19th February 2014

Dear Mrs. Bovey

Re: NORTHAMPTON SOUTH SUE (Planning Application Nos: N/2013/1035 & N/2013/1063)

Abington Consulting Engineers has been appointed by Wootton & East Hunsbury Parish Council to undertake a professional review of the above planning application in respect of highway, sustainability and flood risk matters. Over the last few months I have been actively engaged in discussions with the Parish, Northamptonshire County Council, The Highways Agency and Stagecoach in order to clarify and fully understand the transportation issues relating to this application. I have now concluded my investigations and present below my findings.

BACKGROUND

Bovis Homes submitted an outline planning application for up to 1000 dwellings and a local centre at the beginning of October 2013 in an area between Collingtree Park and East Hunsbury. Later that month a detailed planning application was made for 380 houses adjacent to Collingtree Park which would become the first tranche of the 1000 house development sought by the outline application.

Peter Brett Associates has produced a Transport Assessment (TA) for the proposed development which consists of up to 1000 dwellings. The TA was produced in October 2013 and submitted with the planning application.

The Flood Risk Assessment for the development was also produced by Peter Brett Associates. This is contained in the Environmental Statement in Chapter 12 and was also submitted in October 2013 as part of the planning application.

Both the Transport Assessment and Flood Risk Assessment are applicable to the outline and detailed planning applications.

PREMATURITY

The planning applications have been lodged in advance of the adoption of the Joint Core Strategy (JCS). At present the Planning Inspectorate has yet to receive the final submissions for the JCS. Therefore any changes that may arise from the Inspector’s examination has not yet been included in the JCS and cannot be taken account of in the decision making process for the current planning applications. It would therefore be premature to determine the planning applications until the JCS is finalised.

SUSTAINABILITY

Paragraph 17 of the National Planning Policy Framework (NPPF) sets out core land-use planning principles which should underpin both plan-making and decision taking during the planning process. One of the core principles states:
actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable’

At present the site could not be considered sustainable because there is no public transport provision and walking distances to the nearest existing bus stops would exceed the maximum desirable limits set out in the Institution of Highway & Transportation’s publication ‘Providing for Journeys on Foot’. Therefore the site must be made sustainable in order to comply with the core principle quoted above. To achieve this, the Applicant’s consultant sets out in section 8.0 of the TA the public transport strategy.

Figure 3.2 in the TA shows the routes of the existing bus network. Service 14 travels through East Hunsbury to and from Northampton Bus Station. In paragraphs 8.3.4 and 8.3.5 of the TA, it is proposed that this existing bus service is to be diverted into Phase 1 of the development via Windingbrook Lane. To achieve this, the Applicant proposes that the bus will no longer travel along Granary Road. However, this would remove access to public transport for a significant number of people who live along the existing route. The attempt by the Applicant to resolve one particular issue of accessibility, therefore, would immediately prejudice existing residents and increase their reliance on the car because of the removal of the bus service from their part of the settlement. Such an approach does not represent a sustainable solution to the problem and is in conflict with good planning and the creation of sustainable communities.

Paragraph 8.3.1 of the TA states that a meeting was held between the developer and Stagecoach (who operate the existing bus service in the area). Later on in Paragraph 8.3.4 the TA states ‘It is proposed that one of the two Service 14 buses per hour be extended and diverted along Windingbrook Lane to serve an initial phase of development’. This reads as though there is an agreement between the developer and Stagecoach that the diversion could take place. However, when I spoke to Stagecoach they were less than pleased that such an agreement had been implied. Stagecoach confirmed to me that there is no agreement in place for bus provision to the development and no further discussion had been forthcoming with the developer.

It is also apparent from paragraph 8.3.12 in the TA that there is no agreement in place with Stagecoach to provide a bus service for the outline application scheme. Instead the Applicant’s consultant has speculated as to how a bus service might operate around the site. Two options are proposed and both involve the loss of services to the existing community. (This disbenefit has a bearing on the result of the Exception Test for flood risk set out further on in my letter.)

Without the certainty of a bus service, the site fails to comply with the core principles set out in Paragraph 17 of the NPPF.

Paragraph 8.3.16 of the TA sets out how the bus service might be financially supported by the developer for a 5 year period. Whilst this arrangement may support an uneconomic service for a few years, when the contributions run out there is no guarantee that the service will remain.

HIGHWAYS
Existing Highway Conditions

The NPPF sets out in paragraph 32:

‘All developments that generate significant amounts of movement should be supported by a Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe.’

It is well known that the A45 corridor is afflicted by congestion as are the junctions serving it. For example, the TA for the Hardingstone SUE (also currently a live planning application) states in paragraph 7.7.8 of the Queen Eleanor Interchange:

‘The result of the assessment shows that the junction is operating well above capacity under current baseline peak hour conditions, with very high levels of delay observed, particularly during the morning peak.’

In my opinion, this congestion can only be described as ‘severe’.

An assessment of the Link Flow Capacity has been carried out in the Northampton South SUE TA. Below is table 3.3 taken from the TA which shows that the capacity of the A45 is already exceeded by as much as 9% which means the current situation can only be regarded as ‘severe’.

<table>
<thead>
<tr>
<th>Link No. (Fig 3.6)</th>
<th>Description</th>
<th>Link Standard</th>
<th>Link Capacity</th>
<th>Direction</th>
<th>2015 Base Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>A45 – South of the Queen Eleanor Roundabout</td>
<td>UAP DCW – 7.3m</td>
<td>9000</td>
<td>Nbd</td>
<td>3911 3000</td>
</tr>
<tr>
<td>14</td>
<td>A45 – North of the Queen Eleanor Roundabout</td>
<td>UAP DCW – 11.0m</td>
<td>6200</td>
<td>Nbd</td>
<td>5374 3888</td>
</tr>
<tr>
<td>45</td>
<td>A508 – South of M1 Junction 15</td>
<td>UAP SCW – 7.3m</td>
<td>1090</td>
<td>Nbd</td>
<td>1278 1214</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1690</td>
<td>Std</td>
<td>1515 1590</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2000</td>
<td>Two way</td>
<td>2540 2270</td>
</tr>
</tbody>
</table>

Paragraph 3.9.4 attempts to dismiss the problem, stating:

‘TA79/99 acknowledges that the capacity of a link would be affected by a range of factors that may not necessarily be accurately predicted, and for this reason, TA79/99 states that capacity flows may be up to 10% more or less than the values given above. For the purpose of this assessment, it has been assumed that the practical capacity of a link has been exceeded when the flow is in excess of 10% of those quoted above [in table 3.3].’

The A45 is a straightforward dual carriageway. There is little in the way of obstructions, distractions, junctions etc. that would warrant latitude in the link capacity assessment and therefore the last sentence of the above quote is baseless and the roads are in fact suffering from severe congestion.

The TA has assessed the existing capacity of various road junctions in the area and concludes the following junctions are at or above capacity:

- Wooldale Road / A45 / Rowtree Road roundabout
- Rowtree Road / Penvale Road mini roundabout
- Mereway / Towcester Road / Tesco roundabout
- Queen Eleanor Interchange

The results of the analyses show that the junctions are already suffering severe congestion.

Proposed Highway Improvement Schemes

The Highways Agency is responsible for the A45 dual carriageway through Northampton. They have agreed with NCC and other local stakeholders to acquire contributions from significant developments in the area to
pay for the upgrading of the A45 in order to ease congestion. The scheme is known as the Northampton Growth Management Scheme (NGMS) and Northampton South SUE qualifies for contributing towards this scheme.

The NGMS consists of the introduction of MOVA signals at major interchanges, ramp metering on slip roads and minor realignments to the junctions and slip roads. The scheme allegedly will ensure that congestion will not get any worse than it is now along the A45 and at the M1 junction. Indeed, the standard letter sent to all developers by the Highways Agency proudly announces ‘This scheme has been identified to mitigate the cumulative impact of development in Northampton area on the A45 and M1, and safeguard the continued efficient operation of the Strategic Road Network’. In other words, we will have to endure the continued congestion along the A45, albeit that their calculations suggest it won’t get any worse if the NGMS is implemented!

It is worthy of note that the NGMS does not deal with the fundamental congestion issues along the A45 which is the inadequate link capacity as shown in the table above. Adding MOVA signals and ramp metering will not increase link capacity. Therefore it cannot be claimed that development will not have an impact in the A45 congestion. This is already severe and any additional traffic will only add to the severity of congestion, contrary to the requirements of paragraph 32 of the NPPF.

I asked the Highways Agency about when they hoped to deliver the NGMS. Unfortunately they do not have a programme other than they confirmed that there was little point in delivering a piecemeal scheme. They also conceded that we would have to wait until a very significant proportion of the anticipated development in the area is complete before the improvements could be provided. In the meantime, we can expect that the highway network will get more and more congested with no mitigation in place. Again, the impact of this can only be described as ‘severe’.

**Development Traffic Impact - Link Capacity**

I have already established that the A45 link capacity is severely exceeded and also that the NGMS does not propose to improve the link capacity. A substantial amount of additional traffic arising from the proposed development will feed onto the A45 and therefore the only reasonable conclusion would be that this will increase congestion. There are no proposals to mitigate against this congestion and therefore the impact of the development on the highway network will be severe, contrary to the requirements of paragraph 32 of the NPPF.

**Development Traffic Impact – Junctions**

Existing road junctions in the vicinity of the proposed development have been assessed for capacity based on existing and predicted flows both now and in the future. Most junctions are shown to be within capacity for all scenarios and are therefore considered to be largely unaffected by the proposals. However, it is proposed that where junctions exceed capacity due to the proposed development traffic, alterations to increase capacity will be carried out and hence mitigate the impact of the proposed development. Mitigation measures are proposed at the following junctions:

- Wooldale Road / A45 / Rowtree Road roundabout
- Rowtree Road / Penvale Road roundabout
- Rowtree Road / Butts Road / Windingbrook Lane roundabout

Additionally, possible improvements are proposed at the Wooldale Road / Berry Lane roundabout if the improvements to the Wooldale Road / A45 / Rowtree Road roundabout do not alleviate the current congestion. It is proposed that this will be determined by audit once the works to the Wooldale Road / A45 / Rowtree Road roundabout are complete. Whilst I would welcome this, the uncertainty expressed by the highway consultant about the true impact of the works to the Wooldale Road / A45 / Rowtree Road roundabout is of concern. It suggests that there is a low confidence level in the modelling work undertaken.
on this roundabout which must call into question whether the improvements proposed to all of these junctions will in fact work.

Deliverability

The Highways Agency has confirmed that they will not be constructing the NGMS until they have collected sufficient funds from developers. This will lead to a stagger between increased traffic on the highway network and the measures designed to mitigate the impact of the traffic. As a result, we will experience greater congestion in an area already severely congested.

A similar situation is likely to arise with the developer’s own mitigation measures. There is no mention in the TA about when the highway improvement works would be carried out, so I am assuming that these will be constructed at the end of certain phases of the development.

DEVELOPMENT LAYOUT

The primary route through the proposed development includes a 6.5m wide road. Whilst the designer has attempted to provide some variation in the alignment of the road, there are still significant lengths of straights and the bends are long and slow. As a consequence the layout will invite drivers to speed and the result will be 85th percentile speeds in excess of the proposed 30mph speed limit.

Good designs should provide speed regulating features every 80m or so, but this development has very few along the primary route. If this development is permitted in its current form, it is likely to require retrospective traffic calming similar to that introduced along Rowtree Road which is ugly, has limited success and would be at the expense of the public purse.

FLOOD RISK

Strategic Sequential Test

Paragraph 100 of the NPPF states:

‘Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk……Local Plans should apply a sequential, risk based approach to the location of development to avoid where possible flood risk to people and property’

Paragraph 101 states:

‘The aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding.’

A substantial proportion of the outline application site falls within Flood Zones 2 and 3. Given that there are several other SUE’s available that are wholly within Flood Zone 1, the LPA must prioritise these SUE’s in preference to the Northampton South SUE if they are going to comply with the requirements of the NPPF and the Sequential Test. I need hardly remind the LPA that flood risk is highly topical at present and failing to adhere to this policy would be highly controversial when there are perfectly satisfactory alternative sites.

Site Level Sequential Test

As stated above, a substantial proportion of the outline application site falls within Flood Zones 2 and 3. The latter is divided into Flood Zones 3a and 3b. Flood Zone 3b is the worst flood zone and is regarding as the
functional flood plain. Parts of the main site access and golf course fall into Flood Zone 3a and 3b. The main access will cross Wootton Brook in order to link with Rowtree Road and in accordance with Table 2 of the NPPF Technical guidance, should be regarded as ‘Essential Infrastructure’.

There has been no attempt to steer the access proposals away from areas at risk of flooding by the Applicant contrary to the requirements of paragraph 101 of the NPPF set out above. Notwithstanding this clear breach of planning policy, there is provision within the NPPF to allow such development assuming that there are no other reasonably available sites with a lower probability of flooding. This provision is called the ‘Exception Test’. Paragraph 102 of the NPPF states:

‘If, following application of the Sequential Test, it is not possible, consistent with wider sustainable objectives, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate. For the Exception Test to be passed:

• It must be demonstrated that the development provides wider sustainable benefits to the community that outweigh flood risk…….and
• a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking into account of the vulnerability of its users, without increasing risk elsewhere, and, where possible, will reduce flood risk overall.

Both elements of the test will have to be passed for the development to be allocated or permitted.’

This is a speculative development and arguably there are no benefits to the existing community at all. To resolve the sustainability problem the developer proposes to remove the existing bus service from part of the community. The increased traffic will have a severe impact of the highway network, not to mention the increase noise and nuisance of the traffic. The development will also remove the driving range and club house from the golf course and reduce the scale of the existing golf course making it an altogether less attractive and useful facility. Collingtree Park was developed and marketed on the back of the golf course and the development proposals will detract from its value to the local community. For these reasons alone, the development fails the first requirement of the Exception Test and is therefore contrary to the requirements of the NPPF.

As set out below, I consider that the Applicant has failed to demonstrate that the development proposals will be safe and will not increase flood risk elsewhere. Therefore the Applicant has also failed to comply with the second requirement of the Exception Test. Both elements of the Exception Test must be passed, but neither has. Consequently the outline planning application must be refused.

Flood Water Conveyance

The outline planning application shows the primary site access crossing Wootton Brook. There are no details of this crossing provided in the FRA or any other planning application documentation. The crossing is located at a particularly wide section of flood plain and therefore it would be reasonable to assume that bridge abutments and piers will need to be located adjacent to and in the flood plain. This will interfere with flood water conveyance and cause backing up of flood water upstream of the bridge.

Wootton Brook is acutely sensitive to flooding and interfering with its flood plain and flood water conveyance should be thoroughly investigated before any planning approval is granted. Existing development along Belfry Lane and Augusta Avenue are already in the flood plain and are known to flood. Therefore the proposed development must demonstrate that flood risk will not be increased to these developments if the planning application is to comply with the Sequential Test and the Exception Test.
CONCLUSIONS

The planning applications have been lodged in advance of the finalisation of the JCS and are therefore premature.

The proposed development site is currently unsustainable and there is no certainty that it will be made sustainable in the future. Measures proposed by the developer to divert bus services would result in making other existing communities less sustainable. The development therefore fails to comply with the core principles set out in paragraph 17 of the NPPF.

The A45 is already severely congested. Despite the Highways Agency’s proposed NGMS, this will not increase the link capacity of the A45 and therefore any additional traffic from the development using the A45 will have a severe impact, contrary to the requirements of paragraph 32 of the NPPF.

None of the major highway improvements can be expected to be constructed until significant proportions of the development has taken place. We will therefore have to endure the additional congestion caused by the lag between development and mitigation until the whole site is built out.

The site layout design does not adequately deal with traffic calming and if permitted will expose residents to speeding vehicles. The result will be a retrospective traffic calming scheme which will be ugly, only partially successful and at the expense of the public purse.

The development site fails the Sequential Test both at strategic level and site level. It also fails the Exception Test and is therefore contrary to the requirements of NPPF paragraphs 100, 101 and 102.

No assessment has been carried out to establish the impact of the proposed crossing of Wootton Brook. The crossing will affect flood water conveyance and this may cause greater flood risk to the existing developments in Collingtree Park.

Given the clear conflicts the proposed development has with the NPPF, on behalf of Wootton & East Hunsbury Parish Council, I would invite the Local Planning Authority to refuse the planning applications for this development.

Yours sincerely

Ian Brazier BEng (Hons) CEng MICE
Principal Director
Abington Consulting Engineers Ltd.