Our Ref: JSP/07600
Your Ref:

19th December 2007

Mr Justin R Szopa
Technical Director
Davis Wilson Homes
Wilson Bowden House
Leicester Road
Ibstock
Leicester
LE67 6WB



For the attention of Mr Justin R Szopa

Dear Justin,

Re: Proposed Residential Development, Station Road, Bagworth

Please find below the proposed text for the Transport Statement.

The following Transport Statement relates to a proposed residential development off Station Road, Bagworth. The above site has a number of existing land uses, with a factory, workshop, offices and canteen. For the purpose of this report, the existing uses on the site will be referred to as the commercial development.

Our client, David Wilson Homes, proposes to redevelop the current site, with a residential development of 71 properties. We understand that the preference is to retain the main vehicular entrance to the north of the site. There is also a footpath link into the site directly from Station Road, opposite Durham Close.

BSP Consulting has been instructed to compare the traffic generated by the current/previous use on the site as a working commercial development, with that generated by the redevelopment proposals.

1.0 Existing/Previous Land Uses

The trips associated with the existing commercial use are calculated using the TRICS database. Average rates will be used, as we are carrying out a comparison between the

existing and proposed uses. The trip rates from TRICS are included in Appendix A and are summarised in the table below (see Table 1).

Table 1 – Average Trip Rates (Existing Uses)

Land Use	AM and PM Trip Rate (per 100m²)					
	AM			PM		
	In	Out	Total	In	Out	Total
Office	3.290	0.442	3.732	0.378	2.711	3.089
Industrial Unit	0.935	0.228	1.163	0.097	0.930	1.027

The existing development consists of several units. The offices have a GFA of 660m², and the GFA of the factory (5051m²) and workshop (199m²) are combined to give a total of 5250m² of industrial units. Table 2 (below) shows the potential number of trips associated with these uses.

Table 2 – Trip Generation (Existing Uses)

Land Use	AM and PM Total Number of Trips					
	AM			PM		
	In	Out	Total	In	Out	Total
Office (660 sq.m)	22	3	25	2	18	20
Industrial Unit (5250sq.m)	49	12	61	5	49	54
Total	**71**	**15**	**86**	7	**67**	**74**

It can be seen from the above table that the existing use would generate around 86 trips during the AM, and 74 during the PM.

2.0 Trips Associated with the Proposed Residential Development

The potential number of vehicular trips associated with the proposed residential development of 71 dwellings has also been calculated using the TRICS database. The TRICS results are included in Appendix A, with the associated trip rates and numbers of trips being shown on Tables 3 and 4 below:

Table 3 - Average Trip Rates (Residential)

Land Use	AM and PM Trip Rate (per Unit)					
	AM			PM		
	In	Out	Total	In	Out	Total
Residential Housing	0.178	0.424	0.602	0.399	0.224	0.623

Table 4 – Trip Generation (Residential)

Land Use	AM and PM Total Number of Trips					
	AM			PM		
	In	Out	Total	In	Out	Total
Residential (71 Units)	13	30	43	28	16	44

It can be seen from the above table that the proposed use would generate around 43 trips during the AM, and 44 during the PM.

3.0 Traffic Impact Assessment

In order to establish the net impact of the proposed redevelopment of the site, the trip generation calculated for the existing uses on the site have been subtracted from those calculated for the proposed residential use. This is illustrated in Table 5 below, with the resulting net traffic impact of the development proposals.

Table 5 – Net Traffic Impact (Proposed Use - Existing Uses)

Land Use	AM and PM Total Number of Trips					
	AM			PM		
	In	Out	Total	In	Out	Total
Proposed Residential Use	13	30	43	28	16	44
Total Existing Uses	71	15	86	7	67	74
Net Traffic Impact	**-58**	**15**	**-43**	**21**	**-51**	**-30**

4.0 Discussion and Conclusions

The results of the TRICS comparison exercise, illustrate that the two-way traffic during the AM and PM peak hours associated with the proposed residential use, is less than the trip generation associated with the existing land uses.

Due to the opposing peak directional flows associated with commercial and residential developments, there is an increase in traffic out of the site during the AM peak hour and into the site during the PM peak hour. Nonetheless, this is significantly outweighed by the decrease in traffic travelling in the opposite direction during these periods. As a result the overall impact is a decrease in traffic of 30 - 43 vehicles per hour during the peak hours.

The proposals include a single vehicular access plus a footway link from Station Road, with all of the existing secondary vehicular access points closed off. This more formal access arrangement will be beneficial in terms of traffic management and safety issues.

A further benefit of the proposed change of use is the reduction in commercial vehicles such as delivery vehicles and HGVs. The residential use of the site will mostly attract private cars, with occasional delivery and refuse vehicles.

In light of the above, we consider that the proposed development is acceptable in highway terms.

Yours sincerely
For and on behalf of BSP Consulting

Jo Posnett BA(Hons) MIHT
Senior Transportation Engineer

Appendix A
TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE

VEHICLES



Selected regions and areas:

01	**GREATER LONDON**		
	BT	BRENT	1 days
02	**SOUTH EAST**		
	SC	SURREY	1 days
08	**NORTH WEST**		
	LC	LANCASHIRE	1 days
09	**NORTH**		
	CB	CUMBRIA	1 days
	TW	TYNE & WEAR	2 days
11	**SCOTLAND**		
	AS	ABERDEENSHIRE	1 days
	HI	HIGHLAND	1 days

Main parameter selection:

Parameter: Gross floor area
Range: 408 to 2000 (units: sqm)

Date Range: 01/01/99 to 13/06/06

Selected survey days:

Monday	1 days
Tuesday	4 days
Wednesday	3 days

Selected survey types:

Manual count	7 days
Directional ATC Count	1 days

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
00:30 - 01:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
01:00 - 01:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
01:30 - 02:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
02:00 - 02:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
02:30 - 03:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
03:00 - 03:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
03:30 - 04:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
04:00 - 04:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
04:30 - 05:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
05:00 - 05:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
05:30 - 06:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
06:00 - 06:30	1	1200	0.083	1	1200	0.083	1	1200	0.166
06:30 - 07:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
07:00 - 07:30	7	1133	0.151	7	1133	0.063	7	1133	0.214
07:30 - 08:00	7	1133	0.517	7	1133	0.050	7	1133	0.567
08:00 - 08:30	7	1133	1.210	7	1133	0.202	7	1133	1.412
08:30 - 09:00	**7**	**1133**	**2.080**	7	1133	0.240	**7**	**1133**	**2.320**
09:00 - 09:30	8	1116	0.896	8	1116	0.235	8	1116	1.131
09:30 - 10:00	8	1116	0.627	8	1116	0.448	8	1116	1.075
10:00 - 10:30	8	1116	0.403	8	1116	0.314	8	1116	0.717
10:30 - 11:00	8	1116	0.437	8	1116	0.302	8	1116	0.739
11:00 - 11:30	8	1116	0.414	8	1116	0.269	8	1116	0.683
11:30 - 12:00	8	1116	0.437	8	1116	0.571	8	1116	1.008
12:00 - 12:30	8	1116	0.336	8	1116	0.481	8	1116	0.817
12:30 - 13:00	8	1116	0.336	8	1116	0.459	8	1116	0.795
13:00 - 13:30	8	1116	0.504	8	1116	0.448	8	1116	0.952
13:30 - 14:00	8	1116	0.627	8	1116	0.515	8	1116	1.142
14:00 - 14:30	8	1116	0.560	8	1116	0.493	8	1116	1.053
14:30 - 15:00	8	1116	0.269	8	1116	0.437	8	1116	0.706
15:00 - 15:30	8	1116	0.291	8	1116	0.392	8	1116	0.683
15:30 - 16:00	8	1116	0.224	8	1116	0.258	8	1116	0.482
16:00 - 16:30	8	1116	0.235	8	1116	0.638	8	1116	0.873
16:30 - 17:00	8	1116	0.336	8	1116	1.097	8	1116	1.433
17:00 - 17:30	7	1133	0.189	**7**	**1133**	**1.488**	7	1133	1.677
17:30 - 18:00	7	1133	0.189	7	1133	1.223	7	1133	1.412
18:00 - 18:30	7	1133	0.050	7	1133	0.315	7	1133	0.365
18:30 - 19:00	7	1133	0.013	7	1133	0.101	7	1133	0.114
19:00 - 19:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
19:30 - 20:00	1	1200	0.083	1	1200	0.083	1	1200	0.166
20:00 - 20:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
20:30 - 21:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
21:00 - 21:30	1	1200	0.083	1	1200	0.083	1	1200	0.166
21:30 - 22:00	1	1200	0.083	1	1200	0.083	1	1200	0.166
22:00 - 22:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
22:30 - 23:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
23:00 - 23:30	1	1200	0.000	1	1200	0.000	1	1200	0.000
23:30 - 24:00	1	1200	0.000	1	1200	0.000	1	1200	0.000
Total Rates:			11.663			11.371			23.034

Parameter summary

Trip rate parameter range selected:	408 - 2000 (units: sqm)
Survey date date range:	01/01/99 - 13/06/06
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Optional parameters used in selection:	NO
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT

VEHICLES

Selected regions and areas:

01	**GREATER LONDON**		
	BT	BRENT	1 days
03	**SOUTH WEST**		
	DC	DORSET	3 days
	GS	GLOUCESTERSHIRE	1 days
10	**WALES**		
	CF	CARDIFF	1 days
11	**SCOTLAND**		
	HI	HIGHLAND	1 days

Main parameter selection:

Parameter: Gross floor area
Range: 620 to 6604 (units: sqm)

Date Range: 01/01/99 to 24/10/06

Selected survey days:

Tuesday	4 days
Wednesday	2 days
Thursday	1 days

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	7	2936	0.307	7	2936	0.024	7	2936	0.331
07:30 - 08:00	**7**	**2936**	**0.525**	7	2936	0.068	7	2936	0.593
08:00 - 08:30	7	2936	0.448	7	2936	0.063	7	2936	0.511
08:30 - 09:00	7	2936	0.487	7	2936	0.165	7	2936	0.652
09:00 - 09:30	7	2936	0.180	7	2936	0.088	7	2936	0.268
09:30 - 10:00	7	2936	0.165	7	2936	0.122	7	2936	0.287
10:00 - 10:30	7	2936	0.190	7	2936	0.199	7	2936	0.389
10:30 - 11:00	7	2936	0.165	7	2936	0.112	7	2936	0.277
11:00 - 11:30	7	2936	0.151	7	2936	0.156	7	2936	0.307
11:30 - 12:00	7	2936	0.131	7	2936	0.141	7	2936	0.272
12:00 - 12:30	7	2936	0.141	7	2936	0.180	7	2936	0.321
12:30 - 13:00	7	2936	0.214	7	2936	0.316	7	2936	0.530
13:00 - 13:30	7	2936	0.229	7	2936	0.204	7	2936	0.433
13:30 - 14:00	7	2936	0.238	7	2936	0.112	7	2936	0.350
14:00 - 14:30	7	2936	0.117	7	2936	0.131	7	2936	0.248
14:30 - 15:00	7	2936	0.122	7	2936	0.078	7	2936	0.200
15:00 - 15:30	7	2936	0.151	7	2936	0.141	7	2936	0.292
15:30 - 16:00	7	2936	0.136	7	2936	0.185	7	2936	0.321
16:00 - 16:30	7	2936	0.088	7	2936	0.365	7	2936	0.453
16:30 - 17:00	7	2936	0.097	7	2936	0.530	7	2936	0.627
17:00 - 17:30	7	2936	0.063	**7**	**2936**	**0.633**	**7**	**2936**	**0.696**
17:30 - 18:00	7	2936	0.034	7	2936	0.297	7	2936	0.331
18:00 - 18:30	7	2936	0.034	7	2936	0.190	7	2936	0.224
18:30 - 19:00	7	2936	0.015	7	2936	0.044	7	2936	0.059
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			4.428			4.544			8.972

Parameter summary

Trip rate parameter range selected:	620 - 6604 (units: sqm)
Survey date date range:	01/01/99 - 24/10/06
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Optional parameters used in selection:	NO
Surveys manually removed from selection:	0

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
	KN	KENSINGTON AND CHELSEA	1 days
	WF	WALTHAM FOREST	1 days
02	**SOUTH EAST**		
	BD	BEDFORDSHIRE	1 days
	SC	SURREY	1 days
03	**SOUTH WEST**		
	CW	CORNWALL	1 days
	WL	WILTSHIRE	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
	LE	LEICESTERSHIRE	1 days
06	**WEST MIDLANDS**		
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	2 days
08	**NORTH WEST**		
	LC	LANCASHIRE	1 days
09	**NORTH**		
	CB	CUMBRIA	1 days
	TW	TYNE & WEAR	1 days
10	**WALES**		
	WR	WREXHAM	1 days
11	**SCOTLAND**		
	FI	FIFE	1 days
	HI	HIGHLAND	1 days
12	**NORTHERN IRELAND**		
	AN	ANTRIM	1 days
14	**REPUBLIC OF IRELAND**		
	CR	CORK	1 days
	GA	GALWAY	1 days

Main parameter selection:

Parameter: Number of households
Range: 5 to 100 (units:)

Date Range: 01/01/99 to 30/01/07

Selected survey days:

Monday	5 days
Tuesday	6 days
Wednesday	2 days
Thursday	6 days
Friday	2 days

Selected survey types:

Manual count	21 days
Directional ATC Count	0 days

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

VEHICLES

Calculation factor: 1 HHOLDS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	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	21	53	0.086	21	53	0.258	21	53	0.344
08:00 - 09:00	21	53	0.178	**21**	**53**	**0.424**	21	53	0.602
09:00 - 10:00	21	53	0.235	21	53	0.246	21	53	0.481
10:00 - 11:00	21	53	0.205	21	53	0.229	21	53	0.434
11:00 - 12:00	21	53	0.219	21	53	0.202	21	53	0.421
12:00 - 13:00	21	53	0.254	21	53	0.224	21	53	0.478
13:00 - 14:00	21	53	0.224	21	53	0.235	21	53	0.459
14:00 - 15:00	21	53	0.225	21	53	0.243	21	53	0.468
15:00 - 16:00	21	53	0.309	21	53	0.234	21	53	0.543
16:00 - 17:00	21	53	0.367	21	53	0.251	21	53	0.618
17:00 - 18:00	**21**	**53**	**0.399**	21	53	0.224	**21**	**53**	**0.623**
18:00 - 19:00	21	53	0.317	21	53	0.242	21	53	0.559
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:			3.018			3.012			6.030

Parameter summary

Trip rate parameter range selected:	5 - 100 (units:)
Survey date date range:	01/01/99 - 30/01/07
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Optional parameters used in selection:	NO
Surveys manually removed from selection:	0