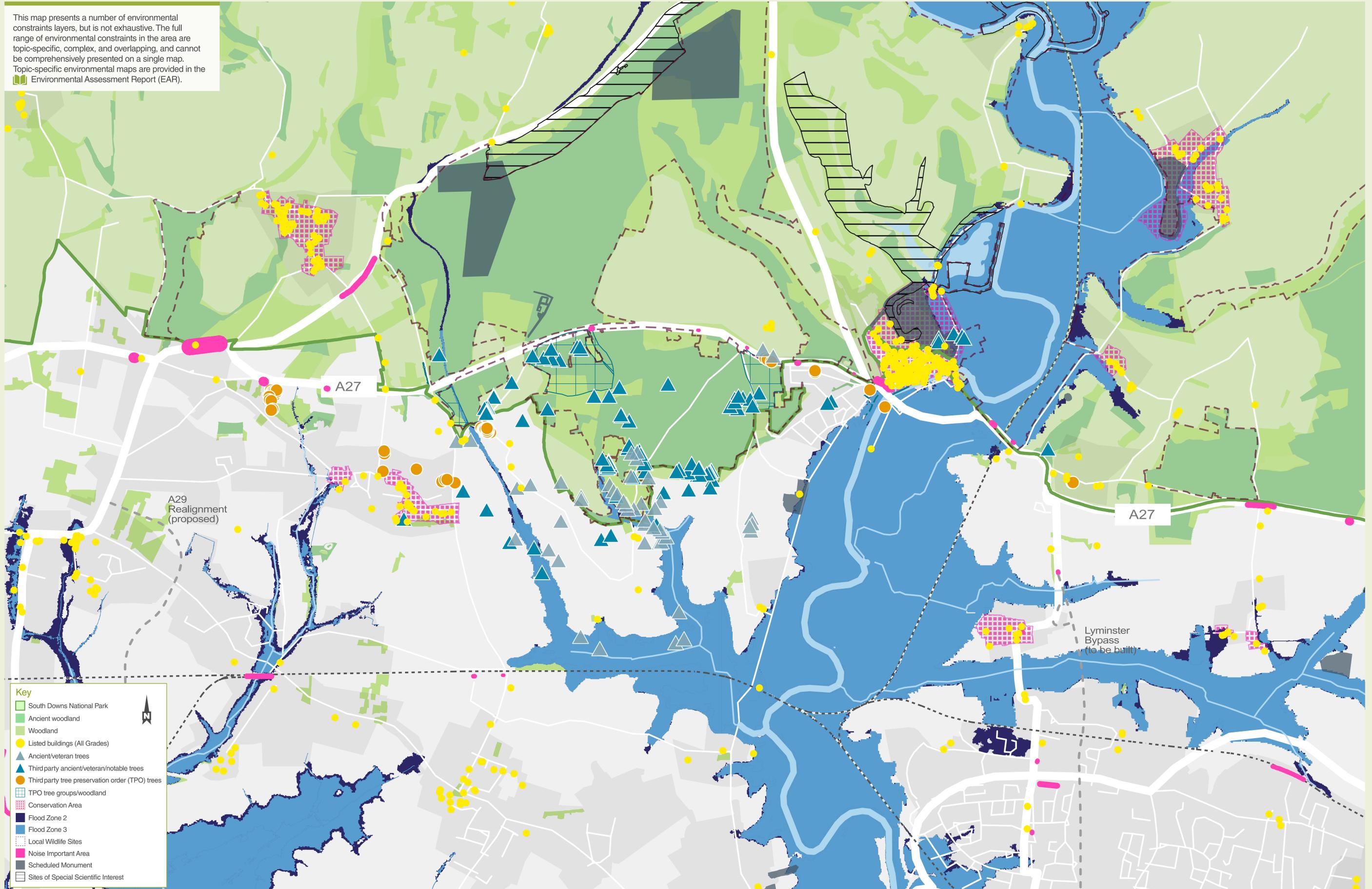


This map presents a number of environmental constraints layers, but is not exhaustive. The full range of environmental constraints in the area are topic-specific, complex, and overlapping, and cannot be comprehensively presented on a single map. Topic-specific environmental maps are provided in the Environmental Assessment Report (EAR).



Key

- South Downs National Park
- Ancient woodland
- Woodland
- Listed buildings (All Grades)
- Ancient/veteran trees
- Third party ancient/veteran/notable trees
- Third party tree preservation order (TPO) trees
- TPO tree groups/woodland
- Conservation Area
- Flood Zone 2
- Flood Zone 3
- Local Wildlife Sites
- Noise Important Area
- Scheduled Monument
- Sites of Special Scientific Interest

Objective	Cyan (Option 1V5)	Beige (Option 1V9)	Crimson (Option 3V1)	Magenta (Option 4/5AV1)	Amber (Option 4/5AV2)	Grey (Option 5BV1)
<p>Improve the safety of travellers along the A27 and consequently the wider local road network</p>	<p>For the Cyan and Beige options, traffic which currently uses local roads to avoid congestion would use the improved A27 instead, leading to fewer accidents. However, the benefit would be lower than the Magenta, Amber and Grey options. For the Crimson option, safety improves to a similar degree as the Cyan and Beige options. The impact is less than the Magenta and Amber options due to the shorter bypass section. For the Magenta, Amber and Grey options, there are significant safety benefits, with the Amber option providing the greatest improvements, as traffic is diverted from the local roads onto the new A27. Accidents avoided are calculated over a 60-year period (from opening in 2026 to 2085) compared to a 'do minimum'¹ scenario where 55,484 accidents would occur.</p> <p>411 ACCIDENTS AVOIDED</p>	<p>397 ACCIDENTS AVOIDED</p>	<p>379 ACCIDENTS AVOIDED</p>	<p>527 ACCIDENTS AVOIDED</p>	<p>727 ACCIDENTS AVOIDED</p>	<p>676 ACCIDENTS AVOIDED</p>
<p>Throughout the design and delivery stages, the scheme should ensure that customers are fully considered</p>	<p>Visual, noise and severance impacts on communities will be mitigated, where possible, but all options would have significant impacts on different communities. For further details, please refer to 'How the options compare: environmental assessment' on pages 24 to 27 in the brochure.</p> <p>All options would have an impact on agricultural land with the Cyan and Beige options taking the least amount of agricultural land. The Grey option would take the most agricultural land, followed by the Magenta, Amber and Crimson options. We will work closely with affected landowners to mitigate the impacts and provide accommodation works through agreement. The Magenta and Grey options would also affect the golf course at Avisford Park. The approximate number of residential properties located within 50m of the scheme footprint are illustrated below.</p> <p>120 RESIDENTIAL PROPERTIES</p> <p>36-month construction timeframe</p>	<p>142 RESIDENTIAL PROPERTIES</p> <p>34-month construction timeframe</p>	<p>3 RESIDENTIAL PROPERTIES</p> <p>36-month construction timeframe</p>	<p>29 RESIDENTIAL PROPERTIES</p> <p>32-month construction timeframe</p>	<p>21 RESIDENTIAL PROPERTIES</p> <p>32-month construction timeframe</p>	<p>41 RESIDENTIAL PROPERTIES</p> <p>36-month construction timeframe</p>
<p>Improve capacity of the A27 whilst supporting local planning authorities to manage the impact of planned economic growth</p>	<p>The Cyan option journey time savings would reduce business costs, save time and provide business and employment opportunities throughout the wider area.</p> <p>Route would operate at around 45-60% capacity in 2041</p>	<p>The Beige option would be close to capacity by 2041, making congestion and delays more likely from that point. All other impacts/benefits similar to the Cyan option.</p> <p>Route would operate at around 85-90% capacity in 2041</p>	<p>Remaining options are, as per the benefits for the Cyan option, although these options would provide additional journey time savings that aid business efficiency particularly in the longer term.</p> <p>Route would operate at around 45-60% capacity in 2041</p>	<p>Route would operate at around 45-60% capacity in 2041</p>	<p>Route would operate at around 45-60% capacity in 2041</p>	<p>Route would operate at around 45-60% capacity in 2041</p>
<p>Reduce congestion, reduce travel time² and improve journey time reliability along the A27</p>	<p>6-8 minutes saved</p>	<p>4-8 minutes saved</p>	<p>6-9 minutes saved</p>	<p>6-10 minutes saved</p>	<p>6-10 minutes saved</p>	<p>6-11 minutes saved</p>
<p>Improve accessibility for all users to local services and facilities</p>	<p>All options would attract traffic onto the A27 and off the local road network, which would improve accessibility to local services and reduce congestion in Arundel. The Beige option would provide more direct access from Arundel onto the A27 than the other options, although the Ford Road roundabout would become congested after 2041.</p> <p>For the Cyan option, a new access to the hospital would be built. For the Beige option, access to the hospital would be away from the new A27 dual carriageway, making it slightly less accessible than the Cyan option. For the Crimson, Magenta, Amber and Grey options access to the hospital remains unchanged.</p>					
<p>Deliver a scheme that minimises environmental impact and seeks to protect and enhance the quality of the surrounding environment through its high-quality design</p>	<p>All six options would have significant potential environmental impacts with the potential to adversely impact biodiversity, heritage features, landscape, soils, noise and hydrology. These impacts could be both direct (such as loss of habitat area) or indirect (such as edge effects and fragmentation of woodland areas). However, some impacts can be mitigated and compensated through design and construction phase environmental management. The design development process takes into account environmental considerations through numerous iterations - from initial concept through to detailed design. Further detail can be found in the Environmental Assessment Report (EAR). Each option would impact³ woodland to a varying degree, as shown below:</p> <p>Impacting 8.37 hectares of woodland</p>	<p>Impacting 7.44 hectares of woodland</p>	<p>Impacting 20.57 hectares of woodland</p>	<p>Impacting 3.51 hectares of woodland</p>	<p>Impacting 5.33 hectares of woodland</p>	<p>Impacting 1.49 hectares of woodland</p>
<p>Respect the South Downs National Park (SDNP) and its special qualities in our decision-making⁴</p>	<p>Reducing congestion on the A27 is likely to reduce traffic on other less suitable routes through the South Downs National Park. However, the scheme could have impacts on landscape, biodiversity, tranquillity, farming and enterprise, recreation and learning, heritage and communities. The South Downs National Park Authority has been engaged from an early stage of the design for the scheme and would continue to be involved in the process. The design of the preferred option would incorporate best practice mitigation measures to minimise any potential effects on the National Park.</p> <p>The additional lanes and additional traffic would generally result in an increase in existing effects on the special qualities of the National Park.</p> <p>1.92km within the SDNP</p>	<p>The new route corridor would require land take from the National Park. The new transport corridor and introduction of traffic in these otherwise tranquil areas would introduce a range of new effects on the special qualities of the National Park and its setting.</p> <p>1.93km within the SDNP</p>	<p>There would be less direct impact on the National Park as the route is outside the National Park boundary, but its setting and views from within the National Park may be affected.</p> <p>2.28km within the SDNP</p>	<p>0.74km within the SDNP</p>	<p>1.97km within the SDNP</p>	<p>0km within the SDNP</p>

¹ 'Do minimum' refers to a scenario where the A27 Arundel Bypass scheme would not go ahead, but this scenario does take into consideration other non-A27 Arundel Bypass improvements that have been considered as part of the traffic forecasts (e.g. Worthing and Lancing scheme and Lyminster Bypass).

² The journey time has been taken between the A27/Blakehurst Lane/Poling Street junction and the A27/A29 junction.

³ Impacted woodland includes all woodland areas identified by the National Forest Inventory. Loss of woodlands is assumed within the scheme footprint. Woodlands at risk is woodlands within 15 meters of the scheme footprint. For further details see Arboriculture Report (an appendix to the EAR).

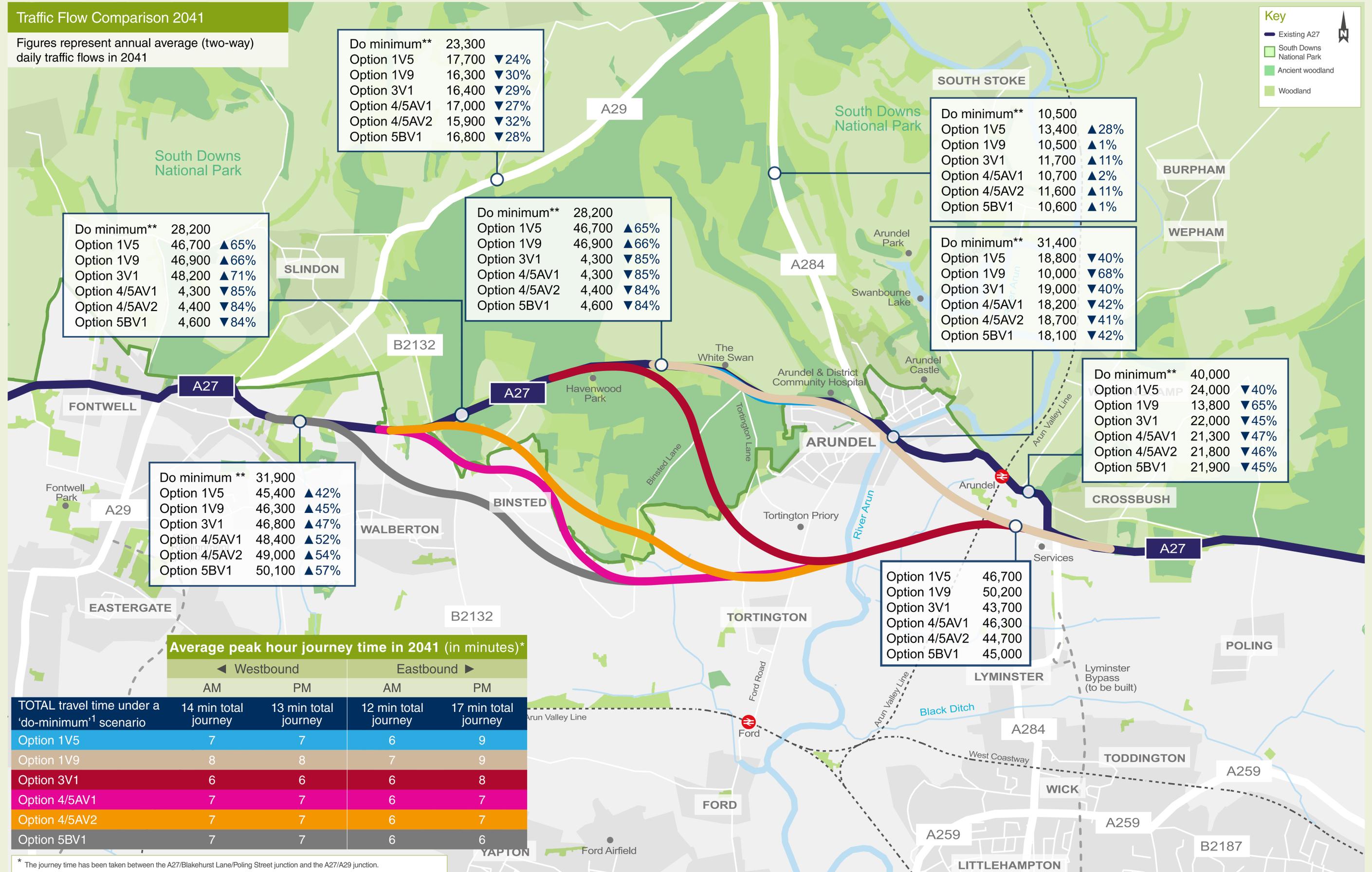
⁴ The special qualities include; diverse, inspirational landscapes and breath-taking views; a rich variety of wildlife and habitats including rare and internationally important species; tranquil and unspoilt places; an environment shaped by centuries of farming and embracing new enterprise, great opportunities for recreational activities and learning experiences, well-conserved historical features and a rich cultural heritage; and distinctive towns and villages and communities with real pride in their area. Further information can be found in the South Downs National Park Special Qualities Assessment (an appendix to the EAR).

This table is a high-level summary of the benefits and impacts of the six options. This information is indicative not exhaustive. The details on how the preferred route will be selected, please see the Interim Scheme Assessment Report (Interim SAR). For more details on any of the following content, please refer to the Interim Scheme Assessment Report (Interim SAR), Combined Modelling and Assessment Report (ComMA) and Environmental Assessment Report (EAR).

A27 Arundel Bypass Comparing the routes: Annual average daily traffic

Traffic Flow Comparison 2041

Figures represent annual average (two-way) daily traffic flows in 2041



Average peak hour journey time in 2041 (in minutes)*

	Westbound		Eastbound	
	AM	PM	AM	PM
TOTAL travel time under a 'do-minimum' ¹ scenario	14 min total journey	13 min total journey	12 min total journey	17 min total journey
Option 1V5	7	7	6	9
Option 1V9	8	8	7	9
Option 3V1	6	6	6	8
Option 4/5AV1	7	7	6	7
Option 4/5AV2	7	7	6	7
Option 5BV1	7	7	6	6

* The journey time has been taken between the A27/Blakehurst Lane/Poling Street junction and the A27/A29 junction.

¹ 'Do minimum' refers to a scenario where the A27 Arundel Bypass would not go ahead, but the scenario does take into consideration other non-A27 Arundel improvements that have been considered as part of the traffic forecasts (e.g. Worthing and Lancing and Lyminster Bypass)