

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 9

9.53 Applicant's comments on the WSP Technical Note in relation
to the Roxton Road Link

Planning Act 2008

Rule 8(1)(k)

Infrastructure Planning (Examination Procedure) Rules
2010

November 2021

Infrastructure Planning

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**The Infrastructure Planning (Examination Procedure)
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**A428 Black Cat to Caxton Gibbet
improvements
Development Consent Order 202[]**

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Author	A428 Black Cat to Caxton Gibbet improvements Project Team, National Highways

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1 Introduction

- 1.1.1 The Applicant has prepared this report in response to a Deadline 3 submission from Duncan and Maxine Buchanan titled 'Alternative highway and drainage options for Roxton Road link (north)' (the WSP Technical Note) with document reference: 1368-WSP-00-XX-RP-CV-0002 dated 09/06/2021' **[REP3-046]**.
- 1.1.2 The WSP Technical Note states that it has been prepared in relation to the Roxton Road link (north), the two attenuation basins either side of the Nagshead Lane link and the two flood compensation areas further north on each side of the Roxton Road link (north).
- 1.1.3 There are three versions of the Roxton Road Link design:
- a. Concept design
 - b. Scheme design (presented at Statutory Consultation)
 - c. Scheme design (presented at Supplementary Consultation and dDCO application)
- 1.1.4 The first section of the WSP Technical Note makes comments about a previous National Highways Technical Note¹, a copy of this is included in Appendix A of the WSP Technical Note **[REP3-046]**. This Technical Note was prepared in response to a previous WSP Technical Note² dated 22 July 2019 (the 2019 Technical Note).
- 1.1.5 Page 1 (i) of the WSP Technical Note acknowledges that the WSP alternative design put forward in the 2019 Technical Note requires more land than the Applicant's Scheme design. It notes that there may be opportunity to refine the WSP drainage design so that it uses less land. A potential way to achieve this is described on page 3 of the WSP Technical Note, but it is not a reduction in land required, rather it proposes to create another drainage pond elsewhere to reduce the land required within Dove Farm, so it is a reallocation rather than a reduction.
- 1.1.6 Page 1 (ii) of the WSP Technical Note states that the WSP alternative design was based on PDF versions of the National Highways Scheme design presented at Statutory Consultation. Whilst that may be the case, the comparisons between the two designs were made using PDF versions of both. The comparison measurements, whilst they may have been different if made using CAD versions of the drawings, are relative and measurements between the two were possible by calibrating them against the scale bars included on the drawings. It is the Applicant's view that the WSP alternative design does use more land than the Applicant's original.

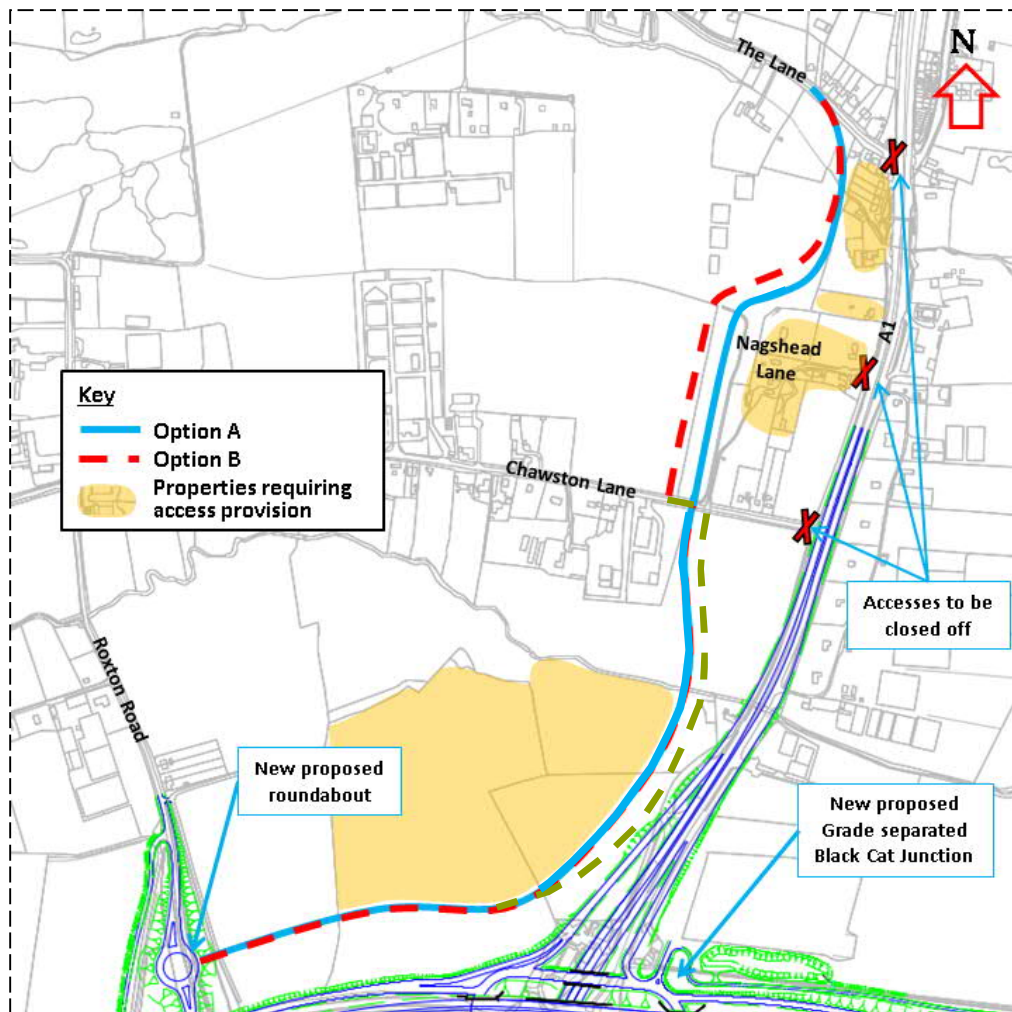
¹ Document reference - HE551495-ACM-GEN-ZN1_SR_SR02_ZZ-RP-CH-0001

² Document reference - 1368-WSP-00-XX-RP-CV-0001

- 1.1.7 Page 2 (iii) of the WSP Technical Note suggests that although the WSP alternative design is closer to residential properties, this is localised and is not considered significant, but that if it was significant then noise mitigation could be provided. There is no noise modelling to support this assertion. Also, there is no acknowledgement that if noise mitigation were needed it could result in additional land take. It is the Applicant's view that noise or any other impact should be addressed through design rather than mitigation where reasonable and practicable to do so.
- 1.1.8 Page 2 (iv) of the WSP Technical Note suggests that although the WSP alternative design requires the removal of an additional 25m of existing hedge, this is localised and not considered significant, but could be addressed through localised landscaping works. There is no acknowledgement that if such mitigation were needed it could result in additional land take. It is the Applicant's view that impacts on the landscape or any other impact should be addressed through design rather than mitigation where reasonable and practicable to do so.
- 1.1.9 The WSP Technical Note then details a further review carried out in June 2021 and queries which alternative options have been assessed as part of the design. The areas considered are alternative options/ corridors for the Roxton Road Link, drainage proposals and flood compensations areas. These are considered further below.

1.2 Alternatives options/corridors for Roxton Road link

- 1.2.1 The WSP Technical Note considers that there has been a lack of alternative options/ corridors for the Roxton Road Link. The Applicant's concept design of the Roxton Road link used a different alignment north of Chawston Lane. This used a straight section of road on a north-south alignment as it crossed Chawston Lane and changed the priorities where it met Chawston Lane, with the new road having priority. This would have resulted in high vehicle speeds. An opportunity to change the alignment was taken, introducing a staggered junction at Chawston Lane. This had several additional benefits including:
- a. Lower radius speed control bends between Chawston Lane and The Lane.
 - b. Allowed a natural change of speed limit between the southern section of the Roxton Road link and the northern section.
 - c. Moved the road away from residential properties on Chawston Lane and Nagshead Lane, particularly Scuttle Cottage, a Grade II listed building.



1.2.2

1.2.3

Figure 1.1 illustrates the concept design alignment (shown as Option A) and the Scheme design (shown as Option B). It also illustrates the areas and properties that would be completely cut off due to the closure of accesses onto the A1 northbound carriageway and which need to be catered for as part of the new link road.

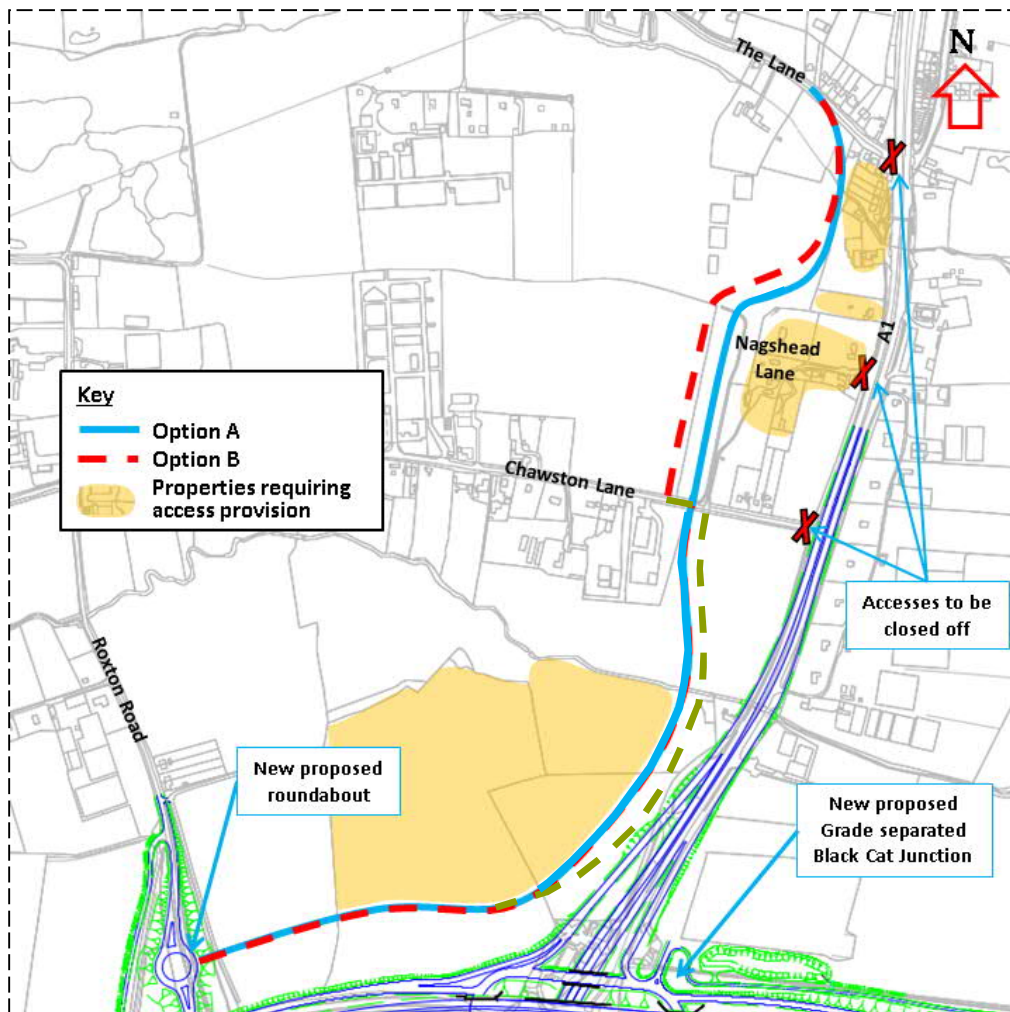


Figure 1.1 – Concept design (Option A) and Scheme design (Option B) indicative centrelines

1.3 Nagshead Lane alternatives

1.3.1 Several alternative arrangements for the Nagshead Lane access were considered as set out below.

Nagshead Lane - Option 1

1.3.2 This option used parts of the properties highlighted in **Figure 1.2** and connected from Nagshead Lane to the Roxton Road Link (north) in the shortest distance possible, thus minimising the land required (approximately 450m² in Property 2 and 190m² in Property 3). Property 2 had two dilapidated non-residential buildings located in the south-east quadrant of the plot and a static caravan in the western part of the plot, the plot was not inhabited and did not appear to be regularly maintained. Property 3 is a narrow plot with an east-facing house and garage at the eastern end of the plot, which are accessed directly from the A1 northbound carriageway. This property also has maintained gardens.

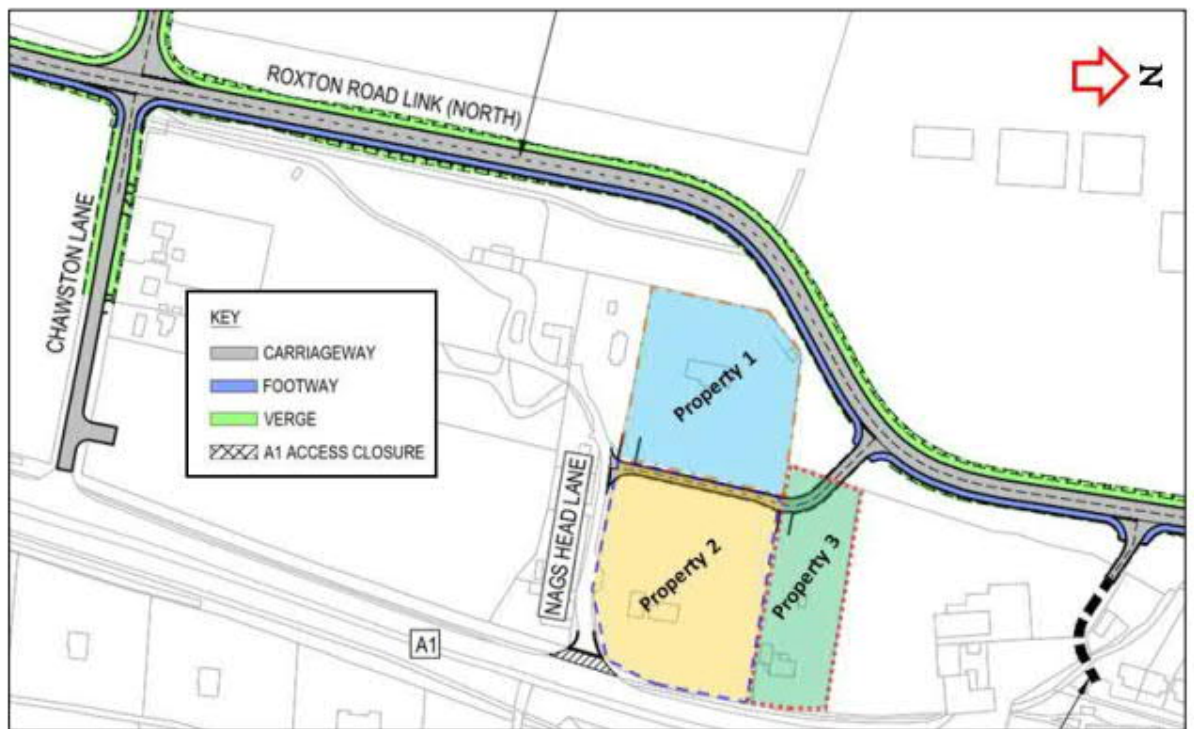


Figure 1.2 – Nagshead Lane Option 1

1.3.3 Option 1 would require the construction of a new driveway in the rear garden of Property 3 in order to access the garage, with a relatively large loss of the rear garden as a result. The garage may also need works too if access is not possible to the front of it via the north side of the property. It would also make vehicular access into Property 1 difficult due to the alignment of the driveway into Property 1.

Nagshead Lane - Option 2

- 1.3.4 As shown in **Figure 1.3** this would create a new section of road running west to east along the north edge of Property 2 (requiring approximately 680m² of land in total from Property 2), which allows access to the front of Property 3 rather than the rear. The turn into Property 3 from Property 2 would be awkward and the problem with the driveway for Property 1 remains.



Figure 1.3 – Nagshead Lane Option 2

Nagshead Lane - Option 3

1.3.5 As shown in **Figure 1.4**, Option 3 follows a similar alignment to Option 1 between the Roxton Road Link (north) and Nagshead Lane, with the only difference being that it has been shifted to the west, so that the centre line of the road follows the land ownership boundary. This means that a similar area of land is required from Properties 1 and 2 i.e. approximately 225m² each and approximately 150m² from Property 3. Access to Property 3 is via an access from the proposed road to the property's back garden, at the property's north-west corner.

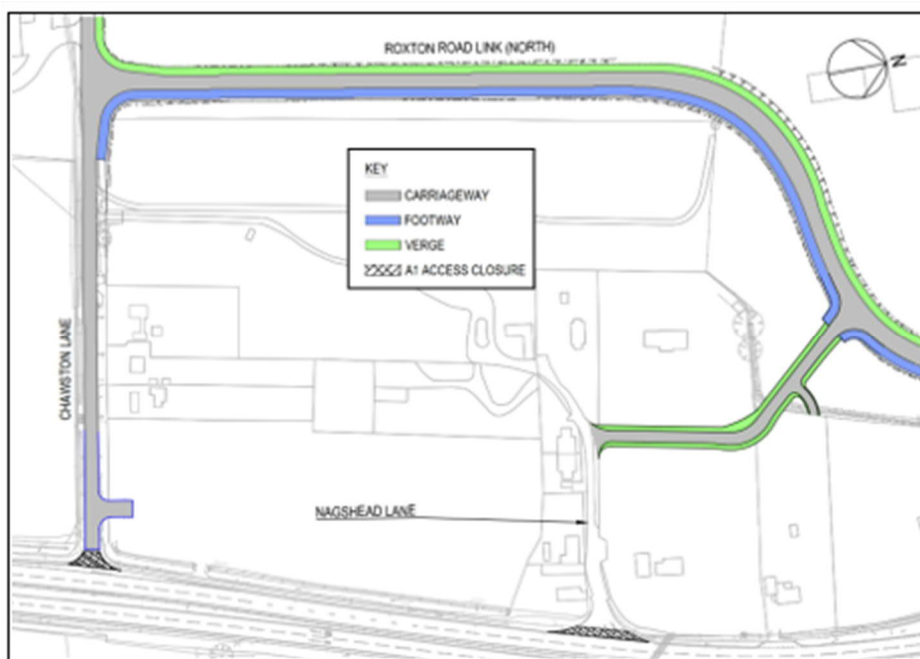


Figure 1.4 – Nagshead Lane Option 3

1.3.6 This option required less carriageway, as the road required for access to Property 3 was removed, but it would still require a driveway to be constructed in Property 3. It reduces the impact on Property 2 by sharing part of the access road with Property 1. This would have required removal of established vegetation along the boundary between property 1 and 2 and would still make vehicular access into Property 1 difficult.

Nagshead Lane - Option 4

1.3.7 As shown in **Figure 1.5**, Option 4 connects to the Roxton Road Link (north) at roughly the same point as the other options. The access then takes an easterly route along the northern side of an existing watercourse, before turning south with a wide radius through the centre of Property 2.

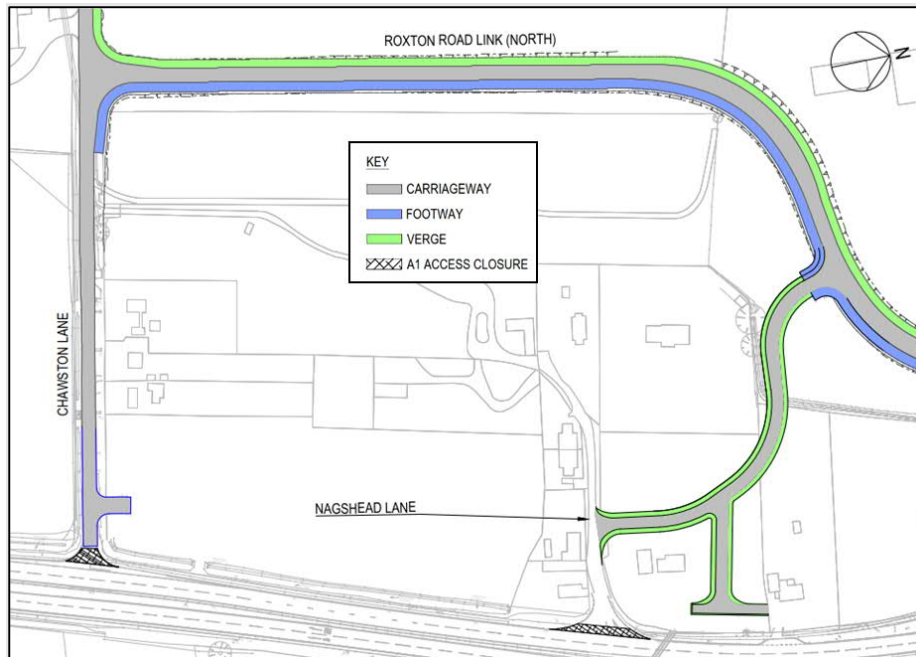


Figure 1.5 – Nagshead Lane Option 4

1.3.8 The alignment chosen for the access within Property 2 follows a similar alignment as the access road provided by the planning application (reference 16/03121/FUL). Access to Property 3 is provided by extending the turning head north to the property boundary. This option does not require removal of vegetation between Properties 1 and 2. The proposed turning head is well located for the provision of vehicular access to the front of Property 3, allowing the owner to use their garage with its current layout. The proposal is aligned with Property 2's development aspirations and would be of significant benefit should a revised planning application successfully come forward. It does however require additional land from Property 2 (approximately 800m² compared to 450m² for Option 1).

Nagshead Lane – further options

1.3.9 Alternatives to the south were considered where access through properties 1, 2 and 3 is avoided altogether. Options 5 and 6 shown in **Figure 1.7** and **Figure 1.8** respectively provide access to Nagshead Lane directly from Chawston Lane from the south. These options will affect other properties, shown in **Figure 1.6**.



Figure 1.6 – Properties mostly affected by Nagshead Lane Options 5 and 6

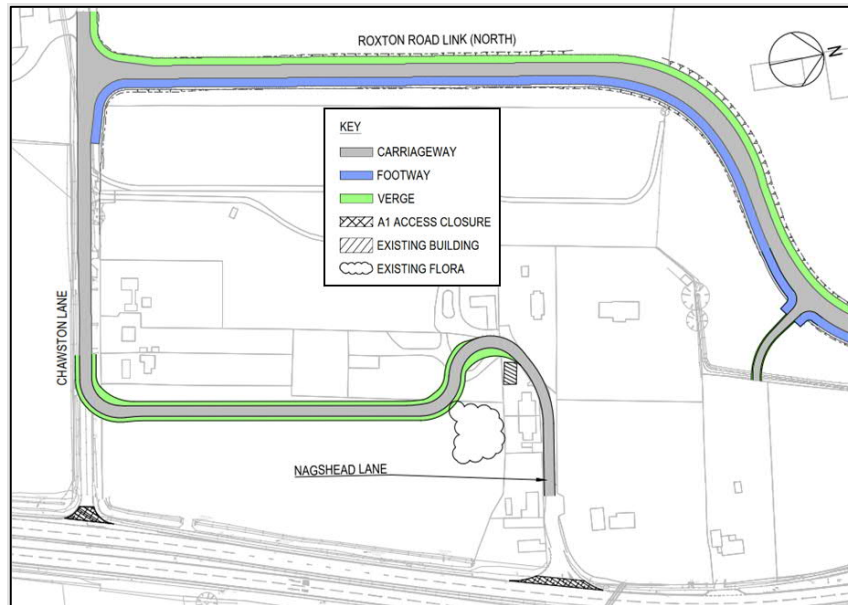


Figure 1.7 – Nagshead Lane Access Option 5

Nagshead Lane - Option 5

1.3.10 **Figure 1.7** shows access to Property 3 provided directly from Roxton Road Link (north), with access to Nagshead Lane being provided directly from the existing Chawston Lane. Option 5 follows an alignment as far west as possible without encroaching over the land plot directly west of Property H and south of Property G. The proposed access connects to the existing Nagshead Lane at its western end, where a double bend is required. It is anticipated that minor improvements to the existing Nagshead Lane will be required as part of this proposal. This option has the following advantages and disadvantages:

Advantages

- a. Most of the land take required is in Property H, which appears to have an agricultural use.
- b. This option would potentially unlock Property H for development opportunity.

Disadvantages

- a. Very poor visibility around the sharp bend due to existing buildings, where the proposed access ties in with the existing Nagshead Lane, would compromise safety for road users.
- b. The proposed access requires a new section of road that is roughly 20% longer than Option 4 (the longest of the previous proposals to the north of Nagshead Lane).
- c. It is anticipated that works will be required in the vicinity of eight dwellings, creating disturbances during construction to a greater number of residents.
- d. It would require acquisition of land from four residential properties (G, F, E and D).

- e. The existing building at the western end of Property D will be extremely close to the proposed access and will be difficult for large vehicles e.g. refuse vehicles to negotiate. This may require extra provisions such as barriers to protect the building and road users.
- f. Residents of properties G, F, E and D will be affected by an increased noise and visual impact due to more traffic using the access in front of their properties.
- g. Access to the garage at Property 3 still requires a new driveway in the rear garden.

Nagshead Lane - Option 6

This uses a similar approach to Option 5, with the exception that the south-north alignment is placed as far east as possible, parallel to the A1. See **Figure 1.8**.

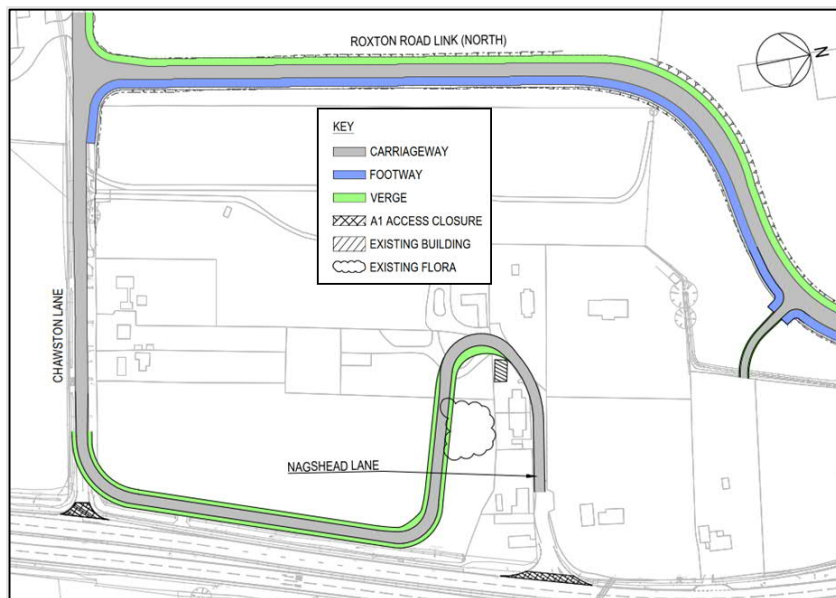


Figure 1.8 – Nagshead Lane Access Option 6

- 1.3.11 Access to Property 3 is provided directly from Roxton Road Link (north), with access to Nagshead Lane being provided directly from the existing Chawston Lane. Option 6 follows an alignment as far east as possible without encroaching over the land associated with the A1. The proposed access connects to the existing Nagshead Lane at its western end, where a sharp bend is required. It is anticipated that improvements to Nagshead Lane will be required as part of this proposal. This option has the following advantages and disadvantages:

Advantages

- a. Most of the land required is in Property H, which is currently agricultural use.
- b. This option would potentially unlock Property H for development opportunity.

Disadvantages

- a. Poor visibility would compromise safety for road users around the sharp bend at the west end of Nagshead Lane due to the existing buildings blocking sightlines where the proposed access ties in with the existing Nagshead Lane.
- b. The proposed access requires a new section of road that is roughly 55% longer than Option 4.
- c. It is anticipated that works will be required in the vicinity of eight dwellings, creating disturbances during construction to a greater number of residents.
- d. This proposal will affect four residential properties (G, F, E and D).
- e. The existing building at the western end of Property D will be extremely close to the proposed access. This may require extra provisions such as barriers to protect the building and road users and will be difficult for large vehicles e.g. refuse vehicles to negotiate.
- f. Residents of properties G, F, E and D will be affected by an increased noise and visual impact due to more traffic using the access in front of their properties.
- g. Land is required on the east side of Property H for realignment of the A1 and the A1 northbound on-slip road construction. The addition of the Nagshead Lane access would probably require acquisition of the entire property.
- h. Access to the garage at Property 3 still requires a new driveway in the rear garden.

Recommendation for Nagshead Lane

- 1.3.12 Based on the advantages and disadvantages of all options, it was considered that Option 4 created the least disruption to existing residents, their homes and use of their land. Option 4 was therefore taken forward as the preferred solution.

Improvement of existing roads

- 1.3.13 Improvement of the existing roads in the area of Wyboston and Chawston was considered as an alternative to the new Roxton Road link at an early stage of the design development. The existing roads, i.e. The Lane, Chawston Lane and Roxton Road, are in many places less than 5m wide and typically have no footway. Without improvement these roads are not suitable to cater for large vehicles such as those from the HE Payne haulage yard on The Lane or the Wernick Hire yard on Chawston Lane, who would be forced to use them by the closure of the accesses onto the A1 northbound carriageway. Improvement of the existing roads would need to include widening to a minimum width of 6m (increased width would be needed at bends) and potentially a new footway/cycleway would be needed on one side of the widened road so that pedestrians and cyclists are not forced to use the road.
- 1.3.14 The lengths of road that would need to be widened are summarised in **Table 1-1** below.

Table 1-1 – Existing sections of road requiring upgrade/widening

Road name	Existing width (m)	Length (m)	Area of new carriageway(m ²)	Area of new footway (m ²)
Roxton Road	5.4 (min 5)	1500	900	6000
Chawston Lane	5.4	430	258	1720
The Lane	5 (min 4.8)	1005	1005	4020

1.3.15 The areas of widened carriageway do not take account of the widening that would be required for long or large vehicles at bends. The area of new footway/cycleway assumes a 4m wide footway/cycleway with no separation from the carriageway. To construct the widening would in places require compulsory acquisition of the frontages of residential and commercial properties along the three roads. This would affect approximately 50 properties, the majority of which are residential. Along the affected section of The Lane there is a Scheduled Monument (a moated enclosure and associated building platforms) and a Grade II listed building (Heddings Farmhouse) and on Chawston Lane there are four Grade II listed buildings (Holly Cottage, Chawston Lodge, Laburnam Cottage and Claygates).

1.3.16 In addition to the impact that widening of the existing roads would have on a large number of properties, there would still be a need to construct approximately 780m of new road between Roxton Road roundabout and the Gleneden Plant Hire site and land to the south, which currently have direct access to the A1 northbound carriageway. A new separate access for the Nagshead Lane properties and residential properties to the north whose access is directly onto the A1 would still be needed as well. These are not catered for by solely widening the existing roads and for all these reasons the widening of the existing roads was not taken forward as a reasonable solution.

Alternative new road to the west

1.3.17 The WSP Technical Note has suggested an alternative location for a new road starting further west along The Lane. This was commented on in the response to Written Representations submitted by the Applicant at Deadline 3 [REP3-008]. A small version of this is copied below in **Figure 1.9**.

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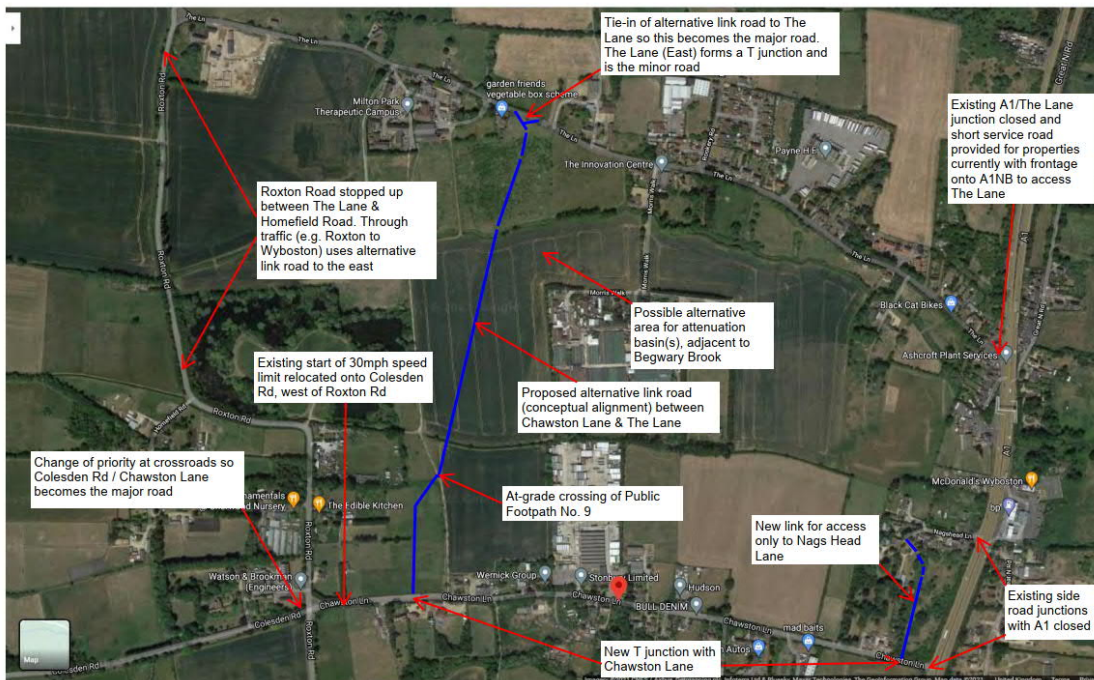


Figure 1.9 – Alternative alignment from WSP Technical Note

- 1.3.18 An alternative such as this was not developed because a new road to the west would have to avoid the site of the scheduled monument immediately west of Dove Farm, so would be too remote to provide reasonable access for the Nagshead Lane properties and the residential properties along the A1 to the north, whose access arrangements are discussed in Section 1.3 . An option like this would not provide access to the Gleneden site. Rather than being on the edge of a rural settlement, a route to the west would cut through open fields and would sever public footpath No. 9, which is designated as the Ouse Valley Way.
- 1.3.19 A route to the west would also involve the following:
- a. Widening of The Lane over a length of at least 750m from the HE Payne haulage yard and inclusion of a footway/cycleway. This would require acquisition of residential gardens on one or both sides of the road fronting The Lane.
 - b. Widening of Chawston Lane from the Wernick Plant hire yard over a length of 470m (please note that this is different to the value of 770m quoted in REP3-008, which was an error and a repetition of the 770m value quoted below relating to the sweeper hire premises) to the junction of Chawston Lane and Roxton Road and inclusion of a footway/cycleway. This would in places require acquisition of residential gardens and parts of commercial properties on one or both sides of the road fronting Chawston Lane. Widening may even be required further east over approximately 770m, to the road sweeper hire premises.

- c. Roxton Road would need to be widened over a length of approximately 470m and include a footway/cycleway, from its junction with Chawston Lane through to the tie-in with the proposed roundabout that is being provided as part of the Scheme. This would require acquisition of agricultural land on one or both sides of the road and potentially parts of residential and commercial properties fronting Roxton Road.
- d. South Brook passes beneath this section of Roxton Road and the culvert carrying South Brook would need to be extended to accommodate the road widening.
- e. The proposal for Nags Head Lane would require acquisition of parts of residential gardens and also part of the field to the south. It would not provide a suitable route for the reasons discussed in Section 1.3.
- f. The proposal caters for the bungalows that front the A1 just south of The Lane but does not cater for access from the two residential properties further south, but north of Nags Head Lane. These two properties would either be completely isolated and would have to be acquired by the Applicant, or would require continued direct access to the A1 northbound carriageway. Neither scenario is considered acceptable.
- g. The proposed main route would sever a public footpath and would cross diagonally across agricultural fields.
- h. The proposal ignores that access is still needed for properties to the south, including the Gleneden plant hire site and adjoining land, which currently have direct access to the A1 northbound carriageway, just north of the existing Black Cat roundabout. A new route of at least 780m is needed to provide this access regardless of where the route to The Lane is to be located.

1.3.20 To summarise, although there are alternative routes, including the WSP alternative, none of these would be as efficient or desirable in terms of effectiveness in providing one single route to give access to as many properties as possible, minimising environmental effects as far as possible and using the least amount of land as reasonably practicable.

1.4 Drainage Proposals

1.4.1 The WSP Technical Note puts forward a suggestion to alter the preliminary drainage design of the Roxton Road link (north). This currently drains the Roxton Road link between a point just north of South Brook through to the tie-in with The Lane and includes two attenuation basins to allow surface water runoff from the new road to be stored and discharged into Begwary Brook at a rate that mimics the natural runoff rates.

- 1.4.2 The alternative proposal is to split the highway catchment in order to discharge some of the surface water runoff to South Brook. The purpose of this is to reduce the volume of attenuation storage needed for the basins located in Dove Farm. This would require an additional attenuation basin to be located between South Brook and Chawston Lane and the WSP Technical Note suggests a location to the west of the new road. Although this area is within the current Order limits it is outside the area identified as permanent acquisition and would require a change to the DCO application. The basin cannot be located in land to the east of the new road as this is being used as flood plain compensation for the impact on South Brook of the A1 realignment and construction of the Roxton Road Link.
- 1.4.3 This alternative was not considered as part of the preliminary design because it was possible to accommodate the two ponds at Dove Farm, between the new road and the rear of neighbouring properties. It is more efficient in terms of maintaining the ponds to locate them close together and in this case, they can be accommodated in a space that would otherwise be difficult to use for agricultural purposes.

1.5 Flood compensation areas

- 1.5.1 The floodplain compensation that has been provided to mitigate the impact of the Roxton Road Link on the floodplain associated with Begwary Brook has been located as close as possible to the area of floodplain that has been lost. Flood compensation is provided on a level for level, volume for volume basis for the displacement of floodplain storage due to the Scheme.
- 1.5.2 Floodplain compensation is an Environment Agency requirement for a Scheme to demonstrate compliance with the National Policy Statement for National Networks (NPS NN). Paragraphs 5.90 to 5.115 set out the requirement to demonstrate that the project will be safe for its lifetime, without increasing flood risk elsewhere.

1.6 Conclusion

- 1.6.1 This note demonstrates that alternative alignments and alternative solutions to solve the severance issues created by closing The Lane, Nagshead Lane, Chawston Lane and direct property accesses to the A1 northbound carriageway have been fully considered.
- 1.6.2 All alternatives would involve the need to acquire land, either by agreement or by compulsory acquisition.
- 1.6.3 The option taken forward is the most suitable and minimises land take and environmental impacts. The WSP alternative options are not preferable for a number of reasons as identified in this note.