# **Halcrow Group Limited**

A96 Corridor Masterplan Stage 2 Technical Options Appraisal – East Inverness October 2006

**The Highland Council** 

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Technical Options Appraisal – East Inverness
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### 1 Introduction

#### 1.1 Context

As part of developing proposals for the growth of Inverness (in the context of considering growth across the A96 Corridor as a whole) a range of proposals were developed<sup>1</sup>. These were designed to present options for growth at East Inverness and to stimulate debate and discussion.

The options are being considered in the context of broad stakeholder considerations<sup>2</sup>, general public consultation (undertaken and assessed by The Highland Council), agency consultation (undertaken and assessed by The Highland Council), contributions from the East Inverness Framework Planning Group<sup>3</sup> and technical considerations in respect of marketability, delivery, urban form, traffic and planning.

This paper reports on the technical considerations and reviews them. It attempts to draw some conclusions that will allow a single preferred option for growth at East Inverness to emerge.

#### 1.2 Report Structure

The report's structure is straightforward. It will:

- Summarise each technical paper drawing out the salient points.
- Draw conclusions and make recommendations for developing a growth option at East Inverness.

<sup>&</sup>lt;sup>1</sup> See Interim Report – Phase 1: Options for Development and Green Frameworks

<sup>&</sup>lt;sup>2</sup> Utilising Collaboration for Success

<sup>&</sup>lt;sup>3</sup> The East Inverness FPG was set up to drive forward the preparation of a Framework for East Inverness. It is made up of key land interests and appropriate public agencies.

## 2 Technical Appraisals

#### 2.1 Marketability

FG Burnett undertook an assessment of each option for East Inverness (see Appendix 1). This considered the marketability of each option. In summary, the salient points for each option were:

#### For Option A

- High density housing allocations appear excessive.
- Educational provision is low.
- o Employment generation has been significantly under-estimated.
- o Regional retail is adequate.
- o Hotel leisure could be doubled.
- o Golf course demand is not proven

#### • For Option B

- High density housing allocations appear excessive. No low density proposed.
- o Educational provision is low.
- o Employment generation has been significantly under-estimated.
- Regional retail is excessive.
- Over allocation for community uses.
- Hotel leisure allocation adequate.
- o Golf course demand is not proven

#### For Option C

- o Increase proportion of medium and low density housing.
- Educational provision is low.
- o Employment generation has been significantly under-estimated.
- Regional retail is excessive in respect of bulky goods.
- Over allocation for community uses.
- Hotel leisure could be doubled.

o Golf course demand is not proven

#### For Option D

- o Increase proportion of medium and low density housing.
- Educational provision is low.
- Employment generation has been significantly under-estimated.
- Regional retail is excessive.
- Over allocation for community uses.
- o Hotel leisure could be doubled.
- Golf course demand is not proven

#### • For Option E

- Over provision of higher density housing.
- o Educational provision is slightly low.
- Employment generation has been significantly under-estimated.
- Regional retail is excessive.
- Over allocation for community uses.
- o Hotel leisure could be doubled.
- o Golf course demand is not proven

A balanced consideration concludes that **Option A** (with amendment) would be the most marketable. The amendments include to:

- Increase medium and low density housing provision
- Ensure a balance in employment generation with population growth.
- Significantly increase education allocation.
- Increase hotel/leisure provision

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#### 2.2 Delivery

Turner and Townsend undertook an assessment of each option for East Inverness (see Appendix 2). This considered the deliverability of each option. In summary, the salient points for each option were:

#### For Option A

 Possible impact on pipeline safeguard zone of new Smithton Interchange proposal.

#### For Option B

- Possible impact on pipeline safeguard zone of new Smithton Interchange proposal.
- o Possible interchange to serve allocations at the east end.
- By-pass route impacts on the floodplain which may be inappropriate.

#### For Option C

- $\circ\,\,$  Sound barriers may be required for housing adjacent to the by-pass.
- Possible impact on pipeline safeguard zone of new Stratton Interchange proposal.

#### For Option D

- By-pass route impacts on the floodplain which may be inappropriate.
- Possible impact on pipeline safeguard zone of new Stratton Interchange proposal.

#### • For Option E

- o Closure and re-alignment of the railway is complex.
- By-pass route impacts on the floodplain which may be inappropriate.
- Possible impact on pipeline safeguard zone of new interchange proposal.

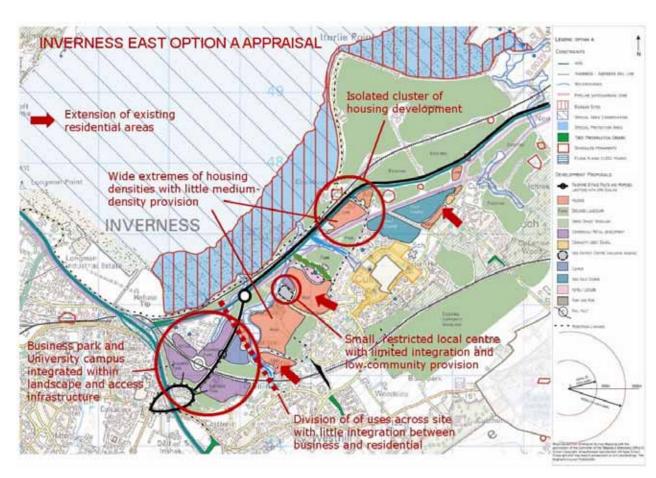
A balanced consideration concludes that  $\mathbf{Option}\ \mathbf{C}$  would be the most deliverable as it involves the most direct A96 by-pass route and the least complexity in implementation.

#### 2.3 Urban Form

Whatmore undertook an assessment of each option for East Inverness (see Appendix 3). This considered the urban form of each option. In summary, the salient points for each option were:

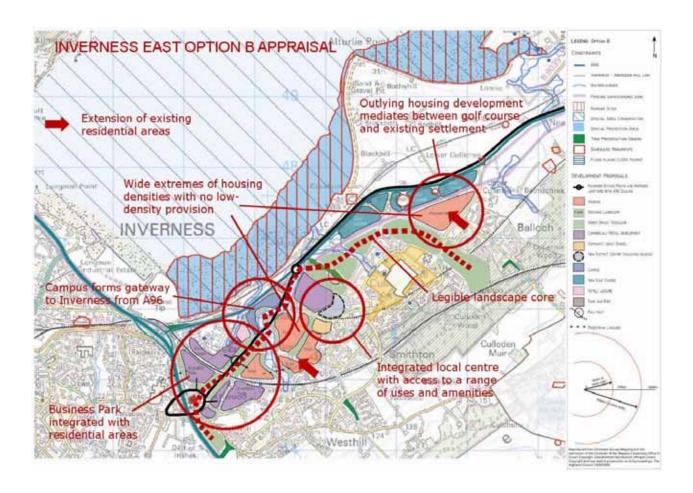
#### For Option A

Strengths	Weaknesses	Opportunities	Threats
Road infrastructure improvements	Potentially divisive	Well serviced development	Pedestrian permeability
Substantial landscape buffer to the east	Limit to land available development	Recreation opportunities	Pushes up housing densities
Business/campus very accessible by road	Isolated from other uses	High density student housing near centre	Restricted expansion; poor integration
Legible high-density settlement near centre	Limited range of house types	Integration with Inverness	Placemaking not as diverse or integrated



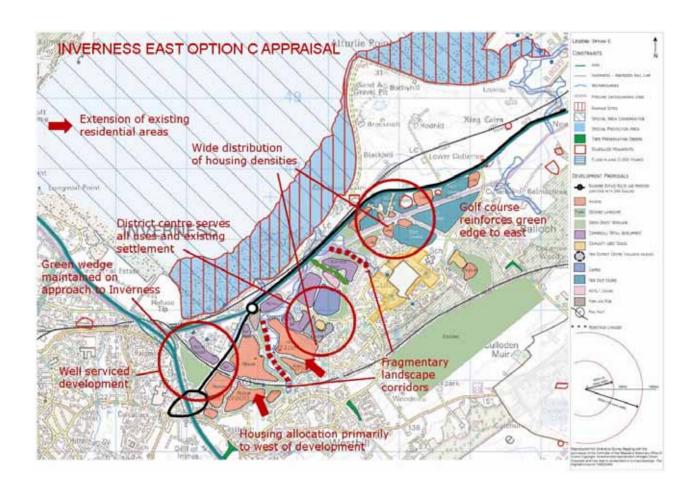
#### • For Option B

Strengths	Weaknesses	Opportunities	Threats
Road infrastructure improvements	Potentially divisive	Well serviced development	Pedestrian permeability
Legible landscape structure	Limits available development land	Network of routes; recreation	High density isolated clusters
Business very accessible by road	Isolated from other uses	Development setting	Houses and employment separated
More dispersed settlement	Clusters of different uses	Links to existing structure	Potential lack of integrated character



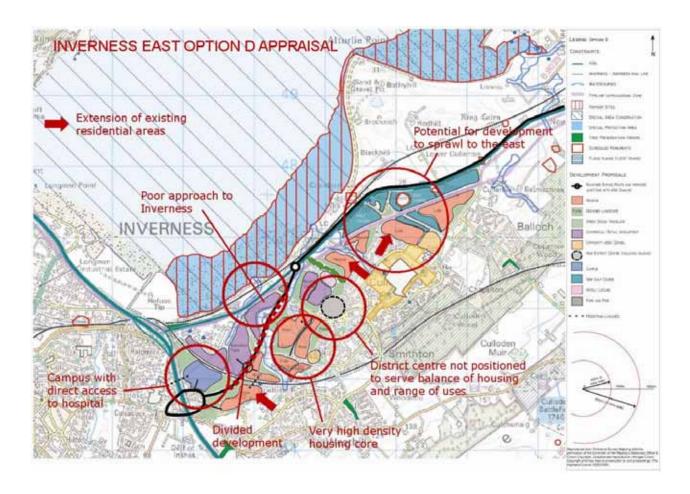
#### For Option C

Strengths	Weaknesses	Opportunities	Threats
Road infrastructure improvements	Potentially divisive	Well serviced development	Pedestrian permeability
Range of housing types and distribution	Poor landscape infrastructure	Balanced community and uses	Housing neighbourhoods rather than integration
Business and campus accessible and legible	Encroachment to Culloden; split	High capacity for study and employment	Overdevelopment
Housing linked to golf	Exclusive	Pockets of exceptional	Golf Ghetto
course		high quality	



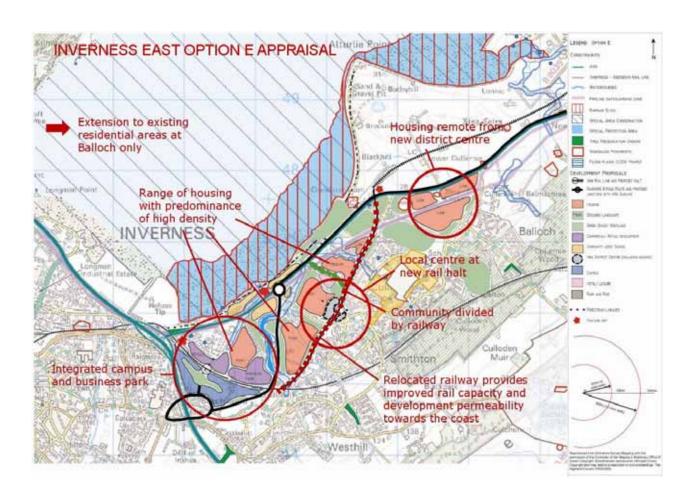
#### • For Option D

Strengths	Weaknesses	Opportunities	Threats
Road infrastructure improvements	Potentially divisive	Well serviced development	Pedestrian permeability
Good distribution of housing densities	Poorly connected land- scape infrastructure	Access to employment	Inadequate connections
Defined local centre	Inappropriate uses and densities by centre	Use of flood plain increases available land	Indistinct centre
Innovative road access arrangement	Intensive single use close to centre	Highly accessible commercial premises	Unattractive approach public transport issues



#### • For Option E

Strengths	Weaknesses	Opportunities	Threats
Road infrastructure improvements	Potentially divisive	Well serviced development	Pedestrian permeability
Access to waterfront	Low employment	Coastal identity	Restricted business opportunity
Improved rail capacity	Unbalanced density range	Growth from new centre	Unbalanced and eccentric development
Innovative rail access arrangement	Division	Rail halt serving community centre	Split community



A balanced consideration concludes that  $\mathbf{Option}\ \mathbf{C}$  would be the most favoured urban form as it promotes legible and compact places with a range of densities.

#### 2.4 Traffic

Halcrow Group undertook an assessment of each option for East Inverness (see Appendix 4). This considered the traffic and movement implications of each option. In summary, the salient points for each option were:

#### For Option A

- o Transport choice may be limited due land use segregation.
- By-pass road provides good access.

#### • For Option B

- Promotes a variety and choice in transport modes and affords walking/cycling opportunities.
- Attractive for bus operators.
- By-pass road provides good access.
- o Eastern development has poor access.

#### • For Option C

- Promotes a variety and choice in transport modes and affords walking/cycling opportunities.
- Promotes improved accessibility for existing and proposed communities.
- Attractive for bus operators.
- By-pass road provides good access.
- Eastern development has poor access and will encourage private car journeys.

#### For Option D

- Provides limited transport choice and poor accessibility due to dispersal of allocations.
- Does not support integration.
- o By-pass road promotes high car use.

#### For Option E

- o Promotes a variety and choice in transport modes.
- Promotes integration of existing and proposed communities provided crossings of railway are provided.
- o Attractive for bus operators.
- By-pass road provides good access.
- Eastern development has poor access and will encourage private car journeys.

A balanced consideration concludes that **Option E** provides excellent choice of transport modes and is attractive to public transport operators. The site is also well designed in order to encourage the use of walking and cycling. Finally all of the main trip generators in the site are ideally located for access to the link road and the A96.

#### 2.5 Planning

Halcrow Group undertook an assessment of each option for East Inverness (see Appendix 5). This considered the planning implications in relation to viable and vital places, environment, land use and landscape of each option. In summary, the salient points for each option are presented in the following table:

Consideration	Viability and Vitality	Environment	Land Use	Landscape
Option				
Option A	Provides district centre at core area.  Business park and campus development is isolated.  Detachment from Culloden may promote isolation.	Affords environmental integration	District centre, business park and campus are poorly integrated.	Facilitates a quality landscape setting.
Option B	District centre well located for integration.	Affords environmental integration  Development in the floodplain is inappropriate.	Campus proposal offers gateway opportunity; but limited clustering benefits.  Retail provision may result in over-supply.	Takes advantage of the natural topography to create green spaces linked to the water courses and open areas
Option C	The compact extension will create a successful place.  Low density housing to the east may become exclusive or even 'closed'.	Limited green space proposed.  Limited scope for enhancement of waterways	Does not take advantage of the development opportunity at Beechwood created by the new Inshes Junction.	Does not afford the opportunity to create shared public spaces
Option D	The proposals will create successful places; although dispersal is a concern.	Affords environmental integration	Campus proposal at Beechwood promotes clustering.  Over provision of retail space adjacent to the district centre.	Does not seem to take full advantage of the green opportunities at the floodplain.

Consideration	Viability and Vitality	Environment	Land Use	Landscape
Option				
Option E	Segregation between the housing sites, the district centre and the community facilities may hinder the developments ability to place make.  District centre would be likely to succeed due to the population surrounding it and the focus created by the new rail halt.	Affords environmental integration	Campus proposal at Beechwood promotes clustering. District centre relates well to the surrounding uses.  Separation between the community uses and the rest of the development would be a concern.	Create a new and widely used green space which would enhance the landscape setting

A balanced consideration concludes that **Option E** would be the most attractive from a planning perspective. This option promotes clustered development at Beechwood, an integrated core area with a district centre and affords environmental integration.

The problems of rail re-alignment are recognised. The outcomes of Option E can be achieved without this.

## 3 Conclusions and Recommendations

#### 3.1 Conclusions

The following presents the preferred options from each technical appraisal<sup>4</sup>.

Options Appraisal	Option A	Option B	Option C	Option D	Option E
Market	•				
Delivery			•		
Urban Form			•		
Traffic					•
Planning					•

Clearly some common themes emerge from these preferences. These include:

- Promotion of a good mix of housing densities within compact palaces.
- Integration with existing communities which provides shared services, shopping and facilities (open space and community).
- A balance of population expansion and employment opportunities.
- Integration of land uses
- A by-pass route that facilitates access to East Inverness and provides alternative for movement.
- Promotion of real transport choice.
- Clustering of research, education and business.

<sup>&</sup>lt;sup>4</sup> It is recognised that these preferences are caveated.

#### 3.2 Recommendations

Emerging from the above there would appear to be some key recommendations for growth at East Inverness can be made as follows:

- The by-pass route should commence at the Smithton Roundabout crossing the railway at the existing crossing before joining an enhanced Inshes junction. This should include one access to the north of the railway to facilitate access to East Inverness – Option A.
- Campus, research and business uses should be focused at Beechwood with access from the Inshes junction. Good green crossings of the A9 (westward) and railway (eastward) should be promoted – Option E.
- A compact place with a range of densities should be created around the floodplain with its district centre toward to southern end in order to facilitate integration. Some convenience shopping would be appropriate to serve existing and new communities. This should maximise environmental assets incorporating a park. This community should be accessible from the by-pass – Option C./E
- Business allocations should be incorporated within the above place –
   Option C.
- Regional retail should be focused to the west of the Retail Park Option A.
- A business park to the south-east of the retail park (north-west of the new by-pass road) – Option A.
- A rail halt to serve Beechwood and the new allocations to the north-east of the railway Option A.
- A park and ride facility with supporting public transport facility (rail or bus)
   Option C.

## Appendix 1 – FG Burnett's Market Assessment

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## Appendix 3 – Whatmore's Urban Form Assessment

## Appendix 4 - Halcrow Group's Traffic Assessment

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## Appendix 5 – Halcrow Group's Planning Assessment

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