Appendix 59

Atkins Review of SATURN Reports and HTp Response

ATKINS

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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The majority of the traffic count data used in the model was collected in 2014 and is therefore some three or so years out of date.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.

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The model was converged but the associated files have not been supplied and should be requested.

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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.

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The forecast scenarios are as follows:

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- 2030 Do Minimum
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- 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.

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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 tempro 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.

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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

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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 growthed 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 growthed 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)
AM Peak				
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
PM Peak				
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)
AM Peak						
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
PM Peak						
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 al 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

HighgateTransportation

Land at Peel Hall, Warrington

Response to Atkins Review

(ref: 5150363.056) for Highways England

(HTp/1107/TN/23)

November 2017

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Appendix 2 Warrington Borough Council Meeting Note (22/03/17)

Appendix 3 Highways England Meeting Note (23/01/17)

1.0 Introduction

1.1 This Technical Note has been prepared by Highgate Transportation Limited in response to Atkins' review of the Saturn LMVR, Forecasting Report and supporting Technical Notes on behalf of Highways England (ref: 5150363.056) dated 23rd October 2017 and received by HTp on 2nd November 2017. The Aktins letter is included as **Appendix 1** to this report for ease of reference.

1.2 The conclusions of the Atkins response are addressed in **Section 2.0** of this report and the Saturn model is to be forwarded direct to Aktins from AECOM for review as requested.

1.3 It is considered that the Saturn model has been produced in line with previous discussions and in agreement with Warrington Borough Council and Highways England. The most recent agreed meeting notes for Warrington Borough Council and Highways England are contained in **Appendix 2** and **Appendix 3** respectively for reference.

2.0 Response

Network Coverage and Use of Saturn

2.1 The original meeting with Warrington Borough Council and Highways England on 19th January 2016 was used to discuss and agree the extent of the area to be modelled for the Peel Hall application.

2.2 A VISSIM of the model area was constructed and validated to a base year of 2015. However, due to the nature of how VISSIM calculates route choice, and its methodology for assigning trips onto the model network, the future year models become unworkable within reasonable time constraints and unrepresentative of realistic network conditions. For this reason, other model packages where considered as an alternative to VISSIM upon which to run future year scenarios for the whole network.

2.3 SATURN was the recommended modelling choice for the following reasons:

i. Highways England currently have all their Regional Traffic Models within SATURN.

ii. The same processes and standard modelling methodology for the VISSIM could be applied to the SATURN model build, but the future year SATURN models provide sensible, workable outputs, within a quicker timescale to allow identification of the forecast impact resulting from the development.

iii. The following statement is taken directly from the first page of the SATURN model and details its six basic functions which ensure its suitability for use of modelling the impact of the Peel Hall development:

- as a combined traffic simulation and assignment model for the analysis of road-investment schemes ranging from traffic management schemes over relatively localised networks (typically of the order of 100 to 200 nodes) through to major infrastructure improvements where models with over 1000 junctions are not infrequent;
- as a "conventional" traffic assignment model for the analysis of much larger networks (e.g., up to 7,500 links in the smallest standard PC version, 200,000 in the largest)
- as a simulation model of individual junctions;
- as a network editor, data base and analysis system;
- as a matrix manipulation package for the production of, e.g., trip matrices; and
- as a trip matrix demand model covering the basic elements of trip distribution, modal split etc.

2.4 The use of SATURN was agreed with Warrington Borough Council earlier this year following the refusal for planning permission at the committee held at the end of February 2017 (see meeting note contained at **Appendix 2**). The geographical coverage of the model is the same as that agreed for the VISSIM.

2.5 Furthermore, at the meeting with Highways England on 23rd January 2017 (see notes contained in **Appendix 3**) the difficulties that had been faced working with VISSIM for this network was also discussed and in terms of the actual impact of the development on the M62 network. This meeting also confirmed that the assessment process going forward was likely to be SATURN based. Following this, a Technical Note (HTp/TN/15 dated February 2017) was provided to Highways England setting out the minimal trip impact forecast to arise from the Peel Hall development through Junction 9 of the M62. It was agreed that this junction already experiences significant delay at peak hours.

Selection of Time Periods

2.6 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 the periods of 0800–0900 and 1700–1800 would be reported upon. Within SATURN typically you model a single hour period and then report upon this.

2.7 The SATURN model is intended to provide an assessment of the same data collected and used to inform the VISSIM assessment. This is a process that started in January 2016.

Age of Data

2.8 The planning application that is the subject of the appeal was validated in mid-2016 and furthermore, 2015 was considered acceptable earlier this year; it is not reasonable to update this now.

2.9 Future years also agreed with Warrington Borough Council and it is considered that these broadly align with what has been previously agreed and therefore should be considered acceptable.

2.10 In any event, the flows related to the motorway network were extracted from Highway England's model.

Modelling Scenarios

2.11 The modelling scenarios were agreed with Warrington Borough Council and are in line with those requested by Highways England.

2.12 At the January 2017 meeting with Highways England it was stated that there is no value in modelling for a full build out in the opening year, and that a phased approached was to be assessed instead; in line with Warrington Borough Council's previous request.

2.13 Therefore, the scenario for a full build out at year of opening has not been carried out for the SATURN model.

Assessment of Impacts

2.14 It was noted that there are some isolated cases at junctions where Do minimum journey times fall between 2025 and 2030 for Do minimum. This is a complex network with many route choices available and therefore this result is considered plausible.

3.0 Conclusions

3.1 It is concluded that:

i. The SATURN model will be issued to Atkins direct from AECOM for review as requested.
ii. The use of SATURN for modelling the network in proximity to the Peel Hall site is suitable.
iii. The network coverage is suitable and is as per that agreed throughout the process to date.
iv. Time periods used in the SATURN model are as per the VISSIM model.
v. The data has been validated to 2015 and does not need to be updated as we are mid-process and this request would be unreasonable.
vi. It is acknowledged that the existing M62 Junction 9 is congested at peak times and operating over theoretical capacity, but that the impact of the Peel Hall site on Junction 9 of the M62 is not severe or significant. It is not considered that further modelling of this junction is required.
vii. The scenario for opening year and full build out was removed at the request of Highways England at the January 2017 meeting, as it was unrepresentative and therefore irrelevant. This has been replaced by scenarios for a future year of 2025 with half the development built out as agreed with Warrington Borough Council.

Appendix 1

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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)
AM Peak						
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
PM Peak						
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 al 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

Appendix 2

Warrington Borough Council Meeting Note (22/03/17)

NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 22nd 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

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1. HTp asked if WBC would audit the VISSIM information submitted on 6th 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. OPENSPACE: 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

Appendix 3

Highways England Meeting Note (23/01/17)

NOTE OF MEETING

PROJECT: Peel Hall, Warrington

DATE: 23rd January 2017

HELD: Highways England, Piccadilly Gate, Manchester @ 14:00.

PRESENT:	Shaun Reynolds	Highways England
	Alistair Johnson	AECOM
	Catherine Zoeftig	AECOM
	Gavin Coupe	Atkins
	Dave Tighe	Highgate Transportation
	Fiona Bennett	Highgate Transportation

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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.