
Transport Statement

Proposed Residential Development off Pendle Drive, Whalley



For Taylor Wimpey

By Curtins Consulting Ltd
September 2011

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Introduction

- 1.1 Curtins Consulting has been appointed on behalf of Taylor Wimpey to provide traffic and transportation advice in relation to a proposed residential development on land off Pendle Drive, Whalley.
- 1.2 The site was previously in use as the isolation unit at Calderstones Hospital. This was demolished in the 90s although since that time outline planning consent has been granted for a B1 office development scheme. This permission was never implemented and Taylor Wimpey is now seeking to provide a maximum of 46 residential dwellings.

Purpose of this Report

- 1.3 This Transport Statement (TS) has been prepared to inform Highways Officers at Lancashire County Council (LCC) on all traffic and transportation matters associated with the development proposals.

Scope of the Report

- 1.4 In order to form the structure and content of this report, a scoping email was sent to Highways Officers at LCC on the 8th June 2011. LCC responded on the 15th June 2011 confirming that the scope contained within the email was acceptable and a TS would be required to accompany the planning application. It was agreed that the TS should include:
 - A description of the highway network in the vicinity of the site;
 - A description of walking, cycling and public transport infrastructure in the vicinity of the site;
 - A review of the accident record in the vicinity of the site using MARIO;
 - A summary of the development proposals including the number of units, access strategy, parking provision and refuse strategy;
 - A drawing showing proposed access arrangements and connections to the wider area;
 - A review of accessibility by all sustainable modes of travel which includes scoring of the site using the LCC accessibility assessment;
 - Information regarding traffic generation using the TRICS database; and
 - A description of the likely impact on surrounding highway network.
- 1.5 It was also confirmed that no traffic counts or capacity assessments would be required and a Travel Plan would not be needed.

1.0 Introduction

Structure of the Report

- 1.6 Following this introduction, Section 2 of the report will describe the existing site and its location followed by Section 3 which will present the development proposals. Section 4 considers the site's accessibility by sustainable modes of travel. Section 5 will outline the likely traffic generation associated with the development proposals and any potential highway impact. Finally, Section 6 will present a summary of the findings of this report along with a set of conclusions.

2.0 Existing Situation

Site Location

- 2.1 The application site is located off Pendle Drive, in Whalley. It is bordered by Pendle Drive to the south, residential properties and green space to the west, trees and green space to the north and a triangular piece of green space to the east.
- 2.2 On the opposite side of Pendle Drive a Taylor Wimpey residential development known as Calderstones Green is currently under construction. This 39 dwelling development consists of a mixture of 2 and 3 bedroom mews and 3, 4 and 5 bedroom detached homes.
- 2.3 The site is shown from a regional perspective in Plan 001 and a local perspective in Plan 002.

Existing Use

- 2.4 The application site is currently unoccupied. It was formerly in use as an isolation unit for the Calderstones Hospital although in recent years there has been outline planning consent for the construction of a new office development on the site.
- 2.5 Access to the former hospital site was via an access road along the western edge of the site. The gates for this access are still visible although the access road itself has been replaced with grass.

Surrounding Highway Network

Pendle Drive

- 2.6 Pendle Drive extends in a westerly direction from Mitton Road in the east for a distance of approximately 0.75km. It predominantly serves residential development and is designed to a high standard. There are wide footways either side of the carriageway, grass verges and street lighting. The intended speed limit is 20mph.
- 2.7 The junction of Pendle Drive and Mitton Road currently takes the form of a three arm priority junction, although there is a private access opposite Pendle Drive which effectively turns the junction into a staggered crossroads. There is good visibility in both directions.

Mitton Road

- 2.8 Mitton Road broadly runs on a north to south alignment from the district centre of Whalley in the south to Great Mitton in the north. It provides access to the regional highway network in the form of the A59 and the A671.

2.0 Existing Situation

- 2.9 In the vicinity of the site there are footways on the western side of Mitton Road but only grass verges on the eastern side of the carriageway. There is street lighting for much of its length and the carriageway is of a good standard.

Pedestrian & Cycle Facilities

- 2.10 The residential nature of the area ensures that there is already a network of existing pedestrian infrastructure in the vicinity of the application site. There are also a number of existing Public Rights Of Way in the vicinity of the site. These are discussed in more detail in Section 4 of this report.

Public Transport Facilities

- 2.11 The nearest public transport facilities consist of two bus stops located on Mitton Road approximately 150m to the south of Pendle Drive and two bus stops located approximately 200m to the north of Pendle Drive.
- 2.12 The nearest railway station is located in Whalley approximately 1km away from the application site.
- 2.13 Access to bus and rail services is discussed in more detail in Section 4 of this report.

Highway Safety Record

- 2.14 Lancashire County Council operates an online GIS system called Maps and Related Information Online (MARIO). This database contains a record of all accidents on the highway network in the last five years.
- 2.15 A review of the database indicates that there have been no accidents on Pendle Drive. However, there have been three accidents on Mitton Road within 600m of the site. Two of the accidents involved cyclists colliding with motor vehicles, both of which resulted in slight injuries. The third accident resulted in two cars colliding and also resulted in a slight injury.
- 2.16 The number of accidents recorded during the five year study period is not considered to be unusual for this type of road. Furthermore, site observations during the peak and off-peak periods have not indicated any highway safety concerns.

3.0 Development Proposals

Proposed Development

- 3.1 Taylor Wimpey is seeking planning permission for the development of 46 residential units. This consists of thirteen 2 and 3 bedroom Mews, twenty seven 3, 4 and 5 bedroom detached houses and six 4 bedroom corner detached homes.
- 3.2 The development proposals are shown on Drawing Number 10/094/P01 produced by LMP Architects.

Vehicular Access

- 3.3 The former vehicular access along the western boundary of the site will be reused to provide access into the development. The access road will be 5.5m metres wide and there will be 6m radii at the junction mouth.
- 3.4 Visibility splays of 2.4m x 22m were used to assess the Calderstones Green access in line with Manual for Streets. As this was accepted by LCC the same visibility splays have been produced for the proposed site access and are shown on Drawing Number 90142/100. The splays demonstrate that visibility is acceptable.
- 3.5 A swept path analysis exercise has been undertaken for a large refuse collection vehicle. The results are shown on Drawing Numbers 90142/200 and 201 and demonstrate that the vehicle can adequately access all properties within the site.

Pedestrian Access

- 3.6 Pedestrian access to the site will be via the main vehicular access as a 2m footway will be provided on the western side of the carriageway. In addition, there will also be connections from the site to the triangle of open space located to the north east of the site.

Cycle Access

- 3.7 Cyclists will access the residential development via the vehicular access point.

Internal Layout

- 3.8 The internal layout of the development has been designed to create streets that are not just for vehicles but also provide other functions such as parking areas and amenity space for pedestrians.
- 3.9 To promote the shared surface principals the streets are relatively narrow and may consist of different finishing work. This encourages drivers to be more careful and have the added advantage of reducing speeds within the development.

3.0 Development Proposals

Parking Provision

- 3.10 Parking for the development is split between garages, driveways and a small courtyard. The thirty three detached homes all have internal or detached garages with driveways whilst the Mews all have allocated parking spaces either on plot or in the courtyard parking area to the north west of the site.
- 3.11 This level of parking is considered to be acceptable and in line with the Joint Lancashire Structure Plan which was adopted in March 2005.

4.0 Accessibility

Introduction

- 4.1 A key element of national, regional and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. It is important to ensure that developments are not isolated but are located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

Pedestrian Accessibility

- 4.2 The location of the site within an existing residential area ensures that pedestrian facilities are of a high standard with well-lit, well-used and well-defined footway networks surrounding the site.
- 4.3 PPG13 states that walking is the *'most important mode of travel at the local level and offers the greatest potential to replace short car journeys, particularly under 2 kilometres'*.
- 4.4 Further research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution for Highways and Transportation (CIHT) document entitled *'Providing for Journeys on Foot'* suggests walking distances which are relevant to this planning application. These are reproduced in Table 4.1.

Table 4.1 Suggested Acceptable Walking Distances

	Town Centres (m)	Commuting/School/Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

- 4.5 To assist in summarising the accessibility of the site by foot, an indicative pedestrian catchment plan has been produced. Plan 003 shows distances of 500m, 1000m and 2000m which are termed *'Desirable'*, *'Acceptable'* and the *'Preferred Maximum'* by the IHT for trips to education facilities or commuting.
- 4.6 Plan 3 shows that Whalley district centre is located within 2000m of the site. This ensures that there are a range of retail, leisure, health, religious and employment opportunities within walking distance of the site. It

4.0 Accessibility

should also be noted that the district centre is accessible via existing footways and pedestrian crossing points.

- 4.7 Furthermore, there is an extensive network of Public Rights of Way in the vicinity of the site that offers leisure opportunities for future residents and links to various destinations. According to MARIO Footpath 1 and Footpath 44 extend on a north south alignment to the west of the application site and ultimately provide linkages to Nethertown and Whalley in the south and Clitheroe in the north. Footpaths 9 and 10 extend from the junction of Pendle Drive / Mitton Road in a south and easterly direction towards Whalley and Wiswell.
- 4.8 In conclusion, walking is considered to be a realistic mode of travel for residents who are accessing Whalley or some of the smaller settlements nearby.

Accessibility by Cycle

- 4.9 PPG13 guidelines state that cycling has the *'potential to replace short car journeys, particularly those under 5 kilometres'*. Therefore, to assist in assessing the accessibility of the site by cycle, Plan 004 presents a 5km cycle catchment for the site. This distance equates to a journey time of around 25 minutes, while cycling at a leisurely speed of 12 kilometres per hour.
- 4.10 The 5km catchment encompasses a wide variety of areas such as Clitheroe, Great Harwood, Great Mitton, Barrow, Whalley, Billington and Wiswell. These areas offer a range of employment opportunities for residents of the application site.
- 4.11 Furthermore, Mitton Road in the vicinity of the site forms part of the Ribble Valley Northern Cycle Loop and is classified as Regional Route 90. This runs between Preston and Lancaster but in Whalley it meets Regional Route 91 which runs between Leyland and Burnley. The site is therefore well positioned in close proximity to two regional cycle routes and cycling is considered to be a realistic alternative to private car use.

Bus

- 4.12 As mentioned previously there are 4 bus stops located on Mitton Road in the vicinity of the site. These are within 400m walking distance of the site. Bus infrastructure currently consists of flags on poles although as part of the Calderstones Green development a contribution was requested towards the provision of a bus shelter.
- 4.13 The existing bus stops are utilised by two services as summarised in Table 4.2

4.0 Accessibility

Table 4.2 – Summary of Bus Services on Mitton Road

Bus Service	Journey	Frequency (Mins)
		Monday to Saturday
5	Longridge – Ribchester Hurst Green – Whalley – Clitheroe	120
C25	Clitheroe – Calderstones Park – Whalley – Dinckley – Salesbury – Blackburn	120

4.14 Based on the above it is considered that the site is well located to benefit from existing bus services. These services provide connections to a wide range of destinations including significant employment areas such as Clitheroe.

Rail

4.15 Whalley railway station is located approximately 1km from the site. There is generally an hourly service northbound to Clitheroe and southbound to Blackburn and Manchester Victoria. However, there are extra trains during peak hours.

4.16 The station also provides access to local destinations such as Langho, Ramsgreave & Wilpshire, Darwen, Entwistle (Request Stop), Bromley Cross, Hall i' th' Wood, Bolton, Salford Crescent Salford Central.

LCC Accessibility Questionnaire

4.17 As agreed during the scoping discussion, the Accessibility Questionnaire on the LCC website has been completed. The full results are contained in Appendix A at the end of this report.

4.18 Based on current conditions the site achieved a score of 20 which is classed as medium accessibility.

5.0 Highways Impact

Introduction

- 5.1 Highways Officers at LCC agreed that no traffic counts or junction capacity assessments would be required as part of this assessment. However, they did request details regarding traffic generation and the potential impact upon the surrounding highway network.

Existing Conditions

- 5.2 There is currently no traffic generated by the application site.
- 5.3 Traffic flows on Pendle Drive have been observed during the AM, PM and off-peak peak periods and it is considered that traffic flows are light.

Trip Generation

- 5.4 To assess the traffic generation associated with the proposed residential development the TRICS database has been used. The TRICS database is an industry-standard software tool which comprises a vast database of traffic surveys of existing developments, sub categorised into particular land uses such as residential, office development, healthcare facilities etc. To ensure robustness 85th percentile trip rates have been used.
- 5.5 The trip rates and predicted trip generation based on the “Residential Houses Privately Owned” category is shown in Table 5.1.

Table 5.1 – TRICS Analysis Results for Proposed Residential Development (85th Percentile)

Time Period	Trip Rate			Traffic Generation		
	Arrivals	Departures	Total	Arrivals	Departures	Total
0800 – 0900	0.24	0.49	0.73	11	23	34
1700 – 1800	0.51	0.26	0.78	23	12	35

(Based on 46 dwellings)

- 5.6 Table 5.1 indicates that the proposed residential development could generate 34 car trips in the AM peak period and 35 car trips in the PM peak period. This equates to approximately one vehicle every two minutes.

5.0 Highways Impact

-
- 5.7 When the combined traffic levels of the proposed development and the Calderstones Green development is considered, the traffic generation equates to approximately 60 vehicles in the AM and PM peak peak periods which still only equates to one vehicle a minute during peak times.
- 5.8 It is therefore considered that the surrounding highway network has sufficient capacity to accommodate the proposed development and the impact is likely to be immaterial.

6.0 Summary & Conclusions

Summary

- 6.1 This report considers the traffic and transport implications associated with proposals to construct 46 residential dwellings on land off Pendle Drive, in Whalley.
- 6.2 The site is located opposite another Taylor Wimpey development known as Calderstones Green.
- 6.3 The access arrangements and internal layout have been designed in accordance with Manual for Streets 2 to encourage slow traffic speeds.
- 6.4 Parking provision is in line with LCC parking standards.
- 6.5 The site's location in an existing residential area ensures that there are good pedestrian and cycling facilities already in place. This includes a number of Public Rights of Way and regional cycle routes.
- 6.6 There are existing public transport facilities in the form of bus stops and Whalley railway station. These provide alternative modes of travel to the car and are considered to be realistic modes of travel for commuting or leisure based journeys.
- 6.7 Based on a review of MARIO and on-site observations there are no highway safety issues in the vicinity of the site.
- 6.8 The traffic generation associated with the proposed development equates to approximately one vehicle every two minutes and therefore it is expected that there will be an immaterial impact on the surrounding highway network.

Conclusion

- 6.9 From a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval.

Plans

Drg No:

90142 / 001

Rev:

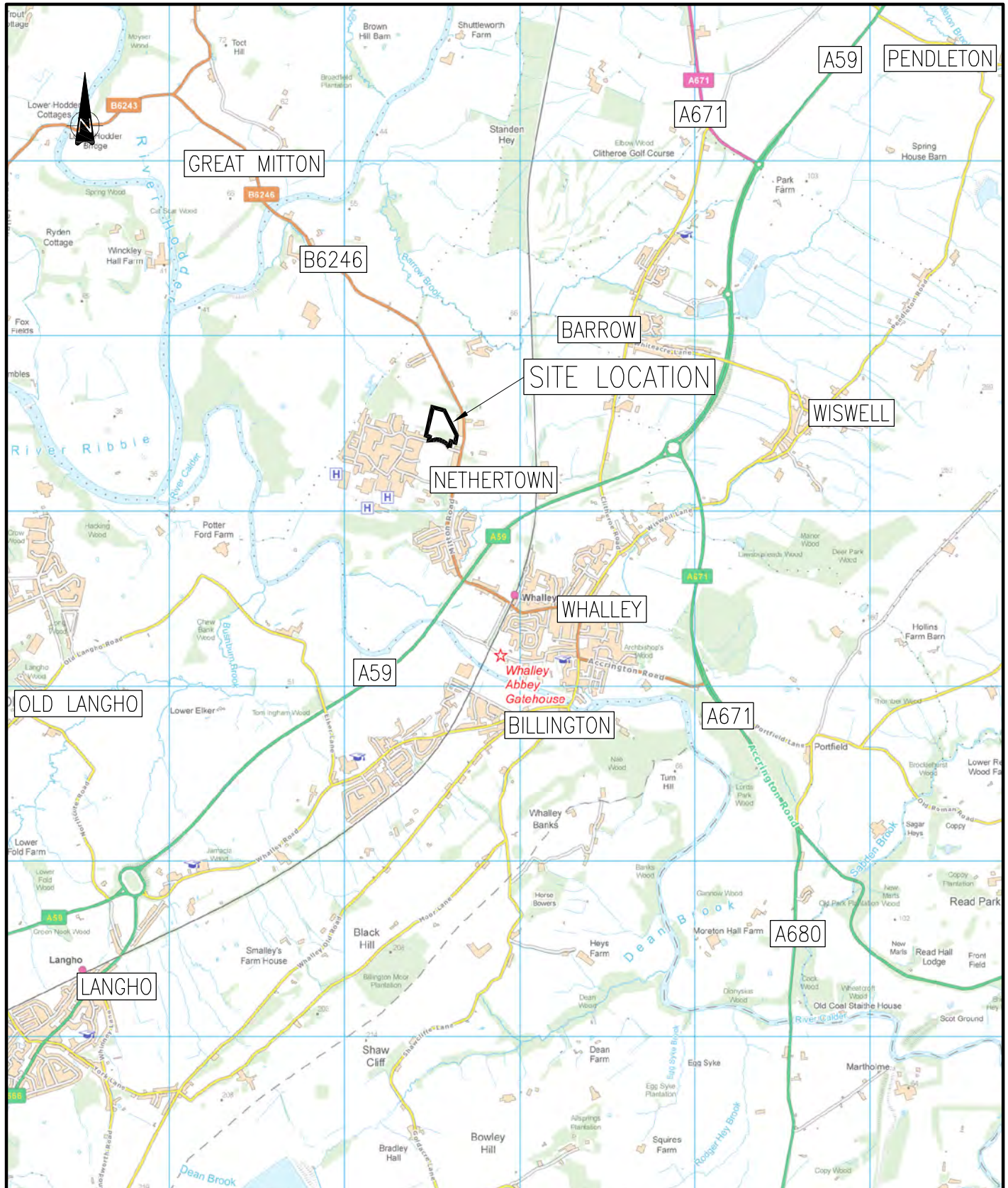
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Project: PENDLE DRIVE, WHALLEY
Drg Title: REGIONAL SITE LOCATION PLAN
Drawn: CMC
Checked: AV
Scale: NTS



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Drg No:

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Rev:

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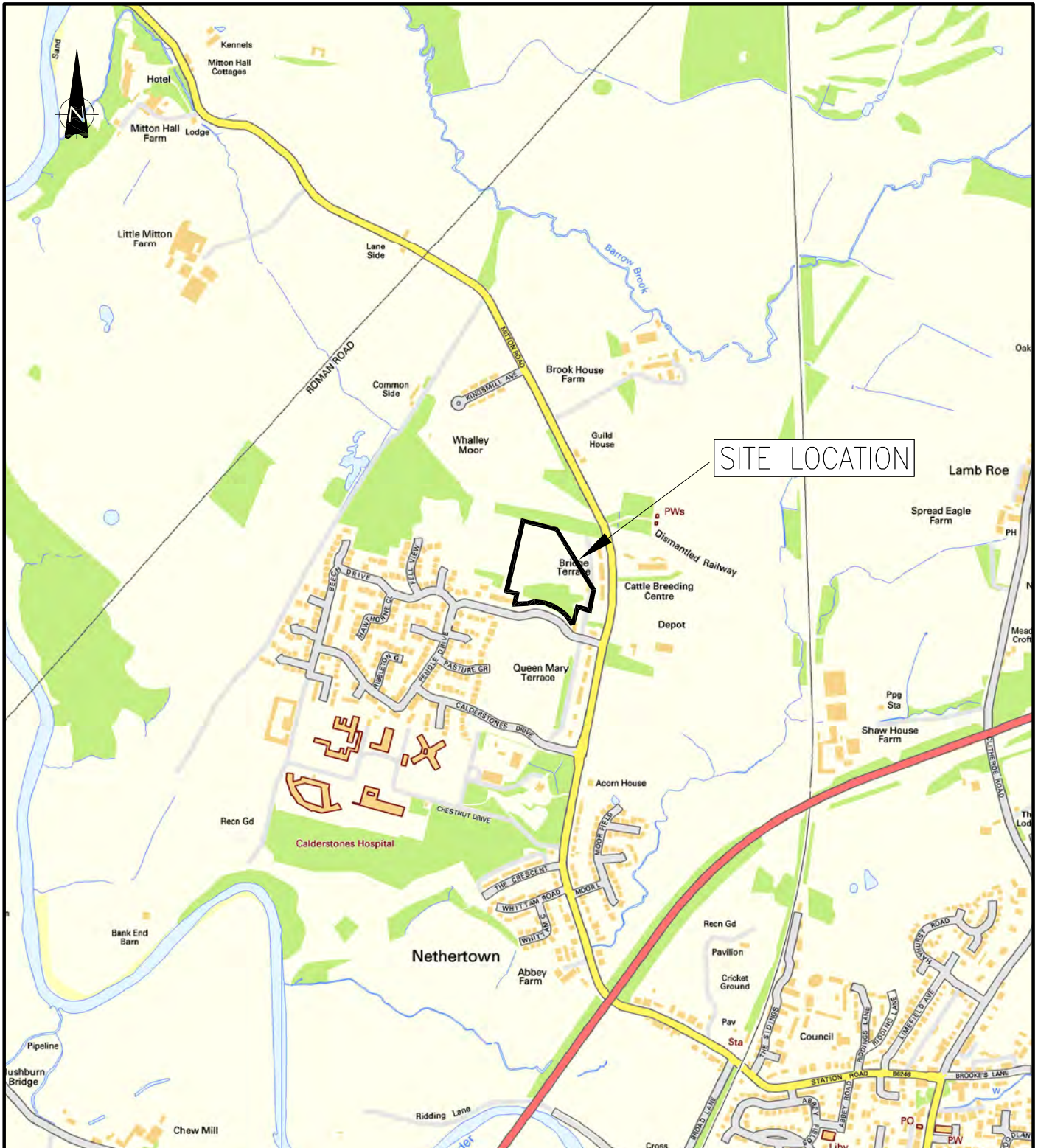
Project: PENDLE DRIVE, WHALLEY

Drg Title: LOCAL SITE LOCATION PLAN

Drawn: CMC

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Scale: NTS



Drg No:

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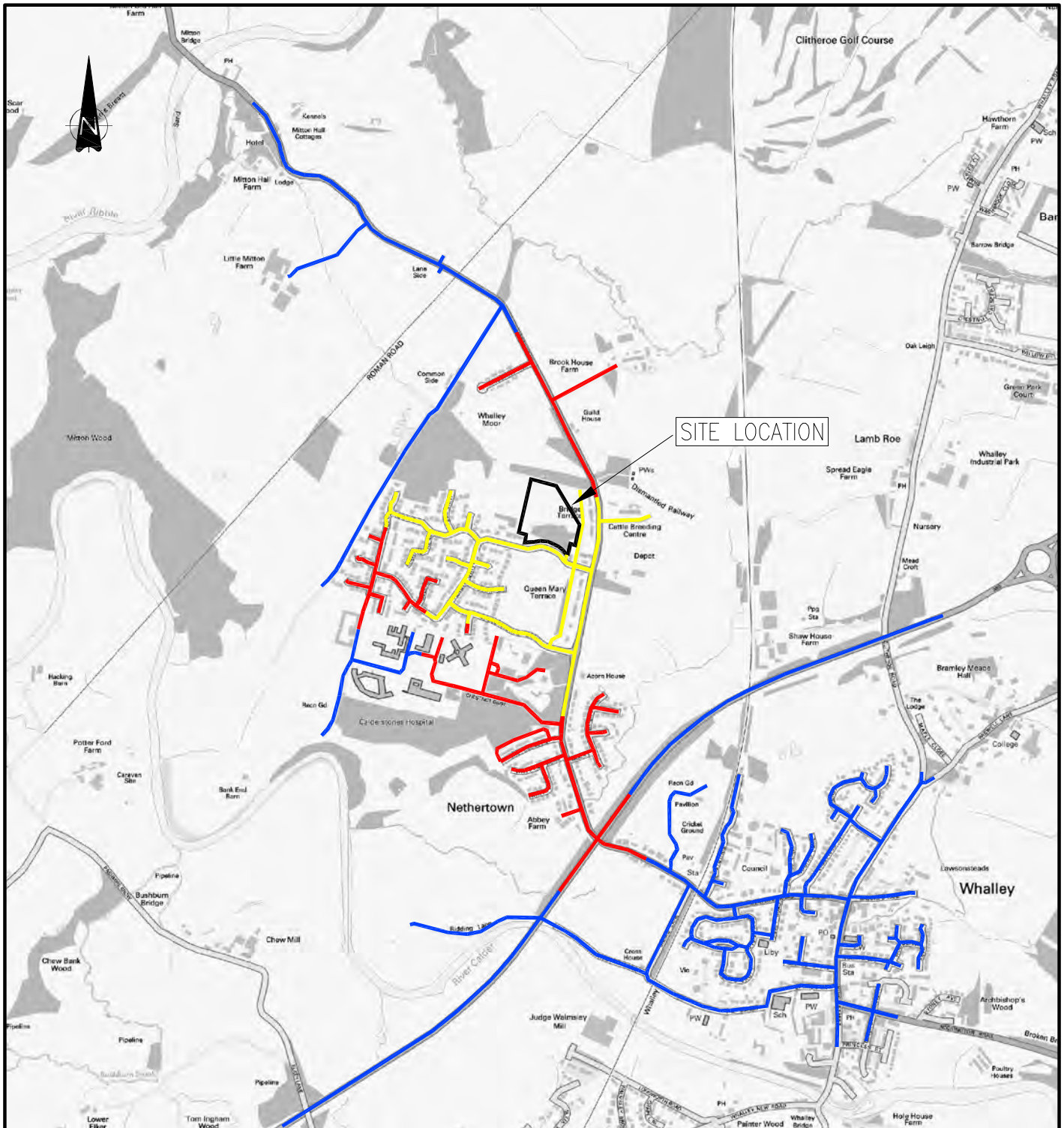
Project: PENDLE DRIVE, WHALLEY

Drg Title: PEDESTRIAN CATCHMENT PLAN

Drawn: CMC

Checked: AV

Scale: NTS



KEY:

- 500m CATCHMENT
- 1000m CATCHMENT
- 2000m CATCHMENT

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Drg No:

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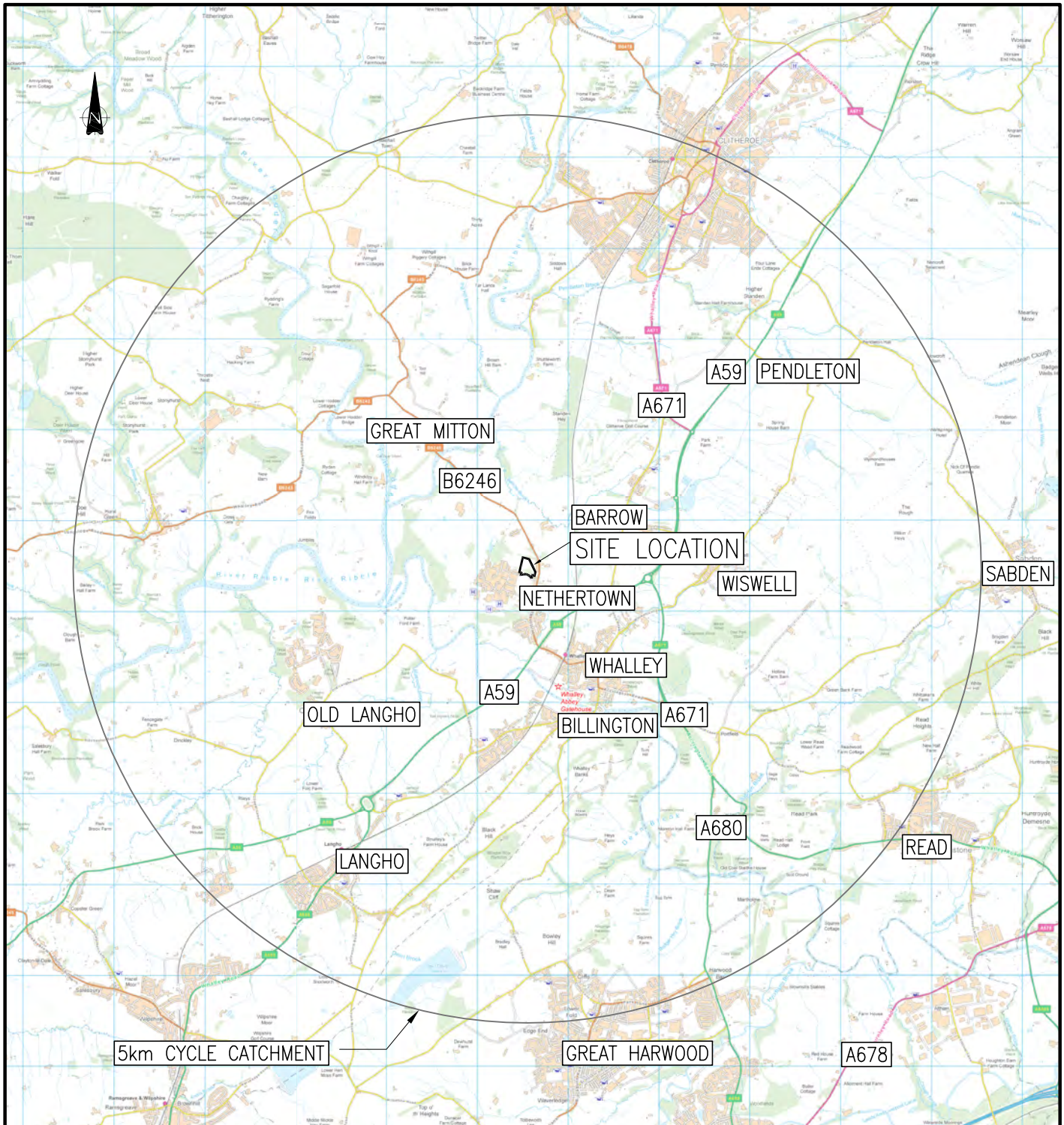
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Project: PENDLE DRIVE, WHALLEY
Drg Title: INDICATIVE CYCLE CATCHMENT
Drawn: CMC
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Scale: NTS





Drawings

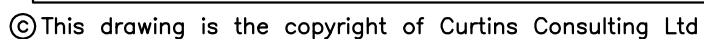


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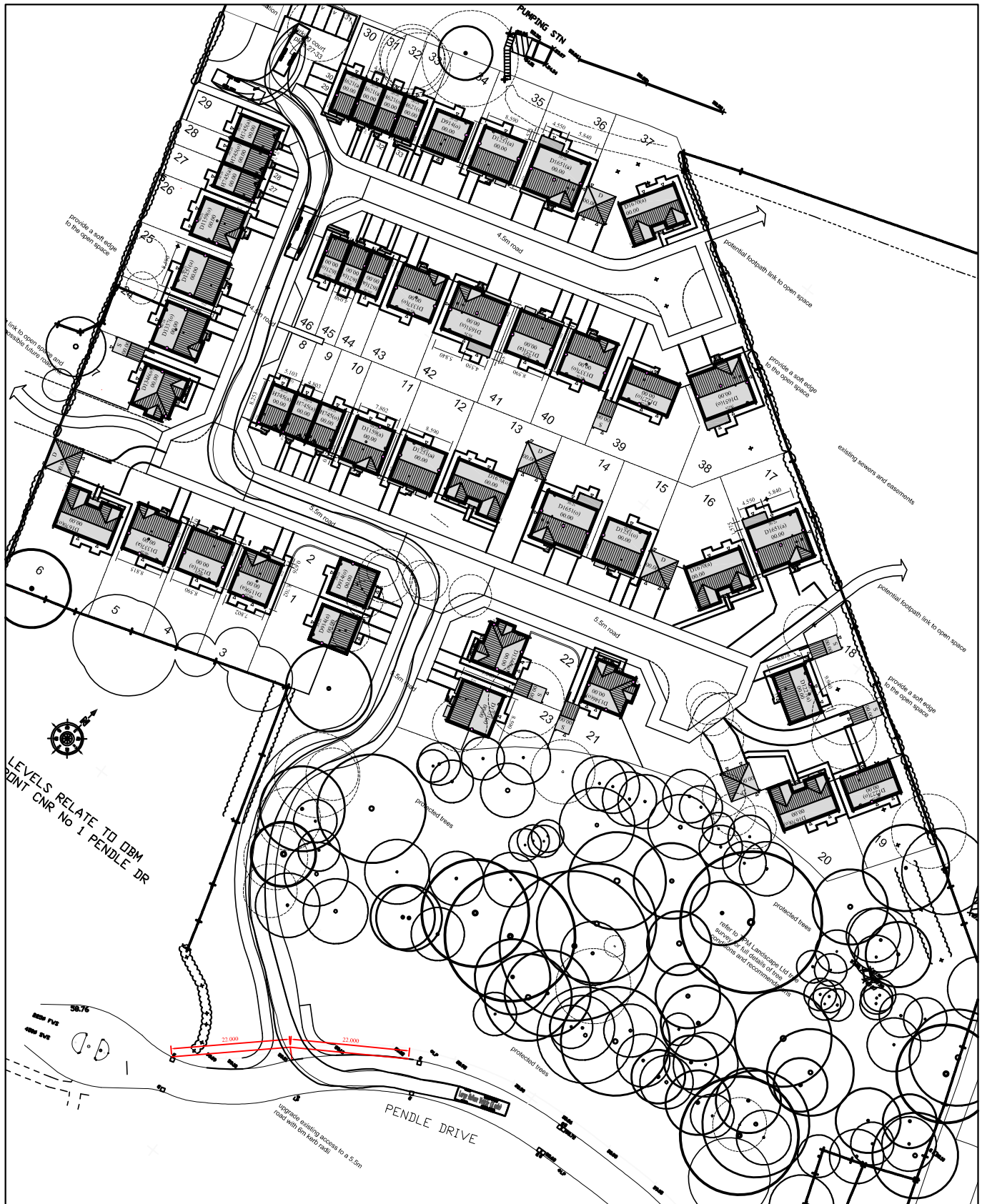
Project: PENDLE DRIVE, WHALLEY

Drg Title: SWEEP PATH ANALYSIS FOR REFUSE VEHICLE

Drawn: RB

Checked: AV

Scale: 1:1000



Drg No:

90142 / 201

Rev: _____



Project: PENDLE DRIVE, WHALLEY
Drg Title: SWEEPED PATH ANALYSIS FOR REFUSE VEHICLE
Drawn: RB
Checked: AV
Scale: 1:1000

Drg Title: **SWEPT PATH ANALYSIS FOR REFUSE VEHICLE**
 Drawn: **RB**
 Checked: **AV**
 Scale: **1:1000**

Drawn: RB
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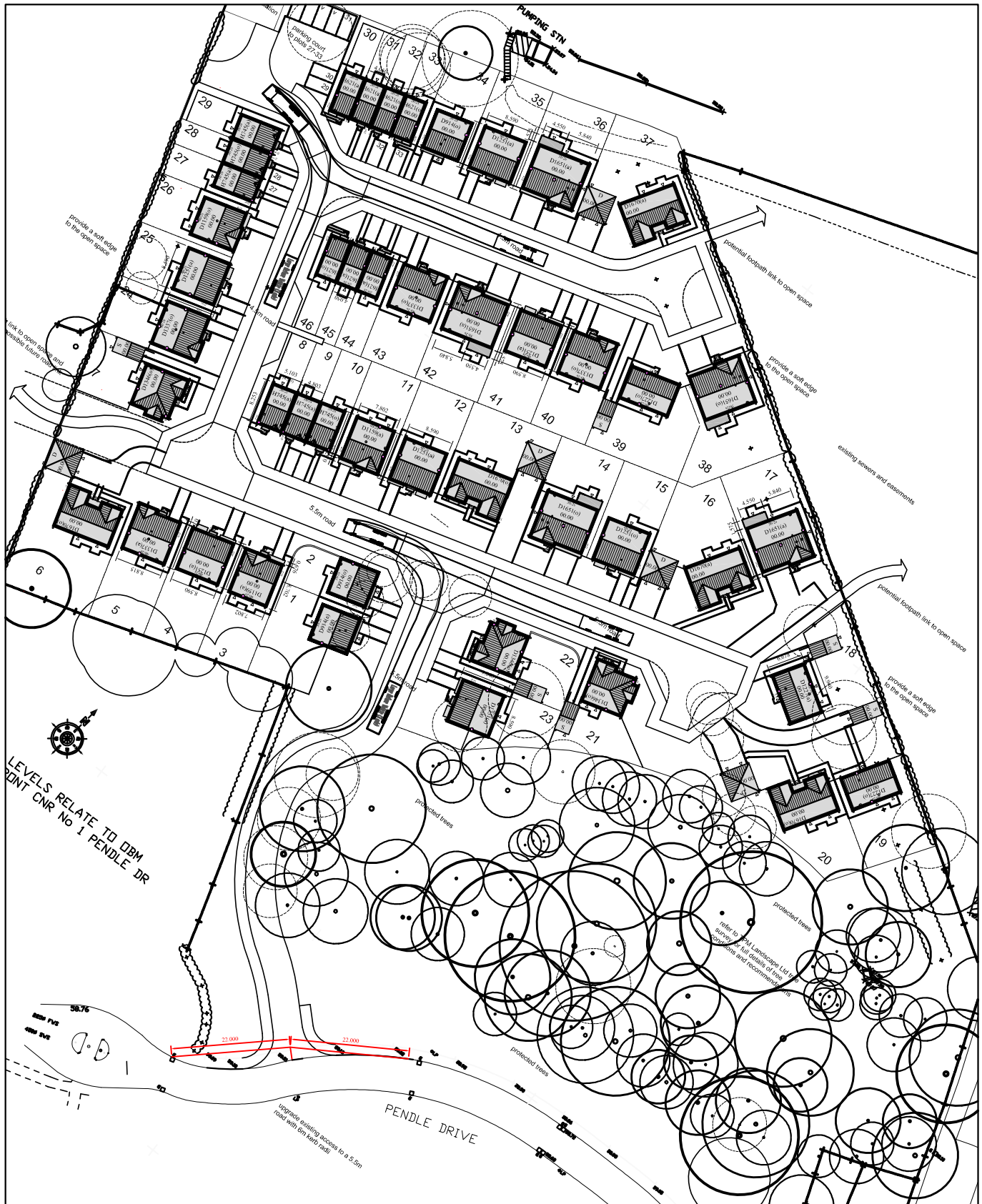
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Appendix A – Accessibility Questionnaire

Residential Development Accessibility Score *(24/06/2011 10:31:12)*

Entered Values

Score for distance to nearest bus stop: **3**
Score for distance to nearest railway station: **1**
Score for distance to nearest Primary School: **0**
Score for distance to nearest food shop: **0**
Score for distance to defined cycle routes: **3**
Score for distance to nearest Secondary School: **0**
Score for distance to nearest Town Centre: **2**
Score for distance to nearest Business Park or employment concentration: **3**
Score for bus frequency of principal service (Urban or Rural): **3**
Score for train frequency from nearest station: **1**
Score for Accessibility to other basic services (GP, Post Office, Library, Bank): **1**
Score for distance to nearest play area or park: **3**

Your Score

Your Residential Development Accessibility Score is: 20

Appendix B – TRICs Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
	BN BARNET	1 days
	BT BRENT	1 days
	KN KENSINGTON AND CHELSEA	1 days
	SK SOUTHWARK	1 days
	WE WESTMINSTER	1 days
	WF WALTHAM FOREST	1 days
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

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 10/02/10

Selected survey days:

Monday	7 days
Tuesday	15 days
Wednesday	7 days
Thursday	16 days
Friday	7 days

Selected survey types:

Manual count	52 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	22
Edge of Town	22
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	38
Built-Up Zone	2
Village	1
Out of Town	1
No Sub Category	10

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

Ranking Type: TOTALS

Time Range: 08:00-09:00

15th Percentile = No. 44 (**)

85th Percentile = No. 9 (**)

Median Values

Arrivals: 0.148

Departures: 0.419

Totals: 0.567

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	BT-03-A-01	SEMI DETACHED, BRENT	BRENT	82	Tue	20/11/07	0.415	0.488	0.903	
3	BN-03-A-01	SEMI DETACHED, COCKFOSTE	BARNET	10	Thu	20/10/05	0.300	0.600	0.900	
4	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE	82	Tue	06/07/04	0.317	0.537	0.854	
5	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tue	14/10/08	0.235	0.588	0.823	
6	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.203	0.543	0.746	
7	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.287	0.454	0.741	
8	TW-03-A-01	SEMI DETACHED, SUNDERLAN	TYNE & WEAR	81	Wed	18/09/02	0.235	0.506	0.741	
9 **	SF-03-A-02	SEMI DET./TERRACED, IPSW	SUFFOLK	230	Thu	24/05/07	0.243	0.491	0.734	
10	SC-03-A-04	HOUSES & FLATS, NEAR FRIM	SURREY	288	Wed	10/02/10	0.156	0.576	0.732	
11	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.321	0.405	0.726	
12	SH-03-A-03	DETACHED, SHREWSBURY	SHROPSHIRE	10	Fri	26/06/09	0.200	0.500	0.700	
13	EX-03-A-01	SEMI-DET., STANFORD-LE-H	ESSEX	237	Tue	13/05/08	0.177	0.523	0.700	
14	CB-03-A-03	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Thu	20/11/08	0.225	0.450	0.675	
15	KN-03-A-01	TERRACED, NORTH KENSINGT	KENSINGTON AND CHELSEA	24	Fri	26/01/07	0.292	0.375	0.667	
16	SF-03-A-03	MIXED HOUSES, BURY ST ED	SUFFOLK	101	Mon	15/05/06	0.109	0.554	0.663	
17	WO-03-A-05	TERRACED/DET., BROMSGROV	WORCESTERSHIRE	215	Thu	23/05/02	0.140	0.516	0.656	
18	LC-03-A-29	DETACHED/SEMI D., BLACKB	LANCASHIRE	185	Thu	10/06/04	0.130	0.524	0.654	
19	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE	14	Wed	26/11/08	0.143	0.500	0.643	
20	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	150	Tue	15/05/07	0.187	0.440	0.627	
21	CW-03-A-01	TERRACED, PENZANCE	CORNWALL	13	Thu	30/06/05	0.385	0.231	0.616	
22	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.183	0.425	0.608	
23	WF-03-A-01	TERRACED, WALTHAMSTOW	WALTHAM FOREST	53	Tue	30/01/07	0.245	0.358	0.603	
24	TV-03-A-01	MIXED HOUSES/FLATS, HART	TEES VALLEY	225	Thu	14/04/05	0.138	0.458	0.596	
25	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Mon	22/09/08	0.113	0.465	0.578	
26	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.152	0.418	0.570	
27	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thu	08/07/04	0.145	0.420	0.565	
28	CB-03-A-04	SEMI DETACHED, WORKINGTO	CUMBRIA	82	Fri	24/04/09	0.183	0.366	0.549	
29	WO-03-A-06	DET./TERRACED, BROMSGROV	WORCESTERSHIRE	232	Thu	30/06/05	0.099	0.448	0.547	
30	CA-03-A-02	MIXED HOUSES, PETERBOROU	CAMBRIDGESHIRE	363	Thu	13/05/04	0.201	0.339	0.540	
31	SC-03-A-03	DETACHED, EAST MOLESEY	SURREY	54	Tue	12/11/02	0.148	0.389	0.537	
32	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK	77	Wed	23/05/07	0.104	0.416	0.520	

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Rank	Site-Ref	Description	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Travel Plan
							Arrivals	Departures	Totals	
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	
35	CB-03-A-02	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Mon	20/06/05	0.075	0.425	0.500	
36	CH-03-A-02	HOUSES/FLATS, CREWE	CHESHIRE	174	Tue	14/10/08	0.103	0.374	0.477	
37	DC-03-A-01	DETACHED, POOLE	DORSET	51	Wed	16/07/08	0.098	0.373	0.471	
38	LE-03-A-01	DETACHED, MELTON MOWBRAY	LEICESTERSHIRE	11	Tue	03/05/05	0.091	0.364	0.455	
39	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.104	0.333	0.437	
40	CW-03-A-02	SEMI D./DETACHED, TRURO	CORNWALL	73	Tue	18/09/07	0.096	0.329	0.425	
41	NT-03-A-03	SEMI DETACHED,KIRKBY-IN-	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.108	0.313	0.421	
42	HF-03-A-01	MIXED HOUSES, WELWYN GC	HERTFORDSHIRE	53	Fri	06/09/02	0.113	0.302	0.415	
43	WL-03-A-01	SEMI D./TERRACED W. BASS	WILTSHIRE	99	Mon	02/10/06	0.071	0.333	0.404	
44 **	CH-03-A-06	SEMI-DET./BUNGALOWS,CREW	CHESHIRE	129	Tue	14/10/08	0.163	0.240	0.403	
45	GS-03-A-01	SEMI D./TERRACED, GLOUCE	GLOUCESTERSHIRE	73	Tue	25/05/04	0.123	0.260	0.383	
46	MS-03-A-01	TERRACED, RUNCORN	MERSEYSIDE	372	Thu	06/10/05	0.091	0.269	0.360	
47	NY-03-A-01	MIXED HOUSES,NORTHALLERT	NORTH YORKSHIRE	52	Tue	25/09/07	0.173	0.173	0.346	
48	WM-03-A-02	DETACHED/SEMI D., STRBRI	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.250	0.333	
49	DS-03-A-01	SEMI D./TERRACED, DRONFI	DERBYSHIRE	20	Thu	22/06/06	0.200	0.100	0.300	
50	NY-03-A-03	PRIVATE HOUSING, BOROUGH	NORTH YORKSHIRE	14	Mon	15/09/08	0.143	0.143	0.286	
51	SK-03-A-01	SEMI D./TERRACED, CAN. W	SOUTHWARK	15	Thu	23/10/08	0.067	0.200	0.267	
52	WE-03-A-01	PRINCES MEWS, NOTTING HI	WESTMINSTER	18	Thu	15/10/09	0.000	0.000	0.000	

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
	BN BARNET	1 days
	BT BRENT	1 days
	KN KENSINGTON AND CHELSEA	1 days
	SK SOUTHWARK	1 days
	WE WESTMINSTER	1 days
	WF WALTHAM FOREST	1 days
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

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 10/02/10

Selected survey days:

Monday	7 days
Tuesday	15 days
Wednesday	7 days
Thursday	16 days
Friday	7 days

Selected survey types:

Manual count	52 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	22
Edge of Town	22
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	38
Built-Up Zone	2
Village	1
Out of Town	1
No Sub Category	10

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

Ranking Type: TOTALS

Time Range: 17:00-18:00

15th Percentile = No. 44 (**)

85th Percentile = No. 9 (**)

Median Values

Arrivals: 0.425

Departures: 0.177

Totals: 0.603

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	BT-03-A-01	SEMI DETACHED, BRENT	BRENT	82	Tue	20/11/07	0.439	0.427	0.866	
7	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.495	0.355	0.850	
8	DC-03-A-01	DETACHED, POOLE	DORSET	51	Wed	16/07/08	0.510	0.333	0.843	
9 **	TW-03-A-01	SEMI DETACHED, SUNDERLAN	TYNE & WEAR	81	Wed	18/09/02	0.519	0.259	0.778	
10	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Mon	24/09/07	0.405	0.369	0.774	
11	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tue	14/10/08	0.353	0.412	0.765	
12	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.463	0.296	0.759	
13	WF-03-A-01	TERRACED, WALTHAMSTOW	WALTHAM FOREST	53	Tue	30/01/07	0.434	0.321	0.755	
14	SF-03-A-03	MIXED HOUSES, BURY ST ED	SUFFOLK	101	Mon	15/05/06	0.525	0.228	0.753	
15	SF-03-A-02	SEMI DET./TERRACED, IPSW	SUFFOLK	230	Thu	24/05/07	0.478	0.248	0.726	
16	CB-03-A-03	SEMI DETACHED, WORKINGTO	CUMBRIA	40	Thu	20/11/08	0.475	0.250	0.725	
17	EX-03-A-01	SEMI-DET., STANFORD-LE-H	ESSEX	237	Tue	13/05/08	0.439	0.274	0.713	
18	NT-03-A-03	SEMI DETACHED,KIRKBY-IN-	NOTTINGHAMSHIRE	166	Wed	28/06/06	0.398	0.307	0.705	
19	BN-03-A-01	SEMI DETACHED, COCKFOSTE	BARNET	10	Thu	20/10/05	0.300	0.400	0.700	
20	WO-03-A-05	TERRACED/DET., BROMSGROV	WORCESTERSHIRE	215	Thu	23/05/02	0.474	0.214	0.688	
21	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE	48	Tue	02/05/06	0.458	0.229	0.687	
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	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Mon	22/09/08	0.437	0.169	0.606	
27	WO-03-A-06	DET./TERRACED, BROMSGROV	WORCESTERSHIRE	232	Thu	30/06/05	0.414	0.185	0.599	
28	WO-03-A-04	MIXED HOUSES, WORCESTER	WORCESTERSHIRE	792	Fri	24/05/02	0.374	0.197	0.571	
29	CB-03-A-04	SEMI DETACHED, WORKINGTO	CUMBRIA	82	Fri	24/04/09	0.354	0.207	0.561	
30	CH-03-A-02	HOUSES/FLATS, CREWE	CHESHIRE	174	Tue	14/10/08	0.322	0.236	0.558	
31	GS-03-A-01	SEMI D./TERRACED, GLOUCE	GLOUCESTERSHIRE	73	Tue	25/05/04	0.411	0.137	0.548	
32	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.342	0.203	0.545	

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Rank	Site-Ref	Description	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Travel Plan
							Arrivals	Departures	Totals	
33	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thu	08/07/04	0.351	0.183	0.534	
34	LC-03-A-22	BUNGALOWS, BLACKPOOL	LANCASHIRE	98	Tue	18/10/05	0.347	0.173	0.520	
35	MS-03-A-01	TERRACED, RUNCORN	MERSEYSIDE	372	Thu	06/10/05	0.325	0.194	0.519	
36	WL-03-A-01	SEMI D./TERRACED W. BASS	WILTSHIRE	99	Mon	02/10/06	0.374	0.141	0.515	
37	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE	14	Wed	26/11/08	0.286	0.214	0.500	
38	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE	82	Tue	06/07/04	0.232	0.268	0.500	
39	CW-03-A-01	TERRACED, PENZANCE	CORNWALL	13	Thu	30/06/05	0.308	0.154	0.462	
40	LE-03-A-01	DETACHED, MELTON MOWBRAY	LEICESTERSHIRE	11	Tue	03/05/05	0.273	0.182	0.455	
41	SC-03-A-03	DETACHED, EAST MOLESEY	SURREY	54	Tue	12/11/02	0.296	0.130	0.426	
42	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK	77	Wed	23/05/07	0.247	0.169	0.416	
43	WM-03-A-02	DETACHED/SEMI D., STRBRI	WEST MIDLANDS	12	Wed	26/04/06	0.083	0.333	0.416	
44 **	HF-03-A-01	MIXED HOUSES, WELWYN GC	HERTFORDSHIRE	53	Fri	06/09/02	0.264	0.151	0.415	
45	CA-03-A-02	MIXED HOUSES, PETERBOROU	CAMBRIDGESHIRE	363	Thu	13/05/04	0.220	0.190	0.410	
46	NY-03-A-01	MIXED HOUSES,NORTHALLERT	NORTH YORKSHIRE	52	Tue	25/09/07	0.154	0.231	0.385	
47	NY-03-A-03	PRIVATE HOUSING, BOROUGH	NORTH YORKSHIRE	14	Mon	15/09/08	0.214	0.143	0.357	
48	KN-03-A-01	TERRACED, NORTH KENSINGT	KENSINGTON AND CHELSEA	24	Fri	26/01/07	0.167	0.125	0.292	
49	CH-03-A-06	SEMI-DET./BUNGALOWS,CREW	CHESHIRE	129	Tue	14/10/08	0.132	0.140	0.272	
50	DS-03-A-01	SEMI D./TERRACED, DRONFI	DERBYSHIRE	20	Thu	22/06/06	0.100	0.150	0.250	
51	SK-03-A-01	SEMI D./TERRACED, CAN. W	SOUTHWARK	15	Thu	23/10/08	0.067	0.067	0.134	
52	WE-03-A-01	PRINCES MEWS, NOTTING HI	WESTMINSTER	18	Thu	15/10/09	0.000	0.000	0.000	