
The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order

Applicant's comment on Written Representations by Campaign for Better Transport

Planning Act 2008

Infrastructure Planning

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

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Introduction

This document provides the Applicant's responses in respect of selected issues raised by Campaign for Better Transport in their Written Representation to the Examining Authority dated 30 June 2014. The Written Representation covers many issues. Some of these have been addressed elsewhere (including the Applicant's comments on Relevant Representations, and the Applicant's comments on other Written Representations). Therefore a limited selection of issues raised have been extracted and comments provided.

The points have been responded to where possible in the order they were raised. Each issue, or in some cases a summary of it, is shown in italics.

Applicant's comment on Written Representations

Representation

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| <p>1.1.</p> | <p><i>Future growth in traffic is much less likely than the official forecasts suggest. Although there are some variations in local areas, traffic across England and Great Britain has seen a significant divergence from historical trends in recent years. Nationally and locally, most charts of traffic growth since 2000 show a pattern of this general form of a clear flattening off in traffic growth in the period 2001 to 2006/7; an obvious decline from 2006/7; and a flattening off of this decline with levels remaining broadly stable and similar to 2003.</i></p> |
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Applicant's comment

- 1.1.1. NDR forecasts are built on 2012 base year modelled traffic hence traffic growth prior to 2012 have no impact on our forecasts. Development of base year highway model can be found in Document Reference 5.7.
- 1.1.2. The development of the traffic forecasts are based on the work carried out in creating the demand matrices, as described in Traffic Forecasting Report Doc Ref 5.6. This accounts for the Joint Core Strategy (JCS) spatial allocation of development for which trip generation has been assessed using the TRICS database. The growth has been controlled using the Department for Transport's National Trip End Model (NTEM) and Road Transport Forecast (RTF) databases, but reductions have then been applied for the JCS development trip generation to account for travel plans and the trip distribution for large mixed developments.

- 1.1.3. It is evident that during their consultation for the latest NTEM forecasts, the DfT have taken on board the future development in Norfolk which includes the JCS spatial allocation of development which the NDR models have been controlled to and as a result, the future forecasts are considered to be realistic.
- 1.1.4. In addition Post Opening Project Evaluation (POPE) of major Schemes, meta-analysis 2013 (Highways Agency, 2013) looked at forecasting accuracy by allowing comparisons between the forecast scheme impacts and observed outcomes. It found that the majority of schemes accurately forecast traffic flows (to within +/- 15%), but there is much variability in accuracy between schemes. It also states that there is evidence to suggest that the accuracy of traffic forecasting improved over time.
- 1.1.5. In addition Summary Results of Sensitivity Tests (Document Ref 5.11) contains a number of sensitivity tests to further examine the robustness or sensitivity of the results.

Representation

1.2. *The 2012 National Travel Survey also illustrates how driving patterns are changing on a per-person basis, raising serious questions about national traffic forecasts' reliance on population growth. The number of trips per person has been in steep decline. Each trip has grown longer, but the distance travelled by car is still down. The annual average distance travelled per car has fallen. Car ownership levels are now lower than in 2005.*

Applicant's comment

- 1.2.1. See response to Para 1.1 above.

Representation

1.3. *There is abundant evidence that forecasts have consistently over-estimated traffic growth since the 1980s, particularly when trying to predict long-term trends. This record of forecasts being proved wrong has now led to a near consensus among academics and transport and planning bodies that the methods and assumptions underlying the National Transport Model, which underlies the DfT's road traffic forecasts, need to be examined and revised in order to make the model and forecasts more accurate.*

Applicant's comment

1.3.1. See response to Para 1.1 above.

Representation

1.4. *Figures show that traffic within Norwich has remained fairly static, or even fallen slightly, over the past decade or more. Outside of Norwich traffic levels in Norfolk have also remained fairly static over the past 10 years and are generally below the levels in 2005, the main exception being the A47 west of Postwick.*

Applicant's comment

1.4.1. See response to Para 1.1 above.

Representation

- 1.5. *These trends clearly call into question the wisdom of building a new road here and in this form. Far better would be to take advantage of the 'breathing space' provided by flat traffic levels and put in measures to encourage reductions in driving, rather than road-building measures that are guaranteed to induce new traffic. Any new road capacity required to support the expansion of Norwich could be provided by a smaller road or series of roads without the large cost that the NDR will have. This alternative package could also be designed to minimise induced traffic and to maximise walking, cycling and public transport use.*

Applicant's comment

- 1.5.1. Alternatives to NDR were examined in the Traffic and Economic Appraisal of NDR Alternatives (Document Ref 5.12). In addition Summary Results of Sensitivity Tests (Document Ref 5.11) contains a number of sensitivity tests to further examine the robustness or sensitivity of the results.
- 1.5.2. See also response to Para 1.1 above.

Representation

- 1.6. *With a more realistic forecast of future traffic levels without the road, modelled time 'savings' due to the road would be much smaller, particularly the component of these savings that comes from long-term predictions. The case for the road, particularly the cost-benefit claims, relies heavily on future growth in traffic based on forecasts using the same flawed methods. The majority of those time savings 56% are for less than 5 minutes which further undermines the value for money that the road would provide. If these small time saving were to be discounted, this would wipe over £400 million off the Present Value of Benefits and severely undermine the proposal's cost-benefit ratio.*

Applicant's comment

- 1.6.1. See responses to para 1.1 and 1.5 above.
- 1.6.2. Section 6.3.2 of Economic Appraisal Report (Document Ref 5.7) contains comments on the user benefits of the Scheme in terms of time and distance bands. Table 6.3 shows that 26% of time savings are up to 2 minutes, 29% are 2-5 minutes and 44% are over 5 minutes.
- 1.6.3. WebTAG Unit A1.3 dated May 2014 states that time savings should be reported in the Appraisal Summary Table disaggregated by magnitude of time saving, and specifies these time bands. The implied scale is small, medium and large time savings. However it notes (foot of page 20) that "these bands are suggested to ensure comparability between project appraisals. There is no evidence to support valuing time savings in these bands at a different rate from time savings in other bands".

- 1.6.4. Therefore time savings of all magnitudes have been included as contributions to the Present Value of Benefits for the Scheme, though it is noted in the Economic Appraisal Report that 73% of time savings are of more than 2 minutes, comprising medium and large time savings. The report also notes that longer trips into or around the city account for the majority of the scheme's generated benefits, reflecting its function of providing ease of access to the A47(T) trunk road, providing alternative route for cross city trips and providing benefit to other longer journeys into the city.
- 1.6.5. In conclusion it is not accepted that there are small time savings for the majority of users, the analysis shows that 73% of time savings are medium or large. Even so it is appropriate to take account of all time savings and the same valuation should be applied to small as well as large time savings. On this basis the benefits of the scheme have been correctly assessed in the economic appraisal which provides one part of the scheme justification. It is not accepted that there is a case for saying that £400m should be removed from the benefits.
- 1.6.6. Section 3.1 of Document Ref 5.7 contains an overview of the economic appraisal carried out and it is stated that all the costs and benefits are presented in 2010 prices discounted to 2010.

Representation

- 1.7. *The WebTAG method of calculating costs and benefits relies too heavily for benefits on small time savings for drivers, while failing sufficiently to take into account very real costs, including health, environmental and social costs.*

Applicant's comment

- 1.7.1. See response to para 1.6 above.
- 1.7.2. With regards to human health, Chapter 12 of the ES (Document Ref 6.1) concludes that the Scheme would have Moderate Beneficial and therefore significant effect for All Travellers. This is as a result of reduced traffic and congestion on the majority of radial routes, improved amenity for Non-Motorised Users and relief from existing severance within and between communities caused by existing high traffic levels thus providing better facilities for walking and cycling. The proposed Scheme incorporates measures to prevent, reduce and where possible offset environmental impacts from the earliest stage of the project. Specific details of the proposed mitigation measures are included in the individual topic sections of this ES. The proposed measures were designed according to statutory and non-statutory guidance and the DMRB to provide proposals that are proportionate to the significance of the relevant effect. Such mitigation measures are set out in the requirements in the applied for Development Consent Order and NCC is committed to delivering them as an integral part of the proposed Scheme.

Representation

- 1.8. *Aside from the traffic forecast concerns, any traffic relief in an urban area could be short-lived due to induced demand due to the expansion of road capacity in the area. This could result in any short term benefits quickly disappearing and, in fact, could undermine walking, cycling and public transport within Norwich itself. Unless there is a way of locking in that traffic reduction it is unlikely that there will be any long term traffic congestion benefits for central Norwich.*

Applicant's comment

- 1.8.1. The NDR is a part of the wider Norwich Area Transportation Strategy (NATS) which includes a number of schemes to improve sustainable transport facilities, which become deliverable through the reductions in traffic resulting from the opening of the NDR. These schemes include the pedestrianisation of streets within the city centre and the re-prioritisation of some highways to facilitate the creation of new cycle routes and public transport/Bus Rapid Transit (BRT) routes. This re-prioritisation of highway space, coupled with associated Travel Planning initiatives, will assist with “locking in” the benefits of traffic reduction.
- 1.8.2. The traffic forecasting included demand modelling that accounts for induced traffic effects. This is explained in section 3.3 of the Traffic Forecasting Report (Document Ref. 5.6). Therefore it is not accepted that the forecast benefits that have been presented would be undermined and short lived.

Representation

1.9. *Another concern is that unless these measures are part of the overall budget and approval, with approval conditional upon radical city centre improvements, they may not actually be progressed. Indeed given that they may not be implemented until after the NDR was opened, there could be a risk that they may never happen at all.*

Applicant's comment

- 1.9.1. The Joint Core Strategy for Greater Norwich, agreed by the local authorities in the area (Norfolk County Council, Norwich City Council, Broadland District Council, Broads Authority and South Norfolk Council) sets out the overall context for how growth will be brought forward in a sustainable manner and includes policies relating to the provision of transport (principally: Spatial Vision, Objective 7; Policy 6 Access and Transportation).
- 1.9.2. The local authorities in the area support a NATS Implementation Plan (NATSIP) setting out in detail the wider package of transport measures that will be implemented in the short, medium and longer term. This plan was updated and further endorsed by the authorities in 2013, alongside the final adoption stages of the Joint Core Strategy for Greater Norwich.
- 1.9.3. NATSIP measures were further included in the New Anglia LEP Strategic Economic Plan, the City Deal for Greater Norwich, and elements have been the subject of bids for government money (eg Cycle City Ambition, Better Bus Area and Local Sustainable Transport Fund).
- 1.9.4. The local authorities are therefore committed to delivering the programme of measures identified in NATSIP (ADD REF TO NATSIP).

- 1.9.5. The city centre measure are being progressed and delivered, evidence of which can be found in the NATS tracker (see appendix I of Examining Authorities 1st questions). As can be seen, 2012/2013 an approximate total of £6,542,123 of sustainable transport improvements to promote public transport, travel planning and cycling and walking. The delivery of these schemes were accomplished by Norfolk County Council along with Norwich City Council pooling resources to fund the schemes and submitting bids to central government. Examples of this is the successful bid of both the Better Bus Access bid of £2,583m and City Cycle Ambition Grant of £5.5 million.
- 1.9.6. NCC are continuing to develop future city centre schemes such as Golden Ball Street and Rose lane with a view to carry out feasibility studies in Autumn 2014 with funding already identified from in year budgets. Scheme identification and development is already underway for the Yarmouth Road/Postwick BRT corridor which will see detailed scheme design completed in 2014/15.
- 1.9.7. NCC's approved LTP programme already shows commitment in funding increasing over the next three years showing commitment to design and delivery of the city centre measures along with wider NATS schemes. This will be in addition to work identifying possible bidding opportunities from central government and Europe for further funding, together with local opportunities for funding through mechanisms such as pooling of CIL or Local Growth Fund.
- 1.9.8. Norwich City Council, Broadland District Council and South Norfolk Council have all published a Community Infrastructure Levy (CIL) for their planning areas. The Levy provides a mechanism to collect developer contributions towards the costs of the infrastructure required to facilitate the development planned for in the Core Strategy for the Greater Norwich Area, including the NATS sustainable transport measures.

Representation

1.10. *While we question the need for the NDR in any guise, we certainly see no justification for the local authority's extension of the proposal from the airport to the A1067 and certainly not as a dual carriageway. In fact, while we may disagree with the Department of Transport's assessment of the value for money for the road from the Postwick junction to the A140, at least this part of the road has been through this relatively rigorous process of assessment. There has been no similar scrutiny of the section from the A140 to the A1067.*

Applicant's comment

- 1.10.1. There are notable transport benefits in delivering the NDR scheme to the A1067.
- 1.10.2. The report on Traffic and Economic Appraisal of NDR Alternatives (TEAA) (Document Ref 5.12) includes the results of appraisal of Alternative 2, which comprises a dual carriageway between the A140 and the A47(E) at Postwick – i.e. the Scheme but without the section between the A140 and the A1067. The results, including effects on traffic flows, junctions, safety, and economics, are presented in Section 6 (Document Ref 6.2 Environmental Statement Chapter 3).
- 1.10.3. Alternative 2 would not provide any relief to roads and communities to the west of the A140, and in some cases there would be increases (section 6.1).
- 1.10.4. Table 6.6 in section 6.4 shows that the Present Value of Benefits for Alternative 2 of some £550m are significantly less than that for the DCO Scheme, of some £989m. Alternative 2 has a lower cost than the DCO Scheme, and the resulting Benefit Cost Ratio is 4.114 compared to 5.331 for the DCO Scheme. This indicates that, in economic terms, the additional cost of the section between the A140 and the A1067 is forecast to be outweighed by the benefits it produces.

- 1.10.5. The TEAA (Document Ref 5.12) also includes the results of appraisal of Alternative 3, which comprises a dual carriageway between the A140 and the A47(E) at Postwick, together with a single carriageway between the A140 and the A1067. The results, including effects on traffic flows, junctions, safety, and economics, are presented in Section 7 (Document Ref 6.2 Environmental Statement chapter 3).
- 1.10.6. Alternative 3 would provide relief to roads and communities to the west of the A140, but to a lesser degree than the DCO Scheme. (Section 7.1).
- 1.10.7. Table 7.6 in section 7.4 shows that the Present Value of Benefits for Alternative 3 of some £810m are less than that for the DCO Scheme, of some £989m. Alternative 3 has a lower cost than the DCO Scheme, and the resulting Benefit Cost Ratio is 4.841 compared to 5.331 for the DCO Scheme. This indicates that, in economic terms, the additional cost of the dual carriageway section between the A140 and the A1067, compared to a single carriageway, is forecast to be outweighed by the benefits it produces.
- 1.10.8. It is also important to note that the JCS Policy 9 requires the allocation of a minimum of 2000 dwellings within the Broadland part of the Norwich Policy Area but outside the 'Growth Triangle'. Broadland District Council's emerging site allocations plan has completed its pre-submission publication stage. As part of the JCS requirement, it allocates around 1,500 dwellings and significant commercial development in the parishes of Taverham, Drayton and Hellesdon (west of the A140), namely:
- Drayton : north of Hall Lane : 200 dwellings (PS20-01)
 - Drayton : village centre : mixed use development including up to 20 dwellings and commercial uses (PS20-02)
 - Hellesdon : Hospital Grounds adjacent to the A1067 : 300 dwellings and B1 uses. Policy requires development to be phased relative to the delivery of the NDR (PS31-01)

- Hellesdon : Golf Club either side of A1067 : 800-1,000 dwellings. Policy requires development to be phased relative to the delivery of the NDR (PS31-02)
- Taverham: Fir Covert Road (adjacent to A1067) : 5.6ha for commercial uses. Linked to a planning permission that includes full permission for 4,181m² gross retail supermarket and outline for around 4,500m² gross of A1, A3, A4 and B1 uses (PS58-01)

1.10.9. In addition Hellesdon Drayton and Taverham are a significant part of the defined “Norwich Urban Area” (JCS para 6.2) and can be expected to deliver ongoing windfall development.

1.10.10. The wider implications for the A140 to A1067 take into account the Norwich Area Transportation Strategy (NATS) Implementation Plan (NATS IP). This includes proposals for a Bus Rapid Transit (BRT) corridor along the existing A1067, which is a very difficult corridor in which to deliver in a cost effective way in view of the existing traffic levels through the built up areas in Taverham, Drayton and Hellesdon. The delivery of the NDR provides, in effect, a bypass for these communities and constrains traffic on the ‘old’ A1067 to less than 2012 levels, even by 2032, which provides the scope to introduce a BRT service, or significantly enhanced bus provision to support sustainable travel to and from the city for the existing and any expanded communities (refer to paragraph 7.1.17 of the Traffic Forecasting Report Document Ref. 5.6).

- 1.10.11. The NATS IP also provides for improved cycle networks within and beyond the City. The Taverham and Drayton communities have access to a high quality link called Marriotts Way (a dedicated cycle corridor utilising an old railway line). The reduction of traffic on the A1067 provides an improvement in terms of access to/from the Marriotts Way, and will enhance the ability for cyclists to cross the existing A1067 at the point at which the cycle route crosses the A1067, a particular benefit at peak hour periods for people commuting to the City by cycling to/from Taverham and Drayton.
- 1.10.12. The existing communities within Taverham and Drayton (which have expanded significantly over the last two decades with little or no improvements to the main highway infrastructure) also suffer as a consequence of traffic using the existing A1067, which also results in severance issues, particularly during peak periods. The introduction of the NDR, and the resulting reduction of traffic on the A1067, provides the scope to improve the communities and their accessibility to local services.
- 1.10.13. The response to ExA first Written Questions, question 10.8 shows the split between longer distance and local (within 10 miles of the city centre) trips. For the NDR west of A140 the analysis shows that between 71% and 76% of trips using the western NDR are longer distance trips, the range covering different time periods in the forecast years 2017 and 2032. Without the NDR west of the A140 these trips would use the existing suburban or city network.

- 1.10.14. At its Cabinet meeting in April 2012, following confirmation of Government funding for the NDR (having been successful in the 'Development Pool' bidding process), Members were provided the opportunity to review the extent of the NDR. It was considered that the NDR should be delivered to the A1067, to provide much needed relief for the existing communities of Taverham, Drayton and Hellesdon. Members were clear that they considered the NDR important and they were content that the additional cost should be underwritten by the County Council. In addition, they took the view that the NDR should be dual carriageway for its entire length to the A1067. The Cabinet Member for Finance and Performance confirmed the support for the NDR and that it was considered to be affordable, a position that had been confirmed by the Head of Finance.
- 1.10.15. In conclusion the Applicant considers that because of all the above factors the western section of the Scheme between the A140 and the A1067 is justified and delivers valuable additional benefits compared to a route that extended only to the A140.

Representation

- 1.11. *The concern with this proposal is that it will locking in the area to a car dependent future, rather than trying to reduce reliance on the private car and increase active travel and the use of public transport. Even where there are proposals to promote more sustainable modes of transport, there is a fear that these 'extras' which are not central to the construction of the road will be lost at a later stage.*

Applicant's comment

- 1.11.1. The scheme needs to be kept in context of the overall strategy and package of sustainable transport measures which is the Norwich Area Transport strategy. The NATS strategy is fundamentally about giving travellers a choice of travel modes. It is recognised that some travellers will always for habit or personal circumstances will continue to need to make there journey via car. However the NATS strategy in its entirety includes active travel planning and public transport is at it's core and this is evidenced in the significant amount of NATS projects delivered to date and programmed in the future which also includes the NDR.

Representation

1.12. *The health impacts of an increasingly sedentary lifestyle in the UK is leading to rising obesity levels, increases in Type 2 diabetes and also impacts on mental health. There are huge health implications associated with transport and therefore substantial proposals such as the NDR have the potential to either worsen or improve the current situation. It is therefore only right that these large social and economic costs should be properly accounted for in the impacts of this development proposal. Our concern is that to date this has not been done.*

Applicant's comment

1.12.1. The scheme has been assessed in accordance with Government Policy, which provides a consistent approach for the assessment of all transport schemes across the country. It would be prejudiced to undertake further assessment which is not based on such Policy. The question posed does, however, raise some interesting points and acknowledges that the scheme may offer improvements over the current situation. Shortened journey times for example will shorten the sedentary time spent sitting in vehicles. The reductions in traffic on routes within the city area will also facilitate the construction of new cycle routes and increased pedestrianisation, encouraging a modal shift towards these active modes. The associated public transport improvements, including Bus Rapid Transit (BRT), will encourage a modal shift towards these modes which will include an element of walking to and from stops and interchanges on these routes.

Representation

1.13. *Out of town retail or business development could undermine more central shops and businesses, and increase the number of people travelling to them by car, due to their very location and accessibility. This would be exacerbated by the provision of large car parks in these new developments which not only encourage car use, but often actively discourage walking and cycling. They also lead to a much lower density of development which ‘wastes’ precious land and increases urban sprawl. Without strong and effective planning policies to address these concerns it is difficult to see how the promoters can have confidence that the new development planned on the back of the NDR will not generate significant car based traffic.*

Applicant's comment

1.13.1. Proposals for out-of-town retail and business development will be subject to normal development management and local planning processes. The National Planning Policy Framework provides the overall policy context and requires a sequential approach to “town centre” uses. Significant new development will be subject to Transport Assessment and Travel Planning.

Representation

- 1.14. *Within the transport assessment, there is no detailed evidence to show how reductions in excessive car use and promotion of sustainable modes of transport might be achieved. It is one thing to have an aspirational transport strategy (NATS), but unless this is backed up by strong planning policy, it is difficult to see the claimed reduction being achieved. Therefore we would like to see evidence provided as to how this traffic reduction would be achieved through local (and national) planning policy.*

Applicant's comment

- 1.14.1. The overall approach of the Joint Core Strategy for the area includes locating and designing development to reduce the need to travel especially by private car (Objective 7). The scale and location of development in the JCS encourages community self-containment and support for public transport, cycling and walking as demonstrated in key policies for growth in the Norwich Policy Area in particular Policies 9, 10 and 12.
- 1.14.2. The National Planning Policy Framework requires all developments that generate significant amounts of movement to be supported by a Transport Statement or Transport Assessment (paragraph 32) and to provide a Travel Plan (paragraph 36). More detailed advice is included in the Government's Planning Policy Guidance.

- 1.14.3. Saved Broadland Local Plan Policies TRA2 and TRA3 require Transport Assessments and Travel Plans for defined types of development and in locations with transport related issues. The approach is carried forward in the pre submission draft Development Management DPD policy TS2. Similarly the saved policies of the City of Norwich Local Plan include a requirement for transport assessments (paragraph 11.29) and for more significant development to be supported by a Travel Plan, and this approach is being taken forward into the submitted Norwich Development Management Policies DPD Policy DM28.

Representation

- 1.15. *A large bypass through high quality agricultural greenfield land that will reduce the available productive land and undermine the viability of some farm units. In addition, the extra air pollution generated by the road, will lead to a reduction in crop productivity. While in itself it is not critical to the UK's future food supplies, with a growing population and therefore a greater demand for land for food-growing, it is a harmful side effect of the road which we feel has not been properly costed or addressed.*

Applicant's comment

- 1.15.1. The impact of the NDR on agricultural land as a national resource and on the viability of individual farm units was assessed in Doc Ref 6.1 Environmental Statement, Chapter 13 Community and Private Assets. Further detailed assessment was provided in a farm viability study report (Agricultural Impact Assessment) included in Doc Ref 6.2, Chapter 13, Section A.
- 1.15.2. Regarding the impact of the NDR on agricultural land as a national resource (and therefore on national agricultural productivity), the

routing of the road was based on a vast array of factors including the importance of maintaining the coverage of the “best and most versatile” agricultural land to the north of Norwich. This is the land which falls within the land classification categories 1, 2 and 3a according to the Agricultural Land Classification (ALC) of England and Wales. The route was selected to avoid all grade 1 agricultural land, but it was not possible to avoid lands of the lesser “best and most versatile” grades. Therefore, within the scheme footprint (i.e. the DCO boundary) there are 168.30 ha of grade 2 and 114.20 ha of grade 3a agricultural land, and there are no areas of grade 1 agricultural land. As described in the Environmental Statement (Doc Ref 6.1, Chapter 13), 142.3 ha of grade 2 and 99.95 ha of grade 3b agricultural land will be permanently lost to the scheme. This was recognised as a major adverse and significant impact on agricultural land as a national resource, but was considered unavoidable. The Land temporarily acquired for the scheme (for construction compounds, for example) will not be lost permanently, but instead will be restored to their original “best and most versatile” grade by the contractor.

- 1.15.3. Regarding the impact of the NDR on individual farm units, a comprehensive and detailed assessment of this impact was provided in Doc Ref 6.2, Chapter 13, Section A – Agricultural Impact Assessment. This assessment identified 66 individual farm businesses within the area of influence of the NDR. In accordance with the Highways Agency Design Manual for Roads and Bridges (DMRB) Volume 11 guidance, the study was based on an assessment of the land-take (permanent and temporary), changes in land quality, alterations in farm husbandry, field severance, and changes in farm access likely to be imposed on individual farm businesses as a result of the proposed NDR.

- 1.15.4. This study predicted “minor adverse” impacts for 40 farm businesses, “negligible” impacts for 22 farms, and “beneficial” impacts for 4 farms. No farms were predicted to suffer significant adverse impacts (as defined by the categories “moderate adverse” or “major adverse” impacts). The overall impact on commercial agricultural viability in the region will therefore be “negligible” to “minor adverse”. This is because of the sensitive routing and design of the road in addition to a range of mitigation measures that will be applied, such as provision of new means of access and compensation to land users provided by the Applicant. This means that with regard to individual farm businesses, the scheme will proceed in accordance with relevant national and local policies and legislation (as described Doc Ref 6.2, Chapter 13, Section A, 1.2) and some individual farm businesses will benefit commercially from the NDR. The commercial viability of no farm businesses will be significantly undermined.
- 1.15.5. Regarding the impact of the NDR on air quality and subsequent effects on agricultural productivity, this was not considered in the Environmental Statement. In accordance with relevant guidance, the impact of the NDR on air quality and subsequent effects on sensitive ecological receptors (i.e. designated sites) was considered in Doc Ref 6.1 Chapter 4 Air Quality. The NDR was not predicted to have a significant impact on ecological receptors through changes imposed upon air quality.

Representation

1.16. *We do not believe that Norfolk County Council has looked sufficiently at other options for improving conditions in the area. These include improving travel choices, public transport, information, smart measures and travel planning, moving freight traffic onto rail and increasing active travel. Clearly, though, the requirements of the Treasury Green Book and the DfT's WebTAG process have not been met while all these other options remain unexamined.*

Applicant's comment

1.16.1. Volume 1 Section 3 of the Environment Statement, (Document Ref. 6.1) looked at the alternatives to the DCO scheme. Traffic and economic assessments for a number of Alternatives have been assessed in the Traffic and Economic Appraisal of NDR Alternatives (Document Ref. 5.12) using the latest version of the transport model. As mentioned in Section 1.1.5 of Document Ref 5.12. These assessments provide comparative quantitative information on the same basis as that provided for the Scheme. Therefore it is not true to say that other options remain unexamined.

Representation

1.17. *The promoters claim to have considered the visual impacts on The Broads and that the proposal complies with the NPPF as it avoids impacting upon the highest quality landscapes. However, tranquillity is clearly an important feature of The Broads special qualities, yet the impact of the NDR on generating extra traffic and the impact that this might have, to some extent visually, but more in terms of noise, has not been addressed. Therefore the promoters have not fulfilled their statutory duty.*

Applicant's comment

- 1.17.1. The Noise assessment contained within the ES has been undertaken in accordance with the Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Part 7 HD213/11 Noise and Vibration (2011). There is no guidance/methodology/requirement within HD 213/11 to assess the effects of noise and vibration on tranquillity. This would be undertaken through the Landscape and Visual Impact Assessment (LAVIA) within the Environmental Statement. NCC consulted on the spatial scope of the Landscape and Visual Impact Assessment through the scoping report produced early in 2013. Responses to this document did not require the LAVIA be extended to the Broads area.
- 1.17.2. The Broads Authority, as the statutory body responsible for The Broads, has not raised any direct concerns regarding the impact of noise on the Broads National Park as a result of the NDR.

Representation

1.18. *Not only is it likely that the NDR will result in there being more traffic passing through The Broads but it will therefore result in more noise being generated within this special landscape and disturbing its tranquillity. Even if this is only marginal, this could be harmful, and certainly goes against the adopted policy direction which is seeking to protect and enhance the area's special qualities.*

Applicant's comment

1.18.1. Please refer to paragraphs 1.17.1 and 1.17.2 above.