

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6

6.1 Environmental Statement

Chapter 3 – Assessment of Alternatives

APFP Regulation 5(2)(a)

Planning Act 2008

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**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

A47 Wansford to Sutton
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ENVIRONMENTAL STATEMENT
Chapter 3 – Assessment of Alternatives

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3. Assessment of alternatives

3.1. Assessment Methodology

3.1.1. The Proposed Scheme has been subject to a process of staged development and evolution. The main development stages were:

- identification of the need for the project
- options identification
- options selection
- preferred route announcement (PRA)
- post PRA design development for statutory consultation
- continued design development post statutory consultation

3.1.2. In seeking to resolve the transport problem between Wansford and Sutton (further detail on issues provided in Chapter 2 – The Proposed Scheme (**TR010039/APP/6.1**)), ten potential options were developed. These were assessed to identify their performance against environmental, engineering, transportation and economic criteria so that they could be compared and contrasted.

3.1.3. Three of the 10 options were taken forward for more detailed assessment and non-statutory public consultation due to performance on environment, engineering, traffic and economics. The three options, as identified in the Scheme Assessment Report, were option 1, option 8 and option 10¹. For the purposes of this summary, the options have been renumbered 1 to 3 (as shown in Figure 3.1, 3.2 and 3.3 below)

- Option 1: Online Dualling plus Free flow Slip from A1 Southbound.
- Option 2: Part Offline to the North Part Offline to the South plus Free flow slip road from the A1 Southbound.
- Option 3: Offline to the North plus Free flow slip road from the A1 Southbound.

3.1.4. These options can be reviewed in the Scheme Assessment Report (2017) (**TR010039/APP/7.9**).

¹ Option 2 and Option 5 were considered similar; therefore the option was moved slightly north and named Option 10. This is explained further in the Scheme Assessment Report.

3.2. Reasonable alternatives studied

- 3.2.1. All three options that were selected were able to resolve the transport problem and allow a safer, swifter movement of traffic along the route corridor.

Option 1

- 3.2.2. Option 1 proposed realigning the southbound slip road from the A1 to provide a free flow link between the A1 southbound carriageway and the proposed new eastbound carriageway of the A47. The slip road from the A1 would also be connected to the existing roundabout to accommodate A47 westbound traffic. The proposed A47 dual carriageway would be 2.5km in length and would be constructed on the line of the existing A47. It would tie into the existing carriageway at the eastern roundabout at the A1 / A47 interchange and at the Nene Way roundabout at the eastern end of the scheme. To the west of Sutton Heath Road, the route would encroach on the scheduled monument by approximately 3m over a length of 180m. See Figure 3-1 overleaf.
- 3.2.3. This option was identified to have minimal environmental impact, but The Scheme Assessment Report identified that during the construction this option could have a larger impact on the cultural heritage and had the potential to cause disruption as agricultural traffic may be forced to mix with long-distance traffic and create 'rat-runs' through local villages. Option 1 was identified by The Scheme Assessment Report as the second preferred option for the environment.
- 3.2.4. The initial transportation assessment identified that this option offered shorter routes and provided quicker journey times. The Engineering assessment stated that this option would be largely online and therefore be more disruptive, requiring extensive traffic management and extensive use of traffic diversions. The economic assessment ranked this option low due to the impact it would have on construction and traffic management.



Figure 3-1: Option 1

Option 2

- 3.2.5. Similarly option 2 would include the southbound slip road at western end of the routes as described in 3.2.3 for Option 1.
- 3.2.6. Option 2 proposes that the dual carriageway would be 2.5km in length and would be constructed part offline to the north and part offline to the south of the existing A47. The option would be offline to the north of the petrol filling station for approximately the first 25% of the route. The route would then cross over the existing carriageway and go offline to the south of the existing A47 through Sutton Meadows CWS to a point approximately 25m from the River Nene. The route would then pass 45m south of the existing A47/Sutton Heath Road junction and south of the property called Deep Springs. It would then cross at grade the side road called Sutton Drift approximately 60m south of the existing A47 and across agricultural land before tying in to the existing A47 at the Nene Way roundabout. See Figure 3.2 overleaf.
- 3.2.7. Option 2 was identified to solve the main traffic and safety problems along the route and would have significant advantages in terms of environmental impact when compared to Option 3 and would have less impact during construction when compared to Option 1. Option 2 was therefore identified as the preferred route.
- 3.2.8. The transportation assessment in the Scheme Assessment Report identified this option as being the one of the best performing option due to the shorter routes, which offers quicker journey times. The engineering assessment stated that option 2 is part offline and therefore would cause some disruption during construction and requires a larger area of land, which brings the route closer to

the River Nene and avoids the area designated as a scheduled monument. The economic assessment ranked option 2 as because construction costs are likely to be lower owing to the majority of the proposed option being offline. Option 2 was ranked third in the environmental assessment with the impact on landscape, water and environment and heritage of historic resources being slightly adverse.

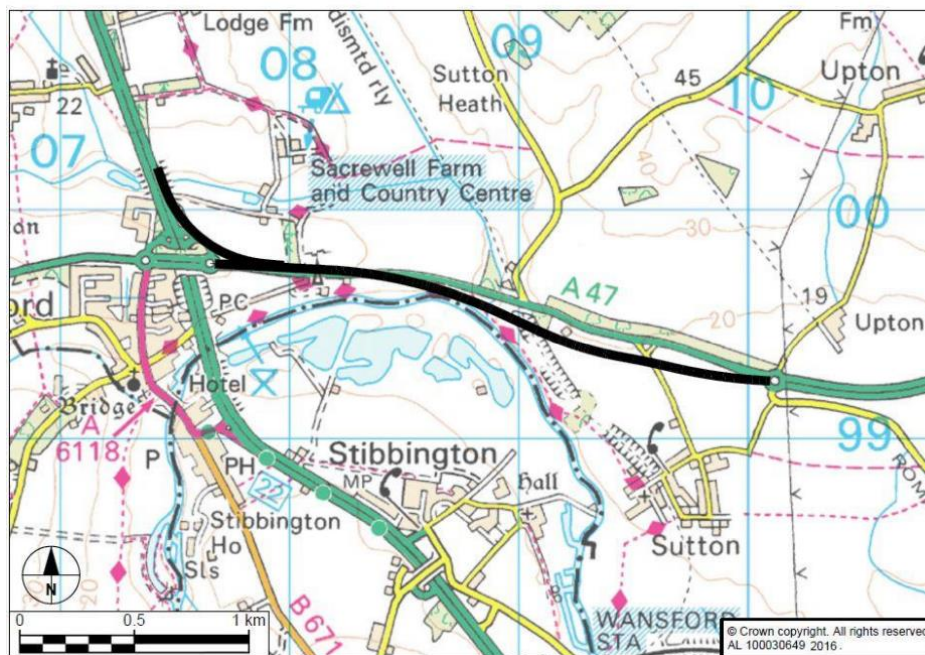


Figure 3-2: Option 2

Option 3

- 3.2.9. Similarly, Option 3 would include the southbound slip road at western end of the routes as described in 3.2.3 for Option 1.
- 3.2.10. Option 3 proposes that the dual carriageway would be 2.5km in length and would be constructed offline to the north of the existing A47.
- 3.2.11. Option 3 proposes that the A47 would pass 46m to the north of the existing petrol filling station and runs across agricultural land towards Sutton Heath Road. The proposed route would go through the scheduled monument and the northern boundary of the route would be up to 50m inside the boundary of the scheduled monument over a distance of 200m and would just cross the southern tip of the Site of Special Scientific Interest (SSSI). After passing Sutton Heath Road the route would continue at grade 60m to the north of the existing A47 and across agricultural fields until tying in with the existing at grade A47 roundabout at Nene Way.
- 3.2.12. This option was likely to have less impact on the existing carriageway but would have a larger impact on the scheduled monument. This option was assessed to

have minor adverse air quality effects and due to the impact on the SSSI it would have a major adverse impact on biodiversity. This option was identified as being the least preferred method for the environment.



Figure 3-3: Option 3

3.3. Justification for chosen option

3.3.1. On completion of the 2017 non-statutory public consultation, it was deemed Option 2 solved the main traffic and safety problems along the route. It had significant advantages in terms of environmental impacts when compared to Option 3 and would have less impact during construction when compared to Option 1.

3.3.2. Key concerns raised at non-statutory public consultation had influenced the amendments to Option 2. The new dual carriageway was moved as close as possible to the southern edge of the existing A47 at the eastern end of the Scheme. This would:

- increase the distance from the new road to both the River Nene and village of Sutton
- reduce the amount of land-take required
- allow for the easiest connecting of existing side roads to the new A47
- allow for most of the existing A47 to remain in place for local traffic and non-motorised group such as pedestrians, cyclists and equestrians.

3.3.3. The chosen option was selected as this option solves the main traffic and safety problems along the route. The potential significant effects on the environment were taken into account when assessing options and Option 2 was deemed to

have less environmental impact than Option 3 and less impact during construction than Option 1, outlined within the preferred route announcement leaflet (link below).

- 3.3.4. In August 2017, a modified version of Option 2 was announced as the preferred route as shown in Figure 3.4.



Figure 3-4: The preferred option as presented in August 2017

- 3.3.5. Further information on the process is reported here:

Preferred Route Announcement (2017) (Consultation Report Annex A (TR010039/APP/5.2) Section 3) and also via the following link:

<https://s3.eu-west-2.amazonaws.com/assets.highwaysengland.co.uk/roads/road-projects/A47+Wansford+to+Sutton+dualling/Appendix+S+Wansford+PRA+Leaflet.pdf>

EIA Scoping Report (February 2018) (TR010039/APP/6.5) and also via the following link:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010039/TR010039-000017-WANS%20-%20Scoping%20Report.pdf>

Preliminary Environmental Information Report (July 2018)

https://highwaysengland.citizenspace.com/he/a47-wansford-to-sutton-statutory-consultation/supporting_documents/A47%20Wansford%20to%20Sutton%20Preliminary%20Environmental%20Information%20Report%20PEIR.pdf

Scheme Assessment Report (February 2018) (**TR010039/APP7.9**) and Appendices (**TR010039/APP7.10**) and also via the following link:

<https://s3.eu-west-2.amazonaws.com/assets.highwaysengland.co.uk/roads/road-projects/A47+Wansford+to+Sutton+dualling/A47+Wansford+-+SGAR+2+-+Scheme+Assessment+Report+final+version.pdf>

Statutory feedback -2018

3.3.6. Statutory consultation on the proposal to upgrade the A47 between Wansford and Sutton was undertaken between September and November 2018. The purpose of the consultation was to seek feedback on the preferred route scheme proposals including the location, purpose and layout of junctions, provisions for walkers and cyclists and environmental impact and mitigation. Figure 3-5 shows the design presented at consultation.

3.3.7. Key themes raised in the responses to the consultation from stakeholders and members of the public included:

- The proposals would make it more difficult for the local community to enter and leave the villages of Sutton and Wansford.
- Opposition to the proposed alignment of the new dual carriageway where it is routed south of the existing A47.
- Concern about the cost of the proposed route alignment, commenting that the 'northern route' would cost less by comparison.
- Concern about the impact of the proposed alignment on the environment in comparison with a 'northern route'.
- Adverse effect on wildlife with the proposed route alignment, which can be avoided by taking the 'northern route'.
- Concern about the destruction of ancient woodland resulting from the proposed route alignment.
- Belief that the chosen route takes the new dual carriageway too close to the River Nene.
- Concern about land-take resulting from the proposed route option. Most of these comments state that the proposed route uses privately owned land of high amenity and environmental value, whereas the 'northern route' would use lower-quality land.

- Concern about an increase in traffic on the new dual carriageway, which would make it more difficult to exit Old North Road, creating a hazard to those living in Wansford.
- Concern regarding safety issues arising from the western roundabout proposals. Many of these believe an increase in traffic on the new dual carriageway would make it more difficult to exit Old North Road and Thackers Close, increasing the likelihood of accidents occurring.
- Concern that congestion would increase at the Nene Way roundabout as a result of the introduction of peak time traffic signals.
- The Nene Way roundabout should be replaced with an alternative junction type. The most common suggestion is an overpass or underpass, or a grade separated junction followed by a dumbbell junction.
- The existing A47 should be used as a road for local traffic, walkers, cyclists and horse-riders with the new dual carriageway built to the north.



Figure 3-5: The proposed design presented at statutory consultation (2018)

3.3.8. Since statutory consultation in 2018 a full design review has taken place to take into consideration the feedback received. Modifications to the design included moving the alignment from the south of the A47 to the north. A design development report was produced in October 2020 to explain the updates to the design and compare with the 2018 Preferred Route. The design development of the chosen option is described in Section 3.4 below and in the Design Development Report 2020 (TR010039/APP/7.11).

3.4. Chosen option design development

2020 Design - Changes following 2018 statutory consultation

- The design developments are outlined in the Scheme Design Report (**TR010039/APP/7.4**), submitted as part of the DCO application. The following key design changes have occurred following the alignment presented at statutory consultation in 2018.
- Proposed A47 dual carriageway mainline west of Sutton Heath Road moved north of the existing A47, due to opposition of the position of the dual carriageway to the south of the existing A47.
- The A47 Nene Way Roundabout relocated (hereafter referred to as the Sutton Heath Roundabout) linking into Sutton Heath Road, Langley Bush Road and the existing A47, due to concern regarding an increase in congestion at the roundabout.
- Closure of the existing access to the A47 from Sutton Heath Road, Church Lane/Upton Road and Sutton Drift as a result of the realignment of the mainline.
- Improvements to the new walking and cycling route connecting Wansford to Sutton. This includes a new underpass at the dismantled railway to connect to Sutton Heath Road. This has been incorporated to address requirements for increased walking, cycling and horse-riding provision for the existing A47.
- Improvements to Upton Drift including limited widening and new passing places
- new safer access to the properties on the A1, north of Windgate Way installation of boundary fencing, safety barriers and signage.

3.4.1. The 2018 design was assessed against the northern alignment developed in 2020, detailed in the design development report (link available in paragraph 3.3.8). Engineering, environment, traffic and costs have been considered in order to determine the best solution. Both the 2018 design and the 2020 northern alignment have been designed to meet the appropriate standards. The 2018 design and the 2020 northern alignment also perform similarly in terms of the environmental topics assessed though the outcome of the assessments suggested that the 2020 northern alignment performs marginally better. Traffic and cost were not differentiating factors between the two designs. Taking into account the feedback to the 2018 statutory consultation and the outcome of the comparative assessment the 2020 northern alignment was taken forward.

3.4.2. As the statutory consultation had taken place in 2018, a Project Update Brochure was produced (Autumn 2020) and circulated within the 2018 consultation zone and to stakeholders. The Project Update Brochure is provided in the Consultation Report Annex L (**TR010039/APP/5.2**) (see Section 2.2.).

3.4.3. A focused statutory consultation was then undertaken between 11th September and 9th October 2020 to consult newly affected parties of the Scheme. Further information is provided in the Consultation Report (**TR010039/APP/5.1**)

Final Changes to the Proposed Scheme in 2021

3.4.4. The feedback received from the previous consultations, together with that from the 2020 engagement, and ongoing engagement has informed the final version of the Proposed Scheme as presented within the application documents which now has a slightly altered alignment in the vicinity of the Scheduled Monument. The most recent changes made to the Proposed Scheme in 2021 include the following:

- inclusion of Water Vole mitigation area to the East of the A1 slip road
- further refinements to include the removal of the A1 Northbound slip road changes
- re - alignment of the carriageway further north, encroaching 9m into the south east corner of the Schedule Monument.

3.4.5. Further environmental assessment has been conducted including discussions with Historic England to enable the alignment to pass through the south east corner of the Scheduled Monument. This has also allowed a reduction in the area required for flood compensation. As a result of this slight change in alignment following responses to the 2020 engagement and to capture any further land interests a further round of targeted statutory consultation was undertaken in late May/early June 2021. Further information is provided in the Consultation Report (**TR010039/APP/5.1**).

3.4.6. The Scheme Design Report (**TR010039/APP/7.3**) provides more detail as to how the design submitted in the DCO application has evolved.

3.5. Conclusion

3.5.1. The Proposed Scheme has been subject to a process of staged development and evolution including the identification of options, option selection and further design development following statutory consultation and ongoing engagement with stakeholders. An assessment of the environmental impacts of the Proposed Scheme was undertaken when assessing each option and at each stage that the scheme was altered.

3.5.2. The chosen option (Option 2) was selected because this option solves the main traffic and safety problems along the route and because Option 2 was deemed to have the least environmental impact when compared with the other options under consideration.

3.5.3. Key concerns raised following non-statutory public consultation have influenced the various amendments to Option 2 which have been made to the Scheme since 2018. The final design of the Proposed Scheme as presented within the application documents is considered to achieve an acceptable balance between the solving the traffic and safety issues along the route of the A47, addressing the interests of stakeholders and minimising the impact of the Scheme on the environment.