

Mr David Brownless
Auldearn Community Council
Dalmore Manse
Lethen Road
Auldearn
IV12 5HZ

Our ref:
B2103500/TR/SH0001/OBJ/108

Date:
31 July 2017

Dear Mr Brownless,

The A96 Trunk Road (Inverness to Nairn (including Nairn Bypass)) (Trunking & Detrunking) Order 201[]

The A96 Trunk Road (Inverness to Nairn (including Nairn Bypass)) (Side Roads) Order 201[]

Thank you for your letter of 28 January 2017 objecting to the draft Orders for the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme, and for your additional letter of 30 January 2017. Transport Scotland has reviewed the points you have raised and respond as follows.

a) Nairn East Junction

We note your concerns regarding the design of Nairn East Junction. Subsequent to publication of the preferred option in October 2014, the following issues with respect to the design of the Nairn East Junction were raised through public consultation feedback, consultation with landowners and design review by the project team:

- The junction layout required lengthy realignment and diversion to the existing A96 and B9111 Auchnacloch – Auldearn Road which would have an impact on road users during construction in terms of traffic management and potential delays;
- The realignments to the existing A96 and B9111 cross the Auldearn Burn and its tributaries in three locations which would likely require works to the existing structures;
- The existing A96 farm underpass for Auchnacloch Farm would be removed;
- Auchnacloch Farm and Kinnudie Farm experience severance as a result of the proposals and farm traffic would have to pass through the Nairn East junction in order to reach parts of the farm on the other side of the dual carriageway;
- The realignment of the existing A96 to the west of the junction passes under the 132kV SSE transmission line and over a pipeline;
- The realignment of the B9111 would require land to be acquired from the Dunbar Recreation Ground which is an area for public amenity;
- The junction layout overlaps with the 1 in 200 year flood risk extent for the Auldearn Burn based on flood mapping provided by SEPA (as illustrated in Figures 13.1 to 13.9 of the DMRB Stage 2 report, published in October 2014), indicating that the road infrastructure could flood and become a flow path for flooding from the Auldearn Burn; and

- The path providing a link between Auldearn and Nairn which runs alongside the existing B9111 would be severed and non-motorised users (NMU) would be diverted along the realigned B9111 and through the proposed Nairn East junction, including at-grade crossings of slip roads. This was highlighted in public feedback in terms of an increased perception of severance between the settlements of Auldearn and Nairn due to the route of the proposed dual carriageway.

Through the Design Manual for Road and Bridges (DMRB) Stage 3 design development and in order to address the issues raised with respect to the preferred option, the design of the proposed Nairn East Junction was developed further in order to reduce or avoid impact on the flood risk area associated with the Auldearn Burn, reduce or avoid impact on the major utilities, reduce the overall footprint of the junction and the length of reconstruction of existing roads, and to maintain the shared use path along the B9111 whilst still maintaining an optimum balance of impacts across the range of DMRB assessment topics.

Transport Scotland is satisfied that the changes made to the proposed design of the Nairn East Junction are appropriate. Further information regarding proposed environmental mitigation measures associated with the junction areas are provided below

b) Noise

Your letter of 28 January raises concerns with regards to noise in the vicinity of Nairn East Junction as a result of changes to the design and suggests that "*Detailed noise reduction and shielding measures are not included in the proposed design of the road*". We would like to clarify that this is not the case as the design of the proposed scheme incorporates noise mitigation in the form of earthworks and low noise road surfacing. Where necessary, this has been supplemented with receptor specific noise mitigation, which may for example take the form of close boarded fencing. Further details are given below with regard to the qualifying criteria for receptor specific noise mitigation. Also refer to Chapter 8, Paragraphs 8.6.10 – 8.6.16 of the Environmental Statement, for information relating to the recommended noise mitigation for the proposed scheme. In addition, to aid understanding, Chapter 8 of the Environmental Statement provides details on external references made in this response and Appendix 8.1 of the Environmental Statement provides a glossary of noise terminology.

Careful consideration has been given as to where additional receptor specific mitigation could be offered, and as to the form that this mitigation should take. Noise mitigation is targeted at those Noise Sensitive Receptors, such as residential dwellings, that meet the noise mitigation criteria set out in Paragraphs 8.2.24 - 8.2.34 of the Environmental Statement. In determining the noise mitigation strategy for the proposed scheme, cognisance has been given to the guidance offered in the DMRB and by the World Health Organisation (WHO).

Taking into account the above guidance, noise mitigation is considered where the significance of impact at a receptor is predicted to be:

- Slight/Moderate adverse or worse, which for high noise sensitive receptors equates to at least a 1dB (i.e. 1 decibel) noise level increase in the short term, i.e., the year of opening, and/or at least a 3dB in the long term, i.e., typically within 15 years of the scheme opening and, in addition, the predicted ground floor façade noise level exceeds 59.5dB $L_{A10,18h}$.
- Slight/Moderate adverse or worse, in the long-term with a predicted noise level that exceeds 55dB $L_{night,outside}$

We acknowledge that there are increases in noise level at some locations in excess of 10 dB, however the absolute noise levels remain below the level identified for receptor specific mitigation, as described above.

For context we can offer the following example. In a very quiet rural area, the noise level may change from $L_{A10,18h}$ 35 dB to $L_{A10,18h}$ 40 dB, which equates to a very quiet noise level increasing to a slightly less quiet noise level. As such, mitigation needs to be applied with caution in rural areas.

It is considered that an absolute noise threshold is necessary to avoid recommending inappropriate / unnecessary noise mitigation measures. Therefore, based on WHO guidance, an absolute noise threshold for mitigation has been adopted which, may at some locations result in noise level changes in excess of 10 dB. However, the associated absolute noise level at these locations remains within WHO guidance levels.

c) Design of the access road to the dwellings at Courage

The re-aligned section of the existing A96 which is to be taken over the proposed dual carriageway at Courage has been designed in accordance with the DMRB for a design speed of 85kph. This design speed has been assessed and considered appropriate for the standard of carriageway at this location. The horizontal and vertical geometry of the alignment is shown on Figure 3.2r of the DMRB Stage 3 Scheme Assessment Report. This report is available on the Transport Scotland website.

For a road with this design speed, the desirable minimum forward stopping sight distance is 160m. This desirable minimum is achieved in both directions throughout the length of the re-aligned section of the existing A96. In addition, the current design includes for 160m visibility looking both east and west from the Courage access. This visibility measurement is taken from a set-back of 2.4m from the edge of the re-aligned section of the existing A96. It is also worth noting that traffic levels on this road will be significantly reduced compared to the current situation.

Refuse will continue to be collected by The Highland Council at the junction with the realigned existing A96.

d) Junction near Hardmuir Toll

The road layout for the proposed scheme at Hardmuir where the road changes from dual carriageway to single carriageway has been considered carefully during design development and a free-flow transition from dual carriageway to single carriageway is considered appropriate. In order to maintain access for the existing A96 single carriageway past Wester Hardmuir and Courage the design connects to the existing A96 single carriageway via an at-grade junction at Hardmuir. The junction will also continue to serve the U3036 Ellands-Hardmuir-Boghole Road.

The existing junction at Hardmuir will be upgraded to current design standards and will include a ghost island right turn lane for westbound traffic leaving the A96. The forward sight distance for eastbound and westbound vehicles approaching the junction and the visibility splay from the side road satisfies the highest required standards as outlined in the DMRB. This provides suitable visibility of any junction movements on the approach to the junction and to allow drivers manoeuvring to or from the side road to view oncoming traffic.

The eastbound dual carriageway ends at chainage 30130 and traffic signs and road markings will direct vehicles to merge into a single platoon of traffic by chainage 30330, some 600m in advance of the proposed at grade junction at chainage 30930.

Other examples of this form of road layout where there is a T-junction after a section of dual carriageway are common place on the existing Trunk Road Network, with five similar sites on the A9 and one on the A96. A technical review concluded that other locations on the trunk road network, with similar junction arrangements to that proposed for the A96 at Hardmuir do not have any serious safety issues in terms of recorded road traffic accidents.

e) Impact on amenity and property values

Landscape and Visual Impacts

You have raised concerns with the impacts of the proposed scheme on local amenity with regards to noise and visual impact. Please refer to our response above with regards noise.

It is acknowledged in the Environmental Statement that a number of properties would be adversely visually affected by the proposed scheme in the vicinity of Auldearn.

A landscape and visual impact assessment, including the consideration of landscape mitigation proposals has been developed to mitigate the potential landscape and visual effects arising from elements of the proposed scheme. The assessment of affects, and proposed mitigation measures are described in Chapter 9 and Chapter 10 of the Environmental Statement. Corresponding appendices and figures provide additional detail and illustrate the assessment and mitigation measures. Appendices A10.1 & 2 (Built and Outdoor Receptor Assessments) provide detailed information on the application of the specific mitigation measures for built and outdoor receptors.

Landscape and ecological mitigation proposals, which have been developed to mitigate the potential landscape and visual effects arising from elements of the proposed scheme can be viewed on Figures 9.5 and 9.6 of the Environmental Statement and Figure 9.5r to 9.5v and 9.6i to 9.6k relate specifically to proposals in the vicinity of Auldearn. Landscape mitigation proposals include native mixed woodland and hedgerow planting to assist screen views towards the proposed scheme from built and outdoor receptors whilst also integrating the proposed dual carriageway, earthworks and other associated elements, such as SUDS and structures, into the surrounding landscape.

Disruption During Construction

It is inevitable that during the construction of the proposed scheme some disruption will occur. However, measures will be taken to reduce disruption to both those using the roads and those living in the vicinity of the areas under construction. Disruption during construction is assessed in the Environmental Statement.

In order to mitigate any potential impacts associated with disruption and noise during construction a Construction Environment Management Plan (CEMP) will be prepared by the appointed contractor, in consultation with the relevant regulatory authorities. The CEMP will set out the intended methods to manage potential environmental impacts from construction of the proposed scheme, including best practice measures to mitigate and manage construction noise impacts in compliance with requirements of BS 5228 Code of practice for noise and vibration control of construction and open sites. These best practice measures would include restricted construction working hours which would be set in consultation with The Highland Council.

It should be noted that while the overall construction period for the project is estimated to be three to four years, disruption at any one location on the route is likely to last for a considerably shorter period.

Impact on Property Values

With regard to potential impact on property values, those who have not otherwise been compensated may be entitled to claim for compensation in terms of Part 1 of the Land Compensation (Scotland) Act 1973. Under Part 1 there is a right to compensation in respect of any depreciation of more than £50 in the value of certain interests in land caused by the use of the new or altered roads resulting from specified physical factors (noise, vibration, smell, fumes, smoke and artificial lighting and the discharge onto the land in respect of which the claim is made of any solid or liquid substance). Compensation is assessed by reference to prices current at the date 12 months after the new or altered road was first open to public traffic. The valuation of any such compensation will be assessed by the Valuation Office

Agency and Transport Scotland will advertise in local press providing contact details at the appropriate time to make home owners aware that claims can be submitted.

Alternative Courage-Hardmuir Alignment

Transport Scotland notes the Community Council's backing for the Courage – Hardmuir Revised Route Proposal put forward by Mr & Mrs Pullan. While the dual carriageway alignment of the Courage – Hardmuir Revised Route Proposal is similar to the proposed scheme as published, more substantial changes to the local road network are indicated.

There are a number of technical reasons why the Courage – Hardmuir Revised Route Proposal is unacceptable since it does not comply with the standards set out in the DMRB. These reasons have been summarised below, along with a number of other factors which would make this proposal undesirable:

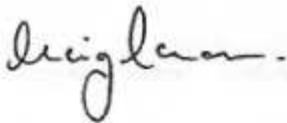
- The design of the published proposed scheme includes a major/minor priority junction between the A96 and the Ellands – Hardmuir – Boghole Road (U3036) at chainage 30920 and from that location, based on the design standards given in the DMRB and the Traffic Signs Manual (TSM) the following minimum dimensions apply to the design of the eastbound carriageway:
 - Minimum 500m from the end of any junction merge taper to the first "Dual Carriageway Ends Ahead" sign (DMRB TD42/95 para 2.28);
 - 420m from the "Dual Carriageway Ends Ahead" sign to the end of the physical central reserve (TSM Chapter 4, Figure 5.2);
 - 302.5m long taper (based on a 1 in 55 symmetrical taper) from the dual carriageway cross section to the single carriageway cross section (DMRB TD27/05 Table 4-3 and TSM Chapter 4, Table 5-1);
 - Minimum 295m stopping sight distance from the start of the single carriageway section to the first major/minor priority junction (DMRB TD9/93 Table 3);
 - This gives an overall minimum desirable distance from the end of any eastbound merge taper to the junction with the U3036 at ch30920 of 1,517.5m.
- It is not clear from the Courage – Hardmuir Revised Route Proposal where the dual carriageway would transition to a single carriageway and tie-in with the existing A96 or the intended layout of the junction between the A96 and the Ellands – Hardmuir – Boghole Road (U3036). In order to provide a major/minor priority junction at chainage 30920 for the U3036 and to achieve the design standards and minimum distances given above, it would not be possible to locate an eastbound merge slip road at the location indicated. Such a merge slip road would need to be located before ch29400 in the vicinity of the properties at Courage.
- Each of the eastbound and westbound slip roads includes a section for two-way traffic followed by a section of one-way traffic. Two-way single carriageway slip roads are not permitted (DMRB TD22/06 para 5.27) and therefore the location of the overbridge at Hardmuir indicated in the Courage – Hardmuir Revised Route Proposal is not suitable.
- Eastbound traffic travelling along the existing A96 past Courage and wishing to continue east towards Brodie and Forres is required to negotiate two junctions to the north and south of the Hardmuir overbridge.
- Public transport services currently travel along the existing A96 and serve the junction of Penick Road (U3164). The Courage – Hardmuir Revised Route Proposal would divert these public transport services to the south of the proposed dual carriageway, increasing the distance that residents on Penick Road would have to walk to reach a location served by the bus services.

I trust that the above addresses your concerns. If after consideration of this response you would like to withdraw your objection to the scheme I would be grateful if you could complete the attached form and return it to me as soon as possible, and before **8 September 2017**.



Should you require any further information on the scheme or any of the above matters please feel free to contact Simon Young of our design consultants, Jacobs UK Ltd, on 01463 228 311.

Yours sincerely,



Craig Cameron
Project Manager

cc Jacobs



A96 Dualling Inverness to Nairn (including Nairn Bypass)

To:

Mr Craig Cameron
Major Transport Infrastructure Projects
Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF

* I / We wish to * **withdraw / maintain** * my / our objection to the above scheme.

* Please delete as appropriate

Signed
Full Name (Block Capitals)
Address
.....
.....
.....
.....
Date