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Proposed Residential Development
Land off Lowfield Road
Bolton upon Dearne – Phase 3

Transport Assessment

June 2020

PROPOSED RESIDENTIAL DEVELOPMENT
LAND OFF LOWFIELD ROAD
BOLTON UPON DEARNE
PHASE 3

GLEESON REGENERATION AND HOMES

TRANSPORT ASSESSMENT

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1.0 INTRODUCTION

1.1 This Transport Assessment (TA) forms part of a planning application submitted by Gleeson Homes & Regeneration to develop 97 residential units on a site off Lowfield Road in Bolton upon Dearne, Barnsley. The application site is approximately 12 kilometres to the south-east of Barnsley town centre and is located to the east of the centre of Bolton upon Dearne. Phases 1 and 2 of the scheme have been previously developed by Gleeson Homes & Regeneration and subsequently occupied. The current application relates to proposals for Phase 3 which is the final phase of the development.

1.2 In 2008, outline planning permission (LPA ref. 2008/1599) was granted to develop part of the site. The Transport Assessment by Halcrow which formed part of the planning application was for 50 residential units including 40 houses and 10 apartments served by way of a new priority junction onto Lowfield Road. However, this planning permission was not implemented.

1.3 In 2011, full planning permission was granted for some 60 residential units on the same site (LPA ref. 2011/0963). This included a mix of two, three and four bed houses, as shown on the plan at **Appendix BGH1**. This was served by way of the same new priority junction of Prior Croft with Lowfield Road that was approved previously. This development will be referred to as Phase 1.

1.4 In May 2015, full planning permission was granted for some 58 residential units on an adjacent plot of land, (LPA ref. 2013/0960) and again this included a mix of two, three and four bedroom houses accessed from Lowfield Road via Prior Croft. This development will be referred to as Phase 2, as shown on the site layout plan at **Appendix BGH2**.

1.5 The proposed development, which will be referred to as Phase 3, will form an extension to the Phase 1 and Phase 2 schemes which again uses the access onto Lowfield Road from Prior Croft. A copy of the proposed site layout is included at **Appendix BGH3** and a composite plan showing all three phases is included at **Appendix BGH4**.

1.6 This TA provides the necessary information to assist the local Highway Authority to assess the planning application. It will consider the transport implications of the proposals to achieve a sustainable development and identify any residual impacts together with appropriate mitigation measures. In particular, it will use national guidance and locally determined traffic generation rates to consider the access arrangements and likely traffic impact on the surrounding highway network.

1.7 It will be demonstrated that that the access will operate safely and that the traffic likely to be generated by the development proposals can be accommodated on the local highway network. The site is also well located to encourage trips by sustainable modes of travel.

1.8 This Transport Assessment will conclude that there are no highways or transportation reasons which would prevent the proposed development being granted planning consent.

2.0 TRANSPORT POLICY CONSIDERATIONS

National Policy

National Planning Policy Framework

2.1 The National Planning Policy Framework (NPPF) was first published in March 2012 and most recently revised in June 2019. It sets out the Government's planning policies for England and how these should be applied.

2.2 Paragraph 108 of the NPPF states that:

> *"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
>
> *a) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
>
> *b) Safe and suitable access to the site can be achieved for all users; and*
>
> *c) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

2.3 Paragraph 109 of the NPPF states that:

> *"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."*

2.4 Paragraph 110 of the NPPF goes on to state:

> *"Within this context, applications for development should:*
>
> *a) Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

b) *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

c) *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

d) *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

e) *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

Planning Practice Guidance

2.5 The Department for Transport web-based resource Planning Practice Guidance (PPG) was first published in November 2016, but also contains guidance published before this date from as early as March 2014. It contains the chapter "Travel Plans, Transport Assessment and Statements in Decision-Taking". This chapter makes reference to the NPPF, which states that all developments that generate significant amounts of transport movement should be supported by a Transport Statement or Transport Assessment.

2.6 It goes on to advise that local planning authorities must make a judgement as to whether a development proposal would generate significant amounts of movement on a case by case basis.

2.7 Paragraph 2 states that:-

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

2.8 In respect of Transport Assessments and Travel Plans, paragraph 6 states that:

> "…Travel Plans, Transport Assessments and Statements can positively contribute to:-
>
> - *encouraging sustainable travel;*
> - *lessening traffic generation and its detrimental impacts;*
> - *reducing carbon emissions and climate impacts;*
> - *creating accessible, connected, inclusive communities;*

- *improving health outcomes and quality of life;*
- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads".*

They support national planning policy which sets out that planning should actively manage patterns of growth in order to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."

2.9 Paragraph 13 of the PPG stipulates that in order to determine whether a Transport Assessment or Statement will be needed for a proposed development, local planning authorities should take into account the following considerations:

- *"The Transport Assessment and Statement policies (if any) of the Local Plan;*
- *The scale of the proposed development and its potential for additional trip generation (smaller applications with limited impacts may not need a Transport Assessment or Statement);*
- *Existing intensity of transport use and availability of public transport;*
- *Proximity to nearby environmental designations or sensitive areas;*
- *Impact on other priorities / strategies (such as promoting walking and cycling);*
- *The cumulative impacts of multiple developments within a particular area; and*
- *Whether there are particular types of impacts around which to focus the Transport Assessment or Statement (e.g. assessing traffic generated at peak times).*

Local Policy

Barnsley Local Plan

2.10 The Barnsley Local Plan was adopted in January 2019 and it seeks to improve the economic prosperity and quality of life for all its residents and those who work in Barnsley. The Local Plan objectives are to:

- Provide opportunities for the creation of new jobs and protection of existing jobs;
- Improve the conditions in which people live, work, travel and take leisure;
- Widen the choice of high quality homes;
- Improve the design of development; and
- Protect and enhance Barnsley's environmental assets and achieve net gains in biodiversity.

2.11 Policy T3 of the Local Plan refers to 'New Development and Sustainable Travel' and it states that new development 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, mopeds and disabled people set out in the relevant Supplementary Planning Document;
- Provide a transport statement or assessment in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts; and
- Provide a travel plan statement or a travel plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition.

Sheffield City Region Transport Strategy

2.12 Sheffield City Region, which includes Barnsley and the development site, has prepared their Transport Strategy which covers the period between 2011 and 2026, providing a 15-year strategy for transport.

2.13 The Transport Strategy's vision is:

> *"Offering people a great place in which to live, work, invest and visit. Focusing on SCR's prosperity and growth, we want it to make a greater contribution to the UK economy by having a local economy less dependent on the public sector, providing conditions for businesses to grow, and become the prime national centre for advanced manufacturing and low-carbon industries."*

2.14 The Transport Strategy has four goals which are:

- To support economic growth;
- To reduce emissions;
- To enhance social inclusion and health; and
- To maximise safety.

2.15 The development proposals are considered to be in line with national and local policy and are consistent with the stated objectives.

3.0 THE LOCAL HIGHWAY NETWORK AND ITS CURRENT USAGE

The Application Site

3.1 The development site is located within Bolton-Upon-Dearne, some 12 kilometres to the south east of Barnsley town centre. It currently comprises an area of undeveloped land. It is bound to the north by residential properties, to the east by agricultural land, to the south by Lowfield Lakes and the River Dearne and to the west by Phases 1 and 2 of the development which is proposed here.

3.2 Phases 1 and 2 of the development have been built out and are occupied. They are both served by Prior Croft. The junction of Prior Croft and Lowfield Lane was built to adoptable standards to accommodate Phases 1 and 2. The location of the application site in relation to the highway network is shown on the plan attached at **Appendix BGH5.**

3.3 Phase 1 comprises of some 60 houses that are accessed by way of residential roads typically comprising 5.5 metre wide carriageways and 2 metre wide footways on both sides, which comply with current design standards. Phase 2 consists of some 58 residential houses comprising of two, three and four bedroom houses and has also been constructed to adoptable standards. Phase 3 will be an extension to the development to the east of Phase 2 for 97 houses. All three phases of the development will be accessed via the existing, approved junction of Prior Croft and Lowfield Road.

The Local Highway Network

3.4 Lowfield Road runs from Station Road in an easterly direction past the existing site access which is called Prior Court. To the east of Prior Court, it runs into Lowfield Lane which continues eastwards to link through to the village of Harlington. Lowfield Road also provides access to other residential streets such as Woodside View, Lowfield Meadows, Lowfield Grove and Crane Well View.

3.5 Lowfield Road is lit and is subject to a 30mph speed limit. It provides access to Bolton-Upon-Dearne railway station car park that is located on the north side of Lowfield Road and to existing residential development in the area. Typically, Lowfield Road has a carriageway which varies in width between 6.0 metres and 6.5 metres. This is more than adequate for the level of two-way traffic flow which uses it at present. In the vicinity of the junction with Prior Court, there are footways on both the northern and southern sides of the carriageway. The southern footway ends approximately 45 metres to the west of the approved access.

3.6 Phase 1 was subject to a number of planning conditions including widening the footway on the northern side of Lowfield Road between the site access and the railway bridge to achieve a uniform width of 2.0 metres. This work, which is shown on the plan at **Appendix BGH6,** has been completed.

3.7 Phase 2 was subject to planning conditions including Condition no. 7 which requires the implementation of the following highway works, as shown on the plan at **Appendix BGH7:-**

a) Provision of two vehicle activated signs;
b) Any necessary signing/lining;
c) Measures to control parking and loading;
d) Provision of high friction coloured surfacing;
e) Provision of LED street lighting on the bridge and the approaches to the bridge;
f) Provision of/any necessary changes to highway drainage; and
g) Resurfacing/reconstruction as necessary

3.8 Some 175 metres to the west of Prior Court, Lowfield Road crosses the Sheffield – Leeds railway line by way of a bridge which is understood to be owned by Network Rail. At this point, the road comprises a carriageway of some 6 metres in width and footways of some 1 metre wide on both sides of the carriageway. In addition, a separate 2 metre wide pedestrian footbridge has been constructed on the northern side of Lowfield Road which links to the platforms on either side of the railway line and to the station car park. This provides safe and convenient pedestrian links to both platforms and the car park from Lowfield Road.

3.9 To the west of the site, Lowfield Road becomes B6098 Station Road which forms a ghost island junction with Angel Street. Angel Street, Station Road and Furlong Road form the main route through Bolton-upon-Dearne. Angel Street provides a link between the A635 and the A623 which in turn provides a direct route to Mexborough, A630 and Rotherham town centre. A635 performs the function of a primary distributor type of road providing links to Barnsley town centre, the A1(M), the M1 Motorway at Junction 37, the A19 and Doncaster town centre. The site is therefore accessible by car and has good access to Barnsley, Rotherham and Doncaster town centres and the national motorway network.

Operation of the Local Highway Network

3.10 Under usual circumstances, traffic surveys would be undertaken to establish the current operation of the local highway network in the vicinity of the site. However,

due to the COVID-19 pandemic, it has not been possible to undertake surveys which would be representative of the typical traffic flows prior to the pandemic.

3.11 As a result, traffic surveys for the previous Phases of the scheme have been utilised in this traffic assessment, this approach has bene agreed with the local Highway Authority. These traffic surveys were previously undertaken on Tuesday 6 January 2015 and Thursday 8 January 2015 between the hours 07:00 - 09:30 and 16:00 – 18:30 and consisted of surveys at:-

- Site access/Lowfield Road simple priority junction
- Station Road/Angel Street ghost island priority junction

3.12 These surveys are considered to be appropriate for the proposed scheme. Usually, traffic surveys are considered to be valid if they are carried out in the previous 3 year period. Hence, these surveys are only 2 years older than would normally be considered acceptable and, as far as we are aware, there have been no significant changes to the road network or to travel patterns in the intervening period. The survey results, which are attached at **Appendix BGH8**, show that the peak usage for the station road junction occurred between 7:45 am to 8:45 am in the morning and between 5:30 pm to 6:30 pm in the evening. Diagrams showing the flows on the network during these two periods are at **Appendix BGH9.**

3.13 During the AM Peak hour, in the vicinity of the site access, Lowfield Road carried a maximum 2-way flow of 86 vehicles during the morning peak hour and a 2-way flow of 93 vehicles during the evening peak hour. This confirms that the traffic flows on Lowfield Road at the railway bridge are very low i.e. a maximum of one vehicle every 40 seconds.

3.14 Analysis of the Station Road/Angel Street ghost island priority junction has been carried out using the PICADY element of the Junctions 8 modelling software. The results which are attached at **Appendix BGH10** and summarised in Table 3.1, show that in 2015, the junction currently operated with significant reserve capacity and little queuing during both peak periods. The RFC ratio is a measure of how a particular arm of a junction is operating. An RFC of 0.85 or less is generally accepted as being required for new junctions whilst an RFC of up to 1.0 can be acceptable for the operation of existing junctions. The model demonstrates that the junction is operating well within capacity with little if any queuing. These findings have been confirmed by site observations. It is therefore concluded that the model represents actual site conditions.

Table 3.1 – 2015 Existing Scenario Operational Assessment
Station Rd/Angel St

Arm	2015 Existing Flows			
	Morning Peak Hour		Evening Peak Hour	
	RFC	Queue	RFC	Queue
Station Road	0.45	1	0.26	0
B6098 Angel Street	0.05	0	0.12	0

Personal Injury Collisions Record

3.15 The record of Personal Injury Collisions (PIC's) that have occurred on the local highway network during the most recent five-year period available has been requested from Barnsley Metropolitan Borough Council. The data received covers the period from January 2015 to December 2019 and is included at **Appendix BGH11**. The area of interest is also included at **Appendix BGH11**.

3.16 During the 5-year period, the data shows that a total of 14 collisions were recorded within the study area, including 4 'serious' collisions and 10 'slight' collisions.

Lowfield Road

3.17 No collisions have occurred on Lowfield Road during the 5-year period. This shows that the road has been operating safely for the last 5 years, including the approved site access junction and the railway bridge.

B6098 Station Road/Angel Street and Station Road junction

3.18 The data shows that there has been three 'slight' PIC's at this junction. The first and second 'slight' PIC's (ref: 18282600 and 17226719) occurred when drivers lost control of their vehicle on the right bend travelling along the B6098 Station Road/Angel Street, both incidents occurred on wet road surfaces. Contributory factors were listed as: 'Loss of Control' and 'Rain, sleet, snow or fog'.

3.19 The third 'slight' PIC (ref: 1649674) at this junction occurred when a vehicle pulled out of Station Road onto the B6098 Station Road/Angel Street in front of another vehicle travelling along the road. Contributory factors were listed as: 'Failed to look properly' and 'Failed to judge other person's path or speed'.

Station Road (between B6098 Station Road/Angel Street and Station Road junction and B6098 Station Road/Furlong Road and Station Road junction)

3.20 One 'slight' PIC (ref: B-00289-15) occurred along this stretch of the B6098 Station Road when a vehicle travelling northbound lost control of their vehicle and collided with a vehicle travelling in the opposite direction. Contributory factors were listed as: 'Slippery road (due to weather)'.

B6098 Station Road/Furlong Road and Station Road junction

3.21 A total of 3 PIC's occurred at this junction, 1 was classed as 'serious' in severity and 2 were classed as 'slight'. The 'serious' PIC (ref: 17255704) and 1 'slight' PIC (ref: 18265718) both occurred when a vehicle pulled out of Station Road onto the B6098 Station Road/Furlong Road in front of them. Contributory factors were listed as: 'Failed to look properly', 'Slippery road (due to weather)' and 'Careless, reckless or in a hurry'.

3.22 The remaining 'slight' PIC (ref: 19878437) occurred when a pedestrian was hit by a vehicle whilst crossing the road. No contributory factors were listed.

Station Road (West of B6098 Station Road/Furlong Road and Station Road junction)

3.23 Two 'serious' PIC's (ref: B-00547-15 and 19807336) occurred on this stretch of road. Both PIC's occurred when a pedestrian entered the carriageway in front of an oncoming vehicle. Contributory factors were listed as: 'Failed to look properly', 'Failed to judge vehicle's path or speed' and 'Careless, reckless or in a hurry'.

B6098 Angel Street (West of B6098 Station Road/Furlong Road and Station Road junction)

3.24 Returning to the B6098 Angel Street, 1 'slight' PIC (ref: C-00989-15) occurred along this stretch of road. It occurred after the driver of the vehicle lost control on the bend travelling southbound. Contributory factors were listed as: 'Loss of control'.

B6098 Angel Street and High Street junction

3.25 A total of two PIC's occurred at this junction, 1 was classed as 'serious' in severity (ref: 19941612) and one was classed as 'slight' (ref: 17159481). Both PIC's occurred when southbound travelling vehicles turned right onto High Street in front of northbound travelling vehicles and colliding with them on B6098 Angel Street. Contributory factors were listed as: 'Failed to look properly', 'Not displaying lights at night or in poor visibility' and 'Dazzling sun'.

High Street (West of B6098 Angel Street and High Street junction)

3.26 One 'slight' PIC (ref: 1673647) occurred along this stretch of road when a vehicle pulled out of a junction in front of a vehicle travelling along High Street.

Contributory factors included: 'Disobeyed 'Give Way' or 'Stop' sign or markings', 'Travelling too fast for conditions' and 'Vehicle in course of crime'.

B6098 Angel Street (South of B6098 Angel Street and High Street junction)

3.27 One 'slight' PIC (ref: 17230114) occurred along this stretch of road when a vehicle was edging out of New Street collided with a vehicle travelling along B6098 Angel Street. No contributory factors were listed.

Summary

3.28 Analysis of the PIC's which have occurred during the 5-year period shows that the majority of PIC's can be attributed to poor decisions made by drivers, such as failing to look properly and misjudging clearance, weather conditions or speed. It is therefore considered that there are no obvious geometric deficiencies within the existing highway network in the vicinity of the site which are required to be addressed as part of the development proposals. It also relevant to note that no collisions occurred within the existing Phases of the scheme, at the Prior Court / Lowfield Road junction or on Lowfield Road in the vicinity of the site.

4.0 ACCESS BY SUSTAINABLE FORMS OF TRAVEL

4.1 National and local transport policies seek to reduce the need to travel and to promote the use of alternative modes to the private car. The development is consistent with these objectives and its location will enable residents to have a choice in how they travel.

Accessibility on Foot

4.2 With regard to pedestrian provision at new developments, guidance is set out within the CIHT document 'Planning for Walking' (March 2015) which describes how approximately 80% of all journeys shorter than 1 mile are made wholly on foot. If destinations are within a convenient walking distance, people are more likely to walk if it is safe, comfortable, and the environment is attractive.

4.3 Guidance within the Institution of Highways and Transportation 'Guidelines for Providing for Journeys on Foot' (2000) sets out the suggested acceptable walking distances below, to and from development for commuting/school and retail/shopping journeys.

Table 4.1: Recommended Walking Distances

	Trip Purpose	
	Commuting/School	**Other Journeys (Retail/Shopping)**
Desirable Maximum Distance	500 metres	400 metres
Acceptable Maximum Distance	1,000 metres	800 metres
Preferred Maximum Distance	2,000 metres	1,200 metres

4.4 The proposed development will be served by a number of convenient pedestrian links to the surrounding residential areas and facilities that will encourage walking trips. The accessibility plan at **Appendix BGH12** shows the 800 metre, 1,200 metre and 2,000 metre walking catchment areas from the centre of the application site. The plan shows that Bolton Upon Dearne railway station and bus stops lie within the 800 metre catchment area and that other facilities with Bolton Upon Dearne are accessible on foot.

Accessibility by Cycle

4.5 The Department for Transport 'Cycling and Walking Investment Strategy' (April 2017) notes that cycling is an ideal mode of transport for journeys under 8 kilometres and that cycling has clear potential to substitute for short car trips, particularly those under 5 kilometres, and to form a longer journey by public transport.

4.6 The accessibility plan at **Appendix BGH13** shows that within 8.0 km, the whole of Bolton Upon Dearne is accessible by cycle. Surrounding areas such as Thurnscoe, Wombwell, Mexborough and Darfield are also accessible by cycle.

Public Transport

Bus

4.7 With regard to public transport provision at new developments, the CIHT publication "Buses in Urban Developments" (January 2018) refers to a maximum walking distance to bus stops of 400 metres, which is a historic recommended distance which has been applied for many years. The aforementioned "Planning for Walking" also states that 400 metres has traditionally been regarded as a cut off point for walking distance to bus stops.

4.8 "Buses in Urban Developments" also recognises that there are a number of other factors to consider, including that people will accept longer walks to reach bus services that are fast, direct, frequent and serve a wider range of destinations. The guidance also notes that the recommended walking distances should not be applied uniformly without regard to the specific characteristics of the particular location or route.

4.9 The nearest bus stops to the site are on Station Road and are located some 615 metres walk distance to the north-west from the centre of the site. The southbound stop provides a flag and timetable information whilst the northbound stop provides a shelter and timetable information. These stops are currently served by bus service numbers 208 and 226.

4.10 The summary of the timetable information for the bus services stopping on Station Road is shown in Table 4.2. The bus timetables which were in place prior to the COVID-19 pandemic were obtained from the Travel South Yorkshire website and are attached at **Appendix BGH14**.

Table 4.2: Bus Services and Frequencies

No.	Route	Headway (both directions)				
		Mon to Fri Daytime	Mon to Fri Evenings (after 6pm)	Saturday Daytime	Saturday Evenings (after 6pm)	Sundays
208	Rotherham – Warren Vale – Bolton-Upon-Dearne - Grimethorpe	3 services per day. Approximate calling times: Northbound: 06:27, 14:27, 22:32 Southbound: 07:37, 15:33, 23:29				
226	Barnsley – Wombwell – Bolton-Upon-Dearne - Thurnscoe	Half hourly	Hourly	Half hourly	Hourly	Hourly

4.11 There is therefore significant potential for public transport trips to be made to destinations including Barnsley, Thurnscoe and Wombwell with a minimum overall frequency of 2 buses per hour Monday to Saturday daytime.

Rail

4.12 Bolton-Upon-Dearne railway station is adjacent to the site. The railway bridge over which Lowfield Road passes is located approximately 370 metres to the north-west of the site as the crow flies. The facilities at the railway station include 26 car parking spaces and 6 sheltered cycle storage spaces. The station also provides step free access throughout the whole station.

4.13 Bolton-Upon-Dearne railway station provides regular train services to destinations including Sheffield, Wakefield and Leeds. Clearly, the proximity of the site to the railway station is a major advantage, enabling future residents to travel by sustainable means to Barnsley, Rotherham and Sheffield and to access the national rail network.

Summary

4.14 It is concluded that the application site is in a sustainable location and offers good opportunities for sustainable travel which will reduce the reliance on the private car.

5.0 THE PROPOSED DEVELOPMENT

5.1 The planning application by Gleeson Homes & Regeneration seeks full planning permission to build a further 97 houses on land off Lowfield Road, Bolton upon Dearne, Barnsley, as shown on the site layout plan at **Appendix BGH3.**

5.2 The proposed development will form an extension to Phases 1 and 2 of the development, as shown on the plan showing **Appendix BGH4**. Access to the site will be by way the existing simple priority junction of Lowfield Road and Prior Court. The layout of this junction was approved as part of Phase 1 of this scheme.

5.3 The proposed development will include both car and cycle parking spaces consistent with relevant national and local policies. The proposed development will link into the existing roads and footways of Phases 1 and 2.

Travel Plan

5.4 The Phase 2 scheme included a requirement for a Travel Plan to be submitted and implemented. This requirement was addressed by the production of a Framework Travel Plan by Travel Plan Services (TPS). This set out a package of measures aimed at promoting sustainable travel and was subsequently implemented. It is therefore proposed to extend the scope of the existing Travel Plan to cover all the properties in Phase 3.

Improvements to Railway Bridge

5.5 The site is allocated in the adopted Local Plan as site HS42. Part of the policy states that the development should provide for traffic signals to be installed at the railway bridge on Lowfield Road. Based on the Local Plan policy, the applicant will deliver the traffic signal scheme.

5.6 In the absence of a scheme being provided by the Council, detailed plans showing a proposed traffic signal scheme over the bridge has been included at **Appendix BGH15** to demonstrate the layout of such a scheme. The improvement scheme includes for introduction of one way working across the bridge as required. It has been assumed that such a scheme is required by the Council but clearly no assessment has been carried out at this early stage in the process. The existing bridge is owned and maintained by Network Rail and therefore it is proposed to liaise with Network Rail and the Council, as the local Highway Authority, to deliver the traffic signals, possibly by way of a Section 106 Agreement. It is also proposed to carry out a Stage 1/2 Road Safety Audit of the proposed traffic signals at the appropriate time.

6.0 THE HIGHWAY IMPACT OF THE PROPOSED DEVELOPMENT

Trip Generation

6.1 The application for Phase 2 included a TA that was based upon traffic generation rates determined from traffic surveys of the existing 112 houses located to the east of the site access on Lowfield Road. The surveys showed that the houses generated some 85 and 73 two-way trips during the morning and evening peak periods respectively, which equates to 0.76 and 0.65 trips per dwelling respectively.

6.2 The TA compared these trip rates with those obtained from the TRICS database and showed that the trip rates determined from local traffic surveys were higher. As a result, the TA was based on the local traffic surveys to ensure that the analyses were robust.

6.3 Given that the previous application was submitted in 2013, new trip rates have been obtained from TRICS based on current trip rates to ensure they are representative of the current trip generations. The updated TRICS rates are lower than the trip rates from the Phase 2 traffic surveys. Therefore, the same surveyed trip rates from the Phase 2 application have been used in the analyses for Phase 3 to ensure the same robustness.

6.4 An assessment year 5 years after the submission of the planning permission is appropriate here and therefore the assessment year of 2025 has been used. The diagrams at **Appendix BGH16** show the 2025 growthed peak hour flows which have been derived by applying the growth factors attached at **Appendix BGH17**, to the existing peak hour flows at **Appendix BGH9.**

Committed Development

6.5 It is likely that the 2015 traffic surveys may include traffic generated from either Phase 1 or Phase 2 of the development. However, there are no records which show when the houses on Phase 1 and Phase 2 were first occupied and hence when they started to generate traffic. As a result, a worst case scenario has been assumed in which the Phase 1 and Phase 2 generated traffic is included in the assessment as committed development, the committed development flows are attached at **Appendix BGH18**. This is a very robust assumption which leads to an over estimate of the design year traffic as some of the Phase 1 and Phase 2 traffic may have been included in the 2015 survey. These have been added to the 2025 growthed peak hour flows shown at **Appendix BGH16** to give 2025 base peak hour flows at **Appendix BGH19.**

Traffic Distribution

6.6 The Phase 2 TA also included an assessment of the likely distribution of generated traffic based upon the 2001 census journey to work data for the Dearne South ward. An updated traffic distribution based on 2011 census data has been used for the Phase 3 analyses and the resultant traffic distribution and development peak hour flows is shown on the diagrams at **Appendix BGH20**.

Predicted Flows

6.7 The generated peak hour development traffic shown on the diagrams at **Appendix BGH20** have been added to the base flows shown at **Appendix BGH19** to give 2025 predicted traffic flows on the network as a result of the proposed development and these are shown on the diagrams at **Appendix BGH21**.

6.8 Based upon the previously validated computer model, analyses of both the base and predicted 2025 peak hour performance of the Station Road/Angel Street junction have been undertaken. The results are attached at **Appendix BGH22** and are summarised in Tables 6.1 and 6.2.

Table 6.1 – 2025 Base Scenario Operational Assessment
Station Rd/Angel St

Arm	2025 Base Flows			
	Morning Peak Hour		Evening Peak Hour	
	RFC	Queue	RFC	Queue
Station Road	0.74	3	0.43	1
B6098 Angel Street	0.08	0	0.20	0

6.9 The analysis shows that when the junction is operating with traffic growth and committed development taken account of in the peak hours, it will still operate satisfactory with a maximum RFC of 0.74 and modest queue lengths.

Table 6.2 – 2025 Predicted Scenario Operational Assessment
Station Rd/Angel St

Arm	2025 Predicted Flows			
	Morning Peak Hour		Evening Peak Hour	
	RFC	Queue	RFC	Queue
Station Road	0.89	6	0.51	1
B6098 Angel Street	0.10	0	0.24	0

6.10 It can be seen that when the impact of the development is included, the junction will continue to operate within its maximum theoretical capacity during the evening peak periods. In the morning the RFC's for the Station Road approach reaches 0.89, which is considered to be acceptable for an existing junction, and the queue length is no more than 6 vehicles in length. As explained previously, the results in both of these Tables 6.1 and 6.2 are likely to be an overestimate of traffic conditions due to the worst case assumptions which have been made regarding occupancy of Phases 1 and 2.

6.11 The diagrams at **Appendix BGH20** show that the proposed development will increase the two way traffic flow on Lowfield Road at the site access by some 74 and 64 two-way trips during the morning and evening peak periods respectively. These increases equate to approximately one additional vehicle every minute at peak times which can readily be accommodated on the adjacent highway network. At other times of the day, the increases will be even less.

6.12 The analysis shows that, following completion of the proposed development, the local highway network will continue to operate in a safely and within capacity.

7.0 SUMMARY AND CONCLUSIONS

7.1 This Transport Assessment forms part of a planning application submitted by Gleeson Homes & Regeneration to develop 97 residential units, in an area of land off Lowfield Road in the Bolton upon Dearne area of Barnsley. The application site is approximately 12 kilometres to the south-east of Barnsley town centre.

7.2 The proposed development (referred to as Phase 3) will form an extension to the Phase 1 and Phase 2 schemes. It will use the existing simple priority access which was created to serve Phases 1 and 2 which form a junction between Lowfield Road and Prior Court.

7.3 A Travel Plan was previously produced for Phases 1 and 2 and this Travel Plan will be extended to encompass the 97 houses which make up Phase 3. This will ensure that the development will accord with Local and Central Government advice regarding sustainable travel, discouraging the use of the single occupancy private car and encouraging trips by environmentally friendly modes of travel.

7.4 This Transport Assessment has considered the transport implications of the proposals to achieve a sustainable development. Based upon national guidance and locally determined traffic generation rates, it has considered the access arrangements and the likely traffic impact on the surrounding highway network. It is concluded that the network and site access will continue to operate in a satisfactory manner with the development in place and therefore there is no need to introduce any further off-site measures to mitigate traffic impact.

7.5 In order to comply with Local Plan policy, a proposed traffic signal scheme to provide one way working across the railway bridge will be provided. The details of such a scheme will be discussed through the planning application process.

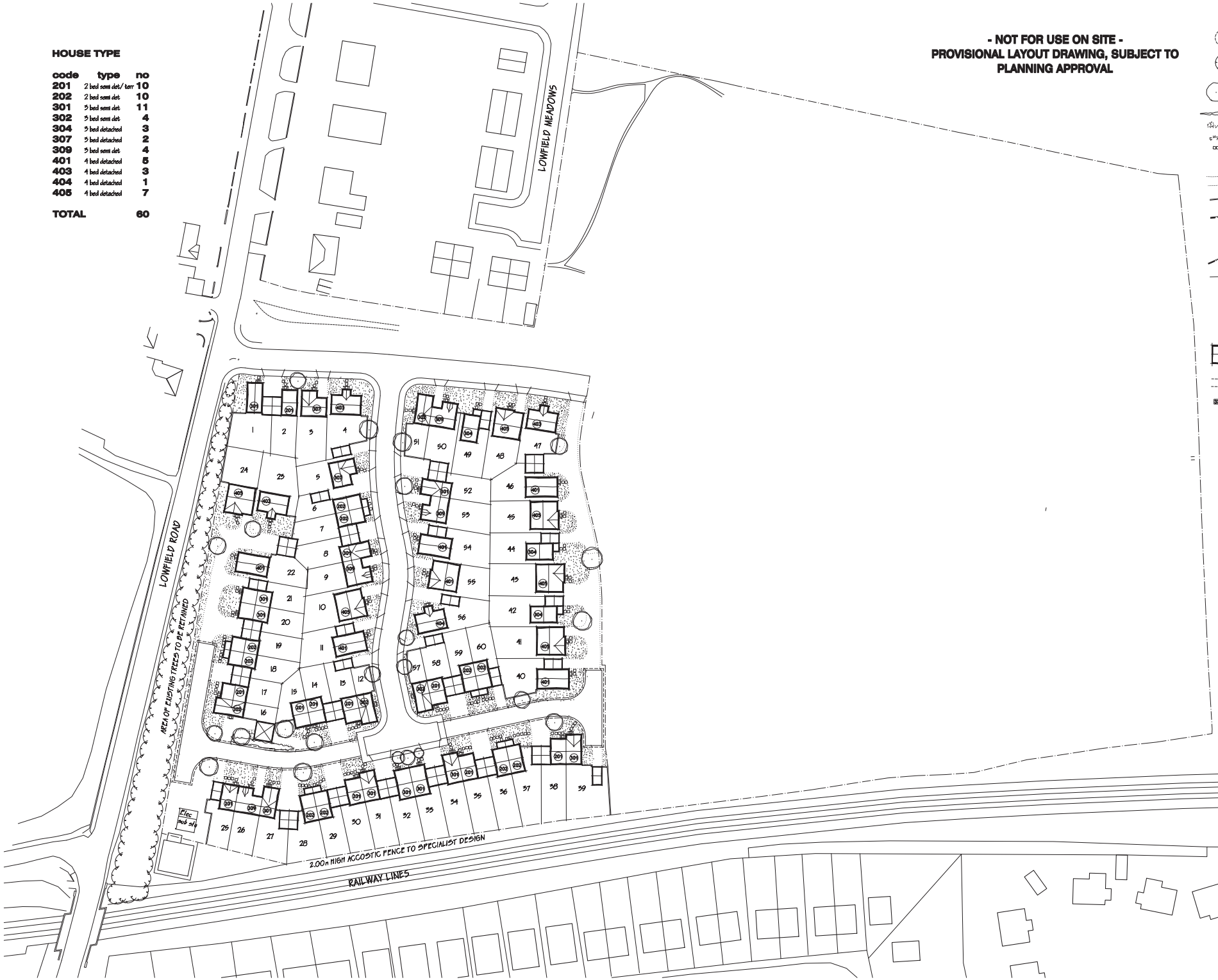
7.6 It can be concluded therefore that there are no highways or transportation reasons which should prevent the proposed development being granted planning consent.

APPENDIX BGH 1

HOUSE TYPE

code	type	no
201	2 bed semi det/ terr	10
202	2 bed semi det	10
301	3 bed semi det	11
302	3 bed semi det	4
304	3 bed detached	3
307	3 bed detached	2
309	3 bed semi det	4
401	4 bed detached	5
403	4 bed detached	3
404	4 bed detached	1
405	4 bed detached	7
TOTAL		60

- NOT FOR USE ON SITE -
PROVISIONAL LAYOUT DRAWING, SUBJECT TO PLANNING APPROVAL



- Existing tree to be removed
- Existing tree to be retained and protected during construction to British Standard 5837:1991.
- Areas of new tree planting see schedule for species
- New shurbs/ ground cover planting
- Grass to front garden
- Paving slab access paths to level threshold for principle entrance. Gradient not to exceed 1in 12 for maximum 5.00m length
- Private drives
- 1.80m high screen wall
- S.W. boarded vertical screen fence 1.80m high (100 x 22mm boards with 22mm gaps, 3No. 75 x 38mm rails, 100 x 100mm posts @ 1.875m centres).
- As above, height reduced to 1.20m
- Plot division fence, post & wire
- 201 House type code reference number
- 8 Plot number
- ba Material code reference refer to schedule
- Garages location.
- Parking bays
- 33.500 Proposed floor levels subject to a tolerance of + / - 0.5m

gleeson

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LOWFIELD ROAD
BOLTON ON DEARNE

planning layout

GLEESON
HOMES & REGENERATION

A	Additional land & surrounding detail added.	29.07.11

Scale
1:500 at A1

Date
18.07.11

Dwg No
344/2A

APPENDIX BGH 2

- NOT FOR USE ON SITE -
PROVISIONAL LAYOUT DRAWING, SUBJECT TO PLANNING APPROVAL

PROPOSED BUFFER PLANTING MIX, - TO INCLUDED SOME SAPPLINGS

Nr	Code	Plant Name	Ht(cm)	Root	Mix(%)
69	Ag	Alnus glutinosa	60-90	B	150
69	Bp	Betula pendula	60-90	B	150
69	Cav	Corylus avellana	45-60	B	150
69	Cm	Crataegus monogyna	45-60	B	150
23	Fe	Fraxinus excelsior	60-90	B	50
23	Pa	Prunus avium	60-90	B	50
23	Qp	Quercus petraea	60-90	B	50
46	Sc	Salix caprea	45-60	B	100
23	Sau	Sorbus aucuparia	60-90	B	50
46	Sv	Sorbus vilmorinii	45-60	B	100

0m 10m 20m 30m 40m 50m 60m 70m 80m 90m 100m

- Existing tree to be removed
- Existing tree to be retained and protected during construction to British Standard 5837:1991.
- Areas of new tree planting see schedule for species
- New shurbs/ ground cover planting
- Grass to front garden
- Paving slab access paths to level threshold for principle entrance. Gradient not to exceed 1in 12 for maximum 5.00m length
- Private drives
- 1.80m high screen wall
- S.W. boarded vertical screen fence 1.80m high (100 x 22mm boards with 22mm gaps, 3No. 75 x 38mm rails, 100 x 100mm posts @ 1.875m centres).
- As above, height reduced to 1.20m
- Plot division fence, post & wire
- (201) House type code reference number
- 8 Plot number
- ba Material code reference refer to schedule
- Garages location.

P indicate parking space compliant garages, all other to be Gleesons standard garages

- Parking bays
- 33.500 Proposed floor levels subject to a tolerance of + / - 0.5m

HOUSE TYPE

code	type	no
201	2 bed semi det/ terr	7
202	2 bed semi det.	8
301	3 bed semi det.	7
302	3 bed semi det.	7
303	3 bed semi det.	2
304	3 bed detached	4
309	3 bed semi det.	9
310	3 bed detached	2
311	3 bed semi det.	4
401	4 bed detached	2
403	4 bed detached	1
404	4 bed detached	2
405	4 bed detached	1
406	4 bed detached	2
TOTAL		**58**

H.	Open space omitted from rear aarden to plots 112-118, plots 112-114 revised. 09.02.19	
J.	Plots 112-115 moved forward. 10.02.19	
A	Scheme re-design. 27.02.13	Scale
B	P69,76-96,114-124 revised(33No) 26.09.13	
C	Play equipment re-positioned. 30.09.13	1:500 at A1
D	Parking to plots 62-64, 67,71,78, 79, 92, 93, 94, 98, 100, 102, 103, 105, 108, 118 & 119.	
	type chanae to plots 65, 66 83,84,96,105 & 114-124. 114-124, Rd margins 675mm 18.03.14	Date
E	Play equipment re-positioned. 28.03.14	02.11.12
F	Plots 74-99, 105-118 revised, odour stand off line advanced 10m, play area re-positioned.	
	buffer planina and schedule added 10.07.14	Dwg No
G	Plot 105 slight repositioning back from margin, elec substation added, plot boundary treatments revised, latest unit footprints used. 25.01.15	373/2J

gleeson

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LOWFIELD ROAD
BOLTON ON DEARNE 2

planning layout

GLEESON HOMES & REGENERATION

APPENDIX BGH 3

- NOT FOR USE ON SITE -
PROVISIONAL LAYOUT DRAWING, SUBJECT TO PLANNING APPROVAL

- Existing tree to be removed
- Existing tree to be retained and protected during construction to British Standard 5837:1991.
- Areas of new tree planting see schedule for species
- New shurbs/ ground cover planting
- Grass to front garden
- Paving slab access paths to level threshold for principle entrance. Gradient not to exceed 1in 12 for maximum 5.00m length
- Private drives
- 1.80m high screen wall
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- Plot division fence, post & wire
- 201 House type code reference number
- 8 Plot number
- ba Material code reference refer to schedule
- Garages location.

P indicate parking space compliant garages, all other to be Gleesons standard garages

- Parking bays
- 33.500 Proposed floor levels subject to a tolerance of + / - 0.5m

0m 10m 20m 30m 40m 50m 60m 70m 80m 90m 100m

HOUSE TYPE

code	type	no
201	2 bed semi det/ terr	19
202	2 bed semi det	8
301	3 bed semi det	16
302	3 bed semi det	16
303	3 bed semi det	6
304	3 bed detached	6
309	3 bed semi det	14
310	3 bed detached	2
403	4 bed detached	1
404	4 bed detached	4
405	4 bed detached	2
406	4 bed detached	3
TOTAL		97

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LOWFIELD ROAD
BOLTON ON DEARNE 3

planning layout

GLEESON HOMES & REGENERATION

Scale	1:500 at A1
Date	28.11.14
Dwg No	449/3-

APPENDIX BGH 4

gleeson

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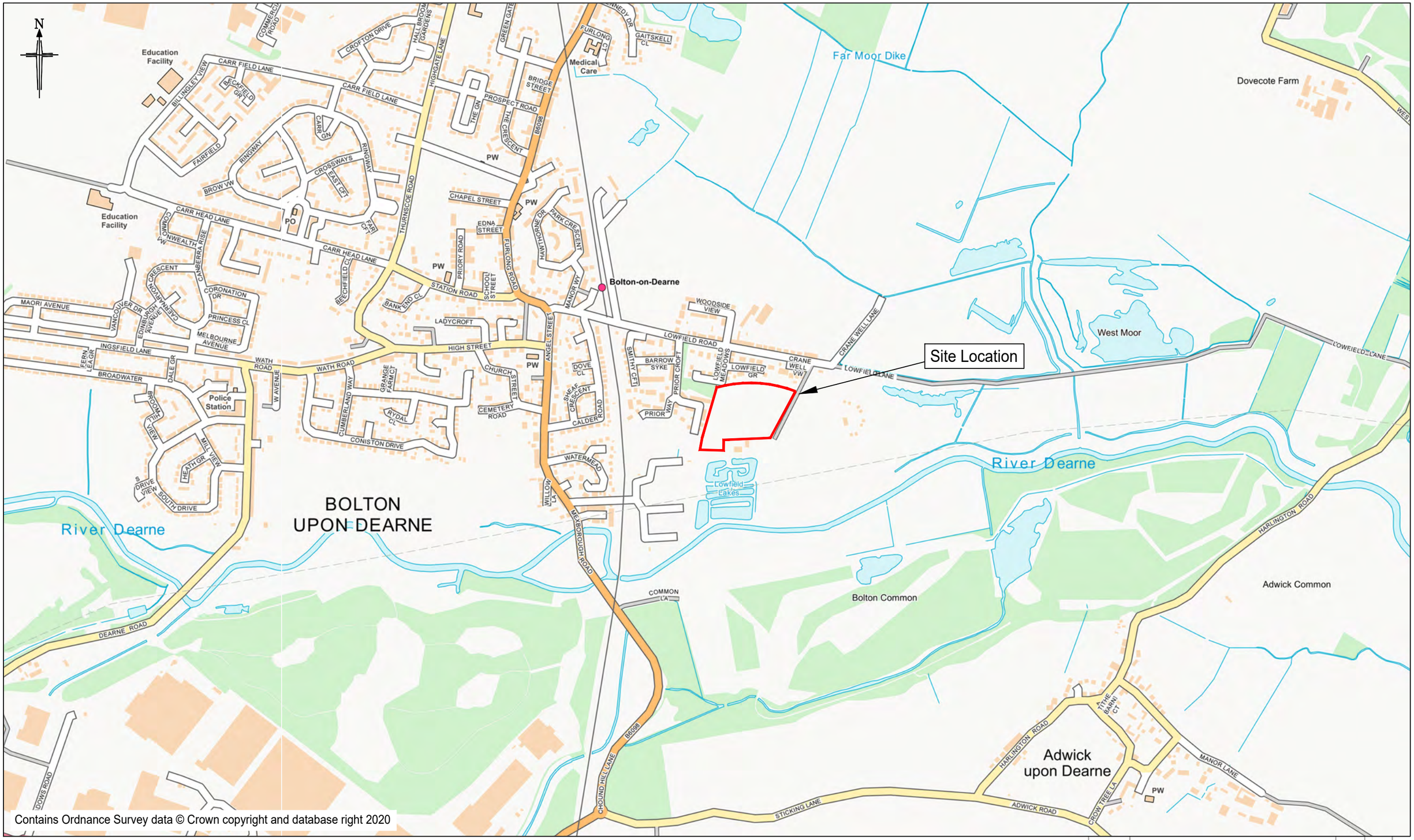
LOWFIELD ROAD
BOLTON ON DEARNE
PHASES 1, 2 & 3

planning layout

GLEESON
HOMES & REGENERATION

Scale	
	1:1000 at A1
Date	
	14.04.15
Dwg No	
	449/4-

APPENDIX BGH 5



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Rev:	Date:	Amendment:	DRN	CHK	APR

Title: SITE LOCATION PLAN

Status: PLANNING

Client: GLEESON REGENERATION AND HOMES

Project: LOWFIELD ROAD, BOLTON-UPON-DEARNE

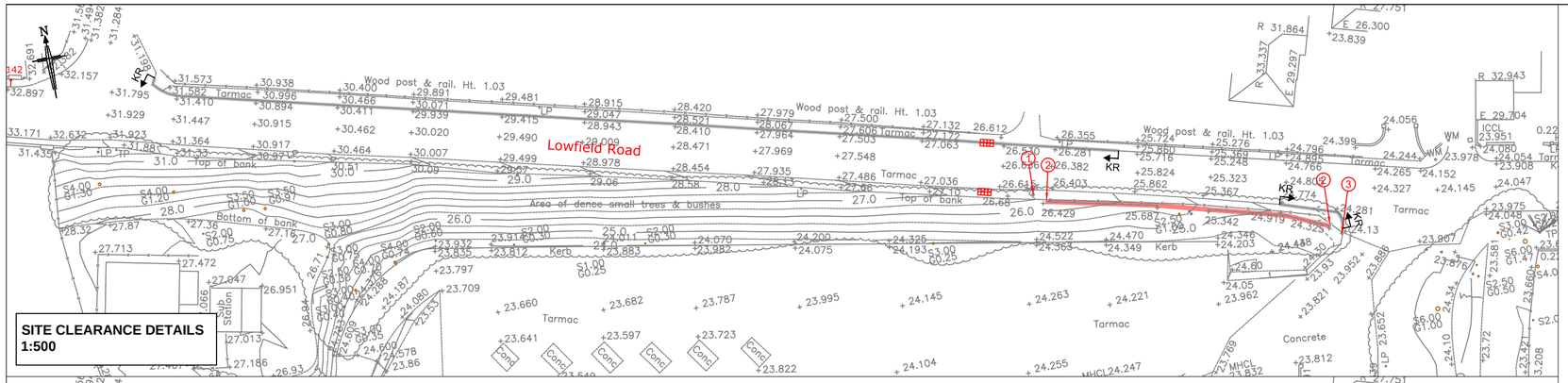
Scale: N.T.S.
Size: A3 - 420 x 297

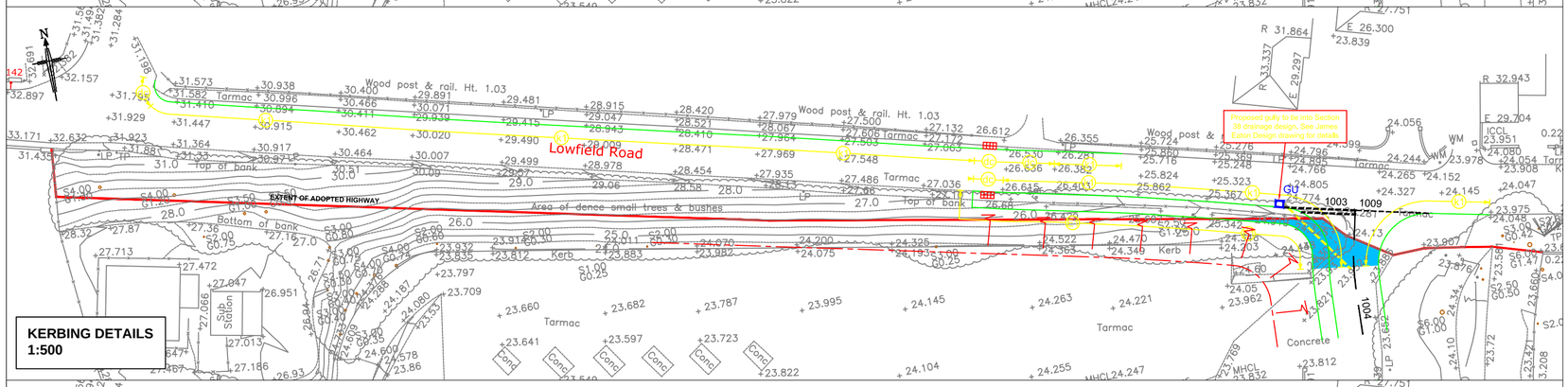
Drawn: DM | Chkd: GB | Appvd: GB

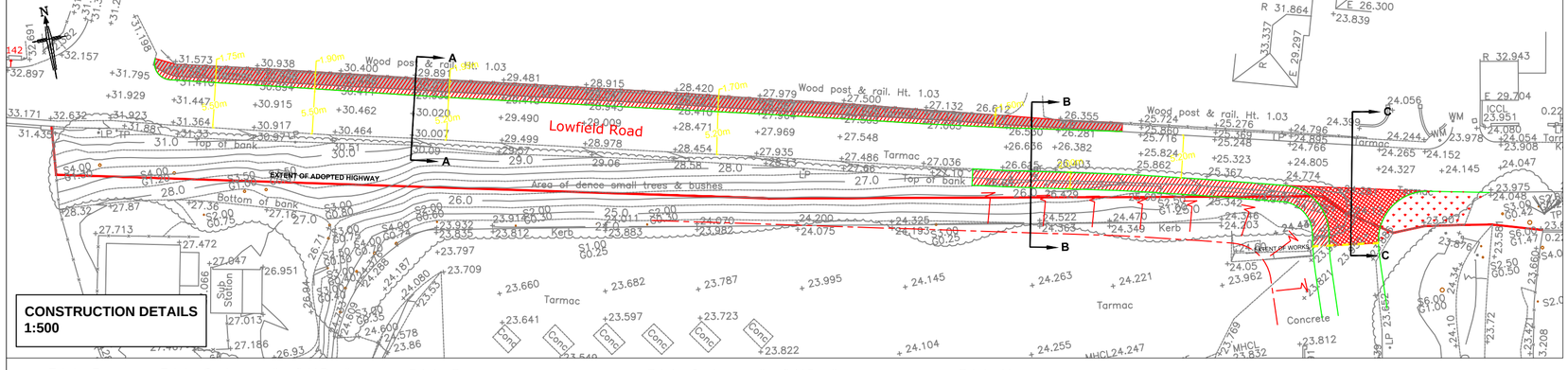
Drawing No: 20/237/LOC/002
Job No: 20-237

Revision: -
Date: 09.06.2020

APPENDIX BGH 6







SITE CLEARANCE

1. Existing inspection chamber cover to be adjusted to match new footway levels.
2. Length of existing vegetation to be taken down and roots grubbed up in accordance with clause 202 of the Specification for Highway Works.
3. Existing gate post and foundation to be taken up and removed to tip off site.

KR — Length of existing Kerb, channel, or edging plus concrete bed and backing to be broken out and where possible recycled for fill.

ROAD MARKING DETAILS

Diagram.	Description.
1004	4000mm line 2000mm gap 100mm wide
1003	600mm line 300mm gap 200mm wide
1009	600mm line 300mm gap 100mm wide

KERBING DETAILS

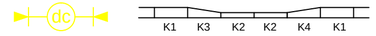
400 x 400 Buff tactile paving to BS 7263 - 3, BS. EN 1339: 2003 & South Yorkshire standard detail 13/14

Area of land to be dedicated as highway

Gu — 450mm diameter pcc gully and D400 cover and frame.

K1 = 125mm x 255mm pcc half battered - 100mm upstand
K2 = 125mm x 150mm pcc bull nose kerb - 0mm upstand
K3 = 125mm x 255mm pcc transition kerb
K4 = 125mm x 255mm pcc transition kerb
E1 = 150mm x 50mm pcc edging kerb
dc = Pedestrian drop crossing - 0-6mm upstand

Pedestrian Drop Crossing (width varies)



CONSTRUCTION DETAILS

New Carriageway Construction

25mm Dense Bitumen Macadam 125 pen surface course (6mm n.s)
50mm Dense Bitumen Macadam 125 pen binder course (20mm n.s)
70mm Dense Bitumen Macadam 125 pen base course
390mm of Type 1 Sub-base

In areas of less than 1.0m carriageway construction ST4 concrete to be used in lieu of sub base

New Flexible Footway Surfacing

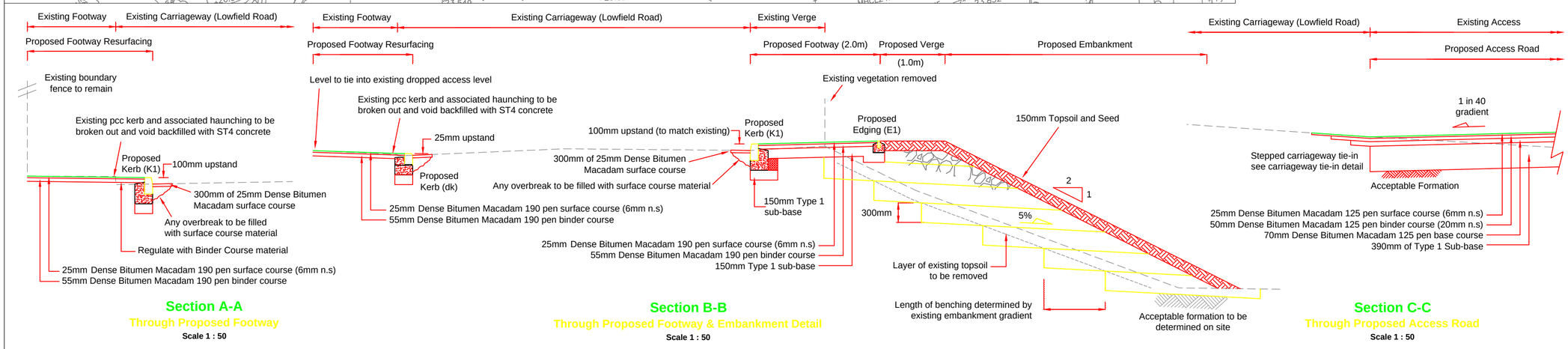
Where required break out existing material
25mm Dense Bitumen Macadam 190 pen surface course (6mm n.s)
55mm Dense Bitumen Macadam 190 pen binder course
150mm Type 1 sub-base

Footway Resurfacing

Break out existing bituminous footway surface
Proof Roll existing sub base material
Regulate with Binder Course material if required
25mm Dense Bitumen Macadam 190 pen surface course (6mm n.s)
55mm Dense Bitumen Macadam 190 pen binder course

Proposed Verge

Break out existing construction and replace with:
150mm Topsoil and Seed

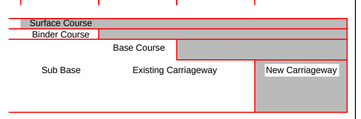


Drawing Number	Revision
12/126/DE/100/001	A

Notes

1. All works to be carried out in accordance with Barnsley Borough Council Council Highway Specification, and standard details unless otherwise instructed by Local Highway Officer.
2. All dimensions in millimetres unless otherwise stated.
3. The depth of foundations, beds channels etc. shall be 150mm, unless otherwise shown.
4. Although the underside of foundations are shown horizontal on the detail, allowance must be made for cross falls of formations and pavement courses.
5. Concrete for foundations and backing shall be mix ST4.
6. Unless otherwise shown on the drawing all kerbs to be vertical and upstand 125mm above the adjacent finished road surface.
7. All bedding concrete to be laid on a minimum of 150mm thick Type 1 sub-base.
9. Precast concrete kerbs to BS EN 1340.
10. All kerbs and edgings to be laid in accordance with BS 7533-6.
11. The mortar bed may be omitted if kerbs are being laid on wet laid concrete.
12. A pedestrian route through the works shall be maintained at all times and absolutely defined by suitable barriers and lights where necessary.
13. All paving details to tie into existing.
14. The contractor is obliged to obtain necessary road opening notices or licenses prior to commencement of the works.
15. All statutory undertakers covers and frames to be lifted/lowered to suit new footway levels prior to surfacing.
16. All services should be located on site prior to any works being carried out.
17. The contractor is to hand dig any trial pits to locate any services which may be affected by the proposed works.
18. All brick, masonry and PCC Kerbs shall be taken away and recycled where possible.

TYPICAL CARRIAGEWAY TIE IN DETAIL N.T.S



General Note:
Base material to be laid in two layers when thickness is greater than 100mm

Do not scale this drawing

Rev	Date	Amendments	Drn	Chk	App
A	27.02.13	Amended to Barnsley MBC comments received via email on 25.02.13	CT	IE	

BRYAN · G · HALL
consulting civil & transportation planning engineers

Status	FOR APPROVAL
Client	GLEESON HOMES
Project	LOWFIELD ROAD, BOLTON UPON DEARNE
Title	PROPOSED ACCESS IMPROVEMENTS

Drawing No.	12/126/DE/100/001	Revision	A
Scale	AS SHOWN	Job No. 12-126	Date 31/01/13
A2 – 420 x 594	Drawn CT	Checked JP	Approved RBC

Suite E8 Joseph's Well
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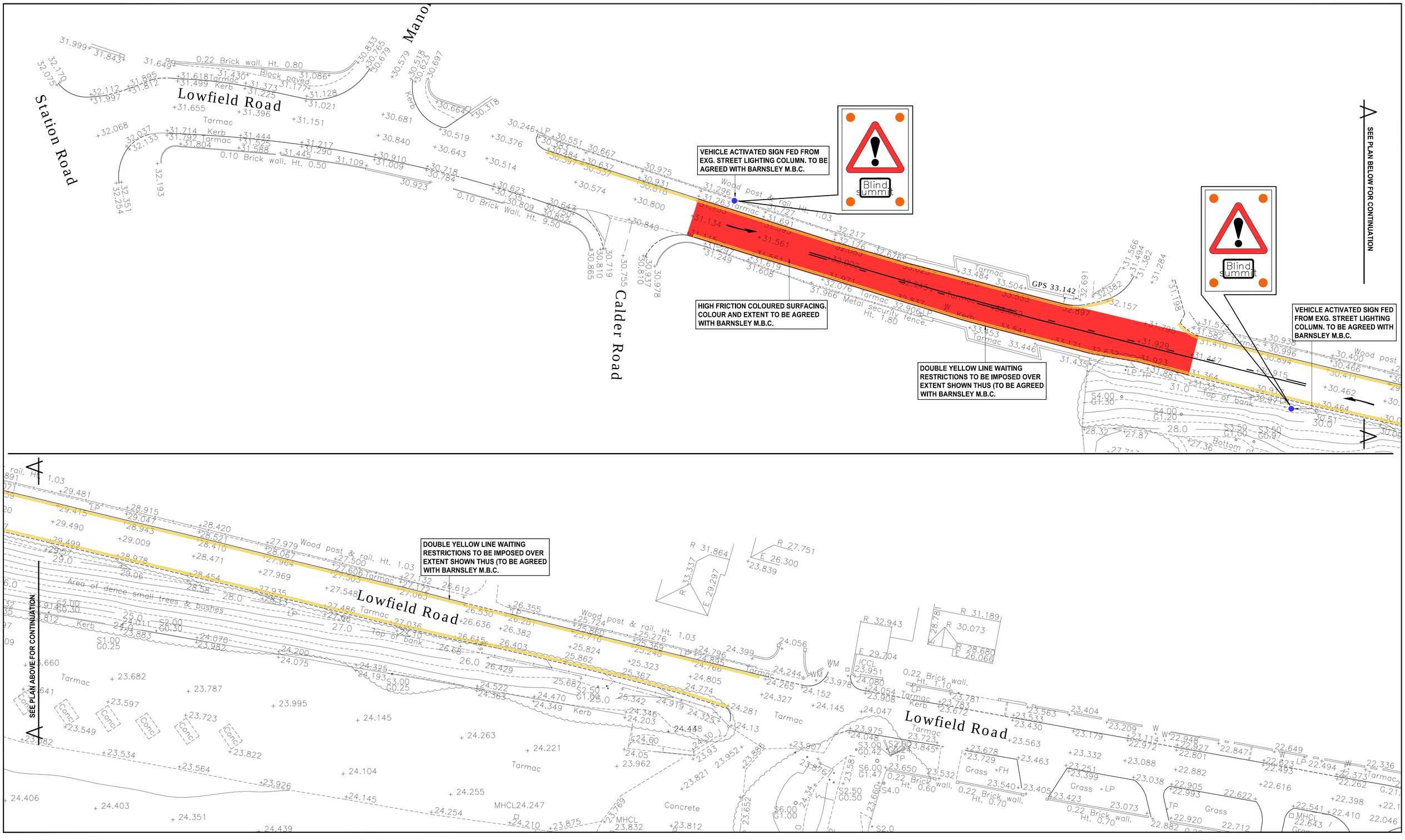
APPENDIX BGH 7



Rev: | Date: | Amendment: | DRN | CHK

Status: FOR APPROVAL

Client: GLEESON REGENERATION AND HOMES

Project: BOLTON UPON DEARNE

Title: Highway Improvements to Discharge Condition 7 of Reserved Matters Planning Approval

Scale: 1:250 A1 - 594 x 841 | Drawn: RPB | Checked: JP | Drawing No: 15/223/TR/001 | Job No: 15-223 | Revision: - | Date: 12.05.15

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APPENDIX BGH 8

		Ahead to Station Road	Right turn to Station Road	Hourly total
7:00-7:15	Cars	50	5	
	HGV	0	0	
7:15-7:30	Cars	53	11	
	HGV	1	0	
7:30-7:45	Cars	82	11	
	HGV	0	0	
7:45-8:00	Cars	66	7	288
	HGV	1	1	
8:00-8:15	Cars	94	5	332
	HGV	2	1	
8:15-8:30	Cars	94	5	372
	HGV	2	1	
8:30-8:45	Cars	99	6	389
	HGV	5	0	
8:45-9:00	Cars	65	10	389
	HGV	0	0	
9:00-9:15	Cars	64	3	360
	HGV	6	0	
9:15-9:30	Cars	75	4	347
	HGV	10	0	

		Ahead to Station Road	Right turn to Station Road	Hourly total
16:00-16:15	Cars	70	15	
	HGV	2	0	
16:15-16:30	Cars	96	19	
	HGV	3	0	
16:30-16:45	Cars	136	11	
	HGV	5	1	
16:45-17:00	Cars	151	13	523
	HGV	1	0	
17:00-17:15	Cars	159	13	609
	HGV	1	0	
17:15-17:30	Cars	133	17	644
	HGV	3	0	
17:30-17:45	Cars	244	9	745
	HGV	1	0	
17:45-18:00	Cars	137	19	736
	HGV	0	0	
18:00-18:15	Cars	130	18	711
	HGV	0	0	
18:15-18:30	Cars	149	27	735
	HGV	1	0	

		Left turn to Angel Street	Right turn to Station Road(NW)	Hourly total
7:00-7:15	Cars	11	9	
	HGV	0	0	
7:15-7:30	Cars	18	10	
	HGV	0	0	
7:30-7:45	Cars	33	24	
	HGV	0	0	
7:45-8:00	Cars	15	16	136
	HGV	0	0	
8:00-8:15	Cars	17	28	
	HGV	0	0	206
8:15-8:30	Cars	17	28	
	HGV	0	0	
8:30-8:45	Cars	26	27	174
	HGV	0	0	
8:45-9:00	Cars	25	11	181
	HGV	2	0	
9:00-9:15	Cars	14	8	158
	HGV	0	0	
9:15-9:30	Cars	13	4	130
	HGV	0	0	

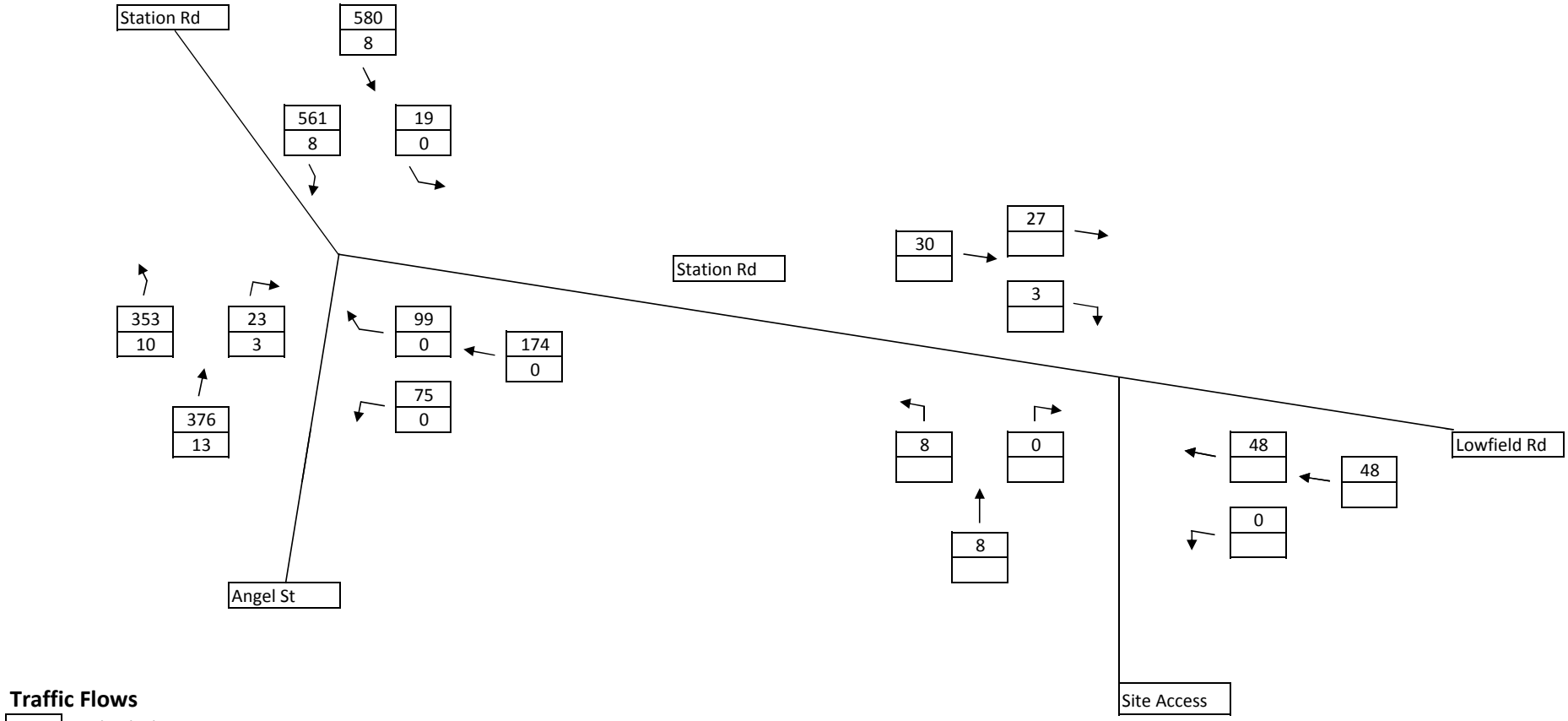
		Left turn to Angel Street	Right turn to Station Road(NW)	Hourly total
16:00-16:15	Cars	10	13	
	HGV	0	2	
16:15-16:30	Cars	12	10	
	HGV	0	0	
16:30-16:45	Cars	4	12	
	HGV	0	1	
16:45-17:00	Cars	9	13	86
	HGV	0	0	
17:00-17:15	Cars	13	3	78
	HGV	0	1	
17:15-17:30	Cars	9	8	73
	HGV	0	0	
17:30-17:45	Cars	20	11	87
	HGV	0	0	
17:45-18:00	Cars	6	12	83
	HGV	0	0	
18:00-18:15	Cars	12	10	88
	HGV	0	0	
18:15-18:30	Cars	10	17	98
	HGV	0	0	

		Left turn to Station Road	Ahead to Angel Street	Hourly Total	Hourly Total
7:00-7:15	Cars	3	42		
	HGV	0	0		
7:15-7:30	Cars	5	69		
	HGV	0	0		
7:30-7:45	Cars	4	136		
	HGV	0	0		
7:45-8:00	Cars	2	116	380	804
	HGV	0	3		
8:00-8:15	Cars	7	143	485	817
	HGV	0	0		
8:15-8:30	Cars	7	148	566	938
	HGV	0	0		
8:30-8:45	Cars	3	154	588	1151
	HGV	0	5		
8:45-9:00	Cars	16	85	572	1142
	HGV	0	4		
9:00-9:15	Cars	11	63	501	1019
	HGV	0	5		
9:15-9:30	Cars	14	69	434	911
	HGV	2	3		

		Left turn to Station Road	Ahead to Angel Street	Hourly total	Hourly total
16:00-16:15	Cars	27	66		
	HGV	0	3		
16:15-16:30	Cars	12	71		
	HGV	1	7		
16:30-16:45	Cars	15	100		
	HGV	0	1		
16:45-17:00	Cars	24	87	415	1024
	HGV	0	1		
17:00-17:15	Cars	17	95	433	1120
	HGV	0	2		
17:15-17:30	Cars	10	99	451	1168
	HGV	0	0		
17:30-17:45	Cars	19	118	472	1304
	HGV	0	0		
17:45-18:00	Cars	13	105	479	1298
	HGV	0	1		
18:00-18:15	Cars	14	94	474	1273
	HGV	0	1		
18:15-18:30	Cars	15	108	488	1321
	HGV	0	0		

APPENDIX BGH 9

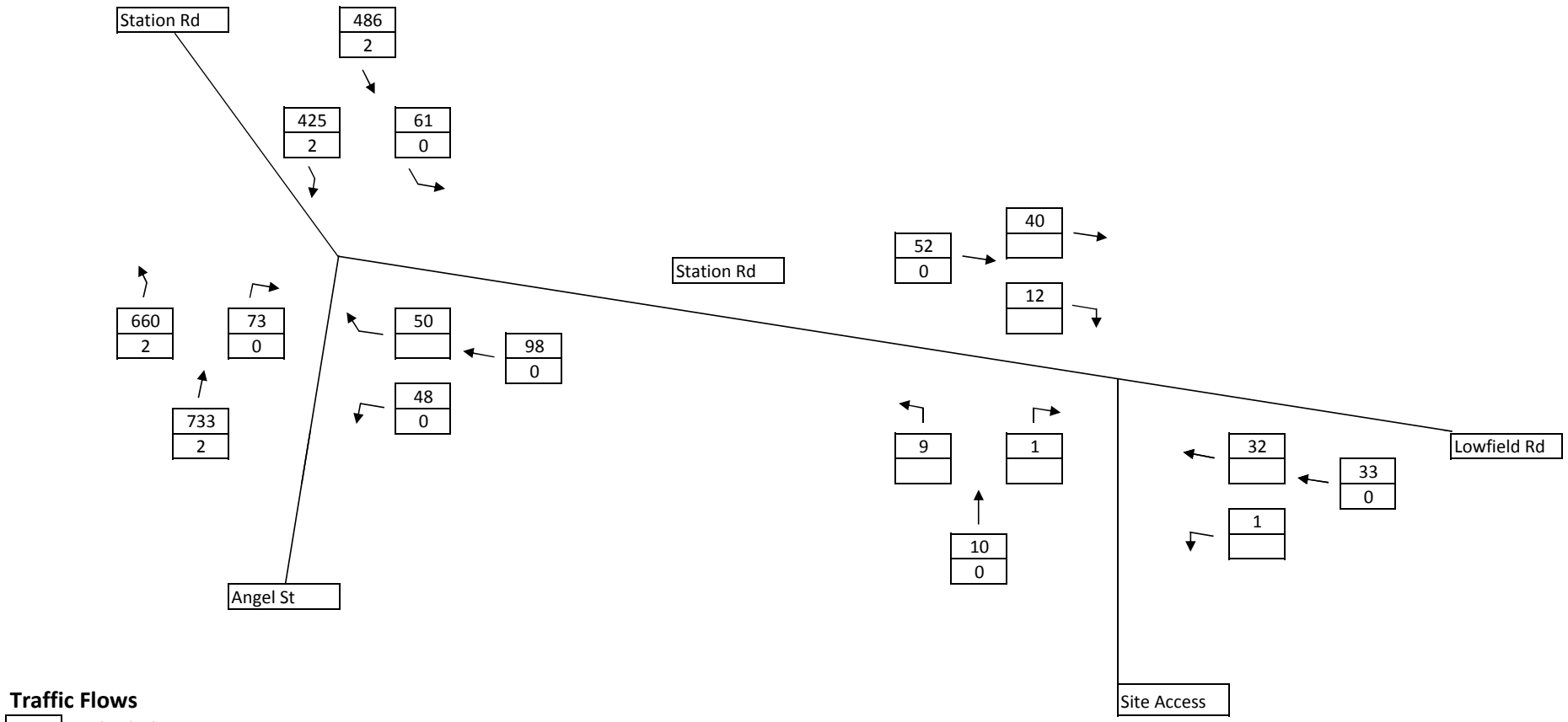
EXISTING 2015 FLOWS
BOLTON UPON DEARNE
Jan-15
Existing AM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

EXISTING 2015 FLOWS
BOLTON UPON DEARNE
Jan-15
Existing PM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

APPENDIX BGH 10

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 10/06/2020 10:45:58

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Existing 2015			
Stream B-AC	0.80	15.17	0.45	C
Stream C-AB	0.05	5.92	0.05	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak " model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak" model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak" model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak" model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak" model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak" model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 10/06/2020 10:45:58

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Existing 2015, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Existing 2015, AM Peak	Existing 2015	AM Peak		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	13.97	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	588.00	100.000
Station Road	ONE HOUR	✓	174.00	100.000
B6098 Angel Street	ONE HOUR	✓	389.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	19.000	569.000
	Station Road	99.000	0.000	75.000
	B6098 Angel Street	363.000	26.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.03	0.97
	Station Road	0.57	0.00	0.43
	B6098 Angel Street	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.45	15.17	0.80	C
C-AB	0.05	5.92	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	129.57	0.00	493.01	0.266	0.36	9.868	A
C-AB	19.58	19.46	0.00	691.60	0.028	0.03	5.356	A
C-A	273.28	273.28	0.00	-	-	-	-	-
A-B	14.30	14.30	0.00	-	-	-	-	-
A-C	428.37	428.37	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	155.87	0.00	466.20	0.336	0.50	11.579	B
C-AB	23.39	23.36	0.00	668.40	0.035	0.04	5.580	A
C-A	326.32	326.32	0.00	-	-	-	-	-
A-B	17.08	17.08	0.00	-	-	-	-	-
A-C	511.52	511.52	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	190.42	0.00	428.72	0.447	0.79	15.031	C
C-AB	28.66	28.62	0.00	636.43	0.045	0.05	5.922	A
C-A	399.63	399.63	0.00	-	-	-	-	-
A-B	20.92	20.92	0.00	-	-	-	-	-
A-C	626.48	626.48	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	191.53	0.00	428.71	0.447	0.80	15.171	C
C-AB	28.66	28.66	0.00	636.43	0.045	0.05	5.922	A
C-A	399.63	399.63	0.00	-	-	-	-	-
A-B	20.92	20.92	0.00	-	-	-	-	-
A-C	626.48	626.48	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	157.55	0.00	466.19	0.336	0.51	11.705	B
C-AB	23.39	23.43	0.00	668.40	0.035	0.04	5.583	A
C-A	326.32	326.32	0.00	-	-	-	-	-
A-B	17.08	17.08	0.00	-	-	-	-	-
A-C	511.52	511.52	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	131.59	0.00	492.97	0.266	0.37	9.979	A
C-AB	19.58	19.61	0.00	691.60	0.028	0.03	5.356	A
C-A	273.28	273.28	0.00	-	-	-	-	-
A-B	14.30	14.30	0.00	-	-	-	-	-
A-C	428.37	428.37	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 10/06/2020 10:46:30

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Existing 2015			
Stream B-AC	0.34	11.44	0.26	B
Stream C-AB	0.14	6.09	0.12	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak" model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak " model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak" model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak" model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak" model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak" model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 10/06/2020 10:46:30

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Existing 2015, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Existing 2015, PM Peak	Existing 2015	PM Peak		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.14	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	488.00	100.000
Station Road	ONE HOUR	✓	98.00	100.000
B6098 Angel Street	ONE HOUR	✓	735.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	61.000	427.000
	Station Road	50.000	0.000	48.000
	B6098 Angel Street	662.000	73.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.13	0.88
	Station Road	0.51	0.00	0.49
	B6098 Angel Street	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.26	11.44	0.34	B
C-AB	0.12	6.09	0.14	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.78	73.08	0.00	493.96	0.149	0.17	8.540	A
C-AB	55.19	54.85	0.00	713.68	0.077	0.08	5.462	A
C-A	498.16	498.16	0.00	-	-	-	-	-
A-B	45.92	45.92	0.00	-	-	-	-	-
A-C	321.47	321.47	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.10	87.87	0.00	464.54	0.190	0.23	9.551	A
C-AB	66.13	66.05	0.00	695.82	0.095	0.10	5.716	A
C-A	594.62	594.62	0.00	-	-	-	-	-
A-B	54.84	54.84	0.00	-	-	-	-	-
A-C	383.86	383.86	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.90	107.48	0.00	422.61	0.255	0.34	11.406	B
C-AB	81.66	81.52	0.00	672.44	0.121	0.14	6.090	A
C-A	727.59	727.59	0.00	-	-	-	-	-
A-B	67.16	67.16	0.00	-	-	-	-	-
A-C	470.14	470.14	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.90	107.89	0.00	422.57	0.255	0.34	11.439	B
C-AB	81.66	81.65	0.00	672.44	0.121	0.14	6.095	A
C-A	727.59	727.59	0.00	-	-	-	-	-
A-B	67.16	67.16	0.00	-	-	-	-	-
A-C	470.14	470.14	0.00	-	-	-	-	-

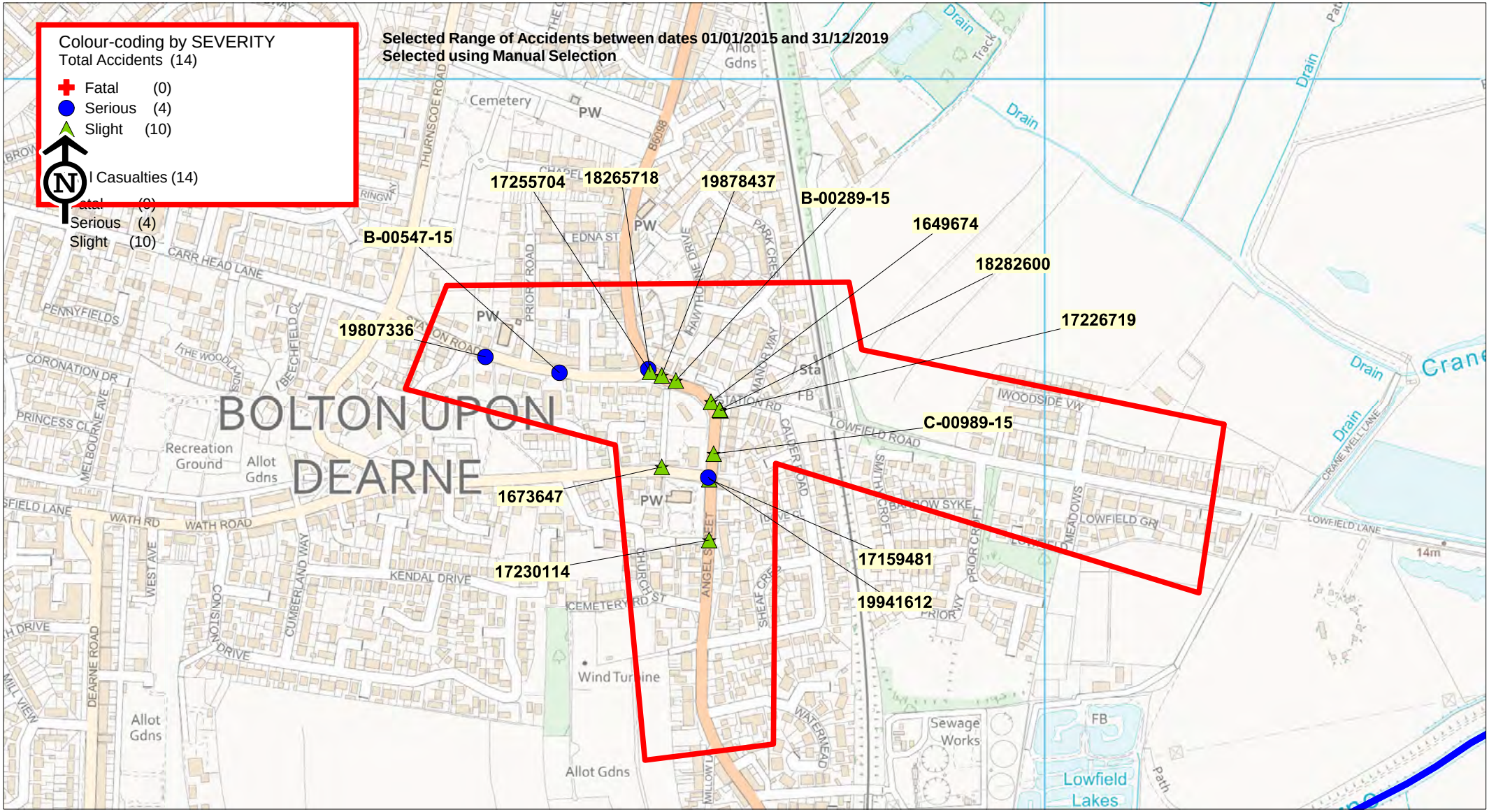
Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.10	88.51	0.00	464.49	0.190	0.24	9.585	A
C-AB	66.13	66.26	0.00	695.82	0.095	0.11	5.718	A
C-A	594.62	594.62	0.00	-	-	-	-	-
A-B	54.84	54.84	0.00	-	-	-	-	-
A-C	383.86	383.86	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.78	74.02	0.00	493.86	0.149	0.18	8.580	A
C-AB	55.19	55.27	0.00	713.68	0.077	0.08	5.470	A
C-A	498.16	498.16	0.00	-	-	-	-	-
A-B	45.92	45.92	0.00	-	-	-	-	-
A-C	321.47	321.47	0.00	-	-	-	-	-

APPENDIX BGH 11



MAKING SOUTH YORKSHIRE ROADS SAFER

Selected map area

SCALE	1 : 6000
DATE	05/06/2020
DRWG No.	
DRN BY	

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

B-00289-15 22/02/2015 Sunday Time: 1956 Vehicles 2 Casualties 1 Slight
Easting: 445,581 Northing: 402,657
Fine without high winds Road Surface: Dry Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: STATION ROAD BOLTON UPON DEARNE 25 MTS FURLONG ROAD
Description: VH1 M/CAR TRV NB ON FURLONG RD LOSES CNTRL & COLL VH2 M/CAR TRV OPP DIREC

Vehicle Reference: 1 Car Going ahead left hand bend
First point of impact: Front
Vehicle direction: S to NW Journey: Other
Age of Driver : 23 Breath test: Not requested

Contributory Factors : 103

Vehicle Reference: 2 Car Going ahead left hand bend
First point of impact: Front
Vehicle direction: N to SE Journey: Other
Age of Driver : 31 Breath test: Not requested

Contributory Factors : 103

Casualty Reference: 1 Age: 31 Female Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

B-00547-15 24/06/2015 Wednesda Time: 1820 Vehicles 1 Casualties 1 Serious
Easting: 445,449 Northing: 402,666
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: STATION RD BOLTON ON DEARNE 26 MTS SCHOOL STREET
Description: VEH TV STATION RD FROM DIRC OF BOLTON ON DEARNE WHEN PEDN RUNS INTO RD FROM N/S FROM BEHIND PARKED VEH.

Vehicle Reference: 1 Car Going ahead
First point of impact: Front
Vehicle direction: E to W Journey: Other
Age of Driver : 32 Breath test: Negative

Contributory Factors : 802 808 803

Casualty Reference: 1 Age: 11 Male Pedestrian Severity: Serious

Ped Dir: Pedestrian Ped Movement : Driver's nearside masked
Ped Location: In carr elsewhere

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

C-00989-15 01/09/2015 Tuesday Time: 0740 Vehicles 1 Casualties 1 Slight
Easting: 445,624 Northing: 402,574
Raining without high winds Road Surface: Wet/Damp Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET BOLTON UPON DEARNE 20 MTS HIGH STREET
Description: VEH 1LOST CONTROL ON THE BEND COLLIDING WITH LAMPOST

Vehicle Reference: 1 Car Going ahead right hand bend
First point of impact: Front
Vehicle direction: N to S Journey: Other
Age of Driver : 33 Breath test: Negative

Contributory Factors : 410

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

1649674 25/01/2016 Monday Time: 1648 Vehicles 2 Casualties 1 Slight
Easting: 445,621 Northing: 402,633
Fine without high winds Road Surface: Dry Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: STATION ROAD (B6098) BARNSLEY AT OR WITHIN 20 MTS OF STATION ROAD
Description: V1 PULLED OUT OF LOWFIELD ROAD INTO THE OFFSIDE FRONT OF V2.

Vehicle Reference: 1 Car Turning right
First point of impact: Front
Vehicle direction: E to NW Journey: Not known
Age of Driver : 79 Breath test: Driver not contacted

Contributory Factors : 405 406

Vehicle Reference: 2 Taxi Going ahead left hand bend
First point of impact: Offside
Vehicle direction: S to NW Journey: Journey as part of work
Age of Driver : 43 Breath test: Driver not contacted

Contributory Factors : 405 406

Casualty Reference: 1 Age: 28 Female Passenger Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

1673647 19/05/2016 Thursday Time: 1943 Vehicles 2 Casualties 1 Slight
Easting: 445,565 Northing: 402,559
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: HIGH STREET BARNSLEY J/W PRIVATE ENTRANCE
Description: V2 PULLED OUT OF JCT COLL WITH V1. DRIVER OF V2 FLED FROM SCENE

Vehicle Reference: 1 Car Going ahead
First point of impact: Front
Vehicle direction: W to E Journey: Other
Age of Driver : 38 Breath test: Negative

Contributory Factors : 302 307 405 403 602 902

Casualty Reference: 1 Age: 38 Female Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Vehicle Reference: 2 Car Turning left
First point of impact: Front
Vehicle direction: N to S Journey: Not known
Age of Driver : Breath test: Driver not contacted

Contributory Factors : 302 307 405 403 602 902

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

17159481 21/02/2017 Tuesday Time: 1915 Vehicles 2 Casualties 1 Slight
Easting: 445,619 Northing: 402,545
Fine without high winds Road Surface: Dry Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET (B6098) BARNSLEY AT OR NR JN WITH HIGH STREET
Description: V1 APPROACHING JCT. V2 TRAVELLING IN OPP DIRECTION INTENDING TO TURN RIGHT COLL WITH V1. BOTH PARTIES REPORTED SEPERATELY

Vehicle Reference: 1 Motorcycle over 50cc and up Going ahead
First point of impact: Front
Vehicle direction: S to N Journey: Not known
Age of Driver : 28 Breath test: Not provided (medical)

Contributory Factors : 506 405

Casualty Reference: 1 Age: 28 Male Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Vehicle Reference: 2 Car Turning right
First point of impact: Nearside
Vehicle direction: N to W Journey: Not known
Age of Driver : 68 Breath test: Driver not contacted

Contributory Factors : 506 405

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

17226719 25/09/2017 Monday Time: 0655 Vehicles 1 Casualties 1 Slight
Easting: 445,632 Northing: 402,623
Raining without high winds Road Surface: Wet/Damp Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET (B6098) BARNSLEY AT OR NR JN WITH STATION ROAD
Description: VEHICLE 1 HAS BEEN TRAVELLING ALONG ANGEL STREET TOWARDS STATION ROAD, BOLTON ON DEARNE. AS THE VEHICLE HAS DRIVEN ROUND THE CORNER OF STATION ROAD THE REAR END HAS SLIPPED AND THE DRIVER 1 HAS TRIED TO STEER OUT OF THE SLIDE THE REAR WHEEL HAS HIT THE K
ERB AND THE FRONT END HAS SPUN TO THE LEFT THE FRONT END COLLIDING WITH A LAMP STANDARD. THIS HAS THEN CAUSED THE VEHICLE TO SPIN AROUND AND COLLIDE WITH A WALL. THIS HAS CAUSED DAMAGE TO THE FRONT END AND ALSO TO HE REAR END. THERE WAS FRONT SEAT PASSEN
GER IN THE VEHICLE WHO HAD MINOR INJURIES. THE VEHICLE WAS REMOVED BY THE DRIVER. THE LAMP STANDARD WHICH WAS COLLIDED WITH HAS COME LOOSE FROM ITS BASE.

Vehicle Reference: 1 Car Going ahead
First point of impact: Front
Vehicle direction: W to S Journey: Journey as part of work
Age of Driver : 31 Breath test: Driver not contacted

Contributory Factors : 410 707

Casualty Reference: 1 Age: 23 Male Passenger Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

17230114 04/10/2017 Wednesda Time: 0850 Vehicles 3 Casualties 1 Slight
Easting: 445,619 Northing: 402,476
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET (B6098) BARNSLEY AT OR NR JN WITH NEW STREET
Description: VEH 1 AT THE JUNCTION WITH NEW STREET, AND MEXBRO ROAD IN BOLTON UPON DEARNE. DRIVER OF VEH 1 HAS LOOKED TO HER LEFT AND NOTHING COMING. LOOKED TO HER RIGHT BUT CARS PARKED, BLOCKING HER VIEW A LITTLE, SHE HAS CREPT FORWARD A LITTLE AND WAS STATIONERY, W HEN VEH 2 HAS COME FROM THE RHS AND COLLIDED WITH THE FRONT NEARSIDE OF VEH 1, CAUSING DAMAGE. VEH 2 HAS JUST CARRIED ON AND ACTUALLY COLLIDED WITH ANOTHER VEH FURTHER ALONG MEXBRO ROAD. DETAILS EXCHANGED, HOWEVER DRIVER OF VEH 1 HAS SUSTAINED AN INJURY TO RHS.

Vehicle Reference: 1 Car Moving off
First point of impact: Front
Vehicle direction: W to E Journey: Journey as part of work
Age of Driver : 35 Breath test: Driver not contacted

Contributory Factors :

Casualty Reference: 1 Age: 35 Female Driver/rider Severity: Slight

Ped Dir: Ped Movement :
Ped Location:

Vehicle Reference: 2 Car Going ahead
First point of impact: Front
Vehicle direction: S to N Journey: Not known
Age of Driver : 30 Breath test: Driver not contacted

Contributory Factors :

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

Vehicle Reference: 3 Car Parked
First point of impact: Back
Vehicle direction: Parked to Parked Journey: Not known
Age of Driver : 30 Breath test: Driver not contacted

Contributory Factors :

17255704 13/12/2017 Wednesda Time: 0715 Vehicles 2 Casualties 1 Serious
Easting: 445,550 Northing: 402,670
Other Road Surface: Wet/Damp Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: FURLONG ROAD (B6098) BARNSLEY AT OR NR JN WITH STATION ROAD
Description: V1 EXITED JUNCTION OF STATION ROAD/FURLONG RD TURNING RIGHT AND COLLIDED WITH V2 WHICH WAS TRAVELLING ON FURLONG RD FROM BOLTON UPON DEARNE TOWARDS GOLDTHORPE.

Vehicle Reference: 1 Car Turning right
First point of impact: Offside
Vehicle direction: W to SE Journey: Commuting to/from work
Age of Driver : 26 Breath test: Driver not contacted

Contributory Factors : 405

Vehicle Reference: 2 Motorcycle over 50cc and up Going ahead right hand bend
First point of impact: Front
Vehicle direction: SE to N Journey: Commuting to/from work
Age of Driver : 22 Breath test: Driver not contacted

Contributory Factors : 405

Casualty Reference: 1 Age: 22 Male Driver/rider Severity: Serious
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

18265718 21/01/2018 Sunday Time: 1800 Vehicles 2 Casualties 1 Slight
Easting: 445,552 Northing: 402,667
Raining without high winds Road Surface: Wet/Damp Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: STATION ROAD (B6098) BARNSLEY AT OR NR JN WITH STATION ROAD
Description: THE FIRST VEHICLE WAS TRAVELLING ALONG THE MAIN ROAD WHEN THE SECOND VEHICLE HAS PULLED OUT OF THE SIDE ROAD INTO THE FIRST VEHICLE

Vehicle Reference: 1 Car Going ahead right hand bend
First point of impact: Front
Vehicle direction: SE to N Journey: Other
Age of Driver : 34 Breath test: Not requested

Contributory Factors : 103 602

Casualty Reference: 1 Age: 34 Male Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Vehicle Reference: 2 Car Turning left
First point of impact: Front
Vehicle direction: W to SE Journey: Other
Age of Driver : 22 Breath test: Not requested

Contributory Factors : 103 602

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

18282600 16/03/2018 Friday Time: 1315 Vehicles 2 Casualties 1 Slight
Easting: 445,631 Northing: 402,624
Fine without high winds Road Surface: Wet/Damp Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET (B6098) BARNSLEY AT OR NR JN WITH STATION ROAD
Description: V1 WAS DRIVING ALONG FURLONG ROAD, BOLTON UPON DEARNE ONTO ANGEL STREET. V1 HAS LOST CONTROL ON A RIGHT HAND BEND, SNAKED ACROSS THE ROAD AND HAS COLLIDED WITH A BRICK WALL AND PARKED CAR V2 AFTER MOUNTING THE PAVEMENT TO THE NEAR SIDE. THIS HAS BEEN WIT NESSED BY ANOTHER DRIVER WHO CONFIRMS THIS OCCURED AND THAT THE DRIVER OF V1 WAS DRIVING CORRECTLY.

Vehicle Reference: 1 Car Going ahead right hand bend
First point of impact: Front
Vehicle direction: W to S Journey: Not known
Age of Driver : 60 Breath test: Not requested

Contributory Factors : 410

Casualty Reference: 1 Age: 60 Female Driver/rider Severity: Slight
Ped Dir: Ped Movement :
Ped Location:

Vehicle Reference: 2 Car Parked
First point of impact: Back
Vehicle direction: Parked to Parked Journey: Not known
Age of Driver : 25 Breath test: Driver not contacted

Contributory Factors : 410

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

19807336 10/01/2019 Thursday Time: 2010 Vehicles 1 Casualties 1 Serious
Easting: 445,365 Northing: 402,684
Other Road Surface: Wet/Damp Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: STATION ROAD BARNSLEY
Description: C1 STEPPED OUT INFRONT OF A STATIONARY BUS AND SAW ONCOMING VEHICLE, TRIED TO STOP BUT HIS LEFT FOOT SKIDDED ON THE ROAD AND HE FELL ON THE FLOOR. DRIVER OF V1 DID NOT HAVE TIME TO STOP AND THE FRONT AND REAR NEARSIDE WHEEL'S WENT OVER C1 FOOT.

Vehicle Reference: 1 Car Overtaking stationary vehicle on its offside
First point of impact: Nearside
Vehicle direction: E to NW Journey: Not known
Age of Driver : 46 Breath test: Not requested

Contributory Factors : 802

Casualty Reference: 1 Age: 13 Male Pedestrian Severity: Serious
Ped Dir: Pedestrian Ped Movement : Driver's nearside masked
Ped Location: In carr elsewhere

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

19878437 14/09/2019 Saturday Time: 2245 Vehicles 1 Casualties 1 Slight
Easting: 445,565 Northing: 402,663
Fine without high winds Road Surface: Dry Darkness: street lights present and lit
Road Type: Single carriageway Speed Limit: 30

Location: STATION ROAD (B6098) BARNSLEY AT OR NR JN WITH STATION ROAD
Description: CASUALTY HAS BEEN HIT BY VEH 1 WHILST CROSSING THE ROAD. CASUALTY WAS KNOCKED UNCONCIOUS BY VEH 1, WHICH STOPPED AT THE SCENE. THE CASUALTIES FRIENDS WERE AT THE SCENE HOWEVER NO ONE HAS OBTAINED DRIVER DETAILS. NO ONE RUNG AN AMBULANCE OR THE POLICE.
THE REGISTRATION NUMBER OF THE VEH WAS, HOWEVER OBTAINED BY A FRIEND.

Vehicle Reference: 1 Car Going ahead right hand bend
First point of impact: Front
Vehicle direction: SE to N Journey: Not known
Age of Driver : 28 Breath test: Driver not contacted

Contributory Factors :

Casualty Reference: 1 Age: 32 Male Pedestrian Severity: Slight
Ped Dir: Pedestrian Ped Movement : Driver's offside
Ped Location: In zig-zag approach

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**
Selection: **Notes:**
Selected using Build Query : Local_auth = 'Barnsley' **Bryan G Hall - Bolton-on-Dearne**

19941612 31/12/2019 Tuesday Time: 1425 Vehicles 2 Casualties 1 Serious
Easting: 445,618 Northing: 402,547
Fine without high winds Road Surface: Dry Daylight
Road Type: Single carriageway Speed Limit: 30

Location: ANGEL STREET (B6098) BARNSLEY AT OR NR JN WITH HIGH STREET
Description: THE DRIVER OF THE CAR WAS TURNING RIGHT AT A JUNCTION. HE HAD THE SUN ON HIS EYES. HE HAS TURNED INTO THE PATH OF AN ONCOMING MOTORCYCLE, CAUSING THE RIDER TO COLLIDE WITH THE FRONT PASSENGER WING OF HIS CAR.

Vehicle Reference: 1 Car Turning right
First point of impact: Nearside
Vehicle direction: N to W Journey: Other
Age of Driver : 50 Breath test: Negative

Contributory Factors : 706

Vehicle Reference: 2 Motorcycle over 500cc Going ahead
First point of impact: Front
Vehicle direction: S to N Journey: Other
Age of Driver : 60 Breath test: Not requested

Contributory Factors : 706

Casualty Reference: 1 Age: 60 Male Driver/rider Severity: Serious
Ped Dir: Ped Movement :
Ped Location:

Accidents between dates **01/01/2015** **and** **31/12/2019** **(60) months**

Selection:

Selected using Build Query : Local_auth = 'Barnsley'

Notes:

Bryan G Hall - Bolton-on-Dearne

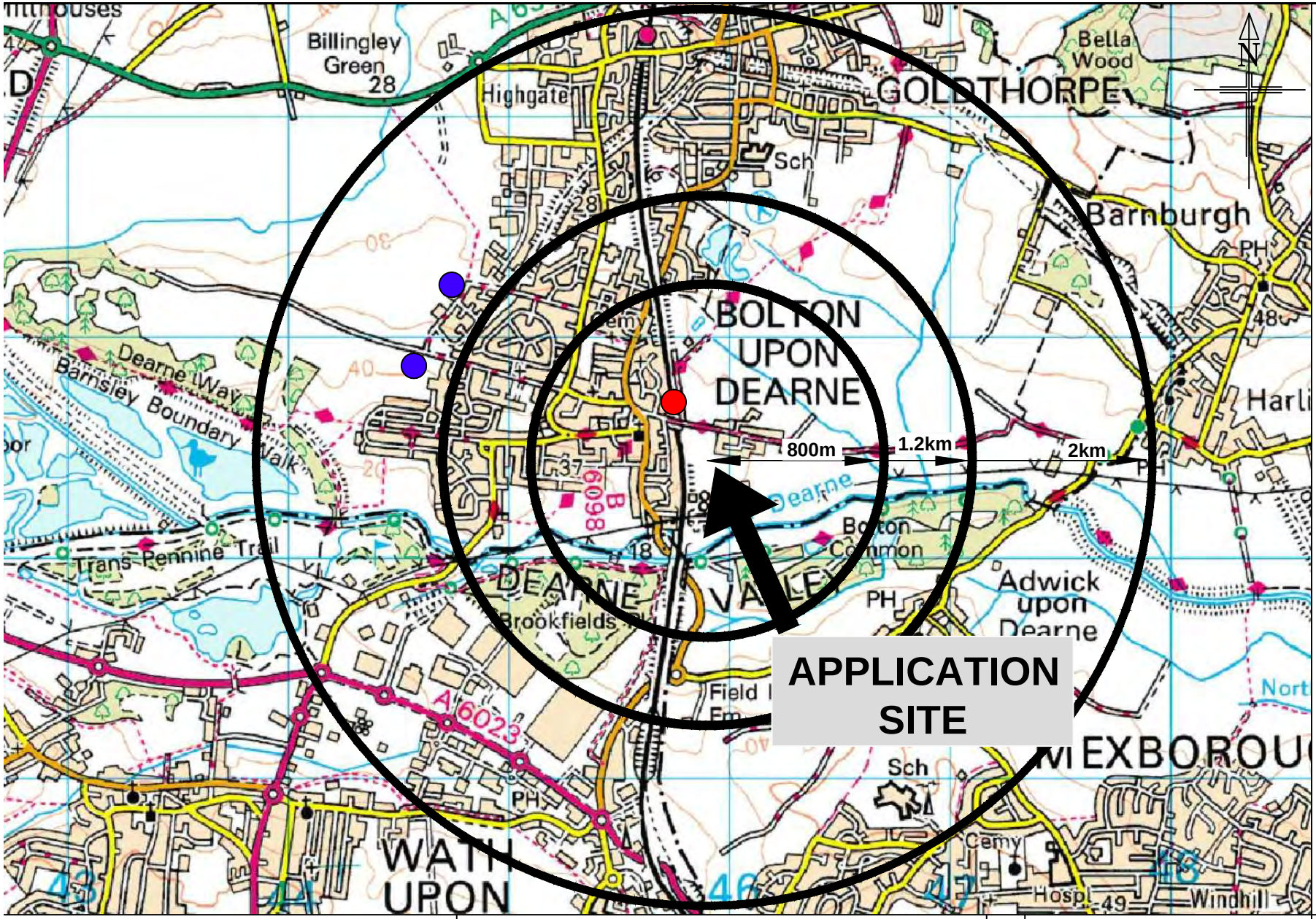
Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only excluding 2-wheels	0	2	9	11
2-wheeled motor vehicles	0	2	1	3
Pedal cycles	0	0	0	0
Horses & other	0	0	0	0
Total	0	4	10	14

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	0	0	6	6
Passenger	0	0	2	2
Motorcycle rider	0	2	1	3
Cyclist	0	0	0	0
Pedestrian	0	2	1	3
Other	0	0	0	0
Total	0	4	10	14

APPENDIX BGH 12



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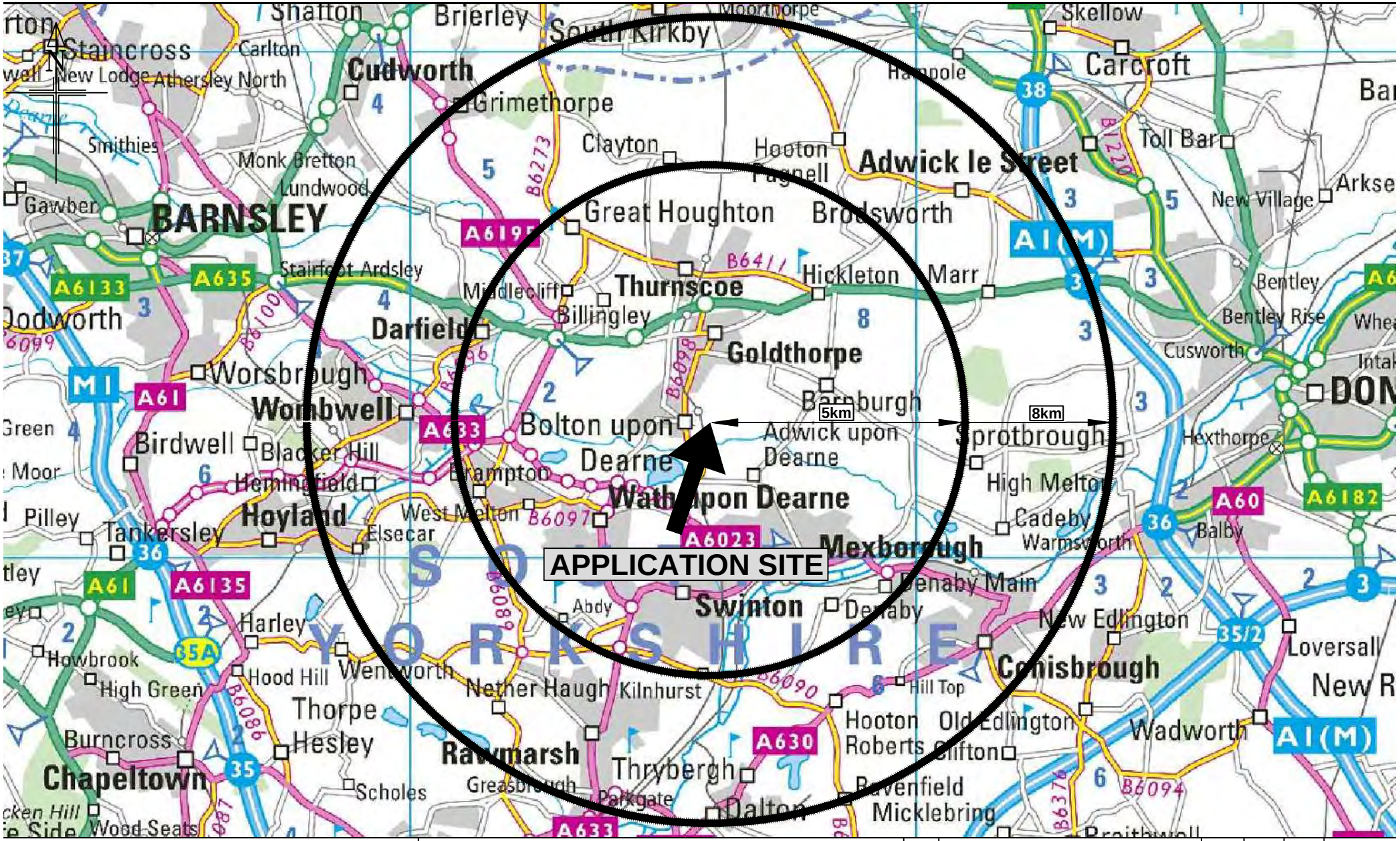
Project BOLTON UPON DEARNE
SOUTH YORKSHIRE

Title WALKING ISOCHRONES
SHOWN AT 800M, 1.2KM AND 2KM DISTANCES

Rev	Amendments	Drawn	Chkd	Appr	Date

Scale 1:25,000 @ A4	Date MARCH 2013	Doc Sheet No
Drawn RD	Checked AM	Approved DJP
Job No 13-141	Drawing No APPENDIX 10	Rev –

APPENDIX BGH 13



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Project BOLTON UPON DEARNE
SOUTH YORKSHIRE

Title CYCLING ISOCHRONES
SHOWN AT 5.0KM AND 8.0KM DISTANCES

Rev	Amendments	Drawn	Chkd	Appr	Date

Scale 1:100,000 @ A4	Date MARCH 2013	Doc Sheet No	
Drawn RD	Checked AM	Approved DJP	
Job No 13-141	Drawing No APPENDIX 11		Rev

APPENDIX BGH 14

Travel South Yorkshire

Bus service(s)

208

Valid from: 20 July 2019

Areas served

Rotherham
Rawmarsh
Warren Vale
Swinton
Mexborough
Bolton upon Dearne
Goldthorpe
Billingley
Grimethorpe

Places on the route

Rotherham Interchange
Mexborough Interchange
Grimethorpe Interchange

What's changed

The last bus from Grimethorpe Interchange on Monday to Friday, Saturday and Sunday will now depart at 2305.

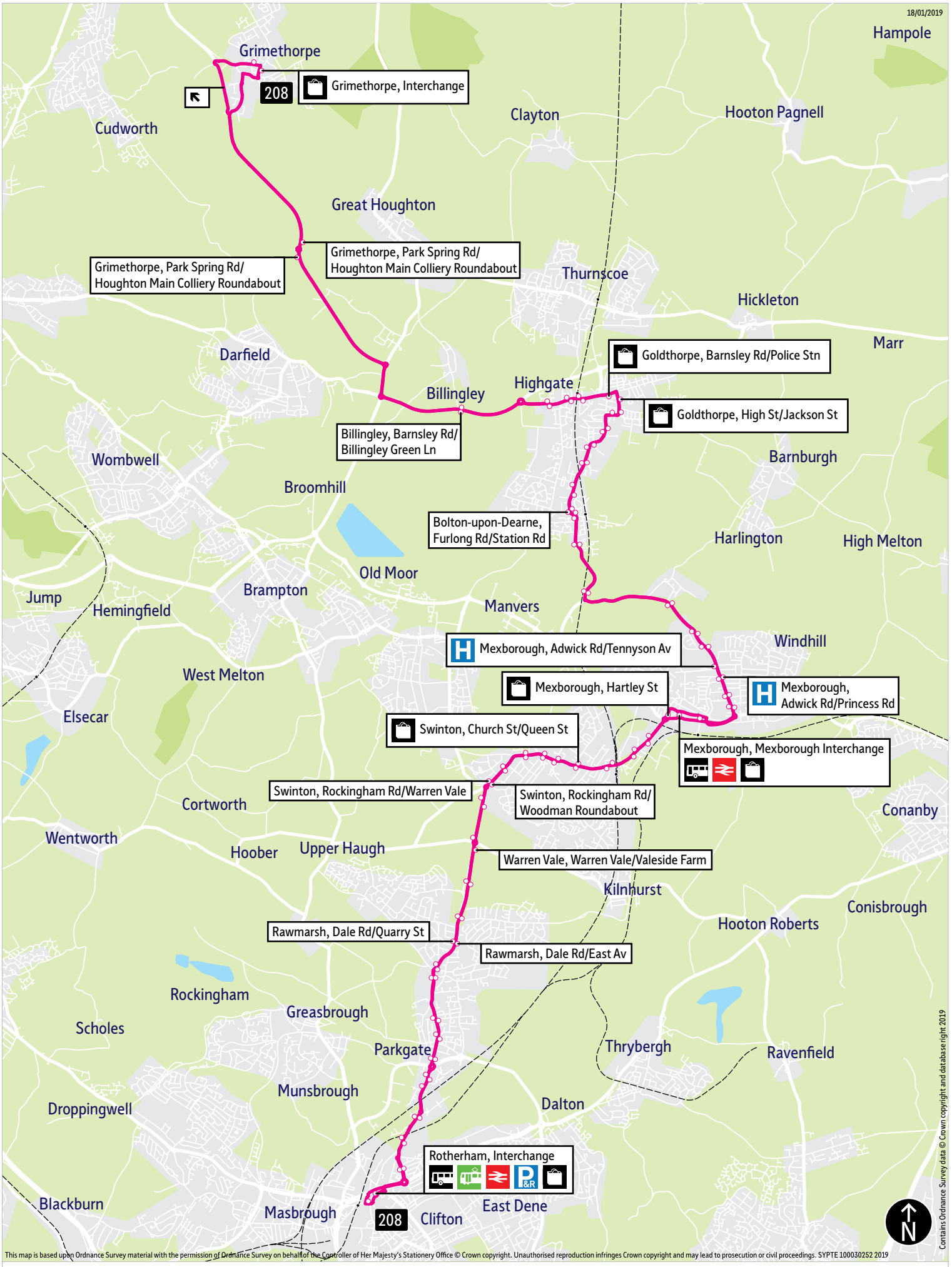
Operator(s)

Stagecoach

How can I get more information?

TravelSouthYorkshire
@TSYalerts
01709 51 51 51

Bus route map for service 208



Stopping points for service 208

Rotherham, Interchange ▸ St Anns Road ▸ **Parkgate** ▸ Rawmarsh Road ▸ Rotherham Road ▸ Broad Street ▸ Rawmarsh Hill ▸ **Rawmarsh** ▸ High Street ▸ Blyth Avenue ▸ Dale Road ▸ **Warren Vale** ▸ **Swinton** ▸ Rockingham Road ▸ Church Street ▸ Station Street ▸ Rowms Lane ▸ **Mexborough** ▸ **Mexborough Interchange** ▸ Adwick Road ▸ **Adwick-upon-dearne** ▸ **Manvers** ▸ Hound Hill Lane ▸ **Bolton-upon-dearne** ▸ Mexborough Road ▸ Angel Street ▸ Furlong Road ▸ **Goldthorpe** ▸ Goldthorpe Road ▸ High Street ▸ Barnsley Road ▸ **Highgate** ▸ **Billingley** ▸ Park Spring Road ▸ High Street ▸ **Grimethorpe, Queensway**

Grimethorpe, Queensway ▸ Springvale Road ▸ Park Spring Road ▸ **Billingley** ▸ Barnsley Road ▸ **Highgate** ▸ **Goldthorpe** ▸ High Street ▸ Goldthorpe Road ▸ Goldthorpe Green ▸ **Bolton-upon-dearne** ▸ Furlong Road ▸ Station Road ▸ Mexborough Road ▸ **Manvers** ▸ Hound Hill Lane ▸ **Adwick-upon-dearne** ▸ Adwick Road ▸ **Mexborough** ▸ Bank Street ▸ Hartley Street ▸ **Swinton** ▸ Rowms Lane ▸ Bridge Street ▸ Station Street ▸ Church Street ▸ Rockingham Road ▸ **Warren Vale** ▸ **Rawmarsh** ▸ Dale Road ▸ Blyth Avenue ▸ High Street ▸ **Parkgate** ▸ Rawmarsh Hill ▸ Broad Street ▸ Rotherham Road ▸ Rawmarsh Road ▸ St Anns Road ▸ Greasbrough Road ▸ **Rotherham, Interchange**

208 ▸ Monday to Friday — Rotherham Centre ▸ Grimethorpe

Rotherham, Interchange	0555 1350 2203
Rawmarsh, Dale Rd/Quarry St	0605 1406 2213
Swinton, Rockingham Rd/Warren Vale	0609 1409 2217
Swinton, Church St/Queen St	0612 1412 2220
Mexborough, Mexborough Interchange	0617 1417 2224
Mexborough, Adwick Rd/Tennyson Av	0621 1421 2227
Bolton-upon-Dearne, Furlong Rd/Station Rd	0627 1427 2232
Goldthorpe, Barnsley Rd/High St	0633 1433 2237
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	0642 1443 2245
Grimethorpe, Interchange	0648 1449 2251

208 ▸ Monday to Friday — Grimethorpe ▸ Rotherham Centre

Grimethorpe, Interchange		0703 1503 2305
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	a.	0708 1508 2310
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	d.	0713 1513 2315
Goldthorpe, High St/Jackson St		0732 1528 2326
Bolton-upon-Dearne, Furlong Rd/Station Rd		0737 1533 2329
Mexborough, Adwick Rd/Princess Rd		0743 1539 2335
Mexborough, Hartley St		0748 1544 2339
Swinton, Rockingham Rd/Woodlands Cres		0756 1552 2345
Warren Vale, Warren Vale/Valeside Farm		0758 1554 2346
Rawmarsh, Dale Rd/East Av		0802 1557 2349
Rotherham, Interchange		0814 1609 2358

208 ▸ Saturday — Rotherham Centre ▸ Grimethorpe

Rotherham, Interchange	0555 1350 2203
Rawmarsh, Dale Rd/Quarry St	0605 1405 2213
Swinton, Rockingham Rd/Warren Vale	0609 1409 2217
Swinton, Church St/Queen St	0612 1412 2219
Mexborough, Mexborough Interchange	0617 1416 2222
Mexborough, Adwick Rd/Tennyson Av	0621 1420 2227
Bolton-upon-Dearne, Furlong Rd/Station Rd	0627 1426 2230
Goldthorpe, Barnsley Rd/High St	0633 1432 2233
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	0642 1443 2245
Grimethorpe, Interchange	0648 1449 2251

208 ▸ Saturday		Grimethorpe ▸ Rotherham Centre
Grimethorpe, Interchange		0703 1503 2305
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	a.	0708 1508 2310
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	d.	0713 1513 2315
Goldthorpe, High St/Jackson St		0728 1528 2328
Bolton-upon-Dearne, Furlong Rd/Station Rd		0733 1533 2331
Mexborough, Adwick Rd/Princess Rd		0737 1537 2335
Mexborough, Hartley St		0742 1542 2340
Swinton, Rockingham Rd/Woodlands Cres		0746 1546 2344
Warren Vale, Warren Vale/Valeside Farm		0749 1549 2346
Rawmarsh, Dale Rd/East Av		0753 1553 2349
Rotherham, Interchange		0805 1605 2358

208 ▸ Sunday	Rotherham Centre ▸ Grimethorpe
Rotherham, Interchange	0555 1350 2203
Rawmarsh, Dale Rd/Quarry St	0605 1405 2213
Swinton, Rockingham Rd/Warren Vale	0609 1409 2217
Swinton, Church St/Queen St	0612 1412 2219
Mexborough, Mexborough Interchange	0617 1416 2222
Mexborough, Adwick Rd/Tennyson Av	0621 1420 2227
Bolton-upon-Dearne, Furlong Rd/Station Rd	0627 1426 2230
Goldthorpe, Barnsley Rd/High St	0633 1432 2233
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	0642 1443 2245
Grimethorpe, Interchange	0648 1449 2251

208 ▸ Sunday		Grimethorpe ▸ Rotherham Centre
Grimethorpe, Interchange		0703 1503 2305
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	a.	0708 1508 2310
Grimethorpe, Park Spring Rd/Houghton Coll R'bout	d.	0713 1513 2315
Goldthorpe, High St/Jackson St		0728 1528 2328
Bolton-upon-Dearne, Furlong Rd/Station Rd		0733 1533 2331
Mexborough, Adwick Rd/Princess Rd		0737 1537 2335
Mexborough, Hartley St		0742 1542 2340
Swinton, Rockingham Rd/Woodlands Cres		0746 1546 2344
Warren Vale, Warren Vale/Valeside Farm		0749 1549 2346
Rawmarsh, Dale Rd/East Av		0753 1553 2349
Rotherham, Interchange		0805 1605 2358

The information shown is correct at the time of production and is subject to change.

24 hour clock

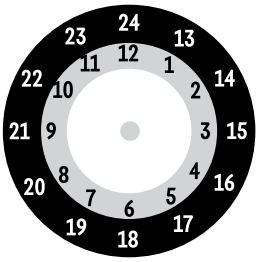
24 hour clock
Throughout South Yorkshire our timetables use the 24 hour clock to avoid confusion between am and pm times.

For example:

9.00am is shown as 0900

2.15pm is shown as 1415

10.25pm is shown as 2225



24 hour times
12 hour times

Travel South Yorkshire

Bus service(s)

226

Valid from: 01 September 2019

Areas served

Barnsley
Stairfoot
Wombwell
Wath upon Dearne
Bolton upon Dearne
Goldthorpe
Thurnscoe

Places on the route

- Barnsley Interchange
- Bolton upon Dearne Rail Station
- Goldthorpe Rail Station
- Thurncoe Rail Station

What's changed

There will be changes to the timetable to improve punctuality.

Operator(s)

Stagecoach

Some journeys operated with financial support from South Yorkshire Passenger Transport Executive

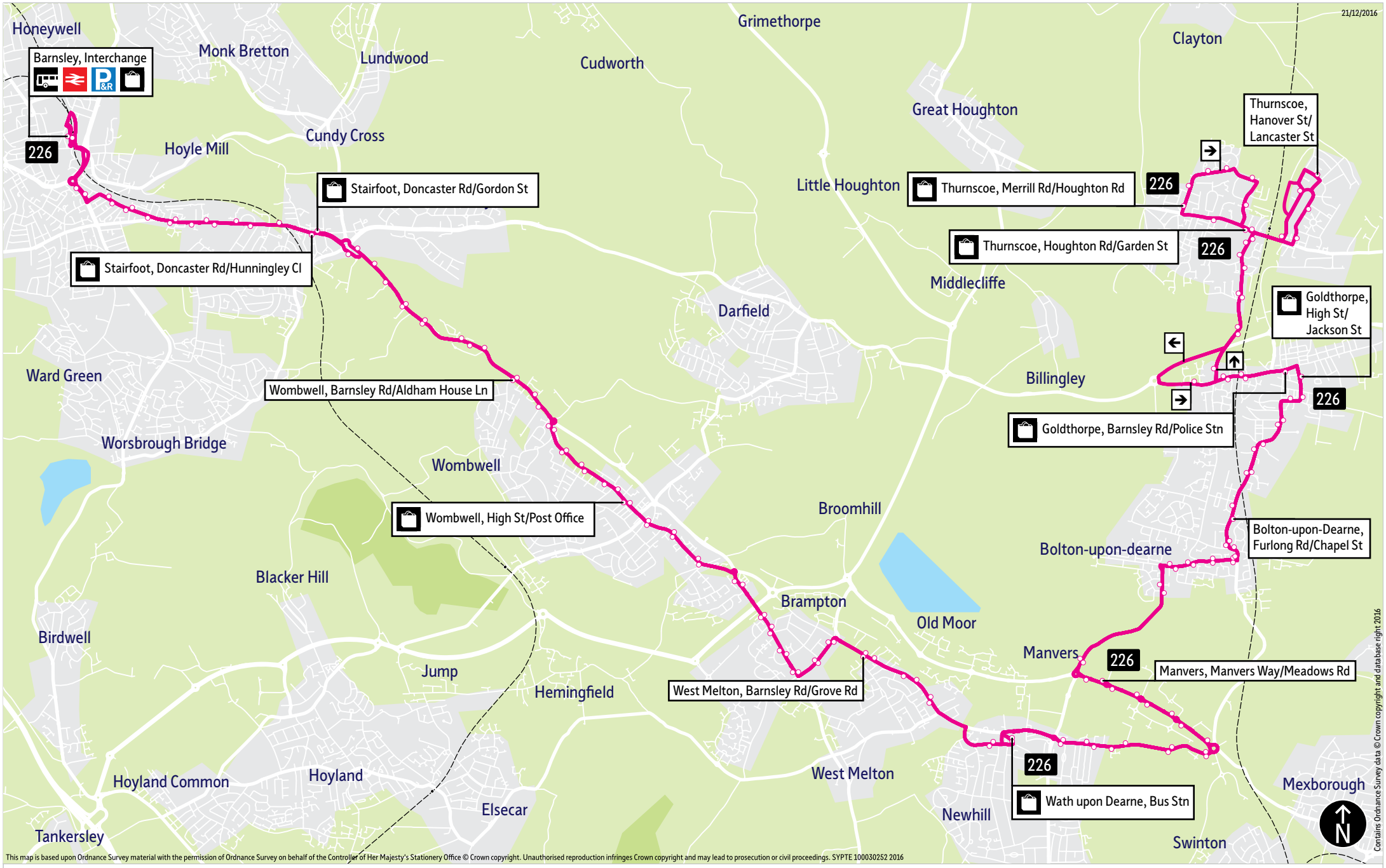
How can I get more information?

TravelSouthYorkshire

@TSYalerts

01709 51 51 51

Bus route map for service 226



= Terminus point | = Public transport | = Shopping area | = Bus route & stops | = Rail line & station | = Tram route & stop

Stopping points for service 226

Barnsley, Interchange ▸ Sheffield Road ▸ Doncaster Road ▸ **Kendray** ▸ **Stairfoot** ▸ Wombwell Lane ▸ **Wombwell** ▸ Barnsley Road ▸ High Street ▸ Park Street ▸ Brampton Road ▸ **Brampton** ▸ Knollbeck Lane ▸ **Brampton Bierlow** ▸ Pontefract Road ▸ **Brampton** ▸ **West Melton** ▸ Barnsley Road ▸ **Wath Upon Dearne** ▸ Church Street ▸ Montgomery Road ▸ Doncaster Road ▸ **Manvers** ▸ Manvers Way ▸ Station Road ▸ **Bolton-upon-dearne** ▸ Dearne Road ▸ Wath Road ▸ High Street ▸ Angel Street ▸ Furlong Road ▸ **Goldthorpe** ▸ Goldthorpe Road ▸ High Street ▸ Barnsley Road ▸ **Highgate** ▸ Nicholas Lane ▸ Thurnscoe Bridge Lane ▸ Shepherd Lane ▸ Houghton Road ▸ **Thurnscoe, Merrill Road**

Thurnscoe, Merrill Road ▸ Lingamore Leys ▸ School Street ▸ Houghton Road ▸ Hanover Street ▸ Shepherd Lane ▸ Thurnscoe Bridge Lane ▸ **Highgate** ▸ Barnsley Road ▸ **Goldthorpe** ▸ High Street ▸ Goldthorpe Road ▸ Goldthorpe Green ▸ **Bolton-upon-dearne** ▸ Furlong Road ▸ Station Road ▸ High Street ▸ Wath Road ▸ Dearne Road ▸ **Manvers** ▸ Station Road ▸ Manvers Way ▸ Doncaster Road ▸ **Wath Upon Dearne** ▸ Montgomery Road ▸ Church Street ▸ **West Melton** ▸ Barnsley Road ▸ **Brampton** ▸ Pontefract Road ▸ **Brampton Bierlow** ▸ Knollbeck Lane ▸ **Brampton** ▸ **Wombwell** ▸ Brampton Road ▸ Park Street ▸ High Street ▸ Barnsley Road ▸ Wombwell Lane ▸ **Stairfoot** ▸ Wombwell Lane ▸ Doncaster Road ▸ **Kendray** ▸ Doncaster Road ▸ Sheffield Road ▸ Schwabish Gmund Way ▸ **Barnsley, Interchange**

226 ▸ Monday to Friday **Barnsley Centre ▸ Thurnscoe**

See notes:													NF	F
Barnsley, Interchange		0615	0645	0710	0745	0815	0855	0925	0955	1025	1055	1125	1155	1155
Stairfoot, Doncaster Rd/Gordon St		0623	0653	0719	0754	0824	0904	0934	1004	1034	1104	1134	1204	1205
Wombwell, High St/Marsh St		0632	0702	0729	0805	0835	0915	0945	1015	1045	1115	1145	1215	1216
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0646	0716	0743	0819	0849	0929	0959	1029	1059	1129	1203	1229	1233
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0646	0716	0743	0822	0852	0932	1002	1032	1102	1133	1203	1233	1233
Manvers, Manvers Way/Meadows Rd		0654	0724	0751	0830	0900	0940	1010	1040	1110	1141	1211	1241	1241
Goldthorpe, Barnsley Rd/High St	a.	0708	0738	0805	0844	0914	0954	1024	1054	1124	1154	1226	1255	1256
Goldthorpe, Barnsley Rd/High St	d.	0708	0738	0805	0844	0914	0954	1024	1054	1124	1156	1226	1255	1256
Thurnscoe, Houghton Rd/Garden St		0714	0744	0811	0850	0920	1000	1030	1100	1130	1201	1231	1302	1303
Thurnscoe, Merrill Rd/Houghton Rd		0715	0745	0812	0851	0921	1001	1033	1102	1131	1202	1232	1303	1304

See notes:		F	NF	NF	F	NF	F	F	NF	F	NF	F	NF	NF
Barnsley, Interchange		1225	1225	1255	1255	1325	1325	1355	1355	1425	1425	1453	1453	1523
Stairfoot, Doncaster Rd/Gordon St		1235	1234	1304	1305	1334	1335	1405	1404	1435	1434	1503	1502	1532
Wombwell, High St/Marsh St		1246	1245	1315	1316	1345	1346	1417	1415	1447	1445	1515	1513	1544
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1303	1259	1329	1333	1359	1403	1435	1429	1505	1459	1533	1530	1558
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1303	1302	1332	1333	1402	1403	1435	1432	1507	1502	1533	1532	1559
Manvers, Manvers Way/Meadows Rd		1311	1310	1340	1341	1410	1411	1443	1440	1516	1510	1542	1541	1607
Goldthorpe, Barnsley Rd/High St	a.	1326	1324	1354	1356	1424	1426	1502	1456	1535	1530	1601	1556	1624
Goldthorpe, Barnsley Rd/High St	d.	1326	1324	1354	1356	1424	1426	1502	1500	1535	1530	1601	1556	1624
Thurnscoe, Houghton Rd/Garden St		1331	1330	1400	1401	1430	1431	1509	1508	1542	1538	1607	1603	1629
Thurnscoe, Merrill Rd/Houghton Rd		1332	1331	1402	1402	1431	1432	1510	1509	1543	1540	1608	1604	1630

See notes:		F	NF	F	F	NF	F	NF						
Barnsley, Interchange		1526	1555	1556	1633	1633	1703	1703	1736	1800	1815	1915	–	2015
Stairfoot, Doncaster Rd/Gordon St		1536	1605	1606	1644	1644	1713	1713	1746	1810	1823	1923	–	2023
Wombwell, High St/Marsh St		1548	1617	1617	1656	1655	1726	1725	1756	1820	1832	1932	–	2032
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1603	1631	1632	1709	1707	1739	1737	1810	1832	1844	1944	–	2044
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1603	1631	1632	1710	1710	1740	1740	1810	–	1849	1949	2003	2049
Manvers, Manvers Way/Meadows Rd		1612	1640	1641	1720	1720	1748	1748	1818	–	1856	1956	2010	2056
Goldthorpe, Barnsley Rd/High St	a.	1629	1655	1658	1734	1734	1802	1802	1831	–	1910	2010	2024	2110
Goldthorpe, Barnsley Rd/High St	d.	1629	1657	1658	1734	1734	1803	1803	1832	–	1910	2010	2024	2110
Thurnscoe, Houghton Rd/Garden St		1634	1702	1703	1739	1739	1808	1808	1837	–	1915	2015	2029	2115
Thurnscoe, Merrill Rd/Houghton Rd		1635	1703	1704	1740	1740	1809	1809	1838	–	1916	2016	2030	2116

226 ▸ Monday to Friday (continued) — Barnsley Centre ▸ Thurnscoe

Barnsley, Interchange		2115	2215	2315
Stairfoot, Doncaster Rd/Gordon St		2123	2223	2323
Wombwell, High St/Marsh St		2132	2232	2332
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	2144	2244	2344
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	2149	2249	–
Manvers, Manvers Way/Meadows Rd		2156	2256	–
Goldthorpe, Barnsley Rd/High St	a.	2210	2310	–
Goldthorpe, Barnsley Rd/High St	d.	2210	2310	–
Thurnscoe, Houghton Rd/Garden St		2215	2315	–
Thurnscoe, Merrill Rd/Houghton Rd		2216	2316	–

226 ▸ Monday to Friday — Thurnscoe ▸ Barnsley Centre

See notes:										F	NF	F	NF	F
Thurnscoe, Houghton Rd/Garden St		–	0456	–	0551	0617	0648	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		–	0458	–	0553	0619	0650	0716	0731	0746	0746	0814	0814	0901
Thurnscoe, Hanover St/Lancaster St	a.	–	0505	–	0600	0626	0657	0726	0739	0754	0754	0822	0822	0908
Thurnscoe, Hanover St/Lancaster St	d.	–	0505	–	0600	0626	0657	0726	0741	0755	0756	0823	0824	0909
Thurnscoe, Stuart St/Clarence Ter		–	–	–	–	–	–	–	–	–	–	–	–	–
Goldthorpe, High St/Jackson St		–	0515	0540	0610	0636	0708	0738	0753	0807	0808	0835	0836	0920
Manvers, Manvers Way/Meadows Rd		0506	0529	0554	0624	0651	0721	0753	0806	0822	0823	0850	0851	0934
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0514	0537	0602	0632	0659	0729	0801	0814	0830	0831	0858	0859	0942
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0514	0539	0604	0634	0702	0732	0804	–	0833	0834	0901	0902	0942
Wombwell, High St/Melville St		0527	0552	0617	0647	0716	0747	0820	–	0848	0848	0916	0916	0957
Stairfoot, Doncaster Rd/Hunningley Cl		0535	0600	0625	0655	0725	0757	0834	–	0859	0859	0927	0927	1008
Barnsley, Interchange		0545	0610	0635	0705	0735	0807	0848	–	0909	0909	0937	0937	1018

See notes:		NF	F	NF	F	NF	F	NF	F	NF	F	NF	NF	F
Thurnscoe, Houghton Rd/Garden St		–	–	–	–	–	–	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		0901	0931	0931	1001	1001	1033	1033	1102	1102	1131	1131	1202	1202
Thurnscoe, Hanover St/Lancaster St	a.	0908	0938	0938	1008	1008	1040	1040	1109	1109	1138	1138	1209	1209
Thurnscoe, Hanover St/Lancaster St	d.	0910	0939	0940	1009	1010	1040	1040	1109	1110	1139	1140	1210	1209
Thurnscoe, Stuart St/Clarence Ter		–	–	–	–	–	–	–	–	–	–	–	–	–
Goldthorpe, High St/Jackson St		0921	0950	0951	1020	1021	1051	1051	1120	1121	1150	1151	1221	1220
Manvers, Manvers Way/Meadows Rd		0932	1004	1002	1034	1032	1105	1102	1134	1132	1204	1202	1232	1234
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0940	1012	1010	1042	1040	1113	1110	1142	1140	1212	1210	1240	1242
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0943	1012	1013	1043	1043	1113	1113	1143	1143	1212	1213	1243	1243
Wombwell, High St/Melville St		0957	1028	1027	1058	1057	1129	1127	1158	1157	1228	1227	1257	1258
Stairfoot, Doncaster Rd/Hunningley Cl		1008	1038	1038	1108	1108	1139	1138	1208	1208	1238	1238	1308	1308
Barnsley, Interchange		1018	1048	1048	1117	1117	1148	1147	1217	1217	1248	1248	1317	1317

See notes:		F	NF	NF	F	NF	F	F	NF	NF	F		NF	F
Thurnscoe, Houghton Rd/Garden St		–	–	–	–	–	–	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		1232	1232	1303	1304	1331	1332	1402	1402	1431	1432	1511	1541	1544
Thurnscoe, Hanover St/Lancaster St	a.	1239	1239	1310	1311	1338	1339	1409	1409	1438	1439	1518	1548	1551
Thurnscoe, Hanover St/Lancaster St	d.	1239	1240	1310	1311	1340	1340	1410	1410	1440	1440	1520	1550	1553
Thurnscoe, Stuart St/Clarence Ter		–	–	–	–	–	–	–	–	–	–	–	–	–
Goldthorpe, High St/Jackson St		1250	1251	1321	1322	1351	1351	1421	1421	1451	1451	1531	1601	1604
Manvers, Manvers Way/Meadows Rd		1304	1302	1332	1333	1402	1402	1432	1432	1503	1503	1542	1611	1614
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1312	1310	1340	1341	1410	1410	1440	1440	1511	1511	1550	1621	1624
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1312	1313	1343	1342	1411	1411	1443	1443	1511	1511	1551	1624	1627
Wombwell, High St/Melville St		1328	1327	1357	1357	1425	1425	1457	1457	1529	1529	1601	1634	1637
Stairfoot, Doncaster Rd/Hunningley Cl		1338	1338	1408	1408	1436	1436	1508	1508	1540	1540	1615	1645	1648
Barnsley, Interchange		1347	1347	1417	1417	1445	1445	1517	1517	1549	1550	1625	1655	1658

See notes:		NF	F											
Thurnscoe, Houghton Rd/Garden St		–	–	–	–	–	–	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		1604	1609	1636	1705	1740	1810	1839	1918	2018	2030	2118	2218	2318
Thurnscoe, Hanover St/Lancaster St	a.	1611	1616	1643	1712	1747	1817	1846	1925	2025	2037	2125	2225	2325
Thurnscoe, Hanover St/Lancaster St	d.	1612	1617	1645	1714	1751	1819	1846	1925	2025	2037	2125	2225	2325
Thurnscoe, Stuart St/Clarence Ter		–	–	–	–	–	–	–	–	–	2038	–	–	–
Goldthorpe, High St/Jackson St		1622	1627	1655	1724	1801	1830	1858	1937	2037	–	2137	2237	2335
Manvers, Manvers Way/Meadows Rd		1634	1639	1707	1736	1813	1842	1908	1947	2047	–	2147	2247	–
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1642	1647	1715	1744	1821	1850	1915	1954	2054	–	2154	2254	–
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1644	1649	1718	1747	1827	1857	1918	1958	2058	–	2158	2258	–
Wombwell, High St/Melville St		1657	1702	1732	1800	1839	1909	1929	2009	2109	–	2209	2309	–
Stairfoot, Doncaster Rd/Hunningley Cl		1708	1713	1743	1810	1847	1917	1937	2017	2117	–	2217	2317	–
Barnsley, Interchange		1720	1725	1752	1818	1855	1925	1945	2025	2125	–	2225	2325	–

226 ▸ Saturday — Barnsley Centre ▸ Thurnscoe

Barnsley, Interchange		0613	0715	0745	0825	0900	0930	1000	1030	1100	1130	1200	1230	1305
Stairfoot, Doncaster Rd/Gordon St		0621	0723	0753	0833	0908	0938	1008	1038	1108	1138	1208	1238	1313
Wombwell, High St/Marsh St		0630	0732	0802	0843	0918	0948	1018	1050	1120	1150	1218	1248	1323
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0642	0744	0814	0856	0931	1001	1031	1103	1133	1203	1231	1301	1336
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0642	0747	0817	0859	0934	1004	1034	1106	1136	1206	1234	1304	1337
Manvers, Manvers Way/Meadows Rd		0649	0754	0824	0906	0941	1011	1041	1113	1143	1213	1241	1311	1344
Goldthorpe, Barnsley Rd/High St	a.	0700	0805	0837	0920	0955	1025	1055	1127	1157	1227	1255	1325	1358
Goldthorpe, Barnsley Rd/High St	d.	0700	0805	0837	0920	0955	1025	1055	1127	1157	1227	1255	1325	1358
Thurnscoe, Houghton Rd/Garden St		0705	0810	0842	0925	1000	1030	1100	1132	1202	1232	1300	1330	1403
Thurnscoe, Merrill Rd/Houghton Rd		0706	0811	0843	0926	1001	1031	1101	1133	1203	1233	1301	1331	1404
Barnsley, Interchange		1332	1402	1432	1502	1530	1600	1630	1700	1730	1800	1820	1915	2015
Stairfoot, Doncaster Rd/Gordon St		1340	1410	1440	1510	1538	1608	1638	1708	1738	1808	1828	1923	2023
Wombwell, High St/Marsh St		1350	1420	1450	1520	1548	1618	1648	1718	1747	1818	1837	1932	2032
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1403	1433	1503	1533	1601	1631	1701	1731	1758	1831	1849	1944	2044
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1406	1436	1506	1536	1604	1634	1704	1734	1758	–	1854	1949	2049
Manvers, Manvers Way/Meadows Rd		1413	1443	1513	1543	1611	1641	1711	1741	1804	–	1901	1956	2056
Goldthorpe, Barnsley Rd/High St	a.	1427	1457	1527	1557	1625	1655	1725	1755	1818	–	1913	2008	2108
Goldthorpe, Barnsley Rd/High St	d.	1427	1457	1527	1557	1625	1655	1725	1755	1818	–	1915	2010	2110
Thurnscoe, Houghton Rd/Garden St		1432	1502	1532	1602	1630	1700	1730	1800	1823	–	1920	2015	2115
Thurnscoe, Merrill Rd/Houghton Rd		1433	1503	1533	1603	1631	1701	1731	1801	1824	–	1921	2016	2116
Barnsley, Interchange		2115	2215	2315										
Stairfoot, Doncaster Rd/Gordon St		2123	2223	2323										
Wombwell, High St/Marsh St		2132	2232	2332										
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	2144	2244	2344										
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	2149	2249	–										
Manvers, Manvers Way/Meadows Rd		2156	2256	–										
Goldthorpe, Barnsley Rd/High St	a.	2208	2308	–										
Goldthorpe, Barnsley Rd/High St	d.	2210	2310	–										
Thurnscoe, Houghton Rd/Garden St		2215	2315	–										
Thurnscoe, Merrill Rd/Houghton Rd		2216	2316	–										

226 ▸ Saturday — Thurnscoe ▸ Barnsley Centre

Thurnscoe, Houghton Rd/Garden St		0459	–	–	0733	–	–	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		0500	–	0707	0734	0829	0859	0929	1004	1032	1102	1134	1204	1234
Thurnscoe, Hanover St/Lancaster St	a.	0507	–	0714	0741	0836	0906	0936	1011	1039	1109	1139	1211	1241
Thurnscoe, Hanover St/Lancaster St	d.	0507	–	0716	0743	0838	0908	0938	1013	1039	1109	1141	1213	1243
Goldthorpe, High St/Jackson St	a.	0517	0617	0726	0753	0848	0918	0948	1024	1050	1120	1152	1224	1254
Goldthorpe, High St/Jackson St	d.	0517	0617	0726	0753	0848	0918	0948	1024	1050	1120	1152	1224	1254
Manvers, Manvers Way/Meadows Rd		0527	0627	0738	0805	0900	0930	1000	1036	1102	1132	1204	1236	1306
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0535	0635	0746	0813	0908	0938	1008	1044	1110	1140	1212	1244	1314
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0535	0635	0746	0816	0911	0941	1011	1047	1113	1143	1213	1247	1317
Wombwell, High St/Melville St		0548	0649	0800	0830	0925	0955	1025	1101	1127	1157	1227	1301	1331
Stairfoot, Doncaster Rd/Hunningley Cl		0557	0657	0810	0840	0935	1005	1035	1115	1145	1215	1245	1317	1347
Barnsley, Interchange		0607	0707	0820	0850	0945	1015	1045	1125	1155	1225	1255	1327	1357

Thurnscoe, Houghton Rd/Garden St		–	–	–	–	–	–	–	–	–	–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		1305	1335	1405	1435	1505	1535	1605	1635	1702	1731	1801	1825	1923
Thurnscoe, Hanover St/Lancaster St	a.	1312	1342	1412	1442	1512	1542	1612	1642	1709	1738	1808	–	1930
Thurnscoe, Hanover St/Lancaster St	d.	1313	1343	1413	1444	1514	1544	1614	1644	1711	1738	1810	–	1930
Goldthorpe, High St/Jackson St	a.	1324	1354	1424	1455	1525	1555	1625	1655	1722	1749	1821	1838	1940
Goldthorpe, High St/Jackson St	d.	1324	1354	1424	1455	1525	1555	1625	1655	1722	1749	1821	1838	1942
Manvers, Manvers Way/Meadows Rd		1336	1406	1436	1507	1537	1607	1637	1707	1734	1801	1833	1850	1952
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	1344	1414	1444	1515	1545	1615	1645	1715	1742	1809	1841	1858	1959
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	1347	1417	1447	1520	1550	1618	1650	1718	1745	1810	–	1858	2003
Wombwell, High St/Melville St		1401	1431	1501	1534	1604	1632	1704	1732	1759	1824	–	1909	2014
Stairfoot, Doncaster Rd/Hunningley Cl		1415	1445	1515	1545	1615	1642	1714	1742	1807	1832	–	1917	2022
Barnsley, Interchange		1425	1455	1525	1555	1625	1652	1724	1751	1816	1841	–	1925	2030

Thurnscoe, Houghton Rd/Garden St		–	–	–	–
Thurnscoe, Merrill Rd/Houghton Rd		2018	2118	2218	2318
Thurnscoe, Hanover St/Lancaster St	a.	2025	2125	2225	2325
Thurnscoe, Hanover St/Lancaster St	d.	2025	2125	2225	2325
Goldthorpe, High St/Jackson St	a.	2035	2135	2235	2335
Goldthorpe, High St/Jackson St	d.	2037	2137	2237	–
Manvers, Manvers Way/Meadows Rd		2047	2147	2247	–
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	2054	2154	2254	–
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	2058	2158	2258	–
Wombwell, High St/Melville St		2109	2209	2309	–
Stairfoot, Doncaster Rd/Hunningley Cl		2117	2217	2317	–
Barnsley, Interchange		2125	2225	2325	–

226 ▸ Sunday — Barnsley Centre ▸ Thurnscoe

Barnsley, Interchange		0815	then at these mins past the hour	15	until	2215
Stairfoot, Doncaster Rd/Gordon St		0823		23		2223
Wombwell, High St/Marsh St		0836		36		2236
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0849		49		2249
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0850		50		2250
Manvers, Manvers Way/Meadows Rd		0857		57		2257
Goldthorpe, Barnsley Rd/High St		0908		08		2308
Thurnscoe, Houghton Rd/Garden St		0912		12		2312
Thurnscoe, Merrill Rd/Houghton Rd		0914		14		2314

Thurnscoe, Merrill Rd/Houghton Rd		–	0916	1016	1116	1216	1316	1416	1516	1616	1716	1816	1916	2016
Thurnscoe, Hanover St/Lancaster St		–	0922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022
Goldthorpe, High St/Jackson St		–	0934	1034	1134	1234	1334	1434	1534	1634	1734	1834	1934	2034
Manvers, Manvers Way/Meadows Rd		0844	0944	1044	1144	1244	1344	1444	1544	1644	1744	1844	1944	2044
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	0851	0951	1051	1151	1251	1351	1451	1551	1651	1751	1851	1951	2051
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	0854	0954	1054	1154	1254	1354	1454	1554	1651	1754	1854	1954	2054
Wombwell, High St/Melville St		0908	1008	1108	1208	1308	1408	1508	1608	1705	1808	1908	2008	2108
Stairfoot, Doncaster Rd/Hunningley Cl		0921	1021	1121	1221	1321	1421	1521	1621	1718	1817	1917	2017	2117
Barnsley, Interchange		0929	1029	1129	1229	1329	1429	1529	1629	1726	1825	1925	2025	2125

Thurnscoe, Merrill Rd/Houghton Rd		2116	2216
Thurnscoe, Hanover St/Lancaster St		2122	2222
Goldthorpe, High St/Jackson St		2134	2234
Manvers, Manvers Way/Meadows Rd		2144	2244
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	a.	2151	2251
Wath upon Dearne, Montgomery Rd/Wath Bus Stn	d.	2154	2254
Wombwell, High St/Melville St		2208	2308
Stairfoot, Doncaster Rd/Hunningley Cl		2217	2317
Barnsley, Interchange		2225	2325

Notes: NF - Monday to Thursday, F - Friday only, a. - Arrival time, d. - Departure time

The information shown is correct at the time of production and is subject to change.

APPENDIX BGH 15

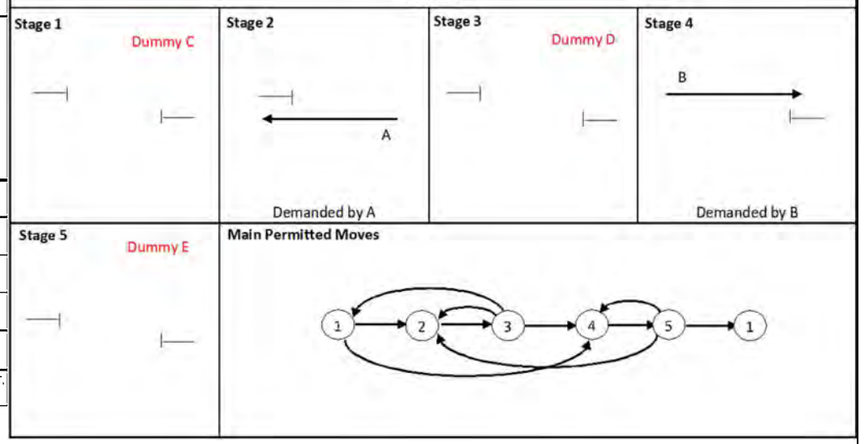
N

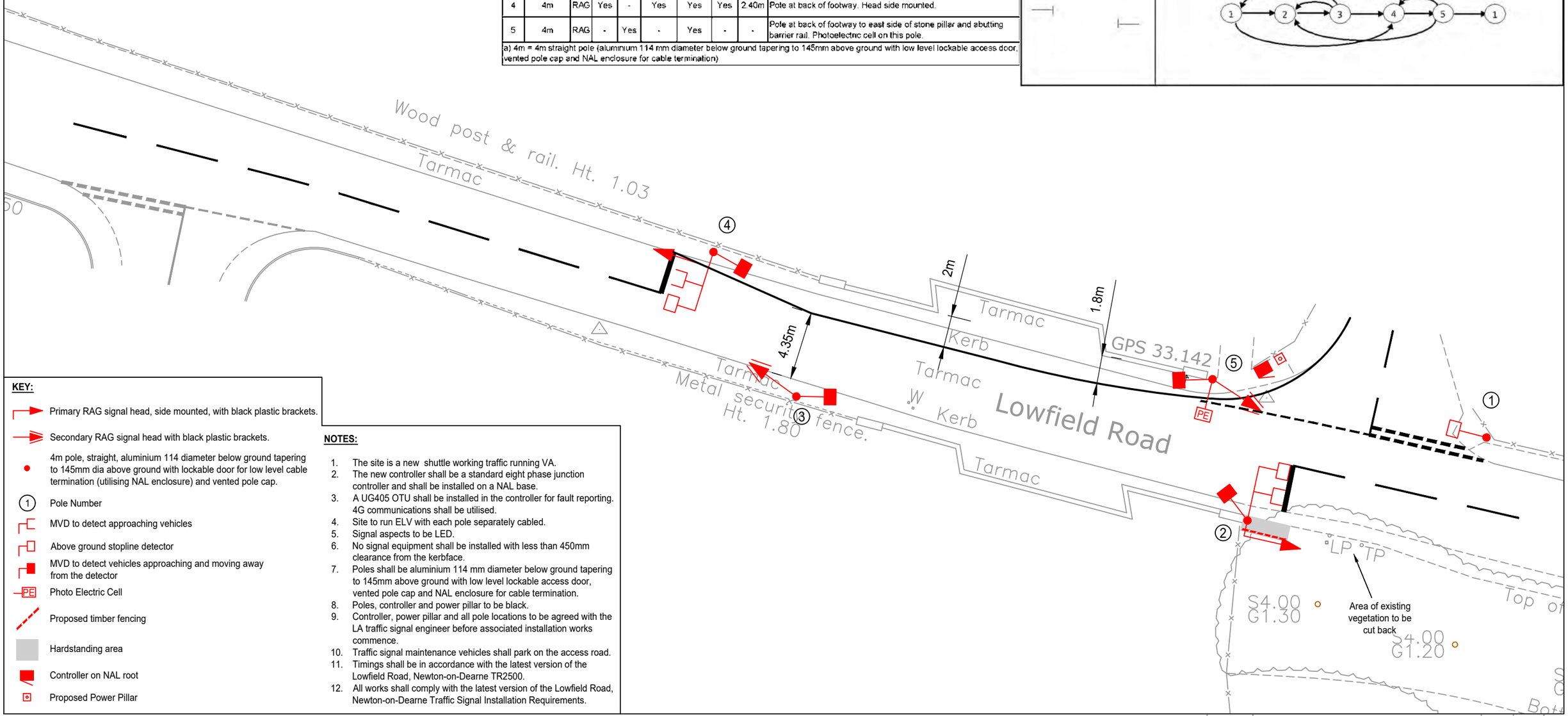
POLE SCHEDULE

Pole Ref	Pole Type	Head Type	Primary Head + Primary Hood	Secondary head +Secondary hood	Detection: MVD (Detects approaching traffic)	Detection: MVD (Detects approaching and departing traffic	Detection: Above ground stopline detector	Pole clearance from stopline	Comments
1	4m	-	-	-	-		Yes	-	Pole at back of footway at end of fence.
2	4m	RAG	Yes	-	Yes	Yes	Yes	2.40m	Pole adjacent to and in line with stone pillar. Head side mounted.
3	4m	RAG	-	Yes	-	Yes	-	-	Pole adjacent to fence.
4	4m	RAG	Yes	-	Yes	Yes	Yes	2.40m	Pole at back of footway. Head side mounted.
5	4m	RAG	-	Yes	-	Yes	-	-	Pole at back of footway to east side of stone pillar and abutting barrier rail. Photoelectric cell on this pole.

(a) 4m = 4m straight pole (aluminium 114 mm diameter below ground tapering to 145mm above ground with low level lockable access door, vented pole cap and NAL enclosure for cable termination)

STAGING





KEY:

- Primary RAG signal head, side mounted, with black plastic brackets.
- Secondary RAG signal head with black plastic brackets.
- 4m pole, straight, aluminium 114 diameter below ground tapering to 145mm dia above ground with lockable door for low level cable termination (utilising NAL enclosure) and vented pole cap.
- (1) Pole Number
- MVD to detect approaching vehicles
- Above ground stopline detector
- MVD to detect vehicles approaching and moving away from the detector
- PE Photo Electric Cell
- Proposed timber fencing
- Hardstanding area
- Controller on NAL root
- Proposed Power Pillar

NOTES:

1. The site is a new shuttle working traffic running VA.
2. The new controller shall be a standard eight phase junction controller and shall be installed on a NAL base.
3. A UG405 OTU shall be installed in the controller for fault reporting. 4G communications shall be utilised.
4. Site to run ELV with each pole separately cabled.
5. Signal aspects to be LED.
6. No signal equipment shall be installed with less than 450mm clearance from the kerbface.
7. Poles shall be aluminium 114 mm diameter below ground tapering to 145mm above ground with low level lockable access door, vented pole cap and NAL enclosure for cable termination.
8. Poles, controller and power pillar to be black.
9. Controller, power pillar and all pole locations to be agreed with the LA traffic signal engineer before associated installation works commence.
10. Traffic signal maintenance vehicles shall park on the access road.
11. Timings shall be in accordance with the latest version of the Lowfield Road, Newton-on-Dearne TR2500.
12. All works shall comply with the latest version of the Lowfield Road, Newton-on-Dearne Traffic Signal Installation Requirements.

BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

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Bryan G Hall

Rev:	Date:	Amendment:	DRN	CHK	APR

Title: TRAFFIC SIGNAL LAYOUT

Status: FOR APPROVAL

Client: GLEESON REGENERATION AND HOMES

Project: LOWFIELD ROAD
BOLTON ON DEARNE

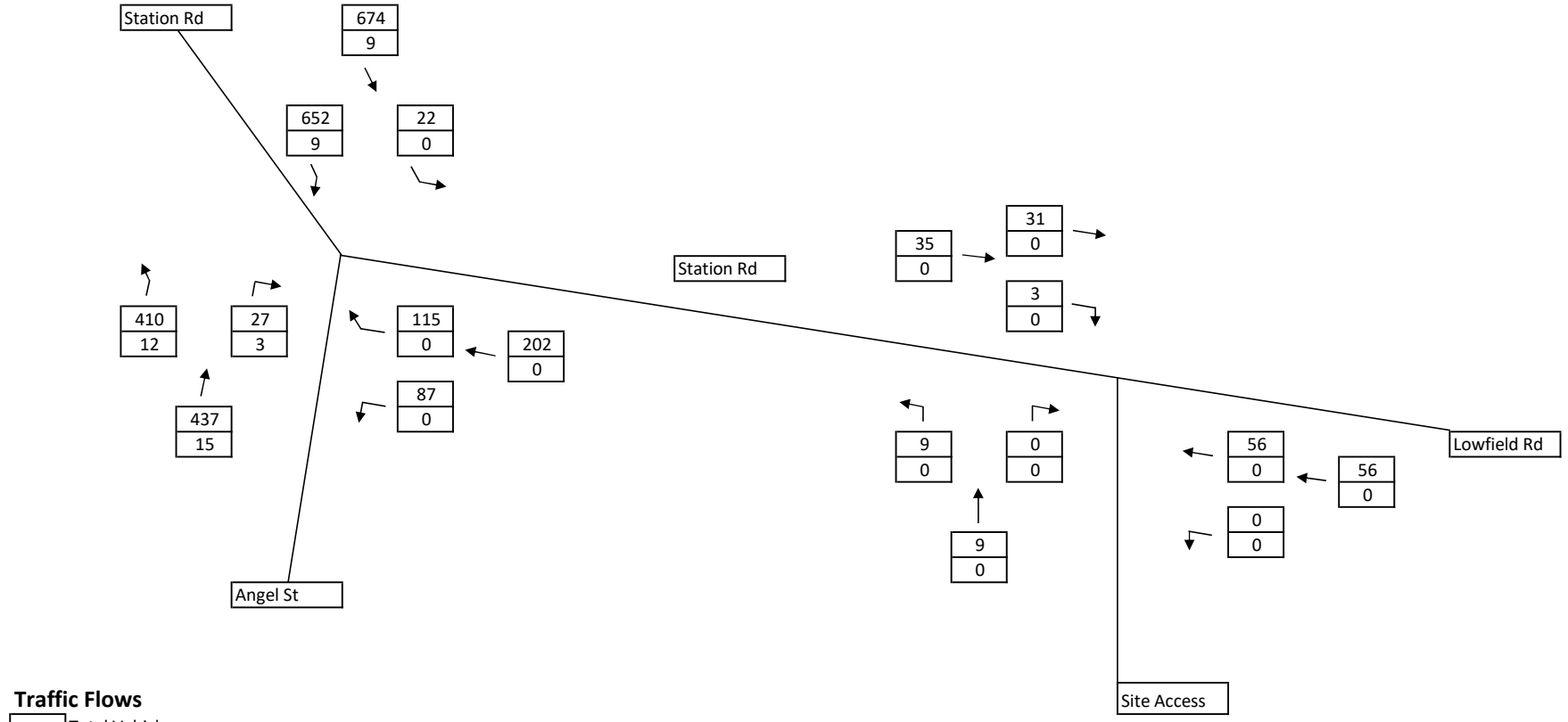
Scale: 1:250 | Size: A3 - 420 x 297 | Drawn: MM | Chkd: IR | Appvd: IR

Drawing No: 20/237/DE/1300/001 | Revision:

Job No: 20-237 | Date: 04/06/2020

APPENDIX BGH 16

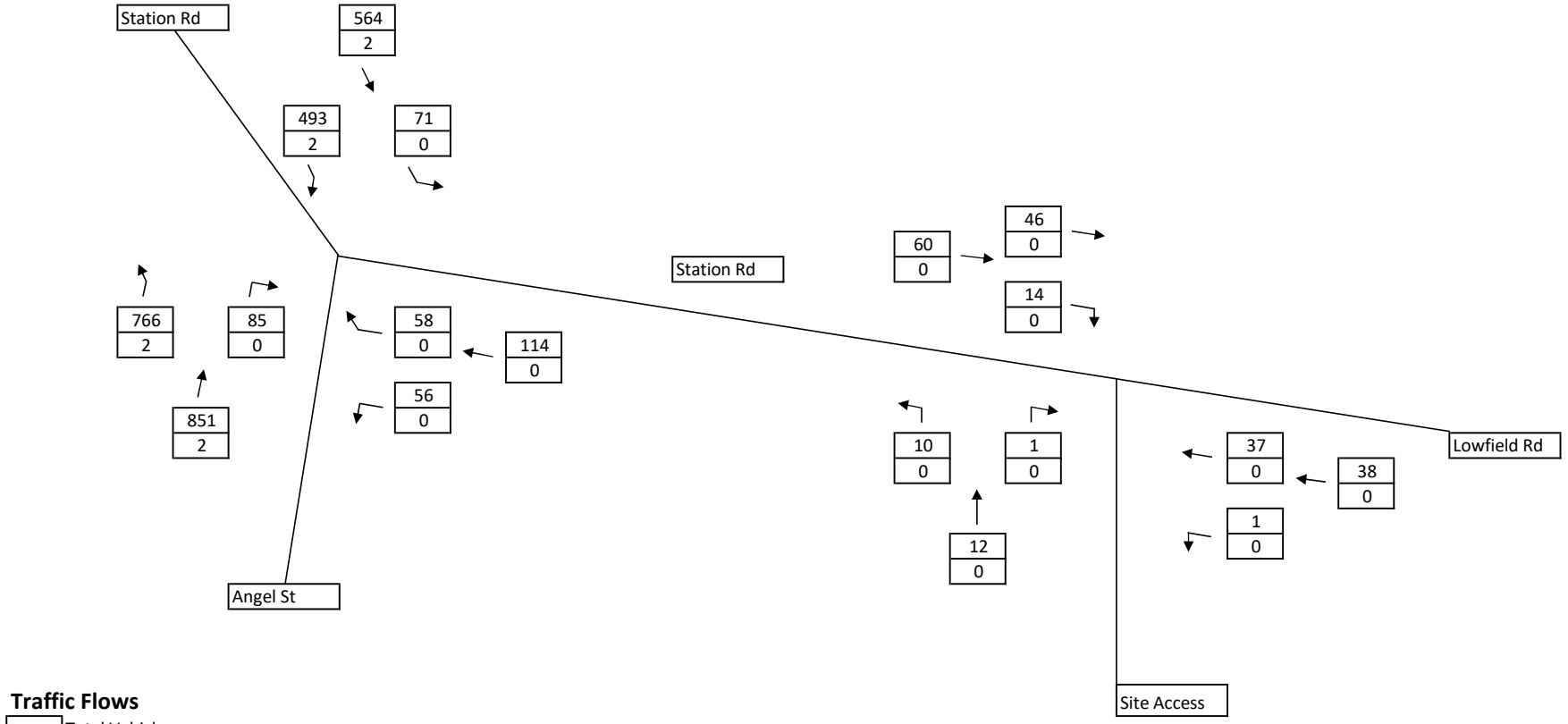
GROWTHED 2025 FLOWS
BOLTON UPON DEARNE
AM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

GROWTHED 2025 FLOWS
BOLTON UPON DEARNE
PM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

APPENDIX BGH 17

2015-2025

AM Peak

Level	Area	Local Growth Figure
E02001533	Barnsley 025	1.162175156

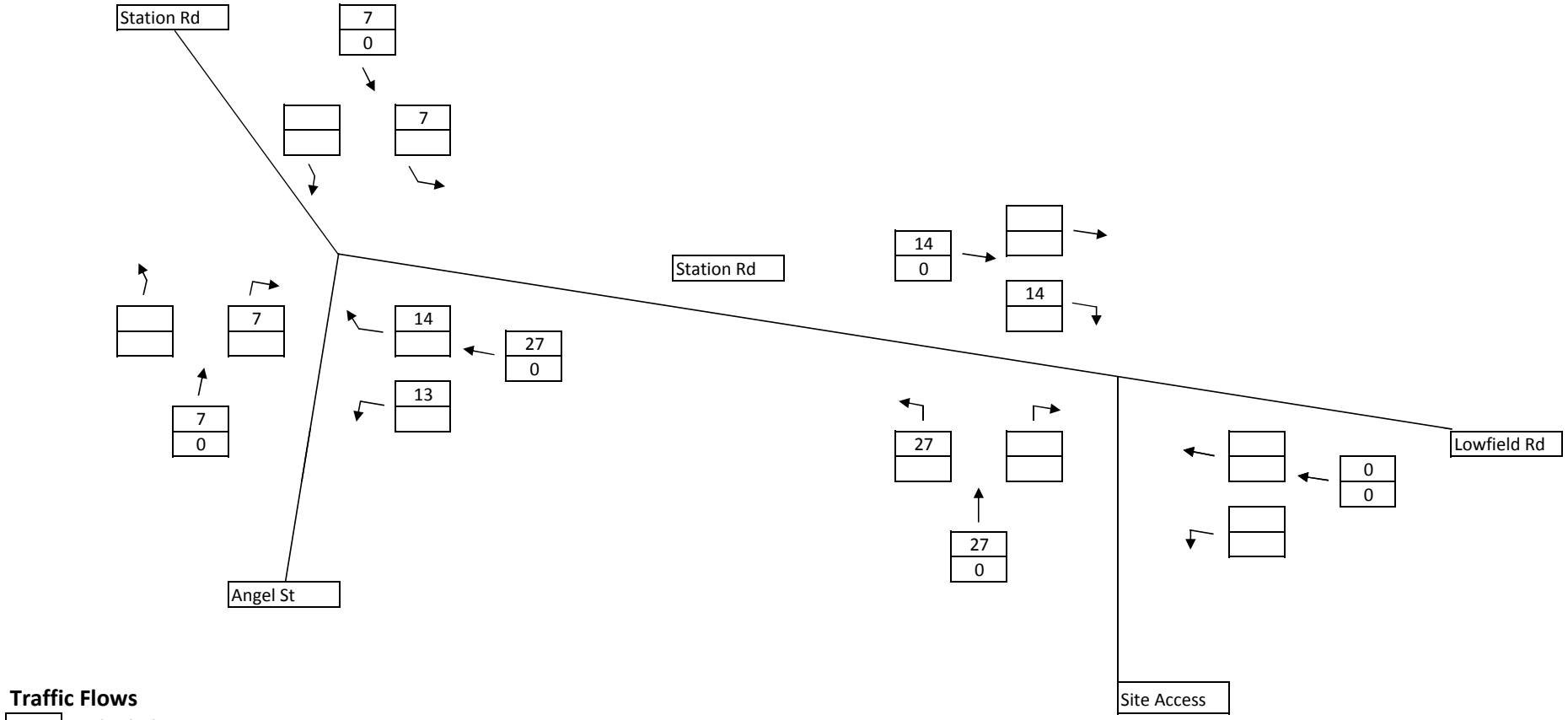
PM Peak

Level	Area	Local Growth Figure
E02001533	Barnsley 025	1.161153488

APPENDIX BGH 18

PHASE 1 GENERATIONS
BOLTON UPON DEARNE

AM

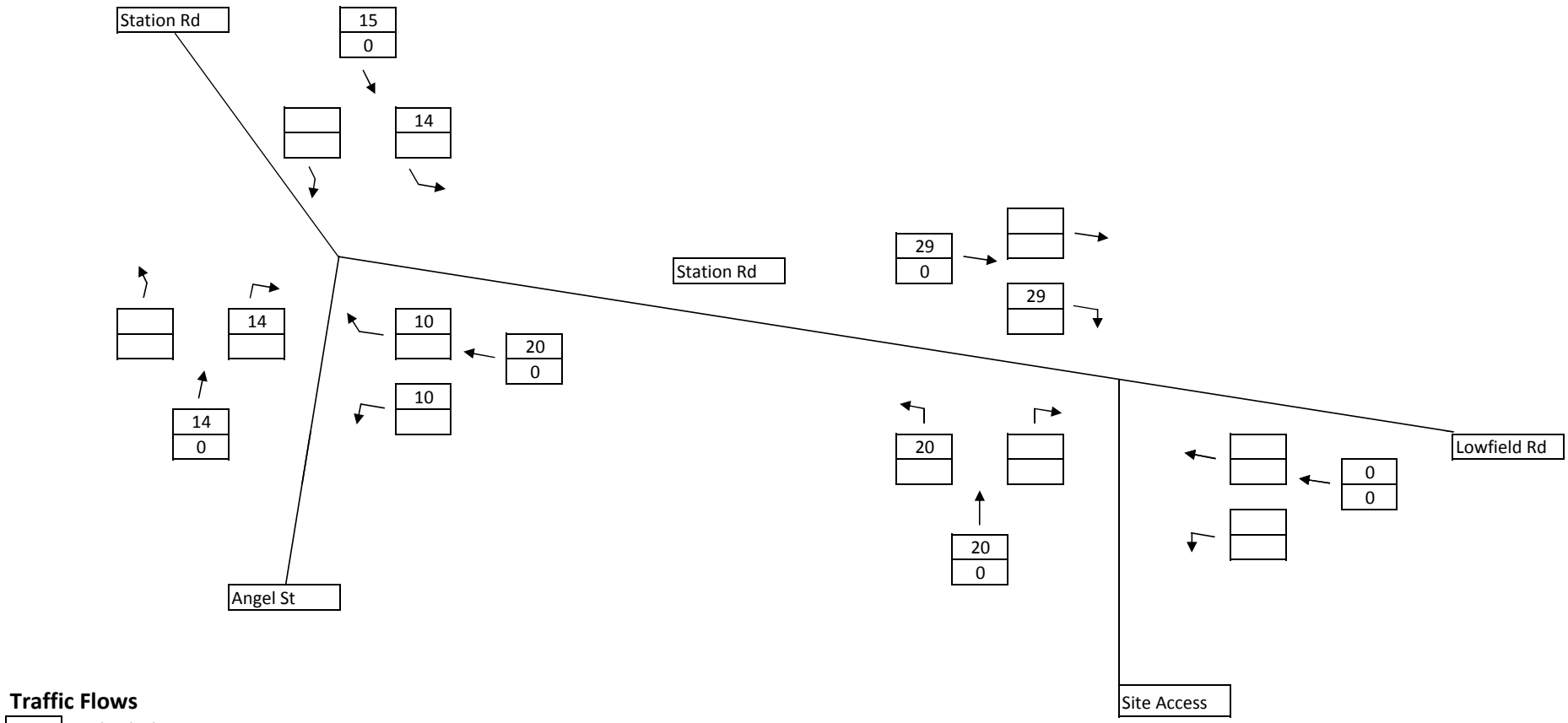


Traffic Flows

Total Vehicles
Total HGVs

PHASE 1 GENERATIONS
BOLTON UPON DEARNE

PM

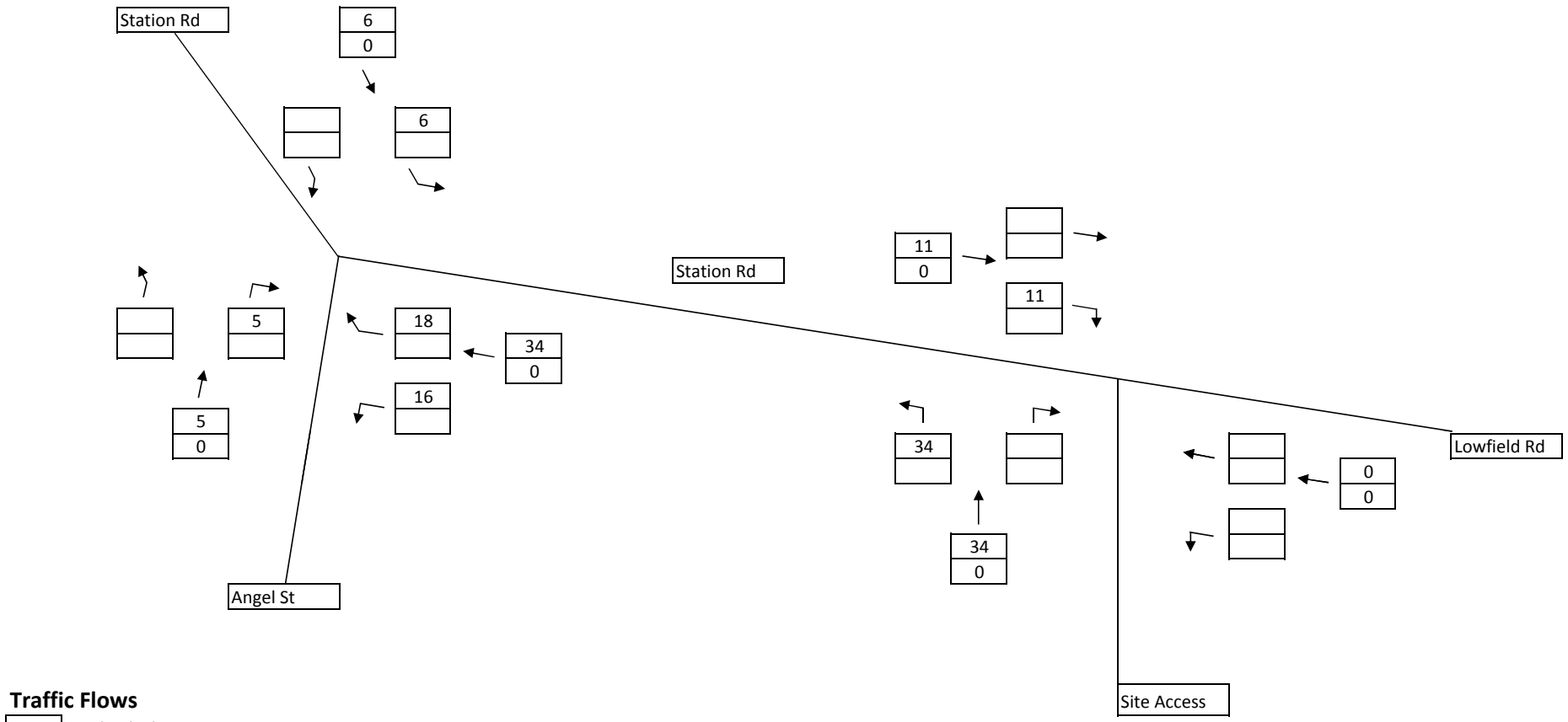


Traffic Flows

Total Vehicles
Total HGVs

PHASE 2 GENERATIONS
BOLTON UPON DEARNE

AM

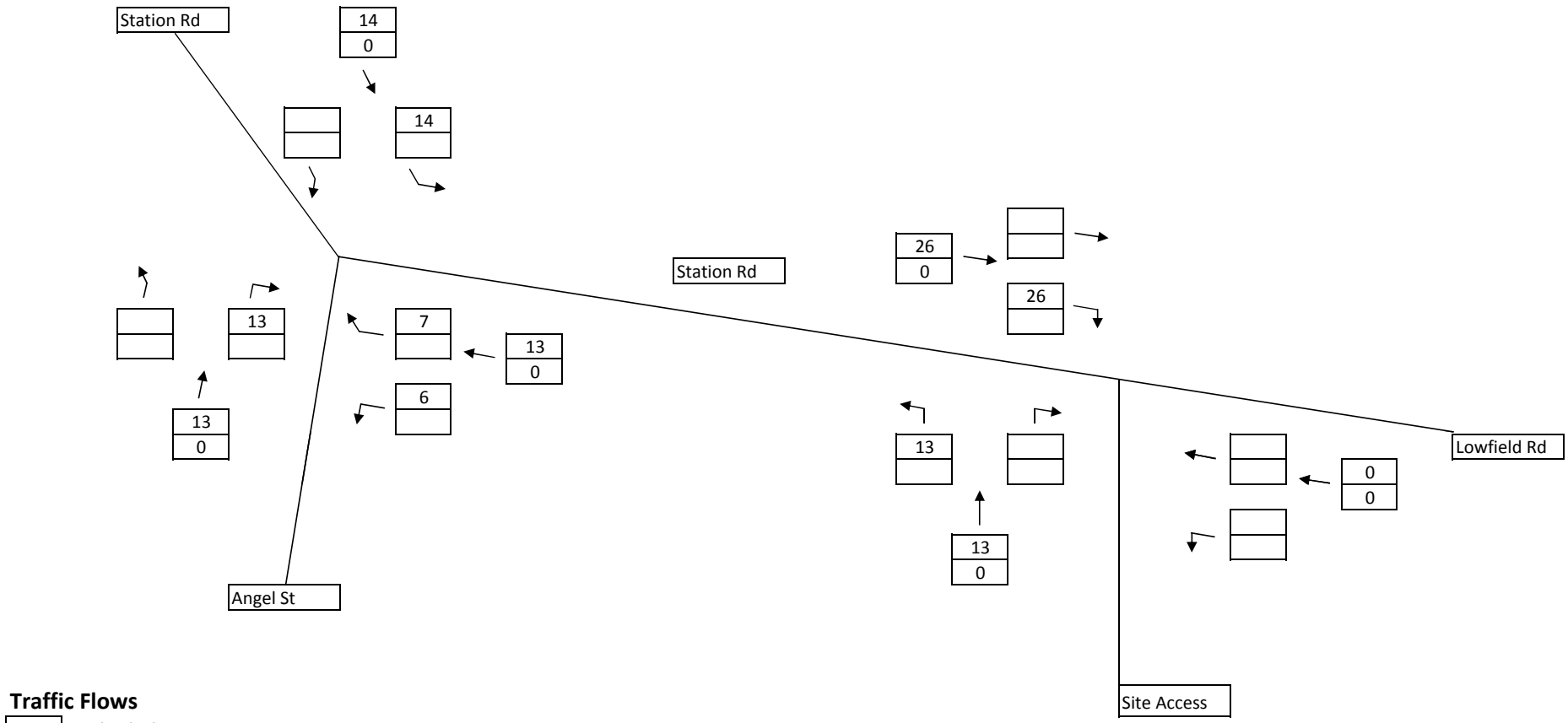


Traffic Flows

Total Vehicles
Total HGVs

PHASE 2 GENERATIONS
BOLTON UPON DEARNE

PM

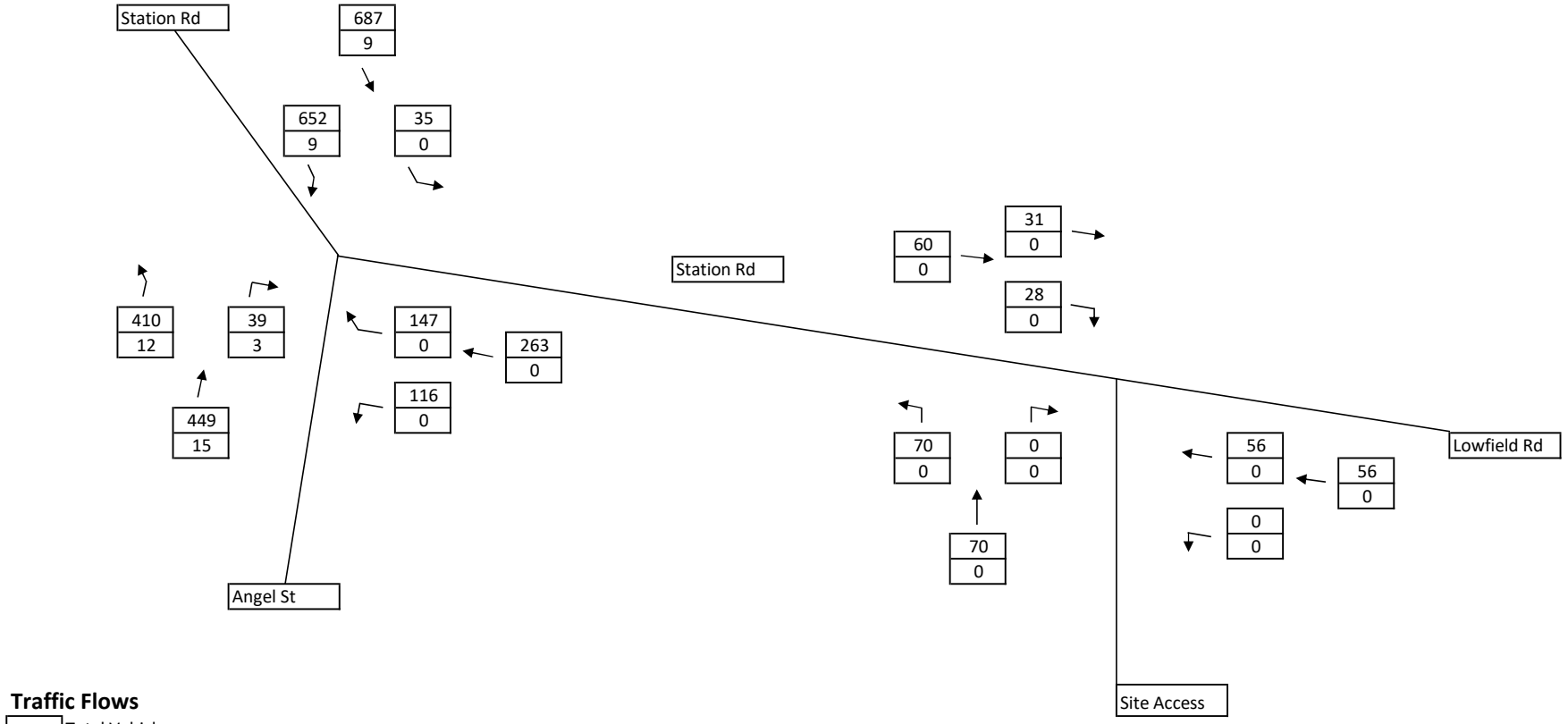


Traffic Flows

Total Vehicles
Total HGVs

APPENDIX BGH 19

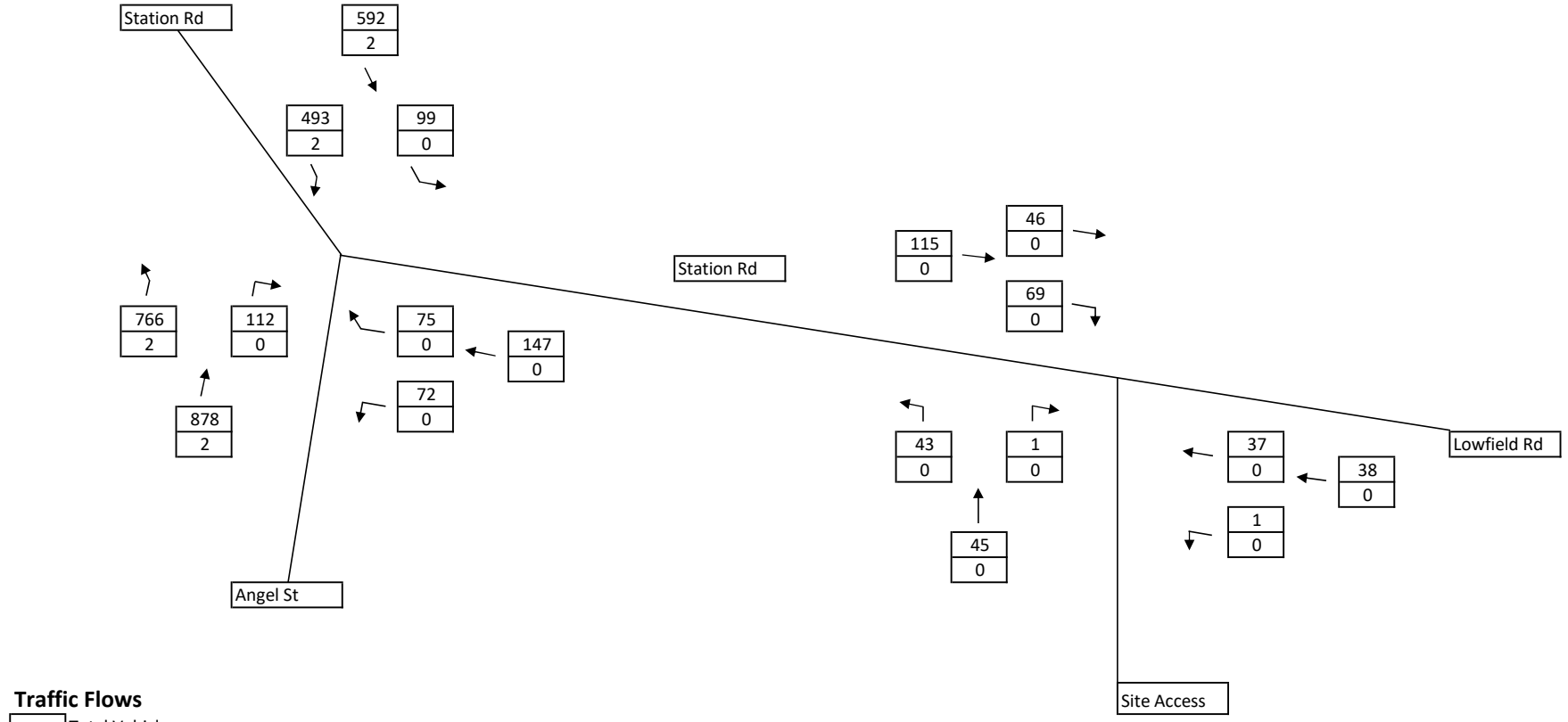
BASE 2025 FLOWS
BOLTON UPON DEARNE
AM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

BASE 2025 FLOWS
BOLTON UPON DEARNE
PM Peak

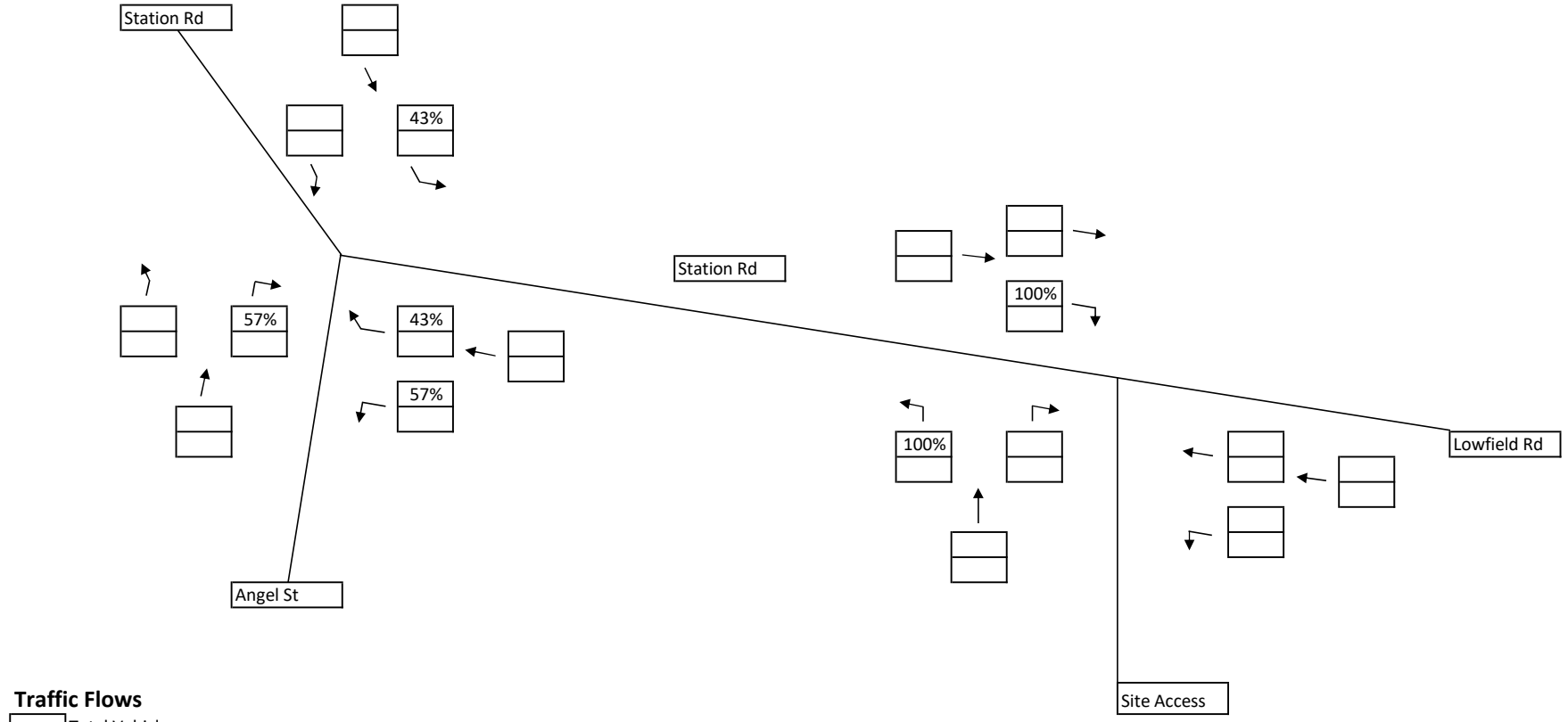


Traffic Flows

	Total Vehicles
	Total HGVs

APPENDIX BGH 20

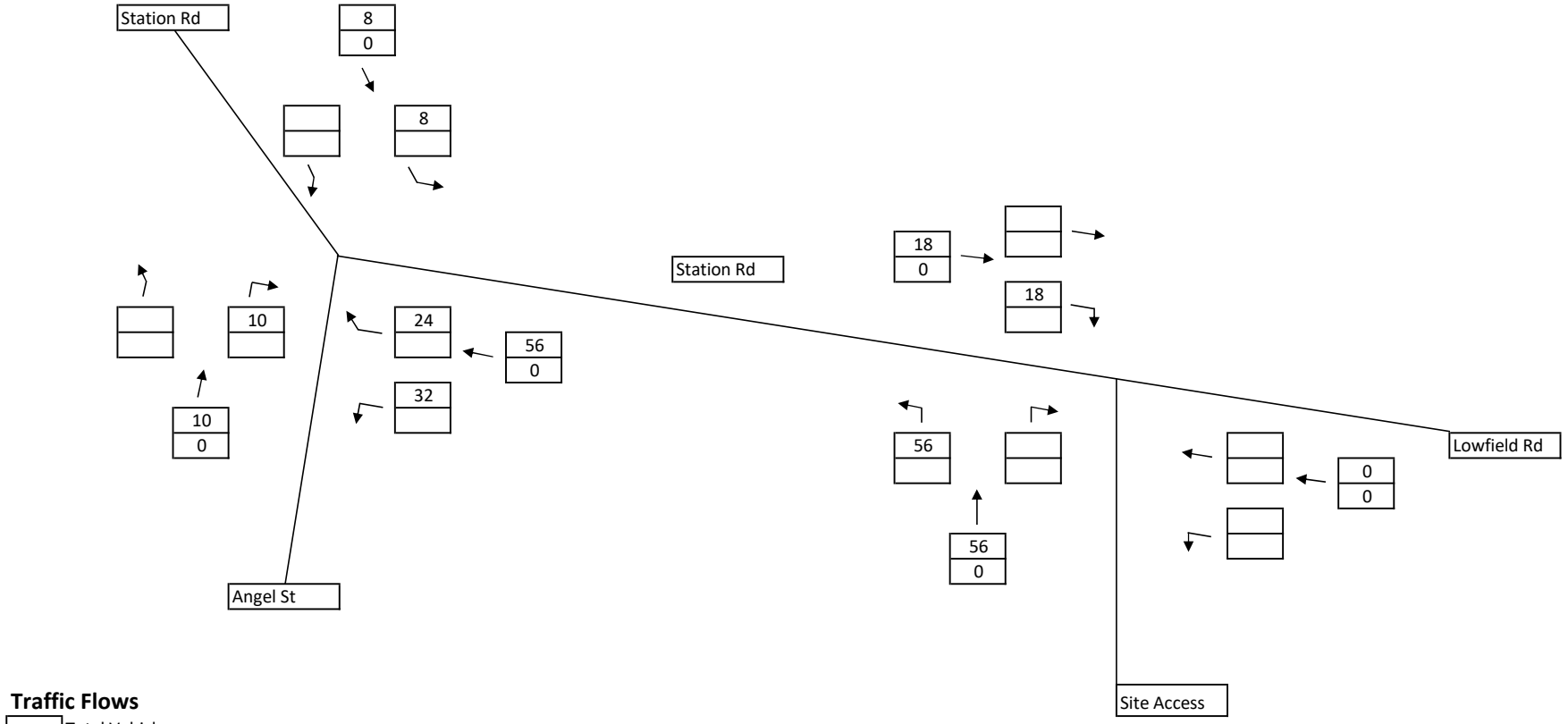
TRAFFIC DISTRIBUTION
BOLTON UPON DEARNE



Traffic Flows

Total Vehicles
Total HGVs

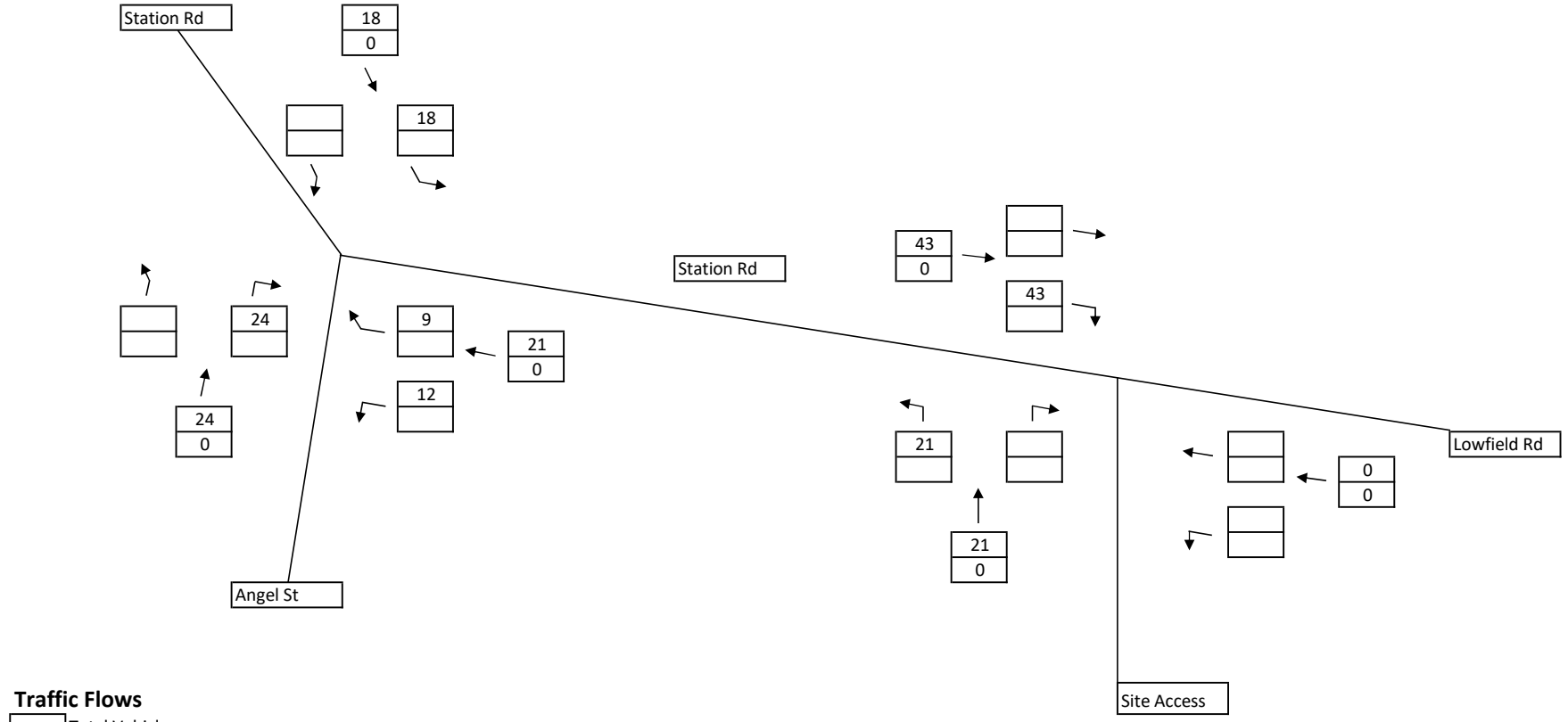
PHASE 3 GENERATIONS
BOLTON UPON DEARNE
AM Peak



Traffic Flows

Total Vehicles
Total HGVs

PHASE 3 GENERATIONS
BOLTON UPON DEARNE
PM Peak

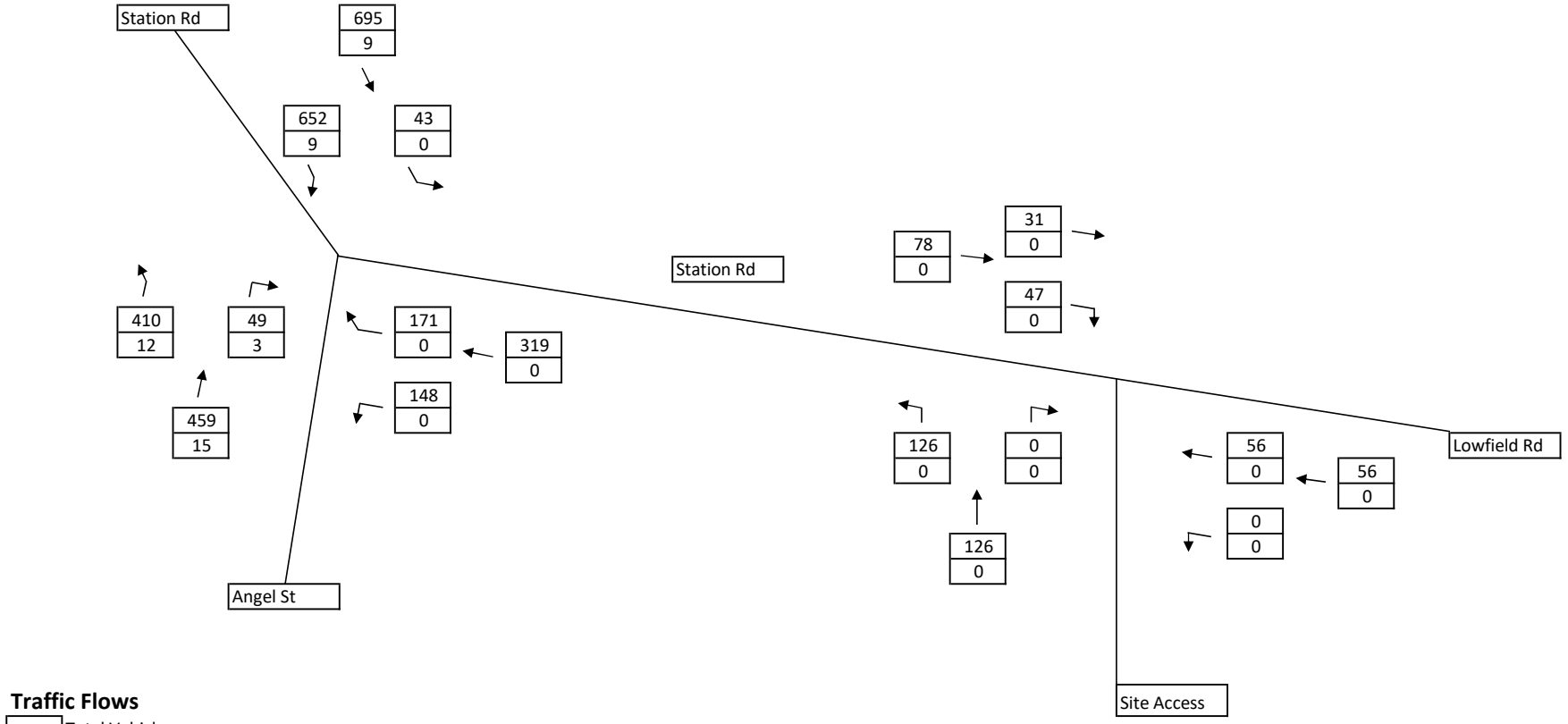


Traffic Flows

Total Vehicles
Total HGVs

APPENDIX BGH 21

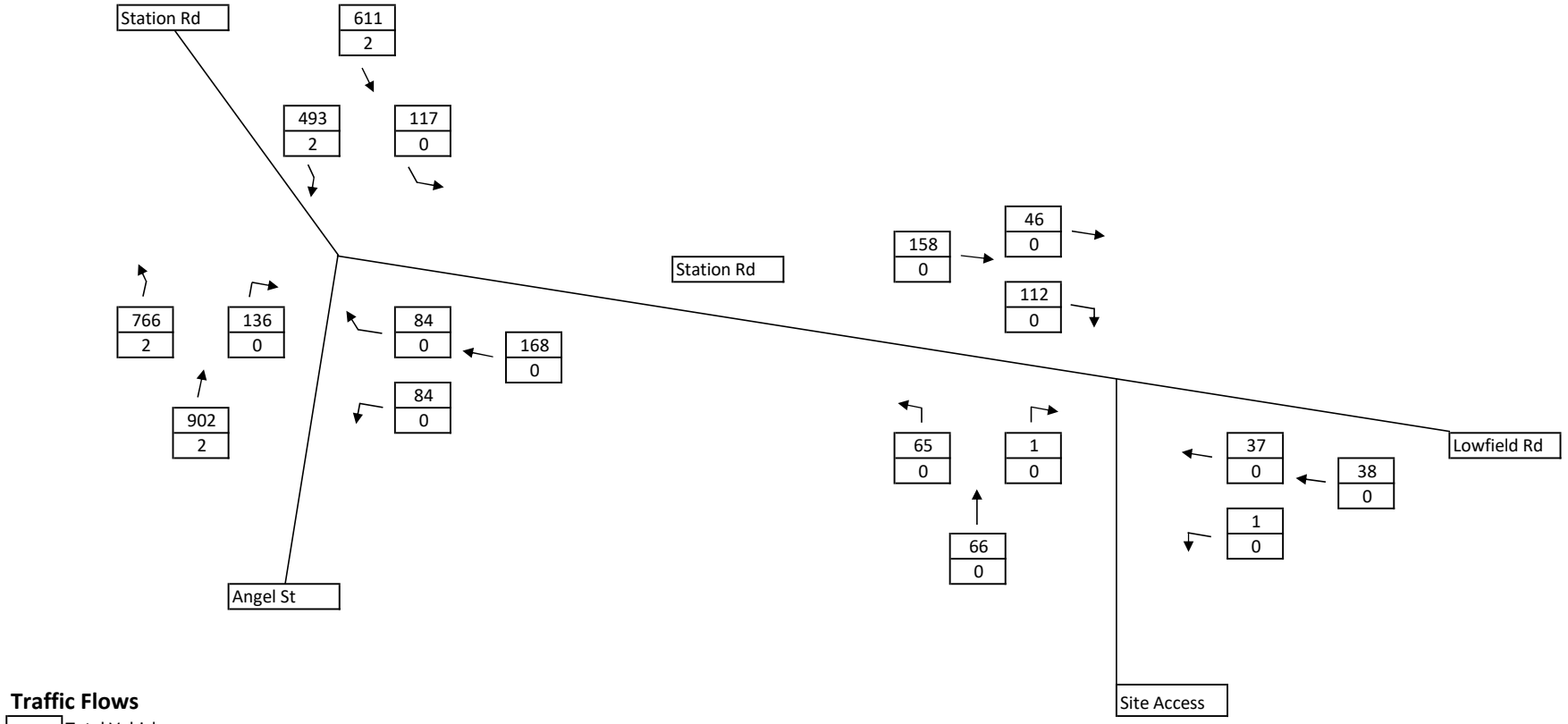
PREDICTED 2025 FLOWS
BOLTON UPON DEARNE
AM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

PREDICTED 2025 FLOWS
BOLTON UPON DEARNE
PM Peak



Traffic Flows

	Total Vehicles
	Total HGVs

APPENDIX BGH 22

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 10/06/2020 10:47:07

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Base 2025			
Stream B-AC	2.64	34.43	0.74	D
Stream C-AB	0.08	6.44	0.08	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak" model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak" model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak " model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak" model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak" model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak" model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 10/06/2020 10:47:07

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Base 2025, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Base 2025, AM Peak	Base 2025	AM Peak		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	30.57	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	696.00	100.000
Station Road	ONE HOUR	✓	263.00	100.000
B6098 Angel Street	ONE HOUR	✓	464.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	35.000	661.000
	Station Road	147.000	0.000	116.000
	B6098 Angel Street	422.000	42.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.05	0.95
	Station Road	0.56	0.00	0.44
	B6098 Angel Street	0.91	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.74	34.43	2.64	D
C-AB	0.08	6.44	0.08	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	198.00	195.15	0.00	469.31	0.422	0.71	13.003	B
C-AB	31.65	31.46	0.00	669.84	0.047	0.05	5.638	A
C-A	317.67	317.67	0.00	-	-	-	-	-
A-B	26.35	26.35	0.00	-	-	-	-	-
A-C	497.64	497.64	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	236.43	234.75	0.00	437.23	0.541	1.13	17.624	C
C-AB	37.83	37.78	0.00	642.64	0.059	0.06	5.951	A
C-A	379.29	379.29	0.00	-	-	-	-	-
A-B	31.46	31.46	0.00	-	-	-	-	-
A-C	594.23	594.23	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	289.57	284.10	0.00	392.14	0.738	2.50	31.796	D
C-AB	46.45	46.37	0.00	605.45	0.077	0.08	6.439	A
C-A	464.42	464.42	0.00	-	-	-	-	-
A-B	38.54	38.54	0.00	-	-	-	-	-
A-C	727.77	727.77	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	289.57	289.00	0.00	392.12	0.738	2.64	34.433	D
C-AB	46.45	46.45	0.00	605.45	0.077	0.08	6.439	A
C-A	464.42	464.42	0.00	-	-	-	-	-
A-B	38.54	38.54	0.00	-	-	-	-	-
A-C	727.77	727.77	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	236.43	242.09	0.00	437.20	0.541	1.23	18.944	C
C-AB	37.83	37.91	0.00	642.64	0.059	0.06	5.953	A
C-A	379.29	379.29	0.00	-	-	-	-	-
A-B	31.46	31.46	0.00	-	-	-	-	-
A-C	594.23	594.23	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	198.00	199.91	0.00	469.25	0.422	0.75	13.458	B
C-AB	31.65	31.71	0.00	669.84	0.047	0.05	5.643	A
C-A	317.67	317.67	0.00	-	-	-	-	-
A-B	26.35	26.35	0.00	-	-	-	-	-
A-C	497.64	497.64	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 10/06/2020 10:47:27

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Base 2025			
Stream B-AC	0.76	17.08	0.43	C
Stream C-AB	0.25	6.86	0.20	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak" model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak" model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak" model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak " model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak" model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak" model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 10/06/2020 10:47:27

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Base 2025, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Base 2025, PM Peak	Base 2025	PM Peak		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	12.58	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	594.00	100.000
Station Road	ONE HOUR	✓	147.00	100.000
B6098 Angel Street	ONE HOUR	✓	880.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	99.000	495.000
	Station Road	75.000	0.000	72.000
	B6098 Angel Street	768.000	112.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.17	0.83
	Station Road	0.51	0.00	0.49
	B6098 Angel Street	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	17.08	0.76	C
C-AB	0.20	6.86	0.25	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	110.67	109.43	0.00	462.59	0.239	0.31	10.159	B
C-AB	85.37	84.81	0.00	695.53	0.123	0.14	5.890	A
C-A	577.14	577.14	0.00	-	-	-	-	-
A-B	74.53	74.53	0.00	-	-	-	-	-
A-C	372.66	372.66	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	132.15	131.62	0.00	425.77	0.310	0.44	12.216	B
C-AB	103.06	102.90	0.00	676.51	0.152	0.18	6.274	A
C-A	688.04	688.04	0.00	-	-	-	-	-
A-B	89.00	89.00	0.00	-	-	-	-	-
A-C	444.99	444.99	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	161.85	160.64	0.00	372.54	0.434	0.74	16.891	C
C-AB	129.53	129.25	0.00	654.47	0.198	0.25	6.851	A
C-A	839.37	839.37	0.00	-	-	-	-	-
A-B	109.00	109.00	0.00	-	-	-	-	-
A-C	545.01	545.01	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	161.85	161.80	0.00	372.46	0.435	0.76	17.079	C
C-AB	129.53	129.53	0.00	654.47	0.198	0.25	6.860	A
C-A	839.37	839.37	0.00	-	-	-	-	-
A-B	109.00	109.00	0.00	-	-	-	-	-
A-C	545.01	545.01	0.00	-	-	-	-	-

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	132.15	133.34	0.00	425.66	0.310	0.46	12.366	B
C-AB	103.06	103.34	0.00	676.51	0.152	0.18	6.285	A
C-A	688.04	688.04	0.00	-	-	-	-	-
A-B	89.00	89.00	0.00	-	-	-	-	-
A-C	444.99	444.99	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	110.67	111.23	0.00	462.41	0.239	0.32	10.267	B
C-AB	85.37	85.54	0.00	695.53	0.123	0.14	5.902	A
C-A	577.14	577.14	0.00	-	-	-	-	-
A-B	74.53	74.53	0.00	-	-	-	-	-
A-C	372.66	372.66	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 11/06/2020 11:10:23

Summary of junction performance

	AM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Predicted 2025			
Stream B-AC	6.32	69.92	0.89	F
Stream C-AB	0.11	6.59	0.10	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak" model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak" model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak" model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak" model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak " model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak" model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 11/06/2020 11:10:23

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Predicted 2025, AM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2025, AM Peak	Predicted 2025	AM Peak		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	61.01	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	704.00	100.000
Station Road	ONE HOUR	✓	319.00	100.000
B6098 Angel Street	ONE HOUR	✓	474.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	43.000	661.000
	Station Road	171.000	0.000	148.000
	B6098 Angel Street	422.000	52.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.06	0.94
	Station Road	0.54	0.00	0.46
	B6098 Angel Street	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.89	69.92	6.32	F
C-AB	0.10	6.59	0.11	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	240.16	236.14	0.00	470.95	0.510	1.01	15.089	C
C-AB	39.21	38.96	0.00	668.45	0.059	0.06	5.719	A
C-A	317.64	317.64	0.00	-	-	-	-	-
A-B	32.37	32.37	0.00	-	-	-	-	-
A-C	497.64	497.64	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	286.77	283.72	0.00	438.47	0.654	1.77	22.804	C
C-AB	46.89	46.83	0.00	641.15	0.073	0.08	6.057	A
C-A	379.22	379.22	0.00	-	-	-	-	-
A-B	38.66	38.66	0.00	-	-	-	-	-
A-C	594.23	594.23	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	351.23	336.80	0.00	392.73	0.894	5.38	54.088	F
C-AB	57.65	57.55	0.00	604.05	0.095	0.11	6.587	A
C-A	464.23	464.23	0.00	-	-	-	-	-
A-B	47.34	47.34	0.00	-	-	-	-	-
A-C	727.77	727.77	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	351.23	347.47	0.00	392.70	0.894	6.32	69.923	F
C-AB	57.65	57.65	0.00	604.05	0.095	0.11	6.587	A
C-A	464.23	464.23	0.00	-	-	-	-	-
A-B	47.34	47.34	0.00	-	-	-	-	-
A-C	727.77	727.77	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	286.77	303.90	0.00	438.43	0.654	2.03	29.533	D
C-AB	46.89	47.00	0.00	641.15	0.073	0.08	6.059	A
C-A	379.22	379.22	0.00	-	-	-	-	-
A-B	38.66	38.66	0.00	-	-	-	-	-
A-C	594.23	594.23	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	240.16	243.99	0.00	470.87	0.510	1.08	16.120	C
C-AB	39.21	39.28	0.00	668.45	0.059	0.06	5.721	A
C-A	317.64	317.64	0.00	-	-	-	-	-
A-B	32.37	32.37	0.00	-	-	-	-	-
A-C	497.64	497.64	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]

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Filename: B6098 Station Road Angel Street Model.arc8
Path: Y:\2020\20-226 to 20-250\20-237 Lowfield Road, Bolton on Dearne\Technical\PICADY
Report generation date: 11/06/2020 11:10:47

Summary of junction performance

	PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS
	Existing Layout - Predicted 2025			
Stream B-AC	1.00	19.96	0.51	C
Stream C-AB	0.33	7.23	0.24	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - Existing 2015, AM Peak" model duration: 08:00 - 09:30
"D2 - Existing 2015, PM Peak" model duration: 15:45 - 17:15
"D3 - Base 2025, AM Peak" model duration: 08:00 - 09:30
"D4 - Base 2025, PM Peak" model duration: 15:45 - 17:15
"D5 - Predicted 2025, AM Peak" model duration: 08:00 - 09:30
"D6 - Predicted 2025, PM Peak " model duration: 15:45 - 17:15

Run using Junctions 8.0.5.523 at 11/06/2020 11:10:46

File summary

Title	B6098 Station Road/Angel Street Priority Junction
Location	Bolton Upon Dearne
Site Number	
Date	08/06/2020
Version	
Status	Preliminary
Identifier	
Client	Gleeson Regeneration and Homes
Jobnumber	20-237
Enumerator	D McLean
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	PCU	PCU	perHour	s	-Min	perMin

Existing Layout - Predicted 2025, PM Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Predicted 2025, PM Peak	Predicted 2025	PM Peak		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	14.12	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
B6098 Station Road	A	B6098 Station Road		Major
Station Road	B	Station Road		Minor
B6098 Angel Street	C	B6098 Angel Street		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
B6098 Angel Street	9.15		0.00	✓	5.00	83.00	✓	2.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Station Road	One lane	3.45										79	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.222	0.090	0.229	0.144	0.326
1	B-C	713.889	0.094	0.239	-	-
1	C-B	811.584	0.271	0.271	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
B6098 Station Road	ONE HOUR	✓	612.00	100.000
Station Road	ONE HOUR	✓	168.00	100.000
B6098 Angel Street	ONE HOUR	✓	904.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.000	117.000	495.000
	Station Road	84.000	0.000	84.000
	B6098 Angel Street	768.000	136.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.00	0.19	0.81
	Station Road	0.50	0.00	0.50
	B6098 Angel Street	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	1.000	1.000	1.000
	Station Road	1.000	1.000	1.000
	B6098 Angel Street	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		B6098 Station Road	Station Road	B6098 Angel Street
From	B6098 Station Road	0.0	0.0	0.0
	Station Road	0.0	0.0	0.0
	B6098 Angel Street	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.51	19.96	1.00	C
C-AB	0.24	7.23	0.33	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	126.48	124.98	0.00	458.99	0.276	0.37	10.733	B
C-AB	104.31	103.60	0.00	694.46	0.150	0.18	6.083	A
C-A	576.27	576.27	0.00	-	-	-	-	-
A-B	88.08	88.08	0.00	-	-	-	-	-
A-C	372.66	372.66	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	151.03	150.33	0.00	420.74	0.359	0.55	13.278	B
C-AB	126.60	126.38	0.00	676.97	0.187	0.23	6.537	A
C-A	686.07	686.07	0.00	-	-	-	-	-
A-B	105.18	105.18	0.00	-	-	-	-	-
A-C	444.99	444.99	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	184.97	183.22	0.00	365.17	0.507	0.98	19.591	C
C-AB	161.16	160.76	0.00	659.14	0.245	0.33	7.219	A
C-A	834.16	834.16	0.00	-	-	-	-	-
A-B	128.82	128.82	0.00	-	-	-	-	-
A-C	545.01	545.01	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	184.97	184.89	0.00	365.06	0.507	1.00	19.956	C
C-AB	161.16	161.15	0.00	659.14	0.245	0.33	7.232	A
C-A	834.16	834.16	0.00	-	-	-	-	-
A-B	128.82	128.82	0.00	-	-	-	-	-
A-C	545.01	545.01	0.00	-	-	-	-	-

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	151.03	152.76	0.00	420.58	0.359	0.57	13.527	B
C-AB	126.60	126.99	0.00	676.97	0.187	0.24	6.550	A
C-A	686.07	686.07	0.00	-	-	-	-	-
A-B	105.18	105.18	0.00	-	-	-	-	-
A-C	444.99	444.99	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	126.48	127.22	0.00	458.75	0.276	0.39	10.884	B
C-AB	104.31	104.53	0.00	694.46	0.150	0.18	6.104	A
C-A	576.27	576.27	0.00	-	-	-	-	-
A-B	88.08	88.08	0.00	-	-	-	-	-
A-C	372.66	372.66	0.00	-	-	-	-	-

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