

PROPOSED TRAVELER'S SITE GREENGATES FARM

TRANSPORT STATEMENT

August 2018

Document Control Sheet

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1. Introduction

The Denbighshire County Council (DCC) Major Project Group has been appointed by DCC Facilities, Assets and Housing to prepare a Transport Statement to assess the potential new sites for transient and residential travellers at St Asaph. Neither sites are large developments with the transient site having space for 5 caravans and the residential site having space for 6 families.

It is proposed to construct both a transient traveller's site (Site A) and permanent traveller's site (Site B) at Greengates Farm, St Asaph. These are subject to separate planning applications which will be applied for simultaneously. Both have been included in this statement as each would impact on the traffic off Cwttir Lane.

Following consultation with the relevant planning officer it has been stated a Transport Statement is required to support the planning applications rather than a Traffic Assessment as the development is of a minor nature and also a footway would not be required for the development.

1.1 Purpose of the Report

The purpose of this report is to present the consideration of the traffic caused by the development in order to assess the merits of the sites off Cwttir Lane, St Asaph.

1.2 Background Information

DCC recognise the importance of providing suitable sites for travellers. Sites have been considered which suit the requirements of travellers, with access to the A55 Expressway and coastal towns being a major factor taken into consideration.

Cwttir Lane originally connected Glas Coed Road to the A55 expressway at which time there would have been higher traffic flows than present. Due to the slip road onto the A55 being below standard, there were safety concerns at the junction, resulting in it being closed in 2009. As this road is no longer a through road, it serves only local properties, although there is a minor road off Cwttir Lane to St Asaph which allows for through traffic at the top of the road. There are no recorded accidents along Cwttir Lane prior to this closure. Due to its original use Cwttir Lane can be considered wider than a typical minor road, with the average width being 4.82m. The junction with Glas Coed Road has recently been improved as part of an adjacent enabling works scheme. Cwttir Lane and the lane off Cwttir Lane to St Asaph are part of the cycling network of routes within Denbighshire County Council. The proposed development is on agricultural land forming part of Greengates Farm with access to the sites presently from Cwttir Lane. The proposed developments are located to fit between easements over the land for the placement of high voltage electric cables. The land is designated industrial development land within the local plan.

2. Site Location

The proposed development sites A and B are located on agricultural land forming part of Greengates Farm by Cwttir Lane as shown in Appendix A. The sites are within 2 miles of the A55 Expressway, which connects Holyhead to Chester using the route via Glancoed Road. St Asaph is located within 2 miles of the proposed sites which provides both essential services plus local facilities. Glan Clwyd Hospital which has an A+E Department is located less than 3 miles away.

3. Policy Considerations

3.1 Introduction

Legislation and policy play an important role in guiding and shaping new developments. This section of the report reviews relevant national and local policies and provides a brief analysis of how the development will contribute to their aims and objectives.

3.2 National Policy

The Welsh Government aims to extend choice in transport and secure accessibility in a way which supports sustainable development and helps tackle the causes of climate change; this can be achieved through encouraging a more effective and efficient transport system, with greater use of more sustainable and healthy forms of travel and minimising the need to travel.

This aim will be achieved through integration:

- Within and between different types of transport;
- Between transport measures and land use planning;

Between transport measures and policies to protect and improve the environment; and between transport measures and policies for education, health, social inclusion and wealth creation.

- When determining a planning application for a development that has transport implications, local planning authorities should take into account:
- The impacts of the proposed development on travel demand;
- The level and nature of public transport provision;
- Accessibility by a range of different transport modes;

The willingness of a developer to promote travel by public transport, walking or cycling, or to provide infrastructure or measures to manage traffic, to overcome transport objections to the proposed development (payment for such measures will not, however, justify granting planning permission to a development for which it would not otherwise be granted). The environmental impact of both transport infrastructure and the traffic generated and the effects on the safety and convenience of other users of the transport network.

The Welsh Government supports a transport hierarchy in relation to new developments which ensures that, wherever possible, they are accessible in the first instance by walking. Land Use Planning can enhance achievement towards the Welsh Governments objectives for transport through:

- Reducing the need to travel, especially by private car, by providing good access to public transport;
- Encouraging multi-purpose trips and reduce journey lengths;
- Improving accessibility through walking, cycling and public transport;
- Ensuring transport is accessible to all, taking into account disabled and less mobile;
- Supporting sustainable travel options in rural areas;
- Supporting any necessary infrastructure improvements; and
- Supporting, promoting and creating access to walking and cycling.

Planning Policy Wales (PPW) Technical Advice Note 18: Transport (2007)

This document is part of Planning Policy Wales (2002) which sets out the land use planning policies of the Welsh Assembly Government. It is stated that an efficient and sustainable transport system is a requirement for a modern, prosperous and inclusive society. It is also recognised that transport can have negative impacts on human health and the environment.

To address these concerns, integration of land use planning and development of transport infrastructure is identified as having a key role to play, particularly relating to climate change objectives. The document sets out key elements that should be considered when planning for new development. This includes location of the development and site accessibility, level of parking provided at the site, inclusive mobility, promotion of walking and cycling and public transport.

The Note addresses development in rural areas specifically, recognising that travel options are restricted due to the typical characteristics of rural areas, including;

- Low population densities;
- Lack of services away from the larger settlements; and
- Lack of pedestrian/public transport.

Although private vehicles are the main mode of transport in rural areas, those who do not have access to a motor car can be severely impacted by social exclusion. Improving transport and accessibility for the effected groups can help to promote social inclusion and reduce rural isolation.

3.3 Local Policy - Denbighshire County Council Local Development Plan (LDP)

Local Development Plans (LDP) are a fundamental part of the planning system, facilitating rational and consistent decision making in line with national policies. The LDP aims to focus on key issues which are to be addressed in the long term, and provides assurance for communities and investors about where development should and should not take place.

The LDP for DCC aims to achieve its vision for a sustainable and prosperous county through the implementation of sixteen objectives addressing areas for concern such as employment, transport and infrastructure.

Transport policies place emphasis on integrating land-use in order to reduce the need to travel while promoting sustainable transport. Denbighshire is recognised as being predominantly a car dependent county due to its rural nature, and the LDP objectives stress the need for improvement of facilities to promote sustainable forms of transport and address this car dependence.

Key issues highlighted facing Denbighshire include a lack of access to transport away from the coast and the A55 corridor, where both public and private networks are considered relatively poor.

3.4 Policy ASA1 - New Transport Infrastructure

Any proposals for the provision of new transport infrastructure or improvements to existing facilities must meet the criteria of this policy, as follows:

- A need and justification for the proposal on economic and social grounds;

- No adverse effects on the natural and built environment: and
- Provision made for safe access to all users.

DCC supports the extension and improvement of cycling and walking routes across the county, and the implementation of measures identified in the North Wales Regional Transport Plan.

4. Transport Statement – Greengates Farm, St Asaph

4.1 Baseline Conditions

Whilst the sites included on Greengates Farm are within an area identified as development land in the LDP the land is presently being used for agricultural purposes with access to the fields being by Cwttir Lane.

Cwttir Lane was originally connected to the A55 Expressway with the junction being closed in 2009 due to safety concerns at the junction. The minor road connecting Cwttir Lane to St Asaph has also been closed for motor vehicles except for access. Following this Cwttir Lane has become a no through road. The access to Cwttir Lane has just been improved following an adjacent scheme to create an access for development land. Both Cwttir Lane and Heol Esgob are part of the local cycle way network, which connects to the national cycle way network at St Asaph. There are bus stops situated on the Glascoed Road approximately a quarter of a mile from the junction with a regular service between Rhyl and Denbigh calling in on route at the Glan Clwyd hospital.

A traffic count was undertaken over a one week period to gain an understanding on the baseline traffic flows at two locations on the lane. As anticipated, the traffic volumes were low with 53 vehicles at the transient site (Site 252/Site A) and 35 at the permanent site (Site 251/Site B) over a 24 hour period with the 85 percentile average speed being 34 and 33 mph and the mean average 25 and 26 respectively. Full breakdown is provided in Appendix B.

5. Proposed Development

Both sites have been taken into account when preparing this statement, although they will be the subject of separate planning applications, each site has a potential impact on the other site. These sites are:

5.1 Transient Site

The transient site has five pitches with a three month maximum occupancy period, with the peak use anticipated to be between March and October, although realistically transient travellers can turn up in the County at any time. In view of this full occupancy will be considered. Overfill/Visitor parking is also allowed for on the approach road. Each site will allow one caravan and two vehicles, however there is space to increase this allowance to two caravans and three vehicles where the occupiers are in the same family group. Once on site it is anticipated the caravans will not be towed on and off the site on a regular basis.

It is anticipated the main family vehicle will complete two return trips per day and the second vehicle, three times per day. This will increase the total number of vehicles travelling along Cwttir Lane from 53 to between 78 and 103 vehicles depending on the occupancy of each pitch as detailed in Table 5.1.

It is unlikely there will be an uptake for school places as the encampments will be either for a short period or during school holidays. As a result, it is not anticipated that school transport will have an effect on the overall traffic count.

Vehicle trips per day	Pitches	Main Vehicle	Second Vehicle	Existing Traffic Flow	Total / day
One caravan per pitch	5	2	3	53	78
Two caravans per pitch	10	2	3	53	103

Table 5.1: Vehicle trips per day at transient site

Waste will be placed by each family in a refuse skip which will be collected weekly.

The foul drainage will be a septic tank which is likely to be emptied once per year.

Visitor parking has been allowed for on the site to reduce the risk of parking on Cwtir Lane.

5.2 Permanent Site

The permanent site will have six pitches for families based on a permanent residency. In view of the permanent nature of this site, full occupancy is assumed. Overfill/Visitors parking has also been allowed for on the approach road.

Each site will have one caravan and two vehicles, however there is space for two caravans and three vehicles where the occupiers are in the same family group. Once on site the caravan will not be towed on and off on a regular basis.

It is anticipated the main family vehicle will leave and return twice per day and second vehicle, three times per day. This will have an effect on increasing the total number of vehicles travelling along Cwtir Lane from 35 to between 65 and 95 vehicles depending on the occupancy of each pitch as detailed in Table 5.2.

As it is likely schooling will be required and the travel will be by minibus or taxi to the relevant schools with one vehicle for primary age children and one vehicle for secondary age children.

Vehicle trips per day	School Taxi	Pitches	Main Vehicle	Second Vehicle	Existing Traffic Flow	Total / day
One caravan per pitch		6	2	3	35	65
Two caravans per pitch		12	2	3	35	95
School trips / day (Junior)	1					2
School trips / day (Secondary)	1					2
Maximum total vehicles per day						99

Table 5.2: Vehicle trips per day at permanent site

Each pitch will have recycling bins and there will be placed in the allocated area, close to the site entrance and will be collected weekly as part of the collection round for the area.

Visitor parking has been allowed for within the site to reduce the risk of parking on Cwtir Lane

5.3 Combined Permanent / Transient Site Vehicular Usage

Should both permanent and transient sites be granted planning permission, then the combined total daily increase of vehicles travelling along Cwtir Lane between the transient site and the junction with GlasCoed Road will increase from 53 vehicles per day to a maximum of 167

vehicles per day assuming maximum occupancy on both sites. This is an overall increase of 114 vehicles per day, however it would be more realistic to assume a figure of around 120 vehicles per day at this location.

6. Site Assessment

Whilst farm vehicles and HGV delivery and collections occur from both farms situated on Cwttir Lane and also there are collections and deliveries from the timber yard and power station, none of these appear to have an impact on the highway.

The existing traffic flow is very light and the proposed increase in traffic flow should not have a significant impact on the lane.

The visibility splays and site entrances have been fixed to give a ninety meter visibility splay in each direction and also to improve the forward visibility around bends, in accordance with Tan 18, Table B.

The existing carriageway is of sufficient construction to allow two way traffic although passing places have been introduced to improve flow.

The junction off Glas Coed Road is situated within a 30mph area and has adequate visibility in both directions.

A road safety audit was undertaken as part of this statement to ensure all matters are considered. The audit detailed in Appendix D, found no issue with the proposed development.

7. Conclusions and Recommendations

The proposed sites are adequately served by Cwttir Lane and the proposals do not impact significantly on its present use.

The sites are well served by local public transport services and also give access opportunity by both cycling and walking.

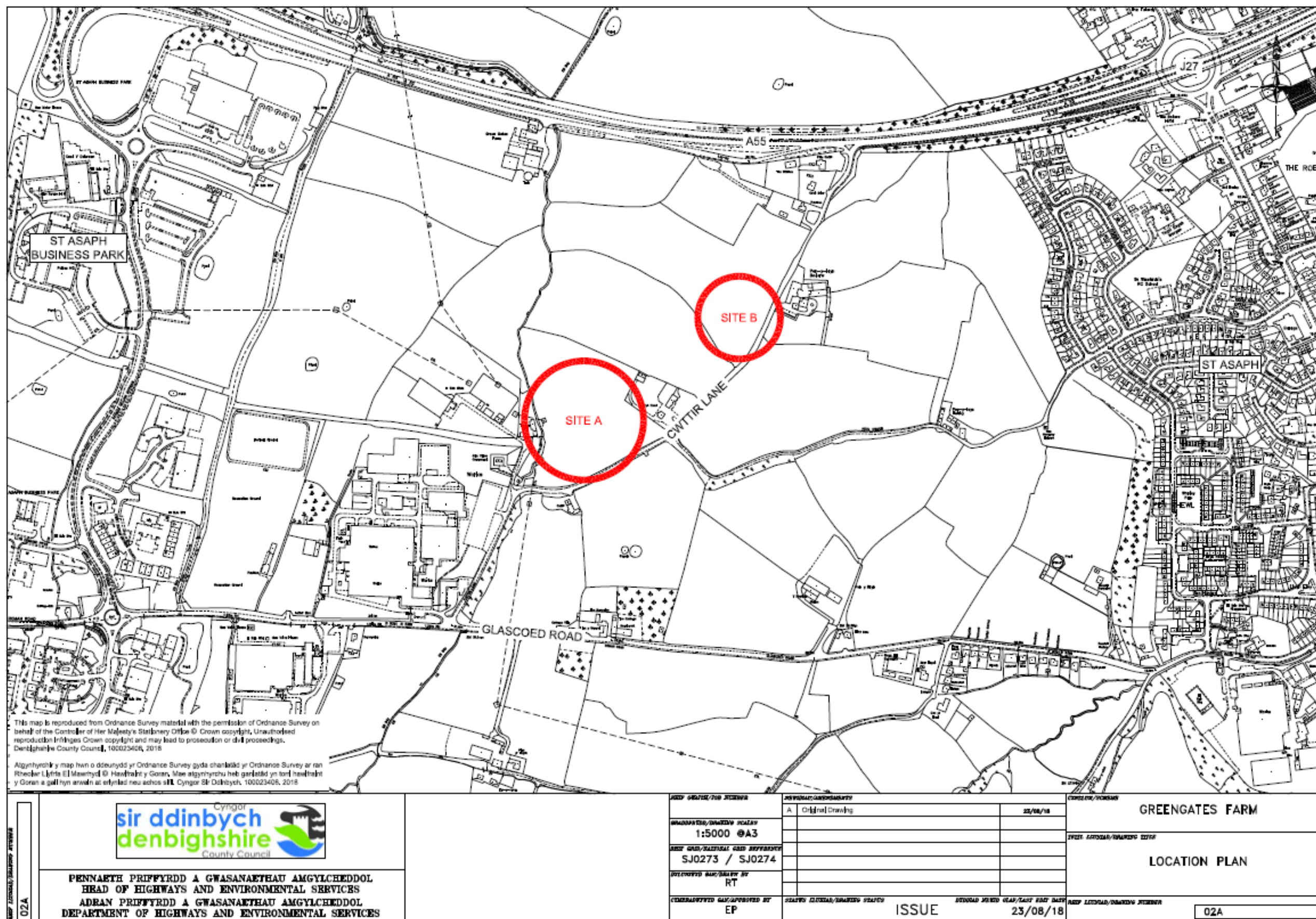
It is recommended the condition of the road is addressed and the passing places are constructed before work on the sites commences.

If the transient traveller's site was to be granted planning permission, the number of vehicles using the road on an average day would increase from 53 to a maximum of 103.

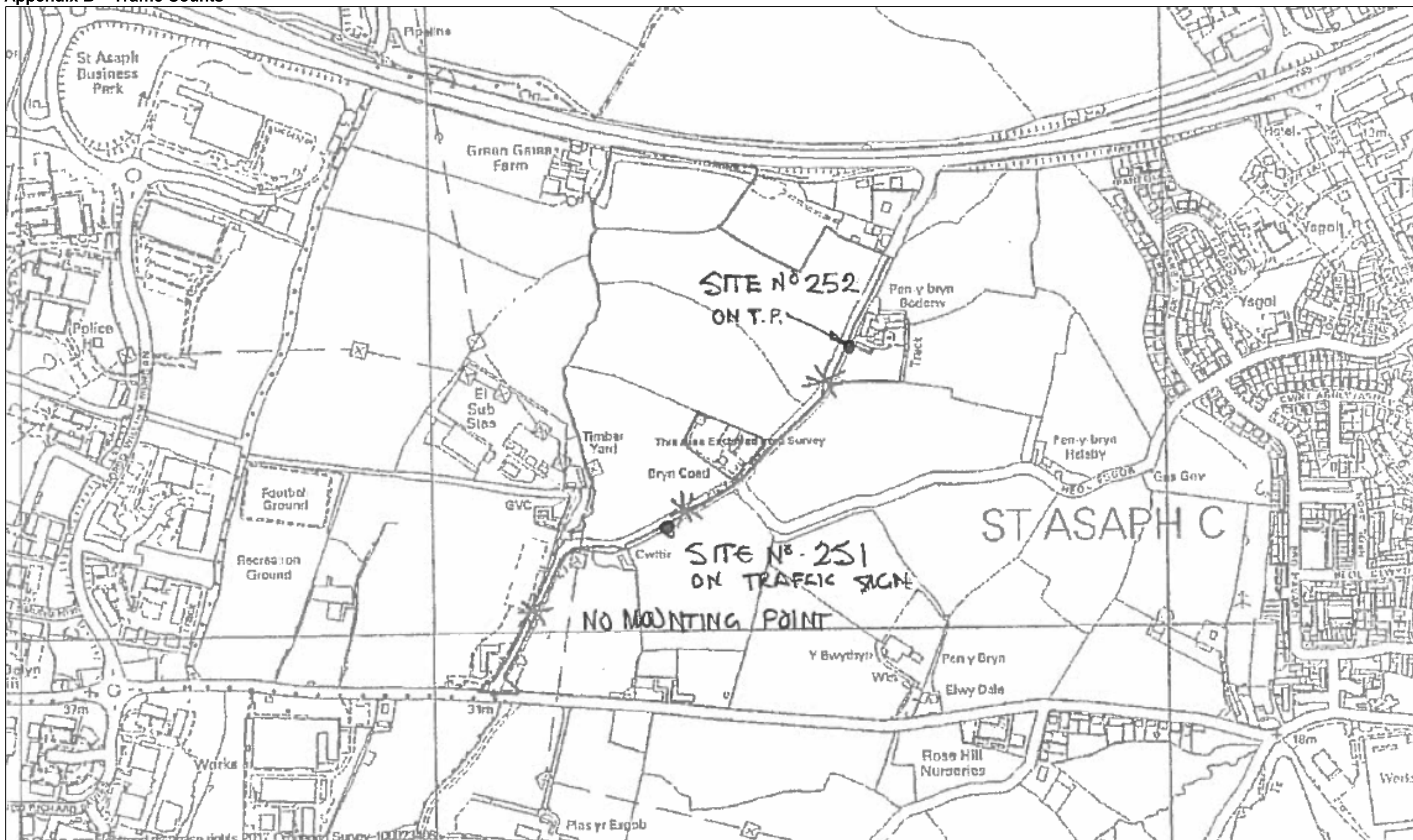
If the permanent site was granted planning permission, whilst the transient site was refused, it is anticipated that the number of vehicles using the road on an average day would increase from 53 to a maximum of 113.

If both sites were granted planning permission, it is anticipated that the number of vehicles using the road would increase from 53 to of 120.

Appendix A – Location Plan



Appendix B – Traffic Counts



Unc.Rd. Cwtŵr Lane TP near Pen-y-Bryn Boderw

Site Number: 00000252
Speed Summary(All Days) Report

From 22/07/2018 To 29/07/2018
No Filters Applied

To A55

	Total Volume	85th %ile	Mean Ave.	Std. Dev.	Bin 1 <10MPH	Bin 2 10-15	Bin 3 15-20	Bin 4 20-25	Bin 5 25-30	Bin 6 30-35	Bin 7 35-40	Bin 8 40-45	Bin 9 45-50	Bin 10 50-55	Bin 11 55-60	Bin 12 60-70	Bin 13 70-80	Bin 14 =>80
00:00	0		18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0		32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1		20	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1		25	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2		27	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1		24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	1		21	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	2		22	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:00	3		22	7	0	1	1	1	1	0	0	0	0	0	0	0	0	0
12:00	4		25	9	0	0	1	1	0	1	1	0	0	0	0	0	0	0
13:00	3		23	9	0	1	0	1	1	1	0	0	0	0	0	0	0	0
14:00	4		27	7	0	0	0	0	1	1	1	0	0	0	0	0	0	0
15:00	6		25	9	0	1	1	1	1	1	0	0	0	0	0	0	0	0
16:00	13	30	20	9	1	4	3	2	1	1	1	0	0	0	0	0	0	0
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18:00	3		29	13	0	0	0	0	0	1	0	0	0	0	0	0	0	0
19:00	2		31	9	0	0	0	0	1	1	0	0	0	0	0	0	0	0
20:00	1		34	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	1		36	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	1		38	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0		28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	45	33	24	9	2	8	8	8	7	7	3	1	0	0	0	0	0	0
16H(6-22)	51	34	25	10	2	8	9	8	8	9	5	1	0	0	0	0	0	0
18H(6-24)	52	35	25	10	2	8	9	8	8	9	5	1	0	0	0	0	0	0
24H(0-24)	53	34	25	10	2	9	9	8	8	9	5	1	0	0	0	0	0	0
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	3		32	10	0	1	1	1	1	0	0	0	0	0	0	0	0	0
PM Peak	16:00		22:00	18:00	16:00	16:00	16:00	16:00	15:00	16:00	16:00	15:00	21:00	22:00	20:00	18:00	23:00	23:00
	13		38	13	1	4	3	2	1	1	1	0	0	0	0	0	0	0



Planning & Public Protection Services

Local Events Included & Global Events Included

Printed at: 09:16:42 on Tue 31 Jul 2018

Unc.Rd. Cwtŵr Lane TP near Pen-y-Bryn Boderw

Site Number: 00000252
Speed Summary(All Days) Report

From 22/07/2018 To 29/07/2018
No Filters Applied

From A55

	Total Volume	85th %ile	Mean Ave.	Std. Dev.	Bin 1 <10MPH	Bin 2 10-15	Bin 3 15-20	Bin 4 20-25	Bin 5 25-30	Bin 6 30-35	Bin 7 35-40	Bin 8 40-45	Bin 9 45-50	Bin 10 50-55	Bin 11 55-60	Bin 12 60-70	Bin 13 70-80	Bin 14 =>80
00:00	0		28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0		30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1		32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2		25	10	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:00	3		32	11	0	0	1	0	0	0	1	0	0	0	0	0	0	0
08:00	3		19	12	1	1	0	0	0	0	0	0	0	0	0	0	0	0
09:00	2		23	5	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:00	3		27	6	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:00	2		21	7	0	1	0	1	0	0	0	0	0	0	0	0	0	0
12:00	3		22	7	0	1	0	1	1	0	0	0	0	0	0	0	0	0
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22:00	0		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0		28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	33	32	24	9	1	5	5	8	8	3	2	1	1	0	0	0	0	0
16H(6-22)	40	33	25	9	1	6	5	10	10	4	3	1	1	0	0	0	0	0
18H(6-24)	40	33	25	9	1	6	5	10	10	4	3	1	1	0	0	0	0	0
24H(0-24)	41	33	25	9	1	6	5	10	11	4	3	1	1	0	0	0	0	0
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Local Events Included & Global Events Included

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From 22/07/2018 To 29/07/2018
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All Channels

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00:00	0		22	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
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21:00	2		34	6	0	0	0	0	0	1	1	0	0	0	0	0	0	0
22:00	1		36	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0		28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	79	33	24	9	3	13	13	16	15	11	6	2	1	0	0	0	0	0
16H(6-22)	90	34	25	9	3	14	14	18	18	13	7	2	1	0	1	0	0	0
18H(6-24)	92	34	25	9	3	14	14	18	18	13	7	2	1	1	1	0	0	0
24H(0-24)	94	34	25	9	3	15	14	18	19	14	7	2	1	1	1	0	0	0
AM Peak	11:00		04:00	08:00	08:00	11:00	07:00	11:00	10:00	10:00	07:00	07:00	07:00	07:00	08:00	11:00	11:00	11:00
	5		31	11	1	1	1	2	1	1	1	0	0	0	0	0	0	0
PM Peak	16:00		22:00	18:00	16:00	16:00	16:00	16:00	14:00	16:00	16:00	15:00	21:00	18:00	20:00	18:00	23:00	23:00
	17		36	11	1	4	4	3	2	2	1	0	0	0	0	0	0	0



Planning & Public Protection Services

Local Events Included & Global Events Included

Printed at: 09:16:42 on Tue 31 Jul 2018

Site Number: 00000252
Speed Summary(5 Day Ave.) Report

Unc.Rd. Cwtir Lane TP near Pen-y-Bryn Boderw
From 22/07/2018 To 29/07/2018
No Filters Applied

To A55

	Total Volume	85th %ile	Mean Ave.	Std. Dev.	Bin 1 <10MPH	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<70	Bin 13 70-<80	Bin 14 =>80
00:00	0		18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1		18	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:00	1		29	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2		24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1		23	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:00	1		24	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	2		24	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:00	2		18	5	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12:00	3		20	7	0	1	1	1	1	0	0	0	0	0	0	0	0	0
13:00	3		24	8	0	1	0	1	1	1	0	0	0	0	0	0	0	0
14:00	4		25	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0
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23:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	41	34	25	9	1	6	8	8	7	7	3	1	0	0	0	0	0	0
16H(6-22)	46	34	25	9	1	6	8	9	8	8	4	1	0	0	0	0	0	0
18H(6-24)	47	35	25	9	1	6	8	9	8	8	4	1	0	0	0	0	0	0
24H(0-24)	48	34	25	9	1	6	9	9	8	8	4	1	0	0	0	0	0	0
AM Peak	11:00		06:00	10:00	10:00	11:00	11:00	11:00	09:00	08:00	10:00	10:00	11:00	11:00	11:00	11:00	11:00	11:00
	2		29	10	0	1	1	0	0	1	0	0	0	0	0	0	0	0
PM Peak	16:00		22:00	18:00	15:00	16:00	16:00	16:00	14:00	16:00	16:00	15:00	21:00	22:00	17:00	18:00	23:00	23:00
	9		39	13	0	2	2	2	1	2	1	1	0	0	0	0	0	0



Planning & Public Protection Services

Local Events Included & Global Events Included

Printed at: 09:15:44 on Tue 31 Jul 2018

Site Number: 00000252

From 22/07/2018 To 29/07/2018

Speed Summary(5 Day Ave.) Report

No Filters Applied

From A55

	Total Volume	85th %ile	Mean Ave.	Std. Dev.	Bin 1 <10MPH	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<70	Bin 13 70-<80	Bin 14 >=80
00:00	0		28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0		32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1		32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	3		25	10	0	1	0	0	1	0	0	0	0	0	0	0	0	0
07:00	3		32	11	0	0	1	0	0	0	1	0	0	0	0	0	0	0
08:00	3		19	13	1	1	0	0	0	0	0	0	0	0	0	0	0	0
09:00	2		22	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:00	3		28	7	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:00	3		19	6	0	1	0	1	0	0	0	0	0	0	0	0	0	0
12:00	2		20	8	0	1	0	0	0	1	0	0	0	0	0	0	0	0
13:00	2		22	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0
14:00	1		22	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0
15:00	3		21	8	0	1	1	1	1	0	0	0	0	0	0	0	0	0
16:00	4		24	6	0	0	1	1	1	0	0	0	0	0	0	0	0	0
17:00	3		26	10	0	1	0	0	1	0	0	0	0	0	0	0	0	0
18:00	4		26	8	0	0	0	2	1	1	0	0	0	0	0	0	0	0
19:00	2		22	5	0	0	0	1	1	0	0	0	0	0	0	0	0	0
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22:00	0		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	33	32	24	9	1	6	5	8	7	3	2	1	1	0	0	0	0	0
16H(6-22)	41	32	24	9	1	7	6	10	10	4	2	1	1	0	0	0	0	0
18H(6-24)	41	32	24	9	1	7	6	10	10	4	2	1	1	0	0	0	0	0
24H(0-24)	42	32	24	9	1	7	6	10	11	4	2	1	1	0	0	0	0	0
AM Peak	07:00		05:00	08:00	08:00	11:00	07:00	11:00	06:00	10:00	07:00	07:00	07:00	07:00	08:00	11:00	11:00	11:00
	3		32	13	1	1	1	1	1	1	1	0	0	0	0	0	0	0
PM Peak	18:00		21:00	17:00	23:00	15:00	15:00	18:00	16:00	18:00	17:00	23:00	17:00	18:00	23:00	23:00	23:00	23:00
	4		30	10	0	1	1	2	1	1	0	0	0	0	0	0	0	0

Unc.Rd. Cwtir Lane TP near Pen-y-Bryn Boderw

From 22/07/2018 To 29/07/2018

Site Number: 00000252

Speed Summary(5 Day Ave.) Report

No Filters Applied

All Channels

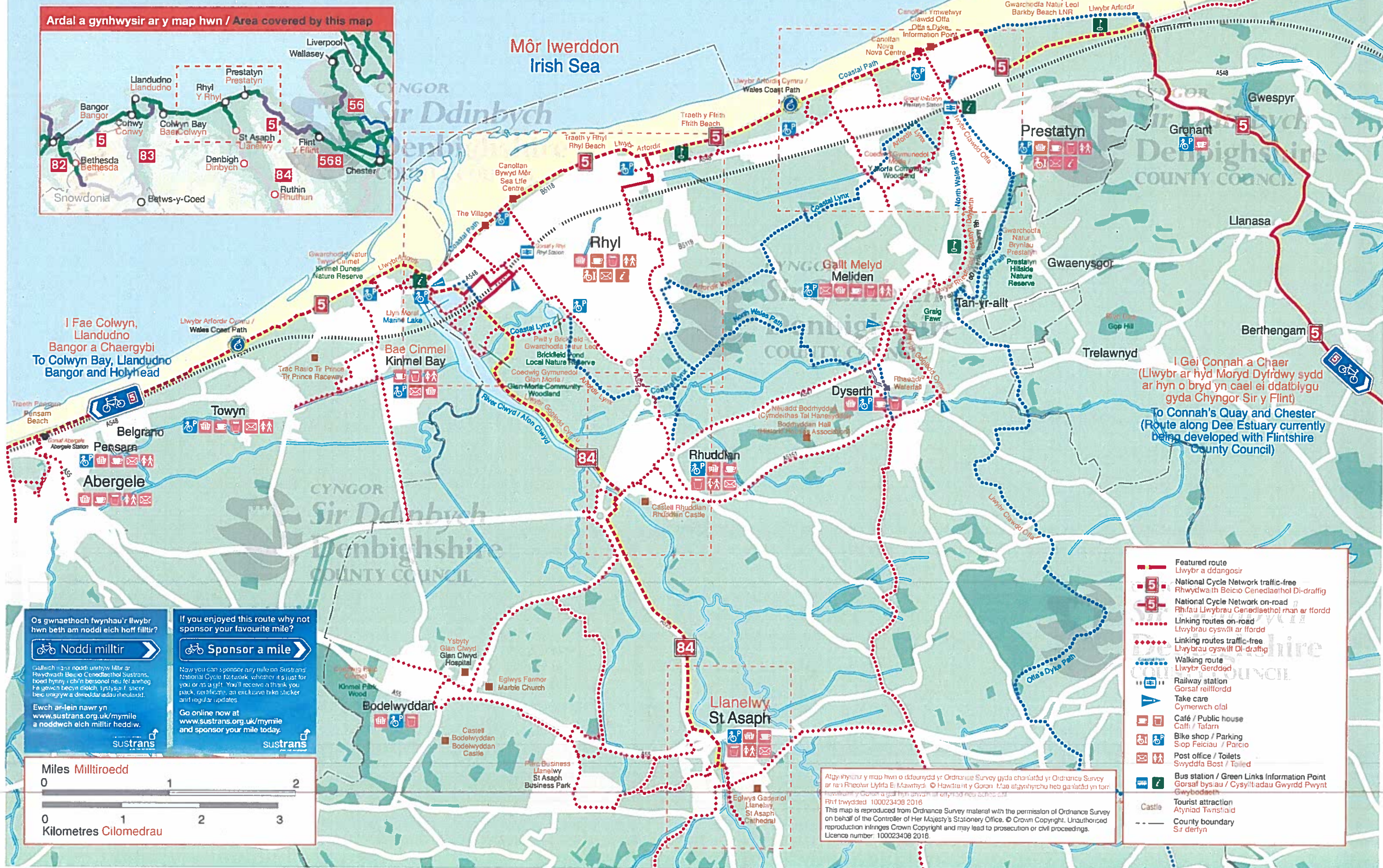
	Total Volume	85th %ile	Mean Ave.	Std. Dev.	Bin 1 <10MPH	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<70	Bin 13 70-<80	Bin 14 >=80
00:00	0		22	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0		32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	2		24	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:00	4		26	10	0	1	0	1	2	0	0	0	0	0	0	0	0	0
07:00	5		29	11	0	0	1	1	0	1	1	0	0	0	0	0	0	0
08:00	4		21	12	1	1	0	0	0	1	0	0	0	0	0	0	0	0
09:00	3		23	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:00	5		26	9	0	0	1	0	1	1	0	0	0	0	0	0	0	0
11:00	5		18	5	0	2	1	1	0	0	0	0	0	0	0	0	0	0
12:00	5		20	7	0	1	1	2	0	0	0	0	0	0	0	0	0	0
13:00	5		24	7	0	1	1	1	1	1	0	0	0	0	0	0	0	0
14:00	5		24	6	0	0	0	2	2	0	0	0	0	0	0	0	0	0
15:00	10	31	24	9	0	1	2	2	2	1	0	1	0	0	0	0	0	0
16:00	13	32	24	8	0	2	2	3	2	2	1	0	0	0	0	0	0	0
17:00	6		27	10	0	1	1	1	2	1	1	0	0	0	0	0	0	0
18:00	7		29	11	0	1	0	2	1	2	0	0	0	0	0	0	0	0
19:00	4		25	7	0	1	0	1	1	1	0	0	0	0	0	0	0	0
20:00	3		28	8	0	0	0	1	1	0	0	0	0	0	0	0	0	0
21:00	2		34	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0
22:00	1		36	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																		
12H(7-19)	74	33	24	9	2	12	13	16	14	10	5	2	1	1	0	0	0	0
16H(6-22)	87	34	25	9	2	13	14	18	18	12	6	2	1	1	1	0	0	0
18H(6-24)	88	34	25	9	2	13	14	19	18	12	6	2	1	1	1	0	0	0
24H(0-24)	90	34	25	9	2	13	14	19	19	13	6	2	1	1	1	0	0	0
AM Peak	07:00		04:00	08:00	08:00	11:00	07:00	11:00	06:00	10:00	07:00	10:00	07:00	07:00	08:00	11:00	11:00	11:00
	5		32	12	1	2	1	1	2	1	1	0	0	0	0	0	0	0
PM Peak	16:00		22:00	22:00	15:00	16:00	16:00	16:00	16:00	16:00	16:00	15:00	21:00	18:00	17:00	18:00	23:00	23:00
	13		36	12	0	2	2	3	2	2	1	1	0	0	0	0	0	0

Llwybrau Beicio yng Ngogledd Sir Ddinbych Cycle Routes in North Denbighshire

Ardal a gynhwysir ar y map hwn / Area covered by this map



Môr Iwerddon
Irish Sea



Os gwnaethoch twynhau'r llwybr hwn beth am noddi eich hoff filltir?

Noddi milltir

Gallwch gwni noddi unrhyw filltir ar Rwydwaith Beicio Cenedlaethol Sustrans, hysbysu i chi'n personol neu fel anhyboga i'w gweithredu diolch, tystysgrif, siarter beic unigryw a diweddarddau rheolaidd.

Ewch ar-lein nawr yn www.sustrans.org.uk/mymile a noddwch eich milltir heddiw.

sustrans

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sustrans

Miles Milliroedd

0 1 2

Kilometres Cilomedrau

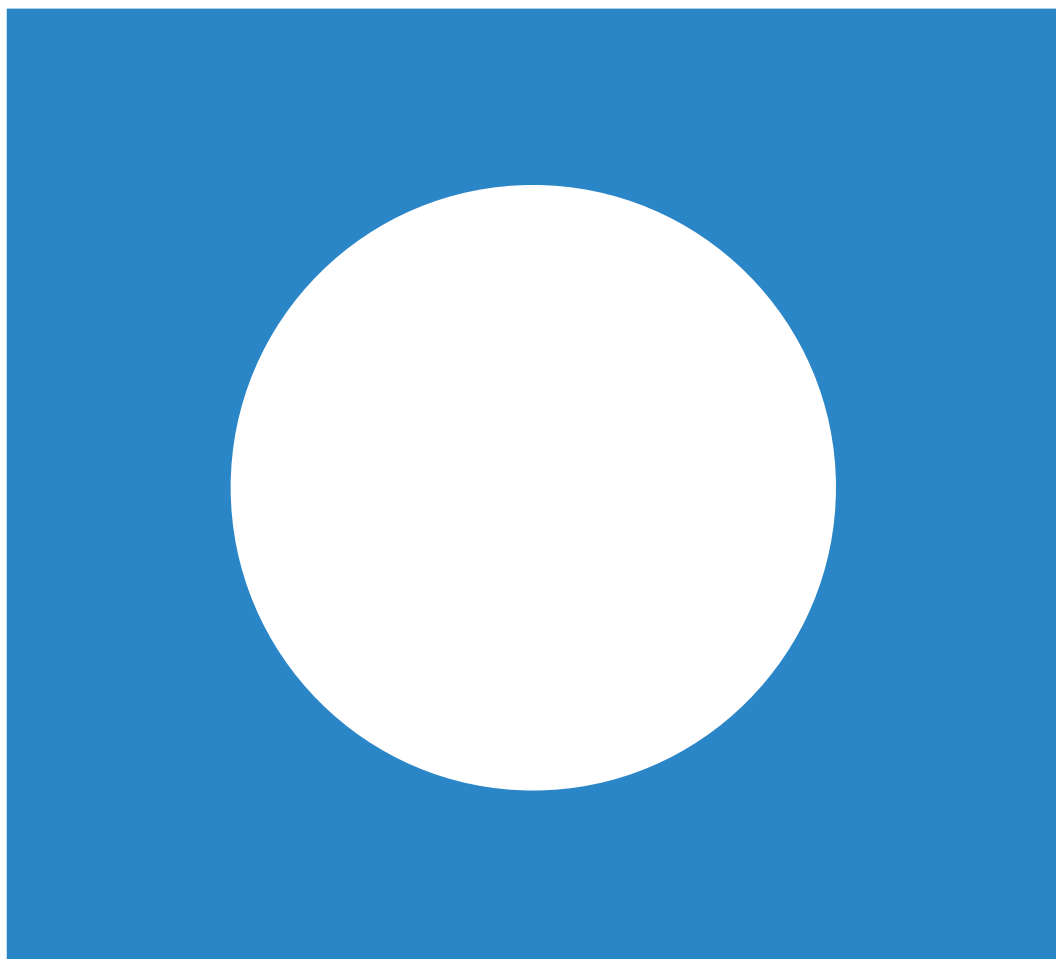
0 1 2 3

Atgynhysir y map hwn o ddata'r Ordnance Survey gyda charitad y'r Ordnance Survey ar rai Rheolwr Llyfr E. Mawrhydi. © Hawlfraith y Goron. Mae atgynhysir heb ganiatâd yn torri hysbysu y Goron a gall hysbysu at gynydd neu golled. Rhif trwydded 100023408 2016. This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorized reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence number 100023408 2016.

- Featured route
Llwybr a ddangosir
- National Cycle Network traffic-free
Rhwydwaith Beicio Cenedlaethol Di-drafftig
- National Cycle Network on-road
Rhwydwaith Beicio Cenedlaethol rhan ar ffordd
- Linking routes on-road
Llwybrau cyswll ar ffordd
- Linking routes traffic-free
Llwybrau cyswll Di-drafftig
- Walking route
Llwybr Gerddod
- Railway station
Gorsaf reilffordd
- Take care
Cymerwch ofal
- Café / Public house
Caffi / Tafarn
- Bike shop / Parking
Siop Feiciau / Parcio
- Post office / Toilets
Swyddfa Post / Toilets
- Bus station / Green Links Information Point
Gorsaf bys-bws / Cysylltiadau Gwydd Pwynt Gwydd
- Tourist attraction
Atyniad Twristiaid
- County boundary
Siri derlyn



Appendix D – Road Safety Audit



Greengates Farm

Road Safety Audit
Stage 1/2

30 August 2018

9 Portland Street
Manchester M1 3BE
United Kingdom

T +44 (0)161 914 8880

mottmac.com

PO Box 62
Ruthin
LL15 9AZ

Greengates Farm

Road Safety Audit
Stage 1/2

30 August 2018

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	29/08/2018	R J Collins	H Palmer	R Skitt	First Issue
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>					

Information class: Standard

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3	Audit Team Statement	6
	Appendices	7
A.	List of Drawings Examined	8
B.	Key Plan – Greengates Farm	9

1 Introduction

This report describes a Stage 1/2 Road Safety Audit carried out on the provision of two sites, a temporary and a permanent site for travellers on Cwtir Lane, Denbigh.

The audit was carried out at the request of the Project Sponsor, Denbighshire County Council.

The audit took place at the Manchester office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Stage 1/2 Road Safety Audit and that the audit was undertaken upon completion of the detailed design work.

The Road Safety Audit Team consisted of:

Rachael Collins	BA (Hons), MSc, MCIHT (Certificate of Competency in Road Safety Audit, July 2016) Audit Team Leader, Mott MacDonald
-----------------	---

Hayley Palmer	BSc (Hons), MSc, MCIHT Audit Team Member, Mott MacDonald
---------------	---

The Audit Team visited the site of the proposed works together on Tuesday 28 August 2018 between 12.30 and 13.30 hours. During this visit the weather conditions were cloudy with sunny spells and surfaces were dry. Traffic levels were low. Pedestrian activity was high with employees from nearby businesses taking a walk during their lunch break. No cyclist activity was observed.

This Road Safety Audit was carried out in accordance with Departmental Standard HD19/15. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to require action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report to the audit should be completed by the Design Team and kept on file for future reference.

A Key Plan indicating the study extents and location of any identified safety related issues is provided in **Appendix B**.

Scheme Description

The works include the provision of two sites for travellers. The first being a transit site which will have a maximum of three months occupancy. It is proposed to have 5 pitches with each one anticipated to cater for a single caravan, however, more than one caravan could be pitched on each site. The second site is a permanent residential site for travellers.

The access for each site is proposed to have 10m radii with 90m visibility splays in both directions. It is understood that to achieve this visibility the hedgerows are to be removed and the visibility splays are to be kept clear.

Two passing places are proposed where the carriageway will be widened to 6.0m. These are intended to allow passing to take place. They will be designed so not to encourage parking within the bays.

2 Items Raised at this Stage 1/2 Audit

This section describes road safety related issues identified by the Audit Team that are associated with the scheme as presented in **Appendix A**. A reference key plan is shown in **Appendix B**.

2.1 Cwttir Lane

2.1.1 Problem 2.01

Location: Length of Cwttir Lane

Summary: Condition of carriageway could deteriorate with increase in use, particularly by large vehicles.

The carriageway surface was uneven with cracks along much of the length of Cwttir Lane (Figure 1) and the Audit Team are concerned that with an increase in use, particularly by large vehicles, the surface could deteriorate leading to pot holes and a more uneven surface. This could lead to cyclists hitting a hole and falling from their bike and given this is a cycle route, numbers using it could be high.

Figure 1: Carriageway condition on Cwttir Lane



Source: Mott MacDonald

Recommendation

Carriageway resurfacing is required if usage by large vehicles is to increase.

2.2 Transit Site

2.2.1 Problem 2.02

Location: Transit Site proposed access

Summary: Hedgerows could restrict visibility for vehicles exiting the site resulting in collisions with passing vehicles.

Hedgerows are currently present within the proposed visibility splays (Figure 2). A driver exiting the site could have a restricted view of approaching vehicles which could result in vehicles turning out colliding with those travelling ahead on Cwttir Lane.

Figure 2: Hedgerows within visibility splay at transit site



Source: Mott MacDonald

Recommendation

Hedgerows will need to be removed and visibility splays kept clear from any obstruction.

2.3 Permanent residential Site

2.3.1 Problem 2.03

Location: Residential Site proposed access

Summary: Hedgerows could restrict visibility for vehicles exiting the site resulting in collisions with passing vehicles.

Hedgerows are currently present within the proposed visibility splays (Figure 3). A driver exiting the site could have a restricted view of approaching vehicles which could result in vehicles turning out colliding with those travelling ahead on Cwttir Lane.

Figure 3: Hedgerows within visibility splay at residential access



Source: Mott MacDonald

Recommendation

Hedgerows will need to be removed and visibility splays kept clear from any obstruction.

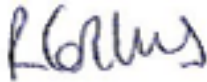
3 Audit Team Statement

We certify that this audit has been carried out in accordance with Departmental Standard HD19/15.

Road Safety Audit Team Leader

R J Collins BA (Hons), MSc, MCIHT
(Certificate of Competency in Road Safety Audit, July 2016)

Signed:



Date: 29th August 2018

Senior Road Safety Engineer
Mott MacDonald
9 Portland Street
Manchester
M1 3BE

Road Safety Audit Team Member

H Palmer, BSc (Hons), MSc

Signed:



Date: 29th August 2018

Senior Transport Planner
Mott MacDonald
Royal Liver Building
Liverpool
L3 1JH

Appendices

A.	List of Drawings Examined	8
B.	Key Plan – Greengates Farm	9

A. List of Drawings Examined

The following documents were examined as part of this Road Safety Audit.

Table 1: Drawings

Document Number	Revision	Drawing Title
01A	A	Greengates Farm, General Arrangement
A101	-	Greengates Farm – Residential, Site layout as proposed, preliminary
A103	-	Greengates Farm – Transit, Site layout as proposed, preliminary

Source: Mott MacDonald

B. Key Plan – Greengates Farm

