	6	6306	0.336	6	6306	0.442
17:00 - 18:00	6	6306	0.079	6	6306	0.756	6	6306	0.835
18:00 - 19:00	5	6587	0.061	5	6587	0.373	5	6587	0.434
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.949			2.974			5.923

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: 4200 - 10200 (units: sqm)
 Survey date date range: 01/01/07 - 06/11/12
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-751001-150807-0805

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
11	SCOTLAND	
	ML MIDLOTHIAN	1 days
17	ULSTER (NORTHERN IRELAND)	
	AR ARMAGH	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: 750 to 1900 (units: sqm)
 Range Selected by User: 500 to 3000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 05/07/11

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	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:

Industrial Zone	2
Commercial Zone	1
Residential 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:

B8 3 days

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

Population within 1 mile:

5,001 to 10,000 1 days

10,001 to 15,000 2 days

25,001 to 50,000 1 days

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

Population within 5 miles:

75,001 to 100,000 1 days

125,001 to 250,000 3 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 2 days

1.6 to 2.0 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 4 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	AR-02-F-01 MAHON ROAD	ELECTRICAL DIST.	ARMAGH
	PORTADOWN Edge of Town Industrial Zone Total Gross floor area: 1900 sqm Survey date: WEDNESDAY 11/11/09		Survey Type: MANUAL
2	DS-02-F-01 FORRESTERS BUSINESS P..	ARMADILLO S. STORAGE	DERBYSHIRE
	SINFIN LANE DERBY Edge of Town Centre Commercial Zone Total Gross floor area: 1900 sqm Survey date: TUESDAY 05/07/11		Survey Type: MANUAL
3	LC-02-F-02 CHORLEY ROAD	WAREHOUSING	LANCASHIRE
	WALTON-LE-DALE PRESTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 1200 sqm Survey date: FRIDAY 22/06/07		Survey Type: MANUAL
4	ML-02-F-01 UNIT 53	WINDOWS	MIDLOTHIAN
	MAYFIELD IND. ESTATE DALKEITH Edge of Town Industrial Zone Total Gross floor area: 750 sqm Survey date: WEDNESDAY 04/05/11		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 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
 VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	1438	0.278	4	1438	0.087	4	1438	0.365
08:00 - 09:00	4	1438	0.400	4	1438	0.122	4	1438	0.522
09:00 - 10:00	4	1438	0.209	4	1438	0.330	4	1438	0.539
10:00 - 11:00	4	1438	0.296	4	1438	0.348	4	1438	0.644
11:00 - 12:00	4	1438	0.226	4	1438	0.174	4	1438	0.400
12:00 - 13:00	4	1438	0.296	4	1438	0.278	4	1438	0.574
13:00 - 14:00	4	1438	0.365	4	1438	0.330	4	1438	0.695
14:00 - 15:00	4	1438	0.174	4	1438	0.122	4	1438	0.296
15:00 - 16:00	4	1438	0.296	4	1438	0.278	4	1438	0.574
16:00 - 17:00	4	1438	0.278	4	1438	0.348	4	1438	0.626
17:00 - 18:00	4	1438	0.087	4	1438	0.278	4	1438	0.365
18:00 - 19:00	4	1438	0.000	4	1438	0.052	4	1438	0.052
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.905			2.747			5.652

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: 750 - 1900 (units: sqm)
 Survey date date range: 01/01/07 - 05/07/11
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.