

FROM: Ian Gledhill **TO:** Arun District Council
FAO: David Innes

SUBJECT: P/6/17/OUT - Outline application with some matters reserved for construction of up to 300No. new homes, Care home of up to 80No. beds, D1uses of up to 4000sqm including a 2 form entry Primary School, formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure. This application is a Departure from the development plan.

Land North of, Hook Lane, Pagham, West Sussex

DATE OF SITE VISIT: 10th February 2017

RECOMMENDATION:

Advice	☐	Modification	☐	More Information	☒
Objection	☐	No Objection	☐	Refusal	☐

1. The application is supported by way of a Transport Assessment (TA), Stage One Road Safety Audit (RSA), and Framework Travel Plan (FTP).
2. The scope of the TA has been discussed with West Sussex County Council in its role as Local Highway Authority (LHA).
3. Although the application refers to 300 dwellings, a school, and a number of other uses, the TA is quite clear that 300 units would only be provided if the school site is not delivered. If the school is included, the overall number of units would reduce to 216. For the purposes of the TA, 230 units are tested alongside the school. The application description is therefore a bit misleading as 300 units would not be provided in association with the school. Two capacity modelling scenarios are included covering the with or without school option.
4. No specific consideration is given within the TA to the applications for 300 dwellings at Sefter Road (P/134/16) and Summer Lane (P1/40/16), although reference is made in the TA to a supplementary TA covering these matters. The National Planning Practice Guidance recognises the importance of assessing the combined impact of developments. It goes on to state that, 'it is important to give appropriate consideration to the cumulative impacts arising from other committed development (i.e. development that is consented or allocated where there is a reasonable degree of certainty this will proceed within the next 3 years)'. However neither the development at Sefter Road or on land south of Summer Lane, or the current application site are allocated in any planning policy or benefit from planning permission. There is consequently no strict planning requirement for the current application to assess the impact of other unpermitted/unallocated developments.
5. To address the potential cumulative impact, an assessment should be prepared between the various applicants for the three developments presently under consideration. Given that all the developments will effectively have impacts at the

same junctions, there is logic to considering mitigation for all the developments collectively rather than on a piecemeal basis. Comments will be made separately when the cumulative assessment is available. The comments below relate to the development proposed as part of the current application.

Access

6. The site is to be served by three vehicle accesses; two onto Hook Lane (although this may be reduced to one) and a further access onto Pagham Road. Hook Lane is subject to a 30mph speed limit, whilst Pagham Road in the vicinity of the proposed access is subject to a 60mph limit. Both the accesses onto Hook Lane take the form of simple priority junctions. The Pagham Road access is shown as a priority junction with right turning lane.
7. The TA refers to a single access being provided onto Hook Lane if the school is included. Two accesses onto Hook Lane would be provided if the school is not included. In principle, the LHA question whether two accesses would be needed onto Hook Lane in either scenario given the presence of the Pagham Road access. Alternately, if two Hook Lane accesses are provided, there may be scope to remove the vehicular access directly onto Pagham Road. Overall, it is considered that there is scope to rationalise the vehicle access arrangements. Irrespective of this, as access is the only matter to be approved at this stage, it needs to be confirmed whether one or two accesses are proposed onto Hook Lane as part of the current application.
8. As part of pre application discussions, the applicant was informed that a formal design audit would be required, particularly for the proposed access onto Pagham Road. This should cover in detail what standards and guidance have been applied to the design and how the scheme shown complies. No such audit has been submitted. This would be necessary.
9. Notwithstanding the need for this audit, the following comments would be made regarding the accesses.
10. The design of the accesses and the relevant design guidance would be determined by the posted speed limit or the recorded 85th percentile wet weather vehicle speeds. For Hook Lane, the posted speed limit is 30mph. The starting point for the design of these should be Manual for Streets (MfS and MfS 2). Recorded 85th percentile vehicle speeds are much greater than the posted limit (recorded as 41.4mph northbound and 38.5mph southbound) although it's unclear if a wet weather adjustment has been applied to these speeds. Even so, in light of the local context, the LHA are satisfied that MfS remains the appropriate guidance.
11. In checking the stopping sight distances at the two Hook Lane accesses against the recorded speeds, the sightlines appear to exceed those typically required using MfS SSD parameters. On this basis, the LHA are satisfied that adequate visibility can be achieved onto Hook Lane within land forming part of the adopted highway and/or land under the control of the applicant. The geometry in all other respects appears acceptable and complies with current guidance.
12. As noted above, the access onto Pagham Road takes the form of a priority junction with ghosted right turn lane. Given the recorded speeds (50.5mph northbound and 50mph southbound (again it's unclear if these are wet weather speeds)) and

function of the road, the Design Manual for Roads and Bridges is considered to be the appropriate highway design guidance.

13. Notwithstanding the lack of a design audit, the LHA would have concerns with respects to several elements of the proposal, namely the impact of the proposed bus lay-by on visibility and the general proximity of this to both the Hook Lane and proposed site access junctions, the use of a pedestrian on a road where the speed limit is greater than 40mph, the through lane widths alongside the refuge, as well as the overall length of the right turning lane itself. Given also that DMRB standards are being applied, there would also be a need for the applicant to apply for Departures from Standard for certain parts of the highway design.
14. As a further point, in light of the information included in the completed TA, the LHA question whether a right turning lane is actually needed in this location. The turning count information indicates very few peak hour movements turning right into the development from Pagham Road; the majority are forecast to arrive and depart to the north. The potential for right turning movements into the development to obstruct the through flow of traffic is therefore limited.
15. Although a design audit would still be required and the junction designed using the DMRB, the applicant is requested to investigate a simple priority junction arrangement onto Pagham Road without the inclusion of a right turning lane. Providing this is demonstrated to work within capacity (a PICADY assessment should be undertaken), not give rise to any safety concerns that cannot be mitigated (a further Stage One Road Safety Audit should be provided), and comply with design standards, then the LHA would accept such an arrangement.
16. The highway access details as submitted have been reviewed by way of an independent Stage One Road Safety Audit. Although this raises a number of problems, the majority of these are matters for the detailed design (drainage, signage, lighting, and tactile paving). The Audit raises a further problem in connection with the Pagham Road access and the possibility of vehicles overtaking using the right turning lane. As the LHA have requested that a priority junction without right turning lane is investigated, consideration of this problem would be held in abeyance agreement over the access form.
17. For both Hook Lane and Pagham Road, additional works (raised traffic calming features on Hook Lane and an extension to the 30mph speed limit on Pagham Road) are shown that would require further separate statutory consultation and detailed design beyond that associated with the current planning application. These works therefore cannot be taken into account as part of this planning application as there is no certainty that any future consultation process would be successful nor has any detailed design check been provided to ensure that the works are in principle deliverable.
18. The LHA are satisfied that the development is in no way dependent upon these additional works. Obligations can still be secured as part of the s106 requiring the applicant to use all best endeavours to implement a scheme of traffic management for Hook Lane and to fund the extension of the 30mph speed limit on Pagham Road.
19. Confirmation would be sought from the applicant/Local Planning Authority as to whether the proposed pedestrian access points are also to be approved at this

stage. A number of these accesses, which are presumed also to be provided with dropped crossing points on the opposite side of Hook Lane, have restricted visibility for crossing movements. Some of these also do not have any connecting footway provision on the opposite side of the carriageway. These elements would need to be revised or details secured via planning condition.

20. There are also a number of existing agricultural field accesses to the land. A condition would be required to ensure that these accesses are not used for construction purposes and to ensure that they are not used by residents of the development as those onto Sefter Road and Pagham Road do not connect with any existing footways. If pedestrian access is to be provided (towards bus stops, for example), improvements would be required.

Highway Capacity

21. The TA details the anticipated vehicular trip generation arising from the development and where this will impact upon the local highway network. The planning application description is noted. Based on the details in the TA and Planning Statement, this description is slightly misleading as 300 dwellings and the school site will not be provided together; 300 dwellings would only be delivered if the school site is not provided. A reduced number of dwellings (230) would then be provided should the school site be constructed. The LHA recognise that the decision on the school lies outside the control of the applicant. The TA therefore includes two scenarios, one with and one without the school and with each scenario including the respective number of dwellings.
22. Vehicle trip generation for all uses within the development has been based upon TRICS. TRICS is a large database containing traffic surveys of other completed developments. The database can be refined so as to use only those completed development comparable to that proposed. The use of TRICS is an accepted means of estimating vehicular traffic arising from new developments. TRICS has been used for a number of developments in the local area, including those under consideration at Summer Lane and Sefter Road.
23. For the residential uses, the TRICS assessment assumes a 100% private market all house development. In reality, the development will include an element of affordable dwellings and apartments. It is recognised that private market units generate more movements than affordable or flatted units. It is considered that trip generation used within the assessment is robust.
24. For the D1 uses (detailed as possibly being a nursery and or GP surgery) and the primary school, the LHA consider that these would generate relatively few new trips. These uses will simply provide a new destination and attract trips that would already be taking place but towards other locations; trips to these would in essence be diverted or transferred to this site instead of heading elsewhere. This would give rise to an increase in trips through junctions in the immediate vicinity of the site, but no increase would result on the wider network. The school would also meet the primary education demands arising from the development itself with the expectation that these internal trips would be made on foot. A discount (of 33%) has been applied to the trip rate to account for this. For the D1 uses, all associated trips are anticipated to already be on the network. No specific trip rate has been proposed for these.

25. Based on the anticipated trip generation for the two development scenarios, scenario 2 (with the school) is forecast to generate more trips during the network peak hours than scenario 1 (without school). For the purposes of the TA and the remainder of this response, the worst case (scenario 2) is considered. The following trips have been used in the assessment,

	AM Peak			PM Peak		
	Arrivals	Departures	2 way	Arrivals	Departures	2 way
230 units	33	83	116	69	41	110
80 bed care home	6	4	10	6	9	15
Primary School	75	55	129	20	21	41
Total	114	142	256	95	71	166

26. The capacity assessments have been undertaken in various scenarios to determine conditions in a base year (2017) and to determine conditions in a future year (2022) without and with development. The future years assessments include consented developments (namely 90 dwellings at land north of Summer Lane (P/58/15) and 40 dwellings at 241 Pagham Road (P/125/14)) that have not yet commenced.

27. An appropriate traffic growth rate has also been applied to the base year surveys using TEMPRO, which uses data from the National Trip End Model, to determine future traffic growth. It's unclear if this future year traffic takes account of the growth proposed within the draft Arun District Council Local Plan. This should be clarified as it may influence the growth rate applied. For those junctions within Chichester District a different growth rate may be appropriate.

28. The forecast vehicle movements have been distributed onto the local highway network using a variety of means. The methods applied are acceptable (using Census Location of Place of Work data for existing residents or estimates based upon the location of existing housing). This indicates that the majority of trips are routed to and from the north or east towards Bognor Regis.

29. The internal layout at this stage is taken as indicative with the development framework plan included in the TA shows a spine road running through the site. The internal layout and proposed access arrangements have the potential to affect route choice. For example, it is considered unlikely for residents in the northern part of the development who want to travel northwards to first travel south and exit onto Pagham Road; it is more likely that residents would exit onto Hook Lane before turning onto Sefton Road and then onto Pagham Road. How trips are distributed will then influence the overall capacity modelling. For some of the junctions in the immediate vicinity of the development it would be appropriate to apply a sensitivity test and route additional development trips through these junctions. This is especially so for those junctions which are forecast to operate close to or over theoretical capacity.

30. From the capacity modelling outputs it is apparent that even with the development, the significant majority of junctions on the local highway network would continue to operate well within theoretical capacity. Three junctions are forecast to operate close to or over capacity with the proposed development.

These junctions are forecast to be close or over capacity without the inclusion of the development traffic. The additional impact of the development should be viewed against the base/without development scenario.

31. The priority junction of Pagham Road/Sefter Road is indicated to be operating over theoretical capacity in the future year without the inclusion of the proposed development. Whilst queues and delays will increase with the development, these increases are not considered to be severe. As referred to above, it is recommended that a sensitivity test be undertaken for this junction given route availability for traffic exiting or entering the development.
32. Certain arms of the signalised junction of Grosvenor Gardens/Gossamer Lane/Nyetimber Lane again are indicated to operate over capacity without the inclusion of the development traffic. Again, the increased queues (of 1 vehicle on Grosvenor Gardens, 8 vehicles on Gossamer Lane, 7 vehicles on Nyetimber Lane) are not considered to be severe taking account of the base situation. A scheme of mitigation for this junction is included. This involves upgrading the signals to include MOVA. MOVA would automatically adjust the signal timings and thus would give greater green time to those arms where queues are greater. An upgrade of this nature is agreeable to the LHA.
33. The priority junction of Pagham Road/Lower Bognor Road is also indicated to be operating over capacity in the future year assessment without the proposed development. Prior to the LHA commenting on the modelling conclusions, the applicant should provide details of the measurements used for this junction; as an observation the visibility distances used for the minor road arm seem excessive compared to what can be achieved. A flare has also been applied, whereas no flare exists on the Lower Bognor Road arm; the actual layout appears as a wide priority junction. It's therefore questioned whether correct measurements/geometry have been used.
34. The applicant is also requested to provide copies of the modelling output appendices directly to the LHA. The black and white versions on the Arun DC website are in places very difficult to read.

Accessibility by Sustainable Modes

35. The TA includes an assessment of services and facilities within walking and cycling distances. This assessment applies maximum walking and cycling distances (of 2km and 5km) as set out within current national guidance. Using these, it's apparent that there are a number of services within reasonable distance of the site. Due consideration should also be given to the uses proposed within the development that again will assist in meeting the needs of future residents.
36. Limited consideration is given to the nature of existing routes for walking and in particular cycling trips. For walking at least, the site lies adjacent to an existing residential area that includes a continuous series of footways that are lit.
37. For cycling, there are no specific dedicated facilities available. Even so for trips to the east (towards Bognor Regis), cyclists would use existing 30mph, lit, predominantly residential carriageways that have very little change in gradients. For northbound journeys towards Chichester route choice is limited with only the B2166 Lagness Road as an option. Again no dedicated facilities are provided for cyclists although part of this route is signed as the South Coast Cycle Route.

Traffic flows and speed limits are though high, which may act as a barrier to some user groups.

38. There is a WSCC aspiration to create an off-road cycle route between Pagham and South Mundham. This would make use of public rights of way upgraded to an appropriate standard to accommodate all year round cycling, or use existing lightly trafficked roads. Such a route could potentially make use of public rights of way no.100 and 106 located a short distance south of the site and accessed via Summer Lane. Although land involved would lie outside the ownership of the applicants of the current planning application, there is still a demand that would be generated by future residents of this development. It is therefore considered appropriate for the development to contribute towards an overall improvement scheme.
39. In summary, whilst gradients are flat, traffic conditions may not be such to encourage cycle based trips amongst certain groups especially towards Chichester. Distance may also be a restricting factor with there being few services within 5km. Based upon distance and traffic conditions, the LHA consider that cycling would be a realistic option for trips towards Bognor Regis. The provision of an off-road route would further increase the potential for trips towards Chichester.
40. The site lies adjacent to the no.600 bus route. This provides a 20 minute Monday to Saturday day time frequency towards either Chichester or Bognor Regis. Services continue into the evening and on Sundays but at hourly intervals. The frequency and journey duration is such that the bus could realistically replace the use of the car for some trips to Chichester or Bognor Regis.
41. Given the nature of the bus service, the applicant should consider what infrastructure improvements could be delivered to further encourage the use of the bus. This could include real time information or improved passenger waiting facilities. The applicant should note that the LHA do not adopt bus shelters; any agreement on the provision and future maintenance of these should be made with the District or Parish Council.
42. Reference is made only to improvements to the existing bus stops at southern end of the development; no reference appears to be made to the possibility of pedestrians using those stops nearer to the Pagham Road/Sefton Road junction. These stops are closer to the development proposed in the northern part of the site.
43. A framework travel plan is provided within the TA. Changes would be required to the draft targets section; the draft WSCC Travel Plan policy would require the development to seek a reduction of 15% to the 12 hour vehicular trip rate. The effectiveness of the travel plan should also be monitored by way of TRICS Standard Assessment Methodology. Monitoring should be undertaken for a period of 5 years from final occupation with surveys in the first, third, and fifth year. It is recommended that the travel plan is secured as a condition.
44. Paragraph 29 of the National Planning Policy Framework states that the transport system needs to be balanced in favour of sustainable transport modes giving people a real choice about how they travel. Paragraph 35 goes on to advise that developments should be located and designed where practical to give priority to pedestrian and cycle movements, and have access to high quality public transport

facilities. In principle, the LHA are satisfied that the location of the development would give future residents a realistic choice about how they choose to travel without there being a reliance upon the use of the private car.

Layout

45.Details of the internal layout are taken as indicative at this stage. Given the lack of detail included as part of the current application, no further comments are offered at this stage. Such matters will form part of reserved matters approvals.

46.As a further point, although the majority of demands will arise from the development proposed at Sefter Road, there is merit to the master planning of access for non-motorised road users from this development through the Hook Lane site. This is particularly relevant for connections towards passenger transport facilities on Pagham Road and existing services within Pagham. It's suggested that linkages between the two sites is more a matter for consideration as part of any reserved matters application.

Conclusion

47.There are a number of additional matters that require further information. In summary these are,

- Investigate the form of vehicular access onto Pagham Road, and determine if a priority junction could be implemented. This should be supported with a PICADY assessment and Stage One RSA.
- Undertake a design audit for the Pagham Road junction, and identify and apply for Departures from Standard.
- Confirm the number of vehicular accesses proposed onto Hook Lane.
- Revise the location of pedestrian access points onto Hook Lane, if these are to be approved as part of the current outline permission.
- Investigate the future year growth rate to ensure that this accounts of traffic growth as part of the adopted Chichester Local Plan and that proposed as part of the draft Arun DC Local Plan.
- Undertake sensitivity tests upon local junctions given the possible traffic routing resulting from the provision of a through road within the site.
- Provide details of the geometry used for the modelling of the Pagham Road/Lower Bognor Road junction, and revise the modelling accordingly if the geometry is incorrect.
- Provide copies of the modelling outputs directly to the LHA.

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