

TRANSPORT ASSESSMENT
TRAVEL PLAN
TRANSPORT STATEMENT
ROAD SAFETY AUDIT
HIGHWAY STATEMENT
TRAFFIC SURVEY



PROPOSED RESIDENTIAL DEVELOPMENT
OFF BRADLEY ROAD, BRADLEY, WEST YORKSHIRE

16033 / May 2016

**HY
CONSULTING**



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OFF BRADLEY ROAD, BRADLEY, WEST YORKSHIRE
TRANSPORT STATEMENT

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1 INTRODUCTION

1.1 Overview

1.1.1 This Transport Statement has been written in support of a planning application for the construction of 9 dwellings and will utilise an existing access road between 32 and 34 Bradley Road, which forms a priority junction with right turning lane with the A6107 Bradley Road. A site location plan is included at Appendix A.

1.1.2 The application site is located on land off the A6107 Bradley Road, which is some 146m from the A62 Leeds Road, 5km from Huddersfield and 9km from Dewsbury. The site consists of a vacant field and garages which is bounded by houses

1.1.3 Both Local and National Transport policy have been reviewed in respect of the development. A review of road safety has been undertaken within the report. Sustainable transport accessibility has also been reviewed within the report. The development proposals have been explained and the impact on the highway network considered.

1.1.4 This Transport Statement indicates that proposed residential development will not significantly impact on the highway network in terms of traffic and will not affect road safety. The proposals are considered to be sustainable and well suited to the surrounding area and existing highway infrastructure.

1.2 Report Format

1.2.1 The sections following this are as follows:

- Section 2 sets out the relevant transport policy and the proposed developments compliance;
- Section 3 details the existing highway conditions, walking and cycling, adjacent public transport facilities and a review of road safety;
- Section 4 provides details of the proposed development, which includes the site access and internal layout;
- Section 5 details the traffic generation and impact; and
- Section 6 provides a summary of the main points of the report and conclusions.

2 TRANSPORT POLICY

2.1 National Transport Policy

2.1.1 When considering transport policy compliance for planning applications, the main thrust of local, regional and national policy is that new development should be conveniently accessible by a range of sustainable transport modes, including public transport, cycling and walking. This policy therefore sets out the framework for this Transport Statement and the project's compliance with the policy objectives. Further details of the relevant policy documents are set out below.

2.1.2 National policy relating to transport is given within the National Planning Policy Framework (NPPF), which 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 policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF.

2.1.3 Paragraph 17 of the NPPF states that the principle to *"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"* should underpin decision making. The proposed residential development can be accessed and use sustainable modes of transport. The development site is in a sustainable location and within walking distance of bus stops. The proposal therefore accords in terms of transport with paragraph 17 of the NPPF.

2.1.4 Paragraph 32 of the NPPF states that *"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 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.”*

2.1.5 The planning application for the proposed residential development is supported by this Transport Statement, which demonstrates that the proposal is not detrimental to road safety or the efficient operation of the highway network, large scale mitigation is not required and is accessible by walking, cycling and public transport.

2.1.6 Paragraph 34 states that *“Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.”* The proposed residential development will facilitate walking, cycling and is accessible by public transport.

2.1.7 Paragraph 35 of the NPPF states that *“developments should be located and designed where practical to:*

- *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.”*

2.1.8 The proposed residential development will comply with paragraph 35 of the NPPF. The proposal will also provide internal pedestrian routes which will connect in to the existing infrastructure on the A6107 Bradley Road.

2.2 Local Transport Policy

2.2.1 The current Local Transport Plan is the third West Yorkshire Local Transport Plan (LTP3), which covers the period 2011 to 2016. The key objectives of the LTP3 include:

- *To improve access to jobs, education and other key services for everyone;*
- *To reduce delays to the movement of people and goods;*
- *To improve safety for all highway users;*
- *To limit transport emissions of air pollutants, greenhouse gases and noise;*
- *To improve the condition of the highway infrastructure.*

2.2.2 The LTP sets out the walking and cycling strategy for West Yorkshire to encourage more people to use these modes of travel to help reduce the dependency on private cars. With regards to cycling provision within development proposals, the WYCS seeks to 'ensure that new development proposals are located and designed to be cycle friendly and adopt guidelines for cycle parking standards. With regards to walking, the LTP seeks to improve the local environment to make walking more attractive by enhancing safety, security and environmental quality.

2.2.3 The LTP also sets out a bus strategy West Yorkshire and seeks to increase patronage for all categories of bus passenger and modal shift towards the bus and away from the car.

2.2.4 Local transport policy is set out in the Kirklees Unitary Development Plan (UDP) as retained in the Local Development framework process. The consistent objectives across all these documents are to look to developments that promote more sustainable transport choices and reduce the need to travel by car and improve the environment.

2.2.5 It is considered that this site is in compliance with local and national transport policies due to the sustainable location of the site with good quality facilities for travel by modes other than the single occupancy private car trips.

3 EXISTING SITUATION

3.1 Site Description

3.1.1 The application site is located off the A6107 Bradley Road between numbers 32 and 34, which is some 146m from the A62 Leeds Road, 5km from Huddersfield and 9km from Dewsbury. The site consists of a vacant field and garages which is bounded by houses. The site has a surfaced access road with flanking footways. The carriageway is approximately 6.4m wide. The access road between the adjoining houses is narrowed by the surface of an access to a garage, a steel I-beam and a bollard painted black and white which are set into the road.

3.1.2 The access road forms a junction with the A6107 Bradley Road, which is on the tapered approach to the traffic signal controlled junction with the A62 Leeds Road. The A6107 Bradley Road has a footway and off-road parking lay-bys either side of the access road. The access road junction has dropped crossings.

3.1.3 The centre of Bradley Road west of the approach lanes for the junction with the A62 Leeds Road is hatched with a series of right turning pockets. The right turn pocket to turn into the access road is some 15m long. The right turn pocket varies in width between some 2.7 to 3.5m. A keep clear marking is provided across Bradley Road at the entry to the access road. An eastbound on-road cycle lane on Bradley Road terminates immediate prior to the site access road. A westbound on-road cycle lane on Bradley Road commences at the access road.

3.2 Highway Network

3.2.1 The A6107 Bradley Road traverses in a generally westerly direction and over 2.6km away forms a roundabout junction with the A641. The A641 to the north crosses the M62 and leads to Brighouse, to the south the A641 traverses in a southerly direction to the centre of Huddersfield. The A6107 continues in a generally north westerly direction until the traffic signal controlled junction with the A643 and B6114. The A643 leads to Brighouse to the north and the A629 and M62 Junction 24 to the south west. The B6114 traverses in a westerly direction to Elland.

3.2.2 The A62 Leeds connects Bradley with Birstall and Leeds to the north east and Huddersfield to the south west. In a north easterly direction from the junction with the A6107, the A62 forms a traffic signal controlled roundabout junction with the A644 at Cooper Bridge. The A644 leads towards M62 Junction 25 and Brighouse. East of the junction with the A644 the A62 continues in a north easterly direction for some 4.4km and forms a traffic signal junction with the A638. The A638 in a north westerly direction leads to Cleckheaton, the M62 Junction 26 and the M602 towards Bradford; to the east the A638 leads to Heckmondwike. The A62 some 320m to the east of the Cooper Bridge junction with the A644 forms a traffic signal junction with the A644 which traverses in a generally easterly direction to Dewsbury.

3.2.3 The A62 Leeds Road traverses in a generally south westerly direction to the centre of Huddersfield, Some 370m from the junction with the A6107 Bradley Road, a priority junction is formed with Oak Road. Oak Road is some 190m long and forms a priority junction with the A6107 Bradley Road some 147m to the west of the site access road.

3.2.4 The fourth arm of the A62 Leeds Road and A6107 Bradley Road junction is the B6118, which leads to Kirkheaton and Grange Moor.

3.3 Pedestrian and Cyclists

3.3.1 The national policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF. 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. Former PPG13: Transport identified a maximum walk distance of 2km. "Providing for Journeys on Foot" gives a preferred maximum walking distance of 2km for commuting/school/sight-seeing, as well as a desirable walking distance of 400m elsewhere.

	Town Centre	Commuting/School/Sight-Seeing	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1000m	800m
Preferred Maximum	800m	2000m	1200m

Source: Providing for Journeys on Foot (IHT, 2000)

Table 1: Suggested Acceptable Walking Distance

- 3.3.2 The proposed residential development would connect into the existing footway on the access road and the A6107 Bradley Road. There are controlled pedestrian facilities at the A62 Leeds Road/A6107 Bradley Road/B6118 traffic signal junction which will assist people to cross the road safely. The junction also has advanced cycle stoplines to provide priority and assist cyclists to negotiate the junction.
- 3.3.3 An eastbound bus stop for school services is located on the northern footway some 70m east of the site access road and the whole of the site is well within 400m. The site is within 290m of the southbound bus stop and within 360m of the northbound on Keldregate, which forms a junction with Bradley Road. The bus stops on the A62 Leeds Road, north east of the River Calder are within 400m of site. The continuous pedestrian route will provide residents and visitors with the opportunity to walk to the bus stops within a safe environment.
- 3.3.4 A pedestrian refuge is located on Bradley Road within 100m to the west of the site. The refuge island will aid pedestrians crossing Bradley Road. Bradley Road has frequently spaced pedestrian refuge islands within the hatched area. A controlled pedestrian crossing is located on Bradley Road some 200m from the site.
- 3.3.5 The A6107 Bradley Road has on-road cycle lanes within 30m of the site, which provides residents and visitors the opportunity to cycle along the road in a dedicated lane. There are also cycle lanes on the A62.

3.3.6 Bradley Post Office is within 150m of the proposed residential site. A Spar shop at the BP Petrol filling station on the A62 is within 300m of the site. Another convenience store is located on the A62 to the south west is within some 325m of the site.

3.3.7 A Tesco Express with adjoining Greggs and hot food takeaway is located within 450m of the proposed residential development.

3.3.8 There are therefore practical and convenient links available to and from the proposed development offering the potential for residents to walk or cycle.

3.4 Public Transport Provision

3.4.1 An eastbound bus stop for school services is located on the northern footway some 70m east of the site access road and the whole of the site is well within 400m. The site is within 290m of the southbound bus stop and within 360m of the northbound on Keldregate. The bus stops on the A62 Leeds Road, north east of the River Calder are within 400m of site. The continuous pedestrian route will provide residents and visitors with the opportunity to walk to the bus stop within a safe environment. The bus stops are well within the desirable walking distance of 400m for Commuting, School and Sight-Seeing. The bus stop locations are shown on Figure 1 at Appendix A.

Bus Number	Route	Frequency	
		Mon – Saturday Daytime	Evenings and Sundays
202	Huddersfield – Leeds Road – Mirfield – Dewsbury – Shaw Cross – Tingley – White Rose Centre - Leeds	15mins	30 mins
203	Huddersfield – Leeds Road – Mirfield – Dewsbury – Shaw Cross – Tingley – White Rose Centre - Leeds	15mins	30 mins
220	Huddersfield – Leeds Road – Cleckheaton – Birstall – Morley – White Rose Centre – Leeds	60mins	-
229	Huddersfield – Leeds Road – Heckmondwike – Batley – Gildersome - Leeds	60mins	-
328	Balmoral Avenue – Huddersfield – Fartown – Riddings - Bradley	10 mins	60 mins Evens, 30mins Sun

Source: West Yorkshire Metro

Table 2: Bus Services

3.4.2 Table 2 identifies service frequencies of the 202, 203, 220 and 229 bus services which use the stops on the A62. The 328 service uses the bus stop on Keldregate. Residents and visitors have access to 10 services per hour Monday to Saturday daytime, in both directions stopping on the A62. During the evenings and Sunday there are four services per hour in both directions.

3.4.3 The 328 service has a frequency of 6 services per hour Monday to Saturday during the daytime, one per hour in the evening and two per hour on Sunday.

3.4.4 The nearest railway station is at Deighton which is some 1.9km from the site by road. Deighton is on the Huddersfield line, who's stations include Huddersfield, Mirfield, Dewsbury, Batley, Morley and Leeds. Leeds city station is a major hub providing connectivity to the wider railway network. Huddersfield station provides connectivity with the North TransPennine, Penistone and Caldervale lines

3.4.5 The proposed residential development is well served and accessible by public transport.

3.5 Injury Collision Record

3.5.1 The CrashMap website has been consulted to ascertain the collision record from 1 January 2010 to 31 December 2014 for the junction of the site access road with the A6107 Bradley Road. No reported injury collisions occurred at the junction of the site access road with the A6107 Bradley Road from 1 January 2010 to 31 December 2014.

4 THE DEVELOPMENT PROPOSALS

4.1 Project Description

4.1.1 The applicant seeks planning permission for the construction of 9 dwellings within the curtilage of the proposed development site, which is located off the A6107 Bradley Road between numbers 32 and 34, which is some 146m from the A62 Leeds Road, 5km from Huddersfield and 9km from Dewsbury. The site consists of a vacant field and garages which is bounded by houses.

4.1.2 The planning application is in outline and establishes the principle of access from the existing access road via its junction with the A6107 Bradley Road. A site plan indicating the area of development can be found in Appendix B.

4.2 Site Access

4.2.1 The site has a surfaced access road with flanking footways. The carriageway is approximately 6.4m wide. The site access road forms a priority junction with the A6107 Bradley Road and the centre of Bradley Road is hatched with a right turning pocket. The right turn pocket is some 15m long. The right turn pocket varies in width between some 2.7 to 3.5m. A keep clear marking is provided across Bradley Road at the entry to the access road. The footway on the site side with parking bays to the right is some 5.9m wide and 5m wide to the left reducing to some 3.7m towards the A62. As a result of the wide footways visibility splays in excess of the requirements of the Design Manual for Roads and Bridges and Manual for Streets can be readily achieved in either direction.

4.2.2 The access road forms a junction with the A6107 Bradley Road, which is on the tapered approach to the traffic signal controlled junction with the A62 Leeds Road. The A6107 Bradley Road has a footway and off-road parking lay-bys either side of the access road. The access road junction has dropped crossings

4.3 Pedestrian Access

- 4.3.1 The access road is a within the site will be a private drive with a shared surface. The shared surface will tie-into the existing footways along the site access road, and will provide connectivity to the wider pedestrian network and bus stops on Bradley Road and Leeds Road.

4.4 Parking Provision

- 4.4.1 Parking for the proposed use shall be provided in accordance with the guidance of the local planning authority. Turning areas and space for vehicles to turn within can be provided to ensure that vehicles can enter and leave the site in forward gear.

4.5 Servicing

- 4.5.1 The road layout will be designed to provide adequate turning facilities for refuse vehicles to allow the collection of waste and a removals vehicle.

5 TRAFFIC IMPACT

5.1 Residential Traffic Generation

5.1.1 HY Consulting has used 85th percentile trip rates for residential development (houses) obtained from the TRICS database details of which are provided in Appendix C to this report.

5.1.2 The rate per dwelling and the predicted additional traffic flows from the proposed four new units are given in the table below:

	MORNING PEAK		EVENING PEAK	
	Arrivals	Departures	Arrivals	Departures
Trip Rate per dwelling	0.225	0.523	0.500	0.319
Predicted Traffic (9 units)	2	5	5	3

Table 3: Trip Generation Rates and Predicted Traffic (9 Units)

5.2 Traffic Impact

5.2.1 The proposed 9 unit residential development is predicted to generate only 2 arrivals and 5 departures in the morning peak hour and 5 arrivals and 3 departures in the evening peak hour. The increase in the morning peak hour equates to an additional vehicle every 8.57 minutes, whilst in evening peak the increase equates to an additional vehicle every 7.5 minutes.

5.2.2 An additional 7 vehicles in the morning peak and 8 vehicles in the evening peak hour is very small and is not considered significant. An additional vehicle every 7.5 minutes at an access will not detrimentally affect road safety.

6 CONCLUSIONS

- 6.1.1 This Transport Statement assesses the characteristics of the existing infrastructure in the surrounding area of the site and predicts that the development generated traffic. It concludes that the adjacent highway network can adequately accommodate the traffic impact of the proposed development in terms of safety and capacity.
- 6.1.2 The proposed residential development accords with both national and local transport policy.
- 6.1.3 The existing access to the site via the access road junction with the A697 Bradley Road is suitable for the quantum of development and is considered to have suitable visibility splays.
- 6.1.4 The proposed 9 dwelling development is predicted to generate a total of 7 vehicles in the morning peak and 8 vehicles in the evening peak hour. The increase in the morning peak hour equates to an additional vehicle every 8.57 minutes, whilst in evening peak the increase equates to an additional vehicle every 7.5 minutes. The increase in vehicular traffic is not considered significant.
- 6.1.5 This report concludes that the development is considered acceptable in terms of traffic impact and accessibility provision, and that there are no highway safety or capacity reasons why planning consent for the proposed development should not be granted.

APPENDICES

APPENDIX A
SITE LOCATION PLAN



KEY

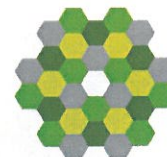
-  SITE LOCATION
-  BUS STOPS



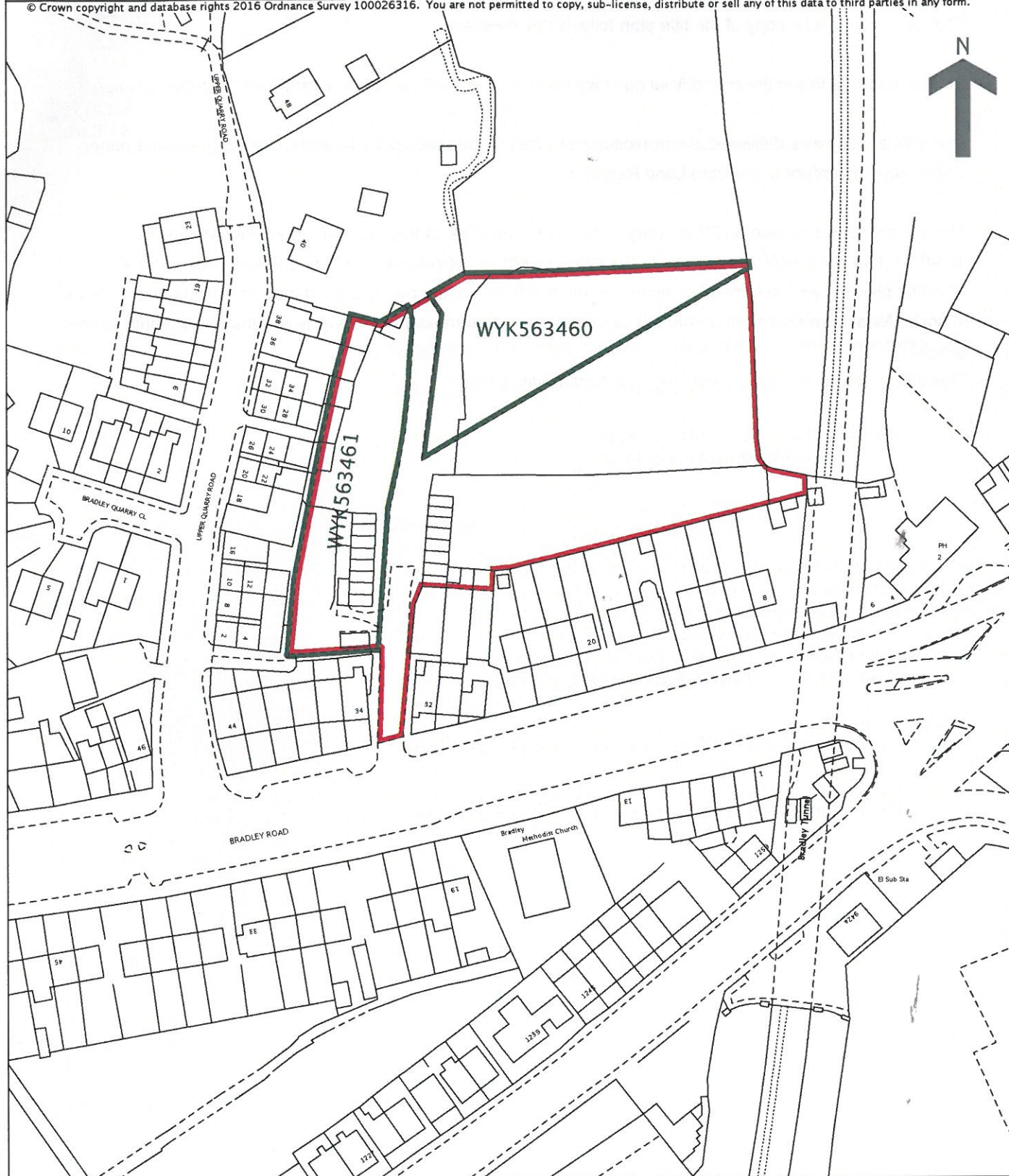
FIGURE 1
SITE LOCATION

SCALE 1: 5000 ©A4

APPENDIX B
PROPOSED DEVELOPMENT



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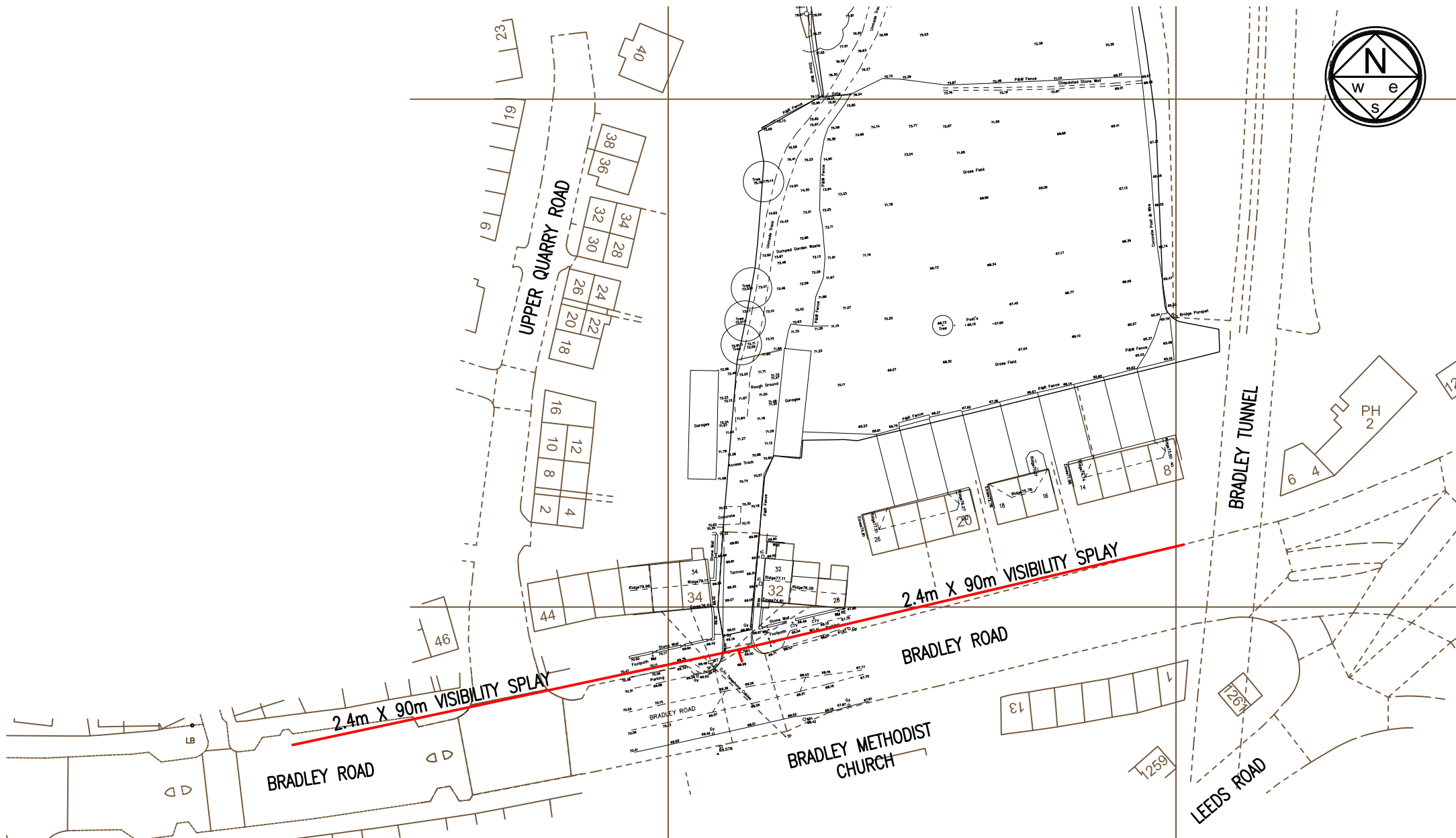


FIGURE 2
EXISTING
VISIBILITY SPLAYS

SCALE 1: 1000 @A4

APPENDIX C
TRICS DATA OUTPUT

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected 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 NEW BEDFORD ROAD	BEDFORDSHIRE
	LUTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	131	
2	BD-03-A-02	SEMI DETACHED, LUTON RIDDY LANE	BEDFORDSHIRE
	LUTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	82	
3	CA-03-A-02	MIXED HOUSES, PETERBOROUGH THORPE ROAD	CAMBRIDGESHIRE
	PETERBOROUGH Edge of Town Centre Residential Zone Total Number of dwellings:	363	
4	CB-03-A-02	SEMI DETACHED, WORKINGTON HAWKSHEAD AVENUE	CUMBRIA
	WORKINGTON Edge of Town Residential Zone Total Number of dwellings:	40	
5	CB-03-A-03	SEMI DETACHED, WORKINGTON HAWKSHEAD AVENUE	CUMBRIA
	WORKINGTON Edge of Town Residential Zone Total Number of dwellings:	40	
6	CB-03-A-04	SEMI DETACHED, WORKINGTON MOORCLOSE ROAD SALTERBACK WORKINGTON Edge of Town No Sub Category Total Number of dwellings:	CUMBRIA
	82		
7	CF-03-A-01	MIXED HOUSES, CARDIFF VIRGIL STREET NINIAN PARK CARDIFF Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings:	CARDIFF
	222		
8	CF-03-A-02	MIXED HOUSES, CARDIFF DROPE ROAD	CARDIFF
	CARDIFF Edge of Town Residential Zone Total Number of dwellings:	196	
9	CF-03-A-03	DETACHED, CARDIFF LLANTRISANT ROAD	CARDIFF
	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 SYDNEY ROAD	HOUSES/FLATS, CREWE		CESHIRE
	CREWE Edge of Town Residential Zone Total Number of dwellings:	174		
11	CH-03-A-05 SYDNEY ROAD SYDNEY CREWE Edge of Town Residential Zone Total Number of dwellings:	DETACHED, CREWE	17	CESHIRE
12	CH-03-A-06 CREWE ROAD	SEMI -DET./BUNGALOWS, CREWE		CESHIRE
	CREWE Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings:		129	
13	CP-03-A-02 THE RISE	SEMI DETACHED, PENGAM		CAERPHILLY
	PENGAM Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings:		41	
14	CW-03-A-01 ALVERTON ROAD	TERRACED, PENZANCE		CORNWALL
	PENZANCE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		13	
15	CW-03-A-02 BOSVEAN GARDENS	SEMI D./DETACHED, TRURO		CORNWALL
	TRURO Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		73	
16	DC-03-A-01 ISAACS CLOSE	DETACHED, POOLE		DORSET
	POOLE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		51	
17	DS-03-A-01 THE AVENUE HOLMESDALE DRONFIELD Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings:	SEMI D./TERRACED, DRONFIELD		DERBYSHIRE
18	EX-03-A-01 MILTON ROAD CORRINGHAM STANFORD-LE-HOPE Edge of Town Residential Zone Total Number of dwellings:	SEMI -DET., STANFORD-LE-HOPE	20	ESSEX
			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 GRAMMAR SCHOOL LANE	NORTH YORKSHIRE
		NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52	
29	NY-03-A-03	PRIVATE HOUSING, BOROUGHBRIDGE NEW ROW	NORTH YORKSHIRE
		BOROUGHBRIDGE Edge of Town Centre Residential Zone Total Number of dwellings: 14	
30	NY-03-A-05	HOUSES AND FLATS, RIPON BOROUGHBRIDGE ROAD	NORTH YORKSHIRE
		RIPON Edge of Town No Sub Category Total Number of dwellings: 71	
31	SC-03-A-03	DETACHED, EAST MOLESEY A3050 HURST ROAD HURST PARK EAST MOLESEY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 54	SURREY
32	SC-03-A-04	HOUSES & FLATS,NEAR FRIMLEY DEEPCUT BRIDGE ROAD DEEPCUT NEAR FRIMLEY Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 288	SURREY
33	SF-03-A-01	SEMI DETACHED, IPSWICH A1156 FELIXSTOWE ROAD RACECOURSE IPSWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 77	SUFFOLK
34	SF-03-A-02	SEMI DET./TERRACED, IPSWICH STOKE PARK DRIVE MAIDENHALL IPSWICH Edge of Town Residential Zone Total Number of dwellings: 230	SUFFOLK
35	SF-03-A-03	MIXED HOUSES, BURY ST EDMDS BARTON HILL FORNHAM ST MARTIN BURY ST EDMUNDS Edge of Town Out of Town Total Number of dwellings: 101	SUFFOLK
36	SH-03-A-03	DETACHED, SHREWSBURY SOMERBY DRIVE BICTON HEATH SHREWSBURY Edge of Town No Sub Category Total Number of dwellings: 10	SHROPSHIRE

LIST OF SITES relevant to selection parameters (Cont.)

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

LIST OF SITES relevant to selection parameters (Cont.)

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

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS
15th Percentile = No. 43 (**)
85th Percentile = No. 9 (**)

Time Range: 08:00-09:00

Median Values

Arrivals: 0.145
Departures: 0.420
Totals: 0.565

Rank	Site-Ref	Description	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Travel Plan
							Arrivals	Departures	Totals	
1	WO-03-A-01	DETACHED, BROMSGROVE	WORCESTERSHIRE	10	Thu	23/06/05	0.500	0.600	1.100	
2	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE	82	Tue	06/07/04	0.317	0.537	0.854	
3	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tue	14/10/08	0.235	0.588	0.823	
4	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.203	0.543	0.746	
5	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.287	0.454	0.741	
6	TW-03-A-01	SEMI DETACHED, SUNDERLAN	TYNE & WEAR	81	Wed	18/09/02	0.235	0.506	0.741	
7	SF-03-A-02	SEMI DET./TERRACED, IPSW	SUFFOLK	230	Thu	24/05/07	0.243	0.491	0.734	
8	SC-03-A-04	HOUSES & FLATS, NEAR FRIM	SURREY	288	Wed	10/02/10	0.156	0.576	0.732	
9 **	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.405	0.726	
10	SH-03-A-03	DETACHED, SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.200	0.500	0.700	
11	EX-03-A-01	SEMI-DET., STANFORD-LE-H	ESSEX	237	Tue	13/05/08	0.177	0.523	0.700	
12	CB-03-A-03	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Thu	20/11/08	0.225	0.450	0.675	
13	SF-03-A-03	MIXED HOUSES, BURY ST ED	SUFFOLK	101	Mon	15/05/06	0.109	0.554	0.663	
14	CF-03-A-01	MIXED HOUSES, CARDIFF	CARDIFF	222	Thu	17/10/02	0.167	0.491	0.658	
15	WO-03-A-05	TERRACED/DET., BROMSGROV	WORCESTERSHIRE	215	Thu	23/05/02	0.140	0.516	0.656	
16	LC-03-A-29	DETACHED/SEMI D., BLACKB	LANCASHIRE	185	Thu	10/06/04	0.130	0.524	0.654	
17	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.500	0.643	
18	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.187	0.440	0.627	
19	CF-03-A-03	DETACHED, CARDIFF	CARDIFF	29	Mon	08/10/07	0.069	0.552	0.621	
20	CW-03-A-01	TERRACED, PENZANCE	CORNWALL	13	Thu	30/06/05	0.385	0.231	0.616	
21	CP-03-A-02	SEMI DETACHED, PENGAM	CAERPHILLY	41	Mon	05/09/05	0.195	0.415	0.610	
22	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.183	0.425	0.608	
23	TV-03-A-01	MIXED HOUSES/FLATS, HART	TEES VALLEY	225	Thu	14/04/05	0.138	0.458	0.596	
24	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Mon	22/09/08	0.113	0.465	0.578	
25	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.152	0.418	0.570	
26	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thu	08/07/04	0.145	0.420	0.565	
27	CB-03-A-04	SEMI DETACHED, WORKINGTO	CUMBRIA	82	Fri	24/04/09	0.183	0.366	0.549	
28	WO-03-A-06	DET./TERRACED, BROMSGROV	WORCESTERSHIRE	232	Thu	30/06/05	0.099	0.448	0.547	
29	CA-03-A-02	MIXED HOUSES, PETERBOROU	CAMBRIDGESHIRE	363	Thu	13/05/04	0.201	0.339	0.540	
30	SC-03-A-03	DETACHED, EAST MOLESEY	SURREY	54	Tue	12/11/02	0.148	0.389	0.537	
31	CF-03-A-02	MIXED HOUSES, CARDIFF	CARDIFF	196	Fri	05/10/07	0.107	0.413	0.520	
32	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK	77	Wed	23/05/07	0.104	0.416	0.520	
33	LC-03-A-22	BUNGALOWS, BLACKPOOL	LANCASHIRE	98	Tue	18/10/05	0.173	0.337	0.510	
34	WO-03-A-04	MIXED HOUSES, WORCESTER	WORCESTERSHIRE	792	Fri	24/05/02	0.120	0.388	0.508	

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Ranking Type: TOTALS
15th Percentile = No. 43 (**)
85th Percentile = No. 9 (**)

Time Range: 17:00-18:00

Median Values

Arrivals: 0.398
Departures: 0.214
Totals: 0.612

Rank	Site-Ref	Description	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Travel Plan
							Arrivals	Departures	Totals	
1	SH-03-A-03	DETACHED, SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.700	0.600	1.300	
2	WO-03-A-01	DETACHED, BROMSGROVE	WORCESTERSHIRE	10	Thu	23/06/05	0.500	0.600	1.100	
3	CB-03-A-02	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Mon	20/06/05	0.525	0.400	0.925	
4	LC-03-A-29	DETACHED/SEMI D., BLACKB	LANCASHIRE	185	Thu	10/06/04	0.551	0.346	0.897	
5	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.558	0.319	0.877	
6	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.495	0.355	0.850	
7	DC-03-A-01	DETACHED, POOLE	DORSET	51	Wed	16/07/08	0.510	0.333	0.843	
8	TW-03-A-01	SEMI DETACHED, SUNDERLAN	TYNE & WEAR	81	Wed	18/09/02	0.519	0.259	0.778	
9 **	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.405	0.369	0.774	
10	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tue	14/10/08	0.353	0.412	0.765	
11	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.463	0.296	0.759	
12	SF-03-A-03	MIXED HOUSES, BURY ST ED	SUFFOLK	101	Mon	15/05/06	0.525	0.228	0.753	
13	SF-03-A-02	SEMI DET./TERRACED, IPSW	SUFFOLK	230	Thu	24/05/07	0.478	0.248	0.726	
14	CB-03-A-03	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Thu	20/11/08	0.475	0.250	0.725	
15	EX-03-A-01	SEMI-DET., STANFORD-LE-H	ESSEX	237	Tue	13/05/08	0.439	0.274	0.713	
16	NT-03-A-03	SEMI DETACHED,KIRKBY-IN-	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.398	0.307	0.705	
17	CF-03-A-01	MIXED HOUSES, CARDIFF	CARDIFF	222	Thu	17/10/02	0.509	0.185	0.694	
18	WO-03-A-05	TERRACED/DET., BROMSGROV	WORCESTERSHIRE	215	Thu	23/05/02	0.474	0.214	0.688	
19	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.458	0.229	0.687	
20	CP-03-A-02	SEMI DETACHED, PENGAM	CAERPHILLY	41	Mon	05/09/05	0.341	0.317	0.658	
21	CF-03-A-03	DETACHED, CARDIFF	CARDIFF	29	Mon	08/10/07	0.414	0.241	0.655	
22	CW-03-A-02	SEMI D./DETACHED, TRURO	CORNWALL	73	Tue	18/09/07	0.425	0.219	0.644	
23	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.413	0.213	0.626	
24	SC-03-A-04	HOUSES & FLATS,NEAR FRIM	SURREY	288	Wed	10/02/10	0.410	0.215	0.625	
25	TV-03-A-01	MIXED HOUSES/FLATS, HART	TEES VALLEY	225	Thu	14/04/05	0.409	0.209	0.618	
26	CF-03-A-02	MIXED HOUSES, CARDIFF	CARDIFF	196	Fri	05/10/07	0.398	0.214	0.612	
27	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Mon	22/09/08	0.437	0.169	0.606	
28	WO-03-A-06	DET./TERRACED, BROMSGROV	WORCESTERSHIRE	232	Thu	30/06/05	0.414	0.185	0.599	
29	WO-03-A-04	MIXED HOUSES, WORCESTER	WORCESTERSHIRE	792	Fri	24/05/02	0.374	0.197	0.571	
30	CB-03-A-04	SEMI DETACHED, WORKINGTO	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	
31	CH-03-A-02	HOUSES/FLATS, CREWE	CHESHIRE	174	Tue	14/10/08	0.322	0.236	0.558	
32	GS-03-A-01	SEMI D./TERRACED, GLOUCE	GLOUCESTERSHIRE	73	Tue	25/05/04	0.411	0.137	0.548	
33	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.342	0.203	0.545	
34	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thu	08/07/04	0.351	0.183	0.534	