

**THE FELIXSTOWE BRANCH LINE AND IPSWICH YARD  
IMPROVEMENT ORDER**

**SUMMARY PROOF OF EVIDENCE**

of

**Steve Purnell MSc, DipHTE**

**Environmental Impact Assessment**



**Port of Felixstowe**



# 1 *INTRODUCTION*

## *QUALIFICATIONS AND EXPERIENCE*

- 1.1 This evidence is given by Stephen Purnell, a Partner in Environmental Resources Management (ERM), responsible for the company's Environmental Impact Assessment (EIA) transport infrastructure schemes in the UK.
- 1.2 It deals chiefly with environmental issues arising from the proposed branch line scheme, addressing a number of detailed matters about which the Secretary of State wishes to be informed.
- 1.3 The evidence describes assessment work undertaken by ERM and others and sets out my responses to points raised by objectors.

## 2 SCHEME ALTERNATIVES

2.1 The Environmental Statement (ES) for the branch line scheme (CD/5) includes a comprehensive description of the appraisal process that was adopted to examine alternatives.

2.2 Three approaches were taken to the assessment of alternatives:

- i) a high level assessment was carried out by the Joint Study Group (CD/3) and checked by Network Rail's Strategic Access Planning (SAP) team;
- ii) the Transport Analysis Guidance (TAG) methodology was used to identify the preferred scheme for both the branch line and Ipswich Yard; and
- iii) assessments were carried out of two schemes at Westerfield.

2.3 A number of options were considered by the Joint Study Group, as follows:

- i) an extension of the existing loop or dualled section between Derby Road and Westerfield;
- ii) increasing the line speed to 75 mph;
- iii) conversion of tractive power to overhead line electrification;
- iv) reducing or removing the existing hourly passenger service;
- v) introduction of longer trains to reduce the requirement for new train paths;
- vi) a reduction in the number of light engine paths; and
- vii) a new loop or dualled section between 77 MP and Trimley Junction, with bi-directional signaling and flighted services.

- 2.4 The study recommended in favour of flighting freight services and providing an additional length of double track.
- 2.5 Network Rail's SAP team reviewed a number of route sections and concluded that dualling a stretch of the Felixstowe Branch Line combined with improvements at Ipswich Yard would provide the most suitable scheme. A 4.25 mile stretch of track to be dualled was identified to provide the capacity.
- 2.6 HPUK then assessed a number of detailed options for the branch line and Ipswich Yard against TAG criteria, as follows:
- i) the extension of the existing loop/ dualled section between Derby Road and Westerfield, including widening of an existing viaduct;
  - ii) a new loop or dualling eastwards from Trimley into the Port of Felixstowe's North rail terminal;
  - iii) the creation of a new loop or dualling between Trimley and an area westwards towards Felixstowe Road near the Suffolk Showground; and
  - iv) a new loop or dualling between Trimley and westwards to the east of Nacton Village.
- 2.7 The preferred option, selected based on both the TAG assessment and the SAP team modelling, was the fourth.
- 2.8 Three principal options were considered for the scheme in Ipswich Yard:
- i) new siding lengths of 531 m, 522 m and 492 m with five original sidings retained and sidings extended along the lower yard access route;

- ii) new siding lengths of 531 m, 530 m and 469 m with five original sidings retained and sidings extended along the lower yard access route; and
- iii) new sidings with lengths of 558 m, 527 m and 532 m, with three original sidings retained.

2.9 The preferred option taken forward was the second option.

2.10 The ES included an assessment of a pedestrian crossing at Westerfield level crossing. Subsequent to the application for the Order, the footbridge was removed from the scheme and an Addendum to the ES submitted.

2.11 Potential impacts in relation to the area known as the Ipswich Fuel Point fuel point were scoped out of the ES for the scheme as it is physically remote from the scheme, it is a network facility, and impacts that arise from its use will in any case continue to exist into the future. Nevertheless, HPUK have revisited the issue of potential impacts from trains at this facility.

### 3 ENVIRONMENTAL IMPACTS

- 3.1 At all levels of government policy there is support for shifting freight from road onto the rail network. The branch line scheme will also fulfil an important function in helping to cater for organic growth at the Port of Felixstowe and will unlock the benefits that will accrue from the Felixstowe South Reconfiguration.
- 3.2 There are very few adverse environmental consequences predicted to occur as a result of the implementation of the branch line scheme.
- 3.3 During the scheme's construction, the implementation of mitigation outlined in the Code of Construction Practice (CoCP) will ensure that impacts are minimised. This will cover a range of environmental topics, and its details are addressed in the proofs of evidence of Richard Spoons (App/21) and Ian Gilder (App/41).
- 3.4 A high standard of design will be used throughout the scheme, and I do not consider that long term significant visual impacts from the scheme will persist.
- 3.5 No significant adverse impacts are predicted on drainage patterns, and all drainage will be provided in accordance with Network Rail Standards. Pollution prevention and control and emergency response measures will be developed for the scheme during detailed design in accordance with the appropriate Environment Agency's Pollution Prevention Guidelines (PPG).
- 3.6 Any potential impacts on water resources due to excavation of earthworks will be mitigated by the prevention of sedimentation and contamination, also in accordance with the relevant PPGs.

- 3.7 Consultation with appropriate third parties will ensure that the location of any pipes potentially affected will be identified and avoided or protected.
- 3.8 The risk of contamination from spills and disturbance of contaminated materials will be minimised by utilising dedicated areas for fuel and oil and by using best practice rail industry techniques.
- 3.9 A detailed site investigation will be carried out to identify any contaminated land present from previous activities, and a Land Assessment Report and Management Plan prepared as appropriate. This, coupled with compliance with the CoCP will ensure that there will be no significant contaminated land impacts.
- 3.10 An archaeological scheme of investigation to ensure that there will be no significant adverse impacts on archaeological resources.
- 3.11 No other significant environmental impacts are predicted to arise.

#### 4 OPERATIONAL EFFECTS ON ROAD TRAFFIC

4.1 There are level crossings situated at Westerfield, Levington, Morston Hall, Thorpe Lane and Trimley. Some barriers at these crossings will be required to be in the down position for a longer period of time as a result of the scheme.

4.2 Traffic flows were counted at each of the relevant vehicular level crossings. With the exception of Westerfield, the flow at each location was low. Each level crossing has barrier down times of varying lengths.

4.3 At Westerfield, the longest individual barrier downtime is predicted to increase from 5 minutes and 54 seconds to 7 minutes and 30 seconds.

4.4 During this downtime, queue lengths will potentially increase from 27 vehicles to 38 vehicles. I do not consider this to constitute a material impact.

4.5 Westerfield is likely to experience the greatest increase in barrier downtime over the course of an hour, from 13 minutes and 15 seconds to a potential total downtime of 21 minutes. For the majority of the day, barrier downtimes will be considerably less than this, and drivers will not experience significant delays.

4.6 Some concerns have been expressed by residents over the ability of emergency vehicles to get into or out of Cordy's Lane with the barrier down at Trimley. HPUK has initiated consultation with the emergency services. The Fire and Rescue Service, Suffolk Constabulary and East Anglian Ambulance NHS Trust have all stated that they have no objection to the proposed scheme with regard to the Trimley crossing.

4.7 I understand that Network Rail are not aware of any concerns at any other location on the branch line.

- 5.1 In embarking upon the EIA for the branch line scheme, I ensured that the ES conformed fully with the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2000.
- 5.2 I am confident that the ES meets in full all the necessary requirements for such documents.

- 6.1 An Addendum was prepared to supplement the information in the ES. It included an assessment of the potential effects of the revisions to the scheme, principally the removal of the pedestrian footbridge at Westerfield and revisions to the Rights of Way in the vicinity of the scheme, which are addressed in Andrew Cann's proof of evidence (App/121).
- 6.2 It was concluded that the removal of Westerfield footbridge from the application did not alter the conclusions presented in the ES in respect of planning, ecology, water resources or contaminated land.
- 6.3 The impacts of the removal of the proposed footbridge at Westerfield on noise and air quality are dealt with in Bernard Postlethwaite's (App/81) and John Drabble's (App/101) proofs of evidence, respectively.
- 6.4 No residual impacts are predicted to arise in respect of archaeology and cultural heritage - an improvement on the situation described in the ES.
- 6.5 The removal of the bridge from the scheme results in no significant landscape and visual impacts arising, and as such the situation is improved.
- 6.6 With no footbridge available pedestrians will have to wait for the barriers to be lifted. This will cause an increase in journey time for pedestrians. There are only very low numbers of pedestrians using this crossing, and I do not consider that significant impacts will arise. The full barrier that is proposed at Westerfield will provide a considerably safer crossing environment.
- 6.7 There will be a very small amount of land take from a private garden, which I consider to be acceptable in the context of the scheme as a whole.

6.8 No significant temporary adverse impacts are predicted to arise as a result of the changes to the scheme identified in the Addendum.

- 7.1 Objections have been received in respect of scheme alternatives, environmental impacts, effects on road traffic and the adequacy of the ES.
- 7.2 All of these matters are dealt with in my proof of evidence, and I do not consider there to be any unresolved issues.
- 7.3 The relevant objections, together with a brief summary of their concerns, are as follows:
- i) OBJ/13 – RF and JA Woodcraft (alternatives at Westerfield level crossing)
  - ii) OBJ/15 – Ian Cowan (construction impacts)
  - iii) OBJ/40 – the Environment Agency (contamination at Ipswich Yard, protection for watercourses and the contents of the ES)
  - iv) OBJ/44 – Ivan Charity (visual impact and mitigation)
  - v) OBJ/08 – Rosemary and Eric Gitsham (time periods for traffic surveys, length of future trains)
  - vi) OBJ/11 – Mrs HS Unwin (increased waiting times for traffic in Cordy’s Lane/Station Road, Trimley)
  - vii) OBJ/16 – Mr and Mrs DA Parkes (road traffic queuing at Morston Hall crossing)
  - viii) OBJ/20 – Robert and Caroline Nice (increase in barrier down times at Trimley, increased travelling times and accessibility for emergency services)
  - ix) OBJ/45 – Martin Barker (barrier downtimes at Trimley)
  - x) OBJ/23 – Mr N Smith (increased down times at Thorpe Lane)

- xi) OBJ/31 - Trimley St Martin Parish Council (increased down times at Thorpe Lane)
- xii) OBJ/43 - David King (barrier down times at Thorpe Lane)
- xiii) OBJ/25 - Westerfield Parish Council (traffic at Westerfield crossing)
- xiv) OBJ/30 - Christine Mann (disruption from extra closed barriers)
- xv) OBJ/53 - Ipswich Borough Council (noise and emissions at Ipswich fuel point)
- xvi) OBJ/55 - Ramsey Park Residents Association (noise and emissions at Ipswich fuel point)

8 **OVERALL CONCLUSIONS**

- 8.1 The EIA for the proposed Felixstowe Branch Line and Ipswich Yard Improvement scheme was carried out for both the operational and construction phases of the development. As requested by the Secretary of State for Transport in his Statement of Matters, I have demonstrated in my proof of evidence that the scheme underwent a thorough EIA and that the ES is robust and fully conforms to the requirements of the Applications Rules (*point 10 in the Statement of Matters*).
- 8.2 The process included an examination of the alternatives to the scheme (*point 3 in the Statement of Matters*) at a strategic level by the Joint Study Group and Network Rail. Additionally an appraisal of the alternatives to the scheme at a scheme specific level was undertaken according to the Government's TAG methodology.
- 8.3 The ES and its Addendum report that there are very few environmental impacts arising from the construction and operation of the scheme that cannot be mitigated (*points 5 (b) and (c), 8 and 13 in the Statement of Matters*). Of those few impacts remaining following the implementation of mitigation, most are minor or negligible.
- 8.4 The same can be said to be true with respect potential impacts on road traffic (*point 6(b) in the Statement of Matters*).
- 8.5 Overall the scheme will provide substantial advantages through unlocking the benefits of the Felixstowe South Reconfiguration, catering for organic growth at the Port of Felixstowe and helping to deliver the Government's policy to increase the movement of freight by rail (*point 4 in the Statement of Matters*).