

# Proposed Travellers Temporary Stopping Site, A49 Leominster

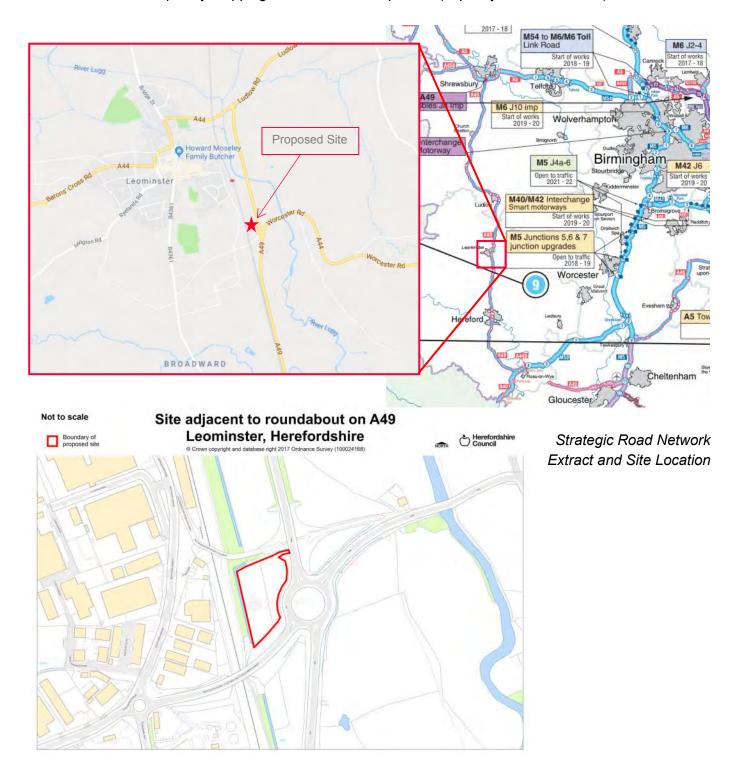
**Balfour Beatty Living Places** 

# Contents

- 1.0 Background
- 2.0 Stage 1: Determining The Scope
- 3.0 Stage 2: Identify the Hazards
- 4.0 Stage 3: Criteria for the Populations
- 5.0 Stage 4: Existing Risk Exposure
- 6.0 Stage 5: Safety Risk Analysis, Assessment and Evaluation
- 7.0 Stage 6: Risk Control Decisions
- 8.0 Stage 7: Documenting the Decision
- 9.0 Stage 8 through 10
- 10.0 Conclusion
- Appendix A Consultation Responses
- Appendix B Traffic Flows and Collision Data
- Appendix C Site Overview Drawings

# 1.0 Background

Herefordshire Council are producing a Travellers Sites Development Plan document to identify and provide for the future demands for Traveller provision within the County. The document proposes that a site is allocated to the west of the A49, northwest of the A44/Southern Avenue (Worcester Road) roundabout for a temporary stopping site for 5 traveller pitches (capacity for 10 caravans).



Highways England (HE) are responsible for operating, maintaining and improving England's motorways and major A roads and as such have a statutory duty to maintain the safe use and operation of the network. As the A49 is part of the Strategic Road Network, they are a consultee in relation to any proposal that may impact upon the road's operation.

Through pre-planning discussions HE requested that a Safety Risk Assessment was required. Guidance for such an assessment is contained in the Design Manual for Roads and Bridges, Vol 0, Sec 2, Part 3 – GD 04/12.

Balfour Beatty Living Places (BBLP) on behalf of Herefordshire Council submitted a Scoping Study to outline the proposed methodology to be followed in preparing this Risk Assessment. This was agreed as appropriate by HE's advised by AECOM/Systra/Kier in their Technical Note dated 16/01/18 (**Appendix A**). In accordance with the DMRB Guidance the stages of assessment are as follows:



GD 04/12 Figure 2: Safety Risk Management Process

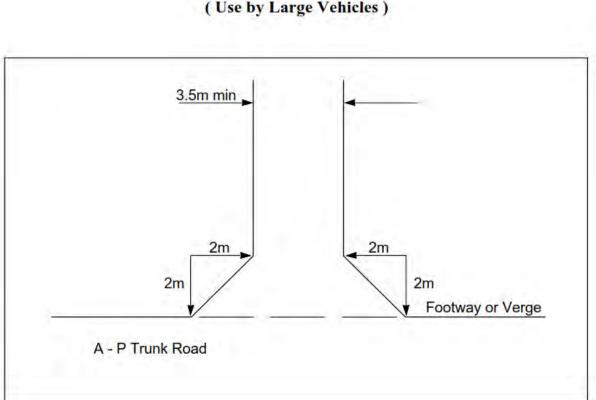
After receiving comments, an updated risk assessment was issued to HE in March 2018. This formed part of the submission of evidence to a Planning Hearing held on 23<sup>rd</sup> May 2018. This report reflects further points raised by Highways England subsequent to the March report, and observations of the Planning Inspector dated 24/05/18.

# 2.0 Stage 1: Determining the Scope

### **Location and Access**

At this time the scheme is in its infancy in so far as it relates to the concept of the land use and detailed site design is to follow if it is allocated. It is expected that the findings of this risk assessment will inform subsequent planning and design decisions. This will include incorporating any requirements arising from the consultations held to date, appropriate to the scale and nature of the proposed use.

The site is accessed directly from the A49 Leominster Bypass, some 75m north of the A44 Worcester Road roundabout. The A49 is a single carriageway, All Purpose Trunk Road, with a national derestricted speed limit (60mph). It is 7.3m in width (S2) between the roundabout and field access, widening to include a 1m wide hard strip north of the toucan crossing. Based on junction types contained in TD 41/95 (Vehicular Access to All-Purpose Trunk Roads) the existing access does not fit any of the prescribed layouts, and is felt to be best described as a Field Access (Layout 1).



Layout 1 - Field Access (Use by Large Vehicles)

Appendix C includes the extent of the adoption, ie the Highway Maintainable at Public Expense (Figure C1). Control is split between two parties, Herefordshire Council as the local Highway Authority have control of the cycleway to the north of the site boundary, whilst the A49 is under the management of Highways England. There are some anomalies, but these in part can be explained by the extent of land ownership (Figure C2) and the transfer of land as the road in conjunction with the Southern Avenue bridge construction.

### The Proposal

The scheme is envisaged to provide a temporary stopping site with a maximum permitted stay of 14 days. A total of five pitches for travellers are proposed. The nature of the expected demand is such that the site, whilst available 365 days a year, would not be fully occupied or used to this extent. The use is expected to reflect seasonal demands and the lifestyle of future users.

As there are no existing sites of this nature in the county, consideration as to the scale of demand has been gauged from consultation with Herefordshire Council's Travellers Team and records of illegal encampments. This is considered to be a reasonable and robust assumption.

- Groups of travellers will move onto the site as and when required and for varying lengths of stay but these will not exceed 14 days.
- The site is most likely to be used during the spring and summer months between April and September.
- During this period it is anticipated that on average there may be 2 -3 stays per month per pitch. Outside these months an average of one stay per month is considered reasonable although there may be no occupants at all through the winter months.
- It is anticipated that once caravans are towed on to the site that they will be unhitched and will only be moved when the occupants leave the site. However whilst the site is occupied it is anticipated that some of the occupants of the site may go off site and return 3-4 times a day.

Assessment of other permanent travellers sites using TRICS data and direct surveys indicate that a typical site would experience an average of 9 movements per day per pitch and hence supports the assumption on daily demand. These values are used later in the report to determine risk levels.

Reference	Location	Pitches	Residents	Survey Date	Туре
HC-16-A-01	Hartfordbridge	20	82	05/01/89	Permanent
SC-16-A-01	Leatherhead	10	Not stated	04/02/10	Static
-	Pembrokeshire	21	51	13/06/17	Not known
<b>k</b>			<b>T</b>		

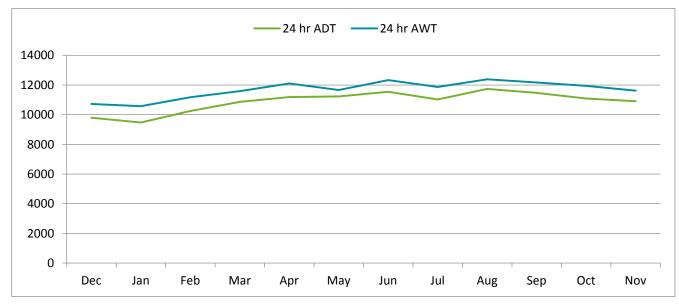
	Time	Location	Arrivals	Departures	Total (2 Way)
AM Peak	08:00-09:00	Hartfordbridge	0.15	0.2	0.35
	08:00-09:00	Leatherhead	0.5	0.8	1.3
	07:45-08:45	Pembrokeshire	0.4	0.7	1.1
PM Peak	x 17:00-18:00 Hartfordbri		0.3	0.4	0.7
	17:00-18:00	Leatherhead	0.3	0.1	0.4
	16:45-17:45	Pembrokeshire	1.4	0.9	2.3
Full Survey	07:00-19:00	Hartfordbridge	4.55	4.7	9.25
	07:00-18:00	Leatherhead	4.6	4.6	9.2
	07:00-19:00	Pembrokeshire	4.33	4.76	9.10

Table 2: Gypsy Traveller Site Traffic Generation – Trip Rates per Pitch

#### **Baseline Conditions**

To establish the current conditions and determine future changes that may arise and increase the potential for risk, traffic survey data and Personal Injury Accident data has been examined. Based on the nature of the proposal a study area has been agreed to encompass the A49 to the east of Leominster known as the Leominster Bypass.

A 12 hour junction count was undertaken to determine the pattern and scale of movements, along with the traffic composition. Due to the timetable for planning consideration the survey was undertaken on Thursday 11<sup>th</sup> January 2018. This is not considered a neutral month and as the chart below shows, traffic flows in January are 9.5% below the Annual Average Weekday Daily Traffic (AWT) flow. As this is the case a correction factor has been applied to scale the recorded traffic to represent the annual average. It should be noted that the current site is presently accessed on an irregular basis by agricultural traffic. It is estimated that this is no more than 20 times a year based on the current land use. The site can however be used more intensively under its permitted uses.



Monthly Variation on Average Traffic Flow (ADT- 7 day average, AWT – 5 day Average)

Month	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov
Monthly ADT	9801	9476	10247	10859	11188	11225	11545	11027	11740	11466	11086	10903
24 hr ADT	-9.9%	-12.9%	-5.8%	-0.2%	2.8%	3.2%	6.1%	1.3%	7.9%	5.4%	1.9%	0.2%
24 hr AWT	-8.2%	-9.5%	-4.3%	-0.8%	3.6%	-0.1%	5.6%	1.7%	6.0%	4.2%	2.2%	-0.5%

Table 3: Monthly Variation on Average Daily Traffic Flow

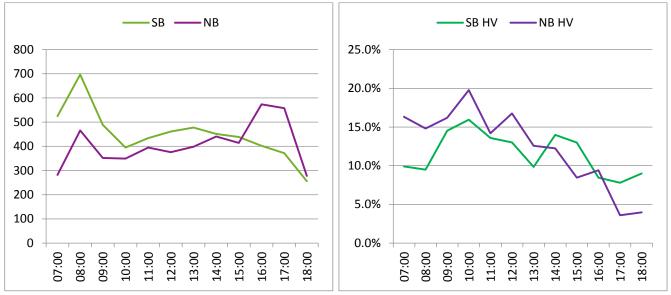
On the day of the survey whilst there was a pronounced AM and PM peak period for northbound vehicles, southbound there was no PM peak. Traffic flows were shown to contain a high proportion of Heavy Good Vehicles in both directions.

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	Peak	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	%HV
Northbound	08:00	306	90	29	37	3	1	0	466	14.8%
	16:00	453	67	21	33	0	0	0	574	9.4%
Southbound	08:00	549	81	36	27	3	0	1	697	9.5%
	16:00	289	78	7	25	2	1	0	402	8.5%

Table 4: Peak Hour Flow and Vehicle Composition



Hourly Flow Variation All Vehicles

Hourly Flow Variation Heavy Vehicle Percentage A49 Leominster Bypass

## **Personal Injury Data**

In the 5 year period from 1/12/12 till 30/11/17 there was a total of five slight injury collisions reported that gave rise to 5 slight casualties. Three of the incidents occurred at the southern roundabout (Worcester Road), and two at the northern roundabout (OK Diner). All five collisions were attributed to driver error/poor manoeuvre. Full details are included in **Appendix B**. It should be noted all these incidents occurred within a 9 month period between August 2014 and May 2015.

	2013	2014	2015	2016	2017
Slight Collision	0	3	2	0	0

## A49/A44 Bromyard Road/Southern Avenue Roundabout

- Driver on entering the roundabout from Leominster intending to travel northbound, veered off the carriageway with no external factors.
- Driver on entering the roundabout travelling southbound veered off the carriageway with no external factors.
- Driver on exiting the roundabout travelling northbound, driver believed they clipped the central reserve island, and in taking evasive action swerved off the carriageway.

### A49/A44 Ludlow Road/Eaton Roundabout

- Driver on entering the roundabout lost control and in over correcting veered off the carriageway with no external factors.
- Driver proceeded to drive forward when in queuing traffic to enter the roundabout, but vehicle ahead had not moved off (rear shunt).

Based on the length of road and annual traffic volume within the 5 year period there has been an average of 1 casualty per annum. The bypass length (1.3km) and the AADT (10,977) give rise to a total of 5,200,000 vehicle kilometres per annum. The A49 bypass is therefore seen as having a good collision rate compared to the RCGB average of one slight collision every 2,500,000 million kilometres.

#### **Identified Populations**

As part of the Scope it is necessary to identify the Populations at Risk. In accordance with the Guidance Document, Table 1, four possible populations have been identified.

Group	Description	Identified Populations
Pop 1	Direct Workers	HE Staff
Pop 2	Contractual workers	Kier Managing Agent, Area 9
Pop 3	SRN Road users	Passing motorised traffic
		Police and emergency services
		<ul> <li>Cyclists &amp; pedestrians using adjacent crossing</li> </ul>
		<ul> <li>Future visitors/travellers' to the proposed site</li> </ul>
Pop 4	Third parties	<ul> <li>Herefordshire Council – site owner and future operator of the proposed travellers' site.</li> </ul>

# 3.0 Stage2: Identify the Hazards

Stage 2 of the Risk Assessment is to identify the associated Hazards. Those identified are listed as follows and their likelihood of their impact upon each of the identified populations noted. Each of the risks is further explored in turn.

	HE Staff	Kier Managing Agent, Area 9	Passing motorised traffic	Police/emerge ncy services	NMUs	Visitors/ travellers' to the site	Herefordshire Council
Increased localized movements impacting traffic flow close to the roundabout	$\checkmark$	~	~	$\checkmark$	~		
Safe access and egress to the site			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Safe use of the crossing	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Vulnerable users next to SRN (eg children at the site)	$\checkmark$	~	~		$\checkmark$	~	
Potential for animals to stray onto SRN eg horses/dogs	~	~	~	$\checkmark$	$\checkmark$	~	$\checkmark$
Distraction of site use to users			$\checkmark$		$\checkmark$		

#### Increased localized movements impacting traffic flow close to the roundabout

At present movements are infrequent based on the site not being actively in use for agriculture or any other related purpose. Based on the expected use outlined above, the table below provides an expected occupancy and associated daily movements. This is presented as a proportion of the existing traffic flow on the A49 Leominster Bypass. This shows an increase of less than 0.6%. The increase in localised flow is not considered lead to any increased risk of collision and is indicative of local daily variations.

Month	Days occupied	Pitches Occupied	Equivalent Daily Movements	%age increase
Jan	5	2	2.90	0.03%
Feb	5	2	3.21	0.03%
Mar	10	4	11.61	0.11%
Apr	15	4	18.00	0.16%
May	22	5	31.94	0.28%
Jun	25	5	37.50	0.32%
Jul	25	5	36.29	0.33%
Aug	25	5	36.29	0.31%
Sep	15	4	18.00	0.16%
Oct	10	4	11.61	0.10%
Nov	5	2	3.00	0.03%
Dec	5	2	2.90	0.03%

Table 5: Monthly estimate of Site Use

#### Safe access and egress to the site

The existing site access is agricultural in nature, but benefits from a wide entry (9m), and a long set back from the road that would allow vehicles room to pull off the carriageway (40m). The location of the access is in close proximity to the crossing (15m to the north) and this is addressed below.



**Existing Site Access** 

#### Change in Flow

The preceding paragraphs indicated the likely increase in localised movements that the site could attract (two way movements). Of these caravan movements on and off the site represent the greatest risk due to the larger and slower moving nature of these vehicles. The volume of movements is shown to be extremely low and not to give rise to undue additional risks. What has been considered a risk is the nature of the vehicle type and the necessary braking required entering the site and consequential impact on following vehicles. This is explored in further detail below.

Month	No of Stays	Monthly Caravan Movements	%age of Average Monthly Flow
Jan	1	6	0.0020%
Feb	1	6	0.0021%
Mar	2	16	0.0048%
Apr	3	24	0.0072%
Мау	3	27	0.0078%
Jun	3	27	0.0078%
Jul	3	27	0.0079%
Aug	3	27	0.0074%
Sep	2	16	0.0047%
Oct	2	14	0.0041%
Nov	1	6	0.0018%
Dec	1	6	0.0020%

Table 6: Monthly estimate of Caravan Movements

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#### Visibility Splay

As evidenced from visiting the site at different times of year, verge-side growth can also impact visibility from the site. A regular schedule of cutting would manage this risk and should be in place as a matter of course. At present there is no active management as the site is not trafficked on a regular basis and hence no demand. Some alternative species planting could also aid in reducing the height of any growth. The growth within the visibility splay would need to be managed to ensure it does not become an impediment to vehicles emerging from the site. It would also appear that the earth bank could benefit from localised remodelling to increase the visibility of crossing users to any waiting vehicles.



Visibility to the left (Winter above, summer below)

Visibility to the right

#### TD 41/95 Outlines the following criteria for assessing visibility.

2.21 Normally, an "X" distance of 4.5m shall be provided for a direct access where use in the design year is forecast not to exceed 500 AADT. The choice of setback distance is related to the forecast traffic using the access. For lightly used accesses, for example those serving a single dwelling or a small cul-de-sac of a half a dozen dwellings, the set back "X" may be reduced to 2.4m. The 2.4m set back relates to normally only one vehicle wishing to join the trunk road at one time. The 4.5m covers the situation where two light vehicles may want to accept the same gap in the trunk road traffic. Where in the case of lightly used accesses the site conditions are particularly difficult, then the set back "X" may be reduced to 2.0m as a Relaxation.

The proposed use will be well below the 500 AADT threshold, and coupled with the part time use, the access demands are more akin to a small cul-de-sac. In the context of the land use, 2.4m is therefore seen as an acceptable X distance to adopt.

#### Visibility Splay to the Left

Drawing MN0130-003 (**Appendix C**) shows the present visibility that is achieved. The drawing indicates that alongside on site observation, there is the potential for the existing mileage sign to limit the visibility to the left. Measured to the nearside kerb, a Y distance of 206m is shown to be achievable. It is noted that this is to the nearside kerb where traffic is not travelling towards any vehicle pulling out. If the Y distance were to be measured a conservative 1m into the carriageway (this would allow for any overtaking vehicles to be seen) then the Y distance achievable increases to 236m. This compares favourably to the 215m required by the standard. Alternatively, with the low volume of use, if the X distance were to be measured from 2.0m, the sign would not interfere with the required 215m splay. Further consideration of this risk is contained in Stage 6.



Existing Distance Sign North of the Site

#### Visibility Splay to the right

To assess the visibility to the right, a different set of criteria are felt to apply based on the proximity to the roundabout. In line with TD 16/07, Geometric Design of Roundabouts, circulatory visibility should be for the size of junction 50m. This applies to the vehicle crosses the ICD at which the standards contained in TD 9/93 apply. The planting and landscaping around the proximity of the roundabout help to reduce traffic speeds to allow for vehicles to respond to other drivers entering, leaving and circulating the junction.

If the TD9/93 standard was applied to the proposed access point (215m), this vegetation would be cleared and increase the risk of faster moving vehicles encouraged by the clearer field of view, to the detriment of driver safety.

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In practical terms the visibility from the junction should accord with vehicle speeds, and the exit speed from the roundabout is in the region of 30-40mph. In this context the necessary visibility splay would be 90m (TD 9/93, 60KPH) or 56m (Manual for Streets, 60kph). These are shown on the plan included in Appendix C. As the visibility splay of 56m aligns with the point of exiting the roundabout, and crosses land within which vegetation can be maintained to an appropriate height, this is seen as a robust measurement in accordance with the spirit of Manual for Streets and the character of the roundabout and desirable circulating vehicle speeds.



Visibility exiting the roundabout (northbound direction)

#### Visibility of the Access

A last component is the visibility of the site access for vehicles to enter the site. Those using it as a transit site would be aware of the location, but vehicles might be caught unaware and make a late manoeuvre, or following drivers caught unawares by a vehicle braking to turn into the site.



Visibility of the access (northbound direction)

The change in use will be accompanied by other works which will give a hint to the site's presence. Advanced Directional Signage will also be recommended and subject to discussion with Highways England as to the appropriate nature and location. These could for the most part be facilitated through amendments to the existing signage. However some new signs may be warranted and this is included as a risk item.

### Northbound Entry (braking manoeuvre)

TD 50/04 (The Geometric Layout of Signal Controlled Junctions and Signalised Roundabouts) para 6.6 states "When signal-controlled pedestrian crossing facilities are incorporated on the exit arms, designers should ensure that adequate storage length is provided to avoid traffic queuing back onto the circulatory carriageway." In relation to visibility, the TD states that stopping distances should be in accordance with TD9 and the appropriate design speed. The provision of the crossing therefore indicates due to the forward visibility afforded, a design speed exiting the roundabout of 60kph. This aligns with Highways England's observation that "it is assumed that the crossing is in a place complaint with standards".

Based on the site stopping distances the braking required to either stop for the crossing (be this behind another queuing vehicle, or as the first to the stop line) or to slow behind a turning vehicle are therefore seen as complimentary and do not give rise to additional conflicting risk.

#### Junction Form

The existing junction form is noted as not directly aligning with any of the access layouts contained within TD41/95. A Swept Path/Track Plot of a long towing vehicle is included in Appendix C and demonstrates that within the context of the existing tarmacked area vehicles can adequately turn into the site. If the site was to be developed some refinement of the access path would be beneficial to enhance junction visibility (see above) and to better accord with the standards established in TD41/95. This would involve negotiation with Highways England as the land is under mixed control and ownership.

#### Safe use of the crossing

The survey of the existing crossing indicated that it is infrequently used. The daily total indicates that 23 people used the facility on the day of the survey (note some of these may have crossed together and does not indicate that the crossing was called 23 times).

Hour:	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	Total
EB	0	1	1	0	3	0	0	0	4	0	0	3	12
WB	0	0	1	0	1	0	0	2	0	5	0	2	11

#### Table 7: Pedestrians Crossing the A49



SRN Safety Risk Assessment

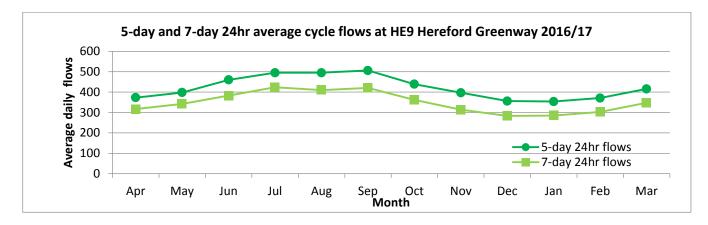
Proposed Travellers Temporary Stopping Site A49, Leominster

#### Pedestrian Crossing of the A49

It is acknowledged that higher use could be expected in warmer months of the year when active travel could be seen as more attractive. As a proxy the flows on the Greenway Cycle Route in Hereford are shown to demonstrate the seasonal shift and changes in cyclist numbers and that 20% fewer cyclists were recorded in January against the yearly average.

Year					2016					2017		
Month	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
7-day 24hr flows	317	342	383	424	410	421	362	314	283	285	303	348
Variation on 16/17 Average	-9.3%	-2.1%	9.6%	21.4%	17.4%	20.5%	3.6%	-10.1%	-19.0%	-18.4%	-13.3%	-0.4%

Table 8: 7-day 24hr flows (2016/17)



It is considered that the highest risk to crossing users could be when vehicles are emerging from the site and are considering traffic as opposed to the risk of pedestrians crossing. Pedestrians from the site itself would be chiefly expected to be attracted towards the town centre and not make regular use of the crossing.

Overall based on the crossing demand and vehicle demand from the site, such movements arising at the same time are infrequent. Site users will still need to obey the Highway Code and take due regard to the crossing.

## Vulnerable users next to SRN (eg children at the site)

At present the site is not occupied but the change of use would lead to an increase in resident population adjacent to the SRN. The site topography being lower than the surrounding ground would help dissuade children from wandering onto the road. The site will need to be securely fenced to ensure appropriate privacy and security for occupants.

#### Potential for animals to stray onto SRN eg horses/dogs

As above the site's topography would help dissuade animals wandering onto the road. The site will need to be securely fenced to ensure appropriate privacy and security for occupants. It will be necessary for

occupants to safely secure animals which would be particularly expected with regard to horses which are a valuable asset for Travellers.

#### **Distraction of site use to users**

The site is sheltered from passing views by existing established vegetation to the boundary. The site is also lower than the adjoining roads and it is felt that few would know the nature of the activities occurring on site. This is therefore not considered a particular risk.

## 4.0 Stage 3: Criteria for the Populations

Stage 3 of the Guidance seeks to establish the safety risk on the population and the risk tolerance for each of the populations. In accordance with the HSEs TOR model the following thresholds are identified in terms of a fatality.

Group	Description	Unacceptable	Tolerable	Broadly Acceptable
Pop 1	Workers	Loss than 1 in 1 000	Creater than 1 in 1 000	Greater than
Pop 2		Less than 1 in 1,000	Greater than 1 in 1,000	1 in 1,000,000
Pop 3	SRN Road users	Less than	Greater than	Greater than
Pop 4	Third parties	1 in 10,000	1 in 10,000	1 in 1,000,000

# 5.0 Stage 4: Existing Risk Exposure

Based on the collision analysis undertaken in Stage 1, the current risk of a **slight** collision is 1 in 4,000,000 (5 collisions / 365\*10,977 AADT in 5 years). This is therefore much better than the broadly acceptable rate for a fatality of 1 in a million.

Systra commented that the existing risk exposure should be calculated as follows

b = collision data collection period (in years) = 5

k = number of fatal casualties = Nil

I = number of serious casualties = Nil

m = number of slight casualties = 5

n = 2-way AADT traffic flow = 10,880

This is therefore 1 in 1,088,025 ie broadly acceptable.

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## 6.0 Stage 5: Safety Risk Analysis, Assessment and Evaluation

In accordance with the HSE's TOR model risks are expressed as being Broadly acceptable, Tolerable or Unacceptable. Each of the risks against the identified populations is summarised as follows, using a RAG colour coding (Red Unacceptable, Amber Tolerable, Green Broadly acceptable). This is based on the assessment of the consequences of the risk and the likelihood of any injury occurring.

The risk of a collision is felt to be greatest if vehicles turning into/from the site. The frequency of movement is 1 in 13,500 vehicles for a caravan, which indicates a risk of collision of 1 in 54,000,000,000. This is infrequent and based on the number of vehicle movements, volume of trips on the A49 and gap acceptance/possibility of conflict is therefore extremely very low and there is no evidence to suggest that additional slight collisions would arise.

There is no readily available basis upon which to judge whether large vehicles would arrive at the site from the north of the south, but if the increase in movements were to result in one additional collision, the change in FWI would fall to one in 906,687. This would fall into the tolerable range. Mitigation is therefore warranted to ensure no increase in recorded collisions occurs (Stage 6).

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	HE Staff	Kier Managing Agent, Area 9	Passing motorised traffic	Police/emergency services	NMUs	Visitors/travellers' to the site	Herefordshire Council
Increased localized movements impacting traffic flow close to the roundabout							
Safe access and egress to the site							
Visibility Left							
Visibility Right							
New Signage (visibility of the access)							
Safe use of the crossing							
Vulnerable users next to SRN							
Potential for animals to stray onto SRN							
Distraction of site use to users							

# 7.0 Stage 6: Risk Control Decisions

Based on the assessment, the primary risk to be addressed is the consequence of vehicles either blocking back across the crossing when turning right into the site, or the impact on visibility of the existing advanced directional sign some 75 metres north of the junction. There is adequate scope to increase the sign height to provide visibility underneath the sign to the left for exiting vehicles. This will require consideration of the sign foundations and their construction to meet appropriate standards and the agreement of Highways England but is not considered a barrier to the proposed development.



Alternatively as it is noted that the sign has been hit in its current location; this is most likely due to agricultural vehicles entering the field access immediately to the south of the sign location. If the sign were to be mounted 200mm further west, the visibility available would exceed 215m at the 2.4m set back distance.

From the picture of the reverse of the sign, it can be seen that there is opportunity to mount the sign further to the west on the existing posts. This will increase the visibility and would result in negligible changes to the loading of the existing posts and would also reduce the likelihood of the sign being impacted by agricultural vehicles entering the field access.

Alternatively the sign could be repositioned further north along the A49. This is within highway verge and in land under control of HE. To gain the required 215m visibility at 2.4m setback the sign would need to be moved north by less than 10m, so the adjustment to the mounting is seen as more pragmatic.

As outlined above the site will need to be securely fenced to reduce the risk children or stray animals entering the highway, but this is not an unduly significant requirement and is appropriate for the development and will be allowed for within the planning and design. The fence line will consider any boundary and landscape issues to ensure it does not introduce any additional element of risk.

To assist turning manoeuvres it is suggested that larger vehicles are encouraged to enter only from the south (left turn in) thereby negating the risk of blocking back across the pedestrian crossing. This is suggested to be part of a voluntary traffic management plan (soft measure) and not require physical measures or a traffic regulation order to enforce. Such a measure can be added to the existing Advanced Directional Signage to advise those entering the site that this is the preferable means of access.

A permanent TRO could be used to regulate such a manoeuvre; however the enforcement might not be supported by the police. If physical measures to stop such a turn were used, this would have the potential to increase hazards to passing vehicles by the introduction of kerbing and thereby increasing the risk of an incident. It is for these reasons a voluntary agreement is proposed and is felt adequate against the backdrop of vehicle movements.

# 8.0 Stage 7: Documenting the Decision

The report has been prepared for consideration by Highways England operatives. The decision has to be considered in light of the decision making pyramid where schemes are classed as Type A, B or C as per the DMRB Guidance. In this instance the scheme is seen primarily Type A.

Features	Type A Specialist Technical/ Coordinator Roles	Type B Professional Safety Advisors	Type C Professional Roles	
What is the size of the decision impact? (geographically and in impact terms; extent of the network, number of "Users'/"Workers")	Local, low density	Local, high density or national, low density	National, high density	
What are the cost implications of the decision for the Agency?	Low	Medium	High	
What is the lifetime of the decision? (how long will the Agency be affected by the decision)	Rest of the day	Months to a few years	Decades	
What is the level of safety risk or uncertainty associated with the decision?	Low	Medium	High	
What is the policy or stakeholder interest level? (how sensitive is it?)	Low	Medium	High	

Note: Stakeholder could be many bodies, e.g. user, worker, another road authority MP etc.

Table 2 - Characterising Decision Features

- Scheme size- local in nature (A).
- Cost implications low to nil for Highways England (A)
- Decision lifetime the site if permitted for this use would be for many years coming (C).
- Level of safety risk shown to be low (A)
- Policy interest perceived to be low due to the scale and intensity of use (A).

# 9.0 Stage 8 through 10

At this time the report is used to inform the consideration of the site's allocation for a Temporary Stopping site for Travellers. Stages 8 to 10 take the report forward through to the operator, updating the report in light of any proposals, and monitoring the situation after implementation.

These stages will be for the future implementation of any works on site if the proposal is approved and construction is undertaken.

# **10.0 Conclusions**

In support of Herefordshire Council's proposed Travellers Sites Development Plan Document, Highways England requested a risk assessment in accordance with GD 04/12.

The risk assessment considers the safety consequences on the Strategic Highway Network (A49 Leominster Bypass) of the proposal and the impact on workers, road users and third parties.

Six primary hazards have been identified and due to the low volume of movements and incidental use of the site, no risk of a fatality at a rate greater than 1 in a million has been identified making the site proposal broadly acceptable.

Some works will be necessary to enhance the site's safety and further reduce risk namely:

- Consideration of the existing directional sign north of the site access and signage for the site to raise driver awareness;
- Site fencing;
- Management of kerbside vegetation; and
- A traffic management plan to reduce the number of turning movements into the site across other traffic streams.



# **APPENDIX A:**

# **CONSULTATION RESPONSES**

## HEREFORDSHIRE COUNCIL Examination of Travellers Sites Development Plan Document Inspector: David Smith BA(Hons) DMS MRTPI

Programme Officer: Tracy Pearson

Tel: 07792 880908

Email: <u>Programme.Officer@herefordshire.gov.uk</u> Address: c/o Plough Lane Offices, Hereford, HR4 OLE Webpage: <u>Travellers' Sites Document examination</u>

# **INSPECTOR'S CLOSING COMMENTS**

- 1. This note sets out the main matters that I covered in my closing comments at the hearing. The purpose of them was to give some indication of the next steps in the process and the likely timescales and an opportunity to deal with any procedural questions that the Council may have had. Nothing should be taken as pre-judging the contents of the final report which will take into account all relevant matters and representations.
- 2. There are various strands that can proceed concurrently during this part of the examination.
- 3. Firstly, the Council and its consultants undertook to respond to the Outstanding Matters raised by Highways England in Annex 1 to its letter of 21 May 2018 (PS12). This is concerned with access arrangements for proposed allocation TS3 – temporary stopping place at Leominster. Some further informal dialogue is also likely to be required with Highways England to ensure their concerns are fully understood. In addition, the Council undertook to give further consideration to matters I raised regarding visibility to the south and potential conflict with traffic leaving the roundabout. It is expected that an updated risk assessment to PS8 should be completed by Friday 1 June and forwarded to Highways England for further comment. In turn, these should be made within 40 working days. The Council should keep me informed of progress in this regard and publish any further documents on the webpage.
- 4. At the same time I will need to give further consideration to the points that emerged during the discussion relating to the scope and purpose of the plan, whether the assessment of need for traveller pitches is justified and whether future supply would be adequate. These substantive points may require my input at this stage to indicate whether there is potential unsoundness, to suggest any revisions that might ensure soundness or to identify any further work that is required to this end. This advice will give the Council an opportunity to consider what further changes, if any, should be put forward and is intended to be helpful. However, it is ultimately for the Council to decide if it wishes to take any further action and to review the available alternatives. This advice to the Council should be completed by Friday 15 June. This letter will be publicly available and published in the normal way.
- 5. The Council has prepared schedules of proposed minor changes as A17 and PS9. Further matters were identified during the hearing which the Council

will give further consideration to. As part of this process the Council will need to distinguish between Main and Additional Modifications. Additional Modifications are those that (taken together) do not materially affect the policies of the Plan and Main Modifications can be taken to be those that do materially affect the policies. They will therefore generally comprise any changes to the policies themselves or to the supporting text which has a significant bearing on the interpretation of that policy. In due course any proposed Main Modifications to the Plan would need to be the subject of consultation for a minimum of 6 weeks.

- 6. However, whilst the Council could progress this schedule now, my advice is that this is deferred until after my letter referred to in paragraph 4 has been received. At that stage, if necessary, I will give further guidance about progressing proposed Main Modifications.
- 7. More generally my report will only be finalised after I have given consideration to any responses to any Main Modification consultation. At the moment it is difficult to be definite about when this will be produced but I expect it would be about 6-8 weeks after the close of the consultation period. A firmer date will be given nearer the time.
- 8. To conclude can I thank the Council and others who attended for their verbal and written contributions to the examination. Also to record my personal appreciation for the very efficient work that Tracy Pearson has done as Programme Officer.

# David Smith

INSPECTOR

24 May 2018



Tracy Pearson Programme Officer C/O Herefordshire Council Plough Lane Hereford HR4 0LE Via Email: <u>programme.officer@herefordshire.gov.uk</u> Heather Wilcox Asset Manager Operations Directorate

The Cube 199 Wharfside Street Birmingham B1 1RN www.highways.gov.uk

## FAO Mr David Smith – Planning Inspector

Direct Line: 0300 470 3407

21 May 2018

Dear Sir,

Town and Country Planning (Local Planning) (England) Regulations 2012, Regulation 24, Examination of Travellers' Sites Development Plan Document,

# Proposed allocation of site to the west of the A49/A44 Worcester Road Roundabout, Leominster, Herefordshire

We have been notified by Herefordshire Council of the above referenced Examination in Public (EiP); please consider this to be Highways England's representation.

Highways England is responsible for the operation and maintenance of the strategic road network (SRN) in England. The network includes all major motorways and trunk roads. The SRN in the vicinity of the proposed site allocation is the A49 trunk road.

## Background

Herefordshire Council has consulted Highways England in three consultations leading up to the current EiP:

- Issues and Options Aug/Oct 2014
- Preferred Options July/Sept 2016
- Pre-Submission Draft Nov 2017

Highways England has provided advice on those sites in the vicinity of the A49/A44 Worcester Road Roundabout at Leominster that Herefordshire Council were considering for the purpose of a Transit Travellers Site. Following wider technical assessment on all of the sites, Herefordshire Council identified that their preferred option, in this locality, was the site to the west of the A49/A44 Worcester Road Roundabout.



## Site Context

The eastern boundary of the site lies immediately adjacent to the A49 trunk road boundary with its existing point of access being located on the A49, 50 metres to the north of the A49 / Worcester Road roundabout and 15 metres to the south of an existing Toucan crossing point. The A49 is subject to a 60mph speed limit at this location. It is agreed that the existing access is agricultural in nature but benefits from a wide entry, and a long set back from the road that would allow vehicles room to pull off the carriageway.

## **Current Position**

At this stage of the DPD process we can confirm:

- 1. That in our view the plan has been prepared in accordance with the relevant regulations; and
- 2. That the allocation of this specific site by the Council was an appropriate policy choice for the Council to have made based on the evidence available at the time of the plan's development.

Highways England has consistently expressed safety risk concerns, discussion of which is fully set out in the annex to this letter, about the use of the site to the west of the A49/A44 Worcester Road Roundabout with the current proposed access arrangements.

Highways England requested that to assist in the evaluation of the potential for the site in coming forward, that a Safety Risk Assessment be undertaken to consider the suitability for the existing point of access to the site which presently comprises a field access onto the A49. Guidance for such an assessment is contained in the Design Manual for Roads and Bridges (DMRB) Vol 0, Sec 2, Part 3 – GD 04/12. The detail of this assessment, its interim findings and subsequent further assessments is summarised in the annex.

## Next Steps

At this stage, Highways England cannot fully conclude that the proposed allocation of land west of the A49/A44 Worcester Road Roundabout with the currently proposed access arrangements is achievable. Alternative access arrangements and the findings of the Safety Risk Assessment work currently underway may in due course negate this concern.

Constructive work has been undertaken by Herefordshire Council to determine the significance of the highways impacts and the potential scope of mitigation which could potentially make the development acceptable in planning terms through the planning application process.

Highways England will continue to work closely with Herefordshire Council to conclude the GD04/12 Safety Risk Assessment report for the site to the west of the A49/A44



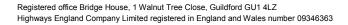
Worcester Road Roundabout for use as a Transit Travellers Site. In the event, that this site is allocated then it could be expected that this work would inform any recommendation by Highways England in relation to any future planning application for this site.

We ask that you consider this late submission due to its direct relevance to your consideration of the DPD. Highways England intends to rely on these written submissions for the purpose of the Examination in Public and does not intend to participate in the hearing. Please do not hesitate to contact me if you require any more information or clarification.

Yours sincerely

Heather Wilcox OD Midlands Email: <u>Heather.Wilcox@highwaysengland.co.uk</u>

Cc: Angela Newey/Kevin Singleton – Herefordshire CC James Carroll - Kier





# <u> Annex 1 – Safety Assessment</u>

Balfour Beatty provided a Safety Risk Assessment Scoping Note for the proposed Travellers Site to Highways England on 12 December 2017 to address the requirements for a GD04/12 Safety Risk Assessment. Highways England responded to the scoping note and Balfour Beatty provided a full GD04/12 Safety Risk Assessment for review on 15 February 2018.

## Site Context

The eastern boundary of the site lies immediately adjacent to the A49 trunk road boundary with its existing point of access being located on the A49, 50 metres to the north of the A49 / Worcester Road roundabout and 15 metres to the south of an existing Toucan crossing point. The A49 is subject to a 60mph speed limit at this location. It is agreed that the existing access is agricultural in nature but benefits from a wide entry, and a long set back from the road that would allow vehicles room to pull off the carriageway.

## **Conformity to Policy**

The relevant starting point for the consideration of potential development impacts on the SRN is *DfT Circular 02/2013: Strategic road network and the delivery of sustainable development (the Circular)* this should be read in conjunction with: *The strategic road network: Planning for the future. A guide to working with Highways England on planning matters.* 

This policy and guidance sets out that Highways England will engage with authorities in the preparation of development plans so that development "*is planned in a manner which will not compromise the fulfilment of the primary purpose of the SRN*" (paragraph 14 of the Circular).

In terms of any individual proposals this includes the consideration of whether proposals are likely to be capable of being accommodated within the affected link or junction. The principles related to any Environmental or Physical impacts of development on the SRN are further outline within the Circular.

## Safety Risk Assessment

The GD04/12 Safety Risk Assessment methodology adopted is the standard for Safety Risk Assessment for the SRN and has been undertaken to assess risks associated with the proposed use of the site. Under the DMRB, this assessment is subject to a formal approval process by Highways England.

The assessment identifies potential hazards associated with the highway including the implications for different road users, particularly vulnerable users such as children at the site. The hazards identified within the assessment comprise:

- Increased localised movements impacting traffic flow close to the roundabout
- Safe access and egress to the site
- Safe use of the pedestrian crossing

- Vulnerable users next to SRN (eg children at the site)
- Potential for animals to stray onto SRN eg. horses/dogs
- Distraction of site use to road users

These risks have been considered in turn and a number of risks have been identified to require mitigation in order to address concerns arising from the assessment.

With regard to intensification of traffic from the site, the baseline traffic conditions and forecast traffic associated with the proposed use have been agreed and are recorded within the Safety Risk Assessment. The present traffic baseline estimates demonstrate that there is only infrequent use of the site access (no more than 20 times a year) however the proposed use, which may see up to 68 vehicles a day during summer months, is still a relatively low volume of traffic movements for a trunk road access.

The suitability of the existing access to accommodate the higher levels of traffic flow has been considered in accordance with DMRB TD 41/95, in particular this has considered the suitability of the identified setback and visibility requirements for the junction. This demonstrates that visibility from the access point is restricted by the location of an existing road sign on the A49. While it is anticipated that this sign would require relocation to enable the junction to operate safely, Highways England has in principle no objections to the relocation of the sign. This would however need to be considered fully as part of more detailed design measures at the appropriate point in time.

Matters of site fencing and security have been identified to be important to the protection of vulnerable users and prevention of animals straying onto the A49. The detail of these measures are agreed to be appropriate for consideration at the point any planning application is made but do not need to be considered at this time.

The assessment currently concludes that, following a quantification of any residual risks associated with collisions on the A49 that it will be necessary for minor improvements to be made to the A49 in mitigation. These are necessary to improve visibility of the access and should be accompanied by a Traffic Management Plan, intended to reduce the number of turning movements into the site. The proviso of adequate site fencing is also required, however no other measures of control have been identified as being necessary at this time.

## Safety Risk Assessment – Outstanding Matters

The comments below are based on a review of the GD04/12 Safety Risk Assessment provided by Balfour Beatty on 15 February 2018. The comments from this review were provided to Balfour Beatty and Herefordshire Council on 16 May 2018. The purpose of providing these comments is to allow Herefordshire Council to further develop the GD04/12 Safety Risk Assessment and reconsider the conclusions, however it is understood that this can occur beyond the timescale for the Examination in Public (EiP).

Highways England's main concerns that have arisen from this review are related to safety, visibility and non-compliance with the Design Manual for Roads and Bridges (DMRB) TD 42/95 with regard to the existing local road joining the A49.

On the whole the assessment provided by Balfour Beatty, on behalf of the Herefordshire Council, does appear to be in in line with GD04/12 standards in terms of approach. However, three points were raised by an independent reviewer from Highways England's Safety & Engineering Standards (SES) Division.

The first issue is in regard to there being no clear reference to the speed limit. There is currently no speed limit signage along this section of the A49, but after further research the speed limit was found to be 60mph. It is considered that this should be made clearer within the report.

The second issue regards site access and egress. There is discussion of other X and Y distances for sightlines on minor to major junctions, with reference made in close alignment with the requirements of TD 42/95. However, it seems that some of the other relevant elements of the same standard have not been analysed in the same way, an example being when the report states that 'the site benefits from a wide entry...', with no further information provided to what that means and how it relates to TD42/95 standards, and any issues that may arise as a result. Justification of the decision to not alter the access must be given in accordance to DMRB TD 41/95 Paragraph 2.8 (Mandatory Section) New or Altered Direct Accesses:

"The geometric layout of new and altered direct vehicular accesses on to existing allpurpose trunk roads shall be determined in TD 9 (DMRB 6.1.1) and the size of vehicles using the access. The access shall be designed for the largest vehicle expected to use it. The selection access layout will be dependent upon carriageway widths, geometric constraints, local traffic flows, other site specific features, and environmental considerations."

Finally there is no information on the impact for those entering the site and other road users approaching from the roundabout in terms of visibility of the oncoming traffic and pedestrian crossing. It is assumed that the crossing is in a place compliant with standards, but the road and time to react to vehicles preparing to enter the site have been reduced. The correct Visibility distance is a mandatory requirement as set out in DMRB TD 9/93, both the forward and backwards visibility for a 60 mph carriageway should be 215m. Whilst Herefordshire are not altering visibility from the roundabout or intending to alter the existing field access, this point is important due to the intended change of use of the access and the consideration of the resultant design must align with DMRB TD 41/95 Paragraph 2.10 (Mandatory Section):

"Any application which results in a material increase in the volume of traffic or a material change in the type of traffic entering or leaving a trunk road shall be carefully considered. Generally, a material increase is considered to be if the turning traffic flows, as a result of the new development, would increase by 5% or more, although there may be cases when it is important to consider smaller increases. For England, this is discussed more fully in Annex B of Planning Policy Guidance Note 13 (1994), and for Wales in Appendix A of Planning Policy Guidance Note 13 (1988)."

Therefore further analysis of the issues stated above is required within the GD04/12 Safety Risk Assessment report, with reference made to the likelihood of vehicles reaching 60mph just after the roundabout, potential for conflict with slow moving vehicles wishing to enter the site etc. and a comparison made with the existing use of the field access in order to qualify/quantify the risk and the acceptability (or otherwise) of this proposed allocation.





# Spatial Planning Framework Commission – Technical Note

Prepared by SYSTRA as named Sub-Consultant to AECOM under the Highways England 2016 SPA

Job No.	GB01T17D46 67						
Job Title	Proposed Travellers Temporary stopping Site, A49 Roundabout Leominster						
То	Patrick Thomas	S	сс				
Торіс	Review of SRN Safety Risk Assessment						
Prepared	Nick Oram	Date	01/03/2018	Checked	Lee White	Date	01/03/2018
Approved	Lee White	Date	01/03/2018	Verified	Aoife O'Toole	Date	01/03/2018

# INTRODUCTION

1. SYSTRA and Kier have been instructed by Highways England to review a Strategic Road Network (SRN) Safety Risk Assessment (SRA), prepared by Balfour Beatty, for a proposed Travellers Temporary Stopping Site near Leominster.

# BACKGROUND

- 2. Further to feedback from Highways England in November 2017, Balfour Beatty provided a Safety Risk Assessment Scoping Note for the proposed Travellers Site to Highways England on 12 December 2017 to address the requirements for a GD 04/12 Safety Risk Assessment.
- 3. The scoping note was produced on behalf of Herefordshire Council as part of their Travellers Sites Development Plan which will, once adopted, form part of the Herefordshire Local Plan.
- 4. Highways England responded to the scoping note and Balfour Beatty provided a full SRA for review on 15 February 2018.
- 5. There is an identified need for a Temporary Stopping site within the County. The proposed site, located approximately 1 mile east of Leominster, adjacent to the A49/A44 Worcester Road Roundabout, has been identified for this purpose (10 pitches).

# PROPOSED SRA STRUCTURE

6. Highways England are pleased that Balfour Beatty have referenced the Vol 0 Section 2 GD 04/12 Standard for Safety Risk Assessment on the Strategic Road Network as well as the DMRB guidance for the stages of assessment.

# KIER COMMENTS

7. As Highways England's Area 9 Asset Support Contractor, Kier have provided the following comments with regard to the effects of the development:





The GD 04/12 Risk Assessment has been reviewed with the following comments.

*P.2, 1.0 Background, final para. – the scoping report was approved by HE, advised by AECOM/SYSTRA/KIER in their Technical Note dated 16/01/18.* 

*P.* 5, 2.0, Stage 1: Determining the Scope – in establishing baseline conditions, there is no consideration given to the current use of the access in order to understand the potential increase in movement with the development and the effect this has upon risk (see comments below).

*P.9, 3.0, Stage 2: Identifying the Risks, final para. – the report* notes that visibility to the left is affected by the location of an existing site to the north of the site access; however the extent of impact is not quantified against DMRB requirements.

P.12, 5.0, Stage 4: Existing Risk Exposure – the basis of risk tolerance is determined by the likelihood of an Individual Safety Risk of Death in a given year as per the HSE TOR model. As such the personal injury collision data collected within the geographical extent of the risk assessment needs to be converted to the Equivalent Fatal and Weighted Injuries (FWI) Risk Fraction per year using the following equation:

Equivalent FWI Risk Fraction per year = 1/(((k + (l/10) + (m/100))/b)/n)

Where:

*b* = collision data collection period (in years)

k = number of fatal casualties

*I* = number of serious casualties

m = number of slight casualties

n = 2-way AADT traffic flow

Accordingly, the Equivalent FWI Risk Fraction per year from the information provided is 1 in 1,097,707 i.e. 'Broadly Acceptable' following the HSE TOR model.

P.12, 6.0 Stage 5: Safety Risk Analysis, Assessment and Evaluation – further to the above comments, the ratio of proposed to existing turning movements for the hazards identified (i.e. restricted visibility to the left of the access and large vehicles turning right into the site) needs to be determined and new risk exposures quantified and compared to the HSE TOR model. Is there an increase or decrease in the likelihood of an Individual Safety Risk of Death? Does the change in risk require mitigation measures to manage the risk level down as is reasonably required?

# SYSTIA



P.13, 7.0 Stage 6: Risk Control Measures, third para. – the proposed 'soft measure' to discourage large right turning vehicles into the site is unlikely to be adhered to and raises the issue of how the voluntary traffic management plan would be implemented and communicated to Travellers. If such a measure is required it would be better to secure a turning ban by means of a permanent traffic regulation order (PTRO) and appropriate signing, which would apparent to all users if approaching the site from the north.

P.13, 8.0 Stage 7: Documenting the Decision – the risk type has been determined as 'Type A' which appears appropriate in this case. With reference DMRB GD 04/12, acceptance of the Risk Assessment is required from a Specialist/Technical Coordinator Role within Highways England.

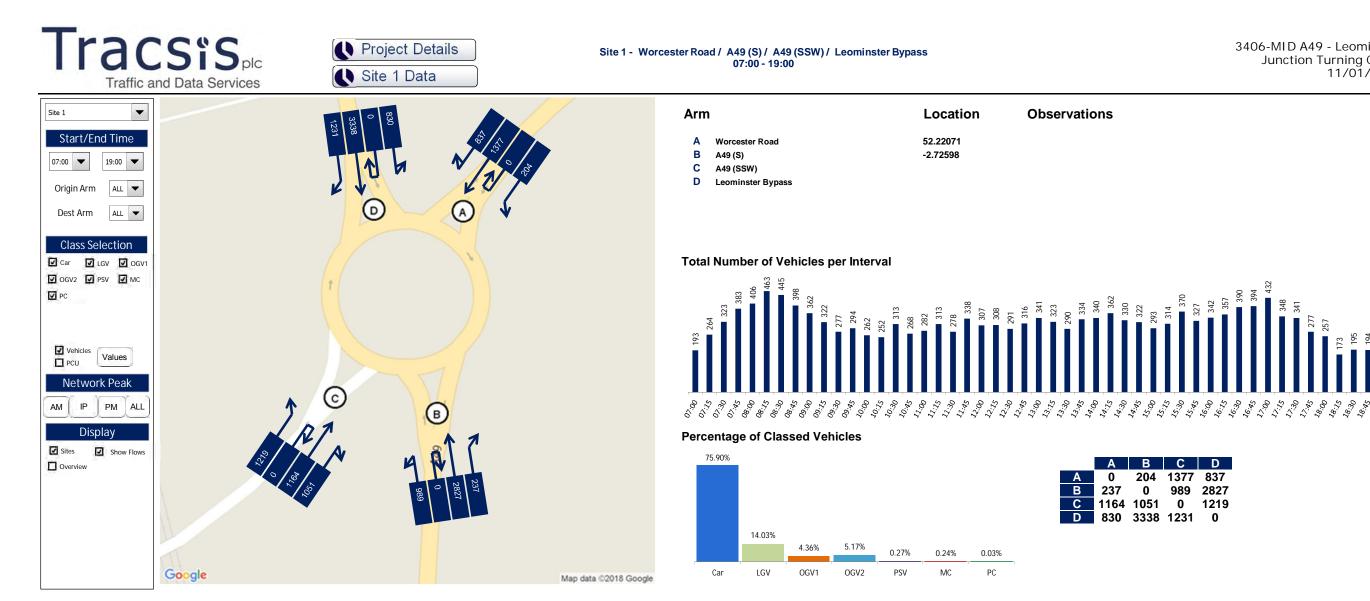
# SUMMARY AND RECOMMENDATION

- 8. A Safety Risk Assessment (SRA) prepared by Balfour Beatty has been submitted to Highways England in respect of a proposed Travellers Temporary Stopping Site near Leominster.
- 9. The Safety Risk Assessment (SRA) has been reviewed with comments summarised below:
  - i. In establishing baseline conditions, there is no consideration given to the current use of the access in order to understand the potential increase in movement with the development and the effect this has upon risk
  - ii. The report notes that visibility to the left is affected by the location of an existing site to the north of the site access; however the extent of impact is not quantified against DMRB requirements.
  - iii. The personal injury collision data collected within the geographical extent of the risk assessment needs to be converted to the Equivalent Fatal and Weighted Injuries (FWI) Risk Fraction per year.
  - iv. The ratio of proposed to existing turning movements for the hazards identified (i.e. restricted visibility to the left of the access and large vehicles turning right into the site) needs to be determined and new risk exposures quantified and compared to the HSE TOR model.
  - v. The proposed 'soft measure' to discourage large right turning vehicles into the site is unlikely to be adhered to and raises the issue of how the voluntary traffic management plan would be implemented and communicated to Travellers. If such a measure is required it would be better to secure a turning ban by means of a Permanent Traffic Regulation Order (PTRO) and appropriate signing, which would apparent to all users if approaching the site from the north.
  - vi. With reference DMRB GD 04/12, acceptance of the Risk Assessment is required from a Specialist/Technical Coordinator Role within Highways England.
- 10. We therefore recommend that the above comments be addressed and the applicant continues to engage with Highways England as the proposals progress in order to avoid any undue delay in Highways England forming its position on a formal planning application.

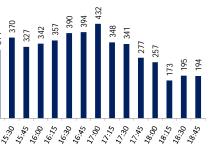


# **APPENDIX B:**

# **COLLISISON AND TRAFFIC DATA**



# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018







Convert to PCU

### Site 1 - Worcester Road / A49 (S) / A49 (SSW) / Leominster Bypass

	Destinat			Worceste				Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
07:00	0	0	0	0	0	0	0	0
)7:15	0	0	0	0	0	Ő	Ő	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
00:80	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
l Hr	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
)9:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	C
10:30	0	0	0	0	0	0	0	C
10:45	0	0	0	0	0	0	0	0
1 Hr 11:00	0	0	0	0	0	0	0 0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	c
1 Hr	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	C
12:15	0	0	0	0	0	0	0	C
12:30	0	0	0	0	0	0	0	C
12:45	0	0	0	0	0	0	0	C
l Hr	0	0	0	0	0	0	0	C
13:00	0	0	0	0	0	0	0	C
13:15	0	0	0	0	0	0	0	C
13:30	0	0	0	0	0	0	0	C
13:45	0	0	0	0	0	0	0	C
1 Hr	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	C
14:30	0	0	0	0	0	0	0	C
14:45	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	C
15:00			0	0			0	
15:15 15:30	0	0	0	0	0	0	0	C
15:30 15:45	0	0	0	0	0	0 0	0 0	C
1 Hr	0	0	0	0	0	0	0	C
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	c
16:30	0	0	0	0	0	0	0	C
16:45	0	0	0	0	0	0	0	C
l Hr	0	0	0	0	0	0	0	C
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	C
17:30	0	0	0	0	0	0	0	C
17:45	0	0	0	0	0	0	0	C
l Hr	0	0	0	0	0	0	0	C
18:00	0	0	0	0	0	0	0	C
18:15	0	0	0	0	0	0	0	C
18:30	0	0	0	0	0	0	0	C
18:45	0	0	0	0	0	0	0	C
l Hr	0	0	0	0	0	0	0	C

			A49(S)	DOM:	MO	PO	Tota
Car	LGV	OGV1	OGV2	PSV	MC	PC	
3	0	0	0	0	0	0	
5	1	0	0	0	0	0	
8	0	0	0	1	0	0	
1	0	1	ů 0	0	0 0	0	
17	1	1	0	1	0	0	
7	2	0	0	0	0	0	
9	0	0	1	0	1	0	
4	0	0	0	0	0	0	
4	0	0	0	0		0	
24	2		1		0	0	
		0		0		-	
2	0	0	0	0	0	0	
3	0	2	0	0	0	0	
6	0	1	1	1	0	0	
2	0	2	0	0	0	0	
13	0	5	1	1	0	0	
4	0	0	1	0	0	0	
2	0	0	0	0	0	0	
7	0	0	1	0	0	0	
1	0	0	0	0	0	0	
14	0	0	2	0	0	0	
2	1	0	0	0	0	0	
3	0	0	0	0	0	0	
1	0	0	0	0	0	0	
1	0	0	0	0	0	0	
7	1	0	0	0	0	0	
3	0	1	1	0	0	0	
0	0	1	0	0	0	0	
1	0	0	0	0	0	0	
3	0	0	0	0	0	0	
7	0	2	1	0	0	0	
4	3	1	0	0	0	0	
2	1	0	1	0	0	0	
1	1	0	0	0	1	0	
0	1	0	0	0	0	0	
7	6	1	1	0	1	0	
1	2	0	1	0	6	0	
3	0	2	0	0	0	0	
3	0	1	0	0	0	0	
0	0	0	1	0	0	0	
7	2	3	2	0	6	0	
3	8	0	0	0	0	0	
0	3	1	0	0	0	0	
2	1	1	1	0	0	0	
1	0	2	0	1	0	0	
6	12	4	1	1	0	0	
1	2	0	0	0	0	0	
3	2	0	0	0	0	0	
3	1	0	0	0	0	0	
3 8	2	0		0	0	0	
8 15	5	0	0	0	0	0	
15							
	0	0	0	0	0	0	
3	0	1	0	0	0	0	
1	1	0	0	0	0	0	
1	1	0	0	0	0	0	
6	2	1	0	0	0	0	
4	0	0	0	0	0	0	
3	0	0	0	0	0	0	
2	0	0	0	0	0	0	
3	0	0	1	0	0	0	
12	0	0	1	0	0	0	

Car	LGV	Arm C / OGV1	A49(SSW OGV2	PSV	MC	PC	Total
Cal	LGV	UGVI	UGVZ	P3V	IVIC	PC	
5	2	0	0	0	0	0	1
5	3	0	0	0	0	0	8
25	2	1	0	0	0	0	28
24	3	0	0	0	0	0	2
59	10	1	0	0	0	0	7(
30	3	1	2	0	0	0	30
41	5	0	0	0	0	0	40
29	1	1	1	0	0	0	3
45	2	1	0	2	0	0	50
145	11	3	3	2	0	0	16
26	1	0	0	0	0	0	2
34	4	1	0	0	0	0	3
20	5	1	0	0	0	0	20
20	2	0	0	0	0	0	2
100	12	2	0	0	0	0	114
18	3	2	0	0	0	0	2
22	4	1	2	0	0	0	29
16	8	1	0	0	0	0	2
16	4	2	1	0	0	0	2
72	19	6	3	0	0	0	10
19	5	0	0	0	0	0	24
20	1	2	1	0	0	0	24
18	6	0	0	0	0	0	24
25	4	1	1	0	0	0	3
82	16	3	2	0	0	0	103
22	3	1	0	0	0	0	2
28	4	1	0	0	0	0	3
17	1	0	0	0	0	0	1
19	5	3	0	0	0	0	2
86	13	5	0	0	0	0	10
18	0	1	0	0	0	0	1
24	1	0	0	0	0	0	2
20	. 1	1	0	0	0	0	2
29	7	0	1	0	0 0	0	3
91	9	2	1	0	0	0	103
26	3	2	0	0	0	0	3
35	7	0	0	0	Ő	0	4
33	5	2	1	0	0	0	4
25	6	1	1	0	0	0	3
119	21	5	2	0	0	0	14
27	5	2	3	0	0	0	3
34	4	0	0	0 0	0	0	3
25	5	0	0	0	0	0	3
21	7	0	1	0	0	0	2
107	21	2	4	0	0	0	13
23	6	1	0	0	0	0	3
25	1	1	0	0	0	0	2
30	6	0	0	0 0	1	0	3
27	9	0	0	0	0	0	3
105	22	2	0	0	1	0	13
24	5	0	0	0	0	0	29
40	2	1	0	0	0	0	4
27	4	0	0	0	0	0	3
19	3	0	0	0	0	0	2
110	14	1	0	0	0	0	12
21	2	0	0	0	0	0	2
17	1	0	0	0	0	0	18
19	5	0	0	0	0	0	2
16	2	0	0	0	0	0	1
	10	0	0	0	0	0	8
73	10	v	v	v	v	v	0.
73							

				er Bypass	-		Tot
Car	LGV	OGV1	OGV2	PSV	MC	PC	
1	4	0	0	0	0	0	
7	5	2	1	0	0	0	
6	7	1	2	0	0	0	
8	1	0	1	0	0	0	
22	17	3	4	0	0	0	
6	5	0	0	0	0	0	
13	6	2	4	0	0	0	
12	5	1	3	0	0	0	
20	2	1	4	0	0	0	
51	18	4	11	0	0	0	
5	3	1	2	0	1	0	
8	4	2	4	0	0	0	
5	1	1	2	0	1	0	
12	4	1	2	0	0	0	
30	12	5	10	0	2	0	
14	2	2	1	0	0	0	
5	6	1	1	0	0	0	
8	4	2	1	0	0	0	
13	5	3	2	0	0	0	
40	17	8	5	0	0	0	
9	6	0	3	0	0	0	
10	2	2	7	0	0	0	
9	1	3	1	0	0	0	
15	2	0	1	0	0	0	
43	11	5	12	0	0	0	
4	4	0	1	0	0	0	
10	5	2	2	0	0	0	
6	5	0	2	0	0	0	
13	3	0	1	0	2	0	
33	17	2	6	0	2	0	
10	0	0	4	0	0	0	
17	2	3	3	0	0	0	
8	2	0	2	0	0	0	
11	3	0	3	0	1	0	
46	7	3	12	0	1	0	
11	4	0	0	0	0	0	
9	3	0	1	0	0	0	
12	2	2	4	0	0	0	
9	0	2	2	0	0	0	
41	9	4	7	0	0	0	
19	3	0	2	0	0	0	_
19	1	0	0	0	0	0	
17	3	0	0	0	0	0	
13	4	0	0	0	0	0	
68	11	0	2	0	0	0	
20	2	2	2	0	0	0	
14	3	0	1	0	0	0	
20	4	2	2	0	0	0	
10	8	1	1	0	0	0	
64	17	5	6	0	0	0	
18	5	0	0	0	0	0	
26	3	0	0	0	0	0	
18	3	1	0	0	0	0	
15	1	0	2	0	0	0	
77	12	1	2	0	0	0	
13	2	1	0	0	0	0	
6	4	0	0	0	0	0	
8	4	0	2	0	0	0	
12	0	0	0	0	0	0	
39	10	1	2	0	0	0	
				-		v	

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

A
Arm Totals
15
29
53
39
136
56
82
57
81
276
41
62
45
45
193
47
4/
49
40 17
186
45
40 70
40
59
100
182
40
53
32
49
174
41
54
37
56
188
56
60
65
47
228
72
62
55
50
239
59
48
69
66
242
53
76
55
42
226
43
31
40
34
148
2418



Convert to PCU

	Destinat	ion: /	Arm A	Worcester	Road			Total	
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
)7:00 )7:15	1	0	0	0	0	0	0	1	
7:15 7:30	0	0 0	0 0	0 0	0 0	0 0	0	( 1	
)7:45	3	1	0	1	1	0	0	6	
Hr	5	1	0	1	1	0	0	8	
00:80	1	0	0	0	0	0	0	1	
8:15	2	3	0	0	0	0	0	ŧ	
8:30	2	1	1	0	0	0	0	2	
8:45	4	1	0	1	0	0	0	6	
Hr	9	5	1	1	0	0	0	16	
9:00	3	1	0	1	0	0	0	5	
9:15	7	0	1	0	0	0	0	8	
9:30	0	1	0	1	0	0	0	2	
9:45	4	2	0	0	0	0	0		
Hr	14	4	1	2	0	0	0	21	
0:00	2	2	0	0	0	0	0	4	
0:15 0:30	1	0 0	0 0	0 0	0 0	0 0	0	3	
0:30	3	1	0	0	0	0	0	2	
Hr	9	3	0	0	0	0	0	12	
1:00	5	1	0	0	0	0	0	6	
1:15	5	1	0	1	0	0	0	7	
1:30	2	2	0	1	0	1	0	6	
1:45	7	1	0	1	0	0	0	9	
Hr	19	5	0	3	0	1	0	28	
2:00	2	1	0	0	0	0	0	3	
2:15	6	1	0	0	0	0	0	7	
2:30	6	1	0	1	0	0	0	8	
2:45	5	0	0	0	0	0	0	5	
Hr	19	3	0	1	0	0	0	23	
3:00 3:15	2 4	2 2	1	0 0	0 0	0 0	0	5	
3:30	2	1	2	0	0	0	0	5	
3:45	7	0	0	0	0	0	o	7	
Hr	15	5	4	0	0	0	0	24	
4:00	2	1	0	0	0	0	0	3	
4:15	1	0	1	0	0	0	0	2	
4:30	3	0	1	0	0	0	0	4	
4:45	2	0	0	0	0	0	0	2	
Hr	8	1	2	0	0	0	0	11	
5:00	3	0	0	0	0	0	0	3	
5:15	4	1	1	0	0	0	0	6	
5:30	6	0	0	0	0	0	0	6	
5:45 Hr	7 20	1 2	0	<u>1</u> 1	0	0	0	24	
6:00	6	2	0	0	0	0	0	- 24	
6:15	5	1	0	0	0	0	0	6	
6:30	8	3	0	0	0	0	0	11	
6:45	4	2	0	0	0	0	0	ė	
Hr	23	7	0	0	0	0	0	30	
7:00	5	0	0	0	0	0	0	5	
7:15	6	1	0	0	0	0	0	7	
7:30	4	1	0	0	0	0	0	5	
7:45	4	0	0	0	0	0	0	4	
Hr	19	2	0	0	0	0	0	21	
8:00	5	1	0	1	0	0	0	7	
8:15	2	0	0	0	0	0	0	2	
8:30	3	2	0	0	1	0	0	6	
8:45	3	1	0	0	0	0	0	4	
Hr	13	4	0	1	1	0	0	19	

-			9(S) DGV2	PSV	MC	PC	Tota
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0 0	0 0	0 0	0 0	0 0	0 0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0 0	0 0	0 0	0 0	0 0	0 0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0 0	Ő	
	0 0	0	0	0	0 0	Ő	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0 0	
	0 0	0 0	0 0	0 0	0 0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0 0	0	Ő	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	

Car	ion: Ar LGV		49(SSW) OGV2	PSV	MC	PC	Total
10 9	2 5	1 0	0 0	0 0	0 0	0	13 14
9 22	5 6	1	1	0	0	0 0	30
22	5	1	0	0	0	0	27
62	18	3	1	0	0	0	84
22	6	1	0	0	0	1	30
28	10	2	0	0	0	0	40
33	6	1	0	0	0	1	41
42	4	1	0	0	0	0	47
125	26	5	0	0	0	2	158
23	0	0	1	0	0	0	24
15	4	2	1	0	0	0	22
17	2	3	3	0	0	0	25
18	6	2	2	0	0	0	28
73	12	7	7	0	0	0	99
10 17	3 2	0 2	0 1	0 0	0 0	0 0	13 22
12	6	2					19
12	о 5	0	0 0	0 0	0 0	0 0	19
50	16	3	1	0	0	0	70
16	6	2	0	0	0	0	24
16	4	3	2	0	0	0	25
6	3	2	0	0	0	0	11
22	4	2	0	0	1	0	29
60	17	9	2	0	1	0	89
9	1	1	1	0	0	0	12
15	3	1	0	0	0	0	19
18	4	1	1	0	0	0	24
17	2	1	0	0	0	0	20
59	10	4	2	0	0	0	75
19	2	0	1	0	0	0	22
17	2	2	0	0	0	0	21
14	2	3	1	0	0	0 0	20
18 68	0	0 5	1 3	0	0	0	19 82
18	7	0	2	0	0	0	27
27	2	1	2	Ő	0	Ő	32
9	3	1	0	0	0	0	13
17	0	0	0	0	0	0	17
71	12	2	4	0	0	0	89
10	2	1	0	0	0	0	13
8	2	2	1	0	0	0	13
16	7	3	0	0	0	0	26
6	2	2	1	0	0	0	11
40	13	8	2	0	0	0	63
14	4	2	0	1	0	0	21
22	3	2	0	1	0	0	28
13 13	1 3	1 1	0 0	0 0	0 0	0 0	15 17
62		6	0	2	0	0	81
7	4	1	0	0	0	0	12
13	3	0	0	1	0	0	17
17	0	0	0	0	0	0	17
20	2	0	0	0	0	0	22
57	9	1	0	1	0	0	68
8	0	0	0	0	0	0	8
6	0	0	0	0	0	0	6
7	0	0	0	1	0	0	8
9	0	0	0	0	0	0	9
30	0	0	0	1	0	0	31
						,	
757	150	53	22	4	1	2	989

stinati			Leominste		MC	50	Tot
Car	LGV	OGV1	OGV2	PSV	MC	PC	
25	7	2	6	1	0	0	
25 33	11	2	6 5		0 0	0 0	
37		2	4	0			
	10 12	4	4	0 0	0 0	0 0	
20			21	1	0	0	
115	40	11			-		
59	17	6	7	0	1	0	
53	12	6	5	0	0	0	
39	10	5	8	1	0	0	
37	12	6	3	0	0	0	
188	51	23	23				
43	16	2	5	0	0	0	
42	13	3	5	0	0	0	
32	12	4	7	0	0	0	
32	7	5	5	0	0	0	
149	48	14	22	0	0	0	
25	3	1	10	0	0	0	
32	5	6	7	0	0	0	
50	9	1	5	0	0	0	
28	3	6	10	0	0	0	
135	20	14	32	0	0	0	
25	7	3	6	0	1	0	
51	8	2	4	0	0	0	
42	4	7	5	0	1	0	
46	9	4	6	0	0	0	
164	28	16	21	0	2	0	
35	4	4	5	0	0	0	
36	9	5	2	0	0	0	
43	6	7	14	0	0	0	
25	14	7	7	0	0	0	
139	33	23	28	0	0	0	
47	8	3	4	0	0	0	
45	7	3	6	0	0	0	
37	4	2	5	0	0	0	
46	1	4	5	0	0	0	
175	20	12	20	0	0	0	
66	16	4	8	0	0	0	
65	8	3	5	0	0	0	
37	5	2	4	0	0	0	
25	8	3	2	0	0	0	
193	37	12	19	0	0	0	
25	5	3	0	0	0	0	
39	6	3	1	0	0	0	
54	12	2	4	0	0	0	
49	5	5	7	0	0	0	
167	28	13	12	0	0	0	
50	8	4	3	0	0	0	
59	3	3	6	0	0	0	
63	9	4	12	0	0	0	
86	10	2	4	0	0	0	
258	30	13	25	0	0	0	
45	8	0	2	0	0	0	
52	5	0	6	0	0	0	
63	5	2	0	1	0	0	
60	3	1	1	0	0	0	
220	21	3	9	1	0	0	
47	1	1	2	0	0	0	_
36	4	0	2	0	0	0	
37	3	0	1	1	1	0	
34	5	0	1	0	0	0	
154	13	1	6	1	1	0	

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

Arm
Totals
55
66
84
280
121
121
108
111
40 T 95
93
82
83
353
73
87
67
283
72 97
76
103
348
63 78
102
78
321
89 89
73
82
333
124 115
65
57
361
49
68 104
86
307
93
105
114 125
437
72
87
93
91 343
66
50
57
53
226
4053



Convert to PCU

### Origin Arm C A49(SSW)

	Destinat	ion: /	Arm A	Worceste	r Road			Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	TOLAI
7.00	9	5	0	0	1	0	0	15
7:00 7:15	9 15	5 4	0 1	0	0	0 0	0 0	20
7:30		4						17
7:45	16 27	6	0 0	0 0	0 0	0 0	0 0	33
Hr	67	16	1	0	1	0	0	85
			0	0	0	0	0	
8:00 8:15	23 21	3 4	1	0	0	0	0	26 26
8:30	21	1	2	0	0	0	0	20
8:45	18	3	2	0	0	0	0	20
Hr	85	11	3	0	0	0	0	99
9:00	18	3	0	0	0	0	0	21
9:00 9:15	18	2	1	0	0	0	0	21
9:30	10	2	0	0	0	0	0	12
9:45	17	5	0	0	0	0	0	22
Hr	63	12	1	0	0	0	0	76
0:00	8	2	1	0	2	0	0	13
0:15	10	3	2	1	0	0	0	16
0:30	24	2	0	0	0	0	0	26
0:45	9	2	1	0	0	0	0	13
0.45 Hr	51	<u> </u>	4	1	2	0	0	68
1:00	11	1	1	0	0	0	0	13
1:15	21	2	1	-1	Ő	Ő	0	23
1:30	18	4	0	0	0	0	0	22
1:45	18	7	0	1	0	0	0	26
Hr	68	14	2	0	0	0	0	84
2:00	26	6	0	0	0	0	0	32
2:15	8	1	0	1	0	0	0	10
2:30	14	2	1	0	0	1	0	18
2:45	19	2	0	0	0	1	0	22
Hr	67	11	1	1	0	2	0	82
3:00	12	7	1	2	0	0	0	22
3:15	16	6	1	1	0	0	0	24
3:30	23	3	0	0	0	0	0	26
3:45	20	5	1	0	0	0	0	26
Hr	71	21	3	3	0	0	0	98
4:00	18	2	0	0	0	0	0	20
4:15	19	2	0	0	0	0	0	21
4:30	28	5	1	0	0	0	1	35
4:45	33	6	0	0	0	0	0	39
Hr	98	15	1	0	0	0	1	115
5:00	20	2	1	1	0	0	0	24
5:15	25	4	1	0	0	0	0	30
5:30	29	5	0	0	0	0	0	34
5:45	24	3	1	1	0	0	0	29
Hr	98	14	3	2	0	0	0	117
6:00	35	3	1	0	0	0	0	39
6:15	21	3	1	0	0	0	1	26
6:30	26	6	0	1	0	0	0	33
6:45	33	5	0	0	0	0	0	38
Hr	115	17	2	1	0	0	1	136
7:00	41	2	1	1	0	0	0	45
7:15	21	3	0	0	0	0	0	24
7:30	22	3	0	0	0	0	0	25
7:45	24	3	0	0	0	0	0	27
Hr	108	11	1	1	0	0	0	121
8:00	20	1	0	0	0	0	0	21
8:15	14	0	0	0	0	0	0	14
8:30	21	0	0	0	0	0	0	21
8:45	27	0	0	0	0	0	0	27
Hr	82	1	0	0	0	0	0	83

Car	LGV	Arm B / OGV1	A49(S) OGV2	PSV	MC	PC	Total
Udi	LGV	0001	0002	FOV	WC	FU	
20	7	1	1	0	0	0	2
15	4	0	1	0	0	0	2
11	4	2	0	1	0	0	1
17	4	0	1	0	0	0	2
63	19	3	3	1	0	0	8
11	6	1	0	0	0	0	1
16	6	1	0	0	0	0	2
19	8	1	0	0	0	0	2
8	4	2	1	0	0	0	1
54	24	5	1	0	0	0	8
25	0	3	0	0	0	0	2
15	3	1	0	0	0	0	1
12	2	1	0	0	0	0	1
14	7	0	0	0	1	0	2
66	12	5	0	0	1	0	8
23	2	1	0	0	0	0	2
14	0	1	0	0	0	0	1
18	5	4	0	0	0	0	2
9	4	3	1	0	0	0	1
64	11	9	1	0	0	0	8
11	2	0	0	0	0	0	1
12	1	0	2	0	0	0	1
17	2	4	0	0	0	0	2
14	2	3	0	0	0	0	1
54	7	7	2	0	0	0	7
17	2	3	3	0	0	0	2
20	4	1	0	0	0	0	2
11	5	1	0	0	0	0	1
17	6	0	1	0	0	0	2
65	17	5	4	0	0	0	9
21	2	1	0	0	0	0	2
22	2	1	0	1	0	0	2
14	3	1	0	0	0	0	1
14	4	2	1	0	0	0	2
71	11	5	1	1	0	0	8
9	4	3	0	0	0	0	1
13	1	2	1	0	0	0	1
9	6	2	0	0	0	0	1
17	5	5	2	1	0	0	3
48	16	12	3	1	0	0	8
23	5	1	0	0	0	0	2
18	2	1	0	0	0	0	2
14	3	2	0	0	0	0	1
19	1	0	0	0	0	0	2
74	11	4	0	0	0	0	8
24	4	0	1	0	0	0	2
17	6	1	0	1	0	0	2
31	2	0	0	0	0	0	3
23	0	0	0	0	0	0	2
95	12	1	1	1	0	0	11
53	6	0	1	0	0	0	6
21	1	0	0	0	1	0	2
19	3	0	0	0	0	0	2
16	2	1	0	0	0	0	1
109	12	1	1	0	1	0	12
24	2	0	0	0	0	0	2
8	1	0	0	0	0	0	
10	0	0	0	0	0	0	1
9	1	0	1	0	0	0	1
51	4	0	1	0	0	0	5

0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0		0 0 0 0 0 0	0
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0 0 0 0 0 0 0 0 0 0 0		0	0
0 0 0 0 0		0	0
		0	0
0 0 0 0 0		0	C
		V	

estinati				er Bypass			Tot
Car	LGV	OGV1	OGV2	PSV	MC	PC	
3	0	0	1	0	0	0	
5	3	1	0	0	0	0	
8	0	0	1	1	0	0	
18	5	1	0	1	0	0	
34	8	2	2	2	0	0	
12	3	1	0	1	0	0	
23	6	1	1	1	0	0	
20	5	0	2	0	0	0	
12	7	0	0	0	0	0	
67	21	2	3	2	0	0	
14	4	0	2	0	0	0	
6	4	1	0	0	0	0	
10	7	1	1	0	0	0	
7	2	1	0	0	0	0	
37	17	3	3	0	0	0	
11	4	1	0	0	0	0	
10	3	2	1	0	0	0	
16	6	3	0	0	0	0	
13	5	1	2	0	0	0	
50	18	7	3	0	0	0	
16	4	0	0	0	0	0	
26	5	0	0	0	0	0	
16	2	1	0	0	0	0	
19	3	0	1	0	0	0	
77	14	1	1	0	0	0	
15	5	0	0	0	0	0	
21	2	2	1	0	0	0	
22	4	0	0	0	0	0	
18	2	1	0	0	0	0	
76	13	3	1	0	0	0	
30	2	0	1	0	0	0	
27	1	0	1	0	0	0	
16	2	0	0	0	0		
						0	
16	5	0	1	0	0	0	
89	10	0	3	0	0	0	
16	6	2	0	0	0	0	
22	5	2	0	1	0	0	
26	3	2	0	0	0	0	
26	3	4	1	0	0	0	
90	17	10	1	1	0	0	
10	7	2	1	2	0	0	
23	5	0	1	0	0	0	
34	1	1	1	0	0	0	
23	2	0	0	0	0	0	
90	15	3	3	2	0	0	
26	3	0	1	0	0	0	
32	4	1	0	0	0	0	
32	7	2	1	0	0	0	
41	6	0	0	0	0	0	
131	20	3	2	0	0	0	
89	8	1	0	0	0	0	
48	4 1	0	1	0	0	0	
38		1	0	0	0	0	
16	4	1	0	0	0	0	
191	17	3	1	0	0	0	
19	1	0	0	0	0	0	
12	0	0	0	0	0	0	
13	2	0	0	0	0	0	
3	0	0	0	0	0	0	
47	3	0	0	0	0	0	
	173						1

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

Α.
Arm Totals
101010
48
49
45 80
222
61
81
81 55
278
69
51
46 54
220
55
47
78
51 231
46
69
64 68
68 247
77
61
61
67 266
79
79
62
289
60
68
83 103
314
75
80
90 74
319
98
88
108
108 402
203
100
87
67 457
67
35
46
41 189
109
3434



Convert to PCU

### Site 1 - Worcester Road / A49 (S) / A49 (SSW) / Leominster Bypass

### Origin : Arm D. Leominster By

	Destinat	ion: /	Arm A	Worceste	r Road			Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	TULAI
07:00	3	0	0	1	0	0	0	4
7:15	11	2	1	2	0	0	0	16
07:30	15	0	1	0	0	0	0	16
7:45	16	4	0	3	0	0	0	23
Hr	45	6	2	6	0	0	0	59
00:80	16	2	0	2	0	0	0	20
8:15	19	4	1	1	0	0	0	25
8:30	24	2	1	1	0	0	0	28
8:45	7	1	4	1	0	0	0	13
Hr	66	9	6	5	0	0	0	86
9:00	9	4	3	1	0	0	0	17
9:15	10	3	0	1	0	0	0	14
)9:30 )9:45	12 14	4 5	0 1	2 3	0 0	0	0 0	18 23
			4			0	0	
Hr	45	<u>16</u> 1	4	7	0	0		72 17
0:00 0:15	13 6	5	1	2 1	0 0	0 0	0 0	17
0:15	12	5 7	0	2	0	0	0	21
0:30	12	2	2	2	0	0	0	21
0.45 Hr	45	15	4	7	0	0	0	20 71
1:00	11	4	1	1	0	0	0	17
1:15	13	5	0	1	0	0	0	19
1:30	13	2	0	2	0	1	0	18
1:45	15	2	0 0	0	õ	1	0	18
Hr	52	13	1	4	0	2	0	72
2:00	12	2	1	0	0	2	0	17
2:15	8	4	2	0	0 0	0	0	14
2:30	4	3	2	3	0	3	0	15
2:45	18	1	1	2	0	0	0	22
Hr	42	10	6	5	0	5	0	68
3:00	14	1	3	2	0	0	0	20
3:15	12	1	1	0	0	0	0	14
3:30	13	5	0	1	0	1	0	20
3:45	11	3	0	0	0	0	0	14
Hr	50	10	4	3	0	1	0	68
4:00	15	1	4	1	0	0	0	21
4:15	15	1	0	1	0	0	0	17
4:30	14	4	3	2	0	0	0	23
4:45	19	2	0	2	0	0	0	23
Hr	63	8	7	6	0	0	0	84
5:00	12	2	1	0	0	0	0	15
5:15	14	3	0	3	0	0	0	20
5:30	24	3	0	1	0	0	0	28
5:45	21	2	1	1	0	0	0	25
Hr	71	10	2	5	0	0	0	88
6:00	17	2	0	2	0	0	0	21
6:15	18	4	0	0	0	0	0	22
6:30	12	2	0	0	0	0	0	14
6:45	7	5	0	1	0	1	0	14
Hr	54	13	0	3	0	1	0	71
7:00	12	3	0	1	0	0	0	16
7:15	13	0	0	1	0	0	0	14
7:30	12	3	1	0	0	0	0	16
7:45	4	1	1	0	0	0	0	6
Hr	41	7	2	2	0	0	0	52
8:00	12	0	0	4	0	0	0	16
8:15	5	0	1	0	0	0	0	6
8:30	5	1	0	0	0	0	0	6
8:45	11	0	0	0	0	0	0	11
Hr	33	1	1	4	0	0	0	39

estinati			A49(S)				Total
Car	LGV	OGV1	OGV2	PSV	MC	PC	
45	13	3	4	0	0	0	6
45 64	15	1	4 9	0	0	0	8
85	11	5	9 4	0	0	0	10
80	14	2	12	0	0	0	10
274	53	11	29	0	0	0	36
75	13	9	5	0	0	0	10
82	9	5	4	0	0	0	10
94	18	8	6	0	0	0	12
57	8	3	5	0	0	0	7
308	48	25	20	0	0	0	40
63	17	1	10	0	0	0	9
52	10	4	8	0	0	0	7
47	9	5	5	0	0	0	6
46	4	6	10	0	0	0	6
208	40	16	33	0	0	0	29
50	2	12	2	0	0	0	6
42	7	5	5	0	0	0	5
39	11	4	6	0	0	0	6
39	12	5	9	0	0	0	6
170	32	26	22	0	0	0	25
57	4	6	12	0	0	0	7
42	3	5	9	0	0	0	5
49	7	1	3	0	0	0	6
55	11	7	6	0	0	0	7
203	25	19	30	0	0	0	27
64	6	2	11	1	0	0	8
66	8	0	7	0	0	0	8
42	3	5	8	0	0	0	5
48	11	3	6	0	0	0	6
220	28	10	32	1	0	0	29
65	10	6	6	0	0	0	8
45	11	2	3	0	0	0	6
51	12	2	8	0	0	0	7
67	10	0	5	0	0	0	8
228	43	10	22	0	0	0	30
43	3	3	8	0	0	0	5
47	12	3	5	0	0	0	6
47	14	3	4	0	0	0	6
35	13 42	5 14	10	0	<u>1</u> 1	0	6
172 35	42 5	4	27 10	0	0	0 0	25 5
35 41	12	4	10	0	0	0	5
41	12	3	7			0	
47	10	6	8	0 0	0 0	0	6 6
168	37	16	26	0	0	0	24
40	8	1	20	0	0	0	5
-0 59	18	2	3	0	0	0	8
35	11	0	9	0	0	0	5
43	5	3	7	0	0	o	5
177	42	6	21	0	0	0	24
51	7	4	5	0	0	0	6
33	7	1	5	0	0	0	4
58	5	1	1	0	0	0	6
42	5	1	4	0	0	0	5
184	24	7	15	0	0	0	23
42	4	1	3	0	1	0	5
35	5	1	0	1	0	0	4
27	2	1	5	0	0	0	3
36	4	1	4	0	0	0	4
140	15	4	12	1	1	0	17

Destinati	on: /	Arm C A	49(SSW)				-
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
5	1	0	0	0	0	0	6
10	3	2	0	0	0	0	15
18	2	0	0	0	0	0	20
50	6 12	0	2	0	0	0	58 99
83 41	5	0	0	0	0	0	99 46
41	5	0	0	1	0	0	40 54
37	4	2	1	0	0	1	45
49	10	3	1	2	0	0	65
175	24	5	2	3	0	1	210
42	4	1	0	2	0	0	49
24	1	1	2	0	0	0	28
11	7	2	0	0	0	0	20
17	2	2	1	0	1	0	23
94	14	6	3	2	1	0	120
18	1	2	0	0	0	0	21
11	3	1	1	0	0	0	16
13	6	0	0	0	0	0	19
14	4	0	0	0	0	0	18
56 10	14	3	1	0	0	0	74
19 17	3 3	1 0	0 1	0 0	0 0	0 0	23 21
16	5	0	0	0	0	0	21
16	1	2	1	0	0	0	20
68	12	3	2	0	0	0	85
18	6	0	2	0	0	0	26
11	6	4	0	0	0	0	21
16	7	0	0	0	0	0	23
24	8	0	0	0	0	0	32
69	27	4	2	0	0	0	102
19	4	1	1	0	0	0	25
22	2	2	0	0	0	0	26
20	4	1	0	0	0	0	25
22	5	3	0	0	1	0	31
83	15	7	1	0	1	0	107
17	4	0	1	0	0	0	22
30	0	3	2	0	0	0	35
19	5	2	0	0	0	0	26
23 89	4 13	1 6	0	0	0	0	28 111
21	5	0	2	0	0	0	28
21	3	3	2	0	0	0	20
22	3	1	0	0	0	0	26
17	4	1	0	1	0	0	23
81	15	5	2	1	0	0	104
16	2	0	0	2	0	0	20
7	4	0	1	0	0	0	12
19	10	1	0	0	0	0	30
16	7	0	0	0	0	0	23
58	23	1	1	2	0	0	85
12	8	0	1	0	0	0	21
20	5	0	0	0	0	0	25
22	2	0	0	1	0	0	25
14	4	0	0	1	0	0	19
68	19	0	1	2	0	0	90
13	1	0	0	0	0	0	14
7	1	0	1	0	0	0	9
11	0	0	0	0	0	0	11
10	0	0	0	0	0	0	10
41	2	0	1	0	0	0	44
965	190	42	21	10	2	1	1231
900	190	42	21	IU	4	1	1231

Car 0 0 0 0 0 0	LGV ( 0 0	OGV1	OGV2	PSV	MC	PC	
0 0 0		0					
0 0 0			0	0	0	0	
0 0 0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
	0	0	0	0	0	0	
	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	o	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0		0	0	0	0		
0	0 0	0	0	0	0	0 0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
	0	0	0	0	0	0	
0							

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

Arm Totals
75
120
141
189 525
168
179
199 151
697 157
157
104
104 112
489
104
88 100
100
395
119
99
99
117
434 127
116
96
122
461 132
132 101
118 127
478
100
119
117 115
97
104
121
117
439 02
92 116
99
95
402
104
85 106
77
372
81
57
52
56 256
200
5399



Convert to PCU

	Origin :		Arm A	Worcester	Road			Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	TULAI
7.00								
)7:00 )7:15	9 17	6 9	0 2	0 1	0 0	0 0	0	15 29
)7:30	39	9	2	2	1	0	0	53
)7:45	33	9 4	1	1	0	0	0	39
I Hr	98	28	5	4	1	0	0	136
08:00	43	10	1	2	0	0	0	56
)8:15	63	11	2	5	0	1	0	82
08:30	45	6	2	4	0	0	0	57
)8:45	69	4	2	4	2	0	0	81
l Hr	220	31	7	15	2	1	0	276
09:00	33	4	1	2	0	1	0	41
9:15	45	8	5	4	0	0	0	62
9:30	31	6	3	3	1	1	0	45
)9:45	34	6	3	2	0	0	0	45
	143	24	12	11	1	2	0	193
10:00 10:15	36 29	5 10	4 2	2 3	0 0	0 0	0	47 44
10:15	29 31	10	2	3 2	0	0	0	44 48
10:30	31	9	з 5	2	0	0	0	40
10.45 I Hr	126	36	14	<u> </u>	0	0	0	186
1:00	30	12	0	3	0	0	0	45
1:15	33	3	4	8	0	0	0	48
1:30	28	7	3	1	0	0	0	39
1:45	41	6	1	2	0	0	0	50
l Hr	132	28	8	14	0	0	0	182
2:00	29	7	2	2	0	0	0	40
2:15	38	9	4	2	0	0	0	53
2:30	24	6	0	2	0	0	0	32
2:45	35	8	3	1	0	2	0	49
Hr	126	30	9	7	0	2	0	174
3:00	32	3 4	2 3	4 4	0 0	0	0	41
3:15  3:30	43 29	4	3 1	4	0	0 1	0 0	54 37
13:45	40	11	0	4	0	1	0	56
Hr	144	22	6	14	0	2	0	188
4:00	38	9	2	1	0	6	0	56
4:15	47	10	2	1	0	0	0	60
4:30	48	7	5	5	0	0	0	65
4:45	34	6	3	4	0	0	0	47
l Hr	167	32	12	11	0	6	0	228
5:00	49	16	2	5	0	0	0	72
5:15	53	8	1	0	0	0	0	62
5:30	44	9	1	1	0	0	0	55
5:45	35	<u>11</u> 44	2	1 7	<u>1</u>	0	0	50
	181 44		6 3		1	0	0 0	239
l6:00 l6:15	44 42	10 4	3 1	2 1	0	0	0	59 48
16:15 16:30	42 53	4 11	2	2	0	1	0	40 69
16:45	45	19	1	2	0	0	0	66
Hr	184	44	7	6	0	1	0	242
7:00	43	10	0	0	0	0	0	53
7:15	69	5	2	0	0	0	0	76
7:30	46	8	1	0	0	0	0	55
7:45	35	5	0	2	0	0	0	42
l Hr	193	28	3	2	0	0	0	226
8:00	38	4	1	0	0	0	0	43
8:15	26	5	0	0	0	0	0	31
8:30	29	9	0	2	0	0	0	40
8:45	31	2	0	1	0	0	0	34
Hr	124	20	1	3	0	0	0	148

Origin :		rm B A	49(S)				Total
Car	LGV	OGV1	OGV2	PSV	MC	PC	TOLAI
36	9	3	6	1	0	0	55
42	16	3	5	0	0	0	66
60 44	16 18	3 5	5 7	0 1	0 0	0 0	84 75
182	59	14	23	2	0	0	280
82	23	7	7	0	1	1	121
83	25	8	5	0	0	0	121
74	17	7	8	1	0 0	1	108
83	17	7	4	0	0	0	111
322	82	29	24	1	1	2	461
69	17	2	7	0	0	0	95
64	17	6	6	0	0	0	93
49	15	7	11	0	0	0	82
54	15	7	7	0	0	0	83
236	64	22	31	0	0	0	353
37	8	1	10	0	0	0	56
50	7	8	8	0	0	0	73
65	15	2	5	0	0	0	87
42	9	6	10	0	0	0	67
194	39	17	33	0	0	0	283
46	14	5	6	0	1	0	72
72	13	5	7	0	0	0	97
50	9	9	6	0	2	0	76
75	14	6	7	0	1	0	103
243	50	25	26	0	4	0	348
46	6	5	6	0	0	0	63
57	13	6	2	0	0	0	78
67	11	8	16	0 0	0	0	102
47 217	16 46	8 27	7 31	0	0	0	78 321
68	12	4	5	0	0	0	89
66	11	6	6	0	0	0	89
53	7	7	6	0	0 0	0	73
71	1	4	6	0	0	0	82
258	31	21	23	0	0	0	333
86	24	4	10	0	0	0	124
93	10	5	7	0	0	0	115
49	8	4	4	0	0	0	65
44	8	3	2	0	0	0	57
272	50	16	23	0	0	0	361
38	7	4	0	0	0	0	49
51	9	6	2	0	0	0	68
76	19	5	4	0	0	0	104
62	8	7	9	0	0	0	86
227	43	22	15	0	0	0	307
70	13	6	3	1	0	0	93
86	7	5	6	1	0	0	105
84	13	5	12	0	0	0	114
103	15	3	4	0	0	0	125
343	48	19	25	2	0	0	437
57	12	1	2	0	0	0	72
71	9	0	6	1	0	0	87
84	6	2	0	1	0	0	93
84 296	5 32	1	1 9	0	0	0	91 343
		4	3	0		0	
60 44	2 4		3 2		0	I	66
44 47	4 5	0 0	2 1	0 3	0 1	0 0	50 57
47	6	0	1	0	0	0	53
197	17	1	7	3	1	0	226
				~		<b>J</b>	
101							

rigin :	A	rm C A	49(SSW)				Total
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
32	12	1	2	1	0	0	48
35	11	2	1	0	0	0	49
35	5	2	1	2	0	0	45
62	15	1	1	1	0 0	Ő	80
164	43	6	5	4	0	0	222
46	12	2	0	1	0	0	61
60	16	3	1	1	0	0	81
62	14	3	2	0	0	Ő	81
38	14	2	1	0	0	0	55
206	56	10	4	2	0	0	278
57	7	3	2	0	0	0	69
39	9	3	0	0	0	0	51
32	11	2	1	0	0	0	46
38	14	1	0	0	1	0	54
166	41	9	3	0	1	0	220
42	8	3	0	2	0	0	55
34	6	5	2	0	0	0	47
58	13	7	0	0	0	0	78
31	12	5	3	0	0	0	51
165	39	20	5	2	0	0	231
38	7	1	0	0	0	0	46
59	8	1	1	0	0	0	69
51	8	5	0	0	0	0	64
51	12	3	2	0	0	0	68
199	35	10	3	0	0	0	247
58	13	3	3	0	0	0	77
49	7	3	2	0	0	0	61
47	11	2	0	0	1	0	61
54	10	1	1	0	1	0	67
208	41	9	6	0	2	0	266
63	11	2	3	0	0	0	79
65	9	2	2	1	0	0	79
53	8	1	0	0	0	0	62
50	14	3	2	0	0	0	69
231	42	8	7	1	0	0	289
43	12	5	0	0	0	0	60
-5 54	8	4	1	1	0	0	68
63	14	5	0	0	0	1	83
76	14	9	3	1	0	0	103
236	48	23	4	2	0	1	314
53	14	4	2	2	0	0	75
66	11	2	1	0	0	0	80
77	9	3	1	0	0	0	90
66	6	1	1	0	0	Ő	74
262	40	10	5	2	0	0	319
85	10	1	2	0	0	0	98
70	13	3	0	1	0	1	88
89	15	2	2	0	Ő	0	108
97	11	0	0	0	0	Ő	108
341	49	6	4	1	0	1	402
183	16	2	2	0	0	0	203
90	8	0	1	0	1	0	100
90 79	7	1	0	0	0	0	87
79 56	9	2	0	0	0	0	67
408	40	5	3	0	1	0	457
63	40	0	0	0	0	0	67
03 34	4	0	0	0	0	0	35
34 44	2	0	0	0	0	0	46
39	1	0	1	0	0	0	40
180	8	0	1	0	0	0	189
100	0	U	I	U	U	U	109
2766	482	116	50	14	4	2	3434
., 00	702	110	30	14	-4	2	0404

Drigin :	/	Arm D	Leominste	er Bypass			Total
Car	LGV	OGV1	OGV2	PSV	MC	PC	TOLA
53	14	3	5	0	0	0	7
85	20	4	11	0	0	0	12
118	13	6	4	0	0	0	14
146	24	2	17	0	0	0	18
402	71	15	37	0	0	0	52
132	20	9	7	0	0	0	16
149	18	6	5	1	0	0	17
155	24	11	8	0	0	1	19
113	19	10	7	2	0	0	15
549	81	36	27	3	0	1	69
114	25	5	11	2	0	0	15
86	14	5	11	0	0	0	11
70	20	7	7	0	0	0	10
77	11	9	14	0	1	0	11
347	70	26	43	2	1	0	48
81	4	15	4	0	0	0	10
59	15	7	7	0	0	0	8
64	24	4	8	0	0	0	10
67	18	7	11	0	0	0	10
271	61	33	30	0	0	0	39
87	11	8	13	0	0	0	11
72	11	5	11	0	0	0	9
78	14	1	5	0	1	0	9
86	14	9	7	0	1	0	11
323	50	23	36	0	2	0	43
94	14	3	13	1	2	0	12
85	18	6	7	0	0	0	11
62	13	7	11	0	3	0	9
90	20	4	8	0	0	0	12
331	65	20	39	1	5	0	46
98	15	10	9	0	0	0	13
79	14	5	3	0	0	0	10
84	21	3	9	0	1	0	11
100	18	3	5	0	1	0	12
361	68	21	26	0	2	0	47
75	8	7	10	0	0	0	10
92	13	6	8	0	0	0	11
80	23	8	6	0	0	0	11
77	19	6	12	0	1	0	11
324	63	27	36	0	1	0	45
68	12	5	12	0	0	0	9
76	18	6	4	0	0	0	10
93	16	4	8	0	0	0	12
83	16	8	9	1	0	0	11
320	62	23	33	1	0	0	43
73	12	1	4	2	0	0	9
84	26	2	4	0	0	0	11
66	23	1	9	0	0	0	9
66	17	3	8	0	1	0	9
289	78	7	25	2	1	0	40
75	18	4	7	0	0	0	10
66	12	1	6	0	0	0	8
92	10	2	1	1	0	0	10
92 60	10	2	4	1	0	0	7
293	50	9	18	2	0	0	37
		9 1	7	0	1	0	<u>37</u> 8
67 47	5	2		1			
47 43	6 3	2	1		0	0	5
	3 4	1	5 4	0	0	0	5
57		5		0	0	0	6 25
	18	5	17		1	U	25
214							

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

Origin
Totals
100
193
264
323
1163
406
463
445
398
1712
362
322
277
294
1255
262
252
313
268
1095
282
279
270
1211
307
308
291
316
1222
341
323
290
334
1288
340
362
330
1254
1354
293
314
327
1304
342
357
390
394
1483
432
348
341
277
1398
257
173
195 194
194 819
019
15304



Convert to PCU

Car           7:00         13           7:15         26           7:30         32           7:45         46           Hr         117           8:00         400           8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         102           1:00         27           1:15         39           1:20         270           4:10         27           1:15         39           2:00         40           2:15         22           3:00         28           3:10         33           3:15         32           3:30         38           3:45         38           Hr         169	LGV	OGV1	OGV2	PSV	MC	PC	Total
7:15       26         7:30       32         7:45       46         Hr       117         8:00       40         8:15       42         8:30       49         8:45       29         Hr       160         9:00       30         9:15       35         Hr       122         0:00       23         0:15       17         0:30       39         0:45       26         Hr       105         1:00       27         1:15       39         1:30       33         1:45       40         Hr       139         1:30       33         1:45       40         Hr       138         3:00       28         3:15       32         3:30       38         3:45       38         Hr       136         4:15       35         5:00       35         5:15       43         5:30       59         5:45       52         Hr       189						10	
7:15       26         7:30       32         7:45       46         Hr       117         8:00       40         8:15       42         8:30       49         8:45       29         Hr       160         9:00       30         9:15       35         Hr       122         0:00       23         0:15       17         0:30       39         0:45       26         Hr       105         1:00       27         1:15       39         1:30       33         1:45       40         Hr       139         1:30       33         1:45       40         Hr       138         3:00       28         3:15       32         3:30       38         3:45       38         Hr       136         4:15       35         5:00       35         5:15       43         5:30       59         5:45       52         Hr       189	_						
7:30         32           7:45         46           Hr         117           8:00         400           8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         36           1100         27           115         39           0:45         26           Hr         105           1:00         27           1:15         39           0:45         26           Hr         130           1:30         33           1:45         400           Hr         139           1:30         33           1:45         40           Hr         138           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:15         35           5:30         59           5:15	5	0	1	1	0	0	20
7:45         46           Hr         117           8:00         400           8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         36           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           0:45         26           Hr         105           1:00         27           1:15         39           2:00         40           2:15         22           2:00         40           2:15         22           2:30         24           2:45         42           Hr         136           3:15         32           3:30         38           3:45         38           Hr         169           5:00         58           6:15	6	2	2	0	0	0	36
Hr         117           8:00         40           8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         36           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         130           2:00         40           2:15         22           2:30         24           2:15         22           2:30         24           2:45         42           Hr         136           3:15         32           3:30         38           3:45         38           Hr         136           4:10         35           4:30         45           5:00         35           5:30         59           5:15	1	1	0	0	0	0	34
8:00         40           8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           0:00         39           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         136           3:15         32           3:00         28           3:15         32           3:00         28           3:15         32           4:10         35           4:30         45           5:00         58           6:15         44           6:30	11	0	4	1	0	0	62
8:15         42           8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         266           Hr         105           1:00         27           1:15         39           1:45         400           Hr         139           2:00         40           2:15         22           2:30         24           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:15         35           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00	23	3	7	2	0	0	152
8:30         49           8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         99           0:45         266           Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           Hr         139           3:10         38           3:15         32           3:30         38           3:45         38           Hr         136           4:15         35           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15	5	0	2	0	0	0	47
8:45         29           Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           9:45         35           Hr         122           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         100           1:10         27           1:15         39           1:45         400           Hr         139           2:00         40           2:15         22           2:00         40           2:15         22           3:00         28           3:15         32           3:30         38           3:45         38           3:45         38           3:45         53           4:00         35           5:15         43           5:30         59           5:45	11	2	1	0	0	0	56
Hr         160           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         139           2:00         40           2:15         22           2:00         40           2:15         22           3:00         28           3:15         32           3:30         38           3:45         38           3:45         38           3:45         54           Hr         136           4:00         35           5:15         43           5:30         59           5:15         43           5:30         59           5:45         52           Hr         189           6:00	4	4	1	0	0	0	58
9:00         30           9:00         30           9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:00         40           2:15         22           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         40           7:15	5	4	2	0	0	0	40
9:15         35           9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         139           2:00         40           2:15         22           2:00         40           2:15         22           2:30         24           2:45         42           Hr         139           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:10         35           4:15         35           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr	25	10	6	0	0	0	201
9:30         22           9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         139           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           Hr         136           4:15         35           5:00         35           5:15         43           5:30         59           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         <	8	3	2	0	0	0	43
9:45         35           Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         130           1:45         42           2:00         40           2:15         22           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           Hr         136           4:00         35           5:15         43           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:15	5	2	1	0	0	0	43
Hr         122           0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         130           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:30         45           4:45         54           Hr         169           5:00         58           6:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         40           7:00	7	0	3	0	0	0	32
0:00         23           0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         20           2:15         22           2:00         24           2:45         42           Hr         128           3:00         28           3:15         32           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:15         35           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         40           7:30	12	1	3	0	0	0	51
0:15         17           0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:00         40           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:30         45           5:30         59           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         40           7:30         38           3:00         37           3:15	32	6	9	0	0	0	169
0:30         39           0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         139           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:30         45           4:30         45           4:45         54           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           6:15		2	2	2	0	0	34
0:45         26           Hr         105           1:00         27           1:15         39           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:00         28           3:15         32           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:30         45           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         42           Hr         168           8:00	8	3	2	0	0	0	30
Hr         105           1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:30         45           4:45         54           Hr         169           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         44           Hr         192           7:00         58           6:15         42           Hr         168           8:00         37           8:15         <	9	0	2	0	0	0	50
1:00         27           1:15         39           1:30         33           1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:00         35           4:30         45           4:45         54           Hr         169           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           6:15         40           7:30         38           7:45	6	3	2	0	0	0	37
1:15       39         1:30       33         1:45       40         Hr       139         2:00       40         2:15       22         2:30       24         2:45       42         Hr       128         3:00       28         3:15       32         3:30       38         Hr       136         4:00       35         4:15       35         4:30       45         4:45       54         Hr       169         5:00       35         5:30       59         5:45       52         Hr       189         6:00       58         6:15       44         Hr       192         7:00       58         6:30       46         6:30       46         6:30       46         6:30       46         6:45       44         Hr       192         7:00       58         7:15       40         7:30       38         7:45       32	28	8	8	2	0	0	151
1:30       33         1:45       40         Hr       139         2:00       40         2:15       22         2:30       24         2:45       42         Hr       128         3:00       28         3:15       32         3:30       38         Hr       136         4:00       35         4:15       35         4:30       45         4:45       54         Hr       169         5:00       35         5:15       43         5:30       59         5:45       52         Hr       189         6:00       58         6:15       44         6:30       46         6:30       46         6:30       46         6:45       44         Hr       192         7:00       58         7:15       40         7:30       38         7:45       32         Hr       168         8:00       37         8:15       21	6	2	1	0	0	0	36
1:45         40           Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           3:45         38           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15	8	1	1	0	0	0	49
Hr         139           2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	0	3	0	2	0	46
2:00         40           2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           4:15         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	10	0	2	0	1	0	53
2:15         22           2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	32	3	7	0	3	0	184
2:30         24           2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	9	1	0	0	2	0	52
2:45         42           Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           8:00         37           8:15         21	6	2	1	0	0	0	31
Hr         128           3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:15         35           4:30         45           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         40           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	6	3	4	0	4	0	41
3:00         28           3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         55           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:30         46           6:45         44           Hr         192           7:00         58           6:30         46           8:45         32           Hr         168           8:00         37           8:15         21	3	1	2	0	1	0	49
3:15         32           3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	24	7	7	0	7	0	173
3:30         38           3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	10	5	4	0	0	0	47
3:45         38           Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	9	3	1	0	0	0	45
Hr         136           4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           6:45         44           Hr         192           7:00         38           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	9	2	1	0	1	0	51
4:00         35           4:15         35           4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	1	0	0	0	0	47
4:15       35         4:30       45         4:45       54         Hr       169         5:00       35         5:15       43         5:30       59         5:45       52         Hr       189         6:00       58         6:15       44         Hr       192         7:00       58         7:15       40         7:30       38         7:45       32         Hr       168         8:00       37         8:15       21	36	11	6	0	1	0	190
4:30         45           4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	4	4	1	0	0	0	44
4:45         54           Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	3	1	1	0	0	0	40
Hr         169           5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	9	5	2	0	0	1	62
5:00         35           5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	0	2	0	0	0	64
5:15         43           5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	24	10	6	0	0	1	210
5:30         59           5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	4	2	1	0	0	0	42
5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	2	3	0	0	0	56
5:45         52           Hr         189           6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	0	1	0	0	0	68
6:00         58           6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	6	2	3	0	0	0	63
6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	26	6	8	0	0	0	229
6:15         44           6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	6	1	2	0	0	0	67
6:30         46           6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	8	1	0	0	0	1	54
6:45         44           Hr         192           7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	11	0	1	0	0	0	58
7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	12	0	1	0	1	0	58
7:00         58           7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	37	2	4	0	1	1	237
7:15         40           7:30         38           7:45         32           Hr         168           8:00         37           8:15         21		1	2	0	0	0	66
7:30         38           7:45         32           Hr         168           8:00         37           8:15         21	4	0	1	0	0	0	45
7:45         32           Hr         168           8:00         37           8:15         21	7	1	0	0	0	0	46
Hr1688:00378:1521	4	1	0	0	0	0	37
8:00 37 8:15 21		3	3	0	0	0	194
8:15 21	2	0	5	0	0	0	44
	0	1	0	0	0	0	22
	3	0	0	1	0	0	33
8:45 41	1	0	0	0	0	0	42
Hr 128	6	1	5	1	0	0	141
120	0		5		U	v	1-41

Car	LGV	OGV1	OGV2				
			0072	PSV	MC	PC	
68	20	4	5	0	0	0	ç
84	20	1	10	0	0	0	11
104	15	7	4	2	0	0	13
98	18	3	13	0	0	0	13
354	73	15	32	2	0	0	47
93	21	10	5	0	0	0	12
107	15	6	5	0	1	0	13
117	26	9	6	0	0	0	15
69	12	5	6	0	0	0	ç
386	74	30	22	0	1	0	51
90	17	4	10	0	0	0	12
70	13	7	8	0	0	0	9
65 62	11 11	7 8	6 10	1 0	0 1	0 0	9
287	52	26	34	1	1	0	40
77	4	13	34	0	0	0	-+0
58	7	6	5	0	0	0	7
64	16	8	7	0	0	0	ģ
49	16	8	10	0	0 0	0	8
248	43	35	25	0	0	0	35
70	7	6	12	0	0	0	9
57	4	5	11	0	0	0	7
67	9	5	3	0	0	0	8
70	13	10	6	0	0	0	9
264	33	26	32	0	0	0	35
84	8	6	15	1	0	0	11
86	12	2	7	0	0	0	10
54	8	6	8	0	0	0	7
68 292	17 45	3 17	7 37	0	0	0	39
90	15	8	6	0	0	0	11
69	14	3	4	1	0	0	
66	16	3	8	0	1	0	9
81	15	2	6	0	0	0	10
306	60	16	24	1	1	0	4(
53	9	6	9	0	6	0	8
63	13	7	6	0	0	0	8
59	20	6	4	0	0	0	8
52	18	10	13	1	1	0	9
227	60	29	32	1	7	0	35
61	18	5	10	0	0	0	9
59 63	17 14	5	1 8	0	0	0 0	8
63 65	14	6 8	8 8	0 1	0 0	0	9
248	60	24	27	1	0	0	36
65	14	1	3	0	0	0	8
79	24	3	3	1	0	0	11
69	14	0	9	0	0	0	ģ
74	7	3	7	0	0	0	ę
287	59	7	22	1	0	0	37
105	13	4	6	0	0	0	12
57	8	2	5	0	1	0	7
78	9	1	1	0	0	0	8
59	8	2	4	0	0	0	7
299	38	9	16	0	1	0	36
70	6	1	3	0	1	0	8
46	6	1	0	1	0	0	5
39	2	1	5	0	0	0	4
48 203	5 19	1	6 14	0	0	0	24
	19	4	14			U	

)estinati	on: /	Arm C	A49(SSW)				Tetel
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
20	5	1	0	0	0	0	26
24	11	2	0	0	0	0	37
65	10	2 1	1	0	0	0	78
95 204	14 40	6	2	0	0	0	112 253
	40 14	2	2	0	0	1	203
93 117	20	2	2	1	0	0	140
99	11	4	2	0	0	2	140
136	16	5	1	4	0	0	162
445	61	13	5	5	0	3	532
91	5	1	1	2	0	0	100
73	9	4	3	0	0	0	89
48	14	6	3	0	0	0	71
55	10	4	3	0	1	0	73
267	38	15	10	2	1	0	333
46	7	4	0	0	0	0	57
50	9	4	4	0	0	0	67
41	20	2	0	0	0	0	63
41	13	2	1	0	0	0	57
178	49	12	5	0	0	0	244
54	14	3	0	0	0	0	71
53	8	5	4	0	0	0	70
40	14	2	0	0	0	0	56
63	9	5	2	0	1	0	80
210	45	15	6	0	1	0	277
49	10	2	3	0	0	0	64
54	13	6	0	0	0	0	73
51	12	1	1	0	0	0	65
60	15	4	0	0	0	0	79
214	50	13	4	0	0	0	281
56 63	6 5	2 4	2 0	0 0	0 0	0 0	66 72
63 54	5 7	4 5	1	0	0	0	72 67
54 69	12	5 3	2	0	1	0	87
242	30	14	5	0	1	0	292
61	14	2	3	0	0	0	80
92	9	4	4	0	0	0	109
61	13	5	1	0	0	0	80
65	10	2	1	0	0	0	78
279	46	13	9	0	0	0	347
58	12	3	5	0	0	0	78
63	9	5	1	0	0	0	78
63	15	4	0	0	0	0	82
44	13	3	2	1	0	0	63
228	49	15	8	1	0	0	301
53	12	3	0	3	0	0	71
54	8	3	1	1	0	0	67
62	17	2	0	0	1	0	82
56	19	1	0	0	0	0	76
225	56	9	1	4	1	0	296
43	17	1	1	0	0	0	62
73	10	1	0	1	0	0	85
66	6	0	0	1	0	0	73
53	9	0	0	1	0	0	63
235	42	2	1	3	0	0	283
42	3	0	0	0	0	0	45
30	2	0	1	0	0	0	33
37	5	0	0	1	0	0	43
35	2	0	0	0	0	0	37
144	12	0	1	1	0	0	158
2871	E40	127	50	10		2	3597
7871	518	127	58	16	4	3	3597

estinati	011. /	Arm D	Leominste	а Буразэ			Tota
Car	LGV	OGV1	OGV2	PSV	MC	PC	1012
29	11	2	7	1	0	0	
45	19	6	6	0	0	0	
51	17	3	7	1	0	0	
46	18	5	7	1	0	0	
171	65	16	27	3	0	0	2
77	25	7	7	1	1	0	1
89	24	9	10	1	0	0	1
71	20	6	13	1	0	0	1
69	21	7	7	0	0	0	1
306	90	29	37	3	1	0	4
62	23	3	9	0	1	0	
56	21	6	9	0	0	0	
47	20	6	10	0	1	0	
51	13	7	7	0	0	0	
		22				-	
216	77		35	0	2	0	3
50	9	4	11	0	0	0	
47	14	9	9	0	0	0	
74	19	6	6	0	0	0	1
54	13	10	14	0	0	0	
225	55	29	40	0	0	0	3
50	17	3	9	0	1	0	
87	15	4	11	0	0	0	1
67	7	11	6	0	1	0	
80	14	4	8	0	0	0	1
284	53	22	34	0	2	0	3
54	13	4	6	0	0	0	
67	16	9	5	0	0	0	
71	15	7	16	0	0	0	1
56	19	8	8	0	2	0	
248	63	28	35	0	2	0	3
87	10	3	9	0	0	0	1
89	10	6	10	0	0	0	1
61	8	2	7	0	0	0	
73	9	4	9	0	1	0	
310	37	15	35	0	1	0	3
93	26	6	8	0	0	0	1
96	16	5	6	1	0	0	1
90 75	10	6	8		0		
				0		0	
60	11	9	5	0	0	0	
324	63	26	27	1	0	0	4
54	15	5	3	2	0	0	
81	12	3	2	0	0	0	
105	16	3	5	0	0	0	1
85	11	5	7	0	0	0	1
325	54	16	17	2	0	0	4
96	13	6	6	0	0	0	1
105	10	4	7	0	0	0	1
115	20	8	15	0	0	0	1
137	24	3	5	0	0	0	1
453	67	21	33	0	0	0	5
152	21	1	2	0	0	0	1
126	12	0	7	0	0	0	1
119		4	0	1	0	0	1
91	8	2	3	0	0	0	1
488	50	7	12	1	0	0	5
79	4	2	2	0	0	0	
54	8	0	2	0	0	0	
58	9	0	3	1	1	0	
49	5	0	1	0	0	0	
240	26	2	8	1	1	0	2

# 3406-MID A49 - Leominster Junction Turning Count 11/01/2018

De	est
To	tals
	193
	264
	323
	383
1	163 406
	463
	445
	398
1	712
	362 322
	277
	294
1	255
	262
	202 313
	268
1	095
_	282
	313
	278
1	211
	307
	308
	291
1	316 222
	341
	323
	290
1	334 288
- 1	340
	362
	330
	322
1	354 293
	295 314
	370
	327
1	304
	342
	357 390
	394
1	483
	432
	348 341
	277
1	398
	257
	173
	195 194
	819
15	304



Client: Project: Site: Date:

Balfour Beatty 3406-MID A49 Leominster 2 11/01/2018

Arm A Eastbound Westbound

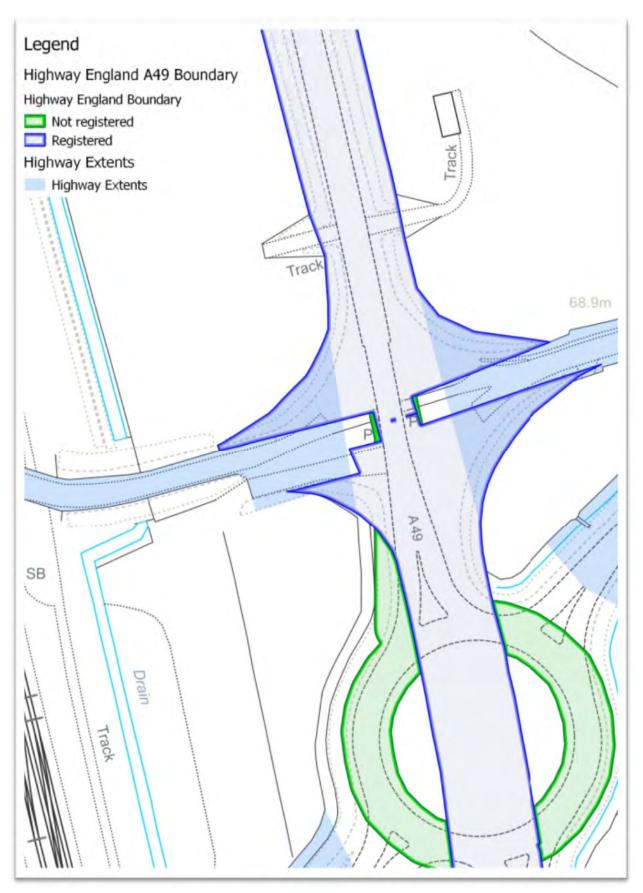
L

	Eastbound	Westbound
07:00	0	0
07:15	0	0
07:30	0	0
07:45	0	0
1 Hr	0	0
08:00	0	0
08:15	0	0
08:30 08:45	0 1	0
	1	0
1 Hr 09:00	0	<mark>0</mark> 1
09:15	1	0
09:30	0	0
09:45	0	0
1 Hr	1	1
10:00	0	0
10:15	0	0
10:30	0	0
10:45	0	0
1 Hr	0	0
11:00	1	1
11:15	1	0
11:30	1	0
11:45	0	0
1 Hr	3	1
12:00	0	0
12:15	0	0
12:30	0	0
12:45	0	0
1 Hr	0	0
13:00	0	0
13:15	0	0
13:30 13:45	0	0
13.45 1 Hr	0	0
14:00	0	2
14:15	0	0
14:30	0 0	õ
14:45	0	0
1 Hr	0	2
15:00	4	0
15:15	0	0
15:30	0	0
15:45	0	0
1 Hr	4	0
16:00	0	0
16:15	0	0
16:30	0	0
16:45	0	5
1 Hr	0	5
17:00	0	0
17:15	0	0
17:30	0	0
17:45	0	0
1 Hr 18:00	0	0
18:00	2	1
18:15 18:30	2	1
18:30	0	1
18:45 1 Hr	3	2
	3	4
Total	12	11
	14	11



# **APPENDIX C:**

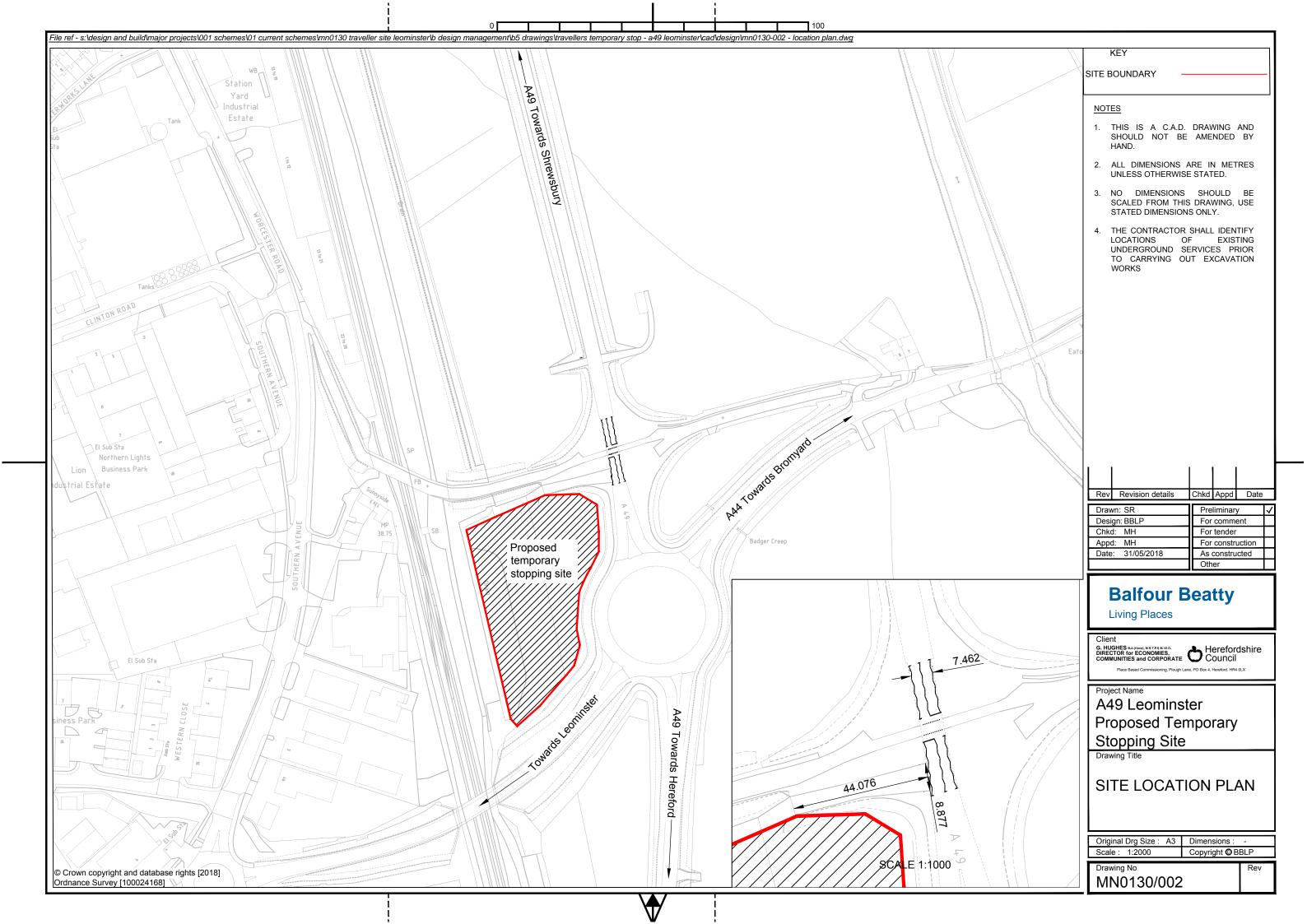
## SITE OVERVIEW DRAWINGS

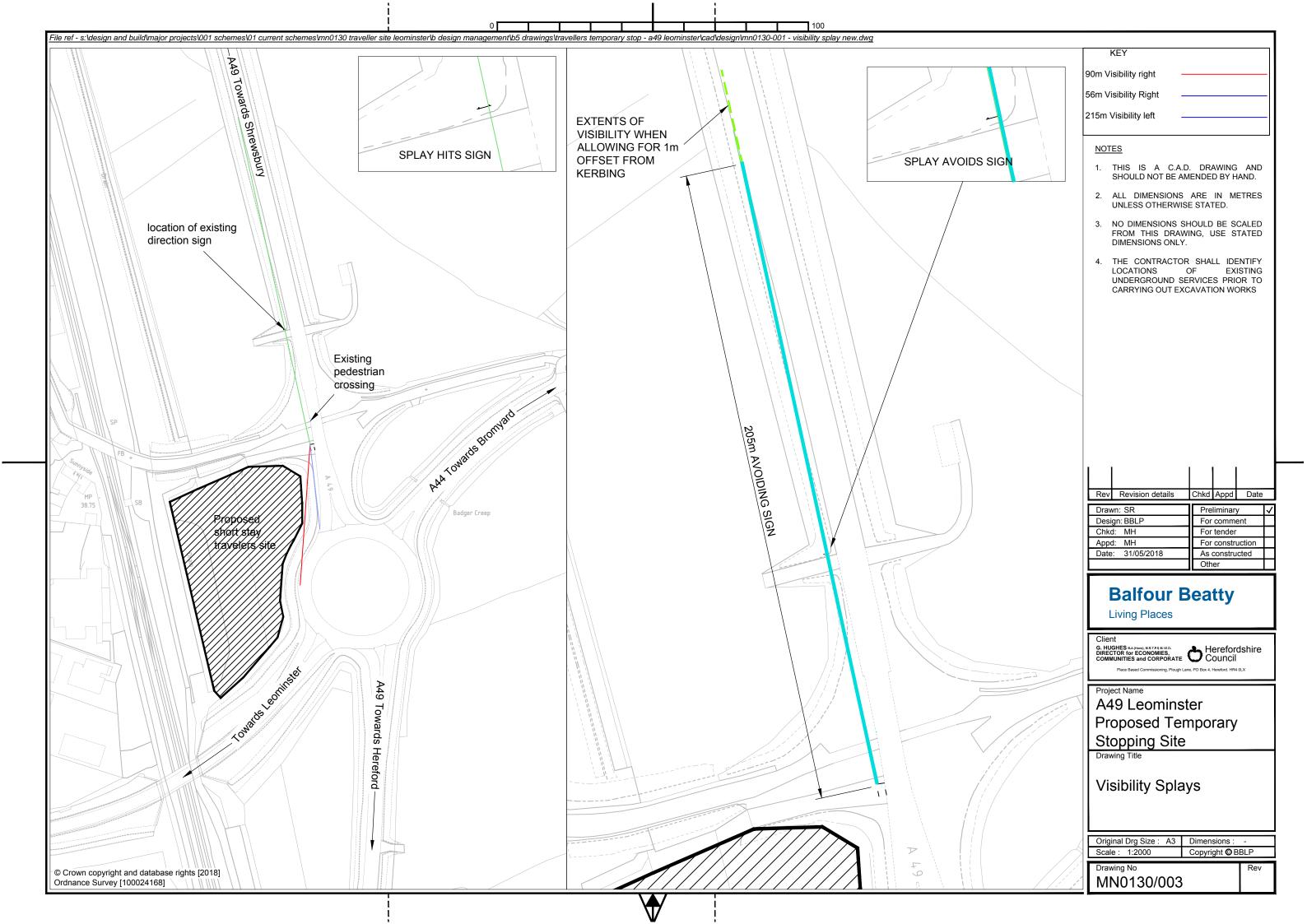


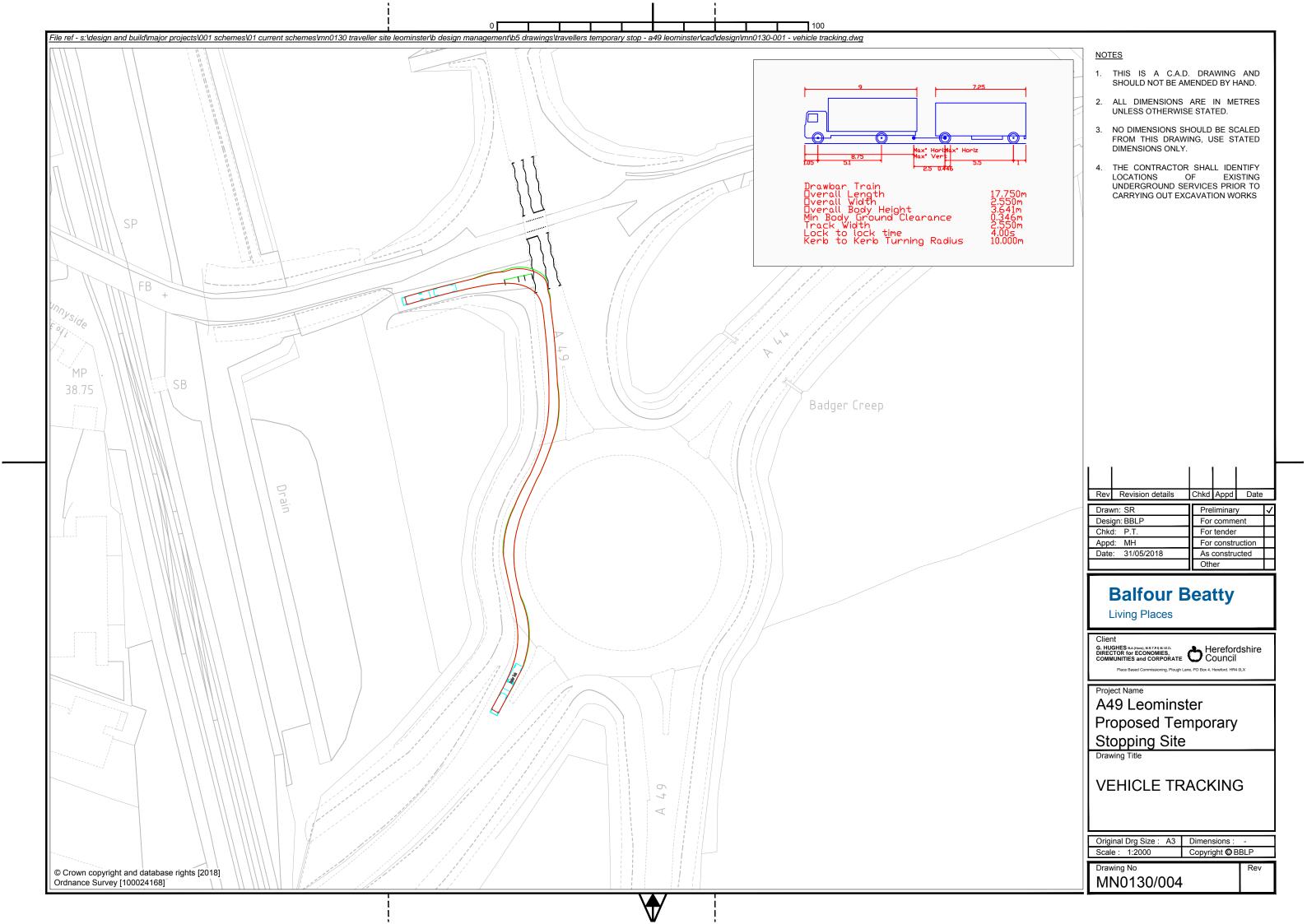












Balfour Beatty Living Places

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