LAND AT BARNBURGH LANE
GOLDTHORPE
PHASE 2

TRANSPORT STATEMENT

Client: Gleeson Homes and Regeneration

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APPENDICES

SECTION 1 INTRODUCTION / BACKGROUND

Overview

1.1 Westgate Consulting (Leeds) Limited has been commissioned by Gleeson Homes and Regeneration to produce a Transport Statement relating to the second Phase of residential development at Barnburgh Lane in Goldthorpe, Rotherham. The local planning and highway authority for the site is Barnsley Metropolitan Borough Council (BMBC).

1.2 Phase 1 of the Barnburgh Lane development which is now being constructed and when complete, will consist of 152 residential units served by way of a purpose built simple priority junction off Barnburgh Lane.

1.3 Phase 2 of the development will consist of 61 residential units located immediately to the south of the first Phase and served by way of an extension to the main spine road running through phase one from the purpose built simple priority junction with Barnburgh Lane.

1.4 This report considers the transport issues associated with the proposed development of Phase 2 and, in particular, the access and likely transport impact on the surrounding highway network based upon trip data from the TRICS Consortium database and the guidance given in the Department for Transport (DfT) publication 'Guidance on Transport Assessment', March 2007.

1.5 The Council supports the principle of the residential development on the application site and has previously confirmed that, based on the provision of 61 residential dwellings served via an extension to the spine road running through Phase 1 the traffic and highways impacts of Phase 2 development upon the surrounding highway network are acceptable.

1.6 This Transport Statement has been prepared to provide further detailed information relating to the proposals.

1.7 The proposed site layout shows a hierarchy of access roads throughout the site serving the residential units. The internal layout has been designed with a principal spine road running north to south through the site from Phase 1 and forming a loop, with a hierarchy of roads branching off the main spine road, providing access to properties across the site.

1.8 Shared surfaces will also be provided within the site linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

1.9 Results set out within the Transport Statement submitted in support of the approved planning application for Phase 1 concluded that the Site Access / Barnburgh Lane priority junction is expected to operate with substantial spare capacity at the agreed future design year 2017.

1.10 Phase 2 will follow on from Phase 1 and therefore it is considered appropriate that this TS considers the impact at a design year of 2018. This TS will demonstrate that there is sufficient spare capacity at the design year 2018 at the Site Access / Barnburgh Lane junction to accommodate the proposals for Phase 2 (61 residential dwellings) in addition to the proposals for Phase 1 (152 residential dwellings), and if required, further development in the future. PhaseThis TS demonstrates that the site is well served by existing pedestrian / cycle facilities and public transport provision, that the site can be safely and appropriately accessed from Barnburgh Lane and the traffic generated by the proposals will not have ore adverse impact upon the surrounding transport networks.

1.11 A Travel Plan has been prepared for the residential development, and this document is also submitted in support of the planning application.

1.12 It is concluded that the traffic expected to be generated by the Phase 2 proposals for 61 residential dwellings will not have an adverse impact upon the surrounding transport networks, therefore, there are no highways or transport reasons why planning permission for the proposals should not be granted.

Scope of Report

1.13 This TS considers the accessibility of the development site and also considers the potential impact of the development-generated traffic upon the surrounding highway network. This report is set out as follows:

- Section 2 sets out the Policy background against which the proposals should be assessed
- Section 23 describes the site location and development proposals with regard to the proposed quantum of development and broad layout of the site, the proposed means of access to the site and also the proposed parking provision and servicing requirements.
- Section 4 provides a description of the highway network surrounding the site.
- Section 5 examines the accessibility of the site by a range of travel modes.
- Section 6 examines the impact of development traffic on the local highway network.
- The report summary and conclusions are drawn together in Section 7

SECTION 2 POLICY BACKGROUND

Policy Background

2.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how they are expected to be applied. At the heart of the NPPF is a presumption in favour of sustainable development which the document indicates should be seen as a 'golden thread' running through the decision making process.

2.2 Within the overarching roles that the planning system ought to play the NPPF indicates that there are a set of core land use planning principles which should underpin the decision making process. Specifically in relation to transport these principles include (at paragraph 17):

> *"actively manage patterns of growth 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;"*

2.3 The NPPF indicates that plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to, inter alia:

> "give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
>
> "consider the needs of people with disabilities by all modes of transport."

2.4 The NPPF indicates that a key tool to facilitate this will be a Travel Plan and as indicated earlier the reserved matters application for the residential development is accompanied by a Travel Plan.

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

2.6 The Transport Act 2000 requires all local transport authorities in England, outside London, to prepare Local Transport Plans. The relevant local policy documentation in the context of this Transport Assessment is the Third South Yorkshire Local Transport Plan (LTP3) 2011 – 2015.

2.7 South Yorkshire's third Local Transport Plan (LTP3) has three component parts: the Transport Strategy, the Implementation Plan and the Annual Delivery Programme which will set out in detail the agreed prioritised delivery programme for the next financial year as well as briefly outlining the proposed four year programme.

2.8 The Transport Strategy has four main goals. The primary goal is to support the economic growth of the City Region. At the same time it aims to enhance social inclusion and health, reduce greenhouse gas emissions and maximise safety.

2.9 In translating the Transport Strategy into action, it will follow four cross-cutting principles:

- Squeeze more from existing assets– in the current funding climate this principle will ensure assets are well managed and maintained and used to their fullest potential, minimising the need for major infrastructure work. It is key to this first Implementation Plan. Efforts will be targeted on the routes, locations, customer groups and issues we have identified from our evidence base as being particularly important;
- Make our growth sustainable – it will look to achieve economic growth while minimising the impact on the environment, reducing emissions wherever possible;
- Give people choice – it will enable people to make informed choices about whether and how they travel, through providing a range of transport links and services to match varying lifestyles; and
- Encourage a change in travel culture - facilitating a shift from car dependency to more active and sustainable travel modes.

2.10 Relevant Transport strategy policies include:

- To improve connectivity between major Settlements;
- To focus new development along key public transport corridors and in places adjacent to existing shops and services;
- To apply parking policies to promote efficient car use, while remaining sensitive to the vulnerability of urban economies;
- To develop public transport that connects people to jobs and training in both urban and rural areas;
- To develop user-friendly public transport, covering all parts of SCR, with high quality of integration between different modes;
- To ensure public transport is accessible to all;
- To encourage active travel and develop high-quality cycling and walking networks; and
- To provide information and travel advice for the users of all modes of transport, so that they can make informed travel choices.

SECTION 3 DEVELOPMENT PROPOSALS

2.1 The development site is located immediately to the south of the Barnburgh Lane Phase 1 development site, approximately 13.0 kilometres to the east of Barnsley town centre.

3.2 The on-going Phase 1 development comprises some 152 residential dwellings including a mix of two, three and four bed houses. A copy of the Phase 1 and Phase 2 site layouts are attached at Appendix 1.

3.3 Shared surface roadways will be provided within Phase 2 linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

Means of Access

3.4 The residential development will be accessed via an extension to the spine road that runs from north to south through Phase 1, from a purpose built simple priority junction with Barnburgh Lane. Westgate Consulting (Leeds) Limited have not been responsible for the detailed design of these proposals, however detailed plans will be included within the documents submitted alongside the planning application.

3.5 At the Site Access / Barnburgh Lane bell mouth there is a 5.5m wide carriageway with 2.0 wide footways to both sides, this continues for some ??m into Phase 1. The main spine road then becomes a 5.5m wide shared surface street with a 600m margin and continues in that form throughout Phase 2. During pre-application discussions BMBC have confirmed this is appropriate to serve Phases 1 and 2.

3.6 The spine road had been designed to accommodate the necessary refuse and emergency vehicle requirements. Beyond this principal network of roads there are a number of private drives providing access to individual properties – where necessary, bin collection points are located at convenient points to allow access by residents and refuse collection operatives.

3.7 The internal access roads have been designed to achieve low vehicle speeds within the site, incorporating elements of shared surfaces, raised tables and appropriate changes in the road alignment. These will assist in providing a safe environment for pedestrians and cyclists within the site.

3.8 Within the site, the proposed site layout indicates a loop road which offers a choice of routes around the site, therefore minimising the risks associated with one particular route becoming blocked in the event of an emergency.

Proposed Parking Provision

3.9 It is considered that the proposed level of parking provides an appropriate balance between the need to promote sustainable modes of transport, meeting residents' demands and minimising on-street parking.

SECTION 4 EXISTING CONDITIONS

The Application Site

4.1 The development site is located immediately to the south of the Barnburgh Lane Phase 1 development site, approximately 13.0 kilometres to the east of Barnsley town centre. The site is bounded to the north by the Phase 1, to the east by Engine Lane and to the south and west by green field land. Further afield to the north and west is residential development and to the south and east is green field land. The site is green field land and has no existing vehicular access.

Surrounding Highway Network

4.2 As described above, the site is located within Goldthorpe, a predominantly residential area approximately 13.0 kilometres to the east of Barnsley town centre. The only vehicular access into the development will be from Barnburgh Lane.

4.3 Barnburgh Lane is a single carriageway two-way road, approximately 8.5 metres in width. A 30mph speed restriction is in force and 1.8m wide footways are provided on both sides of in the vicinity of the site. Barnburgh Lane provides frontage access to residential properties as well as access into other residential streets.

4.4 Approximately 500 metres west of the proposed site access Barnburgh Lane forms a priority junction with the B6068 which is the main route through Goldthorpe. The B6068 provides a link between the A623 and the A635. The A623 provides a direct route into Mexborough and provides access onto the A630 which is the main route into Rotherham town centre. The A635 can be described as a primary distributor type of road from which there is direct access into Barnsley town centre, it also provides access onto the A1(M), the M1 Motorway at Junction 37 and the A19 which is the main route into Doncaster town centre. Accessibility to the site by car is therefore considered to be excellent due to its close proximity with Barnsley, Rotherham and Doncaster town centres and both the A1(M) and M1 Motorway.

4.5 Fully classified traffic surveys were carried out on Barnburgh Lane in the vicinity of the purpose built Site Access / Barnburgh Lane simple priority junction on Wednesday 11th September 2013 during the morning and evening peak periods 7:30am to 9:30am and 3:00pm and 6:00pm. The peak hours were found to be 8:00am to 9:00am and 4:30pm to 5:30pm and the surveyed flows are summarised at Appendix 2.

4.6 During the AM Peak hour Barnburgh Lane carried a maximum 2-way flow of 236 vehicles and during the PM Peak hour a maximum 2-way flow of 279 vehicles. This equates to some four vehicles per minute (two in each direction) thus confirming that the traffic flows on Barnburgh Lane are low.

Existing Traffic Generation

4.7 As the site is green field land it is not currently generating any vehicular traffic.

Personal Injury Accident Records

4.8 Analyses of personal injury accident data within the Transport Statement submitted in support of Phase 1 and recent discussions with BMBC have confirmed that there are no existing safety problems associated with the road network surrounding within or adjacent to the development site. It is not anticipated that the traffic associated with the proposed development would result in any significant safety implications on the adjacent network.

SECTION 5 EXISTING SUSTAINABLE TRANSPORT PROVISION

5.1 The Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised.

5.2 The site has a good level of accessibility by sustainable modes of transport and as outlined in the Introduction, a Travel Plan has been developed for the site which will encourage the use of alternative modes of travel. This along with Barnsley LTP's transport strategy policies is anticipated to reduce the overall travel demands of the site, particularly trips by single occupancy vehicles.

5.3 Travel by non-car modes will be encouraged at the site and the development proposals include pedestrian and cycle connections across the site, linking into the surrounding facilities.

5.4 This section outlines the existing walking, cycling and public transport facilities within the vicinity of the development site and describes the accessibility of the site in terms of its proximity to key services and destinations.

5.5 Whilst superseded by the NPPF, the transport policies set out in the former PPG13 set out specific guidance related to walking and cycling:

> *"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres"* (Para 74)
>
> and
>
> *"Cycling also has potential to substitute for short car trips, particularly those under 5 kilometres, and to form part of a longer journey by public transport"* (Para 77)

5.6 These potential walking and cycling catchments have been used in the consideration of the accessibility of the site set out below.

Walking

4.7 The site is within two kilometres of key facilities within Goldthorpe including education, health care and retail facilities.

5.8 The surrounding residential areas include networks of footways and footpaths and crossing points available on the majority of routes including Barnburgh Lane, Barnsley Road and Doncaster Road and, connecting the site to key facilities.

5.9 There is an existing footpath that runs along the western boundary of the Phase 1 development site and then west to Dearne High School. Subject to land ownership issues, to be confirmed by BMBC, this would be a preferred route for school children walking / cycling from the site to school. The route is shorter and would also prevent children from having to cross any roads.

5.10 There is an existing footpath that crosses the Phase 2 development site which will be diverted around the perimeter of the site and all links retained, as shown on the proposed site layout.

5.11 Shared surfaces will also be provided within the site linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

5.12 As described above, the proposed site layout maximises the accessibility of the site through the various pedestrian links to phase one and existing footpaths. It is considered that the pedestrian provision within the vicinity of the site is of a good quality and provides a range of opportunities for residents to access nearby facilities on foot.

Cycling

5.13 Areas including Goldthorpe, Bolton upon Dearne, Wath upon Dearne, Mexborough and Thurnscoe lie within 5km cycle catchment and Wombwell within the 8km catchment providing residents with a wealth of facilities and employment opportunities.

5.14 Barnsley has a network of cycle routes and lanes as shown on the plan also attached at Appendix 3. Route 62 of the National Cycle Network is located some 4 kilometres south of the site, route 62 follows Dearne Road north bound then runs east along Lowfield Lane where it links into the Trans Pennine Trail. Route 62 provides a traffic free route from the site in to Wath, Mexborough, Barnsley town centre and Doncaster town centre.

5.15 It is considered that the cycle provision within the vicinity of the site is of a good quality and provides a range of opportunities for residents to access nearby facilities by cycle.

Public Transport

5.16 The proposed development site is well located in terms of its proximity to public transport services, including the existing bus services which run along Barnburgh Lane and the B6098 and the railway station which is within Goldthorpe. Details of the existing provision are set out below.

Buses

5.17 There are existing bus services which pass along Barnburgh Lane to the north of the site and the B6098 to the west of the site.

5.18 The stops on Barnburgh Lane are located c.550 metres from the centre of the site for westbound services and c.600 metres for eastbound services. These bus stops are served by bus number 224 which has a service frequency of two per hour Monday to Saturday all day and one per hour on Sundays and runs from Doncaster to Mexborough via Bolton on Dearne.

5.19 The stops on the B6098 are located c.900 metres from the centre of the site for southbound services and c.940 metres for northbound services, via Barnburgh Lane. The north bound bus stop is served by 218, 224 and 226 and the south bound bus stop is served by the 218 and 226 only. The 218 and 226 have a combined service frequency of four per hour Monday to Saturday all day and two per hour on Sundays. Bus number 218 runs from Barnsley to Rotherham via Mexborough and bus number 226 runs from Barnsley to Thurnscoe via Wombwell.

5.20 These existing bus stops are served by a number of bus services which serve Barnsley, Rotherham, Mexborough, Thurnscoe and Wombwell and the surrounding towns and villages as summarised in Table 4.1 below. A copy of the latest bus route map is enclosed within Appendix 4.

Table 4.1 – Local Bus Services

Stop	Bus	Route	Frequency		
			Mon – Sat Daytime	Mon – Sat Evening	Sun
B6098 NB & SB	218	Barnsley – Stairfoot – Darfield – Goldthorpe – Mexborough – Kilnhurst – Rawmarsh - Rotherham	Every 30 minutes	-	-
Barnburgh Lane & B6098 NB	224	Doncaster – Sprotborough – High Melton – Barnburgh – Goldthorpe – Bolton on Dearne - Mexborough	Every 30 minutes	Every 60 minutes	Every 60 minutes
B6098 NB & SB	226	Barnsley – Stairfoot – Wombwell – Wath upon Dearne – Bolton on Dearne – Goldthorpe - Thurnscoe	Every 30 minutes	Every 30 minutes	Every 60 minutes

Source: Stagecoach Website

5.21 The above table shows that the Barnburgh Lane stops are served by the 224 which provides a direct connection from the site to Doncaster town centre and Mexborough, with a 30 minute frequency, Monday – Saturday daytime and 60 minute in the evenings and on Sundays.

5.22 The above table shows that the B6098 stops are served by the 218 and the 226 in addition to the 224. The 218 and 226 provide a direct connection from the site to Barnsley town centre, with a combined 15 minute frequency, Monday – Saturday daytime, 30 minute in the evenings and 60 minutes on Sundays. The 218 also provide a direct connection into Rotherham town centre with a 30 minute frequency, Monday – Saturday daytime and in the evenings.

4.23 It is therefore considered that the site is well served by existing bus services providing good connections to Barnsley, Rotherham and Doncaster town centres and elsewhere.

Rail

5.24 The nearest railway station to the development site is Goldthorpe Railway Station, located approximately 1.75 kilometres walking distance from the centre of the site, which although outside the recommended 800 metres it is still within reasonable walking and cycling distance. The station is also accessible via bus services 218, 224 and 226 which all stop at the station. The station has step free access coverage and a train is available every 60 minutes between Leeds and Sheffield.

5.25 The existing service frequency and journey times from Goldthorpe Station are summarised in Table 4.2 below.

Table 4.2 – Goldthorpe Railway Station – Destinations and Frequencies

Destination	Mon – Friday Daytime Frequency	Typical Journey Time
Rotherham	Every 60 minutes	15 minutes
Sheffield	Every 60 minutes	27 minutes
Wakefield	Every 60 minutes	37 minutes
Leeds	Every 60 minutes	50 minutes

Source: National Rail Website

5.26 Overall, it is therefore concluded that there is a range of sustainable transport infrastructure within the vicinity of the proposed development site and that the site can be considered to be accessible by a range of modes.

Local Facilities

5.27 The surrounding area has a wide range of services and facilities which can be accessed by future residents of the site. These are summarised below:

- Barnsley town centre – has a large range of employment locations including offices, retail, leisure and other jobs, a range of shops, banks, post office, library, pubs, restaurants/cafes, leisure facilities, medical facilities and regular markets;
- Goldthorpe - has a range of shops including newsagents, takeaway food outlets, schools, recreation ground, community centre, dentist, doctors, supermarket, leisure centre, library, convenience stores and a post office.

- Employment – there are a number of large employment areas / industrial estates in the vicinity of the site including Goldthorpe Industrial Estate off Commercial Road located to the southwest of the site and Fields End Business Park located off the A635 to the northwest of the site;

- Education provision - there are primary schools including Dearne Goldthorpe Primary School and Goldthorpe Boys School located on Doncaster Road in Goldthorpe. The Dearne Advanced Learning Centre located on Goldthorpe Road in Goldthorpe is the nearest secondary school to the development site and Barnsley College is located in the town centre;

- Health facilities - including Dearne Valley Dental Practice located on High Street in Goldthorpe and Goldthorpe Doctors Surgery located on Doncaster Road in Goldthorpe;

- Food shopping – food retail units include convenience stores on Doncaster Road in Goldthorpe, ASDA Supermarket in Thurnscoe, ASDA Supermarket and Morrisons Supermarket within Barnsley town centre and Tesco within Mexborough.

- Leisure and Recreation – including Dearnside Leisure Centre and a recreation ground on Goldthorpe Road in Goldthorpe.

4.28 The local facilities within Goldthorpe and the surrounding areas are summarised in Table 4.3 below. The table includes approximate distances from the development site.

4.29 The table also notes whether or not the facilities are accessible by walking, cycling and public transport from the site. The criteria adopted in PPG13 have been used to determine the accessibility by walking (i.e. within 2km) and by cycling (i.e. within 5km) and the facilities are noted as being accessible by public transport if they are accessible by the bus services outlined in Table 4.1 above. Facilities not accessible via these bus services are accessible via buses serving Barnsley town centre.

4.30 Many of the facilities close to the town centre can be reached within an acceptable cycling distance from the site and bus services 218 and 226 connect the site to Barnsley town centre and also to destinations such as Mexborough, Rotherham town centre and Doncaster town centre.

Table 4.3: Key Facilities and Services

Journey Purpose	Destination	Distance from Site	Accessible by Walk (W)/ Cycle (C)/ Public Transport (PT)
Town Centre	Barnsley Town Centre	13km	PT
Employment	Goldthorpe Industrial Estate	2.5km	C/PT
	Fields End Business Park	1.8km	W/C/PT
Education	Dearne Goldthorpe Primary School	1.2km	W/C/PT
	Goldthorpe Boys School	1.2km	W/C/PT
	Dearne Advanced Learning Centre	1.3km	W/C/PT
	Barnsley College	13km	PT
Retail	ASDA Supermarket Thurnscoe	3.7km	C/PT
	Tesco Supermarket Mexborough	6.9km	C/PT
	ASDA Supermarket Barnsley	15.3km	PT
	Morrisons Supermarket Barnsley	14.2km	PT
Health	Dearne Valley Dental Practice	900m	W/C/PT
	Goldthorpe Doctors Surgery	1.9km	W/C/PT
Leisure	Dearneside Leisure Centre	1.3km	W/C/PT
	Recreation Ground	1.7km	W/C/PT

All measurements are approximate

Summary

4.31 The site is situated in an accessible location, various retail outlets, employment facilities, recreation facilities, health care facilities and schools are within a reasonable walking distance and Barnsley town centre, further employment areas, schools, leisure centre, recreation facilities and the railway station are all located within cycling distance of the site or accessible by regular bus services.

4.32 Overall, it is concluded that a range of key facilities and services, including employment, retail, health and education uses, are readily accessible from the site.

4.33 It is therefore considered that the location of the site is consistent with national and local policy objectives.

SECTION 6 POTENTIAL DEVELOPMENT IMPACTS

Introduction

6.1 This section considers the potential impact of the development-generated traffic upon the surrounding highway network. As outlined earlier, the development site is located immediately to the south of the Phase 1 development site and will be served via an extension the spine road running from north to south through Phase 1 from the purpose build simple priority junction with Barnburgh Lane.

6.2 Results set out within the Transport Statement submitted in support of the planning application for Phase 1 concluded that the Site Access / Barnburgh Lane priority junction is expected to operate with substantial spare capacity at the agreed design year 2017.

6.3 In order to demonstrate that the Site Access / Barnburgh Lane priority junction is appropriate to serve both Phase 1 and Phase 2, a further capacity assessment of the has been undertaken, and is set out below.

Consented Traffic Generation Phase 1

6.4 The potential traffic generation of the 152 residential dwellings was set out in the Transport Statement for Phase 1 and this was agreed with the Local Highway Authority. It was estimated using trip rates extracted from the TRICS database and is replicated in Table 5.1 below.

Table 5.1: Approved Trip Rates Phase 1

Peak Period	Trip Rates (per dwelling)		
	In	Out	Two-Way
	Houses Privately Owned		
AM Peak	0.225	0.450	0.675
PM Peak	0.475	0.333	0.808

5.5 The resulting highway network peak hour vehicular trip generation levels are summarised in Table 5.2 below.

6.6 The trip rates used within the Transport Statement submitted in support of the approved planning application for the Phase 1 development site are considered to be robust as they were 85th percentile trip rates. Based on car ownership data for the Dearne South ward in which the site is situated, summarised above, these are considered to be excessive as the car ownership level in this ward is 68%.

Table 5.2 Approved Vehicular Trip Generation Levels (Phase 1 - 152 Dwellings)

Peak Period	Vehicular Trip Generation Levels		
	In	Out	Two-Way
AM Peak	34	68	102
PM Peak	72	51	123

Phase 2 Proposals

6.7 Based upon the agreed trip rates for Phase 1, Table 5.3 below shows the likely traffic generation of the Phase 2 proposals.

Table 5.3 Vehicular Trip Generation Levels (Phase 2 - 61 Dwellings)

Peak Period	Vehicular Trip Generation Levels		
	In	Out	Two-Way
AM Peak	14	27	41
PM Peak	29	20	49

6.8 It can be seen from the above, based on the approved trip rates, that the Phase 2 development site based on the current proposals for 61 residential dwellings could generate c.41 two-way vehicle trips during the AM Peak hour and 49 two-way during the PM Peak hour.

SECTION 7 POTENTIAL DEVELOPMENT IMPACTS

7.1 As identified previously, the Phase 1 and Phase 2 development sites will be served by a simple priority access junction onto Barnburgh Lane. The simple priority junction onto Barnburgh Lane is located towards the centre of the Phase 1 development site frontage.

7.2 The access will serve the site by means of a 5.5 metre wide residential street with 2.0 metre wide footways to both sides. The access will satisfy all current geometric requirements, in terms of width, radii and egress visibility, as well as being carefully designed to integrate the residential development with the existing Barnburgh Lane highway.

7.3 The operation of the proposed access has been analysed for the 2018 "Predicted" morning and evening peak hour traffic demands, using the JUNCTIONS8 computer program.

7.4 The existing 2013 traffic flows have been growthed in line with National Transport Model (NTM) with a local adjustment assuming TEMPRO factors. The 2018 peak hour growth factors used in the assessment are 1.0622 in the morning peak and 1.0644 in the evening peak.

7.5 The agreed traffic flows for Phase 1 have been included in this assessment as a committed development. The proposed Phase 1 and Phase 2 development generated traffic has been distributed based onto the local highway network in proportion to existing flows on Barnburgh Lane, consistent with the Transport Statement for Phase 1, and the resultant predicted 2018 morning and evening peak flow diagrams are attached at Appendix 5.

7.6 For the purpose of the analyses, a 12.5% peak within peak "surge" in traffic flows has been assumed to be robust. A summary of the results obtained by analysis of the operation of one of these junctions under the predicted traffic demands are given in Table 6.1 below with the full JUNCTIONS8 output attached at Appendix 6.

Table 6.1

Proposed Simple Priority Junction Site Access on to Burnburgh Lane Ratio of Flow to Capacity (RFC), Queues, and Maximum Delay (mins/veh) Predicted 2018 Morning and Evening Peak Hour Traffic Flows

Peak Period	Morning Peak			Evening Peak		
	RFC	Queue (veh)	Max Delay (sec)	RFC	Queue (veh)	Max Delay (sec)
Left / Right out of Site Access onto Barnburgh Lane	0.209	0	9	0.161	0	9
Right into the access from Barnburgh Lane	0.043	0	5	0.096	0	5

6.7 From the results tabulated above it can be seen that the proposed site access is predicted to operate satisfactorily during the Predicted 2018 scenario with RFCs well below the 0.85 practical capacity threshold, when serving Phases 1 and 2 of the development. There is considerable spare capacity and there can therefore be no capacity or safety reasons why the access should not be acceptable.

6.8 As noted above the trip generation levels assessed within the Transport Statement submitted in support of the approved planning application for Phase 1 are considered to be robust as 85th percentile trip rates were used. Based on car ownership data for the Dearne South ward in which the site is situated, summarised above, these are considered to be excessive as the car ownership level in this ward is 68%.

7.9 Further potential development land has been identified to the south of the development site which could accommodate an additional c.100 residential dwellings. This site would also be accessed from the single approved access onto Barnburgh Lane. The PICADY analyses from Phase 2 confirm that the junction has sufficient spare capacity to accommodate this potential future extension.

7.10 In summary, therefore it is concluded that the additional traffic flows expected to be generated by Phase 2 of the development for 61 residential dwellings will not have an adverse impact upon the purpose built Site Access / Barnburgh Lane priority surrounding transport networks.

SECTION 8 SUMMARY AND CONCLUSIONS

8.1 Westgate Consulting (Leeds) Limited has been commissioned by Gleeson Homes and Regeneration to produce a Transport Statement relating to the second Phase of residential development at Barnburgh Lane in Goldthorpe, Rotherham. The local planning and highway authority for the site is Barnsley Metropolitan Borough Council (BMBC).

8.2 Phase 1 of the Barnburgh Lane development which is now being constructed will consist of 152 residential units served by way of a purpose built simple priority junction off Barnburgh Lane.

8.3 Phase 2 of the development will consist of 61 residential units located immediately to the south of the first Phase and served by way of an extension to the main spine road running through Phase 1 from the purpose build simple priority junction with Barnburgh Lane.

8.4 A Travel Plan has also been prepared which sets out measures to encourage sustainable travel patterns and reduce the reliance on private car use.

8.5 The site is bounded to the north by the Phase 1, to the east by Engine Lane and to the south and west by green field land. Further afield to the north and west is residential development and to the south and east is green field land. The site is green field land and has no existing vehicular access.

8.6 The Council supports the principle of the residential development on the application site and has previously confirmed that, based on the provision of 61 residential dwellings served via an extension to the spine road running through Phase 1 from the purpose built priority junction with Barnburgh Lane, the traffic and highways impacts of Phase 2 development upon the surrounding highway network are acceptable.

8.7 Shared surfaces will also be provided within the site linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

8.8 It is considered that the proposed level of parking provides an appropriate balance between the need to promote sustainable modes of transport, meeting residents' demands and minimising on-street parking.

8.9 This report has shown that the development proposals will be accessible by a range of travel modes and have been developed to accord with current national and local transport policies, including those set out within the NPPF.

8.10 Based on the trip rates approved within the Transport Statement submitted in support of the approved planning application for Phase 1, the Phase 2 development site based on the current proposals for 61 residential dwellings could generate c.41 two-way vehicle trips during the AM Peak hour and 49 two-way during the PM Peak hour.

8.11 The trip generation levels assessed are considered to be robust as they are 85th percentile trip rates. Based on car ownership data for the Dearne South ward in which the site is situated, summarised above, these are considered to be excessive.

8.12 This Transport Statement has demonstrated that the proposed site access is predicted to operate satisfactorily during the Predicted 2018 peak period scenarios with RFCs well below the 0.85 practical capacity threshold, when serving Phase 1 and 2 of the development. There are therefore no capacity or safety reasons why the access should not be acceptable.

8.13 The access would operate with considerable spare capacity and therefore if required, it would also be appropriate to serve further development in the future.

8.14 In summary, therefore it is concluded that the additional traffic flows expected to be generated by Phase 2 of the development for 61 residential dwellings will not have an adverse impact upon the purpose built Site Access / Barnburgh Lane priority surrounding transport networks.

8.15 Overall it is considered that the site is a suitable location for the proposed development and there are no highways or transport reasons that should prevent the granting of planning consent for the proposals.

APPENDIX 1

- General Notes
- All plots to have 1.8m×1.8m area in rear garden for bin storage. See bin area layout below for details
- Path edges to create demarcation to homezones
- Rear gardens to be grassed by home-owners
- All front gardens to include a 1.5m radius top-soiled quadrant for future planting by homeowners
- Private drives and driveways to be gravel with first 1.8m as tarmac apron
- Dense bitumen macadam surface to roads
- Tarmacadam surface to pavements
- Trees shown are indicative, please refer to Landscaping drawings by Popplewells
- All drainage layout and details in accordance with engineers information

Note
- All levels are indicative, please refer to Street Elevation Drawings for details
- Please note that the landscaping scheme shown on this drawing is indicative. Please refer to detailed Landscaping Layout by Popplewell Associates.

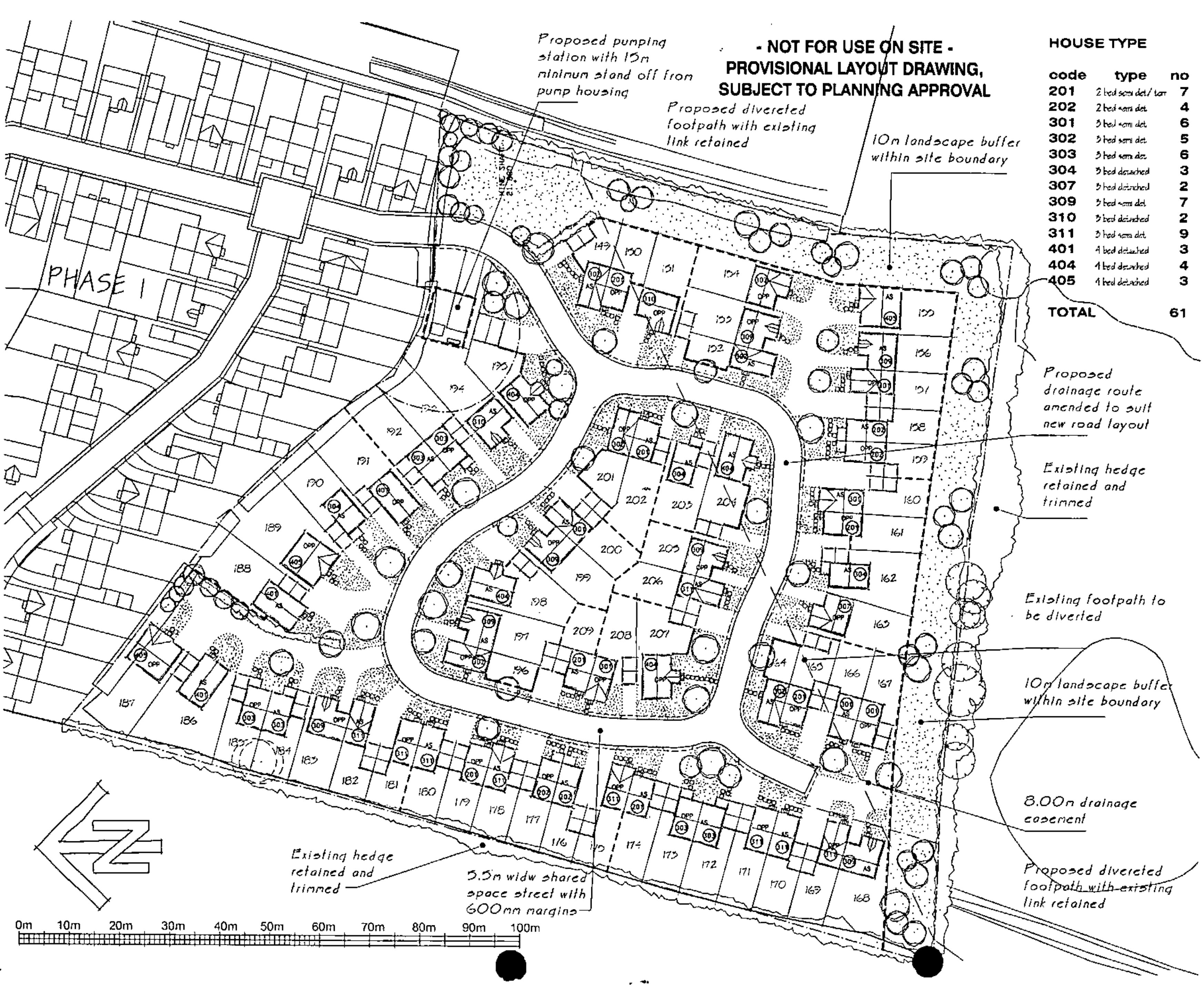
BB	Sheds, water butts and compost bins omitted from all plots bar plots 8 and 98	26.02.13	cr
AA	Path altered to Plot 104	26.07.12	cr
Z	Bamburgh Lane footpath now constant 2m Gardens fronting Bamburgh Lane amended to suit	12.06.12	cr
Y	Garage added to plot 88	17.05.12	cr
X	Pumping station location amended	18.04.12	cr
W	General notes amended Plot 3 patio moved pumping station moved Plot handings added	11.04.12	cr
V	Code requirements shown	27.03.12	cr
U	Landscaping scheme added	27.03.12	cr
T	Plots 64-65 now semis and rotated	23.03.12	cr
S	Plots 63-69 amended	21.03.12	cr
R	Code requirements shown	16.03.12	cr
Q	Housing mix altered, garages added	14.03.12	cr
P	Pumpstation layout changed Driveways splayed in footpaths All homezone roads now 5.5m wide	13.03.12	cr
N	Access road widened in accordance with planning officer's comments	08.03.12	cr
M	Water butts, rotary dryers and bin turning shown, compost bins moved Shared surfaces widened, roads extended to boundary Driveways at 90 deg to road, plot 18 & 37 fence splayed	07.03.12	cr
L	Code requirements added to layout -provision for clothes drying, water butts and sheds to rear gardens	28.02.12	cr
K	Landscaping scheme amended	24.02.12	cr
J	Plots 32-37 and 75-78 amended Housing mix including affordable housing mix altered	23.02.12	cr
H	Landscaping scheme amended	22.02.12	cr
G	3 Piece play area added Homezone note added Plots 26-37, 44, 71-73 & 84-88 altered Additional footpath added to Engine Lane Post and rail fences added to rear gardens Brick wall and piers added to plots 89, 108 & 145	21.02.12	cr
F	Landscaping scheme amended	07.02.12	cr
E	Electrical substation added Public Open Space enlarged and play are centralised Total number of houses reduced by 2 Drainage diversion altered Layout revised between plots 22-27 & 85-104 Existing sewer line and proposed diversion shown	03.02.12	cr
D	Landscaping scheme amended	31.01.12	cr
C	202 house type reinstated	30.01.12	cr
B	Landscaping scheme added	27.01.12	cr
A	All 202 houses replaced with 201s Housing mix amended, schedule revised Public Open Space enlarged Rear parking added to some dwellings Adopted footpath to Engine Lane added	27.01.12	cr

revisions
status Planning

edward architectural services ltd

project Bamburgh Lane, Goldthorpe
client Gleeson Homes and Regeneration
title Proposed Detailed Site Layout

drawn cr checked gs date 20.01.12 scale 1:500@A1
job no 0291 drawing no PL-100 rev BB



HOUSE TYPE

code	type	no
201	2 bed semi det / terr	7
202	2 bed semi det	4
301	3 bed semi det	6
302	3 bed semi det	5
303	3 bed semi det	6
304	3 bed detached	3
307	3 bed detached	2
309	3 bed semi det	7
310	3 bed detached	2
311	3 bed semi det	9
401	4 bed detached	3
404	4 bed detached	4
405	4 bed detached	3
TOTAL		**61**

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 shrubs / 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).

Plot division fence, post & wire

Home type code reference number

Plot number

Garages location.

Parking bays

Richard Ward Design RW

Chartered Architectural Technologist
Architectural Design & Development Consultant

Richard S. Ward
M.C.I.A.T.
Telephone 01604 410943

2, Burtram Close
Weston Favell
Northampton NN3 3PH

BARNBURGH LANE
GOLDTHORPE Ph2

planning layout

GLEESON
HOMES & REGENERATION

Plots renumbered	14.07.15	Scale
		1:500 at A2
		Date
		03.01.15
		Dwg No
		453/2-A

APPENDIX 2

2013 Survey

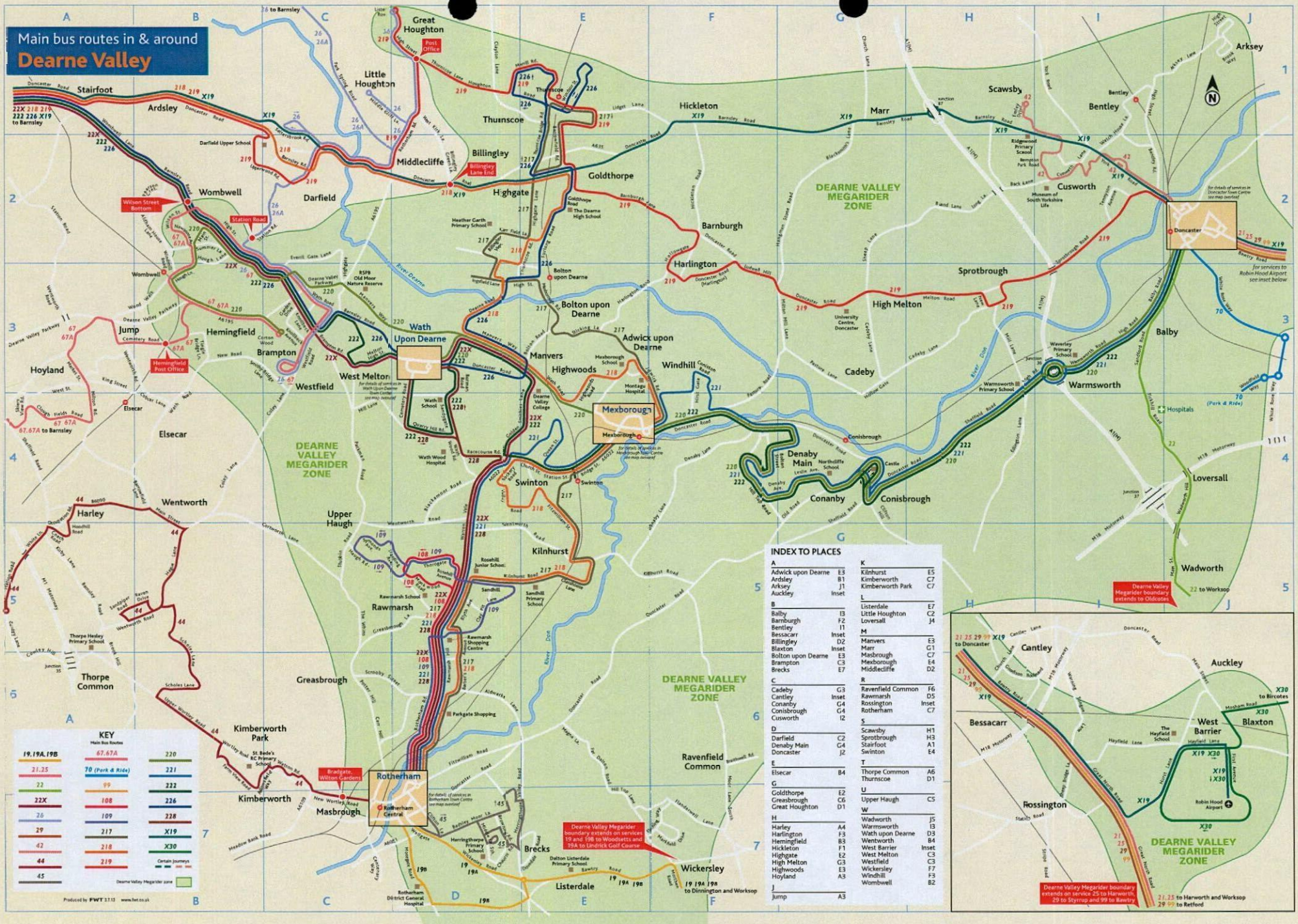
AM (0800 - 0900)	A	B	C
A	0	0	127
B	0	0	0
C	109	0	0

PM (1700 - 1800)	A	B	C
A	0	0	142
B	0	0	0
C	137	0	0

A - Barnburgh Lane (east)
B - Site Access
C - Barnburgh Lane (west)

APPENDIX 3

Main bus routes in & around Dearne Valley



KEY

Main Bus Routes

19, 19A, 19B	67, 67A	220
21, 25	70 (Park & Ride)	221
22	99	222
22X	108	226
26	109	228
29	217	X19
42	218	X30
44	219	Certain Journeys
45		Dearne Valley Megarider zone

INDEX TO PLACES

APPENDIX 5

2018 Base plus Development

AM (0800 - 0900)	A	B	C
A	0	24	135
B	47	0	48
C	116	24	0

PM (1700 - 1800)	A	B	C
A	0	49	152
B	35	0	36
C	146	52	0

A - Barnburgh Lane (east)
B - Site Access
C - Barnburgh Lane (west)

APPENDIX F

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]

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

Filename: Goldthorpe_Site Access.arc8
Path: D:\Cameron Rose Associates\Projects\Goldthorpe, Barnsley
Report generation date: 16/09/2013 15:35:43

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	Proposed Layout - 2018 Base			
Stream B-AC	0.17	8.37	0.15	A
Stream C-AB	0.04	5.05	0.03	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.

"D3 - 2018 Base, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base plus Development, AM" model duration: 07:45 - 09:15
"D6 - 2018 Base plus Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 16/09/2013 15:35:27

File summary

File Description

Title	Barnburgh Road/ Site Access
Location	Goldthorpe
Site Number	
Date	16/09/2013
Version	
Status	(new file)
Identifier	
Client	Gleesom Regeneration & Homes
Jobnumber	
Enumerator	
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	mph	PCU	Veh	perHour	s	-Min	perMin

Proposed Layout - 2018 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			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
2018 Base, AM	2018 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	7.61	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnburgh Lane (east)		Major
B	Site Access		Minor
C	Barnburgh Lane (west)		Major

Major Arm Geometry

Arm	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)
C	8.50		0.00		2.20	220.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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)
B	One lane	2.75										30	30

Pedestrian Crossings

Arm	Crossing Type

A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	489.488	0.079	0.201	0.126	0.287
1	B-C	626.733	0.086	0.216	-	-
1	C-B	701.368	0.242	0.242	-	-

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	152.00	100.000
B	ONE HOUR	✓	68.00	100.000
C	ONE HOUR	✓	133.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	135.000
	B	33.000	0.000	35.000
	C	116.000	17.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.11	0.89
	B	0.49	0.00	0.51
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.15	8.37	0.17	A
C-AB	0.03	5.05	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	51.19	50.76	0.00	519.99	0.098	0.11	7.666	A
C-AB	14.51	14.41	0.00	728.18	0.020	0.02	5.043	A
C-A	85.62	85.62	0.00	-	-	-	-	-
A-B	12.80	12.80	0.00	-	-	-	-	-
A-C	101.64	101.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	61.13	61.03	0.00	513.77	0.119	0.13	7.949	A
C-AB	17.76	17.74	0.00	733.64	0.024	0.03	5.028	A
C-A	101.80	101.80	0.00	-	-	-	-	-
A-B	15.28	15.28	0.00	-	-	-	-	-
A-C	121.36	121.36	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	74.87	.72	0.00	505.17	0.148	0.17	8.361	A
C-AB	22.51	22.47	0.00	741.30	0.030	0.04	5.007	A

C-A	123.93	123.93	0.00	-	-	-	-	-
A-B	18.72	18.72	0.00	-	-	-	-	-
A-C	148.64	148.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	74.87	74.87	0.00	505.16	0.148	3.17	8.366	A
C-AB	22.51	22.51	0.00	741.30	0.030	0.94	5.010	A
C-A	123.92	123.92	0.00	-	-	-	-	-
A-B	18.72	18.72	0.00	-	-	-	-	-
A-C	148.64	148.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	61.13	61.28	0.00	513.76	0.119	0.4	7.960	A
C-AB	17.77	17.81	0.00	733.65	0.024	0.83	5.031	A
C-A	101.79	101.79	0.00	-	-	-	-	-
A-B	15.28	15.28	0.00	-	-	-	-	-
A-C	121.36	121.36	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	51.19	51.30	0.00	519.97	0.098	0.31	7.684	A
C-AB	14.52	14.54	0.00	728.19	0.020	0.62	5.046	A
C-A	85.61	85.61	0.00	-	-	-	-	-
A-B	12.80	12.80	0.00	-	-	-	-	-
A-C	101.64	101.64	0.00	-	-	-	-	-

Proposed Layout - 2018 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			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
2018 Base, PM	2018 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnburgh Lane (east)		Major
B	Site Access		Minor
C	Barnburgh Lane (west)		Major

Major Arm Geometry

Arm	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)
C	8.50		0.00		2.20	220.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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)
B	One lane	2.75										30	30

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	489.488	0.079	0.201	0.126	0.287
1	B-C	626.733	0.086	0.216	-	-
1	C-B	701.368	0.242	0.242	-	-

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	187.00	100.000
B	ONE HOUR	✓	51.00	100.000
C	ONE HOUR	✓	183.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	35.000	152.000
	B	25.000	0.000	26.000
	C	146.000	37.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.19	0.81
	B	0.49	0.00	0.51
	C	0.80	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.11	8.26	0.13	A
C-AB	0.07	5.13	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	38.40	38.07	0.00	510.78	0.075	0.08	7.610	A
C-AB	32.61	32.38	0.00	736.20	0.044	0.06	5.114	A
C-A	105.16	105.16	0.00	-	-	-	-	-
A-B	26.35	26.35	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	45.85	45.77	0.00	502.83	0.091	0.10	7.875	A
C-AB	40.19	40.13	0.00	743.34	0.054	0.07	5.119	A
C-A	124.32	124.32	0.00	-	-	-	-	-
A-B	31.46	31.46	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	56.15	56.04	0.00	491.82	0.114	0.13	8.259	A
C-AB	51.38	51.28	0.00	753.36	0.068	0.10	5.127	A
C-A	150.11	150.11	0.00	-	-	-	-	-
A-B	38.54	38.54	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	56.15	56.15	0.00	491.81	0.114	0.13	8.263	A
C-AB	51.39	51.39	0.00	753.37	0.068	0.10	5.131	A
C-A	150.09	150.09	0.00	-	-	-	-	-
A-B	38.54	38.54	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	45.85	45.96	0.00	502.80	0.091	0.10	7.881	A
C-AB	40.22	40.31	0.00	743.37	0.054	0.08	5.123	A
C-A	124.30	124.30	0.00	-	-	-	-	-
A-B	31.46	31.46	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	38.40	38.47	0.00	510.73	0.075	0.08	7.626	A

C-AB	32.65	32.72	0.00	736.23	0.044	0.86	5.117	A
C-A	105.12	105.12	0.00	-	-	-	-	-
A-B	26.35	26.35	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-

Proposed Layout - 2018 Base plus Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			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
2018 Base plus Development, AM	2018 Base plus Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	8.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnburgh Lane (east)		Major
B	Site Access		Minor
C	Barnburgh Lane (west)		Major

Major Arm Geometry

Arm	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)
C	8.50		0.00		2.20	220.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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)
B	One lane	2.75										30	30

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	489.488	0.079	0.201	0.126	0.287
1	B-C	626.733	0.086	0.216	-	-
1	C-B	701.368	0.242	0.242	-	-

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	159.00	100.000
B	ONE HOUR	✓	95.00	100.000
C	ONE HOUR	✓	140.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	24.000	135.000
	B	47.000	0.000	48.000
	C	116.000	24.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85

	B	0.49	0.00	0.51
	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.21	9.07	0.26	A
C-AB	0.04	5.10	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	71.52	70.89	0.00	517.17	0.138	0.16	8.055	A
C-AB	20.48	20.34	0.00	726.96	0.028	0.04	5.095	A
C-A	84.92	84.92	0.00	-	-	-	-	-
A-B	18.07	18.07	0.00	-	-	-	-	-
A-C	101.64	101.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	85.40	85.24	0.00	510.64	0.167	0.20	8.463	A
C-AB	25.09	25.05	0.00	732.21	0.034	0.05	5.092	A
C-A	100.77	100.77	0.00	-	-	-	-	-
A-B	21.58	21.58	0.00	-	-	-	-	-
A-C	121.36	121.36	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	104.60	104.35	0.00	501.61	0.209	0.26	9.056	A
C-AB	31.79	31.74	0.00	739.57	0.043	0.06	5.087	A
C-A	122.35	122.35	0.00	-	-	-	-	-
A-B	26.42	26.42	0.00	-	-	-	-	-
A-C	148.64	148.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	104.60	104.59	0.00	501.60	0.209	0.26	9.067	A
C-AB	31.80	31.80	0.00	739.58	0.043	0.06	5.086	A
C-A	122.34	122.34	0.00	-	-	-	-	-
A-B	26.42	26.42	0.00	-	-	-	-	-
A-C	148.64	148.64	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	85.40	85.64	0.00	510.62	0.167	0.20	8.477	A
C-AB	25.10	25.15	0.00	732.22	0.034	0.05	5.093	A
C-A	100.76	100.76	0.00	-	-	-	-	-
A-B	21.58	21.58	0.00	-	-	-	-	-
A-C	121.36	121.36	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	71.52	71.68	0.00	517.14	0.138	0.16	8.086	A
C-AB	20.50	20.54	0.00	726.98	0.028	0.04	5.096	A
C-A	84.89	84.89	0.00	-	-	-	-	-
A-B	18.07	18.07	0.00	-	-	-	-	-
A-C	101.64	101.64	0.00	-	-	-	-	-

Proposed Layout - 2018 Base plus Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Proposed Layout			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
2018 Base plus Development, PM	2018 Base plus Development	[redacted]		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	7.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnburgh Lane (east)		Major
B	Site Access		Minor
C	Barnburgh Lane (west)		Major

Major Arm Geometry

Arm	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)
C	8.50		0.00		2.20	220.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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)
B	One lane	2.75										30	30

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	489.488	0.079	0.201	0.126	0.287
1	B-C	626.733	0.086	0.216	-	-
1	C-B	701.368	0.242	0.242	-	-

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	201.00	100.000
B	ONE HOUR	✓	71.00	100.000
C	ONE HOUR	✓	198.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	49.000	152.000
	B	35.000	0.000	36.000
	C	146.000	52.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.24	0.76
	B	0.49	0.00	0.51
	C	0.74	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	8.81	0.19	A
C-AB	0.10	5.31	0.14	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	53.45	52.99	0.00	507.34	0.105	0.12	7.915	A
C-AB	45.86	45.53	0.00	733.80	0.062	0.08	5.231	A
C-A	103.21	103.21	0.00	-	-	-	-	-
A-B	36.89	36.89	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-

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

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	63.83	63.71	0.00	498.75	0.128	0.15	8.273	A
C-AB	56.54	56.45	0.00	740.52	0.076	0.10	5.262	A
C-A	121.46	121.46	0.00	-	-	-	-	-
A-B	44.05	44.05	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	78.17	78.00	0.00	486.86	0.161	0.19	8.801	A
C-AB	72.29	72.15	0.00	749.97	0.096	0.14	5.311	A
C-A	145.71	145.71	0.00	-	-	-	-	-
A-B	53.95	53.95	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	78.17	78.17	0.00	486.83	0.161	0.19	8.808	A
C-AB	72.32	72.31	0.00	749.99	0.096	0.14	5.313	A
C-A	145.69	145.69	0.00	-	-	-	-	-
A-B	53.95	53.95	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	63.83	64.00	0.00	498.71	0.[redacted]	0.15	8.285	A
C-AB	56.57	56.70	0.00	740.57	0.076	0.11	5.266	A
C-A	121.43	121.43	0.00	-	-	-	-	-
A-B	44.05	44.05	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-AC	53.45	53.57	0.00	507.27	0.105	0.12	7.938	A
C-AB	45.92	46.01	0.00	733.85	0.063	0.08	5.236	A
C-A	103.15	103.15	0.00	-	-	-	-	-
A-B	36.89	36.89	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-

LAND AT BARNBURGH LANE
GOLDTHORPE
PHASE 2

TRAVEL PLAN

Client: Gleeson Homes and Regeneration

WESTGATE CONSULTING (LEEDS) LIMITED
64 WESTGATE
GUISELEY
LEEDS
LS20 8HJ

Date: September 2015 v2

CONTENTS

APPENDICES

SECTION 1 INTRODUCTION

Background

1.1 Westgate Consulting (Leeds) Limited has been commissioned by Gleeson Homes and Regeneration to produce a Travel Plan relating to the second phase of residential development at Barnburgh Lane in Goldthorpe, Rotherham. The local planning and highway authority for the site is Barnsley Metropolitan Borough Council (BMBC).

1.2 Phase 1 of the Barnburgh Lane development consisted of 152 residential units, and already has a Travel Plan, which is being implemented by Gleeson Homes and Regeneration.

1.3 Phase 2 of the development will consist of 61 residential units located immediately to the south of the first phase, and will extend the current travel plan programme to cover the new section of the scheme.

Goldthorpe Phase 1

1.4 As noted above, a TP is currently being implemented at the first phase of development at Barnburgh Lane. Therefore this TP is an extension of the existing measures which have previously been agreed with officers at BMBC, rather than a revision to the approach at this site.

The Commitment to Travel Planning

1.5 Gleeson Homes and Regeneration are committed to promoting sustainable travel choices and to the principles of sustainable development.

1.6 Through the submission of this TP report and the TP work carried out at the first phase, the developer shows that they will have a commitment to implement the TP at this second phase of development, once occupation of the begins.

The Travel Plan Vision

1.7 The vision for this travel plan is: *"To make the development a place where residents can make a fully informed travel choice when undertaking regular and one off journeys, and in doing so reduce reliance upon the private car and the subsequent impact upon the local and global environments."*

Travel Plan Aims and Objectives

1.8 To achieve this vision, the aims of this document are to:

- Maximise the attractiveness of the development to potential residents by highlighting the accessibility of the site by a range of travel options; and
- Minimise the effect the development has upon the environment and local highway network by promoting the use of these sustainable travel options above less sustainable modes.

1.9 As a result, the objectives of this travel plan document are to:

- Identify the range of travel options available to the site;
- Build upon the TP mechanisms of Phase 1, which are required to maximise the use of sustainable travel modes amongst residents; and
- Continue to develop the monitoring and reporting mechanisms as used in Phase 1.

Report Format

1.10 This Travel Plan outlines the principles, policies and strategic benefits of effective travel planning, and provides a summary of the transport infrastructure surrounding the development.

1.11 The report also considers the range of measures that have been implemented at Phase 1 of the scheme by the developer, and how these will be expanded into the new development.

SECTION 2 TRAVEL PLAN POLICY CONTEXT

What is a Travel Plan?

2.1 A travel plan is a general term for a package of measures tailored to the needs of an individual site and aimed at promoting greener, cleaner travel choices and reducing reliance upon the car. It involves the development of a set of mechanisms, initiatives, and targets that together can enable individuals on a site such as this to reduce the impact their travel has upon the local environment.

National Policy

2.2 The NPPF sets out the need a Travel Plan for all developments that generate a significant amount of movement. The NPPF is supported in its aims by both the *Guidance on Transport Assessment*, and *Good Practice Guidelines: Delivering Travel Plans through the Planning Process* which are the best practice guides for the production of reports required through the planning system.

2.3 The NPPF defines a travel plan as: "A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed"

2.4 In its White Paper "A New Deal for Transport", the Government identified that the responsibility for transport problems and solutions is to be shared between the private and public sectors. It identified the importance that the planning system could play in reducing the need to travel by car (particularly single occupancy journeys) by the careful planning of new developments in a sustainable manner.

2.5 The Department for Transport document 'Making Residential Travel Plans Work: Good Practice Guidelines for New development', October 2005, provides guidance on producing and developing Travels Plans for new residential development. It sets out that the national sustainability agenda and modernisation of the planning system have reinforced the important and positive role that travel planning, including for residential development, can play in achieving a wide range of national and local objectives. These include:

- Helping to reduce the need to travel and to cut congestion;
- Supporting mixed community and housing objectives, including development location, density, design and parking;
- Supporting social inclusion objectives, particularly through improvement of accessibility to and from new development; and
- Providing a mechanism through which on-going sustainability appraisal and integration can be built into planning and implementation arrangements.

2.6 The document 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process', published April 2009, aims to help all those involved in creating and implementing travel plans; local authorities, transport and travel plan officers, developers and consultants, understand the process involved and good practise steps for achieving successful and sustainable travel plans. It states "Travel plans can be a key tool in achieving national, regional and local objectives to manage the demand for movement and improve accessibility for everyone."

Local Policy

2.7 The Transport Act 2000 requires all local transport authorities in England, outside London, to prepare Local Transport Plans. The relevant local policy documentation in the context of this Transport Assessment is the Third South Yorkshire Local Transport Plan (LTP3) 2011 – 2015.

2.8 South Yorkshire's third Local Transport Plan (LTP3) has three component parts: the Transport Strategy, the Implementation Plan and the Annual Delivery Programme which will set out in detail the agreed prioritised delivery programme for the next financial year as well as briefly outlining the proposed four year programme.

2.9 The Transport Strategy has four main goals. The primary goal is to support the economic growth of the City Region. At the same time it aims to enhance social inclusion and health, reduce greenhouse gas emissions and maximise safety.

2.10 In translating the Transport Strategy into action, it will follow four cross-cutting principles:

- **Squeeze more from existing assets**– in the current funding climate this principle will ensure assets are well managed and maintained and used to their fullest potential, minimising the need for major infrastructure work. It is key to this first Implementation Plan. Efforts will be targeted on the routes, locations, customer groups and issues we have identified from our evidence base as being particularly important;

- **Make our growth sustainable** – it will look to achieve economic growth while minimising the impact on the environment, reducing emissions wherever possible;

- **Give people choice** – it will enable people to make informed choices about whether and how they travel, through providing a range of transport links and services to match varying lifestyles; and

- **Encourage a change in travel culture** - facilitating a shift from car dependency to more active and sustainable travel modes.

2.11 Relevant Transport strategy policies include:

- To improve connectivity between major Settlements;

- To focus new development along key public transport corridors and in places adjacent to existing shops and services;

- To apply parking policies to promote efficient car use, while remaining sensitive to the vulnerability of urban economies;

- To develop public transport that connects people to jobs and training in both urban and rural areas;

- To develop user-friendly public transport, covering all parts of SCR, with high quality of integration between different modes;

- To ensure public transport is accessible to all;

- To encourage active travel and develop high-quality cycling and walking networks; and
- To provide information and travel advice for the users of all modes of transport, so that they can make informed travel choices.

SECTION 3 DEVELOPMENT PROPOSALS - GOLDTHORPE PHASE 2

Site Location

3.1 As described above, the development site is located off Barnburgh Lane in the Goldthorpe area of Rotherham. However, the site is within the jurisdiction of Barnsley Metropolitan Borough Council (BMBC). The Phase 2 site is located immediately to the south of the Phase 1 site as shown on the proposed Site Layout Plan a copy of which is attached at Appendix 1.

Development Proposals

3.2 The proposed site layout indicates that the site will accommodate 61 residential dwellings. Vehicular access into the site will be via an extension to the main spine road running from north to south through Phase 1 from the purpose build simple priority junction with Barnburgh Lane.

3.3 Shared surfaces will also be provided within the site linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

3.4 The proposed site layout shows a hierarchy of access roads throughout the site serving the residential units. The internal layout has been designed with a principal spine road running into the site from Phase 1 which forms a loop, with a hierarchy of roads branching off the main spine road, providing access to properties across the site.

3.5 The spine road had been designed to accommodate the necessary refuse and emergency vehicle requirements. Beyond this principal network of roads there are a number of private drives providing access to individual properties – where necessary, bin collection points are located at convenient points to allow access by residents and refuse collection operatives.

3.6 The internal access roads have been designed to achieve low vehicle speeds within the site, incorporating elements of shared surfaces, raised tables and appropriate changes in the road alignment. These will assist in providing a safe environment for pedestrians and cyclists within the site. The site design reflects the importance of accessibility by walking and cycling.

3.7 The proposed level of parking provides an appropriate balance between the need to promote sustainable modes of transport, meeting residents' demands and minimising on-street parking.

Active Travel

3.8 The Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised.

3.9 The site has a good level of accessibility by sustainable modes of transport and as outlined in the Introduction. This Travel Plan along with Barnsley LTP's transport strategy policies is anticipated to reduce the overall travel demands of the site, particularly trips by single occupancy vehicles.

3.10 Travel by non-car modes will be encouraged at the site and the development proposals include pedestrian and cycle connections across the site, linking into the surrounding facilities.

3.11 This section outlines the existing walking, cycling and public transport facilities within the vicinity of the development site and describes the accessibility of the site in terms of its proximity to key services and destinations.

3.12 Whilst superseded by the NPPF, the transport policies set out in the former PPG13 set out specific guidance related to walking and cycling:

> **"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres"** (Para 74)
>
> and
>
> **"Cycling also has potential to substitute for short car trips, particularly those under 5 kilometres, and to form part of a longer journey by public transport"** (Para 77)

3.13 These potential walking and cycling catchments have been used in the consideration of the accessibility of the site set out below.

Walking

3.14 The site is within two kilometres of key facilities within Goldthorpe including education, health care and retail facilities.

3.15 The surrounding residential areas include networks of footways and footpaths and crossing points available on the majority of routes including Barnburgh Lane, Barnsley Road and Doncaster Road and, connecting the site to key facilities.

3.16 There is an existing footpath that runs along the western boundary of the Phase 1 development site and then west to Dearne High School. Subject to land ownership issues, to be confirmed by BMBC, this would be a preferred route for school children walking / cycling from the site to school. The route is shorter and would also prevent children from having to cross any roads.

3.17 There is an existing footpath that crosses the Phase 2 development site which will be diverted and all links retained, as shown on the proposed site layout.

3.18 Shared surfaces will also be provided within the site linking into the existing shared surfaces / footways / cycle links within Phase 1 and the footways on both sides of Barnburgh Lane. These existing and proposed facilities will connect the site with the existing public transport facilities, employment and retail facilities in the vicinity of the site and the existing residential settlements.

3.19 As described above, the proposed site layout maximises the accessibility of the site through the various pedestrian links to Phase 1 and existing footpaths. It is considered that the pedestrian provision within the vicinity of the site is of a good quality and provides a range of opportunities for residents to access nearby facilities on foot.

Cycling

3.20 Areas including Goldthorpe, Bolton upon Dearne, Wath upon Dearne, Mexborough and Thurnscoe lie within 5km cycle catchment and Wombwell within the 8km catchment providing residents with a wealth of facilities and employment opportunities.

3.21 Barnsley has a network of cycle routes and lanes as shown on the plan also attached at Appendix 2. Route 62 of the National Cycle Network is located some 4 kilometres south of the site, route 62 follows Dearne Road north bound then runs east along Lowfield Lane where it links into the Trans Pennine Trail. Route 62 provides a traffic free route from the site in to Wath, Mexborough, Barnsley town centre and Doncaster town centre.

3.22 It is considered that the cycle provision within the vicinity of the site is of a good quality and provides a range of opportunities for residents to access nearby facilities by cycle.

Public Transport

3.23 The proposed development site is well located in terms of its proximity to public transport services, including the existing bus services which run along Barnburgh Lane and the B6098 and the railway station which is within Goldthorpe. Details of the existing provision are set out below.

Buses

3.24 There are existing bus services which pass along Barnburgh Lane to the north of the site and the B6098 to the west of the site.

3.25 The stops on Barnburgh Lane are located c.550 metres from the centre of the site for westbound services and c.600 metres for eastbound services, via Barnburgh Lane. These bus stops are served by bus number 224 which has a service frequency of two per hour Monday to Saturday all day and one per hour on Sundays and runs from Doncaster to Mexborough via Bolton on Dearne.

3.26 The stops on the B6098 are located c.900 metres from the centre of the site for southbound services and c.940 metres for northbound services, via Barnburgh Lane. The north bound bus stop is served by 218, 224 and 226 and the south bound bus stop is served by the 218 and 226 only. The 218 and 226 have a combined service frequency of four per hour Monday to Saturday all day and two per hour on Sundays. Bus number 218 runs from Barnsley to Rotherham via Mexborough and bus number 226 runs from Barnsley to Thurnscoe via Wombwell.

3.27 These existing bus stops are served by a number of bus services which serve Barnsley, Rotherham, Mexborough, Thurnscoe and Wombwell and the surrounding towns and villages as summarised in Table 3.1 below. A copy of the latest bus route map is enclosed within Appendix 3.

Table 3.1 – Local Bus Services

Stop	Bus	Route	Frequency		
			Mon – Sat Daytime	Mon – Sat Evening	Sun
B6098 NB & SB	218	Barnsley – Stairfoot – Darfield – Goldthorpe – Mexborough – Kilnhurst – Rawmarsh - Rotherham	Every 30 minutes	-	-
Barnburgh Lane & B6098 NB	224	Doncaster – Sprotborough – High Melton – Barnburgh – Goldthorpe – Bolton on Dearne - Mexborough	Every 30 minutes	Every 60 minutes	Every 60 minutes
B6098 NB & SB	226	Barnsley – Stairfoot – Wombwell – Wath upon Dearne – Bolton on Dearne – Goldthorpe - Thurnscoe	Every 30 minutes	Every 30 minutes	Every 60 minutes

Source: Stagecoach Website

3.28 The above table shows that the Barnburgh Lane stops are served by the 224 which provides a direct connection from the site to Doncaster town centre and Mexborough, with a 30 minute frequency, Monday – Saturday daytime and 60 minute in the evenings and on Sundays.

3.29 The above table shows that the B6098 stops are served by the 218 and the 226 in addition to the 224. The 218 and 226 provide a direct connection from the site to Barnsley town centre, with a combined 15 minute frequency, Monday – Saturday daytime, 30 minute in the evenings and 60 minutes on Sundays. The 218 also provide a direct connection into Rotherham town centre with a 30 minute frequency, Monday – Saturday daytime and in the evenings.

3.30 It is therefore considered that the site is well served by existing bus services providing good connections to Barnsley, Rotherham and Doncaster town centres and elsewhere.

Rail

3.31 The nearest railway station to the development site is Goldthorpe Railway Station, located approximately 1.75 kilometres walking distance from the centre of the site, which although outside the recommended 800 metres it is still within reasonable walking and cycling distance. The station is also accessible via bus services 218, 224 and 226 which all stop at the station. The station has step free access coverage and a train is available every 60 minutes between Leeds and Sheffield.

3.32 The existing service frequency and journey times from Goldthorpe Station are summarised in Table 3.2 below.

Table 3.2 – Goldthorpe Railway Station – Destinations and Frequencies

Destination	Mon – Friday Daytime Frequency	Typical Journey Time
Rotherham	Every 60 minutes	15 minutes
Sheffield	Every 60 minutes	27 minutes
Wakefield	Every 60 minutes	37 minutes
Leeds	Every 60 minutes	50 minutes

Source: National Rail Website

3.33 Overall, it is therefore concluded that there is a range of sustainable transport infrastructure within the vicinity of the proposed development site and that the site can be considered to be accessible by a range of modes.

Local Highway Network and Parking Provision

3.34 The only vehicular access into the development will be, through Phase 1, from Barnburgh Lane. The site is located within Goldthorpe, a predominantly residential area approximately 13.0 kilometres to the east of Barnsley town centre.

3.35 Barnburgh Lane is a single carriageway two-way road, approximately 8.5 metres in width. A 30mph speed restriction is in force and 1.8m wide footways are provided on both sides of in the vicinity of the site. Barnburgh Lane provides frontage access to residential properties as well as access into other residential streets.

3.36 Approximately 500 metres west of the proposed site access Barnburgh Lane forms a priority junction with the B6098 which is the main route through Goldthorpe.

3.37 The B6098 provides a link between the A623 and the A635. The A623 provides a direct route into Mexborough and provides access onto the A630 which is the main route into Rotherham town centre.

3.38 The A635 can be described as a primary distributor type of road from which there is direct access into Barnsley town centre, it also provides access onto the A1(M), the M1 Motorway at Junction 37 and the A19 which is the main route into Doncaster town centre. Accessibility to the site by car is therefore considered to be excellent due to its close proximity with Barnsley, Rotherham and Doncaster town centres and both the A1(M) and M1 Motorway.

3.39 Use of alternative means of transport will also be encouraged by a policy of car parking restraint that will be adopted within the development. Parking policies outlined in Government publications are based upon the principle of maximum provision rather than minimum. Parking provision within specific areas of the development will however have regard to the type and mix of properties.

SECTION 4 TRAVEL PATTERNS AND KEY DESTINATIONS

Local Facilities

4.1 The surrounding area has a wide range of services and facilities which can be accessed by future residents of the site. These are summarised below:

- Barnsley town centre – has a large range of employment locations including offices, retail, leisure and other jobs, a range of shops, banks, post office, library, pubs, restaurants/cafes, leisure facilities, medical facilities and regular markets;
- Goldthorpe - has a range of shops including newsagents, takeaway food outlets, schools, recreation ground, community centre, dentist, doctors, supermarket, leisure centre, library, convenience stores and a post office.
- Employment – there are a number of large employment areas / industrial estates in the vicinity of the site including Goldthorpe Industrial Estate off Commercial Road located to the southwest of the site and Fields End Business Park located off the A635 to the northwest of the site;
- Education provision - there are primary schools including Dearne Goldthorpe Primary School and Goldthorpe Boys School located on Doncaster Road in Goldthorpe. The Dearne Advanced Learning Centre located on Goldthorpe Road in Goldthorpe is the nearest secondary School to the development site and Barnsley College is located in the town centre;
- Health facilities - including Dearne Valley Dental Practice located on High Street in Goldthorpe and Goldthorpe Doctors Surgery located on Doncaster Road in Goldthorpe;
- Food shopping – food retail units include convenience stores on Doncaster Road in Goldthorpe, ASDA Supermarket in Thurnscoe, ASDA Supermarket and Morrisons Supermarket within Barnsley town centre and Tesco within Mexborough.

- Leisure and Recreation – including Dearnside Leisure Centre and a recreation ground on Goldthorpe Road in Goldthorpe.

4.2 The local facilities within Goldthorpe and the surrounding areas are summarised in Table 4.1 below. The table includes approximate distances from the development site.

4.3 The table also notes whether or not the facilities are accessible by walking, cycling and public transport from the site. The criteria adopted in PPG13 have been used to determine the accessibility by walking (i.e. within 2km) and by cycling (i.e. within 5km) and the facilities are noted as being accessible by public transport if they are accessible by the bus services outlined in Table 3.1 above. Facilities not accessible via these bus services are accessible via buses serving Barnsley town centre.

4.4 Many of the facilities close to the town centre can be reached within an acceptable cycling distance from the site and bus services 218 and 226 connect the site to Barnsley town centre and also to destinations such as Mexborough, Rotherham town centre and Doncaster town centre.

Table 4.1: Key Facilities and Services

Journey Purpose	Destination	Distance from Site	Accessible by Walk (W)/ Cycle (C)/ Public Transport (PT)
Town Centre	Barnsley Town Centre	13km	PT
Employment	Goldthorpe Industrial Estate	2.5km	C/PT
	Fields End Business Park	1.8km	W/C/PT
Education	Dearne Goldthorpe Primary School	1.2km	W/C/PT
	Goldthorpe Boys School	1.2km	W/C/PT
	Dearne Advanced Learning Centre	1.3km	W/C/PT
	Barnsley College	13km	PT
Retail	ASDA Supermarket Thurnscoe	3.7km	C/PT
	Tesco Supermarket Mexborough	6.9km	C/PT
	ASDA Supermarket Barnsley	15.3km	PT
	Morrisons Supermarket Barnsley	14.2km	PT
Health	Dearne Valley Dental Practice	900m	W/C/PT
	Goldthorpe Doctors Surgery	1.9km	W/C/PT
Leisure	Dearneside Leisure Centre	1.3km	W/C/PT
	Recreation Ground	1.7km	W/C/PT

All measurements are approximate

Summary

4.5 The site is situated in an accessible location, various retail outlets, employment facilities, recreation facilities, health care facilities and schools are within a reasonable walking distance and Barnsley town centre, further employment areas, schools, leisure centre, recreation facilities and the railway station are all located within cycling distance of the site or accessible by regular bus services.

4.6 Overall, it is concluded that a range of key facilities and services, including employment, retail, health and education uses, are readily accessible from the site.

4.7 It is therefore considered that the location of the site is consistent with national and local policy objectives.

SECTION 5 TRAVEL PLAN MEASURES

Introduction

5.1 The key to successful travel planning is to identify the most suitable modes of transport that are realistic and practical for residents of a site such as this to adopt, before making these modes as attractive as possible. There is no single solution to any one person's transport needs. Different people will respond to different measures, whilst some may not react to any. A range of travel plan measures are therefore proposed which residents can pick and choose from as they consider necessary.

5.2 Given that a travel plan is already in the process of being implemented at Phase 1 of Barnburgh Lane, it is therefore appropriate to summarise the actions that have already been undertaken, and those which will also be applied to the second phase of the scheme.

Phase 1: Existing TP Measures

5.3 Firstly, Gleeson Homes & Regeneration appointed a TPC for Barnburgh Lane Phase 1. The contact details for the TPC are:

??????????????

5.4 Secondly, all prospective and confirmed future residents are provided with a copy of the Barnburgh Lane Travel Information Pack.

5.5 As part of the Travel Plan for Phase 1, specific targets were included that should be achieved within four years of full occupation, which are shown in Table 5.1, below.

Table 5.1 Barnburgh Lane Phase 1 Travel Plan Targets

Reference	Target
T1	Reduction in the total number of cars accessing the site during peak hours by 10%
T2	No more than 50% of peak hour two-way trips single occupancy car journeys
T3	14% of peak hour journeys to be by public transport
T4	4% of peak hour journeys to be by cycle
T5	18% of peak hour journeys to be by foot

5.6 Since the submission of the original TP for Phase 1, it has been agreed with BMBC that the first residential survey will be undertaken during ???. This will provide the initial feedback upon the effectiveness of the travel plan for the first residents of Phase 1. The site currently has only ?? of the 152 plots completed and occupied. However, the first annual monitoring survey will be undertaken following the agreed schedule.

Phase 2: Travel Plan Management

5.7 It is recognised that an important element of the success of this TP will be the appointment of a Travel Plan Coordinator (TPC). In this case the role of the TPC will be extended from Phase 1 to cover the whole of the Barnburgh Lane development following planning approval.

5.8 The TPC will subsequently have overall responsibility for the development, implementation and management of the travel plan for the total period of development on Barnburgh Lane.

5.9 The contact details for the Travel Plan Coordinator will be confirmed with BMBC upon appointment, and the responsibility for appointing the TPC will be undertaken by the developer.

5.10 In the interim, the TPC for Phase 1 can be contacted and will be responsible for delivering any measures or addressing issues related to travel planning.

5.11 The role of the TPC will include (but not be limited to):

- Managing the development of the Travel Plan;
- Sourcing the correct information for each of the relevant measures;
- Travel updates via email and other social media;
- Responding to travel issues/questions; and
- Coordinating the annual travel survey.

Travel Plan Marketing and Information Provision

5.12 The principle task of the TPC will be to ensure that the available travel options are effectively promoted to all residents at the development. This will primarily be achieved through a range of modern marketing techniques which will ensure the full demographic of residents (and prospective residents) have easy access to relevant and up to date travel information.

Travel Information Packs

5.13 Given the scale of this site and the previous actions completed for Phase 1, it is proposed that all new residents at Phase 2 will be offered travel information in hard copy. This hard copy information will come in the form of a Travel Information Pack, and will include:

- Hard copy bus timetables for local services;
- Local cycle maps;
- General advice on walking, cycling and catching public transport in the local area;
- Contact details for the TPC;
- Web addresses for public transport timetables and maps for download, journey planning tools, transport direct; and
- Information and advice on car sharing.

5.14 The packs will be made available through the sales office to ensure that residents are able to consider their travel options prior to purchase. Additional packs will also then be distributed at first occupation.

Social Media and Email

5.15 The way that individuals access information is changing, with the internet and electronic media now offering the primary means of accessing travel information and tools for most people.

5.16 Websites provide an ideal means of providing people with access to up to date information, and direct links to external sources of information and tools, such as journey planning websites, car share schemes, timetables and maps.

5.17 A common means of providing people with up to date news and information is to make use of social media and email. The TPC will therefore establish an email group and possibly also a Twitter presence and these will be linked together.

5.18 Residents who subscribe to these social media tools will then be able to receive updates on local travel news and information, with the control of information being managed by the TPC.

5.19 Furthermore, the email group will enable the TPC to send out updates and news on local travel options, as well as providing a mechanism by which residents can ask questions and raise any issues. Furthermore national events such as Bike Week and European Mobility Week will be promoted through this channel. The TPC will forward on promotions and communications from other stakeholders (e.g. BMBC) as and when requested.

Specific Measures

5.20 As agreed between Gleeson and BMBC with the Travel Plan for Phase 1 the following specific measures will be implemented by the Residential Travel Plan Co-ordinator on Phase 2.

Walking

5.21 The Residential Travel Plan Co-ordinator will encourage the residents of the development to walk to local facilities by providing residents with information and advice concerning safe pedestrian routes to and from the development. This information will be provided in the Travel Information Pack and on the general website.

5.22 The Residential Travel Plan Co-ordinator will make residents aware of the health benefits associated with walking and consideration will be given to the provision of personal attack alarms and also umbrellas to encourage residents to walk for all or part of their journey.

5.23 Residents will also be made aware through the Residential Travel Plan of the nationwide on-line walk buddy scheme that is available at www.walkbudi.com. Registration with the scheme is free and the aim is to match individuals who live and work in similar locations in order that they can share the walk to work or educational facilities together.

5.24 The Residential Travel Plan Co-ordinator will promote www.walkit.com as the free online walking journey planner.

5.25 The Residential Travel Plan Co-ordinator will promote the Safer Routes to School Website http://www.saferoutestoschools.org.uk/ which provides free information to schools, parents and pupils interested in school travel initiatives. The website produces templates and resources, including a variety of information sheets, to help with all school travel needs. The School Travel team arranges Action days, one day packages combining fun and information with free training for pupils, teachers, parents and school representatives.

5.26 The Residential Travel Plan Co-ordinator will promote the direct.gov website "Tales of the Road" http://talesoftheroad.direct.gov.uk/ the road safety website for children which explains the Green Cross Code.

5.27 The Residential Travel Plan Co-ordinator will work with residents and local primary schools in order to set up Walking Bus schemes. Walking Bus scheme is a safe and healthy way for groups of children to walk to and from school. Each walking bus has an adult 'driver' at the front and an adult 'conductor' at the rear. The children walk along a set route picking up 'passengers' at planned 'bus stops' along the way. The bus runs in all weather conditions and everyone wears a reflective jacket which the. The developer will provide sponsored high visibility jackets for all children using the local walking bus schemes.

5.28 The Residential Travel Plan Co-ordinator will promote the Walk to School campaign, Walk to School Week (usually held in May) and International Walk to School Month (usually October). The Walk to School campaign encourages pupils to walk to school more often. The campaign includes the popular Walk on Wednesday (WOW) scheme, which helps to promote regular walking among pupils. These are great opportunities to get involved in events that promote the many benefits of walking.

5.29 Subject to any land ownership issues Gleeson would be happy to commit to signing and promoting the existing public footpath which currently runs along the western boundary of the development site and then west to Dearne High School as a preferred route for school children walking / cycling from the site to school. BMBC to confirm land ownership.

Cycling

5.30 The site is accessible by cycle from the local highway network and dedicated cycle storage will be provided at every dwelling. Cycle storage will be an integral part of the design of each dwelling and if a house has no direct access to the garden (shed) or garage without going through the house, cycle storage will be provided at the entrance to the building.

5.30 Residents will be provided with information and advice concerning safe cycle routes to and from the development. A way of encouraging cycling particularly for novices is to organise a series of Breakfast Clubs where new cyclists are introduced to experienced riders in order to gain confidence and useful information. The Residential Travel Plan Co-ordinator will consider the implementation of such meetings to encourage more residents to use this mode of transport on a regular basis. It is acknowledged that this may be difficult to organise within a private residential development and therefore information on established cycle groups and clubs will be provided to residents within the Travel Information Pack.

5.31 The Residential Travel Plan Co-ordinator will approach local cycle shops in an attempt to negotiate a discount for residents of the development for purchasing bicycles and accessories.

5.32 The Residential Travel Plan Co-ordinator will also make residents aware of the nationwide on-line bike buddy scheme that is available at www.cyclebudi.com. Again registration with the scheme is free and the aim is to match individuals who live and work in similar locations in order that they can share the cycle to work together. This is a sister scheme to the walk buddy scheme.

5.33 The Barnsley Cycling Map is also available on-line at www.barnsley.gov.uk/barnsley-cycle-routes. The Residential Travel Plan Co-ordinator will work with residents and local primary/secondary schools in order to encourage children to cycle to school, this includes ensuring there is a safe place at the school for pupils to store their bikes and associated equipment. The developer will provide sponsored high visibility jackets and a voucher towards cycle safety equipment, such as lights and helmets, for all children living on the site who cycle to school.

5.34 The Residential Travel Plan Co-ordinator will work with local primary/secondary schools to arrange the local council to provide Bikeability training at the schools, free of charge, for children who already do or would like to cycle to and from school. Children can start Bikeability lessons once they have learned to ride a bike, usually when they are around 7 to 9 years old (level one). They will usually receive level two training in Year 6 (10 to 11 year olds). Older teenagers in secondary schools can do level three.

5.35 The Residential Travel Plan Co-ordinator will promote the Bike to School Week.

Public Transport

5.36 The Residential Travel Plan Co-ordinator will positively market and promote the use of bus and rail services to all residents in an effort to encourage the use of public transport. It is assumed that most new residents of the development will have access to the internet and the Travel Plan Co-ordinator shall ensure that the residents are aware of the relevant internet links to access travel information including train and bus timetables.

5.37 South Yorkshire Passenger Transport Executive (SYPTE) is responsible for the co-ordination of public transport in South Yorkshire. It is accountable to the Passenger Transport Authority, which is made up of nominated elected members from the local authorities of Barnsley, Doncaster, Rotherham and Sheffield.

5.38 SYPTE is responsible for developing the network and services across the county. Its roles include:

- Providing bus stops and their facilities (e.g. timetable information),
- Running five Park & Ride sites,
- Providing bus services in rural communities:
- Information, awareness and advice to people and organisations about using public transport,
- Providing Traveline - the internet and phone service for finding out when and where to use public transport,
- Providing YourNextBus - the mobile phone texting service for finding out when your next bus is actually going to come,
- Making available South Yorkshire tickets, such as the TravelMaster.

5.39 Bus information, maps and journey planners are available on the Stagecoach, Travel South Yorkshire and Transport Direct websites:

- www.stagecoachbus.com/localdefault.aspx;
- www.travelsouthyorkshire.com;
- www.transportdirect.info/.

5.40 Travel South Yorkshire also operate a YourNextBus text service:

- Text the unique eight digit bus stop number to 64422, South Yorkshire's official YourNextBus text number;
- Within a few seconds a text will be received informing the user of live bus times for the next four buses calling at that stop.

5.41 The following are also available for information about bus and train options in Barnsley and South Yorkshire:

- Call Traveline Yorkshire on 01709 515151.
- Visit one of Barnsley's Travel Information Centres.

5.42 The Travel Plan Co-ordinator will provide a simple checklist of all useful information relating to public transport and this will be provided to new residents as part of the Travel Information Pack. The information will also be available in marketing and sales literature in order that prospective residents can access the site for viewings using public transport.

Powered Two Wheelers (PTWs)

5.43 The Government has recognised that PTWs have a part to play in an integrated transport policy and is encouraging Local Authorities to consider the needs of these vehicles within their Local Transport Plans. The use of these vehicles will be promoted by the Residential Travel Plan Co-ordinator and motorcycle parking will be provided within the site in line with BMBC's policy.

5.43 PTWs have advantages over cars in terms of flexibility and affordability. They can make more efficient use of road space in congested town and city centres and provide an alternative for people on low incomes and those living in rural areas.

5.44 There are various national groups that represent the owners and riders of PTWs including MAG UK (www.mag-uk.org), the British Motorcyclists' Federation (www.bmf.co.uk), the Motor Cycle Industry Association (www.mcia.co.uk) and the Institute of Advanced Motorcyclists (www.iam.org.uk).

Car Sharing

5.45 Car sharing represents a relatively convenient form of travel whilst offering a significant potential to reduce overall private mileage of residents.

5.46 The Residential Travel Plan Co-ordinator will look into the formation of an informal car sharing scheme at the development. The regular travel needs of residents will be identified through the initial travel survey which will enable the establishment of a database enabling residents having the same destination to be identified, promoting multiple occupancy car journeys. The Residential Travel Plan Co-ordinator will devise an incentive scheme to encourage people to take part in car sharing. This could include vouchers for leisure activities given to the people who carry out the greatest number of car sharing journeys over a given period of time.

5.47 The Travel Plan Co-ordinator will promote Car sharing in Travel Welcome Packs and at any residents meetings.

5.48 In addition to any on-site based car sharing scheme, the Residential Travel Plan Co-ordinator will inform residents of the web-based national Lift Share scheme, details of which can also be found at www.liftshare.org. This scheme also operates in the same manner as the Cycle and Walk Buddy schemes described earlier.

Reducing the Need to Travel

5.49 Broadband wireless internet provision is now widely available through a standard telephone line and this facility allows residents to work or study from home and also takes advantage of a wide range of home shopping opportunities.

5.50 In order to reduce the need to travel, the Residential Travel Plan Co-ordinator will promote to all residents the advantages that internet use and home delivery services can provide in terms of reducing the number of trips to and from the development particularly during peak periods on the local highway network.

SECTION 6 TRAVEL PLAN TARGETS AND MONITORING

Introduction

6.1 When delivering a travel plan it is important to monitor its progress and success. One easy way of understanding the impact of the TP is to consider the modal split of trips being made from the site. For this reason a monitoring strategy has been set out below which details how the success of the travel plan will be recorded and reported to BMBC. This is based upon the agreed monitoring strategy for the first phase of the development at Barnburgh Lane.

Travel Plan Targets

6.2 It is considered that the second phase of the site will maintain the targets of the first phase, using modal splits to assess the success of the TP. Therefore the targets are confirmed in Table 6.1.

Table 6.1 Barnburgh Lane Phase 2 Travel Plan Targets

Reference	Target
T1	Reduction in the total number of cars accessing the site during peak hours by 10%
T2	No more than 50% of peak hour two-way trips single occupancy car journeys
T3	14% of peak hour journeys to be by public transport
T4	4% of peak hour journeys to be by cycle
T5	18% of peak hour journeys to be by foot

6.3 Table 6.2 below summarises the proposed timescales for the implementation and monitoring of the Travel Plan.

Table 6.2: Travel Plan Action Plan and Timescales

Item/Action	Timescale	Responsibility
Prepare / Agree Interim Travel Plan	Reserved Matters Planning Application	Gleeson Homes and Regeneration / Westgate Consulting
Prepare / Agree Final Travel Plan	3 Months prior to occupation of first dwelling	Gleeson Homes and Regeneration
Appoint TPC	3 Months prior to occupation of first dwelling	Gleeson Homes and Regeneration
Implement Final Travel Plan	3 months prior to occupation of first dwelling	TPC / Gleeson Homes and Regeneration during construction phase
Conduct Baseline Travel Surveys	Within 1 year of occupation of first dwelling	TPC
Annual Travel Surveys	Annually from Baseline survey until the end of the five year Travel Plan period	TPC

Travel Plan Monitoring

6.4 As noted above, the first travel survey at this site will take place during summer ????. This will consist of a multi-modal traffic count at the site entrance, as agreed in the original travel plan for Phase 1, and agreed with BMBC. This survey will enable the TPC to monitor the travel patterns at the site.

6.5 The results will be shared with travel plan officers from BMBC at the annual meeting of the TPC and the Council following the baseline survey, and suitable targets for the future will then be set, defining modal split targets for future surveys.

6.6 Following the initial baseline travel survey, further subsequent travel surveys will be undertaken annually for a period of four years at Barnburgh Lane, as agreed within the original travel plan. These surveys will allow the TPC to monitor both the success of the travel plan to date in achieving previously set modal split targets.

6.7 The TPC will feed results of these travel surveys back to travel plan officers at BMBC at an annual meeting, and will make appropriate and practical changes to the travel plan programme moving forward.

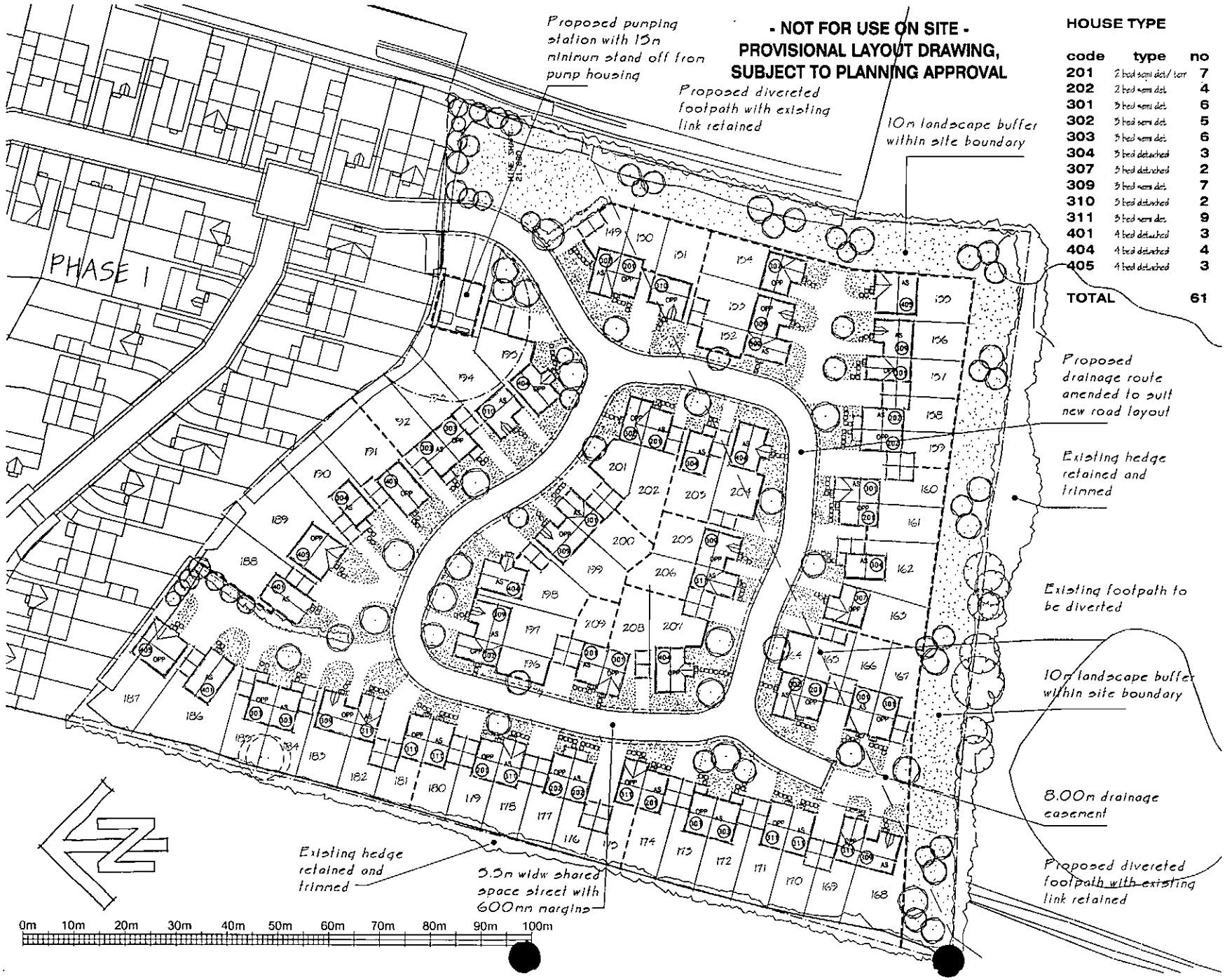
SECTION 7 SUMMARY

7.1 This Travel Plan outlines the local sustainable travel options for the second phase of residential development at Barnburgh Lane, and highlights the ways that the developer will seek to promote these options to residents.

7.2 One of the key measures contained within this document is the continuation of the role of Travel Plan Coordinator from Phase 1 of Barnburgh Lane, who will ensure that this work is completed in a timely fashion, and will be able to use up to date best practice for implementing the measures.

7.3 Regular monitoring will be established beginning in summer 2013 as agreed in the original travel plan, which will help to inform the TPC of the successes and failings of any extant measures, ensuring that the travel plan for the development is suitable for purpose and relevant to the residents who live there. The progress of the TP and the outcome of monitoring will be shared with the Travel Planning team at Barnsley Metropolitan Borough Council.

APPENDIX 1



HOUSE TYPE

code	type	no
201	2 bed semi det/ terr	7
202	2 bed semi det.	4
301	3 bed semi det.	6
302	3 bed semi det.	5
303	3 bed semi det.	6
304	3 bed detached	3
307	3 bed detached	2
309	3 bed semi det.	7
310	3 bed detached	2
311	3 bed semi det.	9
401	4 bed detached	3
404	4 bed detached	4
405	4 bed detached	3
TOTAL		61

Existing trees to be removed

Existing trees to be retained and protected during construction to British Standard 5837:1991.

Areas of new tree planting see schedule for species

New shrub/ ground cover planting

Lawns to front gardens

Paving slab across paths to level threshold for principle entrance. Gradient not to exceed 1in 12 for maximum 9.00m length

Private drives

1.80m high reconstituted stone wall

S.M. 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).

Plot division fence, post & wire

House type code reference number

Plot number

Garages location

Parking bays

gleeson

Richard Ward Design

Chartered Architectural Technologist
Architectural Design & Development Consultant

Richard S. Ward
M.C.I.A.T.
Telephone 01604 410943

2, Bertram Close
Weston Favell
Northampton NN3 3PH

BARNBURGH LANE
GOLDTHORPE Ph2

planning layout

GLEESON
HOMES & REGENERATION

A	Plots renumbered	14.07.15
	Scale	1:500 at A2
	Date	03.01.15
	Dwg No	453/2-A

APPENDIX 2

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