

For and on behalf of
Redmile Homes

Transport Assessment

Goldthorpe Road, Goldthorpe

**Prepared by
Sustainable Development and Delivery
DLP Planning Ltd
Sheffield**

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Prepared by:	Kurt Hardy Senior Transport Planner	
Checked by:	Anna Meer BA (Hons) CMILT Director	
Approved by:	Anna Meer BA (Hons) CMILT Director	
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Sustainable Development and Delivery

**4 Abbey Court
 Fraser Road
 Priory Business Park
 Bedford
 MK44 3WH
 Tel: 01234 832740**

**Office 209
 Cumberland House
 35 Park Row
 Nottingham
 NG1 6EE
 Tel: 01156 715067**

**6th Floor
 Broad Quay House
 Prince Street
 Bristol
 BS1 4DJ
 Tel: 01179 758680**

**Ground Floor
 V1 Velocity
 Tenter Street
 Sheffield
 S1 4BY
 01142 289190**

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1.0 INTRODUCTION

- 1.1 This Transport Assessment (TA) has been prepared by DLP Planning Ltd's Sustainable Development & Delivery Team (SDD) on behalf of Redmile Homes to support a full planning application for a residential development to Barnsley Metropolitan Borough Council (BMBC). The development is located on land to the east of B6098 Goldthorpe Road at Goldthorpe village in the Metropolitan Borough of Barnsley. The site is currently vacant and disused land.
- 1.2 This TA considers key highway and transport related matters, including a review of the proposed site access arrangement and potential impact of the development on the surrounding highway network.
- 1.3 The site is currently allocated for housing as Site HS47 "Land to the north of Dearne Advanced Learning Centre, Goldthorpe" within the adopted BMBC Local Plan (2019). Within the Local Plan, no specific highways or transportation requirements are specified in relation to the site.
- 1.4 This TA follows initial scoping discussions and a Scoping Note, which was issued to BMBC, as the Local Highway Authority on 1st March 2019 in relation to a similar scheme for 113 dwellings. The Scoping Note (see **Appendix A**) primarily identified the likely peak hour traffic generation associated with the proposed development and outlined an anticipated study area for further assessment within the TA. A subsequent scoping response was received from BMBC on 12th March 2019 (see **Appendix B**) which confirmed the content of the Scoping Note was indeed acceptable and agreed.
- 1.5 Since 2019, the scheme has been reduced to comprise a total of 109 dwellings, which represents a reduction of 4 dwellings from the previous proposals. Whilst the LHA were approached in August 2021 to confirm if the scope agreed as part of the 2019 works was still valid, a response was received confirming that due to workloads, the LHA would not be able to provide a formal response within the timescales required. In light of this, the TA has been prepared on the basis that all issues agreed as part of the 2019 scoping process are deemed to remain acceptable. Where updates have been deemed necessary to reflect the lapse in time since 2019, this has been acknowledged and addressed herein.
- 1.6 In order to inform this TA, site visits were undertaken on 8th March February 2019 and also on 17th August 2021 between 14:00 and 16:00 hours to review current highway conditions and identify any key constraints.
- 1.7 This TA has been prepared in accordance with policies contained within the National Planning Policy Framework (NPPF) (2021) and guidance contained within Manual for Streets (MfS) (2007) and the South Yorkshire Residential Design Guide (2011) where applicable.
- 1.8 In accordance with the BMBC Local Validation Checklist, a TA and Travel Plan are required for a development of this scale. This is also in accordance with the recently

archived Department for Transport (DfT) Guidance on Transport Assessment (2007) document, which states that for developments over 80 dwellings a TA is required to support any planning application. The document also states that Travel Plans are to be prepared in accordance with the DfT Good Practice Guidelines: Delivering Travel Plans through the Planning Process (2009).

- 1.9 All distances and travel times stated in this TA are derived using the Google journey planning tool.

Structure of Report

- 1.10 The structure of the remainder of this report is summarised below:
- **Section 2:** provides a summary of relevant national and local transport planning policy;
 - **Section 3:** provides an overview of the existing baseline site conditions, including a review of the available walking and cycling routes and facilities, public transport options, the accessibility of key local facilities, as well as the highway characteristics of the site and adjacent highway network;
 - **Section 4:** describes the transport features of the proposed development scheme and includes a review of swept path analysis to validate safe vehicular access into the site;
 - **Section 5:** provides an analysis of the proposed development's likely impact on the local highway network, estimating the vehicular trips likely to be generated by the development during the AM and PM peak hours;
 - **Section 6:** provides an analysis of the likely traffic impact; and
 - **Section 7:** summarises and concludes the key points in the TA.

2.0 POLICY CONTEXT

National Policy

National Planning Policy Framework (2021)

- 2.1 The NPPF was last updated in July 2021. It sets out the Government's planning policies for England and how these are expected to contribute to the achievement of sustainable development.
- 2.2 Paragraph 8 of Chapter 2 (Achieving Sustainable Development) sets out three overarching objectives; economic, social and environmental. Which are interdependent and need to be pursued in mutually supportive ways, so that opportunities can be taken to secure net gains across each of the different objectives.
- 2.3 Chapter 8 (Promoting Healthy and Safe Communities) outlines that planning decisions should support developments where street layouts allow for accessible pedestrian and cycle routes and connections within and between neighbourhoods and layouts that encourage walking and cycling. Paragraph 100 goes on to describe that planning decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.
- 2.4 Chapter 9 (Promoting Sustainable Transport) of the NPPF considers the promotion of sustainable transport by emphasising the importance of development proposals. Paragraph 104 sets out the potential impacts of developments on transport networks can be addressed, so that:
 - a) *Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
 - b) *Opportunities to promote walking, cycling and public transport use are identified and pursued;*
 - c) *The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
 - d) *Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.*
- 2.5 Paragraph 107 sets out that when setting local parking standards for residential development, policies set by Local Authorities should take into account the following:
 - a) *"The accessibility of the development;*
 - b) *The type, mix and use of development;*

- c) *The availability of an opportunities for public transport; and*
- d) *Local car ownership levels”.*

- 2.6 Paragraph 108 states maximum parking standards for residential development should only be set where there is a *“clear and compelling justification that they are necessary for managing the local road network”.*
- 2.7 Paragraph 111 states that new 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”.*
- 2.8 Paragraph 112 sets out that applications for development should:
- a) Give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas to facilitate access to high quality public transport;
 - b) Create places that minimise scope for conflicts between pedestrians, cyclists and vehicles; and
 - c) Allow for the efficient delivery of goods, and access by service and emergency vehicles.

Planning Practice Guidance on Travel Plans, Transport Assessments and Transport Statements (2014)

- 2.9 Updated guidance on Travel Plans, Transport Assessments and Transport Statements published by the Government in March 2014 states that these reports are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development.
- 2.10 Whilst this Planning Practice Guidance document supersedes the DfT “Guidance on Transport Assessment” (2007), this previous document contains significantly more detailed guidance and has therefore been used, with caution, as a framework to guide the content of this report.

Manual for Streets (2007)

- 2.11 MfS, produced by DfT, provides guidance for the design, construction, adoption and maintenance of new residential streets. It is also applicable to existing residential streets that are subject to re-design. It aims to assist in the creation of high-quality residential streets that:
- Build and strengthen communities;
 - Balance the needs of all users;
 - Form part of a well-connected network; and
 - Create safe and attractive place which have their own identity.

Department for Transport Manual for Streets 2 (2010)

- 2.12 MfS 2 explains how the principles of MfS can be applied more widely to extend the advantages of good design to streets and roads outside residential areas and to provide an environment that improves the quality of life.

Local Policy

Barnsley Metropolitan Borough Council Local Plan (2019)

- 2.13 BMBC's Local Plan was formally adopted in January 2019. Relevant policies include the following:

- **Policy GD1 General Development** – Development proposals will be approved if *“adequate access and internal road layouts are provided to allow the complete development of the entire site for residential purposes, and to provide appropriate vehicular and pedestrian links throughout the site and into adjacent areas”*.
- **Policy T3 New Development and Sustainable Travel** – new developments will be expected to:
 - *“Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists;*
 - *Provide at least the minimum levels of parking for cycles, motorbikes, scooters and mopeds set out in the relevant SPD; and*
 - *Provide a TS or TA in line with guidance set out in the NPPF”*.
- **Policy T4 New Development and Transport Safety** – New development will be expected to be designed and built to provide transport users of the development with *“safe, secure and convenient access and movement”*.

Barnsley Metropolitan Borough Council Supplementary Planning Document (SPD) – Parking (2019)

- 2.14 The BMBC parking standards for residential developments are shown in **Table 1**.

Use Class	Barnsley Wide
C3 : Houses and Flats	1 space for dwellings with 1 or 2 bedrooms
	2 spaces for dwellings with 3 or more bedrooms

Table 1. BMBC Maximum Car Parking Standards

- 2.15 The SPD document states that the minimum cycle parking provision for housing is to be assessed individually. It is outlined that parking provision for motorcycles, scooters and mopeds are not applicable to residential developments.

South Yorkshire Residential Design Guide (2011)

- 2.16 This guidance is currently adopted by BMBC and provides general guidance on designing residential development layouts for planning applications. Section 4B outlines the street and parking geometric parameters for the design of new streets.
- 2.17 Paragraph B.1.6.3 states that for design speeds over 20mph:
- “Direct access is generally permissible for two-way traffic flows up to 500 vehicles per hour
Direct access may be permissible for two-way traffic flows up to 1,000 vehicles per hour, but turning areas may be required on a case-by-case basis so that vehicles enter and leave in forward gear.”*
- 2.18 Paragraph B.2.1.6 goes on to state that for conventional streets with a design speed of 20mph, a minimum carriageway width of 4.8 metres is required. For streets with higher design speeds, a minimum carriageway width of 5.5 metres is required.
- 2.19 In relation to visibility splays, these should be provided in accordance with MfS guidance.
- 2.20 This TA follows the requirements of the South Yorkshire Residential Design Guide, and is referenced throughout the report.

Summary

- 2.21 The development is reflective of national planning policy on sustainable development and local planning strategies and policies outlined in the BMBC Local Plan, Parking SPD and the South Yorkshire Residential Design Guide highlighted in this section, in achieving a development that utilises existing transport services, provides safe access and movement and encourages the uptake of sustainable travel modes.
- 2.22 In accordance with Paragraph 111 of the NPPF, the development is not expected to result in a “severe” impact on the surrounding highway network or result in an “*unacceptable impact on highway safety*”.

3.0 EXISTING CONDITIONS

Site Location

- 3.1 The site is located on land to the east of the B6098 Goldthorpe Road, Goldthorpe, in the Metropolitan Borough of Barnsley and is shown in **Figure 1**.



eetmap.org)

- 3.2 The site is located approximately 750 metres south of Goldthorpe.

Existing Site Use

- 3.3 The site area measures approximately 3.25 hectares and is currently disused land.
- 3.4 To the north of the site are existing residential dwellings and a childcare / nursery centre, to the east is open land and to the south is an access road serving The Dearne ALC School and adjacent leisure centre.
- 3.5 The western boundary of the site is currently bordered by metal fencing along Goldthorpe Road, as shown in **Figure 2**.



Figure 2. Western Boundary of Site

Existing Site Access

- 3.6 A vehicular access point has historically been provided to serve the site from B6098 Goldthorpe Road to the west of the site, as shown in **Figure 3**. However, the access is currently fenced and locked to prevent vehicles entering / egressing the site.



Figure 3. Historic Vehicular Site Access from B6098 Goldthorpe Road

- 3.7 There is a further access point to the north of the site via Hall Street, which is currently used as a vehicular turning area. The access point is also fenced and locked, as shown in **Figure 4**.



Figure 4. Historic Access Point North of Site via Hall Street

Local Highway Network

3.8 **Figure 5** provides an illustration of the local highway network within the vicinity of the site.

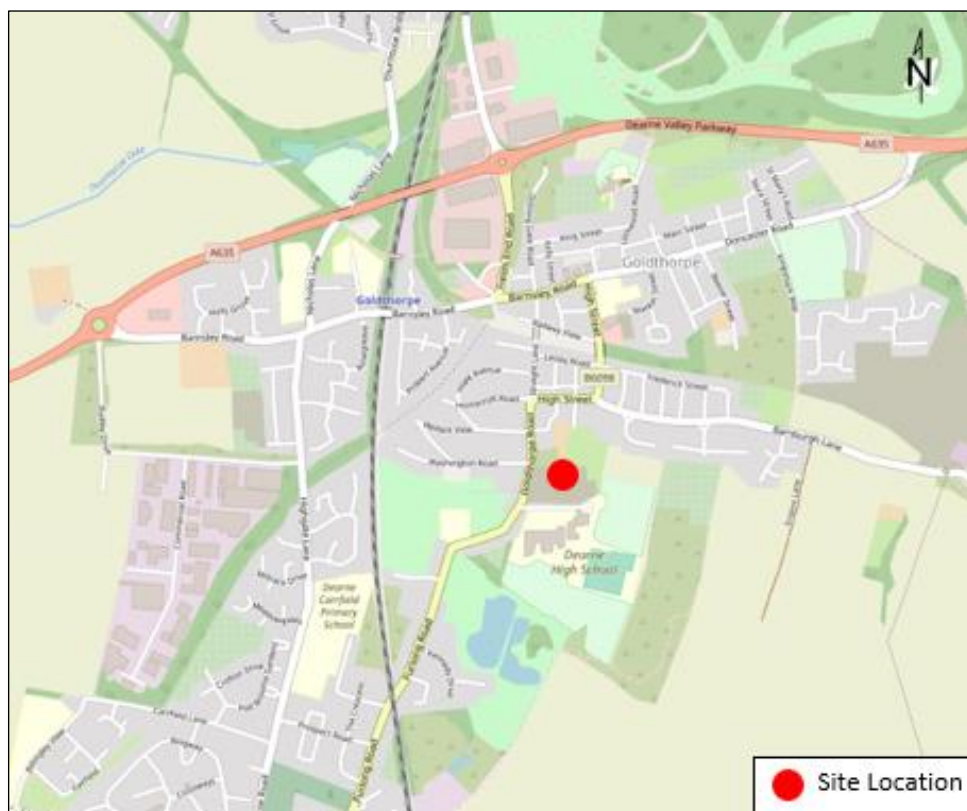


Figure 5. Local Highway Network (Source: [Openstreetmap.org.uk](https://www.openstreetmap.org))

3.9 Hall Street is located to the north of the site and is a residential street providing street

lighting and has a carriageway width that varies between 5.5 and 7.5 metres. Hall Street forms a priority T-junction with B6098 High Street.

- 3.10 The western boundary of the site is bordered by B6098 Goldthorpe Road; a predominantly residential road with a single carriageway width of approximately 8 metres. Many of the dwellings along the B6098 Goldthorpe Road are provided with direct driveway access. The road is subject to a 30mph speed limit, with it being noted that speed camera warning signs are located approximately 75 metres north and 100 metres south of the historic vehicular site access. The road provides street lighting and offers unrestricted on-street parking within the vicinity of the site.
- 3.11 To the south of the site, the B6098 continues as Furlong Road providing access to the nearby village of Bolton Upon Dearne, located approximately 1.4 kilometres south of the site.
- 3.12 Highway boundary data is contained within **Appendix C**.
- 3.13 The B6098 Goldthorpe Road forms priority junctions with the following side roads:
- An access road on the eastern side of B6098 Goldthorpe Road, situated approximately 40 metres south of the historic vehicular site access bordering the southern edge of the site and providing access to The Dearne ALC School and leisure centre. The access road measures approximately 6 metres in width and provides street lighting and a zebra pedestrian crossing close to the junction with B6098 Goldthorpe Road. A further zebra crossing is provided further east along the access road outside the leisure centre. Highway boundary data confirms that this access road does not form part of the publicly maintained highway;
 - Washington Road on the western side of B6098 Goldthorpe Road, located approximately 75 metres north of the historic vehicular site access. Washington Road is a residential road measuring approximately 5 metres in carriageway width, providing street lighting and unrestricted on-street parking;
 - Hope Avenue (approximately 5 metres in carriageway width) and Orchard Street (varying between approximately 4.5 and 7 metres in carriageway width due to two pinch-points along the street) on the western and eastern side of B6098 Goldthorpe Road respectively, which are located approximately 160 metres north of the historic vehicular site access. Both are residential streets providing street lighting and unrestricted on-street parking;
 - Homecroft Road / Straight Lane / B6098 High Street priority junction located approximately 245 metres north of the historic vehicular site access;
 - Homecroft Road is a residential road with a carriageway width of approximately 5.5 metres and provides street lighting and unrestricted on-street parking.
 - Straight Lane has a carriageway width of approximately 7 metres and also provides

street lighting and unrestricted on-street parking. To the north of its junction with Highfield Avenue, Straight Lane is one-way northbound across the bridge towards its junction with Barnsley Road. It is noted that as part of the previous TA prepared in support of this scheme in 2019, the section of Straight Lane was to be permanently closed to vehicular traffic as of 10th March 2019. This meant that northbound traffic towards Goldthorpe would instead likely continue along the B6098 High Street towards its junction with Doncaster Road. However during the site visit undertaken on 17th August 2021 it was noted that the bridge is re-open to northbound traffic (see **Figure 6**)

- The B6098 High Street carriageway measures approximately 6.5 metres in width and provides street lighting and a combination of unrestricted on-street parking and designated parking laybys. B6098 High Street forms a signalised junction with Doncaster Road approximately 500 metres northeast of the site.



Figure 6. Straight Lane open to Vehicular Traffic

- 3.14 Doncaster Road provides street lighting, is subject to a 30mph speed limit and varies in width between 6.5 and 8 metres. There are double-yellow line parking restrictions along Doncaster Road. Doncaster Road continues east towards the A635, which provides onward connections to the A1.
- 3.15 The A635 / A1 provide onward connections to nearby key destinations such as Barnsley, Wakefield, Leeds, Rotherham and Sheffield.

Baseline Traffic Flows

- 3.16 The 2019 Scoping Study identified an agreed study area for assessment as part of the 2019 TA. In light of this, a peak hour Manual Classified Count (MCC) was commissioned at the following junctions for Tuesday 12th March 2019 (having confirmed this was outside the school holiday period):
- B6098 Goldthorpe Road / proposed site access (surveyed B6098 Goldthorpe Road / Washington Road to provide two-way flows across site frontage);
 - B6098 Goldthorpe Road / B6098 High Street / Homecroft Road;
 - Straight Lane / Barnsley Road; and
 - B6098 / Barnsley Road signalised junction.
- 3.17 Full details of the MCC traffic survey are contained at **Appendix D**. The morning peak hour of 07:45 to 08:45 was identified, whilst for the PM peak this varied between 16:30 to 17:30 and 16:45 to 17:45 between junctions.
- 3.18 In addition to the above, 2017 traffic count data was extracted for the B6098 High Street / Barnsley Road / Doncaster Road junction from the 'Former Goldthorpe Colliery' TA dated October 2017.
- 3.19 Whilst BMBC were contacted to confirm the suitability of the above survey data for this revised TA, no response has been received to date. Therefore for the purpose of this TA, it is assumed that the study area agreed in 2019 should remain valid.

Pedestrian Accessibility

- 3.20 There is currently no designated pedestrian access into the site from B6098 Goldthorpe Road and Hall Street, however, the site benefits from the adjacent footway provision on both sides of B6098 Goldthorpe Road and Hall Street, which connect to the wider local footway network. The footways on Hall Street vary between approximately 0.5 metres and 1.5 metres in width along both sides of the carriageway.
- 3.21 To the west of the site, there is a 3 metres wide shared use pedestrian / cycle facility along the eastern edge of the B6098 Goldthorpe Road (see **Figure 7**).



Figure 7. Shared Use Pedestrian / Cycle Facility East of B6098 Goldthorpe Road

- 3.22 On the western side of the B6098 Goldthorpe Road carriageway, a footway is provided which measures approximately 2 metres in width. Further north of the site, where side roads form junctions with the B6098 Goldthorpe Road dropped kerbs and tactile paving are provided as shown in **Figure 8**.



Figure 8. Dropped Kerbs and Tactile Paving North of B6098 Goldthorpe Road

- 3.23 The footway network within the vicinity of B6098 Goldthorpe Road provides onward

connections to local services and Goldthorpe village centre predominantly situated on Doncaster Road / Barnsley Road (see **Table 2** for walking distances and times to local services).

- 3.24 Approximately 270 metres north of the historic vehicular site access on B6098 High Street is a zebra crossing with flashing yellow Belisha beacons either side of the carriageway, as shown in **Figure 9**.



Figure 9. Zebra Crossing with Belisha Beacons on B6098 High Street

- 3.25 Barnsley Road has a number of signal-controlled pedestrian crossings, which provide a dedicated facility for pedestrian movement to the footway on the opposite side of the road and through Goldthorpe centre.
- 3.26 Approximately 40 metres south of the historic vehicular site access is a zebra crossing providing connection to The Dearne ALC entrance and leisure centre.
- 3.27 There are also a number of Public Rights of Way (PRoW) nearby, as shown in **Figure 10**, however, none of these pass through the site or affect the proposed site layout.

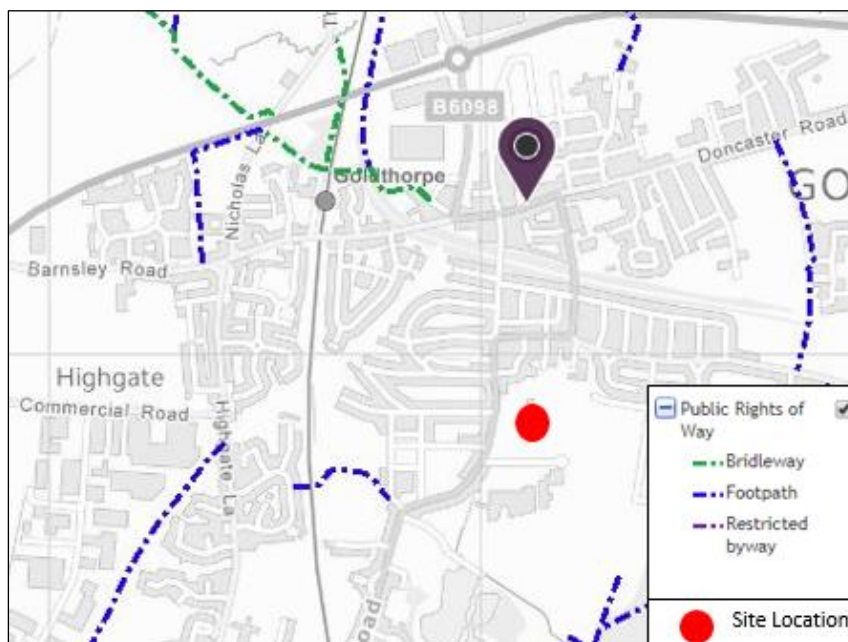


Figure 10. Nearby PRoW (Source: BMBC)

Cyclist Accessibility

- 3.28 A review of the National Cycle Network (NCN) map shows that the nearest NCN route (62) is situated approximately 2.3 kilometres south of the site, which can be reached in approximately 6 minutes by bike from the site. The NCN route 62 provides onward traffic-free and on-road route connections to Rotherham Barnsley and Doncaster (see **Figure 11**).

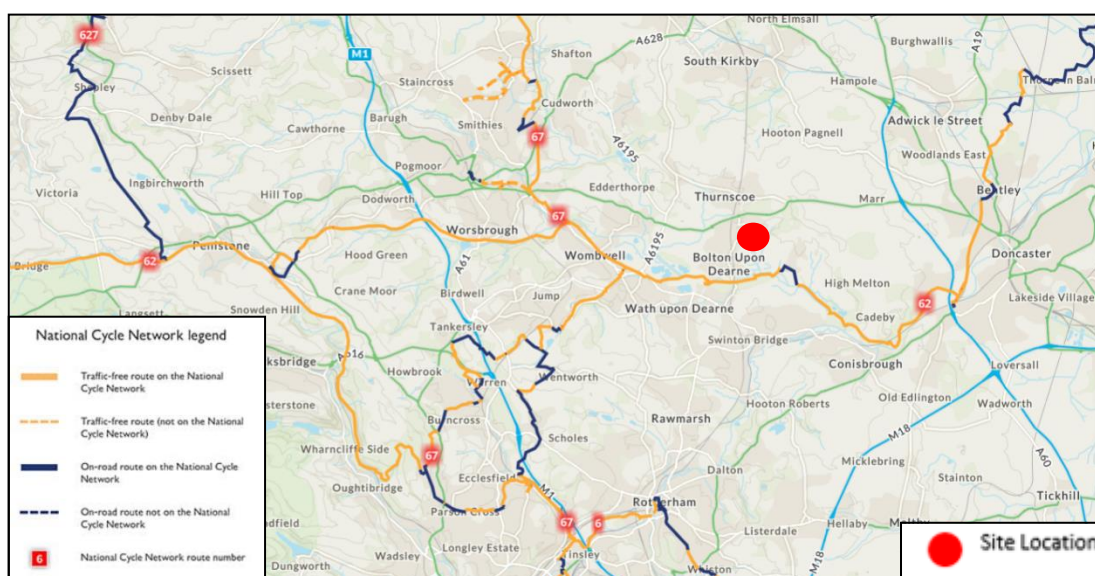


Figure 11. Nearby NCN Routes (Source: Sustrans.org.uk)

- 3.29 Barnsley is located approximately 15.8 kilometres north-west of the site and can be reached via the NCN route 62 in around 50 minutes. Doncaster is located approximately 20 kilometres east of the site and can be reached via NCN route 62 in around 65 minutes. Rotherham is located approximately 14.6 kilometres south-west of the site and can be

reached via NCN routes 62 and 67 in around 50 minutes.

Accessible Services by Walking and Cycling

3.30 **Table 2** provides an outline of the local services that can be reached by walking and cycling.

IHT Preferred Max. Walking Distance (Metres)	Service	Approx. Walking Distance from Site (Metres)*	Walking (Mins)	Cycling (Mins)
Local Services (Local Centre)				
800	Goldthorpe Centre	560** / 860	6** / 10	1** / 2
	Dearne Valley Group Practice	390	4	1
	Weldricks Pharmacy	460	5	1
	Dearne Valley Dental Practice	320** / 560	4** / 8	2** / 3
	Goldthorpe Library	610** / 710	8** / 10	4** / 4
	ASDA Goldthorpe Supermarket	460** / 710	6** / 10	3** / 4
	Dearneside Leisure Centre	150	1	1
Schools				
2000	The Dearne ALC	270	3	1
	Dearne Goldthorpe Primary School	960** / 1110	12** / 14	5
	Sacred Heart Catholic Primary School	910** / 1110	12** / 14	5** / 5
	Carrfield Primary Academy	1210	14	4
	Kids World Goldthorpe (Nursery)	310** / 560	4** / 8	2** / 3

Commuting				
2000	Nearest bus stops (B6089 Goldthorpe Road)	130	1	1
	Nearest bus stops (B6098 High Street)	210 (eastbound) – 280 (westbound)**	3 / 4**	1 / 2**
	The Goldthorpe Railway Station	1110	14	5

*Approximately measured from centre of the site via B6098 Goldthorpe Road

**Approximately measured from centre of site via Hall Street

Table 2. Walking and Cycling Journey Times to Local Services

- 3.31 The facilities listed in **Table 2** are well within the IHT recommended preferred maximum distances for walking, demonstrating the accessibility and sustainability of the site.

Public Transport Accessibility – Bus

- 3.32 The nearest pair of bus stops providing services in both directions are situated directly adjacent to the site on B6098 Goldthorpe Road. Both bus stops are located approximately 130 metres west of the centre of the site.
- 3.33 The northbound buses provide services to Barnsley Interchange in approximately 35 minutes and Thurnscoe in approximately 10 minutes during the AM and PM peak hours.
- 3.34 The southbound services provide services to Rotherham Interchange and Barnsley Interchange in under 60 minutes during the AM and PM weekday peak hours.
- 3.35 Details of the available services are summarised in **Table 3**.

Service no.	Route	Frequency		
		Mon-Fri	Sat	Sun
Northbound				
208	Rotherham Interchange – Grimethorpe	3 services per day (05:55 – 13:50 – 22:03)		
218	Rotherham Interchange – Barnsley Interchange	1 service per hour between 07:09 and 23:20	1 service per hour between 07:16 and 23:20	1 service per hour between 07:35 and 22:20
218A	Rotherham Interchange – Barnsley	1 service per hour between 08:43 and	1 service per hour between 07:46 and	No Services

	Interchange	16:48	16:43	
226	Barnsley Interchange – Thurnscoe	2 services per hour between 06:15 and 23:15	2 services per hour between 06:13 and 23:15	1 service per hour between 08:15 and 22:15
Southbound				
208	Grimethorpe – Rotherham Interchange	3 services per day (07:03 – 15:03 – 23:05)		
218	Barnsley Interchange – Rotherham Interchange	1 service per hour between 07:05 and 18:30	1 service per hour between 08:10 and 18:30	1 service per hour between 08:15 and 22:58
218A	Barnsley Interchange – Rotherham Town Centre	1 service per hour between 07:35 and 16:45	1 service per hour between 08:40 and 16:40	No Services
216	Thurnscoe – Barnsley Interchange	2 services per hour between 04:58 and 23:18	2 services per hour between 05:00 and 23:18	1 service per hour between 09:16 and 22:16

Table 3. Bus Services at B6098 Goldthorpe Road

- 3.36 The northbound bus stop provides a shelter with timetable information and the southbound bus stop provides a flag stop with timetable information.
- 3.37 There is also a pair of bus stops north of the site on B6098 High Street which provide the same services described in **Table 3**. The bus stops are located approximately 210 metres and 280 metres from the centre of the site via Hall Street for the eastbound and southbound services respectively.
- 3.38 The eastbound bus stop provides a post with timetable information and the southbound bus stop provides a sheltered stop with a seating and timetable information.

Public Transport Accessibility – Train

- 3.39 The site benefits from being in close proximity to Goldthorpe Railway Station, approximately 1100 metres north-west from the centre of the site, which can be accessed by an approximate 14 minute walk, 5 minute bike ride, a 5 minute bus journey or a 3 minute drive.
- 3.40 The station offers car and cycle parking and a step-free access into the station via a ramp.

3.41 **Table 4** provides an outline of the key services available from the station during the AM and PM peak hours of a typical weekday (Monday).

Destination	Approx. no. trains per hour*	Fastest journey time (Mins)
AM		
Doncaster	2	52
Rotherham Central	1	15
Barnsley	2	59
Wakefield	1	26
Leeds	1	43
Sheffield	1	31
Manchester	2	95
London	2	152
PM		
Doncaster	2	55
Rotherham Central	1	17
Barnsley	2	61
Wakefield	1	26
Leeds	1	43
Sheffield	1	32
Manchester	2	94
London	2	150

**During 07:00 – 09:00 for AM and 17:00 – 19:00 for PM*

Table 4. Rail Services from Goldthorpe Rail Station

3.42 The above summary shows that there are a variety of services to key commuter destinations for future residents to utilise.

Personal Injury Accident Data

3.43 A review of the 'Crashmap' website to assess the Personal Injury Accident (PIA) data of the nearby roads on which it is considered the majority of development traffic will travel.

3.44 In accordance with Planning Practice Guidance document 'Travel Plans, Transport Assessments and Statement in Decision-Taking' (2014) an analysis should be undertaken of:

“Accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area.”

- 3.45 In light of the above, **Figure 12** shows a total of one slight PIA within the vicinity of the proposed site access and two other accidents (one slight and one serious) along the length of B6098 Goldthorpe Road over a five year period (2016 – 2020) to represent a robust assessment.

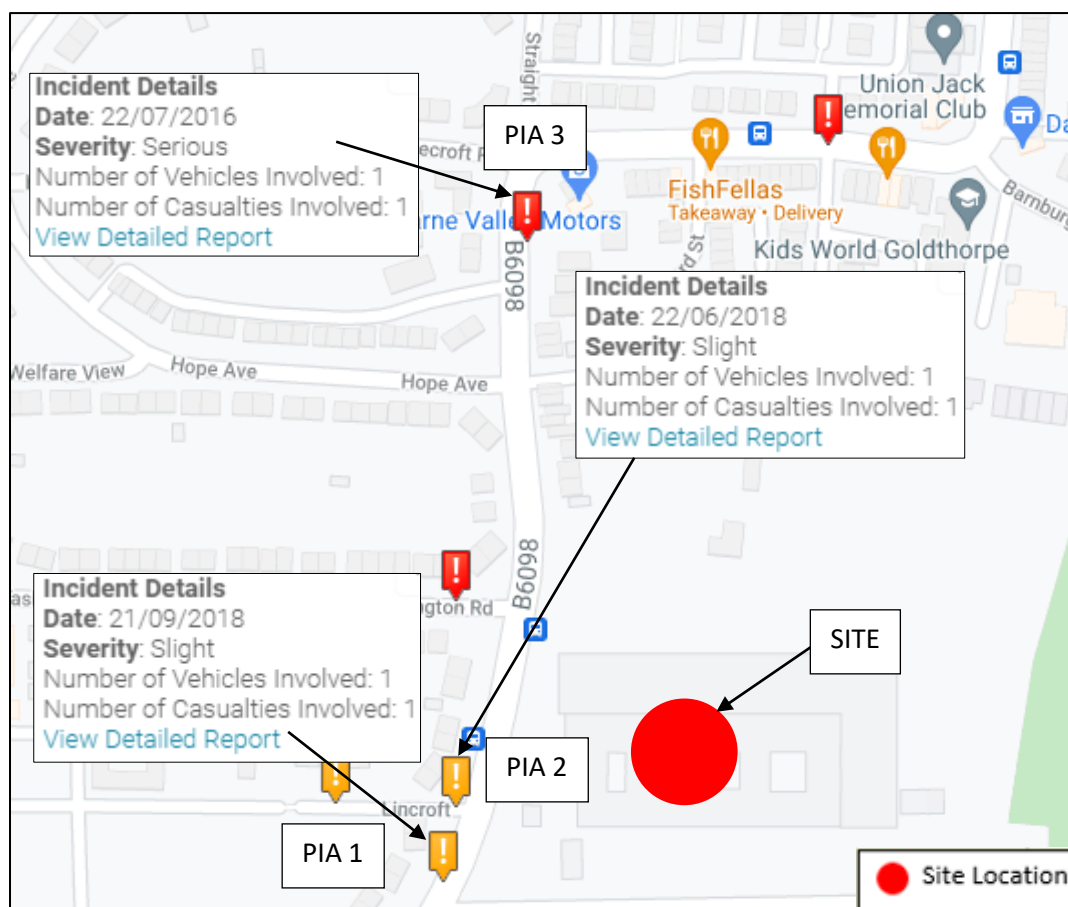


Figure 12. PIA Data (years 2016 to 2020) (Source: Crashmap.co.uk)

- 3.46 Details of the PIAs in the vicinity of the site are attached in **Appendix E** and are as follows:
- **PIA 1:** The slight incident occurred on 21/09/2018 occurred on B6098 Goldthorpe Road. The incident involved one vehicle and one casualty.
 - **PIA 2:** The slight incident occurred on 22/06/2018, adjacent to the B6098 Goldthorpe Road / Lincroft junction. The incident involved one vehicle and one casualty.
 - **PIA 3:** The serious incident occurred on 22/07/2016 accrued on B6098 Goldthorpe Road. The incident involved one vehicle and one casualty.
- 3.47 The PIAs described above occurred at different locations and do not represent a cluster associated with a particular location. The nature of such accidents are typical of that

associated with a residential and urban environment.

- 3.48 Overall, the results of the PIA records show that no significant related accident clusters have been identified within the study area over the five year period. Given that the majority of incidents were slight, it is considered that no further detailed assessment will be undertaken as part of this TA.

Section Summary

- 3.49 This section of the TA has provided a description of the baseline transport-related conditions within the vicinity of the site, including a review of the accident data.
- 3.50 The site is well served by an excellent network of footways providing access to the adjacent bus stops where services run at up to 4 per hour and rail services that run at up to 2 services per hour to key local destinations.
- 3.51 The site is well positioned to allow future residents to walk to local educational facilities and services, within the recommended IHT guideline distances.
- 3.52 A review of the accident data on B6098 Goldthorpe Road within the vicinity of the site shows that the recorded accidents do not highlight a cluster of accidents that can be attributed to the highway defects of the road. It is therefore concluded that there is no sign of any ongoing safety concern that would be exacerbated by the proposed development. Therefore, no further detailed assessment will be undertaken as part of this TA.
- 3.53 Given the above, it is concluded that the site can be considered highly sustainable as it is within close proximity to multiple sustainable transport modes and services and does not pose any particular highway safety concerns from an existing highways condition perspective.

4.0 PROPOSED DEVELOPMENT

Development Composition

- 4.1 The development proposal consists of 109 private and affordable residential units comprising 1, 2, 3 and 4 bedroom dwellings with associated car parking on land to the east of B6098 Goldthorpe Road.
- 4.2 The composition of the 109 residential units is summarised in **Table 5**.

Bedrooms	Approximate No.
2-bedrooms	21
3-bedrooms	81
4-bedrooms	7
Total	109 units

Table 5. Proposed Site Composition

- 4.3 A proposed masterplan is attached in **Appendix F**. It must be noted that the internal site layout has been developed as an iterative process following initial comments received from the Local Highway Authority.

Proposed Site Access

- 4.4 The proposed site access has been designed in accordance with MfS (2007) and also the South Yorkshire Residential Design Guide (2011).
- 4.5 The proposed access would measure 5.5 metres in width with 2 metres wide footways provided on either side, as shown at **Drawing Number YK6169-2PD-001** shows (**Appendix G**). In accordance with Section B.3.1 of the South Yorkshire Residential Design Guide, on streets with design speeds over 20mph, the minimum junction spacing is 40 metres for same side junctions and 20 metres for opposite side junctions. In light of this, the proposed access has been positioned over 20 metres to the south of the B6098 Goldthorpe Road / Washington Road junction. The proposed right / left stagger layout is also more preferable than a left / right stagger. The principle of this access has already been accepted by the Local Highway Authority as part of the scoping exercise.
- 4.6 **Drawing Number YK6169-2PD-001** also shows how in accordance with MfS (2007) design requirements for a 30mph road, the required visibility of 43 metres in each direction is achievable from a 2.4 metres setback distance taken to the edge of the carriageway, within land that is either under the applicants control or part of the assumed highway.
- 4.7 Further to the primary access point, there are 5 dwellings (plots 1 to 5) with direct driveway access onto B6098 Goldthorpe Road. It is noted that the prevailing highway conditions along B6098 Goldthorpe Road allow for tandem parking and direct driveway access to existing residential properties. Such properties have no turning provision within the

curtilage of the site. It is therefore noted that the Local Highway Authority accept such strategy, and that this should continue to be acceptable for plots 1 to 5 of the proposed development.

- 4.8 In terms of further dedicated pedestrian access to the site, a pedestrian access point would be provided to the south of the site onto the Dearnside Leisure Centre access road in the form of 2 metres wide footways. Furthermore, a 2 metres wide footway would also be provided to the north of the site onto Hall Street. These dedicated pedestrian routes allow for shorter walking distances for pedestrians accessing the bus stops and other facilities along B6098 High Street, and also pedestrians heading south towards the various educational and leisure facilities.
- 4.9 Overall it is considered that the site access would be “safe and suitable” and therefore in accordance with Paragraph 110 of the NPPF.

Parking Provision

- 4.10 The BMBC parking standard guidelines for Use Class C3 residential developments are summarised in **Table 65**.

Use Class	Barnsley Urban and Borough Wide – Car (Maximum)	Barnsley Wide – Cycles (Minimum)
C3: Houses and Flats	1 space for dwellings with 1 or 2 bedrooms	To be assessed individually
	2 spaces for dwellings with 3+ bedrooms	

Table 6. Parking Standards

- 4.11 Based on the BMBC parking standards, the development in its entirety could provide up to a total of 197 on-site car parking spaces based upon the mix of 2 / 3 / 4 bed houses contained at **Table 5**.
- 4.12 The proposed development will allow for 209 parking spaces, the majority of which are provided in accordance with the BMBC standards as below:
- **21 x two-bedroom units:** 9 of the units will be provided with 1 car parking space, with the remaining 12 units to each be provided with 2 spaces; and
 - **88 x three/four-bedroom units:** 2 car parking spaces each.
- 4.13 Therefore a total of 12 two-bed units have been provided with an additional parking space. Paragraph 105 of the NPPF states that:

“Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network.”

- 4.14 In light of the above, it is deemed that the level of parking proposed is acceptable and would prevent overspill parking onto the surrounding highway network.
- 4.15 The BMBC parking standards state that residential car parking should be designed in accordance with the South Yorkshire Residential Design Guide. Paragraph B.1.1.22 states that standard residential parking spaces should be 5 metres x 2.5 metres. The guidance goes on to state that internal garages should be 3 x 6.5 metres. Bays in front of garages should be a minimum 6 metres.
- 4.16 Given that the development proposal comprises residential units, each of the houses are designed with a rear garden which would allow for the installation of appropriate cycle storage within the curtilage of each plot.

Internal Layout and Refuse Strategy

- 4.17 The proposed development allows for a single point of vehicle access, with turning heads then provided at the northern, eastern and southern extents of the development. The internal layout therefore allows for a refuse vehicle to manoeuvre within the site utilising the turning heads provided.
- 4.18 In terms of refuse collection, Paragraph 6.8.9 of MfS states that:

“Schedule 1, Part H of the Building Regulations (2000) defines locations for the storage and collection of waste. The collection point can be on-street or may be at another location defined by the waste authority. Key points in the Approved Document to Part H are:

- Residents should not be required to carry waste more than 30 m to the storage points; and*
- Waste collection vehicles should be able to get within 25m of the storage point....”*

- 4.19 The layout has been designed such that the above drag distances are adhered to.
- 4.20 In order to ensure the proposed site access arrangements would allow for internal refuse collections, a swept path analysis of a Phoenix 2 One-Pass refuse vehicle (overall length 11.18m) has been undertaken as shown in **Drawing Number YK6169-2PD-001**. This shows how a refuse vehicle can suitably access and egress the site in a forward gear.
- 4.21 The South Yorkshire Residential Design Guide states at paragraph B.3.7.5 that:
- “Standard turning heads are not provided in this technical guidance - turning areas should be designed to suit the particular local environment as simple turning heads are unattractive.”*
- 4.22 **Drawing Number YK6169-2PD-002** shows (**Appendix G**) how the 11.18m refuse vehicle can satisfactorily negotiate the internal site layout utilising the turning heads provided.
- 4.23 In terms of Plots 1 to 5, these would be serviced by kerbside refuse collections as per the prevailing highway conditions along Goldthorpe Road.

Proposed Off-Site Works

- 4.24 It is noted that the existing southbound bus stop along B6098 Goldthorpe Road is located immediately to the north of the proposed site access. This bus stop currently consists of a flag and pole arrangement. The bus stop is located in the critical direction for visibility in terms of drivers emerging from the proposed site access. In accordance with the CIHT Buses in the Urban Environment guidance (2018), Page 32 states:

“A bus stop should be located on the departure (downstream) side of a junction to avoid blocking sight lines. The Northern Ireland Roads Service recommends a minimum distance from the junction to the back of the bus at the stop of 15 metres (Translink, 2005)”

- 4.25 It is therefore recommended that discussions are held with the Local Highway Authority and public transport providers to investigate potentially repositioning this existing bus stop slightly to the south of the proposed site access (or north towards Orchard Street). The relocated bus stop would then likely be sited opposite the northbound bus stop, which is deemed acceptable in accordance with the CIHT guidance as follows:

“Where it is intended that buses should maintain their position in the traffic stream, an alternative is to place the bus stops opposite one another, with or without a median between them.”

- 4.26 The above works could form part of a suitably worded planning condition. It is also accepted that a Stage 1 Road Safety Audit would be required as part of any modifications to the highway network.

5.0 TRIP GENERATION

Proposed Traffic Generation

- 5.1 As agreed during the 2019 scoping exercise with BMBC, the trip rates provided within the TA for the consented Kingsmark Way site (planning reference 2018/0103) site at the former Goldthorpe Colliery have been utilised.
- 5.2 **Table 7** provides a summary of the estimated generated peak period vehicle trips resulting from the proposed development of up to 109 dwellings.

	AM Peak			PM Peak		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
Vehicle Trip Rate (per dwelling)	0.130	0.349	0.479	0.332	0.169	0.501
Vehicle Trips (109 dwellings)	14	38	52	37	18	55

Table 7. Proposed Residential Development Vehicular Trip rates

- 5.3 **Table 1** shows that the development is likely to generate 52 and 55 two-way vehicular trips in the AM and PM weekday peak hours respectively, which is not considered material.
- 5.4 Paragraph 111 of the NPPF confirms that developments should only be refused where the residual cumulative impacts of a development are “severe”. A maximum generation of 52 vehicle movements in the AM peak hour and 55 vehicle movements in the PM peak hour equates to an average increase of less than 1 vehicle every minute. As such, it is not considered that it would have a “severe” nor detrimental impact on the local highway network.

Multi-Modal Trip Generation

- 5.5 The 2011 Census Method of Travel to Work dataset (QS701EW) was then analysed to calculate the number of vehicle trips likely to be generated by the development. This allows for an accurate representation of how local residents in the vicinity of the proposed site currently travel to work, and applies this travel pattern to the future residents of the development. The ‘work from home’ and ‘not in employment’ categories were removed from the Census dataset as these do not typically generate a weekday peak hour vehicle trip. The dataset results are provided in **Appendix H**.
- 5.6 **Table 8** provides a summary of the Census dataset existing modal split for the ‘Barnsley 022’ area.

Mode of Travel	% Modal Split
Walk	11.8
Cycle	1.0

Public Transport	10.3
Motorcycle, Scooter or Moped	0.8
Taxi	0.3
Passenger in a Car	8.9
Driving a Car	66.5
Other Method of Travel to Work	0.4
Total	100%

Table 8. Method of Travel to Work Modal Split

Based upon the agreed vehicular trip rates and traffic generation figures, the above modal split has been applied to the remaining modes of travel to provide the anticipated trips generated by each mode and are summarised in **Table 9**.

Mode of Travel	Two-way AM peak	Two-way PM peak
Walk	9	10
Cycle	1	1
Public Transport	8	9
Motorcycle, Scooter or Moped	1	1
Taxi	0	0
Passenger in a Car	7	7
Driving a Car	52	55
Other	0	0
Total	78	83

Table 9. Proposed Development Multi-Modal Trip Generation

- 5.7 The above approach has been agreed with BMBC during the 2019 scoping process and is deemed to remain acceptable.

6.0 TRAFFIC IMPACT ANALYSIS

Traffic Distribution

- 6.1 The 2019 Scoping Note confirmed the use of Census 2011 Location of Usual Residence and Place of Work by Method of Travel to Work dataset (WU03EW) for the 'Barnsley 022' Super Middle Output Area (MSOA) as a suitable methodology for distributing the proposed traffic onto the surrounding highway network. This approach is deemed to remain acceptable.
- 6.2 It must be noted that during the 2019 scoping process, the section of Straight Lane was to be permanently closed to vehicular traffic as of 10th March 2019. This meant that northbound traffic towards Goldthorpe would instead likely continue along the B6098 High Street towards its junction with Doncaster Road. However during the site visit undertaken on 17th August 2021 it was noted that the bridge is re-open to northbound traffic and therefore the traffic distribution has been amended accordingly.
- 6.3 The proposed development's likely trip generation (identified in **Section 5** of this report) has therefore been distributed onto the local highway network based on the Census ward population data (data contained at **Appendix I**). The distribution diagram is shown at **Figure 13**, demonstrating that at the site access, 64% of vehicular trips would head north to destinations such as Barnsley, Doncaster, Wakefield and Leeds, whilst the remaining 36% would head south to destinations such as Rotherham and Sheffield.

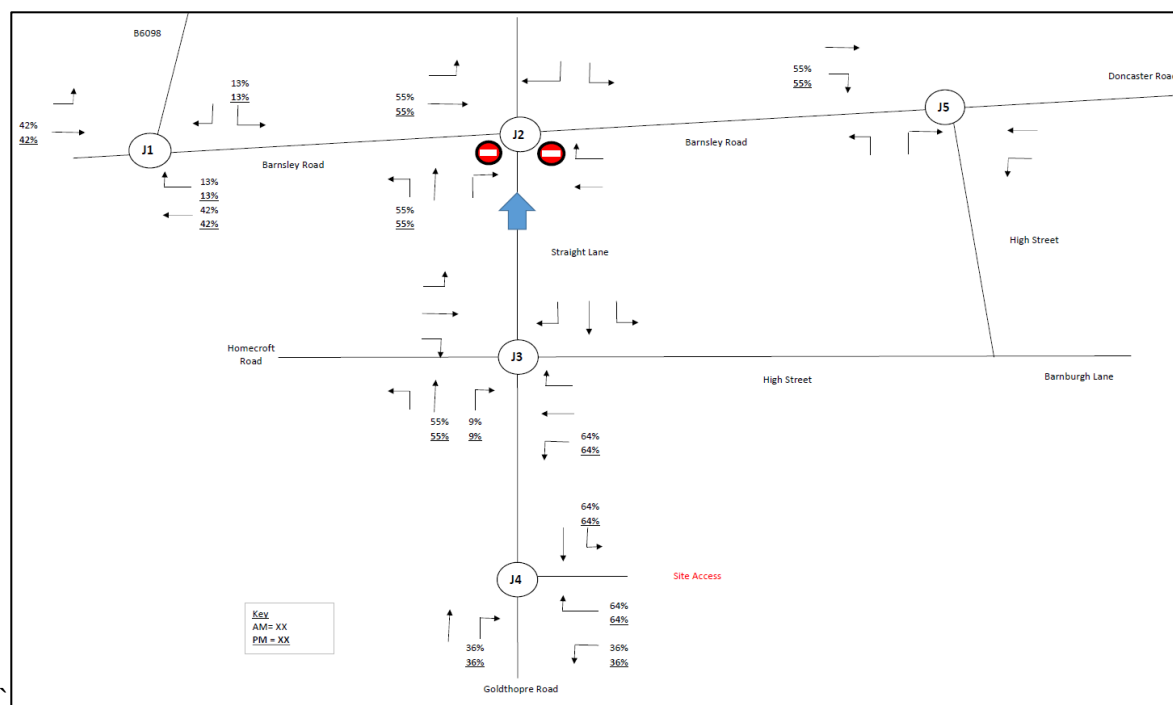


Figure 13. Census Distribution Pattern

- 6.4 The morning and evening peak hour traffic generations were then assigned to the network using the above census distribution model. The resulting peak hour traffic assignments

within the surrounding highway network is shown at **Appendix J**.

Traffic Growth

- 6.5 In accordance with the DfT Guidance on Transport Assessment (2007), for the local transport network, an assessment year should be selected as follows:

“No less than five years after the date of registration of a planning application”.

- 6.6 As agreed with BMBC during the scoping process, growth factors have been extracted from the TEMPro 7.2 database for the ‘Barnsley 022’ area.
- 6.7 As the application is due to be submitted in 2022, the manual classified count undertaken in 2019 has been factored to reflect a baseline year of 2022 and a Design Year of 2027. For the Barnsley Road / Doncaster Road / High Street junction, the 2017 traffic count data extracted from the ‘Former Goldthorpe Colliery’ TA, and therefore a separate 2022 baseline and 2027 growth factors have been applied. A summary of the growth factors are provided below:

2022 Baseline

- 2017 to 2022 AM Peak (07:00 – 09:59) - identified growth factor is 1.0661; and
- 2017 to 2022 PM Peak (16:00 – 18:59) - identified growth factor is 1.0643.
- 2019 to 2022 AM Peak (07:00 – 09:59) - identified growth factor is 1.0351; and
- 2019 to 2022 PM Peak (16:00 – 18:59) - identified growth factor is 1.0343.

2027 Design Year

- 2017 to 2027 AM Peak (07:00 – 09:59) - identified growth factor is 1.1141; and
- 2017 to 2027 PM Peak (16:00 – 18:59) - identified growth factor is 1.1126.
- 2019 to 2027 AM Peak (07:00 – 09:59) - identified growth factor is 1.0818; and
- 2019 to 2027 PM Peak (16:00 – 18:59) - identified growth factor is 1.0813.

- 6.8 In light of the above, the following scenarios will be assessed:

- 2022 Base Year;
- 2027 Base + Committed Development; and
- 2027 Base + Committed Development + Proposed Development.

Committed Developments

- 6.9 A review of the BMBC planning portal confirmed that the below nearby committed development sites would require further assessment as part of this TA. Furthermore as part of the scoping response, no request was made by BMBC for any other sites to be

assessed and therefore the below is deemed to be acceptable:

- Planning Reference 2019/1274 (granted January 2021). Residential development for 116 dwellings. This site is referred to as Goldthorpe Colliery off Kingsmark Way, from which the proposed trip rates have been agreed and extracted as outlined previously.
- Planning Reference 2015/1198 (granted June 2016). Residential development for 61 dwellings. This site is referred to as Phase 2 of Gleeson site off Barnburgh Lane. Based upon the Transport Statement associated with this site, no off-site impact assessment was undertaken and therefore this site has been excluded from any further assessment.
- Planning Reference 2020/1439 (not yet determined). Residential development for 69 dwellings. This site is referred to as Phase 3 of Gleeson site off Barnburgh Lane. Based upon the Transport Assessment associated with this site, no off-site impact assessment was undertaken and therefore this site has been excluded from any further assessment.

6.10 Therefore for the purpose of this assessment, only the traffic generated by the remaining Former Colliery Site (116 dwellings) has been added to the surrounding highway network, based upon the distribution provided within the Kingsmark Way TA. This is shown at **Appendix K**.

Percentage Impact Assessment

6.11 As outlined in the 2019 Scoping Study, in accordance with the DfT Guidance on Transport Assessment (2007), where the proposed development would give rise to an additional 30 two-way trips at any junction on the surrounding highway network, this should be the starting point from which to commence discussions and potentially further capacity analysis would be required. However, typically a threshold of 40 to 60 two-way vehicles is now often used. It is also important to note that in accordance with the most recent guidance contained within Paragraph 111 of the NPPF, development should only be refused where the impact is deemed to be severe.

6.12 In light of the above, it was agreed with BMBC that the following junctions should form part of the study area:

- B6098 Goldthorpe Road / proposed site access;
- B6098 Goldthorpe Road / B6098 High Street / Homecroft Road;
- Straight Lane / Barnsley Road;
- B6098 / Barnsley Road signalised junction; and
- B6098 High Street / Doncaster Road / Barnsley Road.

6.13 As agreed with BMBC in 2019, in the first instance, MCC traffic counts were commissioned

and undertaken at the above locations on Tuesday 12th March 2019 (note for the B6098 High Street / Doncaster Road / Barnsley Road junction traffic count data was already available in the public domain). Where the PM Peak period varied between the above junctions, the worst-case scenario period was assessed.

- 6.14 In accordance with the DfT Guidance on Transport Assessments (2007) document adopted by BMBC, it is considered appropriate to identify the junctions that are significantly impacted by the proposed development in terms of volume of traffic. A significant increase is deemed to be an increase in traffic flows above 5% of the future year assessment. This is considered to be a relevant level to that of daily fluctuations in traffic. This methodology has been accepted by BMBC and **Table 10** over the page summarises this assessment.

Junction	2027 AM Peak (Dev Traffic)	2027 PM Peak (Dev Traffic)	% Impact AM Peak	% Impact PM Peak	Capacity Assessment Required?
Goldthorpe Road / Site Access	879 (52)	825 (55)	5.4%	6.1%	YES
Goldthorpe Road / High Street / Homecroft Road	959 (33)	907 (35)	3.6%	4.0%	NO
Straight Lane / Barnsley Road	830 (29)	828 (30)	3.6%	3.8%	NO
B6098 / Barnsley Road	998 (29)	1045 (30)	3.0%	3.0%	NO
Barnsley Road / Doncaster Road / High Street	829 (8)	956 (20)	0.9%	2.2%	NO

Table 10. 2027 Percentage Impact Assessment

- 6.15 To summarise, the above percentage impact assessment concludes that the following junctions within the study area are deemed to require capacity assessments to be undertaken:

- B6098 Goldthorpe Road / proposed site access

Capacity Analysis

- 6.16 The proposed site access is deemed to require further assessment in terms of operational capacity using the industry standard software packages of Junctions 9. The peak periods of 07:45 to 08:45 and 16:30 to 17:30 have been assessed in accordance with the peak hours identified from the traffic count surveys at this location.
- 6.17 For the assessment of priority junctions the key performance indicator is the Ratio of Flow to Capacity (RFC). A threshold RFC value of 0.85 is usually considered appropriate. Junction arms exhibiting RFC values below 0.85 are considered to be operating 'within

capacity’; whereas junction arms exhibiting RFC values above 0.85 are considered to be operating over capacity’.

- 6.18 The full output files for the PICADY assessment are included at **Appendix K** and summarised in **Table 11** below. Given the site access will not be utilised without the development coming forward, only a worst-case scenario of ‘2027 + committed development + proposed development’ scenario has been assessed.

2027 + Committed Dev + Proposed Dev		Site Access (B-AC)	Goldthorpe Road (C-AB)
AM Peak	RFC	0.11	0.01
	Queue (veh)	0.1	0.0
	Delay (secs)	10.49	5.14
PM Peak	RFC	0.05	0.04
	Queue (veh)	0.1	0.1
	Delay (secs)	9.50	4.91

Table 11. Proposed Site Access / Goldthorpe Road – PICADY Results

- 6.19 The results show that for the 2027 Design Year with the proposed development in place, the maximum RFC reaches 0.11 with a maximum queue of less than 1 vehicle. This demonstrates that the site access would operate well within theoretical capacity and would not significantly impact upon the existing operation of Goldthorpe Road.
- 6.20 In accordance with Paragraph 111 of the NPPF, the proposals are not deemed to have a “severe” impact or given rise to an “*unacceptable impact on highway safety*”.

7.0 SUMMARY AND CONCLUSION

Summary

- 7.1 This Transport Assessment has been prepared by DLP Planning Ltd's Sustainable Development & Delivery Team on behalf of Redmile Homes to support a full planning application for a residential development of 109 dwellings, on land to the east of B6098 Goldthorpe Road in Goldthorpe.
- 7.2 The proposed development is in a highly sustainable location with a range of walking and cycling facilities available from the site to local services. There are bus stops located directly adjacent to the site offering up to 4 services per hour to key destinations such as Goldthorpe centre, Goldthorpe Bus Station, Rotherham Interchange and Barnsley Interchange. The Goldthorpe Railway Station can also be easily accessed from the site and offers services during the AM and PM peak hours to key nearby commuter destinations.
- 7.3 A review of the accident data showed that the recorded accidents do not highlight a common pattern of causation factors that can be attributed to the highway defects of B6098 Goldthorpe Road. It is therefore surmised that there is no sign of any ongoing connected safety concerns that could potentially be exacerbated by the proposed development.
- 7.4 A single vehicular access is provided to serve the site, with an additional two dedicated pedestrian access points. **Drawing Numbers YK6169-2PD-001 and YK6169-2PD-002** demonstrate how a refuse vehicle can satisfactorily manoeuvre into and out of the site access and negotiate the internal layout.
- 7.5 The proposed development would likely generate 52 and 55 two-way trips during both the AM and PM peak hours respectively, which is not considered "severe". The agreed study area where the proposed development could potentially have an impact has been assessed, with only the proposed site access deemed to require further capacity assessment. This assessment has shown that the site access would operate well within theoretical capacity.

Conclusion

- 7.6 In conclusion, having due regard to Paragraphs 110 and 111 of the NPPF, this report has clearly demonstrated that residents would have excellent opportunities to travel by sustainable modes, a safe and suitable access arrangement can be provided, and that the development will not lead to a severe impact on the surrounding highway network. It is therefore considered that given adequate parking has also been provided on site, the proposed development would comply with both national and local planning policy and best practice.
- 7.7 For the above reasons, it is considered that there are no highways or transport related reasons to object to this planning application and it is therefore recommended that the proposal be supported.

APPENDIX A Scoping Note (2019)

Highways Scoping Note

1	I	Project:	YK6169-1M Goldthorpe Road, Goldthorpe	Matrix Transport and Infrastructure Consultants Limited Ground Floor, V1 Velocity, Tenter Street, Sheffield, S1 4BY Tel: 01142 289190
	N	Document type:	Scoping Note	
	T	Intended for:	Barnsley Metropolitan Borough Council	
	R	Date:	March 2019	

DUCTION

- 1.1 This Scoping Note has been prepared by Matrix Transport and Infrastructure Consultants Ltd. (Matrix) on behalf of Redmile Homes in connection with a future full planning application for a residential development of 113 dwellings on land to the east of the B6098 Goldthorpe Road at



e in the Metropolitan Borough of Barnsley, as shown in **Figure 1**.

Figure 1 – Site Location

Source: Openstreetmap.org

Highways Scoping Note

- 1.2 It is understood that the Local Highway Authority has already provided pre-application comments on the internal site layout. At this stage, Matrix have yet to review these comments. However the purpose of this brief Scoping Note is to therefore identify and agree the key scope of works as part of the future Transport Assessment which is required as part of the BMBC Local Validation Checklist and will be submitted as part of the planning application. Following a conversation with Barbara Wilson of BMBC on 26th February 2019, it was advised that Stephen Moss (AECOM acting on behalf of BMBC) would instead provide a response to the scoping note on behalf of BMBC.
- 1.3 In accordance with the Local Validation Checklist, the future Transport Assessment will be prepared in accordance with the Department for Transport (DfT) "Guidance on Transport Assessment" (2007) document. This guidance states that for residential developments over 80 units, a Transport Assessment should be prepared, and that pre-application discussions are held with the Local Highway Authority regarding the local transport network. The Transport Assessment will also adopt the guidance set out in the "South Yorkshire Residential Design Guide" (2011).
- 1.4 In light of the above, it is also noted that a separate Draft Travel Plan will also be produced in conjunction with the Transport Assessment, and this shall be prepared in accordance with the Department for Transport "Good Practice Guidelines: Delivering Travel Plans through the Planning Process" document.

2 SCOPE OF TRANSPORT ASSESSMENT

- 2.1 The proposed principal components of the Transport Assessment will be as follows:

Existing Site

- Existing site description;
- Local highway network;
- Sustainable travel provision; and
- Review of Personal Injury Accident data.

Planning Policy Context

Highways Scoping Note

- Review of current national and local guidance and best practice; and
- Confirmation that having reviewed the local planning portal, the nearby approved developments would potentially require further assessment as follows:
 - Planning Reference 2013/1330 – Phase 1 of Former Goldthorpe Colliery site (granted April 2014). Total 321 dwellings of which the level of build out will be confirmed as part of the Transport Assessment. Traffic associated with the houses already built would be captured by the traffic counts. The Transport Assessment would only therefore assess those units yet to be occupied, as a committed development.
 - Planning Reference 2018/0103 - Phase 2 of Former Goldthorpe Colliery site (granted April 2018). Total 125 dwellings. Site referred to as Kingsmark Way. Once again the Transport Assessment will assess the level of occupation of the site in its entirety, and only assess those units yet to be built / occupied.

Development Proposals

- Review of development details;
- Proposed access strategy, parking provision, servicing arrangement including swept path analysis of site access and internal layout. Confirmation is sought of the refuse vehicle type utilised by BMBC at this stage; and
- Review of facilities / infrastructure to be provided to enable access to sustainable modes of travel.

Traffic Generation, Distribution and Growth

Traffic Generation

- 2.2 In light of the scheme recently consented in April 2018 for 125 dwellings at the Kingsmark Way site (reference: 2018/0103), Matrix have sought to utilise the trip rates provided as part of this Scoping Note (see **Appendix A**). Following initial scoping discussions with Stephen Moss on behalf of BMBC (1st March 2019), it was agreed these are acceptable as follows:

Highways Scoping Note

Table 2.1 – Proposed Residential Development Vehicular Trip Rates						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrival	Departure	Two way	Arrival	Departure	Two way
Vehicle Trip Rate (Per Dwelling)	0.130	0.349	0.479	0.332	0.169	0.501
Vehicle Trips (113 Dwellings)	15	39	54	38	19	57

- 2.3 **Table 2.1** shows that the development is likely to generate 54 and 57 two-way vehicular trips in the AM and PM weekday peak hours respectively.
- 2.4 The 2011 Census ‘Method of Travel to Work’ dataset (QS701EW) was then analysed to calculate the number of vehicle trips likely to be generated by the development. This allows for an accurate representation of how local residents in the vicinity of the proposed site currently travel to work, and applies this travel pattern to the future residents of the development. The ‘work from home’ and ‘not in employment’ categories were removed from the Census dataset as these do not typically generate a weekday peak hour vehicle trip. The dataset results are provided in **Appendix B**.
- 2.5 **Table 2.2** provides a summary of the Census dataset existing modal split for the Barnsley 022 area.

Table 2.2 – Census Method of Travel to Work Modal Split (Area: 022)	
Mode of Travel	% Modal Share
Walk	11.8
Cycle	1.0

Highways Scoping Note

Public Transport	10.3
Motorcycle, Scooter or Moped	0.8
Taxi	0.3
Passenger in a Car	8.9
Driving a Car	66.5
Other Method of Travel to Work	0.4
Total	100%

- 6.1 Based upon the agreed vehicular trip rates and traffic generation figures, the above modal split has been applied to the remaining modes of travel to provide the anticipated trips generated by each mode.

Table 5.2 – Proposed multi Modal Trip Generation		
Mode of Travel	Two-way AM Peak	Two-way PM Peak
On Foot	10	10
Cycle	1	1
Public Transport	8	9
Motorcycle, Scooter or Moped	0	0
Taxi	0	0
Passenger in a Car	7	8
Driving a Car	54	57
Other	0	0
Total	81	86

Distribution

- 2.6 To understand the impact of the proposed development's likely vehicular traffic generation on the local highway network, a Census based distribution model was derived utilising 2011 Census

Highways Scoping Note

‘Location of Usual Residence and Place of Work by Method of Travel to Work’ dataset (WU03EW) for the Barnsley 022 Super Middle Output Area (MSOA).

- 2.7 The proposed development’s likely vehicular trips that were derived from TRICS and the 2011 Census ‘Travel to Work’ (QS701EW) data were then distributed onto the local highway network based on the ‘Location of Usual Residence and Place of Work by Method of Travel to Work’ (WU03EW) dataset. The results are provided in **Appendix C** along with a trip generation diagram illustrating the likely AM peak hour traffic assignment on the local highway network shown at **Appendix D**.
- 2.8 The distribution diagram demonstrates that the majority of traffic would be departing to the north of the site access on Goldthorpe Road towards key nearby destinations such as Barnsley, Rotherham and Doncaster.
- 2.9 The above distribution has been agreed with BMBC on 1st March 2019.

Growth – Future Year Assessment

- 2.10 In accordance with the DfT “Guidance on Transport Assessment” document, for the local transport network, an assessment year should be selected as follows:
- “No less than five years after the date of registration of a planning application.”*
- 2.11 Hence based upon an anticipated date for planning submission in 2019, this would result in a Design Year of 2024, and this will be adopted within the future Transport Assessment.
- 2.12 Suitable growth factors have been extracted from the TEMPro dataset version 7.2 database for the Barnsley 022 Census area are attached in **Appendix E** and are as follows:
- 2019 to 2024 AM Peak (07:00 – 09:59) → identified growth factor is 1.0859; and
 - 2019 to 2024 PM Peak (16:00 – 18:59) → identified growth factor is 1.0853.
- 2.13 As part of the future Transport Assessment, the following scenarios would be assessed:
- 2019 Base Year;

Highways Scoping Note

- 2024 Base + Committed Development; and
- 2024 Base + Committed Development + Proposed Development.

3 OFF-SITE IMPACT

- 3.1 In accordance with the DfT “Guidance on Transport Assessment” document, where the proposed development would give rise to an additional 30 two-way trips at any junction on the surrounding highway network, this should be the starting point from which to commence discussions and potentially further capacity analysis would be required. However typically a threshold of 40 to 60 two-way vehicles is often used more recently. It is also important to note that in accordance with the most recent guidance contained within Paragraph 109 of the NPPF, development should only be refused where the impact is deemed to be *severe*.
- 3.2 In light of this and the trip generation diagram provided, the following junctions are deemed to require further assessment as part of the Transport Assessment:
- Goldthorpe Road / proposed site access;
 - Goldthorpe Road / High Street / Homecroft Road;
 - Straight Lane / Barnsley Road;
 - B6098 / Barnsley Road signalised junction.
- 3.3 As agreed with BMBC on 1st March 2019, As part of the Transport Assessment, traffic counts would be undertaken at the above locations, with capacity assessments then undertaken at the above locations for the 2019 Baseline Year and 2024 Future Year where the impact of the proposed development is greater than 5% of the 2024 background traffic. This is deemed to typically represent daily fluctuations.
- 3.4 Where a junction is deemed to be severely impacted upon, mitigation measures will be identified accordingly.

Highways Scoping Note

APPENDIX A

TRICS Output – Extracted from Former Colliery Site Transport Assessment

Table 5.4 Vehicular Trip Rates using TRICS 7.4.1

Time Period	Total Vehicular Trip Rates (per unit)		
	Arrivals	Departures	Total
AM 08:00 - 09:00	0.130	0.349	0.479
PM 17:00 – 18:00	0.332	0.169	0.501

5.2.5 Table 5.4 shows that the trip rates have decreased in the period since the previous application was approved. This could be due to increased home working, flexible working times or an ageing population which travels outside the peaks. In order to provide a robust assessment of the development impact, the previously approved trips rates will be utilised with the trip generations shown in Tables 5.2 and 5.3.

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

5.3.1 The traffic distribution of the proposed development has been assessed based on local travel patterns contained within the 2011 census data, this information has been obtained from www.nomisweb.co.uk. This data has been updated from the 2001 census data used within the 2014 planning application.

5.3.2 Application of the journey to work data from the census is considered to be an appropriate base for determining the peak hour distribution, on the basis that the majority of residential morning and evening peak hour trips will be journeys to and from work.

5.3.3 The proposed development is located within the Barnsley 022 super output area (SOA).

5.3.4 The travel to work data for all of the residents who travel to work by car has been summarised at Appendix F. The travel to work by car information (raw data) that was originally interrogated included destinations across the United Kingdom i.e. the raw data had multiple destinations that had no recording of trips between Dearne South and that particular destination. Therefore the Spreadsheet has been amended to only include wards in the UK that served as a journey to work destination for residents of Barnsley 022 as recorded in the 2011 Census.

5.3.5 The origins/destinations for the resident population living within the existing super output area have been interrogated in order to establish the geographic distribution of all journey to work by car driver trips.

5.3.6 It is then necessary to assign the distributions to the surrounding local highway network utilising one of the following routes:

- A635 (East);
- B6098 (South);
- A635 (West);
- B6411 Lidget Lane;
- Barrowfield Road; and
- Nicolas Lane.

5.3.7 The assignment process produces the proposed vehicular distributions summarised in Table 5.5. These distributions are to be applied to both the AM and PM peak hour development generated trips.



APPENDIX B LHA Scoping Response (2019)

Goldthorpe Road Scoping Report

Project number
60600537

Client
Barnsley Metropolitan Borough
Council

Subject
Scoping Review

Date
12th March 2019

Prepared by
Samuel Boynton

Introduction

AECOM have been commissioned by Barnsley Metropolitan Borough Council (BMBC) to comment on the scoping of a Transport Assessment relating to a 113 dwelling residential development on Land off Goldthorpe Lane, Goldthorpe. The scoping note, dated March 2019, was prepared by Matrix Transport and Infrastructure Consultants Limited on behalf of Redmile Homes.

The site boundary is shown below and is bound by Existing residential dwellings to the north, greenfield sites to the west, The Dearne Academy to the south and Goldthorpe road to the west.



Figure 1. Site Boundary

Trip Rates

Matrix have based the trip rates for the Goldthorpe road site on a recently consented (April 2018) scheme for 125 private dwellings at a nearby site. The trip rate for this scheme was calculated in 2017 during the development of a Transport Assessment for the site; it is therefore considered to be potentially out of date and should be reviewed.

AECOM calculated trip rates using TRICS version 7.5.4 based on Suburban and Edge of Town surveys during weekday periods. The trip rates calculated by AECOM are given below along with the trip rate calculated by Matrix.

Table 1. Vehicular Trip Rates

	Arrivals	Departures	Two-Way
AM Peak 08:00-09:00 (Matrix)	0.130	0.349	0.479
AM Peak 08:00-09:00 (AECOM)	0.118	0.367	0.485
PM Peak 17:00-18:00 (Matrix)	0.332	0.169	0.510
PM Peak 17:00-18:00 (AECOM)	0.367	0.191	0.558

Source: Matrix / TRICS Version 7.5.4 (Calculation Reference: AUDIT-204609-190228-0236)

The trip rate calculated by AECOM was slightly higher for than the two-way trip rate calculated by Matrix, particularly during the PM peak.

This trip rate was multiplied to give the vehicular trip generations for 113 dwellings and are given as follows.

Trip Generation

Table 2. Vehicular Trip Generation

	Arrivals	Departures	Two-Way
AM Peak 08:00-09:00 (Matrix)	15	39	54
AM Peak 08:00-09:00 (AECOM)	13	41	55
PM Peak 17:00-18:00 (Matrix)	38	19	57
PM Peak 17:00-18:00 (AECOM)	41	22	63

Source: Matrix / TRICS Version 7.5.4 (Calculation Reference: AUDIT-204609-190228-0236)

The results generated by AECOM show a slightly higher two-way traffic generation compared to the results generated by Matrix. The results generated by Matrix show that no more than 57 two-way trips will be generated during a given period compared to 63 two-way trips calculated by AECOM. This is a relatively minor difference of 6 two way vehicular trips which are not expected to have a material impact on the highway network or any traffic impact conclusions.

Therefore in this case AECOM can agree that the trip generations identified are acceptable.

Multimodal Trip Generation

Matrix have made use of the 2011 census journey to work data to establish the modal split for the Barnsley 022 area and AECOM can agree that the data referenced by Matrix is correct. It should be noted that the 10.3% modal split for public transport referenced by Matrix is split between bus (7.07%) and rail (3.2%).

The modal split for the Barnsley 022 area was then used to derive the vehicular trip generations for the remaining modes based on the trip generations for cars outlined in table 2. These are identified as follow for ease of reference:

Table 3. Multimodal Trip Generations

Mode of Travel	Two-way AM Peak	Two-way PM Peak
On foot	10	10
Cycle	1	1
Public Transport	8	9
Motorcycle Scooter or Moped	0	0
Taxi	0	0
Passenger in Car	7	8

Mode of Travel	Two-way AM Peak	Two-way PM Peak
Driving a Car	54	57
Other	0	0
Total	81	86

Source: Matrix

This approach for calculating multimodal trip generations is deemed appropriate by AECOM as it reflects the current travel trends for the Barnsley 022 area. The multimodal trip generations which are outlined above can be agreed by AECOM.

Trip Distribution

Vehicular trip generations have been distributed across the highway network based on Census 2011 data which identifies the usual place of work for people living in the Barnsley 022 MSOA. The traffic generated by the development was distributed onto the highway network using the 30 most common areas of work (MSOA level). A population weighted centroid point was identified and inputted into route planning software to identify possible routes.

We have reviewed the data as given by Matrix and whilst we cannot replicate exactly the results given, any difference is not considered to be material. The distribution as given by Matrix can therefore be agreed in this instance.

Junction Assessment

Considering the trip distribution AECOM consider the scope of junction assessments to be appropriate. Matrix has suggested that the following junctions would be assessed:

- Goldthorpe Road / Proposed site access;
- High Street / Straight Lane / Homecroft Road;
- Straight Lane / Barnsley Road junction, and
- B6098 / Barnsley Road signalised junction.

The junction capacity assessment will require traffic counts to be undertaken on a neutral weekday during the AM and PM peak period. A TEMPRO growth factor should also be applied to traffic generation and observed traffic.

We would also request a sensitivity test at the Barnsley Road signalised junction whereby all traffic uses this junction rather than Straight Lane.

The junction assessment should also consider additional traffic associated with committed developments and developments outlined in BMBC local plan. Matrix have identified two developments which are:

- Phase 1 development at Goldthorpe Colliery (Planning Reference 2013/1330)
- Phase 2 development at Goldthorpe Colliery (Planning Reference 2018/0103)

The traffic generations from these developments should be included in any junction assessments or traffic modelling for future year scenarios.

Growth – Future Year Assessment

Matrix have derived a five year growth factor for a 2024 future year scenario. The growth factors derived from TEMPRO version 7.2 are as follows:

Table 4. Growth Factors

Period	Growth Factor
2019 to 2024 AM Peak (07:00 – 09:59)	1.0859
2019 to 2024 PM Peak (16:00 – 18:59)	1.0853

Source: Matrix (TEMPRO Version 7.2)

AECOM have verified these results for the Barnsley 022 area and therefore the growth factor can be agreed.

Summary

This Technical Note provides a review of a scoping not developed by Matrix Transport and Infrastructure Consultants Limited relating to a 113 dwelling residential development on land off Goldthorpe Road, Goldthorpe. The key issues can be identified as follows:

- The trip rates calculated by AECOM are slightly higher than the trip rate calculated by Matrix, and made use of an older version of TRICS. Although AECOM would not necessarily accept this trip rate when considering the scale of the development and distribution of traffic this is not considered to be an issue in this instance;
- The trip distribution can be agreed in this instance;
- The scope of the junction assessment is deemed appropriate, although a sensitivity test of the Barnsley Road signalsied junction is required; and
- The TEMPRO growth factors identified by Matrix are correct for the Barnsley 022 MSOA.

APPENDIX C Highway Boundary Data

APPENDIX D MCC Traffic Survey Data Results

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (1) B6098 / Barnsley Road

Approach: B6098

TIME	Left to Barnsley Road (East)								Right to Barnsley Road (West)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	5	0	0	1	1	7	0	0	6	2	0	0	0	8
0715 - 0730	0	0	13	2	0	0	0	15	0	0	8	3	0	1	0	12
0730 - 0745	0	0	5	1	0	3	1	10	0	0	111	0	2	1	0	114
0745 - 0800	0	0	18	5	0	0	0	23	0	0	10	3	0	0	0	13
Hourly Total	0	0	41	8	0	4	2	55	0	0	135	8	2	2	0	147
0800 - 0815	0	0	31	0	0	0	1	32	0	0	8	3	0	0	0	11
0815 - 0830	0	0	24	1	0	1	0	26	0	0	8	2	0	1	0	11
0830 - 0845	0	0	20	5	0	0	0	25	0	0	12	5	0	0	0	17
0845 - 0900	0	0	16	4	0	0	1	21	0	0	13	1	0	1	0	15
Hourly Total	0	0	91	10	0	1	2	104	0	0	41	11	0	2	0	54
0900 - 0915	0	0	16	1	0	1	1	19	0	0	9	2	0	0	0	11
0915 - 0930	0	0	11	0	0	0	0	11	0	0	5	2	2	0	0	9
0930 - 0945	0	0	14	0	0	0	1	15	0	0	9	1	0	0	0	10
0945 - 1000	0	0	15	4	0	0	0	19	0	0	8	3	0	2	1	14
Hourly Total	0	0	56	5	0	1	2	64	0	0	31	8	2	2	1	44

Session Total	0	0	188	23	0	6	6	223	0	0	207	27	4	6	1	245
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1600 - 1615	0	0	17	1	0	0	0	18	0	0	20	7	0	0	0	27
1615 - 1630	0	0	24	5	0	0	1	30	1	0	21	5	0	0	0	27
1630 - 1645	0	0	24	3	0	0	0	27	0	0	17	6	0	1	0	24
1645 - 1700	0	0	15	2	0	0	1	18	0	0	17	4	0	0	0	21
Hourly Total	0	0	80	11	0	0	2	93	1	0	75	22	0	1	0	99
1700 - 1715	0	0	36	2	0	0	0	38	0	0	33	6	0	0	0	39
1715 - 1730	0	1	20	0	0	0	0	21	0	0	27	8	0	1	1	37
1730 - 1745	0	0	16	1	0	0	1	18	0	0	23	1	0	0	0	24
1745 - 1800	0	0	13	2	0	0	1	16	0	0	30	9	0	1	0	40
Hourly Total	0	1	85	5	0	0	2	93	0	0	113	24	0	2	1	140
1800 - 1815	0	0	16	2	0	0	0	18	0	0	26	2	0	0	0	28
1815 - 1830	0	0	7	3	0	0	1	11	0	0	17	1	0	0	0	18
1830 - 1845	0	0	11	4	0	0	1	16	0	0	10	0	0	0	0	10
1845 - 1900	0	0	5	0	0	0	0	5	0	0	8	4	0	0	0	12
Hourly Total	0	0	39	9	0	0	2	50	0	0	61	7	0	0	0	68

Session Total	0	1	204	25	0	0	6	236	1	0	249	53	0	3	1	307
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Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (1) B6098 / Barnsley Road

Approach: Barnsley Road (East)

TIME	W/B to Barnsley Road (West)								Right to B6098							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	1	32	6	0	1	3	43	0	1	14	4	0	0	1	20
0715 - 0730	0	0	42	5	0	0	1	48	0	0	14	1	0	0	0	15
0730 - 0745	0	0	43	5	0	0	1	49	0	0	20	4	0	1	1	26
0745 - 0800	1	0	8	8	0	1	0	18	0	0	25	3	0	0	0	28
Hourly Total	1	1	125	24	0	2	5	158	0	1	73	12	0	1	2	89
0800 - 0815	0	1	53	4	1	0	3	62	1	0	19	2	0	0	0	22
0815 - 0830	0	0	46	3	0	0	0	49	1	0	14	1	0	1	1	18
0830 - 0845	0	0	56	7	0	0	2	65	0	0	13	3	0	0	0	16
0845 - 0900	0	0	55	9	0	0	1	65	0	0	18	2	0	1	1	22
Hourly Total	0	1	210	23	1	0	6	241	2	0	64	8	0	2	2	78
0900 - 0915	0	0	43	6	0	1	2	52	0	0	13	2	0	0	0	15
0915 - 0930	0	0	47	3	0	2	1	53	0	0	21	2	0	1	1	25
0930 - 0945	0	0	41	10	0	0	2	53	0	0	13	2	0	1	0	16
0945 - 1000	0	0	49	6	1	0	1	57	0	0	16	1	0	1	1	19
Hourly Total	0	0	180	25	1	3	6	215	0	0	63	7	0	3	2	75

Session Total	1	2	515	72	2	5	17	614	2	1	200	27	0	6	6	242
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1600 - 1615	0	0	65	12	0	1	3	81	0	0	19	6	0	2	0	27
1615 - 1630	1	1	68	6	0	1	1	78	0	0	19	1	0	1	0	21
1630 - 1645	0	0	48	10	0	0	2	60	0	0	19	1	0	0	1	21
1645 - 1700	0	0	63	13	0	0	1	77	0	0	21	7	0	1	0	29
Hourly Total	1	1	244	41	0	2	7	296	0	0	78	15	0	4	1	98
1700 - 1715	0	0	62	6	0	0	2	70	0	0	18	1	0	1	1	21
1715 - 1730	0	0	68	5	0	0	0	73	0	0	20	0	0	0	0	20
1730 - 1745	0	2	57	5	1	0	3	68	0	0	23	4	0	0	1	28
1745 - 1800	0	1	48	5	0	0	0	54	0	0	16	2	0	0	0	18
Hourly Total	0	3	235	21	1	0	5	265	0	0	77	7	0	1	2	87
1800 - 1815	0	0	66	4	0	0	3	73	0	0	14	1	0	0	1	16
1815 - 1830	0	1	58	8	0	0	0	67	0	0	16	3	0	0	0	19
1830 - 1845	0	0	64	5	0	0	3	72	0	0	15	3	0	0	1	19
1845 - 1900	0	0	45	5	0	0	0	50	0	0	5	0	0	0	0	5
Hourly Total	0	1	233	22	0	0	6	262	0	0	50	7	0	0	2	59

Session Total	1	5	712	84	1	2	18	823	0	0	205	29	0	5	5	244
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Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (1) B6098 / Barnsley Road

Approach: Barnsley Road (West)

TIME	Left to B6098								E/B to Barnsley Road (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	20	10	0	0	0	30	0	1	31	4	0	0	3	39
0715 - 0730	0	0	20	3	0	0	0	23	0	0	28	6	0	2	1	37
0730 - 0745	0	0	18	10	0	0	0	28	0	0	50	5	0	0	3	58
0745 - 0800	0	0	19	5	0	1	0	25	0	0	56	3	0	1	1	61
Hourly Total	0	0	77	28	0	1	0	106	0	1	165	18	0	3	8	195
0800 - 0815	0	0	17	5	0	0	0	22	0	0	71	8	0	3	2	84
0815 - 0830	0	0	21	5	0	0	0	26	0	0	71	7	0	1	1	80
0830 - 0845	0	0	24	4	0	0	0	28	0	0	48	10	0	0	3	61
0845 - 0900	0	0	23	1	0	0	1	25	0	0	70	6	0	1	1	78
Hourly Total	0	0	85	15	0	0	1	101	0	0	260	31	0	5	7	303
0900 - 0915	0	0	19	2	0	0	0	21	0	0	68	10	0	1	2	81
0915 - 0930	0	0	13	5	0	2	0	20	0	0	48	5	0	1	1	55
0930 - 0945	0	0	9	6	0	1	0	16	0	1	36	3	0	0	2	42
0945 - 1000	0	0	9	2	0	2	0	13	0	0	34	3	1	1	1	40
Hourly Total	0	0	50	15	0	5	0	70	0	1	186	21	1	3	6	218

Session Total	0	0	212	58	0	6	1	277	0	2	611	70	1	11	21	716
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1600 - 1615	0	0	15	3	0	1	0	19	0	0	57	6	0	0	2	65
1615 - 1630	0	0	9	1	0	0	1	11	0	0	47	6	0	1	1	55
1630 - 1645	0	0	13	1	0	0	0	14	0	0	42	10	0	0	2	54
1645 - 1700	0	1	13	3	0	0	0	17	0	0	56	5	0	1	1	63
Hourly Total	0	1	50	8	0	1	1	61	0	0	202	27	0	2	6	237
1700 - 1715	0	0	15	0	0	0	0	15	0	0	59	4	0	0	2	65
1715 - 1730	0	0	20	3	0	0	0	23	1	0	58	6	0	0	1	66
1730 - 1745	0	0	23	1	0	0	0	24	0	0	59	2	0	0	2	63
1745 - 1800	0	0	11	3	0	0	0	14	1	0	57	7	0	0	2	67
Hourly Total	0	0	69	7	0	0	0	76	2	0	233	19	0	0	7	261
1800 - 1815	0	0	10	4	0	0	0	14	0	0	50	3	0	0	2	55
1815 - 1830	0	0	10	3	0	0	0	13	0	0	47	6	0	0	1	54
1830 - 1845	0	0	11	0	0	0	0	11	0	0	43	2	0	0	0	45
1845 - 1900	0	0	6	1	0	0	0	7	0	0	36	3	0	0	1	40
Hourly Total	0	0	37	8	0	0	0	45	0	0	176	14	0	0	4	194

Session Total	0	1	156	23	0	1	1	182	2	0	611	60	0	2	17	692
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[illegible]

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (2) Gosling Gate Road / Barnsley Road / Straight Lane

Approach: Barnsley Road (East)

TIME	Left to Straight Lane								W/B to Barnsley Road (West)								Right to Gosling Gate Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	1	44	11	0	1	4	61	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	1	56	6	0	0	1	64	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	60	8	0	1	2	71	0	0	1	0	0	0	0	1
0745 - 0800	0	0	0	0	0	0	0	0	1	0	33	11	0	1	0	46	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	1	2	193	36	0	3	7	242	0	0	1	0	0	0	0	1
0800 - 0815	0	0	0	0	0	0	0	0	1	1	72	6	1	0	3	84	0	0	3	0	0	0	0	3
0815 - 0830	0	0	0	0	0	0	0	0	1	0	61	5	0	0	2	69	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	66	11	0	1	2	80	0	0	2	0	0	0	0	2
0845 - 0900	0	0	0	0	0	0	0	0	0	0	75	10	0	1	2	88	0	0	2	0	0	0	0	2
Hourly Total	0	0	0	0	0	0	0	0	2	1	274	32	1	2	9	321	0	0	7	0	0	0	0	7
0900 - 0915	0	0	0	0	0	0	0	0	0	0	55	8	0	1	1	65	0	0	3	0	0	0	0	3
0915 - 0930	0	0	1	0	0	0	0	1	0	0	66	5	0	2	3	76	0	0	2	0	0	0	0	2
0930 - 0945	0	0	0	0	0	0	0	0	0	0	54	11	0	2	1	68	0	0	5	0	0	0	0	5
0945 - 1000	0	0	0	0	0	0	0	0	0	0	63	7	1	1	2	74	0	0	2	0	0	0	0	2
Hourly Total	0	0	1	0	0	0	0	1	0	0	238	31	1	6	7	283	0	0	12	0	0	0	0	12
Session Total	0	0	1	0	0	0	0	1	3	3	705	99	2	11	23	846	0	0	20	0	0	0	0	20
1600 - 1615	0	0	0	0	0	0	0	0	0	0	86	17	0	3	3	109	0	0	4	0	0	0	0	4
1615 - 1630	0	0	0	0	0	0	0	0	1	1	85	9	0	1	1	98	0	0	7	0	0	0	0	7
1630 - 1645	0	0	0	1	0	0	0	1	0	0	69	11	0	1	2	83	0	0	4	0	0	0	0	4
1645 - 1700	0	0	0	0	0	0	0	0	0	0	83	18	0	1	1	103	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	1	0	0	0	1	1	1	323	55	0	6	7	393	0	0	16	0	0	0	0	16
1700 - 1715	0	0	0	0	0	0	0	0	0	0	80	8	0	1	3	92	0	0	4	0	0	0	0	4
1715 - 1730	0	0	1	0	0	0	0	1	0	0	85	6	0	0	1	92	0	0	2	0	0	0	0	2
1730 - 1745	0	0	1	0	0	0	0	1	0	1	77	8	1	0	4	91	0	0	2	0	0	0	0	2
1745 - 1800	0	0	0	0	0	0	0	0	0	1	65	7	0	0	0	73	0	0	3	0	0	0	0	3
Hourly Total	0	0	2	0	0	0	0	2	0	2	307	29	1	1	8	348	0	0	11	0	0	0	0	11
1800 - 1815	0	0	0	0	0	0	0	0	0	1	81	6	0	0	3	91	0	0	0	0	0	0	0	0
1815 - 1830	0	0	0	0	0	0	0	0	0	1	76	11	0	0	1	89	0	0	1	0	0	0	0	1
1830 - 1845	0	0	0	0	0	0	0	0	0	0	77	7	0	0	4	88	0	0	1	0	0	0	0	1
1845 - 1900	0	0	0	0	0	0	0	0	0	0	51	6	0	0	0	57	0	0	2	0	0	0	0	2
Hourly Total	0	0	0	0	0	0	0	0	0	2	285	30	0	0	8	325	0	0	4	0	0	0	0	4
Session Total	0	0	2	1	0	0	0	3	1	5	915	114	1	7	23	1066	0	0	31	0	0	0	0	31

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (2) Gosling Gate Road / Barnsley Road / Straight Lane

Approach: Straight Lane (One-Way Northbound)

TIME	Left to Barnsley Road (West)								N/B to Gosling Gate Road								Right to Barnsley Road (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hourly Total	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
0800 - 0815	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
0830 - 0845	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
0900 - 0915	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0930 - 0945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0945 - 1000	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Session Total	0	0	7	0	0	0	0	7	0	0	2	0	0	0	0	2	0	0	5	0	0	0	0	5
1600 - 1615	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1730 - 1745	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1815 - 1830	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1830 - 1845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1845 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Session Total	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0

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Produced by Road Data Services Ltd

Junction: (2) Gosling Gate Road / Barnsley Road / Straight Lane

Approach: Barnsley Road (West)

TIME	Left to Gosling Gate Road								E/B to Barnsley Road (East)								Right to Straight Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	1	0	0	0	1	0	1	36	3	0	1	4	45	0	0	0	0	0	0	0	0
0715 - 0730	0	0	1	0	0	0	0	1	0	0	38	7	0	2	1	48	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	56	7	0	2	3	68	0	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0	0	0	0	73	8	0	2	2	85	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	2	0	1	203	25	0	7	10	246	0	0	0	0	0	0	0	0
0800 - 0815	0	0	2	0	0	0	0	2	0	0	101	8	0	3	3	115	0	0	0	0	0	0	0	0
0815 - 0830	0	0	3	0	0	0	0	3	0	0	92	9	0	2	1	104	0	0	0	0	0	0	0	0
0830 - 0845	0	0	5	1	0	0	0	6	0	0	63	14	0	0	3	80	0	0	0	0	0	0	0	0
0845 - 0900	0	0	1	1	0	0	0	2	0	0	82	9	0	1	2	94	0	0	1	0	0	0	0	1
Hourly Total	0	0	11	2	0	0	0	13	0	0	338	40	0	6	9	393	0	0	1	0	0	0	0	1
0900 - 0915	0	0	2	0	0	0	0	2	0	0	83	10	0	2	3	98	0	0	0	0	0	0	0	0
0915 - 0930	0	0	1	0	0	0	0	1	0	0	57	5	0	1	1	64	0	0	0	0	0	0	0	0
0930 - 0945	0	0	3	1	0	0	0	4	0	1	47	3	0	0	3	54	0	0	1	0	0	0	0	1
0945 - 1000	0	0	4	0	0	0	0	4	0	0	45	7	1	1	1	55	0	0	0	0	0	0	0	0
Hourly Total	0	0	10	1	0	0	0	11	0	1	232	25	1	4	8	271	0	0	1	0	0	0	0	1
Session Total	0	0	22	4	0	0	0	26	0	2	773	90	1	17	27	910	0	0	2	0	0	0	0	2
1600 - 1615	0	0	0	0	0	0	0	0	0	0	75	7	0	0	2	84	0	0	0	0	0	0	0	0
1615 - 1630	0	0	3	1	0	0	0	4	0	0	66	11	0	1	2	80	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	68	12	0	0	2	82	0	0	0	0	0	0	0	0
1645 - 1700	0	0	2	0	0	0	0	2	0	0	67	7	0	1	1	76	0	0	1	0	0	0	0	1
Hourly Total	0	0	5	1	0	0	0	6	0	0	276	37	0	2	7	322	0	0	1	0	0	0	0	1
1700 - 1715	0	0	3	1	0	0	0	4	0	0	91	5	0	0	3	99	0	0	0	0	0	0	0	0
1715 - 1730	0	0	3	0	0	0	0	3	1	1	75	5	0	0	1	83	0	0	0	0	0	0	0	0
1730 - 1745	0	0	0	0	0	0	0	0	0	0	74	5	0	0	2	81	0	0	1	0	0	0	0	1
1745 - 1800	0	0	4	0	0	0	0	4	1	0	63	8	0	0	3	75	0	0	1	0	0	0	0	1
Hourly Total	0	0	10	1	0	0	0	11	2	1	303	23	0	0	9	338	0	0	2	0	0	0	0	2
1800 - 1815	0	0	2	0	0	0	0	2	0	0	64	6	0	0	3	73	0	0	0	0	0	0	0	0
1815 - 1830	0	0	1	0	0	0	0	1	0	0	53	8	0	0	1	62	0	0	1	0	0	0	0	1
1830 - 1845	0	0	2	1	0	0	0	3	0	0	51	5	0	0	1	57	0	0	0	0	0	0	0	0
1845 - 1900	0	0	1	0	0	0	0	1	0	0	41	3	0	0	2	46	0	0	1	0	0	0	0	1
Hourly Total	0	0	6	1	0	0	0	7	0	0	209	22	0	0	7	238	0	0	2	0	0	0	0	2
Session Total	0	0	21	3	0	0	0	24	2	1	788	82	0	2	23	898	0	0	5	0	0	0	0	5

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Produced by Road Data Services Ltd

Junction: (3) Straight Lane / High Street / Goldthorpe Road / Homecroft Road

Approach: Straight Lane (One-Way Northbound)

	Left to High Street								S/B to Goldthorpe Road								Right to Homecroft Road							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
0715 - 0730	0	1	1	3	0	0	0	5	0	0	3	3	0	0	0	6	0	0	0	0	0	0	0	0
0730 - 0745	0	0	3	0	0	0	0	3	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
0745 - 0800	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	10	4	0	0	0	15	0	0	7	4	0	0	0	11	0	0	0	0	0	0	0	0
0800 - 0815	0	0	3	1	0	0	0	4	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
0815 - 0830	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	2	1	0	0	0	3	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
0845 - 0900	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	0	0	8	2	0	0	0	10	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0
0900 - 0915	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
0915 - 0930	0	0	4	0	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
0930 - 0945	0	0	4	2	0	0	0	6	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
0945 - 1000	0	0	6	2	0	0	0	8	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	0	17	4	0	0	0	21	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0
Session Total	0	1	35	10	0	0	0	46	0	0	24	6	0	0	0	30	0	0	0	0	0	0	0	0
1600 - 1615	0	0	3	1	0	0	0	4	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
1615 - 1630	0	0	6	0	0	0	0	6	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1630 - 1645	0	0	3	2	0	0	0	5	0	0	2	1	0	0	0	3	0	0	1	0	0	0	0	1
1645 - 1700	0	0	5	3	0	0	0	8	0	1	2	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	0	17	6	0	0	0	23	0	1	10	1	0	0	0	12	0	0	1	0	0	0	0	1
1700 - 1715	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
1715 - 1730	0	0	5	0	0	0	0	5	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
1730 - 1745	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
1745 - 1800	0	0	1	0	0	0	0	1	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	0	0	10	0	0	0	0	10	0	0	19	2	0	0	0	21	0	0	1	0	0	0	0	1
1800 - 1815	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2	1	0	0	1	0	0	0	2
1815 - 1830	0	0	3	0	0	0	0	3	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
1830 - 1845	0	0	5	1	0	0	0	6	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
1845 - 1900	0	0	3	0	0	0	0	3	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	0	13	2	0	0	0	15	0	0	11	1	0	0	0	12	1	0	1	1	0	0	0	3
Session Total	0	0	40	8	0	0	0	48	0	1	40	4	0	0	0	45	1	0	3	1	0	0	0	5

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Produced by Road Data Services Ltd

Junction: (3) Straight Lane / High Street / Goldthorpe Road / Homecroft Road

Approach: High Street

TIME	Left to Goldthorpe Road								W/B to Homecroft Road								Right to Straight Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	15	3	0	0	0	18	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
0715 - 0730	0	0	34	3	0	0	2	39	0	0	0	1	0	0	0	1	0	0	2	1	0	0	0	3
0730 - 0745	0	0	61	3	0	0	1	65	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	2
0745 - 0800	0	0	77	9	0	3	3	92	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5
Hourly Total	0	0	187	18	0	3	6	214	0	0	0	2	0	0	0	2	0	0	8	4	0	0	0	12
0800 - 0815	0	0	108	4	0	2	0	114	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5
0815 - 0830	0	0	124	10	0	3	2	139	0	0	0	1	0	0	0	1	0	0	6	0	0	0	0	6
0830 - 0845	0	0	90	11	0	1	0	102	0	0	2	1	0	0	0	3	0	0	3	0	0	0	0	3
0845 - 0900	0	0	61	7	0	1	3	72	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4
Hourly Total	0	0	383	32	0	7	5	427	0	0	4	2	0	0	0	6	0	0	16	2	0	0	0	18
0900 - 0915	0	0	45	4	0	1	0	50	0	0	3	0	0	0	0	3	0	0	1	1	1	0	0	3
0915 - 0930	0	0	54	11	0	1	2	68	0	0	1	0	0	0	0	1	0	0	5	1	0	0	0	6
0930 - 0945	0	0	43	6	0	1	0	50	0	0	2	0	0	0	0	2	0	0	2	2	0	0	0	4
0945 - 1000	1	0	30	12	0	1	2	46	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Hourly Total	1	0	172	33	0	4	4	214	0	0	6	0	0	0	0	6	0	0	11	4	1	0	0	16
Session Total	1	0	742	83	0	14	15	855	0	0	10	4	0	0	0	14	0	0	35	10	1	0	0	46
1600 - 1615	0	0	71	7	0	0	1	79	0	0	1	0	0	0	0	1	0	0	4	1	0	0	0	5
1615 - 1630	0	0	62	15	0	1	1	79	0	0	2	1	0	0	0	3	1	0	2	0	0	0	0	3
1630 - 1645	0	0	71	11	0	0	1	83	0	0	2	0	0	0	0	2	0	0	2	2	0	0	0	4
1645 - 1700	0	0	67	5	0	0	1	73	0	0	2	0	0	0	0	2	0	0	5	2	0	0	0	7
Hourly Total	0	0	271	38	0	1	4	314	0	0	7	1	0	0	0	8	1	0	13	5	0	0	0	19
1700 - 1715	0	1	82	14	0	0	1	98	0	0	1	0	0	0	0	1	0	0	8	1	0	0	0	9
1715 - 1730	0	0	75	16	0	0	1	92	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4
1730 - 1745	0	0	79	8	0	0	1	88	0	0	2	1	0	0	0	3	0	1	6	0	0	0	0	7
1745 - 1800	0	0	58	3	0	0	0	61	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1
Hourly Total	0	1	294	41	0	0	3	339	0	0	10	1	0	0	0	11	0	1	18	2	0	0	0	21
1800 - 1815	0	0	69	5	0	0	2	76	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
1815 - 1830	0	0	50	9	0	0	1	60	0	0	5	0	0	0	0	5	0	0	2	1	0	0	0	3
1830 - 1845	0	0	52	5	0	1	1	59	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
1845 - 1900	0	0	38	2	0	0	1	41	0	0	2	0	0	0	0	2	0	0	2	1	0	0	0	3
Hourly Total	0	0	209	21	0	1	5	236	0	0	11	0	0	0	0	11	0	0	9	2	0	0	0	11
Session Total	0	1	774	100	0	2	12	889	0	0	28	2	0	0	0	30	1	1	40	9	0	0	0	51

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (3) Straight Lane / High Street / Goldthorpe Road / Homecroft Road

Approach: Goldthorpe Road

TIME	Left to Homecroft Road								N/B to Straight Lane								Right to High Street							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	0	0	24	8	0	0	2	34
0715 - 0730	0	0	1	0	0	0	0	1	0	0	4	4	0	0	0	8	0	0	23	2	0	0	0	25
0730 - 0745	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	0	0	36	9	0	1	2	48
0745 - 0800	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	0	0	37	6	0	2	0	45
Hourly Total	0	0	1	0	0	0	0	1	0	0	22	8	0	0	0	30	0	0	120	25	0	3	4	152
0800 - 0815	0	0	0	0	0	0	0	0	0	1	11	3	0	0	0	15	0	0	72	7	0	1	2	82
0815 - 0830	0	0	2	0	0	0	0	2	0	0	10	2	0	0	0	12	0	0	66	13	0	3	0	82
0830 - 0845	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	0	0	65	11	0	0	1	77
0845 - 0900	0	0	2	0	0	0	0	2	0	0	8	1	0	0	0	9	0	0	33	4	0	0	1	38
Hourly Total	0	0	4	0	0	0	0	4	0	1	45	8	0	0	0	54	0	0	236	35	0	4	4	279
0900 - 0915	0	0	5	0	0	0	0	5	0	0	10	1	0	0	0	11	0	0	33	13	0	1	1	48
0915 - 0930	0	0	3	0	0	0	0	3	1	0	15	1	0	0	0	17	0	0	40	4	0	2	1	47
0930 - 0945	0	0	3	0	0	0	0	3	0	0	15	0	0	0	0	15	0	0	29	6	0	3	1	39
0945 - 1000	0	0	1	0	0	0	0	1	0	0	9	1	0	0	0	10	0	0	31	4	0	2	1	38
Hourly Total	0	0	12	0	0	0	0	12	1	0	49	3	0	0	0	53	0	0	133	27	0	8	4	172
Session Total	0	0	17	0	0	0	0	17	1	1	116	19	0	0	0	137	0	0	489	87	0	15	12	603
1600 - 1615	0	0	3	0	0	0	0	3	0	0	4	1	0	0	0	5	0	0	56	11	0	4	2	73
1615 - 1630	0	0	5	0	0	0	0	5	0	0	8	1	0	0	0	9	0	1	73	5	0	0	0	79
1630 - 1645	0	0	5	1	0	0	0	6	0	0	5	1	0	0	0	6	0	0	64	5	0	0	1	70
1645 - 1700	0	0	5	0	0	0	0	5	0	0	8	2	0	0	0	10	0	0	66	11	0	1	1	79
Hourly Total	0	0	18	1	0	0	0	19	0	0	25	5	0	0	0	30	0	1	259	32	0	5	4	301
1700 - 1715	0	0	2	1	0	0	0	3	0	0	6	1	0	0	0	7	0	0	69	8	0	0	2	79
1715 - 1730	0	0	7	0	0	0	0	7	0	0	8	1	0	0	0	9	0	0	84	8	0	0	0	92
1730 - 1745	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	2	0	1	50	8	0	0	2	61
1745 - 1800	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4	0	0	61	3	0	0	0	64
Hourly Total	0	0	12	1	0	0	0	13	0	0	18	4	0	0	0	22	0	1	264	27	0	0	4	296
1800 - 1815	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3	0	0	66	3	0	0	2	71
1815 - 1830	0	0	2	0	0	0	0	2	0	0	9	0	0	0	0	9	0	0	65	2	0	0	0	67
1830 - 1845	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	0	0	55	4	0	0	0	59
1845 - 1900	0	0	1	0	0	0	0	1	0	0	7	1	0	0	0	8	1	0	41	2	0	0	0	44
Hourly Total	0	0	5	0	0	0	0	5	0	0	28	3	0	0	0	31	1	0	227	11	0	0	2	241
Session Total	0	0	35	2	0	0	0	37	0	0	71	12	0	0	0	83	1	2	750	70	0	5	10	838

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (3) Straight Lane / High Street / Goldthorpe Road / Homecroft Road

Approach: Homecroft Road

TIME	Left to Straight Lane								E/B to High Street								Right to Goldthorpe Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	1	0	0	0	0	1
0715 - 0730	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	1	0	0	0	0	1
0730 - 0745	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	2	0	0	0	0	2
0745 - 0800	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	0	0	8	5	0	0	0	13	0	0	5	0	0	0	0	5
0800 - 0815	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
0815 - 0830	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	0	0	1	1	0	0	0	2
0845 - 0900	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1
Hourly Total	0	0	1	0	0	0	0	1	0	0	15	1	0	0	0	16	0	0	5	1	0	0	0	6
0900 - 0915	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
0915 - 0930	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0930 - 0945	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0945 - 1000	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1
Hourly Total	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2	0	0	2	1	0	0	0	3
Session Total	0	0	3	0	0	0	0	3	0	0	25	6	0	0	0	31	0	0	12	2	0	0	0	14
1600 - 1615	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	1	1	0	0	0	2
1615 - 1630	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
1630 - 1645	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	1	1	0	0	0	2
1645 - 1700	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
Hourly Total	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	0	0	6	2	0	0	0	8
1700 - 1715	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
1715 - 1730	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
1730 - 1745	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
1745 - 1800	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	1	0	0	0	0	2	0	0	7	1	0	0	0	8	0	0	1	0	0	0	0	1
1800 - 1815	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
1815 - 1830	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1830 - 1845	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
1845 - 1900	0	0	0	1	0	0	0	1	0	0	4	0	0	0	0	4	0	0	0	1	0	0	0	1
Hourly Total	0	0	0	1	0	0	0	1	0	0	12	0	0	0	0	12	0	0	2	1	0	0	0	3
Session Total	1	0	1	1	0	0	0	3	0	0	30	2	0	0	0	32	0	0	9	3	0	0	0	12

Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (4) B6098 / Washington Road

Approach: B6098 (North)

TIME	S/B to B6098 (South)								Right to Washington Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	17	2	0	0	2	21	0	0	1	0	0	0	0	1
0715 - 0730	0	0	41	5	0	0	0	46	0	0	0	1	0	0	0	1
0730 - 0745	1	0	65	5	0	2	3	76	0	0	1	0	0	0	0	1
0745 - 0800	0	0	81	8	0	1	1	91	0	0	0	0	0	0	0	0
Hourly Total	1	0	204	20	0	3	6	234	0	0	2	1	0	0	0	3
0800 - 0815	0	0	115	4	0	2	2	123	0	0	2	0	0	0	0	2
0815 - 0830	0	0	123	8	0	3	0	134	0	0	0	1	0	0	0	1
0830 - 0845	0	0	88	11	0	0	2	101	0	0	6	0	0	0	0	6
0845 - 0900	0	0	60	10	0	2	1	73	0	0	4	0	0	0	0	4
Hourly Total	0	0	386	33	0	7	5	431	0	0	12	1	0	0	0	13
0900 - 0915	0	0	50	4	0	1	0	55	0	0	1	0	0	0	0	1
0915 - 0930	0	0	51	11	0	1	2	65	0	0	1	0	0	0	0	1
0930 - 0945	0	0	41	10	0	1	0	52	0	0	1	0	0	0	0	1
0945 - 1000	1	0	40	9	0	1	2	53	0	0	0	1	0	0	0	1
Hourly Total	1	0	182	34	0	4	4	225	0	0	3	1	0	0	0	4

Session Total	2	0	772	87	0	14	15	890	0	0	17	3	0	0	0	20
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1600 - 1615	0	1	71	9	0	0	1	82	0	0	3	0	0	0	0	3
1615 - 1630	0	0	68	11	0	1	1	81	0	0	2	2	0	0	0	4
1630 - 1645	0	0	71	9	0	0	0	80	0	0	3	0	0	0	0	3
1645 - 1700	0	0	74	7	0	0	2	83	0	1	3	0	0	0	0	4
Hourly Total	0	1	284	36	0	1	4	326	0	1	11	2	0	0	0	14
1700 - 1715	0	0	77	10	0	0	0	87	0	0	9	3	0	0	0	12
1715 - 1730	0	0	74	17	0	0	2	93	0	0	6	0	0	0	0	6
1730 - 1745	0	0	82	4	0	0	0	86	0	0	3	1	0	0	0	4
1745 - 1800	0	0	61	6	0	0	1	68	0	0	4	1	0	0	0	5
Hourly Total	0	0	294	37	0	0	3	334	0	0	22	5	0	0	0	27
1800 - 1815	0	0	71	8	0	0	1	80	0	0	2	2	0	0	0	4
1815 - 1830	0	0	55	8	0	0	1	64	0	0	2	0	0	0	0	2
1830 - 1845	0	0	53	3	0	1	1	58	0	0	1	0	0	0	0	1
1845 - 1900	0	0	38	6	0	0	2	46	0	0	3	0	0	0	0	3
Hourly Total	0	0	217	25	0	1	5	248	0	0	8	2	0	0	0	10

Session Total	0	1	795	98	0	2	12	908	0	1	41	9	0	0	0	51
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Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (4) B6098 / Washington Road

Approach: B6098 (South)

TIME	Left to Washington Road								N/B to B6098 (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0	24	7	0	0	1	32
0715 - 0730	0	0	2	0	0	0	0	2	0	0	27	6	0	0	1	34
0730 - 0745	0	0	0	0	0	0	0	0	0	0	43	11	0	3	2	59
0745 - 0800	0	0	1	0	0	0	0	1	0	1	41	8	0	0	0	50
Hourly Total	0	0	3	0	0	0	0	3	0	1	135	32	0	3	4	175
0800 - 0815	0	0	1	0	0	0	0	1	0	0	78	9	0	3	2	92
0815 - 0830	0	0	1	2	0	0	0	3	0	0	76	13	0	0	1	90
0830 - 0845	0	0	4	1	0	0	0	5	0	0	78	11	0	0	1	90
0845 - 0900	0	0	3	0	0	0	0	3	0	0	39	7	0	1	0	47
Hourly Total	0	0	9	3	0	0	0	12	0	0	271	40	0	4	4	319
0900 - 0915	0	0	0	0	0	0	0	0	0	0	48	14	0	1	2	65
0915 - 0930	0	0	1	1	0	0	0	2	0	0	51	5	0	2	0	58
0930 - 0945	0	0	0	0	0	0	0	0	0	0	46	5	0	3	1	55
0945 - 1000	0	0	0	1	0	0	0	1	0	0	41	5	0	2	1	49
Hourly Total	0	0	1	2	0	0	0	3	0	0	186	29	0	8	4	227

Session Total	0	0	13	5	0	0	0	18	0	1	592	101	0	15	12	721
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1600 - 1615	0	0	2	0	0	0	0	2	0	0	64	8	0	4	1	77
1615 - 1630	0	0	0	1	0	0	0	1	0	0	76	6	0	0	1	83
1630 - 1645	0	0	5	1	0	0	0	6	0	0	76	10	0	1	1	88
1645 - 1700	0	0	2	2	0	0	0	4	0	0	77	12	0	0	1	90
Hourly Total	0	0	9	4	0	0	0	13	0	0	293	36	0	5	4	338
1700 - 1715	0	0	4	0	0	0	0	4	0	0	82	9	0	0	2	93
1715 - 1730	0	0	4	0	0	0	0	4	0	1	94	9	0	0	0	104
1730 - 1745	0	0	1	0	0	0	0	1	0	0	55	8	0	0	2	65
1745 - 1800	0	0	3	0	0	0	0	3	0	0	64	4	0	0	0	68
Hourly Total	0	0	12	0	0	0	0	12	0	1	295	30	0	0	4	330
1800 - 1815	0	0	3	0	0	0	0	3	0	0	68	2	0	0	2	72
1815 - 1830	0	0	0	1	0	0	0	1	0	0	68	2	0	0	0	70
1830 - 1845	0	0	3	0	0	0	0	3	0	0	60	5	0	0	0	65
1845 - 1900	0	0	2	0	0	0	0	2	0	0	50	3	0	0	0	53
Hourly Total	0	0	8	1	0	0	0	9	0	0	246	12	0	0	2	260

Session Total	0	0	29	5	0	0	0	34	0	1	834	78	0	5	10	928
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Goldthorpe - Manual Traffic Survey, Tuesday 12th March 2019

Produced by Road Data Services Ltd

Junction: (4) B6098 / Washington Road

Approach: Washington Road

TIME	Left to B6098 (North)								Right to B6098 (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
0715 - 0730	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
0730 - 0745	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1
0745 - 0800	0	0	8	0	0	0	0	8	0	0	3	2	0	0	0	5
Hourly Total	0	0	15	1	0	0	0	16	0	0	4	3	0	0	0	7
0800 - 0815	0	0	2	2	0	0	0	4	0	0	3	0	0	0	0	3
0815 - 0830	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
0830 - 0845	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
0845 - 0900	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
Hourly Total	0	0	9	3	0	0	0	12	0	0	8	0	0	0	0	8
0900 - 0915	1	0	5	0	0	0	0	6	0	0	5	0	0	0	0	5
0915 - 0930	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
0930 - 0945	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
0945 - 1000	0	0	3	1	0	0	0	4	0	0	4	1	0	0	0	5
Hourly Total	1	0	10	1	0	0	0	12	0	0	11	1	0	0	0	12

Session Total	1	0	34	5	0	0	0	40	0	0	23	4	0	0	0	27
----------------------	----------	----------	-----------	----------	----------	----------	----------	-----------	----------	----------	-----------	----------	----------	----------	----------	-----------

1600 - 1615	0	0	4	0	0	0	0	4	0	0	2	1	0	0	0	3
1615 - 1630	0	0	3	2	0	0	0	5	0	0	3	0	0	0	0	3
1630 - 1645	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1
1645 - 1700	0	1	3	0	0	0	0	4	0	0	4	0	0	0	0	4
Hourly Total	0	1	14	2	0	0	0	17	0	0	10	1	0	0	0	11
1700 - 1715	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
1715 - 1730	0	0	1	0	0	0	0	1	0	0	6	0	0	0	0	6
1730 - 1745	0	0	1	1	0	0	0	2	0	0	2	0	0	0	0	2
1745 - 1800	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
Hourly Total	0	0	5	1	0	0	0	6	0	0	13	0	0	0	0	13
1800 - 1815	0	0	4	1	0	0	0	5	0	0	3	0	0	0	0	3
1815 - 1830	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
1830 - 1845	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2
1845 - 1900	0	0	3	0	0	0	0	3	0	0	2	0	0	0	0	2
Hourly Total	0	0	13	2	0	0	0	15	0	0	11	0	0	0	0	11

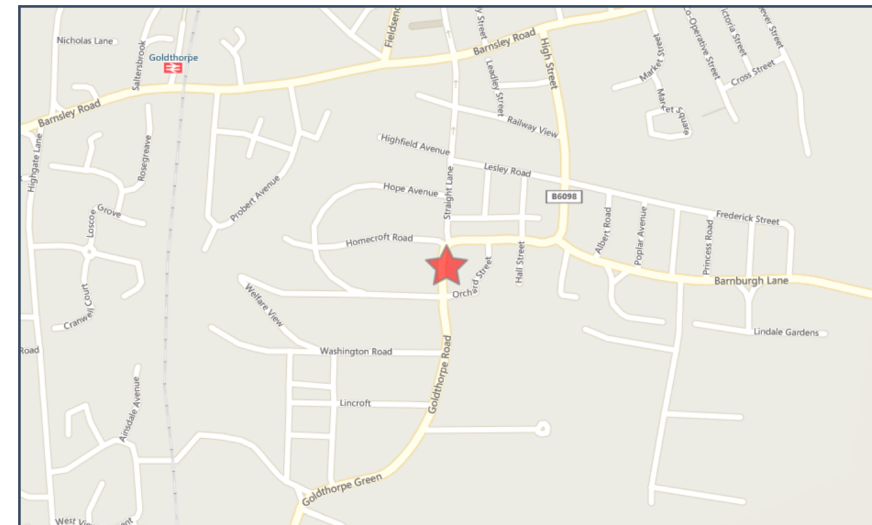
Session Total	0	1	32	5	0	0	0	38	0	0	34	1	0	0	0	35
----------------------	----------	----------	-----------	----------	----------	----------	----------	-----------	----------	----------	-----------	----------	----------	----------	----------	-----------

APPENDIX E PIA Reports



crashmap.co.uk

Crash Date:	Friday, July 22, 2016	Time of Crash:	8:00:00 PM	Crash Reference:	2016140091480
Highest Injury Severity:	Serious	Road Number:	B6098	Number of Casualties:	1
Highway Authority:	Barnsley	Number of Vehicles:	1	OS Grid Reference:	446035 404008
Local Authority:	Barnsley Metropolitan Borough				
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:	Zebra crossing				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a left hand bend	Nearside	Commuting to/from work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Male	0 - 5	In carriageway, crossing elsewhere within 50 metres of pedestrian crossing	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions

APPENDIX F Site Masterplan

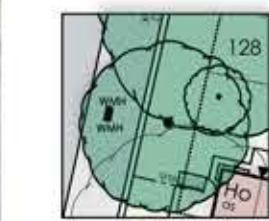
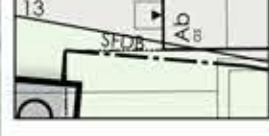
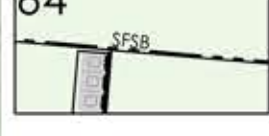
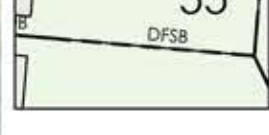


All work to be carried out in accordance with the requirements of the Building Regulations, Water Authority and the Construction (Design and Management) Regulations currently in force.

Do not scale from this drawing. Architect to be notified of any discrepancies.

Verify relevant dimensions on site before commencing work or preparing shop drawings. This drawing is copyright.

rev	date	amendment	initials
A	30/08/18	Layout amended following pre-app meeting with planners	JMB
B	04/12/18	Layout amended to accommodate existing ecological features.	JMB
C	14/01/19	Layout amended to accommodate highway/ planners comments.	JMB
D	22/03/19	Plots 43-46 amended to address public consultation comments.	JMB
E	04/03/20	Plots 11-20 redesigned, dormer bungalows added.	JMB
F	23/07/21	Plots 37-47 redesigned, dormer bungalows added on plots 44-47.	JMB
G	12/10/21	Balancing feature added, layout redrawn.	JMB
H	06/12/21	Balancing feature redesigned, layout amended	JMB
J	09/12/21	Turning head to plots 11-23 amended	JMB
K	11/01/22	Balancing feature & layout amended.	JMB

-  Denotes trees to be retained
-  Denotes trees to be removed
-  1.8m high pier & panel wall, 600mm high panel wall
-  1.8m high double boarded timber screen fence, SD/SDSF/01
-  1.8m high timber screen fence SD/SF/01
-  900mm high timber fence SD/DF/01
-  450mm high timber knee rail SD/KR/01



W Redmile & Sons Ltd, Parkfield House, 118 Alderson Road, Sheffield, S2 4UD.
tel: 0114 2290900 fax 0114 2290909 www.wredmile.co.uk

scale: 1:500 | drawn by: JMB | date: June 18'

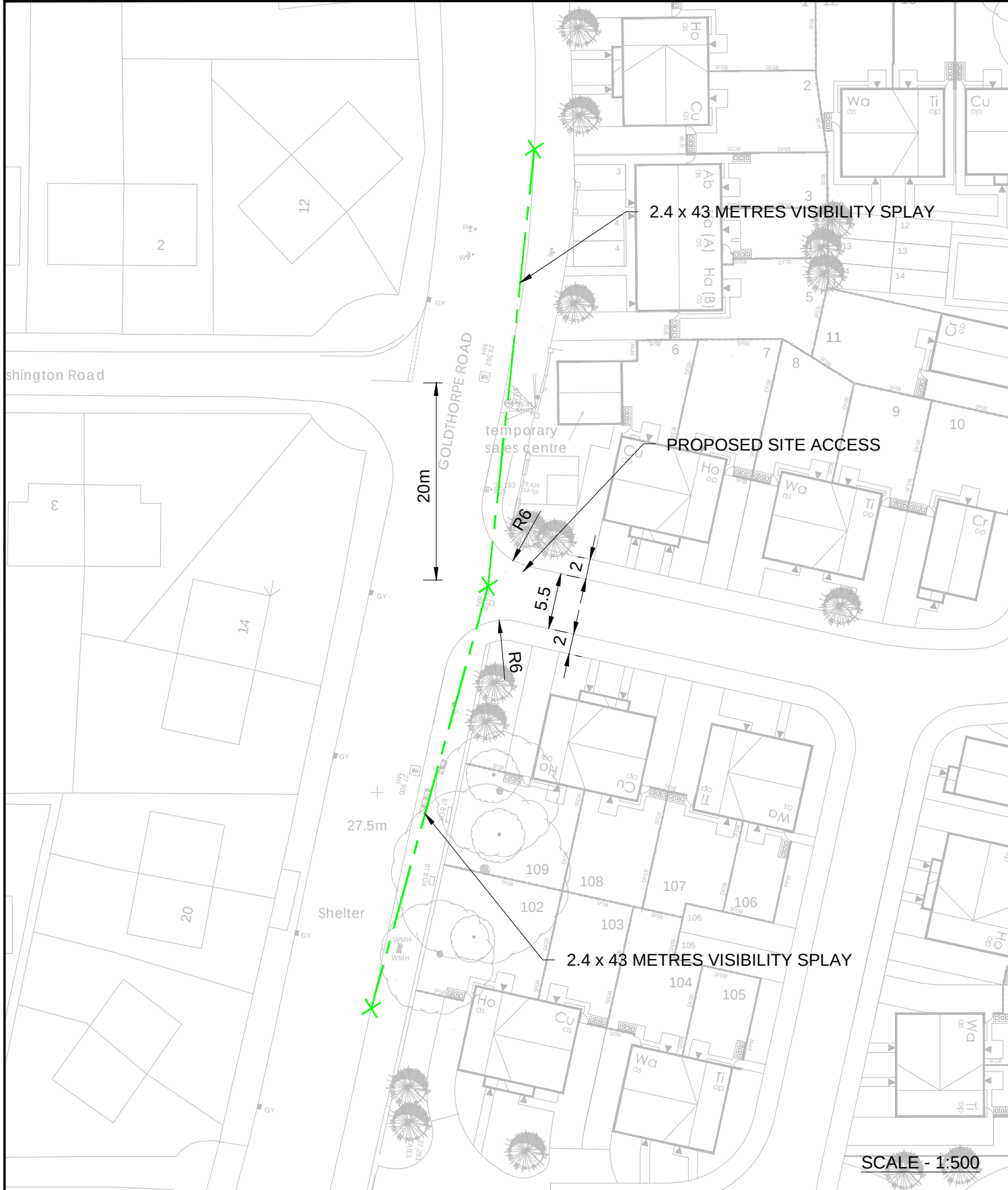
Project: Land off Goldthorpe Road,
Goldthorpe, Barnsley

Drawing: Site Layout

Drawing Number:	GT/SK-01	Revision	K
-----------------	----------	----------	---

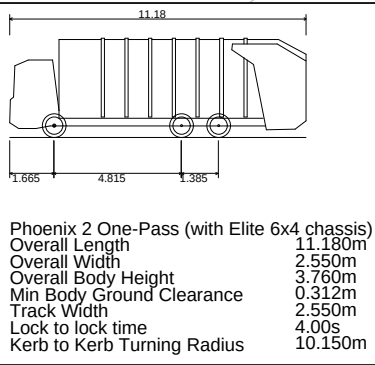
APPENDIX G SDD Drawings

10mm
0
-10mm



Based upon the Ordnance Survey Map with the permission of the Controller of H.M. Stationary Office @ Crown Copyright Contract No. 100048330

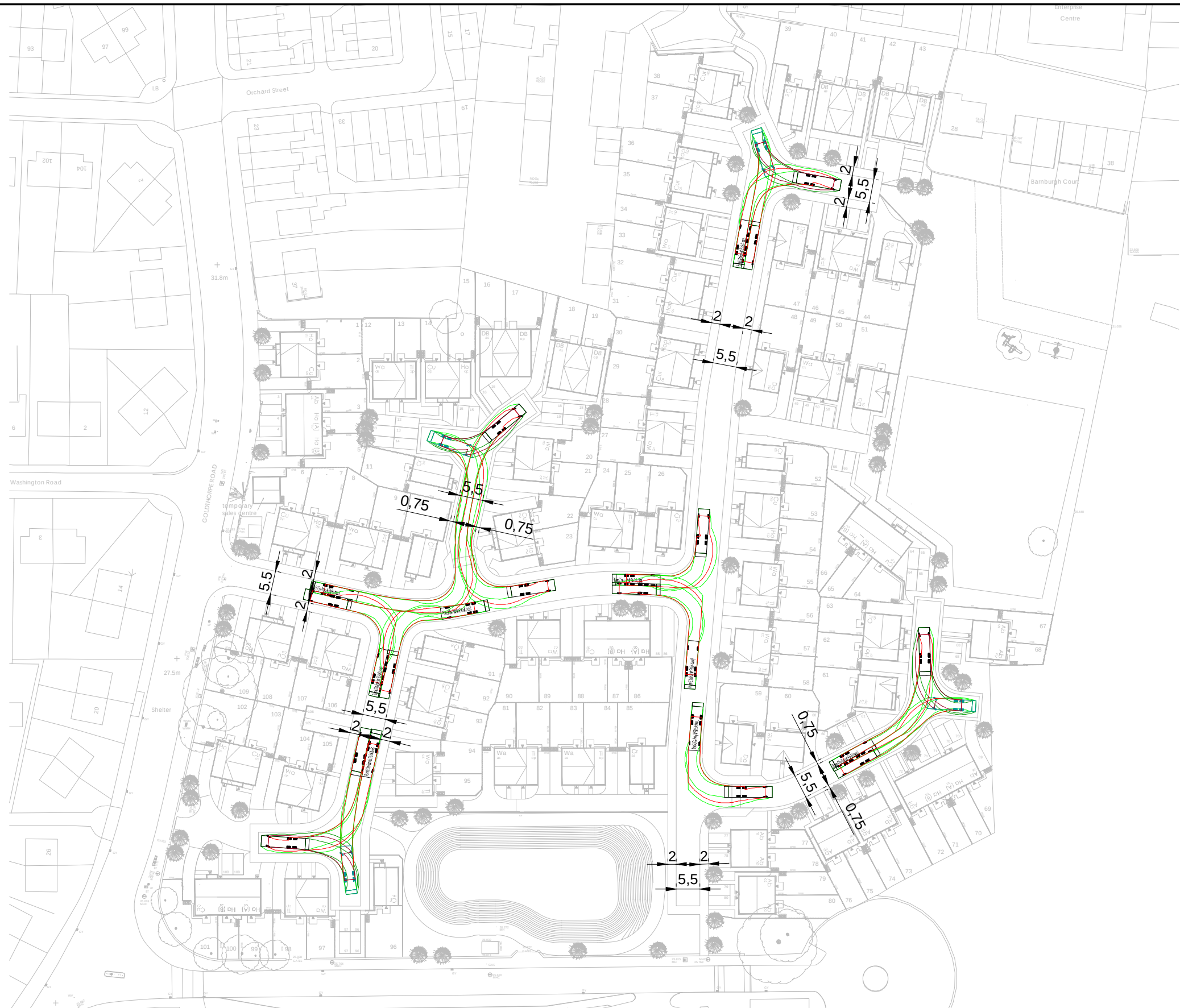
REV	DR	CH	AP	DATE



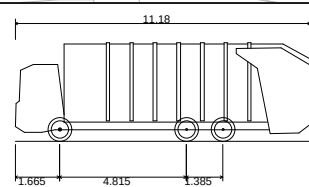
PROJECT GOLDTHORPE ROAD, GOLDTHORPE					
DRAWING TITLE PROPOSED SITE ACCESS ARRANGEMENT					
DRAWN BY KH	CHECKED BY AM	APPROVED BY AM	DATE 16.02.22	SCALES @ A3 SIZE AS SHOWN	ISSUE STATUS PLANNING

CLIENT REDMILE HOMES	
 SUSTAINABLE DEVELOPMENT AND DELIVERY A specialist team within DLP Planning Ltd. e: bristol@dlpconsultants.co.uk w: www.dlpconsultants.co.uk	
DRAWING NUMBER YK6169-2PD-001	REV. -

CAD FILE NAME : YK6169-2PD-001



Based upon the Ordnance Survey Map with the permission of the Controller of H.M. Stationary Office @ Crown Copyright Contract No. 100048330



Phoenix 2 One-Pass (with Elite 6x4 chassis)
Overall Length 11.180m
Overall Width 2.550m
Overall Body Height 3.760m
Min Body Ground Clearance 0.312m
Track Width 2.550m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 10.150m

PROJECT
GOLDTHORPE ROAD, GOLDTHORPE

DRAWING TITLE
PROPOSED INTERNAL LAYOUT

CLIENT
REDMILE HOMES



DRAWN BY	CHECKED BY	APPROVED BY	DATE	SCALES @ A3 SIZE	ISSUE STATUS
KH	AM	AM	16.02.22	1:1000	PLANNING

DRAWING NUMBER	REV.
YK6169-2PD-002	-

CAD FILE NAME : YK6169-2PD-002

APPENDIX H 2011 Census Multi-Modal Data

QS701EW - Method of travel to work

ONS Crown Copyright Reserved [from Nomis on 21 February 2019]

population	All usual residents aged 16 to 74
units	Persons
area type	2011 super output areas - middle layer
area name	E02001530 : Barnsley 022
rural urban	Total

Method of Travel to Work	2011
All categories: Method of travel to work	4,628
Underground, metro, light rail, tram	1
Train	79
Bus, minibuss or coach	177
Taxi	7
Motorcycle, scooter or moped	19
Driving a car or van	1,665
Passenger in a car or van	224
Bicycle	24
On foot	296
Other method of travel to work	11

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

APPENDIX I 2011 Census Distribution

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

ONS Crown Copyright Reserved [from Nomis on 21 February 2019]

population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
usual residence E02001530 : Barnsley 022 (2011 super output area - middle layer)

place of work : 2011 census merged local authority district	All categories: Method of travel to work (2001 specification)	Driving a car or van	Destination Split %	Route Split
Barnsley	864	475	37	R1
Rotherham	528	370	29	R2
Doncaster	326	234	18	R3 /R4
Sheffield	143	95	7	R2
Wakefield	86	70	5	R1
Leeds	54	44	4	R4
	2,001	1,288	100	

**Due to rounding, total vehicular trip numbers may be slightly lower than the vehicle trips provided on trip generation diagram (see ** below).*

***Rounded to nearest higher number up for route split trip distribution purposes.*

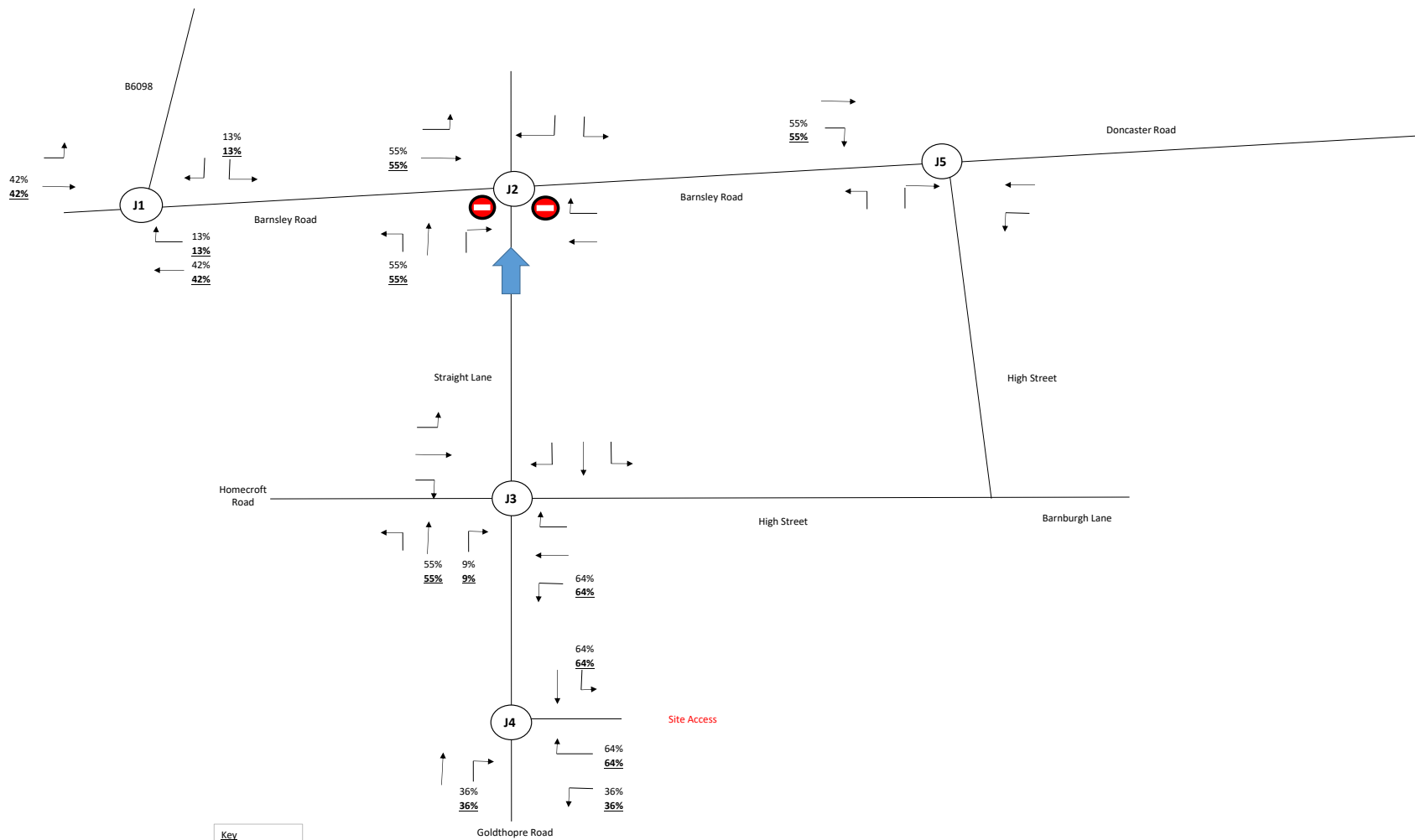
Route 1 (R1): Goldthorpe Road (N), Straight Lane (N), Barnsley Road (W), A635 (W)

Route 2 (R2): Goldthorpe Road (S), A633 (S)

Route 3 (R3): Goldthorpe Road (N), Barnburgh Lane (E)

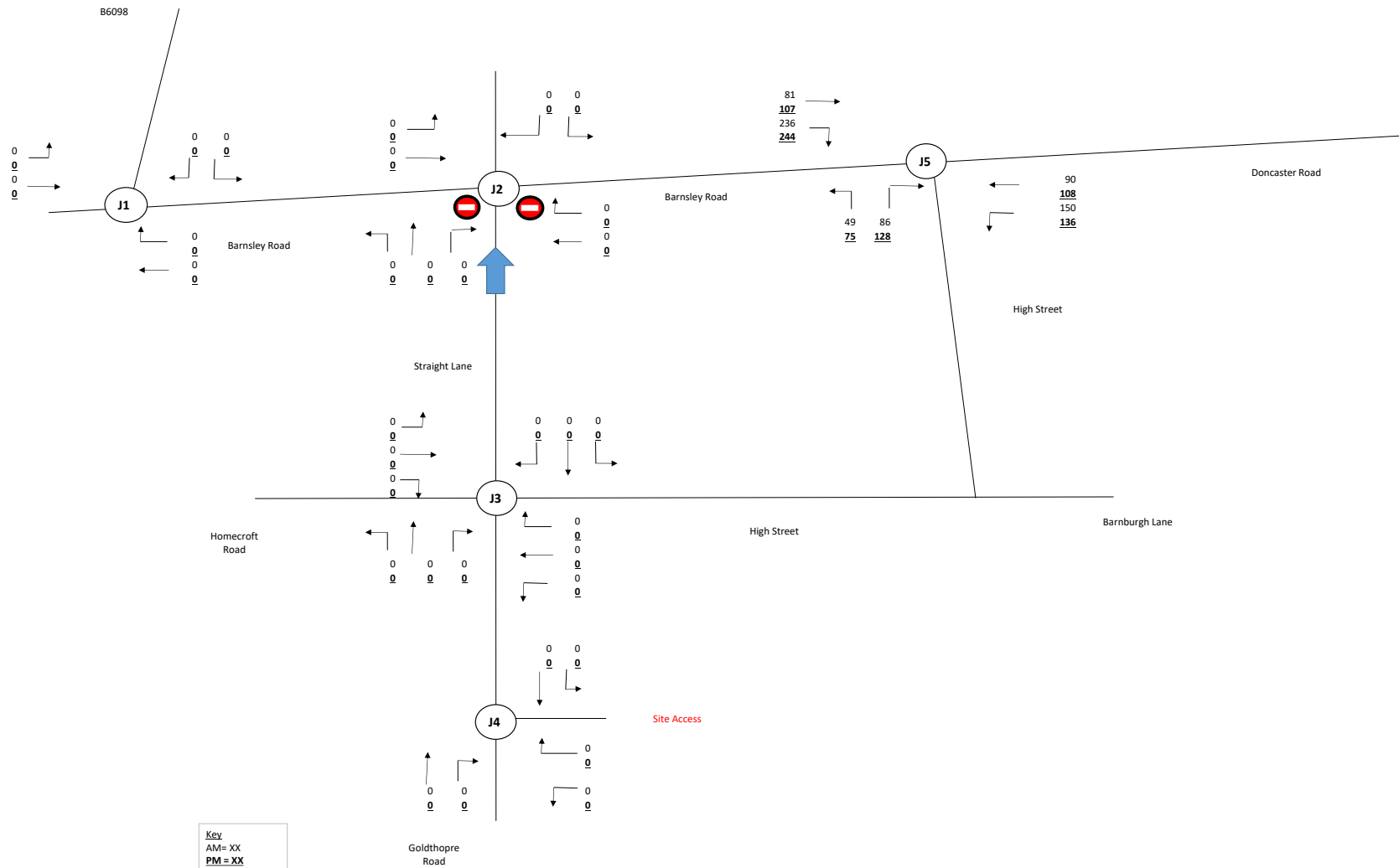
Route 4 (R4): Goldthorpe Road (N), Straight Lane (N), Barnsley Road (W), B5098 (N), A635 (E)

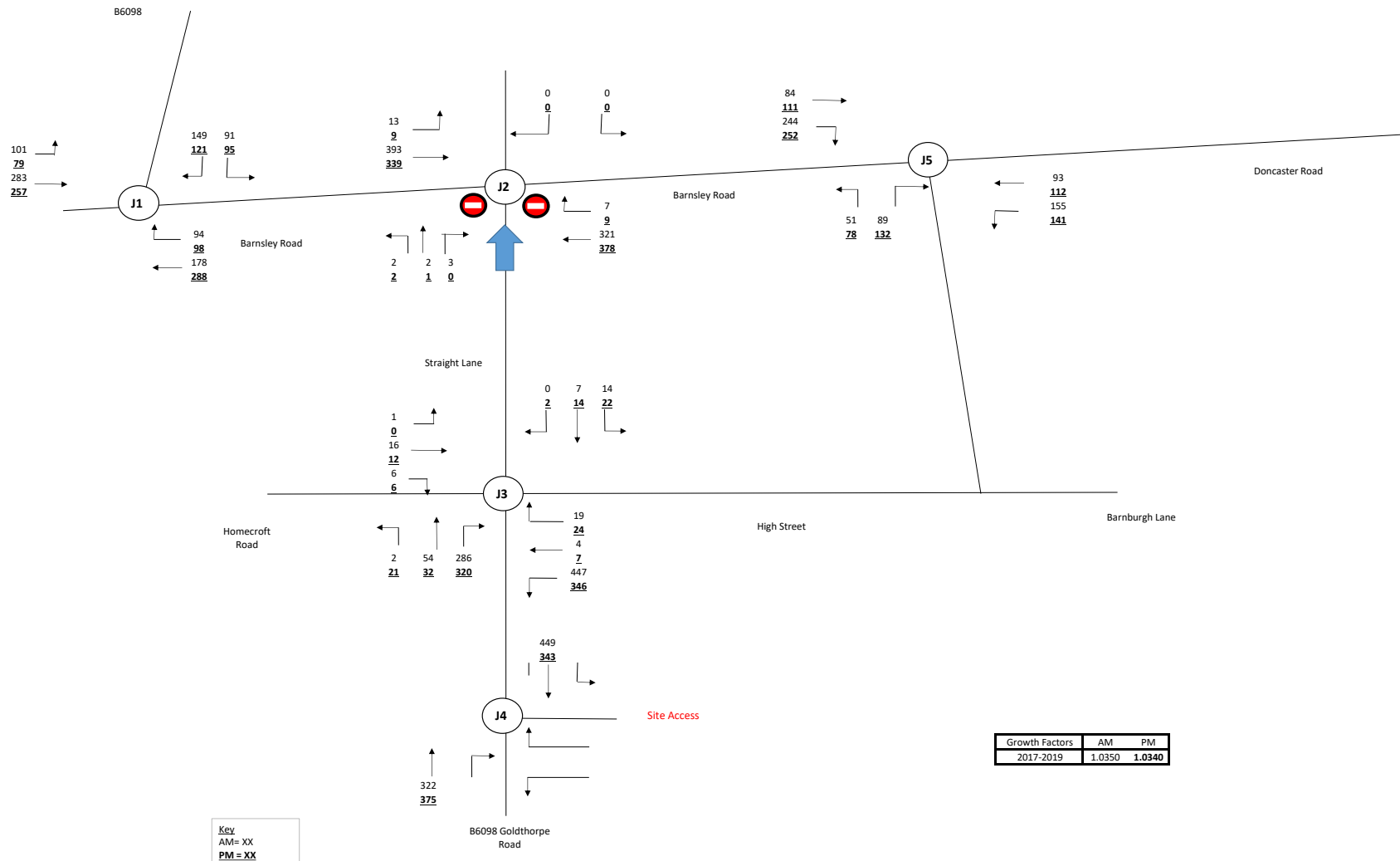
APPENDIX J Traffic Assignment – Traffic Flows



Key
AM= XX
PM= XX

YK6169-2PD	Traffic Flow Figure 1
Goldthorpe Road	
2017 Existing Traffic Flows	
Utilised for High Street / Barnsley Road / Doncaster Road junction only	



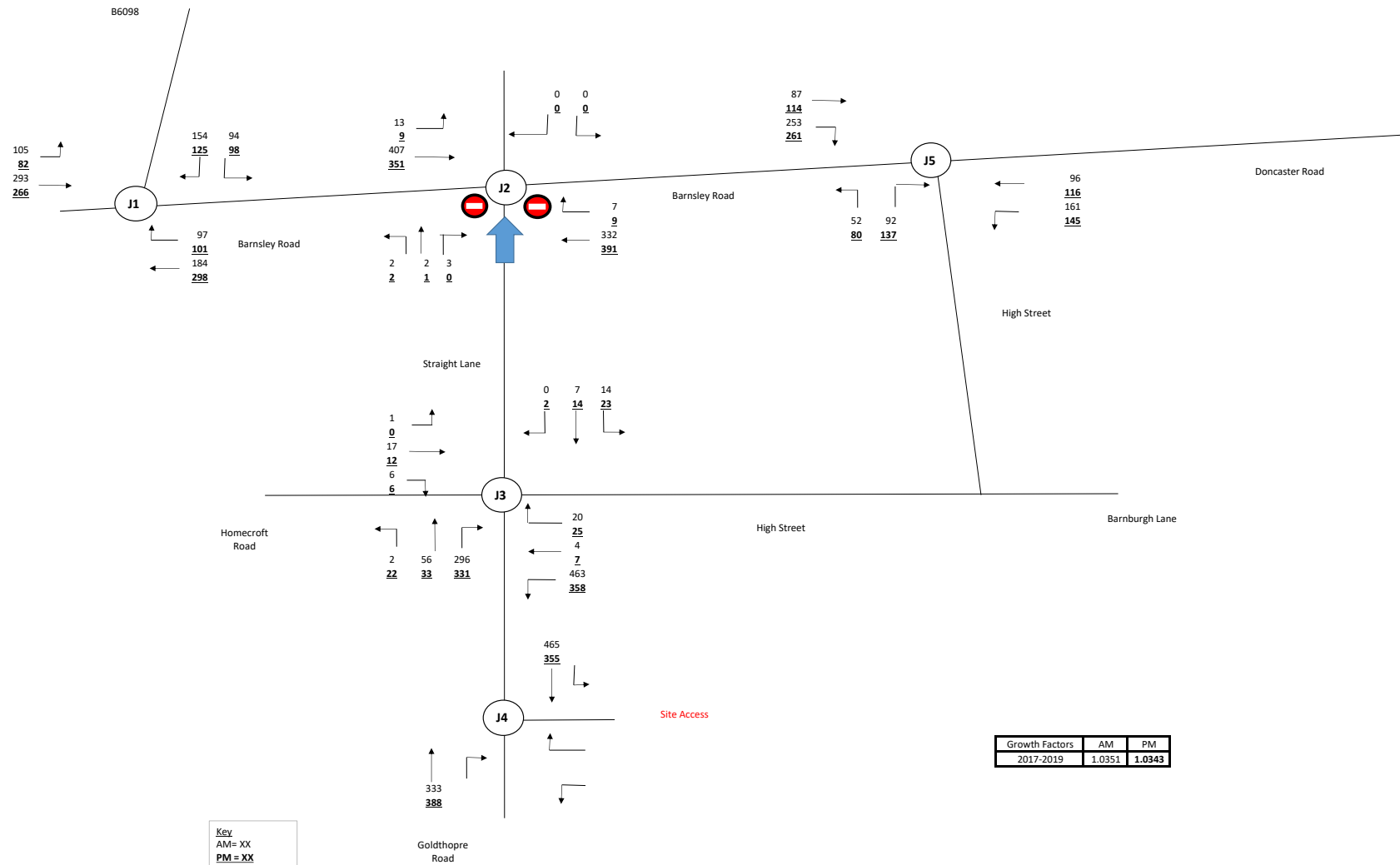


Growth Factors	AM	PM
2017-2019	1.0350	1.0340

YK6169-2PD | Traffic Flow Figure 2

Goldthorpe Road

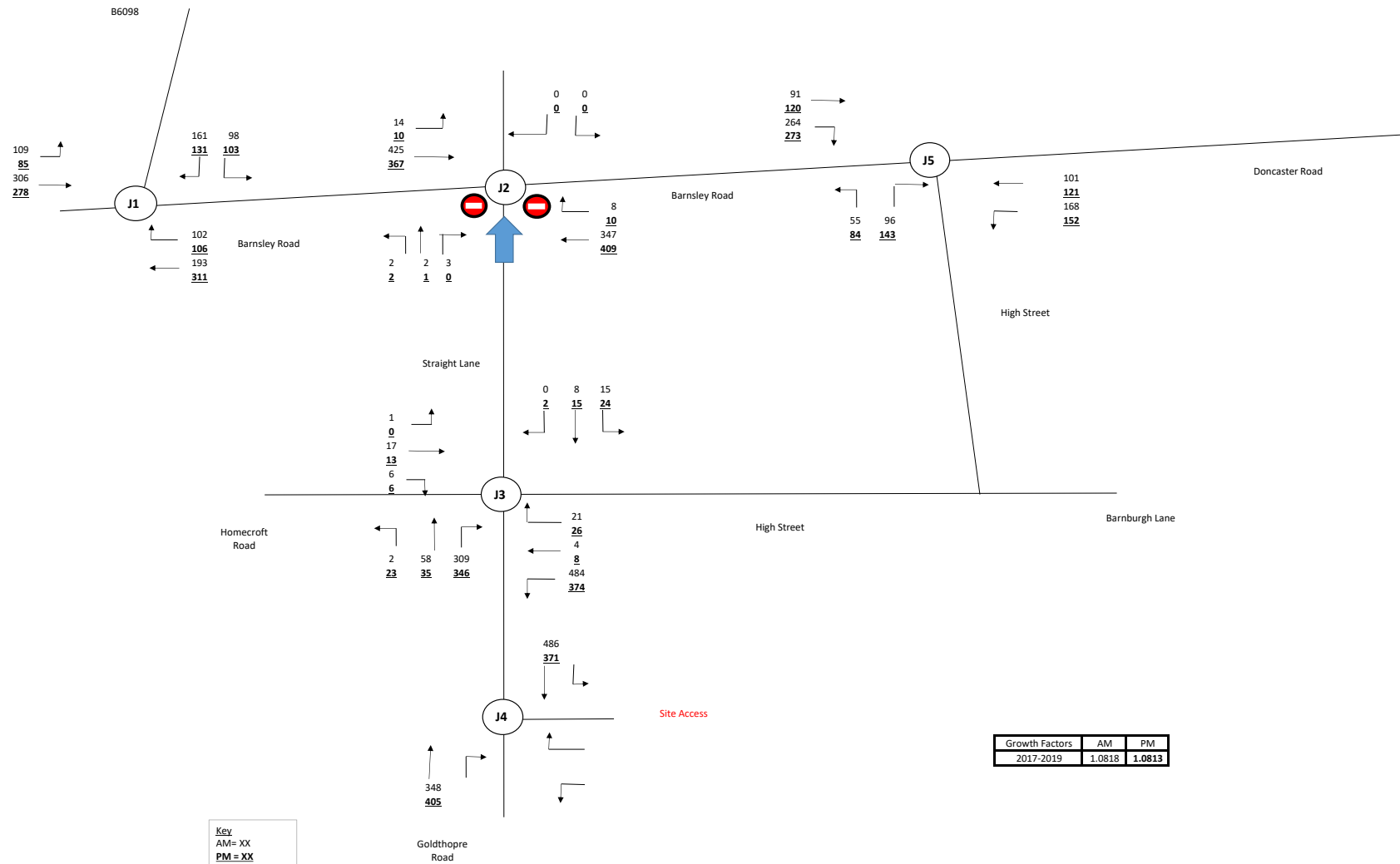
2019 Existing Traffic Flows



YK6169-2PD Traffic Flow Figure 3

Goldthorpe Road

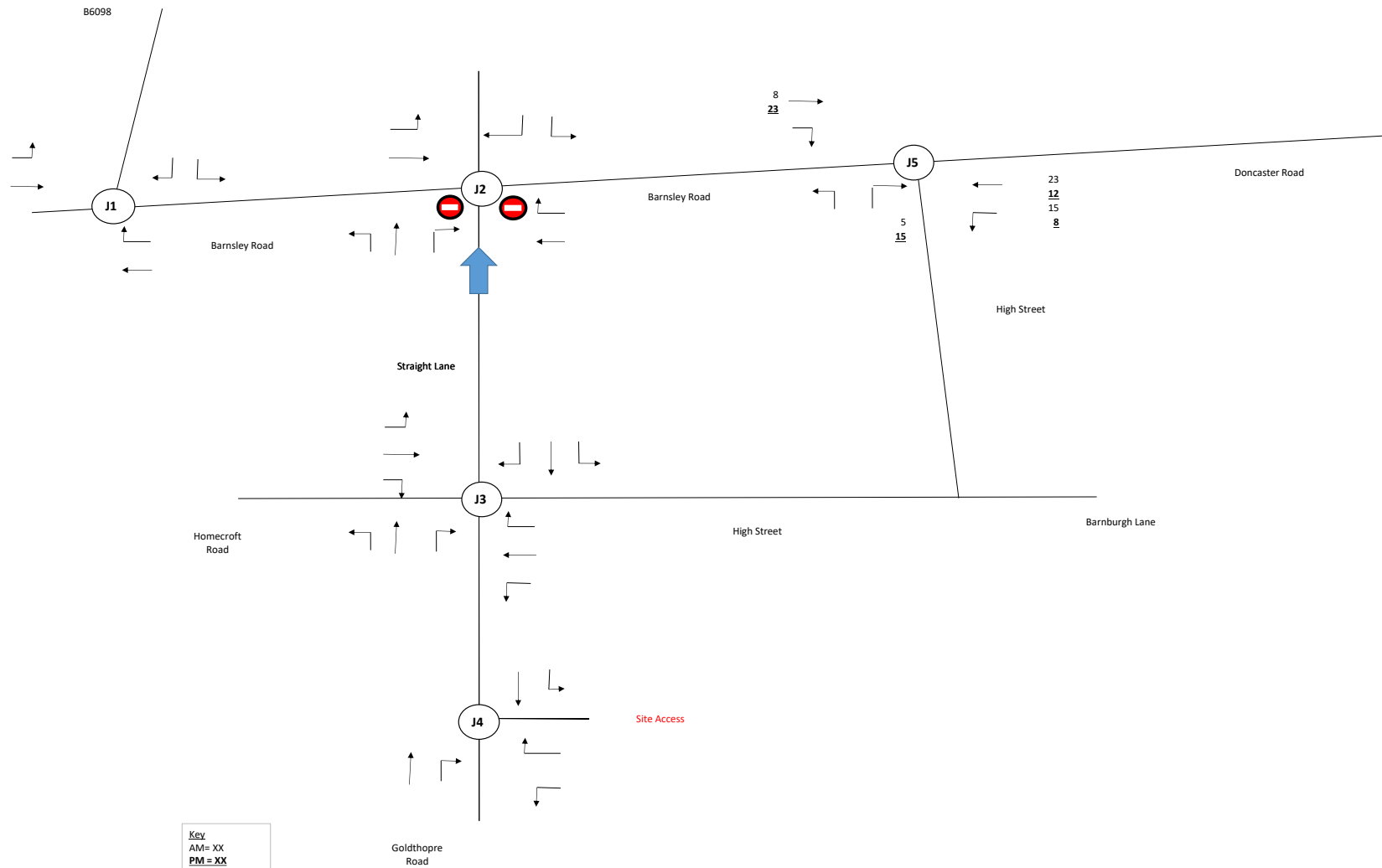
2022 Baseline Traffic Flows



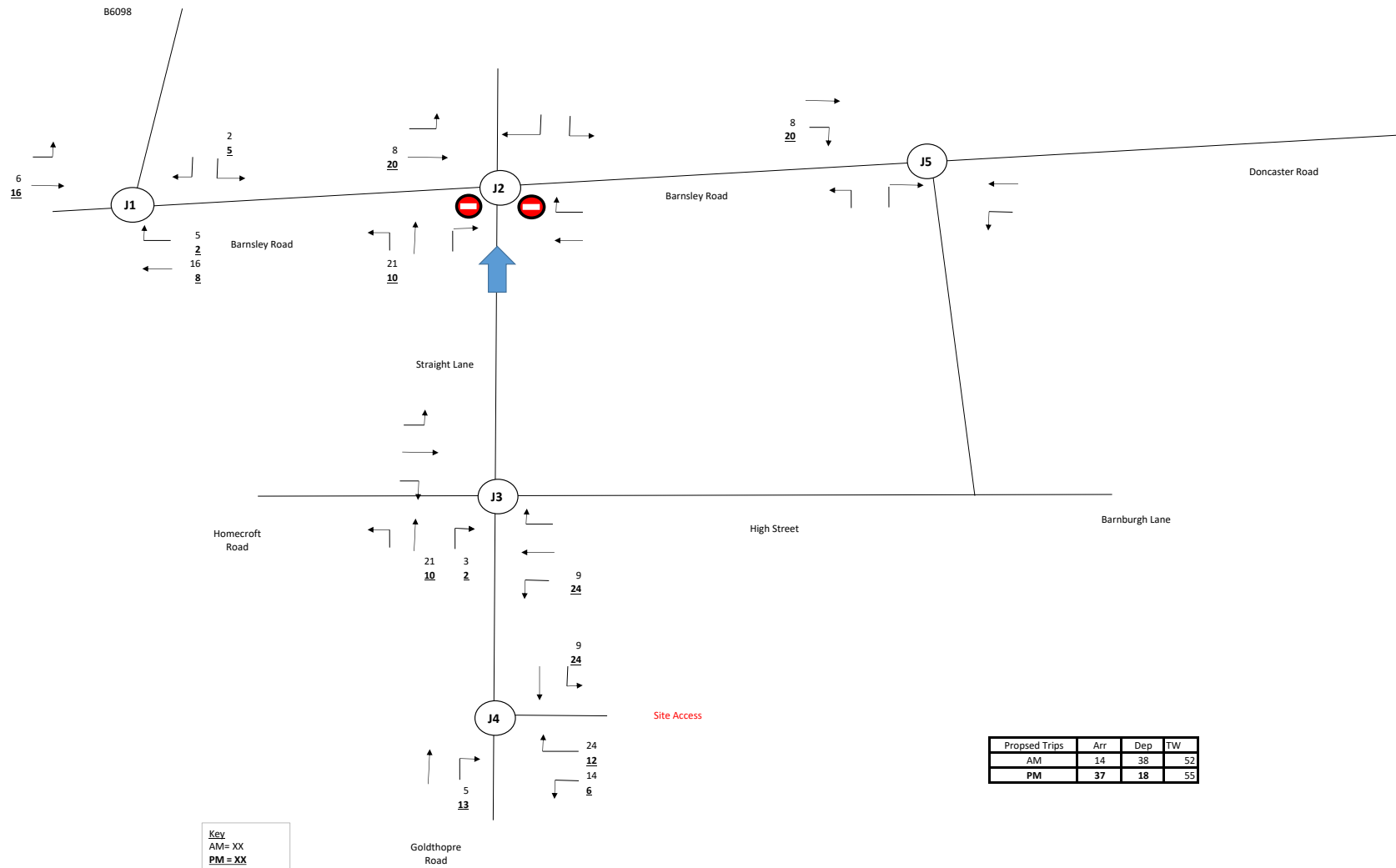
YK6169-2PD Traffic Flow Figure 4

Goldthorpe Road

2027 Design Year Traffic Flows

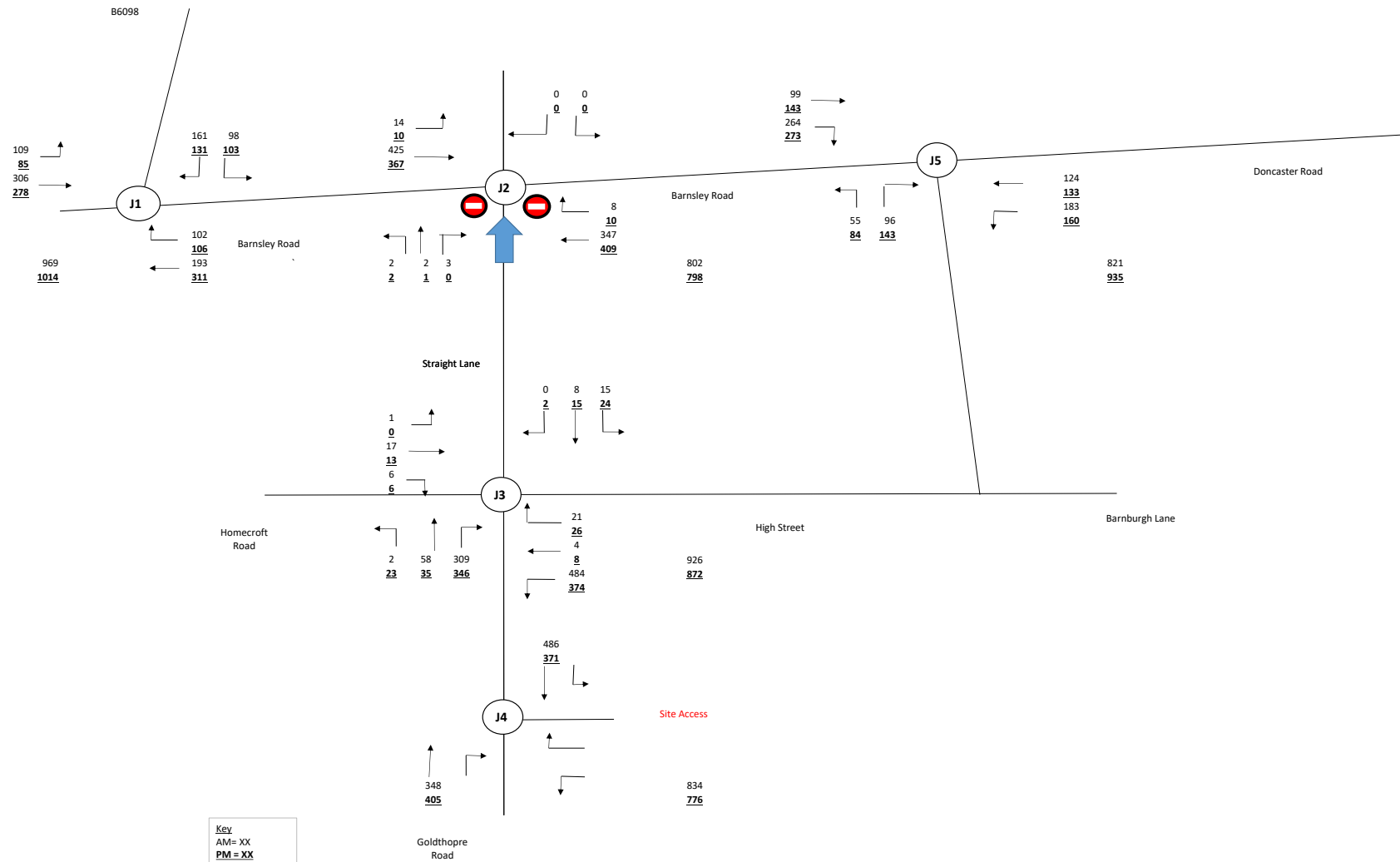


YK6169-2PD	Traffic Flow Figure 5
Goldthorpe Road	
Committed Development Traffic Flows	

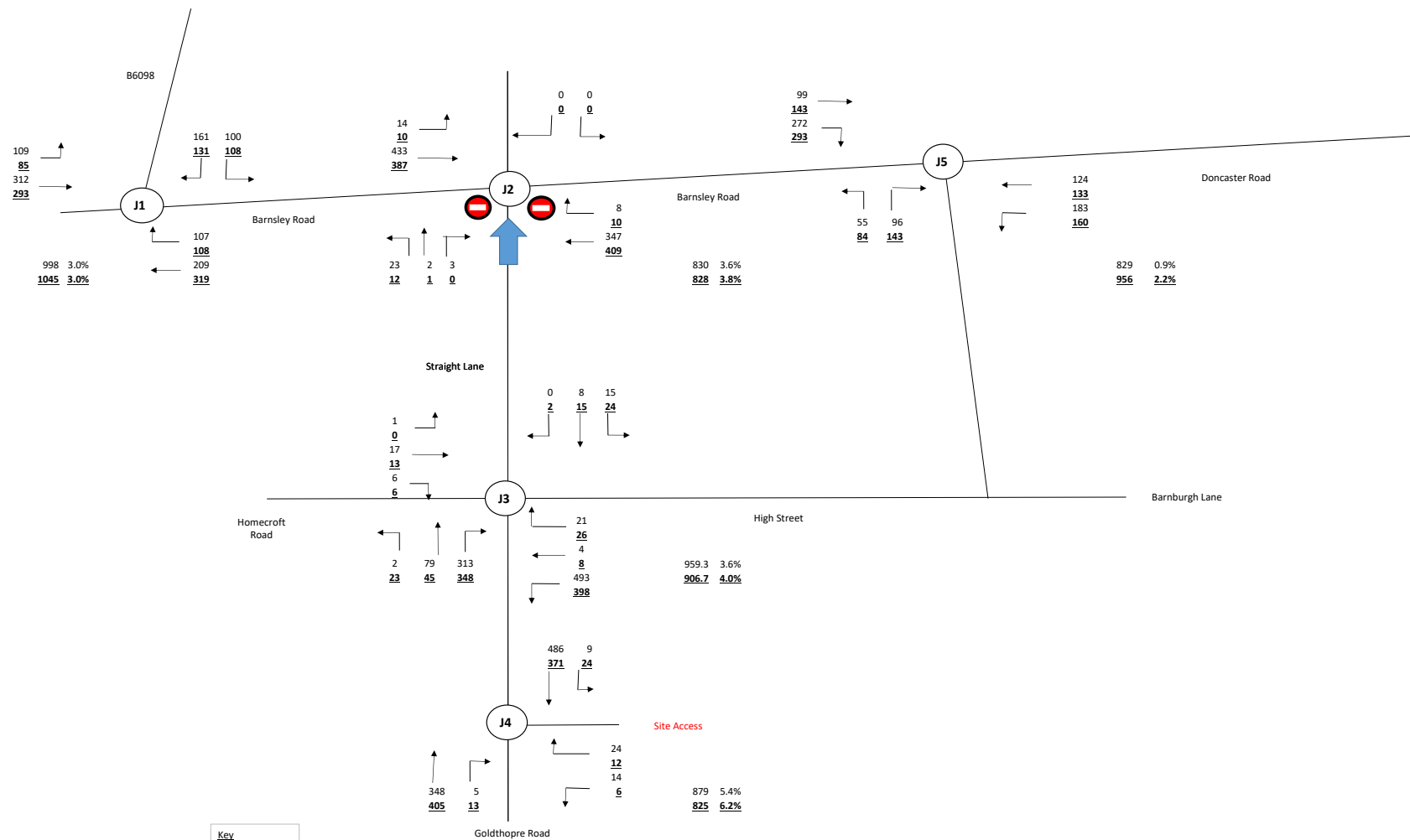


YK6169-2PD | Traffic Flow Figure 6

Goldthorpe Road
 Proposed Development Traffic Flows



YK6169-2PD	Traffic Flow Figure 7
Goldthorpe Road	
2027 Design Year + Committed Development Traffic Flows	



YK6169-2PD Traffic Flow Figure 8
 Goldthorpe Road
 2027 Design Year + Committed Development + Proposed Development Traffic Flows

APPENDIX K Site Access Capacity Assessment

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: Goldthorpe Road site access_Junctions 9.j9

Path: \\25.48.244.42\Job Files\SDD\Yorkshire\YK6169-2PD Goldthorpe Road - Revised TA and TP\Capacity Assessments

Report generation date: 20/12/2021 18:05:04

»2027 + Com Dev + Prop Dev, AM

»2027 + Com Dev + Prop Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	Junction Delay (s)	Set ID	Queue (Veh)	Delay (s)	RFC	Junction Delay (s)
2027 + Com Dev + Prop Dev										
Stream B-AC	D1	0.1	10.49	0.11	0.46	D2	0.1	9.50	0.05	0.33
Stream C-AB		0.0	5.14	0.01			0.1	4.91	0.04	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	Goldthorpe Road, Goldthorpe
Location	
Site number	
Date	20/12/2021
Version	
Status	(new file)
Identifier	
Client	Redmile Homes
Jobnumber	YK6169/2PD
Enumerator	DLP\Kurt.Hardy
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 + Com Dev + Prop Dev	AM	ONE HOUR	07:30	09:00	15	✓
D2	2027 + Com Dev + Prop Dev	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2027 + Com Dev + Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.80			75.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	100	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	519	0.083	0.210	0.132	0.300
B-C	636	0.086	0.216	-	-
C-B	617	0.210	0.210	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 + Com Dev + Prop Dev	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	495	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	353	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	9	486
	B	24	0	14
	C	348	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	10.49	0.1	B	35	52
C-AB	0.01	5.14	0.0	A	8	13
C-A					316	473
A-B					8	12
A-C					446	669

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	440	0.065	28	0.0	0.1	8.733	A
C-AB	6	1	708	0.008	6	0.0	0.0	5.125	A
C-A	260	65			260				
A-B	7	2			7				
A-C	366	91			366				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	417	0.082	34	0.1	0.1	9.393	A
C-AB	8	2	729	0.011	8	0.0	0.0	4.978	A
C-A	309	77			309				
A-B	8	2			8				
A-C	437	109			437				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	10	385	0.109	42	0.1	0.1	10.485	B
C-AB	11	3	760	0.015	11	0.0	0.0	4.794	A
C-A	378	94			378				
A-B	10	2			10				
A-C	535	134			535				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	10	385	0.109	42	0.1	0.1	10.488	B
C-AB	11	3	760	0.015	11	0.0	0.0	4.811	A
C-A	378	94			378				
A-B	10	2			10				
A-C	535	134			535				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	417	0.082	34	0.1	0.1	9.403	A
C-AB	8	2	729	0.011	8	0.0	0.0	5.014	A
C-A	309	77			309				
A-B	8	2			8				
A-C	437	109			437				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	440	0.065	29	0.1	0.1	8.747	A
C-AB	6	1	708	0.008	6	0.0	0.0	5.142	A
C-A	260	65			260				
A-B	7	2			7				
A-C	366	91			366				

2027 + Com Dev + Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2027 + Com Dev + Prop Dev	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	395	100.000
B		ONE HOUR	✓	18	100.000
C		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	24	371
	B	12	0	6
	C	405	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	10
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	9.50	0.1	A	17	25
C-AB	0.04	4.91	0.1	A	23	35
C-A					360	540
A-B					22	33
A-C					340	511

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	3	449	0.030	13	0.0	0.0	8.271	A
C-AB	16	4	752	0.022	16	0.0	0.0	4.896	A
C-A	298	75			298				
A-B	18	5			18				
A-C	279	70			279				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	428	0.038	16	0.0	0.0	8.744	A
C-AB	22	5	781	0.028	22	0.0	0.0	4.732	A
C-A	354	88			354				
A-B	22	5			22				
A-C	334	83			334				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	5	399	0.050	20	0.0	0.1	9.494	A
C-AB	31	8	822	0.038	31	0.0	0.1	4.537	A
C-A	429	107			429				
A-B	26	7			26				
A-C	408	102			408				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	5	399	0.050	20	0.1	0.1	9.496	A
C-AB	31	8	822	0.038	31	0.1	0.1	4.551	A
C-A	429	107			429				
A-B	26	7			26				
A-C	408	102			408				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	428	0.038	16	0.1	0.0	8.748	A
C-AB	22	5	781	0.028	22	0.1	0.0	4.768	A
C-A	354	88			354				
A-B	22	5			22				
A-C	334	83			334				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	3	449	0.030	14	0.0	0.0	8.276	A
C-AB	17	4	752	0.022	17	0.0	0.0	4.914	A
C-A	298	75			298				
A-B	18	5			18				
A-C	279	70			279				



BEDFORD

Planning / SDD / SPRU

bedford@dlpconsultants.co.uk

BRISTOL

Planning / SDD / SPRU

bristol@dlpconsultants.co.uk

EAST MIDLANDS

Planning/ SDD

nottingham@dlpconsultants.co.uk

LEEDS

Planning

leeds@dlpconsultants.co.uk

LONDON

Planning

london@dlpconsultants.co.uk

MILTON KEYNES

Planning

miltonkeynes@dlpconsultants.co.uk

RUGBY

Planning

rugby.enquiries@dlpconsultants.co.uk

SHEFFIELD

Planning/ SDD / SPRU

sheffield@dlpconsultants.co.uk

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