

PROPOSED CHANGE OF USE APPLICATION, BIG SHAFFALONG FARM, SHAFFALONG LANE, CHEDDLETON – TRANSPORT NOTE 01 – NOVEMBER 2023

Introduction

Eddisons have been instructed by Wharfe Planning to provide a Transport Note in support of a Prior Approval application for change of use from an Agricultural building to 2 residential dwellings (C3 Use) at Big Shaffalong Farm off Shaffalong Lane in Cheddleton.

This note has been produced to assist the local planning authority with their determination of the Prior Approval application and will provide details on the traffic impact of the proposals on the local highway network.

Existing Site

The existing building has a gross floor area of circa 836sqm, it forms part of the wider Big Shaffalong Farm. The existing farm is currently not in operation, the existing site plan is shown in **Plan 2**.

Vehicular access into the application site is provided for off Shaffalong Lane to the south which is under the control of the applicant.

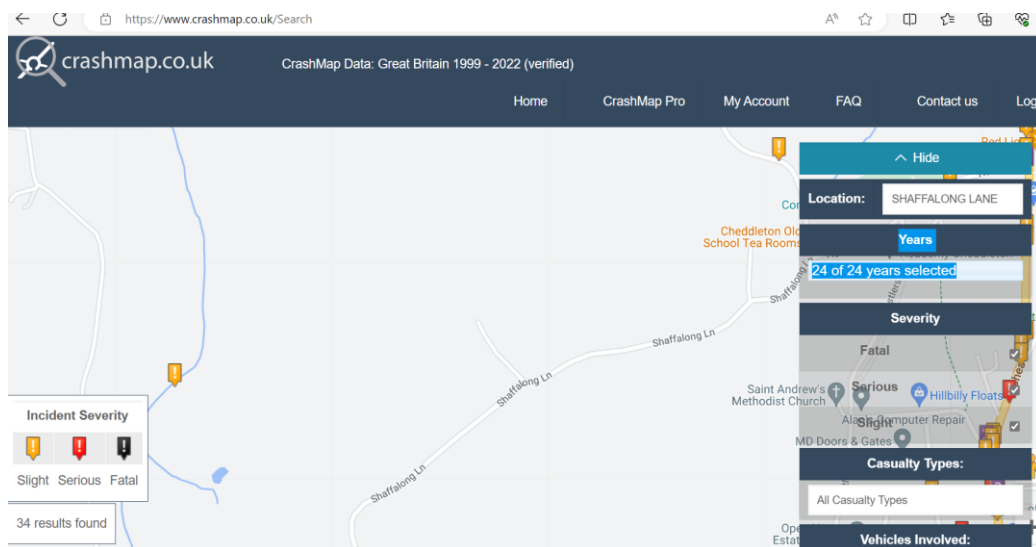


Figure 1 - Crashmap Accident Screenshot

As can be seen above in **Figure 1**, based on the Crashmap database, there have been no reported accidents at the site access junction onto Shaffalong Lane in the last 24 years. This time period will have covered when the farm was operational and when agricultural vehicles i.e. tractors and HGV's would have been using the junction. It is therefore concluded that the access does not have an unduly poor highway safety record.

As stated above, the existing farm is currently not in operation and therefore is not generating any vehicular movements associated with its lawful use. Given the application site forms part of the wider farm, it will have historically generated vehicular movements associated with agricultural use and could be reoccupied at any time.

The level of traffic associated with the existing lawful use will be dependent on the type of agricultural use. Based on information provided by the applicant, this was historically used for pig/dairy/cattle farming. Typically this level of farming generates higher levels of vehicle movements than other types of farming i.e. arable as it involves the transportation of animals, delivery of feeds, delivery of bedding, vet visits, fallen stock removal, removal of muck and removal of slurry etc.

Based on the information provided by the client, the application building was used for a range of agricultural uses ranging from housing of livestock to the storage of feed etc. Therefore, it would have generated traffic movements on to the wider highway network associated with these uses, and the large majority of which would have agricultural vehicles or HGVs.

Given the farm is no longer operational and the fact that agricultural operations differ over the year, gauging the level of vehicular trips generated by the application site is difficult. However, it is felt that the application building is likely to have generated between 3-5 two-way vehicles movements onto the highway network on a typical day, which would be higher or lower at certain times of the year, all of these movements would be HGV or agricultural vehicles.

Proposed Development

The proposals are for a change of use to provide C3 residential use (2 residential dwellings), with associated parking i.e. 2 driveway spaces per dwelling.

Vehicular access will be provided for the existing vehicular off Shaffalong Lane, as stated previously, the existing access does not have an unduly poor highway safety record, and the proposed change of use will reduce HGV/Agricultural vehicles when compared to the lawful use. Therefore, the use of the existing access will not give rise to any highway safety concerns.

To forecast the level of traffic that the proposed residential units could generate, reference has been made to the TRICS database in the field of Residential – Privately owned Houses’ for sites similar to the application site i.e. not town centre or edge of town centre sites with between 5 and 20 units (**TRICS output Appendix 1**).

Table 1 below summarises the peak hour and total trip rates and forecast traffic generation for the provision of 2 residential units.

Peak Period	Trip Rate (per unit)		Number of Trips	
	Arr	Dep	Arr	Dep
AM Peak Hour	0.202	0.307	0	1
PM Peak Hour	0.307	0.202	1	0
Daily 0700-1900	2.246	2.325	4	5

Table 1 - Summary of Forecast Traffic Generation for Residential Development (2 units)

As can be seen in Table 1, the proposed residential development is forecast to generate a total of 1 2-way vehicle movements in the weekday peak periods and up to 9 daily two-way vehicles movements. All of these vehicles movement would be light vehicle movements.

It is important to note that the TRICS interrogation includes survey data from prior to the COVID Pandemic and therefore will not reflect the changes in work patterns that have occurred post-pandemic i.e. hybrid working which may result in lower levels of traffic generation than that forecast by the TRICS interrogation.

When compared with the lawful agricultural land-use, the proposed change of use would result in a minimal increase in vehicle movements. This increase in traffic would not have a severe or material impact on the operation of the local highway network. In addition, the proposed change of use would result in a reduction in the number of HGV/Agricultural vehicle movements on the wider highway network, which provides highway safety benefits.

With regard to the distribution of the proposed residential trips on to the local highway network, reference has been made to 2011 Census. Based on the Journey to Work (JTW) Data contained within the 2011 Census (the most recent JTW data available), the following workplace proportions have been calculated for the residents of Cheddleton (Staffs Moorlands MSOA 006);

- Staffs Moorlands = 55%.
- Stoke-on-Trent and Newcastle-under-Lyme = 25%.
- Other Locations = 20%.

Given the location of the site, there are two routes that vehicles travelling to and from the site to the above locations, namely;

- East along Shaffalong Lane into Cheddleton and then onto the A521 Leek Road;
- West along Shaffalong onto Brund Lane and then disperse north and south.

For the purpose of this analysis, for robustness it has been assumed that all trips to and from Staffordshire Moorlands and all trips to the other locations would use the eastern section of Shaffalong Lane (75%). Whilst the trips to and from Stoke-on-Trent/Newcastle would travel westwards to access Brund Lane which provides access to the routes to the Stoke-on-Trent/Newcastle via Bagnall, Endon and Werrington.

Based on the above, over a typical day, there would be just 7 two-way vehicle movements along the eastern section of Shaffalong Lane and 2 two-way vehicles along the western section of Shaffalong Lane. Such levels of traffic would have a minimal impact on the local highway network.

It is therefore concluded that the proposed increase in vehicle movements would not result in a material impact on the local highway network when compared to the existing land-use and that the removal large agricultural vehicles would have highway safety benefits.

Summary

In summary concluded that proposed development would generate minimal levels of traffic and can be accommodated in a safe and efficient manner on the surrounding highway network.

Therefore it is the conclusion of this Technical Note that there are no material reasons why the proposed development should not be granted planning consent on highways or transportation grounds.

PLANS



PLAN 1

Client:
John Pointon & Sons Ltd

Application:
**Big Shaffalong Farm
Building 1 Class Q
Resubmission**

Drawing title:
Site Plan as Existing

Scale:
1:200 @ A2

Drawing number:
1302/J230088/002.3

Date:
9 November 2023

Drawn by:
SK



WHARFE

RURAL PLANNING

Sapling Home Farm, Ullard Hall Lane, Lower
Peover, Knutsford, Cheshire WA16 9PJ

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PLAN 2

Client:
John Pointon & Sons Ltd

Application:
**Big Shaffalong Farm
Building 1 Class Q
Resubmission**

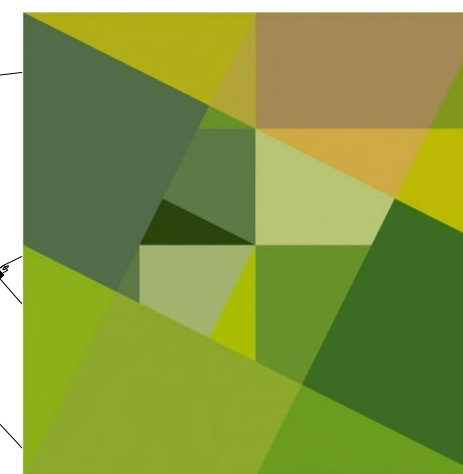
Drawing title:
**INDICATIVE
Site Plan as Proposed**

Scale:
1:200 @ A2

Drawing number:
1302/J230088/003.2

Date:
9 November 2023

Drawn by:
SK



WHARFE

RURAL PLANNING

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APPENDICES

APPENDIX 1

TRICS Output – Residential Development

Calculation Reference: AUDIT-851401-221014-1043

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HF HERTFORDSHIRE	1 days
	KC KENT	1 days
	MW MEDWAY	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 8 to 19 (units:)
 Range Selected by User: 5 to 20 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 06/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	4 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	1 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	8
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	8
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This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	8 days
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This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	HF-03-A-04 HOLMSIDE RISE WATFORD SOUTH OXHEY Edge of Town Residential Zone Total No of Dwellings: 8 Survey date: TUESDAY 08/06/21	TERRACED HOUSES	HERTFORDSHIRE	Survey Type: MANUAL
2	KC-03-A-09 WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone Total No of Dwellings: 14 Survey date: WEDNESDAY 09/06/21	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
3	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM Edge of Town Residential Zone Total No of Dwellings: 19 Survey date: MONDAY 06/06/22	MIXED HOUSES	MEDWAY	Survey Type: MANUAL
4	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 16/09/15	DETACHED HOUSES	NORFOLK	Survey Type: MANUAL
5	NF-03-A-10 HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Total No of Dwellings: 17 Survey date: WEDNESDAY 12/09/18	MIXED HOUSES & FLATS	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT
6	SF-03-A-05 VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total No of Dwellings: 18 Survey date: WEDNESDAY 09/09/15	DETACHED HOUSES	SUFFOLK	Survey Type: MANUAL
7	SH-03-A-06 ELLESMERE ROAD SHREWSBURY Edge of Town Residential Zone Total No of Dwellings: 16 Survey date: THURSDAY 22/05/14	BUNGALOWS	SHROPSHIRE	Survey Type: MANUAL
8	VG-03-A-01 ARTHUR STREET BARRY Edge of Town Residential Zone Total No of Dwellings: 12 Survey date: MONDAY 08/05/17	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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

TOTAL 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									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	14	0.079	8	14	0.211	8	14	0.290
08:00 - 09:00	8	14	0.202	8	14	0.307	8	14	0.509
09:00 - 10:00	8	14	0.070	8	14	0.167	8	14	0.237
10:00 - 11:00	8	14	0.193	8	14	0.219	8	14	0.412
11:00 - 12:00	8	14	0.149	8	14	0.140	8	14	0.289
12:00 - 13:00	8	14	0.211	8	14	0.237	8	14	0.448
13:00 - 14:00	8	14	0.202	8	14	0.175	8	14	0.377
14:00 - 15:00	8	14	0.105	8	14	0.132	8	14	0.237
15:00 - 16:00	8	14	0.237	8	14	0.193	8	14	0.430
16:00 - 17:00	8	14	0.219	8	14	0.158	8	14	0.377
17:00 - 18:00	8	14	0.307	8	14	0.202	8	14	0.509
18:00 - 19:00	8	14	0.272	8	14	0.184	8	14	0.456
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.246			2.325			4.571

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 8 - 19 (units:)
 Survey date range: 01/01/14 - 06/06/22
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.