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A96 Dualling

East of Huntly to Aberdeen scheme

DMRB Stage 2

Route Options Sifting Workshop Report

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DMRB Stage 2 Route Options Sifting Workshop Report

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Prepared for:
Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF

Prepared by:
AmeyArup JV
Precision House
McNeill Drive
Eurocentral
Motherwell
ML1 4UR

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Glossary of Terms/Abbreviations

AWPR	Aberdeen Western Peripheral Route
BGS	British Geological Survey
DMRB	Design Manual for Roads and Bridges
GDL	Gardens and Designed Landscape
GIS	Geographic Information Systems
HES	Historic Environment Scotland
HIC	High Impact Constraints
HIAs	High Impact Areas
IIP	Infrastructure Investment Plan
LDP	Local Development Plan
MtT	Meet the Team
NMU	Non-Motorised User
SAC	Special Area of Conservation
SBC	Strategic Business Case
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SGN	Scottish Gas Networks
SNH	Scottish Natural Heritage
SO	Scheme Objective
SSE	Scottish and Southern Energy
STAG	Scottish Transport Analysis Guide
TS	Transport Scotland

1 Introduction

The DMRB Stage 2 Route Options Sifting Workshop for the A96 Dualling East of Huntly to Aberdeen Scheme was held on 24th July 2018 and was attended by representatives of Transport Scotland (TS) and their appointed consultants AmeyArup. It was facilitated by [REDACTED] of AmeyArup. Workshop Sessions 1 and 2 detailed the process undertaken to generate high impact constraints, route corridors and initial route options within those corridors. Workshop Sessions 3 and 4 provided detail and justification of the preferred route option sections proposed for further detailed development and assessment as part of the DMRB Stage 2.

The workshop had the following objectives:

1. To explain the process adopted in the:
 - Identification of High Impact Areas (HIAs);
 - Development, assessment and sifting of route corridor options taking cognisance of HIAs;
 - Development of route options within the route corridors carried forward; and
 - To explain the process adopted in the identification and appraisal of the end to end route options resulting from AmeyArup's initial route option development and appraisal work.
2. To present the route options appraisal and resulting outcomes.
3. To recommend and seek confirmation on the better performing route options to be taken forward for further assessment as part of the DMRB Stage 2 and for comment and feedback at Public Exhibition (Autumn 2018).
4. To enable all participants to provide constructive comment on the route options development and appraisal process, including its findings and to identify any areas that may require further consideration.

This Workshop Report captures background information on the scheme, the workshop and participants, the route options appraisal methodology and workshop outputs.

2 Scheme Background

2.1 A96 Dualling Programme

Transport Scotland is progressing a programme to upgrade the A96 between Inverness and Aberdeen to dual carriageway standard by 2030. The existing A96 is approximately 160km (99 miles) long, of which 138km (86 miles) is currently single carriageway.

Following the Preliminary Engineering and Strategic Assessment (DMRB Stage 1), the A96 Dualling Programme has been divided into sections (i.e. individual schemes within the overall dualling programme) for further assessment at DMRB Stages 2 and 3 (route options assessment and preliminary design). The three sections are:

- A96 Dualling Hardmuir to Fochabers (Western Section);
- A96 Dualling East of Fochabers to East of Huntly (Central Section); and,
- A96 Dualling East of Huntly to Aberdeen (Eastern Section).

The Inverness to Nairn (including Nairn Bypass) scheme also forms part of the A96 Dualling Programme. The DMRB Stage 3 assessment for this scheme has been completed, with the Environmental Statement and Draft Orders published in November 2016. A Public Local Inquiry is anticipated to be held in Autumn 2018.

Transport Scotland appointed AmeyArup, in July 2017, to progress the A96 Dualling East of Huntly to Aberdeen Scheme, starting with the DMRB Stage 2 and 3 assessment phases.

An Inception Stage Handover Workshop was held on 16 August 2017 and was followed by an Inception Workshop held on 6 October 2017, where the Scheme Objectives were agreed.

Since the Inception Workshop, AmeyArup have been undertaking option identification and assessment work under the scope of their commission for the DMRB Stage 2 delivery. This has included public Meet the Team Events, phased option development and appraisal, internal AmeyArup Senior Management challenge reviews and sifting workshops.

2.2 Programme and Scheme Objectives

The A96 Dualling Programme Objectives are:

- To improve the operation of the A96 and inter-urban connectivity between the cities of Inverness and Aberdeen and their city regions through:
 - Reduced journey times;
 - Improved journey time reliability; and
 - Reduced conflicts between local and strategic journeys
- To improve safety for motorised and non-motorised users through:
 - Reduced accident rates and severity; and
 - Reduced driver stress
- To provide opportunities to grow the regional economies on the corridor through:
 - Improved access to the wider strategic transport network; and
 - Enhanced access to jobs and services
- To facilitate active travel in the corridor;
- To facilitate integration with Public Transport Facilities; and
- To reduce the environmental effect on the communities in the corridor.

The Programme Objectives have been further developed into specific A96 Dualling East of Huntly to Aberdeen Scheme Objectives. The Scheme Objectives are set out in Table 2.1 with an explanation for their development beyond the requirement of the Programme Objectives.

The Scheme Objectives form the basis of the comparative assessment of route options but, in addition, AmeyArup have appraised route options against the following appropriate STAG criteria as follows:

- STAG 1: Environment
- STAG 2: Safety
- STAG 3: Economy
- STAG 4: Integration
- STAG 5: Accessibility & Social Inclusion
- STAG 6: Feasibility
- STAG 7: Affordability
- STAG 8: Public Acceptability

A seven-point scale was used to undertake the route options assessment, as outlined in Figure 2.1. Where there was any overlap in assessments against the various criteria, this was acknowledged and addressed as outlined in the Appraisal Methodologies in Appendix C.

Colour Coding	Assessment
Red	Major Adverse Impact
Orange	Moderate Adverse Impact
Yellow	Minor Adverse Impact
Light Blue	Neutral Impact
Light Green	Minor Beneficial Impact
Medium Green	Moderate Beneficial Impact
Dark Green	Major Beneficial Impact

Figure 2.1 – 7 Point Assessment Scale

Table 2.1 – A96 Programme Objectives and A96 Dualling East of Huntly to Aberdeen Scheme Objectives

A96 Programme Objectives	A96 East of Huntly to Aberdeen Scheme Objectives	Rationale for Developed Scheme Objectives
<ul style="list-style-type: none"> To improve the operation of the A96 and inter-urban connectivity between the cities of Inverness and Aberdeen and their city regions through: <ul style="list-style-type: none"> - Reduced journey times; - Improved journey time reliability; and - Reduced conflicts between local and strategic journeys. 	<ul style="list-style-type: none"> To improve the operation of the A96 and inter-urban connectivity through: <ul style="list-style-type: none"> - Reduced journey times; - Improved journey time reliability; - Increased overtaking opportunities; - Improved efficiency of freight movements along the transport corridor; - Reduced conflicts between local traffic and strategic journeys; and - Improved network resilience. 	<p>To reinforce the operational objective so that we provide a scheme that is resilient and copes with closures (both weather-related and other) given the area of the country and the potential for inclement weather.</p>
<ul style="list-style-type: none"> To improve safety for motorised and non-motorised users through: <ul style="list-style-type: none"> - Reduced accident rates and severity; and - Reduced driver stress. 	<ul style="list-style-type: none"> To improve safety for motorised and Non-Motorised Users through: <ul style="list-style-type: none"> - Reduced accident rates and severity; - Reduced driver stress; and - Reduced potential conflicts between Motorised and Non-Motorised Users. 	<p>To reinforce the objective of providing a scheme that is safe for all users and seeks to minimise conflicts at all locations.</p>
<ul style="list-style-type: none"> To provide opportunities to grow the regional economies on the corridor through: <ul style="list-style-type: none"> - Improved access to the wider strategic transport network; and - Enhanced access to jobs and services. 	<ul style="list-style-type: none"> To provide opportunities to grow the regional economies on the corridor through: <ul style="list-style-type: none"> - Improved access to the wider strategic transport network; and - Enhanced access to jobs and services. 	<p>Unchanged</p>
<ul style="list-style-type: none"> To facilitate active travel in the corridor. 	<ul style="list-style-type: none"> To facilitate active travel in the corridor. 	<p>Unchanged</p>
<ul style="list-style-type: none"> To facilitate integration with Public Transport Facilities. 	<ul style="list-style-type: none"> To facilitate integration with Public Transport Facilities. 	<p>Unchanged</p>

A96 Programme Objectives	A96 East of Huntly to Aberdeen Scheme Objectives	Rationale for Developed Scheme Objectives
<ul style="list-style-type: none"> To reduce the environmental effect on the communities in the corridor. 	<ul style="list-style-type: none"> To avoid significant environmental impacts and where this is not possible, to minimise the environmental effect on: <ul style="list-style-type: none"> the communities and people in the corridor; and natural and cultural heritage assets. 	<p>To include an objective that considers the specific environmental impacts of the scheme.</p>

2.3 DMRB Stage 2 Process

The A96 Dualling East of Huntly to Aberdeen DMRB Stage 2 Assessment is being progressed in accordance with Figure 2.2. In conducting the assessment, cognisance has been taken of the feedback received from stakeholders, interest groups and members of the public as a result of the consultations held in 2015 (DMRB Stage 1) and from the scheme specific 'Meet the Team' Events held in November 2017.

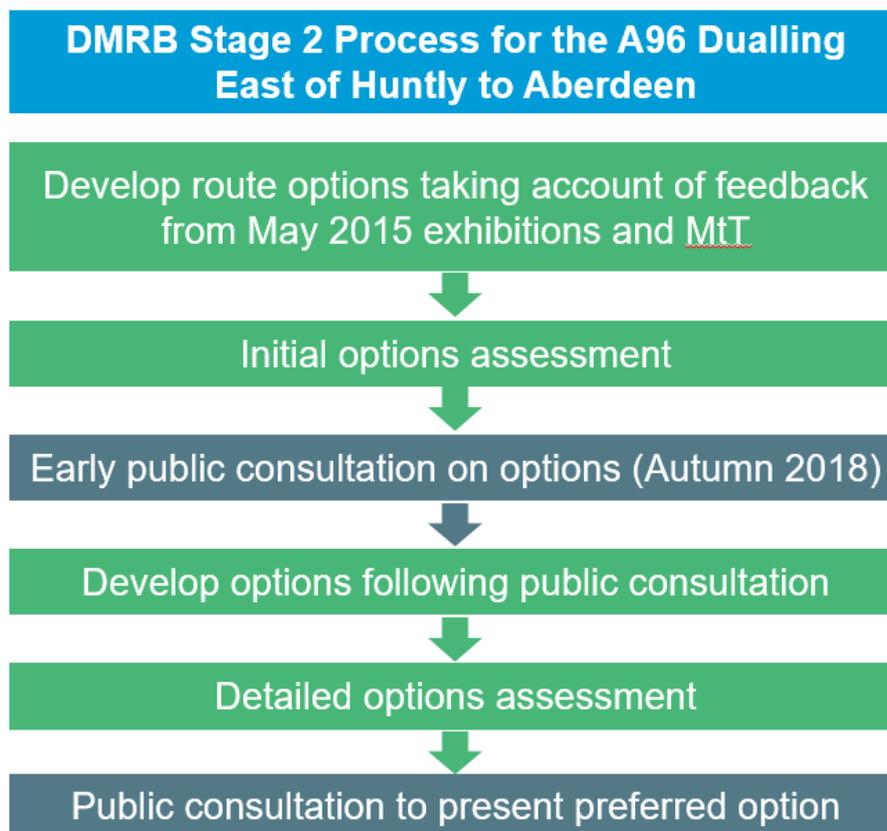


Figure 2.2 - DMRB Stage 2 Process for the A96 East of Huntly to Aberdeen Dualling Scheme.

2.4 Route Option Identification, Assessment and Process

AmeyArup has adopted a progressive and iterative route option development and appraisal process with phased methodology to deliver the DMRB Stage 2 Assessment. Figure 2.3 illustrates this five phase methodology with supporting text demonstrating how each step enables the design development to progress and the preferred route option to be identified for detailed consideration at DMRB Stage 3.

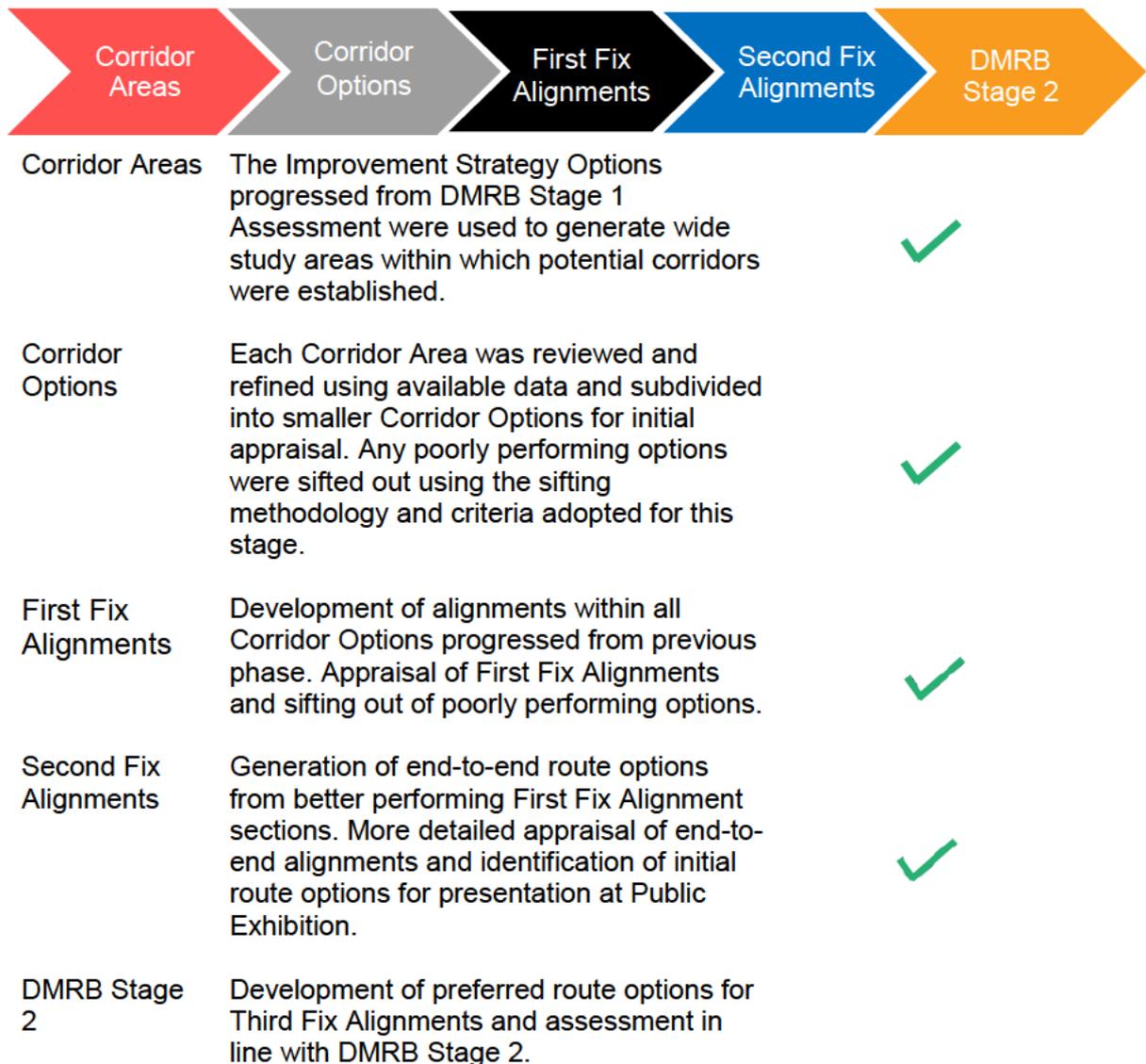
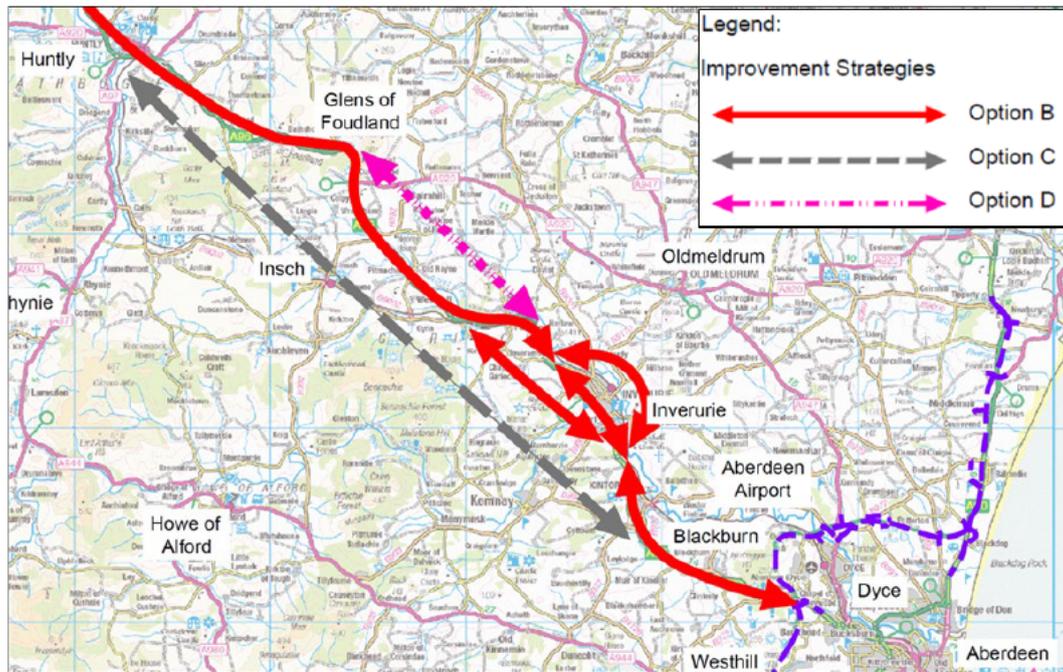


Figure 2.3 - AmeyArup Five Phase Methodology

2.4.1 Corridor Areas

The DMRB Stage 1 Improvement Strategy Options, as illustrated in Figure 2.4, were used to define study areas during the scheme familiarisation phase. To enable the development of initial options for assessment at DMRB Stage 2, AmeyArup identified existing constraints within these areas.



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Figure 2.4 - DMRB Stage 1 Improvement Strategy Options

2.4.2 Constraints Mapping and Development of Corridor Options

Significant engineering and environmental constraints, including groups of constraints within the Corridor Areas were amalgamated into 'High Impact Areas' (HIAs). (Refer to Appendix A). The HIAs represented areas to be avoided where possible during design development, thus avoiding environmental constraints of national importance and onerous engineering constraints such as difficult topography or strategic utilities. The HIAs were used to develop approximately 2km wide corridors and then internal sifting workshops were held. 17 Corridor Options were identified and each of these were appraised to identify those that performed poorly against the Scheme Objectives and the STAG criteria. This appraisal resulted in the removal of one Corridor Option to the south of Inverurie which offered no benefit over other similar adjacent corridors. The results of the Corridor Options Appraisal were presented and agreed at an internal workshop in February 2018.

2.4.3 Improvement Strategy Option Q Overview

Improvement Strategy Option Q was considered as part of the previous DMRB Stage 1 Assessment, but was discounted on the grounds that it did not perform well against the A96 Dualling Programme objectives.

However, acknowledging the feedback received from stakeholders and members of the public following the 2015 exhibitions, and the more recent 'Meet the Team' events in 2017, a further review of Improvement Strategy Option Q was undertaken by AmeyArup as part of the initial development of the A96 Dualling East of Huntly to Aberdeen scheme.

Full details of the review are contained in the Improvement Strategy Option Q Appraisal Report. The main recommendations from this report are:

- The eastern section following the existing A947 corridor was sifted out due to poor performance against the Scheme Objectives.
- The western section following the existing A920 corridor performed well against the Scheme Objectives and was taken through the ongoing sifting process.

2.4.4 First Fix Alignment Development

First Fix Alignments were then developed within the Corridor Options. It should be noted that at First Fix, these were alignment sections and did not represent complete end-to-end alignments from East of Huntly to Aberdeen. The First Fix Alignments were intended to assess the feasibility of alternative proposals within each of the Corridor Options and were developed as 80m wide lines to represent the potential overall width of a dual carriageway road corridor.

In total, 80 First Fix Alignments were developed across the 17 Corridor Options. Each alignment section was appraised to identify the better performing sections within a Corridor Option and these were taken forward for Second Fix Alignment Development. The results of the First Fix Alignments appraisal were presented and agreed at an internal workshop in April 2018.

Post First Fix workshop, further design development was undertaken on the connections between the better performing sections within each Corridor Option to develop end to end route options. Some interim sifting was also undertaken using pairing assessments, based on the guidance provided in TA 30/82. This compared connections which linked the better performing alignments between each corridor against those that were performing similar functions between common points.

2.4.5 Second Fix Alignment Development

The alignment sections remaining were combined to make a longlist of 52 end-to-end alignments on which the Second Fix Appraisal was undertaken, the outcome of this appraisal being the subject of the Second Fix Workshop and this report. Appendix B contains a plan of the 52 end-to-end alignments and explains the sections that combined to form these.

Appendix C contains a summary of how the alignments were appraised by each discipline team (Engineering / Environment / Traffic) and includes detail on the following:

- Second fix assessment metrics;
- Details of Environmental, Engineering and Transportation appraisal methodologies;
- Graphical output of discipline assessments (Environment and Engineering);
- Combination of the discipline appraisals and results table; and
- Discipline assessment summary sheets for each alignment, recording the key issues for each and how they performed against the appraisal criteria

Appendix D contains a plan of the 'better performing' alignments being progressed to the next step in the process, following the Second Fix Workshop.

3 Workshop Agenda and Outputs

3.1 Workshop Agenda

Time	Workshop Session	
9:30	Tea and Coffee	■
10.00	Introductions and Safety Moment	■
10:05	Session 1: Scheme Familiarisation and Workshop Objectives	■
10:15	Session 2: Process for Option Development Corridor Development High Impact Constraints/Areas Corridor Option Identification & Sifting Outcomes First Fix Alignments & Sifting Outcomes Further Sifting Outcomes Improvement Strategy Option Q	■
11.00	Q&A	■
11.15	Break	■
11:20	Session 3: Option Development (Second Fix) and Appraisal Worked Example & Summary Table Engineering (Feasibility) Appraisal covering description of Second Fix Alignments Environmental Appraisal Traffic Appraisal against Scheme Objectives/STAG Operation and Connectivity Safety Economy/Growth of Regional Economies Active Travel Integration with Public Transport H&S Affordability Public Acceptability (includes stakeholder and public feedback)	■
12.30	Q&A	■

Time	Workshop Session	
13:00	Lunch	■
13:45	Session 4: Combined Appraisal Results Summary of collated appraisal outputs Explanation of outputs Better Performing Alignments justification Poorer Performing Alignments justification Proposed Options for Public Exhibition	■
14.45	Q&A	■
15:00	Tea and coffee	■
15:15	Session 5: Other Issues Junction Strategy Major Structures Stakeholder Consultation Public Exhibition Details	■
15:45	Session 6: Summary, Actions and AOB	■
16:00	Close	■

3.2 List of Workshop Participants

Name	Organisation
[REDACTED]	TS – Head of Planning and Design
[REDACTED]	TS – A96 Dualling Design Manager
[REDACTED]	TS – A96 EoH-A Project Manager
[REDACTED]	TS – Environmental Advisor
[REDACTED]	TS – Development Manager
[REDACTED]	TS – TRBO
[REDACTED]	TS Technical Analysis Branch
[REDACTED]	TS
[REDACTED]	TS – Geotechnical Manager
[REDACTED]	TS - Construction Branch
[REDACTED]	TS
[REDACTED]	TS – Communications
[REDACTED]	AmeyArup - Contract Director
[REDACTED]	AmeyArup - Contract Manager
[REDACTED]	AmeyArup - Roads and Infrastructure Manager
[REDACTED]	AmeyArup - Roads and Infrastructure Manager
[REDACTED]	AmeyArup - Senior Roads and Infrastructure Engineer
[REDACTED]	AmeyArup - Senior Roads and Infrastructure Engineer

Name	Organisation
[REDACTED]	AmeyArup - Roads and Infrastructure Engineer
[REDACTED]	AmeyArup - Senior Geotechnical Specialist
[REDACTED]	AmeyArup - Transportation Manager
[REDACTED]	AmeyArup - Deputy Transportation Manager
[REDACTED]	AmeyArup - Senior Transportation Specialist
[REDACTED]	AmeyArup - Environmental and Landscaping Manager
[REDACTED]	AmeyArup - EIA Coordinator
[REDACTED]	AmeyArup - Senior Environmental Specialist
[REDACTED]	AmeyArup - Senior GIS Specialist
[REDACTED]	AmeyArup - Landowner & Communities Manager
[REDACTED]	AmeyArup - Senior Roads and Infrastructure Engineer
[REDACTED]	AmeyArup – Student Work Placement

3.3 Workshop Format

The workshop format comprised a series of presentations covering each agenda item. A copy of the presentations can be found in Appendix E of this report. Questions and points for discussion were raised by the workshop participants and recorded in Table 3.3 below.

3.4 Workshop Outputs

Workshop attendees noted the design and assessment process implemented in relation to Constraints Mapping in relation to HIAs, Corridor and initial route options development, sifting outcomes and recommendations.

During Session 4 of the workshop AmeyArup invited challenge and discussion on these appraisal results from participants.

One of the key issues noted from the results was that a number of sections of existing A96 road corridor were omitted from the better performing alignments, primarily due to existing physical constraints at Pitcaple and Inverurie denying opportunities to accommodate a dual carriageway cross section without incurring significant impacts. However, there was one section of the existing A96 between Colpy and Oyne, which was not identified within any of the better performing alignments, but could feasibly accommodate a dual carriageway cross section.

Workshop participants agreed that an alignment encompassing this section of the existing A96 corridor should be progressed for further assessment for the following reasons:

- Inclusion of a dual carriageway alignment within the existing A96 corridor supports the key aims within National and Local Planning Policy guidelines including the Aberdeenshire Local Development Plan (2017) and Aberdeenshire Local Transport Strategy (2012) which look to “make the best of our existing transport network” and to ‘maximise existing and new assets’.
- While the constraints identified during the Stage 2 Assessment preclude on-line dualling along the full length of the existing A96, further consideration of the existing Colpy to Oyne corridor was acknowledged to provide opportunities to minimise the extent of new local road connectivity required to facilitate access from the A96 to surrounding settlements, including those at Colpy, Kellockbank, Pitmachie and Old Rayne.
- It was further noted that a dual carriageway alignment that closely follows the trunk road corridor would facilitate a reduction in traffic on any section of existing A96 re-utilised as a local road connector, inducing potential safety benefits on the local road network and facilitating active travel opportunities in line with Aberdeenshire Council’s aims and national and regional policies.
- Recent feedback received following meetings with Historic Environment Scotland (HES) and Scottish Natural Heritage (SNH) identified that adverse impacts upon the Garden and Designed Landscapes at Williamston and Newton House were key issues. Alignments which minimise these issues should therefore be considered and an alignment beyond the existing A96 at Williamston House was considered worthy of further consideration both by HES and SNH.

On the basis of the above observations, which were acknowledged by workshop attendees, it was agreed that Alignment 22 was one of the better performing alignments utilising the existing A96 corridor between Colpy and Oyne and should therefore be carried forward for further assessment.

It was agreed that all alignment sections forming the better performing end-to-end alignments would be presented at the public consultation to obtain vital feedback on the alignment sections. This feedback will then be considered during the next stages of route option development and assessment.

Table 3.2 - Better performing end-to-end alignments

Alignment Ref	Alignment Section Code							
Alignment 10	L1	C2	P1	P3	O1	O2	O3	O4
Alignment 20	L1	C2	B1	B2	B3	V3		
Alignment 21	L1	C2	B1	B2	G3	V3		
Alignment 22	C1	Br1	Br2	Br3	V1	V2	V3	
Alignment 58	C1	C2	P1	P3	O1	O2	O3	O4
Alignment 60	C1	C2	P1	P3	G1	G2	G3	V3
Alignment 66	C1	C2	B1	B2	B3	V3		
Alignment 67	C1	C2	B1	B2	G3	V3		
Alignment 92	R1	B1	B2	B3	V3			
Alignment 93	R1	B1	B2	G3	V3			
Alignment 125	L1	C2	P1	P3	V1	V2	V3	
Alignment 126	C1	C2	P1	P3	V1	V2	V3	
Alignment 185	R1	R2	P2	P3	O1	O2	O3	O4
Alignment 187	R1	R2	P2	P3	G1	G2	G3	V3
Alignment 191	L1	C2	P1	P3	G1	G2	G3	V3
Alignment 194	C1	P2	P3	G1	G2	G3	V3	
Alignment 196	C1	P2	P3	O1	O2	O3	O4	

Refer to Appendix D for better performing end to end alignments plan, details of alignment development and the resultant route options plan for Public Exhibition.

Table 3.3 – Workshop Questions and Discussions

Workshop Questions and Issues		Workshop Comments/Discussion and Actions
	Safety Moment undertaken AmeyArup	
1	Session 1 – Scheme Familiarisation and Workshop Objectives	
1.1	No Questions or Issues raised	N/A
2	Session 2 – Process for Option Development	
2.1	Have all combinations been considered as part of the route options development process?	All combinations of alignment sections were considered and appraised. The sectional appraisal approach allows the better performing sections of alignment to be taken forward.
2.2	One of the main traffic issues will be around Inverurie - there needs to be careful consideration of assumptions in relation to future development and the Local Development Plan. The plan is currently under review which is to be completed by 2021.	Yes, the current version of the LDP has been considered as part of the alignment development.
2.3	Have junction locations been considered?	Indicative junction locations have been considered when modelling the alignments for traffic and economic assessment. However, junction layouts etc. have not been considered at this stage. Further junction development is required as the scheme progresses
3	Session 3: Option Development (Second Fix) and Appraisal Works Example and Summary Table	
3.1	Has there been any evidence to date of public feedback from people outwith the study area? A9 schemes have attracted public feedback from Canada?	We will conduct an up to date postcode assessment based on the feedback received from the Public Exhibition events planned for Autumn 2018.
3.2	Have lifetime costs been considered and what assumptions have been made in relation to the type of contract and how the project will be procured?	Construction costs have been considered on a comparative exercise only to this point and whole life costing will be derived as alignment options are further developed.
3.3	Is NMU provision included in the cross-section?	At this stage, existing NMU facilities are assumed to be maintained with appropriate crossing facilities to be provided where required by the proposals. Specific details of NMU provision will be detailed as part of the further assessment work to be undertaken, and particularly upon identification of a preferred option.

Workshop Questions and Issues		Workshop Comments/Discussion and Actions
		It was noted on the A96 Dualling Inverness to Nairn (incl. Nairn Bypass) approximately 30km of the 31km scheme has an NMU provision within the road footprint.
3.4	Traffic Modelling Will the existing A96 capacity issues i.e. around Port Elphinstone and Blackhall be resolved when the dualling of the A96 is complete and has this been considered in the model?	A new route would take a proportion of traffic from the existing A96, which would be beneficial to the local road network. The junction strategy will be developed to consider both local and strategic traffic.
3.5	Is there an issue with overall link capacity between Inverurie to Aberdeen – will a dual carriageway be sufficient?	The existing dual carriageway with new grade separated junctions will deliver an improvement. The impact of the AWPR is not yet fully understood and further traffic counting is required. A sensitivity and validation analysis will be required when data is available. At this stage the A96 CRAM model does not include delays or detailed routeing behaviour through Inverurie and Dyce. Additional surveys have been undertaken and these will be used to refine the A96 CRAM model. Updated model is expected in September 2018.
3.6	It is important at this stage to not sift too many options out around Inverurie to allow flexibility for LDP development.	Noted.
3.7	Have Aberdeenshire Council seen the traffic modelling to date?	Aberdeenshire Council have not yet seen the modelling, but we will be briefing the local authorities on the outcomes of our assessment work to date.
3.8	In terms of the engineering and environmental appraisal, as each 50m alignment interval has been appraised, does that mean longer sections generate higher scores?	For engineering this is not the case as clusters of major impacts have been used in the appraisal. For example, a 500m long structure is 10 major impacts but just one major cluster, so this does not skew the result by length. For the environmental appraisal the larger the feature (i.e. longer) the bigger the impact, similarly if there is a large (i.e. longer) section with no constraints there would be no impact. This is acceptable for the environmental appraisal since the environmental constraints were often covering a larger plan area and this would reflect the impact of the road on this feature over its length.

Workshop Questions and Issues		Workshop Comments/Discussion and Actions
4	Session 4: Combined Appraisal Results	
4.1	Are there alignments within the better performing alignments which performed very poorly for one individual discipline?	The three disciplines have equal weighting, so it is possible that a poorer performing alignment for one discipline can still form part of a better performing end to end route option. However, we confirm that there are no very poor performing route options from any of the three disciplines in the better performing alignments recommended for further development.
4.2	Noted that there are three route options close together at the western end of the scheme and if there was just one route option could this link to all other combinations?	AmeyArup originally looked at route options over a much wider area but challenging topography and other constraints resulted in these three route options being identified as better performing. All three route options are very different in nature and represented distinct alternative routes. Theoretically one route option could link to the other combinations however, due to the alignment challenges in this location AmeyArup wished to keep flexibility by having a number of route options available.
4.3	How will this scheme tie into the next scheme (Central Section)?	All of the alignments finish sufficiently east of Huntly to allow a northern or southern bypass to be implemented. The cut off point for the alignments will be confirmed as part of the further design development and assessment required.
4.4	What is the impact of the alignments on wildcat populations given that all alignments go through the wildcat priority area?	At a recent meeting with SNH it was made clear that all alignments will have to pass through the wildcat priority area since it is so extensive. SNH have confirmed this will need to be managed appropriately. Further discussions will be held as design and assessment work continues.
4.5	From an engineering and transportation perspective Alignments 22 and 195 perform relatively well, but not from an environmental perspective. Therefore, if environment was taken aside this would result in alignments 22 and 195 being in the top performing alignments. Are there any further works that could be undertaken to improve the environmental situation for these alignments?	The unmitigated scenario is the worst case and therefore a robust starting point for comparative assessment. If mitigation was used it would have to be applied equally across all alignments for each of the nine environmental topics. The alignment design is not yet detailed enough to develop suitable mitigation measures for all environmental topics.
4.6	Why is alignment 22 marked very low from environmental perspective?	It is largely due to the alignment impacting on the setting of some large features (GDLs and Scheduled Monuments).

Workshop Questions and Issues		Workshop Comments/Discussion and Actions
4.7	Has environmental mitigation been considered?	Environmental mitigation has not been included as part of the assessment/appraisal to-date but would be at the next stage of assessment.
4.8	Does the DMRB state not to use mitigation at this stage?	<p>The DMRB is limited in terms of requirements at options appraisal stage. The unmitigated scenario is the worst case and therefore a robust starting point for comparative assessment.</p> <p>If mitigation was used it would have to be applied equally across all alignments for each of the nine environmental topics. The alignment design is not yet detailed enough to develop suitable mitigation measures for all environmental topics.</p>
4.9	If mitigation was applied to the amber lesser performing alignments, would that result in these alignments being reconsidered as better performing alignments, or would they still likely be sifted out at a later stage?	It is difficult to ascertain how well the alignments would perform with mitigation in place. As previously noted the assessment is more robust being based on the un-mitigated scenario and it is expected that applying mitigation would be relatively effective across all alignments.
4.10	<p>Concern was raised that some of the better performing alignments from a traffic and economics perspective (Alignment 127, Alignment 22 and Alignment 195) have been sifted out.</p> <p>Also concern raised about the public perception of not having an online alignment to the west of Inverurie.</p>	<p>There was a lengthy discussion within the workshop on the merits and challenges of taking an online alignment through that was not considered as being a better performing alignment.</p> <p>Alignments 22 and 45 both follow the existing A96 through the section between Colpy and Pitcaple (GIS was used to compare the two alignments). The following points were discussed:</p> <ul style="list-style-type: none"> - General nervousness of not taking through a large section of alignment within the existing on-line corridor. Desire to make best use of existing online corridor. - It is understood that public perception of an alignment to the far south of Inverurie would not be positive. This therefore favours Alignment 22 over 45, since 45 follows the online section between Colpy and Pitcaple but then goes to the far south of Inverurie near the Special Landscape Area. - Concern about not fully following the agreed process. i.e. taking a poorer alignment through. - Concern about being able to defend the decision of taking an additional alignment (Alignment 22) through that was not in the group

Workshop Questions and Issues		Workshop Comments/Discussion and Actions
		<p>of better performing alignments. Needs to be a strong justification for making best use of the existing infrastructure.</p> <ul style="list-style-type: none"> - Alignment 22 has junctions at Colpy, Inch, Oyne, Oldmeldrum and Kintore, providing good connections to local communities. - Recent meetings with SNH and HES identified Alignment 22 south of the existing A96 would be more favourable than some other alignments but this had not been included in the appraisal.
5	Session 5: Next Stages of Development	
5.1	Stakeholder Consultation	Now need to undertake further consultation with key stakeholders i.e. SNH/HES/SEPA and local authorities.
5.2	What standard of highway and junctions is being utilised?	Category 7A with full grade separated junctions.
6	Session 6: AOB	
6.1	From previous experience Scottish Water should be included in consultation at an early stage of the design to ensure they are comfortable with the proposals	Noted
6.2	Consideration needs to be given early to the use of high quality SuDS	Noted
6.3	All decisions from workshop to be ratified by Transport Scotland Programme Board. Board meeting on 29/08/18, board paper and presentation required in advance of meeting.	Noted

Appendix A

Corridor Options and High
Impact Areas

Combined First Fix
Alignments

Appendix B

Second Fix Alignments
Longlist of 52 End to Ends

Appendix C

Second Fix Discipline
Methodologies

Second Fix Assessment
Matrix

Second Fix Appraisal
Summary Sheets

Second Fix Combined
Discipline Appraisal

Appendix D

Second Fix Better Performing
End to End Alignments

Second Fix Better Performing
Alignments Design
Development

Route Options Plan

Appendix E

Workshop Presentation



**TRANSPORT
SCOTLAND**
CÒMHDHAIL ALBA

A96

DUALLING

EAST OF HUNTLY TO ABERDEEN

**[transport.gov.scot/projects/
a96-dualling-inverness-to-aberdeen/
a96-east-of-huntly-to-aberdeen](https://transport.gov.scot/projects/a96-dualling-inverness-to-aberdeen/a96-east-of-huntly-to-aberdeen)**