

**Himley Village, NW Bicester –
LPA Ref: 14/02121/OUT**

**Technical Note 5 – Development
Phasing Proposal**

P3Eco

January 2017

Himley Village, NW Bicester

Development Phasing Proposal

1.0 Introduction

This Technical Note sets out the background to decisions made over the last two years with regard to transport infrastructure improvements and the phasing of development at NW Bicester. The current position with anticipated programmes for the delivery of the strategic link road and the various sites at NW Bicester is then set out together with a traffic assessment that justifies the early and accelerated occupation of 680 homes at Himley Village.

2.0 Transport Infrastructure Improvements and Development Phasing

The Howes Lane / Bucknell Road junction has been identified as a key capacity constraint on the Howes Lane / Lords Lane corridor. The NW Bicester Masterplan includes a new strategic link road with an underpass beneath the railway line to relieve this capacity constraint. This strategic infrastructure will facilitate not only NW Bicester but have wider benefits for housing and employment growth elsewhere in the town.

Towards the end of 2014 Hyder undertook a traffic assessment to determine the trigger point for the strategic link road together with upgrades to various other junctions in the north west area of the town. This assessment used traffic flows from the town wide Saturn model for a Local Development Plan Interim Year of 2024. This Interim Year covered development anticipated to be delivered between 2011 and 2024 and assumed 7369 housing units and 127 ha of employment land. For NW Bicester, 2256 housing units (including the Exemplar) and 10 ha of employment land were assumed to be delivered by 2024.

Hyder assessed three scenarios for North West Bicester: 100%, 40% and 53% of the development anticipated for 2024. The conclusion of Hyder's work was that the critical Howes Lane / Bucknell Road junction would be slightly over capacity under the 40% scenario (900 homes and 4ha of employment land at NW Bicester) and therefore that the strategic link road would be required to deliver levels of development above this.

OCC have accepted the assessment by Hyder and therefore agreed to the 900 home trigger point. This is reflected in various draft planning conditions and S106 heads of terms documents that have been issued by CDC.

CDC is currently minded to consent to all 900 homes being located north of the railway but no formal planning consent has yet been granted. It is assumed that the vast majority of the employment land will be located to the south of the railway on the Albion land.

3.0 Delivery of the Strategic Link Road and Underpass

The strategic link road and underpass is subject to its own planning application and CDC have passed a resolution to grant consent.

Based on CDC being minded to locate all 900 homes on the Exemplar and the Application 1 site, A2 Dominion have progressed the design of the underpass. The status of the design for the link road connecting either side of the underpass is not currently known.

We understand that the design of the underpass is at GRIP Stage 3 and that a 'Form 1' submission has been made to Network Rail. This stage identifies a single engineering option and should result in an 'approval in principle' decision from Network Rail. At this stage discussions about the timing of railway possessions can also commence. It is understood from CDC that feedback on the GRIP 3 submission is expected from Network Rail in February 2017.

Beyond GRIP 3 the design needs to be progressed through GRIP 4 (scheme design), GRIP 5 (detailed design) and GRIP 6 (construction). It is understood that A2 Dominion's commitment associated with being able to deliver 507 homes on Application 1, is to take the design to GRIP 4 and clarity is therefore needed about the responsibility for taking the underpass and strategic link road through the detailed design, tender and construction phases.

However, given that the underpass design is already at GRIP Stage 3, based on previous experience it is reasonable to assume that a railway possession could be secured for Christmas 2019 and that the entire scheme could be completed by the end of 2020. CDC have advised that that this delivery timetable is used in this analysis and this is set out at a high level in the attached programme.

On the assumption that design of the underpass and connecting link roads will continue this year it is likely that by the end of 2017 there will be a reasonably high level of certainty as to the programme and cost for this important infrastructure. This programme and cost information will be important for input into Section 106 legal agreements for the different applications which should be close to being finalised towards the end of 2017.

4.0 Delivery of Development

Exemplar

We are aware of the proposed and actual development delivery programme of the Exemplar development being undertaken by A2 Dominion. Construction and occupation of homes at the Exemplar has been significantly slower than expected. Under the original programme the entire development of 393 units was due to be completed and handed over by December 2017. Barton Willmore formally advised CDC on 6th December 2016 that the construction of phase 3 of the Exemplar development (90 units) would not now commence until December 2017, and phase 4 (138 units) in September 2018.

On the basis that A2 Dominion will achieve this later commencement date and previously assumed build out rates for phases 3 and 4, it is assumed that no more than 300 units will be occupied on the Exemplar site by the end of 2019 with occupation of all 393 units by the end of 2020.

This is illustrated on the attached outline programme.

Application 1

CDC are currently minded to give consent for 507 homes on Application 1 but the programme for delivery of this housing by A2 Dominion cannot be predicted with certainty.

To provide a robust analysis of likely occupations it has been assumed that A2 Dominion will wish to commence development without undue delay and the baseline assumption is that they will secure first occupation in 2019 and full occupation by the end of 2021. This programme assumes that A2 Dominion are seeking to sell/rent homes concurrently with those at the Exemplar in both 2019 and 2020 and will achieve rates of delivery which are significantly higher than they have achieved at the Exemplar.

An alternative programme would be to assume commencement in 2020, first occupation from 2021 and steady occupation rate over the following 4 years. This would assume that Application 1 follows on naturally from the Exemplar and has delivery rates similar to that at the Exemplar.

Both scenarios are illustrated on the attached programme.

Albion Land

Consent has not yet been granted for employment space on the Albion Land and the original application has been refused. It is understood that this application is subject to an appeal and that a further application is expected to be submitted at the end of Summer 2017.

Given this planning context a highly optimistic scenario would be to assume commencement on site in 2018, first occupation in 2019 and full occupation by the end of 2021.

An alternative programme would be to assume commencement in 2019 with first occupation from 2020 and a steady occupation rate over the following 4 years.

Both scenarios are illustrated on the attached programme.

Himley Village

The construction of housing is linked to the delivery of a modular housing factory adjacent to the site. The advantage of modular construction is that this system enables much higher rates of delivery compared to conventional methods of construction. However, in order for the modular factory to be financially viable a minimum throughput of units is required and under the programme submitted to CDC, 680 units need to be guaranteed for Himley Village in the first two phases. After this the subsequent two phases of around 500 units each need to follow on almost immediately in order that the factory is fully utilised.

Assuming that a resolution to grant consent is given in February 2017, P3Eco believe that site enabling works would commence in Q4 2017 with first occupation from Q3 2018. The rate of delivery would be high with 180 units occupied by the end of 2018 and all 680 units occupied by the end of 2019. This is achievable as it is comparable to the delivery rate being achieved currently on a project in Kent using the modular system proposed for Himley Village.

This is illustrated on the attached programme.

5.0 Traffic Impact of Proposed Development Phasing

Baseline Development Phasing

In response to the assessment by Hyder, OCC have accepted that 900 homes and 4 ha of employment land can be occupied in advance of the strategic link road being completed. CDC are minded to locate all of the housing north of the railway and it is assumed that the 4 ha of employment land will be located on the Albion land.

The rate at which this development will be constructed and occupied is not certain but to be consistent with the previous work by Hyder it seems reasonable to assume full occupation by 2021. This essentially is the optimistic delivery rates as illustrated on the attached programme.

On the basis of full occupation by the end of 2021, this approach to phasing of development at North West Bicester establishes a **baseline** traffic impact at the Howes Lane/Bucknell Road junction against which alternative phasing proposals should be considered. The baseline traffic impact in terms of total number of vehicles using the junction is as set out in Table 1 below.

Element	AM Peak	PM Peak	Comment/Source
2016 Flows	1331	1747	Information provided by OCC
Tempro Growth	155	203	11.6% growth 2016 to 2021
Exemplar (393 homes)	155	129	Figure 8.1 of Exemplar TA
Application 1 (507 homes)	82	70	Saturn plots by WYG
Albion Land (26,233 sq m)	33	19	Saturn plots by WYG
Total	1756	2168	

Table 1 – Traffic impact of Baseline Development Phasing (2021)

It should be noted that WYG in their Technical Note 1 (dated 4th Nov 2016) considered a range of different development scenarios that used flows extracted from Saturn for specific development sites. A request has previously been made to OCC that this traffic flow information be provided but this has not been forthcoming. We have therefore used Temprow growth factors to take account of traffic generated by other developments in the Bicester area.

Proposed Revised Development Phasing

In the context of the programme for delivering the strategic link road now becoming more certain now (and through 2017) and the slow rate of delivery elsewhere on the NW Bicester site, P3Eco are proposing that first two phases totalling 680 homes at Himley Village are constructed and occupied by the end of 2019. As set out above P3Eco believe that it is possible for all of these homes to be occupied by the end of 2019.

In order to determine the traffic impact of this alternative development phasing, two scenarios have been considered and are set out in Tables 2 and 3 below. The first scenario assumes an optimistic programme for actual occupations on sites elsewhere at North West Bicester and matches with the programme for the baseline position. The second assumes an alternative, slower programme with occupation levels that reflect historic rates of delivery and the current position with regard to planning consents.

Element	AM Peak	PM Peak	Comment/Source
2016 Flows	1331	1747	Information provided by OCC
Tempo Growth	93	122	7% growth 2016 to 2019
Exemplar (300 homes)	118	98	Pro-rata from Figure 8.1 of Exemplar TA
Application 1 (150 homes)	25	21	Pro-rata from Saturn plots by WYG
Albion Land (8,750 sq m)	10	6	Pro-rata from Saturn plots by WYG
Himley Village (680 homes)	58	63	Pro-rata from Saturn plots by WYG
Total	1635	2057	

Table 2 – Traffic impact of Proposed Revised Development Phasing (2019) – Optimistic Programme

Element	AM Peak	PM Peak	Comment/Source
2016 Flows	1331	1747	Information provided by OCC
Tempo Growth	93	122	7% growth 2016 to 2019
Exemplar (300 homes)	118	98	Pro-rata from Figure 8.1 of Exemplar TA
Application 1 (0 homes)	0	0	
Albion Land (0 sq m)	0	0	
Himley Village (680 homes)	58	63	Pro-rata from Saturn plots by WYG
Total	1600	2030	

Table 3 – Traffic impact of Proposed Revised Development Phasing (2019) – Alternative Programme

Tables 2 and 3 demonstrate that under both scenarios, occupation of 680 homes at Himley Village would result in a traffic impact that is **less** than that which would occur under the baseline development scenario (Table 1). The situation would be no worse than would occur if 900 homes north of the railway and 26,233 sq m of employment space on the Albion Lane were to be fully occupied in 2021 without the strategic link road being completed.

At this stage, delivery of the strategic link road and tunnel by the end of 2020 seems feasible. However, even if there were to be a delay in delivery, under the alternative programme scenario there is still ‘headroom’ of 156 vehicles in the AM peak and 138 vehicles in the PM peak that would allow on-going occupation of housing and employment space at North West Bicester including Himley Village without exceeding the baseline traffic impact. This ‘headroom’ could certainly accommodate a further third phase of 500 homes at Himley Village beyond 2019 and depending on the rate of delivery elsewhere could potentially accommodate all 1700 homes at Himley Village.

Based on the analysis set out above there are no highway grounds to refuse the first two phases of 680 homes at Himley Village before provision of the strategic link road. This alternative approach to phasing at North West Bicester reflects the real position with current planning permissions, historic rates of delivery, the current programme for the Exemplar and a feasible completion date for the strategic link road.

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