

PROJECT No 1216

**PROPOSED RESIDENTIAL DEVELOPMENT
LAND SOUTH OF NEW SMITHY AVENUE,
THURLSTONE**

TRANSPORT STATEMENT
DECEMBER 2016



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Quality Management

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1 INTRODUCTION

- 1.1.1 Paragon Highway Consultants have been appointed to prepare this Transport Statement relating to the proposed residential development on the site south of New Smithy Avenue, Thurlstone. Appendix A shows the site location in relation to the local highway network.
- 1.1.2 The proposals are for outline planning permission for 21 dwellings, which will all be served from a continuation of New Smithy Avenue into the site. Drainage, street lighting, footways, and carriageway will be provided in accordance with the Councils current guidance contained within the South Yorkshire Residential Design Guide.
- 1.1.3 This Transport Statement considers the traffic impact and transport sustainability provision associated with the proposed development. This statement demonstrates that the proposals should be acceptable for planning approval purposes.

2 EXISTING CONDITIONS

2.1 Site Description

- 2.1.1 The application site consists of 0.9 hectares of vacant green field land located within the centre of the village of Thurlstone. The site is bounded by residential properties off New Smithy Avenue and New Smithy Drive to the north, residential properties off High Bank and Towngate to the south and the east respectively, and a public right of way and agricultural land located to the west.



Photograph 1 – Application Site

- 2.1.2 The site contains a gated access directly off the end of New Smithy Avenue, which has been used by vehicles accessing/ maintaining the site and is around 3.2m in width. The site also benefits from a pedestrian gate located in the southeast corner which serves the adjoining White House Farm.



Photograph 2 – Existing Site Access

- 2.1.3 The site contains a mix of boundary treatment including stone walling along the north, east, and south sides, and a boundary fence along the west side separating the site from the public right of way.

2.2 Local Highway Network

- 2.2.1 The site will be accessed via a continuation of New Smithy Avenue which is a residential access road serving a number of residential properties and is subsequently subject to very low traffic volumes throughout the day. New Smithy Avenue is a two way single carriageway road with footways provided on both sides. Its carriageway is generally around 4.8m in width with 1.9m wide footways provided on both sides. The geometry of the road appears suitable for its day to day use and the carriageway complies with the conventional street requirements provided within the South Yorkshire Residential Design Guide for roads with design speeds of 20mph or less (as described within paragraph B.2.1.6 within the guide). The footways are generally in good condition with the carriageway in fair condition containing some isolated areas containing pot holes and surface cracking.
- 2.2.2 New Smithy Avenue contains street lighting to residential road standards and is subject to a 30mph speed limit, although given the layout of the road with a bend located at the New Smithy Drive junction that acts as a traffic calming feature, the actual traffic speeds are somewhat lower and envisaged to be no greater than 20mph.
- 2.2.3 New Smithy Avenue does not currently contain internal turning to accommodate a large refuse vehicle. These large vehicles travel along the full length of New Smithy Drive to access the turning head to turn around. Similarly, New Smithy Avenue terminates adjacent to the site access with no turning provision.

- 2.2.4 It is noted that the majority of residential properties served from New Smithy Avenue have off street parking facilities in the form of individual drives or in some cases communal garage courts, although some on street parking does occur, this does not impede through traffic such as refuse collection vehicles. It should be noted that there is ample off street parking available for residents along New Smithy Avenue with the first 6 dwellings along the north side of New Smithy Avenue containing frontage off street parking, and 3 out of the first 6 dwellings along the south side of the road also containing off street frontage parking. Between the site access and Towngate there are around 16 dwellings that do not contain off street frontage parking, however, there is a communal parking/ garage court located on the south side of New Smithy Avenue that can accommodate at least 19 vehicles (18 garages and 1 void), and a second parking court located on the north side of New Smithy Drive that accommodates 10 vehicles (9 garages and 1 void). These two communal parking areas provide at least 29 off street parking spaces which could be used by residents of New Smithy Avenue subject to agreement with Berneslai Homes. It should be noted that information obtained from Berneslai Homes identified that 23 of the 29 available off street parking spaces are rented by residents of New Smithy Avenue and New Smithy Drive, and therefore these communal garage courts provide residents with a feasible alternative to parking on street for those 16 dwellings that do not contain off street frontage parking. It is envisaged that should traffic volumes increase along this road as a result of the development then residents are more likely to utilise their off street parking provision which should reduce the number of vehicles parked on street.



Photograph 1 – New Smithy Avenue

2.2.5 New Smithy Avenue joins with Towngate via a simple priority junction, visibility at this junction meets the SSD requirements within Manual for Streets for 30mph speed limit roads. Towngate is primarily a residential access road that also provides access to a public house and access to the local primary school. It provides direct access to residential properties and is around 230m in length connecting to the A628 Manchester Road to the south. Given the number of properties served Towngate is subject to light traffic volumes throughout the day.

2.2.6 Towngate is a two-way single carriageway road with footways provided on both sides within the vicinity of the New Smithy Avenue junction, although there is a section to the north and short section to the south where a footway is provided on one side. The carriageway ranges between 4.9m and 7.6m in width which at its narrowest point at the pinch point adjacent to the public house provides sufficient carriageway space for a HGV to pass a car. These carriageway widths exceed the conventional street geometry requirements within the South Yorkshire Residential Design Guide. Where footways are provided these range between 1.5m and 1.8m in width within the vicinity of the New Smithy Avenue junction.



Photograph 2 – Towngate

2.2.7 Towngate joins the A628 Manchester Road via a simple priority junction. The junction meets Manchester Road at an acute angle however, cars can easily make the left turn out of Towngate onto Manchester Road without encroaching onto the westbound traffic lane along Manchester Road as demonstrated on the plan at Appendix D. Visibility splays meet the requirements within current Government Guidance contained within Manual for Street and Manual for Streets 2 as splays of 2.4m x 43m can be achieved on both sides of the junction. Manchester Road is a two way single carriageway road with footways provided on both sides. Both the carriageway and footways appear to be suitable for their day to day use in terms of width, layout, and condition. It should be noted that based on the accident study there have been no reported injury accidents at this junction. Therefore, the junction appears to operate safely. The road contains street lighting to main road standards and is subject to a 30 mph speed limit enforced by speed cameras. It should also be noted that there is some on street parking along Manchester Road which also acts as a traffic calming feature reducing traffic speeds to a suitable level.



Photograph 3 – Manchester Road

- 2.2.8 There is a public right of way that exist along the west side boundary of the site that connects High Bank to the south with Westfield Avenue and Westfield Lane to the north (public footpath no. 37). It provides access to the wider public footpath network, and also a playground located around 50m to the northwest of the site. The section of public footpath to the immediate west of the site contains a flagged surface with some street lighting.



Photograph 4 – Public Right of Way

- 2.2.9 The site is located within easy reach of the bus services available on Manchester Road. Further details of the bus services available from the local fare stages are shown in section 2.4.

2.3 Road Traffic Accidents

- 2.3.1 The personal injury accident records for the five year period (between January 2011 and December 2015) have been obtained from Crashmap.co.uk, and included the majority of roads within Thurlstone including New Smithy Avenue, Towngate, and the A628 Manchester Road. The accident data is included at Appendix B.
- 2.3.2 Within the study area there have been 3 reported injury accidents, which were all classified as slight, with two located along the A628 Manchester Road and one at its junction with Rock Side Road. One collision occurred during 2011, and the remaining two collisions occurred in 2013.
- 2.3.3 The collision in 2011 occurred at the Rock Side Road/ Manchester Road junction during the daylight hours with wet road surface conditions. This collision involved 2 vehicles, with the first vehicle emerging from the Rock Side Road junction turning right into the path of an oncoming car.

- 2.3.4 The first collision in 2013 occurred in February, some 80m east of the Towngate junction on Manchester Road. This collision occurred during the hours of darkness and fine weather conditions, and involved a vehicle colliding into stationary vehicles. The second collision in 2013 occurred in March near to the Manchester Road/ High Bank junction (located greater than 20m from the junction) during the daylight hours and snow, and appears to be a loss of control type collision due to the snow and involved only one vehicle.
- 2.3.5 There are no significant clusters of incidents and it would appear that these incidents are disparate events with no apparent common causation factors or trends and occurred at different times of the day and locations. It should be noted that there are no injury reported accidents at the Towngate/ Manchester Road junction, or along Towngate and New Smithy Avenue. Therefore, the local highway network (including the Towngate/ Manchester Road junction) appears to operate safely.
- 2.3.6 The injury accident record in the vicinity of the site does not indicate a road safety problem or any trends of any significance which would warrant treatment or be a cause for concern as a result of the slight change in peak hour flows as a result of the development proposals.

2.4 Transport Sustainability

- 2.4.1 The site is in a sustainable location within a short walking distance of bus services, and the many local services and amenities within Thurlstone. The site is within cycling distance of the many commercial, employment, retail, and leisure facilities within Penistone Town Centre, and the settlements of Hoylandswaine, Oxspring, Snowden Hill, Langsett, Ingbirchworth, Highflatts, Upper Denby and Gunthwaite.
- 2.4.2 The National Planning Policy Framework (NPPF) was published on 27th March 2012. This document superseded a number of national Planning Policy Statements and Guidance Notes (PPS's and PPG's). The national transport policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF.

- 2.4.3 However the guidance within PPG 13 is still useful as a reference until such time as the Local Planning Authority publishes their specific transport policies.
- 2.4.4 Paragraph 35 of the NPPF states that “developments should be located and designed where practical to:
- accommodate the efficient delivery of goods and supplies;
 - give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
 - create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
 - incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
 - consider the needs of people with disabilities by all modes of transport.
- 2.4.5 The catchment areas for the preferred maximum walking distance of 2km and cycling distance of 5km are shown on the plan at Appendix C.
- 2.4.6 New Smithy Avenue and Towngate provide a good quality link to the nearby bus services on Manchester Road (A628) located 305m from the site and to further links to the nearby town of Penistone located 1.4km east of the application site. Within walking distance of the site there are many retail establishments including a large supermarket, essential services, employment, and local businesses located within Penistone Town Centre. There are also local bar/ restaurants and hot and cold food establishments within walking distance of the site. Primary health care facilities exist within this catchment including a GP surgery, a pharmacy, and an optician. There are also primary and secondary education establishments within this catchment including a primary school (Thurlstone Primary School) within proximity to the site.
- 2.4.7 The local footway network is considered suitable in terms of width, construction, and lighting. The footways contain dropped crossing facilities at junctions in the majority of cases.

2.4.8 With regards to cycling, PPG 13: Transport stated that “Cycling also has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport”. The plan at Appendix C also shows the 5km cycle catchment area from the site. The whole of Penistone Town Centre is contained within this catchment containing leisure, employment, retail, and essential services. The settlements of High Flatts, Gunthwaite, Hoylandswaine, Oxspring, Snowden Hill, Langsett and Ingbirchworth are also located within the cycle catchment area.

2.4.9 The Trans Pennine Trail can be easily accessed from the site located around 750m to the Southeast of the site off Manchester Road. The Trans Pennine Trail is mainly a traffic free cycle route, which is mapped and signed and can be used by walkers, cyclists, and horse riders, providing the opportunity for the potential residents of the site to use the Trans Pennine Trail for commuting or for leisure purposes. The Trans Pennine Trail allows residents to access places nearby such as Penistone and Barnsley.

2.4.10 Within cycling distance of the site is Penistone railway station, which contains sheltered and secure cycle storage facilities and also cycle hire services, allowing for multi modal journeys by residents and visitors of the proposed development.

2.4.11 The nearest bus stops are located approximately 305m south of the site and have the benefit of timetable information. The table below identifies the bus services that use the nearest stops.

Service No	From – To	Frequency Mon – Sat	Late evenings and Sundays
23A	Crow Edge – Barnsley	2 hours	2 hours
25	Holmfirth – Penistone	2 hours	2 hours
92	Crow Edge – Barnsley	1 hour	1 hour
300	Penistone – Millhouse Green (circle)	1 hour	No service

Table 1: Bus Services

2.4.12 As can be identified from the above table, there are hourly services to Penistone and the Principal Town of Barnsley. These services call at places such as Silkstone and Hoylandswaine. There are also two, 2 hour services one between Crow Edge and Barnsley and the other between Holmfirth and Penistone, providing access to Stocksbridge, Deepcar, Dunford Bridge and also Harden.

- 2.4.13 In addition to the above, the Dial-a-Ride bus service operates in this area providing community transport and a pre-bookable door to door bus service providing access to anywhere within the Barnsley District.
- 2.4.14 The bus services are therefore considered to be of a high standard and will provide an alternative to the private car in line with current Government guidelines.
- 2.4.15 The nearest railway station is located at Penistone approximately 2.3km east of the application site. This railway station provides services every hour to Sheffield, Meadowhall, Chapeltown, Elsecar, Wombwell, Barnsley, Dodworth, Silkstone Common, Denby Dale, Shepley, Stocks Moor, Brockholes, Honley, Berry Brow, Lockwood and Huddersfield. Penistone Railway Station contains cycle storage facilities allowing for multimodal journeys by the potential residents and visitors to the site.
- 2.4.16 In summary, the site is considered to be in a very sustainable location within walking distance of the local services and amenities within Thurlstone and also the nearby town of Penistone. Primary health and education facilities exist within walking distance of the site. Within the cycle catchment area is the whole of Penistone, Hoylandswaine, Oxspring, Snowden Hill, Langsett, Ingbirchworth, Highflatts, Upper Denby and Gunthwaite. These areas provide extensive residential, commercial, employment, retail, and leisure facilities. Therefore, the site conforms to current Government directives for ensuring developments are located in sustainable locations.

3 THE DEVELOPMENT PROPOSALS

3.1 Proposed Development

- 3.1.1 The proposals are for outline planning permission for 21 dwellings. All of the proposed dwellings are to be served from a new internal access road.
- 3.1.2 The internal road layout, drainage, street lighting and footways will be provided in accordance with the South Yorkshire Residential Design Guide.
- 3.1.3 Secure cycle storage facilities will be provided within the site, the type and location is to be agreed with the LPA.

3.2 Vehicular Access

- 3.2.1 Vehicular access to the development will be provided via a continuation of New Smithy Avenue into the site, with footways provided on both sides. New Smithy Avenue and the proposed internal access road meets the geometry requirements within the South Yorkshire Residential Design Guide.
- 3.2.2 New Smithy Avenue provides a suitable connection onto the wider network, with suitable visibility splays provided at its junction with Towngate, and at the Towngate/ A628 Manchester Road junction, with 2.4m x 43m visibility splays provided on both sides. Given that suitable visibility splays are provided and that this junction has a good road safety record, no improvements are required to the junction as a result of the proposed development.
- 3.2.3 The internal road will take the form of a traditional estate road, and will travel in a south and then southwest direction into the site. The internal road network will fully conform to the South Yorkshire Residential Design Guide.
- 3.2.4 Considering the road traffic accident study in section 2.3 of this report, the proposed vehicle access arrangements including New Smithy Avenue, Towngate, and the A628 Manchester Road are considered to be suitable.

3.3 Parking Provision

- 3.3.1 The level of parking provision on the site will be in accordance with Barnsley Council's Parking Standards given within the LDF at a ratio of at least 1 space per dwelling for those with 1 or 2 bedrooms, and 2 spaces per dwelling with 3 or more bedrooms.

3.4 Pedestrian and Cycle Provision

- 3.4.1 Pedestrian routes through the site will follow natural desire lines and lead pedestrians to proposed crossing facilities.
- 3.4.2 It is proposed to provide a pedestrian link from the internal road network to the existing public right of way along the west side of the site (public footpath number 37).
- 3.4.3 Secure cycle storage facilities will be provided within the site, the type and location is to be agreed with the LPA.
- 3.4.4 New Smithy Avenue, Towngate and Manchester Road provide suitable and convenient access to local schools, services and amenities within Thurlstone, Millhouse Green, and Penistone.

3.5 Servicing

- 3.5.1 Service vehicles will use the same access to the site as all other traffic. A turning head is to be provided to allow such vehicles (such as a large refuse vehicle) to enter and leave the site in a forward gear, and also providing an additional turning facility for all users of New Smithy Avenue.
- 3.5.2 The servicing requirements for the proposed development can be adequately catered for.

4 TRAFFIC IMPACT

4.1 Development Traffic

4.1.1 This application is for outline planning permission for 21 dwellings. To determine the anticipated traffic generation from the new development of 21 new dwellings, it has been necessary to interrogate data from the national TRICS database.

4.1.2 Table 2 provides the typical peak hour trip rates (morning peak 0800-0900 hours and evening peak 1700-1800 hours) and likely traffic generation of the proposed new dwellings. The TRICS data is shown at Appendix E.

	Morning Peak			Evening Peak		
	ARRIVE	DEPART	TOTAL	ARRIVE	DEPART	TOTAL
Trip Rate	0.151	0.416	0.567	0.390	0.225	0.615
Generated Trips	3	9	12	8	5	13

Table 2 – Predicted Development Trip Rates & Generation

4.1.3 As can be seen from the above table, the proposed development is anticipated to generate approximately 12 trips during the morning peak, and 13 trips during the evening peak hours. It is estimated that the development would generate a daily trip rate of around 110 vehicle movements.

4.1.4 Thurlston Primary School has recently obtained planning approval to extend the school from 112 pupils to 175 pupils by the year 2022 (planning application number 2015/1168). Based on the South Yorkshire LTP targets, the school would expect at least 25% of pupils to travel by car. Therefore, the extension to the school could generate a further 30 trips (two way) during each of the school opening and closing times. It should be noted that vehicular traffic would only access the school via Towngate and its junction with Manchester Road, and that no objections from the Councils Highways Officers were made to the development and the additional traffic this would bring.

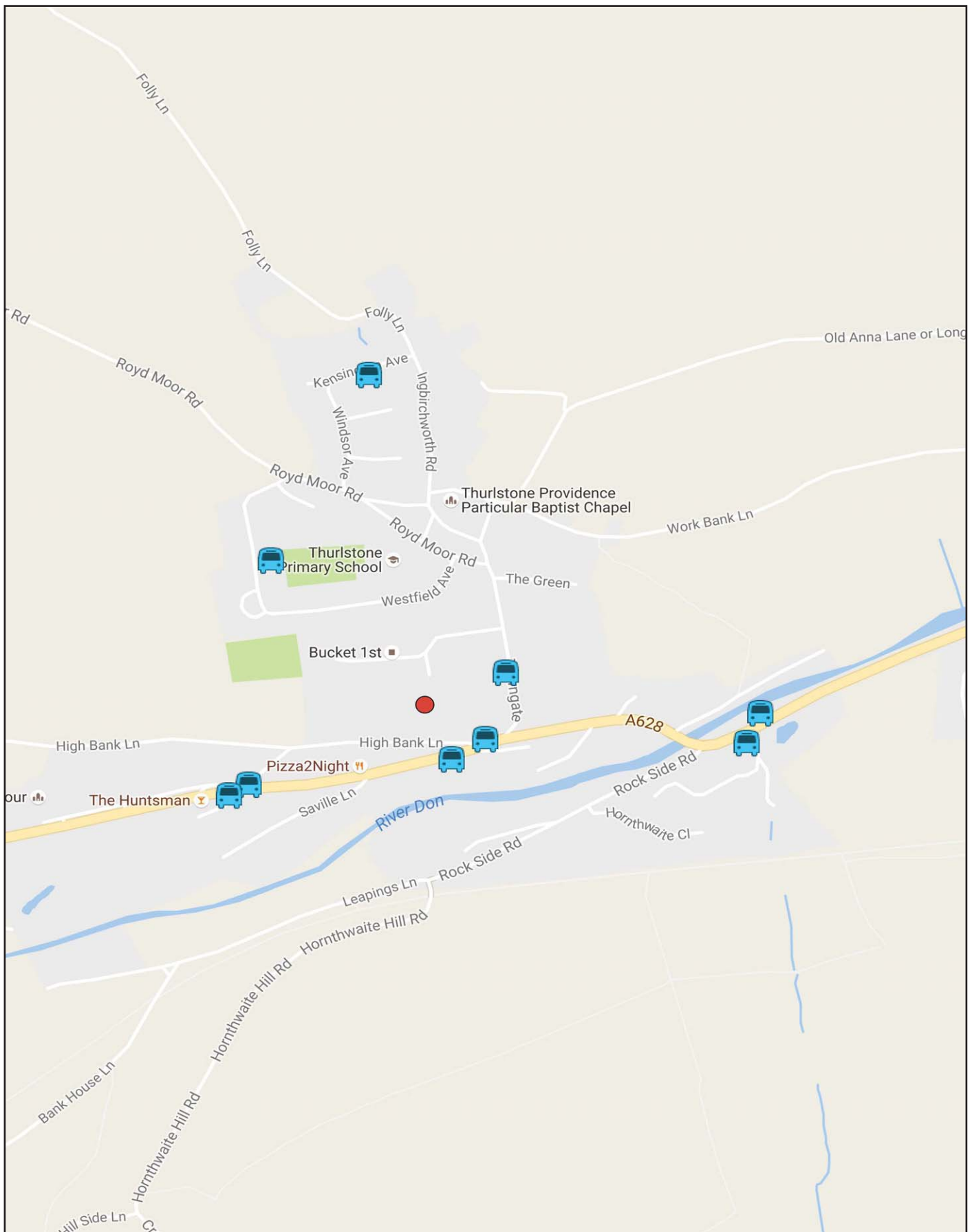
- 4.1.5 New Smithy Avenue conforms to the road geometry requirements within the South Yorkshire Residential Design Guide. Suitable visibility splays are provided at both the New Smithy Avenue/ Towngate junction, and at the Towngate/ Manchester Road junction as splays of 2.4m x 43m can be provided on both sides along Manchester Road in accordance with Manual for Streets. It has also been demonstrated that despite this junction containing an acute angle to the A628, a car can easily turn left without impacting the A628 westbound traffic lane. It is therefore considered that even with the additional traffic associated with the extension to the nearby primary school, the proposed site access from the immediate and wider network will provide a safe arrangement and will not cause any delays to through traffic, given the relatively small increase in traffic on to the local network.
- 4.1.6 It should be noted that at present there are no turning facilities located on New Smithy Avenue, as a consequence all vehicles have to travel to the end of New Smithy Drive to access the turning head before proceeding back in the opposite direction. The lack of a turning head at the end of New Smithy Avenue adjacent to the site access can also lead to vehicles having to reverse and turn at the New Smithy Avenue/ New Smithy Drive junction, which provides a risk of a reversing vehicle colliding with a vulnerable road user. The proposals will provide an additional turning facility at the end of the proposed internal access road, which could be utilised by New Smithy Avenue traffic, thus reducing large vehicle traffic movements along New Smithy Drive and preventing lengthy reversing manoeuvres, which can only have a positive impact on road safety.
- 4.1.7 The injury accident record along New Smithy Avenue, Towngate, and the A628 Manchester Road (including the junction between Towngate and Manchester Road) does not indicate a road safety problem which would warrant treatment or be a cause for concern as a result of the increase peak hour flows as a result of the development proposals.
- 4.1.8 It is considered that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network. Therefore the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.

5 CONCLUSIONS

- 5.1.1 This Transport Statement presents the existing traffic characteristics and infrastructure in the surrounding area of the proposed development. The development proposals are then presented. The traffic impact of the development of 21 new dwellings is also assessed, and compares the traffic generations, highway safety and access proposals with the existing situation. Accident records were also obtained, and revealed that there doesn't appear to be a road safety problem which would warrant treatment or be a cause for concern as a result of the increase peak hour flows as a result of the development proposals.
- 5.1.2 The site is considered to be in a very sustainable location within walking distance of the local services and amenities within Thurlstone and also the nearby town of Penistone. Primary health and education facilities exist within walking distance of the site. Within the cycle catchment area is the whole of Penistone, Hoylandswaine, Oxspring, Snowden Hill, Langsett, Ingbirchworth, Highflatts, Upper Denby and Gunthwaite. These areas provide established residential, commercial, employment, retail, and leisure facilities. Therefore, the site conforms to current Government directives for ensuring developments are located in sustainable locations.
- 5.1.3 It is considered that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network. Therefore the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network. It is therefore concluded that the development is considered acceptable, and that there are no highway safety or efficiency reasons why planning consent for the proposed development should not be granted.

Appendix A

Location plan



 SITE LOCATION

 BUS STOP LOCATION

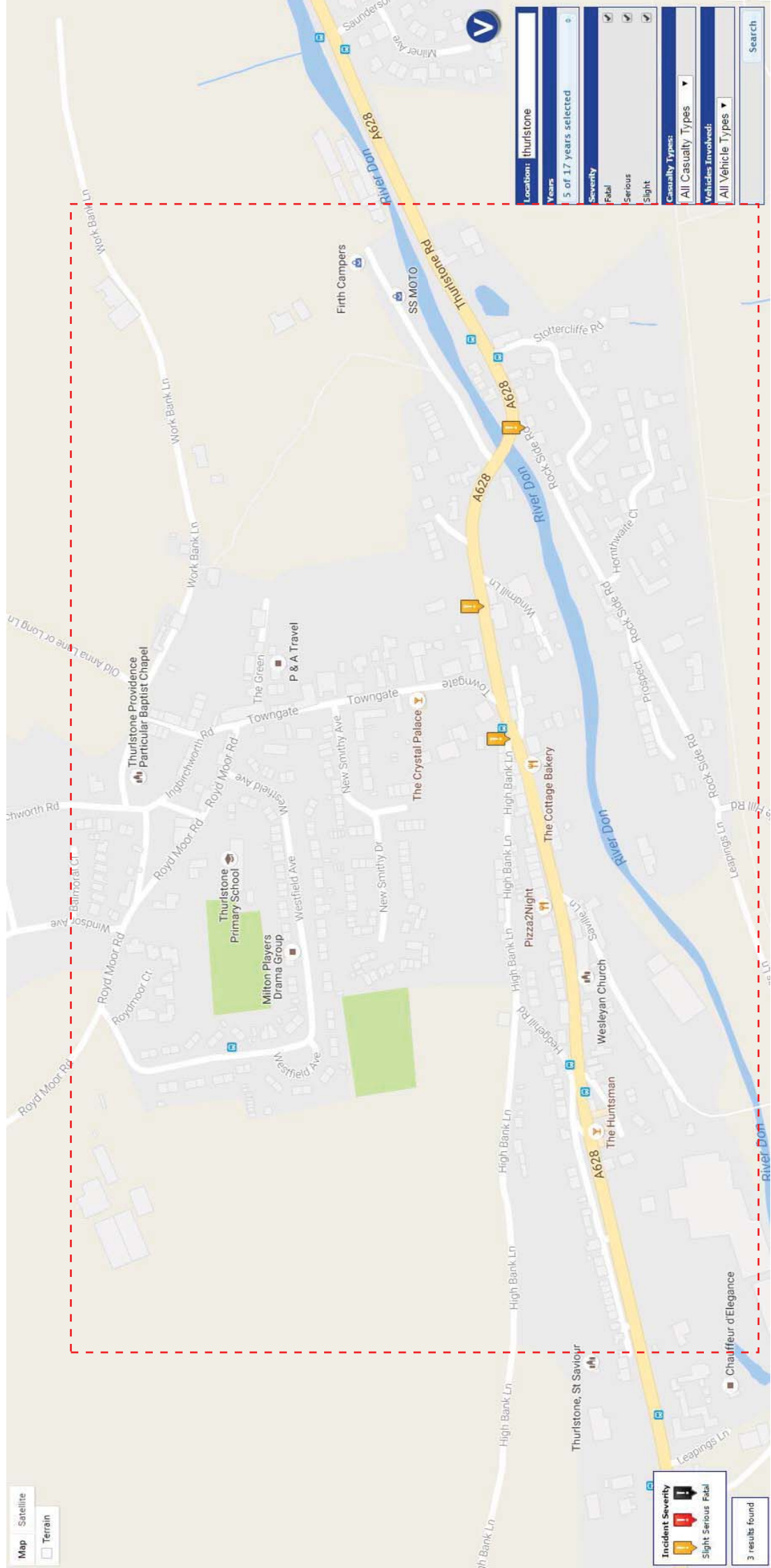


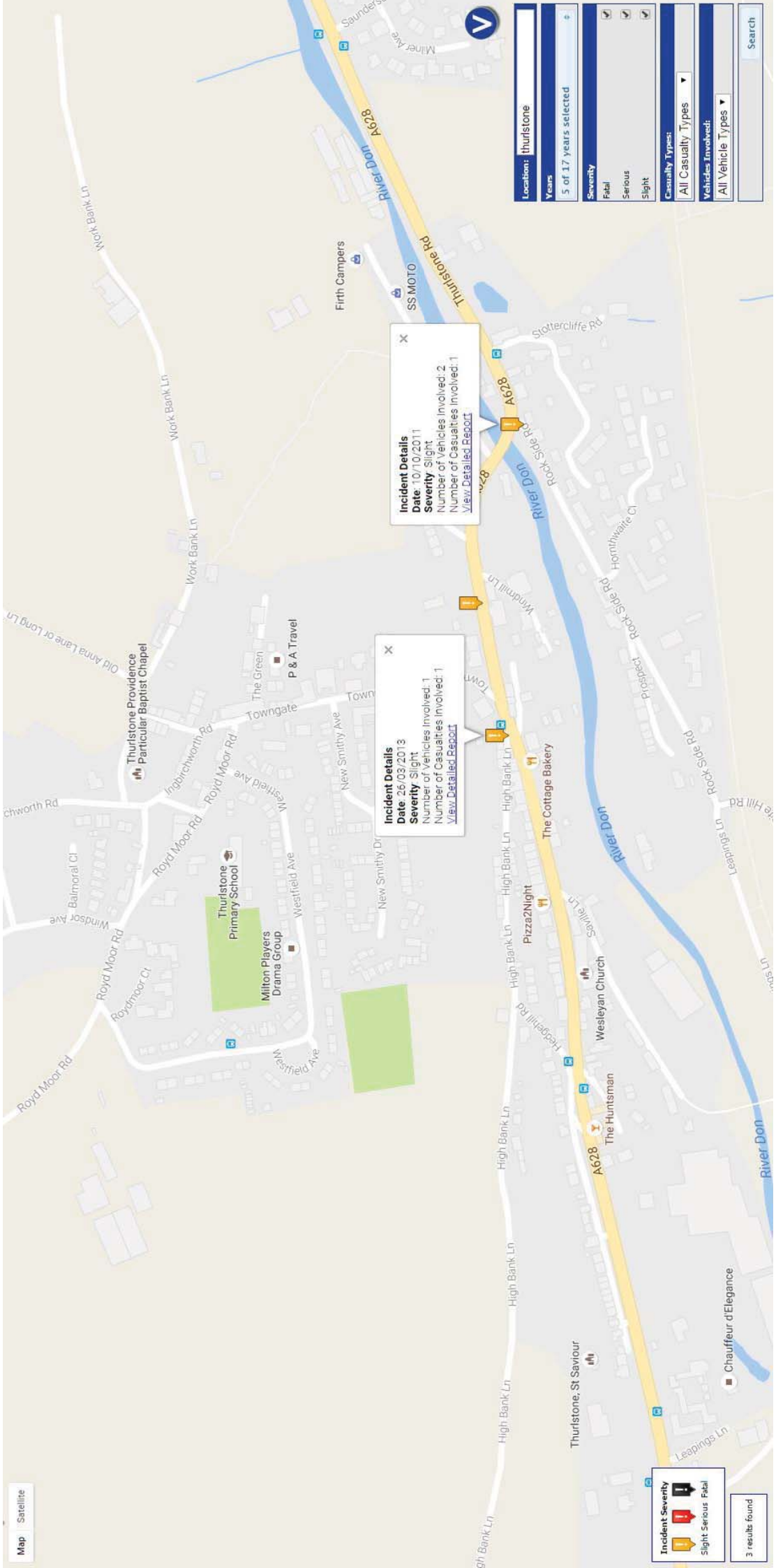
UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

Appendix B

Accident Data

ACCIDENT SEARCH AREA





Map Satellite

Incident Severity

Slight Serious Fatal

3 results found

Location:	thurlstone
Years	5 of 17 years selected
Severity	☒ Fatal ☒ Serious ☒ Slight
Casualty Types	All Casualty Types
Vehicles Involved:	All Vehicle Types
Search	

Incident Details

Date: 10/10/2011

Severity: Slight

Number of Vehicles Involved: 2

Number of Casualties Involved: 1

[View Detailed Report](#)

Incident Details

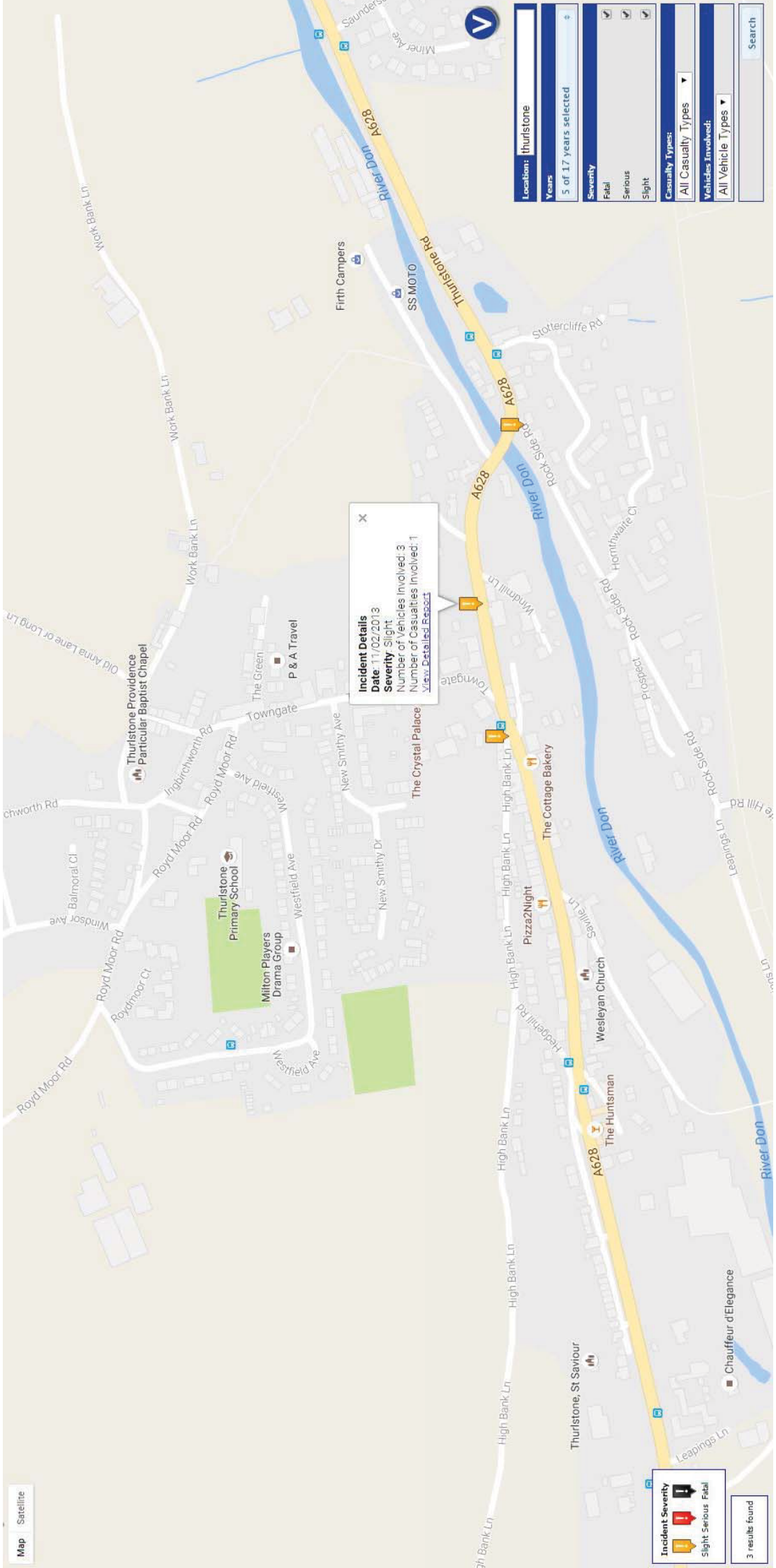
Date: 26/03/2013

Severity: Slight

Number of Vehicles Involved: 1

Number of Casualties Involved: 1

[View Detailed Report](#)



X

Incident Details

Date: 11/02/2013

Severity: Slight

Number of Vehicles Involved: 3

Number of Casualties Involved: 1

[View Detailed Report](#)

Location:

Years:

Severity:

Fatal

Serious

Slight

Casualty Types:

All Casualty Types

Vehicles Involved:

All Vehicle Types

Map Satellite

Incident Severity

Slight Serious Fatal

3 results found

Crash Report including Vehicle and Casualty Information

Crash Date:		Monday, October 10, 2011		Time of Crash:		8:13:00 AM		Crash Reference:		201114B097411	
Highest Injury Severity:		Slight		Number of Vehicles:		2		Number of Casualties:		1	
Highway Authority:		Barnsley						OS Grid Reference:		423580 403460	
Local Authority:		Barnsley									
Road Number:		A628		Road Type:		Single carriageway					
Weather Description:		Raining with high winds									
Road Surface Description:		Wet or Damp									
Speed Limit:		30		Junction Control:		Give way or uncontrolled					
Light Conditions:		Daylight: regardless of presence of streetlights									
Carriageway Hazards:		None									
Junction Detail:		T or staggered junction									
Junction Pedestrian Crossing:		No physical crossing facility within 50 metres									
Vehicles involved											
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway		
1	Car (excluding private hire)		5 Male	36 - 45	Vehicle is in the act of turning right	Offside	Other	None	None		
2	Car (excluding private hire)		14 Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None		

Crash Report including Vehicle and Casualty Information



Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	1 Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

Crash Report including Vehicle and Casualty Information

Crash Date:	Monday, February 11, 2013	Time of Crash:	11:00:00 PM	Crash Reference:	2013140003637
Highest Injury Severity:	Slight	Number of Vehicles:	3	Number of Casualties:	1
Highway Authority:	Barnsley			OS Grid Reference:	423429 403494
Local Authority:	Barnsley				
Road Number:	A628	Road Type:	Single carriageway		
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30	Junction Control:	Not Applicable		
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Female	21 - 25	Vehicle is parked in the carriageway	Front	Other	None	None
2	Car (excluding private hire)	16	Female	46 - 55	Vehicle is parked in the carriageway	Front	Other	None	None
3	Car (excluding private hire)	12	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

For more information about the data please visit: <http://www.crashmap.com/home/aboutthedata> and <http://www.crashmap.com/home/definitions>



Crash Report including Vehicle and Casualty Information



Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
3	1	1 Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

Crash Report including Vehicle and Casualty Information



Crash Date:	Tuesday, March 26, 2013		Time of Crash:	8:00:00 AM	Crash Reference:	201314B008213			
Highest Injury Severity:	Slight	Number of Vehicles:		1	Number of Casualties:		1		
Highway Authority:	Barnsley				OS Grid Reference:		423317 403471		
Local Authority:	Barnsley								
Road Number:	A628	Road Type:		Single carriageway					
Weather Description:	Snowing without high winds								
Road Surface Description:	Snow								
Speed Limit:	30	Junction Control:		Not Applicable					
Light Conditions:	Daylight: regardless of presence of streetlights								
Carriageway Hazards:	None								
Junction Detail:	Not at or within 20 metres of junction								
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres								
Vehicles involved									
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	6	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Crash Report including Vehicle and Casualty Information

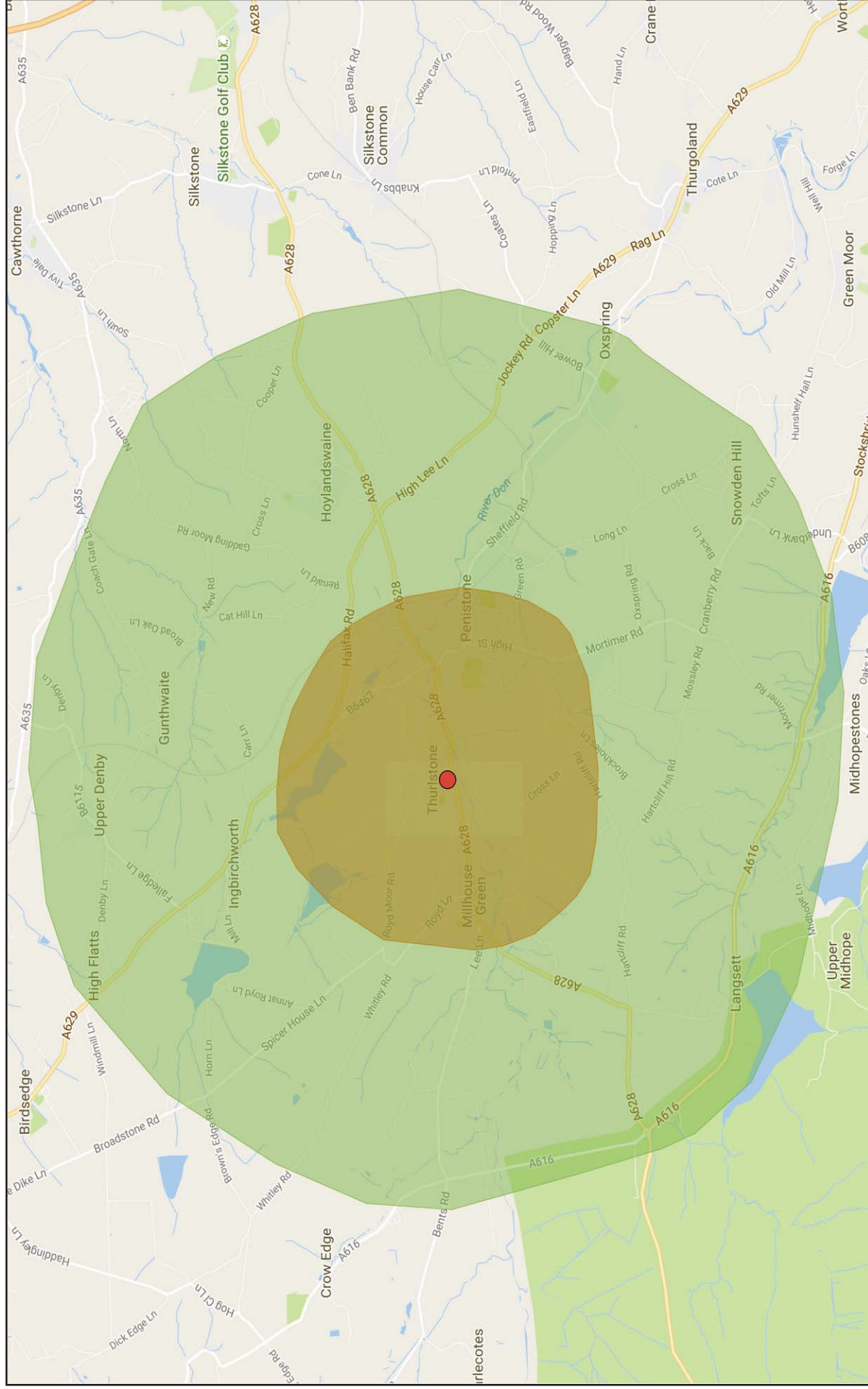


Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	1 Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other

Appendix C

Pedestrian & Cycle Catchment



5km CYCLE CATCHMENT

2km WALKING CATCHMENT

SITE LOCATION



UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

Appendix D

Proposed Access Arrangements



11.6m Refuse Vehicle

Overall Length 11.600m

Overall Width 2.530m

Overall Body Height 3.211m

Min Body Ground Clearance 0.416m

Track Width 2.530m

Lock to Lock Time 4.00s

Kerb to Kerb Turning Radius 9.950m

11.6

5.285

1.385

GENERAL NOTES:

- THIS DRAWING SHOWS THE PROVISIONAL DESIGN ONLY AND IS SUBJECT TO LOCAL AUTHORITY APPROVAL. THIS DRAWING SHOULD NOT BE SCALED FOR SETTING OUT PURPOSES.
- THIS DRAWING IS BASED ON A TOPOGRAPHICAL SURVEY PROVIDED BY OTHERS.

C	11/16	AMENDMENTS TO LAYOUT & TRACKING
B	11/16	AMENDMENTS TO LAYOUT & TRACKING
A	11/16	TRACKING

REV	DATE	DESCRIPTION
11/16	11/16	AMENDMENTS TO LAYOUT & TRACKING
12/16	12/16	AMENDMENTS TO LAYOUT & TRACKING
01	01	TRACKING

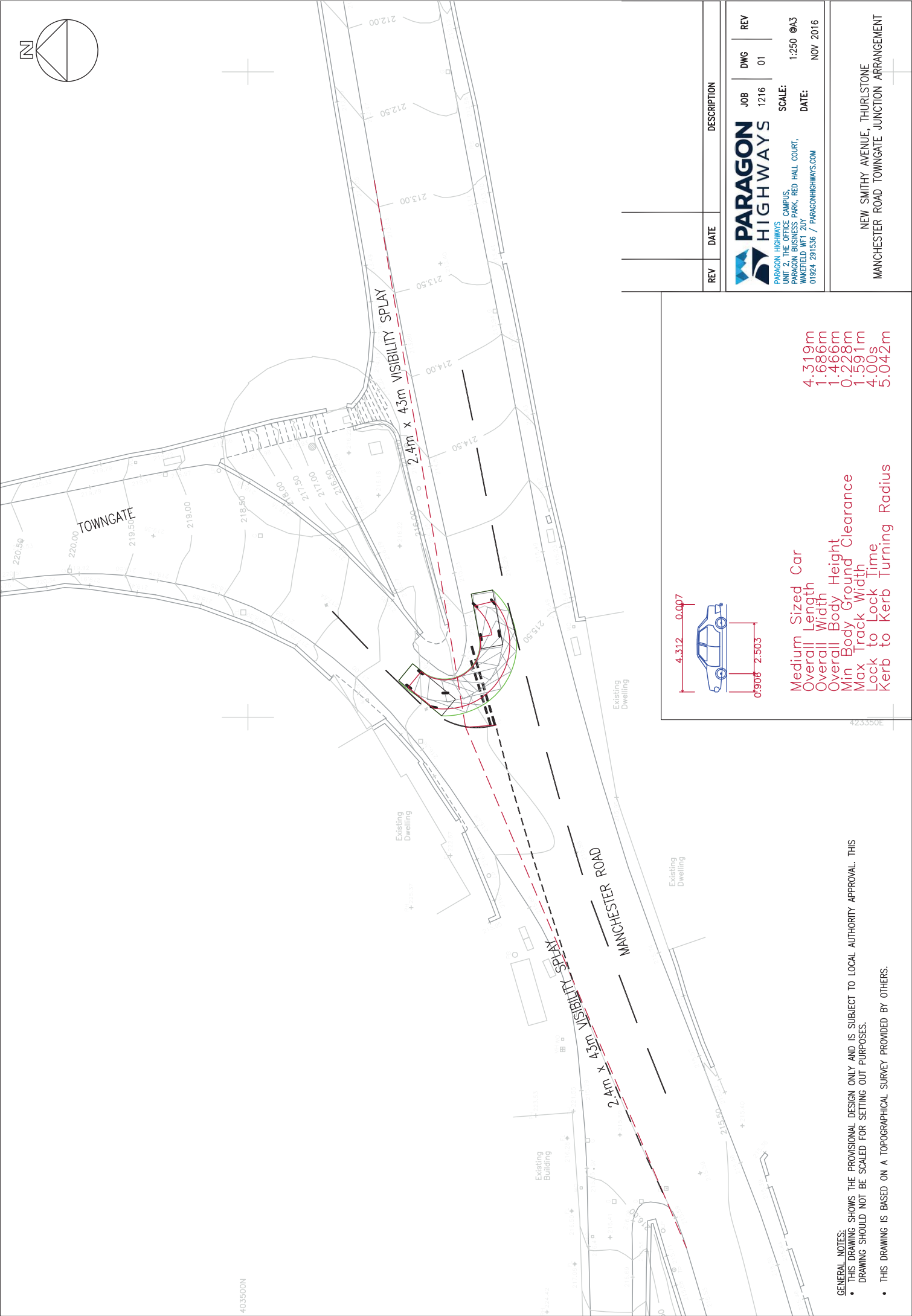
PARAGON HIGHWAYS

PARAGON HIGHWAYS
UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2JY
01924 291536 / PARAGONHIGHWAYS.COM

REV	DWG	REV
C	01	C

SCALE: 1:500 @A3
DATE: NOV 2016

NEW SMITHY AVENUE, THURLSTONE TRACKING



Medium Sized Car
 Overall Length 4.312m
 Overall Width 1.686m
 Overall Body Height 1.466m
 Min Body Ground Clearance 0.908m
 Max Body Ground Clearance 2.503m
 Max Track Width 0.228m
 Lock to Lock Time 1.591m
 Lock to Kerb 4.00s
 Kerb to Kerb Turning Radius 5.042m

4.312m 0.007

REV	DATE	DESCRIPTION

PARAGON HIGHWAYS

PARAGON HIGHWAYS
 UNIT 2, THE OFFICE CAMPUS,
 PARAGON BUSINESS PARK, RED HALL COURT,
 WAKEFIELD WF1 2JY
 01924 291536 / PARAGONHIGHWAYS.COM

JOB 1216
 DWG 01
 SCALE: 1:250 @A3
 DATE: NOV 2016

NEW SMITHY AVENUE, THURLSTONE
 MANCHESTER ROAD TOWNGATE JUNCTION ARRANGEMENT

- GENERAL NOTES:
- THIS DRAWING SHOWS THE PROVISIONAL DESIGN ONLY AND IS SUBJECT TO LOCAL AUTHORITY APPROVAL. THIS DRAWING SHOULD NOT BE SCALED FOR SETTING OUT PURPOSES.
 - THIS DRAWING IS BASED ON A TOPOGRAPHICAL SURVEY PROVIDED BY OTHERS.

Appendix E

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	2 days
	EX ESSEX	1 days
	HF HERTFORDSHIRE	1 days
	SC SURREY	2 days
03	SOUTH WEST	
	CW CORNWALL	2 days
	DC DORSET	1 days
	GS GLOUCESTERSHIRE	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	SF SUFFOLK	3 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	2 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	1 days
	WM WEST MIDLANDS	3 days
	WO WORCESTERSHIRE	6 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
08	NORTH WEST	
	CH CHESHIRE	3 days
	LC LANCASHIRE	2 days
	MS MERSEYSIDE	1 days
09	NORTH	
	CB CUMBRIA	3 days
	TV TEES VALLEY	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	3 days
	CP CAERPHILLY	1 days
	WR WREXHAM	1 days

Filtering Stage 2 selection:

Parameter: Number of dwellings
Range: 10 to 792 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 05/09/10

Selected survey days:

Monday	10 days
Tuesday	13 days
Wednesday	7 days
Thursday	14 days
Friday	7 days

Selected survey types:

Manual count	51 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	20
Edge of Town	24
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	36
Village	1
Out of Town	1
No Sub Category	13

LIST OF SITES relevant to selection parameters

1	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE
	NEW BEDFORD ROAD		
	LUTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings: 131		
2	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE
	RIDDY LANE		
	LUTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings: 82		
3	CA-03-A-02	MIXED HOUSES, PETERBOROUGH	CAMBRIDGESHIRE
	THORPE ROAD		
	PETERBOROUGH		
	Edge of Town Centre		
	Residential Zone		
	Total Number of dwellings: 363		
4	CB-03-A-02	SEMI DETACHED, WORKINGTON	CUMBRIA
	HAWKSHEAD AVENUE		
	WORKINGTON		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings: 40		
5	CB-03-A-03	SEMI DETACHED, WORKINGTON	CUMBRIA
	HAWKSHEAD AVENUE		
	WORKINGTON		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings: 40		
6	CB-03-A-04	SEMI DETACHED, WORKINGTON	CUMBRIA
	MOORCLOSE ROAD		
	SALTERBACK		
	WORKINGTON		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings: 82		
7	CF-03-A-01	MIXED HOUSES, CARDIFF	CARDIFF
	VIRGIL STREET		
	NINIAN PARK		
	CARDIFF		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings: 222		
8	CF-03-A-02	MIXED HOUSES, CARDIFF	CARDIFF
	DROPE ROAD		
	CARDIFF		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings: 196		
9	CF-03-A-03	DETACHED, CARDIFF	CARDIFF
	LLANTRISANT ROAD		
	CARDIFF		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings: 29		

LIST OF SITES relevant to selection parameters (Cont.)

10	CH-03-A-02	HOUSES/FLATS, CREWE	CHESHIRE
	SYDNEY ROAD		
	CREWE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	174	
11	CH-03-A-05	DETACHED, CREWE	CHESHIRE
	SYDNEY ROAD		
	SYDNEY		
	CREWE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	17	
12	CH-03-A-06	SEMI-DET./BUNGALOWS, CREWE	CHESHIRE
	CREWE ROAD		
	CREWE		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	129	
13	CP-03-A-02	SEMI DETACHED, PENGAM	CAERPHILLY
	THE RISE		
	PENGAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	41	
14	CW-03-A-01	TERRACED, PENZANCE	CORNWALL
	ALVERTON ROAD		
	PENZANCE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	13	
15	CW-03-A-02	SEMI D./DETACHED, TRURO	CORNWALL
	BOSVEAN GARDENS		
	TRURO		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	73	
16	DC-03-A-01	DETACHED, POOLE	DORSET
	ISAACS CLOSE		
	POOLE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	51	
17	DS-03-A-01	SEMI D./TERRACED, DRONFIELD	DERBYSHIRE
	THE AVENUE		
	HOLMESDALE		
	DRONFIELD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	20	
18	EX-03-A-01	SEMI-DET., STANFORD-LE-HOPE	ESSEX
	MILTON ROAD		
	CORRINGHAM		
	STANFORD-LE-HOPE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	237	

LIST OF SITES relevant to selection parameters (Cont.)

19	GS-03-A-01	SEMI D./TERRACED, GLOUCESTER	GLOUCESTERSHIRE
	KINGSHOLM ROAD KINGSHOLM GLOUCESTER Edge of Town Centre No Sub Category Total Number of dwellings: 73		
20	HF-03-A-01	MIXED HOUSES, WELWYN GC	HERTFORDSHIRE
	LONGCROFT LANE WELWYN GARDEN CITY Edge of Town Centre Residential Zone Total Number of dwellings: 53		
21	LC-03-A-22	BUNGALOWS, BLACKPOOL	LANCASHIRE
	CLIFTON DRIVE NORTH BLACKPOOL Edge of Town Residential Zone Total Number of dwellings: 98		
22	LC-03-A-29	DETACHED/SEMI D., BLACKBURN	LANCASHIRE
	REVIDGE ROAD FOUR LANE ENDS BLACKBURN Edge of Town Residential Zone Total Number of dwellings: 185		
23	LE-03-A-01	DETACHED, MELTON MOWBRAY	LEICESTERSHIRE
	REDWOOD AVENUE MELTON MOWBRAY Edge of Town Residential Zone Total Number of dwellings: 11		
24	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE
	BRANT ROAD BRACEBRIDGE LINCOLN Edge of Town Residential Zone Total Number of dwellings: 150		
25	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE
	HYKEHAM ROAD LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 186		
26	MS-03-A-01	TERRACED, RUNCORN	MERSEYSIDE
	PALACE FIELDS AVENUE RUNCORN Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 372		
27	NT-03-A-03	SEMI DETACHED, KIRKBY-IN-ASHFD	NOTTINGHAMSHIRE
	B6018 SUTTON ROAD KIRKBY-IN-ASHFIELD Edge of Town Residential Zone Total Number of dwellings: 166		

LIST OF SITES relevant to selection parameters (Cont.)

28	NY-03-A-01	MIXED HOUSES,NORTHALLERTON	NORTH YORKSHIRE
		GRAMMAR SCHOOL LANE	
		NORTHALLERTON	
		Suburban Area (PPS6 Out of Centre)	
		Residential Zone	
		Total Number of dwellings:	52
29	NY-03-A-03	PRIVATE HOUSING, BOROUGHBRIDGE	NORTH YORKSHIRE
		NEW ROW	
		BOROUGHBRIDGE	
		Edge of Town Centre	
		Residential Zone	
		Total Number of dwellings:	14
30	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE
		BOROUGHBRIDGE ROAD	
		RIPON	
		Edge of Town	
		No Sub Category	
		Total Number of dwellings:	71
31	SC-03-A-03	DETACHED, EAST MOLESEY	SURREY
		A3050 HURST ROAD	
		HURST PARK	
		EAST MOLESEY	
		Suburban Area (PPS6 Out of Centre)	
		Residential Zone	
		Total Number of dwellings:	54
32	SC-03-A-04	HOUSES & FLATS,NEAR FRIMLEY	SURREY
		DEEPCUT BRIDGE ROAD	
		DEEPCUT	
		NEAR FRIMLEY	
		Neighbourhood Centre (PPS6 Local Centre)	
		Village	
		Total Number of dwellings:	288
33	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK
		A1156 FELIXSTOWE ROAD	
		RACECOURSE	
		IPSWICH	
		Suburban Area (PPS6 Out of Centre)	
		Residential Zone	
		Total Number of dwellings:	77
34	SF-03-A-02	SEMI DET./TERRACED, IPSWICH	SUFFOLK
		STOKE PARK DRIVE	
		MAIDENHALL	
		IPSWICH	
		Edge of Town	
		Residential Zone	
		Total Number of dwellings:	230
35	SF-03-A-03	MIXED HOUSES, BURY ST EDMDS	SUFFOLK
		BARTON HILL	
		FORNHAM ST MARTIN	
		BURY ST EDMUNDS	
		Edge of Town	
		Out of Town	
		Total Number of dwellings:	101
36	SH-03-A-03	DETACHED, SHREWSBURY	SHROPSHIRE
		SOMERBY DRIVE	
		BICTON HEATH	
		SHREWSBURY	
		Edge of Town	
		No Sub Category	
		Total Number of dwellings:	10

LIST OF SITES relevant to selection parameters (Cont.)

37	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE
	ST MICHAEL'S STREET		
	SHREWSBURY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	108	
38	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE
	WATERMEET GROVE		
	ETRURIA		
	STOKE-ON-TRENT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	14	
39	TV-03-A-01	MIXED HOUSES/FLATS, HARTLEPL	TEES VALLEY
	POWLETT ROAD		
	HARTLEPOOL		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	225	
40	TW-03-A-01	SEMI DETACHED, SUNDERLAND	TYNE & WEAR
	LEECHMERE ROAD		
	HILLVIEW		
	SUNDERLAND		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	81	
41	WL-03-A-01	SEMI D./TERRACED W. BASSETT	WILTSHIRE
	MAPLE DRIVE		
	WOOTTON BASSETT		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	99	
42	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS
	FOLESHILL ROAD		
	FOLESHILL		
	COVENTRY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	79	
43	WM-03-A-02	DETACHED/SEMI D., STRBRIDGE	WEST MIDLANDS
	HEATH STREET		
	STOURBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	12	
44	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS
	BASELEY WAY		
	ROWLEYS GREEN		
	COVENTRY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	84	
45	WO-03-A-01	DETACHED, BROMSGROVE	WORCESTERSHIRE
	MARLBOROUGH AVENUE		
	ASTON FIELDS		
	BROMSGROVE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	10	

LIST OF SITES relevant to selection parameters (Cont.)

46	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE
	MEADOWHILL ROAD		
	REDDITCH		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	48	
47	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE
	BLAKEBROOK		
	BLAKEBROOK		
	KIDDERMINSTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	138	
48	WO-03-A-04	MIXED HOUSES, WORCESTER	WORCESTERSHIRE
	MALVERN ROAD		
	WORCESTER		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	792	
49	WO-03-A-05	TERRACED/DET., BROMSGROVE	WORCESTERSHIRE
	ST GODWALDS ROAD		
	ASTON FIELDS		
	BROMSGROVE		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	215	
50	WO-03-A-06	DET./TERRACED, BROMSGROVE	WORCESTERSHIRE
	ST GODWALDS ROAD		
	ASTON FIELDS		
	BROMSGROVE		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	232	
51	WR-03-A-01	SEMI DETACHED, WREXHAM	WREXHAM
	MOLD ROAD		
	RHOSDDU		
	WREXHAM		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	82	

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: **1 DWELLS**

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.074	51	125	0.260	51	125	0.334
08:00 - 09:00	51	125	0.151	51	125	0.416	51	125	0.567
09:00 - 10:00	51	125	0.167	51	125	0.215	51	125	0.382
10:00 - 11:00	51	125	0.148	51	125	0.183	51	125	0.331
11:00 - 12:00	51	125	0.180	51	125	0.178	51	125	0.358
12:00 - 13:00	51	125	0.203	51	125	0.177	51	125	0.380
13:00 - 14:00	51	125	0.184	51	125	0.177	51	125	0.361
14:00 - 15:00	51	125	0.193	51	125	0.195	51	125	0.388
15:00 - 16:00	51	125	0.280	51	125	0.210	51	125	0.490
16:00 - 17:00	51	125	0.320	51	125	0.200	51	125	0.520
17:00 - 18:00	51	125	0.390	51	125	0.225	51	125	0.615
18:00 - 19:00	51	125	0.283	51	125	0.214	51	125	0.497
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			2.573				2.650	5.223	

Parameter summary

Trip rate parameter range selected: 10 - 792 (units:)
 Survey date date range: 01/01/02 - 05/09/10
 Number of weekdays (Monday-Friday): 51
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.003	51	125	0.003	51	125	0.006
08:00 - 09:00	51	125	0.003	51	125	0.003	51	125	0.006
09:00 - 10:00	51	125	0.005	51	125	0.003	51	125	0.008
10:00 - 11:00	51	125	0.003	51	125	0.004	51	125	0.007
11:00 - 12:00	51	125	0.002	51	125	0.002	51	125	0.004
12:00 - 13:00	51	125	0.004	51	125	0.004	51	125	0.008
13:00 - 14:00	51	125	0.004	51	125	0.004	51	125	0.008
14:00 - 15:00	51	125	0.002	51	125	0.003	51	125	0.005
15:00 - 16:00	51	125	0.002	51	125	0.002	51	125	0.004
16:00 - 17:00	51	125	0.002	51	125	0.001	51	125	0.003
17:00 - 18:00	51	125	0.001	51	125	0.001	51	125	0.002
18:00 - 19:00	51	125	0.001	51	125	0.001	51	125	0.002
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.032			0.031			0.063

Parameter summary

Trip rate parameter range selected: 10 - 792 (units:)
 Survey date date range: 01/01/02 - 05/09/10
 Number of weekdays (Monday-Friday): 51
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.000	51	125	0.001	51	125	0.001
08:00 - 09:00	51	125	0.001	51	125	0.002	51	125	0.003
09:00 - 10:00	51	125	0.001	51	125	0.001	51	125	0.002
10:00 - 11:00	51	125	0.001	51	125	0.001	51	125	0.002
11:00 - 12:00	51	125	0.001	51	125	0.001	51	125	0.002
12:00 - 13:00	51	125	0.001	51	125	0.001	51	125	0.002
13:00 - 14:00	51	125	0.001	51	125	0.001	51	125	0.002
14:00 - 15:00	51	125	0.001	51	125	0.001	51	125	0.002
15:00 - 16:00	51	125	0.001	51	125	0.001	51	125	0.002
16:00 - 17:00	51	125	0.001	51	125	0.001	51	125	0.002
17:00 - 18:00	51	125	0.001	51	125	0.001	51	125	0.002
18:00 - 19:00	51	125	0.001	51	125	0.001	51	125	0.002
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.011			0.013			0.024

Parameter summary

Trip rate parameter range selected: 10 - 792 (units:)
 Survey date date range: 01/01/02 - 05/09/10
 Number of weekdays (Monday-Friday): 51
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

CYCLISTS

Calculation factor: **1 DWELLS**

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.006	51	125	0.010	51	125	0.016
08:00 - 09:00	51	125	0.004	51	125	0.013	51	125	0.017
09:00 - 10:00	51	125	0.002	51	125	0.004	51	125	0.006
10:00 - 11:00	51	125	0.003	51	125	0.003	51	125	0.006
11:00 - 12:00	51	125	0.004	51	125	0.003	51	125	0.007
12:00 - 13:00	51	125	0.004	51	125	0.003	51	125	0.007
13:00 - 14:00	51	125	0.003	51	125	0.004	51	125	0.007
14:00 - 15:00	51	125	0.003	51	125	0.003	51	125	0.006
15:00 - 16:00	51	125	0.011	51	125	0.006	51	125	0.017
16:00 - 17:00	51	125	0.011	51	125	0.009	51	125	0.020
17:00 - 18:00	51	125	0.012	51	125	0.008	51	125	0.020
18:00 - 19:00	51	125	0.009	51	125	0.006	51	125	0.015
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.072				0.072	0.144	

Parameter summary

Trip rate parameter range selected: 10 - 792 (units:)
 Survey date date range: 01/01/02 - 05/09/10
 Number of weekdays (Monday-Friday): 51
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0