



HIGHWAYS STATEMENT

Land off Saunderson Road, Penistone, West Yorkshire S36
9DU

for

Orion Homes Limited

June 2018

Highways Statement

Highways Statement, Land off Saunderson Road, Penistone, West Yorkshire S36 9DU

for

Orion Homes Limited (OHL)

P3246	Highways Statement, Highways Statement, Land off Saunderson Road, Penistone, West Yorkshire S36 9DU			
Revision	Date of Issue	Comments	Prepared By	Checked By
1.0	27.03.2017	First Issue	RBM	DB
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1.0 Introduction

- 1.1 Patrick Parsons Ltd (PPL) was commissioned by Orion Homes Limited (OHL) to prepare a Highways Statement to accompany a Planning Application, for the proposed residential development at land off Saunderson Road, Penistone, West Yorkshire S36 9DU.
- 1.2 The purpose of this study is to advise the Local Authority, Barnsley Metropolitan Borough Council, of the Transport Impact that the proposed development could have on the local highway network.
- 1.3 The general limitations of the assessment are that:
- A number of data sources have been used in compiling this report. Whilst Patrick Parsons Ltd (PPL) believe them to be trustworthy; it is unable to guarantee the accuracy of the information that has been provided by others.
 - This report is based on information available at the time of preparation. There is potential for further information to become available, which may create a need to modify conclusions drawn in this report.
- 1.4 In **Section 2** we detail the National and Local Planning Policies. In **Section 3** we describe the site location in relation to the highway network and describe the existing site. In **Section 4** we describe the proposed development. **Section 5** details the likely impact of the proposals on the surrounding highway network and **Section 6** details the sustainability of the site in relation to public transport, walking and cycling opportunities. **Section 7** concludes the report.

2.0 Planning Policy Context

Transport White Paper – Creating Growth, Cutting Carbon (January 2011)

- 2.1 Creating Growth, Cutting Carbon' sets out the Government's objectives for a greener and safer transport network that encourages economic growth and improves quality of life for communities.
- 2.2 The White Paper encourages the implementation of sustainable local transport systems and aims to remove the previous top-down approach to transport planning. Local Authorities will have the power to implement and tailor transport systems and schemes based on local needs and behaviour
- 2.3 The economic aims of the White Paper can be achieved by increasing access to employment and services, reducing carbon emissions, increasing public transport accessibility, and as a by-product, increasing the number of people using safer transport methods with wider health benefits.
- 2.4 The White Paper notes the key role of travel planning in achieving the Government's objectives, as set out below:

"The Government wants to encourage and enable more sustainable transport choices. [...] In transport terms, this might be exemplified by reducing unnecessary signs, posts and other street clutter to improve road safety and encourage walking, by travel planning, or by presenting information in such a way as to encourage choice"
- 2.5 Successful travel planning schemes are noted and used as examples within the White Paper, including Travel Planning for Schools, Cycle Journey Planning and Area-Wide Travel Planning. At Cambridge Science Park an initial investment of £70k brought about £200k benefits and a 5-6% reduction in journey times. The success shown in the White Paper Case Studies should be used to encourage the implementation of other travel planning schemes.

National Planning Policy Framework (2012)

- 2.6 'On the 27th March 2012 the National Planning Policy Framework was published, which sets out the Government's planning policies for England. The new document is a key part of the Government's reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth.

With regards to sustainable travel NPPF states:

Para 29

- 2.7 Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

Para 30

- 2.8 Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

Para 32

- 2.9 All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that will cost-effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

Para 36

- 2.10 A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan.

Barnsley Metropolitan Borough Council Local Transport Plan (2014)

- 2.11 Barnsley, working with the city region partners and other stakeholders, is mobilising a Transport Strategy for Barnsley. The purpose of the transport strategy is 'to identify and prioritise interventions associated with sustainable transport corridors within and beyond the borough to:
- Deliver the Barnsley Economic Strategy
 - Implement the Barnsley Local Plan Accessibility Priorities
 - Fully engage the Barnsley economy in the city regional, national and international economies and
 - Deliver the Barnsley related transport economic growth, social inclusion, health and safety policies and associated investments of the National Planning Policy Framework (paragraphs 29-41) and Sheffield / Leeds City Region sustainable transport strategies.

Policy T1 Accessibility Priorities

- 2.12 Working with city region partners and other stakeholders transport investment will be set out in Transport Strategy programmes focused on development-transport corridors to:
- Improve sustainable transport and circulation in the Accessibility Improvement Zone (AIZ) area particularly between Principal Towns
 - Implement transport network improvements as supported by evidence from modelling, feasibility studies, consultation, surveys, community engagement etc.
 - Facilitate sustainable transport links to and from existing and proposed employment, interchange, community and leisure and tourism facilities in the borough, including provision for car parking and enhancing the non-car role of the A1-M1 link road
 - Promote high quality public transport linking the AIZ to significant places of business, employment and national / international interchange in the Leeds - Sheffield City Region

corridor including neighbouring Wakefield, Kirklees, Doncaster, Sheffield and Rotherham. Improve direct public transport and freight links to London, Manchester, other Core Cities, national / international interchanges and the Humber ports.

Policy T3 New Development and Sustainable Travel

2.13 New development will be expected to:

- Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists
- Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people, and should not provide more than the maximum number of car parking spaces set out in the relevant Supplementary Planning Document
- Provide a transport statement or assessment in line with the thresholds and guidance set out in Department for Transport 'Guidance on Transport Assessments' as published March 2007 (or any subsequent version)
- Provide a travel plan statement or a travel plan in accordance with the thresholds and guidance set out in Department for Transport 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' as published April 2009 (or any subsequent version). Travel plans will be secured through a planning obligation or a planning condition.

2.14 Where levels of accessibility through public transport, cycling and walking are unacceptable, we will expect developers to take action or make financial contributions in accordance with Policy T4.

2.15 If it is not possible or appropriate for the minimum amount of parking for cycles motorbikes, scooters and mopeds to be met on site, the developer must provide, or contribute towards, off-site parking, or improve or provide other forms of travel.

Policy T4 New Development and Highway Improvement

2.16 New development will be expected to be designed and built to provide safe, secure and convenient access for all road users.

2.17 If a development is not suitably served by the existing highway, or would create or add to highway safety problems or the efficiency of the highway for all road users, we will expect developers to take mitigating action or to make a financial contribution to make sure the necessary improvements go ahead. Any contributions will be secured through a planning obligation or planning condition.

Policy T5 New Development and Highway Improvement

2.18 We will reduce the impact of road travel by:

- Developing and implementing robust, evidence based air quality action plans to improve air quality
- Working with our sub regional partners, fleet and freight operators to improve the efficiency of vehicles and goods delivery, and reduce exhaust emissions
- Implementing measures to ensure the current road system is used efficiently.

3.0 Site Location and Existing Situation

Existing Site Description

- 3.1 The application site is a 0.92Ha plot of land off Saunderson Road, Penistone, South Yorkshire, S36 9DU. The site is currently undeveloped agricultural land within residential developments to the north, west and south and a Telephone Exchange building to the east. The site is located in a semi-rural location close to Penistone Market Town within Barnsley Metropolitan Borough Council, with the nearest shops in Market Street approximately 500m south-east of the site. The Site Location is shown in **Figure 3.1** below.

Figure 3.1: Site Location



Source: Google

Local Highway Network

Thurlstone Road (A628)

- 3.2 Thurlstone Road is a local distributor road which becomes part of the major road network (A628) connecting Greater Manchester and South Yorkshire between Manchester Road – Rock Side Road junction in the west and Barnsley Road - Bridge Street junction in the East. This single carriageway provides vehicular access via Saunderson Road to the application site. This is a well-lit road and has a continuous footway along the northern side of the road, with a further footway on the southern side set back behind a highway verge.

Saunderson Road

- 3.3 The application site can be accessed via Saunderson Road which runs perpendicular to Thurlstone Road. There are continuous footways along both sides of the road which is well lit throughout its length. The road is residential with detached houses with off street parking.

3.4 Talbot Road

Talbot Road is a residential road which connects Thurlstone Road in the North and Bridge Street to the east. This becomes an important access road as it connects Thurlstone Road to Market Street where there are banks, post office, retail units, Tesco Superstore and many other amenities. The first section is metalled but in poor condition with no footways. Sections of the road become a single carriageway road which has continuous footways along both sides. It is well-lit with street lights along its length.

Personal Injury Accident Data

- 3.5 We have searched for Personal Injury Accidents for the last 3 years on Crashmap.co.uk. There have been no recorded accidents in the 3 years between 2014 and 2016 along Thurlstone Road in the vicinity of the site.

Traffic Surveys

- 3.6 Peak hour traffic counts were undertaken on 30th March 2017 at the junction of Saunderson Road with the Thurlstone Road (A628). The results of the surveys can be seen in **Figure 1** in **Appendix A**. The junction has been modelled and the results can be seen in **Section 5** of this report.

4.0 Proposed Development

4.1 The proposal is to construct 24 new dwellings consisting of:

- 11 x 3-bed houses
- 13 x 4-bed houses

4.2 The proposed site layout can be found in **Appendix B**.

Access

4.3 The development will have both pedestrian and vehicular access from Saunderson Road. This road is 5.5m wide with footways along both sides of the road.

Sightlines

4.4 Sightlines of 2.4m x 90m sightlines can be achieved in both directions from Saunderson Road. Vegetation may require cutting back to the west of Bent Street, which is within private ownership.

Car Parking

4.5 Car parking spaces will be provided in line with the Barnsley Metropolitan Borough Council's Residential Car Parking Standards. The following parking spaces will be required in accordance with the Standards:

- 11 x 3-bed houses = 2 spaces per house = 22 spaces;
- 13 x 4-bed units = 3 spaces per house = 39 spaces;

Therefore, a minimum of 61 car parking spaces will be provided for the development.

Cycle Parking

4.6 In line with the Barnsley Metropolitan Borough Council's Cycle Parking Standards, provision for cycle storage will be made in the garden sheds or garages.

Servicing and Deliveries

4.7 Servicing will be carried out in line with current arrangements for Penistone with turning areas provided on site for all refuse and delivery vehicles from Saunderson Road. A Large Refuse Vehicle will be able to turn around within the site and get to within 25m of all properties. Refuse and recycling bins will be left at the front of each property on collection day. The swept paths for a service vehicle can be seen on the proposed access arrangements drawing in **Appendix C**.

5.0 Highway Impact

- 5.1 When undertaking a Highways Statement for a new site, it is a normal practice to consider the likely impact of the proposed development in the peak hours, i.e. when the combination of the existing traffic and the proposed is at its highest. We have carried out a trip prediction exercise to show the number of vehicular trips that could be generated by the proposed development.
- 5.2 Within this section, we have analysed the impact which the proposed development vehicular trips could have on the Saunderson Road – Thurlstone Road junction during the peak hours. We have obtained existing AM and PM peak traffic flow / turning movement data for the junction, applied the traffic growth and added the proposed development flows, before using Junctions 9 to model the operational performance of the junction.
- 5.3 We have obtained TRICS data for small, privately owned housing developments at the edge of town centre. The Peak hour trip rates are shown in **Table 5.1** below. The full data is included at **Appendix D**.

Table 5.1 – Trip Rates per Residential Unit

Trip Rates	AM Peak (8:00-9:00)		PM Peak (17:00-18:00)		Total Daily (07:00-19:00)	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Housing	0.158	0.418	0.378	0.209	2.529	2.609

- 5.4 Using the trip rates in **Table 5.1** above, **Table 5.2** below predicts the vehicular trips associated with the proposed residential development.

Table 5.2 - Trips associated with the proposed 24-unit development using TRICS data

Trips	Coverage No	AM Peak Trips		PM Peak Trips		Total Daily Trips	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Housing	24 Units	4	10	9	5	61	63

- 5.5 **Table 5.2** above shows that the proposed residential development is likely to generate a maximum of 14 two-way trips in the AM peak hour, 14 two-way trips in the PM peak hour and 124 two-way trips from 7am to 7pm. These trips are extremely low and they will have an insignificant impact on the local highway, generating just 4 trips every 12-15 minutes during the peak hours.
- 5.6 As stated above, we undertook a junction survey at the Saunderson Road – Thurlstone Road junction. The surveys were carried out on Thursday 30th March 2017. The surveys were carried out between 8am to 9am and 5pm to 6pm. The existing AM and PM peak flows can be found in **Appendix A**.

- 5.7 Using the existing base turning movements, we have calculated the trip distribution for vehicular trips coming towards and leaving from the site during the AM and PM peak hours. The traffic distribution at each junction is shown along with the proposed development flows (in brackets) on the drawing in **Appendix A**.

Proposed Development Flows

- 5.8 A distribution diagram for the site traffic has been produced, which includes the proposed development flows and this is included within **Appendix A**. It can be seen from the proposed trip distribution flow diagrams that a higher proportion of 90% (9 No.) of the trips from the site will turn right in AM peak, whilst 10% (1 No.) will turn left. Similarly, in the PM peak, 60% (3 No.) turn right, whilst 40% (2 No.) will turn left. This is based upon the existing vehicular flows along Thurlstone Road during the peak hours.

Highway Impact

- 5.9 The existing junction Saunderson Road with Thurlstone Road has been modelled using the Junctions 9 modelling software. The AM and PM peak hour analysis, with the development traffic added. The result of the Junctions 9 analysis can be found in **Appendix E** and a summary is shown in **Tables 5.3 and 5.4** below.

Table 5.3: Junctions 9 result of Saunderson Road-Thurlstone Road Junction with Existing Traffic

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
Saunderson Road	0.06	0.06	0.0	0.0
Thurlstone Road (W)	0.01	0.01	0.01	0.01

Table 5.4: Junctions 9 Result of Saunderson Road – Thurlstone Road Junction with Existing plus Development Traffic

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
Saunderson Road	0.09	0.09	0.02	0.02
Thurlstone Road (W)	0.01	0.01	0.02	0.02

- 5.10 As you can see in **Tables 5.3 and 5.4** above, junctions perform very well with no predicted queues or delays in either peak hour. It should be noted that the junctions have been modelled using all predicted development traffic as a “worst case” scenario.

6.0 Sustainable Transport

Pedestrians

- 6.1 Pedestrians will be able to access the site via Saunderson Road. There is a continuous footway along both sides of the Saunderson Road.
- 6.2 For pedestrians without mobility impairment, the Institution of Highways and Transportation (IHT) in their publication, 'Guidelines for Providing for Journeys on Foot 2000' made a series of suggested acceptable walking distances in relation to some common facilities. Table 3 below sets out suggested acceptable walking distances in relation to some common facilities. More recent guidance in Manual for Streets states that "walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' walk (up to about 800m) walking distance of residential areas".

Table 6.1 – Suggested Acceptable Walking Distances

	Town Centres, Retail (metres)	Employment, School, Tourism (metres)	Elsewhere (metres)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Shopping and Amenities

- 6.3 Penistone Market Street is situated to the south of the proposed development at approximately 1km distance away. Market Street provides a range of shopping opportunities, including fashion, banking, home and food, post office, hair dressers, bowling club, Tesco Superstore, restaurant, cycle shop and other amenities. Penistone Swimming Pool is about 70m away from the proposed development along Thurlstone Road. Cycle Penistone C.I.C, specialises in bike hire and organising events and activities are just 400m away. Penistone Paramount Cinema, a community cinema and theatre, organises live shows and monthly organ concerts.

Schools

- 6.4 There are many schools located within 2.0km of the proposed development site and they are listed below:
- St John CE Primary School
 - Saint John the Baptist Primary School
 - Busy Bees Penistone
 - Daisy Chains Pre-school
 - Thurlstone Primary School
 - Penistone Grammer School

Cyclists

- 6.5 Previous Planning Policy Guidance 13 (PPG13) defined a distance of 5,000m, within which 'cycling can reasonably be considered as an alternative to travelling by private car'. On the basis of a relatively slow cycling speed of 15kph, this distance could be achieved in 20 minutes. Within this time, cyclists could reach places such as Thurlstone, Millhouse Green, Barnsley Trout Club, Springvale, Cubley, Royd Moor, Catshaw, Hoylandswaine etc.
- 6.6 Penistone to Dunford Bridge route which forms a part of the Trans Pennine Trail (TPT) starts the route in the historic market town of Penistone, at the purpose built Trans Pennine Train car park which is located at the rear of Tesco's within walking distance to the proposed development. The Trans Pennine Trail (TPT) is an exciting route for walkers, cyclists and horse riders. This trail is mapped and signed, mainly traffic free and is surprisingly level considering the dramatic scenery along the way. Easy gradients and surfaced paths make many sections suitable for families, gentle exercise and people using wheelchairs and pushchairs.

Buses

- 6.7 The nearest bus stops are at the Saunderson Road junction with the A628. The bus numbers 20, 21, 21a, 23, 23a and 29 serve this area and are operated by Stagecoach. Live bus times, bus stops nearby, planning a journey, tickets and timetables can be accessed at www.stagecoachbus.com.

Table 6.2 – Bus Service Summary

Bus Service	Route	Start -End Timings with Daily Frequency (Monday - Friday)	Start -End Timings with Daily Frequency (Saturday)	Start -End Timings with Daily Frequency (Sunday)
20	Barnsley, Interchange - Cubley	06:00 – 16:25 Every 60 minutes	08:15 – 17:25 Every 60 minutes	No service
21/21a	Barnsley, Interchange – Millhouse Green	06:40 – 17:50 Every 60 minutes	07:45 – 21:10 Every 60 minutes	09:10 – 23:10 Every 60 minutes
23/23a	Millhouse Green - Stocksbridge	10:32 – 15:36 Every 2 hours	10:32 – 15:34 Every 2 hours	No service
29	Sheffield, Interchange – Holmfirth Bus Station	08:25 – 17:30 Every 3 hours	08:31 – 17:30 Every 3 hours	08:30 – 21:30 Every 2 hours

Trains

- 6.8 The closest railway station to the proposed development is Penistone Train Station which is about 1.2km away. This station is serviced by Northern Railway. There are services to Huddersfield and Sheffield via Barnsley. Live arrivals / departures, purchase of tickets, timetable etc. can be accessed at <http://www.nationalrail.co.uk/stations/PNS/details.html>.

Table 6.3: First and Last Departure timings from Penistone Train Station

Northern Railway	Start -End Timings with Daily Frequency (Monday - Saturday)	Start -End Timings with Daily Frequency (Sunday)
Penistone - Huddersfield	06:18 – 23:25 Every 60 minutes	10:23 – 20:23 Every 60 minutes
Penistone - Sheffield	06:42 – 22:49 Every 60 minutes	09:50 – 19:50 Every 2 hours

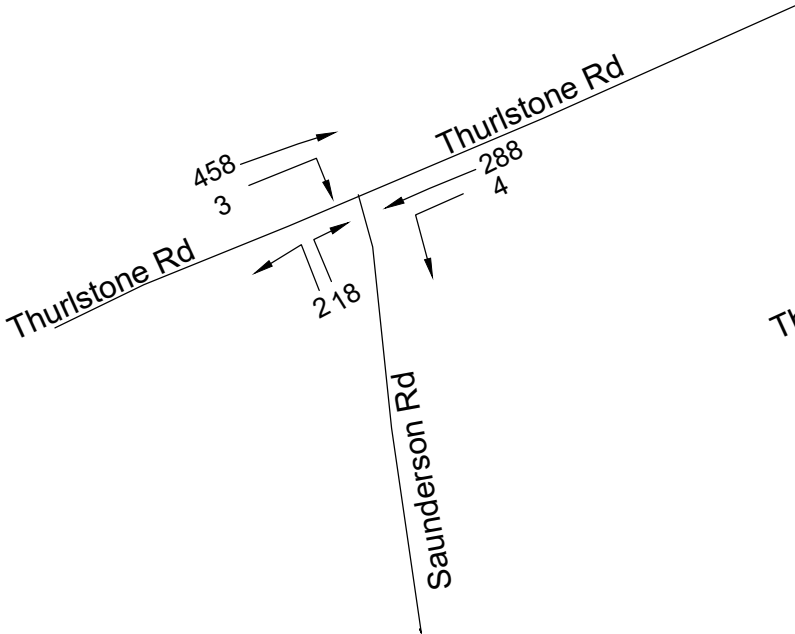
7.0 Summary & Conclusions

- 7.1 Patrick Parsons Ltd (PPL) was commissioned by Orion Homes Limited (OHL), to undertake a Highways Statement, to accompany a Planning Application for the proposed development at Penistone, West Yorkshire S36 9DU. The planning application is for the erection of 24 new residential houses.
- 7.2 The residential units would generate an extremely low number of vehicle trips, a maximum of 14 two-way trips both in AM and PM peak hours and so will have an insignificant impact on the local highway network.
- 7.3 The study has shown that the junction performs very well with no predicted queues or delays in either peak hour and can easily accommodate the proposed flows.
- 7.4 Car and cycle parking spaces will be provided, in line with Barnsley Metropolitan Borough Council Parking Standards.
- 7.5 The study has shown that the site is in a sustainable location, maximising the potential for residents to use cycling/walking as an alternative to the use of private vehicles.
- 7.6 In summary, the study concludes that the proposed development can be accommodated without detriment to vehicular flows and road safety on the surrounding highway network.

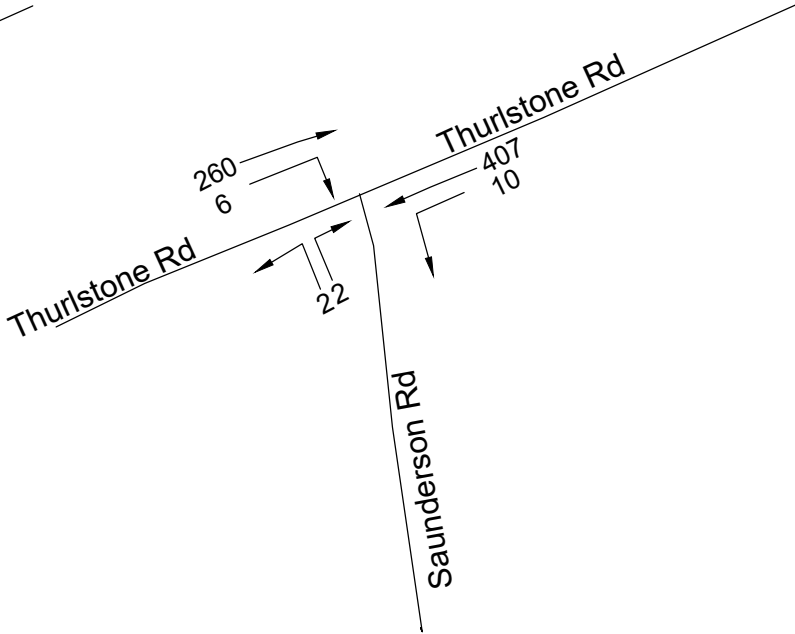
Appendix A

Turning Movement Diagrams

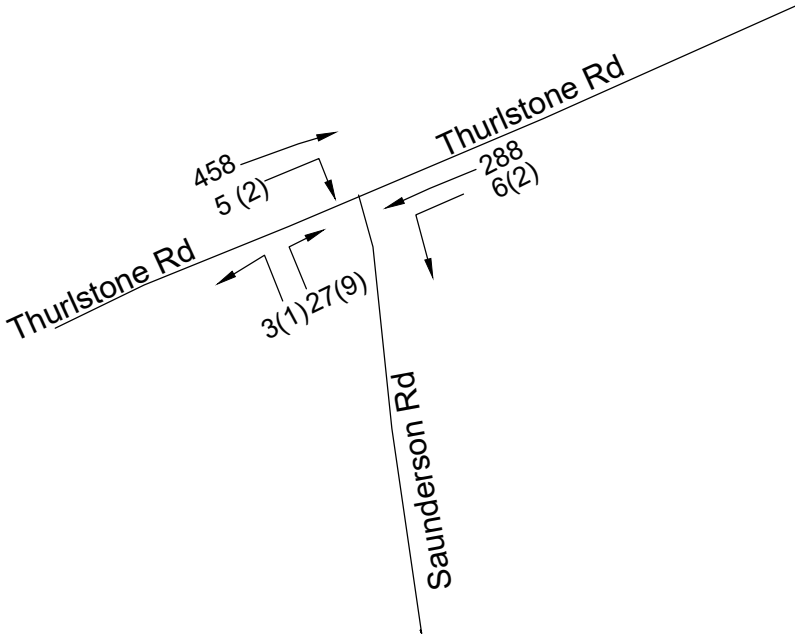
Existing AM Peak (08:00-09:00)



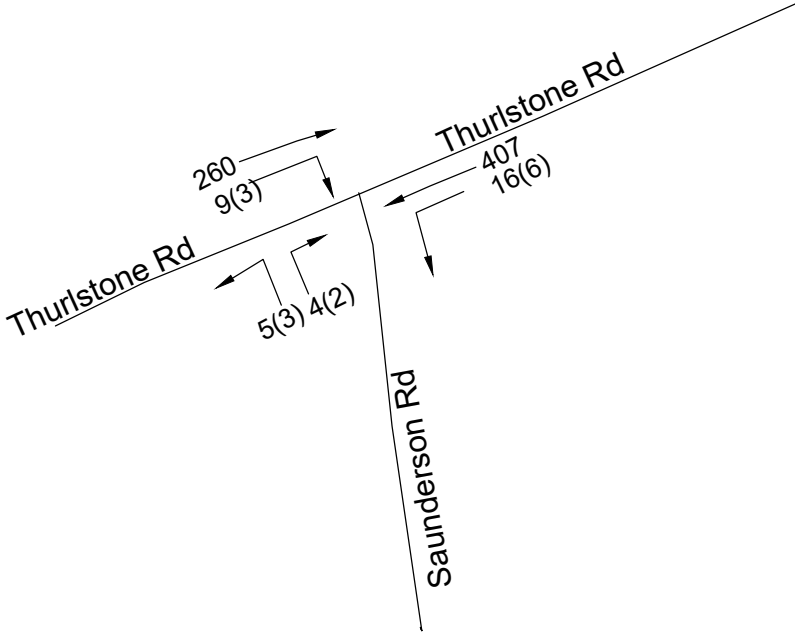
Existing PM Peak (17:00-18:00)



Proposed AM Peak (08:00-09:00)



Proposed PM Peak (17:00-18:00)



A	FIRST ISSUE	RBM	DB	03.04.2017
Rev	Description	Drw	Ckd	Date



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Project:

Land off Saunderson Road, Penistone

Title:

Turning Movement Diagrams

Date:	April 2017	Drawn:	RBM	Checked:	DB	
Scale:	NTS @ A3	Status:	Preliminary			
Drawing No:	TSP/PPL/P3246/02				Rev:	A

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NOT FOR CONSTRUCTION

Appendix B

Proposed Site Layout

SITE | LAYOUT PLAN



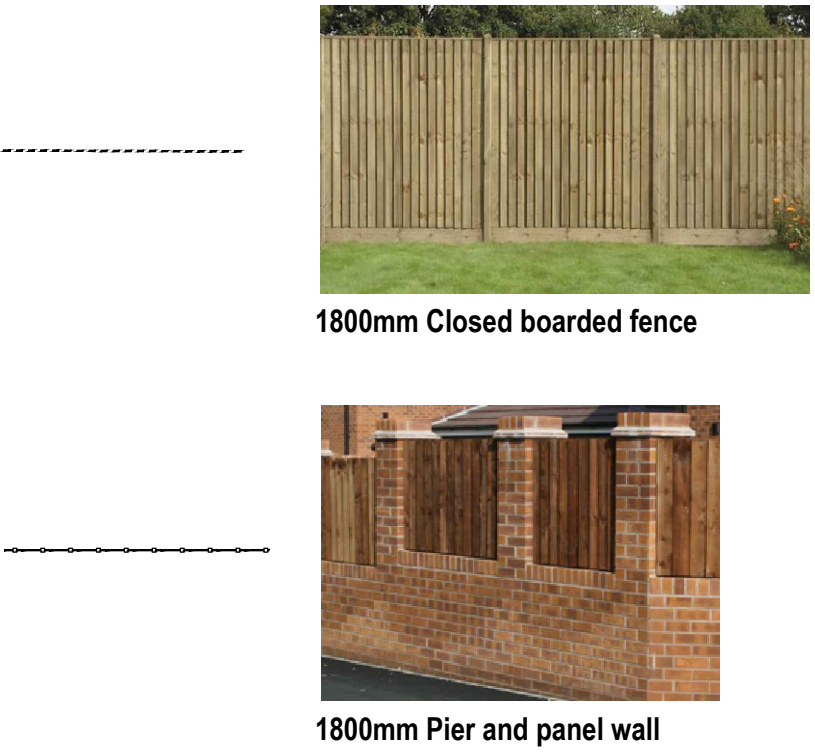
Saunderson Road, Penistone
Orion Homes

Housetype	number	sqft	total
Preston	5	873	4365
Chichester	5	1161	5805
Salisbury	4	1377	5508
Dunstanburgh	3	1073	3219
Plymouth	2	1418	2836
Exeter	2	1407	2814
Arlington	3	968	2904

Site Total	24	27451
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Orion site area 0.92Ha 2.28 Acres
Density 26dph
coverage 12,040 sqft per acre

Boundary Treatment Key:



Revision notes:		
Rev:	Date:	Notes:
A	14.02.17	Private drive amended in front of plots 5 - 12, drives widen, visitor parking added & plot 13 amended to avoid using Bent Street.
B	27.02.17	Accommodation schedule added.
C	06.04.17	85msq Sewer Easement added to Site - FS/GC
D	13.11.17	Amended to suit comments from urban design and TL - CD
E	08.01.18	Plots 2, 3, 15 to 19, 22 & 23 amended - CD
F	04.06.18	Aerial image added - CD

Revision notes:		
Rev:	Date:	Notes:
..	..	..

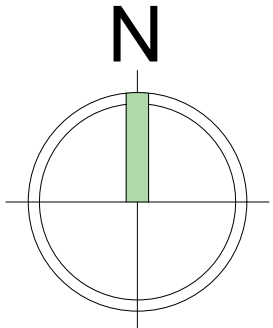
Revision notes:		
Rev:	Date:	Notes:
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Date:	13.02.17
Project:	Saunderson Road, Penistone
Scale @ A1:	1:500
Drawn By:	CD
Drawing Number:	9295-100
Revision:	F



SO GOOD TO COME HOME TO

Unit 5, Benton Office Park, Bennett Avenue,
Horbury, Wakefield, WF4 5RA, Tel: 01924 831030



Appendix C

TRICS Data Output

Trip Rate

03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED

[Trip Rate](#)
[List Sites](#)
[Map](#)
[Print](#)
[Trip Rate Graph](#)
[Copy Data](#)
[Forum](#)
[Library](#)
[Reports](#)
[Good Practice Guide](#)
[Settings](#)
[Help](#)
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PROGRESS CHECKLIST



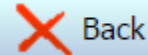
land use & trip rate selection



primary filtering



secondary filtering

[filtering summary](#)
[site selection](#)
[survey selection](#)
[calculate trip rate](#)
[rank order list](#)

[Back](#)
[Cross Test](#)

[Key Period Trip Rates](#)
[Peak Hour Analysis](#)
[Enhanced Site List](#)

VEHICLES

Survey Start/End: 07:00-19:00

Trip rate parameter range available:

6 - 98 (units:)

Estimate TRIP rates



Weighting factors can affect trip rates. For further information please review section 13 of the Good Practice Guide

[Descriptive Note on TRICS for Data Recipients](#)

TRIP RATE VALUE PER 1 DWELLS	ARRIVALS			DEPARTURES			TOTALS		
	Total rate: 2.529 Peak: 17:00-18:00			Total rate: 2.609 Peak: 08:00-09:00			Total rate: 5.138 Peak: 17:00-18:00		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	63	39	0.063	63	39	0.244	63	39	0.307
08:00-09:00	63	39	0.158	63	39	0.418	63	39	0.576
09:00-10:00	63	39	0.169	63	39	0.237	63	39	0.406
10:00-11:00	63	39	0.140	63	39	0.151	63	39	0.291
11:00-12:00	63	39	0.157	63	39	0.171	63	39	0.328
12:00-13:00	63	39	0.181	63	39	0.173	63	39	0.354
13:00-14:00	63	39	0.205	63	39	0.207	63	39	0.412
14:00-15:00	63	39	0.203	63	39	0.214	63	39	0.417
15:00-16:00	63	39	0.264	63	39	0.199	63	39	0.463
16:00-17:00	63	39	0.321	63	39	0.208	63	39	0.529
17:00-18:00	63	39	0.378	63	39	0.209	63	39	0.587
18:00-19:00	63	39	0.290	63	39	0.178	63	39	0.468
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									

TRIP RATE MODE

☒ Vehicles


63 Surveys

☐ PSVs


63 Surveys

☐ OGVs


63 Surveys

☐ Cyclists


63 Surveys

☐ Taxis


63 Surveys

Cars

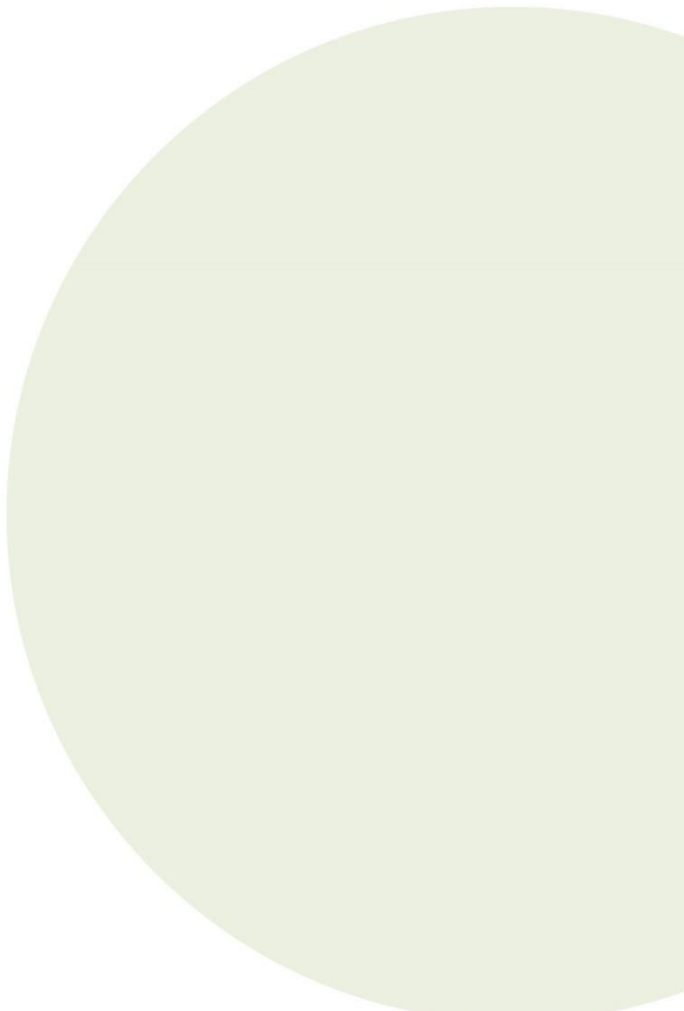


Cannot calculate (see notes)

LGVs



Cannot calculate (see notes)



London – Twickenham

London – Central

Guildford

Birmingham

Chester

Manchester

Huddersfield

Newcastle upon Tyne

Glasgow

Dubai

Sydney

