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Prepared on behalf of

Barnsley Metropolitan Borough Council

Billingley View
Bolton Upon Dearne

Residential Development

Transport Statement

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IHE

Acknowledgements:

The TRICS database (v7.6.1) has been used in this report to derive trip rates and then calculate traffic generations.

Accident data has been obtained www.crashmap.co.uk

Google maps and Ordnance Survey map data (OS OpenData) has been utilised within this report.

Disclaimer

The methodology adopted and the sources of information used by Sanderson Associates (Consulting Engineers) Ltd in providing its services are outlined within this Report.

Any information provided by third parties and referred to herein has not been checked or verified by Sanderson Associates (Consulting Engineers) Ltd, unless otherwise expressly stated within this report.

This report was checked and approved on the 2nd July 2019 and the Report is therefore valid on this date, circumstances, regulations and professional standards do change which could subsequently affect the validity of this Report.

Copyright

Report Ref:	11076/CH/001/01		July 2019
Author:	Carly Hoyle		
Checked & Approved:	David Colley	**Date:**	2nd July 2019

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1 Introduction

1.1 Sanderson Associates (Consulting Engineers) Limited has been appointed by Barnsley Metropolitan Borough Council, to prepare this Transport Statement in support of a full planning application for a proposed residential development on land off Billingley View, Bolton Upon Dearne. A site location plan is provided in **Appendix A** and the wider context of the site is shown on **Figure 1** (**Appendix A**).

1.2 The site has no designation in the Barnsley Metropolitan Borough Council Local Plan (adopted January 2019).

1.3 The proposed development includes a total of 16 semi-detached dwellings with direct vehicular access to Billingley View.

1.4 In accordance with the Planning Practice Guidance 'Transport evidence bases in plan making and decision taking' this Transport Statement addresses key transport issues including:

- The local highway network and its road traffic accident record.
- The access arrangements to the proposed development.
- The proposed development and its operational characteristics.
- The impact of the development on the local highway network in terms of highway safety and capacity at the site access.
- Accessibility of the site in relation to sustainable transport and local facilities and means to encourage the use of sustainable transport.

1.5 For the benefit of this assessment, Sanderson Associates visited the site on Thursday 27th June 2019 in order to observe and record the prevailing highway conditions.

2 Planning Policy Context

2.1 National Planning Policy

2.1.1 In February 2019, a new revision to the National Planning Policy Framework (NPPF) was published. NPPF sets out the Government's planning policies for England and how these are expected to be applied.

2.1.2 NPPF paragraph 108 states that;

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, give the type of development and its location;

b) Safe and suitable access to the site can be achieved for all people; and

c) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

2.1.3 Paragraph 109 goes on to say;

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

2.2 Local Planning Policy

2.2.1 The Adopted Local Plan and Policies Map sets out how Barnsley Metropolitan Borough Council will manage physical development of the borough on behalf of residents and businesses. This includes providing sufficient land in the right places to attract more businesses into the borough and to allow existing businesses to grow. The Barnsley Local Plan was adopted in January 2019.

2.2.2 There is a housing allocation reference HS51 situated to the south west of the site and located to the south of Carr Head Lane. The site is known as 'Site to the west of Broadwater Estate' with an indicative number of dwellings noted as 279. The notes to the allocation indicate that appropriate access to the housing site should be provided from Billingley View through the south east corner of employment site ref ES10.

2.2.3 Employment allocation ES10 abuts the site's western boundary and comprises of 72.9 hectares. The notes to the allocation indicate that the development would be expected to '*provide appropriate access to housing site reference HS51 from Billingley View through the south east corner of the site*'.

2.2.4 The site allows access to allocation HS51 and indeed some units are accessed from the potential access route.

2.2.5 The Council's objectives and policies are set out in Section 12 – Transport of the Local Plan and policy T3 – New Development and Sustainable Travel is relevant to the proposals.

2.2.6 Parking Standards are contained in the Supplementary Planning Document: Parking adopted March 2012.

3 Existing Conditions

3.1 The Site and Surrounding Area

3.1.1 The site is situated on the western fringe of Bolton upon Dearne approximately 10.6km south east of Barnsley and 10.1km north of Rotherham. Goldthorpe is located to the north east of the site and Wath upon Dearne is to the south. It is bound by open fields to the west (Local Plan allocation ES10), Dearne Community Children's Centre to the north, Billingley View to the east and Lacewood Primary school to the south. A site location plan is provided in **Appendix A** and the wider context of the site is shown on **Figure 1** (**Appendix A**).

3.1.2 The following extract from Google Maps details the approximate extent of the site as detailed by the red line and shows the local context of the site:

Figure 3.1.2 – Site Context

3.1.3 Local facilities are available around St Andrews Square some 400m to the east of the site. Bolton upon Dearne railway station is approximately 1.14km to the east of the site.

3.1.4 To the south of the site there is a stub road (Carr Head Lane) that serves Lacewood Primary School and continues to the west as an unmade track which is provided with a gate. The site appears to be have been used for grazing and keeping livestock. There is no footway on the Billingley View frontage. There is a bus stop with a shelter approximately 70m north of the site for northbound services and one for southbound services opposite the site.

3.1.5 There are two field access gates serving the site, one situated on the north east corner of the site accessed from Billingley View and one on the south east corner accessed from the Carr Head Lane stub road.

3.2 Local Highway Network

3.2.1 Billingley View joins Carr Head Lane at a 90 degree bend to the south of the site and joins to Carr Field Lane some 220m to the north. Billingley View is a single carriageway residential road with an approximate width of 7.4m. It is a bus route and is subject to a 30mph speed limit and is street lit. The existing road, along the site frontage, as a grassed verge with street lights and there is a 2.8m wide footway on its eastern side. Direct vehicle access to the proposed units is proposed from Billingley View.

3.2.2 There are waiting restrictions in the form of school zig-zag lines close to Lacewood Primary School on both Billingley View and Carr Head Lane. There are further school zig-zag lines to the north of the site associated with the Dearne Community Children's Centre / Heather Garth Primary Academy.

3.2.3 Carr Head Lane and Carr Field Lane both continue is an easterly direction to join Thurnscoe Road. Thurnscoe Road leads to Goldthorpe in the north where it joins

Barnsley Road at a signalised junction and in the south leads to Manvers / Wath Upon Dearne and joins Manvers Way (A633 / A6023).

3.3 Personal Injury Accident Data

3.3.1 The Crashmap database has been reviewed for the most recent 5 year period available (2014 to 2018). This online tool identifies recorded injury incidents and shows that no accidents have occurred on Billingley View. The nearest incident is on Carr Head Lane between Commonwealth View and Canberra Rise. The slight incident occurred on the 8 November 2017 and involved a single vehicle and 1 casualty. A copy of the accident report is provided at **Appendix B**.

3.3.2 An extract from Crashmap is shown in Figure 3.3.2 below and the study area is outlined in red.

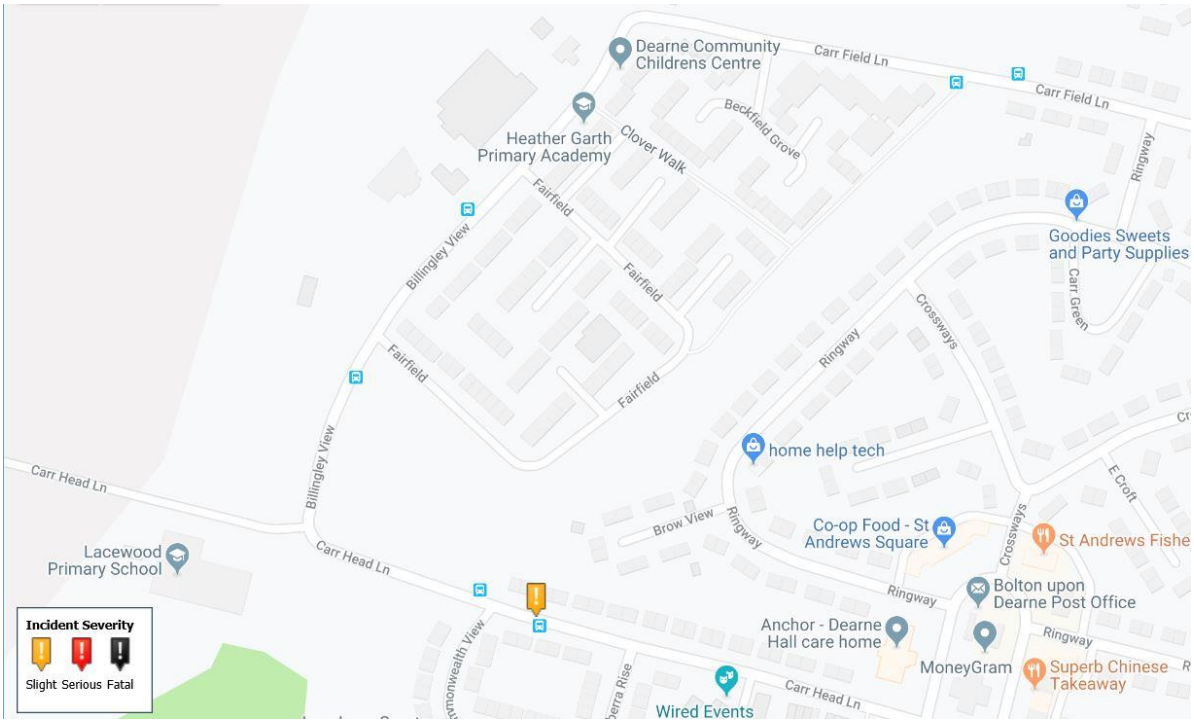


Figure 3.3.2 – Extract from www.crashmap.co.uk

3.3.3 Based on the data provided it is considered that no material accident issues are present on the local highway network and that the proposed development is unlikely to exacerbate the prevailing conditions.

4 Proposed Development

4.1 The proposed development comprises a total of 16 2 and 3 bedroom semi-detached houses with drives direct from Billingley View. A copy of the proposed site layout is included at **Appendix C**.

4.2 The site allows access to allocation HS51 and a realignment of Billingley View / Carr Head Lane to accommodate the access to the residential allocation. Some of the proposed units are accessed from the potential allocation access route. These proposals also amend the vehicular access to Lacewood Primary Academy. Amendments to the school zig-zag lines will be required to suit the proposed allocation access.

4.3 Parking

4.3.1 Local parking standards for residential use C3 Dwelling houses have been taken from the Supplementary Planning Document: Parking adopted March 2012. These are summarised below:-

- Borough wide (excluding Barnsley Urban). 1 space for dwellings with 1 or 2 bedrooms and 2 spaces for dwellings with 3 or more bedrooms.

The council will also encourage the provision of electric charging infrastructure.

4.4 Servicing

4.4.1 The proposed refuse collection arrangements for the development will be from Billingley View.

5 Accessibility by Sustainable Travel Modes

5.1 Introduction

5.1.1 With regards to sustainability, paragraph 11 of the NPPF states that:

Plans and decisions should apply a presumption in favour of sustainable development.

5.1.2 This section of the report seeks to demonstrate the accessibility of the site by sustainable travel modes; this includes both *'Active Transport'* (walking and cycling) and *'Public Transport'* (bus and rail travel).

5.2 Accessibility on Foot

5.2.1 Guidance indicates that walking is the most common form of travel in Britain and has the greatest potential to replace short car trips, particularly those under 2km.

5.2.2 Further guidance on walking accessibility is provided in the Department for Transport's document 'Building Sustainable Transport into New Developments' (2008) which gives the following advice:

"Walkable neighbourhoods are typically characterised as having a range of facilities within 10 minutes walking distance (around 800m). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating."

5.2.3 CIHT's Planning for Walking (2015) report acknowledges that; *"Academics have studied walkability without coming up with any generally accepted measure of what improves it, but factors considered important include the closeness and directness of routes to local services, the quality of footways and street crossings, perceived personal security and the good appearance of routes."*

5.2.4 To this end, the existing pedestrian infrastructure surrounding the site includes well defined and continuous street-lit footways with dropped kerbs to aid pedestrian crossing movements. A network of streets are situated to the east of the site providing a good level of pedestrian connectivity to the adjacent residential areas and to local facilities including bus stops along Billingley View.

5.2.5 The figure below identifies 800m and 2,000m walking radii from the site. It is noted that walking routes will not follow the simple radius of this plan and the plan is provided as an indication of where destinations lie and the general extent to which the local area can be accessed on foot.

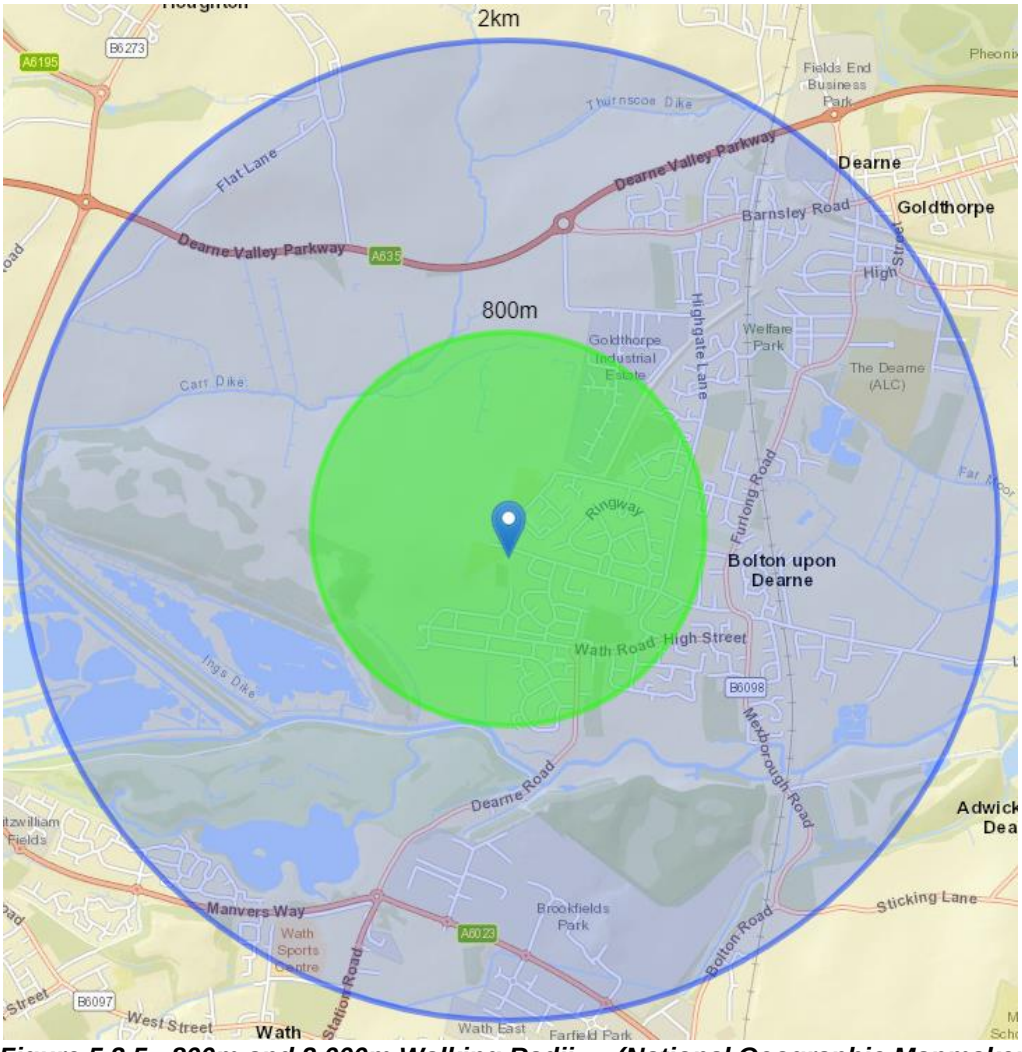


Figure 5.2.5 - 800m and 2,000m Walking Radii (National Geographic Mapmaker)

5.2.6 A summary of services and amenities that fall within the preferred maximum walking distance of 2km are detailed as follows:

Education

- Dearne Community Children's Centre (0.06km)
- Lacewood Primary School (0.07km)
- Heather Garth Primary Academy (0.13km)
- Carrfield Primary Academy (0.5km)
- Dearne ALC Secondary School (2.0km)

Retail

- Post Office & Newsagent (0.5km)
- Co-op Food store (0.55km)
- Premier convenience store (0.55km)
- Various food and drink establishments

Health

- Dearne Valley Group Practice (1.7km)
- Mydentist (0.55km)
- Weldrick's pharmacy (0.5km)

Transport

- Bus stops on Billingley View/Carr Head Lane (<0.2km)
- Bus stops on Furlong Road (1.0km)
- Bolton-upon-Dearne Train Station (1.3km)

Sport & Leisure

- Dearneside Leisure Centre (2.0km)
- Ings Lane Sports and Social Club (0.33km)

Other

- Barry's Gents' Barbers (0.55km)
- Harveys Hair & Beauty (0.55km)
- Goldthorpe Industrial Estate employment area (1.8km)

5.2.7 It is demonstrated that a great array of facilities are available within reasonable walking distance to accommodate most typical journey purposes.

5.3 Accessibility by Cycle

5.3.1 Guidance indicates that cycling has the potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport.

5.3.2 The figure overleaf indicates destinations that lie within a 5km radius of the application site. Again it is noted that cycling will not follow the simple radius shown on this plan and it is provided to give an indication of where destinations lie and the general extent to which the site is accessible by cycle.

5.3.3 As can be seen, all of Bolton-upon-Dearne, Manvers, Goldthorpe and Wath-upon-Dearne are located within 5km of the site.

5.3.4 As such it is considered that cycling presents a realistic opportunity for sustainable travel for future residents.

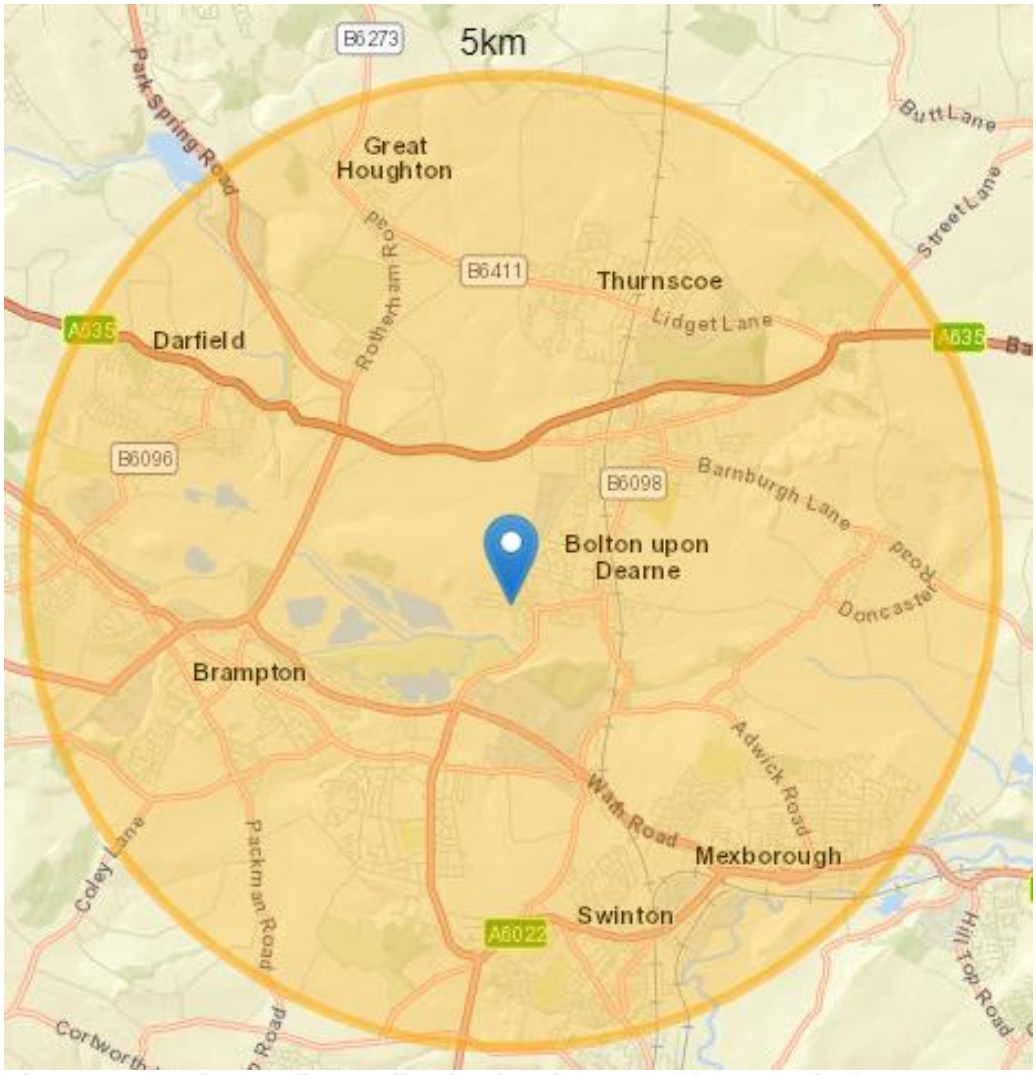


Figure 5.3.4 – 5km Cycling Radius (National Geographic Mapmaker)

5.4 Accessibility by Bus

5.4.1 Existing bus stops are located on Billingley View/Carr Head Lane within approximately 130-180m walking distance. Additional stops are located within approximately 1km walking distance of the site on Furlong Road where further services are available. The location of these stops are indicated overleaf:

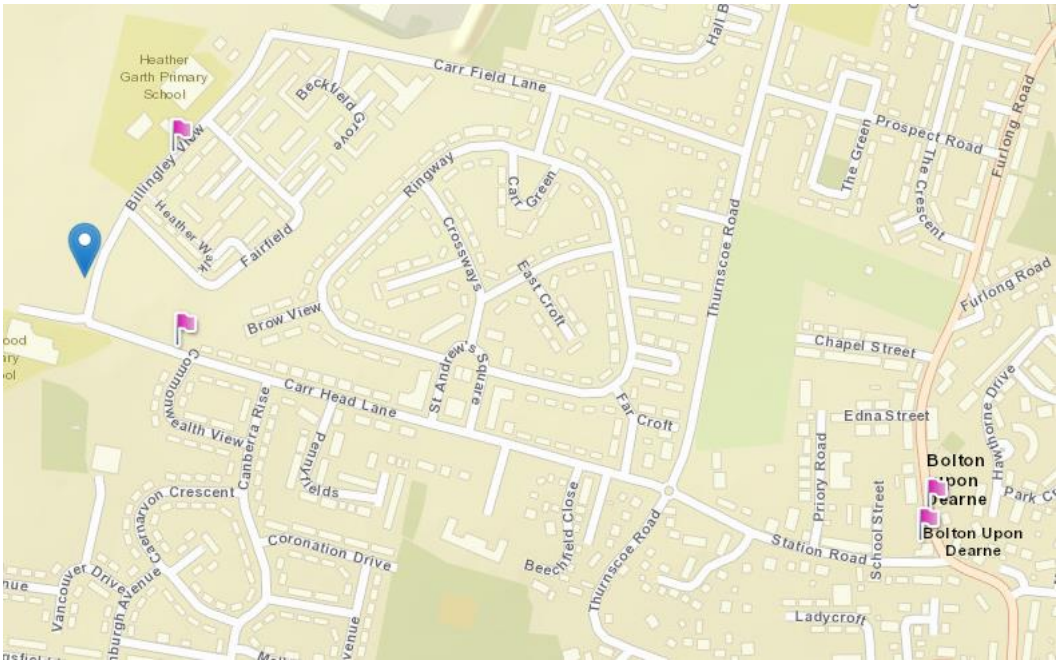


Figure 5.4.1 – Location of nearest bus stops (National Geographic Mapmaker)

5.4.2 The northbound stop on Billingley View and both stops on Furlong Road provide shelters and all stops provide timetable information. A summary of the bus services that operate at these stops is provided as follows:

Summary of Services		Approximate Peak Frequency		
No	**Overall Route**	**Mon – Sat Daytime**	**Mon – Sat Evening**	**Sunday**
208	Grimethorpe - Rotherham	2 services each way	1 service each way	3 services each way
218 / 218a	Barnsley - Rotherham	30 mins	No service	No service
226	Barnsley - Thurnscoe	30 mins	60 mins	60 mins

Table 5.4.2 – Summary of Bus Services

5.4.3 The following extract from Travel South Yorkshire's Network Map of Barnsley shows the buses and routes in the area.

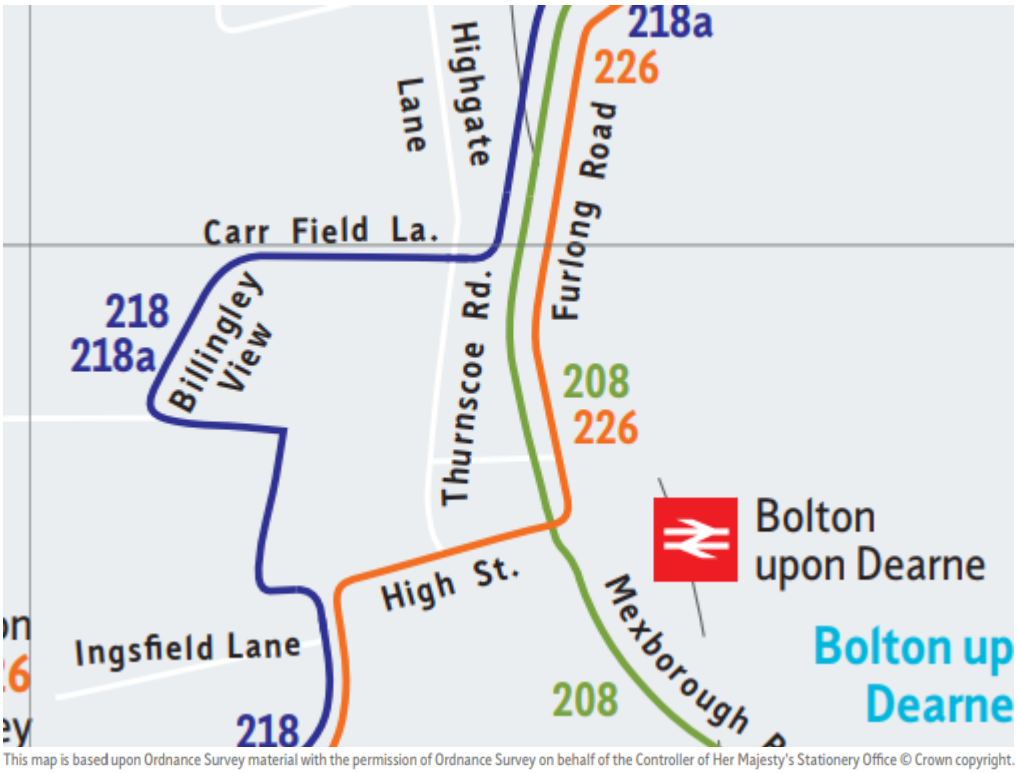


Figure 5.4.3 – Extract of Barnsley Network Map (Travel South Yorkshire)

5.4.4 It is demonstrated that there are regular services within easy walking distance of the site that connect to a range of destinations including Barnsley and Rotherham where a wide range of opportunities for onward travel exist.

5.4.5 It is considered that the proximity of bus stops to the site, combined with the services available makes travel by bus an appealing alternative to travel by car.

5.5 Accessibility by Rail

5.5.1 The closest railway station to the site is the Bolton-upon-Dearne Train Station which is located approximately 1.3km walking distance to the east of the site. The station provides 10 CCTV monitored sheltered cycle parking spaces.

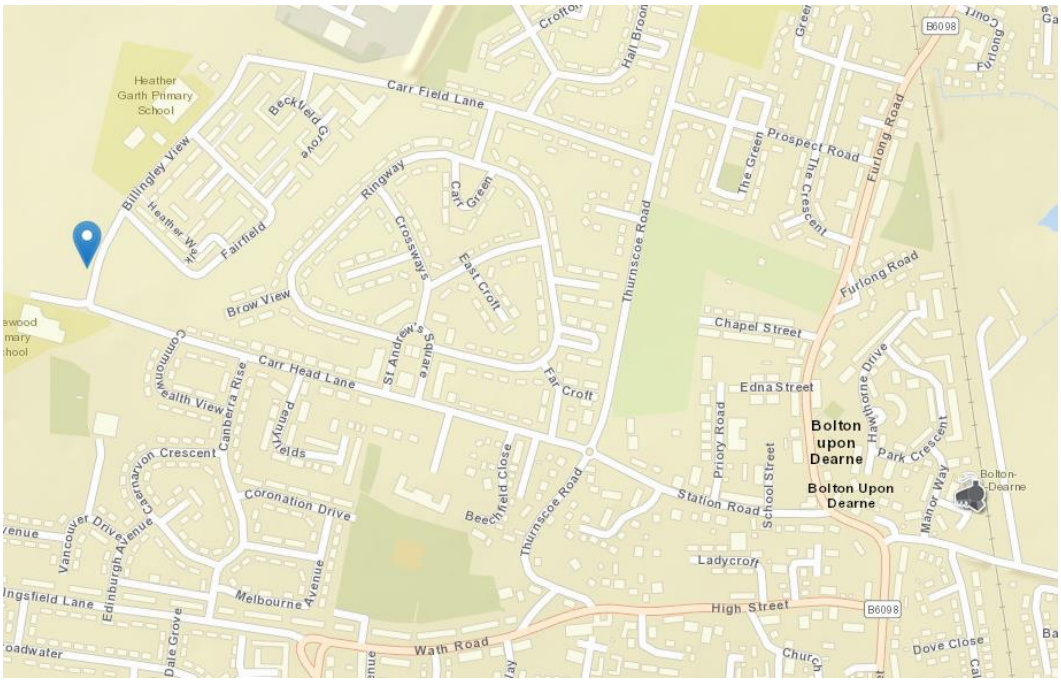


Figure 5.5.1 – Location of train station (National Geographic Mapmaker)

5.5.2 A summary of the available service and its frequency is shown in the following table:

Route	Frequency (mins)		
	Mon - Sat Daytime	Mon - Sat Evening	Sunday
Sheffield - Leeds	60 mins	60 mins	60 mins

Table 5.5.2 - Summary of available rail services

5.5.3 The frequent service provides links to Sheffield, Leeds, Wakefield, Rotherham, and Meadowhall as well as other local destinations on route.

5.6 Summary

5.6.1 The site is located within walking and cycling distance of a range of amenities and is surrounded by a quality pedestrian and cycle infrastructure which will encourage the uptake of active travel. Furthermore, public transport services provide links to surrounding towns and cities.

6 Trip Generations

6.1 Multimodal Trip Generations

6.1.1 To predict the multimodal trips for the development, the TRICS v7.6.1 database has been used to derive average multimodal trip rates using the following search parameters:

Land use:	03 - Residential
Category:	B – Affordable / Local Authority Houses
Selected regions and areas:	Greater London and Ireland Excluded
Parameter:	Number of Dwellings
Actual range:	24 – 280 units
Date range:	01/01/02 – 19/09/2013
Selected survey days:	10 sites - Monday - Friday
Selected locations:	Suburban Area, Edge of Town Centre and Edge of Town

6.1.2 The following table provides details of the weekday AM and PM peak hour multimodal total trip rates per unit along with the corresponding modal percentage split and generated trips for the proposed 16 dwellings, whilst a copy of the TRICS data is included at **Appendix D**.

Time Period	Mode of Travel	Trip Rate	Modal Split %	Generations
Weekday AM Peak (08:00-09:00)	Pedestrian	0.325	35.7%	5
	Cyclists	0.009	1.0%	0
	Public Transport Users	0.018	2.0%	0
	Vehicle Occupants	0.558	61.3%	9
	Total People Trips	0.910	100.0%	14
Weekday PM Peak (17:00-18:00)	Pedestrian	0.268	31.3%	4
	Cyclists	0.020	2.3%	0
	Public Transport Users	0.011	1.3%	0
	Vehicle Occupants	0.557	65.1%	9
	Total People Trips	0.856	100.0%	13

Table 6.1.2 - Summary of multimodal trip rates, generations and modal split

6.1.3 The multimodal data identifies that the development could expect to generate 38.7% of trips by walking, cycling and public transport modes in the weekday AM peak and 34.9% on a weekday PM peak period.

6.1.4 Peak hour demand for walking, cycling and public transport is predicted to be at a level which is unlikely to have a detrimental impact on the existing infrastructure.

6.2 Proposed Vehicle Trip Generation

6.2.1 The TRICS database has also been used to predict the vehicular trips for the development using the same parameters as those detailed in paragraph 6.1. Average trip rates have been utilised in this assessment and the full TRICS output is contained in **Appendix D**.

6.2.2 The following table provides details of the weekday AM and PM peak hour vehicular trip rates per unit along with the corresponding generated trips for the proposed 16 units.

16 dwellings	Trip Rates			Traffic Generations		
	Arr	Dep	2-way	Arr	Dep	2-way
08:00 to 09:00	0.112	0.224	0.336	2	4	6
17:00 to 16:00	0.233	0.154	0.387	4	2	6

Table 6.2.2 –Average trip rates and generations for 16 dwellings

6.2.3 As can be seen from the above table the development could be expected to generate in the order of 6 vehicle movements two-way in the AM peak hour and 6 vehicle movements two-way in the PM peak hour. This equates to approximately 1 vehicle movement every 10 minutes during network peak periods.

6.2.4 It is considered that this level of traffic generation is unlikely to result in a material adverse impact on the local highway network in terms of either capacity or safety.

7 Summary and Conclusions

7.1 Sanderson Associates (Consulting Engineers) Limited has been appointed by Barnsley Metropolitan Borough Council, to prepare this Transport Statement in support of a full planning application for a proposed residential development on land off Billingley View, Bolton Upon Dearne.

7.2 The proposed development comprises a total of 16 2 and 3 bedroom semi-detached houses with drives direct from Billingley View.

7.3 A review of available accident data has identified that no material accident issues are present on the local highway network.

7.4 The site is accessible by both 'active transport' and public passenger transport provisions. As such residents and visitors will have a realistic choice of sustainable travel options.

7.5 Peak hour demand for walking, cycling and public transport is predicted to be at a level which is unlikely to have a detrimental impact on the existing infrastructure.

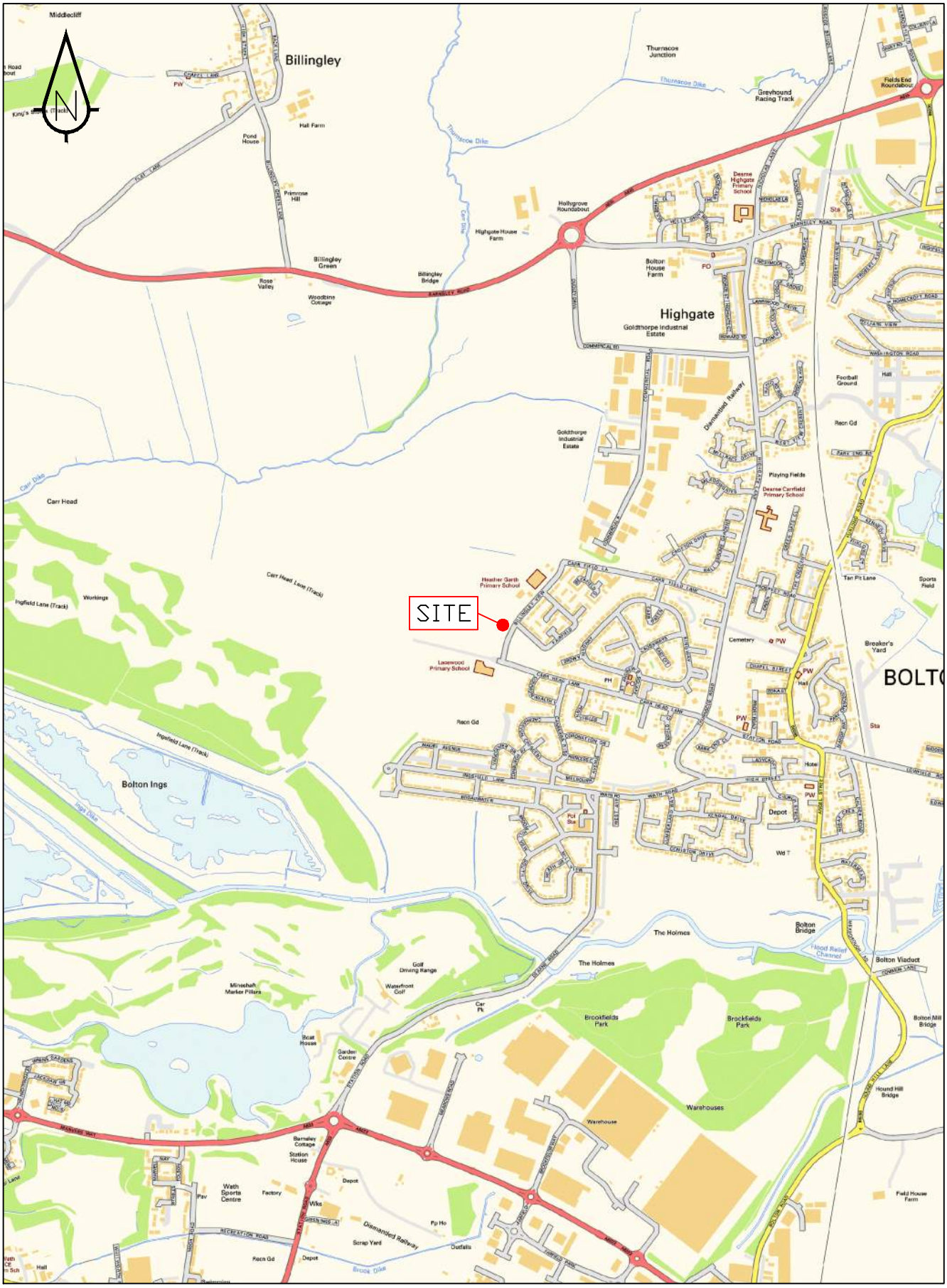
7.6 The predicted level of vehicle traffic generation is unlikely to result in a material adverse impact on the local highway network in terms of either capacity or safety.

7.7 In accordance with the National Planning Policy Framework paragraph 109, this Transport Statement has demonstrated that the cumulative impacts of the development are not severe and therefore should be considered to be acceptable in terms of transport.

APPENDIX A

Figure 1 – Site Location

Block Plan



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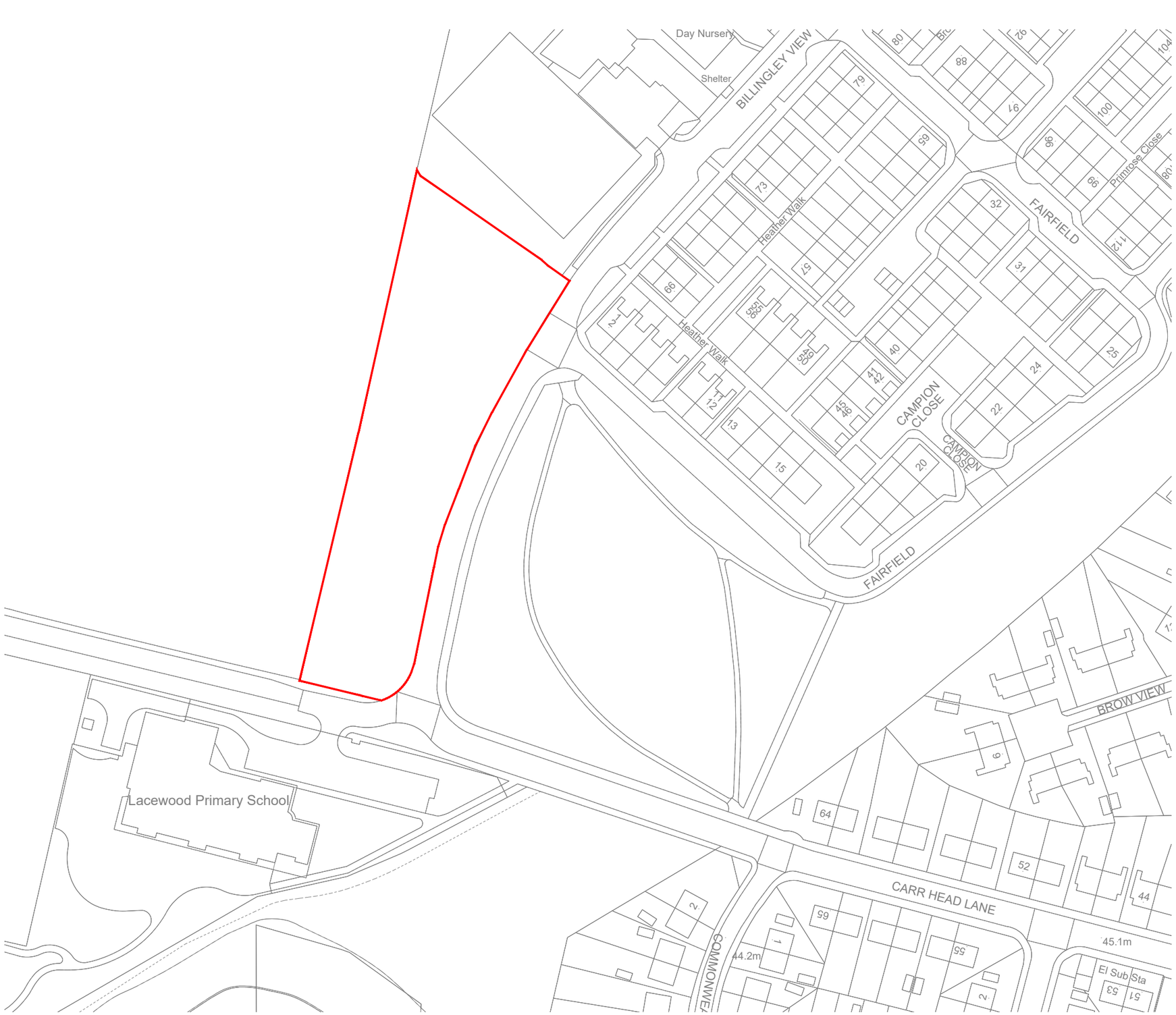
Site Location Plan

Billingley View
Bolton-upon-Dearne

Drawn	Scale
CH	NTS
Checked	Date
DJC	June 2019
Approved	Drawing Number / Size
DJC	Figure 1 / A4

Billingley View, Bolton on Dearne



NOTES:

SCALE BAR

PURPOSE OF ISSUE

FILE STATUS CODE

 A3

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CLIENT
Berneslai Homes

PROJECT
Billingley View
Bolton on Dearne
Housing Development

TITLE
Proposed Site Plan

SCALES	DATE	DRAWN	CHECKED
1:1250	25/03/19	IKC	

FILE / DRAWING NAME

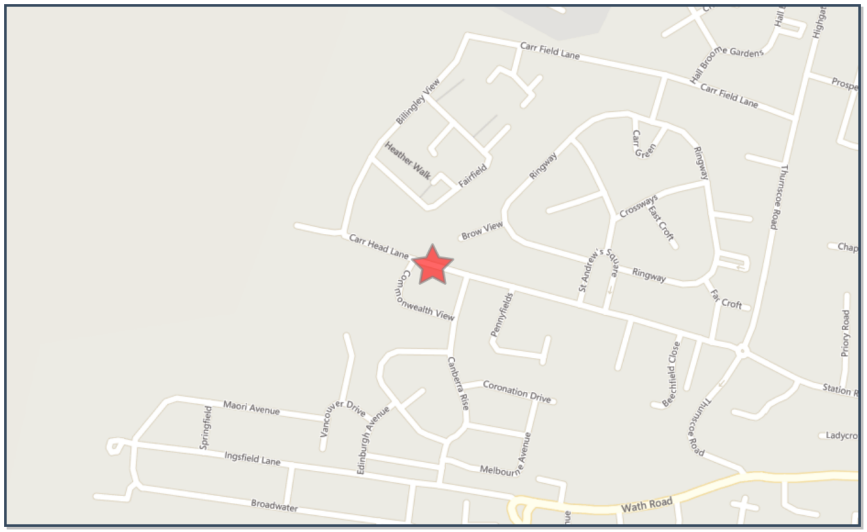
PROJECT NR	ZONE	LEVEL	TYPE	ROLE	UNIQUE NR	REV CODE
19-1-1080	-	-	PL	A	01	-

APPENDIX B

Crashmap Accident Report

crashmap.co.uk

Crash Date:	Wednesday, November 08, 2017	**Time of Crash:**	1:55:00 PM	**Crash Reference:**	**2017140243293**
Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Barnsley			**Number of Vehicles:**	1
Local Authority:	Barnsley Metropolitan Borough			**OS Grid Reference:**	444773 402865
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
To subscribe to unlimited reports using CrashMap Pro visit *www.crashmap.co.uk/Home/Premium_Services*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Bus or coach (17+ passenger seats)	3	Male	36 - 45	Vehicle is moving off	Did not impact	Journey as part of work	None	None

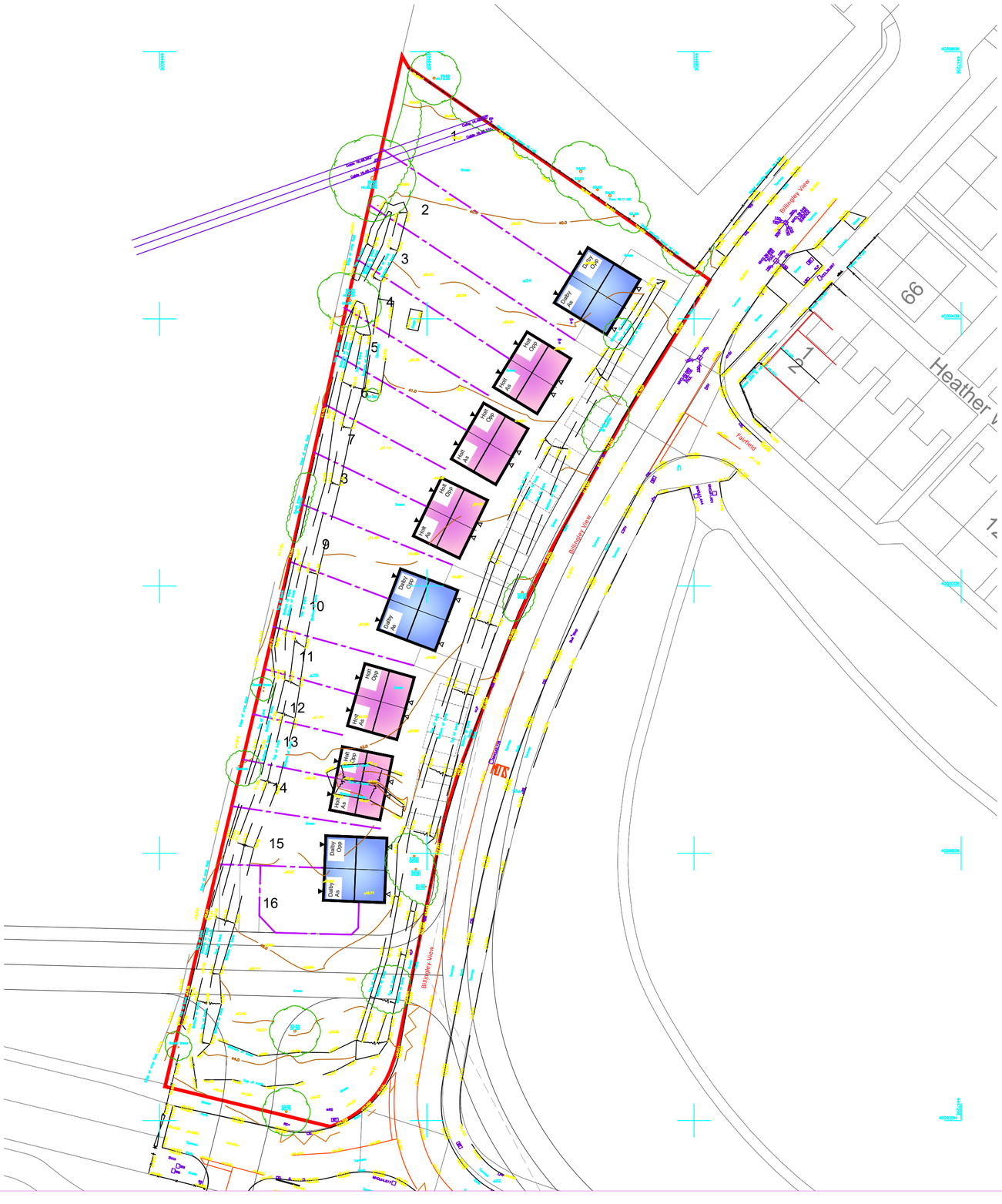
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion passenger	Female	Over 75	Unknown or other	Unknown or other

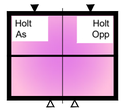
APPENDIX C

Proposed Site Layout

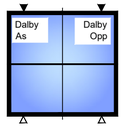
Billingley View, Bolton on Dearne



House Type Legend



Ilke - Holt
2 Bedroom Semi
Detached Dwelling
10No (62%)



Ilke - Dalby
3 Bedroom Semi
Detached Dwelling
6No (38%)

NOTES:

SCALE BAR

PURPOSE OF ISSUE

FILE STATUS CODE

 A2

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CLIENT
Berneslai Homes

PROJECT
Billingley View
Bolton on Dearne
Housing Development

TITLE
Proposed Site Plan

SCALES	DATE	DRAWN	CHECKED
1:500	25/03/19	IKC	

FILE / DRAWING NAME

PROJECT NR	ZONE	LEVEL	TYPE	ROLE	UNIQUE NR	REV CODE
19-1-1080	-	-	PL	A	03	-

APPENDIX D

TRICS Data Multimodal

Calculation Reference: AUDIT-109307-190626-0638

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
	WY	WEST YORKSHIRE	2 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
11	SCOTLAND		
	MO	MORAY	2 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 14 to 280 (units:)
Range Selected by User: 14 to 100 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/02 to 19/09/13

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	3 days
Wednesday	2 days
Thursday	3 days
Friday	1 days

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

Selected survey types:

Manual count	10 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:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3

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	5
Built-Up Zone	1
No Sub Category	4

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

Secondary Filtering selection:

Use Class:

C3	10 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:

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

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	1 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	7 days
1.1 to 1.5	3 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	10 days

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

PTAL Rating:

No PTAL Present	10 days

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

LIST OF SITES relevant to selection parameters

1 DV-03-B-01 TERRACED DEVON
HAM DRIVE
PLYMOUTH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 35
Survey date: WEDNESDAY *06/07/05* *Survey Type: MANUAL*

2 ES-03-B-01 BUNGALOWS EAST SUSSEX
BOWLEY ROAD
HAILSHAM

Edge of Town
Residential Zone
Total Number of dwellings: 14
Survey date: THURSDAY *03/07/03* *Survey Type: MANUAL*

3 LC-03-B-02 SEMI DETACHED/TERRACED LANCASHIRE
BILLINGE STREET
BLACKBURN

Edge of Town Centre
Residential Zone
Total Number of dwellings: 15
Survey date: MONDAY *10/06/13* *Survey Type: MANUAL*

4 MO-03-B-01 SEMI DETACHED MORAY
HAWTHORN ROAD
ELGIN

Edge of Town Centre
No Sub Category
Total Number of dwellings: 15
Survey date: FRIDAY *12/05/06* *Survey Type: MANUAL*

5 MO-03-B-02 BUNGALOWS MORAY
PLUSCARDEN ROAD
ELGIN

Edge of Town Centre
No Sub Category
Total Number of dwellings: 40
Survey date: WEDNESDAY *10/05/06* *Survey Type: MANUAL*

6 MS-03-B-01 TERRACED MERSEYSIDE
TARBOCK ROAD
LIVERPOOL
SPEKE
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: TUESDAY *18/06/13* *Survey Type: MANUAL*

7 NY-03-B-01 TERRACED HOUSING NORTH YORKSHIRE
NORTHALLERTON ROAD
THIRSK
NORBY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 280
Survey date: THURSDAY *20/09/07* *Survey Type: MANUAL*

8 SF-03-B-01 SEMI D./TERRACED SUFFOLK
A1144 ST PETERS STREET
LOWESTOFT

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 46
Survey date: TUESDAY *20/09/05* *Survey Type: MANUAL*

9 WY-03-B-02 MIXED HOUSES WEST YORKSHIRE
WHITEACRE STREET
HUDDERSFIELD
DEIGHTON
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

10 WY-03-B-03 TERRACED HOUSES WEST YORKSHIRE
LINCOLN GREEN ROAD
LEEDS

Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Number of dwellings: 29
Survey date: THURSDAY *19/09/13* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.050	10	54	0.136	10	54	0.186
08:00 - 09:00	10	54	0.112	10	54	0.224	10	54	0.336
09:00 - 10:00	10	54	0.129	10	54	0.132	10	54	0.261
10:00 - 11:00	10	54	0.116	10	54	0.129	10	54	0.245
11:00 - 12:00	10	54	0.142	10	54	0.116	10	54	0.258
12:00 - 13:00	10	54	0.129	10	54	0.134	10	54	0.263
13:00 - 14:00	10	54	0.132	10	54	0.112	10	54	0.244
14:00 - 15:00	10	54	0.121	10	54	0.153	10	54	0.274
15:00 - 16:00	10	54	0.182	10	54	0.145	10	54	0.327
16:00 - 17:00	10	54	0.153	10	54	0.143	10	54	0.296
17:00 - 18:00	10	54	0.233	10	54	0.154	10	54	0.387
18:00 - 19:00	10	54	0.131	10	54	0.090	10	54	0.221
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.630			1.668			3.298

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:	14 - 280 (units:)
Survey date date range:	01/01/02 - 19/09/13
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.013	10	54	0.009	10	54	0.022
08:00 - 09:00	10	54	0.002	10	54	0.007	10	54	0.009
09:00 - 10:00	10	54	0.006	10	54	0.013	10	54	0.019
10:00 - 11:00	10	54	0.007	10	54	0.000	10	54	0.007
11:00 - 12:00	10	54	0.004	10	54	0.004	10	54	0.008
12:00 - 13:00	10	54	0.006	10	54	0.002	10	54	0.008
13:00 - 14:00	10	54	0.004	10	54	0.004	10	54	0.008
14:00 - 15:00	10	54	0.000	10	54	0.004	10	54	0.004
15:00 - 16:00	10	54	0.017	10	54	0.004	10	54	0.021
16:00 - 17:00	10	54	0.009	10	54	0.015	10	54	0.024
17:00 - 18:00	10	54	0.011	10	54	0.009	10	54	0.020
18:00 - 19:00	10	54	0.018	10	54	0.015	10	54	0.033
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.097			0.086			0.183

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.053	10	54	0.184	10	54	0.237
08:00 - 09:00	10	54	0.154	10	54	0.404	10	54	0.558
09:00 - 10:00	10	54	0.156	10	54	0.189	10	54	0.345
10:00 - 11:00	10	54	0.162	10	54	0.186	10	54	0.348
11:00 - 12:00	10	54	0.178	10	54	0.143	10	54	0.321
12:00 - 13:00	10	54	0.165	10	54	0.169	10	54	0.334
13:00 - 14:00	10	54	0.167	10	54	0.145	10	54	0.312
14:00 - 15:00	10	54	0.162	10	54	0.210	10	54	0.372
15:00 - 16:00	10	54	0.325	10	54	0.202	10	54	0.527
16:00 - 17:00	10	54	0.239	10	54	0.233	10	54	0.472
17:00 - 18:00	10	54	0.318	10	54	0.239	10	54	0.557
18:00 - 19:00	10	54	0.204	10	54	0.132	10	54	0.336
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.283			2.436			4.719

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.017	10	54	0.042	10	54	0.059
08:00 - 09:00	10	54	0.053	10	54	0.272	10	54	0.325
09:00 - 10:00	10	54	0.092	10	54	0.077	10	54	0.169
10:00 - 11:00	10	54	0.066	10	54	0.107	10	54	0.173
11:00 - 12:00	10	54	0.072	10	54	0.075	10	54	0.147
12:00 - 13:00	10	54	0.108	10	54	0.083	10	54	0.191
13:00 - 14:00	10	54	0.051	10	54	0.050	10	54	0.101
14:00 - 15:00	10	54	0.070	10	54	0.092	10	54	0.162
15:00 - 16:00	10	54	0.235	10	54	0.145	10	54	0.380
16:00 - 17:00	10	54	0.114	10	54	0.086	10	54	0.200
17:00 - 18:00	10	54	0.136	10	54	0.132	10	54	0.268
18:00 - 19:00	10	54	0.075	10	54	0.072	10	54	0.147
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.089			1.233			2.322

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.000	10	54	0.006	10	54	0.006
08:00 - 09:00	10	54	0.000	10	54	0.018	10	54	0.018
09:00 - 10:00	10	54	0.007	10	54	0.020	10	54	0.027
10:00 - 11:00	10	54	0.002	10	54	0.002	10	54	0.004
11:00 - 12:00	10	54	0.006	10	54	0.013	10	54	0.019
12:00 - 13:00	10	54	0.009	10	54	0.002	10	54	0.011
13:00 - 14:00	10	54	0.026	10	54	0.006	10	54	0.032
14:00 - 15:00	10	54	0.007	10	54	0.004	10	54	0.011
15:00 - 16:00	10	54	0.011	10	54	0.002	10	54	0.013
16:00 - 17:00	10	54	0.000	10	54	0.004	10	54	0.004
17:00 - 18:00	10	54	0.011	10	54	0.000	10	54	0.011
18:00 - 19:00	10	54	0.002	10	54	0.000	10	54	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.081			0.077			0.158

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	54	0.083	10	54	0.241	10	54	0.324
08:00 - 09:00	10	54	0.210	10	54	0.702	10	54	0.912
09:00 - 10:00	10	54	0.261	10	54	0.300	10	54	0.561
10:00 - 11:00	10	54	0.237	10	54	0.294	10	54	0.531
11:00 - 12:00	10	54	0.259	10	54	0.235	10	54	0.494
12:00 - 13:00	10	54	0.289	10	54	0.256	10	54	0.545
13:00 - 14:00	10	54	0.248	10	54	0.204	10	54	0.452
14:00 - 15:00	10	54	0.239	10	54	0.309	10	54	0.548
15:00 - 16:00	10	54	0.588	10	54	0.353	10	54	0.941
16:00 - 17:00	10	54	0.362	10	54	0.338	10	54	0.700
17:00 - 18:00	10	54	0.476	10	54	0.381	10	54	0.857
18:00 - 19:00	10	54	0.300	10	54	0.219	10	54	0.519
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.552			3.832			7.384

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.*