



# TECHNICAL NOTE

## GUILDFORD PROPOSED SUBMISSION LOCAL PLAN: STRATEGY AND SITES 2017

### Transport and Highway Review

Date: June 2017

Ref: SHBL/16/3174/TN02

#### 1 INTRODUCTION

- 1.1 RGP is commissioned to provide further transport and highway advice to Compton and Worplesdon Parish Councils in relation to the Guildford Borough Council Proposed Submission Local Plan: Strategy and Sites 2017 document (hereinafter referred to as the Draft Local Plan 2017) specifically around the Compton area, the Park Barn area and in relation to the Blackwell Farm development site.
- 1.2 Guildford Borough Council (GBC) has published a new draft Local Plan which is open for consultation from 9<sup>th</sup> June 2017 following the extensive consultation exercise during June and July 2016. There are a number of changes proposed in the Draft Local Plan 2017 which in part have arisen from comments provided last summer by a range of stakeholders and local residents.
- 1.3 This report has reviewed the following documents listed below which have been published to support the overall site allocations which form the Local Plan.
- i) Guildford Borough Council Proposed Submission Local Plan: Strategy and Sites 2017;
  - ii) Guildford Borough Council Proposed Submission Local Plan 2016: Strategic Highway Assessment Report (SHAR) (June 2016);
  - iii) Addendum to Guildford Borough Council Proposed Submission Local Plan "June 2016" Strategic Highway Assessment Report (SHAR) (June 2017);
  - iv) Guildford Borough Transport Strategy 2017 (June 2017).

- 1.4 Commentary has been provided in this report relating to the adequacy, or otherwise, of the assessments which should be taken into consideration by the Local Planning Authority, the Highway Authority and indeed the Local Plan Inspector upon determining whether the site allocations included within the draft Local Plan 2017 are appropriate and deliverable. This report makes reference to the allocations at Blackwell Farm and the new station at Park Barn.
- 1.5 To avoid duplicating information, this Technical Note is an addendum to RGP's Technical Note from 2016 (ref: CC/3174/2016/TN01) and should be read in conjunction with that previous document.

## **2 AMENDMENTS FROM THE DRAFT LOCAL PLAN 2016**

- 2.1 Policy A26 in the Draft Local Plan 2017 provides for development at Blackwell Farm on the Hogs Back, Guildford. The allocation is still a residential led mixed use development outlined to provide for 1,800 homes but with a minimum of 1,500 homes to be delivered within the Plan period. The employment land is reduced by 1,000sqm to 30,000sqm, which will still form a 10-11ha extension to the west of the current Research Park.
- 2.2 The allocation would also still provide a range of other ancillary uses including a two-form entry primary school, retail units across the A use class and D1 community buildings but will now also need to provide a secondary school of up to six-form entry of which two forms are needed to serve the housing on the site.
- 2.3 Policy A59 has been added into the Draft Local Plan 2017 which provides for the New Rail Station at Guildford West (Park Barn). The intention to provide a rail station at Park Barn was always an intention in the previous iteration of the Local Plan and was identified as NR2 of the Infrastructure Delivery Plan, however it has been made its own site allocation to 'provide greater clarity and certainty to its delivery' according to GBC.
- 2.4 The associated Policy A59 states that drop off areas to the north of the station (located where Southway Court is currently positioned) would be required as well as facilities for taxis, buses and disabled parking to the south on the Royal County Hospital estate with a connection to the Local Road Network (although the policy does not allocate land for this requirement).

## **3 POLICY A59: NEW STATION AT GUILDFORD WEST (PARK BARN)**

- 3.1 An Addendum report to the original 'Guildford Borough Council Proposed Submission Local Plan 2016: Strategic Highway Assessment Report' (SHAR) (June 2016) has been produced by GBC which it states that the Addendum:

*'provides a high level review of the potential changes to traffic impacts from those reported in the SHAR 2016 which are expected as a result of the key changes made to proposed site policies and to the programme of transport schemes as identified in the Draft Local Plan 2017'.*

- 3.2 The key changes are outlined in Table 2 of the document where on the final page it acknowledges the new Policy A59: New Rail station at Guildford West (Park Barn) as a key change to the Draft Local Plan 2017 and states:

*'It is expected that, borough-wide, modal shift of car to rail trips will significantly outweigh new vehicle trips to access the new rail station. The station is not planned to be a parkway station so sustainable transport options for travel to and from the site will be a priority.'*

- 3.3 It is acknowledged that locating a new station adjacent to existing (Park Barn) and proposed (Blackwell Farm) housing settlements as well as the Royal Surrey County Hospital, Surrey University and Surrey Research Park is a very positive move in terms of encouraging sustained modal shift from the private car for regular journeys such as commuting and indeed for short trips to and from Guildford town centre. It is however a concern that the actual vehicle activity associated with the new station has not been specifically included in the strategic model.

- 3.4 The assumption by GBC that the current traffic modelling completed in 2016 represents a 'worst case' as the traffic levels will reduce borough-wide due to modal shift is misleading since the zones on the network which include and adjoin the new station are likely to experience an increase in vehicular traffic. As well as a likely increase in vehicular traffic, there would also be an associated change in vehicle routing dynamics on the overall network as vehicles access it and this has not been taken into account.

- 3.5 Despite it not being a 'parkway' style station with parking provided (other than disabled parking), the new station will still generate the need for vehicular access from taxis, buses and 'kiss and ride' facilities (i.e. drop off from private cars) as outlined in the policy requirements for the allocation. It is accepted that overall there could well be a borough-wide modal shift to using rail for shorter trips which is welcomed and supported, but the concentration of traffic at the proposed access points north and south of the new station is a cause for concern given the congested nature of the local road network.

- 3.6 The absence of strategic modelling associated of the transport impacts on local infrastructure close to the new station considering the close proximity of the A3 and Egerton Road junctions is a concern. The proposed highway improvements to address capacity issues at these junctions as a result of existing and forecast traffic conditions could result in the current work not providing sufficient capacity to accommodate the immediate impact of the trips attracted to the new station from buses, taxis and private cars.

- 3.7 With regard to deliverability of the station there is a concern. The Inspector should ensure that Network Rail is satisfied that a new station is technically deliverable and that the costs assumed within the Draft Local Plan 2017 are appropriate. RGP is not aware whether such a statement has been made by Network Rail at the time of writing.

## 4 POLICY A26: BLACKWELL FARM, HOGS BACK

4.1 The transport infrastructure requirements outlined for Policy A26 within the Draft Local Plan 2017 are outlined below with the corresponding cost estimate in italics from the Infrastructure Schedule in Appendix C of the GBC Draft Local Plan 2017.

- i) Vehicular access to the site allocation will be via the existing or a realigned junction of the A31 and Down Place access road which will be signalised, and from the site to Egerton Road, preferably Gill Avenue (*LRN2 - £5 million and LRN 3 - £5 million*).
- ii) The design of the improved Down Place access road will be sympathetic to its setting;
- iii) A through vehicular link which will be controlled is required via the above accesses between the A31 Farnham Road and Egerton Road to provide a new route for employees and emergency services to the Surrey Research Park, the University of Surrey's Manor Park campus and the Royal Surrey County Hospital, as well as a choice of vehicular access for the new residents/occupiers. This will reduce impact on the A31/A3 junction, in advance of the delivery of Highways England's A3 Guildford scheme (*LRN4 - £20million*);
- iv) Developer to provide the western route section of the Sustainable Movement Corridor on the site and make a necessary and proportionate contribution to delivering the western route section on the Local Road Network, both having regard to the Sustainable Movement Corridor Supplementary Planning Document (*SMC1 – proportion of £20 million*);
- v) A significant bus network to serve the site and key destinations including the existing western suburbs of Guildford and the town centre. (*BT6 – £TBC*)
- vi) Necessary and proportionate contribution to delivering Guildford West (Park Barn) railway station (*NR2 – proportion of £10 million*);
- vii) Interventions which address the potential highway performance issues which could otherwise result from the development (*LRN5 £5-10 million*).

4.2 Compared to the same list of infrastructure which was provided last year in the previous iteration of the Local Plan there has been an increase in the level of transport infrastructure requirements which the site must provide, namely in the form of the bus network as per scheme BT6 relating to the Sustainable Movement Corridor.

4.3 The transport infrastructure costs associated with the site outlined above now amount to £70-£80 million to deliver just 1,500 residential units in the Plan period (1,800 in total) and 30,000sqm of commercial mixed-use development. The proportionate level of contribution towards the Guildford West (Park Barn) railway station and the western route section on the Local Road Network are as yet unknown at this early stage.

- 4.4 However, the Blackwell Farm site is the only development site in the Guildford urban area which has the specific written requirement to contribute to the new Park Barn station and since it is indicated as being solely developer funded in the Infrastructure Strategy (Appendix C) of the Draft Local Plan 2017 it is assumed that the Blackwell Farm allocation would need to contribute a significant proportion of the £10 million cost. The western section of the Sustainable Movement Corridor is also only noted on the requirements list for the Blackwell Farm allocation although there is money available through the Local Growth Fund to contribute to this, therefore it is estimated that the obligation would be circa 50% of the total cost of this scheme. This would make the total transport contributions for the Blackwell Farm development around £60 million.
- 4.5 Concern is therefore raised that the level of transport infrastructure costs which the Blackwell Farm site is required to deliver (~ £35,000 per unit) as well as the new secondary school on top of the numerous other costs of infrastructure mitigation is disproportionate to the size of the allocation and brings into question the deliverability and financial viability of the allocation in the Local Plan period contrary to Paragraph 173 of the National Planning Policy Framework (NPPF) as previously discussed in RGP's previous report TN01 (June 2016).

#### ***'Through vehicular link' between A31 and Gill Avenue***

- 4.6 Policy A26 now states that the through vehicular route between the A31 Farnham Road and Egerton Road will be 'controlled' and will be for employees and emergency services to the Surrey Research Park, the University of Surrey's Manor Park Campus, Royal Surrey County Hospital staff, patients and visitors as well as for residents on the site. This is a significant and wide range of people who will be permitted to use this route. The method of control is an integral part to the deliverability of the whole site allocation to ensure that it is not used by 'rat-running' traffic avoiding the A31/A3 junction and this is a concern that was previously highlighted in RGP's TN01 (June 2016).
- 4.7 SCC has indicated that ANPR cameras will be the preferred method of control for the vehicular link road. RGP has looked into the use of ANPR cameras to carry out this type of enforcement and a scheme in Cambridge is known to exist at the Cambridge Biomedical Hospital to deter rat-running vehicles attempting to avoid congestion between the M11 and central Cambridge.
- 4.8 It is understood that the Cambridge scheme consists of cameras positioned at each of the 4 access points to the Hospital site and the system is based on the time period that cars are recorded as taking between any 2 of the 4 cameras.
- 4.9 If the duration of stay that the ANPR cameras record associated with any car is below a set period of time which would accord with a 'through traffic' speed then the system assumes they were using the Hospital roads as a short-cut and they are charged a fine of £50. If there is a longer dwell time then it is assumed that the cars are legitimate patients/visitors to the Hospital and therefore no fine is issued; additionally, the staff that work in the Hospital are registered on the system so that they do not get fined.

- 4.10 The roads are understood to be privately owned by the hospital estate and the cameras are owned by the site's private parking contractor, however, the fines are enforced by Cambridgeshire Police.
- 4.11 This is a small-scale example of the type of system that would need to be implemented on the Blackwell Farm link road, but with it raises a series of questions related to site deliverability such as:
- i) Will the developer provide for the financial enforcement costs of the link road restrictions for the lifetime of the road i.e. in perpetuity? Is this included within the £20million cost for LRN4?
  - ii) Will Surrey Police be expected to provide the enforcement of the ANPR in perpetuity for the lifetime of the road?
  - iii) How will all of the people who will be granted access to use the road (residents, University staff and students, Research Park employees, Royal Surrey County Hospital staff, patients and visitors) be able to be differentiated from through traffic?
- 4.12 Whilst these are operational questions and could be considered as relevant for discussions during a future planning application, they are also considered fundamental to the successful deliverability of the vehicular link road and ensuring that it does not become an attractive 'rat-run' for through traffic between the A31 and the A3, but still delivers the aim of being a link road to serve all of the desired uses.
- 4.13 As discussed in further detail in RGP's TN01 (June 2016), the implications on the A31 Down Place junction and the Egerton Road junctions of all-purpose through traffic using this route have not been modelled in the strategic model and it is imperative that the link road restrictions operate successfully to ensure that other junctions are not adversely impacted.

## **5 EGERTON ROAD AND SURROUNDING AREA**

- 5.1 The Egerton Road Roundabout and the Egerton Road/Gill Avenue junctions are forecast to experience an increase in vehicular traffic which would push the ratio of flow to capacity over actual capacity based on the SHAR 2016 report. This assessment is not understood to have included any specific assessment associated with the new station at Park Barn or any impact associated with the new secondary school on the Blackwell Farm site.
- 5.2 It is accepted that the SCC strategic model cannot model specific junction impact as accurately as microsimulation models such as LinSig and Junctions 8 and it is further acknowledged that this detail is not necessary for the high-level assessment required for a Local Plan. However, the true quantum of flows forecast to be generated by all of the Draft Local Plan 2017 aspirations should be incorporated to allow consideration of detailed mitigation to commence.

- 5.3 The Sustainable Movement Corridor (SMC) Update published in February 2017 by GBC identifies that mitigation options are already being considered for providing additional capacity at the Egerton Road Roundabout and its junction with the A3. The process of considering detailed mitigation to inform the strategic allocations is supported and welcomed, but concern is raised that the options are being considered without the traffic impacts from the Park Barn station and the new secondary school being incorporated.
- 5.4 The new Park Barn station southern access for instance will likely take its primary access from the western side of Egerton Road to the east of the Hospital. The position of this access will likely result in an increased demand on right turning vehicles at the Egerton Road/Gill Avenue signal controlled junction. Increased provision for right turning vehicles in this location will consequently reduce the capacity of the junction for other movements which may well impact on the new designs for the Egerton Road Roundabout, the SMC and the wider local highway network.
- 5.5 Additionally, the provision of a new secondary school on the Blackwell Farm site (relocated from the Land to south of Normandy and north of Flexford site allocation [previous Policy A46] which has been removed in its entirety) will ultimately draw vehicular traffic through the Egerton Road junctions. The Blackwell Farm allocation (Policy A26) wording states that the new secondary school would be 'up to six form entry of which two forms are needed for the housing on the site and the remainder for the wider area'. This indicates that two-thirds of the secondary school children attending the new school will come from off-site. Assuming that there are 30 children per form, 6 forms per year and 5 years in the school (i.e. Years 7-11) there would be a 900 student capacity at the school of which 600 students would need to commute in from outside the Blackwell Farm site each day.
- 5.6 Whilst the Sustainable Movement Corridor proposals and the new Park Barn station will undoubtedly assist some school pupils and staff in travelling to the new secondary school sustainably from other parts of the borough, there will still ultimately be a draw of vehicles through the Egerton Road junctions to the secondary school, particularly during the morning peak period, which has not been considered.

## **6 SUMMARY AND CONCLUSIONS**

- 6.1 The Draft Local Plan 2017 has addressed some of the points which RGP raised in the previous Technical Note in June 2016, however there is still concern regarding the deliverability and viability of the Blackwell Farm allocation (Policy A26) for the following reasons:
- i) The required transport infrastructure requirements of around £60 million to make the site acceptable are considered to be excessive in comparison to the scale of the development proposals and the viability and deliverability of the site are still questioned. Compliance with paragraph 173 of the NPPF is also raised;
  - ii) There are still operational concerns regarding how the through vehicle link will be controlled and how the enforcement will be carried out, by whom and whether it can effectively remove potential for 'rat-running' between the A31 and the A3 given the wide range of permitted users of the road;

- iii) The deliverability of the scheme still requires third party land to access Gill Avenue and it has not been demonstrated that this is possible to acquire;
- iv) The vehicular impact resulting from the requirement to now provide a six-form entry secondary school on the site whereby two thirds of the children would travel in from outside the Blackwell Farm site has not been included in the strategic traffic model and is not understood to be accounted for in the current Egerton Road detailed layout designs.

6.2 In relation to the New Rail Station at Guildford West (Park Barn) (Policy A59) the following concerns are raised:

- i) The vehicular impact of the Park Barn station on the Egerton Road area has not been included within the strategic traffic model, therefore the true impacts of the scheme are not understood to be included within the detailed mitigation currently being considered;
- ii) The deliverability of the station is heavily reliant upon Network Rail and RGP is not aware that Network Rail is in a position to deliver the station within the lifetime of the Local Plan so that the expected modal shift is achievable for all of the reliant development primarily on the Blackwell Farm development.