

## NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 19<sup>th</sup> January 2016

HELD: AECOM, 6<sup>th</sup> Floor, No.1 New York Street, Manchester @ 14:30.

PRESENT:	Shaun Reynolds	Highways England
	Simon Clarke	Highways England
	Frank Mohan	AECOM
	Catherine Zoeflig	AECOM
	Michelle Zenner	Warrington Borough Council
	Richard Flood	Warrington Borough Council
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

- 
1. DT provided a summary to the history of the site, recapped the scoping meeting from June 2014 and the set out the current development profile and access strategy and explained that the applicant has now secured all points of access. It was explained that the planning application would be for outline consent but with full approval on the access strategy.
  2. It was agreed that all parties will work together and that a step-by-step approach was favoured by all.
  3. Trip Rates:
    - TRICS to be used, with validation from local surveys.
    - FB to circulate 2014 and 2015 traffic surveys to all parties and produce a trip rate report for agreement, which will feed into the scoping report.
    - CZ to provide the latest Omega TA trip rates to HTP.
  4. Modelling:
    - FM explained that the Highways England VISSIM model has not been progressed beyond the March 2015 report. HE/AECOM to progress.
    - SR proposed that the use of one model, rather than two, would keep the modelling together.
    - It was agreed by all parties that the use of the VISSIM model would be beneficial.

- WBC and HTP to discuss and agree on the additional points of coverage required for the local highway network. The area further east, linking the site to Birchwood, would be favourable.
  - As assessment work progresses it may be prudent that consideration is given to different access scenarios such as a through-route across the site.
  - SR reiterated that the VISSIM model was to be extended at the developer's expense and that AECOM will act as modellers. AECOM and HTP to liaise.
  - It was agreed that, further to a review of the current traffic surveys, there may be a need to commission additional surveys between the site and Birchwood.
  - It was agreed that the 2014 and 2015 traffic surveys are still valid for use.
  - MZ confirmed that WBC has ATC data for the A49.
  - SR confirmed that the HE has traffic data for the SRN.
  - SR will consider if further diverge assessments will be required for Junction 9 of the M62.
  - It was discussed that the HE would like to see modelling carried out for opening year, plus full build-out for mitigation tests and then 10 years hence (the latter with no further mitigation required). *MZ has confirmed that WBC will be happy with these modelling years.*
  - WBC to consider other modelling years.
5. Network constraints and future plans:
- SR explained that the M62 network is quite full and depending on traffic distribution Junction 21 of the M6 (to the south) may need to be included within the scoping area and so could J22 (to the north).
  - MZ stressed that the A49 is also quite full.
  - SR mentioned Smart Motorways and Ramp Metering in terms of current and future plans for this section of the SRN.
  - There may be a need to consider future plans for the Croft Interchange (J21A M6/J10 M62).
  - *SR has confirmed that HE policy states that no mitigation works are allowed within the HE highways boundary.*
6. Committed developments:
- MZ/RF to provide more information. MZ has confirmed that Mike Davies (Planning) should be contacted to obtain a full picture of committed development in the area.

7. Mitigation:
  - MZ said that WBC will seek to ensure that the traffic generated from the development is mitigated.
  - MZ said that no specific measures identified for this area of Warrington at this time, but mentioned that WBC may want to look at the Fordton junction with A49.
  - DT asked WBC to also consider potential mitigation measures.
8. Other matters:
  - SR requested interface details on proposed boundary treatment along northern edge of site. HE require that the risk of pedestrian intrusion is minimised and that vehicle restraint is considered and accounted for. The HE will not fund any additional vehicle restraint systems required as part of this development. DT anticipated bunding along the boundary.
  - SR asked if the 50m buffer was wide enough and for this to be investigated.
  - SR/SC to check policy/ guidance regarding the location of the proposed balancing ponds in close proximity to the SRN where not protected from boundary treatment.
9. Next meeting end of February – date to be confirmed.

**fiona.bennett@highgatetransportation.co.uk**

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 01 February 2016 07:43  
**To:** 'shaun.reynolds@highwaysengland.co.uk'; 'mzenner@warrington.gov.uk'; Flood, Richard (x-rflood@warrington.gov.uk); 'catherine.zoeflig@aecom.com'; frank.mohan@aecom.com; 'simon.clarke@highwaysengland.co.uk'  
**Cc:** dave.tighe@highgatetransportation.co.uk  
**Subject:** Pell Hall, Warrington - Note of Meeting  
**Attachments:** 1107 HE Meeting Note v2 190116.pdf

Good morning All,

Further to our meeting on 19<sup>th</sup> January, I have updated the meeting note to incorporate Shaun and Michelle's comments.

I had no further comments by close of play Friday and trust that the attached is satisfactory to all.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett  
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## Peel Hall proposed planning application meeting with Warrington Borough Council

**Date:** Wednesday 20 January 2016 at 10:00

**Participants:** For Warrington Borough Council:  
 Michael Bell, Planning Policy and Programmes Manager  
 Mike Davies, Principal Planning Officer  
 Michelle Zenner, Transport Development Control Team Leader  
 Richard Flood, Consultant - Transport for Warrington  
 Simon Twigg, Trees & Woodland Conservation Officer  
 Dave Cotterill, Parks Woodland & Facilities Manager  
 Tom Haworth, Sports & Physical Activity Engagement Services Manager  
 Richard Moore, Environmental Protection Officer (Air Quality)  
 Hilary Smith, Head of Service (Access and Assets)  
 Michael Coope, Programme Manager, Access and Assets  
 Vicky Simcock, Principal Officer (Contaminated Land)  
 Steve Smith, Principal Officer (Environmental Protection)

For Satnam Planning Services:  
 CG  
 Dave Tighe – Highgate Transportation  
 Dave Starkie – Appletons

**Reference:** 197SBCGWARR

**Circulation:** CG/DGT/DS/DA/AM/DB/NH

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1	<p><u>Introduction</u></p> <p>CG set out the planning position that set the context for the submission of the outline planning application – that housing need in Warrington had been established at circa 840 houses per annum and that in order to meet that need the 3 large sites not within the greenbelt (the Omega site, Peel Hall and HCA land to the south) were needed to be brought into development in the Plan period. CG also referred to the 2015 SHLAA which records Peel Hall as a suitable housing site.</p> <p>This summary was broadly agreed by Michael Bell.</p> <p>CG set out that the form of the application would be an outline application seeking approval for a new residential neighbourhood of up to 1200 dwellings with employment, local centre, and open space, with points of access to be approved at the outline stage.</p> <p>The application is to be supported by an ES.</p> <p>The application plans will comprise a site plan, a site parameters plan and the various access plans for the site access points. The master plan, phasing plan and landscape master plan would all be illustrative at this</p>

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	<p>stage.</p> <p>It was agreed that this form of application appeared to be acceptable in principle.</p> <p>That would be further considered by Michael Davies (MD) in due course and he will feed back to CG.</p> <p>MB queried whether the HCA were supportive of the proposals given their site was included within the red line boundary.</p> <p>CG confirmed ownership across the site and confirmed that HCA are supportive of the development of their site, subject to re-provision of the sports pitches.</p>
2	<p><u>Affordable Housing</u></p> <p>CG set out that the application at this stage is anticipated to provide for 30% affordable housing which is compliant with policy.</p> <p>This of course will be subject to further scrutiny once the full extent of the Section 106 Agreement / CIL package has been set out by the Authority.</p> <p>It is the intention of the applicants to focus the affordable housing provision via discussion with the Local Authority and its affordable housing providers so that it is principally starter homes and specialist accommodation for the elderly / those with special needs. CG's view is that there was already a high level of rented accommodation in this northern part of Warrington and this should not merely be replicated on the application site.</p> <p>Satnam's approach was noted by the representatives of Warrington Borough Council and further discussion will take place.</p>
3	<p><u>The Local Centre</u></p> <p>CG stated that this would be located in the southern part of the site near to Poplars Avenue and would be centred on a food store of up to 2000m<sup>2</sup> with approximately 600m<sup>2</sup> of further unit shopping / other retail / food outlets. There would also be accommodation for support services is required.</p> <p>CG will give further consideration whether there needs to be a ceiling figure for these other support services if they are indeed required on the site.</p> <p>MB confirmed the need for a Retail Impact Assessment and it will be important to demonstrate that provision is proportionate in scale to the overall development. MB did not think there was anything in particular that the study should address in addition to standard methodology, but he would check.</p>
4	<p><u>Health</u></p> <p>Michael Bell (MB) explained that Warrington Borough Council were speaking to the NHS with regard to the health strategy for the whole of Warrington. This arises out of the increase in housing needs to 840 dwellings per annum. The NHS are looking at the capacity of the service across Warrington and will be</p>

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	<p>feeding back through the CCG.</p> <p>At this initial stage the strategic view of the NHS and CCG is that given capacity constraints on GPs in north Warrington, they would seek a contribution from the development to provide additional capacity for primary health care through expanding 2 existing surgeries at Fearnhead and Padgate.</p> <p>This will be further discussed over the following weeks once the NHS has fed back further to WBC.</p>
5	<p><u>Sports</u></p> <p>It was noted that Sport England required a like for like replacement of the HCA playing fields currently located in the eastern portion of the site. CG / Dave Starkie (DS) explained these would be re-provided within the site in the southern area linked to an improvement in the Local Authority sports area off Windermere Ave.</p> <p>This is able to include 3G/MUGA provision and would be phased so that the replacement provision was available prior to the loss of the existing facilities.</p> <p>Warrington Borough Council requested that this should be agreed with Sport England prior to the submission of the application.</p> <p>CG explained that a phasing plan would be produced that would show phasing for the various elements of the housing and open space / infrastructure strategies and this would form part of the application. Phasing is then able to be regulated by means of a planning condition following the grant of outline permission.</p> <p>Tom Haworth (TH) stated that information with regard to team generation rates and information with regard to existing facilities within the area is able to be shared with the applicants.</p> <p>Overall he felt the approach was reasonable for this application.</p> <p>Dave Cotterill stated that the existing area of open space off Windermere Avenue had recently benefited from new play equipment and this served a wide residential catchment. There would be a concern if this was to be lost.</p> <p>There was a note that the drainage should be looked at on the whole of the application site including the open space proposals on the site and on the adjacent Local Authority land.</p>
6	<p><u>Open Space Strategy</u></p> <p>DS set out that the hedgerows and habitats that were of interest would be retained within the overall master plan approach to the site and would be highlighted within the parameters plan. There are extensive open space improvements and enhancements as part of the application proposals and the local footpath network will be enhanced to run through the formal and informal open spaces.</p>

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	<p>The overall approach was supported by the Officers present. It was noted that liaison with the Woodland Trust was required in order to ensure that there was no issues in that regard.</p>
7	<p><u>Ecology</u></p> <p>DS noted that all the necessary buffer zones and so on would be set out on the parameters plan. 95% of the required surveys have now been completed and there are no issues with regard to protected or notable species on the site.</p> <p>The land drainage scheme for the site will bring forward opportunities for ecology enhancement with regard to SUDS and Surface Water Drainage ponds. It was noted that Highways England had raised concern that the proximity of the balancing ponds shown on the masterplan may be too close to the M62 and therefore could be a breach of their guidelines for vehicle containment. CG said that the position of the balancing ponds were being reviewed.</p> <p>The areas of woodland and existing trees at the point of the existing urban area were raised and it was noted that these would be retained where they exist at a width of 5 / 8metres. These would be retained in a mixture of private and public areas as per the final layout of the relevant housing parcels. This is able to be controlled by means of a condition following the grant of outline permission.</p> <p>Open space would be handed over to a management company as Warrington Borough Council indicated they did not wish to maintain any open space proposed as part of the site.</p> <p>At the detail stage the various requirements for play areas would be set out.</p> <p>It was noted that the main spine road would be lined with trees and Warrington Borough Council stated that they would supply the necessary information to indicate the maintenance cost of such trees if they are located within Highway land.</p> <p>It was agreed that there should be a Tree Survey of trees and tree groups which are impacted on as part of the outline application. DS to agree the extents of the Tree Survey with Simon Twigg (ST) and that will be submitted as part of the application proposals.</p> <p>This will focus on key groups of trees and areas that are important for the master plan / access proposals.</p> <p>ST to confirm to DS the agreed viewpoints for the Landscape Impact Report.</p> <p>MZ said that she would contact the Footpath Officer (John Thorpe) to confirm the existing PROW and any other proposed public footpaths across the site.</p> <p>It was noted that at the detailed stage the surfacing of footpaths would be important. It was noted that there will be a plan forming part of the application that shows the footpath routes through the site both existing and proposed – including the proposed treatment.</p>

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8	<p><u>Environmental Protection</u></p> <p>Nick Hawkins (Hawkins Environmental Services) is to agree the methodology of the Noise and Air Quality proposals with the relevant Officers at Warrington Borough Council.</p> <p>Steve Smith confirmed that the Council's requirements and expectations are set out in the Environmental Protection SPD.</p> <p>CG confirmed that a Desktop SI Report would be submitted with the application. This will allow for the imposition of conditions on an outline planning approval with regard to further work in that regard.</p> <p>The local centre lighting / pitches will be the subject of a planning condition in respect of their impact on the area and any surrounding properties. This will be imposed on any outline planning approval.</p>
9	<p><u>Education</u></p> <p>With regard to primary schools it was noted that all of the existing schools will be at or near the capacity in 2017 and there will be a need to create further capacity at existing schools or on the site in the form of a new school as part of the application proposals. The Authority are looking at present as to whether the Cinnamon Brow primary school (C of E) is able to expand from a 1.5 form entry to a 2 form entry as part of the application proposals with a new a single form entry on the site, or rather to request a 2 form entry school on the application site.</p> <p>It is likely that the primary school provision will be required early in the proposals. It will be important that the school site is accessible from all areas within the site and within the existing built up area.</p> <p>The mechanism for how the school site is acquired / transferred to the Local Authority / Free School Trust / The Academy needs to be looked at once the form of the new school is established.</p> <p>With regard to secondary schools it again has been established that there is physically sufficient space for the pupils arising out of the Peel Hall scheme at existing schools within the area. Finance however may well be required in order to bring surplus space into use. Routes to and from these schools will be very important as part of the application proposals.</p> <p>Further information with regard to the PAN figures for the various schools will be provided to the applicants.</p> <p>There is a possible requirement for a home for young adults with special needs and the relevant Officers enquired whether there was the opportunity to provide this as part of the application proposals. The site area (which will not be large) would be acquired by a charitable trust. CG mentioned that it may be that one of the housing parcels served from Birch Avenue could be suitable for this form of use.</p> <p>Further information on this will be provided in due course.</p>

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10	<p><u>Highways</u></p> <p>Dave Tighe (DT) explained where the proposed site access junctions were and the amount of development envisaged off each; he also explained that a Spine Road was envisaged through the site that would also be a bus route. A bus-gate was proposed to prevent the Spine Road becoming a through route which reflected discussions since 2010.</p> <p>Richard Flood (RF) asked if the option of having a through-route for traffic rather than a bus-gate as proposed could be considered. This would also involve creating a through-route to the A49 by removing or relocating the landscape block on Poplars Avenue.</p> <p>DT stated that there had been a meeting with Highways England and Warrington Borough Council earlier that week and with the local bus provider the previous week.</p> <p>It was noted that with regard to the Highways England Traffic Model that covers the M62 and A49 – this is now able to be used to assess the proposals and can be expanded to cover the local highway network.</p> <p>The process of agreeing the level of trips and other parameters associated with the site are in the course of agreement between the applicants and Warrington Borough Council. It was noted that new trip figures have recently been agreed for Omega proposals which are not the same as originally submitted.</p> <p>It was noted that the A49 and much of the local highway network can be congested at peak times. Routes to the north via Delph Lane through Winwick and to the east of Birchwood will also have to be considered.</p> <p>DT explained that the main focus of the access strategy was bus based and, following discussions with Network Warrington, the expectation was that some existing services would be enhanced and extended into the site as the phased development progresses. Once the Spine Road is completed, a new service that links the site with the town centre and Birchwood could also be introduced. There will also be measures within the Travel Plan to encourage bus travel.</p> <p>Michelle Zenner (MZ) asked that any phased financial support was structured to support bus services longer term.</p> <p>MZ asked that any roads near the school should be able to accommodate parking at drop-off and pick up times. It was noted that the school would be next to the local centre where parking would be available for the supermarket and other uses. It was agreed that a Shared Use Agreement of the parking would be beneficial in that regard.</p> <p>The need for footways and cycle-ways throughout the area and into the existing urban area and nearby facilities was stressed. DT said that this would be shown on a separate plan.</p> <p>MZ said that there will be a need for a safety audit for each of the proposed access points at the point of submission of the application. Jamie Fisher at Warrington Borough is able to provide this service. Plans of</p>

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	the various junctions were handed over to MZ and RF by DT.
11	<p><u>Other Matters</u></p> <p>MB noted that there was the opportunity for major schemes to be presented by the applicant to the planning members in advance of the planning meeting. He stressed that this was at the request of the applicant. He suggested however that this would be useful for Peel Hall once the application had been properly considered. CG thanked MB for this information and stated that this was an opportunity that Satnam would use.</p> <p>It was noted that all emails / letters / submissions relating to this application (either pre or post submission) should be copied (cc) to MD who is the Case Officer.</p> <p>It was noted that the SOCI was to take place on Saturday 23 January 2016 and a report of that would be submitted with the application.</p> <p>CG stated that there will need to be further work with regard to the draft CIL / Section 106 relationship so that any infrastructure provision / Section 106 matters are acceptable in the context of the emerging CIL. MD confirmed that the Council would expect a viability appraisal if the development was not providing a policy compliant level of affordable housing and/or the appropriate S106 contributions to mitigate the impacts of the development.</p>

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 01 February 2016 09:20  
**To:** Zenner, Michelle (mzenner@warrington.gov.uk); Flood, Richard (x-rflood@warrington.gov.uk)  
**Cc:** dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall Trip Rates  
**Attachments:** 1107 TN02 on Trip Rates 310116.pdf

Good morning Michelle and Richard,

Please find attached our Technical Note on vehicular trip rates for the Peel Hall site.

I look forward to discussing these with you.

Kind regards,  
Fiona

Fiona Bennett  
Highgate *Transportation*

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HTp/1107/TN/02

Superseded by TN/02/A issued April 2016 and contained in TA/01/A Appendix 44

**From:** Davies, Michael (Planning) <mdavies@warrington.gov.uk>  
**Sent:** 09 February 2016 17:46  
**To:** 'fiona.bennett@highgatetransportation.co.uk'  
**Cc:** Zenner, Michelle  
**Subject:** RE: Peel Hall, Warrington - Committed Developments

Fiona –

Sorry for the delay.

Major sites with planning permission which may be worth considering as committed development for the modelling would include:-

- Befred office HQ site, Birchwood – 2015/26220
- Birchwood Shopping Centre expansion – 2015/25880
- Birchwood Park office development (for Patrizia) – 2015/26044

Possibly the following also – Michelle may be able to confirm whether these are eligible for inclusion too:

- Omega, Zone 7 – 2014/23290
- Genesis Centre – 2014/23569
- Calver Park – 2015/26685

Current schemes at B&Q warehouse (2015/26628) and Omega phases 3 to 6 (2015/26469) are not yet consented – but may be quite soon.

You can view the details of all applications via our website.

Regards,

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
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**From:** fiona.bennett@highgatetransportation.co.uk [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 09 February 2016 11:01  
**To:** Davies, Michael (Planning)  
**Cc:** dave.tighe@highgatetransportation.co.uk  
**Subject:** FW: Peel Hall, Warrington - Committed Developments  
**Importance:** High

Good morning Mike,

Further to my email of last week, are you able to provide a steer on the committed developments in the area that may need to be included within the modelling work for the Peel Hall site?

I look forward to hearing from you.

Kind regards,  
Fiona

Fiona Bennett  
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**Sent:** 05 February 2016 12:21  
**To:** 'mdavies@warrington.gov.uk'  
**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk); Zenner, Michelle ([mzenner@warrington.gov.uk](mailto:mzenner@warrington.gov.uk)); Flood, Richard ([xflood@warrington.gov.uk](mailto:xflood@warrington.gov.uk)); Colin Griffiths ([colin@satnam.co.uk](mailto:colin@satnam.co.uk))  
**Subject:** Peel Hall, Warrington - Committed Developments

Dear Mike,

Further to the recent meeting between WBC and Satnam, and our meeting with Michelle Zenner, Richard Flood and Highways England, I understand from Michelle that you would be able to provide confirmation of the committed developments in the area that may need to be accounted for within the highway modelling.

All parties have agreed the extent of the network to be modelled and are currently firming up programmes, collecting the additional required data and seeking agreement on trip factors, therefore your assistant regarding committed development would be welcomed.

I look forward to receiving your response.

Please do not hesitate to contact me or Dave Tighe (07973 375937) if you have any queries.

Kind regards,  
Fiona

Fiona Bennett  
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# WARRINGTON Borough Council



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Peter Astley MBE  
Assistant Director  
Regulation & Public Protection

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WA1 2NH

Our ref: PR 2015/03409

26th February 2016

Dear Colin

## **Peel Hall PR 2015/03409**

### Principle of Development

Peel Hall is not specifically identified in the Local Plan Core Strategy, but is identified in the Council's 2016 Strategic Housing Land Availability Assessment (SHLAA) under the 'Suitable, available and achievable' category of housing site. The principle of a comprehensive residential led development for this site is therefore acceptable in principle.

With regard to the proposed Local Centre, and in particular the proposed foodstore, the Council will require a sequential and retail impact assessment to be submitted as part of the application to ensure that new retail development is proportionate in scale to the overall development and will not have a significant detrimental impact on any existing identified town, district or local centres. This requirement is set out under Policy SN5 of the Local Plan Core Strategy. If required, Officers are able to provide advice on the scope of the assessment, including which local centres should be assessed in terms of impact.

### Affordable Housing

The Council's affordable housing policy SN2 requires 30% affordable housing provision to be provided on site of which 50% should be rented and 50% intermediate. The policy acknowledges that the level and tenure of affordable housing will vary on a site by site basis based on viability and individual site characteristics. The Policy also states that the most up to date Strategic Housing Market Assessment (SHMA) should also be taken into account.

The latest SHMA, published in January 2016, identifies a net need of 220 affordable homes per annum of which the need for rented homes is 83% and intermediate 17%. The SHMA also acknowledges that consideration could be given to areas with high concentrations of social rented housing where



additional intermediate housing might be desirable to improve the housing mix and to create 'housing pathways'.

Your current proposal is 30% affordable housing on site, all of which is to be provided as starter homes. Your rationale for this offer is because of the high level of rented affordable housing within the existing area together with the Government's stated priorities for affordable housing provision.

As we discussed in the meeting, starter homes are not currently considered to be affordable, although the Government is currently consulting on changes to the NPPF to include starter homes under the affordable housing definition. Having discussed starter homes with the Council's Housing Officers, our view is that starter homes will fall into the 'intermediate' category of affordable housing for the purposes of Policy SN2.

Peel Hall is located in the Poplars & Hulme ward which according to the latest census data does have a high proportion of households in affordable rented housing (39.8%) relative to the Borough as a whole (15.6%). This indicates that Peel Hall may be a location where the Council would accept a higher proportion of intermediate affordable housing, but given the Borough wide need for rented affordable housing, Officers are keen to explore the potential for a wider range of affordable housing than you are currently proposing on site.

At the pre-application meeting there was discussion about providing affordable homes specifically for elderly people and potentially to provide independent living for young people with learning disabilities. Officers would welcome the opportunity for more detailed discussions on these particular initiatives.

#### Open Space and Sports provision

Officers welcome the principles of the open space strategy which underpins the masterplan for the site. The Council's detailed requirements regarding open space provision are set out in the Open Space and Recreation SPD together with the 2012 Open Space Audit – both of which are available on the Council's web site.

The Council is able to provide a more detailed assessment of your proposed open space provision if you are able to provide a map and schedule of the different types and sizes of open space across the site. This would be a follow up to the initial pre-application charge.

As stated in the meeting, the Council will not be looking to adopt the areas of public open space and therefore it will be your responsibility to lay out the open space and ensure its long term management and maintenance.

With regard to sports pitch provision and the replacement of the existing playing fields, it will be important for you to provide more detailed plans setting



out your proposals to enable discussion with Sports England. As part of these details, it will be important to consider the issue of the new play equipment which has recently been provided within the existing area of open space off Windermere Avenue. As stated at the meeting, this play area serves a wide residential catchment and there would be concern if it was to be lost and not replaced in an appropriate accessible location.

I am still awaiting information from The Council's Sports & Physical Activity Engagement Services Manager regarding team generation rates and information with regard to existing facilities within the area. As soon as I have this information, I will send it on.

### Ecology

Detailed advice from GMEU has been sent to you separately to confirm the necessary ecology work that will need to be undertaken in support of the application.

In addition, it was confirmed at the meeting that there should be a Tree Survey of trees and tree groups which are impacted on as part of the outline application. The extent of the Tree Survey needs to be agreed with Simon Twigg, the Council's Tree & Woodland Conservation Officer.

### Environmental Protection

The scope of necessary assessments and supporting information was discussed at the meeting and details of the Council's standards are set out in the Environmental Protection SPD which is available on the Council's web site. I understand that the methodology for air quality assessment has subsequently been discussed and agreed with Officers and a further discussion is due to take place on the scope of the noise impact assessment work.

The Council is able to review the outcome of the assessments and potential mitigation measures at pre-application stage. This would be a follow up to the initial pre-application charge.

### Education

Education colleagues have provided the pupil place projections for primary and secondary schools within the vicinity of the Peel Hall Site (attached).

For pupil projections the Council utilises the following formulae to determine the impact of any housing development, based on the most recent census information:

Primary - Number of pupils = 0.3 pupils per dwelling x number of dwellings

Secondary - Number of pupils = 0.18 pupils per dwelling x number of dwellings



Using the above formulae, Peel Hall's 1200 dwellings would equate to 360 primary pupils and 216 high school pupils and for the Council's purposes we would assume these are spread equally across all year groups.

On the basis of the impact of the Peel Hall development the projections demonstrate that in the early years of the build, Warrington will already be experiencing a shortage of primary places within 2 miles of the site, so it is important that a contribution is received for the provision of primary school places.

With regard to the impact of the development on secondary school places, the projections demonstrate that in the early years of the build, Warrington will have capacity within the high school sector to accommodate additional numbers, but this will soon expire as pupils already in the primary sector transfer to the high school sector. By the time the development is nearing completion there is predicted to be a significant shortfall of places within 3 miles of the site, therefore it is also important that a contribution is received for the provision of high school places.

To determine the contribution from new housing development, the Council uses the Department for Education's cost multipliers for the cost of providing school places, updated by applying construction cost indices to Q1 2015. The costs for primary and secondary school places are £12,929 and £19,482 respectively.

The contribution sought for secondary school places will therefore be £19,482 multiplied by the secondary school child yield of 216, equating to £4,208,112.

The starting point for the contribution for primary school places will be £12,929 multiplied by the primary school child yield of 360, equating to £4,654,440.

Education colleagues have confirmed they will seek land within the Peel Hall site for a 1.5 FE new primary school, but are yet to reach a final conclusion on whether to provide all provision within Peel Hall site or whether to provide some additional places at nearby schools.

The area of land required for a 1.5FE Primary School is 11,250m<sup>2</sup>.

The value of the land secured for the school will be offset against the primary school contribution with the balance of the contribution being used to construct the school and / or provide additional capacity to existing schools within 2 miles of the site.

Education colleagues will confirm, in due course, with DfE the funding and delivery arrangements for the construction of a new primary school, which will be either an academy or free school.



Given the immediate pressure on primary school places the Council will look to confirm its preferred option for providing primary school places at the earliest opportunity.

In accordance with the CIL Regulations 2010, the Council will name the specific school improvement projects that the primary and secondary school contributions will be used for.

### Health

I have discussed your proposals with the Council's Public Health Team, Warrington Clinical Care Commissioning Group (CCG) and NHS England.

The Chief Operating Officer of the CCG has confirmed that based on the geographical location of the site, it is expected that majority of the residents will choose to register with the two closest GP practices which are Fearnhead Medical Centre and Padgate Medical Centre. Warrington's Strategic Estates Plan completed in December 2015 shows that whilst the practices have an open list for registrations neither have a surplus of clinical rooms to accommodate the significant increase in population that the Peel Hall development would bring.

In response to the plans and recent consultation both practices have approached the CCG and NHS England to discuss future options as they are concerned about the practices ability to accommodate new residents. These meetings will be concluded by the end of February. At that point the CCG will have a clearer idea of the plans of both practices. Outline discussions indicate that both practices may require at least an addition of 2 clinical rooms to accommodate the increase required of GP and Practice Nurse time, however the details of any future expansion of either site is what is currently being discussed.

I will be able to provide further detail on the expansion plans and contribution which may be sought from the Peel Hall development once these discussions have concluded.

### Highways

The Council requires detailed transport modelling work to be undertaken to establish the impact of the development on the local and strategic road network. As part of this work, Highways Officers have specifically requested that you review the option of opening up the proposed spine road to create a through route to general traffic, not just buses, between the A49 and Blackbrook Avenue.

Highways Officers are currently in discussions with your transport consultants to agree the scope of the modelling work and the assumptions that are feeding into it.



Given the importance of highways and transportation to the deliverability of the development, it is considered important that there is a follow up meeting specifically on these matters when the modelling work has been completed. That will enable Officers to understand the impacts of the development and the requirement for mitigation measures.

#### Form of Application

The submission of an outline application, with accompanying Environmental Statement, in the form discussed at the meeting is acceptable to the Council in principle.

A phasing plan will be critical to understand how elements of the development will come forward over time and to ensure the timely delivery of infrastructure to support the development of new homes, the local centre and employment floorspace.

You should take care to distinguish between those plans / drawings you are submitting for approval now and those which are submitted purely for illustrative purposes. The detailed design of highway and pedestrian works should be submitted for approval please.

#### Next steps

I trust the above confirms the Council's view on your proposals to date. I am conscious that there are a number of pieces of outstanding information which we agreed to provide and I will ensure you receive these at the earliest opportunity.

I am also keen to continue discussions on your affordable housing offer and education and health contribution once you have had the opportunity to review the advice set out in this letter. Additional discussions on these topics would be within the initial pre-application fee you have provided.

Following the completion of your transport modelling work it will be essential for Officers to review the impacts of the model and work with you to agree any necessary mitigation measures. For clarity, there will be an additional pre-application following up fee for this work.

Finally, the Council can also undertake a more detailed review of your open space proposals and the outcome of your environmental protection studies, although there will also be an additional pre-application charge for this work.

I must stress that the information provided above is the professional opinion of Officers and is given entirely without prejudice to the Council's determination of a future planning application for the Peel Hall site.

Yours sincerely

Michael DC Bell

Michael Bell  
Planning Policy & Programmes Manager

## NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 8<sup>th</sup> March 2016

HELD: WBC, New Town House, Warrington @ 14:00.

PRESENT:	Richard Flood	Warrington Borough Council
	Michelle Zenner	Warrington Borough Council
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

- 
1. DT explained the latest development profile and set out that we are awaiting the latest masterplan for circulation. RF expressed his desire for all parties to work together, whilst each being sympathetic to the desires and pressures of each other's clients.
    - DT explained that the previously identified retirement homes are now included as part of the 1,200 dwellings and will be treated as ordinary dwellings for trip rate purposes. There is now a separate care home facility of 100-beds.
    - MZ expressed the need to ensure that appropriate and desirable walking and cycling links are included within the masterplan, including those for recreational use. DT said that each parcel/use would be assessed accordingly
    - WBC happy with splitting the local centre and food store car parks, back-to-back with good pedestrian linkages – but no vehicular through route. DT explained that this would make access simpler from the eastern part of the development and that car parks would be designed to have sufficient capacity to accommodate some of the school drop off requirement.
    - The principle of providing school drop-off and collection car parking and turn around facilities on the end of the access road that serves the primary school was agreed. MZ proposed localised widening (e.g. 7.5m) of this access road. FB to investigate accordingly. It is unlikely that green verges will be provided on the road past the school and TROs and Keep Clear markings could assist with the further control of parking in front of the school if required.
    - It was discussed that staff parking would be provided on the school site (and coach turn around facilities), but a travel plan will be required to encourage non-car modes of travel. It was agreed that a 2-form entry school would be assumed for within the TA modelling and that this will result in some external trips.
    - It was agreed that good pedestrian links to the school should be created, but that no desirable pedestrian links will be made between the school and Windermere Avenue in order to prevent this area becoming an attractive drop-off and collection area.

2. Accesses:

- Blackbrook Avenue/Mill Lane – southbound deflection on Mill Lane to be checked. Vehicle tracking to be issued to WBC.
- Radley Lane – DT gave background to proposals that resulted from the recent public consultation. MZ requested that it be modified to reflect their design guide. FB agreed to modify the alignment and show vehicle tracking.
- Poplars Avenue (central) – DT explained changes that are planned re: bus stop location and controlled crossing to both switch sides further to Network Warrington meeting. Discussion held over detail of controlled pedestrian crossing. FB to rework and issue with tracking.
- Proposed parking areas at Poplars Avenue well received by WBC.
- Grasmere Avenue – segregated footway to be highlighted.
- Poplars Avenue (west) – Tracking at Cotswold Road/Poplars Avenue corner to be provided. Tracking to focus on large vans and rigid vehicles.
- Birch Avenue – alternative parking area options to be drawn up.
- Mill Lane – FB to reconsider the need for the off-road cycle facility. FB to provide tracking at the third party access and tweak radii as required.
- Peel Cottage Lane – MZ to investigate the requirements for service strips. HTP to investigate existing refuse collection to Peel Hall Cottage.

3. Phasing:

- DT ran through initial phasing plan and set out that phasing would be dealt with in detail in the TA.
- WBC are not able to make a decision on the quantum of development loading onto Poplars Avenue until modelling results are in.

4. Bus strategy:

- DT explained that we have worked up a comprehensive bus strategy with Network Warrington which includes for extension to existing services during early phases of development and a flagship route from the town centre, through the site, to Birchwood.
- WBC are happy for us to speak directly to their colleague Alyn Jones.

5. Trip Rates:

- MZ recommended that food store trip rates to be based on the generic category within TRICS rather than the discount food store option. FB to run a comparison test.
- Future reports for comment to be sent directly to Gavin Coupe at ATKINS copying in MZ and RF.
- FB set out that there will be a trip rate note that includes for trip rates over the morning and afternoon peak periods (0700-0930 and 1600-1830 respectively), to assist AECOM with modelling the peak hours.

- DT set out that a level of development trip rates will be internalised due to the location of Primary school and local centre facilities, and also subject to a discount factor yet to be proposed to account for, for example, the proposed bus strategy (which includes bus passes to new residents).
6. Committed development:
- FB summarised these as: Land at Benson Road (2015/26220), Birchwood Shopping Centre (2015/25880), Birchwood Park (2015/26044) and Calver Park (2015/26685).
  - MZ agreed to send through her highway consultation responses on these. (Received – thank you).
  - It was agreed that the B&Q extension at Winwick (2015/26628) did not need to be included under committed developments as it is considered that this will not have a peak hour weekday impact in real terms.
7. Spine Road as a through-route scenario:
- RF requested that the scenario that has the spine road as a through route and the links to Winwick Road be considered (i.e. removes/relocates the existing closure and creates a signalled junction with Winwick Road) as this would help reduce the impact on Long Lane/A49 junction from development traffic. RF said that this is something that officers need to be able to demonstrate to Members has been considered in detail.
  - A discussion took place regarding the implications and achievability of this and HTP agreed to carry out some further investigation.
8. Any other business
- Growth factors were discussed. WBC advised that the same mechanism used for growing existing network flows used in the Omega application should be applied to the Peel Hall application.
  - The AECOM modelling timescale and the TA program was discussed. RF/MZ strongly advised against an interim TA being submitted with the planning application given their experience with the Omega application and stressed that they would push for the application not to be validated if all the modelling work was not completed.
  - It was noted that the Omega application will not go to committee until after the May 2016 elections.
  - MZ said that the number of planning applications had more than doubled and that officer response times had increased accordingly. RF said that there may be a new protocol introduced to help manage the resources available. DT/FB said they appreciated the time and cooperation received to date.

**fiona.bennett@highgatetransportation.co.uk**

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 14 March 2016 18:41  
**To:** 'Zenner, Michelle'; 'Flood, Richard'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'  
**Subject:** RE: Peel Hall Meeting Notes  
**Attachments:** 1107 WBC Note of Meeting 080316 FINAL FOR ISSUE.pdf

Dear Michelle and Richard,

Further to Michelle's email I have now taken 'draft' off the previously circulated meeting notes. Please see attached.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217  
[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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*Highgate Transportation Ltd,  
Box 13, 42 Triangle West,  
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Company Registration Number: 07500534*

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**From:** Zenner, Michelle [mailto:mzenner@warrington.gov.uk]  
**Sent:** 14 March 2016 13:10  
**To:** fiona.bennett@highgatetransportation.co.uk; Flood, Richard  
**Cc:** dave.tighe@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall Meeting Notes

Fiona,

Reviewed and acceptable.

Regards

Michelle Zenner  
Transport Development Control Team Leader

Warrington Borough Council  
Environment & Regeneration Directorate  
3rd Floor New Town House  
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**From:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk) [<mailto:fiona.bennett@highgatetransportation.co.uk>]  
**Sent:** 09 March 2016 17:00  
**To:** Flood, Richard; Zenner, Michelle  
**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)  
**Subject:** Peel Hall Meeting Notes

Dear Richard and Michelle,

Thank you for agreeing to meet with us yesterday to discuss the Peel Hall site. Your time is much appreciated.

Please find attached the draft minutes for your comment as promised.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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\*\*\*\*\*

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**From:** Zoefitg, Catherine <catherine.zoefitg@aecom.com>  
**Sent:** 01 April 2016 10:14  
**To:** colin@satnam.co.uk; Fiona Bennett (fiona.bennett@highgatetransportation.co.uk); dave.tighe@highgatetransportation.co.uk; Dickin, Alan (adickin@warrington.gov.uk); mzenner@warrington.gov.uk; x-rflood@warrington.gov.uk  
**Cc:** Johnson, Alistair; Mohan, Frank  
**Subject:** Peel Hall Development - Model Scoping Report  
**Attachments:** Peel Hall Model Scoping Report 01.04.2016.pdf; Peel Hall Model Scoping Report 01.04.2016.doc

**Importance:** High

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear All,

Please find attached a Model Scoping Report, in reference to the Peel Hall development planning application. I would appreciate it if you could take the time to review this note, and provide any thoughts / comments.

Kind Regards,

Catherine

**Catherine Zoefitg**, BA (Hons), CMILT  
Associate Director, Strategic Planning and Advisory  
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PLEASE NOTE: DUE TO PART-TIME WORKING ARRANGEMENTS I AM NOT IN THE OFFICE ON **WEDNESDAY AFTERNOONS** OR **FRIDAY AFTERNOONS!**

Project:	<b>Peel Hall Development Site, Warrington</b>	Job No:	<b>60487959</b>
Subject:	<b>Model Scoping Report</b>		
Prepared by:	<b>Catherine Zoeflig / Alistair Johnson</b>	Date:	<b>1<sup>st</sup> April 2016</b>
Checked & Approved by:	<b>Grigoria Argyropoulou / Frank Mohan</b>	Date:	<b>1<sup>st</sup> April 2016</b>

## 1. Introduction

A package of models is required to support the planning application for the Peel Hall development site in Warrington. This Technical Note has been prepared to inform all parties concerned in this project, of the decisions made, concerning the scope and depth of the network model analysis. The note will consider, in particular, the appropriateness of the tool selected, to assess the impact of this particular development site, upon the surrounding highway network. The aim of this note is to ensure communication between all parties, as well as transparency concerning the approach taken, as a record that can be held throughout the life of the project.

This note is intended for distribution among the following individuals / organisations:

*SATNAM Development Group*  
Colin Griffiths

*Warrington Borough Council*

Alan Dickin

Richard Flood

*Highgate Transportation*

Michelle Zenner

Fiona Bennett

David Tighe

## 2. Consideration of the Appropriate Modelling Package / Tool

### a. VISSIM

VISSIM is a commonly used package for microscopic traffic simulation, and allows exact simulation of traffic patterns, and displays all road users, and their interactions, in one motion model. Links and connectors are implemented to provide flexible input of model geometries, with any level of complexity. Driver and vehicle characteristics can be applied individually. In addition route choice within VISSIM can be further calibrated utilising the cost and surcharge facilities which directly influences driver decisions within the model.

Interfaces can provide seamless integration, with other systems for signal controllers, traffic management or emissions models. It has also been considered appropriate for this project, given its abilities to provide detailed results, coupled with 3D animation, as required, to present to both members of the public and key decision makers, within the local authority.

There is an existing VISSIM model available for Junction 9 of the M62, which was original developed by AECOM, on behalf of Highways England, and in agreement with both Highways England and Warrington Borough Council (WBC). The existing model covers most of the network required to be

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assessed for the purpose of the planning application for Peel Hall, and can be easily extended to cover the rest of the required network.

## b. SATURN

SATURN is a detailed highway traffic assignment suite, however it is considered more suitable to strategic county or district wide studies, as well as detailed city models. It does have facilities for matrix manipulation, and demand estimation, from counts. SATURN can be used in several different roles including:

- As a conventional assignment model for regional or national models;
- As a pure junction simulation model to support the detailed design process;
- or more usually, as a combined simulation, and assignment model for the analysis of either large or small network changes, such as the introduction of one-way streets, changes to junction controls, bus-only streets, etc. and whose evaluation requires a detailed analysis of traffic behaviour at junctions.

Whilst SATURN provides a detailed traffic assignment suite, it is considered that it is more suited to more strategic studies, and that the outputs provided from the results, are in a format which is not necessarily conducive to our anticipated audience.

## c. Dynameq

Dynameq provides a mesoscopic approach to modelling, providing both traffic simulation and dynamic traffic assignment, which can be used in evaluating congestion, relief strategies, corridor and lane management, construction mitigation, transit design, traffic impact studies, emissions modelling, and event planning. Both route choice and traffic patterns can be run under congested conditions.

As a mesoscopic tool, the level of detail is between that of a microscopic (e.g. VISSIM) and a macroscopic (e.g. SATURN) model. Queuing and blocking back is represented but the visualisation of queue lengths is not as detailed as microsimulation and it is not possible, for example, to see queue lengths by lane to the same detail.

The modelling is particularly targeted at larger networks and so it does not deal with the situation when the front of the queue dissipates first.

### *Summary*

Based on the above synopsis of the various modelling tools available, it has been concluded that, given the network characteristics, availability of an existing model, the ability to calibrate / limit route choice to avoid a "grid locked" network scenario were appropriate, VISSIM is the most suitable tool, to model this network in, and obtain an appropriate assessment of the impacts of the development, upon the highway network.

## 3. VISSIM Model

### a. Model Scenarios

The existing M62 J9 Model (Originally developed by AECOM for Highways England) will be extended, in accordance with the attached plan, and as agreed with WBC.

The following suite of model scenarios, (10 models), will be prepared. The AM and PM peak periods will be aligned with the existing M62 Junction 9 model, which has flows for 07:00 to 09:30 (Data recorded 08:00 to 09:00) and 16:00 to 18:30 (Data recorded 17:00 to 18:00):

- 1) Base Models (AM & PM) (2015)
- 2) Do Minimum (AM & PM) (Opening Year tbc) – ‘full’ build out of proposed development, internal network, and planned access arrangements, no mitigation works.
- 3) Do Minimum (AM & PM) (Design Year tbc) - As above (without mitigation), plus ten years. These models will be presented at a workshop, where mitigation will be agreed. The agreed mitigation requirements will then be tested (as the Do Something models).
- 4) Do Something (AM & PM) (Opening Year tbc) – ‘full’ build out of proposed development, internal network, and planned access arrangements. Mitigation included.
- 5) Do Something (AM & PM) (Design Year tbc) – As above, (including agreed mitigation), plus ten years. All above models will be developed using a consistent version of VISSIM.

The models will be run multiple times in order to achieve route-decision convergence, and with random seeds 5, 10, 15, 20 and 25.

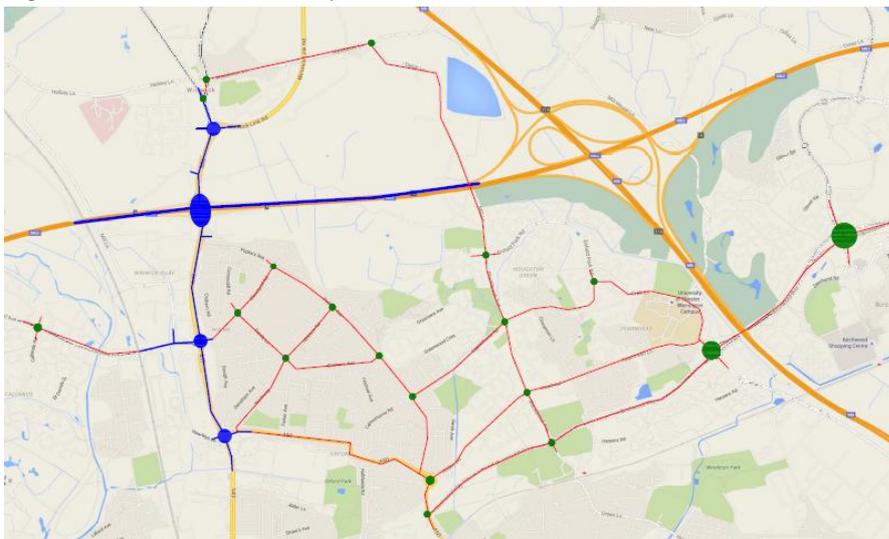
Given the size of the network within the model, traffic flows will be applied incrementally in order to achieve optimum route-decision convergence.

All lane coding / assignments at the junction intersections will be checked for appropriate driver behaviour.

b. Model Area

The area of the model that will be covered within this analysis is indicated within the figure following:

Figure 1 – Peel Hall Development VISSIM model area



c. Model Validation

To ensure the robustness of the base model, validation will be completed for the periods 08:00 to 09:00 and 17:00 to 18:00. The models will be appropriately checked against the required DMRB

Criteria, in terms of traffic flows, and journey time criteria (GEH statistic test, flow differences, journey times). This information will be presented within the Model Development Report.

Maximum and average queue length data will be collected and tabulated, and a model development report will be prepared, which will describe the development of the model, and validation.

#### 4. Traffic Data

##### a. Count Data

It has been agreed that all count data required, to develop the models, will be provided by Highgate Transportation. Appropriate liaison will be undertaken with Highgate, to ensure that all required links, and junctions are covered, in order to satisfy the extent of the model, as indicated within the above figure.

There was limited ANPR data available from WBC, however data for both the A49 and Crab Lane, has now been extracted, this information will be used to supplement / validate the wider data sets.

Journey time data will be extracted from the Traffic Master database. A sub-user agreement has been signed, between WBC and AECOM, to extract Warrington' Traffic Master data using the BaseMap platform. Journey time route data will be extracted for average week day peak hour periods of 0800-0900 and 1700-1800s for the neutral month of May 2015 (12<sup>th</sup> – 14<sup>th</sup>).

The count data does not provide any information on trip patterns (origins and destinations (OD)) so another source is needed for this. Although it is older than maybe considered ideal, we would propose asking WBC to use the Warrington Multi Modal Transport Model (WMMTM) as a source of this OD data. If they are in agreement, then we would produce a cordon model covering our area of interest. We would then refine the zone system and add additional links so as to match the detail required within the VISSIM model. Matrix estimation techniques would then be run within VISUM using the turning counts you have provided to obtain a best estimate of trip patterns and volumes. This process will be undertaken both for the AM & PM. The trip matrices would then be passed from VISUM to VISSIM. As part of this process, there are likely to be some differences in the level of congestion and routings, as is always the case when taking demand matrices from a strategic model to a micro-sim model. The VISSIM model would therefore need to be calibrated accordingly using the count data, as before, supplemented by the journey time data from Traffic Master. If WBC is not content with the use for the WMMTM to provide an initial estimate of trip patterns, then a bespoke gravity model would need to be developed.

##### b. Development and Committed Development Traffic Data

Highgate will provide trip generations, for the following development mix, subsequent to completion of the final masterplan option:

- 7500 m sq. employment;
- 1200 houses;
- 100 bed care home;
- 2,000 sq. m foodstore;
- 600 sq. m local centre (small shops, healthcare, pharmacy);
- 1600 sq. m family restaurant; and

- 2 form entry primary school.

Highgate transport are responsible for defining the development traffic which should be forecast using the industry standard TRICS database, using the same parameters, as applied in the Trip Generation assessment, undertaken for the nearby OMEGA development.

The model will need to include traffic associated to local, committed developments, within the relevant modelling scenarios. Highgate Transportation would be responsible for confirming these with Mike Davies (WBC Planning). AECOM will be responsible for applying them to the assessments accordingly.

c. Traffic Growth.

Traffic growth will be applied to the assessments in accordance with the methodology applied to the assessments undertaken for the nearby OMEGA development. It is possible that the traffic 'growth' forecasts applied, to the future models, will initially result in exponential congestion, which will cause the models to lock-up. The growth forecasts may therefore need to be re-visited using an alternate tool. Highgate Transportation will hold discussions with WBC regarding appropriate traffic growth factors, and calculations.

## 5. Signal Specifications

Highgate Transportation is responsible for obtaining the required signal specifications from WBC. The following junctions require signal information to support the model development:

- A574 Cromwell Avenue / Calver Road
- A49 / Cromwell Avenue / Sandy Lane West including the Pedestrians crossing to the south of the junction
- Delph Lane / A49 Newton Road
- A49 Newton Road / Winwick Park Avenue / Winwick Link Road
- A49 Winwick Road / Hawleys Lane / A50
- A50 Orford Green / Hallfields Road
- A50 Orford Road / Birchwood Way
- Hilden Road / Insall Road / Blackbrook Avenue

## Summary and Conclusion

This note sets out how the existing M62 J9 VISSIM model (Originally developed by AECOM for Highways England), will be extended, to include the area illustrated in Figure 1. The model will be used to assess the impacts, and any mitigation requirements, resulting from the proposed Peel Hall residential led development. It also provides a critique of the modelling tools available, and considers why VISSIM has been selected as the most appropriate tool for this assessment. This note will be distributed, to all concerned parties, (including the developer Satnam, the developers consultant Highgate Transportation, and the Local Authority WBC), in order to provide transparency over the above approach. The aim of this approach is to capture any subsequent comments, at an early stage in the modelling process, in order to avoid any abortive work being undertaken.

**From:** Flood, Richard <x-rflood@warrington.gov.uk>  
**Sent:** 04 April 2016 15:26  
**To:** Mohan, Frank  
**Cc:** Dickin, Alan; Zenner, Michelle; Johnson, Alistair; Zoefitig, Catherine; Reynolds, Shaun; Gavin.Coupe@atkinsglobal.com; fiona.bennett@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall, Warrington - Modelling

Frank

The concept of using the WMMTM as a reference for the prior matrix is agreeable to us. As we are not the client for this work, it's probably appropriate that this is agreed with Highgate and Atkins (as WBC's modelling auditor).

Regards  
Richard

Richard Flood  
Consultant - Transport for Warrington  
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---

**From:** Mohan, Frank [mailto:frank.mohan@aecom.com]  
**Sent:** 04 April 2016 12:28  
**To:** Flood, Richard  
**Cc:** Dickin, Alan; Zenner, Michelle; Johnson, Alistair; Zoefitig, Catherine; Reynolds, Shaun  
**Subject:** RE: Peel Hall, Warrington - Modelling

Richard

As agreed we are progressing with the concept of a gravity model for the distribution of trips from the proposed development.

I realise however that I had not requested approval from you for the use of the WMMTM to provide a starting prior base matrix for the model work. We require a starting estimate of OD patterns (the "prior matrix") which is then refined using local count and journey time data.

We believe the most appropriate approach would be the use of the WMMTM in a similar fashion to that adopted elsewhere for the Council e.g. Centre Park Link. The only practical alternative would be to use TrafficMaster OD data which is obtainable via DfT. However we would have concerns over its use given the bias towards light goods vehicles in that data set.

Are you comfortable with this approach? As noted above, the prior matrix would be refined to reflect locally observed conditions and would also be disaggregated spatially in the local area using demographic data.

Regards

Frank

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**From:** Flood, Richard [<mailto:x-rflood@warrington.gov.uk>]  
**Sent:** 16 February 2016 09:19  
**To:** Mohan, Frank  
**Cc:** Dickin, Alan; Zenner, Michelle; Johnson, Alistair; Zoefitg, Catherine  
**Subject:** RE: Peel Hall, Warrington - Modelling

Frank

Thanks for the note – on that basis, we are happy to go with a gravity model.

Regards  
Richard

Richard Flood  
Consultant - Transport for Warrington  
Economic Regeneration, Growth and Environment Directorate

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---

**From:** Mohan, Frank [<mailto:frank.mohan@aecom.com>]  
**Sent:** 15 February 2016 18:46  
**To:** Flood, Richard  
**Cc:** Dickin, Alan; Zenner, Michelle; Johnson, Alistair; Zoefitg, Catherine  
**Subject:** RE: Peel Hall, Warrington - Modelling

Richard

Honestly Richard I don't think there are any such issues. The gravity model would be a more transparent means to an end and, as you say, does not invite any unintended criticism relating to the previous strategic model.

We will look at the most appropriate form of such a model and discuss with yourselves and Highgate.

Regards

Frank

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**From:** Flood, Richard [<mailto:x-rflood@warrington.gov.uk>]  
**Sent:** 12 February 2016 09:30  
**To:** Mohan, Frank  
**Cc:** Dickin, Alan; Zenner, Michelle  
**Subject:** RE: Peel Hall, Warrington - Modelling

Frank

I have had a chat with Alan and, even though it sounds like the trip distribution elements of the MMTM could be used (which, presumably is one of the more robust parts of the old model!) we could be criticised as we have previously told developers of this site that it cannot be relied upon.

A new gravity model makes sense but it would be helpful if you could let us know of any unique issues that the MMTM would pick up that a standard gravity model would not.

Regards  
Richard

Richard Flood  
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---

**From:** Mohan, Frank [<mailto:frank.mohan@aecom.com>]  
**Sent:** 11 February 2016 13:56  
**To:** Zenner, Michelle; Flood, Richard; [shaun.reynolds@highwaysengland.co.uk](mailto:shaun.reynolds@highwaysengland.co.uk); [simon.clarke@highwaysengland.co.uk](mailto:simon.clarke@highwaysengland.co.uk)  
**Cc:** Zoefitig, Catherine  
**Subject:** RE: Peel Hall, Warrington - Modelling

All

Fiona's email reminded me I have an action to progress with you in regard to the distribution of trips from the site and how that is dealt with in the modelling.

The developer and their consultants will provide us with trip volumes and the entry / exit point from the site. To distribute beyond that point, we have two options:

- Option A - Utilise the existing WMMTM as a basis; or
- Option B – develop a form of gravity model.

Whilst there are well documented issues with the WMMTM, we would only be using the distribution pattern to inform the assessment; it would still require some work however to ensure network coverage is equivalent between itself and the VISSIM model.

The gravity model is also an option and would just require some agreement on form.

I don't have a strong view either way on this point but would welcome your views / preferences.

Regards

Frank

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**From:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk) [<mailto:fiona.bennett@highgatetransportation.co.uk>]

**Sent:** 11 February 2016 13:08

**To:** Zenner, Michelle; Flood, Richard; [shaun.reynolds@highwaysengland.co.uk](mailto:shaun.reynolds@highwaysengland.co.uk);  
[simon.clarke@highwaysengland.co.uk](mailto:simon.clarke@highwaysengland.co.uk); Zoefitg, Catherine; Mohan, Frank

**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)

**Subject:** Peel Hall, Warrington - Modelling

Dear all,

The development profile has progressed since we all met mid-January, further to the public consultation and various meetings, and is now as follows:

- Up to 1,200 dwellings (including for 60 independent-living retirement dwellings)
- Up to 8,100sqm GFA of employment (starter units made up of mainly B1c and B2)
- Primary School (1 or 2-phase intake, up to 420 pupils)
- Retirement care home (up to 120 beds, land use class C2)
- Neighbourhood centre comprising:
  - Up to 2,000sqm GFA food store
  - Up to 600sqm GFA small shops (A1/A2) and healthcare (D1)
  - Up to 1,600sqm GFA family pub/restaurant (A3-A5)

We will do an addendum to our recently issued trip note (TN02) to reflect this.

With regard to the first units to be built on site, we have been advised by the client that, in the event of planning permission being granted, they would expect circa 50 dwellings to be occupied by the end of 2019. Therefore can we agree 2019 as the year of opening?

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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\*\*\*\*\*

**From:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
**Sent:** 05 April 2016 10:14  
**To:** Flood, Richard; Mohan, Frank  
**Cc:** Dickin, Alan; Zenner, Michelle; Johnson, Alistair; Zoefitg, Catherine; Reynolds, Shaun; fiona.bennett@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall, Warrington - Modelling

All,

Apologies for the delay in responding, I was on leave yesterday.

I concur that the concept of using the WMMTM as a start point for the development of the base matrix is agreeable. In order for us to complete our audit, we will need details of how the final matrix was developed from the WMMTM and any other local data. It would seem sensible to incorporate this in to the LMVR although I'd be happy to look at a Technical Note in advance of the LMVR if AECOM were keen to get the approach agreed earlier.

I am currently waiting for Alistair Johnson to provide indicative timescales for submission of information and modelling to Atkins so that we can make sure that we have resources ready and available at that time to undertake the work without delay.

Regards,

Gavin.

---

**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]  
**Sent:** 04 April 2016 15:26  
**To:** Mohan, Frank <frank.mohan@aecom.com>  
**Cc:** Dickin, Alan <adickin@warrington.gov.uk>; Zenner, Michelle <mzenner@warrington.gov.uk>; Johnson, Alistair <Alistair.Johnson@aecom.com>; Zoefitg, Catherine <catherine.zoefitg@aecom.com>; Reynolds, Shaun <Shaun.Reynolds@highwaysengland.co.uk>; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>; fiona.bennett@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall, Warrington - Modelling

Frank

The concept of using the WMMTM as a reference for the prior matrix is agreeable to us. As we are not the client for this work, it's probably appropriate that this is agreed with Highgate and Atkins (as WBC's modelling auditor).

Regards  
Richard

Richard Flood  
Consultant - Transport for Warrington  
Economic Regeneration, Growth and Environment Directorate

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 12 April 2016 17:10  
**To:** catherine.zoefitig@aecom.com; Johnson, Alistair (Alistair.Johnson@aecom.com);  
Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com); 'shaun.reynolds@highwaysengland.co.uk'  
**Cc:** frank.mohan@aecom.com; Zenner, Michelle (mzenner@warrington.gov.uk); Flood,  
Richard (x-rflood@warrington.gov.uk); dave.tighe@highgatetransportation.co.uk;  
'simon.clarke@highwaysengland.co.uk' (simon.clarke@highwaysengland.co.uk)  
**Subject:** Peel Hall Trip Rates (Email 1 of 2)  
**Attachments:** 1107 TN 02A on Trip Rates.pdf; 1107 TN06 Trip Discounts .pdf

Dear All,

As previously discussed, please find attached the following Technical Notes:

- TN02/A – Trip Rates
- TN06 – Trip Discounts

Please note that TN02/A/Addendum (on peak period trip rates) will arrive under separate cover due to its file size. Please let me know if it does not arrive.

If you intend to print out these documents, please note that TN02/A is appended to the Addendum, and as such you may not want to print twice.

The masterplan is likely to be issued later this week.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

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HTp/1107/TN/02/A/Addendum  
See Appendix 41 of TA/01/A

Highgate *Transportation*

**Land at Peel Hall, Warrington  
Technical Note on Trip Discounts  
(HTp/1107/TN/06)**

**March 2016**

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## **1.0 Introduction**

- 1.1 This Technical Note has been prepared by Highgate Transportation Limited (HTp) to set out the estimated trip discounts to be applied to the Peel Hall development profile, based on trip containment (likely number of internal trips) and access location.
- 1.2 This Technical Note should be read in conjunction with HTp Technical Note on Trip Rates (TN/02/A) and the accompanying addendum for peak period trip rates (TN/02/A/Addendum).
- 1.3 It is considered that the overall approach and assumptions used are robust because higher trip rates have been used wherever possible, such as calculating the vehicle trips for residential dwellings, B1(c) land use and proposed food store. It is considered that the use of higher trip rates where possible gives confidence to the overall figures used in the assessment.

## 2.0 Trip Discounts and Assumptions

2.1 The estimated trip discounts applied to the level of arrival and departure trips during the AM peak hour are set out in **Table 2.1**.

**Table 2.1 - AM Peak Hour Trip Discounts**

Land Use	Percentage AM Peak Hour 0800-0900			
	Internal	External Pass-by	External New	External Total
Residential	20%	0%	80%	80%
Care Home	0%	0%	100%	100%
Employment	0%	0%	100%	100%
Food Store	60%	10%	30%	40%
Local Centre	70%	0%	30%	30%
Family Pub/Restaurant	-	-	-	-
Primary School	75%	0%	25%	25%
Community Uses	0%	0%	100%	100%

2.2 The estimated trip discounts applied to the level of arrival and departure trips during the PM peak hour are set out in **Table 2.2**.

**Table 2.2 - PM Peak Hour Trip Discounts**

Land Use	Percentage PM Peak Hour 1700-1800			
	Internal	External Pass-by	External New	External Total
Residential	20%	0%	80%	80%
Care Home	0%	0%	100%	100%
Employment	0%	0%	100%	100%
Food Store	60%	10%	30%	40%
Local Centre	70%	0%	30%	30%
Family Pub/Restaurant	25%	0%	75%	75%
Primary School	50%	0%	50%	50%
Community Uses	0%	0%	100%	100%

2.3 There have been a number of assumptions made in the above tables, as follows:

- i. Primary School trips in the AM peak are based on 360 pupils living on site (circa 86%), and the remaining 60 living off site (circa 14%), whilst also accounting for staff travel from outside the site based on the AM and PM trip data from TRICS. It is also acknowledged that not all children living in the development will attend the on-site primary school and this accounted for in **Table 2.1** above.
- ii. Primary School trips in the PM peak set at 50% external to account for teaching staff living off site and a greater proportion of after school club children likely to be living on site.

- iii. An element of residential trips in the peak hours have been internalised due to the availability of the local centre, food store and school land uses on site.
  - iv. No diverted trips have been accounted for in the above tables as these are not expected to be significant in numbers due to site location, type and size of facilities available on site and the location and range of existing facilities available nearby.
- 2.4 Furthermore, it is considered that none of the food store vehicle trips will extend beyond the local residential area, and therefore will not travel onto the A49 during the peak periods. This is considered to also be the case for the local centre and the school in terms of school pupils.
- 2.5 The distribution of employment vehicle trips will be distributed as per the gravity model, which is to be provided by AECOM as part of the network modelling package.
- 2.6 It is expected that the vehicle trips associated with the family pub/restaurant will also be distributed as per the gravity model, but that minimal trips will be added to the A49 due to other similar establishments being available in the wider area.
- 2.7 The distribution of the residential vehicle trips will also be distributed by the gravity model, but there is an expectation that not all of these trips will affect the A49. Indeed, it is expected that there will be a fair proportion of vehicle traffic heading out to the area of Birchwood and beyond in the east, and to the M6 north and south.
- 2.8 It is expected that the gravity model will provide an indication of trip distribution for external vehicle trips associated with the primary school, but that not all of these will use the A49.

### 3.0 Peak Hour Application of Trip Discounts

3.1 The overall trip generation and attraction of the proposed development profile as set out in Table 9.1 from HTP Technical Note TN/02/A is provided below for reference. The peak hour trips are then applied to the discounts shown in **Table 2.1** and **Table 2.2**, as set out in **Table 3.1** and **Table 3.2**, following, for AM and PM peak hour time periods respectively.

**Trip Generation Table 9.1 extract from TN02/A**

Development Traffic	AM Peak Hour		PM Peak Hour	
	Arrival	Departure	Arrival	Departure
Residential Trips	270	628	594	368
Care Home Trips	7	7	8	8
Employment Trips	69	39	20	47
Food Store Trips	92	61	181	191
Local Centre Shop Trips	30	29	36	39
Family Pub/Restaurant Trips	-	-	46	30
Primary School Trips	113	79	19	27
Community Uses	10	5	8	7
<b>Total Trips</b>	<b>591</b>	<b>848</b>	<b>912</b>	<b>717</b>

**Table 3.1 - AM Peak Hour Trips, with Discount Applied**

Land Use	Trip Numbers AM Peak Hour 0800-0900					
	Internal (Arrival)	Internal (Departure)	Pass-By (Arrival)	Pass-by (Departure)	External New (Arrival)	External New (Departure)
Residential	54	126	-	-	216	502
Care Home	0	0	-	-	7	7
Employment	0	0	-	-	69	39
Food Store	55	37	9	6	28	18
Local Centre	18	17	-	-	12	12
Family Pub/Restaurant	-	-	-	-	-	-
Primary School	85	59	-	-	28	20
Community Uses	0	0	-	-	10	5
<b>To be used in modelling</b>			<b>9</b>	<b>6</b>	<b>370</b>	<b>603</b>

**Table 3.2 - PM Peak Hour Trips, with Discount Applied**

Land Use	Trip Numbers PM Peak Hour 1700-1800					
	Internal (Arrival)	Internal (Departure)	Pass-By (Arrival)	Pass-by (Departure)	External New (Arrival)	External New (Departure)
Residential	119	74	-	-	475	294
Care Home	0	0	-	-	8	8
Employment	0	0	-	-	20	47
Food Store	109	115	18	19	54	57
Local Centre	25	27	-	-	11	12
Family Pub/Restaurant	11	7	-	-	35	23
Primary School	9	13	-	-	10	14
Community Uses	0	0	-	-	8	7
<b>To be used in modelling</b>			<b>18</b>	<b>19</b>	<b>621</b>	<b>462</b>

3.2 A summary of the resultant peak hour vehicle trips and the overall discount, based on the expected level of contained trips, is set out in **Table 3.3** below.

**Table 3.3 – Summary of Vehicle Trip Numbers**

	AM Arrival	AM Departure	PM Arrival	PM Departure
<b>a) Total Identified Trips TN02/A</b>	591	848	912	717
<b>b) Figures to be Used in Modelling</b>	379	609	639	481
<b>Overall Discount (a-b)</b>	212	239	273	236

3.3 It can therefore be seen that there may be up to 1,120 trips on the local highway network in the busiest peak hour as a result of the Peel Hall development.

#### 4.0 Peak Period Application of Trip Discounts

4.1 It is considered that the peak hour discounts provided in **Tables 2.1** and **2.2** can be applied to the vehicle trips across the peak periods of 0700-0930 and 1600-1830, as set out in the HTP Addendum to TN/02/A for all proposed land uses forming the Peel Hall masterplan.

4.2 However, the residential units are anticipated to be as follows:

- i. 0700-0800 - 95% external
- ii. 0800-0900 - as shown in **Table 2.1**
- iii. 0900-0930 - 70% external  
 (To account for an increase in trips to on-site facilities and amenities)
- iv. 1600-1830 - as shown in **Table 2.2**

4.3 The Primary School is also anticipated to have a variation in constrained trips within the AM peak, as follows:

- i. 0700-0800 - 100% external
- ii. 0800-0930 - as shown in **Table 2.1**
- iii. 1600-1830 - as shown in **Table 2.2**

4.4 The resultant vehicle trips arising from the proposed development across the AM and PM peak periods are now provided below in the following tables.

**Table 4.1 – Residential (1,200 houses)**

Peak Period	EXTERNAL TRIPS		
	%	Arr.	Dep.
<b>0700-0800</b>	95%	144	433
<b>0800-0900</b>	80%	216	502
<b>0900-0930</b>	70%	92	123
<b>1600-1700</b>	80%	402	238
<b>1700-1800</b>	80%	475	294
<b>1800-1830</b>	80%	174	131

**Table 4.2 – Care Home (100-beds)**

Peak Period	EXTERNAL TRIPS (100%)	
	Arr.	Dep.
<b>0700-0800</b>	8	8
<b>0800-0900</b>	7	7
<b>0900-0930</b>	5	2
<b>1600-1700</b>	7	5
<b>1700-1800</b>	8	11
<b>1800-1830</b>	5	5

**Table 4.3 – Employment (7,500sqm)**

Peak Period	EXTERNAL TRIPS (100%)	
	Arr.	Dep.
<b>0700-0800</b>	52	12
<b>0800-0900</b>	69	39
<b>0900-0930</b>	27	20
<b>1600-1700</b>	36	50
<b>1700-1800</b>	20	47
<b>1800-1830</b>	5	16

**Table 4.4 – Food Store (2,000sqm)**

Peak Period	EXTERNAL TRIPS (40%)	
	Arr.	Dep.
<b>0700-0800</b>	14	9
<b>0800-0900</b>	37	24
<b>0900-0930</b>	27	20
<b>1600-1700</b>	65	62
<b>1700-1800</b>	72	76
<b>1800-1830</b>	28	34

**Table 4.5 – Local Centre (600sqm)**

Peak Period	EXTERNAL TRIPS (30%)	
	Arr.	Dep.
<b>0700-0800</b>	8	7
<b>0800-0900</b>	9	9
<b>0900-0930</b>	5	5
<b>1600-1700</b>	10	11
<b>1700-1800</b>	11	12
<b>1800-1830</b>	5	5

**Table 4.6 – Family Pub/Restaurant (1,600sqm)**

Peak Period	EXTERNAL TRIPS (75%)	
	Arr.	Dep.
<b>1600-1700</b>	22	14
<b>1700-1800</b>	35	23
<b>1800-1830</b>	18	15

**Table 4.7 – Primary School (420 pupils)**

Peak Period	EXTERNAL TRIPS		
	%	Arr.	Dep.
<b>0700-0800</b>	100%	24	10
<b>0800-0900</b>	25%	28	20
<b>0900-0930</b>	25%	3	3
<b>1600-1700</b>	50%	25	35
<b>1700-1800</b>	50%	10	14
<b>1800-1830</b>	50%	4	3

**Table 4.8 – Sports Pitches and Ancillary Facilities**

Peak Period	TRIPS	
	Arr.	Dep.
<b>0700-0800</b>	0	0
<b>0800-0900</b>	10	5
<b>0900-0930</b>	3	5
<b>1600-1700</b>	8	7
<b>1700-1800</b>	7	8
<b>1800-1830</b>	10	5

## 5.0 Summary

- 5.1 This Technical Note has been prepared by Highgate Transportation Limited (HTp) to set out the estimated trip discounts to be applied to the Peel Hall development profile, based on trip containment and access location.
- 5.2 Trip discounts have been applied to AM and PM peak hour arrival and departure trips for the proposed development profile. The assumptions used to calculate the anticipated level of internal trips has been based on the type and size of land uses proposed in respect of the overall quantum of development but also in relation to the local residential area. Some assumptions have been as follows:
- i. Primary school trips based on the number of school places expected to be generated by the site, accounting for staff travel from off-site and an acknowledgement that that some children living on-site will attend a different primary school. These assumptions have been taken into account in **Table 2.1**.
  - ii. An element of residential trips in the peak hours have been internalised due to the availability of the local centre, food store and school land uses on site.
- 5.3 The same approach and basic assumptions have been utilised to apply trip discounts across the peak periods of 0700-0930 and 1600-1830, as set out in **Section 4.0**, for inserting into the VISSIM model.
- 5.4 External trips have been considered in the form of pass-by and those newly generated. No account of diverted trips has been made as these are not expected to be of a significant level for this development.
- 5.5 Furthermore, none of the vehicle trips associated with the food store and local centre will extend beyond the local residential area, and therefore will not travel onto the A49 during the peak periods. This is considered to also be the case for the school trip rates in terms of school pupils.
- 5.6 Employment vehicle trips will be distributed as per a gravity model, as well as those associated with the external primary school trips and the family pub/restaurant. It is considered that only a minimal quantity of trips from the latter will be added to the A49 due to other similar establishments being available in the wider area.
- 5.7 The distribution of the residential vehicle trips will also be distributed by a gravity model, but there is an expectation that not all of these trips will affect the A49. A fair proportion of vehicle traffic is expected to travel out towards the area of Birchwood and beyond in the east and a proportion of trips will be to the M6 in the north and south.
- 5.8 The number of external vehicle trips likely to be generated by the Peel Hall development are as follows:
- i. AM peak hour – 379 arrivals and 609 departures.
  - ii. PM peak hour – 639 arrivals and 481 departures.

- 5.9 It can therefore be seen that there may be up to 1,120 trips on the local highway network in the busiest peak hour as a result of the Peel Hall development.
- 5.10 These external trips will be distributed from the site onto the local highway network based on the corresponding development access point. Trip distribution at each site access will be set out in HTp Technical Note TN/08.
- 5.11 It is considered that the overall approach and assumptions that have been used in this Technical Note are robust and that the use of higher trip rates where possible gives confidence to the overall figures used in the assessment.

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 12 April 2016 17:14  
**To:** catherine.zoeftig@aecom.com; Johnson, Alistair (Alistair.Johnson@aecom.com);  
Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com); 'shaun.reynolds@highwaysengland.co.uk'  
**Cc:** frank.mohan@aecom.com; Zenner, Michelle (mzenner@warrington.gov.uk); Flood,  
Richard (x-rflood@warrington.gov.uk); 'simon.clarke@highwaysengland.co.uk'  
(simon.clarke@highwaysengland.co.uk); dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall Trip Rates (Email 2 of 2)  
**Attachments:** 1107 TN 02A Addendum on Peak Period Trip Rates.pdf

Dear all,

As promised, peak period trip rates (TN02/A/Addendum) are attached.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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HTp/1107/TN/02/A/Addendum  
See Appendix 41 of TA/01/A

**fiona.bennett@highgatetransportation.co.uk**

---

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 14 April 2016 13:55  
**To:** catherine.zoefitig@aecom.com; Johnson, Alistair (Alistair.Johnson@aecom.com);  
Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com); 'shaun.reynolds@highwaysengland.co.uk'  
**Cc:** frank.mohan@aecom.com; Zenner, Michelle (mzenner@warrington.gov.uk); Flood,  
Richard (x-rflood@warrington.gov.uk); 'simon.clarke@highwaysengland.co.uk'  
(simon.clarke@highwaysengland.co.uk); dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall - Vehicular Trips at Access locations  
**Attachments:** 1107 TN08 Number of Vehicular Trips at Each Site Access Location.pdf

Dear all,

Further to my previous emails, please find attached Technical Note TN08 for comment.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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**Land at Peel Hall, Warrington**  
**Technical Note on Number of Vehicular Trips**  
**at Each Site Access Location**  
**(HTp/1107/TN/08)**

**April 2016**

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2.0	Trip Distribution Tables	2

## **Appendices**

Appendix 1	Peel Hall Access Locations (HTp/1107/19/C)
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## 1.0 Introduction

- 1.1 This initial Technical Note on internal trip distribution has been prepared by Highgate Transportation Limited (HTp) to set out the number of peak period vehicular trips at each of the proposed vehicular access points on the Peel Hall development site, for each proposed land use, to inform the forthcoming modelling and AECOM gravity model.
- 1.2 An overview of the site access locations are provided on the plan HTP/1107/19/C contained at **Appendix 1** of this report for reference.
- 1.3 This Technical Note should be read in conjunction with HTp Technical Note on Trip Rates (TN/02/A), the accompanying addendum for peak period trip rates (TN/02/A/Addendum) and Technical Note TN/06 Trip Discounts.
- 1.4 It is anticipated that there will be a follow-up report to this Technical Note (TN/08) that sets out the traffic distribution on the wider highway network, further to the assumptions set out in TN/06 and the results of the AECOM gravity model.

## 2.0 Trip Distribution Tables

- 2.1 The following **Tables 2.1 to 2.6** set out the total number of trips at each of the access points for the land uses proposed for the Peel Hall development.
- 2.2 A discount has not been applied to the residential vehicular trip rates at Mill Lane/Blackbrook Avenue and Birch Avenue as these areas are self-contained with restricted vehicular permeability and therefore any vehicular trip will require travel off site. Therefore the overall total trip figures provided in each of the following **Tables 2.1 to 2.6** are higher than shown in Table 3.3 of HTP Technical Note TN/06.
- 2.3 It should be noted that although motorised vehicular access will be restricted from both the Mill Lane/Blackbrook Avenue and the Birch Avenue residential plots, pedestrian and cycle routes will be provided that connect into the wider Peel Hall site.

**Table 2.1 – Number of Vehicular Trips at Site Accesses 0700-0800**

AM Peak 0700-0800								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.127	0.380	19	57	0%	19	57
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.127	0.380	89	266	5%	85	253
	Primary School (up to 420 pupils)	0.057	0.023	24	10	0%	24	10
Poplars Ave. (Central)	330 Dwellings	0.127	0.380	42	125	5%	40	119
	Food Store (2,000sqm)	1.801	1.082	36	22	60%	14*	9*
	Local Centre (600sqm)	4.257	3.792	26	23	70%	8	7
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.075	0.083	8	8	0%	8	8
Poplars Ave. (West)	Employment (7,500sqm)	0.688	0.164	52	12	0%	52	12
Birch Avenue	20 Dwellings	0.127	0.380	3	8	0%	3	8
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	0	0	0%	0	0
<b>Total</b>				299	531	-	<b>253</b>	<b>483</b>
								<b>736</b>

\*Pass-by trips account for 10%

**Table 2.2 – Number of Vehicular Trips at Site Accesses 0800-0900**

AM Peak 0800-0900								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.225	0.523	34	79	0%	34	79
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.225	0.523	158	366	20%	126	293
	Primary School (up to 420 pupils)	0.269	0.189	113	79	75%	28	20
Poplars Ave. (Central)	330 Dwellings	0.225	0.523	74	173	20%	59	138
	Food Store (2,000sqm)	4.615	3.030	92	61	60%	37*	24*
	Local Centre (600sqm)	5.025	4.780	30	29	70%	9	9
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.068	0.068	7	7	0%	7	7
Poplars Ave. (West)	Employment (7,500sqm)	0.919	0.514	69	39	0%	69	39
Birch Avenue	20 Dwellings	0.225	0.523	5	11	0%	5	11
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
<b>Total</b>				592	849	-	<b>384</b>	<b>625</b>
								<b>1,009</b>

\*Pass-by trips account for 10%

**Table 2.3 - Number of Vehicular Trips at Site Accesses 0900-0930**

AM Peak 0900-0930								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.109	0.147	16	22	0%	16	22
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.109	0.147	76	103	30%	53	72
	Primary School (up to 420 pupils)	0.024	0.028	10	12	75%	3	3
Poplars Ave. (Central)	330 Dwellings	0.109	0.147	36	49	30%	25	34
	Food Store (2,000sqm)	3.368	2.554	67	51	60%	27*	20*
	Local Centre (600sqm)	2.851	2.601	17	16	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	-	-	-	-	-	-	-
	100-Bed Care Home	0.045	0.019	5	2	0%	5	2
Poplars Ave. (West)	Employment (7,500sqm)	0.354	0.272	27	20	0%	27	20
Birch Avenue	20 Dwellings	0.109	0.147	2	3	0%	2	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	3	5	0%	3	5
<b>Total</b>				259	283	-	<b>166</b>	<b>186</b>
							<b>352</b>	

\*Pass-by trips account for 10%

**Table 2.4 - Number of Vehicular Trips at Site Accesses 1600-1700**

PM Peak 1600-1700								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.419	0.248	63	37	0%	63	37
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.419	0.248	293	174	20%	234	139
	Primary School (up to 420 pupils)	0.116	0.165	49	69	50%	25	35
Poplars Ave. (Central)	330 Dwellings	0.419	0.248	138	82	20%	110	66
	Food Store (2,000sqm)	8.121	7.697	162	154	60%	65*	62*
	Local Centre (600sqm)	5.735	5.828	34	35	70%	10	11
	Family Pub/ Restaurant (1,600sqm)	1.828	1.195	29	19	25%	22	14
	100-Bed Care Home	0.068	0.053	7	5	0%	7	5
Poplars Ave. (West)	Employment (7,500sqm)	0.473	0.668	36	50	0%	36	50
Birch Avenue	20 Dwellings	0.419	0.248	8	5	0%	8	5
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	8	7	0%	8	7
<b>Total</b>				827	637	-	<b>588</b>	<b>431</b>
							<b>1,019</b>	

\*Pass-by trips account for 10%

**Table 2.5 - Number of Vehicular Trips at Site Accesses 1700-1800**

PM Peak 1700-1800								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.495	0.307	74	46	0%	74	46
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.495	0.307	347	215	20%	278	172
	Primary School (up to 420 pupils)	0.045	0.063	19	27	50%	10	14
Poplars Ave. (Central)	330 Dwellings	0.495	0.307	163	101	20%	130	81
	Food Store (2,000sqm)	9.056	9.550	181	191	60%	72*	76*
	Local Centre (600sqm)	6.039	6.495	36	39	70%	11	12
	Family Pub/ Restaurant (1,600sqm)	2.847	1.845	46	30	25%	35	23
	100-Bed Care Home	0.083	0.113	8	11	0%	8	11
Poplars Ave. (West)	Employment (7,500sqm)	0.262	0.621	20	47	0%	20	47
Birch Avenue	20 Dwellings	0.495	0.307	10	6	0%	10	6
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	7	8	0%	7	8
<b>Total</b>				911	721	-	<b>655</b>	<b>496</b>
							<b>1,151</b>	

\*Pass-by trips account for 10%

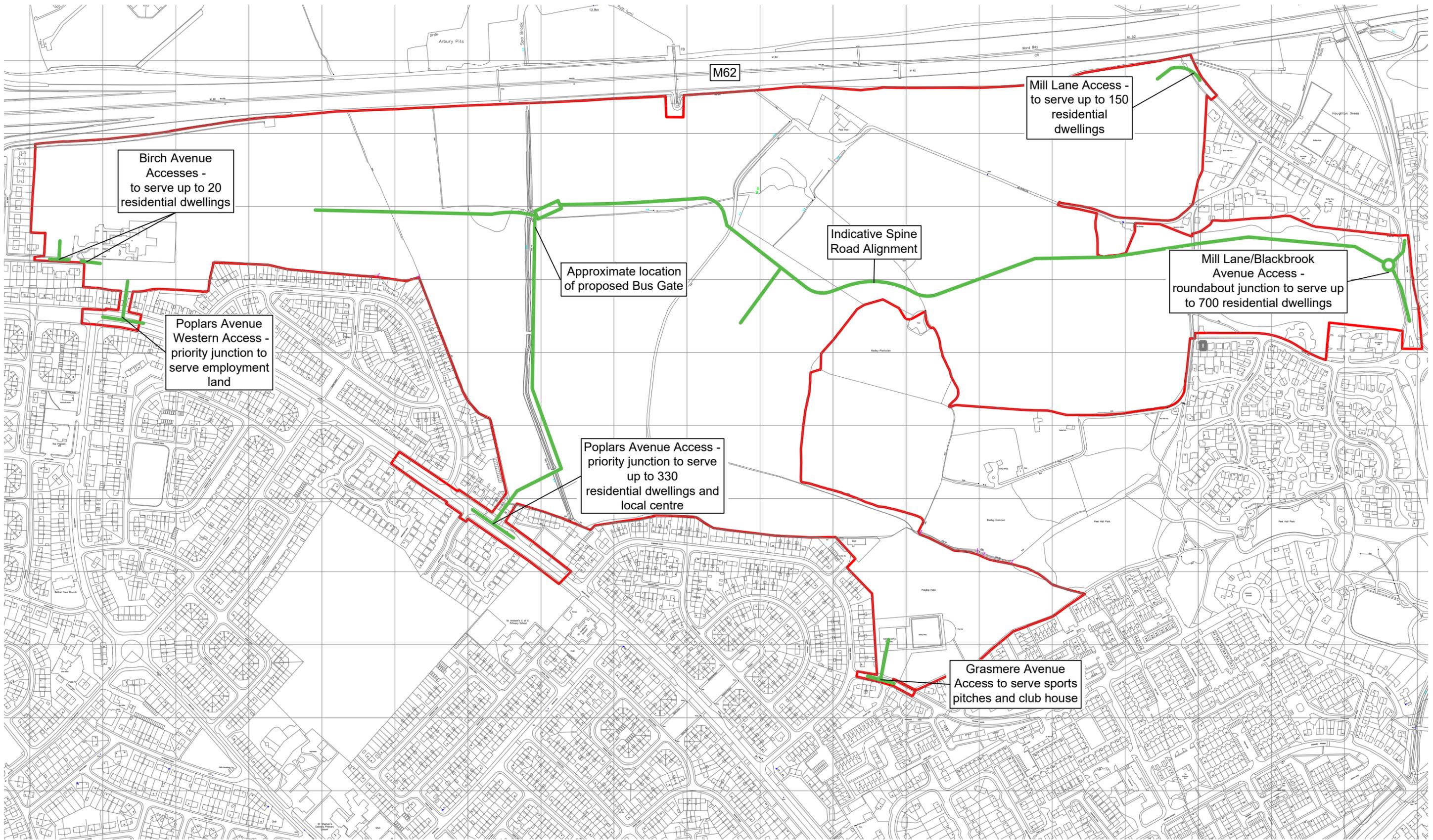
**Table 2.6 - Number of Vehicular Trips at Site Accesses 1800-1830**

PM Peak 1800-1830								
Access	Units/sqm	Trip Rate		Trips		Discounts/ Internal Trips	Total Trips	
		Arrival	Departure	Arrival	Departure		Arrival	Departure
Mill Lane	150 Dwellings	0.182	0.137	27	21	0%	27	21
Mill Lane/ Blackbrook Avenue	700 Dwellings	0.182	0.137	127	96	20%	102	77
	Primary School (up to 420 pupils)	0.020	0.015	8	6	50%	4	3
Poplars Ave. (Central)	330 Dwellings	0.182	0.137	60	45	20%	48	36
	Food Store (2,000sqm)	3.554	4.251	71	85	60%	28*	34*
	Local Centre (600sqm)	2.910	3.049	18	18	70%	5	5
	Family Pub/ Restaurant (1,600sqm)	1.512	1.257	24	20	25%	18	15
	100-Bed Care Home	0.049	0.053	5	5	0%	5	5
Poplars Ave. (West)	Employment (7,500sqm)	0.067	0.216	5	16	0%	5	16
Birch Avenue	20 Dwellings	0.182	0.137	4	3	0%	4	3
Grasmere Avenue	Sports Pitches and Community Facilities	-	-	10	5	0%	10	5
<b>Total</b>				359	320	-	<b>256</b>	<b>220</b>
							<b>476</b>	

\*Pass-by trips account for 10%

## **Appendix 1**

Peel Hall Access Locations (HTp/1107/19/C)



Birch Avenue  
Accesses -  
to serve up to 20  
residential dwellings

Poplars Avenue  
Western Access -  
priority junction to  
serve employment  
land

Approximate location  
of proposed Bus Gate

Poplars Avenue Access -  
priority junction to serve  
up to 330  
residential dwellings and  
local centre

Indicative Spine  
Road Alignment

Mill Lane Access -  
to serve up to 150  
residential  
dwellings

Mill Lane/Blackbrook  
Avenue Access -  
roundabout junction to serve up  
to 700 residential dwellings

Grasmere Avenue  
Access to serve sports  
pitches and club house

NOTES:  
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C	Amendment to dwelling numbers at access points	12/04/16
B	Alteration to dwelling numbers at access points	04/03/16
A	Reduction in number of dwellings shown off Birch Avenue	19/02/16
ISSUE	REASON FOR REVISION	DATE
DATE:	DRAWN BY:	CHECKED:
12/01/15	FB	DT

PROJECT:	PEEL HALL, WARRINGTON
CLIENT:	SATNAM

TITLE:	PROPOSED ACCESS POINTS AND INDICATIVE SPINE ROAD		
PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:	
1107	19	Not to scale	

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 © Highgate Transportation Limited

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---

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 28 April 2016 15:56  
**To:** catherine.zoeftig@aecom.com; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com> (Gavin.Coupe@atkinsglobal.com); 'shaun.reynolds@highwaysengland.co.uk'  
**Cc:** Zenner, Michelle (mzenner@warrington.gov.uk); Flood, Richard (x-rflood@warrington.gov.uk); Johnson, Alistair (Alistair.Johnson@aecom.com); frank.mohan@aecom.com; dave.tighe@highgatetransportation.co.uk; 'simon.clarke@highwaysengland.co.uk' (simon.clarke@highwaysengland.co.uk)  
**Subject:** Peel Hall - Committed Developments  
**Attachments:** 1107 TN10 on Committed Developments.pdf

Dear All,

Further to my previous emails, please find attached Technical Note TN10 on committed development for comment and use within the VISSIM model.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

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HTp/1107/TN/10  
See Appendix 53 of TA/01/A

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---

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 13 May 2016 14:55  
**To:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com)  
**Cc:** Zenner, Michelle (mzenner@warrington.gov.uk); Flood, Richard (x-rflood@warrington.gov.uk); 'shaun.reynolds@highwaysengland.co.uk'; 'simon.clarke@highwaysengland.co.uk' (simon.clarke@highwaysengland.co.uk); catherine.zoeftig@aecom.com; dave.tighe@highgatetransportation.co.uk; frank.mohan@aecom.com; Johnson, Alistair (Alistair.Johnson@aecom.com)  
**Subject:** Peel Hall Technical Note on Trip Distribution - Gravity Model  
**Attachments:** 1107 TN08 Addendum on Trip Distribution.pdf; 140367-B-001-M.pdf

Dear Gavin,

Please find attached the technical note on Peel Hall trip distribution for agreement. This is the gravity model that has been built by AECOM for the Peel Hall site.

I also attach the latest site masterplan.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

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**Land at Peel Hall, Warrington  
Trip Distribution – Gravity Model  
(HTp/1107/TN/08/Addendum)**

**May 2016**

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2.0	Traffic Distribution	2

## **Appendices**

Appendix 1	AECOM Trip Distribution Technical Note
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## **1.0 Introduction**

- 1.1 This Technical Note on trip distribution has been prepared by Highgate Transportation Limited (HTp) further to the previous Technical Note on internal trip distribution (TN/08) to present the gravity model for Peel Hall that has been provided by AECOM, in order to enable the proposed Peel Hall trip distribution to be agreed with Warrington Borough Council (WBC).
- 1.2 WBC highway officers agreed the use of their Multi Modal Transport Model as the basis for the gravity model.
- 1.3 This Technical Note should be read in conjunction with HTp Technical Note on Trip Rates (TN/02/A), the accompanying addendum for Peak Period Trip Rates (TN/02/A/Addendum), Technical Note TN/06 Trip Discounts, Technical Note TN/08 that sets out the number of vehicular trips expected at each access point and also the Technical Note on Pub/Restaurant Vehicular Trips Update (TN/12).

## 2.0 Traffic Distribution

- 2.1 As part of the transport assessment process it has been agreed with Highways England and WBC highway officers to expand the existing VISSIM micro simulation model that covers parts of the M62 and A49 corridors. This model was originally developed by AECOM on behalf of Highways England.
- 2.2 In order to provide the VISSIM model with trip distribution for the Peel Hall site a gravity model needed to be built. WBC highway officers agreed the use of their Multi Modal Transport Model (MMTM) as the basis for the gravity model.
- 2.3 Therefore the gravity model has been prepared to derive the trip distribution for each of the proposed land use, based on the zoning levels contained in the Warrington MMTM. As such the origin-destination matrices for the modelled time periods were derived from the trip proportions set out in the MMTM and applied to the Peel Hall development, with the Peel Hall trips grouped into three categories: residential; employment and other (being the primary school, the local centre and food store, care home, family pub and sports facilities).
- 2.4 It should be noted that the Warrington MMTM is based on observed traffic flows and origin destination data and as such gives confidence to the data derived from the AECOM Peel Hall gravity model.
- 2.5 The AECOM technical note on trip distribution setting out the methodology and results from the gravity model is contained at **Appendix 1**.
- 2.6 Based on the manual interpretation of the gravity model results, **Table 2.1** below sets out an approximation of the trip distribution derived from the gravity model.

**Table 2.1: Trip distribution summary derived from the gravity model**

<b>Direction/Destination</b>	<b>AM</b>	<b>PM</b>
M62 west	5%	6%
M62 east	2%	5%
Town Centre	8%	1%
South Warrington	18%	30%
Callands	10%	9%
Hulme	20%	17%
Birchwood	14%	11%
Fearnhead	4%	5%
Winwick	10%	14%
A49	9%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>

- 2.7 As set out in **paragraph 2.4** above, the MMTM is based on observed data and as such the origin-destination data for the Peel Hall site is derived from actual travel patterns.

- 2.8 Therefore in **Table 2.1** it can be seen that there is limited trip loading onto the A49 due to existing levels of congestion, and that figures for the town centre and south Warrington appear skewed. AECOM were asked to review this and it can be confirmed that the figures for the town centre and south Warrington are a direct reflection of existing car driver travel patterns, in that to avoid areas of congestion to the north of the town centre around the A49, they travel to and from the town centre via rat-run routes to the east.
- 2.9 It should be noted that the actual gravity model will be fed directly into the VISSIM model in order to produce an assignment throughout the study area.

13/05/16

HTp/1107/TN/08 Appendix 1 + 140367-B-001-M not printed due to size  
(most up to date version of the 'Gravity Model' (since referred to as the 'Distribution Model')  
is set out in email of 06/09/16 and provided on USB/electronically

**fiona.bennett@highgatetransportation.co.uk**

---

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 13 May 2016 16:31  
**To:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com)  
**Cc:** Zenner, Michelle (mzenner@warrington.gov.uk); Flood, Richard (x-rflood@warrington.gov.uk); 'shaun.reynolds@highwaysengland.co.uk'; 'simon.clarke@highwaysengland.co.uk' (simon.clarke@highwaysengland.co.uk); catherine.zoeftig@aecom.com; Johnson, Alistair (Alistair.Johnson@aecom.com); frank.mohan@aecom.com; dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall - Technical Note on Traffic Growth  
**Attachments:** 1107 TN07 on Traffic Growth.pdf

Dear Gavin,

Please find attached a Technical Note on Traffic Growth for the Peel Hall site for your comment.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

*Highgate Transportation Ltd,  
Box 13, 42 Triangle West,  
Park Street, BRISTOL BS8 1ES  
Company Registration Number: 07500534*

HTp/1107/TN/07  
See Appendix 51 of TA/01/A

Omega/Lingley Green Committee Meeting, Warrington

**Date:** 26<sup>th</sup> May 2016  
**Time:** 18.30  
**Attendees:** Colin Griffiths

TOPIC	STATUS / MINUTE
1.	A main issue was protection of amenity for and from RM depot 24/7 operation. Conditions are applied to determine the height of acoustic barriers and size of landscape buffers at RM stage. RM spoke on this issue at the meeting. Members agreed it needed to be handled properly at the detail stage.
2.	Cllr Barr noted the poor turnout at committee, 5 members short of full complement, and said a shame as this was the biggest housing release since the new town era, an important moment etc. He said important to make sure public and committee are involved and protected at future stages. Outline is an important stage.
3.	Andy Farrell said this was an old site and there was an air of inevitability about its coming forward and that may explain the low turnout, and the creation of new councillors after the elections. He said there is a development framework to guide the development of the site and an extremely well worked up partnership including the council to guide the site. The site is owned by the HCA. He is confident the details will be inclusive and correctly done. Careful control can be achieved.
4.	Cllr ?? said this was an amazing moment for Warrington, and here is an opportunity to make a very special/outstanding neighbourhood here.
5.	Michelle (highways officer) stated that the task of the developer is to mitigate the situation at the chosen forward year back to the position without the development, not to solve existing problems. She says part of that exercise here has been to offset the office permission that exists with housing flows in that analysis. She confirmed the model has been "extrapolated" to deal with issues away from the site (not expanded). Michelle stated that an impact of less than 5% was not material in the scale of matters/ impact.
6.	Cllr Wheeler, noted there was a real need for health care facilities on this site, as existing services are stretched. She noted there was no mention of sustainable travel, public transport in the papers. It seems a car led scheme.
7.	S Hunter stated that the £500k could be used in part for bus subsidies. Sustainable travel has already received 200k from earlier Omega phases. There is an Omega Transport Steering Group that looks at this on a regular basis.
8.	Cllr Kerry, stated that the traffic model was too limited in area, and does not refer to impact on roads away from the site. It seems not to be related to the congested conditions on the ground and focuses on the motorway. He has sympathy for Wain Homes. He is also concerned with the acoustic fence to RM. He noted the site was "very important for the owner to get right". He noted there was no public version of the VISSM model. He said maybe the principle of the site was wrong if the details cannot work.
9.	S Hunter referred to the report and raised that £7m has already been spent on Skyline Drive by the HCA. He said anything under 5% increase cannot be pinned on the developer.
10.	Farrell noted that "Warrington is busy because it is successful, if it was not busy it would not be successful". The council has "an obligation to look after all needs of the town and residents, not just traffic". He said the site had been in the development plan for years and it

Omega/Lingley Green Committee Meeting, Warrington

TOPIC	STATUS / MINUTE
	should tackle the issues it generates only, not current problems. There is congestion all through the town and Omega cannot and should not solve that. He referred to the range of bids for public funds being made by the council that will assist with other matters. He concluded by saying "we have to provide homes for local people, we cannot stop applications for housing".
<b>11.</b>	Cllr ?? stated that he hoped the area would have a name ASAP and proper marketing etc, could begin ASAP. Place making was important.
<b>12.</b>	A Farrell stated that a number of informatives on the consent could be set out to ensure a neighbourhood was created.
<b>13.</b>	The application for Omega and Lingley Mere were approved unanimously.

**From:** Colin Griffiths [<mailto:colin@satnam.co.uk>]  
**Sent:** 25 July 2016 06:55  
**To:** Bell, Michael; Davies, Michael (Planning) ([mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk))  
**Cc:** Dave Tighe ([dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk))  
**Subject:** FW: LETTER FROM COLIN GRIFFITHS Re Peel Hall Application - Highways

Mike (Bell) in Mike Davies absence,

Further to the string of emails set out below regarding the validation of the recently submitted application for Peel Hall.

1. The position of the applicants is that the application should be validated forthwith, the information submitted meets your validation guidelines and is in excess of that submitted with the Omega application.
2. The operation of validation procedures in a clear and consistent fashion is important for transparency and fairness. This will avoid prejudice being caused or suspected to parties when the rules are applied in a seemingly inconsistent fashion.
3. In this case however, we see that the council agreed with the Omega applicants a period for highway and traffic modelling as an early extension of time for consideration of the application. We are happy to follow a similar approach in the case of Peel Hall.
4. We propose therefore that the application be registered as valid now and the 16 week period for the determination of the application be extended to cover the period 6 weeks following receipt of the Addendum TA that accounts for VISSM modelling work, which is due to be submitted on 14 October 2016, subject to a review at a scheduled meeting on 12th September.
5. We regard 6 weeks through to the end of November as sufficient as your highway officers and their consultants have agreed the scope of the modelling work to date, will be further involved as the modelling progresses, and have the submitted TA that sets out the site access matters and includes a bus based agreed mitigation strategy that is agreed with Network Warrington. I note Mike Davies words in his email of 20<sup>th</sup> July (10:20am) that *"In that scenario, I would ensure that I continue to be very reasonable in terms of what our Highway specialists are asking for, going forward – and not to ask for the desirable rather than the essential"*.
6. In this way the consideration of this important application can progress.
7. We wish to work with your council, not against it in the course of this application, and very much hope an appeal will not be necessary on account of the fundamental agreement between us that the site is appropriate for residential development (as set out in your SHLAA and confirmed in the pre-application advice). With the timetable outlined above, the application could be reported to Development Management Committee on 21<sup>st</sup> December of this year. Clearly in the light of the established need for the land to be brought forward for housing now, an early resolution to this application is in the interest of all parties.

I look forward to hearing from you,

Regards  
Colin

Satnam Group  
T +44 (0) 1242 227159  
M +44 (0) 7932 042253  
F +44 (0) 1242 227160  
17 Imperial Square, Cheltenham, Glos., GL50 1QZ  
United Kingdom

Skype name: colingriffiths1

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**From:** Davies, Michael (Planning) [<mailto:mdavies@warrington.gov.uk>]  
**Sent:** 22 July 2016 14:40  
**To:** Colin Griffiths <[colin@satnam.co.uk](mailto:colin@satnam.co.uk)>  
**Subject:** RE: LETTER FROM COLIN GRIFFITHS Re Peel Hall Application - Highways

Can we agree a target date for the submission of the transport modelling ?

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

**From:** Colin Griffiths [<mailto:colin@satnam.co.uk>]  
**Sent:** 22 July 2016 14:21  
**To:** Davies, Michael (Planning)  
**Subject:** Re: LETTER FROM COLIN GRIFFITHS Re Peel Hall Application - Highways

Mike, I am on holiday currently too, but in advance of your break and to try to wrap this issue up, could you set out that if we were to agree to an extended period for highways consideration, you would be willing to agree to 6 weeks extension following the submission of the TA with VISSM modelling? Clearly your highways officers are included in the ongoing work at present so it will not be new to them when it lands.  
I can then work with that knowledge with Mike next week,  
Have a good break,

Colin  
Satnam Group  
Sent from my iPhone  
+44(0)7932042253

On 22 Jul 2016, at 16:08, Davies, Michael (Planning) <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)> wrote:

Colin,

I will be on leave after today until 8<sup>th</sup> August.

In my absence, and if needed, please liaise with Michael Bell.

Regards,

Mike Davies  
Principal Planning Officer

Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

**From:** Davies, Michael (Planning)  
**Sent:** 20 July 2016 10:20  
**To:** 'Colin Griffiths'  
**Subject:** RE: LETTER FROM COLIN GRIFFITHS Re Peel Hall Application - Highways

Colin –

The Omega application was received in Sept 2015 and determined on 25<sup>th</sup> May 2016. In addition to the wait for transport info – the main delay was to allow us to avoid the election/ purdah period – and to fully agree S106 measures, which were very involved, with viability matters etc

Without prejudice, if you wish I can put the notion of agreeing a time extension with you for Peel Hall to senior staff here – but such an extension would need to be explicit; accompanied by your undertaking not to appeal against non-determination (within any agreed period) and realistically would need to run from the time we have all the transport info/ modelling we feel we need (the target date for the submission of which we would need to agree too).

In that scenario, I would ensure that I continue to be very reasonable in terms of what our Highway specialists are asking for, going forward – and not to ask for the desirable rather than the essential.

Regards,

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

**From:** Colin Griffiths [<mailto:colin@satnam.co.uk>]  
**Sent:** 20 July 2016 06:29  
**To:** Davies, Michael (Planning)

**Cc:** Susan Brown

**Subject:** Re: LETTER FROM COLIN GRIFFITHS Re Peel Hall Application - Highways

Mike,

Without prejudice to our response, what was the agreed extended period for the determination of the Omega application?

Colin

Satnam Group

Sent from my iPhone

+44(0)7932042253

On 19 Jul 2016, at 15:52, Davies, Michael (Planning) <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)> wrote:

Colin –

In accordance with the Planning Acts, the particulars or evidence the authority can require to be included in the application must be:-

- reasonable having regard, in particular, to the nature and scale of the proposed development; and
- are about a matter which it is reasonable to think will be a material consideration in the determination of the application;

As set out during our pre-application discussions, for example at our meeting on 20<sup>th</sup> January 2016 and in our letter to you from Michael Bell dated 26<sup>th</sup> February 2016, detailed traffic modelling information will be needed to support the application. No such modelling has been provided in the submitted Transport Assessment. The traffic modelling will be essential to understand the impact of the scheme and any required mitigation. Such information will also have a bearing on matters such as air quality assessment and on the robustness of some aspects of your Environmental Statement.

Without the detailed modelling information, we can not consider the TA to be fit for purpose.

The highway interface with the Peel Hall site is an established residential estate road which pre-dates current design standards. With Omega, the interface is primarily with Skyline Drive; a modern, purpose built, high-standard distributor road, supplemented with specific improvements to M62 Junction 8. On this basis – and on the basis that the traffic impacts at Omega were generally already understood, the Highway Authority had far greater confidence of the ability of the Omega local network to accommodate the development traffic. This was even more the case given the known history of committed development and mitigation at the site. These are considered to be clear distinctions with the Peel Hall proposal and background.

Furthermore, whilst the submitted TA does include local level modelling, this is based on existing traffic flows and manually assumed assignment of the development traffic to the network. Whilst the modelling presented is useful to see:

- A) The value of this is limited, as the yet to be finalised network model *could* produce significantly different flows to those assumed, which would make the assessments submitted of very limited value;

- B) We would expect to see a consistent methodology applied between the opening year and design year assessments – for instance, to understand if, when and where mitigation would be required. The current inconsistent approach would not allow this.

In addition, it was agreed with the developer at Omega that the period for determination should be extended, and that an appeal against non-determination would not be submitted. This removed the risk to the Council of a non-determination appeal – which might otherwise arise where an application is validated before required information is submitted in full, and the authority has to wait for this.

As agreed previously, I would be very grateful if you would confirm the scope and content of the traffic modelling work with the Council's Highways team, whose advice I will then bear in mind in deciding whether the application can be registered as valid.

In the meantime, please regard this as an Invalidation Notice issued by the Local Planning Authority.

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

**From:** Colin Griffiths <colin@satnam.co.uk>  
**Sent:** 10 August 2016 11:25  
**To:** Davies, Michael (Planning) (mdavies@warrington.gov.uk); Bell, Michael  
**Subject:** FW: Peel Hall.

Mike,

Further to our discussion yesterday please see a note from Highgate below setting out what is expected to occur over the next few months and what will be submitted in the October TA addendum.

I am now on my mobile for this afternoon and Thursday. Please feel free to call,

*Dear Colin,*

*Following our review meeting, please find below a summary of where we are to date with the highways work. We also set out what additional material will be provided in the October TA Addendum.*

***Submitted highways information***

***The submitted TA includes the following:***

- ***Development traffic flows***
- ***Trip distribution***
- ***Modelled access junctions***
- ***2019 growth plus committed flows***
- ***Over £2m bus mitigation measures***

***It is therefore considered that there is plenty of information within the TA for highway officers to consider and provide comment on, which will inform the October Addendum TA.***

***In addition to the TA submitted with the application, during the pre-application stage discussions were held with WBC highway officers and Highways England, and technical notes were submitted including trip rates, trip discounting, distribution, traffic growth and number of vehicular trips at the site access junctions. These are currently subject to ongoing discussion.***

***In summary, in the run up to the application there was a significant level of work that was submitted and that Warrington highway officers have been engaged in.***

***In reality, what officers have at present is everything except the impact of development traffic on the wider highway network (i.e. beyond the site access points). This will follow in the October Addendum TA.***

***12th September Review Meeting***

***As you are aware, AECOM have been building a new VISSIM model of the wider highway network; the study area of which is agreed with WBC highway officers and Highways England, and this is nearing completion. A review meeting is to be held on 12th September and WBC highway officers, Highways England and associated consultants have agreed to attend and we will ensure that their comments on the VISSIM modelling and need for further work are taken into account.***

***By the 12th September it is expected that the following information will be available to be reviewed at the meeting:***

- ***Base 2015 AM and PM***
- ***2019 Do Minimum + committed development AM and PM***
- ***2019 Do Minimum + committed development + Peel Hall AM and PM***
- ***2029 Do Minimum + committed development AM and PM***
- ***2029 Do Minimum + committed development + Peel Hall AM and PM***

*Following this meeting, we would expect to spend the next month preparing the Addendum TA that brings all of this information together.*

*The meeting on 12th is also expected to identify possible further mitigation measures and sensitivity tests, which will then be modelled during September and October; the results of this are expected to be available for consideration in the second half of October.*

**October Addendum TA Submission**

*The Addendum TA is expected to be submitted to WBC by the 14th October and will include the following:*

- *Tabulated output data from all the VISSIM modelling set out above, of turning movements at each junction and queue lengths*
- *An analysis of the impact of the development on the wider highway network in 2019 and 2029, based on vehicle numbers, percentage impact and difference over 'without development' scenario*
- *A summary of Do-Something scenario modelling progress and extent of agreed mitigation*

*Therefore, we would have expected to have agreed with highway officers the impact of the development and supporting mitigation measures in sufficient detail for them to provide their consultation response before the Christmas break.*

*Happy to discuss.*

*Kind regards,  
Dave*

*Dave Tighe  
HighgateTransportation*

*Tel: 07973 375 937  
dave.tighe@highgatetransportation.co.uk*

Regards  
Colin

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Skype name: colingriffiths1

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**From:** Davies, Michael (Planning) [mailto:mdavies@warrington.gov.uk]  
**Sent:** 09 August 2016 15:36  
**To:** Colin Griffiths <colin@satnam.co.uk>  
**Subject:** RE: Peel Hall.

Colin –

I think you are meeting with your Highways specialists today.

**From:** Colin Griffiths [<mailto:colin@satnam.co.uk>]  
**Sent:** 12 August 2016 11:33  
**To:** Davies, Michael (Planning) ([mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk))  
**Cc:** Bell, Michael  
**Subject:** Peel Hall, Application.

Mike,

Further to the recent application submitted regarding this site and our various discussions and emails concerning its validation, I confirm the following,

1. All of the information set out in Highgate Transportation's Email from Dave Tighe of 11.25 am on 10th August 2016 will be submitted for assessment to the local planning authority by end of business on 14th October 2016, namely:
  - An Addendum TA Submission which includes tabulated output data from all the VISSIM modelling; of turning movements at each junction and queue lengths; an analysis of the impact of the development on the wider highway network in 2019 and 2029, based on vehicle numbers, percentage impact and difference over 'without development' scenario; a summary of Do-Something scenario modelling progress and the full extent of proposed mitigation;
2. That an extension of time for the determination of the application until 23rd February 2017 is agreed by the applicant.

I look forward to working with you and your colleagues on this important planning application,

Regards  
Colin

Satnam Group  
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F +44 (0) 1242 227160  
17 Imperial Square, Cheltenham, Glos., GL50 1QZ  
United Kingdom

Skype name: colingriffiths1

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1 8 AUG 2016

# WARRINGTON Borough Council



Mr Colin Griffiths,  
Satnam Planning Services  
17, Imperial Square  
Cheltenham  
Glous  
GL50 1QZ

Professor Steven  
Broomhead  
Chief Executive

Peter Astley MBE  
Assistant Director  
Regulation & Public  
Protection

3rd Floor New Town  
House  
Buttermarket Street  
Warrington  
WA1 2NH

Date: 16-Aug-2016  
E-mail: devcontrol@warrington.gov.uk

Dear Mr Colin Griffiths,

**TOWN & COUNTRY PLANNING ACT 1990**  
**APPLICATION FOR PLANNING PERMISSION ACCOMPANIED BY**  
**AN ENVIRONMENTAL ASSESSMENT**

devcontrol@warrington.gov.uk

**NOTICE OF VALIDATION**

01925 442819

<b>Application No:</b>	2016/28492
<b>Location:</b>	Land at Peel Hall; Land South of M62 bounded by, Elm Road; Birch Avenue; Poplars Avenue; Newhaven Road; Windermere Avenue, Grasemere Avenue; Merewood Close, Osprey Close Lockerbie Close, Ballater Drive and Mill Lane, Poplars & Hulme, Warrington
<b>Proposal:</b>	Major Development: Outline planning application for a new mixed use neighbourhood comprising residential institution (residential care home - Use Class C2); up to 1200 dwelling houses and apartments (Use Class C3); local centre including food store up to 2000 square metres (Use Class A1); financial & professional services; restaurants and cafes; drinking establishments; hot food takeaways (Use Classes A2-A5 inclusive); units within Use Class D1 (non residential institution) of up to 600 sq m total with no single unit of more than 200 sq m; and family restaurant/ pub of up to 800 sq m (Use Classes A3/A4); employment uses (research; assembly and light manufacturing - Use Class B1); primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure. (All detailed matters other than access reserved for subsequent approval.) (Application is accompanied by an Environmental Impact Assessment).

WARRINGTON  
Borough Council



I confirm that the above application was registered as valid on 15<sup>th</sup> August 2016.

In the light of your agreement of 12<sup>th</sup> August 2016 to allow an extension of time for the determination of the application until 23<sup>rd</sup> February 2017, the Council will aim to determine your application by that date, at the latest. In the unlikely event that your application will take longer than this to process, then you will be aware that you have the right to make an appeal against non-determination, unless a further period for our determination is agreed.

It will assist the Council if, in all communications, you could please quote the application reference number – 2016/28492.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Peter Astley', written over a horizontal line.

Peter Astley MBE  
Assistant Director  
Regulation & Public Protection



**Notes**

**1. Description of Proposal**

Please read carefully the proposal description at the head of the letter. This may vary from the one that you wrote on your application form. We may have changed the description, following a thorough examination of your application, to one that reflects more accurately what we understand to be your proposal(s). Unless we hear from you to the contrary, in writing, we will assume that you are agreeable to any revisions made.

**2. Time Period within which the Council is allowed to make a Decision**

The Council must make a decision on your application 04-Dec-2016. After this date, you have the right to lodge an appeal to the Secretary of State. This will result in the application being determined by a Government-appointed Inspector as opposed to the Council. You may, however, agree to the Council taking longer than 16 weeks to determine your application. In all circumstances where this is the case, the Council will make a decision as soon as possible after the 16 weeks.

If, however, you wish to exercise your right to appeal, then you should notify the Council as soon as possible after the 16 week period, whilst at the same time writing to the Planning Inspectorate at the following address: The Planning Inspectorate, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN, Tel: (01173) 728000, Fax: (01173) 728624, Web: [www.planning.inspectorate.gov.uk](http://www.planning.inspectorate.gov.uk)

The Planning Inspectorate will issue guidance notes on how it will deal with your application, including the time-scales involved.

**From:** dave.tighe@highgatetransportation.co.uk  
**Sent:** 31 August 2016 11:11  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Subject:** FW: Peel Hall Planning Application 2016-28492 - Trip Generation Review  
**Attachments:** 5148057 - TN01 - Trip Generation Review V1.pdf

---

**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]  
**Sent:** 30 August 2016 16:11  
**To:** dave.tighe@highgatetransportation.co.uk  
**Cc:** Davies, Michael (Planning)  
**Subject:** Peel Hall Planning Application 2016-28492 - Trip Generation Review

Dear Dave

Our consultants, Atkins, have reviewed the trip generation element of the TA on our behalf and, notwithstanding the future submission to the Planning Authority of the TA Addendum, I thought that it would be helpful for you to have our observations so that changes can be made in the meantime.

The key issues that have been raised within this review are:

- The use of Average Trip Rates;
- Inappropriate discounting of trips; and
- OMEGA and B&Q Winwick extension being omitted from committed developments.

The Atkins report is attached.

Regards  
Richard

Richard Flood  
Consultant - Transport for Warrington  
Economic Regeneration, Growth and Environment Directorate

Warrington Borough Council, New Town House, Buttermarket Street, Warrington, WA1 2NH  
Tel - 01925 442521  
Mobile – 07730 075765

Email – [x-rflood@warrington.gov.uk](mailto:x-rflood@warrington.gov.uk)  
Web - [www.warrington.gov.uk](http://www.warrington.gov.uk)

\*\*\*\*\*

DISCLAIMER

# Technical note

<b>Project:</b>	Peel Hall	<b>To:</b>	Warrington BC
<b>Subject:</b>	Trip Generation Review	<b>From:</b>	Gavin Coupe
<b>Date:</b>	24 Aug 2016	<b>cc:</b>	

## 1. Introduction

Atkins has been commissioned by Warrington Borough Council (WBC) to review a series of Technical Notes which have been produced by Highgate Transportation (HT) on behalf of Satnam Millennium Ltd in support of the proposed development of land at Peel Hall in Warrington.

Briefly, the proposed developed includes the following:

- A residential neighbourhood with up to 1,200 dwellings
- A 100 bed care home
- An area of employment land comprising up to 7,500 square metres Gross Floor Area (GF) of B1(c) light industry
- A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 800 square metres GFA
- A primary school for up to two-form entry (i.e. up to 420 pupils)
- Open space including sports pitches and ancillary facilities, which are expected to include changing facilities, for up to four teams at any one time, • and a function room that could be used for local community uses

A meeting with representatives from Highways England and their call-off consultants AECOM as well as representatives from Warrington Borough Council (WBC) to discuss the work completed by HT to date, and AECOM's review of the work, was held on 10<sup>th</sup> May 2016.

This TN broadly follows the document structure set out by AECOM in their review for consistency.

# Technical note

## 2. Background

The following sub-sections provide some background to this review and the application in general.

### 2.1. Historic Application

Transport Planning Associates (TPA) produced an Access Strategy Report for Land at Peel Hall Farm, Warrington in September 2010 on behalf of Satnam Planning Services Limited.

Comments on this strategy were provided by WBC on 28<sup>th</sup> October 2010 and by the Highways Agency on 19<sup>th</sup> January 2011. Both of these documents raised concerns with regard to the access strategy as proposed in 2010.

The Public Inquiry was held on 29<sup>th</sup> May 2013 and the Planning Inspectorate subsequently rejected plans by the developer later in 2013 (*Appeal ref: APP/M0655/A/13/2192076*).

### 2.2. This Application

In order for Atkins to undertake a review of the Trip Rates, Trip Generation and Trip Distribution, the following notes have been provided by HT:

- 1107 TN02A on Trip Rates (March 2016)
- 1107 TN02A Addendum on Peak Period Trip Rates (March 2016)
- 1107 TN06 Trip Discounts (March 2016)
- 1107 TN08 Addendum on Trip Distribution
- 1107 TN08 Number of Vehicular Trips at Each Site Access Location (April 2016)
- 1107 TN10 on Committed Developments (April 2016)
- 1107 TN12 Pub Vehicle Trips Update (April 2016)

In addition, the following documents have been produced by AECOM and provided by Highways England:

- Peel Hall Review\_On Behalf of Highways England\_Final 250516

Finally, the following documents have been produced by AECOM on behalf of HT:

- Peel Hall Model Scoping Report 01.04.2016

Dave Tighe, on behalf of HT, confirmed that HT had not provided a response to the review of Trip Rates, Trip Generation and Trip Distribution undertaken by AECOM on behalf of Highways England via email correspondence of 16<sup>th</sup> August 2016.

# Technical note

## 3. Review of HT Technical Notes

The following sub-sections provide a review of the relevant HT Technical Notes with regards to trip generation and distribution.

### 3.1. 1107 TN02 - Trip Rates (March 2016)

This TN is the first in the series relating to trip generation and distribution and is focused on setting out the start point for the trip rates for each part of the proposed development.

The TN states that discussions have taken place with WBC where it was agreed that trip rates, proposed by AECOM in their Omega application, are appropriate to be used in this assessment, where relevant. Where trip rates were unable to be derived from the Omega application, the TN states that it was agreed that the TRICS database could be used to provide an indication of the likely number of weekday peak period vehicular movements. As a rule, sites within Greater London have been excluded, as it is considered that greater public transport opportunities result in unrepresentative trip rates.

All of the above is agreed.

The following assumptions have been made within the TN on Trip Rates:

- Using B1(c) surveys from the Industrial Estate section of the database for B1(c). As per the Highways England review, this is considered a robust approach.
- Discount food store trip rates have not been used as per the Omega development. Instead, Food Store rates have been used from the TRICS database and these generate higher trip rates. As per the Highways England review, this is considered a robust approach.

#### 3.1.1. Residential Trip Rates

The residential trip rates mirror those agreed by WBC for the Omega application. Trip rates for privately owned houses have been used to cover all peak period residential trips for all 1,200 dwelling units; including retirement flats, social housing and apartments. As per the Highways England review, this is considered a robust approach.

For completeness within this review, the trip rates are provided again in the below table.

**Table 1. Residential Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
85th percentile Trip Rates (per unit)	0.225	0.523	0.495	0.307
Residential Trips (1,200 units)	270	628	594	368

# Technical note

## 3.1.2. Care Home Trip Rates

The care home trip rates mirror those agreed by WBC for the Omega application. As per the Highways England review, this is considered a robust approach.

For completeness within this review, the trip rates and resultant trips are provided again in the below table.

**Table 2. Care Home Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
85th percentile Trip Rates (per unit)	0.068	0.068	0.083	0.113
Care Home Trips (100 beds)	7	7	8	6

## 3.1.3. Employment Trip Rates

Due to the lack of suitable data available within TRICS, HT have instead used 'average' trip rate data instead of '85<sup>th</sup> percentile' for the industrial estate (B1(c)) land uses within the site. HT selected the TRICS Land Use codes 02/C and 02/D, and those sites that did not contain operations classed as B1(c), were then removed from the selection.

For completeness within this review, the trip rates and resultant trips are provided again in the below table.

**Table 3. Employment Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
Average Trip Rates (per 100sqm GFA)	0.919	0.514	0.260	0.621
Employment Trips (7,500sqm)	69	39	20	47

In their review on behalf of Highways England, AECOM noted that:

*“Highways England wish to clarify with HT what specific employment land use is likely to be forthcoming on the site, since there is likely to be huge variability between trip rates / vehicular types associated to potential different employment land uses. Highways England therefore request a sensitivity test using ‘trip rates’ for the ‘Employment Office’ and ‘Warehousing Distribution’ land uses, along with provision of details of the likely HGV / Car split.”*

Atkins is in general agreement with the above statement noting, in particular, that there can be significant variability in trip rates associated with different employment land uses with much higher rates typical of office developments. It is also noted that average trip rates have been used. As such, it may be that WBC look to restrict the type of employment that can be developed on site unless a more robust assessment is undertaken.

## 3.1.4. Neighbourhood Centre Trip Rates (Food Store)

HT initially review trip rates for 'Discount Food Stores' ignoring Greater London in TRICS. HT concluded that these rates were low and instead reviewed the TRICS 'Food Superstores' dataset. This is agreed as a robust approach as there is no way of knowing at this stage the type of superstore that would be built.

Due to the lack of suitable data available within TRICS, HT have instead used 'average' trip rate data instead of '85<sup>th</sup> percentile' for the 'Superstore' land use within the site.

For completeness within this review, the trip rates and resultant trips are provided again in the following table.

# Technical note

**Table 4. Food Superstore Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
Average Trip Rates (per 100sqm GFA)	4.615	3.030	9.056	9.550
Trips (2,000sqm)	92	61	181	191

## 3.1.5. Neighbourhood Centre Trip Rates (Local Centre)

The proposed development includes a 600 square metre GFA local centre. HT state in their TN that the local centre may be comprised of, for example, a chemist, dry cleaners, estate agent, takeaway, café and/or health care facilities.

HT used TRICS with the category 'local shops' in order to generate trip rates and resultant trips. Due to the lack of suitable data available within TRICS, HT have instead used 'average' trip rate data instead of '85<sup>th</sup> percentile'.

For completeness within this review, the trip rates and resultant trips are provided again in the below table.

**Table 5. Local Centre Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
Average Trip Rates (per 100sqm GFA)	5.025	4.780	6.039	6.495
Trips (2,000sqm)	30	29	36	39

## 3.1.6. Neighbourhood Centre Trip Rates (Family Pub/Restaurant)

HT state in their TN that the proposed development includes a family pub and restaurant facility of up to around 1,600sqm GFA. However, TN 1107 TN 12 'Pub Vehicle Trips Update' (April 2016), identifies a reduced size of 'family pub and restaurant' at 800sqm GFA.

HT used TRICS with the category 'pub/restaurant' in order to generate trip rates and resultant trips. HT have used 'average' trip rate data instead of '85<sup>th</sup> percentile'.

For completeness within this review, the trip rates and resultant trips are provided again in the below table.

**Table 6. Pub Trip Rates and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
Average Trip Rates (per 100sqm GFA)	N/A		2.847	1.845
Trips (800sqm)			23	15

## 3.1.7. Summary of Neighbourhood Centre Trip Rates

It is noted that HT have used 'Average' trip rates for each of the developments within the Neighbourhood Centre. Whilst it is acknowledged that, in part, this is due to low numbers of sites in TRICS, the cumulative impact of using 'Average' rates as opposed to 'industry standard' 85<sup>th</sup> percentile trip rates leads to an assessment that has a lower level of robustness than would be desirable.

In turn, this may mean that the impact of the development at a local level may be underestimated.

# Technical note

## 3.1.8. Primary School Trip Rates

HT state in their TN that the proposed development scheme will include for up to a two-form entry primary school, which could have up to 420 pupils. HT state that:

*“From discussions with WBC the indication is that the development of 1,200 houses would result in a demand for around 360 primary school places. The transport assessment will therefore assume that 360 places from the on-site 420 primary school intake would come from within the proposed development, with the remaining 60 pupil places being made-up from those residents living within the area of Poplars and Hulme immediately surrounding the site.”*

This is noted and agreed. However, it is noted that trips to and from the Primary School cannot immediately be internalised within the development and ignored in any modelling if it is not possible to travel to the Primary School, by road, from all parts of the overall development without having to travel on existing roads. Instead, it may be prudent to assign trips to/from the Primary School and zones within the development and allow the model to load those trips onto the network.

HT used TRICS with the category ‘Primary School’ in order to generate trip rates and resultant trips. HT have used ‘average’ trip rate data instead of ‘85<sup>th</sup> percentile’.

For completeness within this review, the trip rates and resultant trips are provided again in the following table.

**Table 7. Primary School Trip Rate and Resulting Trips**

	Morning Peak		Evening Peak	
	Arrival	Departure	Arrival	Departure
Average Trip Rates (per pupil)	0.269	0.189	0.045	0.063
Trips (420 pupils)	113	79	19	27
External Trips (60 pupils)	16	11	3	4

## 3.1.9. Sports Pitches and Ancillary Facilities Trip Rates

Adjacent to the proposed development at Peel Hall is a linked site located off Windermere and Grasmere Avenues, to the southeast of Peel Hall. This site will provide a development comprising a series of new sports pitches which are intended to replace sports pitches currently located on existing Homes and Communities Agency (HCA) land to the east of the site.

The relocated sports pitches will predominantly be used at the weekends and consequently it was agreed at the 2013 Public Inquiry (Appeal ref: APP/M0655/A/13/2192076) that this element of the development proposals would not need to be included within the weekday assessments and modelling.

However, it is likely that the proposed clubhouse facilities will be used by the local community, for example, by a mother and toddler group, and also that the sports pitches may be used during the evening after 1800.

It was also agreed at the 2013 Inquiry that the clubhouse facilities for local community use may attract up to 15 car movements over two-hour slots during the day between the hours of 0900 and 1800. These should be captured in the modelling.

## 3.2. 1107 TN02 Addendum - Trip Rates (March 2016)

The addendum to TN02 has been produced to set out the trip rates for all proposed land uses as a summary of TN02 with further extrapolation of the methodology applied to produce trip rates for the model periods which are 07:00 – 09:30 for the Morning Peak and 16:00-18:30 for the Evening Peak. It has been reviewed and is deemed to be an accurate summary of the data presented in the TRICS outputs.

As discussed earlier in this review, Atkins is concerned about the use of a large number of ‘Average’ trip rates, particularly for the Local Centre trips.

# Technical note

## 3.3. 1107 TN06 Trip Discounts (March 2016)

TN06 presents HT's proposed discounting of the trip rates set out in TN02 and TN02 Addendum for internalisation and by-passing.

For reference, the trip discounts for each peak period are provided again in the following tables.

**Table 8. Morning Peak Hour Discounts**

Land Use	Percentage			
	Internal	External By-pass	External New	External Total
Residential	20	0	80	80
Care Home	0	0	100	100
Employment	0	0	100	100
Food Store	60	10	30	40
Local Centre	70	0	30	30
Pub / Restaurant	N/A			
Primary School	75	0	25	25
Community Use	0	0	100	100

**Table 9. Evening Peak Hour Discounts**

Land Use	Percentage			
	Internal	External By-pass	External New	External Total
Residential	20	0	80	80
Care Home	0	0	100	100
Employment	0	0	100	100
Food Store	60	10	30	40
Local Centre	70	0	30	30
Pub / Restaurant	25	0	75	75
Primary School	75	0	25	25
Community Use	0	0	100	100

The following sub-sections discuss the trips which are discounted in more detail. As such, there is no discussion on the Car Home, Employment and Community Use trip discounting.

### 3.3.1. Residential

HT state in their TN that:

*“An element of residential trips in the peak hours have been internalised due to the availability of the local centre, food store and school land uses on site.”*

Whilst this statement is agreed with in principle if trips over a full day were being considered, it is felt that a reduction of 20% of the trips for internalisation is far too high for peak hours. Atkins recommend that the assessment is undertaken on the basis of no reduction of residential trips.

### 3.3.2. Food Store

It is felt that the reduction of food store trips by 60% is far too high, particularly given the location of the food store on the periphery of the site. It is suggested that the proportion of food store trips that are deemed to be internal is reduced either as part of the main assessment or as a sensitivity test.

# Technical note

## 3.3.3. Local Centre

It is felt that the reduction of local centre trips by 70% is far too high, particularly given the location of the local centre on the periphery of the site. It is suggested that the proportion of local centre trips that are deemed to be internal is reduced either as part of the main assessment or as a sensitivity test.

## 3.3.4. Pub / Restaurant

It is felt that the reduction of pub trips by 25% for internalisation is broadly correct. However, any trips originating within the proposed residential parts of the development that cannot access the pub by road without leaving the development need to be re-added to the assessment as these trips would impact on the external highway network.

## 3.3.5. Primary School

With regard to the Primary School trip reduction, HT state in their TN that:

*“Primary School trips in the AM peak are based on 360 pupils living on site (circa 86%), and the remaining 60 living off site (circa 14%), whilst also accounting for staff travel from outside the site based on the AM and PM trip data from TRICS.”*

AECOM, on behalf of Highways England have set out the following points in their review of the TN:

*“No evidence is provided to support the offering of discounts related to the primary school use. In an initial query made by Highways England’s call off consultants AECOM, HT responded as follows;*

*‘Information for primary school places issued by WBC was based on census data, and the following calculation: 0.3 places per dwelling x number of dwellings. Allowance for parents who drop off and go to work are contained within residential trips’.*

*However, it is requested that HT provide a summary of the data, referred to within this statement (WBC census data and ‘drop off to work trips’ from TRICS). The assumptions made for the AM peak period, (With 75% of trips assumed internal and the remaining 25% external), seem unrealistic.*

*HT should also clarify whether the school has been designed as a replacement facility for an existing school, or whether it is simply being proposed to serve the families of residents within the development site. The assumed catchment area of the school should be quoted.”*

Atkins is in general agreement with the above statement and therefore await a response on the above before commenting further.

## 3.3.6. Trip Distribution

HT state in their TN that the distribution of vehicle trips is to be provided as per a gravity model being prepared by AECOM. This is agreed in principal however, Atkins would wish to see detail of this in order to fully understand the approach.

## 3.4. 1107 TN08 Number of Vehicular Trips at Each Site Access Location (April 2016)

HT state that this TN has been prepared to detail the strategy for distributing internal trips at each access point across the site. The intention is to use these assumptions to inform the gravity model that AECOM are developing.

A review of this TN suggests that geographical location appears to be a defining reason behind using certain accesses to exit and enter the site along with restrictions on movement inherent within the masterplan at the time of writing, including the presence of a bus gate.

A review of the TN suggests the approach is broadly sensible noting our previous comments on the level of trip generation and reduction for internalisation and pass-by. However, as the masterplan evolves, the amount of loading on each point of access will also likely evolve and this needs to be borne in mind.

# Technical note

Further to the above, assurance is sought that the final design and assessment of the masterplan will properly address the potential to 'rat run' through the Local Centre which, as it is shown on the most recent masterplan available to Atkins, has accesses from both sides of the development.

## 3.5. 1107 TN10 on Committed Developments (April 2016)

TN10 provides details of the committed developments that HT propose to include in their assessment. The committed developments are as follows:

- Land at Benson Road, Birchwood (ref: 2015/26220).
- Birchwood Shopping Centre (ref: 2015/25880).
- Birchwood Park (ref: 2015/26044, 2014/23358 and 2008/12744).
- Calver Park (ref: 2015/26685 and 2013/22533).

In the TN, HT provide the following supporting text:

*In summary, the development proposals at Benson Road and Birchwood Park result in the provision of additional GFA and subsequent traffic generation above current operational levels. The trip rates and loading associated with these new developments are set out in Section 3.0, based on the 2015 Transport Assessments that accompanied the respective planning applications.*

*At Birchwood Shopping Centre the proposed changes to the development profile to replace 2,565sqm GFA of B1 land uses with 4,907sqm GFA A1, A3, A5 and D1 land uses results in lower forecast AM peak hour trips but higher PM trip rates during the weekday. This is supported by an associated increase in car parking provision.*

*At Calver Park, the proposed floor area also remains the same with the increase in motor sales GFA offset by a reduction in proposed B2/B8 GFA. The 2015 TA set out that the proposed increase in motor sales floor area would not create an increase in the level of weekday peak hour vehicle trips above the agreed motor sales floor area, which would have been for two car showrooms at a GFA of circa 967sqm each, due to the nature of both the more recent (2015) and previously proposed (2013) permissions.*

In their response on behalf of Highways England, AECOM state that:

*The peak hour trip rates for the proposed development profiles have been taken from the relevant Transport Assessment for each of the planning applications, taking into the account the associated highway officer consultation responses and Decision Notices. Highways England are content with this approach for these committed development. However Highways England question why the OMEGA development has not been included as a committed development? In addition, supporting information should be provided identifying the negligible net change to the overall GFA of the B&Q extension at Winwick (ref: 2015/26628), and impact on the local highway network during peak hours. A sensitivity test, with OMEGA and B&Q at Winwick should be included as committed development, within the wider assessments in the TA.*

Atkins broadly agree with the issues raised in AECOM with regards to the B&Q extension and the OMEGA development and await HT's response on these issues to Highways England.

## 3.6. 1107 TN 12 Pub Vehicle Trips Update (April 2016)

An update to the size of the proposed family pub and restaurant has been provided in the TN as discussed previously.

# Technical note

## 4. Summary

Atkins has been commissioned by Warrington Borough Council (WBC) to review a series of Technical Notes which have been produced by Highgate Transportation (HT) on behalf of Satnam Millennium Ltd in support of the proposed development of land at Peel Hall in Warrington

A number of key issues have been raised within this review most notably:

- The use of Average Trip Rates;
- Inappropriate discounting of Trips; and
- The failure to include OMEGA and B&Q as committed developments.

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 06 September 2016 11:53  
**To:** Flood, Richard (x-rflood@warrington.gov.uk)  
**Cc:** dave.tighe@highgatetransportation.co.uk; Coupe, Gavin D  
<Gavin.Coupe@atkinsglobal.com> (Gavin.Coupe@atkinsglobal.com);  
'mdavies@warrington.gov.uk'  
**Subject:** FW: Peel Hall Planning Application 2016-28492 - Trip Generation Review  
**Attachments:** 1107 TN13 Response to HE TN.ZIP

Dear Richard,

Thank you for your email and for forwarding the Atkins review of the Technical Notes submitted to date.

Our response is set out below and I also attach our response to the Highways England Review. It would appear that this Technical Note had not yet been circulated by Highways England, and whilst we did not update any of the trip rates further to this, it should help address some of the points raised in the Atkins note.

### **3.1.3 – Employment Trip Rates**

Please see Section 2.0 of the attached report.

The planning application is in outline and will be for an area of employment land comprising up to 7,500sqm Gross Floor Area (GFA) of light industrial units. Permission for B1 office land use is not being sought on this land and the developer would be prepared to accept a planning condition restricting the land use to B1(c) activities to ensure suitability with the location next to existing and proposed housing.

### **3.1.4 – Neighbourhood Centre Trip Rates (Food Store)**

Please see Section 4.0 of the attached report.

Whilst average trip rate figures were used due to the number of surveys available in the TRICS database within the recommended dates, the rates provided are higher than the figures used for the OMEGA application.

### **3.1.7 – Summary of Neighbourhood Centre Trip Rates**

As set out above and in the attached report, average figures were used where 85<sup>th</sup> percentile figures could not be relied upon. In any event there is likely to be a good level of linked trips occurring within the neighbourhood centre.

### **3.1.9 – Sports Pitches and Ancillary Facilities Trip Rates**

We will review to see if the 15 movements per 2-hourly periods have been captured in the modelling. In any event they are well within the daily variation of flow expected on the network and are very likely to only be trips within the adjacent area.

### **3.3.1 – Residential**

Please see Section 6.0 of the attached report.

It is noted that an assessment is requested on the basis of no discounting of residential trip during the peak hour, but that the principle of discounting residential trips over a full day is agreed in principle.

It is noted that Omega did not discount their residential trips, but OMEGA did base their assessment on no new food store trips (see below).

### **3.3.2 – Food Store**

Please see Section 6.0 of the attached report.

Omega discounted by 70% and then accounted for the remaining 30% as pass-by trips only.

### **3.3.3 – Local Centre**

Please see Section 6.0 of the attached report.

The 70% discount reflects the consideration of internal trips, with 30% being modelled as new on the network; 85% of the proposed dwellings can reach the local centre and food store facility without driving on the local highway network.

As part of the Omega application it included for complementary commercial floor space such as local shop (1,500sqm) and a local community facility/medical centre, as well as the food store. However no trips were included on the network (therefore a discount of 100%).

### 3.3.5 – Primary School

Please see Section 5.0 of the attached report.

### 3.3.6 – Trip Distribution

We will forward the Gravity Model report and the matrices will be included within the VISSIM modelling information that is to be provided on week commencing 12<sup>th</sup> September.

### 3.4 – 1107 TN08 Number of Vehicular Trips at Each Site Access Location (April 2016)

Please see Section 7.0 and Section 8.0 of the attached report.

There will be no rat-run created through the local centre car park.

### 3.5 – 1107 TN10 on Committed Development (April 2016)

Please see Section 9.0 of the attached report.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

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*Highgate Transportation Ltd,  
Box 13, 42 Triangle West,  
Park Street, BRISTOL BS8 1ES  
Company Registration Number: 07500534*

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**From:** Flood, Richard [<mailto:x-rflood@warrington.gov.uk>]  
**Sent:** 30 August 2016 16:11  
**To:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)  
**Cc:** Davies, Michael (Planning)  
**Subject:** Peel Hall Planning Application 2016-28492 - Trip Generation Review

Dear Dave

Our consultants, Atkins, have reviewed the trip generation element of the TA on our behalf and, notwithstanding the future submission to the Planning Authority of the TA Addendum, I thought that it would be helpful for you to have our observations so that changes can be made in the meantime.

The key issues that have been raised within this review are:

- The use of Average Trip Rates;
- Inappropriate discounting of trips; and

For HTP/1107/TN/13  
See Appendix 45 of TA/01/A

**fiona.bennett@highgatetransportation.co.uk**

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 06 September 2016 12:03  
**To:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
(Gavin.Coupe@atkinsglobal.com)  
**Cc:** Flood, Richard (x-rflood@warrington.gov.uk);  
dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall Trip Distribution  
**Attachments:** Peel Hall Trip Distribution Technical Note Rev B.PDF

Dear Gavin,

Please find attached AECOMs revised Technical Note on trip distribution based on the updated Gravity Model.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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*Highgate Transportation Ltd,  
Box 13, 42 Triangle West,  
Park Street, BRISTOL BS8 1ES  
Company Registration Number: 07500534*

06/09/16

See USB/electronic copy of 'Peel Hall Trip Distribution Technical Note RevB'

**NOTE OF MEETING**

PROJECT: Peel Hall, Warrington

DATE: 12<sup>th</sup> September 2016

HELD: AECOM, 6<sup>th</sup> Floor, No.1 New York Street, Manchester @ 14:00.

PRESENT:	Shaun Reynolds	Highways England
	Simon Clarke	Highways England
	Alistair Johnson	AECOM
	Catherine Zoeflig	AECOM
	Richard Flood	Warrington Borough Council
	Andrew Oates	Warrington Borough Council
	Gavin Coupe	Atkins
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

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DT opened the meeting and explained that the scope of the meeting was to review the VISSIM modelling, but that it would be also useful to discuss the emerging comments on the various technical notes that have been submitted since the spring and from the TA submitted in June 2016.

1. DT also explained that the base AM and PM (2015) VISSIM models would be issued to GC for audit. (GC said that as it is a large model, he would review upon arrival and provide an estimation of timescales for the audit.) It was agreed that GC and AJ were to converse directly over the VISSIM modelling, ensuring that all parties are kept abreast of changes moving forward.
2. CZ explained that we have a good base model that we are comfortable with and that reflects the existing situation on the network.
3. AJ explained that the network is as per that agreed with Warrington following the joint meeting on 19<sup>th</sup> January 2016.
4. AJ ran the base (2015) AM model, which he confirmed was converged to 100%, and explained the following:
  - Dynamic assignment was used, in which route choice is made within the VISSIM model whilst it is running, and not prescribed by the modeller.
  - The model has had to be coded to represent the aggressive driver behaviours observed on the busy Warrington network.
  - Multiple site visits were carried out, particularly to the signal junctions, to observe on-site timings, traffic build-up and driver behaviour.

- The original base matrices were taken from the 2008 Warrington Borough Council (WBC) VISUM model and calibrated by on-site survey data from 2014, 2015 and 2016 counts.
  - The journey times/routes were previously agreed with WBC.
  - HGVs were observed on the minor routes throughout the network.
  - Base model outputs taken from 5 seeds (seeds 5, 10, 15, 20 and 25).
  - AM modelling covers 0700-0930 and 1600-1830 (15 minute intervals).
  - Weekday peaks modelled only.
  - Very large and complex modelling network.
  - Post meeting note: Two of the journey times did not validate (westbound movement on the A50 in the morning peak and southbound movement on the A49 in the afternoon peak period).
5. RF queried the validation of Sandy Lane West junction as on site experience is that queues build up and block back to the Cotswold Road roundabout. AJ explained that he undertook many site visits and that different runs will show slightly different variations, but that queueing back along Sandy Lane West does occur within the modelling; it builds up and dissipates at various times within the base model.
  6. GC queried the behaviour of vehicles on the M62 network eastbound. AJ explained that the VISSIM model has been taken from the large HE VISSIM model of the motorway network and SR explained that the slowing traffic was likely due to the M6 merge slip eastbound at Junction 10/Croft Interchange.
  7. AJ presented the base (2015) PM model, which also further demonstrated the rise and fall of traffic at the Sandy Lane West arm of its junction with the A49.
  8. AJ explained that the AM 2019 scenarios are still not converged due to the level of committed development traffic and growthed traffic.
  9. The PM 2019 Do Minimum model was run. GC commented that he noted queueing off the network i.e. at Birchwood (Oakwood Gate) and AJ confirmed that not all vehicles are able to filter through onto the network at this point. AJ also explained that the signal timings in the Do Something mirror those modelled in the Do Minimum. GC suggested lengthening of the links where queueing off the network occurs.
  10. GC also raised the possibility that it may be that some of the development traffic and other traffic in the 2019 scenario is outside the model during the peak hours, queueing to get in. This and potential effects will be considered further following audit.
  11. AJ then ran the PM 2019 Do Something model. He explained that the development traffic was represented by the small green vehicle markers and that it can be seen that there are only a few development vehicles making up each junction queue, with the Sandy Lane West junction having a slightly higher percentage of development vehicles likely due to the proximity to the development as well as to the A49 and M62.

12. AJ explained that costs have been put into the base model on links to reflect current behaviour through residential roads. GC suggested that details of the costs need to be in the LMVR
13. The Cotswold Road link into Poplars Avenue is currently not modelled as a link, but has zones loading to and from the adjacent links and also enables development traffic to load onto it in either direction. AJ confirmed that this is as per the agreed scope. (AECOM modelling scope issued to WBC 1<sup>st</sup> April 2016 attached for reference). WBC raised concern over the routing of traffic in this location. It is agreed that this would be picked up in the audit process.
14. DT raised concerns over the following:
  - Currently we are not getting a feel for impact of the development on the network.
  - There is a lot of committed development traffic and background growth traffic on the network that is currently prohibiting the VISSIM model from operating in future years.
  - A dialogue needs to be started now to set out sensitivity tests going forward. AO set out that WBC would want to see modelling of phased impact of development over a series of years.
15. In terms of sensitivity testing, RF said that it would be ever so helpful if one of the scenarios to be addressed could be a through route for all traffic across the site, providing a link between the new roundabout on Blackbrook Avenue and Poplars Avenue in the vicinity of the proposed employment access and linking through along Poplars Avenue i.e. removing the existing closure. The existing A49 junction would be modified to include traffic signals. This is understood to be a key issue with Members and therefore if not tested RF will have difficulty persuading Members to accept the impact of the development on the immediate residential network. This will be addressed following the audit of the base model.
16. CZ proposed moving forward with the good base model (further to audit) and adding development traffic, then add growth incrementally.
17. A discussion was held over the OMEGA traffic flows and why it was not originally included within the VISSIM modelling as a committed development. In summary:
  - The OMEGA January TA showed only 0.2% of traffic coming off M62 at Junction 9 and travelling south.
  - The use of high motorway growth rates on all links within the model is considered to include any OMEGA traffic that would potentially flow through the network modelled, and the level of committed development trips added onto the network is very high in any event.
  - Committed developments were confirmed in WBC meeting of 8<sup>th</sup> March 2016 and previous correspondence with Michelle Zenner and Mike Davies from 9<sup>th</sup> and 10<sup>th</sup> February 2016.

18. Overall it was agreed that it would be prudent to review the acceptable growth rates to be used. CZ to provide latest OMEGA development traffic flows from the OMEGA VISSIM output files (i.e. the 0.2% to/from Winwick Road South as shown in the OMEGA January 2016 TA, or most recent figures if applicable) so that the OMEGA flows can be considered in more detail by all. The actual vehicle numbers generated by OMEGA to/from the M62 East would also be helpful (shown as 19.6% in the OMEGA January 2016 TA).
19. SR set out that there should be realistic levels of growth within the model and that the HE would be happy to look at discounting growth. GC asked to assist in process.
20. RF specified that any assumptions used in discounting growth would need to be justified.
21. SR advised that HE will look at sensitivity tests and it is understood that they would instruct Atkins to carry these out.
22. DT recalled the comments from the planning officer at the OMEGA committee meeting that it was not for the development to solve existing highway problems but to mitigate its own impact.
23. Trip rates were discussed, and the methodology adopted by HTP in setting out development trip rates was put forward. DT set out that the general approach was to follow the OMEGA process and parameters wherever possible/appropriate. HTP stated that overall they are putting comparably more trips on network than the OMEGA application did e.g. the difference in the actual number of trips assumed for the food store and local centre.
24. DT reiterated that the masterplan is illustrative. HTP will provide an example sketch of the proposed local centre car park layout (ref: 140367-D-003/C - attached). The Design and Access statement also shows the intention of a no-vehicular through route through the local centre car park on page 35 (Section 8 – Access). DT explained that the client would be happy to accept a condition to secure this.
25. It was discussed that the school is likely to be a single form entry, but HTP have modelled for a two-form entry to ensure robustness. DT explained that we are not getting a response from the education departments at WBC as to what level of primary school provision they need. It was agreed that DT would ask Satnam for the latest email correspondence with the education authority and provide this to RF so that RF can apply pressure to bottom-out the primary school provision on site and inform the trip rates and discounting process. (Post meeting note: Agreed between DT and RF 15/09/16)
26. AO stated that the discounting of trips associated with the school and local centre was a vital element that needed to be supported with evidence. It was agreed that this would be looked at by HTP in more detail as a sensitivity test.
27. Winwick B&Q was discussed. HTP set out that the previous agreement with WBC to not include it within the committed development assessment was based on a review of the application's TA, WBC highways response to that application and discussions with WBC held at the meeting on 8<sup>th</sup> March 2016. The evidence for this was also supplied in TN/10

on committed developments (attached). HTP to ensure all supporting text/technical notes contained with the October TA submission.

28. The bus gate design was discussed and it was agreed that cycle and NMU needs will be considered in the design. DT explained that it is an outline application. RF explained that as it will be adopted by the highways authority it needs to be agreed with them – WBC would be looking to use ANPR and therefore physical measures would be unlikely. RF to send through further thoughts on bus gate design. DT said happy to accept a condition to secure this.
29. HTP to send HE a hard copy of the June TA.
30. Going forward, hard copies of TA addendum to be issued as follows:
  - 1x HE (SR)
  - 2x WBC (RF)
  - 1x ATKINS (GC)
31. GC to email comments on gravity model to AJ copying in FB.
32. RF to supply WBC comments on the 14<sup>th</sup> October deadline for TA addendum in light of current modelling situation.
33. AO response to TA to be submitted to Mike Davies and likely sent out by end of this week.
34. Further to the meeting RF suggested that the OMEGA application was different in that the development traffic did not all filter through a constrained residential network; they had new infrastructure to tie-into within the OMEGA site. DT said that in principle the developments were very similar in terms of content, but as always the impact is specific to the sites specific location.
35. In terms of summarising the modelling strategy moving forward:
  - HE want 2019 (all development - to assess the proposals) and 2029 (all development for their own benefit in terms of forward programming). This is what was agreed at our January meeting. This will need an agreed constrained level of growth. Mitigation would only be based on 2019 modelling outputs.
  - WBC would like phased modelling to represent the phases of development build-out. This is to be agreed on moving forward.
36. Further points:
  - AO to provide refuse vehicle dimensions for tracking.
  - AO/RF to confirm the availability of Saturday traffic flow data.
  - RF to check if there are any further phases planned for the Birchwood pinch-point junction (Oakwood Gate). (Post meeting note: RF supplied details 15/09/16)

## Economic Regeneration, Growth & Environment Internal Memorandum

**To:** Mike Davies

**From:** Andy Oates

**Date:** 21/09/2016

**Ref:** 2016/28492

**Land at Peel Hall; Land South of M62 bounded by, Elm Road: Birch Avenue; Poplars Avenue; Newhaven Road; Windermere Avenue, Grasmere Avenue; Merewood Close, Osprey Close Lockerbie Close, Ballater Drive and Mill Lane, Poplars & Hulme, Warrington**

We understand the application is an outline planning application for a new mixed use neighbourhood comprising residential institution (residential care home - Use Class C2); up to 1200 dwelling houses and apartments (Use Class C3); local centre including food store up to 2000 square metres (Use Class A1); financial & professional services; restaurants and cafes; drinking establishments; hot food takeaways (Use Classes A2-A5 inclusive); units within Use Class D1 (non-residential institution) of up to 600 sq m total with no single unit of more than 200 sq m; and family restaurant/ pub of up to 800 sq m (Use Classes A3/A4); employment uses (research; assembly and light manufacturing - Use Class B1); primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure. (All detailed matters other than access reserved for subsequent approval.) (Application is accompanied by an Environmental Impact Assessment).

The following response from the Highways Development Control team addresses the Transport Assessment (TA) submitted as part of the application, and the details of the site layout and supporting infrastructure.

### **1 - Comments on Transport Assessment:**

#### **General**

The submitted TA is part 1 of the overall assessment that will eventually include network modelling information on which the final assessment will be undertaken. As the inclusion of the network model traffic data is critical to allowing a full and comprehensive assessment to be undertaken, this initial TA and the Highways comments herein should be seen as an initial review.

We understand that the Applicant has confirmed that an 'Addendum TA' will be submitted for assessment to the local planning authority by end of business on 14th October 2016. This will include tabulated output data from all of the VISSIM modelling; turning movements and queue lengths at each junction; an analysis of the impact of the development on the wider highway network in 2019 and 2029 based on vehicle numbers, percentage impact and difference over 'without development' scenario; a

summary of 'Do-Something' scenario modelling and the full extent of proposed mitigation.

### **Assessment Scenario**

The submitted TA states the assessment is presented for the agreed assessment year of 2019, assuming the full build-out of the site. However, in Section 5.2 (Development Phasing & Construction Traffic) the TA states "*It is anticipated at this stage that the development will come forward in 12 phases over a 12 year period with typically around 100 residential units being constructed each year, with the relocated sports pitches in year 1, the local centre and care home opening at the end of year 2, the primary school by the end of year 10 and the distributor road being completed by the end of year 9.*"

Highways would raise two concerns relating to this. Firstly; if the assessment assumes the full build out, the assessment year should be 2028, rather than 2019. Using a 2019 assessment year would exclude a significant amount of background traffic growth and would possibly under report operational levels. Secondly, it is noted that there is no reference in the TA to the assessment of any other years, or indeed of any other scenarios. Typically, an assessment of a +5 or +10 year after opening is required, but no information appears to have (yet) been included.

Furthermore, as the build period is so elongated, with several elements of the overall scheme programmed to be completed at the latter stages of the build, there is a clear impact on other key assumptions made in the TA and a clear need for intermediate assessments.

Highways will therefore require additional assessments to be undertaken on the most likely scenario(s). Highways will confirm these scenarios following submission of the second TA.

Highways note that the scheme proposes no internal area to internal area movements as there will be no physical means of doing so. In latter sections of the TA the concept of internal trips is discussed and the resultant discounting of trip rates to reflect the likely internal trips (i.e. home to school or home to local centre). The lack of internal linkages means that any trip starting in one area and travelling to another area must therefore utilise the external highway network. This undermines the principle of the discounting assumptions and means these trips must therefore be included in the assessment as they will impact on the highway.

### **Proposed Bus Access**

The TA presents proposals for the internal bus routes which will link the various areas of the site, but will introduce a bus gate to control this interlinkage. Highways note that as the application is outline, the detail of the internal area is indicative at this time and is likely to change as the scheme develops.

### **Trip Generation & Trip Rates**

Technical Note 02 presents the assumptions used to derive the trip rates for the different elements of the scheme.

The residential trip rates used have been derived based on 85<sup>th</sup> percentile rates from the TRICs database. However, the remaining trip rates appear to be average trip rates. Justification of this trip rates particularly in relation to other similar developments will be required to be provided to support the use of non-85<sup>th</sup> percentile rates.

Whilst the TA states a robust set of assumptions have been adopted, the following stages of the assessment appear to downscale any robustness. Hence, starting with 85<sup>th</sup> percentile ensures at least a robust starting point.

### **Trip Discounting**

TN06 details the assumptions made on trip discounting. Firstly on this aspect, we would comment that no evidence has been provided to support these key assumptions. Secondly, we would also note that without any certainty of where the key internal facilities will be located within the scheme (given this is an outline application), we would question whether these assumptions can be made without further information (e.g. the 10% external pass-by trips for the food-store may not be realistic if it is inconveniently located or of more concern, if it were located on the periphery of the development, it may attract trips from the external area).

We note that the discounting of trip rates has been done for both the residential trip *AND* the attractors, and would question whether this is correct. We would expect the residential trip rates to remain at 100% and the other elements that might be associated with a trip to / from the residential origin / destination to be discounted.

The TA states that the full-build out of the site may extend to a 10-year period. Given this length of construction period, Highways would require a phased based assessment to determine the intermediate impacts on the local network and sensitivity tests on the trip generation and discounting. This is important because of the length of build and the risk that full-build out will not be achieved. The operation of the network must be safeguarded therefore against any mid-build out changes.

Related to this, we also note that the school is not proposed to be developed until Year-10 and the internal estate road not completed until Year 9. Highways would also require some form of sensitivity assessment to identify what the short / medium term impact of the scheme would be without these two elements. As the school will not be operational until year 10, the sensitivity test must address how the network would operate without the school and with residents travelling to / from other schools in the area.

Similarly, the lack of internal connectivity will significantly affect the assumptions on discounting as there will be a need for development traffic to utilise the external network. These trips must therefore be included as new trips and not unilaterally removed from the network.

**Given the significant impact the discounting has on overall trip generation levels, Highways would require further supporting evidence and clarification before this element of the assessment can be accepted.**

### **Trip Distribution**

Highways understand the trip distribution component of the TA has been updated and the submitted information has now been superseded. However, notwithstanding this, Highways would request clarification of what the A49 zone that has been referred to represents. It is unclear whether this refers to the north / south / central as other zones exist in the model that could duplicate this.

It is noted that a number of the destination zones would share similar routes. Highways request clarification on how has this been allowed for?

Section 7.6 states this is the manual interpretation of the gravity model results. It would be helpful to see the model results to allow Highways to review this interpretation.

It would be beneficial if a drawing / figure could be provided that illustrates the routes that have been assumed to be taken between the zones and the development.

### **Traffic Flows**

Traffic flows are only provided for the immediate site access junctions. No information is provided to identify how the development traffic travels onwards from the site to the wider area (and vice-versa). This is a fundamental omission as there is no way for the LHA to understand the routing of traffic to / from the site access points. For instance in Figure 8.7, the majority of the traffic movements are to / from the east. There is no way of identifying where the traffic that turns left out of the site then goes to or indeed whether this is reasonable.

Highways will therefore require an overall flow diagram to be provided, showing the forecast traffic flows for the full area, rather than junction specific diagrams, which are of limited value without the wider context.

### **Assessment Periods**

Given the extensive and significant retail activity on the A49 corridor and immediate area, the TA should include consideration of the weekend peak period.

Further to comments made on the assessment year that has been presented in the TA, Highways will require the following scenarios to be assessed, either by use of sensitivity tests, or by revising the main case:

- AM, PM and weekend\* Peak periods
- Do-Minimum (background traffic + growth + committed developments)
- Do-Something (Do-minimum + development trips)
- DM and DS Year of Opening
- DM and DS year of Opening +5yrs

*\*Unless it can be demonstrated the weekend impact would be no worse than the weekday day peak period.*

Highways note there may be technical reasons that prevent or limit the modelling of the future year scenario (+5 years). Whilst the reasons for this are understood, Highways will still require the assessment of a future year (possibly by applying additional background growth to the 2028 assessment) to have surety of the future operation of the network with the scheme in place.

### **Capacity Assessments**

The TA presents the results of capacity based assessments for the site access junctions. These assessments are based on existing traffic flows growthed to 2019 and with development traffic added based on manual assumptions. Whilst these results provide an indication of how the site access junctions may operate, there is no certainty that the final model flows will generate similar traffic flows. The value of these assessments is therefore limited.

As stated earlier, Highways will / may require assessments to be undertaken and provided for further, additional locations, where traffic flows are predicted to increase in excess of an agreed threshold. As with many other aspects, the full range of required junction capacity assessments will not be known until the network model data is available. Highways will therefore require 'difference plots' (or similar) to be provided when the modelled data is available to allow this review to take place.

As stated elsewhere in this note, the assessment of a 2019 scenario is at odds with the statements elsewhere that the scheme is unlikely to be fully complete for 12-years. Any assessments should therefore in theory take account of the equivalent period of background traffic growth.

## **2 - Comments on Proposed Access Junction Arrangements**

### **Junction Proposals - General**

Spays demonstrating satisfactory visibility will be required for each new junction / access.

All new junctions / accesses should be designed to adoptable standards and should be provided with dropped kerbs and tactile paving.

Across the scheme there are numerous locations where existing street furniture and / or service or telecoms apparatus will need to be relocated to facilitate the proposals. Any relocation of such equipment must be undertaken at the applicant's expense at nil cost to the Council.

### **Poplars Avenue (Western Access)**

Highways are concerned with the proposal to modify the Cotswold Road / Poplars Avenue bend. This modification is a relaxation of the curve rather than widening and may encourage greater speeds around this corner where forward visibility is already constrained by parked vehicles – a situation that appears likely to be exacerbated by the proposal to introduce a parking bay. Highways also note that the footway in the location of the proposed changes to the kerb appears to contain utilities and / or telecoms apparatus and that this may therefore need to be diverted (at the applicant's expense at nil cost to the Council).

The area around the Cotswold Road / Poplars Avenue bend is extremely heavily parked, with significant on-street and on-verge parking. The introduction of a new junction in this location will have a significant impact by removing a large amount of space currently used for parking. To compensate for this the proposals include the provision of new parking areas. However, the number of re-provided spaces would not appear to off-set the lost parking area. A row of parking bays is shown in the stub-end on the western side of the bend. The ability of vehicles to safely enter and exit these bays and re-join the carriageway in a forward gear will need to be demonstrated as the layout of this parking area in relation to the carriageway appears onerous.

A parking layby is proposed on the southern kerb of Poplars Avenue. Highways are concerned that vehicles parked in this layby would affect the forward visibility around the bend and would also affect visibility from the proposed access arm. Highways will therefore require satisfactory forward visibility to be demonstrated.

It should be noted that parking spaces must be designed to the minimum dimensions of 2.5m x 5m with a minimum aisle width of 6m.

Parking prohibition Traffic Regulation Orders (TROs) are proposed around the new access junction. Whilst the reason for these TROs is understood, Highways are concerned about the impact these restrictions will have on parking and that this may force parking to occur in more unsuitable locations. Furthermore, the introduction of such TROs would be subject to public consultation and given the significant impact these restrictions would have on parking, public objection is likely to be high.

It is also noted that the TROs are shown along the front edge of the proposed parking bays. This would mean vehicles could not legally park in the bays as the TRO is effective to the back of the footway.

### **Poplars Avenue Central (Residential, Care Home and Local Centre Junction)**

Poplars Avenue in the vicinity of Brathay Close and the proposed new access junction (residential, care home and local centre junction) is heavily parked on the northern kerb as a result of the adjacent apartment blocks having no off-street parking. The junction proposals will impact on existing parking and the relocated bus stop and may impact of the operation of both.

Highways are concerned the proposals may lead to an increase in parking on the verge / grassed area. It is noted that a new parking bay is proposed on the southern side of the carriageway, but we are concerned this is unlikely to be used given the location in relation to the apartments.

The right turn movement into the new access road will be provided with a ghost island right turn bay. Highways would require the right turn lane to be of sufficient width such that a large vehicle could wait in the right turn bay and a large vehicle could safely pass either side of the waiting vehicle. The plans of this location do not show the resultant lane widths and we would request the plan be annotated to show this information.

We also note that the hatching for the ghost island on the western side of the junction overlaps with the junction of Brathay Close. Whilst such carriageway marking can be crossed (where necessary) this overlap is not ideal as it could result in driver confusion and will result in accelerated wear of the markings and increased maintenance costs.

The proposals involve the widening of Poplars Avenue to incorporate the ghost island right turn. This widening and the introduction of the parking layby appear to impact on existing services / telecoms apparatus in the southern verge.

The proposed signal controlled (Pelican) crossing (replacing and relocating the existing zebra crossing) appears to be incorrectly shown, with the traffic stop-lines too close to the crossing studs. This should be revised accordingly.

### **Mill Lane Access (150 residential dwellings)**

The scheme plans indicate that the existing alignment of Mill Lane is to be stopped up. A Section 278 agreement will therefore need to be entered into to stop-up the existing highway and a Section 38 agreement entered into to adopt the realigned highway. The highway must therefore be designed to adoptable standards.

It is not clear what the shared surface concept as referred to on the scheme plans is. Highways preference would be for a conventional junction, with a raised table (as shown), with defined priority to one of the arms - preferably the new access having priority over the northern section of Mill Lane.

The northern realigned section appears very narrow considering it *may* need to accommodate 2-way traffic movements, particularly turning through the bend. Highways would require this section to be provided to meet adoptable standards and to

accommodate all potential vehicles that may use it up to and including refuse vehicles and articulated HGVs.

### **Mill Lane New Roundabout**

The layout of the proposed roundabout may be subject to change pending the results of the capacity assessments in the 'TA Addendum', however Highways have the following comments on the proposed layout:

The deflection through the roundabout from the northern arm (in a southbound direction) should be increased. The single lane approach southbound and the angle of approach mean drivers may be tempted to 'straight-line' the junction.

The alignment and positioning of the new development (northwestern) arm means that the northwest to north movement may be onerous given the radius of the turn, particularly for large vehicles. Swept path assessment will be required to demonstrate that all vehicles can negotiate the roundabout in a safe manner.

The new roundabout would also significantly affect the visibility of northbound vehicles for drivers waiting to turn out of the Mill Lane junction, given the acute angle exiting the roundabout.

The capacity modelling of the junction does not appear to have taken account of the unequal lane usage that is likely to occur on each arm. On each arm there is a strong bias in traffic movements which if not modelled correctly can lead to the model overestimating available capacity. This aspect should be addressed when the junction model is re-run with the final model flows.

### **Birch Avenue Access**

The proposals for this access involve the provision of two replacement parking bays. The access road is shown as 4.8m width. This will need to be a 6m minimum width as the access road will need to act as the aisle to accommodate manoeuvres from the parking bays.

Satisfactory visibility splays will need to be demonstrated for this junction. Highways are concerned that the proposed parking area on Birch Avenue will significantly restrict the visibility from the new access arm.

Confirmation should also be provided of what purpose the "proposed shared surface access" to the east will provide.

### **Proposed Access Junctions – Road Safety Audit (Stage 1)**

It is noted that the safety issues identified in the Stage 1 Road Safety Audit appear not to have been incorporated in the scheme proposals. It is also noted that at the time of writing no Designers Response reports have been prepared by the applicant's consultants.

Until the matters raised within the audit have been addressed to the satisfaction of the audit team (separate to the Highways Development Control team), the scheme proposals cannot be accepted.

**In summary, it is considered there are significant amounts of further information required to enable a comprehensive and complete Highways review of the scheme proposals. If the proposed Addendum TA fully addresses all of the comments made in this response, then it should be possible for a review of the highways and transport elements to be completed.**

**Andy Oates**  
**Team Leader - Transport Development Control**

# Minutes

<b>Meeting name</b> Peel Hall Development	<b>Subject</b> VISSIM Workshop	<b>Attendees</b> Dave Tighe (DT) - Highgate Transportation Gavin Coupe (GC) - Atkins Richard Flood (RF) - Warrington Borough Council Andy Oates (AO) - Warrington Borough Council Catherine Zoeflig (CZ) - AECOM Alistair Johnson (AJ) - AECOM	<b>Circulation list</b> Dave Tighe - Highgate Transportation Fiona Bennett - Highgate Transportation Gavin Coupe (GC) - Atkins Richard Flood (RF) - Warrington Borough Council Andy Oates (AO) - Warrington Borough Council Catherine Zoeflig (CZ) - AECOM Alistair Johnson (AJ) - AECOM Grigoria Argyropoulou (GA) – AECOM Frank Mohan (FM) - AECOM
<b>Meeting Date</b> 27/09/2016	<b>Time</b> 09:15		
<b>Location</b> AECOM Manchester Office	<b>Project name</b> Peel Hall VISSIM Development		
<b>Project number</b> 60487959	<b>AECOM project number</b> 60487959		
<b>Prepared by</b> Catherine Zoeflig			

<b>Ref</b>	<b>Action</b>	<b>Initial</b>
01	<p>GC Requested the provision of the following background data:</p> <ul style="list-style-type: none"> <li>- Signal Data, Count Data, Journey Time Data, and Model Layout Diagram annotated with the location of the traffic counts.</li> </ul> <p>He also requested a copy of the LMVR report document. CZ suggested that this could be sent in draft after some additional further work.</p>	<b>CZ, AJ, and GA</b>
02	<p>GC started with his review of the model to date:</p> <p>Birchwood Way / Birchwood Park Avenue (Dog Bone) Roundabout: GC identified that the driver behaviour modelled does not follow the road markings or match what he observed to happen on the ground noting the recent signalisation of one arm.</p> <p>The base model is 2014, with 2014 data that pre-dated the recent changes to the junction.</p> <p>AJ stated that a left single lane exit is marked, you can happily and safely, (if you're aggressive enough), exit the roundabout. GC said hadn't seen anyone complete said manoeuvre. However, in AJ's experience people will and did exit the junction in this way.</p> <p>AJ suggested that since the layout has now been superseded, he would collate evidence he has for driver behaviour at the junction, and provide this within the LMVR</p>	<b>AJ</b>
03	<p>Again GC observed that there was possibly some incorrect behaviour modelled within the College Green Roundabout. AJ stated that some interesting behaviour had been noted on site at this roundabout, during site visits. GC was concerned that the amount of lane changing modelled would reduce capacity within the model. AJ / GC concurred that there are no lane markings implemented at the roundabout. RF stated that this junction is earmarked for review, within the borough. AJ stated that he has videos of the junction operation and supporting queue length surveys to back up the way it has been portrayed within the model. This evidence will</p>	<b>AJ / CZ</b>

<b>Ref</b>	<b>Action</b>	<b>Initial</b>
	be included within the LMVR.	
04	<p>GC noted that there were a few Zebra Crossings (along Capesthorne Road, Hilden Road for example), which had not been accounted for within the model. He was particularly concerned with regards to the crossing near the primary school which he had observed to have been called regularly in the Morning Peak.</p> <p>AJ admitted that this was an error. A site visit will be undertaken to provide an understanding as to how many times the crossings were used during the peak periods.</p>	<b>AJ</b>
05	<p>GC referred to discussions at the meeting on the 12<sup>th</sup> September with regard to the Cotswold Road / Poplars Avenue Junction being left out. DT confirmed that it had been agreed with Warrington Borough Council that it was left out.</p> <p>It was discussed that the link should be included, and traffic should be loaded on to the network using the existing zones at Chiltern Road and Newhaven Road. AJ will change this within the base models. The loading points might differ slightly, depending upon the effects on routing; however AJ can agree this with GC as matters progress. GC was open to some variance on this.</p>	<b>AJ / GC</b>
06	<p>GC mentioned that he had some concerns about the motorway merge, however he hadn't looked at it in any detail. GC stated that exact speeds were not so critical and that he was more concerned with vehicles being in the correct lanes.</p>	
07	<p>AJ / GC concurred that there was a need to agree what hierarchy of costs were included within all links within the model. In order to do this, he asked that AECOM make sure that details of the costs are provided within the LMVR.</p>	<b>AJ/GC</b>
08	<p>GC requested clarification on the summary of Journey Time (JT) routings within the originating excel calculation spreadsheet as the travel times were not the same as what appeared to be their constituent parts. There was some clarification required resulting from the way in which the numbers had been presented. AJ explained the methodology.</p> <p>GC requested that the data is presented such that the full route is captured within the constituent parts for each route. He also requested the raw data for the purpose of standard spot checks.</p>	
09	<p>A few non-matches were identified within the traffic flow validation spreadsheet, however GC concurred that he wasn't overly concerned at the number, given the large size of the model. He noted that he would obviously need to undertake spot checks.</p> <p>GC also noted that the target values were not whole vehicles. AJ clarified</p>	

<b>Ref</b>	<b>Action</b>	<b>Initial</b>
	that some of the traffic counts had been 'growthed' up to the base year and that this would be detailed in the LMVR	
10	DT & GC discussed the matter of timescales for concluding the review. GC confirmed that only once the requested background data, (Signal Data, Count Data, Journey Time Data, and Model Layout Diagram), had been received a programme could be identified.	
11	CZ identified a mutually convenient date for a further workshop: Tuesday 18 <sup>th</sup> October @ 10:00. GC / AJ agreed that quick interim progress meetings between GC & AJ could be arranged if necessary...	<b>GC / AJ</b>

**From:** Johnson, Alistair <Alistair.Johnson@aecom.com>  
**Sent:** 14 October 2016 15:01  
**To:** Coupe, Gavin D  
**Cc:** Zoeflig, Catherine; fiona.bennett@highgatetransportation.co.uk  
**Subject:** Peel Hall LMVR with Appendices  
**Attachments:** Peel Hall VISSIM\_LMVR\_2016-10-11 (With Appendices).pdf

Afternoon Gavin,

As promised please see attached the Peel Hall LMVR including Appendices.

Any questions please don't hesitate to contact me.

Enjoy your weekend

Thanks

Ally

**Alistair Johnson** BSc, PgD  
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14/10/16

Peel Hall VISSIM\_LMVR\_2016-10-11 (with Appendices) provided on USB

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 18 October 2016 14:50  
**To:** Flood, Richard (x-rflood@warrington.gov.uk); Oates, Andy (x-aoates@warrington.gov.uk); 'shaun.reynolds@highwaysengland.co.uk'; 'simon.clarke@highwaysengland.co.uk' (simon.clarke@highwaysengland.co.uk); Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com> (Gavin.Coupe@atkinsglobal.com)  
**Cc:** dave.tighe@highgatetransportation.co.uk; catherine.zoeflig@aecom.com  
**Subject:** Peel Hall VISSIM - growth rates  
**Attachments:** 1107 TN07 Addendum on Traffic Growth.pdf

Dear all,

Please find attached a technical note setting out proposed amendments to the growth rates and committed developments for the Peel Hall modelling, further to our meeting on 12<sup>th</sup> September.

I look forward to receiving your comments.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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*Highgate Transportation Ltd,  
Box 13, 42 Triangle West,  
Park Street, BRISTOL BS8 1ES  
Company Registration Number: 07500534*

For HTP/1107/TN/07/Addendum  
See Appendix 52 of TA/01/A

# Technical note

<b>Project:</b>	Peel Hall	<b>To:</b>	Warrington BC
<b>Subject:</b>	VISSIM Model Review	<b>From:</b>	Gavin Coupe
<b>Date:</b>	26 Oct 2016	<b>cc:</b>	

## 1. Introduction

Atkins has been commissioned by Warrington Borough Council (WBC) to review a base VISSIM model and supporting LMVR which has been produced by AECOM on behalf of Highgate Transportation (HT) who have been commissioned by Satnam Millennium Ltd (Satnam) in support of the proposed development of land at Peel Hall in Warrington.

Briefly, the proposed developed includes the following:

- A residential neighbourhood with up to 1,200 dwellings;
- A 100 bed care home;
- An area of employment land comprising up to 7,500 square metres Gross Floor Area (GF) of B1(c) light industry;
- A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 800 square metres GFA;
- A primary school for up to two-form entry (i.e. up to 420 pupils); and
- Open space including sports pitches and ancillary facilities, which are expected to include changing facilities, for up to four teams at any one time, and a function room that could be used for local community uses.

Following receipt of the VISSIM model and supporting output files, a meeting with representatives from AECOM, HT and WBC was held on 27<sup>th</sup> September 2016, at Atkins request, to discuss Atkins initial findings and recommendations with regards to the model. AECOM subsequently issued an LMVR for the model on 11<sup>th</sup> October which did not take on board any of the comments and recommendations of the meeting of 27<sup>th</sup> September 2016. A further meeting was held to discuss this report on 25<sup>th</sup> October 2016.

This Technical Note (TN) summarises Atkins findings and recommendations with regards to the VISSIM model and supporting LMVR in line with discussions at the two meetings referred to above. It broadly follows the document structure set out by AECOM in their LMVR for consistency and ease of reading.

It should be noted that, given the fundamental nature of some of the comments, this review should be regarded as a 'review' and not a formal 'audit'.

# Technical note

## 2. Model Review

The model review is provided in the following sub-sections under headings broadly matching those in the LMVR.

### 2.1. Model Network

The following issues have been identified with the basic modelled network:

- The junction of Cotswold Road and Poplars Avenue should be included as a road that general traffic can use
- The West facing slips of M62 J10 (Croft) should be added so that the impact of the development on the merges and diverges as well as the weaving of vehicles between M62 J9 and J10 can be properly assessed in the model
- Zebra crossings should be added to the model where they are currently missing such as on Poplars Avenue next to Brathay Close
- Winwick Road is missing from the model

### 2.2. General Model Set Up

The modelled time periods are agreed as robust.

The modelled vehicle types are agreed as being sensible.

### 2.3. Network Coding

The following sub-sections discuss the network coding by area.

#### 2.3.1. Edges

The edge closures have been checked and, whilst generally they are fine, the edge closures at the large roundabouts are causing the model to assign traffic to routes that require weaving movements to be made that have not been observed on-site. This is most prevalent at the Birchwood Way / Birchwood Park Avenue (Dog Bone) Roundabout and the College Green Roundabout.

It is suggested that AECOM review the edge closures in the model and amend them to avoid unnecessary weaving whilst still allowing observed behaviour to take place.

#### 2.3.2. Priority Rules

AECOM's LMVR states that Priority Markers have been used throughout the model as opposed to Conflict Areas but a review of the model indicates that Conflict Areas have also been used at some locations generally in combination with Priority Markers.

AECOM's LMVR states that model, gap times of 2.7 seconds for Cars / LGVs and 3.7 seconds for HGV's have been applied throughout the model as per the OMEGA VISSIM. However, the LMVR later states that the gap times have been amended for a range of locations based on observations. This is acceptable so long as the model is shown to be replicated on-site conditions by calibration and validation against observed throughput, journey times and queues.

#### 2.3.3. Desired Speeds & Reduced Speed Areas

AECOM's LMVR states that no data on local vehicle speeds was available during the course of the study therefore desired speed distributions have been derived from the DfT's Vehicle Free Flow Speeds. This is an acceptable approach so long as the model is shown to be replicated on-site conditions by validation against observed journey times.

# Technical note

AECOM's LMVR states that Reduced Speed Areas within the model have been coded to reflect points on the network where drivers have to slow down in response to highway features such as bends, junctions and traffic calming. This is an acceptable approach so long as the model is shown to be replicated on-site conditions by validation against observed journey times.

Notwithstanding the above, reduced speed areas on the M62 mainline through Junction 9 are not accepted as there is not a highway feature that is causing the traffic to slow down. The model should be amended so that the traffic slows away from the area of interest and that this slowing is perpetuated back along the motorway into the area of interest as happens in peak hours on the ground.

## 2.3.4. Link Costs

AECOM's LMVR states that:

*Whilst traffic calming will reduce vehicle speeds and potentially reduce the volume of traffic which chooses to use a particular road. In reality drivers will also avoid roads / routes with traffic calming particular if the features, as installed across the minor road network within the study area, are those which benefit from significant vertical and horizontal deflection.*

This statement and the use of Link Costs on roads with physical traffic calming is agreed. However, any use of Link Costs on roads where there is no traffic calming is not agreed. It would also be useful for AECOM to show in a figure in their LMVR, where Link Costs have been applied in the model and to provide a table detailing the location and the cost applied.

The actual values used have not been reviewed in detail as the changes to the network structure discussed earlier may well require AECOM to amend the Link Costs in any case.

## 2.3.5. Signal Controllers and Timings

The VISSIM model has a large number of Signal Controllers in it, some of which are not used in the model. These should be removed before the model is re-submitted for audit. It is noted that six Controller Specs have been supplied alongside the model but that the model uses 30 Signal Controllers. The number of specs and controllers would be expected to be broadly similar noting that exit pedestrian crossings can sometimes be modelled under a separate controller in VISSIM.

Where controller specs have been provided, the coding of the signals in VISSIM does not always match that in the controller spec. For example, at Cromwell Avenue / Calver Road, there are four traffic phases A-D with the Eastbound movement labelled Phase A. To match this in VISSIM, this movement should be Phase 1 but it is coded as Phase 3. The model should be completely consistent with the spec so that it can be checked properly.

The timings used in the model have not been thoroughly reviewed as they may need amending by AECOM in order to get the journey times in the model to match those which were observed. This information was not properly supplied in the LMVR as will be discussed later.

## 2.3.6. Driver Behaviour

Driver behaviour on certain approaches has been calibrated by AECOM to observed values. This is an acceptable approach so long as the model is shown to be replicated on-site conditions by validation against observed journey times.

## 2.3.7. Bus Stops & Routes

Whilst not reviewed in detail, the bus routes and stops appear to match the supplied information.

## 2.4. Matrices & Assignment Process

The approach AECOM have taken to matrix development and assignment appears to be robust. The approach is there agreed as being acceptable so long as the model is shown to be replicated on-site conditions by calibration against observed traffic counts.

# Technical note

## 3. Calibration and Validation Review

The following sub-sections provide a brief review of the calibration and validation undertaken by AECOM notwithstanding the comments on the modelled approach provided in Section 2.

### 3.1. Calibration against Counts

AECOM have set out a table in their LMVR that illustrates the model calibration against counts for 201 different turns which occurred at junctions in the modelled network for cars, light vehicles and HGV's. This is an acceptable approach and it would be expected that at least 85% of the comparisons have a GEH of less than 5.0.

Given the scale of the model and the location of the area of interest to Warrington BC within that network, it is suggested that AECOM provide a second table illustrating the calibration of the model for junctions 5-11 only as these are closest junctions to the proposed development site.

It was also noted that at Junction 8, there was a severe mis-calibration in the Evening Peak period and two mis-calibrations in the Morning. Given the proximity of this junction to the development site, it would be a concern if this were to remain in the updated model outputs.

### 3.2. Validation against Journey Times

AECOM have set out a table in their LMVR that illustrates the model validation against observed journey times for eight routes. It would also be expected that tables and graphs are produced showing the cumulative journey time comparison for the relevant sections of these routes. For example, for Route 1-4, it would be expected to see a table and graph showing 1-2,2-3,3-4 and not just 1-4.

### 3.3. Validation against Queue Lengths

AECOM have not set out any validation against observed queues in their LMVR despite sending a spreadsheet along with the model. This is presumed to be an oversight and that relevant validation against queues will be provided in the revised version of the LMVR.

# Technical note

## 4. Summary

Atkins has been commissioned by WBC to review a base VISSIM model and supporting LMVR which has been produced by AECOM on behalf of HT who have been commissioned by Satnam in support of the proposed development of land at Peel Hall in Warrington.

Following receipt of the VISSIM model and supporting output files, a meeting with representatives from AECOM, HT and WBC was held on 27<sup>th</sup> September 2016, at Atkins request, to discuss Atkins initial findings and recommendations with regards to the model. AECOM subsequently issued an LMVR for the model on 11<sup>th</sup> October which did not take on board any of the comments and recommendations of the meeting of 27<sup>th</sup> October 2016. A further meeting was held to discuss this report on 25<sup>th</sup> October 2016.

This Technical Note (TN) has summarised Atkins findings and recommendations with regards to the VISSIM model and supporting LMVR in line with discussions at the two meetings referred to earlier.

# Technical note

<b>Project:</b>	Peel Hall	<b>To:</b>	Warrington BC
<b>Subject:</b>	Addendum to Trip Generation TN Review	<b>From:</b>	Gavin Coupe
<b>Date:</b>	3 Nov 2016	<b>cc:</b>	

## 1. Introduction

Atkins has been commissioned by Warrington Borough Council (WBC) to review Technical Note (TN) 'HTp/1107/TN/07/Addendum' which have been produced by Highgate Transportation (HT) on behalf of Satnam Millennium Ltd in support of the proposed development of land at Peel Hall in Warrington.

Briefly, the proposed developed includes the following:

- A residential neighbourhood with up to 1,200 dwellings
- A 100 bed care home
- An area of employment land comprising up to 7,500 square metres Gross Floor Area (GF) of B1(c) light industry
- A neighbourhood centre comprising a food store of up to 2,000 square metres GFA plus up to a further 600 square metre GFA of local centre type facilities and a family pub and restaurant of up to 800 square metres GFA
- A primary school for up to two-form entry (i.e. up to 420 pupils)
- Open space including sports pitches and ancillary facilities, which are expected to include changing facilities, for up to four teams at any one time, • and a function room that could be used for local community uses

The TN that is dealt with this in this review specifically addresses the traffic growth to be used in the assessment of the application. It follows on from a meeting held on 12th September 2016 between HT, WBC, Atkins and AECOM where the original proposed growth was briefly discussed and it was agreed at that meeting that HT would review the growth factors used.

# Technical note

## 2. Review of the Technical Note

The following sub-sections provide a review of the TN and follow the same headings as HT have used in the TN for consistency.

### 2.1. Use of TEMPRO

HT propose to retain the use of TEMPRO v6.2 which has recently been superseded by TEMPRO V7. This is agreed on the basis that the application has already been submitted on the basis of work based on TEMPRO v6.2.

### 2.2. Growth Rates

HT review growth rates in Section 2 of their TN. In Section 2, HT state in their TN that:

*“It is evident that there is an element of double-counting associated with future jobs and potentially housing supply (in TEMPRO), because the Warrington Local Plan already contains the developments of Peel Hall, Calver Park and Birchwood Park. As these sites are all contained within the adopted Plan, they should be accounted for within TEMPRO”*

This is agreed as a reasonable assumption.

On the basis of the above HT propose to remove 90 houses from TEMPRO to account for the 90 houses that are assumed to be part of the Peel Hall development in 2019 in the Warrington Local Plan. This is agreed as a reasonable assumption.

Further to the above, HT state in their TN that:

*“Two of the employment sites identified as committed developments; Calver Park (ref:2015/26685 and 2013/22533) and Birchwood Park (ref: 2015/26044, 214/23358 and 2008/12744), are included in the Local Plan. Therefore it can reasonably be assumed that an estimation of the volume of trips these developments would generate will have been provided by Warrington and feed into TEMPRO.*

*Hence there is an argument that these two developments should be removed from the committed development list included for within the Peel Hall VISSIM model as they will be captured within any future year forecasting in TEMPRO”.*

This is agreed as a reasonable assumption and it is agreed that these trips can be removed from the TEMPRO background growth factors on the basis that they are explicitly captured as committed developments based on their respective Transport Assessments in the VISSIM modelling and supporting documentation is provided to illustrate this.

### 2.3. OMEGA Trips

HT set out a methodology for capturing OMEGA trips that may impact on the Peel Hall network, excluding the Motorway network in Section 3 of the TN. It looks at the distribution of trips from OMEGA onto Delph Lane and the A49 via the M62 in the OMEGA VISSIM model. This methodology is not agreed as robust as it fails to take into account of OMEGA trips that will impact on the Peel Hall network via Westbrook Way and the A574.

It is also unclear as to what the conclusion of this section of the TN is as there is no wording under a heading ‘summary’ in a similar fashion to the summary for Section 2 of the TN.

# Technical note

## 3. Summary

Atkins has been commissioned by Warrington Borough Council (WBC) to review Technical Note (TN) 'HTp/1107/TN/07/Addendum' which have been produced by Highgate Transportation (HT) on behalf of Satnam Millennium Ltd in support of the proposed development of land at Peel Hall in Warrington.

The TN that is dealt with in this review specifically addressed the traffic growth to be used in the assessment of the application. It follows on from a meeting held on 12th September 2016 between HT, WBC, Atkins and AECOM where the original proposed growth was briefly discussed and it was agreed at that meeting that HT would review the growth factors used.

The review of HT's TN has concluded that the proposed amendments to the 'Growth Rates' as set out in Section 2 of the TN are sensible. However, it should be noted that the actual processing of the numbers has not been explicitly reviewed. The review of the 'OMEGA' section of the report is inconclusive as it is not clear as to what HT are concluding. In addition, HT's proposed methodology for identifying OMEGA trips that impact upon the Peel Hall local network is not agreed.

**From:** "Davies, Michael (Planning)" <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)>

**Date:** 2 December 2016 at 16:54:33 GMT

**To:** Colin Griffiths <[colin@satnam.co.uk](mailto:colin@satnam.co.uk)>

**Subject:** Peel Hall - S106 matters

Colin –

Sorry to Email you so late in the week.

In terms of S106/ financial contribution matters – I have summarised my current understanding as below:-

### Affordable Housing

The Council's affordable housing policy in the context of the Peel Hall site has a requirement for 30% affordable housing provision of which 50% should be affordable housing for rent and 50% intermediate provision. The Council's draft Planning Obligations SPD has confirmed that the Council will accept Starter Homes to contribute towards affordable housing provision as part of the intermediate proportion of provision. The draft SPD also reconfirms the Council's requirement for rented affordable housing, reflecting the findings of the 2016 Mid-Mersey Strategic Housing Market Assessment.

The application proposes 30% affordable housing with the type and tenure proposed to be agreed on a phase by phase basis, provided no less than 50% are starter Homes and if other tenures are to be included then no less than 30% are for discount purchase. This implies that for an individual phase there would be a minimum of 80% intermediate provision and a maximum of 20% rented affordable housing.

Policy SN2 confirms that affordable housing provision will be based on negotiation and agreement on a site by site basis and that a lower proportion and/or a different tenure split may be permitted where it can clearly be demonstrated that development would otherwise not be viable.

I can't see that you have provided a justification for the proposed variation to the Council's required affordable housing tenure split. In the absence of an overriding justification, your current affordable housing offer is in conflict with Local Plan Core Strategy Policy SN2.

### Schools

I passed on our preliminary advice to you on this on 24<sup>th</sup> October. Since then, I have discussed this in more detail with our schools team, with the following conclusions:

#### *Primary School Contribution:*

Applying a child yield of 0.3 primary school pupils per dwelling gives a total child yield of 360. This equates to the equivalent of a 1.7 Form Entry (FE) primary school.

There is insufficient existing and planned capacity to accommodate any additional primary school places within the local schools within the vicinity of the site arising from the proposed development. There are also no deliverable options to meet the

full demand generated by the development through expansion of existing schools or through provision of a new school(s) elsewhere which could serve the development.

The Council will therefore seek to secure land for a new primary school on the development site at no cost to the Council. Initially this will be for a 1 FE school but the Council will seek to secure a larger site capable of providing a 2 FE School to ensure sufficient flexibility if expansion is required in the future.

The Government is clear that the Council is responsible for providing the site and meeting the associated capital costs where there is a requirement for a new school (Departmental advice for local authorities and new school proposers, Department for Education, February 2016.) Government Basic Needs funding falls well short of what is required to provide for the additional school places required in Warrington and the DfE has clear expectations that councils will receive S106 contributions from developers arising out of new residential development where there is no existing capacity to meet demand. The Council will therefore also seek a contribution for the capital cost of constructing the school and for providing additional capacity in local school(s) to meet the balance of demand.

The contribution for the construction of the 1 FE School (with a capacity of 210 pupils) equates to  $210 \times \pounds 12,929 = \pounds 2,715,090$

The balance of 0.7 FE (150 pupils) generated by the site will be provided for by expansion to existing schools in the area. The Council will therefore seek a further contribution of  $150 \times \pounds 12,929 = \pounds 1,939,350$  to provide this additional capacity. The specific school(s) to be expanded will be confirmed prior to the completion of the S106 agreement.

As the Council is seeking to secure a larger site than is required to meet the demand generated from the development, the value of the additional land over and above that required for a 1FE school will be offset against the financial contribution sought.

*Secondary School Contribution:*

Applying a child yield of 0.18 secondary school pupils per dwelling gives a total child yield of 216.

There is insufficient existing and planned capacity to accommodate any additional secondary school places within the local schools within the vicinity of the site arising from the proposed development.

The Council will therefore seek a contribution of  $216 \times \pounds 19,482 = \pounds 4,208,112$  to provide additional capacity at existing schools. The specific school(s) to be expanded will be confirmed prior to the completion of the S106 agreement.

Health

I don't think I have anything to add to the advice I forwarded to you on 24<sup>th</sup> October, as follows:-

A contribution of £759,600 is required. This is based on the formula set out in the SPD, but excluding the provision of additional community space. The community

space has been excluded as the Clinical Commissioning Group are seeking to expand existing facilities - rather than to provide a new hub.

This gives a cost per dwelling of £633 - as opposed to the £943 set out in the draft SPD.

£633 x 1,200 homes = £759,600.

This money will be used to expand the existing practices at Padgate and Fearnhead.

### Sport/ Recreation

I have been working to establish if the Council's sport/ recreation provider (Livewire) are supportive of your proposals - in the light of the advice I have forwarded to you previously from Dave Cotterill (our Environment Services Manager) and Sport England.

In terms of the Artificial Grass Pitch (AGP), Livewire will be guided by the Council's Playing Pitch Strategy Action Plan (PPSAP). The PPSAP will identify strategic locations where they feel AGPs should be sited. The Football Association (who would be the primary source of partnership funding) are clear that they prefer AGPs to be located in an area of need, but most importantly at sites where infrastructure - in terms of access, car parking and management of facilities - already exists. (That way, the required funding is less - as it only relates to pitch works and not other elements such as building a car park etc.).

The PPS is likely to confirm a need for an additional 10 AGPs across Warrington to meet demand – but these will be in as-yet-to-be-identified strategic location, which may include Rylands Sports Club; Dallam Recreation Ground/ Bewsey and Dallam Hub; and Orford Jubilee Neighbourhood Hub (2<sup>nd</sup> pitch) near to the Peel Hall site – but not the Peel Hall site itself.

I have asked Livewire – as a potential alternative - to give me the monetary cost of providing an AGP away from the Peel Hall site, and will provide this shortly, for information. As it stands, I can not say that your proposal for a synthetic pitch at Peel Hall necessarily accords with the Council's aspirations, nor that it necessarily meets known or projected demand.

In terms of the grass pitches; the principle of the proposed improvements to the existing pitch at Radley Common is welcome, alongside the creation of additional pitches and ancillary facilities, based on these being available for community use. The specific pitch types required (e.g. mini, junior, senior pitches) etc, needs to be informed by the PPS. It may be that Livewire can confirm this in a few months time - once the needs assessment has been "signed off" and their PPS Action Plan is developed.

### Ecology/ Nature Conservation and Trees

You have seen advice from the Council's ecologist, Derek Richardson, and I think you have been liaising with the Woodland Trust (WT), in the light of their objection.

Both Derek and the WT have referred to the need for a physical buffer zone – albeit of differing depths – which may impact on the developable area of the Peel Hall site

– and possibly therefore the total number of dwellings which potentially might be accommodated.

Derek, in liaison with your ecologist, has re-iterated that:-

- space be set aside [within the site] for a new, un-fragmented area of semi-natural greenspace that could be managed for people and wildlife.
- a comprehensive, holistic Landscape and Habitat Creation and Management Plan should be prepared for the site. Once agreed, this Plan should be implemented in full. The Plan should include biodiversity enhancement measures and proposals to retain and/or create meaningful green corridors through the site to allow for species movement.
- important habitat features (hedgerows, trees, woodlands, ponds and water courses) should be retained and protected as part of the scheme, or if lost, replaced.
- Radley Plantation woodland and the Spa Brook should be ‘buffered’ with landscape screens of 8 - 10 metres.

Derek goes on to stress that if these recommendations are adopted then the required ecological compensation could be delivered on-site and that he would **not** consider that off-site compensation would be required.

Your consultants have suggested the following conditions – which Derek generally sees as reasonable – but he has proposed the additions/amendments in **red** below:-

*“No development shall take place on any individual phase until an Ecological Protection Plan for Construction has been submitted to and approved in writing by the Local Planning Authority. The Plan shall include:*

*A. An appropriate scale plan showing **habitats to be created and/or retained and ecological protection zones where construction activities are restricted and where protective measures will be installed or implemented.***

*B. Details of ecological features of importance such as mature trees, woodland, hedgerows, ponds and protected species including bats that will be **retained and protected, or if lost, compensated.***

*C. Details of protective measures (both physical measures and sensitive working practices) to avoid **harmful** impacts during construction. These to include measures relating to **the protection of** breeding birds, mammals and amphibians, the throughput of construction and other vehicular traffic, timing of operational activities; the erection of protective fencing at agreed distances from sensitive habitats and wildlife areas.*

*D. Details of ecology enhancement proposals within the wildlife corridor including details of the wetland areas.*

*E. A timetable to show phasing of construction activities to avoid periods of the year when activities could be **most** harmful, ~~such as~~ **including the optimal** bird nesting season and other wildlife breeding or hibernation seasons or times at which habitats may be most sensitive for example when setting seed.*

*F. Persons responsible for;*

*(a) Compliance with legal consents relating to nature conservation;*

*(b) Compliance with planning conditions relating to nature conservation;*

*(c) Installation of physical protection measures during construction;*

*(d) Implementation of sensitive working practices during construction.*

*(e) Regular inspection and maintenance of physical protection measures and monitoring of working practices during construction;*

*(f) Provision of training and information about the importance of ecological protection zones to all personnel on site.*

*(g) Species monitoring- All construction activities shall be implemented in accordance with the approved details and timing of the plan unless otherwise approved in writing by the Local Planning Authority.*

*2 - No development shall take place until a scheme for the provision and management of the 8 metre buffer zones around the watercourses and the Radcliffe plantation woodland has been submitted to and approved in writing by the local planning authority. The buffer zone shall be implemented in accordance with the approved details and retained as such thereafter.*

*3 - As part of the reserved matters application (s), a **landscape and habitat creation and management plan** for each phase shall be submitted to and approved by the local planning authority. The plan shall make reference to:*

- i. Description and evaluation of the features to be managed;*
  - ii. Ecological trends and constraints on site that may influence management;*
  - iii. Aims and objectives of management;*
  - iv. Appropriate management options for achieving aims and objectives;*
  - v. Prescriptions for management actions;*
  - vi. Preparation of a work schedule (including a 5 yr project register, an annual work plan and the means by which the plan will be rolled forward annually);*
  - vii. Personnel responsible for implementation of the plan;*
  - viii. Monitoring and remedial / contingencies measures triggered by monitoring.*
- The plan shall be carried out as approved, unless otherwise approved in writing by the local planning authority.*

I would have thought that the provision/ retention of habitat within the site would reduce developable area below that which you have indicated – but how much would depend on details of layout, and other reserved matters.

#### Highways/ Transportation

We agreed in early August that you would submit an Addendum TA which detailed, amongst other things, the full extent of proposed mitigation - by 14<sup>th</sup> October. We agreed to extend this deadline until 18<sup>th</sup> November, and I agreed that could be extended further until 2<sup>nd</sup> December.

The current position is that there is no agreed mitigation. The advice to me is that even if we were presented with a validated base model and acceptable LMVR immediately, this would still fall very short of what is required for our Highways team to make final comments/ recommendations to me.

From what I can see, you are currently at the stage of preparation which would normally be expected several months before the submission of a planning application.

For the time being, I have asked the Council's Highway team not to commit to reviewing any further material you may submit – and to give their advice to me based on the state-of-play on 2<sup>nd</sup> December. This is to prevent the determination period of the application dragging on into 2017, with the continued piecemeal and spasmodic submission of modelling and other transport/ highways work.

Whilst the application is of course being considered first and foremost against the provisions of the Development Plan and NPPF, there is, also the need for the community and their representatives to have some surety of when a decision will be made. I hope you will understand that there is a need for the Council to aim to maintain public confidence in their consideration of major planning applications – and that our credibility should not be overly-stretched by the continual extension of timescales for the completion of outstanding pieces of work, for a proposed development which is being bitterly resisted by much of the local community – who already see Satnam as being purveyors of an attritional and/ or predatory strategy.

In Highways/ Transport terms, as I have said recently, there is likely to be a conclusion that the submitted information is insufficient to characterise impact and consequently to identify required mitigation. On this basis, you may conclude that you do not wish to commission any further work from your own highway advisers.

If you wish to withdraw the application, then please let me know as soon as possible.

Otherwise, I will proceed to make a recommendation on the application, although realistically this may not now be finalised until the New Year.

Regards,

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
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## Susan Brown

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**From:** Colin Griffiths  
**Subject:** FW: Peel Hall - S106 matters

**From:** Davies, Michael (Planning) [mailto:mdavies@warrington.gov.uk]  
**Sent:** 05 December 2016 09:21  
**To:** Colin Griffiths <colin@satnam.co.uk>  
**Subject:** RE: Peel Hall - S106 matters

Colin –

I remain of the view that the scheme has a great deal to commend it.

I was almost certain that any surprise on your behalf would be tempered by the tone of my previous Emails to you, and early indications of likely S106 requirements.

I am sorry for only being able to get an Email to you late on Friday – I do try to correspond earlier in the business day/ week wherever I can.

Regards,

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH

---

**From:** Colin Griffiths [mailto:colin@satnam.co.uk]  
**Sent:** 05 December 2016 09:13  
**To:** Davies, Michael (Planning)  
**Subject:** Re: Peel Hall - S106 matters

Mike,

Your email of Friday is surprising to say the least, this is the first substantive response from you on a number of substantive issues. Your comments are noted and we will respond in due course.

It would be unfortunate for your council to decide to stop constructive engagement in the application as a whole. I trust we can agree a strategy to maintain the focus to deliver the site in short timescale bearing in mind the high level of unmet housing need in the borough.

I shall respond shortly,

Colin

## Economic Regeneration, Growth & Environment Internal Memorandum

**To:** Mike Davies

**From:** Andy Oates

**Date:** 05/12/2016

**Ref:** 2016/28492

**Land at Peel Hall; Land South of M62 bounded by, Elm Road: Birch Avenue; Poplars Avenue; Newhaven Road; Windermere Avenue, Grasmere Avenue; Merewood Close, Osprey Close Lockerbie Close, Ballater Drive and Mill Lane, Poplars & Hulme, Warrington**

### **Highways Response: Objection Raised (Insufficient Information)**

We understand the application is an outline planning application for a new mixed use neighbourhood comprising residential institution (residential care home - Use Class C2); up to 1200 dwelling houses and apartments (Use Class C3); local centre including food store up to 2000 square metres (Use Class A1); financial & professional services; restaurants and cafes; drinking establishments; hot food takeaways (Use Classes A2-A5 inclusive); units within Use Class D1 (non-residential institution) of up to 600 sq m total with no single unit of more than 200 sq m; and family restaurant/ pub of up to 800 sq m (Use Classes A3/A4); employment uses (research; assembly and light manufacturing - Use Class B1); primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure. (All detailed matters other than access reserved for subsequent approval.) (Application is accompanied by an Environmental Impact Assessment).

The following response from the Highways Development Control team addresses the Transport Assessment (TA) submitted as part of the application, and the details of the site layout and supporting infrastructure.

### **General**

The submitted TA was part 1 of the overall assessment that was to eventually include network modelling information on which the final assessment was to be undertaken. As the inclusion of the network model traffic data is critical to allowing a full and comprehensive assessment to be undertaken, the Highways comments herein should be seen as a review of part 1 of the TA alone.

In early August 2016, the applicant agreed to submit, by 14th October, an Addendum TA which would detail, amongst other things, the impact of the development traffic and the full extent of proposed mitigation. The Planning Authority agreed to extend this deadline until 18th November and again, finally, until 2nd December.

The current position is that there is no agreed base year model, forecast year models, Local Model Validation Report or mitigation measures and this falls very short of what is required for Highways to make informed transport comments

## **1 - Comments on Transport Assessment:**

The TA states the assessment is presented for the agreed assessment year of 2019, assuming the full build-out of the site. However, in Section 5.2 (Development Phasing & Construction Traffic) the TA states *“It is anticipated at this stage that the development will come forward in 12 phases over a 12 year period with typically around 100 residential units being constructed each year, with the relocated sports pitches in year 1, the local centre and care home opening at the end of year 2, the primary school by the end of year 10 and the distributor road being completed by the end of year 9.”*

Highways would raise two concerns relating to this. Firstly; if the assessment assumes the full build out, the assessment year should be 2028, rather than 2019. Using a 2019 assessment year would exclude a significant amount of background traffic growth and would possibly under report operational levels. Secondly, it is noted that there is no reference in the TA to the assessment of any other years, or indeed of any other scenarios. Typically, an assessment of a +5 or +10 year after opening is required, but no information appears to have (yet) been included.

Furthermore, as the build period is so elongated, with several elements of the overall scheme programmed to be completed at the latter stages of the build, there is a clear impact on other key assumptions made in the TA and a clear need for intermediate assessments.

Highways will therefore require additional assessments to be undertaken on the most likely scenario(s). Highways will confirm these scenarios following submission of the second TA.

Highways note that the scheme proposes no internal area to internal area movements as there will be no physical means of doing so. In latter sections of the TA the concept of internal trips is discussed and the resultant discounting of trip rates to reflect the likely internal trips (i.e. home to school or home to local centre). The lack of internal linkages means that any trip starting in one area and travelling to another area must therefore utilise the external highway network. This undermines the principle of the discounting assumptions and means these trips must therefore be included in the assessment as they will impact on the highway.

### **Proposed Bus Access**

The TA presents proposals for the internal bus routes which will link the various areas of the site, but will introduce a bus gate to control this interlinkage. Highways note that as the application is outline, the detail of the internal area is indicative at this time and is likely to change as the scheme develops.

### **Trip Generation & Trip Rates**

Technical Note 02 presents the assumptions used to derive the trip rates for the different elements of the scheme.

The residential trip rates used have been derived based on 85<sup>th</sup> percentile rates from the TRICs database. However, the remaining trip rates appear to be average trip rates. Justification of this trip rates particularly in relation to other similar developments will be required to be provided to support the use of non-85<sup>th</sup> percentile rates.

Whilst the TA states a robust set of assumptions have been adopted, the following stages of the assessment appear to downscale any robustness. Hence, starting with 85<sup>th</sup> percentile ensures at least a robust starting point.

### **Trip Discounting**

TN06 details the assumptions made on trip discounting. Firstly on this aspect, we would comment that no evidence has been provided to support these key assumptions. Secondly, we would also note that without any certainty of where the key internal facilities will be located within the scheme (given this is an outline application), we would question whether these assumptions can be made without further information (e.g. the 10% external pass-by trips for the food-store may not be realistic if it is inconveniently located or of more concern, if it were located on the periphery of the development, it may attract trips from the external area).

We note that the discounting of trip rates has been done for both the residential trip *AND* the attractors, and would question whether this is correct. We would expect the residential trip rates to remain at 100% and the other elements that might be associated with a trip to / from the residential origin / destination to be discounted.

The TA states that the full-build out of the site may extend to a 10-year period. Given this length of construction period, Highways would require a phased based assessment to determine the intermediate impacts on the local network and sensitivity tests on the trip generation and discounting. This is important because of the length of build and the risk that full-build out will not be achieved. The operation of the network must be safeguarded therefore against any mid-build out changes.

Related to this, we also note that the school is not proposed to be developed until Year-10 and the internal estate road not completed until Year 9. Highways would also require some form of sensitivity assessment to identify what the short / medium term impact of the scheme would be without these two elements. As the school will not be operational until year 10, the sensitivity test must address how the network would operate without the school and with residents travelling to / from other schools in the area.

Similarly, the lack of internal connectivity will significantly affect the assumptions on discounting as there will be a need for development traffic to utilise the external network. These trips must therefore be included as new trips and not unilaterally removed from the network.

### **Trip Distribution**

Highways understand the trip distribution component of the TA has been updated and the submitted information has now been superseded. However, notwithstanding this, Highways would request clarification of what the A49 zone that has been referred to represents. It is unclear whether this refers to the north / south / central as other zones exist in the model that could duplicate this.

It is noted that a number of the destination zones would share similar routes. Highways request clarification on how has this been allowed for?

Section 7.6 states this is the manual interpretation of the gravity model results. It would be helpful to see the model results to allow Highways to review this interpretation.

It would be beneficial if a drawing / figure could be provided that illustrates the routes that have been assumed to be taken between the zones and the development.

### **Traffic Flows**

Traffic flows are only provided for the immediate site access junctions. No information is provided to identify how the development traffic travels onwards from the site to the wider area (and vice-versa). This is a fundamental omission as there is no way for the LHA to understand the routing of traffic to / from the site access points. For instance in Figure 8.7, the majority of the traffic movements are to / from the east. There is no way

of identifying where the traffic that turns left out of the site then goes to or indeed whether this is reasonable.

Highways will therefore require an overall flow diagram to be provided, showing the forecast traffic flows for the full area, rather than junction specific diagrams, which are of limited value without the wider context.

### **Assessment Periods**

Given the extensive and significant retail activity on the A49 corridor, the TA should include consideration of the Saturday peak period.

Further to comments made on the assessment year that has been presented in the TA, Highways will require the following scenarios to be assessed, either by use of sensitivity tests, or by revising the main case:

- AM, PM and Saturday\* Peak periods
- Do-Minimum (background traffic + growth + committed developments)
- Do-Something (Do-minimum + development trips)
- DM and DS Year of Opening
- DM and DS year of Opening +5yrs

*\*Unless it can be demonstrated the Saturday impact would be no worse than the weekday day peak period.*

Highways note there may be technical reasons that prevent or limit the modelling of the future year scenario (+5 years). Whilst the reasons for this are understood, Highways will still require the assessment of a future year (possibly by applying additional background growth to the 2028 assessment) to have surety of the future operation of the network with the scheme in place.

### **Capacity Assessments**

The TA presents the results of capacity based assessments for the site access junctions. These assessments are based on existing traffic flows growthed to 2019 and with development traffic added based on manual assumptions. Whilst these results provide an indication of how the site access junctions may operate, there is no certainty that the final model flows will generate similar traffic flows. The value of these assessments is therefore limited.

As stated earlier, Highways will / may require assessments to be undertaken and provided for further, additional locations, where traffic flows are predicted to increase in excess of an agreed threshold. As with many other aspects, the full range of required junction capacity assessments will not be known until the network model data is available. Highways will therefore require 'difference plots' (or similar) to be provided when the modelled data is available to allow this review to take place.

As stated elsewhere in this note, the assessment of a 2019 scenario is at odds with the statements elsewhere that the scheme is unlikely to be fully complete for 12-years. Any assessments should therefore in theory take account of the equivalent period of background traffic growth.

## **2 - Comments on Proposed Access Junction Arrangements**

### **Junction Proposals - General**

Splays demonstrating satisfactory visibility will be required for each new junction / access.

All new junctions / accesses should be provided with dropped kerbs and tactile paving.

Across the scheme there are numerous locations where existing street furniture and / or service or telecoms apparatus will need to be relocated to facilitate the proposals. Any relocation of such equipment must be undertaken at the applicant's expense at nil cost to the Council.

### **Poplars Avenue (Western Access)**

Highways are concerned with the proposal to modify the Cotswold Road / Poplar Avenue bend. This modification is a relaxation of the curve rather than widening and may encourage greater speeds around this corner where forward visibility is already constrained by parked vehicles – a situation that appears likely to be exacerbated by the proposal to introduce a parking bay. Highways also note that the footway in the location of the proposed changes to the kerb appears to contain utilities and / or telecoms apparatus and that this may therefore need to be diverted (at the applicant's expense at nil cost to the Council).

The area around the Cotswold Road / Poplars Avenue bend is extremely heavily parked, with significant on-street and on-verge parking. The introduction of a new junction in this location will have a significant impact by removing a large amount of space currently used for parking. To compensate for this the proposals include the provision of new parking areas. However, the number of re-provided spaces would not appear to off-set the lost parking area. A row of parking bays are shown in the stub-end on the western side of the bend. The ability of vehicles to safely enter and exit these bays and re-join the carriageway in a forward gear will need to be demonstrated as the layout of this parking area in relation to the carriageway appears onerous.

A parking layby is proposed on the southern kerb of Poplars Avenue. Highways are concerned that vehicles parked in this layby would affect the forward visibility around the bend and would also affect visibility from the proposed access arm. Highways will therefore require satisfactory forward visibility to be demonstrated.

It should be noted that parking spaces must be designed to the minimum dimensions of 2.5m x 5m with a minimum aisle width of 6m.

Parking prohibition Traffic Regulation Orders (TROs) are proposed around the new access junction. Whilst the reason for these TROs is understood, Highways are concerned about the impact these restrictions will have on parking and that this may force parking to occur in more unsuitable locations. Furthermore, the introduction of such TROs would be subject to public consultation and given the significant impact these restrictions would have on parking, public objection is likely to be high.

It is also noted that the TROs are shown along the front edge of the proposed parking bays. This would mean vehicles could not legally park in the bays as the TRO is effective to the back of the footway.

### **Poplar Avenue Central (Residential, Care Home and Local Centre Junction)**

Poplar Avenue in the vicinity of Brathay Close and the proposed new access junction (residential, care home and local centre junction) is heavily parked on the northern kerb as a result of the adjacent apartment blocks having no off-street parking. The junction proposals will impact on existing parking and the relocated bus stop and may impact of the operation of both.

Highways are concerned the proposals may lead to an increase in parking on the verge / grassed area. It is noted that a new parking bay is proposed on the southern side of the carriageway, but we are concerned this is unlikely to be used given the location in relation to the apartments.

The right turn movement into the new access road will be provided with a ghost island right turn bay. Highways would require the right turn lane to be of sufficient width such that a large vehicle could wait in the right turn bay and a large vehicle could safely pass either side of the waiting vehicle. The plans of this location do not show the resultant lane widths and we would request the plan be annotated to show this information.

We also note that the hatching for the ghost island on the western side of the junction overlaps with the junction of Brathay Close. Whilst such carriageway marking can be crossed (where necessary) this overlap is not ideal as it could result in driver confusion and will result in accelerated wear of the markings and increased maintenance costs.

The proposals involve the widening of Poplars Avenue to incorporate the ghost island right turn. This widening and the introduction of the parking layby appear to impact on existing services / telecoms apparatus in the southern verge.

The proposed relocated signal controlled (Pelican) crossing appears to be incorrectly shown, with the traffic stop-lines too close to the crossing studs. This should be revised accordingly.

### **Mill Lane Access (150 residential dwellings)**

The scheme plans indicate that the existing alignment of Mill Lane is to be stopped up. A Section 278 agreement will therefore need to be entered into to stop-up the existing highway and a Section 38 agreement entered into to adopt the realigned highway. The highway must therefore be designed to adoptable standards.

It is not clear what the shared surface concept as referred to on the scheme plans is. Highways preference would be for a conventional junction, with a raised table (as shown), with defined priority to one of the arms - preferably the new access having priority over the northern section of Mill Lane.

The northern realigned section appears very narrow considering it *may* need to accommodate 2-way traffic movements, particularly turning through the bend. Highways would require this section to be provided to meet adoptable standards and to accommodate all potential vehicles that may use it up to and including refuse vehicles and articulated HGVs.

### **Mill Lane New Roundabout**

The layout of the proposed roundabout may be subject to change pending the results of the capacity assessments in the second TA, however Highways have the following comments on the proposed layout:

The deflection through the roundabout from the northern arm (in a southbound direction) should be increased. The single lane approach southbound and the angle of approach mean drivers may be tempted to 'straight-line' the junction.

The alignment and positioning of the new development (northwestern) arm means that the northwest to north movement may be onerous given the radius of the turn, particularly for large vehicles. Swept path assessment will be required to demonstrate that all vehicles can negotiate the roundabout in a safe manner.

The new roundabout would also significantly affect the visibility of northbound vehicles for drivers waiting to turn out of the Mill Lane junction, given the acute angle exiting the roundabout.

The capacity modelling of the junction does not appear to have taken account of the unequal lane usage that is likely to occur on each arm. On each arm there is a strong bias in traffic movements which if not modelled correctly can lead to the model

overestimating available capacity. This aspect should be addressed when the junction model is re-run with the final model flows.

### **Birch Avenue Access**

The proposals for this access involve the provision of two replacement parking bays. The access road is shown as 4.8m width. This will need to be a 6m minimum width as the access road will need to act as the aisle to accommodate manoeuvres from the parking bays.

Satisfactory visibility splays will need to be demonstrated for this junction. Highways are concerned that the proposed parking area on Birch Avenue will significantly restrict the visibility from the new access arm.

Confirmation should also be provided of what purpose the “proposed shared surface access” to the east will provide.

### **Proposed Access Junctions – Road Safety Audit (Stage 1)**

It is noted that the safety issues identified in the Stage 1 Road Safety Audit appear not to have been incorporated in the scheme proposals. It is also noted that at the time of writing no Designers Response reports have been prepared by the applicant’s consultants.

Until the matters raised within the audit have been addressed to the satisfaction of the audit team (separate to the Highways Development Control team), the scheme proposals cannot be accepted.

### **Summary:**

This Highways response presents the review of the submitted Transport Assessment (TA), which was part 1 of the overall assessment that was to eventually include network modelling information on which the final assessment was to be undertaken. As the inclusion of the network model traffic data is critical to allowing a full and comprehensive assessment to be undertaken, the Highways comments herein should be seen as a review of part 1 of the TA alone.

The review of this initial TA has identified a number of matters that require clarification or amendment. To date no formal response has been received on these points.

In early August 2016, the applicant agreed to submit, by 14th October 2016, an Addendum TA which would detail, amongst other things, the impact of the development traffic and the full extent of proposed mitigation. The Planning Authority agreed to extend this deadline until 18th November and again, finally, until 2nd December.

The current position is that there is no agreed base year model, forecast year models, Local Model Validation Report or mitigation measures and this falls very short of what is required for Highways to make informed transport comments. Highways have no alternative therefore, but to formally object to the scheme proposals due to insufficient information.

**Andy Oates**  
**Team Leader - Transport Development Control**

**From:** Flood, Richard <x-rflood@warrington.gov.uk>  
**Sent:** 05 December 2016 12:50  
**To:** dave.tighe@highgatetransportation.co.uk  
**Cc:** Oates, Andy; Davies, Michael (Planning); Johnson, Alistair; Zoeflig, Catherine; Coupe, Gavin D; fiona.bennett@highgatetransportation.co.uk; Colin Griffiths; Reynolds, Shaun; Clarke, Simon; Mohan, Frank; Rowland, Gary  
**Subject:** Peel Hall application 2016/28492 - Concluding response

Dave

I am writing to inform you that the Highway Authority's Transport Development Control team, as consultees to the Planning Authority, have been asked to cease work on this application and to provide a concluding response based on the state-of-play on 2nd December 2016. As you will appreciate, it is in the interests of all those involved in the application to be made aware of this position immediately in order to avoid any abortive work.

Below is an extract from the email to Colin Griffiths from the Planning case officer, Mike Davies, sent at close of business on Friday 2<sup>nd</sup> December.

*"We agreed in early August that you would submit an Addendum TA which detailed, amongst other things, the full extent of proposed mitigation - by 14<sup>th</sup> October. We agreed to extend this deadline until 18<sup>th</sup> November, and I agreed that could be extended further until 2<sup>nd</sup> December.*

*The current position is that there is no agreed mitigation. The advice to me is that even if we were presented with a validated base model and acceptable LMVR immediately, this would still fall very short of what is required for our Highways team to make final comments/recommendations to me.*

*From what I can see, you are currently at the stage of preparation which would normally be expected several months before the submission of a planning application.*

*For the time being, I have asked the Council's Highway team not to commit to reviewing any further material you may submit – and to give their advice to me based on the state-of-play on 2<sup>nd</sup> December. This is to prevent the determination period of the application dragging on into 2017, with the continued piecemeal and spasmodic submission of modelling and other transport/ highways work.*

*Whilst the application is of course being considered first and foremost against the provisions of the Development Plan and NPPF, there is, also the need for the community and their representatives to have some surety of when a decision will be made. I hope you will understand that there is a need for the Council to aim to maintain public confidence in their consideration of major planning applications – and that our credibility should not be overly-stretched by the continual extension of timescales for the completion of outstanding pieces of work, for a proposed development which is being bitterly resisted by much of the local community – who already see Satnam as being purveyors of an attritional and/ or predatory strategy.*

*In Highways/ Transport terms, as I have said recently, there is likely to be a conclusion that the submitted information is insufficient to characterise impact and consequently to identify required mitigation. On this basis, you may conclude that you do not wish to commission any further work from your own highway advisers.”*

We will submit our comments to Planning later this afternoon and they will be made available to the public over the coming days.

Regards

Richard

Richard Flood  
Consultant - Transport for Warrington  
Economic Regeneration, Growth and Environment Directorate

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## Susan Brown

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**From:** Colin Griffiths  
**Subject:** FW: Peel Hall application 2016/28492 - Concluding response

**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]

**Sent:** 05 December 2016 14:01

**To:** Colin Griffiths <colin@satnam.co.uk>

**Cc:** Oates, Andy <x-aoates@warrington.gov.uk>; Davies, Michael (Planning) <mdavies@warrington.gov.uk>; Johnson, Alistair <Alistair.Johnson@aecom.com>; Zoefitig, Catherine <catherine.zoefitig@aecom.com>; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>; fiona.bennett@highgatetransportation.co.uk; Reynolds, Shaun <Shaun.Reynolds@highwaysengland.co.uk>; Clarke, Simon <Simon.Clarke@highwaysengland.co.uk>; Mohan, Frank <frank.mohan@aecom.com>; Rowland, Gary <Gary.Rowland@atkinsglobal.com>; dave.tighe@highgatetransportation.co.uk

**Subject:** RE: Peel Hall application 2016/28492 - Concluding response

Colin

The Highway Authority will be providing its concluding response to this application this afternoon and our consultants, Atkins, have been informed through the email below that work at this end has ceased.

Obviously it is Satnam / Highgate's responsibility - and not the council's - to determine AECOM's future work programme and to provide instruction to them - but the Planning case officer's email has made it clear that concluding advice will be based on the situation as of Friday 2<sup>nd</sup> December and we will not be reviewing any further information.

Regards  
Richard

Richard Flood  
Consultant - Transport for Warrington  
Economic Regeneration, Growth and Environment Directorate

Warrington Borough Council, New Town House, Buttermarket Street, Warrington, WA1 2NH

---

**From:** Colin Griffiths [mailto:colin@satnam.co.uk]

**Sent:** 05 December 2016 13:03

**To:** Flood, Richard; [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)

**Cc:** Oates, Andy; Davies, Michael (Planning); Johnson, Alistair; Zoefitig, Catherine; Coupe, Gavin D; [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk); Reynolds, Shaun; Clarke, Simon; Mohan, Frank; Rowland, Gary

**Subject:** RE: Peel Hall application 2016/28492 - Concluding response

All,  
Please note I have replied to Mike today informing him that a substantive response to his email will be provided in due course. In the meantime I would expect no presumptive actions to be taken considering the role of the authority (as a whole) in this application process,

Regards  
Colin

---

**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]

**Sent:** 05 December 2016 12:50

**To:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)

**Cc:** Oates, Andy <x-aoates@warrington.gov.uk>; Davies, Michael (Planning) <mdavies@warrington.gov.uk>; Johnson, Alistair <Alistair.Johnson@aecom.com>; Zoefitig, Catherine <catherine.zoefitig@aecom.com>; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>; [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk); Colin Griffiths <colin@satnam.co.uk>; Reynolds, Shaun <Shaun.Reynolds@highwaysengland.co.uk>; Clarke, Simon <Simon.Clarke@highwaysengland.co.uk>; Mohan, Frank <frank.mohan@aecom.com>; Rowland, Gary <Gary.Rowland@atkinsglobal.com>

**Subject:** Peel Hall application 2016/28492 - Concluding response

Dave

Our Ref: CG/PeelHall.

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House,  
Buttermarket Street  
Warrington WA1 2NH

By email only: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)

8<sup>th</sup> December 2016

Dear Mike,

**Application at Peel Hall, ref 2016-28492**

I refer to your email of Friday 2nd December. I am also in receipt of your email of yesterday, 7th December, enclosing the final comments of your highways department. We also discussed the issue over the telephone yesterday.

1. We are disappointed that the council have decided to withdraw from constructive discussions on this application, as outlined in your email of the 2nd. The application is of major importance and the acceptability of the principle of housing on this site appears to be beyond doubt, see your SHLAA and other policy documents. The scale of housing need in Warrington is increasing, as evidenced in your recent draft policy documents (the council's suggested increase in annual need rising from 840 to 1,000 new homes per annum).
2. The withdrawal of positive council engagement in this application is against the guidance set out in the Framework at paras 186 & 187 (and others) which instructs councils to **"approach decision making in a positive way"**, that council's **"should look for solutions rather than problems"** and **"should seek to approve applications for sustainable development where possible"**. Furthermore, the withdrawal of positive engagement on a practical level serves no purpose, as if an appeal is lodged following a premature refusal, then your council will have to engage in these matters leading up to and during the appeal/ inquiry process in any event.

3. The preparation and agreement of the VISSIM highways model has taken longer than anticipated, but as you are aware this is a complicated process and active involvement of the council and HE (together with your jointly appointed consultant) has been taking place. All parties agree the validated model should be available next week. By your action to withdraw highways involvement in this process at this late stage, this model will now be agreed only by ourselves and HE. This could place the council at a disadvantage at later stages.
4. Your email of the 2nd sets out a desire to report the application quickly for refusal on the grounds of lack of agreement and clarity on S106 and mitigation grounds, when I am sure you would agree the usual course of events would be to agree these matters through discussion and negotiation over a period of weeks/ months leading to a conclusion as to which elements can be accommodated and which cannot. You will be aware we have asked for meetings to discuss the S106 issues but you have been reluctant to arrange these for some reason. Your email states,

*“For the time being, I have asked the Council’s Highway team **not to commit to reviewing any further material you may submit – and to give their advice to me based on the state-of-play on 2nd December. This is to prevent the determination period of the application dragging on into 2017, with the continued piecemeal and spasmodic submission of modelling and other transport/ highways work....***

and further you state,

*“In Highways/ Transport terms, as I have said recently, **there is likely to be a conclusion that the submitted information is insufficient to characterise impact and consequently to identify required mitigation. On this basis, you may conclude that you do not wish to commission any further work from your own highway advisers.***

*“If you wish to withdraw the application, then please let me know as soon as possible.*

*“Otherwise, I will proceed to make a recommendation on the application, although realistically this may not now be finalised until the New Year.”*

5. Your email of the 7th sets out the council highway officer’s comments, summarised in their consultation response as **“The current position is that there is no agreed base year model, forecast year models, Local Model Validation Report or mitigation measures and this falls very short of what is required for Highways to make informed transport comments. Highways have no alternative therefore, but to formally object to the scheme proposals due to insufficient information.”** It should be noted of course the applicant is not refusing to submit the information, and is making all efforts possible (using

external modelling specialists with inputs from the council and HE) to finalise and submit this base model information as quickly as possible.

6. We are surprised by your recent rush to refuse, as only as recently as the 28th November (1 week ago), you sent an email requesting an extension of time from the 23rd February to the 28th April as the extended period **“should allow sufficient time for the modelling to deliver a picture of the mitigation needed, and for any necessary legal agreements to be well advanced in detail.”** Just the process referred to as usually happening at 4 above.
7. When we spoke yesterday morning you indicated your email was motivated by an expectation of receiving an instruction from your senior management team shortly to move towards refusing the application and this is why you have altered your previous course to see the negotiations through in good time (see 5 above). Of course you are not aware of the exact reason for the awaited instruction, but it appears this may be political and centred on the limited public opposition to the scheme that has been expressed by some local residents and elected members and the MP. Clearly public opposition by itself is not a planning objection, nor does the status of the person making the objection give it weight: the nature of the objections need to be carefully considered to discern the planning weight such objections should receive.
8. I shall not dwell on your use of unfortunate and inaccurate wording regarding Satnam’s intention and strategy regarding this application, but trust you will withdraw these comments in the cause of ensuring the council and its officers remain an impartial decision maker in this process. I have not noticed these words featuring in the representations submitted, and I do wonder where this description comes from, on the face of the phrases however, they do appear to be highly prejudicial and unfair.

I would ask that you reconsider your approach on the basis that a rush to refuse at this stage will result in an appeal having to be lodged against a clearly unreasonable and premature refusal, with such a refusal taken against the advice and guidance to engage proactively in the planning application process (see 2 above).

Your considered response is awaited,

Yours Sincerely,



Colin Griffiths BA(Hons) MRTPI.

**Managing Director**

Cc Simon Ricketts

Christopher Lockhart-Mummery QC.

**From:** "Davies, Michael (Planning)" <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)>

**Date:** 14 December 2016 at 16:06:55 EET

**To:** Colin Griffiths <[colin@satnam.co.uk](mailto:colin@satnam.co.uk)>

**Subject:** RE: Peel Hall, Warrington - 2016/28492

Colin –

Thank you for your letter of 8<sup>th</sup> December 2016, the detailed contents of which I have considered.

In short, the Council's intention is to proceed to the determination of the application at a meeting of its Development Management Committee in early 2017. I should be able to confirm the date and venue of the meeting by mid-January.

Myself and members of other teams in the Council are very happy to continue to engage with you to further this project – but realistically we do not feel this can be undertaken as part of a live planning application. I say this partly because we are far away from identifying and agreeing any necessary Highway/ Transport mitigation – and it is not possible to be reasonably clear how long is needed to resolve this. We feel that it is not reasonable to keep the application running given this level of uncertainty – given the high public profile of the application and the understandable impatience felt by a substantial part of the local community and their elected members to bring matters to a conclusion, as far as the Council's decision-making is concerned.

Only when the cost of Highways/ Transport mitigation is known, can a meaningful discussion then be had concerning the ability of your proposals to stand the possibility of other potential financial contributions towards social infrastructure – the basis of which I set out in my Email to you of 2<sup>nd</sup> December. Ultimately, this is likely to require exploration of financial viability – which in itself could take a period of months to prepare and review.

As I also say in my Email of 2<sup>nd</sup> December, the Peel Hall scheme will be determined first and foremost against the provisions of the Development Plan. The need for us to make a recommendation - rather than to repeatedly request and await new deadlines for pieces of work – is, however, considered to be overriding in the context of the public and political expectation I have outlined.

A significant amount of work still needs to be undertaken to address outstanding matters – either as part of an appeal – or as part of a re-submitted application. I would much prefer that we work on the latter together.

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

**From:** Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 06 January 2017 16:49  
**To:** 'Flood, Richard'  
**Cc:** 'dave.tighe'; 'x-aoates@warrington.gov.uk'; 'Gavin.Coupe@atkinsglobal.com'; 'mdavies@warrington.gov.uk'  
**Subject:** RE: Peel Hall application 2016/28492 - Concluding response  
**Attachments:** LMVR Peel Hall VISSIM 2016 Final 050117 (Complete Document).pdf

Dear Richard,

Further to your email below, I understand from Mike Davies's email to Colin Griffiths dated 14<sup>th</sup> December that he wants the various WBC teams to continue to engage on this project and in the case of his highway's team, to continue to help identify and agree any necessary transport related mitigation.

To this end, I am pleased to confirm that following your modelling consultant's (Gavin Coupe from Atkins) comments to Aecom that the base models are now validated and that we are now in a position to proceed to future year modelling as previously discussed.

As requested at our last meeting, please find attached the LMVR. I will send the base models and supporting spreadsheets via WeTransfer to you, Andy Oates and Gavin Coupe due to their file size (I can provide a Dropbox link if preferred). It would be helpful for Gavin to confirm that he is now happy for these models to be used as the basis for the future year modelling.

Happy to discuss.

Kind Regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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*Company Registration Number: 07500534*

---

**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]  
**Sent:** 05 December 2016 14:01  
**To:** Colin Griffiths  
**Cc:** Oates, Andy; Davies, Michael (Planning); Johnson, Alistair; Zoefitig, Catherine; Coupe, Gavin D; fiona.bennett@highgatetransportation.co.uk; Reynolds, Shaun; Clarke, Simon; Mohan, Frank; Rowland, Gary; dave.tighe@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall application 2016/28492 - Concluding response

Colin

The Highway Authority will be providing its concluding response to this application this afternoon and our consultants, Atkins, have been informed through the email below that work at this end has ceased.

# 1. Introduction

## 1.1 Introduction and Background

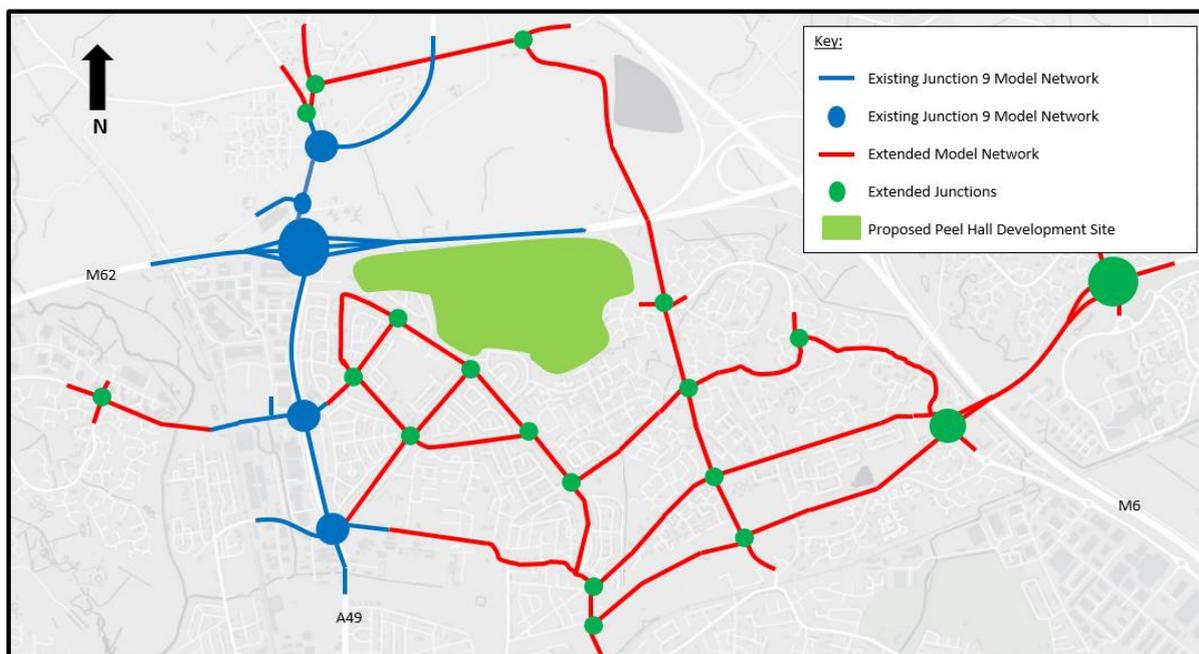
The 2014 M62 J9 base year VISSIM model, (originally developed by AECOM for Highways England) has been updated and extended, and as agreed with Highways England and Warrington Borough Council (WBC), has been used by AECOM to assess the impact of the Peel Hall development on the highway network, including M62 Junction 9.

This Local Model Validation Report (LMVR) describes the methodology undertaken to update and validate the VISSIM base model on behalf of Highgate Transportation / SATNAM Millennium in order to provide a suitable tool for which an assessment of the proposed housing development at Peel Hall can be completed.

Given the extensive levels of queueing across the study area, in particular along the A49, it is important any traffic model used to assess the proposed Peel Hall development can replicate the impact of blocking back of queue traffic across certain strategically important junctions. VISSIM provides an excellent platform for modelling such behaviour and the interaction of vehicles which can result in further delays. The base model is reflective of a typical neutral day in the month of May 2015. In order to ensure the model is reflective of the extensive queueing across the network, an hour warm up and half an hour warm down period has been modelled alongside the AM (08:00-09:00) and PM (17:00-18:00) peak periods.

## 1.2 Model Area

**Figure 1** below provides an overview of the extent of the modelled network in VISSIM, and the location of the proposed Peel Hall Development.



**Figure 1. Extent of Modelled Network**

A copy of the Peel Hall Master Plan is contained within **Appendix A, Figure 1** as well as a larger copy of the **Figure 1** above at the end of this report.

## 2. Summary of Data Collection

### 2.1 Traffic Count Data

The model has been developed utilising classified turning count data provided by Highgate Transportation. A significant proportion of the total traffic counts were collected on the 8<sup>th</sup> July 2014 for the periods 07:00 – 10:00 and 16:00 – 17:00.

A full summary list of the locations where junction traffic counts were completed, including dates undertaken, are presented below in **Table 1**.

<b>13<sup>th</sup> May 2014</b>
Junction 9 of the M62
<b>8<sup>th</sup> July 2014</b>
Southworth Lane / Delph Lane / Myddleton Lane
Newton Road / A49 / Winwick Park Avenue
A49 Newton Road / Delph Lane
A49 / Birch Avenue
A49 / Sandy Lane West / A574
Cotswold Road / Cleveland Road / Sandy Lane / Sandy Lane West
Poplars Avenue / Cleveland Road
Poplars Avenue / Howson Road
Mill Lane / Enfield Park Road / Blackbrook Avenue / Ballater Drive
Blackbrook Avenue / Enfield Park Road / Capesthorpe Road
Poplars Avenue / Capesthorpe Road
A49 / Long Lane / Hawleys Lane
Blackbrook Avenue / Insall Road / Hilden Road
A50 / Hilden Road / Orford Road / Smith Drive
Blackbrook Avenue / A574
A50 / A574
Crab Lane / A574 / Woolston Grange Avenue
<b>9<sup>th</sup> July 2014</b>
Europa Boulevard / A574 / Callands Road
Calver Road / A574
<b>9<sup>th</sup> February 2016</b>
A49 / Golborne Road

**Table 1. Summary of Junction Count Data**

The sites above form the key traffic count inputs into the model build and calibration process. A plan detailing the location of each of the aforementioned counts is contained within **Appendix B** of this report.

### 2.2 Origin Destination Data

Since the count data did not provide any information on trip patterns (origins and destinations (OD)) another source was required. The Warrington Multi Modal Transport Model (WMMTM) was utilised as the best available source of OD data.

The aforementioned model is a VISUM model developed in 2008 by WBC in partnership with Highways England, the North West Development Agency (NWDA), Homes and Communities Agency (HCA) and Peel Holdings to provide an evidence base to support and aid decision making regarding spatial development, transport infrastructure and services within the Warrington area. The model uses the

forecast future growth in employment, population and trends in travel choices to assess where people will work, live and what mode of transport they are likely to use in future to make their journeys. The model was constructed and validated in accordance with WebTAG guidance produced by the Department for Transport (DfT).

The use of the model to provide OD data was agreed with WBC representatives prior to beginning the modelling process. As highlighted it has been used to inform and provide traffic flows for a number of transport studies within the Warrington area over a number of years and so formed the most appropriate source of OD data.

A cordon of the study area was extracted from the model and a matrix of the OD movements for the AM and PM peak hours was obtained.

## 2.3 Traffic Signal Data

Traffic signal specifications were obtained from WBC traffic signals team for the following junctions;

- Junction 9 of the M62
- A49 Newton Road / A49 / Winwick Park Avenue;
- A49 / Sandy Lane West / A574;
- A49 / Long Lane / Hawleys Lane;
- Blackbrook Avenue / Insall Road / Hilden Road;
- Calver Road / A574;
- A50 Orford Road / A574 Birchwood Way
- A49 Newton Road / Delph Lane; and
- A50 Orford Green / Hallfields Road.

In addition to receiving the signal specifications several site visits were completed to observe the operation of traffic within the vicinity of the signalised junctions. In addition to general observations, green times and how many times certain stages were called, were recorded.

## 2.4 Journey Time Data

Given the size of the VISSIM model, to ensure the model is reflective of the key routes across the study area and as agreed with WBC prior to starting the modelling process, a number of journey times have been obtained.

Utilising basemaps.co.uk analyst software, journey time data was extracted for an average of three neutral week days of the 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup>, May 2015. The routes are shown overleaf in **Figure 2** and a large plan is provided in **Appendix C**. The data extracted was for both directions of travel and for both AM and PM peak hour periods.

## 3. Base Model Development

### 3.1 Model Description and Specification

As agreed with Highways England and WBC, the existing M62 J9 model (originally developed by AECOM for Highways England) has been extended in accordance with **Figure 1**.

Prior to commencement of the modelling work, a Model Scoping Report was produced which describes the process of decision making, and appropriateness of tool selected, to assess the impact of this development upon the surrounding highway network. This report was agreed with all parties, a copy of the report is presented within **Appendix E** at the end of this report.

VISSIM version 8.04 has been used for all models as at the time of development this formed the most up to date version of the software.

#### *Model Periods*

Agreed with Highways England and WBC and as in accordance with the recently developed VISSIM model for the OMEGA development at Junction 8 of the M62 the model covers the following periods;

- 07:00 – 09:30; and
- 16:00 – 18:30

A 2.5 hour model period has been developed to ensure the assessed model peak periods of 08:00 – 09:00 and 17:00 – 18:00 are reflective of the significant queueing and blocking back through junctions which is common place along the A49 for a base year of 2015. The hour warm up ensures enough of a time period has been modelled to allow the build-up of said delays. The 30 minute warm down period again ensures the model reflects the dissipation of queueing traffic.

To replicate the profile of traffic correctly across the network traffic so queues build up as per reality demands for the aforementioned periods have been be split into 15 minute periods.

#### *Vehicle Types*

Vehicles types within the VISSIM model are as per those listed below:

- Cars;
- LGVs;
- HGVs; and
- Buses.

### 3.2 Network Coding

All model coding has been completed utilising CAD overlays of the study area, aerial images and notes taken during site visits.

Initially an audit of the existing Junction 9 model was completed to ensure it remained reflective of reality. The additional elements of the network were then added to the model so it was reflective of the key roads within the agreed study area.

During busy periods, particularly 17:00 – 18:00, drivers were observed completing extremely aggressive manoeuvres on the approach to certain junctions. The Northway approach to the A50 Long Lane priority junction and the Birchwood Way approach to the Oakwood Gate roundabout were both observed to experience vehicles approaching three abreast when queues occur, as a direct a result of aggressive drivers. The model has not been calibrated to replicate this behaviour as it was not consistently observed throughout the peak periods but is worthy of note moving forward.

VISSIM LMVR January 2017 on USB/electronically

**From:** Davies, Michael (Planning) <mdavies@warrington.gov.uk>  
**Sent:** 06 January 2017 17:19  
**To:** 'Fiona Bennett'  
**Cc:** Flood, Richard  
**Subject:** RE: Peel Hall application 2016/28492 - Concluding response

Fiona -

We have no intention of engaging with you further on Highway/ Transport matters as part of the current application.

We will determine 2016/28492 according to the state of play on 2<sup>nd</sup> December 2016.

Mike Davies  
Principal Planning Officer  
Development Management  
Economic Regeneration, Growth and Environment Directorate  
New Town House, Buttermarket Street  
Warrington WA1 2NH  
Tel: 01925 442813  
Email: [mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)  
Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

---

**From:** Fiona Bennett [mailto:[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)]  
**Sent:** 06 January 2017 16:49  
**To:** Flood, Richard  
**Cc:** 'dave.tighe'; Oates, Andy; [Gavin.Coupe@atkinsglobal.com](mailto:Gavin.Coupe@atkinsglobal.com); Davies, Michael (Planning)  
**Subject:** RE: Peel Hall application 2016/28492 - Concluding response

Dear Richard,

Further to your email below, I understand from Mike Davies's email to Colin Griffiths dated 14<sup>th</sup> December that he wants the various WBC teams to continue to engage on this project and in the case of his highway's team, to continue to help identify and agree any necessary transport related mitigation.

To this end, I am pleased to confirm that following your modelling consultant's (Gavin Coupe from Atkins) comments to Aecom that the base models are now validated and that we are now in a position to proceed to future year modelling as previously discussed.

As requested at our last meeting, please find attached the LMVR. I will send the base models and supporting spreadsheets via WeTransfer to you, Andy Oates and Gavin Coupe due to their file size (I can provide a Dropbox link if preferred). It would be helpful for Gavin to confirm that he is now happy for these models to be used as the basis for the future year modelling.

Happy to discuss.

Kind Regards,  
Fiona

Fiona Bennett

**NOTE OF MEETING**

PROJECT: Peel Hall, Warrington

DATE: 23<sup>rd</sup> January 2017

HELD: Highways England, Piccadilly Gate, Manchester @ 14:00.

PRESENT:	Shaun Reynolds	Highways England
	Alistair Johnson	AECOM
	Catherine Zoeflig	AECOM
	Gavin Coupe	Atkins
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

---

1. Aktins are finalising their response on HE's behalf for the VISSIM base model, it is not expected that there will be any major comments just minor tweaks or questions. It is expected that HTp will have sight of their review by the end of next week.
2. HE would like to understand the implications of the Peel Hall access strategy in terms of numbers of development trips through Junction 9 of the M62. Modelling an opening year with full development in place is not meaningful in terms of identifying a mitigation strategy for a site of this size in this location, and does not reflect the phasing strategy. The phasing of the Peel Hall development was discussed and HTp agreed to provide phased development flows through Junction 9, based on the agreed gravity model.
3. RIS2 funding (2020-2025) for the Warrington Box area was discussed in terms of potential access strategy for the site and mechanism for contributions.

**From:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
**Sent:** 07 February 2017 14:18  
**To:** Fiona Bennett  
**Cc:** Simon.Clarke@highwaysengland.co.uk; 'dave.tighe';  
Shaun.Reynolds@highwaysengland.co.uk  
**Subject:** RE: Peel Hall VISSIM  
**Attachments:** 5150363.010 - TN03 - VISSIM Model Audit.pdf

Fiona,

Please find attached our draft response to the latest models and LMVR. Apologies that this is being issued slightly later than planned. This is due to a member of my team being unwell as we discussed the other day.

Regards,

Gavin.

---

**From:** Fiona Bennett [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 06 January 2017 17:05  
**To:** Shaun.Reynolds@highwaysengland.co.uk  
**Cc:** Simon.Clarke@highwaysengland.co.uk; 'dave.tighe' <dave.tighe@highgatetransportation.co.uk>; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>; Beel, Andy <Andy.Beel@atkinsglobal.com>  
**Subject:** Peel Hall VISSIM

Dear Shaun,

As you know, much work has been carried out by Aecom to get the base VISSIM models to validate following Gavin Coupe's most recent comments, and we are pleased to confirm that Aecom have now achieved this.

The LMVR is attached and I will send over the models and accompanying spreadsheets via WeTransfer, or a Dropbox link if you prefer. It would be helpful to have any comments the HE might have on this prior to our meeting on 23<sup>rd</sup> January.

We look forward to meeting you then to discuss the Peel Hall proposals and wider longer term impacts around the M62.

In the meantime should you have any questions please do not hesitate to contact me.

Kind Regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

*Highgate Transportation Ltd*  
42 Triangle West, Park Street

**From:** Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 21 February 2017 11:07  
**To:** 'Shaun.Reynolds@highwaysengland.co.uk'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Zoeftig, Catherine';  
'Simon.Clarke@highwaysengland.co.uk'; 'Coupe, Gavin D'  
**Subject:** Peel Hall Warrington - TN on M62 Trip Levels  
**Attachments:** 1107 TN15 M62 Trips.pdf

Dear Shaun,

As discussed at our meeting on 23<sup>rd</sup> January, please find attached a note on the level of development trips forecast through Junction 9 as requested.

You will note from this that up to around 120 trips are anticipated to travel through M62 Junction 9 during the PM peak hour.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

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42 Triangle West, Park Street  
BRISTOL BS8 1ES*

*Company Registration Number: 07500534*

**From:** Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 21 February 2017 16:15  
**To:** 'Shaun.Reynolds@highwaysengland.co.uk'; 'Simon.Clarke@highwaysengland.co.uk'  
**Cc:** 'Zoeftig, Catherine'; 'Coupe, Gavin D'; 'dave.tighe@highgatetransportation.co.uk'  
**Subject:** Peel Hall VISSIM Audit  
**Attachments:** 5150363.010 - TN03 - VISSIM Model Audit.pdf

Dear Shaun and Simon,

We have reviewed Atkin's Audit comments with AECOM and generally the comments appear to identify no fundamental issues within the modelling to date.

However, Comment 3.2 is of concern. *AECOM have set out a table in their LMVR that illustrates the model validation against observed journey times for eight routes. As none of these reflect the area of interest to Highways England, no comments are appropriate other than to say that this would mean that the applicant may not be able to show that the model can accurately assess the impact of the scheme on this part of the network.*

At the start of the process in early 2016 we agreed the extent of the VISSIM model with yourselves and Warrington Council, which did not include for Junction 8 or 10 of the M62 as you expressed that Junction 9 was of greater interest. This was further illustrated in Atkin's Technical Note, 23<sup>rd</sup> November 2016, in which it was requested that, *"In order for the model to be acceptable to Highways England, we would expect that turning movements at M62 J9 calibrate and that AECOM are able to illustrate that the flows on the motorway network match observed values."* This was taken on board and the western on and off slips for Junction 10 were added into the model. No further journey times were requested to be included for within the VISSIM model for the M62 motorway including through Junction 10.

It appears that the study area requiring assessment within VISSIM is unnecessarily growing at every review. We understand the journey times through Junction 10 particularly in an eastbound direction can be directly influenced by driver behaviour between Junction 10 and Junction 11, namely traffic merging from the M6 to the M62 and then traffic weaving before Junction 11. These are all areas outside of the agreed study area. If the model was extended to include areas to the east of the study area, it would result in the construction of a VISSIM model which may not be stable and so prove unsuitable for providing informative outputs for the assessment.

I am sure that you appreciate we need a base model that we can take forward for future year modelling, which will continue to be of use for all parties in providing genuinely useful outputs in assessing the impact of the proposed development. Therefore, we feel it would be an unconstructive use of the model to replicate the journey times through Junction 10. However, we propose that journey times on the M62 through Junction 10 will be compared from the base model to all future year with scheme models, in order to provide an idea of the impact on the motorway.

Furthermore, the turning movements which failed the GEH criteria for LGVs are all small values and it should also be noted that the model is forecasting slightly higher LGV count than observed in any event.

Please can you provide a definitive comment on this latest request for journey time validation as soon as possible so that we can move the base model forward.

I intend to issue our full response this week, but it would be ever so helpful to have your stance on the points above beforehand.

Many thanks in advance - happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

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*42 Triangle West, Park Street*

*BRISTOL BS8 1ES*

*Company Registration Number: 07500534*

**From:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
**Sent:** 21 February 2017 17:25  
**To:** Fiona Bennett; Shaun.Reynolds@highwaysengland.co.uk;  
Simon.Clarke@highwaysengland.co.uk  
**Cc:** 'Zoeftig, Catherine'; dave.tighe@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall VISSIM Audit

Fiona,

I will review the below and issue an updated TN to reflect its contents.

Regards,

Gavin.

---

**From:** Fiona Bennett [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 21 February 2017 16:15  
**To:** Shaun.Reynolds@highwaysengland.co.uk; Simon.Clarke@highwaysengland.co.uk  
**Cc:** 'Zoeftig, Catherine' <catherine.zoeftig@aecom.com>; Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>;  
dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall VISSIM Audit

Dear Shaun and Simon,

We have reviewed Atkin's Audit comments with AECOM and generally the comments appear to identify no fundamental issues within the modelling to date.

However, Comment 3.2 is of concern. *AECOM have set out a table in their LMVR that illustrates the model validation against observed journey times for eight routes. As none of these reflect the area of interest to Highways England, no comments are appropriate other than to say that this would mean that the applicant may not be able to show that the model can accurately assess the impact of the scheme on this part of the network.*

At the start of the process in early 2016 we agreed the extent of the VISSIM model with yourselves and Warrington Council, which did not include for Junction 8 or 10 of the M62 as you expressed that Junction 9 was of greater interest. This was further illustrated in Atkin's Technical Note, 23<sup>rd</sup> November 2016, in which it was requested that, *"In order for the model to be acceptable to Highways England, we would expect that turning movements at M62 J9 calibrate and that AECOM are able to illustrate that the flows on the motorway network match observed values."* This was taken on board and the western on and off slips for Junction 10 were added into the model. No further journey times were requested to be included for within the VISSIM model for the M62 motorway including through Junction 10.

It appears that the study area requiring assessment within VISSIM is unnecessarily growing at every review. We understand the journey times through Junction 10 particularly in an eastbound direction can be directly influenced by driver behaviour between Junction 10 and Junction 11, namely traffic merging from the M6 to the M62 and then traffic weaving before Junction 11. These are all areas outside of the agreed study area. If the model was extended to include areas to the east of the study area, it would result in the construction of a VISSIM model which may not be stable and so prove unsuitable for providing informative outputs for the assessment.

I am sure that you appreciate we need a base model that we can take forward for future year modelling, which will continue to be of use for all parties in providing genuinely useful outputs in assessing the impact of the proposed development. Therefore, we feel it would be an unconstructive use of the model to replicate the journey times through Junction 10. However, we propose that journey times on the M62 through Junction 10 will be compared

**From:** Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 24 February 2017 15:06  
**To:** 'Coupe, Gavin D'; 'Shaun.Reynolds@highwaysengland.co.uk';  
'Simon.Clarke@highwaysengland.co.uk'  
**Cc:** 'Zoeftig, Catherine'; 'dave.tighe@highgatetransportation.co.uk'  
**Subject:** RE: Peel Hall VISSIM Audit

Dear Gavin,

It was really good to speak with you earlier and discuss the Peel Hall VISSIM model.

Thank you for taking the time to talk me through comment 3.2, it is much appreciated.

I understand you have a meeting with Highways England next week on 2<sup>nd</sup> March, and therefore, for completeness, I attach our initial comments to your audit review prior to your meeting. You will note that apart from para 3.2 from my previous email of Tuesday 21<sup>st</sup> there is little we disagree with.

### **2.1. General Model Set Up**

*The models have been built and run in VISSIM 8 but 'Project Mode' has not been used such that the Morning and Evening Peak models are completely separate. This introduces risk that any changes made in one version of the model are not made in the other. It is strongly suggested that 'Project Mode' is used as the scheme testing begins as this will make the model easier to check and review.*

*Noting the above, for most comments in the following review, only the Morning Peak version of the model has been reviewed.*

The PM model is an exactly copy of the AM, with only differences in signal timings and vehicle / pedestrian demands.

### **2.3.3. Desired Speeds & Reduced Speed Areas**

*It is noted from a re-run of the model that desired speed decision 281 and 449 are ignored.*

The speed decisions can be updated to ensure they are not ignored.

*In addition, it is not clear as to why a reduced speed area has been used on the eastbound diverge at J10 (Croft).*

The reduced speed area was added to replicate vehicles slowing at the very final point vehicles can merge on the M62. Observations identified that vehicles slow at this location as a precautionary measure before exiting the motorway. Further to the above, several of the slip roads are uphill and gradients should be used to reflect the impact of the uphill gradient on the movement of vehicles in the model.

The model can be updated to reflect the gradients.

### **2.4. Signal Controllers and Timings**

*It is noted that some Controller Specs have been supplied with the model. However there are a number of Signal Controllers for which the corresponding signal specs do not appear to have been supplied. These include:*

- SC7 - Alban Retail Park access;
- SC8 - Decathlon - Peds near Decathlon on Winwick Road;
- SC9 - South Ped - Ped on Winwick Road, S of Long Lane;
- SC12 - Ped - Birchwood Way nr Blackbrook Ave;
- SC13 - Ped - Insall Road nr Vulcan Close;
- SC14 - Ped - Poplars Ave nr Capesthorpe;
- SC17 - Ped - Long Lane nr Fisher Ave;
- SC19 - Long Lane (A50) / Longfield Road; and

- SC20 - Enfield Park Road / Cinnamon Lane.

Signal Controller	Junction	Comment
SC2	Newton Road / Delph Lane	Delph Lane left turn on network should be coded as group 5 (not 4)
SC6	Winwick Rd / Long Lane / Hawleys Lane	Clarification on the operation of this junction is required
SC10	Blackbrook Ave / Insall Road / Hilden Road	Pedestrian demanded 'all red' stage 4 is not called at junction. Evidence should be supplied to illustrate this is the case
SC11	Orford Green / Hallfields Road	Pedestrian demanded 'all red' stage 3 is not called at junction. Evidence should be supplied to illustrate this is the case. SG3 (phase C) Orford Rd EB RT - not coded - could have signal head added on right turn.
SC15	Ped Winwick / Sandy Lane - Sandy Lane exit	Appears to be labelled incorrectly in SC (does not match network coding)
SC16	Ped Winwick / Sandy Lane - Cromwell exit	Appears to be labelled incorrectly in SC (does not match network coding)
SC18	Orford Road (A50) / Birchwood Way	SG3 (phase C) Orford Rd NB RT - not coded on network. could have signal head added on right turn.

It has not been possible to check the fixed times used in the model as there is no data provided on the observed signal times. From the LMVR report supplied this is expected to include green times, cycle times, offsets and how frequently demand dependant stages are called.

At many locations the pedestrian crossings have not been coded on the network or included in the signal times. This is generally acceptable in cases where the pedestrian stages are called within the stages and the intergreen times between traffic streams therefore remain accurate. The locations where this is likely not to be acceptable are noted in the table above.

In terms of the times used, it is noted that the minimum green times are not always consistent with the signal controller specs, and 5s or 0s is entered. It is not clear why this is the case, although in the case of fixed times is not critical. In addition a red/amber time of 1s is entered in many cases with a red time of 1s, when it would normally be expected to see red/amber times of 2s. This should be amended.

The signal controllers provided within the LMVR are what was received from Warrington Council in support of the modelling exercise. Observations on site were used to develop and match the operation of the junctions.

Pedestrian demand surveys were not requested at all junctions, only at uncontrolled crossing locations. Surveys at uncontrolled crossing locations were completed on the 5th October 2016, and the model and LMVR were updated accordingly, as detailed in the section 4.2.1 of the supporting LMVR.

SC2 – The model can be updated

SC6 – The Winwick Rd / Long Lane / Hawleys Lane operates as per the signal specification provided. It is modelled as operating under VAP control to replicate the change in signal plans throughout the peak periods, something which was observed onsite. Within the AM peak the junction is coded as operating on three individual plans switching at approximately 8:05 am and 8:17am.

SC10 – Observations on site identified the all red pedestrian stages were called regularly during either peak periods. For this reason they have not been coded within the model as they will have very little impact on the overall operation of the junction.

SC11 - Observations on site identified the all red pedestrian stages were not called regularly during either peak periods. For this reason they have not been coded within the model as they will have very little impact on the overall operation of the junction. Stage three is coded within the signal timings contained within the model, but it is active alongside Stage 1. As Stage 1 and 3 share the same single line stop line Stage 3 isn't visually coded in the model as the junction operates as on site.

SC15 & SC16 – The pedestrian crossing operates as part of a separate stream of traffic within the controller hence they have been coded on separate controllers, and not coded with the corresponding numbers in the site controller. The phase labelling can be updated within the model and will not impact upon the outputs, or current operation of the model.

The network coding of the pedestrian crossings on the southernmost section of Winwick Road does not appear to be up to date as follows:

- SC8 – Decathlon – the placement appears to be incorrect; there should be a staggered pedestrian crossing close to Warrington College / Business School and also the Jubilee Way junction added in.
- SC9 – South Ped – the placement appears to be incorrect being at Ireland Street; this should be moved slightly further north to be aligned with Corbet Avenue.

The aforementioned junctions were not included in the study area. This approach was agreed with both Highways England and Warrington, since it was decided that they were not required to be assessed as part of the area of impact of this development proposal. However, for completeness, they were coded in as high level representations of the junction, to provide the visual effects of platooning entering and exiting the model.

### **3.0 Calibration and Validation Review**

*It should be noted that Atkins have re-run the models in VISSIM 9 and have achieved slightly different results than are presented in the LMVR.*

The model was developed and ran in VISSIM 8.04, as stated in Section 3.1 of the supporting LMVR. Running in a different version of VISSIM will result in different outputs.

#### **3.1 Calibration against Counts**

*In order for the model to be acceptable to Highways England, we would expect that turning movements at M62 J9 and J10 to calibrate and that AECOM are able to illustrate that the flows on the motorway network match observed values. In the Morning Peak, we therefore have concerns about the level of flow calibration illustrated in the spreadsheets supporting the model.*

Assessment of the GEH values identified only two turning count fails, (For cars with a maximum GEH of 5.8). The three turns which failed the GEH criteria for LGVs are all small values and it should also be noted that the model is forecasting slightly higher LGV count than observed. GEH values at Junction 10 only fail for HGV movements with a GEH value no greater than 7.18. Differences of such magnitude within a model of this size would not be a cause for significant concern.

#### **3.3 Validation against Queue Lengths**

*AECOM have not set out any validation against observed queues in their LMVR despite sending a spreadsheet along with the model. As with the previous review, this is presumed to be an oversight and that relevant validation against queues will be provided in the revised version of the LMVR.*

AECOM do not consider any checks on 'queue lengths' as validation, this is because 'queue lengths' can be subjective and volatile across a peak period.

I trust that the above is clear, however please do not hesitate to contact me if you would like to discuss further.

I look forward to hearing from you at the end of next week. I am sure you can appreciate there is a need to get this base model agreed as soon as possible.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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**From:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
**Sent:** 08 March 2017 14:14  
**To:** Fiona Bennett  
**Cc:** Shaun.Reynolds@highwaysengland.co.uk; Simon.Clarke@highwaysengland.co.uk;  
dave.tighe@highgatetransportation.co.uk  
**Subject:** RE: Peel Hall VSISIM  
**Attachments:** 5150363.010 - TN03a - VISSIM Model Audit.pdf

Fiona,

Please find attached TN3a which replaces TN3 issued previously.

This TN has been reviewed by Shaun on behalf of Highways England and is broadly the same as the original draft version of the TN.

Regards,

Gavin.

---

**From:** Fiona Bennett [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 08 March 2017 10:31  
**To:** Coupe, Gavin D <Gavin.Coupe@atkinsglobal.com>  
**Cc:** Shaun.Reynolds@highwaysengland.co.uk; Simon.Clarke@highwaysengland.co.uk;  
dave.tighe@highgatetransportation.co.uk  
**Subject:** FW: Peel Hall VSISIM  
**Importance:** High

Dear Gavin,

Further to our discussion last week, you had anticipated formally issuing your comments on the Peel Hall VISSIM base model on Friday 3<sup>rd</sup> March.

Please can you let me know what the delay is and provide an update on expected provision of this report by reply email, as we are seeking to finalise the base model.

Please feel free to contact me if you would like to discuss.

Kind regards,  
Fiona

Fiona Bennett

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**From:** Flood, Richard <x-rflood@warrington.gov.uk>  
**Sent:** 28 February 2017 14:23  
**To:** dave.tighe@highgatetransportation.co.uk; Colin Griffiths  
**Cc:** fiona.bennett@highgatetransportation.co.uk; Davies, Michael (Planning); Oates, Andy  
**Subject:** RE: Peel Hall - Saturn

Dave

Whilst it may be possible to copy VISSIM matrices into SATURN, we do not have a functioning SATURN base model to compare the VISSIM model with – albeit with a cordoned off network.

The latest indication is that the new Warrington model won't be available until September this year.

Colin – I understand that you have just spoken to Mike about us reviewing the LMVR for the last application ahead of the pre-app meeting. Based on Dave's suggestion of a new model, I would be grateful if you could confirm what exactly you are requesting as the last LMVR would no longer be relevant.

Regards  
Richard

**Richard Flood**

Consultant – Transport for Warrington

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---

**From:** dave.tighe@highgatetransportation.co.uk [mailto:dave.tighe@highgatetransportation.co.uk]  
**Sent:** 28 February 2017 13:14  
**To:** Flood, Richard  
**Cc:** fiona.bennett@highgatetransportation.co.uk  
**Subject:** Peel Hall - Saturn

Richard,

It was good to speak you earlier regarding the use of Saturn.

All we are seeking is to use the existing network of the in-progress WBC SATURN model by cordoning off the relevant section of the model. A comparison would then be made between the Peel Hall VISSIM base network coverage and that of the cordoned off section of the SATURN model and modifications made to the network coverage where necessary.

The VISSIM base matrices would then be transferred into this stand-alone Peel Hall SATURN model, and it is envisaged that a level of matrix estimation would be required to adjust the VISSIM matrix to the SATURN model. Once calibration is completed the model can be validated against the same journey times used within the VISSIM model.

Given the issues that have been faced with the VISSIM base model to date, the conversion of the models to a SATURN platform will enable the future year/with development models to run more quickly than using VISSIM, due to the increased stability of the SATURN modelling platform.

Please can you confirm that you would be happy with this approach.

Kind regards,  
Dave

Dave Tighe  
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**From:** dave.tighe@highgatetransportation.co.uk  
**Sent:** 03 March 2017 15:15  
**To:** 'Flood, Richard'  
**Cc:** 'Colin Griffiths'; 'Oates, Andy'; 'Davies, Michael (Planning)';  
fiona.bennett@highgatetransportation.co.uk  
**Subject:** Peel Hall, Highways - Possible Use of SATURN - Method Statement  
**Attachments:** 1107 TN18 Possible Use of Saturn - Method Statement.pdf

Hi Richard,

Further to Colin's recent conversation with Mike and our discussions yesterday afternoon and today, I said that I would provide a Method Statement regarding the use of a stand-alone Peel Hall SATURN model as the modelling platform going forward.

As you are on leave next week, you advised that if you could be provided with a copy of the Method Statement this afternoon then you would circulate it to your colleagues so that you would have feedback on your return.

The Method Statement is attached.

You will note from the Method Statement that we would import some information from the base VISSIM model, so we would still like the VISSIM information we submitted in early January to be reviewed.

Have a good holiday and look forward to discussing this with you when your return on 13<sup>th</sup> March.

Kind regards,  
Dave

Dave Tighe

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**From:** Flood, Richard [mailto:x-rflood@warrington.gov.uk]  
**Sent:** 01 March 2017 19:05  
**To:** dave.tighe@highgatetransportation.co.uk  
**Cc:** Colin Griffiths; Oates, Andy; Davies, Michael (Planning)  
**Subject:** FW: Peel Hall, Highways.

Hello Dave

I have just had a useful conversation with Colin and tried to call you to discuss what information WBC would need ahead of the pre-app meeting for us all to get the most out of it.

We would like confirmation around what model you intend to use for the new application. You stated yesterday afternoon that you were looking to move to SATURN believing that parts of the Warrington SATURN model should already be in place – as I have explained, this is not the case and it won't be available until September.

We would not accept two separate modelling packages for base and forecast modelling and so if you are moving to SATURN, you would need to run a new SATURN base model and submit an LMVR for that. The VISSIM LMVR submitted in January would no longer be relevant.

To move forward, you need to decide what model you are going to use.

For the pre-app meeting to be of most use, we require a method statement from you to explain what model you are going to use and the confidence you have in it successfully informing the level of mitigation and the TA.

If you are going to continue with VISSIM then you need to provide us with an assurance statement from AECOM stating that they believe the forecast models will work.

If you want to move to SATURN, we want to see how you are going to build your model and produce the TA given your expected timescale of the determination.

Please be assured that we wish to continue working with you in a constructive way. Once we have received the method statement, we will review it and report back at the pre-app meeting on 22 March.

Regards  
Richard

**Richard Flood**

Consultant – Transport for Warrington

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# Highgate *Transportation*

**Land at Peel Hall, Warrington**

**Technical Note**

**Possible Use of SATURN**

**Method Statement**

**(HTp/1107/TN/18)**

**March 2017**

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## 1.0 Method Statement

- 1.1 This Method Statement has been prepared by Highgate Transportation Limited (HTp) following a request by the case highway officer. It is based on discussions with AECOM with the aim of considering creating our own stand-alone Peel Hall SATURN model to assess the impact and identify mitigation arising from development at Peel Hall.
- 1.2 It is proposed to use the VISSIM base matrices already created although it is envisaged matrix estimation would be required to adjust the VISSIM matrices so that they calibrate within SATURN and produce a representative reflection of OD movements/patterns.
- 1.3 Once calibration is completed the model can be validated against the same journey times used within the VISSIM model.
- 1.4 Currently WBC are creating their own SATURN model for the whole of their network with the full model due to be completed later this year. While it does not currently exist in its entirety it is understood that the network has been built. Since this covers the whole of the WBC network the section covering the Peel Hall network area could be cordoned off. The WBC model does not need to be functioning for the relevant part of the network to be cordoned off and there would no further use made of the WBC model.
- 1.5 A comparison would be made between the VISSIM agreed base network coverage and that of the SATURN model and modifications made where necessary.
- 1.6 The demand matrices from the existing base VISSIM network would then be loaded onto the Peel Hall SATURN model.
- 1.7 The future year, with development scenarios and sensitivity tests would then follow, once the SATURN base model had been agreed.
- 1.8 If WBC are unwilling to let the Peel Hall network area be cordoned off from their in-progress SATURN model then we would build our own network as part of the Peel Hall Saturn model.

**From:** Oates, Andy <x-aoates@warrington.gov.uk>  
**Sent:** 20 March 2017 14:09  
**To:** dave.tighe@highgatetransportation.co.uk  
**Cc:** fiona.bennett@highgatetransportation.co.uk; Flood, Richard; Davies, Michael (Planning)  
**Subject:** RE: Peel Hall, Highways - Possible Use of SATURN - Method Statement

David,

Having discussed the content of the Method Statement presented in TN18, we have the following comments.

The concept of creating and using a SATURN model to assess the scheme proposals is recognised as a positive proposal. Given the extent of the modelled area and the technical problems faced with the VISSIM model, the use of SATURN as a modelling tool should be of benefit.

However, we do have concerns over the what the TN appears to set out as the use of the two modelling suites to operate in parallel. This point therefore needs clear clarification.

For the avoidance of doubt, WBC will view the use of SATURN as an acceptable modelling platform (subject to detailed technical review) if both the base and the forecast scenarios are modelled. The Council would be concerned if VISSIM were used for one scenario and SATURN the other.

TN18 makes reference to the Council's Multi-Modal SATURN model that is currently in development. This SATURN model is still in the early stages of development and the Council would be willing to share this model, *but* only at a time when this SATURN model has reached a point of suitable completion and certainly not before the model has been satisfactorily validated and calibrated (currently programmed to be September 2017). This is not only to ensure suitable technical accuracy of the model, but also to ensure that the model is fully checked and fit for purpose before its use or provision to third parties.

Notwithstanding the above, we also have the following questions on the detail presented in the Method Statement:

Section 1.5 states that a comparison would be made between the VISSIM agreed base network coverage and that of the SATURN model. Does this refer to the physical network coverage of the SATURN model that may need to be extended to cover the same network as the agreed network in VISSIM?

Section 1.6 states that the demand matrices from the existing base VISSIM network would be loaded onto the Peel Hall SATURN model. We are not clear what exactly this statement means. If the SATURN model is to be validated, why would the existing base VISSIM data need to be carried over – wouldn't the existing demand matrices already be in SATURN to have enabled the validation to be completed?

Please don't hesitate to contact me in advance of our meeting if you have any questions on the above.

Kind regards

Andy

Transport Development Control Team Leader  
Warrington Borough Council  
Environment & Regeneration Directorate  
3rd Floor New Town House  
Buttermarket Street  
Warrington, WA1 2NH.

**From:** dave.tighe@highgatetransportation.co.uk  
**Sent:** 20 March 2017 15:32  
**To:** x-aoates@warrington.gov.uk  
**Cc:** Flood, Richard; mdavies@warrington.gov.uk;  
fiona.bennett@highgatetransportation.co.uk  
**Subject:** FW: Peel Hall, Highways - Possible Use of SATURN - Method Statement

Andy,

Thank you for your email.

See our comments below.

Happy to discuss.

Kind regards,  
Dave

Dave Tighe

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dave.tighe@highgatetransportation.co.uk

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**From:** Oates, Andy [<mailto:x-aoates@warrington.gov.uk>]  
**Sent:** 20 March 2017 14:09  
**To:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)  
**Cc:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk); Flood, Richard; Davies, Michael (Planning)  
**Subject:** RE: Peel Hall, Highways - Possible Use of SATURN - Method Statement

David,

Having discussed the content of the Method Statement presented in TN18, we have the following comments.

The concept of creating and using a SATURN model to assess the scheme proposals is recognised as a positive proposal. Given the extent of the modelled area and the technical problems faced with the VISSIM model, the use of SATURN as a modelling tool should be of benefit.

However, we do have concerns over the what the TN appears to set out as the use of the two modelling suites to operate in parallel. This point therefore needs clear clarification. **We do not propose to model in parallel, only that, sections of the VISSIM could still be used for visual demonstration purposes if required**

For the avoidance of doubt, WBC will view the use of SATURN as an acceptable modelling platform (subject to detailed technical review) if both the base and the forecast scenarios are modelled. The Council would be concerned

if VISSIM were used for one scenario and SATURN the other. **As set out above, we propose the modelling to be carried out in SATURN for all scenarios, we would use sections of the VISSIM for visual demonstration purposes.**

TN18 makes reference to the Council's Multi-Modal SATURN model that is currently in development. This SATURN model is still in the early stages of development and the Council would be willing to share this model, *but* only at a time when this SATURN model has reached a point of suitable completion and certainly not before the model has been satisfactorily validated and calibrated (currently programmed to be September 2017). This is not only to ensure suitable technical accuracy of the model, but also to ensure that the model is fully checked and fit for purpose before its use or provision to third parties. **We understand your comment, however it would have been of a positive time-saving benefit to have been able to cordon off a section of the WBC SATURN network (the basic road network) to use this for the base model of the Peel Hall SATURN, all technical data and matrices would be independent of this; it would still be subject to validation as part of the Peel Hall model and therefore is not considered to be inappropriate. Therefore, we would still ask for this to be made available now.**

Notwithstanding the above, we also have the following questions on the detail presented in the Method Statement:

Section 1.5 states that a comparison would be made between the VISSIM agreed base network coverage and that of the SATURN model. Does this refer to the physical network coverage of the SATURN model that may need to be extended to cover the same network as the agreed network in VISSIM? **Yes, physical network coverage (as per points above).**

Section 1.6 states that the demand matrices from the existing base VISSIM network would be loaded onto the Peel Hall SATURN model. We are not clear what exactly this statement means. If the SATURN model is to be validated, why would the existing base VISSIM data need to be carried over – wouldn't the existing demand matrices already be in SATURN to have enabled the validation to be completed? **The data forming the VISSIM matrices is in spreadsheets which can be transferred to the SATURN model. We would not be using demand matrices from the WBC SATURN model as it is not yet ready.**

Please don't hesitate to contact me in advance of our meeting if you have any questions on the above.

Kind regards

Andy

Transport Development Control Team Leader  
Warrington Borough Council  
Environment & Regeneration Directorate  
3rd Floor New Town House  
Buttermarket Street  
Warrington, WA1 2NH.  
Tel: 01925 444086  
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Email: [x-aoates@warrington.gov.uk](mailto:x-aoates@warrington.gov.uk)

Web: [www.warrington.gov.uk](http://www.warrington.gov.uk)

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**From:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk) [<mailto:dave.tighe@highgatetransportation.co.uk>]

**Sent:** 17 March 2017 16:26

**To:** Oates, Andy; Flood, Richard

**Cc:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

**Subject:** RE: Peel Hall, Highways - Possible Use of SATURN - Method Statement

Andy/Richard,

## NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 22<sup>nd</sup> March 2017

HELD: Warrington BC, New Town House @ 10:00.

PRESENT:	Richard Flood	WBC
	Andy Oates	WBC
	Mike Davies	WBC
	Colin Griffiths	Satnam
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

- 
1. HTP asked if WBC would audit the VISSIM information submitted on 6<sup>th</sup> January. WBC didn't consider it necessary as now moving to SATURN.
  2. The use of SATURN to move forward with the modelling was agreed with WBC. However WBC highway officers do not agree to the use of the network already completed within their SATURN model as the WBC SATURN model has not yet been validated (latest estimate, the model will be ready by September 2017). Therefore the Satnam team will build a SATURN model from scratch.
  3. HTP and Satnam confirmed that they have instructed AECOM to carry out the Peel Hall SATURN model, using the same modelling team as used for the VISSIM modelling i.e. separate from the team preparing the WBC SATURN modelling. Therefore no conflict of interest for the AECOM team arises.

### Scenario testing

4. Years of assessment had previously been set out as 2019 and 2029 (both with all development). However, HTP proposed the following for moving forward:
  - a. Based on now being one year further on, an opening year of 2020 is more appropriate.
  - b. The phasing programme has been revised to reflect a ten year build out, and confirmed based on housing numbers. Therefore an assessment year of 'opening year plus 10 years after' is considered appropriate to assess the forecast traffic impact from the whole development.
  - c. An interim year has previously been requested by WBC, as set out in their consultation response, to assess the development for a mid-build scenario without the spine road in place and thereby all traffic must use the external road network to access the local centre facilities.

- d. The current phasing schedule sets out end of year five for the initial section of the spine road link to be provided. It is therefore considered that five years after opening (2025) is appropriate to be modelled but without putting the initial link for the spine road in; this would be for circa 600 dwellings.
5. Therefore the SATURN modelling years of assessment are proposed as 2025 and 2031. These were agreed with WBC as reasonable and consistent.
6. WBC are keen to see a link road scenario through the site tested. HTP confirmed that this was a scenario we would be looking to include as a sensitivity test. It was confirmed by CG that if this road was a priority for WBC, Satnam would not build the road as it would serve wider needs, but would instead assist the council in achieving it as far as current land ownership allowed. It was made clear that other residential properties would have to be acquired to facilitate this route onto Poplars Avenue and these would have to be acquired by the council as they are operated by a housing association.

### **Work Stages**

7. HTP tabled a preliminary schedule of work stages (see attached) for the proposed SATURN modelling. It was agreed that this was broadly similar to that set out by WBC (albeit for VISSIM) and reasonable.
8. WBC had concerns over the iterative nature and the amount of audit work likely to arise for the pre-app stage as a model audit was outside the normal scope of a pre-app and as such would not usually be carried out until after submission of a planning application.
9. On that basis, WBC do not intend to review the SATURN base model as part of the pre-app, or the outputs at each stage, and therefore the Satnam team can carry out this work without staged checking by WBC, as WBC had confidence in AECOM. It was agreed that there was no overriding need for the step by step review.
10. It was discussed that a follow up meeting would be arranged for three months' time (June 2017) to update WBC on progress and discuss impact and anticipated mitigation.
11. HTP to keep WBC updated on progress periodically.
12. WBC agreed to supply a response within the next two weeks regarding an indication of the level of engagement they consider reasonable as part of this pre-app process (and fee).

### **Timescales**

13. HTP estimate that with the modelling required and step by step review by WBC, the TA would be ready by September 2017.
14. Appeal to be lodged by August 2017 for refused application. Inquiry expected within six months of this, hence late 2017 date likely. If WBC require an opportunity to reconsider a second application prior to the inquiry therefore, it would have to be submitted in late July 2017.

15. Agreed between CG and MD that any second application would ideally be considered at committee in October 2017. A speedy resolution of S106 arising from any favourable committee decision will be required, and it was agreed that a draft S106 should be submitted with the application and be in a position ready to sign immediately following committee.

### **Mitigation Measures**

16. HTP asked if WBC, as local highway authority, had a feel for mitigation measures to protect the area to the south of Poplars Avenue. WBC were unwilling to provide any advice or comment until they have considered the modelling results.

### **Planning Issues**

17. EDUCATION: CG to feedback to MD once advice is received Education.
18. OPENSOURCE: MD to feedback once he has further input from within the council.
19. HEALTH CONTRIBUTIONS: CG to respond.
20. ECOLOGY: updates ongoing and MD emphasised that an agreed position with GMEU and WBC was required for resubmitted application.
21. AFFORDABLE HOUSING: position agreed.
22. AIR QUALITY: MD suggested that AQ be relooked to ensure it takes on board the most recent reports from WHO etc.
23. SECTION 106: draft to be submitted with second application and/or worked up prior to inquiry.
24. CONDITIONS: CG to prepare a list and send to MD when appropriate.
25. VIABILITY: MD noted that if Satnam were to raise viability points then a viability appraisal was required with the application.
26. LOCAL PLAN: the SATURN model is being prepared by WBC to test possible Local Plan allocations; CG to liaise with MB regarding general progress on Local Plan.

### **Actions**

- i. AO to feedback on work tasks WBC can do for the pre-app, and timescales.
- ii. HTP to confirm to AECOM to continue with SATURN from scratch.
- iii. Next meeting scheduled for June 2017.
- iv. Information to be sent to WBC as work produced.

END OF MEETING

**From:** Fiona Bennett <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 29 September 2017 07:25  
**To:** 'Zoeftig, Catherine'  
**Subject:** Peel Hall

Good morning Catherine,

Further to our meeting yesterday, I can confirm that I will be sending you the updated Technical Note with the summary tables later today.

Prior to issue, it would be ever so helpful if you could please enquire if there are any firm proposals for the M62 Junction 9 in the future. Thank you in advance.

I also note that, in terms of the Junction 3 results you were going to review the 2025 PM results for arm A as there was a decrease in VoC; also Junction 25 has a VoC of 91 in the 2025 PM with no queues. Furthermore, we discussed that the 2030 AM Do Minimum arm B has a VoC of 31, which seems out of proportion with all other results including for 2025, etc.

We agreed yesterday that there were 9 junctions requiring further modelling, but I believe that one of those was PH6; which has already been done. Please can you confirm that you only need to actually model 8 in more detail? Many thanks.

I look forward to receiving your fee proposal next week; please can you send this over to me before issuing to the client? Many thanks.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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*First Floor, 43-45 Park Street*

*BRISTOL BS1 5NL*

*Company Registration Number: 07500534*

**fiona.bennett@highgatetransportation.co.uk**

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**From:** Zoeflig, Catherine <catherine.zoeflig@aecom.com>  
**Sent:** 29 September 2017 09:18  
**To:** Fiona Bennett  
**Subject:** RE: Peel Hall

Ah yes I have just re-read my notes and you are correct.

8 junctions then.

Regards,  
Catherine

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**From:** Fiona Bennett [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 29 September 2017 09:04  
**To:** Zoeflig, Catherine  
**Subject:** RE: Peel Hall

Morning Catherine,

I have notes that say we decided Junction 3 was not needed.

Happy to discuss,  
Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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**From:** Zoeflig, Catherine [mailto:catherine.zoeflig@aecom.com]  
**Sent:** 29 September 2017 08:57  
**To:** Fiona Bennett  
**Subject:** RE: Peel Hall

Hi Fiona,

The 9 junctions that I have noted requiring further modelling are as follows:

Junction 3, 5, 8, 15, 20, 24, 25, 26, and 27.

Regards,  
Catherine

**Catherine Zoeflig**, BA (Hons), CMILT  
Associate Director, Strategic Planning and Advisory

**AECOM**  
M +44-(0)7979-474810  
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PLEASE NOTE: DUE TO PART-TIME WORKING ARRANGEMENTS I AM NOT IN THE OFFICE ON WEDNESDAY AFTERNOONS OR FRIDAY AFTERNOONS

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**From:** Fiona Bennett [<mailto:fiona.bennett@highgatetransportation.co.uk>]  
**Sent:** 29 September 2017 07:25  
**To:** Zoeflig, Catherine  
**Subject:** Peel Hall

Good morning Catherine,

Further to our meeting yesterday, I can confirm that I will be sending you the updated Technical Note with the summary tables later today.

Prior to issue, it would be ever so helpful if you could please enquire if there are any firm proposals for the M62 Junction 9 in the future. Thank you in advance.

I also note that, in terms of the Junction 3 results you were going to review the 2025 PM results for arm A as there was a decrease in VoC; also Junction 25 has a VoC of 91 in the 2025 PM with no queues. Furthermore, we discussed that the 2030 AM Do Minimum arm B has a VoC of 31, which seems out of proportion with all other results including for 2025, etc.

We agreed yesterday that there were 9 junctions requiring further modelling, but I believe that one of those was PH6; which has already been done. Please can you confirm that you only need to actually model 8 in more detail? Many thanks.

I look forward to receiving your fee proposal next week; please can you send this over to me before issuing to the client? Many thanks.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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*Highgate Transportation Ltd*  
*First Floor, 43-45 Park Street*

**From:** dave.tighe@highgatetransportation.co.uk  
**Sent:** 02 October 2017 18:02  
**To:** Flood, Richard  
**Cc:** Colin Griffiths; fiona.bennett@highgatetransportation.co.uk; mdavies@warrington.gov.uk  
**Subject:** Peel Hall - Highways Update  
**Attachments:** 1107 TN22 Impact Summary.pdf; 1107 Response Note to WBC Consultation Response.pdf; 1107 Letter to WBC 021017.pdf

Dear Richard,

I trust you are well.

Further to our meeting on 22<sup>nd</sup> of March 2017 and subsequent correspondence, I thought it would be helpful to provide an update of the work we and Aecom have carried out.

Please find attached:

- 1) My letter setting out the updated position.
- 2) Our Technical Note TN22 which summarises the impact from the Peel Hall Saturn model.
- 3) Our response to the comments on our part 1 TA provided by Andy Oates.

Fiona will shortly send you a link to the three Aecom reports which comprise the Local Model Validation Report, the Forecasting Report and the SATURN Modelling Results Technical Note.

If you consider that it would be helpful to meet so that we can take you through the recent SATURN modelling and update you with our on-going work, then we would be happy to do this.

Kind regards,  
Dave

Dave Tighe

Highgate *Transportation*

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dave.tighe@highgatetransportation.co.uk

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Richard Flood  
Transport for Warrington  
Warrington Borough Council

2<sup>nd</sup> October 2017

By Email Only

Dear Richard,

## **Proposed Development at Peel Hall Highways Update**

Further to our meeting on 22<sup>nd</sup> of March 2017 and subsequent correspondence, we thought it would be helpful to provide an update of the work we have subsequently carried out.

You will recall from that meeting we agreed the use of SATURN for on-going work and revised assessment years. Aecom have now completed the Peel Hall SATURN model and you will find enclosed their three reports namely the Local Model Validation Report, the Forecasting Report and the SATURN Modelling Results Technical Note. In addition you will find enclosed our Technical Note TN/22 which gives a summary of the impact arising from the SATURN work and identifies those junctions that require further modelling.

You will recall that when we met in March we confirmed that the SATURN work would also assess the option of a through route across the site that you had requested to be promoted at our earlier meetings. You will note from the attached reports that this option does indeed present some advantages. We are therefore promoting a fully worked up two-strategy approach, one with and one without a through route, to be formally considered.

You will also recall that last September your colleague Andy Oates provided comments on our Part 1 Transport Assessment and that these comments were repeated in December and largely formed one of the Appendices to February's Committee Report. In order to complete our update to you, please find our comments on Andy's comments also attached. You will recall that during the VISSIM review meetings held last autumn we did advise that these comments would be fully addressed within the next iteration of the Transport Assessment and that many of your comments were either superseded or easily addressed. Indeed, you will recall most of these issues were discussed at our March 2017 meeting.

If you consider that it would be helpful to meet so that we can take you through the recent SATURN modelling and update you with our on-going work, then we would be happy to do this.

We trust that this is in order but should you have any questions please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Dave Tighe". The signature is written in a cursive style with a large initial 'D' and 'T'.

Dave Tighe

Director  
07973 375 937  
dave.tighe@highgatetransportation.co.uk

02/10/17

HTp/1107/TN/22 Contained at Appendix 64 of TA/01/A

1107 Response Note to WBC Consultation Response Contained at Appendix 5 of TA/01/A

Simon Clarke  
Asset Manager  
Asset Development Team  
Highways England

2<sup>nd</sup> October 2017

By Email Only

Dear Simon,

## **Proposed Development at Peel Hall Highways Update**

We thought it would be prudent to provide you with an update of what is happening regarding the proposals for development at Peel Hall. As you are aware we are now in the run up to a planning appeal, which is due to commence in the middle of February next year.

You will recall when we met Sean and your consultants (Atkins) in January, we were able to confirm that the base VISSIM work had been agreed and that subsequent work would involve Aecom building a bespoke Peel Hall SATURN Model. We also advised that the option of a through route across the site would also be considered as previously requested by WBC.

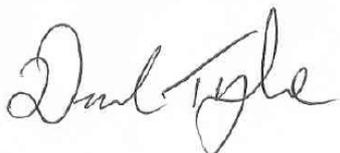
Aecom have now completed this model and you will find enclosed their three reports; namely the Local Model Validation Report, the Forecasting Report and the SATURN Modelling Results Technical Note. In addition you will find enclosed our Technical Note TN/22 which gives a summary of the impact arising from the SATURN work at different junctions including the junction of the M62 with the A49.

From these reports the conclusion is that the impact on this motorway junction is not significant.

If you consider that it would be helpful to meet so that we can take you through the recent SATURN modelling and update you with our on-going work, then we would be happy to do this.

We trust that this is in order but should you have any questions please do not hesitate to contact me.

Yours sincerely,



Dave Tighe

Director  
07973 375 937  
[dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)

**Your ref:** NW097 - 17/18  
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[www.atkinsglobal.com](http://www.atkinsglobal.com)

23 Oct 2017

Dear Ben

## Re: Peel Hall, Warrington

Highways England has received documentation in support of a planning appeal by SATNAM Millennium for a mixed use site in Warrington known as Peel Hall. SATNAM's lead Consultant for transport are Highgate Transportation and they have supplied a Technical Note summarising SATURN modelling work undertaken by their sub-consultant AECOM in order to assess the impacts of the proposed development on the surrounding highway network. In addition, they have supplied two reports and a Technical Note written by AECOM themselves.

I write to provide our comments on the reports and technical notes in relation to the impact of the development on the SRN.

## SATURN Model LMVR

A Local Model Validation Report (LMVR) has been produced by AECOM on behalf of Highgate Transportation. The LMVR has been provided to Atkins and is reviewed herein.

## Geographical Model Coverage

The geographical coverage of the model appears to be the same as the VISSIM model previously produced by AECOM on behalf of Highgate Transportation.

In Figure 1.1 of the LMVR there is reference to an existing SATURN model covering the M62 and A49 but no reference is made to this elsewhere within the report suggesting that this figure may be erroneous.

In terms of properly assessing the impact of the proposed development on the SRN, it is recommended that the model be extended to cover M6 Junction 21 and 21a. Traffic travelling to/from the development to/from the South may well use Junction 21 of the M6 and it would be useful for the impact on this junction to be understood through the use of the model.

It should be noted that although this is a SATURN model, the scale of the modelled network severely limits the models ability to assign traffic to different routes.

## **Data**

The majority of the traffic count data used in the model was collected in 2014 and is therefore some three or so years out of date. It is not clear as to why more contemporary data has not been collected or if any attempt has been made to compare this data to current conditions.

Origin – Destination data has been extracted from the Warrington Multi-Model Transport Model developed in 2008. This is robust in lieu of a more up to date model.

Traffic signal data has been supplied by Warrington Borough Council although no dates have been given for the specifications. Clarification should be sought that the signal specifications are the latest versions. Observations were taken in order to build up a picture of operational timings but again, no dates have been given and clarification should be sought.

Journey Time data has been extracted from basemaps.co.uk. However, when Atkins attempted to access this site, it transferred to ukmapcentre.com from which it was not obvious as to how to access journey time data. Clarification should be sought.

Journey time data has apparently been extracted for May 2015. This is several years out of date and it is not clear as to why more recent available data was not used in the construction of the model.

## **Base Model Development**

The base model periods have been set to 08:00-09:00 and 17:00-18:00 although no justification has been provided for the selection of those time periods. Clarification should be sought as to whether these periods will allow for a robust assessment of the development on the SRN.

The model was converged but the associated files have not been supplied and should be requested.

## **Base Model Calibration / Validation**

The model has been calibrated to a base year of 2015 by factoring the 2014 traffic counts to a common year of 2015. It is not clear as to why 2015 has been chosen as a base year and justification should be sought as it is recommended that the base year of any given model is as close to present day as possible.

Table 6 illustrates that the model just passes the standard calibration criteria in the Morning Peak with better calibration in the Evening Peak. In order to fully review the calibration of the model, the model and output spreadsheets should be sought. Table 7 shows better calibration although it is not entirely clear as to what the difference between the two tables is.

Table 8 illustrates a reasonable validation against observed journey times although the model appears to be relatively consistently quick suggesting it is not generating the observed congestion.

## **Summary**

The model and associated output spreadsheets will be needed in order to undertake a thorough review of the work. However, the LMVR illustrates a model that is calibrated and validated reasonably well to a 2015 base year. Concerns have been raised over the geographical scope and choice of base year as well as the age of the data used.

## **Peel Hall Forecasting Report**

A Forecasting Report has been produced by AECOM on behalf of Highgate Transportation. The report has been provided to Atkins and is reviewed herein.

The forecast scenarios are as follows:

- 2025 Do Minimum
- 2025 Do Something (Partial build-out of site)
- 2030 Do Minimum
- 2030 Do Something (Full build out of site)
- 2030 Through Route (where the internal road network allows for through traffic East – West)

It does not appear that a scenario for the full build out at opening year has been tested although this was requested by Highways England at an earlier meeting.

### **Future Year Trip Matrix Development**

Background traffic has been growthed using Tempro 7.2 from the 2015 base year to 2025 and 2030. As discussed in the review of the LMVR, the 2015 base year is itself factored from 2014 counts and as such, there are 11 and 16 years of temporo growth applied to the counts to get to the design years. As discussed in the review of the LMVR, the level of assumption made could be reduced with more contemporary counts.

The development trips and distribution appear to be in line with previous reporting.

### **Assessment of Impacts on Journey Times**

Tables 4.1 and 5.2 illustrate the impact of the development on journey times in 2025. It should be noted that a partial build-out of the development is assumed in this year.

It can be seen from a review of these tables that the development has a significant detrimental impact on the majority of the journey times that are reported upon. It is also noted that the results of the impact on the M62 are not reported and should be requested.

Tables 5.3 and 5.4 illustrate the impact of the development on journey times in 2030. As with the 2025 scenarios, there is significant dis-benefit with the proposed development. However, it is also noted that the Do Minimum journey times fall between 2025 and 2030 in some cases which is illogical albeit not impossible. Further clarification should be sought as to why this is the case.

Tables 5.3 and 5.4 illustrate the impact of the development on journey times in 2030 with the 'through route' within the proposed development. As with the 2030 preferred scenario, there is significant dis-benefit with the proposed development.

### **Assessment of Impacts on Delay**

Figures 6.1 and 6.2 illustrate the impact of the development on delay in 2025. It should be noted that a partial build-out of the development is assumed in this year.

The figures illustrate increases in delay across the majority of the network and critically, there is a significant increase in delay on the eastbound offslip to Junction 9 of the M62 in the Evening Peak.

Figures 6.3 and 6.4 illustrate the impact of the development on delay in 2030. As with the 2025 scenarios, there is significant dis-benefit with the proposed development and again, as with the 2025 scenarios, there is a significant increase in delay on the eastbound offslip to Junction 9 of the M62 in the Evening Peak.

### **Assessment of Impacts on Queuing & Volume over Capacity**

The assessment of impacts on queuing and Volume over Capacity are described in Sections 7 and 8.

The outputs show that overall in 2025, the M62 J9 will be operating over its theoretical capacity with large queues forming on the majority of arms in both peak periods. Queues on the eastbound off-slip are could have an impact upon the safe operation of the mainline, as can occasionally happens currently

The outputs show that overall in, the 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

It is noted that the introduction of the through-road as part of the proposed development does not appear to have a material difference in the V/C and queuing on the SRN, although there are negative impacts on the A49 approach arms.

## Technical Note – SATURN Modelling Results

A Technical Note has been produced by AECOM for Highgate Transportation. The Technical Note has been provided to Atkins but is not reviewed herein as it repeats the same data as is presented in the other provided reports. As such, the review would draw the same conclusions as for the reviews of the other reports and technical notes.

### Technical Note TN22 – Impact Summary

The outputs from the SATURN modelling described above have been summarised by the applicants lead transport consultant, Highgate Transportation, in a technical note (HTp/1107/TN/22). The following is a summary of the document and the key points that have been made as it relates to the SRN (M62 Junction 9).

#### Scenarios

TN22 summarises the testing, using SATURN, of the following scenarios:

- Base 2015 – this is calibrated from existing traffic count and journey time data.
- ‘Do Minimum’ 2025 – this is the base traffic growth to a future year of 2025, plus committed development traffic.
- ‘Do Something’ 2025 – this is the Do Minimum 2025 scenario plus the Peel Hall development flows for a part build-out scenario of 600 dwellings and no internal vehicular link for car traffic between the majority of the residential areas and the local centre.
- ‘Do Minimum’ 2030 – this is the base traffic growth to a future year of 2030, plus committed development traffic.
- ‘Do Something’ 2030 – this is the Do Minimum 2030 scenario plus full build-out of the Peel Hall development, with an internal link to the local centre, but no through-route for general traffic across the site.
- ‘Through-Route’ 2030 - this is the Do Minimum 2030 scenario plus full buildout of the Peel Hall development, with a fully open through-route for general traffic between the A49 (a new signalised junction is proposed) in the west and the proposed site access roundabout junction with Mill Lane to the east of the site.

The SATURN outputs from each set of scenarios have been compared to identify the change in the volume / capacity (V/C) of specific junctions. In the case of the SRN this exercise has been undertaken for the AM and PM peak periods for the M62 J9. The results from TN22 summarised in the following Table 1 for 2025 and Table 2 for 2030.

**Table 1 – Comparison of V/C and Queuing of M62 J9 in 2025 Scenarios**

Arm	Do Minimum		Do Something	
	V/C	Queue (PCU)	V/C	Queue (PCU)
<b>AM Peak</b>				
M62 EB Off Slip	97	21	98	21
A49 North Arm	109	71	109	71
M62 WB Off Slip	71	4	72	4
A49 South Arm	91	15	93	18
<b>PM Peak</b>				
M62 EB Off Slip	135	78	117	89
A49 North Arm	106	49	107	52
M62 WB Off Slip	50	2	51	2
A49 South Arm	101	109	106	143

The outputs summarised in Table 1 show that overall in 2025 M62 J9 will be operating over its theoretical capacity with large queues forming on the majority of arms in both peak periods. Queues

on the eastbound off-slip are could have an impact upon the safe operation of the mainline, as can occasionally happens currently.

**Table 2 – Comparison of V/C and Queuing of M62 J9 in 2030 Scenarios**

Arm	Do Minimum		Do Something		Through-Route	
	VoC	Queue (PCU)	VoC	Queue (PCU)	VoC	Queue (PCU)
<b>AM Peak</b>						
M62 EB Off Slip	101	22	102	21	102	20
A49 North Arm	109	71	109	71	109	71
M62 WB Off Slip	74	4	75	4	75	4
A49 South Arm	94	36	96	38	98	41
<b>PM Peak</b>						
M62 EB Off Slip	119	100	123	119	123	119
A49 North Arm	105	45	106	48	107	55
M62 WB Off Slip	52	2	53	2	53	2
A49 South Arm	104	121	107	143	101	96

The outputs summarised in Table 2 show that overall in 2030 M62 J9 will be operating further over its theoretical capacity with queues increasing in length on the majority of arms in both peak periods, when compared to 2025 scenarios.

It is noted that the introduction of the through-road as part of the proposed development does not appear to have a material difference in the V/C and queuing on the SRN, although there are negative impacts on the A49 approach arms.

TN22 concludes that the traffic from the proposed development in all scenarios is not significant and as such do not merit further investigation / modelling, which has been recommended for adjacent junctions identified as having V/C over 85%.

M62 J9 is predicted to be significantly over capacity in all scenarios and whilst the addition of the Peel Hall traffic does not result in a considerable jump in the impact, it does result in further worsening of the performance of the SRN and as such the extent of this should be further investigated and reported upon.

## Conclusions & Recommendations

### Conclusions

The review of the provided documentation has come to the following conclusions.

- It has not been possible to accurately review the modelling as the model itself has not been supplied. A more detailed review could be undertaken if the model and associated output files and spreadsheets were supplied.
- Atkins has concerns over the appropriateness of SATURN as an assessment tool and has some concerns about the limited geographical scope of the model.
- Atkins has concerns over the time periods used in the SATURN model
- Atkins has concerns over the age of the data used to build the model
- No assessment of the full development at opening year has taken place although this was previously requested by Highways England.
- M62 J9 is significantly over capacity in all tested scenarios and the addition of the Peel Hall traffic does not result in a considerable jump in the impact, but it does result in further worsening of the performance of the SRN.

## **Recommendations**

Atkins would offer Highways England the following recommendations in progressing the assessment of the proposed Peel Hall development.

- The consultant supply the model and associated output files and spreadsheets
- The consultant supply more information in support of the modelling in line with comments set out within this letter
- The consultant undertake operational modelling of the M62 J9 and its associated slip roads, and merge and diverges using an appropriate modelling tool.

On the basis of the above, it is recommended that planning permission should not be granted until adequate information is provided to assess impacts on the Strategic Road Network.

Yours Sincerely,  
For and on behalf of ATKINS Limited

**Gavin Coupe**  
Managing Consultant  
Transportation

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 08 November 2017 16:26  
**To:** 'Coupe, Gavin D'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Laverick, Benjamin'; 'Zoefitig, Catherine'  
**Subject:** Proposed Development at Peel Hall  
**Attachments:** 1107 TN23 Response to HE Atkins Saturn Response.pdf

Dear Gavin,

Further to Ben Laverick sending across your review of the SATURN LMVR and Forecasting Report, please find attached our response prior to our meeting next week.

AECOM are sending across the SATURN model to you direct as requested.

If you have any questions or further comments in the meantime please do not hesitate to contact us.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

*Highgate Transportation Ltd*

*First Floor, 43-45 Park Street*

*BRISTOL BS1 5NL*

*Company Registration Number: 07500534*

08/11/17

HTp/1107/TN/23 contained in Appendix 59 of TA/01/A

## NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 14<sup>th</sup> November 2017

HELD: Highways England, Manchester Piccadilly Gate @ 14:30.

PRESENT:	Ben Laverick	Highways England
	Gavin Coupe	Atkins
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation
	Catherine Zoefitig	AECOM

---

1. DT provided an overview of the application and summary of the current appeal programme.
2. The Atkins advice letter and HTP TN/23 in response was discussed. GC confirmed that his statement regarding the 2014 traffic data used was not that it was out of date, but that the use of growth rates are likely to result in higher forecast flows in the model as a consequence, since in reality traffic growth on this network is heavily constrained.
3. It was agreed to focus on reviewing local traffic growth and what might be included in the Statement of Common Ground for the forthcoming Appeal.
4. Discussion took place regarding the significance of impact of the Peel Hall development at the M62 J9, and FB agreed to set this out in an email for discussion with the aim of the conclusions of this to be included in the Statement of Common Ground.
5. It was agreed that there is no material difference in impact on J9 of the M62 between either of the two Peel Hall access strategies (no through-route/through-route), but BL made the point that that is not to say that the two options will not have any impact.
6. Mitigation of impact - it was discussed that the junction has very limited scope for widening, GC confirmed that previously this junction had been reviewed and that widening would require rebuilding the overbridges. It was agreed that this was not a scheme for Peel Hall to investigate. There is a possibility for widening of the eastbound slip road onto the M62; this is to be investigated by HTP.
7. It was discussed that if a scheme of mitigation is proposed for the J9 M62 eastbound on-slip the Peel Hall Saturn data would be used if no further data provided by Atkins.

8. Actions:

- i. HTP to contact WBC to request static ATC data for A49 north and south of the M62 J9 and obtain J9 traffic count data from the DfT website in order to review levels of traffic growth.
- ii. HTP to review eastbound slip roads in terms of scope for widening.
- iii. GC to confirm if Atkins has traffic modelling data for M61 J9 which is validated to a later year than 2015.
- iv. Correspondence will be entered into between Highways England and HTP regarding significance of impact with the aim of including in the Statement of Common Ground in advance of the Appeal.
- v. BL to discuss history of the application with Sean Reynolds.

END 15:10

**From:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Sent:** 21 November 2017 08:58  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** Davies, Michael (Planning); dave.tighe@highgatetransportation.co.uk; colin@satnam.co.uk; Dickin, Alan  
**Subject:** RE: Peel Hall - Winwick Road Data

Fiona,

Thanks for your email.

Just to clarify for the benefit of yourself and your client I have taken over from Andy Oates and will be the point of contact for highway matters in respect of the Peel Hall scheme. The Council has appointed WSP to review the SATURN modelling on its behalf and I expect to have some feedback from them in the next day or two.

It is my intention to provide feedback to you as WSP's comments come in rather than collate all of their information together in one response; I trust that this is acceptable.

I am aware of the timescales involved and will endeavour to progress matters as quickly as possible.

In the meantime if you need any further information please let me know.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
Transport for Warrington  
Warrington Borough Council  
New Town House, Buttermarket Street, Warrington, WA1 2NH

 [mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)

 Office: 01925 444086 Mobile: 07966 884639

[warrington.gov.uk](http://warrington.gov.uk)



**From:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Sent:** 22 November 2017 10:39  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** Dickin, Alan; Davies, Michael (Planning)  
**Subject:** Peel Hall Development - LMVR Review  
**Attachments:** Peel Hall Farm LMVR review.docx

Fiona,

Please find attached the first comments from WSP in respect of the information submitted in support of the Peel Hall development.

The issues to be addressed are highlighted in red with the main issues being the use of OD data from the 2008 VISUM model (the data is old and does it still represent trip patterns in 2015?) and journey time validation on Birchwood Way eastbound in the AM peak (the model is quick on this route which may lead to an underestimation of the impact of the development).

I look forward to your response and as discussed I will forward more information as I receive it.

Let me know if you need any further information/clarification.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
Transport for Warrington  
Warrington Borough Council  
New Town House, Buttermarket Street, Warrington, WA1 2NH

 [mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)

 Office: 01925 444086 Mobile: 07966 884639

[warrington.gov.uk](http://warrington.gov.uk)



\*\*\*\*\*



# MEMO

<b>TO</b>	Mike Taylor, WBC	<b>FROM</b>	Colin Wright, WSP
<b>DATE</b>	22 November 2017	<b>CONFIDENTIALITY</b>	Confidential
<b>SUBJECT</b>	Peel Hall Farm – LMVR Review		

## Introduction

WSP have been commissioned by Warrington Borough Council (WBC) to review a suite of modelling documents that have been submitted to WBC as part of the planning application for a major residential development at Peel Hall Farm.

The Planning Application was submitted by Satnam Group in 2016 and rejected by WBC on the grounds of insufficient information relating to highway matters, namely a functioning traffic model and a set of mitigation measures to cope with the development traffic.

The following documents have been submitted to WBC in order to address the shortcoming of the planning application. These are:

- Local Model Validation Report (LMVR), Aecom, September 2017;
- Peel Hall Forecasting Report, Aecom, September 2017;
- Technical Note – Impact Summary, Highgate Transportation, September 2017.

The proposed method of review by WSP is to produce a short summary “memo style” report for each of the above documents. This document will review the information provided within the LMVR. The purpose of this report is to summarise the key points of the LMVR and raise queries where additional information may need to be sought.

## Model Overview

Originally the development was to be modelled using VISSIM micro-simulation software. An existing model of M62 J9 was extended in order to cover the area of influence of the development. The extent of this VISSIM network has been converted to SATURN by Aecom under the instruction of Highgate Transportation. SATURN has been chosen as it can model elements of blocking back.

The base model is of a typical neutral day in May 2015.

The model extent is given in Figure 1.1 in the LMVR. This shown below.

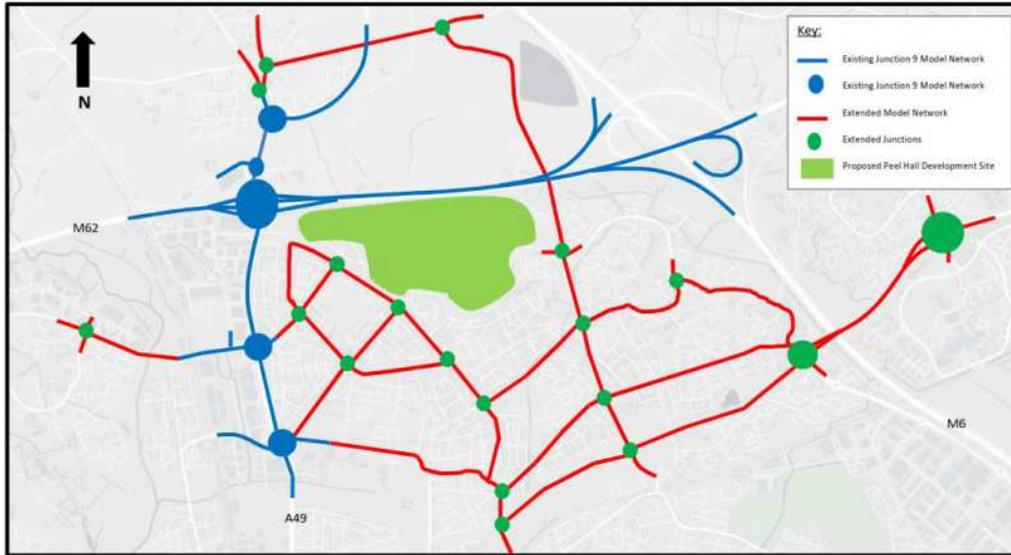


Figure 1.1: Extent of Modelled Network

**1. How has the area of influence of the development site been determined?**

**Model Data**

The traffic count data used is taken from 21 junction turning counts. Traffic counts were collected between 07:00 – 10:00 and 16:00 – 19:00 on the 8<sup>th</sup> July 2014 for 17 of the sites. One of the sites was surveyed on 13<sup>th</sup> May 2014, two of the sites were surveyed on 9<sup>th</sup> July 2014, and one of the sites was surveyed on 9<sup>th</sup> February 2016.

Origin destination traffic data is based upon the 2008 base VISUM model of Warrington. The VISUM model was cordoned to the model extent and OD matrices extracted.

- 2. Has the 2008 OD data been uplifted to 2015 before matrix estimation was applied?**
- 3. The OD data that informed the 2008 model is from Roadside Interview surveys that are at least 10 years old. How did the 2008 model validate in this area and are the OD patterns logical? Can they be relied upon to represent OD movements in May 2015?**

Traffic signal data was obtained from WBC for nine junctions in the model area. Site visits were also undertaken to better understand staging and green time durations during peak hours.

Journey routes were set up and TrafficMaster data was downloaded for 3 neutral days in May 2015. The journey routes are given in Figure 2.1 in the LMVR. This shown below.

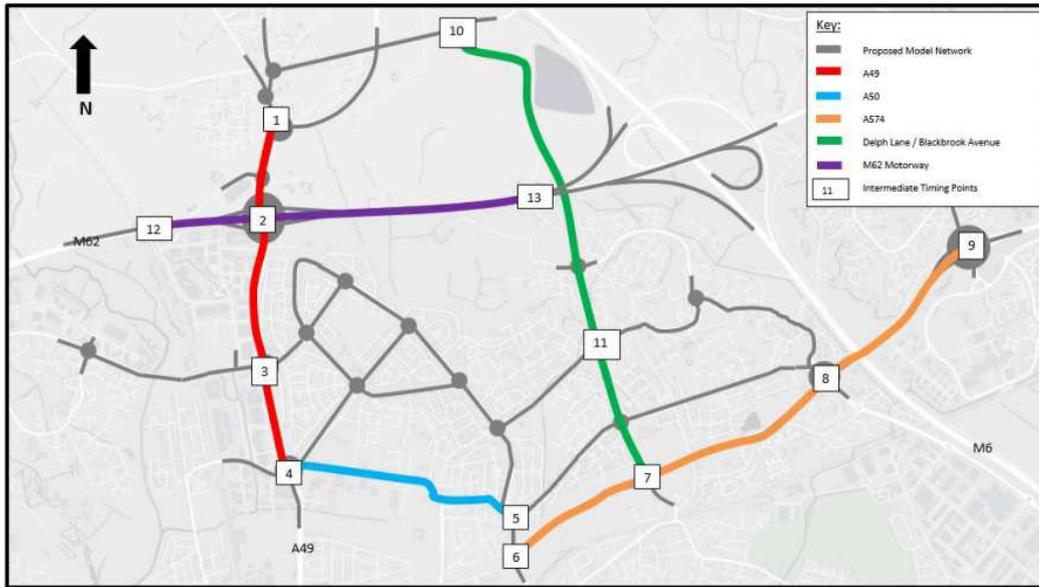


Figure 2.1: Proposed Journey Time Routes for Validation

Finally a number of site visits were undertaken during May and June 2016. This observed driver behaviour, queue lengths, lane usage and estimations of vehicle speed. “The site visits and information collected provided a valuable resource in calibrating the SATURN base models”.

- 4. How was this information used? There is no further mention of site specific adjustments to the SATURN model. Base year queuing in the model is not reported on or discussed.**

**Model Development**

The modelled time periods were AM 08:00 – 09:00 and PM 17:00 – 18:00.

- 5. Confirmation that these are peak hour models and not one hour averages of the three hour data collection period?**

The model has been constructed with 5 user classes: Car Commute, Car Work, Car Other, LGV and HGV. The pcu values used to convert vehicle matrices into Passenger Car Units for assignment in SATURN are 1.0 for Car, 1.0 for LGV and 2.3 for HGV.

The original M62 J9 model coding was checked to ensure it was still reflective of the current situation. The remaining network was coded using CAD overlays, aerial images and notes taken during site visits. Speed flow curves were applied to the M62 and to Birchwood Way. The remaining links did not have speed flow curves applied, the free flow speed reflected the speed limit expect in areas where traffic calming was in place.

The original VISUM zone structure was not detailed enough in the residential areas that form the southern boundary of the Peel Hall Farm site. They were large zones with multiple connectors. An exercise was undertaken to disaggregate the zones and provide realistic loading points.

- 6. Provide updated zone plan showing the extent of disaggregation and loading points for trips? What is the final number of zones?**

The process of matrix estimation describes running matrix estimation in both VISUM and SATURN. It is not entirely clear why this has been carried out. Is this two entirely separate processes or somehow linked (from VISSIM to VISUM to SATURN)? Prior and Post ME matrix results are not provided.

- 7. Provide Prior and Post ME matrix integrity results – Prior and Post ME totals, R2, slope and intercept values – to ensure OD patterns remain consistent.**



Convergence is good and in line with DfT TAG criteria, though DMRB is quoted as throughout the document.

**8. Why is DMRB quoted as guidance, should be looking to DfT TAG guidance?**

**Calibration and Validation**

The traffic counts are said to have been factored to a common year of 2015 using Tempro NTEM dataset v6.2, details of which are given in Technical Note HTP/1107/TN/20 which is an appendix to the forecasting report.

**9. Technical Note TN/20 only details growth factors for 2015-2025 and 2015-2030? The dataset to be used should be NTEM v7.2 (available since March 2017) for car trips. LGV and HGV growth factors are typically derived from National Transport Model (NTM). State factors used and sources to adjust counts to a common year for all vehicle types.**

**10. Has any adjustment been made for seasonality?**

Calibration statistics are presented for turning movements and link counts. The results show GEH<5 for 85% of counts across all vehicle types and time periods.

Validation performance is measured against journey times on the 10 routes (five bi-directional) selected. In each time period 9 out of 10 routes meet the criteria, though the modelled times are quicker than observed in 16 of the 20 routes, 9 out of 10 in the AM.

In the AM peak Birchwood Way EB (JR 6-9) is 55% quicker in the model than observed. This is a key route and known area of delay especially on the EB approach to College Place roundabout. Entry flows to the roundabout calibrate well with observed, which may conclude that the choice of speed flow curve on A574 is not representative and / or the turning movements at College Place roundabout are not being represented in the model.

**11. Provide comparison between modelled and observed turning movements at College Place roundabout.**

**12. Were there any network issues that caused observed journey time EB in the AM peak on Birchwood Way to be higher than normal? How do other neutral periods compare?**

Journey route 6-9 continues to Oakwood Gate junction (section 8-9). There is no count data used at that junction so getting the journey route to validate on that section will be very difficult.

**13. If the model needs to extend to Oakwood Gate then count data should be used to ensure that the flows at that junction are accurately represented.**

**Other**

**14. Provide plots of base year flows, delays and queuing.**



## Summary

A SATURN model of the area around Peel Hall Farm has been produced using turning count data and OD patterns from the 2008 VISUM model. The model represents a neutral day in May 2015.

Notwithstanding the points of clarification regarding growth factors, final zone structure, prior and post ME comparisons, the model compares well with observed data for calibration counts and validation journey routes.

However, there are two issues that require further examination. Firstly, the OD data used in the model has been extracted from the 2008 VISUM model of Warrington. This model was informed by RSIs from 2006 and 2007 and thus the data is at least 10 years old. Evidence is required to show that the OD data is still relevant to trip patterns in May 2015. If the OD data cannot be shown to be suitable, there is now a validated SATURN / Emme multimodal model of Warrington with a base year of 2016 which can be used.

Secondly, the scale of the difference between the modelled and observed journey time EB on Birchwood Way in the AM peak requires further examination. Birchwood Way EB in the AM peak is one of the most congested routes on the network and is critical to model accurately given its influence in this part of Warrington. As it stands the model suggest additional capacity on this route that in reality doesn't exist. This may influence development traffic behaviour in forecast scenarios and underestimate the need for mitigation measures.

Colin Wright  
Principal Transport Planner



## **RESPONSE TO WSP LMVR REVIEW (Rev. A)**

PROJECT: Peel Hall, Warrington

REVIEW DATE: 22 November 2017

REF.: APP/M0655/W/17/3178530

### **Land at Peel Hall, Warrington**

**Outline application for a new residential neighbourhood including C2 and C3 uses; local employment (B1 uses); local centre including food store up to 2,000m<sup>2</sup>, A1-A5 (inclusive) and D1 use class units of up to 600m<sup>2</sup> total (with no single unit of more than 200m<sup>2</sup>) and family restaurant/pub of up to 800m<sup>2</sup> (A3/A4 use); site for primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure at Peel Hall, Warrington.**

---

### **Model Overview**

1. How has the area of influence of the development site been determined?

*The area of influence of the development site was determined through our scoping meetings with WBC (19<sup>th</sup> January 2016 and updated following meeting 12<sup>th</sup> September 2016). See meeting minutes and modelling scope attached for reference.*

### **Model Data**

2. Has the 2008 OD data been uplifted to 2015 before matrix estimation was applied?

*It can be confirmed that the 2008 OD data has been uplifted to 2015.*

3. The OD data that informed the 2008 model is from Roadside Interview surveys that are at least 10 years old. How did the 2008 model validate in this area and are the OD patterns logical? Can they be relied upon to represent OD movements in May 2015?

*The OD data was based on the 2008 VISUM model of Warrington, as this was agreed to be the most reliable data set available within the time-frame available. The planning application that is the subject of the appeal was validated in mid-2016 and 2015 was considered acceptable earlier this year; it would not be reasonable to update this now. Future years were agreed with WBC in March 2017 and HE confirmed in January 2017 that a year of opening assessment with all development traffic was unnecessary in this case. The current future years of 2025 and 2030 broadly align with what was previously discussed during 2016 in any event.*

- How was this information used? There is no further mention of site specific adjustments to the SATURN model. Base year queueing in the model is not reported on or discussed.

*The 2016 flow data and 2016 and 2017 observations were taken into account during validation and calibration of the model. It is agreed that this can be made clear in any further LMVR.*

**Model Development**

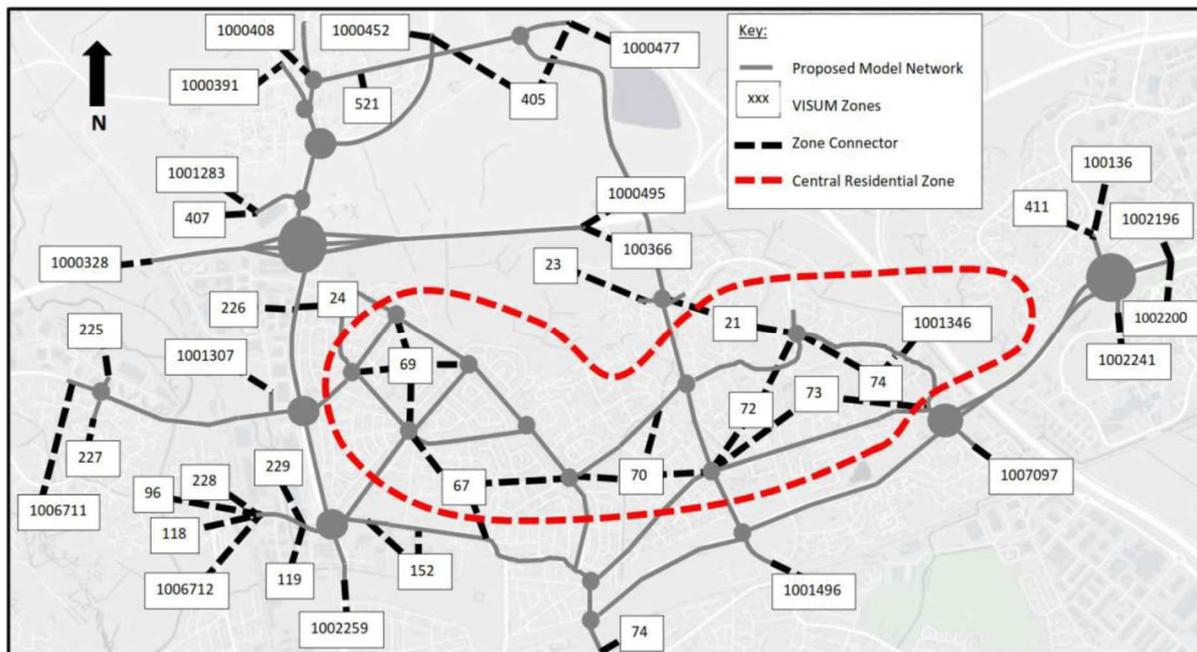
- Confirmation that these are peak hour models and not one hour averages of the three hour data collection period?

*A two and half hour model period was developed for both the AM and PM model periods in VISSIM to ensure that VISSIM replicated the rise of fall of queueing across the network. Within that period, it was agreed that 0800–0900 and 1700–1800 would be reported upon. Within SATURN typically you model a single hour period and then report upon this. The SATURN model is intended to provide an assessment of the same data collected and used to inform the VISSIM assessment, which is a process that started in January 2016.*

- Provide updated zone plan showing the extent of disaggregation and loading points for trips? What is the final number of zones?

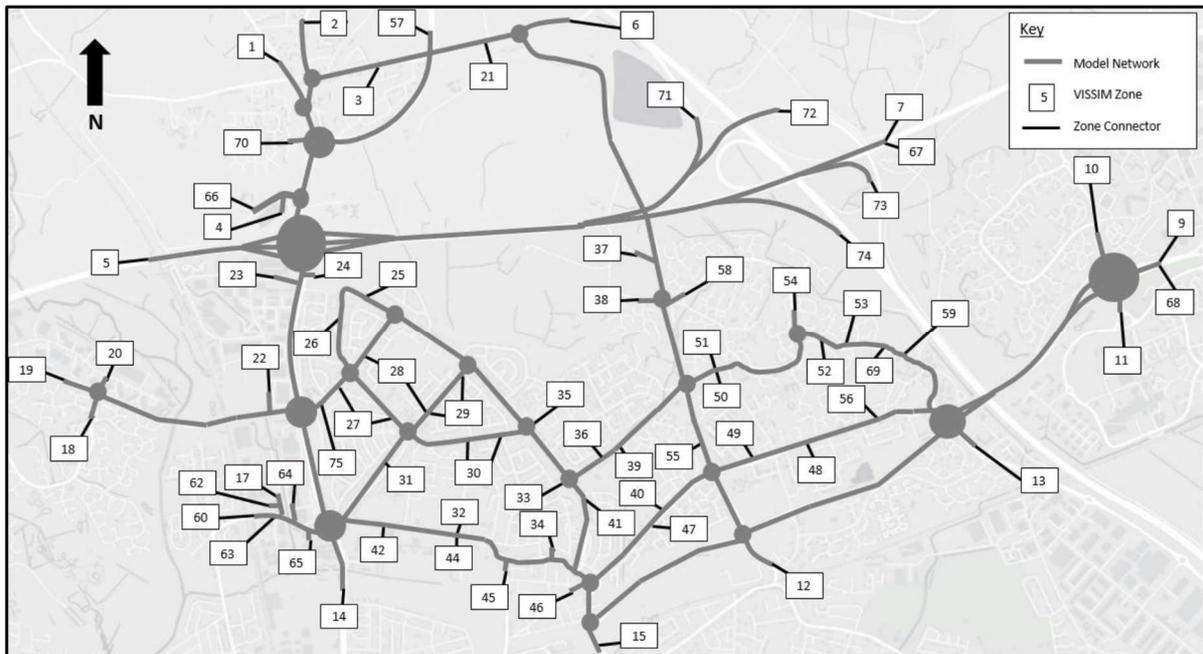
*The zone structure for the Warring Multi Modal Model (WMMM) is shown in Figure 1 below, as provided in the original supporting LMVR.*

*Figure 1 – WMMM zone structure*



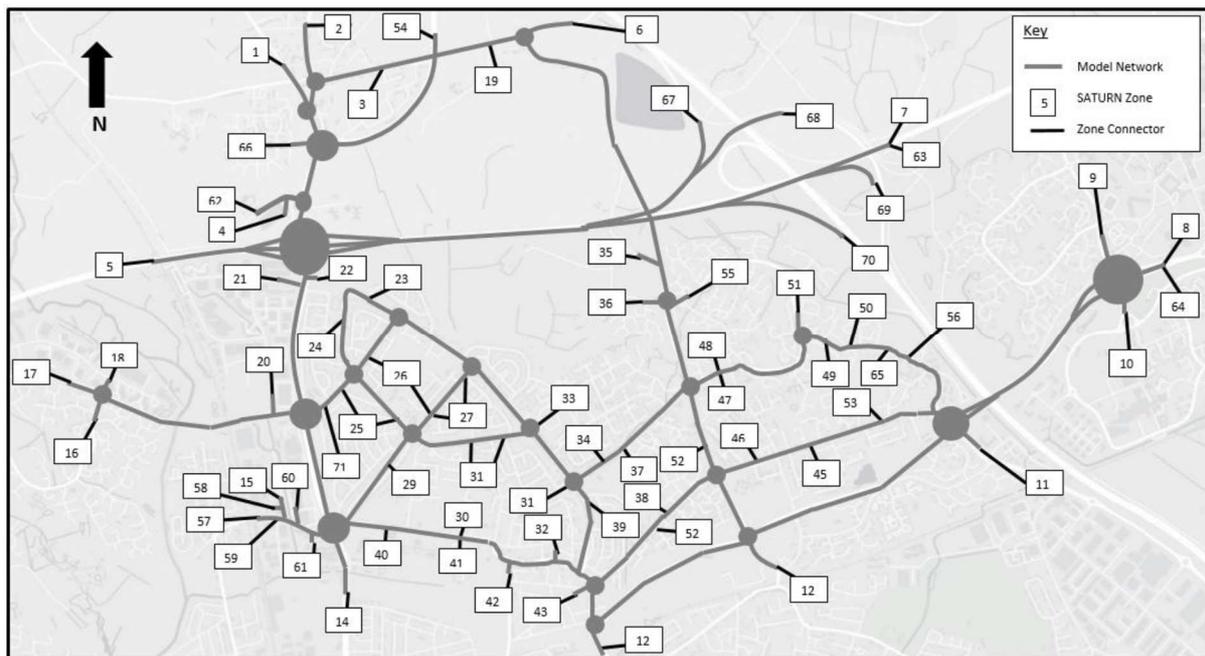
The zone structure, totalling 42 zones, of the WMMM presented in Figure 1, was disaggregated within the central residential zone, to provide a more suitable structure for loading points into the VISSIM model, originally developed for this assessment. The updated VISSIM zone structure including loading points is presented below in Figure 2 (see also Appendix 1).

Figure 2 – VISSIM model zone structure



The zone structure and number of zones remained the same at 71 when moving to SATURN, only the zone numbers changed. A plan of the SATURN zone structure is presented in Figure 3 below (see also Appendix 2).

Figure 3 – SATURN model zone structure



7. Provide Prior and Post ME matrix integrity results – Prior and Post ME totals, R2, slope and intercept values – to ensure OD patterns remain consistent.

*Whilst these can be provided, it is considered unnecessary; the original VISSIM model was built by WSP.*

*It is acknowledged that a considerable volume of work was required to convert the matrices to VISSIM originally, and then into SATURN.*

8. Why is DMRB quoted as guidance, should be looking to DfT TAG guidance?

*The guidance reference can be updated going forward; these are essentially the same standards.*

### Calibration and Validation

9. Technical Note TN/20 only details growth factors for 2015-2025 and 2015-2030? The dataset to be used should be NTEM v7.2 (available since March 2017) for car trips. LGV and HGV growth factors are typically derived from National Transport Model (NTM). State factors used and sources to adjust counts to a common year for all vehicle types.

*The growth calculations are as per previously agreed approach with WBC and were updated in May 2017 to reflect NTEM v7.2, which provided lower growth rates than v6.2. HTP/TN/07/Addendum (October 2016) provided an update on reducing background growth, further to the previously provided HTP/TN/07 dated May 2016 that set out the agreed strategy. It is understood that AECOM originally used v6.2 to growth the 2014 survey data to 2015.*

10. Has any adjustment been made for seasonality?

*No additional adjustments were made for seasonality, as per previously agreed approach.*

11. Provide comparison between modelled and observed turning movements at College Place roundabout.

*This will be provided going forward.*

12. Were there any network issues that caused observed journey time EB in the AM peak on Birchwood Way to be higher than normal? How do other neutral periods compare?

*No network issues were reported for the journey times dated 12th, 13th, 14th, May 2015 as obtained from Basemap.co.uk.*

*Since 2015 the Oakwood Gate roundabout has benefitted from signalisation of the eastbound approach and corresponding internal circulatory link. The implementation of traffic signals has significantly reduced queues on the A574 Birchwood Way in an eastbound direction and so comparison of the existing journey times with those in 2015 is not recommended. To provide a comparison of journey times for the eastbound route following the A574 Birchwood Road a number of week's data from 2015 and 2014 has been obtained from Basemap.co.uk. and summarised in Table 1 below.*

*Table 1, Comparison of Eastbound Journey times for the A574 Birchwood Way*

Year	Month	Date Range	Journey Time (Seconds)
2015	April	21st - 23rd	616
		28th - 30th	638
	May	5th - 7th	490
		<b>12th - 14th</b>	<b>502</b>
		18th - 21st	637
	September	8th - 10th	599
		15th - 17th	567
		22th - 24th	764
29th - 1st		768	
2014	May	13th - 15th	556

**\*Journey time used to Validate Model**

*Table 1 identifies that journey times along the A574 differ noticeably, depending upon the time of the year. Comparison of the same week in 2014 identifies the average journey time in the AM peak was approximately 10% higher than the journey time observed during 2015. The journey time data identifies a significant proportion of the delays to vehicles in an eastbound direction traveling along the A574 Birchwood Way are experienced at roundabouts along the route. The route is characterised by a number of roundabouts, so a small change in flows can have a significant impact upon the levels of delay at junctions.*

*The introduction of the new signals at Oakwood Gate regulate the flow of traffic in an eastbound direction, which has a significant impact on and can be attributed to a significant proportion of the journey times.*

13. If the model needs to extend to Oakwood Gate then count data should be used to ensure that the flows at that junction are accurately represented.

*We are happy to consider removing the far eastern extents from a future version of the SATURN model; please confirm.*

**Other**

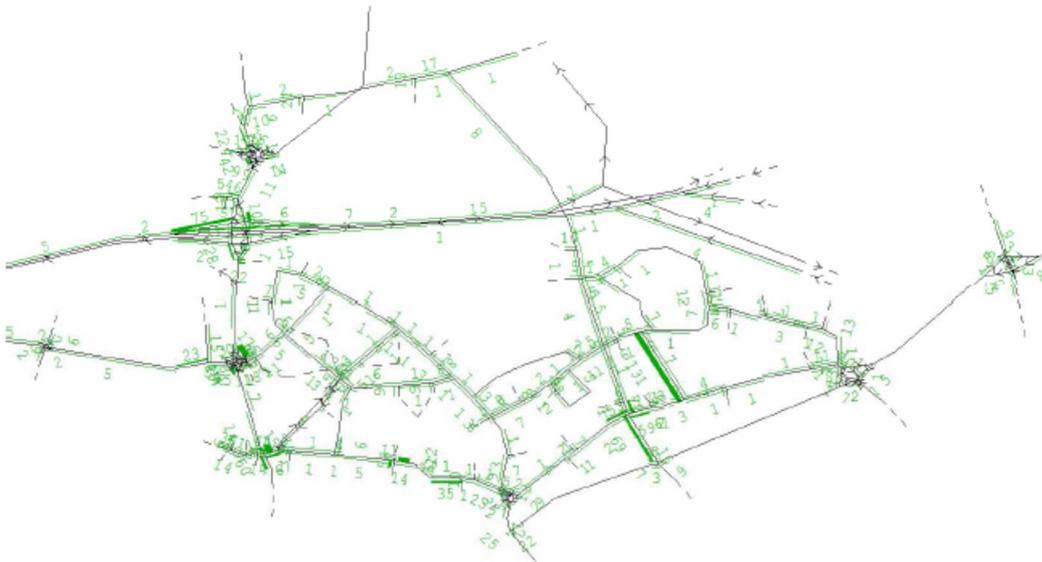
14. Provide plots of base year flows, delays and queuing.

*Base year flows have been provided within the spreadsheets supplied as part of the validation exercise, and also as part of the comparison exercise with the future year flows. Plots of delays for the base year are provided below in Figures 4 to 7 (see also Appendix 3 and 4).*

**Base year Delay Plots**

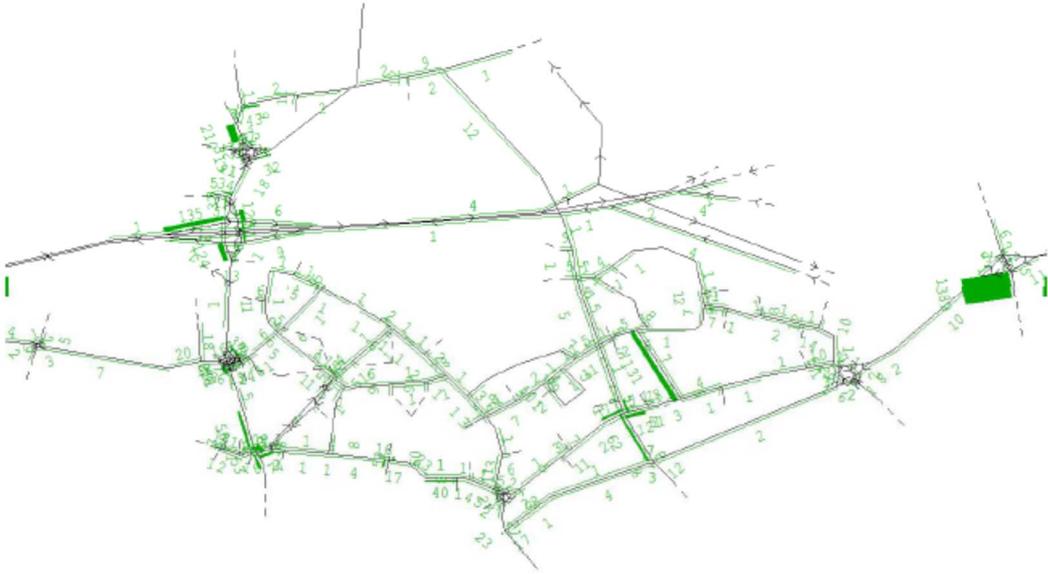
**AM**

**Figure 4, AM Peak Period Delay Plots**



PM

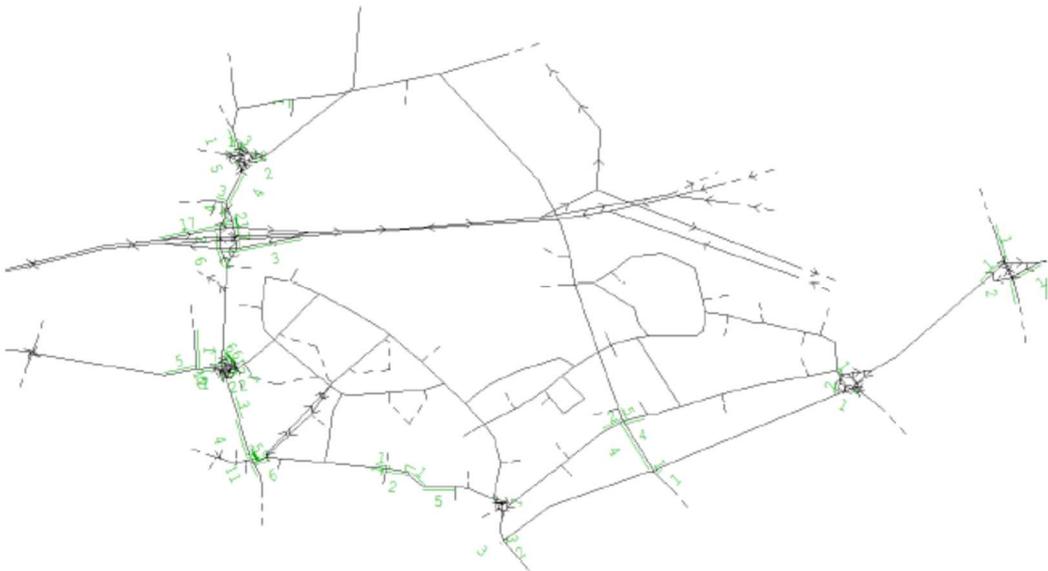
Figure 5, PM Peak Period Delay Plots



Base Year Queue Plots

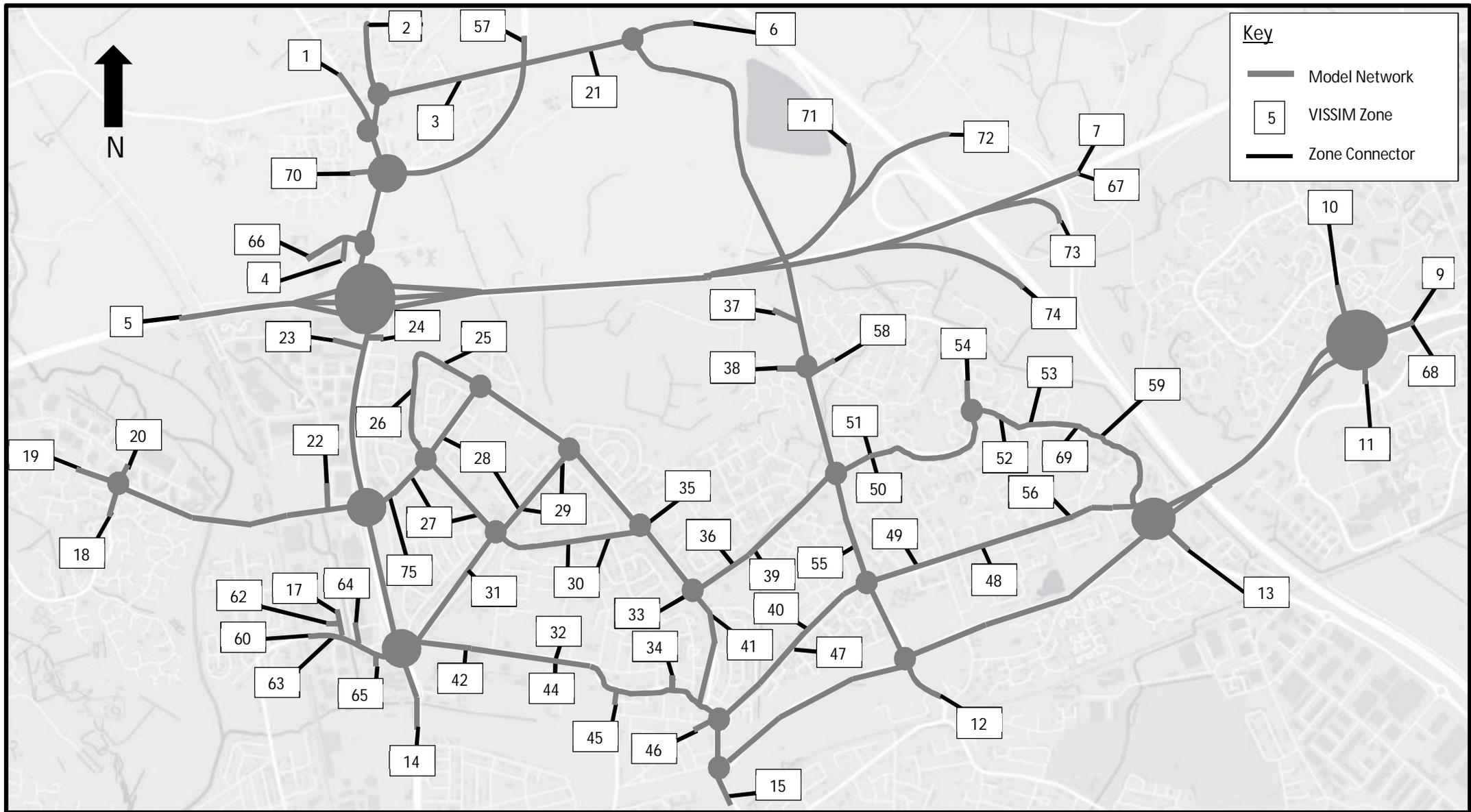
AM

Figure 6, AM Peak Base Year Period Average Queue Plots



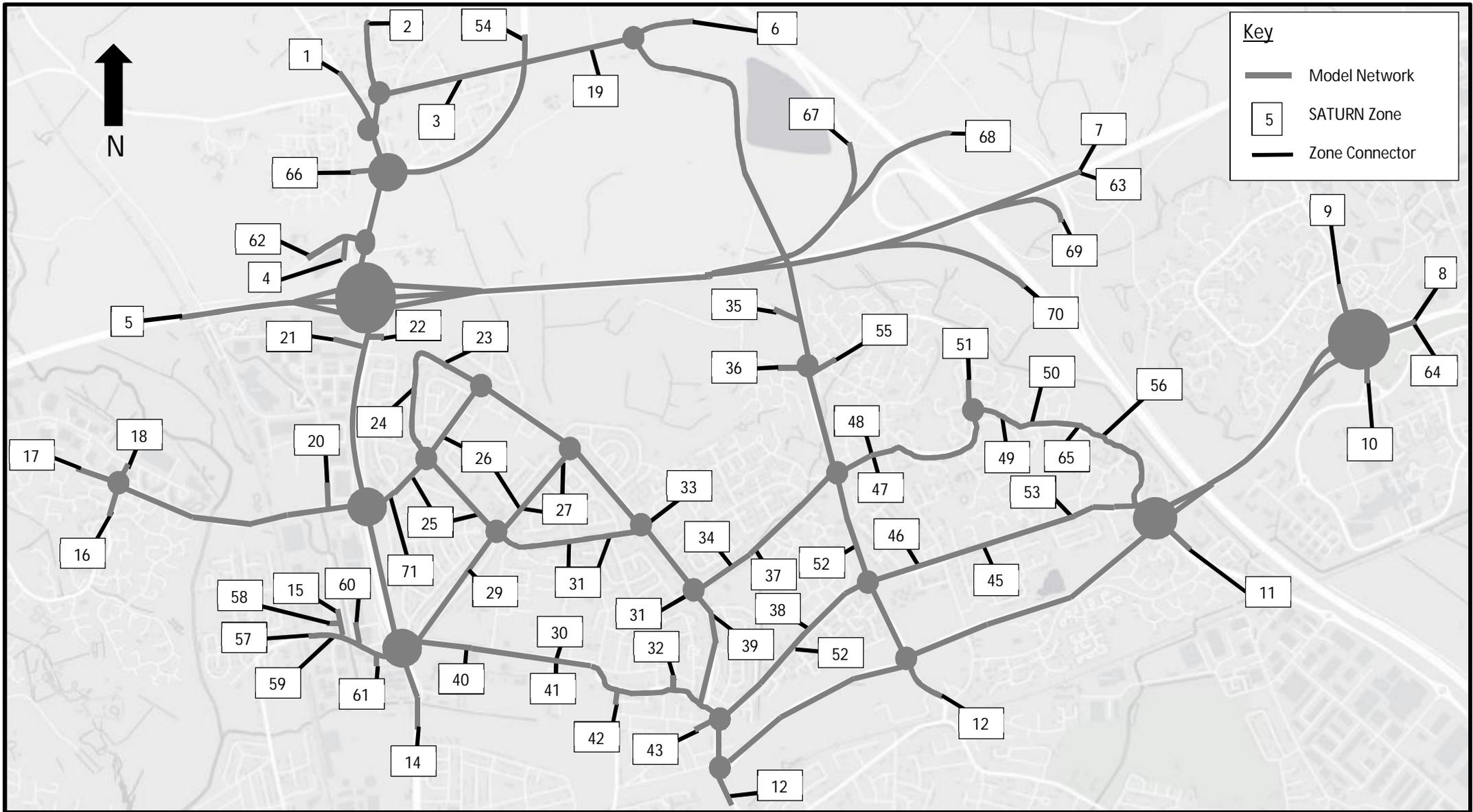


# Appendix 1



Appendix A – VISSIM Zone Structure

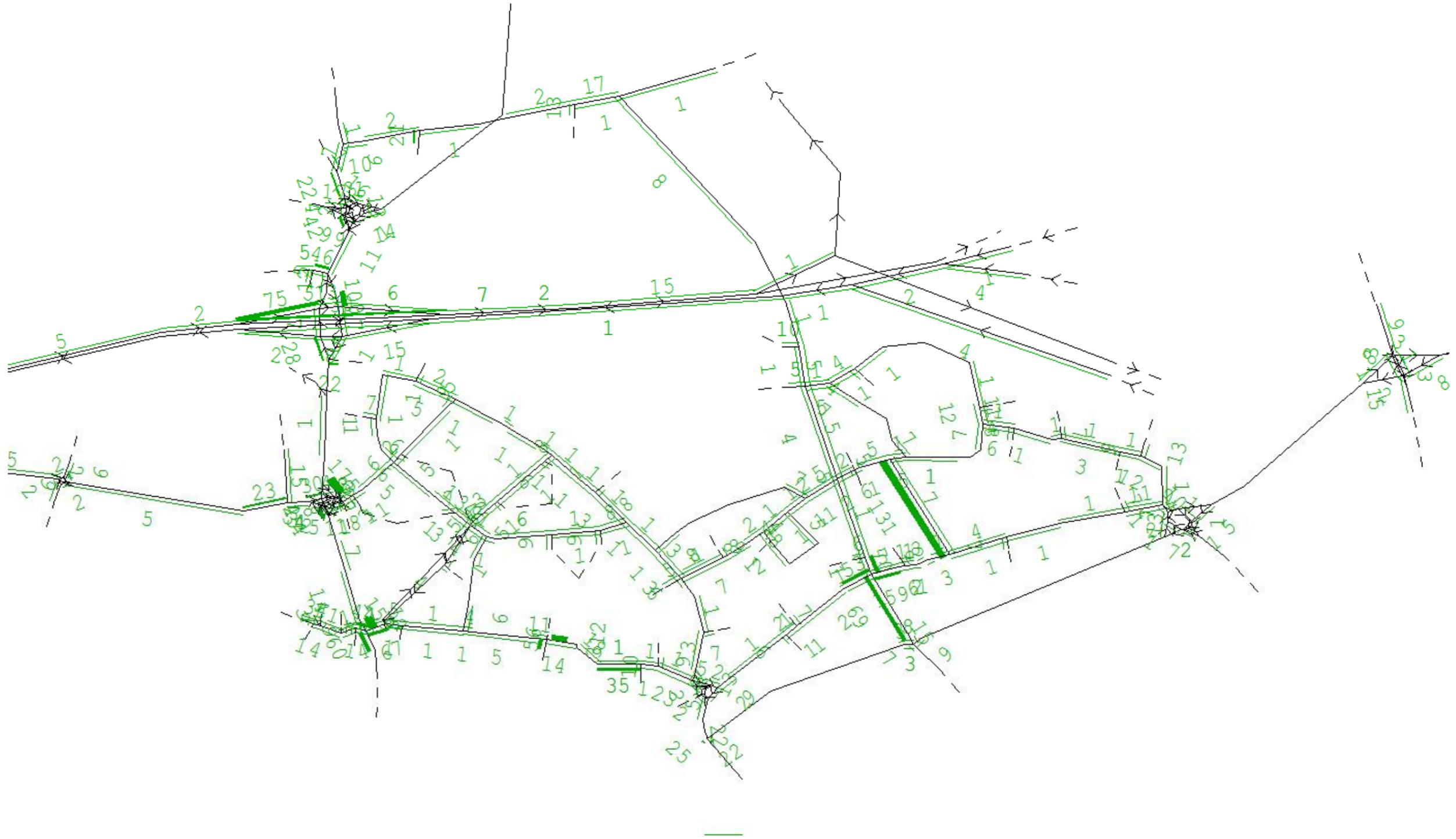
## **Appendix 2**



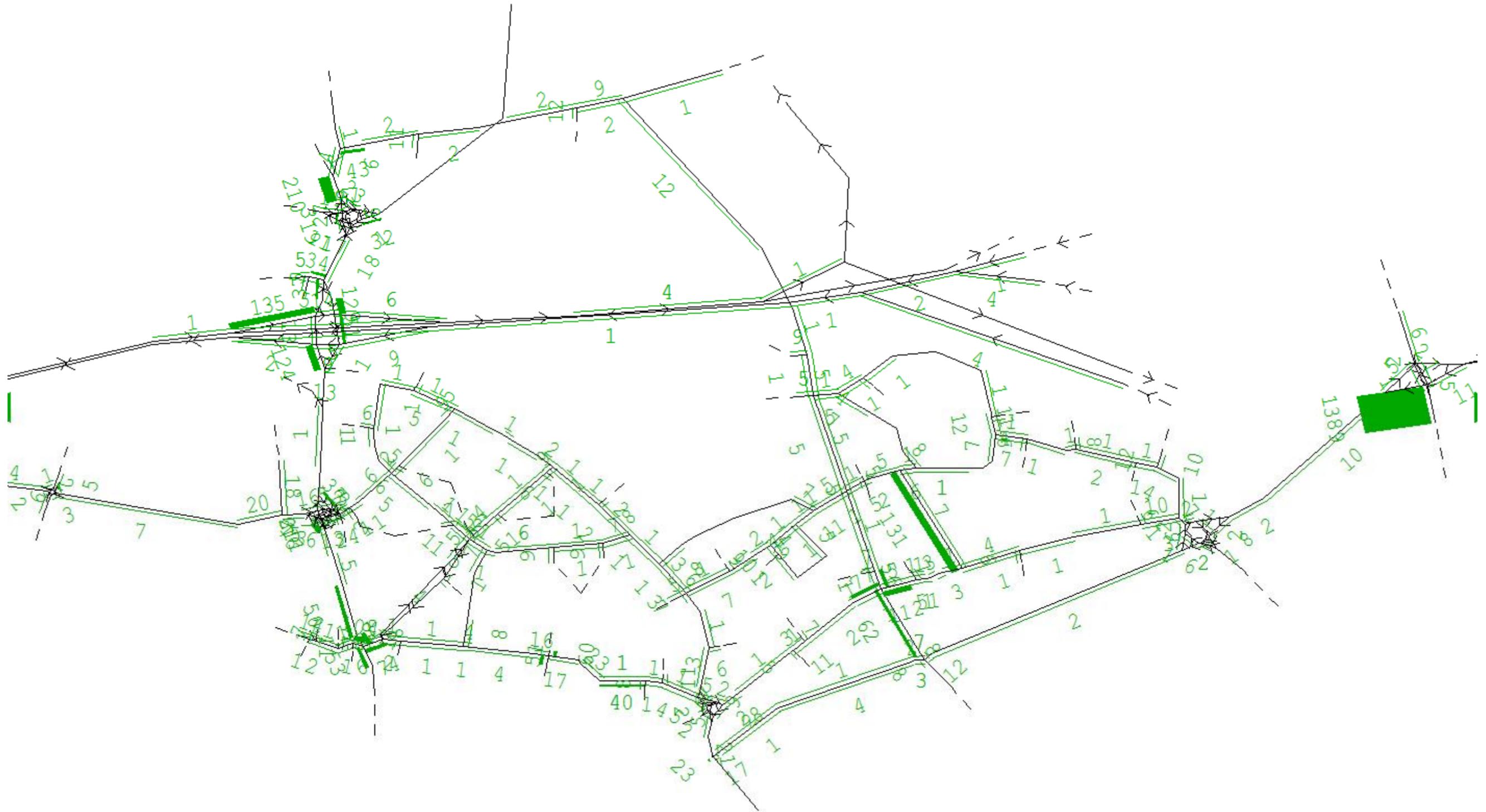
Appendix B – SATURN Zone Structure

## **Appendix 3**

# AM Peak Period Total Delay Plot

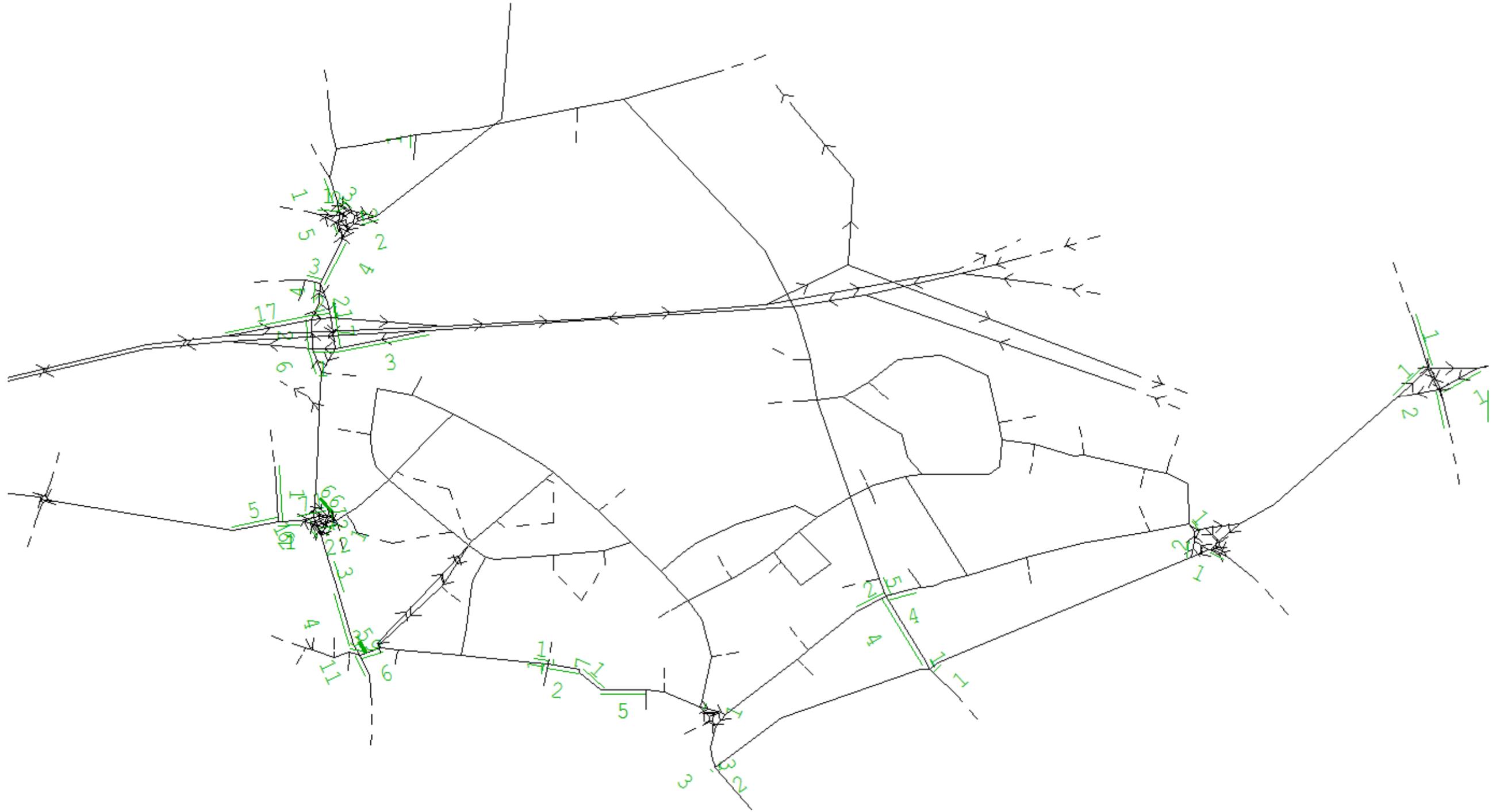


# PM Peak Period Total Delay Plot



## **Appendix 4**

# AM Peak Period Average Queue Plot





**From:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Sent:** 29 November 2017 13:09  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** Dickin, Alan; Davies, Michael (Planning); dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall Farm - Forecasting Report Review  
**Attachments:** Peel Hall Farm Forecasting Report review.docx

Fiona,

Further to my email of 22<sup>nd</sup> November containing the LMVR review please find attached comments in respect of the forecasting report.

Once again the issues to be addressed are highlighted in red, with the main issues being:

Background growth – has an appropriate level of background growth been applied for all trip purposes and vehicle types. Have committed developments been modelled correctly?

Trip distribution – are the parent zones selected suitable (actual modelled distribution and age of OD data)? Comparison with census JTW data would suggest that the distribution is not wide reaching enough, with 20% of development trips going to / from other residential areas in Hulme and Orford.

Trip rates – the assumptions and evidence base behind the discounting, internalisation, pass-by and transfer needs to be made clearer. The trips rates themselves seem reasonable, though for some land use type the number and age of surveys may be questioned.

Model stability – the delays, queues and V/C information all highlighted a problem around Oakwood Gate roundabout, on the Oakwood Gate and Birchwood Way WB approaches, and at other areas where traffic enters the model. The PM model had 50% more delay than the AM model. Links operating way over 100% V/C can cause the model to be unstable as small changes in flow lead to big changes in delay.

Reporting – a descriptive narrative is required to explain exactly what is causing changes to journey times, delays, queues and V/C rather than just reporting the change itself. How does the development traffic interact with existing traffic? Also flow plots would be beneficial.

I look forward to your response and I hope to forward you the impacts summary by the end of the week.

Let me know if you need any further information/clarification.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
Transport for Warrington  
Warrington Borough Council  
New Town House, Buttermarket Street, Warrington, WA1 2NH

 [mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)



# MEMO

<b>TO</b>	Mike Taylor, WBC	<b>FROM</b>	Colin Wright / Andy Carpenter, WSP
<b>DATE</b>	27 November 2017	<b>CONFIDENTIALITY</b>	Confidential
<b>SUBJECT</b>	Peel Hall Farm – Forecasting Report Review		

## Introduction

WSP have been commissioned by Warrington Borough Council (WBC) to review a suite of modelling documents that have been submitted to WBC as part of the planning application for a major residential development at Peel Hall Farm.

The Planning Application was submitted by Satnam Group in 2016 and rejected by WBC on the grounds of insufficient information relating to highway matters, namely a functioning traffic model and a set of mitigation measures to cope with the development traffic.

The following documents have been submitted to WBC in order to address the shortcoming of the planning application. These are:

- Local Model Validation Report (LMVR), Aecom, September 2017;
- Peel Hall Forecasting Report, Aecom, September 2017;
- Technical Note – Impact Summary, Highgate Transportation, September 2017.

The proposed method of review by WSP is to produce a short summary “memo style” report for each of the above documents. This document will review the information provided within the Peel Hall Forecasting Report. The purpose of this report is to summarise the key points of the Forecasting Report and raise queries where additional information may need to be sought.

## Overview

The forecast modelling report details the scenarios modelled and methodology applied. It reports on the SATURN model outputs from the forecast models, comparing with and without scheme.

A total of five forecast scenarios were modelled:

- 2025 Do Minimum – Base traffic flow + Background growth+ Committed developments;
- 2025 Do Something – Base traffic flow + Background growth+ Committed developments + Peel Hall partial build out;
- 2030 – Do Minimum – Base traffic flow + Background growth+ Committed developments;
- 2030 Do Something – Base traffic flow + Background growth+ Committed developments + Peel Hall full build out;
- 2030 Do Something with through route – Base traffic flow + Background growth+ Committed developments + Peel Hall full build out + spine road connecting Mill Lane to A49.

## Future Year Highway Networks

The Do Minimum network contains one committed scheme, the part signalisation of the Birchwood Way EB approach to Oakwood Gate roundabout.

The Do Something network contains the access arrangements for the Peel Hall development. These are:

- 6 new zones for development traffic; and
- Three new junctions tying into the existing network – two priority junctions on Poplars Avenue (one for employment, one for 330 residential (in 2030)) and a roundabout at Mill Lane / Blackbrook Avenue (for 700 residential (in 2030)).

The Do Minimum and Do Something networks do not change between 2025 and 2030.

A variation of the Do Something network was coded with a through route connecting A49 to Mill Lane / Blackbrook Avenue. A signalised junction permitting all movements was coded to allow access to/from the through route via Birch Avenue onto A49. A total of 7 new zones were added (compared to Do Minimum) for development traffic. The zone serving Poplars Avenue central now represents 180 residential units. Three zones load directly onto the through route (this is inferred from the SATURN plots in the appendices).

- 1. Provide detail regarding the level of development represented by the three zones along the through route. The location of the trip loading point may have an influence on where it accesses onto the existing highway network.**
- 2. Can confirmation be made that signal timings are consistent between Do Minimum and Do Something options and signal optimisation has not been applied?**

## Future Year Trip Matrix Development

### *Background Growth*

Background traffic growth is detailed in Technical Note HTp/1107/TN/20. A single growth factor has been calculated for each forecast year and time period using the NTM functionality in TEMPRO. The single growth factor has been based on car driver growth for Warrington 006 MSOA, with the NTM road type selected being Urban Motorway. It is stated that the combination of Warrington 006 MSOA and Urban Motorway has been selected as it produces the highest growth factors and “represents an over-estimate for traffic growth over much of the model network”.

- 3. What is the benefit for over predicting the background growth? If anything this may dilute the impact of the development trips.**
- 4. The forecasting methodology, specifically the use of the NTM function, is not normally applied when forecasting from a strategic model. Typically TEMPRO OD factors for each trip type would be used for the fully observed trips and NTM for trips that have an origin or destination in the external area.**
- 5. TEMPRO and NTM will only provide growth factors for cars. How has LGV and HGV growth been defined?**

Two employment sites are listed as committed developments:

- Land at Benson Road, Birchwood; and
- Birchwood Shopping Centre.

It is assumed that these developments are included within TEMPRO forecasts, so no additional account is made for them within forecasting.

6. Are these developments small enough to exclude from explicit modelling?
7. Comparison of the number of jobs each site will create and the growth predicted by TEMPRO for the relevant MSOA should be provided. Then a decision should be made on whether they are accounted for within TEMPRO.
8. Neither of these sites are in Warrington 006. The current forecasting methodology will not model any changes in trip patterns brought about by these developments.

### Trip Generation

The trips generated by the developments at Peel Hall are detailed in Technical Note HTp/1107/TN/19 and summarised in the Peel Hall Forecasting Report.

The trip rates have been derived using the TRICS database and the TRICS outputs are contained in HTp/1107/TN02 Revision A. The trip rates and selected sites in the TRICS outputs appear to be suitable. However, it should be noted the date range selected for surveys for the food store was between 01/01/07 to 19/07/13 and only 3 sites were used in calculating the trip rate.

A summary of the 2030 peak hour trip generation set out in the report (Table 4.3) is summarised in Table 1.

**Table 1: Summary of 2030 Vehicle Trip Generation (Source: HTp/1107/TN/19 and Peel Hall Forecasting Report)**

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	330 dwellings	74	173	163	101
	care home	7	7	8	8
	food store	92	61	181	191
	local shops	30	29	36	39
	family pub	0	0	23	15
	<i>Total</i>		203	270	411
Poplars Avenue (West)	employment land	69	39	20	47
Mill Lane	150 dwellings	34	79	74	46
Mill Lane/Blackbrook Avenue	700 dwellings	158	366	347	215
	primary school	113	79	19	27
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
<b>Total</b>		<b>592</b>	<b>849</b>	<b>888</b>	<b>703</b>

A number of discounts have applied to the values shown in Table 1. The discount rates are as follows with the discounted development trips shown in Table 2.

- Residential 0%
- Care Home 0%
- Employment 0%
- Food Store 100% (70% discount and 30% pass-by)
- Local Centre 100%

- Family Pub/Restaurant 0%
- Primary School 50%
- Community uses 0%

**Table 2: Summary of 2030 discounted Vehicle Trip Generation (Source: HTP/1107/TN/19)**

Access	Quantum of Development	AM Arrival	AM Departure	PM Arrival	PM Departure
Poplars Avenue (Central)	330 dwellings	74	173	163	101
	care home	7	7	8	8
	food store*	28	18	54	57
	local shops	0	0	0	0
	family pub	0	0	23	15
	<i>Total</i>		<i>109</i>	<i>198</i>	<i>248</i>
Poplars Avenue (West)	employment land	69	39	20	47
Mill Lane	150 dwellings	34	79	74	46
Mill Lane/Blackbrook Avenue	700 dwellings	158	366	347	215
	primary school	57	40	10	14
Birch Avenue	20 dwellings	5	11	10	6
Grasmere Avenue	community uses	10	5	7	8
<b>Total</b>		<b>442</b>	<b>738</b>	<b>716</b>	<b>517</b>

\* pass-by trips only

Technical Note HTP/1107/TN/19 states that food store trips will be discounted by 100% in the Saturn Model, with the 30% of pass-by trips being re-distributed from existing traffic on the network passing by Poplars Avenue.

- 9. The re-distribution of the traffic may change the turning proportions at the junction which may affect the operation of Poplars Avenue. No evidence has been provided to demonstrate no impact due to pass-by trips. Are these pass by trips modelled in the SATURN model?**
- 10. The 30% by-pass trip rate has been derived by assuming the same trip reduction as the Omega development. Can a justification for the 30% reduction be provided based on current best practice? 'TRICS Research Report 14/1: Pass-By & Diverted Trips Report' states that a standard trip rate reduction for pass-by and converted trips is no longer considered applicable and that a first principles approach should be undertaken. No evidence has been provided to suggest this is the case.**
- 11. No account for has been provided for transferred or diverted trips. For example traffic may divert from the A49 which may impact upon the operation of the local network. Can more information be provided to explain why these trip types have not been included in the analysis?**

It is assumed that 100% of trips to the local centre will be internal and that there will be no external trips generated.

- 12. Technical Note HTP/1107/TN/13 which is the applicant's response to the HE contradicts this and states that 30% of trips will be pass-by (Table 6-1). More information should be provided to explain**

**the inconsistencies between the discounting rates between the applicant's response to the HE and Technical Note HTP/1107/TN/19.**

An internalisation discount of 50% has been applied to the primary school trips based on an estimation that 85% of pupils will be from the development site.

- 13. More information should be provided on the rationale for the 50% value as there appears to be no evidence submitted to substantiate this proportion.**
- 14. Are trips from the 330 dwellings accessed via Poplars Avenue to the west of the site included in the internalisation discount? Access to the primary school from these 330 dwellings will be restricted due to the proposed bus gate and the vehicle trips will have to travel on the local highway network to access the school. Has this been accounted for in the modelling?**

Tables 4.2 and 4.3 summarise the final trips generated by the Peel Hall development for 2025 and 2030 respectively.

- 15. Table 4.3 represents undiscounted trips from 2030 scenario without through route. The discounted trips should be shown as this is the number of trips that are loaded onto the network. The correct tables are Table 5.2 (HTP/1107/TN/19, without through route) and Table 3.10 (HTP/1107/TN/21, with through route).**
- 16. At this stage of the report, it would be beneficial to present some matrix totals. This would show base year and forecast years with and without developments.**

#### *Trip Distribution*

The trip distribution applied for the development trips is detailed in AECOM's Technical Note "Proposed Distribution for Peel Hall Development" included in Appendix E. Parent zones have been chosen for distribution depending on land use type, i.e. residential, employment or other. Distribution percentages for the Peel Hall developments are shown based on the original zone structure in Figures 1-20.

- 17. Can the trips groupings be defined? Are they:
  - a. Residential – all trips to/from a residential property (including commuting)**
  - b. Employment – employers business trips (non-home based only?)**
  - c. Other – other trips (non-home based only?)****
- 18. Do the parent zones provide a realistic distribution? Looking at Fig 4 (AM from PH), Fig 8 (AM to PH), Fig 12 (PM from PH) and Fig 16 (PM to PH) it can be seen that roughly 20% of the trips stay within Hulme and Orford (original model zones 67, 69, 70 and 152).**
- 19. Census JTW information for Warrington 006 and 007 (included in Appendix A) shows largest proportions are to Warrington town centre, Birchwood and Woolston Grange industrial park? The AM Residential from PH and PM Employment to PH distribution plots should reflect this.**
- 20. Zone 405 (land north of M62 bounded by Winwick Link) shows trips in Fig 13 Residential trips to Peel Hall. Is this correct? There are no development trips at any other time period or trip type.**
- 21. The distributions are taken from the multi modal model with full zone structure. Has any change in routing for forecast Do Minimum scenarios been taken in to account? There are quite a number of routes to Warrington town centre, the distribution may change, e.g. increase of traffic on A49 transferring trips to A50.**

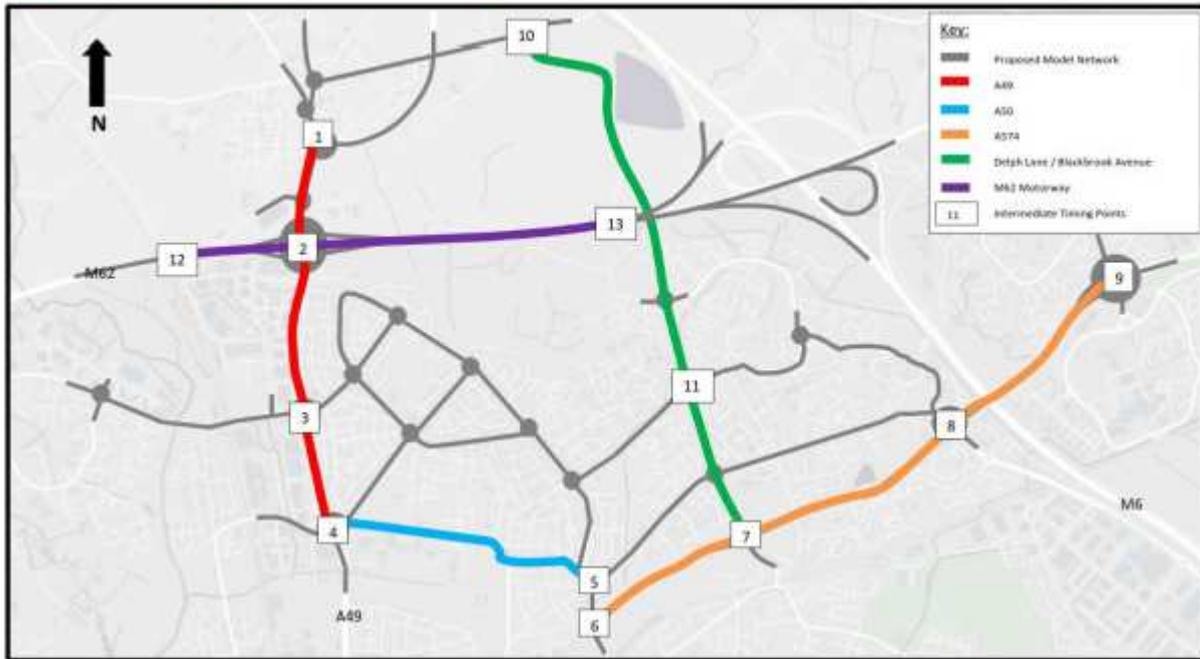
Covergence is stated to be satisfactory, with delta round 0.15%.

- 22. Can the convergence statistics be provided, in line with DfT WebTAG Unit M3.1 Table 4.**

## Assessment of Impact on Journey Times

The journey times assessed are given in Figure 5.1. This is shown below.

Figure 5.1, Journey Times used in the Analysis



The analysis is then presented without the journey times on the M62.

**23. Provide explanation for omission of M62 journey route from analysis.**

**24. Analysis of the residential access roads, e.g. Poplars Avenue, would have been useful especially with regard to through route analysis.**

The addition of the development traffic results in increases in journey times along the four routes assessed. Biggest increases 2030 no through route (DS-DM) are:

- Mill Lane SB AM +165secs,
- A49 SB AM +87 secs,
- Birchwood Way EB AM +74secs,
- A50 WB PM +74secs,
- Birchwood Way WB PM +63secs

Addition of the through route relieves A50 and A574 (partially) but increases on Mill Lane & A49.

**25. Can a narrative be provided to explain why the journey times are changing, e.g. is it link capacity, green times, opposing turning movements etc. How are the development trips and their distribution impacting on journey times?**

**26. The through route decreases journey time NB on A49, this seems counter intuitive as a new signalised junction will add delay. Can this be explained?**

## Impacts on Delay

Difference plots of delay from the SATURN model are presented for all scenarios without the through route. A difference plot for the through route was not produced due to structural changes between the networks with the through route and those without the through route. For each scenario comparison link delays are stated at key junctions.

- 27. As with the journey times section, can a narrative be provided explaining the increases and how development trips influence changes in link delay? The same junctions are mentioned for each scenario yet there are other links with increases in delay greater than 40 seconds that are not discussed.**
- 28. The total delay plots provided for the through route assessment reveal very large delays entering the model at Oakwood Gate (AM and PM), Birchwood Way (PM) and M62 J9 EB off slip (PM). This could have an effect on model stability and result in trips not being able to enter the network. The calibration and coding in these areas should be reviewed.**

The total delay time for each model is also presented. Logically the Do Something models have more delay than the Do Minimum models.

- 29. The total delay in the PM models is about 50% higher than the AM models. Is this solely due to the delay identified above at Oakwood Gate / Birchwood Way junction. It would be expected that the models carry similar amounts of delay.**
- 30. The introduction of the through route increases delay in the AM model but reduces delay in the PM when compared to the Do Something models without the link road. Can a narrative be provided to explain this?**

## Queuing

Similar to the delay assessment, queue lengths are compared between Do Minimum and Do Something scenarios. Compared to the delay assessment there are not many areas of queue length change. The changes in queue length are concentrated around the major junctions; M62 J9, A49 / Cromwell Avenue, College Place Roundabout and Oakwood Gate roundabout.

- 31. As with journey times and delay can an explanatory narrative be provided?**
- 32. The through route total queue length plots show large queues (greater than 100 pcus) in the PM on the approaches to Oakwood Gate roundabout, M6 J9 EB off slip and A49 NB approach to Long Lane junction? Are these realistic? Is all traffic getting through the network? Total queue length plots would be useful for Do Minimum and Do Something without through route.**

## Assessment of Impact of Volume over Capacity

Link Volume over Capacity is compared between Do Minimum and Do Something scenarios. The increases due to the development seem low and overall there are not too many links with V/C greater than 85%. Difference plots and total V/C plots have been provided.

- 33. Again can a narrative be provided?**
- 34. What is the capacity of each link? Is it appropriate for the link type? No flows have been provided so cannot infer what increase in 13% V/C on Poplars Avenue means for flow.**
- 35. Large V/C occur M62 WB after J9 merge, M62 J9 EB off slip, and the approaches to Oakwood Gate roundabout. Coding should be checked in these areas.**

**36. The difference plots are difficult to read with many labels overlapping especially around multi-node junctions. Can there appearance be improved? Also all plots are labelled Volume of Capacity, should be Volume over Capacity.**

#### Other

**37. It would be beneficial to see some flow plots, both total and difference. Also select link analysis plots to show the routing to and from the developments, and also to identify the non-development traffic using the through route.**

#### Summary

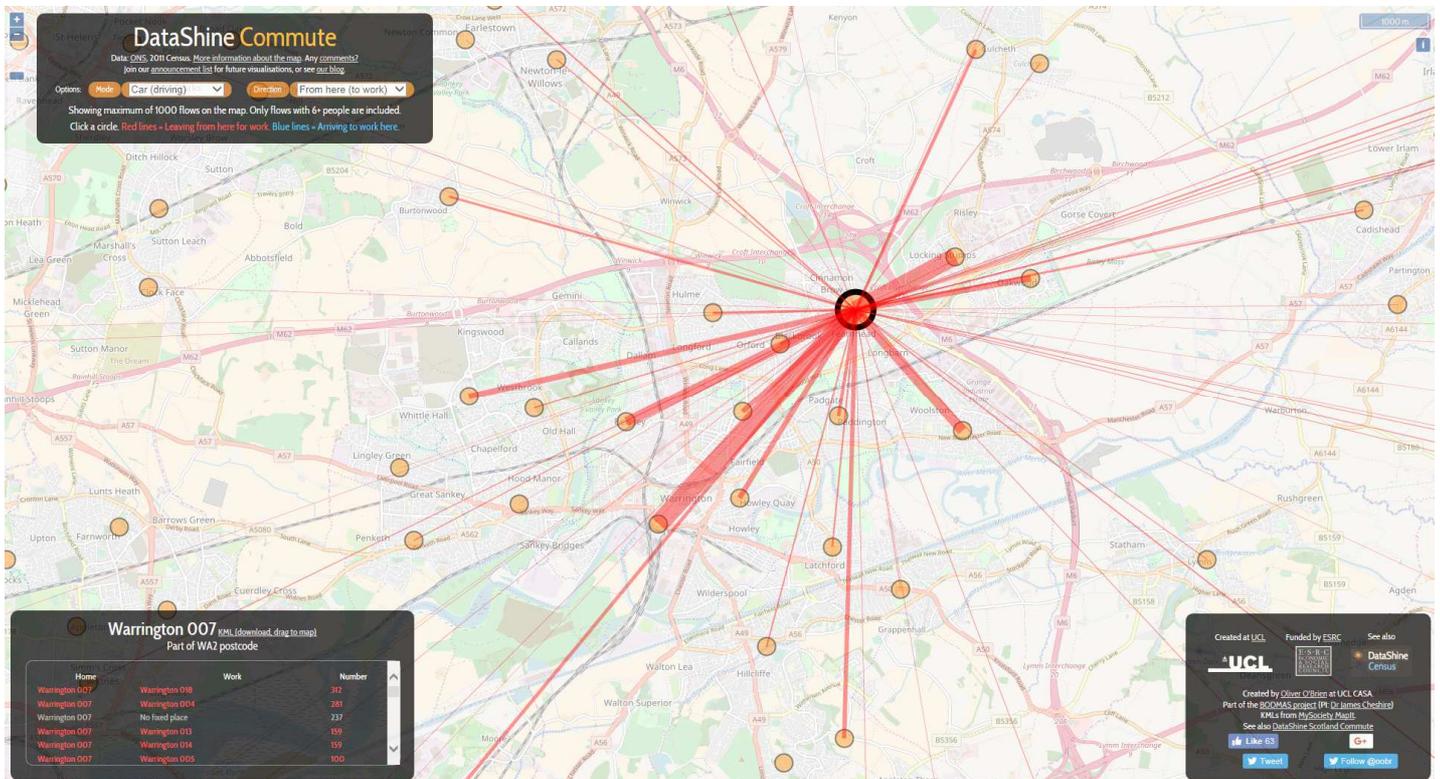
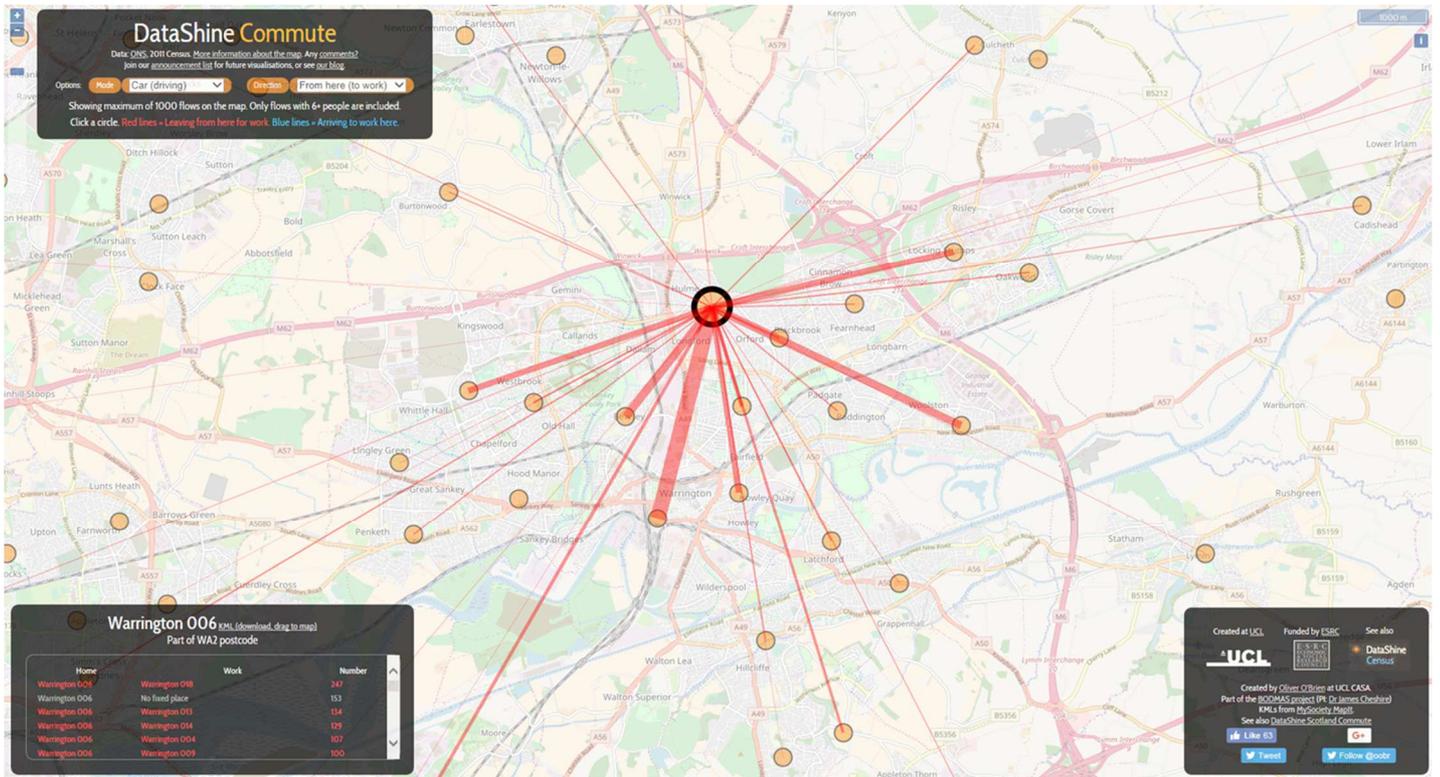
The SATURN model of the area around Peel Hall Farm has been used to provide with and without development models for 2025 (partial development build out) and 2030 (full build out). An additional 2030 scenario was tested with full build out and a through route connecting the A49 and Mill Lane / Blackbrook Avenue.

A summary of the main issues that require further attention are:

- Background growth – has an appropriate level of background growth been applied for all trip purposes and vehicle types. Have committed developments been modelled correctly?
- Trip distribution – are the parent zones selected suitable (actual modelled distribution and age of OD data)? Comparison with census JTW data would suggest that the distribution is not wide reaching enough, with 20% of development trips going to / from other residential areas in Hulme and Orford.
- Trip rates – the assumptions and evidence base behind the discounting, internalisation, pass-by and transfer needs to be made clearer. The trips rates themselves seem reasonable, though for some land use type the number and age of surveys may be questioned.
- Model stability – the delays, queues and V/C information all highlighted a problem around Oakwood Gate roundabout, on the Oakwood Gate and Birchwood Way WB approaches, and at other areas where traffic enters the model. The PM model had 50% more delay than the AM model. Links operating way over 100% V/C can cause the model to be unstable as small changes in flow lead to big changes in delay.
- Reporting – a descriptive narrative is required to explain exactly what is causing changes to journey times, delays, queues and V/C rather than just reporting the change itself. How does the development traffic interact with existing traffic? Also flow plots would be beneficial.

Colin Wright  
Principal Transport Planner

# Appendix A



## **RESPONSE TO WSP FORECASTING REPORT REVIEW (Rev. A)**

PROJECT: Peel Hall, Warrington

REVIEW DATE: 27 November 2017

REF.: APP/M0655/W/17/3178530

### **Land at Peel Hall, Warrington**

**Outline application for a new residential neighbourhood including C2 and C3 uses; local employment (B1 uses); local centre including food store up to 2,000m<sup>2</sup>, A1-A5 (inclusive) and D1 use class units of up to 600m<sup>2</sup> total (with no single unit of more than 200m<sup>2</sup>) and family restaurant/pub of up to 800m<sup>2</sup> (A3/A4 use); site for primary school; open space including sports pitches with ancillary facilities; means of access and supporting infrastructure at Peel Hall, Warrington.**

---

### **Future Year Highway Networks**

1. Provide detail regarding the level of development represented by the three zones along the through route. The location of the trip loading point may have an influence on where it accesses onto the existing highway network.?

*The through route has been constructed within the SATURN model based on the masterplan. The loading points are as per Technical Note HTP/TN/21 with the addition of splitting the 850 dwellings which load onto the through route equally into two zones, one to the east and one to the west of the through route.*

*An annotated screen shot of the through route in SATURN is contained in Appendix 1.*

2. Can confirmation be made that signal timings are consistent between Do Minimum and Do Something options and signal optimisation has not been applied?

*Signal timing are not optimised in any of the future year scenarios and remain consistent between the Do Something and the Do Minimum.*

### **Future Year Trip Matrix Development**

#### *Background Growth*

3. What is the benefit for over predicting the background growth? If anything this may dilute the impact of the development trips?

*This is as per previous agreements from 2016, and was reduced twice; once in terms of committed developments and once in terms of updated NTEM data.*

4. The forecasting methodology, specifically the use of the NTM function, is not normally applied when forecasting from a strategic model. Typically TEMPRO OD factors for each trip type would be used for the fully observed trips and NTM for trips that have an origin or destination in the external area.

*Data used as per previously agreed strategy.*

5. TEMPRO and NTM will only provide growth factors for cars. How has LGV and HGV growth been defined?

*Scope agreed early 2016.*

6. Are these developments small enough to exclude from explicit modelling?

*This is as per agreement with WBC and HE, and set out in HTp/TN/07/Addendum.*

7. Comparison of the number of jobs each site will create and the growth predicted by TEMPRO for the relevant MSOA should be provided. Then a decision should be made on whether they are accounted for within TEMPRO.

*Previous methodology agreed.*

8. Neither of these sites are in Warrington 006. The current forecasting methodology will not model any changes in trip patterns brought about by these developments.

*Previous methodology agreed.*

#### *Trip Generation*

9. The re-distribution of the traffic may change the turning proportions at the junction which may affect the operation of Poplars Avenue. No evidence has been provided to demonstrate no impact due to pass-by trips. Are these pass by trips modelled in the SATURN model?

*Pass-by as per previous agreed strategy.*

*Our stand alone site access modelling to account for impact of pass-by trips and the pass-by trips are accounted for in the SATURN model.*

10. The 30% by-pass trip rate has been derived by assuming the same trip reduction as the Omega development. Can a justification for the 30% reduction be provided based on current best practice? 'TRICS Research Report 14/1: Pass-By & Diverted Trips Report' states that a standard trip rate reduction for pass-by and converted trips is no longer considered applicable and that a first principles approach should be undertaken. No evidence has been provided to suggest this is the case.

*As per agreed strategy dating from 2016.*

11. No account for has been provided for transferred or diverted trips. For example traffic may divert from the A49 which may impact upon the operation of the local network. Can more information be provided to explain why these trip types have not been included in the analysis?

*Approach already agreed.*

12. Technical Note HTp/1107/TN/13 which is the applicant's response to the HE contradicts this and states that 30% of trips will be pass-by (Table 6-1). More information should be provided to explain the inconsistencies between the discounting rates between the applicant's response to the HE and Technical Note HTp/1107/TN/19.

*HTp/TN/13 dated July 2016 was superseded by responding to WBC December 2016 consultation comments on trip discounting.*

13. More information should be provided on the rationale for the 50% value as there appears to be no evidence submitted to substantiate this proportion.

*Response in HTp/TN/13.*

14. Are trips from the 330 dwellings accessed via Poplars Avenue to the west of the site included in the internalisation discount? Access to the primary school from these 330 dwellings will be restricted due to the proposed bus gate and the vehicle trips will have to travel on the local highway network to access the school. Has this been accounted for in the modelling?

*The local centre car park can be reached from both the Poplars Avenue central access junction and the Birchwood Avenue/Mill Lane main site access junction. It was agreed with highway officers at WBC in March 2016 meeting that this was acceptable.*

15. Table 4.3 represents undiscounted trips from 2030 scenario without through route. The discounted trips should be shown as this is the number of trips that are loaded onto the network. The correct tables are Table 5.2 (HTp/1107/TN/19, without through route) and Table 3.10 (HTp/1107/TN/21, with through route).

*It has been confirmed that the correct discounted trips were loaded into the model. Table 4.3 of the forecasting report has been updated accordingly with these discounted values and an updated Forecasting Report provided.*

16. At this stage of the report, it would be beneficial to present some matrix totals. This would show base year and forecast years with and without developments.

*This can be provided going forward.*

#### *Trip Distribution*

17. Can the trips groupings be defined? Are they:
- a. Residential – all trips to/from a residential property (including commuting)
  - b. Employment – employers business trips (non-home based only?)

- c. Other – other trips (non-home based only?)

*This is confirmed; the trips have been split out in SATURN to provide an improved response to routing within the model.*

18. Do the parent zones provide a realistic distribution? Looking at Fig 4 (AM from PH), Fig 8 (AM to PH), Fig 12 (PM from PH) and Fig 16 (PM to PH) it can be seen that roughly 20% of the trips stay within Hulme and Orford (original model zones 67, 69, 70 and 152).

*The distribution was carried through from the WS VISUM model, into the VISSIM and subsequently the SATURN model. Zone locations from the VISSIM model remain in the same locations, but where required have been disaggregated.*

19. Census JTW information for Warrington 006 and 007 (included in Appendix A) shows largest proportions are to Warrington town centre, Birchwood and Woolston Grange industrial park? The AM Residential from PH and PM Employment to PH distribution plots should reflect this.

*The approach and gravity model has already been agreed back in 2016; however consideration can be given to updating this and providing a sensitivity test in a future run of the SATURN model.*

20. Zone 405 (land north of M62 bounded by Winwick Link) shows trips in Fig 13 Residential trips to Peel Hall. Is this correct? There are no development trips at any other time period or trip type.

*Trip distribution Taken from the gravity model.*

21. The distributions are taken from the multi modal model with full zone structure. Has any change in routing for forecast Do Minimum scenarios been taken in to account? There are quite a number of routes to Warrington town centre, the distribution may change, e.g. increase of traffic on A49 transferring trips to A50.

*No change in routing for forecast Do Minimum scenarios has been taken into account.*

22. Can the convergence statistics be provided, in line with DfT WebTAG Unit M3.1 Table 4.

*Yes, this will be provided going forward.*

23. Provide explanation for omission of M62 journey route from analysis.

*The M62 journey time information is provided in the updated Forecasting Report (eastbound and westbound directions).*

24. Analysis of the residential access roads, e.g. Poplars Avenue, would have been useful especially with regard to through route analysis.

*This can be provided going forward.*

25. Can a narrative be provided to explain why the journey times are changing, e.g. is it link capacity, green times, opposing turning movements etc. How are the development trips and their distribution impacting on journey times?

*Almost all journey times are forecast to experience an increase as a result of the additional development trips upon the network. Traffic signal timings have remained the same between the Do-Minimum and Do-Something. So as the volume of development trips increases through junctions, delays also increase, since it takes vehicles longer to traverse the network.*

*The largest impact on journey times is experienced during the AM peak along Blackbrook Avenue / Mill Lane because the route has a number of roundabout junctions and a single signalised junction. Roundabout junctions are more sensitive to changes in traffic flows and so a greater increase in delays is forecast compared to other routes such as the A49, which is predominately signal controlled.*

26. The through route decreases journey time NB on A49, this seems counter intuitive as a new signalised junction will add delay. Can this be explained?

*The quicker journey times forecast along the A49 in the 'Through Route' models compared to the 'Do-Something' models are a direct result of the reduction in traffic on the A49 north of the M62. The reduction in traffic results in less delay on the A49 Newton Road northbound approach to its junction with the A49 Winwick Link Road and the link to the north of the roundabout up to its junction with Golborne Road.*

*Providing the 'Through Route' opens up an alternative route from the A49 south of the M62 to destinations accessed off Myddleton Lane and the A573 Golborne Road. Traffic is forecast to transfer to the through route, and route via Delph Lane, consequently reducing delays to vehicles waiting at the northbound stop line of the A49 Newton Road, traffic signals at the A49 Winwick Link Road roundabout junction, and those completing the right turn to Golbourne Road from the A49 Newton Road.*

### **Impacts on Delay**

27. As with the journey times section, can a narrative be provided explaining the increases and how development trips influence changes in link delay? The same junctions are mentioned for each scenario yet there are other links with increases in delay greater than 40 seconds that are not discussed.

*AECOM to review/as above.*

28. The total delay plots provided for the through route assessment reveal very large delays entering the model at Oakwood Gate (AM and PM), Birchwood Way (PM) and M62 J9 EB off slip (PM). This could have an effect on model stability and result in trips not being able to enter the network. The calibration and coding in these areas should be reviewed.

*It is recognised that the junction was forecast to experience large queues within the VISSIM model also, which were confirmed by observations made during site visits. As the traffic flows increase in the forecast years, the queues increase.*

*We consider the model is more than adequate to assess the development impact.*

29. The total delay in the PM models is about 50% higher than the AM models. Is this solely due to the delay identified above at Oakwood Gate / Birchwood Way junction. It would be expected that the models carry similar amounts of delay.

*The forecast delays at Oakwood Gate accounts for almost all of the additional 50% in the AM peak hour model.*

30. The introduction of the through route increases delay in the AM model but reduces delay in the PM when compared to the Do Something models without the link road. Can a narrative be provided to explain this?

*To be provided in more detail going forward – attributed to tidal nature of traffic flows entering and leaving Warrington on this route.*

## **Queuing**

31. As with journey times and delay can an explanatory narrative be provided?

*As above/to be reviewed going forward.*

32. The through route total queue length plots show large queues (greater than 100 pcus) in the PM on the approaches to Oakwood Gate roundabout, M6 J9 EB off slip and A49 NB approach to Long Lane junction? Are these realistic? Is all traffic getting through the network? Total queue length plots would be useful for Do Minimum and Do Something without through route.

*Difference in Queue length plots have been provided as part of Appendix F of the Forecasting Report, these are supported by total queue length plots also provided in Appendix 2 of this document.*

*The Oakwood Gate junction currently experiences significant delays and queueing in the PM peak on the eastbound Birchwood Way approach and northbound Oakwood Gate approach, so it is expected delays at the junction would be significant in the future year models. The forecast year VISSIM models predict similar queue lengths and delays across the junction.*

*In reality it is likely drivers may reroute to avoid the Oakwood Gate junction if delays of such magnitude were realised. However, as this forms the edge of the study area, and the alternative routes fall outside of the study area the model does not reflect this behaviour and so the demand remains fixed.*

*Checks between demand and actual flows at Oakwood Gate are forecast to experience minor differences suggesting all trips are getting through the network.*

*Given the level of queueing across the existing network within the the study area, the forecast queue lengths are believed to be reasonable in the future years of 2025 and 2030.*

### **Assessment of Impact of Volume over Capacity**

33. Again can a narrative be provided?

*As above/to be reviewed going forward.*

34. What is the capacity of each link? Is it appropriate for the link type? No flows have been provided so cannot infer what increase in 13% V/C on Poplars Avenue means for flow.

*The calculated link capacities have been extracted from SATURN and placed alongside the actual flows in the supporting spreadsheet.*

35. Large V/C occur M62 WB after J9 merge, M62 J9 EB off slip, and the approaches to Oakwood Gate roundabout. Coding should be checked in these areas.

*The coding of Junction 9 and the M62 motorway has been checked and is believed to be representative of the existing motorway layout. V/C values above 90% are forecast on the M62 mainline in a westbound direction underneath Junction 9. The eastbound direction M62 mainline is forecast to experience V/Cs approaching 90%.*

*These values do not differ between the Do-Minimum and Do-Something models.*

*Westbound on and off slips are forecast to experience a small 1% increase in V/C between the Do-Minimum and Do-Something models, however forecast V/C values are all forecast to be lower than 61%. Eastbound the forecast increases in V/C on the off slip to the M62 is a 4% increase from 119% in the Do-Nothing scenario, highlighting the approach is already at capacity and the development traffic has a minimal impact.*

*The high V/C values on the eastbound M62 link are because it is coded as an external link and should benefit from the same / higher than the preceding link as the section of motorway benefits from an additional lane. The coding of the motorway link to avoid the high V/C will be updated within the sensitivity test models.*

*It should be noted the eastbound motorway link is forecast to experience a V/C of 139% in the Do-Minimum, and 140% in the Do-Something scenarios, highlighting that the development traffic is forecast to have a small impact on the motorway network.*

*The coding of Oakwood Gate roundabout has been checked and is believed to be representative of the existing junction layout. Sporadic hostile driver behaviour has been observed at the junction, where drivers were observed utilising the hatched areas to access the circulatory lanes, however the junction has not been coded to reflect this behaviour, since it is considered not to be consistent.*

36. The difference plots are difficult to read with many labels overlapping especially around multi-node junctions. Can there appearance be improved? Also all plots are labelled Volume of Capacity, should be Volume over Capacity.

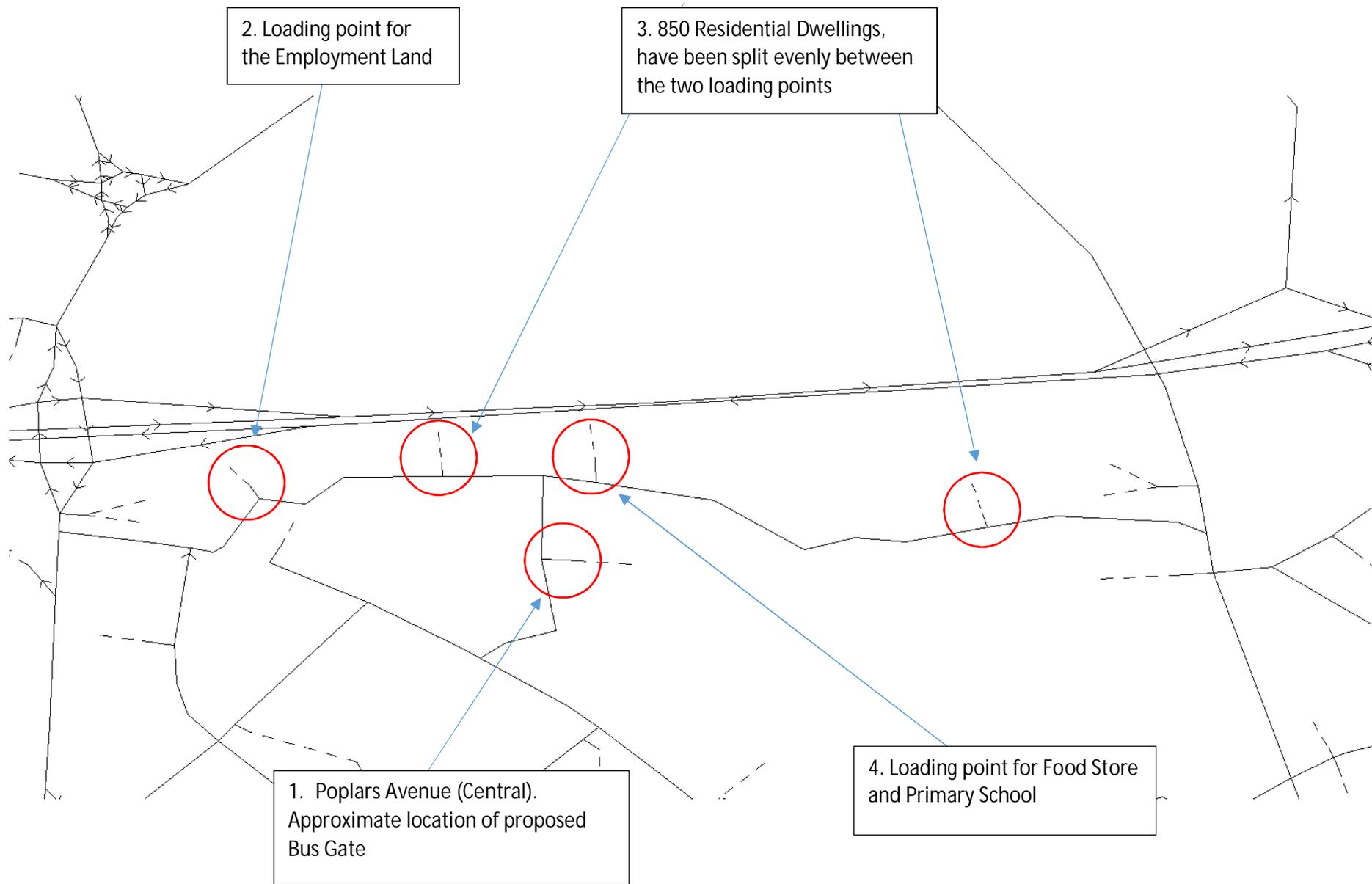
*This will be taken into account going forward.*

#### **Other**

37. It would be beneficial to see some flow plots, both total and difference. Also select link analysis plots to show the routing to and from the developments, and also to identify the non-development traffic using the through route.

*To be provided going forward.*

# Appendix 1



Appendix E, Through Route Trip Loading Points

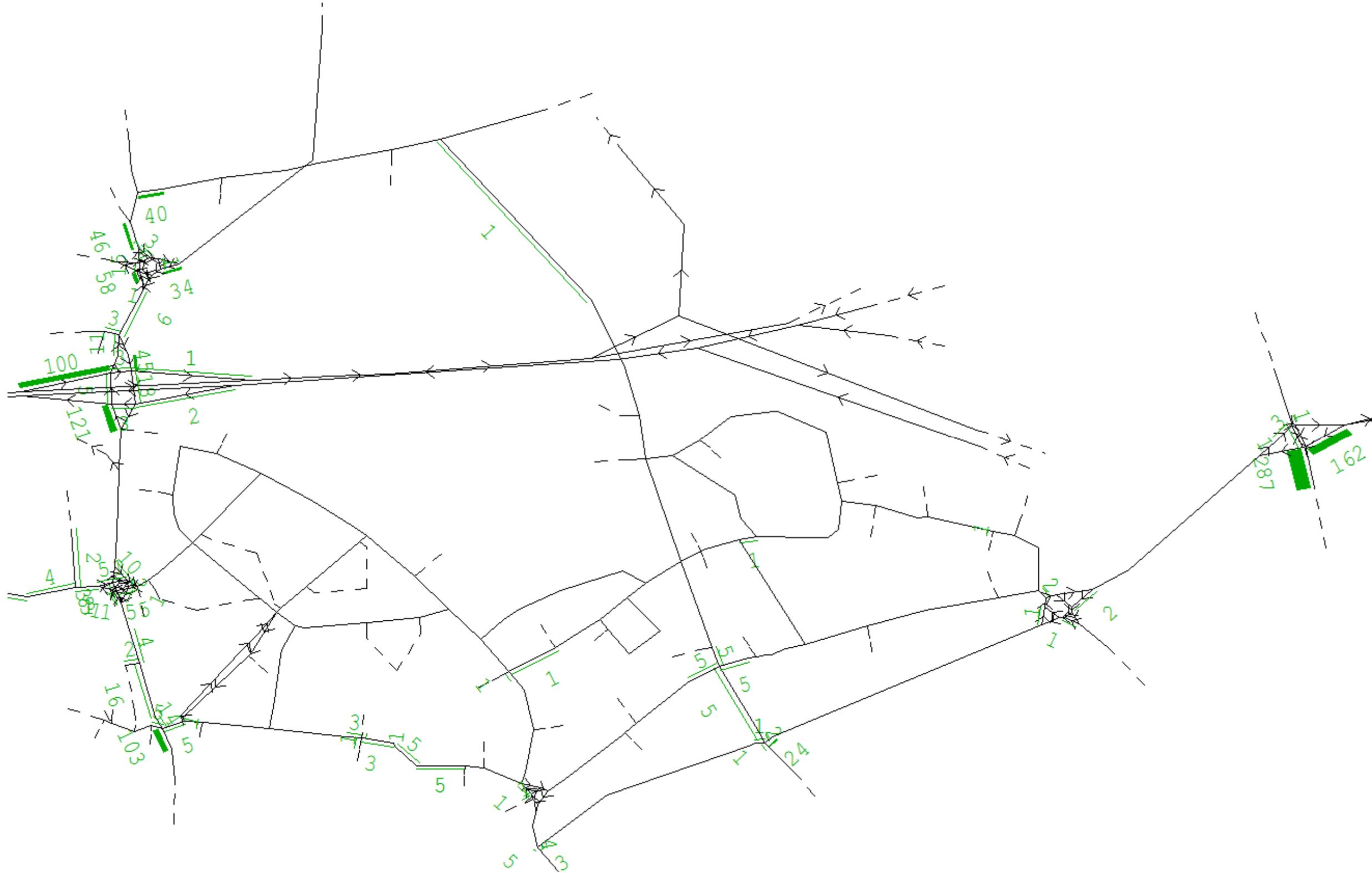
## **Appendix 2**



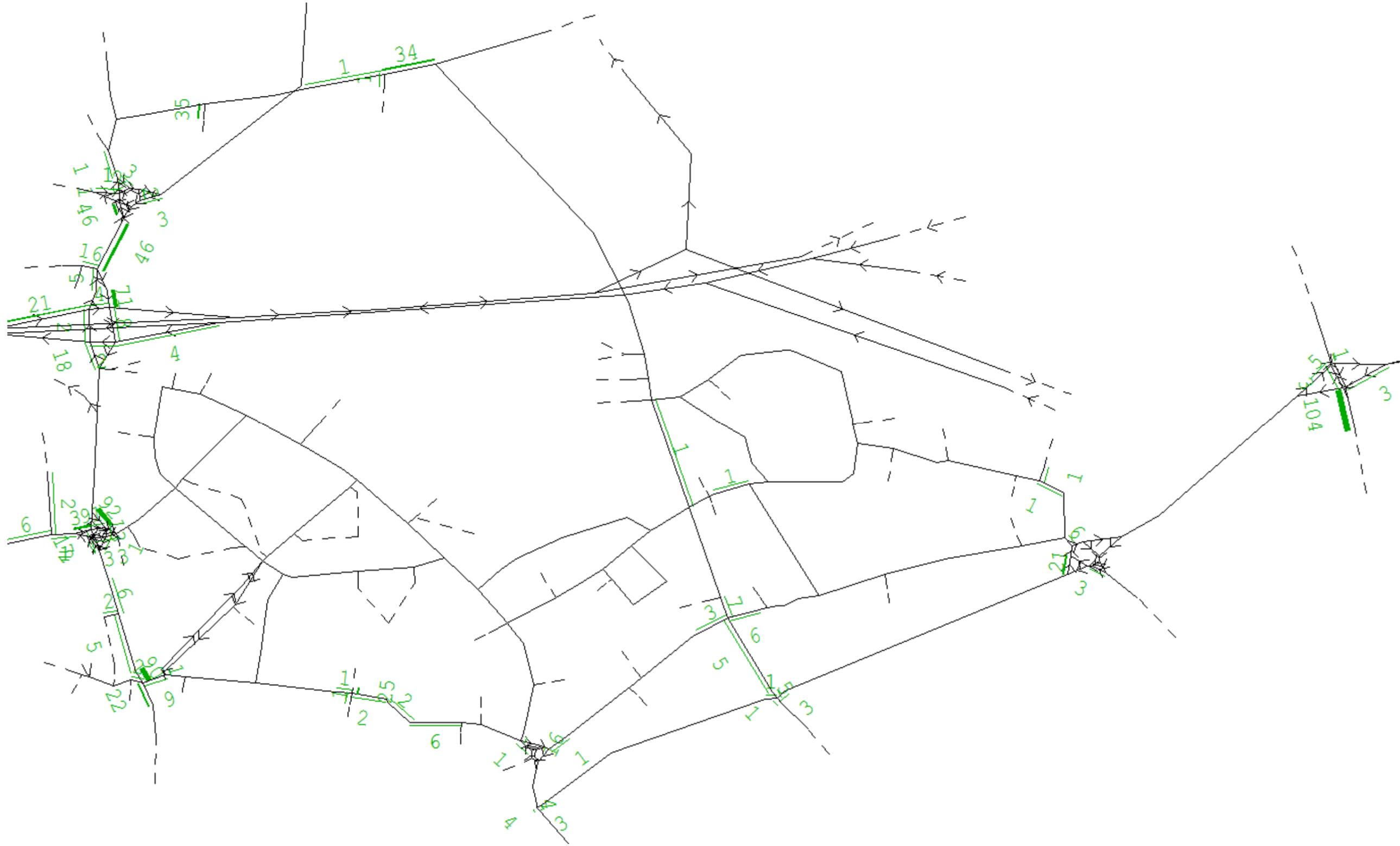




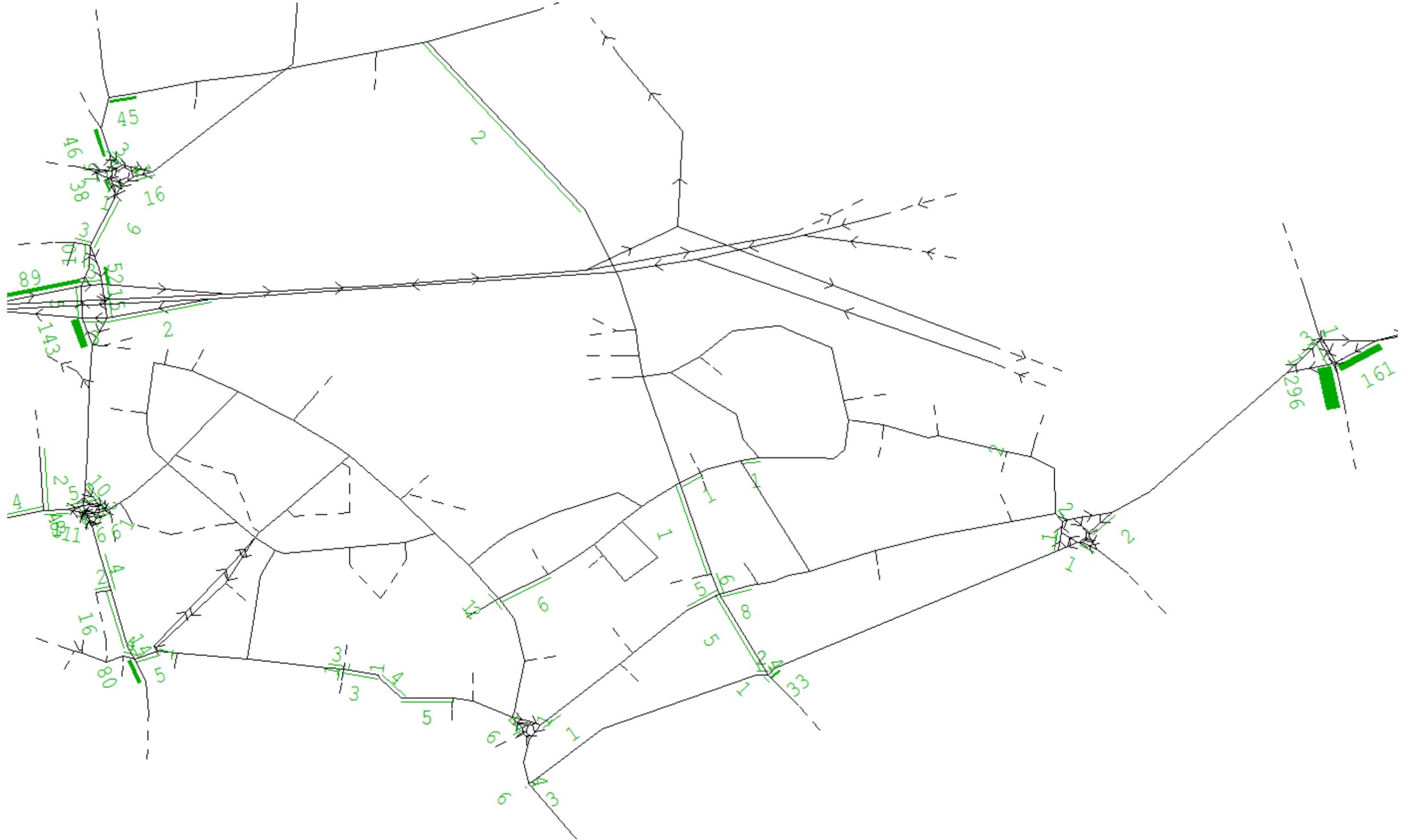
### 2030 Do-Minimum PM Peak Period Average Queue Plot



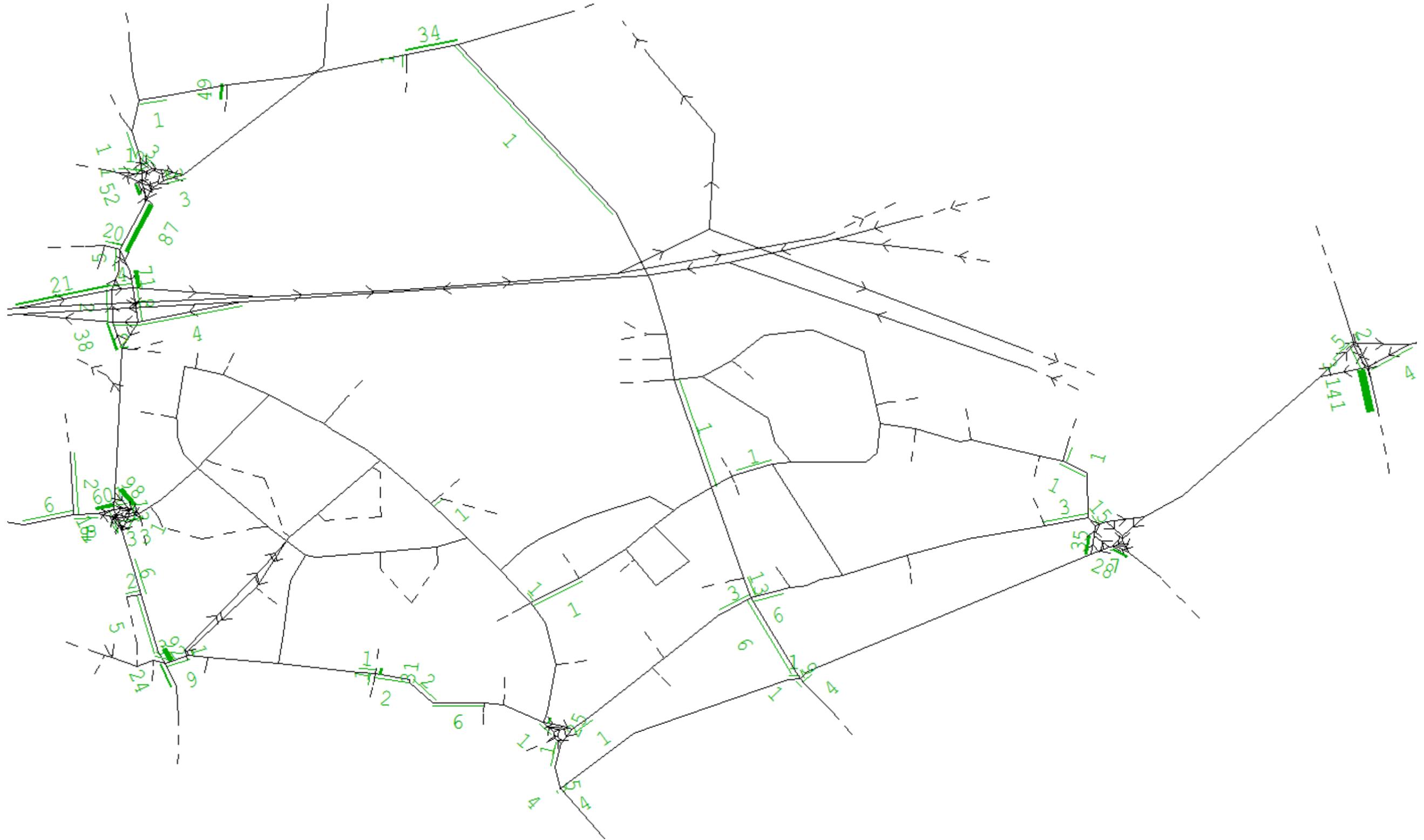
### 2025 Do-Something AM Peak Period Average Queue Plot



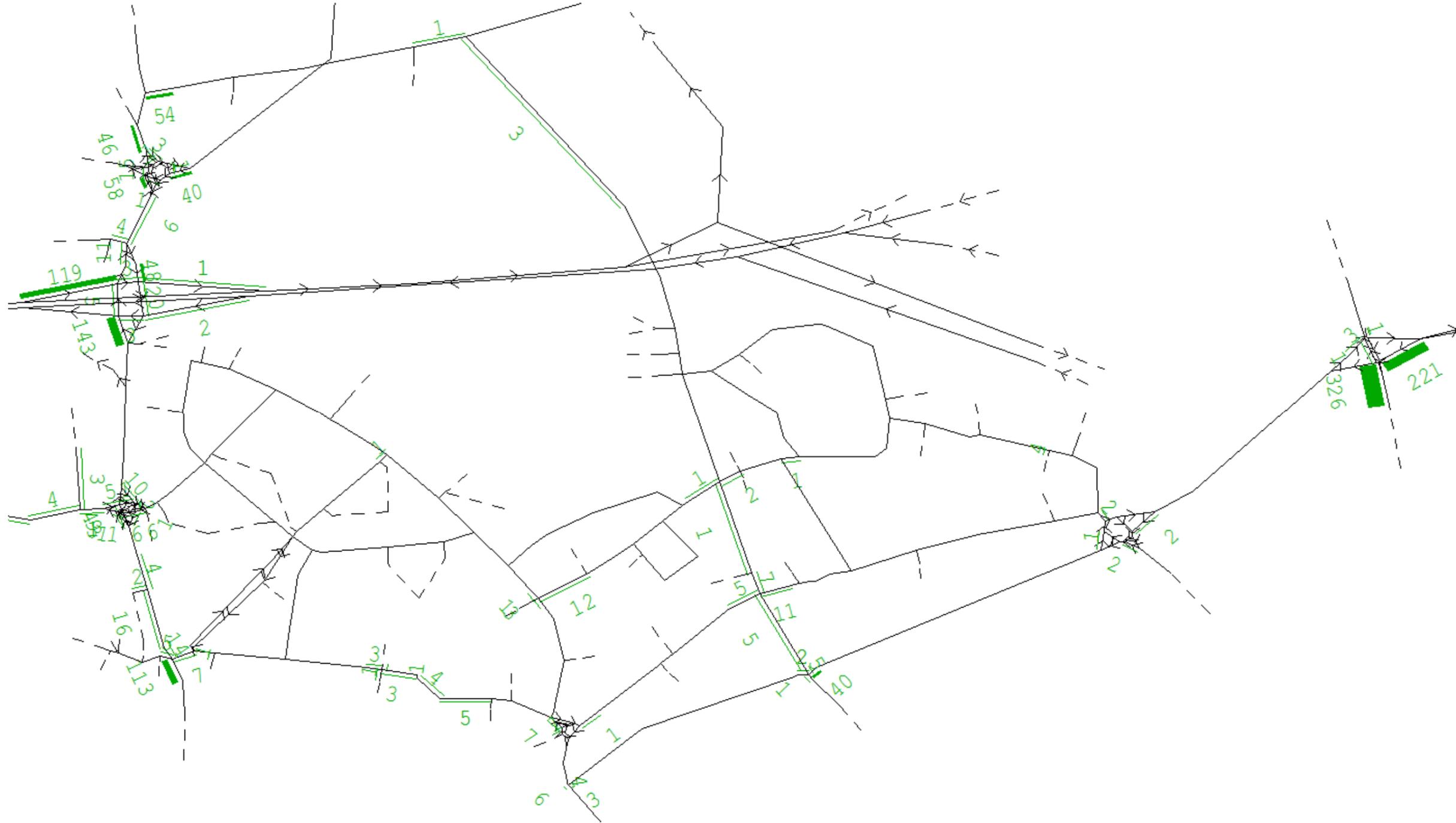
### 2025 Do-Something PM Peak Period Average Queue Plot



### 2030 Do-Something AM Peak Period Average Queue Plot



### 2030 Do-Something PM Peak Period Average Queue Plot



**From:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Sent:** 04 December 2017 09:07  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** Dickin, Alan; Davies, Michael (Planning); dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall Farm Impacts Summary Review  
**Attachments:** Peel Hall Farm Impact Summary Review FINAL.docx

Fiona,

Further to my previous emails of 22<sup>nd</sup> November and 29<sup>th</sup> November please find attached comments in respect of the Impacts Summary.

Once again the issues to be addressed are highlighted in red.

The issues previously raised in the earlier summary reports will need to be addressed before any Saturn outputs can be used with confidence to identify the impacts of the development. Notwithstanding the fact that the Saturn outputs may change, a number of queries have been listed at junctions where the relationship between Volume over Capacity ratio and queuing does not appear logical; it may be advantageous to look at these in advance of any model update.

Our consultant's recommendation is that once the modelling queries have been resolved, Saturn can act as a tool to identify junctions and corridors that operate at high levels of congestion. With the recommendation that micro-simulation and individual junction models are then used to fully understand the operation and interactions of these junctions (specifically blocking back), and ultimately to identify what mitigation measures are needed to accommodate the development traffic.

I look forward to your response, and to the response in relation to the other reports.

Please let me know if you need any further information/clarification.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

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# MEMO

<b>TO</b>	Mike Taylor, WBC	<b>FROM</b>	Andy Carpenter, WSP
<b>DATE</b>	01 December 2017	<b>CONFIDENTIALITY</b>	Confidential
<b>SUBJECT</b>	Peel Hall Farm – Technical Note – Impacts Summary Review		

## Introduction

WSP have been commissioned by Warrington Borough Council (WBC) to review a suite of modelling documents that have been submitted to WBC as part of the planning application for a major residential development at Peel Hall Farm.

The Planning Application was submitted by Satnam Group in 2016 and rejected by WBC on the grounds of insufficient information relating to highway matters, namely a functioning traffic model and a set of mitigation measures to cope with the development traffic.

The following documents have been submitted to WBC in order to address the shortcoming of the planning application. These are:

- Local Model Validation Report (LMVR), AECOM, September 2017;
- Peel Hall Forecasting Report, AECOM, September 2017;
- Technical Note – Impact Summary, Highgate Transportation, September 2017.

The proposed method of review by WSP is to produce a short summary “memo style” report for each of the above documents. This document will review the information provided within the Technical Note – Impact Summary report. The purpose of this report is to summarise the key points of the report and raise queries where additional information may need to be sought.

The previous review of the LMVR and the Forecasting Report has raised some outstanding issues and queries regarding the robustness of the Saturn model. Therefore the results and conclusions set out within the Technical Note – Impact Summary Report should be treated with caution and are likely to require revising once the outstanding technical issues have been addressed. Notwithstanding the above, WSP has provided some initial comments on the results presented in the report.

## Report Overview and General Comments

The Technical Note – Impact Summary Report was prepared by Highgate Transportation Planning (HTP) and provides a narrative to the results set out by AECOM in a Technical Note prepared in September 2017.

The AECOM Technical Note sets out the results of the Saturn Modelling. The note reports the volume over capacity ratio (V/C) and queue lengths (in passenger car units (pcus)) for each junction arm for the following scenarios:

- 2015 Base;
- 2025 Do Minimum – Base + Committed + Growth;
- 2025 Do Something - Base + Committed + Growth + Development (Part-build out development profile);
- 2030 Do Minimum – Base + Committed + Growth;

- 2030 Do Something - Base + Committed + Growth + Development (Full development profile); and
- 2030 Do Something Sensitivity test – As 2030 Do Something above + through route between the A49 and Mill Lane/Blackbrook Avenue open for all traffic.

To establish what the impact directly attributed by the development would be at each junction, HTP compared the V/C between the Do Minimum and the Do Something scenarios. The difference was used to determine if there would be a significant impact at any of the junctions as a result of the proposals. The report defines what is considered 'significant' in 1.8 as *'an increase of 10% or more on a junction operating at 90% or above. The significance of impact on queue length is generally dependent on the available stacking capacity on that link'*.

- 1. Further evidence should be provided to substantiate the definition of significant used in the assessments. Usually a V/C of 85% would be considered to be the threshold at which minor fluctuations in flow or vehicle type can be accommodated without the junction reaching capacity.**

HTP state that assessments using junction modelling software would then be undertaken at junctions where a significant impact was identified and that this would inform whether any potential mitigation measures are required. It should be noted that with the exception of the through route there was no mitigation proposed in the report.

The technical note provided details of queue lengths, however these did not form part of HTP assessment or narrative on which junctions should be further assessed. Changes in delay or journey times on links for each scenario was not reported on.

- 2. The use of Saturn as a way of identifying junctions where further assessment is required is appropriate. However it is considered that all junctions with a V/C of above 85% would benefit from further, more detailed modelling analysis.**
- 3. It is the view of WSP that a micro-simulation model should be used to assess the A49 corridor in order to understand how blocking back at junctions would impact on the performance of the network. Stand-alone junction models would be sufficient to assess the other junctions where a V/C is in excess of 85%.**
- 4. The review of the LMVR and Forecasting Report queried how the links and junctions in the Saturn model had been coded, in relation to saturation flows and signal timings. Until further information has been provided it is not possible to comment on the accuracy of the V/C outputs.**
- 5. The use of the V/C as an indicator for which further assessment is required is appropriate, however sense checks should be undertaken using changes in delay and queue lengths.**

## **Junction Comments**

As stated above, a number of outstanding technical issues were raised in the review of the LMVR and Forecasting Report. Until these have been addressed it is difficult to provide comments on the impact of the development. Notwithstanding this, WSP have provided some comments on the reported Key Performance Indicators (KPI's) below.

The report assessed 27 existing junctions and 6 proposed junctions. The location of the junctions are shown on Figure 1.

**Figure 1 Location of Assessed Junctions**



A review of the results contained in Appendix A of technical note has found that 16 junctions are forecast to have a V/C of above 85% in at least one scenario: These are as follows:

- Junction 1 - Winwick Link Road / Newton Road / A49;
- Junction 2 - A49 / Delph Lane Retail Park;
- Junction 3 - Junction 9 M62;
- Junction 4 - Cromwell Avenue / Calver Road;
- Junction 5 - A49 / Sandy Lane West / Cromwell Avenue;
- Junction 6 - A49/A50;
- Junction 8 - Blackbrook Avenue /Insall Road/Hilden Road;
- Junction 10 - A49/ Birch Avenue;
- Junction 15 - A50 Orford Green / Poplars Avenue;
- Junction 20 - Capesthorpe Road / Poplars Avenue;
- Junction 23 - Capesthorpe Road / Blackbrook Avenue/ Enfield Park Road;
- Junction 24 - Birchwood Way / Blackbrook Avenue;
- Junction 25 - Enfield Park Road / Crab Lane;
- Junction 26 – Birchwood Way / Crab Lane / Woolston Grange Avenue;



- Junction 27 - Birchwood Way / Oakwood Gate; and
- Junction PH6 -Through Route joining the A4.

HTP discounts junctions 1, 2 and 4 have as not needing any further assessments. HTP state that this is due to the development not impacting them significantly.

Table 1 provides some comments on the results for some of the junctions set out above. It is not an exhaustive list and further comments can be provided following the resolution of the outstanding technical issues used to provide the KPI's in the impact summary report. No comments have been provided regarding changes in delay or journey time as these were not reported on in the technical note.

**Table 1 Initial Comments on Reported Junction KPI's**

JUNCTION NAME	COMMENT / ISSUE
Junction 3 – M62 Junction 9	<p>The junction is operating well over capacity in all scenarios. A review of the results show the following discrepancies:</p> <ul style="list-style-type: none"> <li>■ The V/C on Arm A in the PM decreases from 135% to 117% in 2025. This appears to be illogical given an increase in queues at the junction. Can a narrative be provided for the reason for this drop in V/C</li> <li>■ HTP conclude that an increase in queue of 34 pcus (approx. 204m) in the 2025 PM scenario is not significant. Clarity should be provided on why HTP consider this increase insignificant.</li> </ul>
Junction 5 – A49 / Sandy Lane West	<ul style="list-style-type: none"> <li>■ In the 2025 AM peak hour, the A49 (N) arm shows a decrease in queue of 3 pcu, however the V/C increases. This seems counter intuitive, further details should be provided for this.</li> <li>■ In the 2025 PM peak hour, the Sandy Lane W arm has an increase of V/C from 80% to 97% and the A49 N arm has a V/C of 91% so are both nearing capacity. Despite this, the queues are minimal at the junction (6 and 10 respectively). It is not possible to determine whether this is realistic or not as no flow data has been provided.</li> </ul>
Junction 6 – A49 / A50	<ul style="list-style-type: none"> <li>■ HTP conclude that no additional modelling is required, however junction is running above capacity in all scenarios. More detailed modelling should be undertaken as Saturn should not be used to draw direct comparisons between junctions at a local level.</li> </ul>
Junction 8 – Blackbrook Avenue / Install Road / Hilden Road	<ul style="list-style-type: none"> <li>■ In the AM peak hour, the queues decrease on all arms of the junction despite all arms seeing an increase in V/C. A narrative should be provided to why this is as it seems illogical.</li> </ul>
Junction 10 – A49 / Birch Avenue	<ul style="list-style-type: none"> <li>■ HTP reports that the junction operates within capacity in all scenarios with the exception of the through route in 2030 where a V/C of 101% is reported on the A49 northern arm. Paragraph 3.13 states that it is not considered that the geometry of the junction needs to be modelled. This implies that improvements to the junction geometry would not improve the operational performance of the junction. Evidence should be provided to substantiate this statement and to demonstrate that geometric improvements cannot improve the capacity of the junction.</li> </ul>
Junction 15 – A50 Orford Green / Poplars Avenue	<ul style="list-style-type: none"> <li>■ The results reported show that the junction will see a rise in V/C. In the AM peak hour Do Minimum scenario, the V/C is 97% so reaching capacity but the reported queue is only 3 pcus. There are no queues reported in the PM peak hour Do Minimum scenario. An explanation should be provided for the minimal queuing at the junction. The coding assumptions should also be provided.</li> </ul>
Junction 20 – Capesthorpe Road / Poplars Avenue	<ul style="list-style-type: none"> <li>■ There are no queues reported in either the AM or PM Do minimum scenario.</li> <li>■ In 2025 the V/C increases in the PM Do Something scenario to 100% on Poplars Ave, however there is only a queue of 6 pcus. Details should be provided to why the queue is so low?</li> </ul>



Junction 24 – Birchwood Way / Blackbrook Avenue	<ul style="list-style-type: none"><li>■ In the AM peak hour in 2025, there is high V/C's on arms B and C but with minimal queues.</li><li>■ In the 2025 PM, the V/C for arm C drops from 109% in the Do Minimum scenario to 106% in the Do Something scenario. This is despite there being an increase in queue of 15pcus on the arm and there being an increase in V/C on the other arms of the junction. Details should be provided to why this is the case.</li></ul>
Junction 25 – Enfield Park Road / Crab Lane	<ul style="list-style-type: none"><li>■ There are no queues on any of the arms of the junction in all scenarios for both time periods. This is despite there being an increase in V/C to 91% in the PM peak Do Something scenario.</li><li>■ In 2025, the V/C for Crab Lane in the PM peak Do minimum scenario is 0%.</li><li>■ In 2025, the Do minimum for Enfield Park Lane S decreases in the PM peak following the delivery of the scheme.</li></ul>
Junction 27 – Birchwood Way / Oakwood Gate	<ul style="list-style-type: none"><li>■ The junction is located on the outskirts of the model and the results show an extremely high V/C and large queues. A narrative should be provided to why this is the case and to explain whether the model is accurate in this area.</li></ul>



## Summary

The SATURN model of the area around Peel Hall Farm has been used to provide with and without development models for 2025 (partial development build out) and 2030 (full build out). An additional 2030 scenario was tested with full build out and a through route connecting the A49 and Mill Lane / Blackbrook Avenue.

The Technical Note – Impact Summary Report submitted by Northgate Transport Planning provides a comparison between the Do Minimum and Do Something scenarios to establish what impact there will be on the local highway network as a result of the development. The report only presents the V/C and queue lengths.

The previous review of the LMVR and the Forecasting Report has raised some outstanding issues and queries regarding the robustness of the Saturn model. Therefore the results and conclusions set out within the Technical Note – Impact Summary Report should be treated with caution as they are likely to require revising once the outstanding technical issues have been addressed

However, there are a number of discrepancies with the V/C's and queues at a number of junctions. An explanation should be provided to why this is the case.

Once the outstanding issues raised in the review of LMVR and Forecasting Report have been addressed the outputs from the Saturn model can be used in a similar way to assess the impact of the development on the local network. The Saturn outputs should be used to identify junctions and corridors (combinations of junctions in close proximity) that operate at high levels of congestion. It is recommended that micro-simulation and individual junction models are then used to fully understand the operation and interactions of these junctions (specifically blocking back), and ultimately to identify where mitigation measures are needed to accommodate the development traffic.

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 14 December 2017 17:26  
**To:** 'Taylor, Mike'  
**Cc:** 'Dave Tighe'  
**Subject:** Peel Hall SATURN Reports Review  
**Attachments:** 1107 Response to WSP LMVR Review DEC17.pdf; 1107 Response to WSP Forecasting Review DEC17.pdf; 1107 Highways Meeting Minutes 120916.pdf; 1107 WBC Note of Meeting 080316 FINAL FOR ISSUE.pdf; 1107 HE Meeting Note v2 190116.pdf; Peel Hall Model Scoping Report 01.04.2016.pdf

**Importance:** High

Dear Mike,

Further to our conversation earlier today, please find attached our responses to the two WSP reports (LMVR review and Forecasting Report review) as promised.

I also attach some meeting minutes and the original scoping agreement provided by AECOM that may be helpful.

You will appreciate that we want to be as accommodating as possible but don't wish to unpick what has been previously agreed.

Happy to discuss.

Kind regards,  
Fiona

Fiona Bennett

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14/12/17

HTp attachments provided on USB/electronically

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 15 December 2017 16:16  
**To:** 'Taylor, Mike'  
**Cc:** 'Dave Tighe'; 'Dickin, Alan'; 'Davies, Michael (Planning)'  
**Subject:** RE: Peel Hall - A574 Growth

Dear Mike,

Thank you for your helpful response.

At this stage I think we can at least agree that the current SATURN model, has a level of growth that is likely to be higher than realistic and we are happy to agree the use of this in our assessment.

As you are aware, we are looking at further sensitivity tests and no doubt growth levels will be one of the elements considered. In this instance it is WSP that has raised the issue of significantly lower growth, and perhaps it would be best if the narrative for this comes from them.

Would Tuesday 9<sup>th</sup> January at 11.30am be convenient for you for our meeting?

Kind regards,  
Fiona

Fiona Bennett

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Tel: 07595 892 217

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**From:** Taylor, Mike [mailto:mike.taylor@warrington.gov.uk]  
**Sent:** 15 December 2017 15:59  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** 'Dave Tighe' <dave.tighe@highgatetransportation.co.uk>; Dickin, Alan <adickin@warrington.gov.uk>; Davies, Michael (Planning) <mdavies@warrington.gov.uk>  
**Subject:** RE: Peel Hall - A574 Growth

Fiona,

My apologies, I only had a cursory look at the DfT data and there are limitations to the accuracy of these counts. That being said, those data-sets may not necessarily relate to the periods 2016-2025 and 2016-2030 and growth may vary from zone to zone throughout the model.

I am reluctant to agree to zero growth throughout the model at this stage without further justification/clarification, particularly as growth rates have previously been agreed; which has been stressed in your responses to the WSP reports received yesterday.

I'm happy to postpone our meeting until you've received full feedback from AECOM and can make either the 8<sup>th</sup> or the 9<sup>th</sup>, whichever is more convenient for you.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
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**From:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk) [mailto:fiona.bennett@highgatetransportation.co.uk]

**Sent:** 15 December 2017 12:00

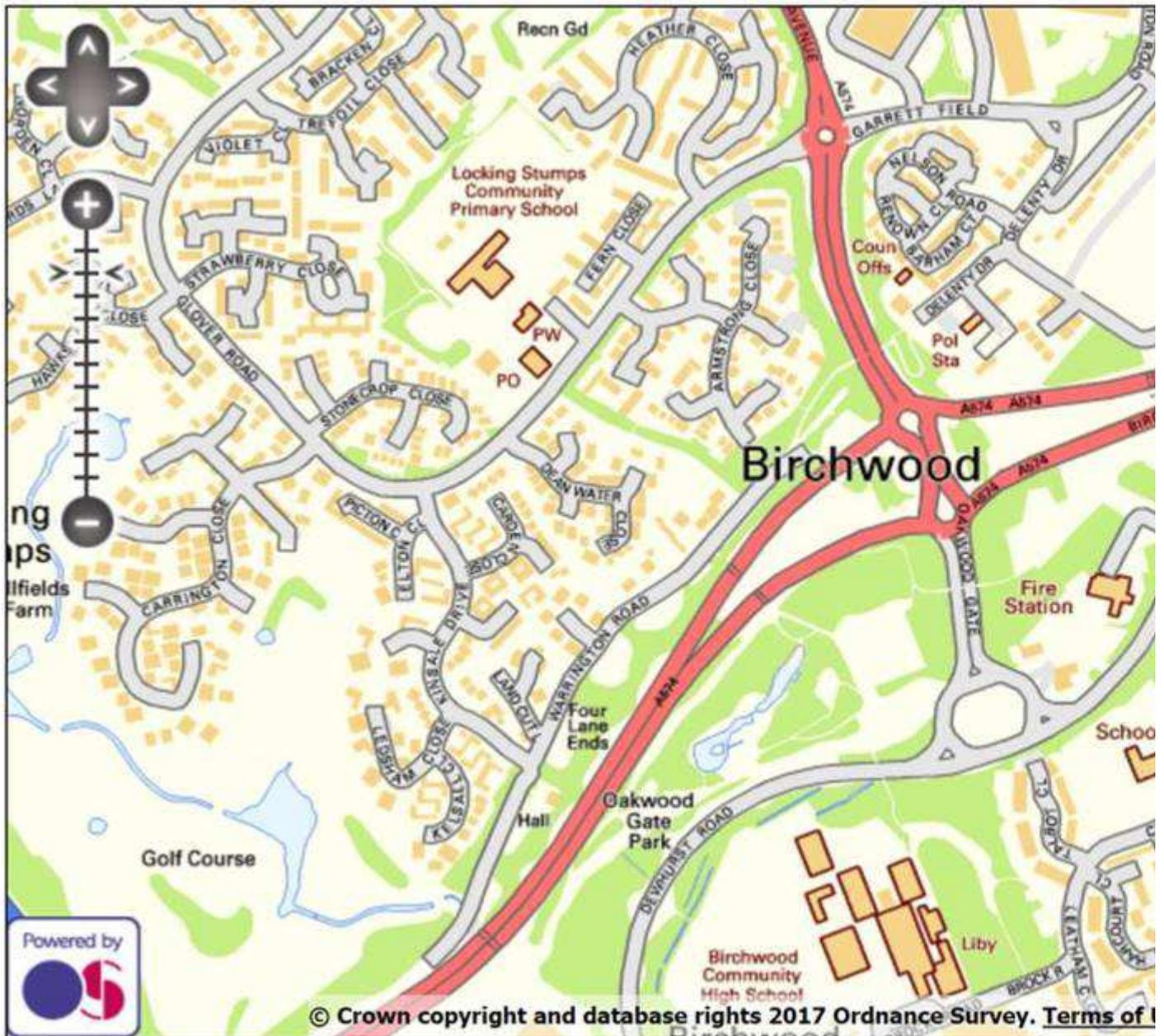
**To:** Taylor, Mike <[mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)>

**Cc:** 'Dave Tighe' <[dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)>

**Subject:** Peel Hall - A574 Growth

Good morning Mike,

Further to our conversation yesterday regarding growth, we have obtained DfT traffic count data for count point ID 77943 on the A574 as discussed. The location of which is shown below.



The count data is tabulated below for 2000 to 2016, with the actual count data highlighted yellow (the others are estimated flows).

AADF Year	Estimation method	All Motor Vehicles
2000	Estimated	12773
2001	Estimated	12391
2002	Estimated	12613
2003	Counted	12330
2004	Estimated	12654
2005	Estimated	12270
2006	Estimated	12057
2007	Counted	12953
2008	Estimated	12715
2009	Estimated	12957
2010	Estimated	12984

2011	Estimated	13099
2012	Estimated	12936
2013	Estimated	12909
2014	Estimated	13315
2015	Estimated	13604
2016	Counted	12764

In summary, of the 16 years' worth of data, only three were manual counts. The three counted (i.e. known) years of 2003, 2007 and 2016 show similar traffic flows, with the greatest occurring 2007. Traffic flows were recorded as lower during 2016 than 2007 and as such annual growth can be considered minimal on the A574.

Please can you forward me the data you procured for this area if different so we can broaden our analysis?

In terms of the meeting pencilled in for next Wednesday morning, we consider that it may be beneficial to re-schedule for the new year (8<sup>th</sup> or 9<sup>th</sup> January) once we have received a full response from AECOM. Would this be acceptable?

Happy to discuss.

Kind regards,  
Fiona

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\*\*\*\*\*

**From:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Sent:** 04 January 2018 15:49  
**To:** fiona.bennett@highgatetransportation.co.uk  
**Cc:** dave.tighe@highgatetransportation.co.uk; Dickin, Alan; Wright, Colin; Davies, Michael (Planning)  
**Subject:** RE: Peel Hall

Fiona,

Thank you for your email, sorry for the slight delay but I was waiting for feedback from Traffic Management and Traffic Signal colleagues.

This junction was subject to an improvement scheme in May 2017 and the north/south arms now run concurrently. I would ask you to confirm that you are modelling the latest layout/stages/phases? The latest information can be provided if required.

In respect of your responses to the WSP review of the Local Model Validation Report and the Forecasting Report I would make the following comments for response/discussion at our meeting:

LMVR

Can you confirm with whom and when it was agreed that OD data should be based on a 2008 VISUM model?

The two main issues raised by WSP need to be satisfactorily addressed; 1: lack of justification for using the older 2008 model - evidence is required to show that the OD data (from 2006/2007) is still relevant to trip patterns in May 2015 and 2: lack of validation on the A574 route - the model suggests additional capacity that in reality doesn't exist. This may influence development traffic behaviour in forecast scenarios and underestimate the need for mitigation.

Forecasting Report

Background growth – TN/07 states that all committed developments will be added to the growthed background traffic but your response states that growth rates were discounted to allow for committed development. Can you clarify and confirm the 2016 agreement referenced and the references to *agreed strategy* and *previous methodology*?

Trip generation – It is my understanding that trip rates have never been agreed. Are a different set of pass-by (and other) assumptions used in the modelling of the site access to what has been assumed in SATURN? The inconsistency in discounting rates is addressed by reference to a response on trip discounting in December 2016, however, it is my understanding that this was around the time of the planning committee and that no key assumptions were agreed. Again can you clarify and confirm the agreed strategy/approach referenced at each point?

Trip distribution – can you expand on the reference to trip distribution being taken from the gravity model? Also the lack of analysis of the local roads e.g. Poplars Avenue has been a critical issue throughout the assessment process and the need to fully understand the impact of the scheme on the local roads is key; the exclusion of this information is a significant issue.

General – A number of technical notes are referenced (dated May/June/July 2017). Between the refusal decision and the Public Inquiry programme no documents have been agreed. Several references are made to future SATURN runs; when can these practically take place given the Public Inquiry deadline? Has there been a fundamental revision to the site configuration? A dedicated employment access on Poplars Avenue seems to be referenced. The number of residential units also appears to differ between the no-through route and the through route options.

Can you confirm when you will provide both the outstanding information from AECOM referred to in your responses and a response to the WSP review of the Impact Summary?

Finally, can you also confirm the attendees for the meeting so I can ensure that the room is adequate?

If you need any further information please let me know.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
Transport for Warrington  
Warrington Borough Council  
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 [mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)

 Office: 01925 444086 Mobile: 07966 884639

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---

**From:** fiona.bennett@highgatetransportation.co.uk [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 29 December 2017 13:39  
**To:** Taylor, Mike <mike.taylor@warrington.gov.uk>  
**Cc:** dave.tighe@highgatetransportation.co.uk  
**Subject:** Peel Hall

Dear Mike,

In advance of our meeting on 9<sup>th</sup> January we have been reviewing potential mitigation measures at local junctions.

The Insall Road signalised junction with Blackbrook Avenue appears to currently operate with east-west running and then north and south separately. This has been modelled for 2025 and 2030 and shows that the junction will operate at c92% capacity in 2025 and c95% capacity in 2030; increasing to c100% when adding the Peel Hall development. If operated with the north and south run concurrently, this would increase operational capacity significantly i.e. c69% with Peel Hall.

Is a change in signal stages at this junction something that WBC would be happy to discuss?

Kind regards,

Fiona

Fiona Bennett

Highgate *Transportation*

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 08 January 2018 15:35  
**To:** 'Taylor, Mike'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Dickin, Alan'; 'Wright, Colin'; 'Davies, Michael (Planning)'  
**Subject:** RE: Peel Hall  
**Attachments:** 040416.pdf; HTP 1107 19F Consultation Plan - Access.pdf; HTP 1107 43 Through Route Alignment.pdf; Supporting flows and VoC spreadsheet.xlsx; 1107 Response to WSP LMVR Review Rev A JAN18.pdf; 1107 Response to WSP Forecasting Review Rev A JAN18.pdf

Dear Mike,

Thank you for your email of 4<sup>th</sup> January,

In principle we do have an issue with being asked to reconsider some of the fundamental parameters that were put to Warrington BC and their consultants over the past two years, which were either not commented on at the time or were allowed to pass to enable further work to progress, and one of the elements that fall into this category is for example the OD data using the 2008 VISUM model.

Notwithstanding this we are obviously keen to achieve as much common ground as possible in the run-up to the inquiry and to this extent we do envisage carrying out some sensitivity testing if necessary, as previously discussed.

Our response to your email is provided below for ease of reference.

I also attach further responses on the WSP comments and an updated SATURN output spreadsheet, and I will forward the updated Forecasting Report under separate cover due to its size.

I look forward to meeting you and your colleagues at 11.30 tomorrow.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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*First Floor, 43-45 Park Street*

*BRISTOL BS1 5NL*

*Company Registration Number: 07500534*

**From:** Taylor, Mike [<mailto:mike.taylor@warrington.gov.uk>]

**Sent:** 04 January 2018 15:49

**To:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk); Dickin, Alan <[adickin@warrington.gov.uk](mailto:adickin@warrington.gov.uk)>; Wright, Colin <[Colin.Wright@wsp.com](mailto:Colin.Wright@wsp.com)>; Davies, Michael (Planning) <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)>

**Subject:** RE: Peel Hall

Fiona,

Thank you for your email, sorry for the slight delay but I was waiting for feedback from Traffic Management and Traffic Signal colleagues.

This junction was subject to an improvement scheme in May 2017 and the north/south arms now run concurrently. I would ask you to confirm that you are modelling the latest layout/stages/phases? The latest information can be provided if required. **The information we were provided with in 2016 has now been superseded by the recent works. Please can you supply the latest signal timings and we will update the future year modelling.**

In respect of your responses to the WSP review of the Local Model Validation Report and the Forecasting Report I would make the following comments for response/discussion at our meeting:

#### LMVR

Can you confirm with whom and when it was agreed that OD data should be based on a 2008 VISUM model? **This was agreed by Richard Food in an email to Frank Mohan (AECOM) on 4<sup>th</sup> April 2016. See attached.**

The two main issues raised by WSP need to be satisfactorily addressed; 1: lack of justification for using the older 2008 model - evidence is required to show that the OD data (from 2006/2007) is still relevant to trip patterns in May 2015 and **The use of the 2008 OD data was agreed. See above.**

2: lack of validation on the A574 route - the model suggests additional capacity that in reality doesn't exist. This may influence development traffic behaviour in forecast scenarios and underestimate the need for mitigation.

**The SATURN model as a whole calibrates to within acceptable validation as per DfT WebTAG guidance. All links have been shown to validate except for the A574, which is known to have variable journey times and large queues.**

#### Forecasting Report

Background growth – TN/07 states that all committed developments will be added to the growthed background traffic but your response states that growth rates were discounted to allow for committed development. Can you clarify and confirm the 2016 agreement referenced and the references to *agreed strategy* and *previous methodology*? **TN/07 report (May 2016) was subsequently revised in October 2016 (TN/07/Addendum) following our meeting with WBC, Atkins and HE September 12<sup>th</sup> 2016 and 29<sup>th</sup> September 2016 with WBC and Atkins. Originally the committed developments were added on top of the motorway growth rates (May 2016), but then in discussion at these meetings it was agreed to reduce them to avoid double counting on an already constrained network where motorway growth has been used (October 2016).**

Trip generation – It is my understanding that trip rates have never been agreed. Are a different set of pass-by (and other) assumptions used in the modelling of the site access to what has been assumed in SATURN? The inconsistency in discounting rates is addressed by reference to a response on trip discounting in December 2016, however, it is my understanding that this was around the time of the planning committee and that no key assumptions were agreed. Again can you clarify and confirm the agreed strategy/approach referenced at each point? **It was agreed at the January 2016 meeting that the trip rates were to be based on the Omega trip rates and this was further discussed at the March 2016 meeting. Our work since December 2016 has taken into account the comments raised in the WBC consultation response. We have mirrored Omega or provided evidence for using higher flows.**

Trip distribution – can you expand on the reference to trip distribution being taken from the gravity model? Also the lack of analysis of the local roads e.g. Poplars Avenue has been a critical issue throughout the assessment process and the need to fully understand the impact of the scheme on the local roads is key; the exclusion of this information is a significant issue. **The trip distribution is taken from the gravity model, printouts of which are contained in Appendix B of the Forecasting Report and a Technical Note is provided at Appendix E of the Forecasting Report.**

**The SATURN model and stand alone junction modelling for the access junctions demonstrates that there is not an issue with development traffic. At our meeting on Tuesday we are happy to discuss measures to discourage development traffic entering the area to the south of Poplars Avenue.**

General – A number of technical notes are referenced (dated May/June/July 2017). Between the refusal decision and the Public Inquiry programme no documents have been agreed. Several references are made to future SATURN runs; when can these practically take place given the Public Inquiry deadline? Has there been a fundamental revision to the site configuration? A dedicated employment access on Poplars Avenue seems to be referenced. The number of residential units also appears to differ between the no-through route and the through route options. **No fundamental difference to site configuration – see attached plans. The quantum of development remains the same. No doubt we can discuss any specific queries relating to this on Tuesday.**

Can you confirm when you will provide both the outstanding information from AECOM referred to in your responses and a response to the WSP review of the Impact Summary?

Finally, can you also confirm the attendees for the meeting so I can ensure that the room is adequate?

If you need any further information please let me know.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

Economic Regeneration, Growth & Environment Directorate  
Transport for Warrington  
Warrington Borough Council  
New Town House, Buttermarket Street, Warrington, WA1 2NH

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**From:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk) [mailto:fiona.bennett@highgatetransportation.co.uk]

**Sent:** 29 December 2017 13:39

**To:** Taylor, Mike <[mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)>

**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk)

**Subject:** Peel Hall

Dear Mike,

In advance of our meeting on 9<sup>th</sup> January we have been reviewing potential mitigation measures at local junctions.

08/01/18

HTp attachments provided on USB/electronically

See HTP Responses Contained with MT emails of 22/11/17 and 29/11/17 Respectively

## MEETING AGENDA

PROJECT: Peel Hall, Warrington

DATE: 9<sup>th</sup> January 2018

HELD: Warrington BC, New Town House, Buttermarket Street, Warrington WA1 2NH @ 11:30.

PRESENT:	Mike Taylor	WBC
	Alan Dicken	WBC
	Mike Davies	WBC
	Colin Wright	WSP
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

- 
1. Introductions
  2. Recent correspondence regarding SATURN
  3. Data requests
    - Recent Insall Road/Blackbrook Avenue signal data
    - College Place proposed scheme signal data
    - Oakwood Gate proposed scheme signal data
  4. Mitigation measures being considered
  5. Framework Travel Plan
  6. Transport Assessment
  7. Sensitivity testing
  8. Statement of Common Ground
  9. AOB

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 10 January 2018 17:12  
**To:** 'Taylor, Mike'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Wright, Colin'; 'Dickin, Alan'; 'Davies, Michael (Planning)'  
**Subject:** Peel Hall Draft Meeting Note 100118  
**Attachments:** 1107 Draft Note of WBC Meeting 090118.pdf

Dear Mike,

Please find attached the draft meeting note for comment as promised. Please could you forward on to Andy Carpenter as I do not appear to have his contact details. Many thanks.

I will now forward copies of the plans we discussed at our meeting.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

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**NOTE OF MEETING**

PROJECT: Peel Hall, Warrington

DATE: 9<sup>th</sup> January 2018

HELD: Warrington BC, New Town House, Buttermarket Street, Warrington WA1 2NH @ 11:30.

PRESENT:	Mike Taylor	WBC
	Alan Dicken	WBC
	Mike Davies	WBC
	Andy Carpenter	WSP
	Colin Wright	WSP
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

**SATURN**

1. DT/FB set out that they want to agree as much as possible in advance of the inquiry but do have a concern of being asked to revisit and justify some of the modelling parameters that were set out and provided in 2016, including those that arose from the agreement to follow what had been used to support the Omega application.
2. AD/MT recalled that the VISSIM model was never fully validated and that the SATURN model is predicated on some of the VISSIM assumptions.
3. DT/FB said that the VISSIM model was on the cusp of being validated early 2017.
4. In terms of the SATURN modelling, AD/MT would want reliance on the information from the model caveated until final clarification on the base modelling parameters is received, such as details of OD data used, validation on A574, and discounting of trip rates. It was agreed that the trip rates used are acceptable.
5. CW/AC raised in particular their need for clarification on the acceptability of the 2005/2008 data used for the OD trips patterns in terms of being relative to those represented in the 2015 model; what form of gravity model was used; turn movements at the College Place roundabout as WSP consider that the journey time is half of what it should be but the data for links is appropriate; growth rates used in the model and committed developments applied. CW/AC also queried the specific growth rate used and commented on reducing this.
6. DT/FB said that most of the parameter queries raised stem from discussions in 2016 between ourselves, AECOM and WBC and Atkins that allowed the VISSIM modelling work to proceed. DT/FB agreed to respond to the points raised above as requested.
7. A discussion took place regarding the alternative approaches to growth that could have been taken i.e. i) reduce background growth to maximise development impact, or ii) use the growth levels to flush out which junctions have the potential to require additional

mitigation. While either strategy is valid, in 2016 it was agreed that the VISSIM work would progress on the basis of the higher growth rates and adding on the agreed committed development that was not already accounted for. This follows the approach by Omega (apply motorway growth and then discount) upon which the 2016 modelling work was agreed and progressed at the request of WBC/HE.

8. DT/FB stated that from discussions with AECOM it is considered that given the extensive modelling that has taken place covering this area of Warrington, any changes to the parameters are not likely to significantly change the level of flows at any given location or the potential mitigation works to be considered and tested.
9. AD/MT set out that the Council's area wide SATURN 2016 base model has just been validated and may be available for extracting data and/or potentially for developers to use for future modelling runs. There would be a cost of obtaining this data.

#### **Actions:**

- A WBC and WSP to provide response on HTP comments received to date on the SATURN by close of play Friday 12/01/18 and confirm what additional junctions they may wish to be considered for mitigation.**
- B HTP to provide clarification on whether further tests were undertaken on the VISUM OD flows prior to use in the VISSIM and SATURN modelling; what committed developments were added to the v7.2 TEMPRO background growth; whether a Gravity Model has actually been produced or if this term referred to the use of proxy zones; if further analysis has been completed on the turning flows at the College Place roundabout.**
- C HTP to confirm if they wish to be provided with the OD matrix information from WBC's recently validated base SATURN model.**

#### **Potential Mitigation Measures**

10. AD/MT confirmed that they would review the preliminary mitigation measure tabled and the proposed A49 access junction (Option B through route scenario) and provide comments. It was also confirmed that the details for the future schemes at the College Place Roundabout and Oakwood Gate Roundabout are progressing and will be provided for use in the future year modelling, together with the latest signal timing data for the recently improved Insall Road/Blackbrook Avenue junction.
11. AD also confirmed that, whilst caveated by the validation of the SATURN model, he would provide a list of junctions that he considers will require potential mitigation.
12. CW/AC queried that one of the A49 junctions (listed as 1 or 6 in their Impact Summary response) should be investigated further.
13. FB/DT to consider a sensitivity test for junctions based on a scenario for stripped out growth and requested that WBC/WSP confirm what other junctions beyond that listed as investigated in the Impact Summary reports may require further consideration. DT/FB queried why the A50 Orford Road/Hilden Road roundabout junction had been reduced to single lane entry and working and asked MT/AD to confirm.

**Actions:**

**C AD/MT to confirm why the current scheme at the A50 Orford Road/Hilden Road roundabout was initiated and provide comment on the potential mitigation measures and A49/Poplars Avenue access junction by end of week commencing 15/01/18.**

**D FB/DT to circulate electronic copies of the potential mitigation plans and the proposed A49/Poplars Avenue access junction.**

**Framework Travel Plan**

14. DT/FB confirmed that the Transport Assessment will be accompanied by a Framework Travel Plan. At this stage it is an umbrella document and that individual Travel Plans are expected to be subject to a future planning condition.

15. AD confirmed that the Council assist in the running of the Travel Plan for large developments and agreed to send examples of service provided by WBC to HTp.

**Action:**

**E AD to confirm the Travel Plan services that WBC offer in respect of major developments.**

**Transport Assessment**

16. FB/DT confirmed that the full Transport Assessment will be issued at the end of January 2018. This is as set out in the programme discussed in October.

**Sensitivity Testing**

17. Following the submission of the Transport Assessment there may be a period of sensitivity testing. MD was concerned that this may require additional advertising if significant.

18. DT/FB advised that it is not considered likely that the sensitivity tests will significantly alter the level of impact or the mitigation proposed. WBC to provide details of parameters and potential additional junctions for consideration.

**Statement of Common Ground**

19. It was agreed that a Statement of Common Ground on Highway Matters would be jointly produced following submission of the Transport Assessment.

**AOB**

Next meeting date to be first half of week commencing 12<sup>th</sup> February 2018 – all to circulate availability.

Meeting/discussion with WSP and AECOM to be arranged as appropriate.

**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 19 January 2018 18:36  
**To:** 'Taylor, Mike'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Dickin, Alan'; 'Michael (Planning)'; 'Colin Griffiths'; 'Wright, Colin'  
**Subject:** FW: Peel Hall Meeting 09/01/18  
**Attachments:** HTp Second Draft Meeting Note text 090108.pdf

Dear Mike,

Further to my email of Monday 15<sup>th</sup> with the updated meeting note, are we able to agree this please?

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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**From:** fiona.bennett@highgatetransportation.co.uk [mailto:fiona.bennett@highgatetransportation.co.uk]  
**Sent:** 15 January 2018 08:33  
**To:** 'Taylor, Mike' <mike.taylor@warrington.gov.uk>  
**Cc:** 'Dickin, Alan' <adickin@warrington.gov.uk>; 'Wright, Colin' <Colin.Wright@wsp.com>; 'Davies, Michael (Planning)' <mdavies@warrington.gov.uk>; 'dave.tighe@highgatetransportation.co.uk' <dave.tighe@highgatetransportation.co.uk>; 'Colin Griffiths' <colin@satnam.co.uk>  
**Subject:** Peel Hall Meeting 09/01/18

Dear Mike,

Thank you for your comments on our draft meeting note.

Both myself and Dave thought the meeting on the 9<sup>th</sup> was both positive and productive and provided a good platform for going forward to exchange of Evidence and Statement of Common Ground on 27<sup>th</sup> March 2018. As discussed previously between Colin Griffiths and Mike Davies the expectation is that the Statement of Common round will set out what is agreed and what is not agreed.

However, we note from your comments that additional matters have been added that we have no recollection of being addressed at the meeting. We have assimilated as much as we can into the second draft of the meeting note attached and we hope that you will be in a position to agree this. If you have some minor comments I am sure we would be happy to incorporate these.

It may be that we are unable to agree the meeting note, in which case we will consider the attached an unagreed note.

For the avoidance of doubt, it was confirmed at the end of the meeting that you will have our Transport Assessment at the end of January i.e. not early February.

We of course look forward to continuing to work with you and your colleagues to ensure that as much is agreed as is possible to ensure the smooth running of the inquiry, which will begin on 23<sup>rd</sup> April 2018.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

Tel: 07595 892 217

[fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)

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## NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 9<sup>th</sup> January 2018

HELD: Warrington BC, New Town House, Buttermarket Street, Warrington WA1 2NH @ 11:30.

PRESENT:	Mike Taylor	WBC
	Alan Dicken	WBC
	Mike Davies	WBC
	Andy Carpenter	WSP
	Colin Wright	WSP
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

---

### SATURN

1. DT/FB set out that they want to agree as much as possible in advance of the inquiry but do have a concern of being asked to revisit and justify some of the modelling parameters that were set out and provided in 2016, including those that arose from the agreement to follow what had been used to support the Omega application.
2. MD said that WBC need to be in position to re-advertise the application as soon as the completed TA (and the additional EIA material also requested by PINS) are submitted by the end of January. FB confirmed that our full Transport Assessment would be provided by the end of January.
3. MD was anxious that any subsequent sensitivity testing should result in limited change.
4. AD/MT recalled that the VISSIM model was never fully validated and that the SATURN model is predicated on some of the VISSIM assumptions.
5. DT/FB said that the VISSIM model was on the cusp of being validated early 2017.
6. In terms of the SATURN modelling CW asked:
  - That the use of the OD data in the Peel Hall SATURN model is checked against the OD data in WBCs recently validated SATURN base model.
  - For further checks to be carried out on the A574 link as whilst the flows were acceptable, the journey time was quicker than expected and suggested AECOM look at turning movements and network coding at the relevant junctions along the link. FB confirmed that AECOM had carried out checks and were happy the base model validated satisfactorily. DT/FB agreed to provide SATURN model files to assist in any review work by WSP.
  - DT/FB suggested that a future meeting may be beneficial between WSP and AECOM, and are happy to arrange if required.

7. Discussion regarding the Forecasting Report took place, the key points were:
  - CW asked for further information around how background growth and committed developments had been modelled.
  - A discussion took place regarding the alternative approaches to growth that could have been taken i.e. i) reduce background growth to maximise development impact, or ii) use the growth levels to flush out which junctions have the potential to require additional mitigation. In 2016 it was agreed that the VISSIM work would progress on the basis of the higher growth rates and adding on the agreed committed development that was not already accounted for. This follows the approach by Omega (apply motorway growth and then discount) upon which the 2016 modelling work was agreed and progressed at the request of WBC/HE.
  - FB suggested sensitivity testing could be carried out to understand the impact of applying different growth rates.
  - MT/AC raised the issue of how trip rates had been applied and discounting of trips treated in the forecast model. FB/DT set out that the approach followed that agreed for Omega and as requested by WBC/HE.
  - CW asked whether a Gravity Model or Proxy Zones methodology had been used from the development trip distribution. He shared a concern that the proportion of short range trips from the developments in the model was too high when compared to Journey To Work data from current census, and thus diluting the impact of the development trips on the wider network. FB to confirm.
  - CW suggested that a comparison with Trafficmaster data for journey times on Poplars Avenue could be considered.
8. AD stated that the recently completed WMMTM SATURN base model was available for third party use and further information could be provided at a cost to HTP on request.
9. DT/FB said that most of the parameter queries raised stem from discussions in 2016 between ourselves, AECOM and WBC and Atkins that allowed the VISSIM modelling work to proceed. DT/FB agreed to respond to the points raised above as requested.
10. DT/FB stated that from discussions with AECOM it is considered that given the extensive modelling that has taken place covering this area of Warrington, any changes to the parameters are not likely to significantly change the level of flows at any given location or the potential mitigation works to be considered and tested.

**Actions:**

- A. WBC and WSP to provide response on HTP comments received to date on the SATURN base model and Forecasting report by close of play Friday 12/01/18**
- B. WBC to consider provisionally what additional junctions they may wish to be considered for mitigation. To be provided by 19<sup>th</sup> January 2018.**
- C. HTP to provide clarification on whether further tests were undertaken on the VISUM OD flows prior to use in the VISSIM and SATURN modelling; what committed developments were added to the v7.2 TEMPRO background growth; whether a Gravity Model has actually been produced or if this term referred to the use of proxy zones; if further analysis has been completed on the turning flows at the College Place roundabout.**
- D. HTP to confirm if they wish to be provided with the OD matrix information from WBC's recently validated base SATURN model. [Post meeting note – this information was requested on 10<sup>th</sup> January 2018].**

**Potential Mitigation Measures**

11. DT/FB stated a desire to agree locations to be considered for mitigation and tabled a number of proposals.
12. MT stated that any comments made by WBC on the proposed plans would have to be caveated and would be provisional only, and may be subject to further comment.
13. The proposals tabled by HTP comprised:
  - Hilden Road/Orford Green Roundabout. Proposals to increase highway capacity by changes which would reverse some previous measures implemented by WBC to reduce capacity. AD/MT to investigate history and need for existing measures.
  - Capesthorpe Road/Poplars Avenue Roundabout. Scheme to increase roundabout capacity through measures on entry/exits and reduced roundabout dimensions.
  - Crab Lane/Enfield Park Road. Introduction of traffic signal control
  - Sandy Lane West/A49. Widening on approach to roundabout junction from Sandy Lane West. Requires land believed to be in WBC ownership. DT/FB confirmed that this has previously been discussed with WBC.
  - Option B scheme based on through route from within site emerging onto A49 with new traffic signal junction at Poplars Avenue. MT highlighted that initial issues would include the impact on bus routing and the impacts on local movements as a result of the proposed one-way systems.

14. AD/MT confirmed that they would review the preliminary mitigation measure tabled and the proposed A49 access junction (Option B through route scenario) and provide comments by the end of week commencing 15<sup>th</sup> January 2018. It was also confirmed that the details for the future schemes at the College Place Roundabout and Oakwood Gate Roundabout are progressing and as soon as information is available will be provided for use in the future year modelling, together with the latest signal timing data for the recently improved Insall Road/Blackbrook Avenue junction.
15. CW/AC queried that one of the A49 junctions should be investigated further. AD also confirmed that, WBC would consider provisionally what additional junctions they may wish to be considered for mitigation.

**Actions:**

- E. AD/MT to confirm background on the current layout at the A50 Orford Road/Hilden Road roundabout and provide provisional comments on the other potential mitigation measures and the Option B plan for A49 Junction tabled. This information to be provided by 19<sup>th</sup> January 2018.**
- F. FB/DT to circulate electronic copies of the potential mitigation plans and the proposed A49/Poplars Avenue access junction. [Post meeting note – circulated on 10<sup>th</sup> January 2018]**

**Framework Travel Plan**

16. DT/FB confirmed that the Transport Assessment will be accompanied by a Framework Travel Plan. At this stage it is an umbrella document and that individual Travel Plans are expected to be subject to a future planning condition.
17. AD confirmed that the Council can assist in the delivery of travel plans measures for large developments, both residential and commercial and agreed to send examples of service provided by WBC to HTP.

**Action:**

- G. AD to confirm the Travel Plan services that WBC offer in respect of major developments.**

**Transport Assessment**

18. FB/DT confirmed that the full Transport Assessment will be issued by the end of January 2018. This is as set out in the programme discussed in October.
19. MT advised HTP to consider previous comments raised by Andy Oates on a previous version of the TA. This included consideration of other junctions and the impact of the scheme on the network at weekends, particularly on the A49 corridor. FB/DT confirmed that this was being considered.

**Sensitivity Testing**

- 20. Following the submission of the Transport Assessment there may be a period of sensitivity testing. MD was concerned that this may require additional advertising if significant changes or additional mitigation measures came forward, and noted that his programme did not include time for this second consultation.
- 21. DT/FB advised that it is not considered likely that the sensitivity tests will significantly alter the level of impact or the mitigation proposed.

**Statement of Common Ground**

- 22. It was agreed that a Statement of Common Ground on Highway Matters would be jointly produced following submission of the Transport Assessment.

**AOB**

Next meeting date to be first half of week commencing 12<sup>th</sup> February 2018 – all to circulate availability.

Meeting/discussion with WSP and AECOM to be arranged by HTP as appropriate.



# WARRINGTON

## Borough Council

Assistant Director  
Transport and Environment

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Fiona Bennett  
Highgate Transportation  
First Floor, 43-45 Park Street  
Bristol  
BS1 5NL

Our Ref: 2016/28492/Appeal/MT  
Your Ref: HTP/1107

18<sup>th</sup> January 2018

Dear Fiona

### **Peel Hall Transport Assessment**

I am writing in response to your email to Mike Taylor of 15<sup>th</sup> January concerning the above.

It is agreed that the meeting was productive and it certainly gave us an understanding of where you are up to in respect of the work undertaken in preparing the submission of transport information to the Inspectorate to support your proposal.

I am disappointed that you are unable to agree the minutes; it is our opinion that they provided a detailed account of matters discussed. Perhaps if you specifically identified the issues that you do not recall being discussed then we could clarify matters? Otherwise I'm afraid that we'll have to accept that both of the notes you have produced cannot be agreed; we will therefore move forward with differing accounts of what was discussed and to the level of detail of those discussions. Clearly we do wish to work closely with you to resolve problems, unify methodology and, as far as possible, narrow down areas where we cannot agree.

That issue aside, and taking into account the tight deadlines, I thought it would be useful to outline what progress has been made to date and to clarify where we are in the anticipated programme.

Highgate Transportation submitted to ourselves the following AECOM documents on 2<sup>nd</sup> October 2017:-

- SATURN Local Model Validation Report,
- SATURN Forecasting Report,
- SATURN Modelling Results Technical Note,
- Highgate's Technical Note TN/22 (SATURN Impacts Summary) and

- A response to WBC Highways Consultation Memo of 5<sup>th</sup> December 2016.

It is noted that the SATURN Impacts Summary is Highgate's own interpretation of the SATURN Modelling Results Technical Note. A number of junctions which were highlighted by AECOM which in their professional view would benefit from further detailed analysis were omitted from the junctions of interest in the Impacts Summary. It is also noted that the response to the WBC Highways comments highlighted that many of the issues (raised by WBC) would be picked up in future reports and that other issues (also raised by WBC) had been superseded by unspecified subsequent and continuing work.

The Local Model Validation Report (LMVR), Forecasting Report (FR) and Impacts Summary (IS) were subsequently reviewed by the Council's consultants WSP. Comments on the reports were sent to Highgate on 22<sup>nd</sup> November 2017, 29<sup>th</sup> November 2017 and 4<sup>th</sup> December 2017 respectively. Highgate provided responses to the LMVR review and FR review on 14<sup>th</sup> December 2017 and a meeting on 20<sup>th</sup> December 2017 was provisionally arranged to discuss matters; this meeting was subsequently rescheduled at Highgate's request to allow for a full response from AECOM to be considered and the meeting took place on 9<sup>th</sup> January 2018.

In advance of the meeting, in response to a request for further information, WBC sent an email to Highgate on 4<sup>th</sup> January 2018 outlining some of the issues for response and discussion at the meeting. WBC also sent an email on 8<sup>th</sup> January 2018 suggesting that the meeting be structured around the bullet points highlighted in WSP's reviews of the LMVR, FR and IS (and subsequent Highgate responses). Highgate responded to the 4<sup>th</sup> January email on 8<sup>th</sup> January 2018 but provided a specific agenda for the meeting.

Highgate provided minutes of the meeting on 10<sup>th</sup> January 2018 and WBC provided a tracked copy on 12<sup>th</sup> January 2018 together with a table-style response to the issues still considered to be outstanding in relation to the LMVR, FR and IS. Our concern is that these issues will need to be addressed before any SATURN outputs can be used with confidence to identify the impacts of the development. It is noted that no formal response has ever been received to WSP's review of the IS (4<sup>th</sup> November 2017) although it is acknowledged that the IS may need to be reviewed once the LMVR and FR issues have been resolved.

Because of these outstanding issues we are at present unable to agree the SATURN model.

Although a formal programme has never been submitted to the Planning Inspectorate, you will recall that an outline programme was shared with you. That programme outlined some of the key requirements and milestones which would need to be reached in order to allow appropriate review of the information to be submitted within the latest Transport Assessment. No objections were raised to that programme by yourselves or your client and we understood this to be an agreed timetable for the

work and assessment which needed to be carried out. I am somewhat concerned that the first key milestone (acceptance of the SATURN Model) was due to be resolved at the end of October 2017. As stated above the concerns we have raised in respect of the suitability of the model have yet to be satisfactorily addressed.

It is noted that you intend to submit a Transport Assessment by the end of January 2018. However we have not had any opportunity to review any local level model detail or validation, or indeed detailed junction level modelling. It is noted that you submitted proposed mitigation schemes on 10<sup>th</sup> January 2018 for review by ourselves. This followed on from the production of these mitigation schemes at the meeting on the 9<sup>th</sup> January 2018 but no background in respect of detailed modelling has been provided to clarify what impacts these schemes are intended to address. It therefore follows that any feedback provided on these schemes can only be very basic and they can in no way be accepted as agreed mitigation without the provision of further information. As highlighted at our meeting, and in previous responses, in order for Warrington Borough Council to properly assess any proposed mitigation we need to have an analysis of it based upon an agreed SATURN model and Impact Study.

Having had discussions with Highways England in relation to the potential impacts of your proposal I understand that a mitigation scheme for M62 Junction 9 has been submitted for their review. From our discussions with them it seems that the scheme that they have has not been disclosed to us by yourselves. Of course any scheme that will affect the A49 roundabout (which is adopted highway) should be disclosed to ourselves. I am extremely disappointed that the details of the scheme have not been shared with the Council as Local Highway Authority. It would also seem from discussions with the Highway England that matters have progressed in a way that they are unaware of. Perhaps it would be a good idea if there were a three way meeting to resolve these issues and make sure that we all have the same data to work from.

### Conclusion.

In the final analysis what it comes down to is this; our understanding of the position is that we were working to a timetable in terms of sharing information and achieving basic milestones before the deadline for your submission of the Transport Assessment on the 31<sup>st</sup> January 2018. For avoidance of doubt a copy of that timetable is attached to this letter. The first and most basic step is that we wanted to make sure that the base data that you were working from was agreed. Unfortunately, it is our view that you have not given us sufficient information for us to be able to agree that data. Although we have no objection to your using a SATURN model it is obviously imperative that the base data that is "fed into" that model is agreed so that the results can be agreed. As stated we have (in the course of preparing for the local plan) created our own Multi-Modal Transport Model based on the SATURN platform based on the most up-to-date information and this is available for third party use. Obviously if you utilise that resource then we could agree the accuracy of the data used and move forward. However, we have no objection to using your own data, provided that you

share with us how that data has been obtained and how it has been adjusted, to take account of the various factors which influence highway assessment. I am pleased that you have since taken the opportunity to utilise our model to carry out a comparison with your base model, albeit that further processing work will be required

As stated within this letter, given the absence of an agreed model based upon agreed data we really cannot begin to assess either the impact of the proposed development or any mitigation measures that you put forward with respect to addressing that impact. Our desire is to communicate with you and, as far as possible, narrow or even eliminate any areas of dispute. We cannot do that unless and until we know the basis upon which you are working. Despite the drawing up of an agreed timetable for exchange of information we still are unaware of many of the basic factors which are needed in order to assess your approach.

It may be that these questions will be answered in full in the Transport Assessment document that you are due to file (in accordance with the Inspector's direction) on the 31<sup>st</sup> January 2018. However, if that assessment does not provide the missing pieces to the puzzle, and does not give us information which we can use to properly assess your analysis of the highways impact, then clearly we will be unable to agree large amounts of the highways evidence. We will then have no option but to point out to the Inspector why it is that we are unable to move this matter forward. As you are aware this application was turned down by the Borough Council through lack of highways information in February of 2017. Nearly a year has passed and we are still concerned about the lack of information that you have given us.

We are of course as anxious as you are to resolve this matter, however, failure to spell out the basic planks upon which your assessment is made may lead to the inquiry being adjourned and also may have implications in respect of wasted costs.

In those circumstances we would be grateful if you could address the issues that we have outlined. We look forward to hearing from you in that regard as soon as possible.

Yours sincerely

Andy Farrall  
Executive Director  
Economic Regeneration, Growth & Environment

**Please contact:** Mike Taylor, Transport Development Control Team Leader  
**Direct dial:** 01925 444086  
**Email:** [mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)

Andy Farrall  
Executive Director, Economic Regeneration, Growth and Environment  
Warrington Borough Council  
New Town House  
Buttermarket Street  
Warrington  
WA1 2NH

31<sup>st</sup> January 2018

By email only

Dear Mr Farrall,

## **Peel Hall Public Inquiry - Transport Assessment Work**

We are writing in response to your letter on highway matters dated 22<sup>nd</sup> January 2018 (posted second class mail arriving on 24<sup>th</sup> January and emailed on 24<sup>th</sup> January at 15.30 by Mike Taylor).

You will be aware that at our first meeting with highway officers in January 2016 the approach to highway matters for the development of the Peel Hall site was agreed. The process was to follow the general parameters and process agreed and undertaken for the Omega application. The scope of the network to be modelled was also agreed.

The acceptability of this approach was re-affirmed in the latter part of 2016, and again in March 2017. At our meeting with your highway officers in March 2017 it was agreed that the overall approach remained valid and appropriate and that the data input to the VISSIM model would be transferred into a new SATURN modelling platform. At this meeting your highway officers confirmed that they had full confidence in AECOM to build and validate this Peel Hall SATURN model. Your officers made clear they did not wish to review AECOM's work on a step by step basis and wanted to receive the finalised model when ready. This resulted in a technical package on the SATURN modelling being provided to your highways officers on 2<sup>nd</sup> October 2017. You will note the submission of this modelling package was in accordance with the programme agreed with yourselves.

The first response from WBC on this package was some seven weeks later (22<sup>nd</sup> November 2017) with general background queries from your newly appointed consultants WSP consistent with someone unfamiliar with the background to the project, and WBC suggesting for the first time that the OD data used may not be acceptable. We provided a detailed response to these queries on 14<sup>th</sup> December 2017 that set out the background to the use of the OD data and why this approach remained valid. (It had not been indicated previously that the basic parameters of the base model were disagreed upon by your officers, indeed the reverse with officers supporting the overall approach, and therefore it was considered that the approach established for the last two years remained acceptable.) No meaningful response to our information submitted on 14<sup>th</sup> December has been provided to confirm why the agreed OD data we have been using is not appropriate.

You will of course appreciate that after a period of nearly two years of detailed modelling agreed as appropriate by your authority to then be told that fundamental revisions may be required is both surprising and disappointing because the implications of using an alternative set of OD data could undermine much of what had previously been agreed over such a lengthy period. The changing of OD data at this stage would set back the modelling assessment by several months and there is no need or requirement to do this.

WBC will be in receipt of our Transport Assessment by close of play Wednesday 31<sup>st</sup> January 2018 (which is again in accordance with the programme agreed with yourselves). This gives your Authority sufficient time for a review of the material to be carried out well in advance of submitting evidence for the public inquiry. As previously advised to your highway officers in March 2017 and October 2017, the information your team is seeking is contained within this Transport Assessment. We will of course respond to any information requests arising from your highways officers with the aim of working together to ensure the smooth and efficient running of the inquiry.

There is reference in your letter to discussions with Highways England. You will note that this took place during the transition period where your Authority changed the case highway officers and also external modelling consultants. In any event however, the mitigation proposals referred to are contained in the Transport Assessment and no doubt will be discussed with your officers following their review in due course.

We as ever look forward to meaningful engagement from your officers now the Transport Assessment has been delivered. We assume that they will promptly share with us any information requests/alternative assumptions or assessments and other relevant information as their review progresses.

If you require any further information please contact me.

Yours sincerely,



Fiona Bennett  
Director

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**From:** fiona.bennett@highgatetransportation.co.uk  
**Sent:** 05 March 2018 12:36  
**To:** 'Taylor, Mike'  
**Cc:** 'dave.tighe@highgatetransportation.co.uk'; 'Colin Griffiths'; 'Davies, Michael (Planning)'; 'Dickin, Alan'  
**Subject:** RE: Peel Hall, Warrington

Dear Mike,

Further to our correspondence last week, given that we are now only three weeks away from exchange of evidence and SoCG please could you confirm when you will forward your comments on the draft SoCG and the TA.

I look forward to hearing from you.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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**From:** fiona.bennett@highgatetransportation.co.uk <fiona.bennett@highgatetransportation.co.uk>  
**Sent:** 27 February 2018 18:55  
**To:** 'Taylor, Mike' <mike.taylor@warrington.gov.uk>  
**Cc:** 'dave.tighe@highgatetransportation.co.uk' <dave.tighe@highgatetransportation.co.uk>; 'Colin Griffiths' <colin@satnam.co.uk>; 'Davies, Michael (Planning)' <mdavies@warrington.gov.uk>; 'Dickin, Alan' <adickin@warrington.gov.uk>  
**Subject:** RE: Peel Hall, Warrington

Dear Mike,

Look forward to hearing from you regarding the SoCG and the TA by the end of this week.

Kind regards,  
Fiona

Fiona Bennett

Highgate *Transportation*

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**From:** Taylor, Mike [<mailto:mike.taylor@warrington.gov.uk>]  
**Sent:** 27 February 2018 14:52  
**To:** [fiona.bennett@highgatetransportation.co.uk](mailto:fiona.bennett@highgatetransportation.co.uk)  
**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk); 'Colin Griffiths' <[colin@satnam.co.uk](mailto:colin@satnam.co.uk)>; Davies, Michael (Planning) <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)>; Dickin, Alan <[adickin@warrington.gov.uk](mailto:adickin@warrington.gov.uk)>  
**Subject:** RE: Peel Hall, Warrington

Fiona,

Thank you for your email. I apologise for not being in touch.

I'll endeavour to respond to the SoCG and provide a response to the TA by the end of the week.

Regards

Mike

**Mike Taylor**

Transport Development Control Team Leader

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**Sent:** 26 February 2018 16:39  
**To:** Taylor, Mike <[mike.taylor@warrington.gov.uk](mailto:mike.taylor@warrington.gov.uk)>  
**Cc:** [dave.tighe@highgatetransportation.co.uk](mailto:dave.tighe@highgatetransportation.co.uk); 'Colin Griffiths' <[colin@satnam.co.uk](mailto:colin@satnam.co.uk)>; Davies, Michael (Planning) <[mdavies@warrington.gov.uk](mailto:mdavies@warrington.gov.uk)>  
**Subject:** Peel Hall, Warrington

Dear Mike,

Further to the submission of our Transport Assessment (TA/01/A) on 31<sup>st</sup> January 2018, we assume that you will share any information requests/alternative assumptions or assessments and other relevant information as your review progresses.

Also, we provided a draft version of the Statement of Common ground on Highway and Transport matters on 16<sup>th</sup> February 2018. Please could you send me your formal response on this to enable us to make progress.

Please do not hesitate to contact me to discuss. Happy to arrange a meeting at your offices if you feel this is required.

Kind regards,  
Fiona

Fiona Bennett

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