Initial Sustainability Commentary On further consultation proposals

This document has been prepared to provide initial comments in relation to sustainability issues raised by the options that are the subject of the January 2011 Further consultation for the Cinderford Northern Quarter Area Action Plan (AAP). A full sustainability appraisal will accompany that Plan when it is finalised and this will be open to public comment when the AAP is published.

1. Spine Road Alignment

When considering previous road alignment options, the following key objectives were identified as the drivers for the provision of the AAP link road:

1. To reduce traffic on the A4151;
2. To reduce traffic on Steam Mills Road, especially at the primary school and in Steam Mills;
3. To address the movement constraints at Nailbridge junction;
4. To provide access to the Northern Quarter;
5. To provide a new gateway to Cinderford;
6. To provide access for all modes of transport, including public transport;
7. To limit its environmental impact;
8. To be in accordance with The Forestry Act;
9. To determine the most sustainable option overall, taking into account all the aforementioned considerations.

Broadly utilising these objectives, comment has been provided on the sustainability of the three alternative Scenarios that are set out in the Transport Strategy Update (January 2011) and should be considered in conjunction with that report. This document has only sought to provide high level comment around the value gained through traffic diversions from a sustainability perspective (as these are more technically detailed in the Transport Strategy Update). The primary focus of the review has been on the wider economic, social and environmental aspects which have been subject to an initial review. The consideration of the three Scenarios has also included a comparison with the 2009 published Preferred Option:

Scenario 1 – 20% traffic uses the new route via a non signal but improved junction at NU

Development of a western link road through the Northern Quarter serving development proposed at Northern United and connecting via routes already identified through the site to Broadmoor Road. This link would be developed early in the plan period and would provide through access for public transport and other vehicles between the A 4136 and Broadmoor Road instead of the proposed Spine Road contained in the original preferred Option of 2009.

This Scenario would decrease some of the traffic flow on the A4151 and would ease pressure on the Nailbridge Junction. However, this would be less effective than the option proposed in the 2009 Preferred Option and would result in less traffic being removed from the entrance to the Steam Mills School.
The Scenario increases the areas of the masterplan which can be accessed via the primary route through the site and would maintain the opportunity for a new “gateway” at the entrance to the Northern United site. The connection of the Northern United site to the primary road network could result in improved integration throughout the site. The level of access to public transport would not be significantly varied from that provided in the 2009 Preferred Option. As with the Preferred Option the careful consideration of public transport routes will be required to ensure ongoing provision to the Steam Mills School/community as well as the AAP site.

The Scenario will result in the primary movement corridor running through the Northern United Site and to the back of the existing vehicle yards. In terms of environmental impact, the increased traffic flow, increased width and anticipated additional lighting requirements (e.g Northern United Junction) are likely to result in increased severance of the known habitats of value to protected species on the site. In addition, the construction of the primary route to the rear of the existing properties has the potential to result in increased loss of trees. This effect should be considered in the context of the Forestry Act and consultation will be undertaken with the Forestry Commission.

This Scenario would also have an increased adverse effect upon the amenity of the Gloucestershire Way National Trail and the existing residential property adjacent to the vehicle wreckage yard and garage within the Northern United area.

The potential flood impacts from this route arrangement do not change from that identified in the 2009 Preferred Option as the route variations are outside of the floodplain. There is a minor water course identified in the area of the route through to the Northern United site, which would need to be integrated into the design of the road network.

Scenario 2 - 50% traffic uses the new route via a signalled junction at NU
Development of a western link road through the Northern Quarter serving development proposed at Northern United and connecting via routes already identified through the site to Broadmoor Road. This link would be developed early in the plan period and would provide through access for public transport and other vehicles between the A 4136 and Broadmoor Road instead of the proposed Spine Road contained in the original 2009 Preferred Option. The signalised junction at the Northern United Junction would result in a greater flow of traffic along the spine road alignment.

The range and type of changes/effects associated with Scenario 2 are generally the same as those outlined for Scenario 1. However, the magnitude of these varies due to the increased diversion of traffic through the site. This is set out in summary below:

- Greater reduction of traffic on A4151 and past Steam Mills Primary School (now equivalent to that achieved through the 2009 Preferred Option)
- Primary connectivity network between Northern United site and Cinderford achieved with a higher number of movements through the employment area;
- Public transport provision is unchanged, with maintained sensitivity around integration of Steam Mills to the public transport network;
- Greater severance due to increased traffic flow on known habitats and species;
Greater adverse effect to the Gloucestershire National Trail and residential property due to increased traffic flow;
Consistent potential for loss of trees through routing to the north of existing properties at Northern United;
Flood risk remains unchanged from Scenario 1 and the 2009 Preferred Option.

**Scenario 3 – Long term Strategy western access route, with traffic signals but without the original Spine Road being connected directly to the A4136.**

This scenario has been considered in part as a result of initial sustainability reviews of the two above scenarios. This identified that unless surety could be provided about the long term suitability of the proposed alternative route to service the AAP without the need for the forest route there would be adverse in-combination environmental effects, whilst removing some of the economic gains identified. It would not therefore be a sustainable solution.

In itself, Scenario 3 identifies that the AAP can in principle be delivered in the long term without the need for the forest route also being implemented, which is a positive. However further transport modelling is required to confirm this.

Scenario 3 demonstrates the expected traffic flows that would utilise the proposed alternative spine road alignment once the AAP area is developed and occupied without the forest route being implemented. In terms of effects when considered against the 2009 Preferred Option, the scenario would have the same effects as Scenario 2 but exacerbated (either positively or negatively) as a result of the increased overall traffic flow identified as utilising this route.

**Sustainability Comment**

When previously considering route options, the forest route was considered the most sustainable overall and was therefore integrated as the 2009 Preferred Option. In terms of overall sustainability, it is important to consider if variations to the Preferred Option will on balance have an overall benefit to that previously published. The following is high level summary text of sustainability aspects relating to the proposed Scenarios:

**Environmental**
- All Scenarios require the primary route to travel through the forest trees on site to the rear of the existing business/residential properties within the Northern United area. Although this route featured on the previous 2009 preferred option, it was as a secondary route, and it would therefore need to be upgraded.
- All Scenarios would have direct impacts on the Gloucestershire Way National Trail.
- All Scenarios would increase the pressure the masterplan exerts on the likely movement corridors and site habitats for statutorily protected species on site. There would be a need for suitable design mitigation to be incorporated into the detailed design to minimise/avoid these impacts.
All Scenarios show that it is possible to remove the forest route so direct severance through the forest block would be reduced.

Social

All Scenarios create an opportunity to have the primary road network of Cinderford linked with the Northern United Site. This is potentially a marginal improvement on the 2009 Preferred Option.

All Scenarios would address, to some extent, the traffic related social issues within Steam Mills. Scenario 2 would have the greater social benefit than Scenario 1 in terms of diverting the most traffic. However, neither would have increased benefits over the 2009 Preferred Option and this would remain the case in the long terms as demonstrated by Scenario 3.

Analysis and Next Steps

In light of this outline sustainability review, the following key concluding comments are made:

The revised spine road alignment would not result in a sustainability benefit over the previous preferred option, if there remained a long term need to implement the Forest route as a result of the AAP. The revised alignment would be as described in the 2009 Preferred Option, the resulting situation would be as described in the long term. This is acceptable in principle and can offer some benefits although it is still subject to detailed testing.

The proposed Scenarios 1-3 are likely to have increased environmental impacts relating to protected species and severance of habitats within the AAP area and adverse impacts on the Gloucestershire National Trail.

Economic

The Scenarios considered offer an opportunity to provide access to all the proposed development areas from the primary infrastructure. This improves the flexibility and viability of delivering all development areas. This would therefore contribute to facilitating the AAP and the associated overall benefits therein. The proposed Scenarios require a reduced capital investment compared with the 2009 Preferred Option and therefore are more likely to be delivered.

The scenarios considered have a marginal advantage over the 2009 Preferred Option in providing greater opportunity for "main street" frontage for the light industrial and employment uses through the Northern United site.

Social

All Scenarios would address, to some extent, the traffic related social issues within Steam Mills. Scenario 2 would have the greater social benefit than Scenario 1 in terms of diverting the most traffic. However, neither would have increased benefits over the 2009 Preferred Option and this would remain the case in the long terms as demonstrated by Scenario 3.

The scenarios assessed would put the primary infrastructure route to the rear of the existing residential and commercial properties which lie to the east of the Northern United site (and use the same vehicle access)
The proposed Scenarios maintain the social benefits (particularly Scenario 2) achieved with the 2009 Preferred Option. There are only likely to be marginal improvements on these with the proposed Scenarios.

The main economic benefits of the proposed scenarios 1-3 are the improved deliverability opportunities of the AAP following the early delivery of the primary infrastructure network and identified capital cost savings. Given the current uncertainty about the viability of the Forest route, these identified economic benefits are likely to have a significant influence on the viability of the overall masterplan and the associated wider sustainability benefits therein.

It should be noted that sensitive design and mitigation (similar to that currently proposed to reduce forest severance with the Forest route) could contribute to minimising the adverse environmental impacts identified but this would need to be explored and assessed further at the detailed design stage, if this does become the preferred option.

An opportunity for improvement may be to utilise the existing access route to the south of the existing business/residential buildings on the Northern United route, instead of the proposed route to the north of these buildings through the trees. Whilst this would be a marginally less direct route, it would utilise an existing vehicular route and minimise the removal of trees and increase the distance of the primary traffic away from the Gloucestershire National Trail and existing property. This route would still require careful thought around habitat severance and would need to be subject to highway/transport design and comment.

In considering the potential route alignment it will be important to consult with the Statutory Bodies to seek their comment as to whether the potential effects identified around protected species and the national trail would be acceptable (with mitigation). In addition, it will be important to confirm that the level of assessment in relation to the Habitats Regulations remains robust and the approach to undertake more detailed assessment at a later more detailed planning stage continues to be acceptable.

2. Location of Educational Facility

The provision of an education facility was recognised within the 2009 Sustainability Appraisal as a positive benefit of the scheme which actively addresses economic and social aspects relating the AAP objectives. In addition, the location of the educational provision was noted as providing environmental benefits relating public transport access seeking to reduce the need for car travel.

The proposed relocation of the education facility does not reduce the beneficial outcome achieved with the Preferred Option as it remains within a central and visible location within the AAP and will continue to be well served by the public transport network. In addition to maintaining the benefits originally identified from the education provision, the relocation provides other additional benefits:

- a site location which better meets the aspirations of key stakeholders, thus increasing the deliverability of this key facility,
- Provides a location with good access via the linear park to the south (pedestrian and cyclists)
- Removes the need for parking provision (or any other form of development) from the flood plain area to the east of the Old Engine Brook.
- Integration of the eco-visitor and activity centre within the educational provision on the site, resulting in improved integration of these facilities and improved deliverability.

In considering the land swap of the educational provision with residential and employment uses adjacent to the lake in the 2009 Preferred Option, it is acknowledged there could be a reduction in the economic market value gained as the lake side location may have increased value to the residential and employment market. However, the reduced size of the educational provision (in accordance with stakeholder needs) in this location will maintain and could resulting an overall increase in the area being available for employment and residential uses within the AAP. This aspect should be explored in more detail.

In relation to the environmental context of the site, the location of low density residential properties in close proximity to the lake was considered to be an advantage of the 2009 Preferred Option, due to the increase in garden space and pedestrian/visitor accessibility. Initial feasibility layouts of the education facility identify that there is potential for the building layout to front the primary road network allowing a suitable landscaped area between the building and the lake. In addition, the intention of the education provision to integrate the eco-visitor centre will continue to provide public accessibility to this important public area. Clearly, it will be important that the scale and design of the education building is sensitive to this location.