

A27 Arundel Bypass – Consultation Responses by Walberton Parish Council

	Issue	Comment
1. Air Quality		
1.1	Quality of data	<p>Paragraph 5.3.1 of the PEIR states that the ES will be based on “<i>detailed traffic modelling data which is currently being prepared</i>”. Paragraph 5.3.4 goes on to confirm monitoring data was used from a “<i>Scheme-specific study in 2015</i>”.</p> <p>Therefore, the current data used for the PEIR may differ from the ES and the former may be inaccurate, in particular given its age, and the fact that the 2015 scheme was different from the scheme now proposed. This is not helpful for local stakeholders in trying to understand potential significant effects.</p>
1.2	Inclusion of Fontwell	<p>According to consultation documents, adverse impacts are not expected at Fontwell despite acknowledged future rat-running, additional traffic moving northwest and increased HGV movements. Fontwell should be included in air quality modelling as it is clearly foreseeable that there may be changes to existing background levels of NO_x, PM₁₀ and PM_{2.5} due to this additional traffic.</p>
1.3	Study area	<p>It is alarming to WPC that NH have yet to even finalise its study area for Air Quality assessment. This is confirmed in paragraph 5.3.5, where it states that “<i>there remains a risk that areas not considered within this PEI Report may be subject to changes in air quality when the assessment of road traffic impacts is updated for the ES Chapter</i>”.</p> <p>This lack of detail means that the PEIR fails to meet the legal requirement under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 for it to provide information that “<i>is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development</i>”. The Planning Inspectorate’s Advice Note 7, Section 8, elaborates a little on this and stating: “<i>A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely environmental effects of the Proposed Development and helps to inform their consultation responses to the Proposed Development during the pre-application stage.</i>”¹</p>
1.4	Inclusion of The Street in assessment	<p>WPC question why The Street was not included in the locations listed in paragraph 5.8.20 of the PEIR, and also whether The Street meets the criteria under the Design Manual for Roads and Bridges for assessment of air quality.</p>

¹ [Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements | National Infrastructure Planning \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/advice-note-seven-environmental-impact-assessment-process-preliminary-environmental-information-and-environmental-statements/)

1.5	Sensitive receptors	WPC request that in the environmental impact assessment the sensitive receptors for assessment of air quality should include Walberton & Binsted C of E Primary School. WPC also request an assessment of effects from PM 2.5.
1.6	Significance of air quality changes	<p>WPC note that paragraph 5.8.15 of the PEIR states: "<i>The Storrington area is expected to experience an improvement in air quality as a result of a reduction in traffic on the A283 to the north of the Scheme</i>".</p> <p>However, the Summary of Preliminary Assessment of Potential Likely Significant Environmental Effects (e.g., Consultation Brochure page 42), states that, "<u><i>No potential significant effects are anticipated</i></u>" [emphasis added]</p> <p>WPC notes this apparent contradiction and queries whether Walberton, as a consequence of the change in traffic patterns thanks to the Scheme, will experience a decrease in air quality.</p>
2. Cultural Heritage		
2.1	General	In all there is little of merit with which an informed decision can be made within this PEI on the Heritage and Landscape chapter. It ticks the box as an exercise, however given the significance of the impact of the Scheme and its status as nationally significant and historically important heritage WPC would expect more depth and detail to verify any claims, especially concerning the appropriateness of any mitigation and likeliness and significance of any benefits.
2.2	General	<p>WPC notes that the PEIR has an appearance of bias towards assumed benefits of the Scheme and doubt of any impacts or disbenefits. This is highlighted within the Heritage and Landscape and Visual chapters where statements are consistently made that issues or adverse effects only have "potential" (see paragraphs 6.8.6, 6.8.7 and 6.8.20) and benefits are definite as they "will" occur, even when the statement is not substantiated by how that benefit will occur (see Table 6-2). An example is found at paragraph 6.8.17:</p> <p><i>"Construction and operation of the scheme would result in a number of likely permanent adverse significant effects Conversely the scheme would deliver benefits to the historic environment in Arundel ..."</i> [emphasis added].</p> <p>This statement is misleading as the PEIR clearly states that the setting of several Scheduled Monuments near the Scheme will suffer "<i>permanent adverse effects</i>" (Table 6-2) and any permanent beneficial effects are only associated with the removal of some traffic from the de-trunking of the existing A27. However, traffic will still operate on the existing A27, therefore this benefit will be small in comparison to the adverse impact of the Scheme, in noise, pollution and setting of Scheduled Monuments and listed buildings.</p>

2.3	South Downs National Park impacts	<p>NH's justification for choosing the grey route was it not being within the SDNP. This was set out in its "Preferred route announcement"² document dated October 2020, which specified the reason for choosing this route, stating that the route "<i>is outside the South Downs National Park</i>", and that "<i>Although the A27 at Arundel will no longer encroach on the National Park...</i>".</p> <p>The PEIR, however, goes back on this, and states at 7.5.3. in relation to the infrastructure of the Scheme that "<i>...some elements would be located within very small parts of the SDNP, including utilities diversions.</i>". Given that the Scheme is not only close to, but also partially within the SDNP. Such a statement highlights that the setting of the SDNP would also likely be adversely affected.</p>
2.4	Mitigation	<p>The PEIR lacks any detail on mitigation measures to be employed against the likely impacts on heritage assets. Instead NH simply outline at paragraph 6.7.7 that this will involve "<i>standard measures</i>" in an environmental management plan.</p> <p>Paragraph 6.7.7 hints that there will be a chance find protocol "<i>to set out the process required to deal with unexpected archaeological remains uncovered during construction</i>", however, this protocol is not listed so cannot be accessed.</p> <p>Without any information on mitigation, WPC and other consultees are unable to analyse the likely efficacy of such mitigation and provide a view on it.</p>
2.5	Baseline	<p>The level of detail on the current baseline is minimal, and does not include consideration of the heritage asset within its local or national context.</p>
2.6	Damage to cultural associations	<p>'Cultural associations' include heritage assets. In the words of the National Policy Statement for National Networks (NPSNN) at 5.122: "<i>Heritage assets may be buildings, monuments, sites, places, areas or landscapes. Significance derives not only from a heritage asset's physical presence, but also from its setting.</i>"</p> <p>a) Buildings</p> <p>In Walberton Parish there are a total of 39 listed buildings³. Binsted alone contains seven Grade 2 Listed houses - The Glebe House, Marsh Farmhouse, Church Farmhouse, Beam Ends, Morley's Croft, Meadow Lodge and The Thatched Cottage, and one Grade II* listed building (St Mary's Church). The listing of St Mary's Church, Binsted, has recently been raised to Grade II*. Four buildings in Binsted are 'locally listed' as 'buildings or structures of character', the Old Rectory, Grove Lodge, Bramble Barn and the Black Horse Pub. An application for the Grade II listing of the Old Rectory is under way, due to it being designed by architect S.S.Teulon.</p> <p>All seven listed houses, all four 'buildings of character', and St Mary's Church would suffer significantly from proximity to the Scheme. The setting of these buildings, including the quiet rural locale, is very important to their significance. However, there is no specific assessment</p>

² https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/GFD20_0090%20Arundel%20A27%20Bypass%20Consultation_PRA%20October%202020%20PRINT.pdf

³ See Historic England records available online <https://historicengland.org.uk/listing/the-list/advanced-search-results?page=1>

	<p>of the impacts on the settings of any of the seven houses in the PEIR. Paragraph 6.8.16 contains some assessment of effects on St Mary's Church, however, the full assessment is left for the ES, with the statement that "<i>without further design refinement, particularly of the Binsted Rife crossing, there is potential for these effects to be significant</i>". Mitigation is mentioned in Table 6-2, in the EMP, however no detail is offered on what form these measures will take beyond "<i>standard measures</i>" in paragraph 6.7.7.</p> <p>b) Monuments</p> <p>The PEIR contains no assessment, or mention, of the following monuments:</p> <p>i. War Dyke</p> <p>The Iron Age linear bank and ditch (double in places) known as War Dyke⁴ passes through the whole of historic Binsted Parish from north to south. The Scheme would cross, and destroy, the remnants of War Dyke in the field south of St Mary's Church, Binsted. The Scheme would then pass St Mary's Church on a viaduct, at the level of 11.5 metres above ground level and 110 metres from it. This would obscure and likely destroy the large bank directly west of St Mary's Church and churchyard, which may be part of War Dyke, by earth movements during construction to create an embankment in this area.⁵</p> <p>ii. The pottery kilns</p> <p>The whole of Binsted's landscape has more significance than at first appears. In the 13th and 14th centuries an important pottery industry was located in Binsted. The industry was intricately linked to the landscape's characteristics: the presence of clay, large woodlands providing fuel, and the Binsted Rife for transporting the products.⁶ Its ware, known as 'Binsted ware', as well as roof tiles, included pottery such as jugs with faces. The pottery kilns remain in good condition underground. This industrial history would be obscured by the Scheme.</p> <p>iii. The Moot Mound</p> <p>Binsted was the meeting place of the Binsted Hundred (a large unit of countryside administration, stretching from the Downs to the sea) before the Norman Conquest. In 2017 the likely site of the meeting place, or Moot Mound, was identified.⁷ As Historic England states of Alstoe Moot Mound in its scheduling: '<i>All well preserved or historically well documented moot mounds are identified as nationally important</i>'. Routes such as Scotland Lane, an ancient wide track through Binsted Woods, between earth banks, can now be seen as leading to the Moot Mound. The Iron Age earthwork itself (part of the remains of which would be destroyed by the Scheme) may have been used as an</p>
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⁴ The section of War Dyke through Binsted is part of a larger monument, the northern section of which is a Scheduled Monument (List Entry 1002983). The Scheduled Monument is known as War Dyke, but the name War Dyke now refers (as used by archaeologists, e.g. David McOmish of Historic England) to the whole of the earthwork, which is thought to have joined loops of the river Arun and tributaries to defend or define an area. The section through Binsted makes use of the steep Binsted Rife valley as part of the defence. The section through Binsted is demonstrably of equivalent significance to the scheduled part.

⁵ Highways England's archaeological survey work in 2020 revealed a layer of chalk within the bank which may be important in further researching the nature of the bank.

⁶ Mediaeval pottery and tile kiln in the garden of 'Glenthams House', Binsted, SU 97937 06514: excavated in 1967 by Con Ainsworth (K.J.Barton, *Mediaeval Sussex Pottery*, 1979, pp 170-179). Tile kiln site in field opposite Black Horse Pub, Binsted, NGR SU 98037 06611: Test Pits and Surface Collection Survey (1999-2003) and the Tile Kiln excavation (2005). Worthing Archaeological Society Journal, vol. 3 No. 7 (Winter 2006), pp. 8-13, and WAS Journal, vol. 3 No. 5 (Summer 2005). See also *Medieval Archaeology* vol. XI (1967).

⁷ Emma Tristram, 'Identifying the meeting place of Binsted Hundred, near Arundel, West Sussex', *Sussex Archaeological Collections*, 155, 2017.

		approach path. The identification of the Moot Mound means that Binsted is not just a farming landscape, but also a 'landscape of governance'. This significant landscape would be seriously damaged by the Scheme.
2.7	St Mary's Church, Binsted (listed Grade II*)	<p>The Scheme would pass within the setting of the churchyard wall of 12th-century St Mary's, Binsted. The church's setting, function, and significance for both local people and visitors from further afield, would all be affected. The importance should be a key feature of the church's assessment in the ES, and NH should consider the following in detail:</p> <p>i. The church's significance to visitors: the British Pilgrimage Trust</p> <p>The church and its setting are of value not just to the village which it has served for centuries, but to people who visit it for its peace and quiet and the views, or as a sacred place in a more general way. The British Pilgrimage Trust, which has rediscovered the 'Old Way', a pilgrimage route from Southampton to Canterbury, gives a route via Binsted church as part of the route.⁸</p> <p>ii. The church's architectural importance</p> <p>St Mary's, Binsted is listed Grade II*. Its listing was recently raised as the excellent quality of its restoration in 1868 has not been sufficiently recognised. The application was accompanied by an article by historian Martin Jones. His conclusion was:</p> <p><i>'St Mary's is not the very ordinary small rural parish church of West Sussex it may seem. Historically and architecturally, it is an undervalued heritage asset that provides material evidence for significant parts of England's history. In turn, the way these tie this church into the narrative of England's past establishes valuable meaning for the local community. St Mary's Binsted is special.'</i></p> <p>iii. Burials outside church wall</p> <p>WPC have been advised by the Rector of St Mary's Church that the wall around the church was constructed in the 19th century. This opens the possibility of unmarked burials pre dating the construction of the wall being present outside it. WPC note that there has been no investigation of these burials and expects that NH will undertake careful surveys so as to avoid disturbance of unmarked burials.</p>
3. Landscape and Visual		
3.1	Mitigation	There is minimal detail of the mitigation measures proposed for landscape and visual impacts. As stated in relation to Heritage impacts above, this means that these measures cannot be assessed for their appropriateness by stakeholders including WPC.
3.2	NH Guidance	The Scheme is contrary to NH's own guidance in relation to landscape consideration.

⁸ <https://britishpilgrimage.org/portfolio/old-way-to-canterbury/#>

		<p>NH's design statement states: "Good road design fits in context: ...Good road design demonstrates sensitivity to the landscape, heritage and local community, seeking to enhance the place while being true to structural necessities."⁹</p> <p>The Scheme cannot fulfil these guidelines for the reasons given in Highways England's 2020 'Appraisal Summary Tables':¹⁰</p> <p><i>"This option [grey – as chosen for the Scheme] would result in significant adverse impacts on the setting of the SDNP and would permanently change the diverse, high quality landscape from Binsted to Crossbush. It would result in loss of vegetation, including woodland and hedgerows, and significant fragmentation of the existing local landscape pattern. It would result in a considerable loss of tranquillity, especially within the quiet, rural communities of Binsted and Tortington. Cultural associations with these communities would also be damaged, through severance of physical linkages and through disturbance of cultural activities."</i> [emphasis added]</p>
3.3	Permanent damage to 'diverse, high quality landscape'	<p>The Scheme would permanently change, divide, and damage the current diverse, high quality landscape.</p> <p>All the different kinds of land needed for farming – woodland, hedges, arable, pasture, meadow, marsh, watercourses, ponds, claypits, sandpits – were included in the one parish, as these were in many other parishes. The pattern of the fields of Binsted reflects this history as an independent parish¹¹, from the two large, central fields of the historic parish, which were farmed in strips by the whole community, to the historic small fields further south in the parish, and small meadows and pastures in the marshy south. The same applies to Tortington Parish, also historically an independent parish. Massive woodlands were included in both Binsted and Tortington parishes (100ha in Binsted, 70 ha in Tortington).¹² Woodland was an important resource for animal food, firewood, materials for mattresses and building and roofing.</p> <p>This history is to be lost with the Scheme as both parishes would be split in two.</p>
3.4	'Significant fragmentation of the existing local	<p>The Scheme would cross Binsted Lane in two places, splitting the village in two (16 houses south of it, 23 north), and take away the fundamental significance of Binsted as a historic parish, by destroying its unity, isolation, peacefulness, beauty, and sense of looking backwards in time.</p> <p>Binsted's one winding lane, bending round in a U-shape, connected the spread-out buildings and gave access to the different types of land. Hoe Lane, a 'dead end' at the south end of the parish, was on a peninsula in the marshes – a Hoe like Plymouth Hoe. The lane</p>

⁹ From: 'The road to good design', design statement by Highways England, 2018.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672822/Good_road_design_Jan_18.pdf. The name 'Highways England' is used when quoting something written before the name change to National Highways in November 2021.

¹⁰ The 'Appraisal Summary Tables' appear in Appendix F of the October 2020 Scheme Assessment Report.

¹¹ Binsted was joined to Walberton parish in 1983. Tortington is now part of Arundel Parish.

¹² Both areas of woodland together are now called the Binsted Wood Complex Local Wildlife Site and are included in the South Downs National Park.

	landscape pattern'	<p>does not connect with the outside world at all in the southern part of the parish. The layout of the lane reflects Binsted's historic isolation and independence.</p> <p>Binsted never became a 'nucleated' village with a centre. Nucleation happened in the 7th and 8th centuries, so this means Binsted is a refuge from the modern world. The parish's unchanged layout is very old and gives a sense of looking back in time. Hence it is a favourite place for many people to walk, especially as half of the old Parish is in the National Park.</p> <p>The Scheme would cross Tortington Lane and also destroy Tortington's unity as a village and historic parish.</p>
3.5	Landscapes	<p>i. Binsted Rife valley</p> <p>The Binsted Rife valley is a steep-sided valley, it is dramatic north of the A27, and shallower south of the A27. From the A27 south, it has a chalk stream, and its lower reaches are a rare habitat, a 'Flushed Fen', one of only two in coastal West Sussex. The stream in the steep valley formed the western Parish boundary from Anglo-Saxon times to 1983. The valley is thought by geologists to have been formed by a 'melting event' at the end of the last Ice Age, some 10,000 years ago. Its steep sides were used by the Iron Age monument builders as part of their defence ('War Dyke'), by building a bank and ditch on the lip of the valley. The edge of the valley was the dramatic setting chosen for St Mary's Church, Binsted, in about 1150.</p> <p>The significance of the valley, with its links to the Ice Age, the Iron Age monument, and 12th-century St Mary's Binsted, would be severely damaged by the Scheme but this is not assessed in the PEIR.</p> <p>ii. The whole area 'from Walberton to the River Arun' – recommended for inclusion in the South Downs National Park</p> <p>The first report for the Countryside Agency by Landscape Design Associates (LDA), the '<i>Area of search for the South Downs National Park</i>', March 2001, stated that the whole area from Walberton to the Arun Valley was suitable for including in the proposed National Park. E.g. at 6.15: '<i>Thus only two areas meet natural beauty criteria [for National Parks] and these are between West Ashling and Chichester and Walberton to the Arun Valley.</i>'¹³ The final boundary did not include this land, although it is not clear why. But the assessment of landscape made at the time shows that this is a landscape of high quality and of a standard to be recommended for inclusion in a National Park. This applies not just to Binsted but also to Tortington and to the Arundel water meadows as far south as the railway.</p> <p>The whole of this area in Binsted, Tortington and south of Arundel would be severely damaged by the Scheme, but the quality of the landscape as described here is not considered in the PEIR. Setting of the South Downs National Park</p>

¹³ The woodland in the area between Walberton and Arundel had already been recommended for inclusion in the proposed National Park under the section 'Central Wooded Chalk Uplands', so it is clear that the areas south of the main block of woodland are meant. In its 'Conclusions', LDA listed 'Land between Walberton and the Arun Valley' among the 'areas to include'.

		<p>WPC note that South Downs National Park Authority (“SDNPA”) makes extensive comments objecting to the impact of the Scheme on the setting of the South owns National Park in its representation¹⁴. In particular, it states at paragraph 3.1:</p> <p><i>“SDNPA has significant concerns regarding the impact of the Proposal on the setting of the National Park in respect of landscape character and in views from, and to, the Park”.</i></p> <p>As SDNPA correctly point out, the National Planning Policy Framework (paragraph 176) makes clear that development within the setting of a National Park must be sensitively located and designed to minimise impacts on those designated areas. NH have not made any consideration of the Scheme being in the National Park setting in its environmental assessment, and in fact in chapter 7 of the PEIR state only that the Scheme would have a positive impact on the National Park (an example being paragraph 7.7.27, which states <i>“There is the potential for the Scheme to introduce beneficial change within the SDNP and at Arundel through the removal of signage, introduction of planting, and reduction in visible traffic on the existing A27”</i>).</p>
4. Biodiversity		
4.1	Survey data and mitigation	<p>Paragraph 8.3.4 of the PEIR confirms that the baseline report from the most up to date ecology surveys, from 2020 and 2021, is still in production and therefore was not used for the baseline in the PEIR. This left the surveys from 2017 to 2019 as the most recent data, that related to a previous iteration of the Scheme.</p> <p>Further, the data for Great Crested Newts is incomplete and shows that Madonna Pond (within 220m of the Scheme) has not yet had any newt surveys completed despite the NH data stating that these are required.</p> <p>This approach means that the PEIR is not adequate for consultees to comment upon. It is possible that the baseline for certain species has changed dramatically in the last two to three years. WPC is surprised that given that more recent surveys have already been undertaken that NH has not delayed production of the PEIR until such time as more recent and accurate data, for the current Scheme, can be made available.</p> <p>The Environmental Management Plan is referred to throughout the PIER as the main mitigation document, however this has not been made available, and therefore cannot be scrutinised.</p>
4.2	Bats and biodiversity more generally	<p>WPC attaches to this representation (as Appendix 1) a report prepared by Arun Countryside Trust regarding bats dated January 2022. WPC asks NH to review and respond to this report.</p>

¹⁴ <https://www.southdowns.gov.uk/wp-content/uploads/2022/02/20220303-Agenda-Item-8-A27-Arundel-Bypass-Consultation.pdf>

4.3	"Temporary" Effects on Bats	<p>Table 16-1 of the PEIR reports "<i>Temporary adverse effects to bats</i>" during the operational phase. Paragraphs 8.5.20 and 8.5.21 outline an increase in mortality of Barbastelle and Bechstein's bats, and propose mitigation in the form of green bridges and underpasses for bats.</p> <p>It is important to ensure that for these mitigations that provision is made for connecting these bridges and underpass to suitable habitat. This is not made clear in the PIER.</p> <p>The assumption in the PEIR that the mitigation will be completely successful overlooks the effect of severance on populations, and on foraging, with bats travelling in both directions i.e. from the woods to the countryside where they forage, and from points in the countryside and villages to the woods. WPC are aware there is no evidence of the efficacy of mitigation of these effects on bats, but will await confirmation from NH in its ES.</p> <p>As set out in the report by Arun Countryside Trust dated 5 May 2020, there is no diminution of bat activity across the Scheme as compared with the previously considered Amber/5A route. Also the report notes that very high percentages of those bats are flying at unsafe heights. Although the survey was about the Amber route, the 'transects' crossed the Scheme route area so are transferable. Figure 1 of the 5 May 2020 paper, 'transects map with Grey route' shows this.</p>
4.4	Bat Roost Surveys	<p>WPC note that Table 8-1 of the PEIR sets out the ecological surveys undertaken, which include bat roost surveys. It is difficult for NH to argue that roost disturbance is a more important measure than bat activity, or that bat activity surveys need not be taken into account. Whilst construction noise and subsequent operational use could cause disturbance that leads to roost abandonment, most research has shown that direct impacts during periods of bat activity are the most important consideration for bat conservation due to the multifactorial effects that can result.</p> <p>The Journal of Applied Ecology (Berthinussen and Altringham 2012; Journal of Applied Ecology, 49, pp.82–89) has an open source paper from 2012 looking at major road impacts on bat activity that concluded:</p> <p><i>'.....we detected a marked independent decrease in bat activity and diversity in proximity to the road. This decline, to a distance of at least 1.6 km either side of the road, which for activity was consistent over 2 years, shows that major roads have a very significant impact on bat activity'</i>.</p> <p>The reliance on underpasses and green bridges appears to be inconsistent with the available scientific knowledge when it comes to compensating for disturbance and habitat loss/fragmentation. WPC request the details of the studies that contradict this view and show the high underpass and green bridge success rates that will be needed to avoid a loss of Favourable Conservation Status' in relation to the 4 rarest species in the area.</p> <p>A second paper, by Berthinussen and Altringham¹⁵ published in 2012, found that <i>'At two underpasses attempts to divert bats from their original commuting routes were unsuccessful and bats crossed the road at the height of passing vehicles.....No bats were observed flying</i></p>

¹⁵ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0038775>

		<i>along the planted diversion to the underpass'</i> . Of the seven mitigation structures studied (both gantries and underpasses), only one was successful in providing a significant commuting route.
4.5	Lack of assessment of effects on Alcatthoe bat	<p>There is no reference in the PEIR to NH's own field surveys showing the presence of Alcatthoe bat (<i>Myotis alcatthoe</i>) maternity roosts approximately 1km north of the Scheme and with an active feeding range that encompasses the western extent of the Scheme between Binsted and Walberton as far south as St Mary's Church¹⁶. This species is the UK's rarest breeding bat for which almost no scientific data exists on location and distribution and there is no current classification on its Favourable Conservation Status (FCS). This species forages along the Binsted valley and rife, is highly sensitive to physical barriers, noise and lighting. There is a high likelihood that an adverse effect on this species will follow the construction of the western section of the route.</p> <p>WPC suspect this oversight is due to the recent high court judgement relating to HS2 bat roost licencing¹⁷. In this judgment (paragraph 36) it is stated that “...where, in the light of the best scientific knowledge in the field, there is a reasonable doubt that a human activity will not have an adverse effect on the conservation of habitats and protected species, that activity cannot be authorised”.</p> <p>Conservation status of Alcatthoe was last assessed in 2019 and there was insufficient data to change from 'unknown'. The only known at that time was it has only been recorded in 25 1x1km2 throughout the UK. This population in Walberton Parish could therefore be the largest and most important in the UK. Putting this population at risk of local extinction would thus be highly at odds with stated Government aims and focus on biodiversity enhancements and the NH Scheme objectives as set out in its preferred route announcement¹⁸ to “<i>Deliver a scheme that minimises environmental impact and seeks to protect and enhance the quality of the surrounding environment through its high-quality design</i>”.</p> <p>It is therefore logical to make the argument that for a species for which there is no FCS but an accepted rarity (hence no FCS), the precautionary approach to avoiding adverse conservation impacts should be applied. This approach would be akin to the protections afforded to individuals of protected species under the 'recklessness' clause of the Wildlife and Countryside Act 1981 (as amended).</p> <p>WPC note that Table 8.6 of the PEIR states that European Protected Species Mitigation Licences will be needed to implement mitigation measures for impacts on Bechstein's and Barbastelle bats, which are also Annex II species, but not Alcatthoe. Whilst mitigation to permit flight lines for commuting is mentioned, loss of foraging habitat compensation is 'new habitat' around the area; this demonstrates that this species has been overlooked, as this would not be suitable mitigation for Alcatthoe given the noise and light sensitivity characteristics of the species.</p>

¹⁶ See 2020 Bat Survey Report (Document No: HE551523-BAM-EBD-ZZ-RP-LB-0024)

¹⁷ R (On the Application of Kier) v Natural England [2021] EWHC 1059 (Admin) (27 April 2021)

¹⁸ https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/GFD20_0090%20Arundel%20A27%20Bypass%20Consultation_PRA%20October%202020%20PRINT.pdf

		As stated in NPSNN paragraph 5.35: <i>The Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.</i> WPC are of the view that the benefits of this Scheme, particularly in light of its low value for money score do not ' <i>clearly outweigh</i> ' the harm caused to rare species.
4.6	Proposed Green Bridge at Binsted Lane	<p>We note that the chosen option d design for Binsted Lane (as set out in the PEIR paragraph 3.5.30 onwards) is not the best mitigation for bats as it is a multi-functional offering.</p> <p>This green bridge does not take into account where bats are going. It is clear that the east side of Binsted Lane is a popular location for bats and they fly north-south from Binsted Park and the woodland, down Binsted Lane, down Hoe Lane and to the countryside at Ford and Tortington. They also fly across from one arm of Binsted Lane to the other, alongside the public footpath, on their way to the Rife valley. The chosen green bridge does not go in either of these directions and therefore would not offer effective mitigation for them.</p>
4.7	Lack of information on Mitigation	<p>Paragraph 8.3.3 of the PEIR states that mitigation measures to compensate to reduce impacts on biodiversity is "<i>evolving</i>" and based on "<i>best practice and guidance</i>", though there is no reference to what this guidance is or what best practice methods will be employed.</p> <p>A recent paper by Hunter <i>et al</i> 2021¹⁹ has shown that of off-cited mitigation measures in construction plans, only 10% of mitigation measures cited by guidance documents have been evaluated using empirical evidence on which to base efficacy. The mitigation measures chosen during the A27 construction are therefore highly relevant when asserting they prevent future biodiversity declines or will avoid loss of favourable conservation status for a particular species as required in order for the Secretary of State to grant development consent.</p>
4.8	Loss of veteran trees	<p>In paragraphs 8.5.44 and 8.5.46 of the PEIR, NH acknowledge that there may be habitat degradation due to tree root disturbance and that there are further veteran trees which may be lost. There is no further information on this issue.</p> <p>It is worth noting the quote from paragraph 5.32 of the NPSNN, which NH themselves highlight:</p> <p><i>"The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided"</i>. [emphasis added]</p> <p>This policy would therefore support refusal of an application for development consent for this Scheme as it stands.</p>
4.9	Mitigation for loss of ancient	WPC notes that paragraph 8.7.6 of the PEIR states that ' <i>The risk of damage (direct and dust deposition impacts) to ancient woodland and potential veteran trees may be mitigated by implementation of protection measures included in BS5837: 2012</i> '.

¹⁹ (EcolSolutEvid.2021;2:e12089; <https://besjournals.onlinelibrary.wiley.com/doi/10.1002/2688-8319.12089>)

	woodland and veteran trees	WPC note that BS5837:12 does not contain mitigation measures to prevent dust and vehicle emissions impacting trees (other than advice to wash down foliage of trees in close proximity to demolition). The acknowledged potential impacts on veteran and ancient trees have not therefore been adequately considered or mitigated. It should be noted that PEIR paragraph 8.7.7 states that ' <i>For potential veteran tree 6, which may be indirectly impacted by the operation of the Scheme, additional mitigation measures will be explored and outlined in the ES</i> '. It is not therefore possible to comment on the planned mitigation measures for ancient woodland and tree impacts during this consultation. WPC is therefore of the view that NH has failed in its duty to provide information that " <i>is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development</i> ".
4.10	Habitat Metric Calculation	WPC notes that paragraph 8.6.28 confirms that habitat compensation calculations will be based on the Natural England Metric 2.0. NH should be advised that this metric was made obsolete in 2021 with the publication of Metric 3.0. There is also no commitment to replant where trees are lost.
4.11	Green bridges and tunnels	NH emphasise the proposed use of green bridges and underpasses as proposed mitigation, for example at paragraph 8.7.10 of the PEIR. However, WPC note that the route covers 8km, therefore given this distance it is not reasonable to expect all wildlife to benefit from these structures. NH also emphasise habitat creation preventing losses of individual protected species and viable populations as a whole. However, it should be noted that as some of the habitats will take between 5 and 30 years to provide comparable habitat to that currently present it is not clear if this wildlife will survive in the depleted and highly disturbed habitat that will be available between construction start and habitat maturity. The assertion that planned compensation planting (such as mentioned at paragraph 8.5.32) and translocation (see paragraph 8.5.31) will suffice and offset losses is therefore questionable and lacks data and plans to support claims. Indeed, habitat translocation and restoration is highly debated within ecology circles and acknowledged to be problematic to complete successfully.
4.12	Failure to consider Neighbourhood Plan	Paragraph 1.3.13 of the PEIR correctly notes that when deciding the application for the Scheme, the Secretary of State will " <i>consider other important and relevant national and local planning policy</i> ". However, NH have failed to consider Walberton Neighbourhood Plan, which forms part of the local development plan. In particular, there is no mention of policy VE10 2020 - Biodiversity corridors ²⁰ in the PEIR and assessment of the adverse impact of the Scheme on biodiversity corridors numbers 1, 3, 4, 6 7 8, 9 and 10. Furthermore the Neighbourhood plans of adjacent Parishes such as Barnham and Eastergate and Aldingbourne plus Slindon all of who will be detrimentally impacted by the scheme through induced rat running and its inherent increase in pollution and noise.

²⁰ <https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n16781.pdf&ver=17358>

4.13	Loss of Binsted Rife Chalk habitat	Paragraphs 8.5.71 and 8.5.73 of the PEIR do not acknowledge that the Binsted Rife chalk stream habitat will be lost rather than degraded and indeed states that the planned increases in woodland, grassland and wetland habitats would enhance the Binsted Rife. This is incorrect, as the plan is to discharge road water runoff collected in the adjacent large attenuation pond directly to the rife. This will change the underlying chemical properties that make chalk streams valuable and unique habitats and lead to loss of habitat not degradation.
4.14	Binsted Rife protection status	The PEIR makes no mention that part of the Scheme within Binsted Valley is covered by the Clymping to Houghton Biodiversity Opportunity Area (BOA). BOAs are currently afforded protection through Arun Local Plan policy ENV DM3. As local policy is a material consideration for the Secretary of State, this should feature in NH's assessment.
5. Geology and soils		
5.1	ALC	It is noteworthy in paragraph 9.5.16 of the PEIR that NH have not undertaken sufficient assessment of agricultural land at this stage to determine whether Grade 3 land within the Scheme is subgrade a or b. Such determination has been left to the ES, however, WPC consider that such differentiation could have a material impact on the Scheme's justification and should have been investigated at PEIR stage when there would be more opportunity to alter the Scheme to avoid more valuable land.
5.2	Mitigation	As with other chapters, the Geology and Soils chapter of the PEIR provides scant detail on specific mitigation measures, instead deferring to an environmental management plan (paragraph 9.7.2).
6. Material assets and waste		
6.1	Data assumptions	Paragraph 10.3.2 of the PEIR specifies that data is not currently available for the type and quantity of materials needed to construct the Scheme. Notional amounts are used, but there is no background for these figures and how NH arrived at these to allow WPC to consider and scrutinise these assumptions.
6.2	Requirements	It is a requirement of this scheme to have a completed Mineral Resources Assessment and a Waste Infrastructure Statement (in relation to Copse Barn). These will need to be completed prior to DCO and should be made available for comment.
7. Noise and vibration		
7.1	'Considerable loss of tranquility'	The noise maps for the Scheme ²¹ showed a projected large increase in noise in both Binsted and Tortington villages, extending south as far as the railway line i.e. throughout both parishes. The PEIR is vague on operational noise impacts, not touching upon any potential effects in any detail.

²¹ Noise figures are attached to Chapter 11 of the PCF Stage 2 Further Consultation Environmental Assessment Report (EAR), 2019. Figure 11.48 shows the noise assessment results for Option 5BV1 (Grey).

		The noise effects as noted in the noise maps would mean a complete loss of tranquillity for the whole of Binsted and Tortington villages. The maps show a reduction in noise for an area to the north of the present A27 where there are no villages. NH must clarify the status of these impacts.
7.2	Lack of certainty in assessment	<p>WPC note that paragraph 11.3.1 of the PEIR states that “<i>Details of the construction traffic, diversion routes, construction schedule, construction methodology and plant requirements are not yet confirmed. Therefore, a qualitative assessment has been carried out at this stage, based on professional judgment and experience of other nationally significant road schemes</i>”. Therefore, impacts from the construction phase are only approximations and may bear no resemblance to reality.</p> <p>Similarly, paragraph 11.3.2 provides little assistance in relation to the assessment of operational traffic, confirming that a detailed operational phase noise assessment will only be reported in the ES, based on the submitted Scheme design. Therefore, WPC is left to wonder whether impacts will be lesser or greater at this stage, a serious failing in the effectiveness of the PEIR.</p>
7.3	Effectiveness of mitigation	<p>NH state at paragraph 11.7.3 of the PEIR that one of the operational mitigation measures will be a 50mph speed limit.</p> <p>WPC questions whether traffic would abide by this without additional measures such as average speed cameras, and also how quickly a vehicle travelling in the 70mph limit area can drop speed to abide by such limit. Further, WPC would recommend that the limit is stretched to further east beyond St Mary’s Church so that it ceases well beyond all of the residential and commercial properties in Binsted.</p> <p>Further, WPC would request that NH ensure that any other mitigation measures provided would be fully effective, and not leave the situation hinted at in paragraph 11.8.21, where despite mitigation being implemented “<i>it is possible that some properties may still experience significant adverse effects after mitigation</i>”.</p>
7.4	Provision of mitigation	Paragraph 11.8.18 of the PEIR contains a number of possible mitigation measures against noise, (“ <i>bunds, noise barriers and very low noise surfacing</i> ”) which if not provided will result in “ <i>significant adverse noise effects</i> ”. WPC would expect all of these measures to be employed in the final Scheme so as to provide certainty that no significant effects would arise.
7.5	Effects from construction compound	Paragraph 11.8.24 of the PEIR confirms likely significant effects for sensitive receptors from the construction compound at Yapton Lane. WPC also notes WSCC’s concerns in its draft representation ²² over the location of this compound and that it “ <i>would result in total or partial loss of archaeological heritage assets identified during the recent geophysical survey and ongoing trial trenching</i> ”. Given this likelihood, WPC would request that NH consider alternative sites for this compound which would not have such effects.

²² See para 2.71 <https://westsussex.moderngov.co.uk/documents/g3177/Public%20reports%20pack%2024th-Feb-2022%2010.30%20Communities%20Highways%20and%20Environment%20Scrutiny%20Committee.pdf?T=10>

7.6	Noise effects at Church of St Mary's	WPC notes that paragraph 12.5.11 of the PEIR states that " <i>the Church of St Mary's, Binsted is located directly alongside the Scheme alignment</i> ". The increased noise at this site and vibration from construction will be completely unacceptable for a location intended for quiet, peaceful reflection, and worship. It is accordingly anticipated that the Scheme may have a disproportionate effect on members of the Christian faith, and NH are expected to give this due consideration in their Equalities Impact Assessment.
7.7	Modelling Fontwell	The PEIR contains no reference to noise and air quality modelling in Fontwell despite a foreseeable increase in traffic volumes. In addition, no night-time noise modelling was undertaken in Fontwell which WPC state should be rectified given the expected increased flow of night-time HGV traffic servicing Westbourne Motors 24 hour vehicle recovery operations.
8. Population and human health		
8.1	Incomplete information	In relation to population and human health, as with other topics, NH have provided insufficient or potentially unreliable information. Paragraph 12.3.4 of the PEIR states that information to assess impacts on agricultural land holdings is not yet available, and therefore those interested in impacts on agricultural holdings are unable to understand these until far later in the process. The lack of information is made worse by paragraphs 12.8.28 and 12.8.44, which state that no assessment of effects on human health will be undertaken until the ES for construction and operation respectively. This is a very substantial element of concern for this Scheme, given the manifold impacts it is likely to have from noise, dust and other emissions.
8.2	Effects on churchgoers	WPC must reiterate its concern from paragraph 12.5.11 of the PEIR in relation to the Scheme's proximity to the Church of St Mary's, Binsted. The location of a major arterial road near the church will not be conducive to general wellbeing. WPC is surprised that NH would make an assertion that the church is " <i>not anticipated to be directly affected by the Scheme</i> " (paragraph 12.8.6) and would dispute the accuracy of this claim.
8.3	Significant adverse effects on Walberton	Paragraphs 12.8.39 and 12.8.40 outline the Local Landscape Character Areas which will suffer a significant adverse landscape effects during construction. This assessment predicts " <i>a negative health outcome on people who live in and have regular access</i> " to these areas. On reviewing this list, WPC note that all of Walberton Binsted and Fontwell are covered, and therefore most of WPC's parish by these areas.
8.4	Scheme Options	In relation to the two options provided at 12.9.2 and 12.9.3 of the PEIR, WPC require an 18 hole golf course to the same standard as currently exists, to maintain the level of leisure facilities. However, this should not entail any additional parking and must be easy to move on foot from the front to back 9 holes – WPC note that opinion of local residents does not favour NH's suggested back 9 holes location, which would further erode the agricultural landscape setting adjacent to the SDNP. This, along with the addition of a driving range to this as mentioned by NH would be a positive benefit. Also, PROW 350 gives Walberton Parish direct access to the SDNP. It is imperative that this underpass is designed to remain accessible at all times and not become waterlogged.

8.5	Errors in chapter 12	WPC note the following errors in Chapter 12: BN/18/21/RES has now been approved rather than Undecided; and WA/80/21/OUT has now been refused rather than Undecided.
9. Road drainage and water environment		
9.1	Road drainage and water environment	WPC attaches to this representation (as Appendix 2) a document which contains comments on PEIR Chapter 13. NH is requested to review this and respond to it. In summary, it appears that complete and adequate risk assessment for flooding and pollution have not been undertaken with sufficient rigour at the western extent of the Scheme and there is a potential for Walberton Pond pollution and flooding. WPC also believe there is a potential for non-compliance with the Water Environment Regulations 2017 and NH's internal procedures for water risk assessment (HEWRAT).
10. Climate		
10.1		WPC note that Table 14-4 of the PEIR sets out projected emissions from the Scheme's construction. These are said to lead to an estimated "11,600 tCO ₂ e to 35,900 tCO ₂ e per km of road" of carbon emissions. The Climate Change Committee, in its 2021 Progress Report to Parliament, Joint Recommendations ²³ , recommended that: <i>"Decisions on investment in roads should be contingent on analysis justifying how they contribute to the UK's pathway to Net Zero. This analysis should demonstrate that the proposals would not lead to increases in overall emissions."</i> This recommendation is at odds with the quoted statement from the PEIR and should be a material consideration against the Scheme.
11. Value for Money		
11.1	BCR and value for	WPC attaches to this representation (as Appendix 3) a letter which contains comments on BCR and value for money of the Scheme from page 4 onwards.

²³ See Table A6, <https://www.theccc.org.uk/wp-content/uploads/2021/06/CCC-Joint-Recommendations-2021-Report-to-Parliament.pdf>

	money (p 4 onwards)	
12. Traffic		
12.1	General	WPC attach a note to this representation (as Appendix 4) which contains detail on its comments related to traffic. Below is a summary of certain headline points from that document.
12.2	Inclusion of Lyminster traffic in core scenario	In including the A284 south upgrade proposals at Lyminster within the core scenario, NH double-counts its benefits for the Scheme, as indicated by the National Audit Office. Further detail on this point is contained in the attached note under “1. Lyminster bypass interdependent benefits miscounted”.
12.3		Lyminster is included at a traffic forecast that exceeds its congestion reference flow in 2041. NH has forecast that following construction of the Scheme that by 2041 the Lyminster Bypass will serve 31,500 AADT ²⁴ , whereas the actual forecast for that bypass is 19,000 AADT. The implication of this overestimation is an increase in the benefits-cost ration (BCR) of the Scheme. Further detail on this point is contained in the attached note under “2. Lyminster Bypass Capacity”.
12.4		In traffic generation terms, and in congestion-creation and congestion-easing terms, it is incorrect to include traffic between Lyminster and Littlehampton in the A27 east-west corridor core scenario as set out in the previous Scheme assessment report dated October 2020 ²⁵ . In fact, the traffic between these towns utilises the key north-south A284 route. It is therefore a bifurcation in the corridor and not a continuation of it. Further detail on this point is contained in the attached note under “3. Corridor Amalgamation and Scheme Impact”, particularly at point a.
12.5		Traffic travelling to and from Lyminster mostly utilises Crossbush junction element of the Scheme, but not the rest of it. Therefore, this traffic cannot be included as part of the justification for the Scheme Further detail on this point is contained in the attached note under “3. Corridor Amalgamation and Scheme Impact”, particularly at point b.

²⁴ See Scheme Assessment Report, October 2020 Figure 9-1: https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/A27_ArundelBypass_Scheme_Assessment_Report.pdf

²⁵ https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/A27_ArundelBypass_Scheme_Assessment_Report.pdf

12.6	Brighton – Portsmouth trip times	<p>NH relies heavily on three benefits for the Scheme: journey time reductions, improved reliability, and safety. In particular, in the Preferred Route Announcement²⁶, NH stated: “<i>The A27 Arundel Bypass scheme is a critical part of this investment and by reducing congestion in the area the scheme will improve journeys between Brighton and Portsmouth which is great news for local people and the regional economy</i>”.</p> <p>However, NH’s claims for and promotion of the improvements in Brighton-Portsmouth trip times are simply unsubstantiated. In response to a request under the Environmental Information Regulations 2004, NH confirmed that it does not hold information on the Brighton to Portsmouth journey times for 2041, in minutes, east and west bound at AM and PM peaks.</p> <p>Further detail on this point is contained in the attached note under “6. Journey Time Improvement and Rat Running”.</p>
12.7	Rat running reduction	<p>On the issue of rat running, WPC support and reiterate the objections made by Dr Mike Davis under his letter dated 14 February 2022. A copy of the letter is attached to this representation (as Appendix 5).</p> <p>WPC note that rat running is an important issue, with impacts from it on local communities recognised in paragraph 3.5 of the draft West Sussex Transport Plan 2022-2036. NH’s claims that the Scheme will promote rat running reduction or elimination can be seen, for example, in the Preferred Route Announcement with consequential reliability and safety benefits suggested. These benefits, however, are unsubstantiated and are simply a journey time issue which itself is not substantiated (see point above). NH tied in benefits related to air quality at Storrington into these supposed benefits, which must also be cast into doubt. In fact, it is likely that AADT increases will result on the edge of Worthing by some 37%²⁷.</p> <p>Of great concern to WPC is ensuring that mitigation of the Scheme in relation to traffic through Fontwell is successful. Full, detailed and credible plans to ensure that traffic runs smoothly through Fontwell are imperative as without this WPC consider that the Scheme will cause rat running through the centre of Walberton. This can already be seen in NH’s figures: in the Consultation Brochure, it is projected that an increase of 1,300 daily vehicles will use The Street in Walberton, no doubt driven by the increased delays in Fontwell.</p> <p>This number will also not be spread evenly throughout the day, but rather present issues at peak times, making the effect even greater.</p> <p>Further detail on this point is contained in the attached note under “6. Journey Time Improvement and Rat Running”.</p>
12.8	Access by local traffic	<p>Despite contrary statements, the significantly increasing local traffic has deliberately been allowed much-reduced access to the new A27 due to NH’s plans to close certain junctions, or limiting their use.</p>

²⁶ https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/GFD20_0090%20Arundel%20A27%20Bypass%20Consultation_PRA%20October%202020%20PRINT.pdf

²⁷ See Scheme Assessment Report, October 2020 Figure 9-1: https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/A27_ArundelBypass_Scheme_Assessment_Report.pdf

12.9	Inconsistency in figures	Inconsistencies undermine the NH traffic forecasts. At public statutory consultation events (for example in Walberton on 22 January 2022), Aecom, instructed by NH to undertake traffic modelling, acknowledged that the traffic model is inaccurate and therefore unreliable in forecasting traffic flows on local roads. For example, Aecom agrees that the forecast for Yapton Lane is understated, and this is borne out by the figures provided, which veer from the base year 3,400 AADT ²⁸ versus the Network Rail figure of 7,900. This error and the reduction in Yapton Lane traffic has been included since 2017 and objected to but only now is it being partly admitted. It has implications for traffic in The Street, Walberton.
12.10	NH underestimates congestion	The Arun Local Plan requires delivery of a further 13,200 new homes to 2031. Of these, only 4,710 have been included in traffic modelling by NH, based on projecting past trends in house building but ignoring the actual planned figures. NGOs and local authorities plan for major economic and housing development, including those served by north-south roads such as the A29 that intersects with the A27 in dogleg fashion at Fontwell. However, NH data and forecasts do not fully reflect these traffic increases including local traffic between now and 2027 or to 2041, on local lanes as well as on the A29 and A27. By using these incorrect figures, NH grossly underestimates the growth in local traffic.
12.11	Cost benefit not met	The Scheme's wider corridor journey time, reliability and safety benefits are not secured by the amount spent on its costs; its included benefits depend on major excluded but necessary costs to be met at Fontwell and Worthing-Lancing. Worthing-Lancing is not capable of significant improvement so the three benefits are significantly, mainly or entirely lost. Further detail on this point is contained in the attached note under "3. Corridor Amalgamation and Scheme Impact", particularly at point c. and "6. Journey Time Improvement and Rat Running".
12.12	Reliability of data	Meaningful but undeclared changes in traffic forecast have been made to consultation documents at least twice including this statutory consultation. Costs and/or benefits and/or traffic forecasts produced for each consultation are shown to allow arguably wrong or unreliable information to have been given. WPC can cite two examples of this: a. The change from the 2019 consultation approach of using a variable demand model to 2041 ²⁹ to the Statutory Consultation approach of using a fixed demand model, but to 2027 ³⁰ . No attention was drawn to the change in modelling approach, which cuts back traffic volumes.

²⁸ See Scheme Assessment Report, October 2020, Figure 3-5.

²⁹ See Combined Modelling and Appraisal Report https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-further-consultation/supporting_documents/Combined_Modelling_and_Appraisal_Report_ComMA.pdf

³⁰ this was confirmed to our parishioner Edmund Camerer Cuss by Alan Feeney of NH at a Fontwell display, see also https://www.whatdotheyknow.com/request/a27_arundel_bypass_traffic_forec#incoming-1973408

		<p>b. NH also did this in 2018, running the consultation on the fixed demand model and then in the 2018 Scheme Assessment Report used to justify the 5A preferred route NH swapped to using a variable demand model³¹. This, among other things, gave rise to a 37% increase in traffic volumes – for example traffic numbers at Fontwell 33,800 rises to 46,200.</p> <p>This has resulted at the three consultations in NH seriously misleading the public, thereby allowing skewed responses.</p>
12.13	Availability of information	<p>In its response to the 2019 Further Public Consultation, WSCC stated³²:</p> <p><i>Highways England should work with the County Council at the next stage of the project to ensure that local roads are adequately represented and also work with local stakeholders to ensure that the modelling information is well understood.</i></p> <p>The Council also stated:</p> <p><i>Whichever option is selected as the preferred route, the design will need to be refined to ensure that access routes are maintained and, in some cases, to ensure that undesirable effects on the local road network, such as creation of new rat-runs, are effectively managed. This should take place at the next stage once a preferred option has been selected.</i></p> <p>None of these things have happened. WSCC's draft consultation response states "<i>The County Council considers that National Highways must provide a more robust and transparent evidence base across a number of topic areas, including the necessary traffic modelling, so that the likely significant environmental effects of the proposals can be better understood by stakeholders and local communities</i>"³³. The response goes on to raise concerns over rat runs due to the Fontwell West junction alterations, stating "<i>Poor performance of these junctions has the potential to degrade the benefits of the project and lead to rat-runs through adjacent communities</i>"³⁴.</p> <p>In fact, NH is providing much less information in 2022 than in 2019. WPC have been informed that NH has not provided answers to even simple questions from members of the public who will be affected by the Scheme about the new traffic assessment or the Scheme's projected costs and benefits.</p>
12.14	A27 Transport	<p>The A27 Transport Model is not an appropriate tool to be used for the Scheme. A recurring and major problem is that the model is better calibrated to the strategic road network rather than local roads. This means that flows on local roads that are forecast by the model</p>

³¹ See Scheme Assessment Report para 6.1.5 <https://highwaysengland.citizenspace.com/he/a27-arundel-bypass/results/sarv1forpublishing.pdf>

³² <https://westsussex.moderngov.co.uk/documents/s11874/Response%20to%20Highways%20Englands%20Further%20Non-statutory%20Consultation%20on%20Options%20for%20the%20A27%20Arundel%20Byp.pdf>

³³ See paragraph 2.42, <https://westsussex.moderngov.co.uk/documents/s30068/Appendix%201%20-%20Draft%20decision%20report.pdf>

³⁴ Paragraph 2.59.

	Model accuracy	<p>frequently do not match what is observed in real world counts. NH has failed to validate its model; the model is therefore unreliable. This has eroded trust in NH's traffic assessments.</p> <p>WPC point to the 2019 Local Roads Study³⁵ which was produced by the model, but comprehensively failed to identify rat running at the western end of the scheme. Furthermore, WPC have discussed this issue directly with NH and their consultants who admit that certain roads within the parish are omitted from the model and therefore the model is blind to them, most significantly The Street, West Walberton Lane, Eastergate Lane, Wandleys Lane and Arundel Road. This means the model is not a representative model of the road scheme in and around the A27 Grey route. Yapton Lane is also particularly poor in its calibration. This is a problem as it carries more traffic than most other local roads and a higher proportion of HGVs. Larger vehicles frequently slow to a crawl to pass safely at Blacksmith's Corner and Hedger's Hill. Yapton Lane is also expected to take additional construction traffic for several years serving the compound opposite Avisford Grange.</p> <p>The draft West Sussex Transport Plan 2022-2036 aims to improve the efficiency of the road network in West Sussex in order to reduce congestion and therefore rat-running on less suitable routes. This aim will be jeopardised given that the Scheme will congest the Fontwell roundabouts so that users of the A29 will be forced to divert through the centre of Walberton, inevitably leading to more congestion. NH should consider this in its application, and properly assess the effects of the Scheme.</p>
12.15	Inconsistency of BCR and Value for Money information	<p>The benefit cost ratio and value for money assessment on which the Preferred Route Announcement was made in 2020 are different to those presented at the 2019 Further Public Consultation.</p> <p>When it briefed ministers in August 2020, National Highways recognised that the preferred route announcement would be sensitive due to the value for money being Low, with a benefit cost ratio of 1.46³⁶. This assessment was subsequently left out of the public route announcement and associated publicity. The benefit cost ratio used to support the investment decision is different again and lower still at 1.37³⁷.</p>
12.16	Lack of up-to-date data	<p>The latest consultation documents and the PEIR contain very scant traffic data modelling for the current proposed design. Indeed, the only real data seems to be pages 36 and 37 of the consultation brochure³⁸. Given that traffic impacts and predicted changes would seem to be a fundamental component of the need for a road and its design choice, the lack of published data is extremely surprising.</p> <p>PEIR 5.3.1 states that detailed data is currently being prepared while 5.3.3 states that there could be increases or decreases compared to the information provided of 15%.</p>

³⁵ <https://assets.highwaysengland.co.uk/roads/road-projects/A27+Arundel+Improvement/A27+Arundel+Bypass+-+Western+tie-in+local+roads+study.pdf>

³⁶ See also Table 10-12 of the Interim Scheme Assessment Report [https://assets.highwaysengland.co.uk/roads/road-projects/A27+Arundel+Improvement/SAR/SAR+Chapter+10+%E2%80%93+Summary+of+Economic+Appraisal+\(1\).pdf](https://assets.highwaysengland.co.uk/roads/road-projects/A27+Arundel+Improvement/SAR/SAR+Chapter+10+%E2%80%93+Summary+of+Economic+Appraisal+(1).pdf)

³⁷ See table 10-11 of the Scheme Assessment Report, October 2020 https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/supporting_documents/A27_ArundelBypass_Scheme_Assessment_Report.pdf

³⁸ https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-statutory-consultation-january/supporting_documents/Arundel%20Bypass%20Statutory%20Consultation%20brochure.pdf

12.17	Traffic data	Adverse impacts based on the NH data are set out in the table below:		
		Location	AADT increase	Comment
		Fontwell roundabouts	10%	These are well documented as currently running over capacity. Increasing the traffic levels further is counterproductive.
		West of Fontwell	9%	This traffic will also have to queue at Tangmere, increasing emissions by the residential areas near to the roundabout.
		East of Fontwell	28%	Will potentially increase noise and emissions for residential areas immediately next to this stretch of road.
		The Street	42%	<p>This is a narrow road that already experiences marked congestion at peak times. Conflict with pedestrians already results due to the lack of pavements. Pushing large increases in traffic through a conservation area conflicts with Walberton Neighborhood Plan policies VE4 (Conservation Areas and Areas of Special Character), GA4 (School Transport) and GA5 (Traffic Management).</p> <p>The increase in traffic is reported to be due to rat-running from the A29 along Mill Road, then across the old A27 via Yapton Lane and through Walberton to exit west. This is as modelled by National Highways because of traffic trying to avoid the increased congestion</p>

			at Fontwell. The run is facilitated by the old A27 route now being easier to cross.	
		East of Crossbush	39%	Worthing currently is over capacity. This degree of increase will promote rat running – e.g. via Storrington to access the A24.
		<p>The lack of a junction at Ford Road, despite its addition being widely supported by other stakeholders, leads to more traffic finding alternative routes rather than using the A27.</p> <p>It is imperative that this massive traffic change in Walberton is mitigated, or better, prevented. This requires the addressing of the Fontwell roundabouts issue as part of this Scheme.</p> <p>This issue relates to the closure of the Arundel Road turning westbound from the A27 means that HGVs accessing the light industrial sites now have to travel to Fontwell East, then Fontwell West, then turn back and through the residential village with speed humps in order to access the sites. This will result in increased traffic, noise, vibration and pollution in a residential street. It also increases the traffic load a little more on roundabouts already over capacity and about to be even more loaded.</p>		
12.18	Alternative proposed route	<p>WPC attaches a representation (as Appendix 6) made by PSM Ansell, a retired highway engineer, which it supports:</p> <p>WPC confirms its agreement to this proposed alternative route suggested by Mr Ansell. In particular, we would highlight that this route would be more in compliance with the seven objectives for the Scheme set out in the Statutory Consultation Brochure³⁹.</p>		
12.19	SCHEME OBJECTIVES	<p>In relation to these objectives, WPC would highlight that the Scheme fails to meet these as follows:</p> <ol style="list-style-type: none"> 1. Reduced travel time and congestion – As stated above, NH has not proven a reduction in travel time for its chosen journey, from Brighton to Portsmouth, as NH has not measured or forecasted this journey time. Reduced congestion is also not proven as the two adjoining congestion spots, Fontwell and Worthing, are outside the Scheme boundaries. 2. Improve Capacity of A27, help local planning authorities manage impact of economic growth – Because journey times and reliability are not - cannot be - evidenced as improving, this is not met. 		

³⁹ See Page 8: https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-statutory-consultation-january/supporting_documents/Arundel%20Bypass%20Statutory%20Consultation%20brochure.pdf

		<p>3. Minimise environmental impact – The Scheme is the longest route of the options considered by NH and most damages the environment, so cannot minimise environmental impact compared with other options, especially online options.</p> <p>4. Improve road user safety – The Scheme does not encourage local road users to use the A27 rather than local routes. Indeed, the reverse. For example, The Causeway, Ford Road, Tye Lane and Arundel Road off-slip junction removal all reduce local access, without any replacement. In respect of safety, WPC note that the Scoping Report prepared by NH states⁴⁰: <i>'The Stage 2 Arundel bypass Further Consultation brochure states that the proposed scheme (option 5BV1 (Grey) route) would result in 676 accidents being avoided when calculated over a 60-year period (from opening in 2027 to 2085) compared to a 'do minimum scenario where 55,484 accidents would occur.'</i></p> <p>This is saying that by doing little there is likely to be a total of 55,484 accidents in a 60-year period. That is approx. 925 per year or some 18 accidents per week. However, when the Scheme is constructed, then the number of accidents will fall by 676 to 54,808 over the same 60-year period. This equates to 913 per year or 17 per week. WPC note that⁴¹ between 1999 – 2020 over the existing A27 from east of the Northern Fontwell roundabout (where the Scheme is supposed to re-join the existing A27) to the Crossbush interchange i.e., the length of A27 affected by the bypass scheme there were a total of 284 accidents over a period of 22 years. Of these 215 are classed as 'minor', 59 as serious and 10 fatal. So, there is a mismatch; the actual data shows some 13 accidents per year over the past 22 years while NH is predicting 913 per year with the Scheme. NH's calculations suggest that the Scheme would cause additional accidents rather than reducing these when compared to empirical data.</p> <p>5. Improve accessibility of local services and facilities – This is not the case as local access is demonstrably reduced by the Scheme.</p> <p>6. Consideration of communities and customers – 93% do not support the route choice for the Scheme⁴², and no statutory consultee support.</p> <p>7. Respect the South Downs National Park – There is no evidence that traffic will be drawn out of the South Downs National Park. As noted above, SDNPA proposes to object to the Scheme, noting (in the Executive Summary of its draft representation) that there <i>"remains significant adverse impacts on the setting of the National Park as well as potential for direct impact within the National Park itself"</i>.</p>
<p>13. Miscellaneous</p>		
13.1	Lack of detail in PEIR	<p>As alluded to in numerous sections of this document, NH have failed to provide sufficient detail to enable consultees such as WPC the opportunity to respond.</p> <p>As set out above, the legal requirement for a PEIR is that it provides sufficient information that <i>"is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development"</i>. WPC is strongly of the view that this</p>

⁴⁰ Dated 25 February 2021, para 5.7.10 see <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010045/TR010045-000009-A27%20Arundel%20Bypass%20EIA%20Scoping%20Report.pdf>

⁴¹ See www.crashmap.co.uk/Search

⁴² See second bullet, *Feedback we received from the Further Consultation* – only 7% favoured grey - <https://highwaysengland.citizenspace.com/he/a27-arundel-bypass-preferred-route-announcement/>

		PEIR does not meet the statutory test. As it stands, there are many areas where WPC has not been able to make representations with certainty due to a lack of information. It is unreasonable to expect WPC to await a full application to make comments, when the scheme will essentially be a fait accompli. As it stands, in light of this lack of information, WPC consider that NH's PEIR is insufficient and as such any application for the Scheme should not be accepted for examination by the Planning Inspectorate unless a new, fully evidenced PEIR can be produced.
13.2	Green Bridges	WPC note that a green bridge is offered at Binsted Lane, in accordance with the preferred option d set out in paragraph 3.5.31 of the PEIR. If green bridges can be demonstrated to be effective mitigation, then WPC has no issue with having one at this location. However, no such demonstration has been provided and NH must make its case in the ES.
13.3	Error in PEIR	NH should note a mistake in the PEIR, Non Technical Summary, Chapter 1. Section 'Tye Lane to Binsted Rife' states " <i>Avisford Park Road, which is used to access the Avisford Park Golf Club, would be realigned 50m north of its current alignment</i> ". Avisford Park Road is not " <i>used to access Avisford Park Golf Club</i> " but is a residential road hundreds of metres to the south. NH should amend this to: ' <i>The present access road to Avisford Park Golf Club would be realigned</i> '.
13.4	Failure to consider Neighbourhood plan	As alluded to in the Ecology comments, WPC note that NH have completely failed to consider the relevant policies of the Walberton Neighbourhood Development Plan. Under section 38(3A) of the Planning and Compulsory Purchase Act 2004, neighbourhood plans form part of the development plan for the area that these relate to. However, NH completely overlook this plan when listing the relevant local planning policy at paragraph 1.3.14 of the PEIR. In addition, in NH's Scoping Report, which is referred to in paragraph 1.3.15 as containing relevant policy, only the Arundel Neighbourhood Plan is referred to.
14. Mitigation		
14.1	Suggested Mitigation	WPC attach to this representation (as Appendix 7) a list of suggested mitigation measures.
14.2	Yapton Lane Compound	WPC notes that the proposed temporary construction compound to be located at Yapton Lane is likely to result in loss or damage to heritage assets in this location. This loss should be mitigated against particularly given the concern raised on this topic by West Sussex County Council, who state in their draft consultation response that " <i>The necessity of the loss of these archaeological features, purely for the siting of a temporary construction compound, has not been demonstrated to the County Council and alternative locations for this compound should be explored</i> " (see comments above at 7.5).

Glossary	
Term	Meaning
PEIR	Preliminary Environmental Information Report prepared by NH for the Scheme
SDNP	South Downs National Park
NH	National Highways
ES	Environmental Statement
FCS	Favourable Conservation Status
NPSNN	National Policy Statement for National Networks 2014
Scheme	The proposed A27 Arundel Bypass scheme, utilising the proposed "Grey route".

Whilst WPC has included independent reports submitted to WPC by third party representations, and accept them as valid reflections of opinion based on available information at time of submission, assertions and conclusions may not have been independently verified in their entirety and WPC does not take responsibility for any inaccuracies therein

Appendix 1: *Turning a blind eye to bats*, Emma Tristram

Appendix 2: PEIR Chapter 13 Notes

Appendix 3: BCR Letter

Appendix 4: Traffic Note

Appendix 5: Dr Mike Davis Letter

Appendix 6: PSM Ansell Letter

Appendix 7: Mitigation List