

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

## Applicant's comment on Written Representations by Andrew Cawdron

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 Andrew Cawdron in his Written Representation to the Examining Authority published 3 July 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

1.1. There are no apparent funding allowances or improvement proposals for the rural roads it crosses and links with, which may add to their volumes without improvements to their capacities or safety for other users such as cyclists or pedestrians.

### Applicant's comment

1.1.1. The traffic flows forecast with the NDR are compared to those without the Scheme in the Traffic Forecasting Report (Document Ref. 5.6) in Volume 3 Figures I.1 to I.4. These show that there are increases on some radial routes in the vicinity of where they connect with the NDR. However the Transport Assessment (Document Ref. 5.5) shows in section 8.5 that the NDR junctions are considered to operate acceptably well. Furthermore the Traffic Forecasting Report in Vol 1 Section 7 describes the reductions in traffic in other parts of the network with NDR. In particular traffic would be reduced in the suburban area, including on radial routes and on inappropriate routes that are currently used by orbital traffic movements.

### Representation

1.2. Further and contrary to Highway Design Manual for Roads and Bridges requirements there have been no proper safety audits executed for these roads and their downstream and upstream restrictions.

### Applicant's comment

1.2.1. The Scheme has been the subject of a number of road safety audits carried out by independent audit teams in accordance with NCC



procedures and the DMRB HD 19/03 Road Safety Audit. The audits are scheduled on pages 3 and 4 of Road Safety Audits and Briefs (Document Ref 10.1).

- 1.2.2. The audits comprise an evaluation of all works that involve construction of new highways or permanent change to the existing highway layout or features in accordance with the guidance in paragraph 1.15 and 1.17 of HD19/03 and this includes the junctions of radial routes with the Scheme and any off-line improvements proposed on these radial routes. Road safety audit is an ongoing process and further audits will be carried out as the scheme progresses through detailed design, completion of construction and post construction monitoring.
- 1.2.3. In addition to the formal road safety audit process Chapter 10 of the Transport Assessment (Document Ref 5.5) includes a high level Personal Injury Collision (PIC) data analysis carried out as part of a wider road safety review of the Scheme. This analysis considers all the principal routes in the study area, and identifies accident cluster sites. It then identifies the changes in traffic flow on the approaches to a cluster site junction and then provides a commentary on the likely implications for each site as a result of the Scheme. The conclusions of this analysis can be found in paragraphs 10.6.1 to 10.6.5 of the Transport Assessment (Document Ref. 5.5). Where cluster sites are subject to forecast increases in traffic with the Scheme NCC will monitor these sites on a quarterly basis. This regular investigation of the detailed accident records will determine whether the road environment was a factor and what, if any, measures could be implemented to improve road safety.



1.3. It will be enormously environmentally destructive as it traverses across acres and acres of productive Grade 2 farmland, a nationally important resource.

- 1.3.1. The effects on Landscape, Air Quality, Noise, Water and Drainage, Ecology, Agricultural Land, Carbon and the Community are presented within the Environmental Statement (ES) (Document Ref. 6.1). The ES presents the findings of the Environmental Impact Assessment (EIA) and details the effects of the Scheme, both adverse and beneficial.
- 1.3.2. An overall view of the results of the EIA is presented in the Non-Technical Summary (Document 6.3) Section 16 provides a Summary of Effects. The detailed analyses and assessments are presented within Volume 1 of the ES (Document 6.1) The technical reports that support these assessments can be found in Volume 2 of the ES (Document 6.2).
- 1.3.3. 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.
- 1.3.4. The routing of the road was based on 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 6.2, Chapter 13), 142.3 ha of grade 2 and 99.95 ha of grade 3b agricultural land will be permanently lost to the scheme.

1.3.5. This was recognised as a major adverse and significant impact on agricultural land as a national resource, but was considered unavoidable.

### Representation

1.4. Thorpe End Garden Village (a conservation area) will be environmentally and visually badly affected by the 8 to 9 metre high NDR embankments and bridge crossings over the road and railway.

- 1.4.1. The majority of the Thorpe End Garden Village CA will be screened from the Scheme by existing bands of trees, woodland and building and planting within the CA itself. The setting of the north-eastern part of the CA will however be affected by the Scheme to some degree.
- 1.4.2. The CA appraisal for Thorpe End Garden Village states that the separation from other settlements gives it 'a special character of its own' (BDC 2010 Thorpe End Garden Village Conservation Area Character Statement; Broadland District Council, p5). To the east of the CA the Scheme will be situated on the other side of the existing railway. The CA is therefore already impacted by noise from the railway, although this is not identified in the CA Appraisal in the



'Things which detract from the character of the area' section.

Nevertheless, the noise associated with the Scheme would diminish this sense of separation, both during its construction and operation.

This will lead to a moderate impact upon this medium value historic environment asset and a resultant moderate adverse significance of effect prior to mitigation. However, woodland creation along the northern side of Middle Road and the Western side of the Scheme will provide additional visual separation of the new road and associated traffic from the CA once mitigation planting has matured to form an effective screen. Noise bunding is also proposed along the city side of the Scheme at this location which will reduce the impact of traffic noise upon the CA during operation. This mitigation will reduce the operational effect upon the setting of the CA to slight adverse.

### Representation

1.5. Traffic through the Thorpe End village will grow to unsustainable levels and be constantly at a standstill between two roundabouts or behind stopping buses and vehicles. This traffic will be generated by the increased numbers of dwellings proposed in the area, already over 3,000, and the fact that the projected business park increases are to be served by the new 'middle road' link

### Applicant's comment

1.5.1. Traffic forecasts on Plumstead Road through Thorpe End village are shown in the Traffic Forecasting Report (Document Reference 5.6) in Figure I.2 in Vol3. This shows that traffic levels would reduce with the Scheme to levels substantially below the base 2012 levels (location A84). Traffic flows in this area would also be affected by the implementation of the link road associated with Brook Farm / Laurel Farm development.



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### Representation

1.6. We will see further development pressures all around, to the North around the woodlands and to the west of the railway line to fund the 62.5 million pound shortfalls in finance for the NDR, even though the noise and air pollution should have been an inhibiting factor. Thorpe End will be suburbanized.

- 1.6.1. The economic development impact of NDR is set out in the Development Economics Report (Document Ref. 10.3). The economic impact assessment of the proposed NDR is provided within the context of the JCS stated growth targets which are in place to guide the future of the Greater Norwich economy. The NDR is a key strategic piece of infrastructure and will play a key role in supporting the delivery of growth in housing and jobs over the next two decades.
- 1.6.2. The amount of development and the general location of development for the Greater Norwich area are detailed in the adopted JCS, the key adopted element of the development plan for Norwich and its surrounding area. This has been found to be sound following independent examinations of that strategy; most recently in 2013. As explained in paragraphs 2.11.2 to 2.11.9 of Volume 1 of the ES (Document Ref 6.1) the NDR scheme is identified as infrastructure which is fundamental to the achievement of the strategy in the JCS.
- 1.6.3. The level of employment provision in the JCS is required to meet the objectively assessed need to support economic, household and population growth. This has been determined by the local plan process which is the appropriate mechanism.
- 1.6.4. The JCS is the adopted strategy for the area and sets out the broad distribution type and scale of growth. It emphasises the need for the NDR as Priority 1 infrastructure as well as providing the spatial



strategy for the area encompassing the city centre, the rest of the urban area and surrounding areas including market towns in Broadland and South Norfolk. The views of surrounding areas such as North Norfolk and Great Yarmouth were taken into account through the consultation process and more recently through the duty to co-operate. The JCS is evidenced based and subject to sustainability appraisal which includes economic considerations.

1.6.5. Norwich is a dominant regional city located within a largely rural county. As explained in Chapters 2 and 3 of Volume 1 of the ES (Document Ref 6.1) a number of objectives which centre on substantial population growth and economic development have been identified for the City of Norwich and its surrounding area. As explained in paragraphs 3.3.20 to 3.3.34 of Volume 1 of the ES (Document Reference 6.1), at the local level these objectives have been largely identified within the adopted JCS. As paragraphs 3.3.35 to 3.3.46 of Volume 1 of the ES further explain, these objectives benefit from support at the national level.

### Representation

1.7. Smaller east west Plumstead parish roads will be blocked off, which removes links across the Parish to schools and workplaces and forces traffic to routes which are detrimental to existing residents.

- 1.7.1. An assessment of the impact of the closure of Low Road and Smee
  Lane is included within Section 12.5 and 12.6 of Volume 1 of the
  Environmental Statement ( Document Ref 6.1).
- 1.7.2. During consultations undertaken in April/ May/ June 2012 the scheme proposals included closures of Smee Lane and Middle Road where they meet the NDR, and a Non-Motorised User (NMU) and



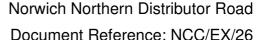
agricultural vehicle bridge over the Norwich Northern Distributer Road (NDR) at Low Road.

1.7.3. As a result of the consultations, which highlighted concerns that the scheme reduced the number of access options to Great Plumstead, the proposals were amended to provide closures to Smee Lane and Low Road, with an all user bridge being provided over the NDR at Middle Road. Middle Road was identified as the most appropriate road out of these three roads for an all user bridge because it was a better standard than Low Road or Smee Lane.

### Representation

1.8. The traffic volume modelling base data is regarded as suspect.

- 1.8.1. Traffic forecasts have been made in accordance with DfT guidance set out in WebTAG and has taken account of the full implementation of the JCS. The forecast traffic includes all the generated traffic from the development sites in Norwich, South Norfolk and Broadland. This is set out in section 5 of the Traffic Forecasting Report (Document Ref. 5.6).
- 1.8.2. The traffic modelling takes account of the full range of existing and forecast travel across Norwich, both radial and orbital movements. NDR results in reductions in traffic on inappropriate routes and reductions in traffic on the radial routes into the city centre. These impacts are explained in Section 7 of the Traffic Forecasting Report (Document Ref. 5.6).





1.9. Future Planning Applications will need to claw back NDR funding shortfall. Future planning policy will be predetermined by debt reduction rather than need. It is therefore the forerunner to the loss of yet more farmland and communities.

### Applicant's comment

1.9.1. Refer to Para 1.6.1 to 1.6.5 above.

### Representation

1.10. The NDR will further facilitate vehicle use, when all transport trajectories and health aims are to reduce vehicle dependency and use other transport means.

- 1.10.1. The NDR is part of the overall transport strategy for the Norwich area, the Norwich Area Transport Strategy (NATS) which has been devised to address the current and future problems and issues. This is described in detail in the Environmental Statement (ES) (Document Ref. 6.1) which identifies the existing problems and issues and illustrates the conditions on the highway network including traffic flows. Section 3.5 then identifies how the NDR as part of NATS addresses these problems and issues taking account of the planned JCS growth. Sections 3.7 and 3.8 explain how the preferred NATS strategy which includes and NDR was devised. During this process strategies that didn't include an NDR were assessed but were not selected due to their inability to offer solutions to the full range of problems and issues.
- 1.10.2. More recently, prior to the DCO submission to the Planning Inspectorate, we have reviewed the previous analyses of options in light of new traffic surveys undertaken in 2012, the final results of the



environmental studies, feedback from stakeholders and public consultation and the progress of the JCS to adoption. This included an option that only improved public transport without an NDR and an option making improvements to the existing road network instead.

- 1.10.3. The conclusion for public transport initiatives was that they are an essential complement to the NDR and key to the implementation of a sustainable transport policy but, even in combination, they do not constitute an alternative to it. By relieving the radials of traffic, the NDR would help to facilitate the introduction of bus priority measures and an orbital bus service. By freeing the internal road networks of new development areas of the need to cater for extraneous through traffic, better residential environments could be created, which would be more easily penetrated by local bus services and walking and cycling routes.
- 1.10.4. The conclusion for improving the existing highway network in the urban area was that it would only partly replicate the functions of an NDR and would not resolve many cross city connectivity issues or serve new development. It would unavoidably have a very significant direct and/or indirect physical and environmental impact on many residential and commercial properties, and would require property acquisition and demolition in order to provide the necessary additional highway capacity. It would be likely to face considerable objection, especially from affected occupiers.



1.11. There are alternatives E.g. the immense housing developments proposed to the North East of Norwich could be properly designed and integrated to include an orbital distributor road.

- 1.11.1. Chapter 3 of Volume 1 of the ES (Document Ref 6.1) explains the consideration given to potential alternatives. Section 3.15 discusses Alternative 5 which comprises developer link roads between radials (within the growth areas).
- 1.11.2. Further analysis using the DCO transport model for alternatives is provided in The Traffic and Economic Appraisal of NDR Alternatives (Document Ref 5.12). Section 8 of the report provides an analysis for Alternative 5 and conclusions are summarised in Section 9.
- 1.11.3. Alternative 5 (developer link roads) singularly fails to reduce traffic on inappropriate routes and relieve the existing network. Whilst the Alternative includes the city centre traffic management measures the reductions of cross city centre traffic are much smaller compared with the DCO Scheme, especially for trips crossing the Outer Ring Road Cordon. The junction analyses show that North Walsham Road and Wroxham Road junctions would operate substantially over their theoretical capacity with long queues and delays, with delays of over 10 minutes at North Walsham Road Junction in the 2032 AM peak, and 5 minutes in the 2032 PM peak. On these grounds the developer link roads would not operate satisfactorily and they would cause particularly severe difficulties in implementing the proposed shared use high street-type design envisaged in the development proposals.



1.12. A further alternative would be to reduce the scale of the highway, drop the design speed and include wide single roads with separated cyclepaths, set in cuttings rather than overpasses to reduce the environmental and visual impact.

- 1.12.1. This is a variation of Alternative 1 which is discussed within Section 3.11 of Volume 1 of the Environmental Statement (Document Ref 6.1) and in the Traffic and Economic Appraisal of NDR Alternatives (Document Ref. 5.12). A lower design speed would further reduce the attractiveness of the route compared to Alternative 1. Although a detailed economic appraisal has not been undertaken it is expected that it would not perform as well as the Scheme. The economic appraisal for Alternative 1 showed a substantial reduction in benefits compared with the DCO Scheme, the benefit cost ratio (BCR) reducing from 4.2 for the DCO Scheme to 2.4 for Alternative 1 with accident benefits included.
- 1.12.2. From a safety point of view a Wide Single carriageway would not perform as well as a dual carriageway and lengths in excess of 2km require departure from standard approval. Refer to Section 4.1 of the Design and Departures Report (Document Ref 10.2). The accident analysis carried out for Alternative 1 showed that there would be fewer personal injury accidents saved compared with the DCO Scheme submission analysis. An important change is a significant increase in fatalities and no savings in serious casualties.

  Consequently overall the cost benefit analysis for Alternative 1 shows a small accident dis-benefit of £0.842m. Although a detailed accident analysis has not been undertaken for a Wide Single carriageway, it is expected that the results would be similar but some difference would be expected.



1.13. A better use of public money would be to upgrade and improve firstly, the A47 Highway through Norfolk, linking Yarmouth Harbour to the Midlands.

### Applicant's comment

1.13.1. The County Council cannot switch funding from one budget to another and cannot spend government funding allocated to the NDR on the A47. In any case, the A47 is a trunk road and so the Council is not responsible for the funding of it. However, NCC is part of the A47 Alliance Group which works together to ballot central government to provide improvements for the A47 across Norfolk.

### Representation

1.14. There should be no automatic right of access and development land from the NDR and roundabouts.

### Applicant's comment

1.14.1. There are no automatic rights of access to the NDR junctions for new development sites. The NDR will provide a new strategic access route to development sites that are brought forward in accordance with the Joint Core Strategy. The individual development sites will be identified through Broadland District Council's development management processes. Connecting these sites to the highway network, which could include NDR junctions, will be subject to normal development management processes where the developer will need to prepare a transport assessment and propose an access arrangement and any necessary mitigation measures.