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Date	4 th June 2020	Email	nick.gammer@hants.gov.uk

For the Attention of Richard Wright

Dear Richard

Land at Newgate Lane (North), Fareham, P/18/1118/OA – Outline planning permission for the demolition of existing buildings and development of up to 75 dwellings, open space, vehicular access point from Newgate Lane and associated and ancillary infrastructure, with all matters except access to be reserved.

Thank you for consultation on the above planning application. Highway related information submitted under this planning application has been previously reviewed by the highway authority and responses dated 6th November 2018, 11th April 2019 and 31st July 2019 have been provided, all requesting further information.

The latest submission consists of the following information and aims to address the outstanding concerns raised by the highway authority.

- Signalisation Technical Note – A review of signalisation options at old Newgate Lane/ Newgate Lane East junction.
- Transport Technical Note, Modelling – An assessment of the traffic impact on the wider highway network (excluding old Newgate Lane/ Newgate Lane East junction).
- BRS4989 FIGURE 16 Rev A –Plan showing proposed signalisation of old Newgate Lane/ Newgate Lane East.
- BRS4989 OPTION 2 – Plan showing proposed unsignalised junction amendments at old Newgate Lane/ Newgate Lane East junction.
- VISSIM Technical Note – Modelling of the existing junction layout and proposed unsignalised (OPTION 2) arrangement.
- Explanatory email dated 6th February 2020.
- Forward Visibility Splays for Northern Access - BRS.4989_SK01 Rev A
- Swept Path Analysis for Northern Access - BRS.4989_SP01 Rev A
- BRS.4989_FIGURE 8 Rev C Proposed T junction northern site access

- Road Safety Audit Stage 1 (unsignalised proposals) – Safety Audit of proposals shown on drawing BRS4989 OPTION 2.
- Road Safety Audit Stage 1 (unsignalised proposals) – Designers Response
- Road Safety Audit Stage 1 (signalisation proposals) – Safety audit of proposals shown on drawing BRS4989 FIGURE 16 Rev A.
- Road Safety Audit Stage 1 (signalisation proposals) – Designers Response

The comments below relate solely to the above information, submitted to and accepted by the LPA.

It is worth noting that throughout the application process only cumulative highway information regarding the impact on the operation of the highway network has been submitted, relating to both applications P/18/1118/OA and P/19/0460/OA.

Information regarding the impact of this site in isolation on the surrounding highway network has not been submitted and therefore no assessment of this scenario can be carried out. The highway authority is only able to comment on the submitted information.

Matters of Agreement

The explanatory email seeks to confirm three 'matters of agreement'. These are commented on below:

1. The principle of access to the site from Newgate Lane is not yet agreed, see Site Access comments below. It is correct that the Highway Authority has a preference for a single point of access onto Newgate and has previously requested that one of the accesses onto Newgate Lane should be closed to vehicular access and restricted to pedestrian, cycle and emergency access only, should both applications be permitted. However, the principle of two vehicular accesses (one for each application) is not considered to represent a severe impact on the highway network. As such, should the above single access scenario not be secured, the Highway Authority would not raise this point as a reason for refusal.
2. The junction modelling scenarios, committed development, traffic growth rates, trip distribution and associated traffic flows are agreed. Regarding trip generation rates, please note that those originally submitted are agreed. As set out in the Highway Authority response dated 31st July 2019, the amended trip rates put forward in the subsequent technical note are not accepted. It is noted that no discounts to trip rates have been applied in the latest assessment (that is, the original trip rates have been used), which is acceptable.
3. The scheme is considered to have suitable sustainable modes access subject to the provision of acceptable S106 contributions and a north – south pedestrian and cycle link through the sites linking to Woodcote Lane. Contributions have yet to be fully agreed as set out in the Outstanding Highways Matters section below.

Site Accesses

1. No scale has been included on drawing BRS.4989_SK01. As a result, comments cannot be provided. A scale on this drawing should be provided to enable review.
2. Drawing BRS.4989_SP01 Rev A (swept path analysis)
 - a) An articulated vehicle can use the access during construction; however, the footway will be overrun. This may be resolved through geometric amendments required to address point b) below. If not, confirmation should be provided regarding construction timing of the footway during site build out. Pedestrian access to and from the site for early residents, should occupations occur prior to footway construction, will also require consideration.
 - b) A refuse vehicle (weekly movement) will overrun the centre line of both old Newgate Lane and the proposed development access. Review of both the access radii and the width of the access for the first 20m to avoid this conflict is required.

Old Newgate Lane/ Newgate Lane East Proposed Improvements

All assessments of this junction have been submitted in conjunction with the adjoining plot of land to the south, currently subject to a live application for 115 dwellings (planning ref P/19/0460/OA). The Technical Notes consider the cumulative transport impact of both sites coming forward on the junction of old Newgate Lane and Newgate Lane East. Information regarding the impact of this site in isolation on the junction of Old Newgate Lane/ Newgate Lane East has not been submitted and therefore no assessment of this scenario can be carried out. The highway authority is only able to comment on the submitted information.

The recent realignment and upgrade of Newgate Lane makes up part of the 'Improving Access to Fareham and Gosport' strategy. The primary aim of the strategy is to stimulate the provision of employment and investment in employment opportunities within Gosport. Proposals that are detrimental to this strategy are not supported by the Highway Authority.

Existing junction layout

While the VISSIM modelling requires amendments as set out below, these are unlikely to improve the forecast junction performance. The existing layout is forecast to be substantially over capacity and is not able to accommodate the increase in traffic associated with the proposed developments.

Proposed priority junction amendments (Option 2)

Amendments are proposed to the existing priority junction to provide a right turn pocket when egressing old Newgate Lane. The proposal is set out in the following submission material: BRS4989 OPTION 2, Road Safety Audit (RSA) Stage 1

(unsignalised proposals) and the designer's response to the RSA. The following comments relate to this proposal.

1. Drawing BRS.4989 OPTION 2 does not have dimensions or radii shown. Dimensions and radii should be shown to enable a full review.
2. There is a lack of swept path analysis, with only limited movements and vehicle types assessed. Swept path analysis of all moves, with all vehicles that will use this junction, is required to enable a full review.
3. Confirmation should be provided regarding whether the junction has been designed in accordance with DMRB CD 123 (Geometric Design of At-Grade Priority and Signal-Controlled Junctions).
4. Confirmation should be provided regarding whether the appropriate type of junction based on traffic flows has been assessed against figure 2.3.1 of CD 123.
5. Whilst not raised in the independent RSA, there is concern that a vehicle waiting in the southbound pocket (after exiting old Newgate Lane) will not have adequate visibility of southbound traffic on Newgate Lane East.
6. The Highway Authority do not agree that the designer's response to RSA problem 2.1 is acceptable. A number of commercial enterprises are served via old Newgate Lane, including a car showroom, nursing home and water treatment works. All of these have the potential to regularly generate vehicles larger than an 11.4m refuse vehicle. The depth of the central right-turn dwelling area should be sufficiently wide to ensure it can accommodate HGV traffic.
7. The addition of marked left and right turn lanes on egress from old Newgate Lane are not acceptable on safety grounds as visibility to approaching vehicles on Newgate Lane East can be blocked by vehicles in the second lane waiting to exit.

The comments above are likely to result in geometric changes to the proposed junction arrangement. However, a review of the VISSIM modelling, assessing the capacity performance of the existing layout and the proposed priority junction arrangements, has been carried out and the following comments can be made. The below relate to all modelling scenarios unless otherwise stated.

- The VISSIM scenario management feature could have been used to avoid the need for separate model files for each scenario.
- Regarding the existing layout, a short lane of approximately 4-5 Passenger Car Units (PCUs) is coded at the old Newgate Lane egress for left turning vehicles at the junction give way line. There are no lane markings on the road surface that segregate left and right turn lanes. Evidence should be provided regarding this assumption as this may overestimate link capacity.
- The existing layout models right turning vehicles from old Newgate Lane making the manoeuvre in two stages. Evidence should be provided supporting this as the current operation of the junction.
- No vehicle input is defined for the cool down period. The volume in cool down period needs to be defined to understand residual queues at the end of the simulation time period.
- The routing decision proportion of vehicles in each 15-minute period is a fixed value across the entire simulated time period. Routing decisions should be updated with the actual turning proportions, varying every 15 minutes.

- Journey time (JT) validation criteria is +/- 15% or 60-seconds variation between observed and modelled journey times for 85% of the routes (TAG Unit M3.1 Section 3.3.15) and the length of the JT sections should not be less than 3km (TAG Unit M3.1 Section 4.3.3). The longest JT section is only 194 seconds and 1.5 km in length, therefore the 60-seconds variation rule cannot be used and the +/- 15% rule only should be applied.
- 85% of the routes should fall within the acceptable variation range of +/- 15% error. As the model is validated only for Journey times, validation should be revisited to consider the above points.

Comments below relate specifically to modelling of the proposed unsignalised junction amendments:

- The background CAD image used for the model build shown in the report (Figures 8.1 and 8.2) does not geometrically match the submitted design shown in drawing BRS4989 OPTION 2 and should be updated accordingly.
- The right turn egress from old Newgate Lane is set up in such a way that the right turn manoeuvre is completed in two stages. In first stage, vehicle drivers look for gaps in northbound traffic on Newgate Lane East and cross the northbound mainline traffic to access space in the median area between northbound and southbound traffic. Drivers again wait for gaps in southbound traffic on Newgate Lane East to complete the right turn manoeuvre to travel south. Traffic from the north turning right into old Newgate Lane is modelled in such a way that the right turn manoeuvre is completed in two stages. In the first stage, vehicles check for any existing vehicle waiting to turn right (southbound) on the small space in median. Then in stage two the vehicle waits for a gap in the northbound Newgate Lane East traffic and moves across to old Newgate lane when a gap is available. This priority rule set up in the model is unusual and is different from that shown in drawing BRS4989 OPTION 2, in which the right turners from Newgate Lane East do not appear to give way to right turners from old Newgate Lane, as only one vehicle will enter the space between the median. Also, as shown in drawing BRS4989 OPTION 2, right turners from old Newgate Lane should give way to vehicles turning right from Newgate Lane East. Modelling should be updated to so the right turn from Newgate Lane East has priority over the right turn from old Newgate Lane. The right turners from old Newgate Lane should complete the right turn in two stages; in the first stage giving way to northbound traffic and to the right turners from Newgate Lane East and in the second stage, the right turners from old Newgate Lane give way to southbound through traffic on Newgate Lane East, whilst waiting at the gap in median. One vehicle at a time turning right when egressing old Newgate Lane can wait at the gap in the median to complete this right turn maneuverer. The right turners from Newgate Lane East into old Newgate Lane give way only to northbound traffic on Newgate Lane East.
- As set out in the engineering comments above, the addition of marked left and right turn lanes on egress from old Newgate Lane are not acceptable. The modelling should be updated accordingly.
- It should be noted that changes to the base model should also be carried through to the updated Option 2 modelling where applicable.

Proposed signalisation of the junction

Signalisation proposals were previously reviewed and a number of comments relating to the modelling and engineering aspects were made in the Highway Authority response dated 31st July 2019. A subsequent Signalisation Technical Note prepared by Red Wilson Associates has been submitted, presenting three signalisation options; these options have been reviewed and comments are given below.

- Option 1 - Two lanes northbound with downstream merge. Newgate Lane East right turn into old Newgate Lane has Right Turn Indicative Arrow phase.

For the reasons set out in the highway Authority's response dated 31st July 2019 the inclusion of a Right Turn Indicative Arrow across two lanes of opposing traffic is not considered acceptable. The issue of this right turn movement was identified independently by the Road Safety Audit (RSA1) of the signalisation proposals, raising concerns of potential collisions between northbound vehicles and vehicles turning right into old Newgate Lane. The recommendation of the RSA1 is that '*signal staging / phasing should incorporate a separately signalled right-turn into Newgate Lane.*'

The Signalisation Technical Note suggests a possible reduction in speed limit to 30mph and/or rumble strips on the approach to the junction. A speed limit reduction or traffic calming is not considered acceptable on this heavily trafficked link. Newgate Lane East was designed and funded on the basis of being a strategic access route, improving access to the Gosport Peninsula and associated regeneration/ employment sites. Additional delay will detract from the benefits brought about by construction of this new link and therefore runs contrary to both the basis on which funding for the scheme was awarded and the purpose of this link, which is primarily the movement of more strategic (or longer distance) traffic.

Irrespective of northbound vehicle speeds, allowing drivers to gap seek across two lanes of on-coming traffic is not acceptable in safety terms. This method of control is not acceptable, and this option should not be considered further.

- Option 2- Two lanes northbound with downstream merge. Newgate Lane East right turn into old Newgate Lane is fully signalled.

This option provides the only safe method of signal operation that would be accepted at the junction based on the proposed layout. Irrespective of the volume of right turning vehicles from Newgate Lane East, the full signalisation of this movement is the only acceptable way to safely accommodate this movement across two lanes of on-coming traffic.

With 42 PCU movements turning right in the AM peak hour (DS2 scenario), on the assumption of a 120 second cycle time there would be 30 cycles per hour. On that basis the right turn stage would appear most cycles and for modelling purposes its inclusion every cycle is appropriate for a robust

assessment.

With this option, the issue centres around the usage of the northbound offside flared lane. This lane has been provided to increase capacity of the proposed signalisation of the junction. Various traffic distribution percentages have been tested from 50%/50% up to 90%/10% between the nearside and offside lanes respectively. In the 2024 AM peak in both DS1 (without Stubbington bypass) and DS2 (with Stubbington bypass) scenarios, it is only the 50%/50% traffic flow split that provides a positive practical reserve capacity. Any other imbalance in traffic distribution across these lanes results in the junction operating over capacity.

As stated in the Highway Authority's response dated 31st July 2019, where flares and merges occur through signal junctions many drivers have a reluctance to use the offside lane. This would result in an imbalance between the usage of the lanes. While reference is made to a technical paper on modelling merges from signal junctions, local evidence from sites where driver behaviour could be reasonably expected to replicate that at the old Newgate Lane/ Newgate Lane East junction should be provided to justify lane usage. Due to current conditions relating to COVID-19, any data collected at this time would not be considered reliable.

- Option 3 - Northbound single lane without a flare or merge.

It is unknown how the right turn movement is controlled in this option. However, the results show that the junction would operate over capacity in the 2024 AM peaks under the DS1 and DS2 scenarios in the future year. In capacity terms this demonstrates that a two-lane northbound approach is required to provide adequate capacity.

The report by Red Wilson Associates demonstrates that only Option 1 results in acceptable operation of the junction, unless a 50%/50% lane usage split can be justified. However, Option 1, with an indicative arrow stage for right turners into old Newgate Lane, is not considered acceptable on safety grounds as set out above.

The following comments were previously made in relation to the engineering aspects of the signal design.

1. *Provision for pedestrians and cyclists should be considered.*
2. *There is concern regarding the two accesses to the south of the junction causing late braking when travelling southbound on a green wave.*
3. *This option impacts on highway ditches (OWC) and street lighting.*
4. *There will be a negative impact on the free flow of traffic, contrary to the design objectives of Newgate Lane realignment.*

Regarding point 1, there are no existing or proposed pedestrian or cycle provision connections to this junction, however, there appears to be sufficient land available for pedestrian and cycle facilities should these require consideration in the future. Regarding point 2, this was not raised as a problem in the independent Road Safety Audit Stage 1 (signalisation proposals). Points 3 and 4 are observations and do not require further information.

In addition to the above, confirmation regarding whether the junction has been designed in accordance with CD 123 Geometric Design of At-Grade Priority and Signal-Controlled Junctions should be provided.

Prevent Right Turn Manoeuvres from Newgate Lane Bypass to the Newgate Lane Minor Arm

Banning right turn movements into old Newgate Lane will result in all traffic (current and future) wishing to access old Newgate Lane from the north having to travel an additional 900m to the south and U-turn at Peel Common roundabout. This would have an impact on the junction performance of Peel Common roundabout, which has not been assessed.

The physical measures required to prevent right turn movements have not been presented and are thought to be difficult to achieve and enforce. Restriction of this movement will require a TRO, which is unlikely to be supported by the police, unless significant measures were taken to physically prevent right turns, as this is likely to create an ongoing enforcement issue.

Furthermore, there are safety concerns regarding inappropriate manoeuvres; that is, drivers making inappropriate and potentially unsafe U-turn movements at unsuitable locations, for example farm accesses or the carriageway itself, to avoid travelling the additional distance of over a mile in total to U-turn at Peel Common roundabout. This is not a proposal the Highway Authority would be willing to accept.

Outstanding Highway Matters

Wider Highway Network Impacts

A Transport Technical Note, Modelling (February 2020) has been provided, giving an assessment of the traffic impact on the wider highway network. The Junctions assessed within this note are as follows:

- Newgate Lane/ Site Access priority T junction;
- Speedfields Park roundabout and HMS Collingwood signal junction;
- Peel Common signalised roundabout;
- Newgate Lane East/ Longfield Avenue/ Davis Way roundabout.

The review below has been undertaken based on the scenarios where the agreed trip rates have been used, forecasting the trip generation for 100% privately owned dwellings, with no discount for affordable dwellings or travel plan measures.

Modelling of the old Newgate Lane/ Site Access priority junction is not accurate given the required geometric amendments set out in the Site Access comments above. However, given the required geometric amendments are likely to be relatively minor in terms of the effect on junction performance and there is a high level of spare capacity forecast by the submitted modelling, the Highway Authority are comfortable the amended access will operated acceptably in capacity terms and no further modelling is required.

The modelling of Speedfields Park roundabout and HMS Collingwood signal junction is technically correct. Regarding the impact at this location, in both the DS1 and DS2 scenarios, all arms would continue to operate within capacity and queues would be at acceptable levels. As such, the forecast impact of development traffic on this junction is considered acceptable.

The modelling results of Peel Common signalised roundabout, for both the existing and full signalisation layouts and in both the DS1 and DS2 scenarios, show excessive levels of queuing on the circulatory of the roundabout in many areas. The modelling would provide a more accurate forecast if all internal circulatory lanes had queues been limited to two thirds of the available storage capacity. However, the Highway Authority has reviewed modelling carried out prior to the recent improvement scheme at this location, which was based on a later future year, using generally higher forecast traffic flows than the with development scenarios presented as part of this application. The junction was forecast to operate satisfactorily under these circumstances and therefore the additional development traffic at this location is considered acceptable.

Regarding Newgate Lane East/ Longfield Avenue/ Davis Way roundabout, the geometric measurements and modelling parameters for the junction are acceptable. Likewise, the demand flow entries have been entered correctly in line with the agreed flows. The model is acceptable in terms of modelling parameters, flow entries and results reported.

The roundabout model forecasts the junction to operate within practical capacity across all approaches in all scenarios modelled except for Newgate Lane North approach, which operates slightly above the practical capacity RFC of 0.85, but comfortably within theoretical capacity, in 2024 Base DS1 and 2024 Base + Development DS1 scenarios in the PM peak. The addition of development traffic at this junction is not considered to have a severe impact.

All assessments of the above junctions have been submitted in conjunction with the adjoining plot of land to the south, currently subject to a live application for 115 dwellings (planning ref P/19/0460/OA). The Technical Notes consider the cumulative transport impact of both sites coming forward. However, given no further information is requested and no objections are raised in relation to the cumulative impact on the above junctions, it is reasonable to assume neither application site in isolation will have a severe impact on the modelled network.

Highway Contributions

- A contribution of £241,920 to support bus services and associated infrastructure in the vicinity of the site (to be split proportionally between the two developments).
- A contribution of £150,000 towards Newgate Lane crossing improvements at Woodcote Lane/ Brook Lane (to be split proportionally between the two developments).

The above contributions were discussed at a meeting on 4th September 2019. The Highway Authority believe these contributions, included values, were agreed and a follow up email on 4th September 2019 was sent confirming this. No response was received to this email.

- A contribution of £173,731 has been requested towards improvements to routes to school.

The contribution value requested was provided by email on 4th September 2019. As above, no response was received to this email. Agreement of contribution values is required to adequately mitigate the proposed development.

Furthermore, the following comment was made in the Highway Authority's response dated 11th April 2019. This has not been addressed.

It is noted that a contribution to provide footway connections from the site access to the Old Newgate Lane/Newgate Lane junction has been proposed in order to provide connections to the HA2 site access should this site come forward. It is considered beneficial to secure this to ensure suitable links can be provided should HA2 come forward. The applicant should provide a design and cost estimate of these works for review.

Travel Plan

Comments raise in the Highway Authority's response dated 11th April 2019 in relation to the Framework Travel Plan have not been addressed. An updated Travel Plan should be submitted for review.

Recommendation

The additional information submitted does not overcome the concerns previously raised by the Highway Authority. As set out in this response, there remain a number of outstanding comments that need to be addressed. It is understood this application will be taken to planning committee shortly. As such, the following reasons for refusal are recommended.

- Unacceptable site access design.
In the opinion of the Planning Authority the proposal involves development that cannot be reconciled with the National Planning Policy Framework (NPPF) in that the proposed access is inadequate to accommodate the development safely. This would result in an unacceptable impact on the safety of users of the development and adjoining highway contrary to the NPPF and Fareham Borough Local Plan Policy CS5.
- Unacceptable impact on the junction of old Newgate Lane/ Newgate Lane East.
In the opinion of the Planning Authority the proposal involves development that cannot be reconciled with the National Planning Policy Framework (NPPF) in that the significant movements generated could not be

accommodated adequately on the transport network. This would result in a severe impact on the road safety and operation of the local transport network contrary to NPPF and Fareham Borough Local Plan Policy CS5.

- Lack of an acceptable Travel Plan and no agreement of sustainable transport contributions.

In the opinion of the Planning Authority the proposal involves development that cannot be reconciled with the National Planning Policy Framework (NPPF) in that there is insufficient support for sustainable transport options. Appropriate opportunities to promote sustainable transport modes have not been taken up, contrary to NPPF and Fareham Borough Local Plan Policy CS5.

I trust the above is clear, but please do not hesitate Nick Gammer on the above number should you wish to discuss anything further.

Yours Sincerely,

Ben Clifton
Transport Team Leader – Highways Development Planning