

Lower Hall Farm Quarry, Samlesbury

Highway Statement

For and on behalf of

John Cowley



Project Ref: 4049

PCL Transport Planning Ltd
Highway, Traffic & Transport Consultants
1st Floor 3 Silverdown Office Park
Fair Oak Close
Exeter, Devon
EX5 2UX

Tel: 01392 363812

E-mail: m.brady@pcltransportplanning.co.uk

This page is intentionally blank for double sided printing

REPORT CONTROL



e. m.brady@pcltransportplanning.co.uk
w. www.pcltransportplanning.co.uk

Exeter Office:
1st Floor
3 Silverdown Office Park
Fair Oak Close
Exeter,
Devon
EX5 2UX
t. 01392 363812
m. 07818 852241

Report Title:	Highway Statement V2
File Location:	Z:\PCL Transport Planning Ltd\Active\4026-4050\4049 Samlesbury, Preston\Reps 14

Client:	John Cowley
Project Number:	4049

Report Issued:	V01 – 29 May 2014
Report Issued:	V02 – 04 June 2014
Report Issued:	V03 – 23 September 2015

Prepared By:	Rafael Morant
Office:	Exeter
Checked By:	Martin Brady

© The contents of this document must not be copied or reproduced in whole or in part without the written consent of PCL Transport Planning Ltd.

This page is intentionally blank for double sided printing

CONTENTS

1	INTRODUCTION	1
2	EXISTING TRANSPORT CONDITIONS	3
	Existing Highway Conditions	3
	Existing Traffic Conditions	4
	Accident Data	5
3	TRANSPORT PLANNING POLICY FRAMEWORK	7
	National Government Policy	7
	National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG)	7
4	PROPOSED DEVELOPMENT	9
	Access Scheme	9
	Committed Developments	10
	Trip Generation for the Proposed Development	11
	Existing Quarry Related Traffic in Local Area	12
	Highway Impact	13
5	CONCLUSION	16

FIGURES

Figure 1. Site Location Plan	1
Figure 2. Base Traffic Survey Results	5
Figure 3. Accident Data Location	6
Figure 4. Proposed Site Access Junction Scheme	10
Figure 5. Proposed Cycle Network Enhancement	11

PLATES

Plate 1. Proposed Site Access Junction to the West	3
Plate 2. Proposed Site Access Junction to the East	4

TABLES

Table 1. Proposed Development Vehicle Trip Rates	12
Table 2. Percentage of Vehicle Trips by Time of Day	14

This page is intentionally blank for double sided printing

1 INTRODUCTION

- 1.1 PCL Transport has been commissioned by John Cowley to prepare a Highway Statement to support a planning application for the proposed operation of a sand and gravel quarry at Lower Hall Farm, Samlesbury.
- 1.2 This report will assess the existing highway conditions and the likely vehicle trip generation and traffic impact of the proposal. The proposed development comprises the provision of a new vehicle access from the A59 Preston New Road at approximately 650 metres to the west of the A59/A677 roundabout junction. This new access will only serve the quarry and no other traffic will use it except from the occasional HGV accessing Lower Hall Farm and Seed House Farm.
- 1.3 The location plan for the proposed site access junction is shown with a red arrow in **Figure 1** below.



Figure 1. Site Location Plan

1.4 This report will assess the existing highway conditions and the likely vehicle impact caused by the operation of the quarry, and more specifically at the following issues:

- Review of local road network
- Safety issues
- Vehicular trip analysis for the proposed use
- Trip distribution
- Vehicle impact on the local road network

2 EXISTING TRANSPORT CONDITIONS

Existing Highway Conditions

- 2.1 The proposed development site is located approximately 1,500 metres to the east of the M6 Junction 31, which provides access to the national strategic highway network.
- 2.2 The A59 Preston New Road is a strategic route also used by local traffic and has frontage access to private properties along the road.
- 2.3 The section of the A59 Preston New Road fronting the proposed site access junction is a double carriageway on the eastbound direction with a 50mph speed limit. It is located in a straight section in terms of horizontal alignment and with minimum gradients in terms of vertical alignment. The road is approximately 7.5-metre wide at the section in front of the proposed site access junction.
- 2.4 The following **Plates 1 and 2** show the section of the A59 Preston New Road to the west and the east of the location for the proposed site access junction respectively.



Plate 1. Proposed Site Access Junction to the West



Plate 2. Proposed Site Access Junction to the East

2.5 **Plate 1** shows that the site access junction will have excellent visibility to the right onto the A59 Preston New Road.

Existing Traffic Conditions

2.6 Existing base traffic flows on the A59 Preston New Road have been taken from the “Proposed A59 Access to Samlesbury Enterprise Zone Transport Assessment” (prepared by Jacobs on September 2013 for Lancashire County Council).

2.7 **Figure 2** below shows the volume of vehicle traffic flows at the Swallow junction at the first week of July 2013.

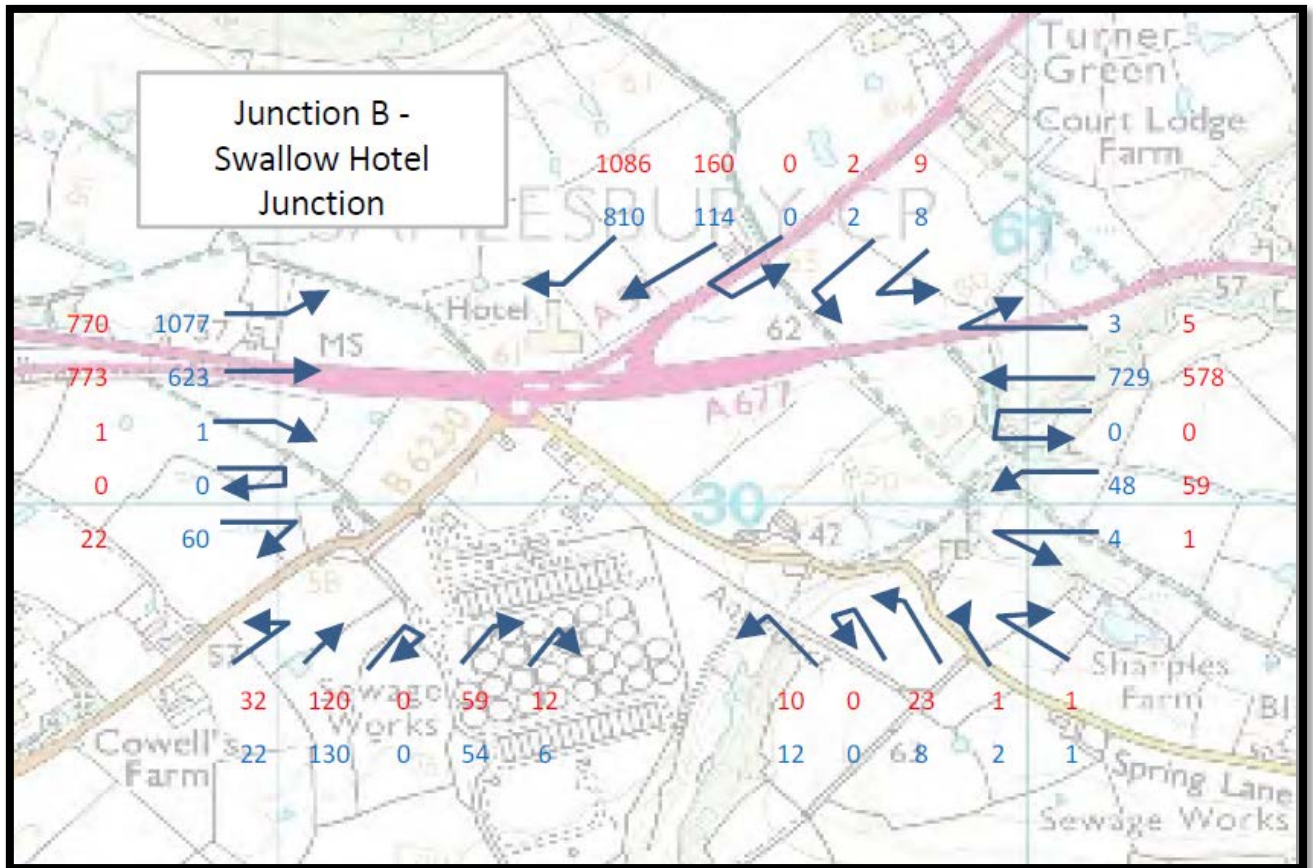


Figure 2. Base Traffic Survey Results

- 2.8 These results show that the volume of vehicle traffic flows passing by the proposed site access junction are 1,761 vehicle trips during the AM peak hour (07:30-08:30) and 1,566 during the PM peak hour (17:00-18:00).
- 2.9 The Transport Assessment states that the current highway network will be able to accommodate the estimated traffic generated by the Samlesbury Enterprise Zone when added to the future scenario, and which are estimated as significantly higher than the flows shown in **Figure 2** above.

Accident Data

- 2.10 Collisionmap UK has been used to provide a preliminary picture of collisions involving personal injury accident (PIA) in a section that comprises 200 metres to the east and west of the proposed site access junction, in order to assess whether the proposed location for the site access junction is appropriate in terms of highway safety. The accident study covers the 3-year period comprised between 2012 and 2014.

- 2.11 There has only been one accident in the three years where accident data has been recorded. This took place 200 metres to the west of the proposed location for the site access junction. This was a slight accident between two vehicles where one person was injured back in the year 2013. Since then, no new accidents have been recorded in the vicinities of the development site up to the end of 2014 (data from 2015 is not available yet).
- 2.12 The location of this accident is shown in **Figure 3** below, with the accident spot shown in a yellow symbol.



Figure 3. Accident Data Location

- 2.13 Based on the fact that there was only one collision in the study area in a three year period between 2012 and 2014, and that no particular pattern in terms of accidents has been identified, further inquiry into Personal Injury Collision Data for the area was not deemed necessary.

3 TRANSPORT PLANNING POLICY FRAMEWORK

National Government Policy

National Planning Policy Framework (NPPF) and the National Planning Policy Guidance (NPPG)

3.1 Relevant current government guidance is contained in the National Planning Policy Framework (NPPF) and the National Planning Policy Guidance (NPPG).

3.2 Chapter 9 of the NPPF is titled “*Promoting sustainable transport*” in which the principles of sustainable transport in relation to development are promoted. It suggests that developments should be located and designed where practical to:

- *allow for the efficient delivery of goods;*
- *create places that are safe and secure and which minimise conflicts between pedestrians, cyclists and vehicles, avoid street clutter (...);*

3.3 The NPPF document, in this sense, states the following in Paragraph 111:

- *111. All developments that will generate significant amounts of movement should be required to provide a travel plan ... and be supported by a transport statement or transport assessment.*

Paragraph 108 states that plans and decisions should take account of whether:

- *appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *safe and suitable access to the site can be achieved for all users; and*
- *any significant impacts on the transport network or on highway safety can be cost effectively mitigated to an acceptable degree*

Paragraph 109 states that developments should only be prevented or refused on highway grounds where there would be an unacceptable impact on highway safety or residual cumulative impacts would be severe.

- 3.4 The proposed development and site access junction off the A59 Preston New Road will provide a safe layout in an area where a number of improvements to sustainable modes of transport, especially cycling, will be taking place in the area, and that will promote alternative modes of transport to the private vehicle for some employees when feasible.
- 3.5 The site access junction has been designed to allow the appropriate circulation of pedestrians and cyclists, ensuring that it complies with the adequate safety standards.
- 3.6 This Highway Statement shows that the impact of the site development will have a minimal impact on the local highway network, and that no further highway infrastructure developments will be needed as part of the development.
- 3.7 The proposed development and this document satisfy the provisions and requirements of the NPPF and the NPPG, where relevant.

4 PROPOSED DEVELOPMENT

Access Scheme

- 4.1 The proposed development involves the operation of a quarry that includes a new site access junction from the A59 Preston New Road leading to a single carriageway access road to the quarry site. This road will only be used for distribution purposes related to the quarry operation and the occasional HGV accessing Lower Hall Farm and Seed House Farm.
- 4.2 The road will comprise a “left in left out” approach. The access road will be 7.3-metre wide for the first 200 metres approximately. After that, the road will be narrowed to at around 3.5 metres with a number of passing places strategically located to allow for appropriate circulation of large vehicles to and from the quarry. An island is also proposed at the junction to avoid any obstruction of HGV vehicles accessing and egressing the junction.
- 4.3 The access road will provide for the development of on-road cycle lanes proposed by Lancashire County Council, as stated in the following section.
- 4.4 The site access junction is estimated to carry just a small volume of vehicle trips comprised of cars and HGVs. The access road will be a dead end road that will provide direct access to the quarry.
- 4.5 The proposed vehicle access scheme is shown in **Figure 4** overleaf.

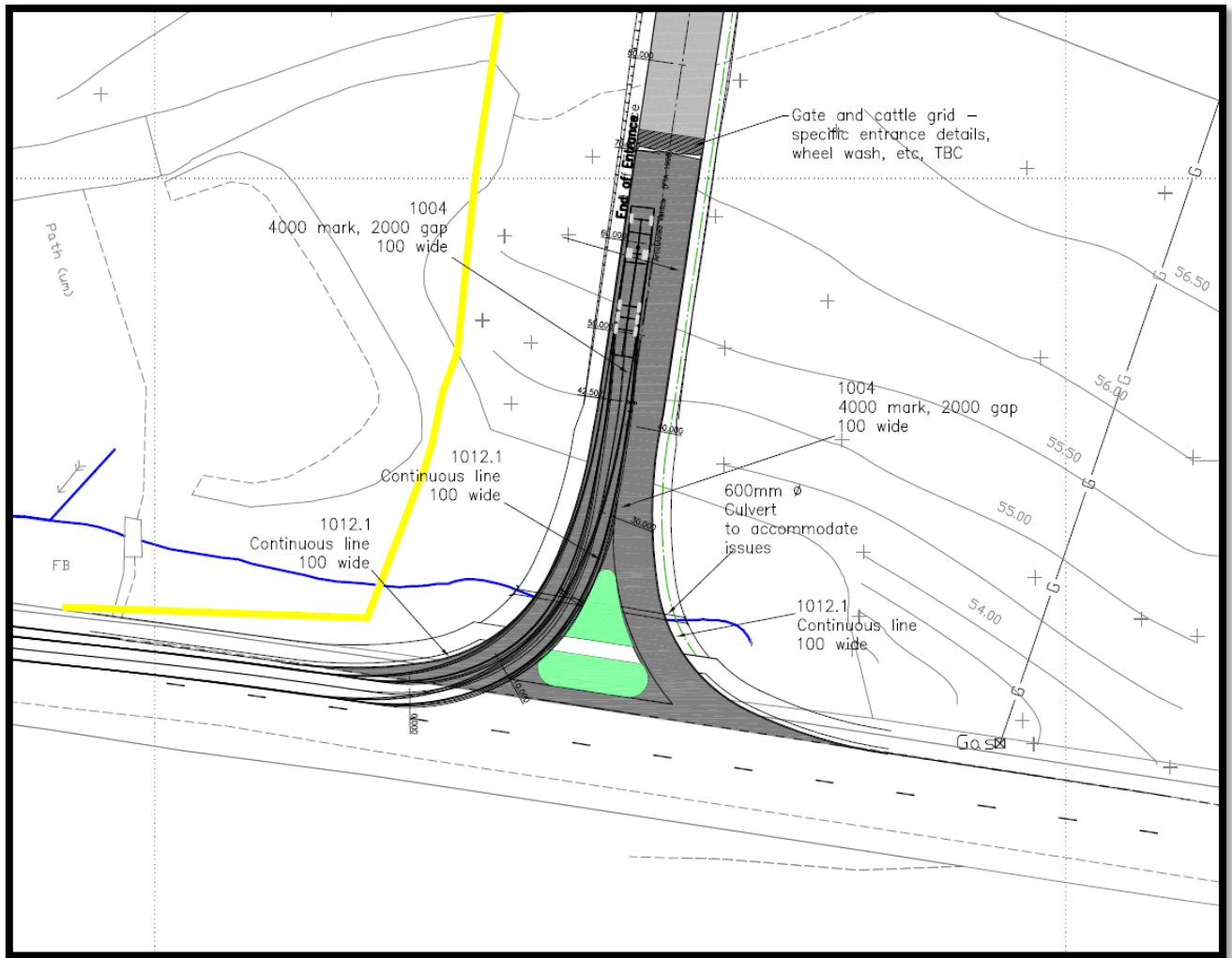


Figure 4. Proposed Site Access Junction Scheme

4.6 Other than this, it is not proposed to include any other off-site highway works.

Committed Developments

4.7 The future development of the Samlesbury Enterprise Zone (EZ) will bring about a number of highway improvements that will benefit the proposed quarry operation. This include a review of the Swallow junction design that will be undertaken as part of the EZ development in order to accommodate future traffic flows estimated for this development, although these works have not been detailed yet.

4.8 There are also a number of improvements related to the provision of an enhanced cycle network in the surrounding area to the quarry site. These are shown in **Figure 5** overleaf.

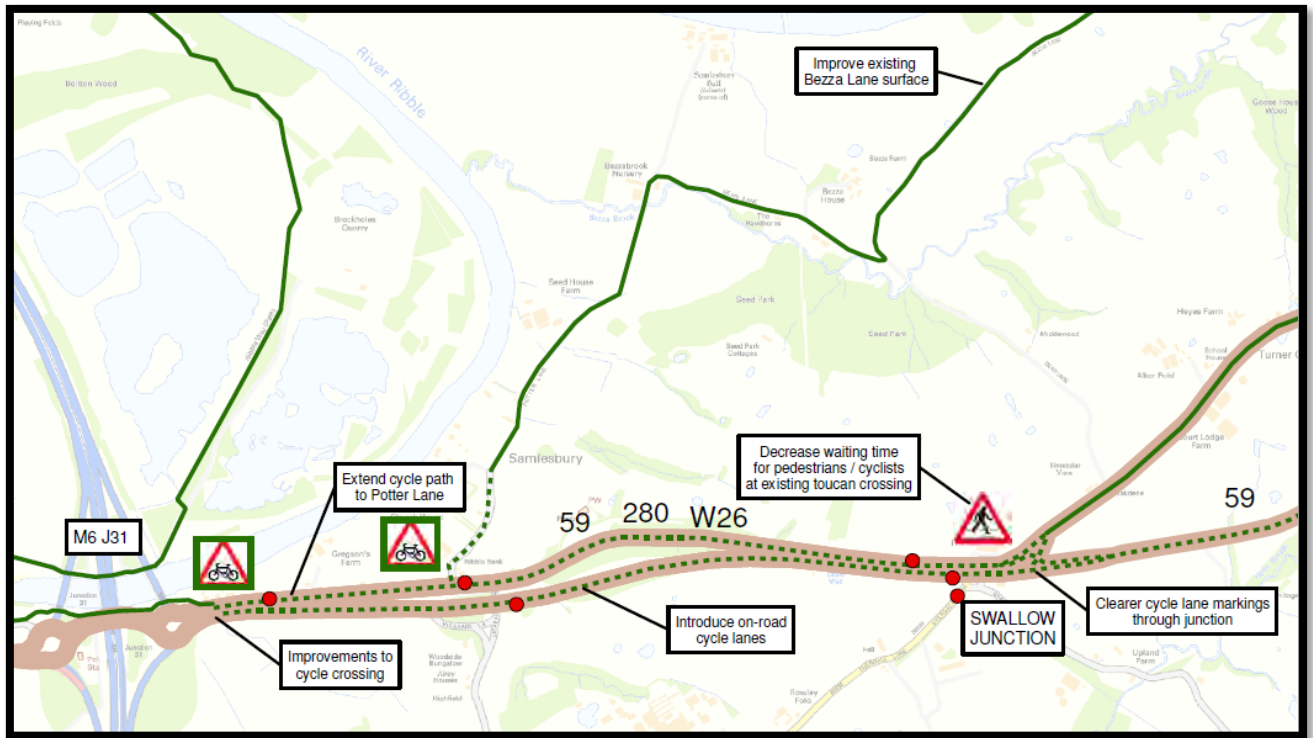


Figure 5. Proposed Cycle Network Enhancement

4.9 These improvements comprise the development of on-road cycle routes along the A59 Preston New Road and passing by the site access junction.

4.10 The proposed improvements to the cycle routes are already taking place.

Trip Generation for the Proposed Development

4.11 The proposed development comprises the generation of up to 60 two-way vehicular movements per day, as provided by the client. This will include 10 car trips for employees and 50 HGV trips as part of the quarry operation that will mainly comprise 6 axle lorries.

4.12 Operating hours will be 07:00-17:00 hours between Monday and Friday and 07:00-17:00 hours on Saturdays. The employees will arrive earlier in the day to the site and will leave later at the end of their working day.

4.13 The life operation of the quarry will be 20 years. It is proposed to start works as soon as possible on receipt of planning consent.

4.14 All the traffic to and from the site will operate on a left in left out approach. When leaving the site the traffic will travel eastbound towards the Swallow junction, where these vehicles will either keep travelling eastbound via the A59 and A677

to reach destinations located to the east, or will turn back to Junction 31 of the M6 for distribution to other destinations.

4.15 The exact distribution of HGV traffic at the Swallow junction cannot be concluded at this stage and will, in any event, vary over time according to market demand.

4.16 **Table 1** below shows the volume of nature of vehicle trips in and out of the site access junction:

Day	Time	Type	Purpose	Number
Working Day	Earlier than 07:00	Cars	Commuting	5
	07:00-17:00	HGVs	Distribution	50
	Later than 17:00	Cars	Commuting	5
Total				60

Table 1. Proposed Development Vehicle Trip Rates

4.17 It is clear from this analysis that the proposed development will generate a minimal amount of traffic flows on the local highway network during a working day.

4.18 This impact will be negligible during the busiest peak hour times as the employees to the site will arrive to their workplaces before the commuting AM peak hour (07:30-08:30 hours) as defined by the Transport Assessment prepared for the “Proposed A59 Access to Samlesbury Enterprise Zone”.

Quarry Related Traffic in Local Area

4.19 The Lower Hall Farm quarry traffic will in effect replace that from the former Lower Brockholes Quarry, which is currently in restoration using landfill. The traffic generated from that quarry joins the A59/M6 junction via special connections that were constructed in connection with the development of the former Higher Brockholes Quarry (now the Brockholes Centre) to provide an access road to the that former quarry.

4.20 The Lower Brockholes Quarry is located in the same area as the proposed Lower Hall Farm quarry and therefore the traffic associated with the proposed quarry will follow the same patterns as the existing Lower Brockholes Quarry in terms of trip generation and distribution.

4.21 This will significantly reduce the net impact of the Lower Hall Farm quarry operation, as well as the impact of the HGV traffic on the A59/M6 junction.

Highway Impact

- 4.22 It can be seen in **Table 1** above that the proposed development would add an additional 60 two-way vehicles trips on a given working day to the daily flow of traffic along the A59 Preston New Road.
- 4.23 The Transport Assessment for the EZ development provided traffic flows travelling along the A59 Preston New Road on an eastbound direction towards the Swallow junction. **Figure 2** showed the results from the TA, in which the volume of vehicle traffic flows passing by the proposed site access junction are 1,761 vehicle trips during the AM peak hour (07:30-08:30) and 1,566 during the PM peak hour (17:00-18:00).
- 4.24 In order to estimate the daily volume of traffic flows circulating along the A59 Preston New Road on an eastbound direction, Table NTS0501 “Trips in Progress by Time of Day and Day of Week” from the National Travel Survey carried out by the Department for Transport in 2014, has been analysed. The relevant section of this Table related to “Car Driver Trips” on a “Monday to Friday” has been extracted and is shown below in terms of comparative index to an average day, and in terms of percentage on the day studied, as in **Table 2** overleaf:

Car Driver Trips – Monday to Friday		
Time of Day	Index Figures	Percentages
0000 - 0059	4	0.15%
0100 - 0159	2	0.06%
0200 - 0259	2	0.06%
0300 - 0359	2	0.08%
0400 - 0459	4	0.15%
0500 - 0559	19	0.73%
0600 - 0659	62	2.40%
0700 - 0759	171	6.61%
0800 - 0859	280	10.83%
0900 - 0959	174	6.73%
1000 - 1059	141	5.45%
1100 - 1159	146	5.65%
1200 - 1259	145	5.61%
1300 - 1359	139	5.37%
1400 - 1459	152	5.88%
1500 - 1559	203	7.85%
1600 - 1659	203	7.85%
1700 - 1759	246	9.51%
1800 - 1859	193	7.46%
1900 - 1959	125	4.83%

2000 - 2059	73	2.82%
2100 - 2159	49	1.89%
2200 - 2259	34	1.31%
2300 - 2359	18	0.70%
Total	2,594	100%

Table 2. Percentage of Vehicle Trips by Time of Day

4.25 **Table 2** above provides the volume of traffic flows undertaken in the United Kingdom on an hourly basis on a given day on average. For the purposes of this assessment a Monday to Friday working day has been considered.

4.26 For simplicity, the PM peak (17:00-18:00 hours) has been considered for the assessment.

4.27 The base traffic volumes taken from the Samlesbury Enterprise Zone in 2013 have been updated to 2015 traffic flows by using the relevant TEMPRO/NTM traffic growth factors, which have resulted in an increase of 2.5% between 2013 and 2015 for the Preston (Rural) geographic area for Trunk & Principal Rural Roads (as defined in the National Road Traffic Forecasts).

4.28 Hence, the PM peak hour on a working day carries on average a 9.51% of the daily traffic. When applying this to the volume of traffic estimated along the A59 Preston New Road, this results in a total of 18,971 daily vehicle trips.

4.29 The impact of the 60 additional vehicle trips generated by the site results in a total daily increase of 0.32% vehicle trips on the A59 Preston New Road.

4.30 Furthermore, the operation of the Lower Hall Farm quarry will replace the operation of the Lower Brockholes Quarry, also located in the same area and with similar vehicle trip generation and distribution.

4.31 Therefore, the highway impact can be considered as negligible. This is compliant with paragraph 109 of the National Planning Policy Framework (NPPF) which states:

‘Development should only be prevented or refused on highway grounds if ... the residual cumulative impacts on the road network would be severe’

4.32 In this case, having regard to the particular circumstances of the proposal, which is a modest development that will have a minimal highway impact, it is considered that for the purposes of this development further modifications to the external local highway network are not necessary.

4.33 The proposed site access junction complies with the required national standards and the site access junction will accommodate the additional traffic generated by the proposed operation of the quarry.

5 CONCLUSION

- 5.1 The proposed development of the Lower Hall Farm quarry will, in effect, be replacing the former operation of the Lower Brockholes Quarry, which is currently undergoing restoration using landfill. The commencement of the operation of the Lower Hall Farm quarry will result in a negligible net increase of vehicle traffic flows on the local road network, including the peak periods, and the impact caused by the site's operation will be minimal.
- 5.2 The site includes the provision of a new site access junction off the A59 Preston New Road. This has been designed complying with national standards and will operate on a "left in left out" approach with a wider first section of the access road that will avoid any obstruction of large vehicles accessing and egressing the junction.
- 5.3 The A59 Preston New Road is subject to a 50mph speed limit. There is only one traffic accident recorded in the 3 years studied between 2012 and 2014. This happened 200 metres to the west of the site access junction.
- 5.4 A number of highway improvements will be undertaken as part of the Samlesbury Enterprise Zone. This will comprise improvements to the operation of the Swallow junction as well as the provision of an enhanced cycle network in the area, already being developed.
- 5.5 The proposal is compliant with the NPPF and it is therefore considered acceptable.