Structura

Transportation

Architectura

Queensberry DESIGN LIMITED RESIDENTIAL AND COMMERCIAL DESIGN CONSULTANTS



Our ref: - QD1183

22nd August 2016

Miller Homes NE

Dear Eddie, Proposed Development at Victoria Road West, Hebburn

Further to our discussions, we are pleased to provide a briefing note covering access options for this site.

Background

The new site for 334 homes is in an accessible location close to the range of employment, education and leisure facilities offered by the South Tyneside area. The railway line to the west is a constraint for vehicle access to and from that direction. The key transport route is the A185; Victoria Road which runs parallel to the river.

The site has an historic industrial use and is allocated within the LDF as an economic development site, for a mixed use within classes B1, B2 and B8. Parkside continues to serve as an access to this site.

The homes will be laid out off a principal loop which takes access from Victoria Road West. The proposed streets within the development will be laid out to current best practice for local streets. Adequate visibility provision will be made at all junctions and provision will be included for pedestrians.

Vehicular Access Options

Continued use of Parkside

Parkside serves as an access to this site for this established use although this activity has ceased some years ago. Residents of these streets have, therefore, raised concerns over reintroducing traffic here.

The developer has responded to these concerns by proposing to close this access to vehicles; the existing pedestrian link to the site from Parkside will continue to be utilised to provide permeability.

Existing access from VRW

There is an existing vehicle access directly from Victoria Road which formerly served a car park and commercial building on site. The access is near to the north end of the site frontage and, as such, is not placed in a suitable position to efficiently serve the proposed residential development.

New 'T' junctions onto Victoria Road West

The current proposal is to create two new junctions onto Victoria Road West to serve the site. The road here already has a central hatched divide so that the creation of new accesses will have minimal impact upon the main road (VRW). Although the effect of 'specimen' trees on visibility will need checking in detail, this option is likely to have least impact upon the existing highway and the highway trees.

NORTH EAST (Head Office) Suite 7D Netherton Park Stannington Northumberland NE61 6EF Telephone: 01670 789834 Fax: 01670 789861 Managing Director : M D Paylor Company Secretary : S J Paylor Company No. 4568021 YORKSHIRE & NORTH WEST Blake House St Martin's Lane York YO30 5FY

Telephone: 01904 500 662 Fax: 01670 789861 Associate Directors : - A Lowdon - M Axtell VAT Registration number 828730609

A Crossroads junction of the main site access with Hartleyburn Avenue

The principle of a crossroads was discussed at pre-application stage and rejected.

Site access opposite Hartleyburn Ave (Mini RA)

The provision of a mini-roundabout to create a four-way junction with Hartleyburn Avenue and one of the new site accesses has been considered. It is noted that Para 2.15 of TD54/07 states that 'Four-arm mini-roundabouts introduce additional conflicts and can create difficulty for drivers' perceptions of the layout and turning flows. They are not recommended where the sum of the maximum peak hour entry flows for all arms exceeds 500 veh/hr.'

Given that the peak hour flow here will significantly exceed this figures (more than 1,500 veh/hr) the provision of a four-way mini roundabout would not accord with TD54/07 guidance.

Site access opposite Hartleyburn Ave (Compact RA)

The provision of a compact roundabout to create a four-way junction with Hartleyburn Avenue and one of the new site accesses has been considered. There is an example of a similar type of junction on Victoria Road West at Campbell Park Road (north of the site).

This would require significant works to the existing carriageway and kerbs and would, no doubt, impact upon the proposed housing layout and therefore have considerable cost implications. In addition, the kerb realignment would result in changes to vehicle crossings; the removal of a number of trees and the relocation of at least one bus stop.

If this option was to be applied, there would need to be detailed checks on capacity and safety.

Provide Mini RAs at the two 'T' junction access points

The provision of mini roundabouts at two three-way junctions has been considered. There would be greater disruption to traffic along Victoria Road West during construction (compared with priority junctions).

Clearly this junction type would reduce through traffic speeds (particularly south-bound) but it can also increase delay and journey time on roads with high levels of flow, such as this one. Given that the road is subject to a 30mph speed limit and there are a series of 'features' along its length (traffic signals, islands junctions etc.) it should be adequate to design junctions to current standards.

Again, if this option was to be applied, there would need to be detailed checks on capacity and safety.

To conclude none of the alternatives provide significantly more net operational and safety benefit than two simple 'T' junction and the application of this approach is, therefore, recommended.

We hope this further information assists your consideration.

Yours sincerely

Whay

Ken Hay Senior Transportation Engineer Ken.Hay@QueensberryDesign.co.uk