CAPITA SYMONDS

Review of Transport Assessments

Keep Sutton Courtenay Rural

March 2013

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Quality Management

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1 Introduction

1.1 Background

1.1.1 Capita Symonds have been appointed by Keep Sutton Courtenay Rural (KSCR) to review the Transport reports which have been prepared to support the two separate planning applications for separate areas of land north of Milton Road, Sutton Courtenay.

1.1.2 The details of the two planning applications are as follows:

- P13/V0233/FUL – Application by Pye Homes for 34 residential units, with access to be taken via a new access at 110 Milton Road
- P13/V0410/O – Application by Redrow Homes for up to 70 residential units, with access to be taken via a new access at 44 Milton Road

1.1.3 This report will consider the methodology and approach taken in both of the reports and provide comment on any issues which these reports fail to address.

1.2 Report Structure

1.2.1 This report includes the following sections:

- Section 2 reviews the Pye Homes application;
- Section 3 reviews the Redrow Homes application;
- Section 4 reviews the cumulative effect of the proposals;
- Section 5 summaries summarises the findings of the report.

2 P13/V0233/FUL – Pye Homes

2.1 Introduction

2.1.1 The Pye Homes planning application comprises the demolition of number 110 Milton Road to create a vehicle and pedestrian access for a residential development of 34 dwellings. The access will also serve an industrial unit.

2.1.2 The proposed development will be located on land north of Milton Road, immediate behind numbers 92a to 112 Milton Road.

2.1.3 The planning application is supported by a Transport Statement prepared by David Tucker Associates (report reference RM/14349-01 TS_final), dated 1 February 2013.

2.2 Existing Conditions

2.2.1 Section 2 of the Transport Statement (TS) sets out the existing conditions around the proposed development site, reviewing the local highway network and road safety.

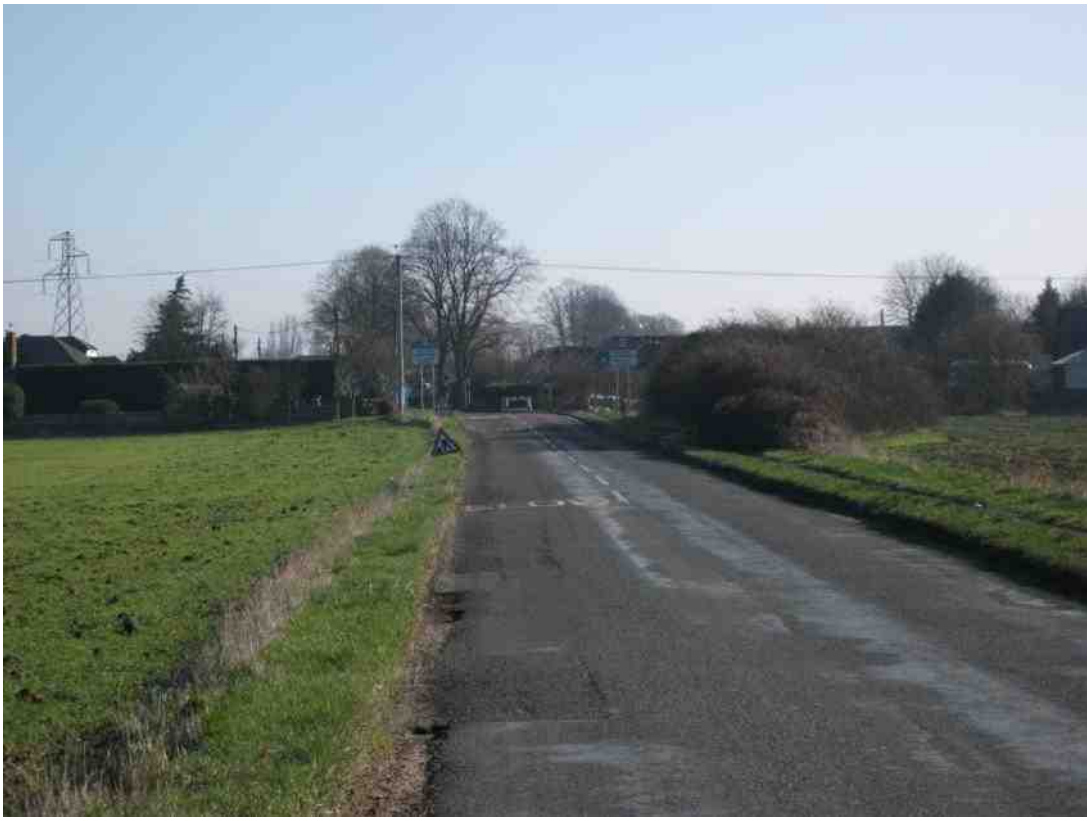
2.2.2 In describing the site location the TS fails to identify that the site is currently a green field site.

Local Highway Network

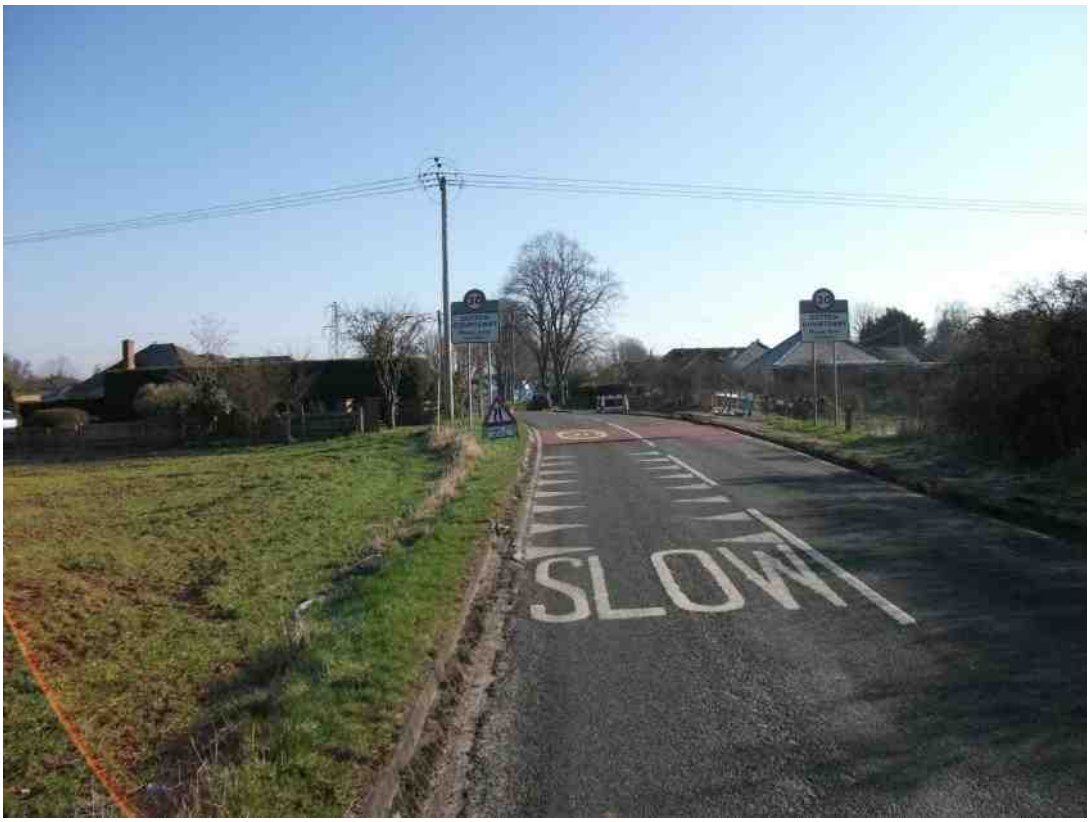
2.2.3 The TS also sets out that there is a 30mph speed limit along Milton Road, but it clearly fails to mention that within 43m, to the west of the proposed site access, the speed limit changes to the national speed limit.

2.2.4 The TS also fails to set out the limited forward visibility along the carriageway when approaching the village from the west along Milton Road / Sutton Road. At present this visibility is restricted due to the alignment of the carriageway, as shown in Photographs 1 to 3.

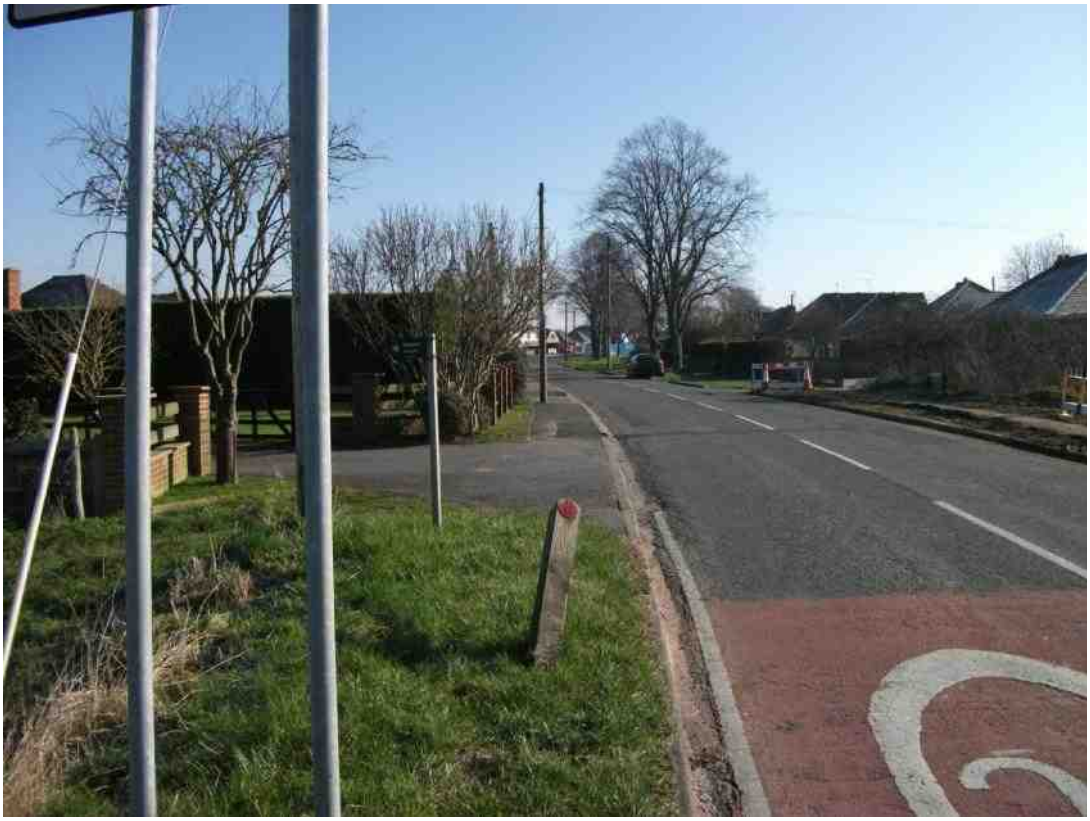
Photograph 1: Forward Visibility Approaching Village from West



Photograph 2: Forward Visibility 70m West of Proposed Site Access



Photograph 3: Forward Visibility 43m West of Proposed Site Access



Traffic Flow

2.2.5 Paragraph 2.10 of the TS discusses an Automatic Traffic Count (ATC) which was undertaken in early December 2012 and Table 1 sets out the volume of traffic recorded during the 7 day period. There is, however, no indication as to where the ATC was laid and the actual ATC data is not included within the appendices of the TS for review. Table 1 of the TS suggests traffic flows of 195 vehicles in the AM peak and 199 in the PM peak, with a tidal pattern in the flow with the majority heading eastbound in the AM peak and westbound in the PM peak, suggesting a high degree of external traffic routing through the village.

2.2.6 The traffic composition set out in Table 1 suggests that 14% of westbound vehicles and 11% of eastbound vehicles are 'heavies'. Without the ATC data available for review it is not possible to confirm if these percentages are consistent throughout the day or indeed if there are higher 'heavy' traffic flows during certain periods of the day. Regardless, for a road of this nature it is unusual for heavy vehicles to account for more than 10% of the total volume.

2.2.7 Within the ATC data there is no indication of what the vehicle speeds were and given that the mechanism for collecting this data was an ATC this seems to be misleading as it is common practice to collect the traffic volume and vehicle speeds at the same time when using ATCs. Rather, in paragraph 2.11 the posted speed limit is again repeated with the national speed limit change to the west of the site access again being ignored.

2.2.8 As set out in Section 3 of this report, ATC data collected further along Milton Road identify that 85th percentile vehicle speeds are in excess of the 30mph speed limit and nearer

40mph, suggesting vehicles would be travelling at higher speeds at the point of the proposed access.

2.2.9 During the time of the ATC there were extensive works taking place in the village, particularly along High Street, which are not mentioned with the TS. Although these works are unlikely to have affected traffic speeds along Milton Road it is possible that traffic diverted around the village to avoid the delays which were caused along High Street and therefore the overall traffic flow along Milton Road may have been less than would normally occur, although these works may account for the higher than expected heavy vehicle movements along Milton Road during the survey period.

Road Safety

2.2.10 It is agreed that the overall personal injury accident rate for the area is low at present.

2.3 Accessibility of the Development Site

2.3.1 Section 3 of the TS reviews the sites overall sustainability in terms of walking, cycling and public transport, as well as accessibility to local facilities.

Walking and Cycling

2.3.2 It is accepted that there are adequate footpaths within the village, although there are no dedicated cycle routes or facilities. The Sustrans route NC5 does pass through the area, although this is considered to be more suitable for recreational use rather than for regular commuting trips.

Public Transport

2.3.3 The level of local bus services which serve the village is set out in paragraph 3.4 and Table 2 of the TS. The level of bus services is limited with only one bus (No. 32) during the peak hours. It is therefore unlikely that residents of the proposed development would actually use the local bus service when commuting to work. The limited service during the day and at weekends is also likely to discourage residents from using the services for regular trips such as shopping or other recreational pursuits.

2.3.4 It is accepted that Didcot Parkway offers a high frequency rail service to Oxford, Reading and beyond. However, due to limited bus services and the distance from the proposed development site the overall accessibility of Didcot Parkway by non car modes is very limited. Therefore anyone commuting via rail services are likely to drive to the station, which although sustainable for the greater part of their journey does not remove the likely increase in vehicle movements from the proposed development site.

Local Facilities

2.3.5 Paragraphs 3.6 to 3.10, and Table 3, of the TS set out the availability and location of local facilities. Paragraph 3.7 suggests that there is a short parade of shops along Bradstocks Way, which is no longer the case. There is now a single Londis store, which is suitable for day to day needs but is not adequate to fulfil weekly shopping requirements. For weekly shopping needs, residents will have to travel to the supermarkets in either Didcot or

Abingdon, as set out in paragraph 3.10 of the TS. However, given the distances and limited local bus services it is unlikely that these trips will be made by sustainable modes of transport, rather they are more likely to be made by private vehicle in the vast majority of cases.

2.3.6 Paragraph 3.13 of the TS suggests that the distances of the local facilities within Table 3 are all within national guidance for cycling. DfT National Statistics suggest that the average length of cycle trips is approximately 3.86km, which is shorter than the journey to the local supermarkets, which is in excess of 5km.

2.4 Development Proposals

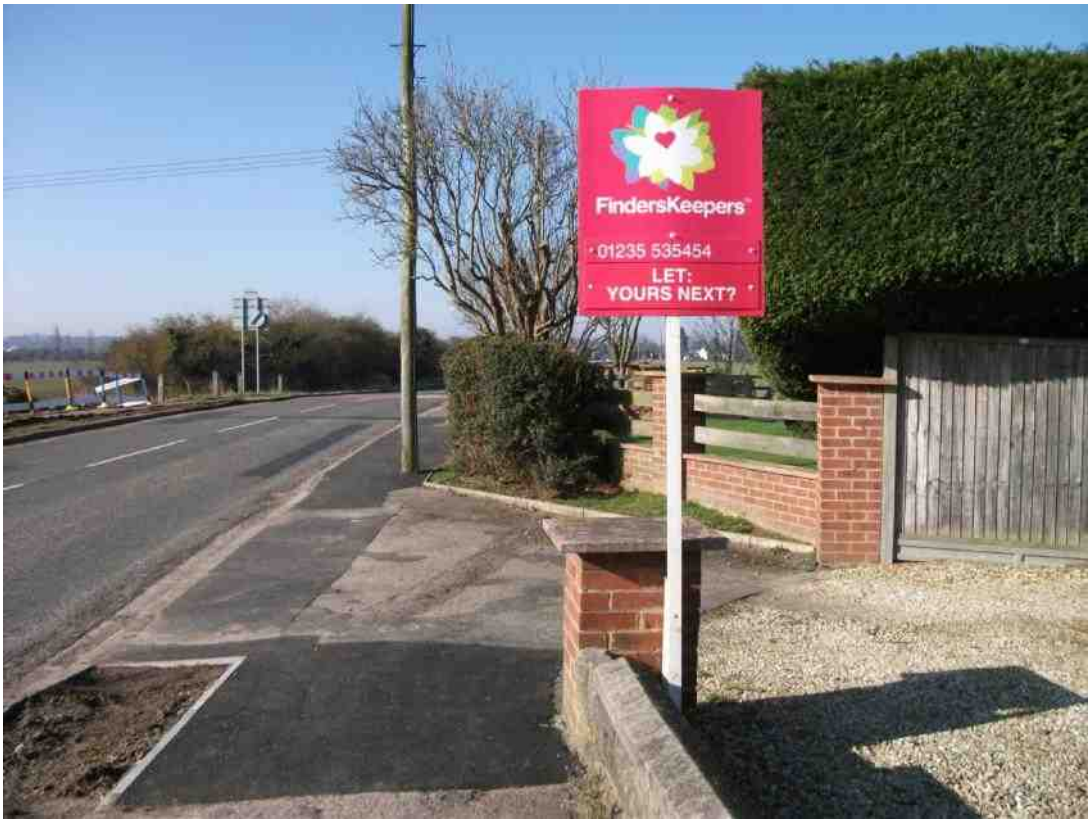
2.4.1 Section 4 of the TS sets out the overall development proposals in relation to the proposed access arrangements, layout and traffic impact.

Access

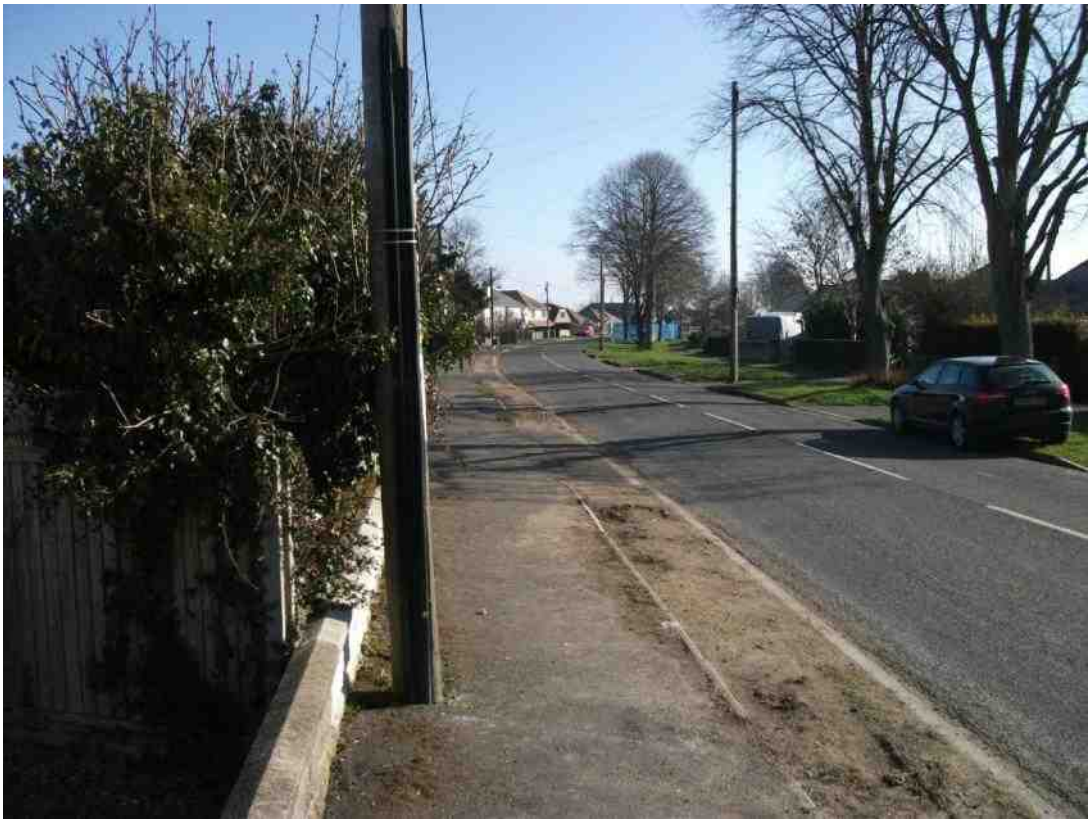
2.4.2 The proposed development would be accessed via a simple priority junction, which will replace 110 Milton Road. Paragraphs 4.3 of the TS confirms that to achieve visibility splays of 2.4m x 43m will require a portion of 112 Milton Road's garden to become highway verge.

2.4.3 Photographs 4 and 5 show the visibility splay from proposed access junction. The removal of the front portion of 112's garden would improve visibility splays, however, the proposed visibility splays are still likely to be substandard given the speeds of approaching vehicles.

Photograph 4: Visibility to West from Proposed Access Location at 2.4m



Photograph 5: Visibility to East from Proposed Access Location at 2.4m



2.4.4 As set out previously in this report, there is a change in speed limit between 30mph and 60mph approximately 43m west of the proposed access. Given that recorded speeds further along Milton Road, as part of the Redrow application and discussed later in this report, demonstrate vehicle speeds exceed the 30mph speed limit. Therefore, the visibility splays for the proposed access should accord to actual vehicle speeds rather than signed speed limit to ensure suitable visibility splays are provided.

2.4.5 Although the proposed build is likely to encourage the majority of approaching vehicles to reduce their speed it must be accepted that not all will. Therefore, the combination of poor visibility and excessive vehicle speeds are likely to result in the junction operating in a unsafe manor.

2.4.6 No Stage 1 Road Safety Audit has been undertaken on the proposed access arrangements which would give further indication on whether the proposed access arrangements are considered safe. It is likely that the proposed 4.8m width of the access road will be considered too narrow and a wider access of 5.5m will be required.

2.4.7 It has also not been possible to consider the suitability of the junctions design in terms of proposed radii's in relation to the industrial unit as details are not provided on the expected vehicle movements associated with this element of the development. If there are regular deliveries then there may be a need to increase the size of the radii's to ensure that these vehicles would be able to access the site area, should the application be approved, without damaging the kerb or verge.

Traffic Impact

2.4.8 With regards to the overall impact of the proposed development on the local highway network, the TS suggests that during both the AM and PM peak hours there will be an additional 20 vehicle movements. Based on the ATC data provided within the TS, and applying suitable growth rates of 1.003 and 1.004 from 2012 to 2013, these increases in vehicle movements would represent a 10.2% increase in AM peak and 10% in the PM peak. These increases in traffic would be significant and will therefore have a noticeable impact on the local area.

2.4.9 It could be argued that the proposed trip rates are too low, given that the Redrow development application has deemed that higher trip rates are more suitable for this area in the AM peak, and this is likely to be the case given the limited public transport available throughout the day and the general affluence of the area. If these alternative trip rates were applied to the proposed Pye Homes development the resulting traffic flows would be 24 vehicle movements in the AM peak which equates to a 12.27% increase in vehicle movements.

2.4.10 The TS states that the proposed development is below the threshold for a formal appraisal of the traffic implications of the development. However, given the overall impact of the proposed development and that there is existing congestion within the village during the peak hours, particularly at Culham Bridge, it would seem justified that the traffic implications are considered. The existing congestion on the approaches to Abingdon and at the A34 Milton Interchange will also be increased, all be it on a minor level with this particular development. However, these increases will become more relevant when taken into consideration alongside the Redrow Homes application.

2.5 Summary

2.5.1 The TS fails to set an accurate reflection of the local highway by failing to identify all the current speed limits, visibility splays and more importantly vehicle speeds in the vicinity of the proposed site access.

2.5.2 Given the limited local bus services and local facilities it is considered that the proposed development site is not in a sustainable location and would be heavily reliant on private vehicle trips.

2.5.3 The proposed access arrangements will provide inadequate visibility splays for both vehicles approaching the village from the west as well as vehicles egressing the development site. This will be coupled with a minimum increase in traffic of 10% during both the AM and PM peak which is considered a significant increase given the nature of the local area.

2.5.4 Given the increases in traffic levels the TS has failed to identify and address the effect which the development will have on the existing traffic congestion which is already experienced at key points within the village as well as on the approaches to local towns and the trunk road network.

2.6 Conclusion

2.6.1 The proposed development will have a detrimental impact on the local highway network in terms of additional vehicle movements. This will in turn add to the existing congestion which is experienced at key locations in the village and on the approaches to the surrounding towns and trunk road network.

2.6.2 The inadequate visibility splays along Milton Road / Sutton Road have not been addressed and no mitigation measures proposed. Therefore the proposed access junction will have inadequate visibility splays which is likely to result in the increased potential for vehicle conflict at the site access junction.

2.6.3 Given the findings set out above it is considered that the proposed development should not be recommended for approval on highways and transport grounds.

3 P13/V0410/O – Redrow Homes

3.1 Introduction

3.1.1 The Redrow Homes planning application comprises the demolition of number 44 Milton Road to create a vehicle and pedestrian access for a residential development of up to 70 dwellings.

3.1.2 The proposed development will be located on land north of Milton Road, immediate behind numbers 28 to 74 Milton Road.

3.1.3 The planning application is supported by a Transport Assessment prepared by M-EC (report reference 20430/JW/02-13/3310), dated February 2013.

3.2 Site Description

3.2.1 Section 4 of the Transport Assessment (TA) reviews the existing site.

3.2.2 Reference is made to the local amenities and paragraph 4.3 confirms that the Londis store on Bradstock Way is a mini supermarket rather than a store suitable for weekly shopping needs.

3.3 Local Highway Network

3.3.1 Section 3 of the TA reviews the local highway network and refers to an ATC which was undertaken in early November 2012. The results of the ATC suggest an AM peak flow of 180 vehicles per hour and a PM peak hour flow of 187 vehicles per hour, which are comparable to the flows identified in the Pye Homes application.

3.3.2 Vehicle speeds were also recorded as part of the ATC, which indicates 85th percentile speeds of 38.2mph westbound and 34.2mph eastbound, which are in excess of the 30mph signed speed limit. The average speeds were also noted to be 29.3mph westbound and 27.6mph eastbound.

3.4 Sustainability

3.4.1 Section 6 of the TA considers the sites sustainability with regards to public transport, walking and cycling.

3.4.2 Table 1 sets out the local bus services and frequencies and are as per those identified in the Pye Homes application. As stated previously in Section 2 of this report, the frequency of the local bus services is limited to a single bus in the peak hours which is unlikely to encourage the residents of the proposed site to use these services for their commute to work.

3.4.3 Paragraph 6.1 of the TA refers to the local school bus services which Oxfordshire County Council (OCC) operates to the village. Given that there is a need to provide a school bus service to the village further highlights the limited accessibility to public bus services that exist in the village.

3.4.4 As previously stated in Section 2 of this report, while it is accepted that Didcot Parkway offers a high frequency rail service to Oxford, Reading and beyond the overall accessibility of Didcot Parkway by non car modes is very limited due to the distance from the development site and the lack of bus services. Therefore anyone wishing to commute via rail services is likely to drive to the station, which although sustainable in the greater part of their journey does not remove the likely increase in vehicle movements from the proposed development site.

3.4.5 It is accepted that there are adequate footpaths within the village, although there are no dedicated cycle routes or facilities. The Sustrans route NC5 does pass through the area, although this is considered to be more suitable for recreational use rather than for regular commuting trips.

3.5 Vehicular Impact

3.5.1 Section 7 of the TA considers the proposed developments vehicular impact. In addition to the ATC which was undertaken in November 2012, manual turning counts were also undertaken in mid November 2012. Although the TA does confirm that road works were in place during the survey period, as previously discussed there is likely to have been a degree of vehicles bypassing the village to avoid the delays these long term works have caused in the area as they have continued since November 2012 to date along the main roads within the village.

3.5.2 The proposed trip rates and resulting trip generation are set out in Tables 5 to 7. These trip rates are higher than those used for the Pye Homes application and are more likely to reflect the greater use of private vehicles in the village, due to limited public transport etc.

3.5.3 The TA fails to review the developments impact except for the Milton Road / High Street junction in 2023. Using the growth rates provided within the TA and 70 residential units, the proposed development would result in an additional 50 vehicle movements during the AM peak and 39 vehicle movements in the PM peak, which equate to a 27.6% and 20.7% increase in flows respectively. This impact will be exacerbated if the Pye Homes traffic is included.

3.5.4 Given the overall impact of the proposed development will have and that there is existing congestion within the village during the peak hours, particularly at Culham Bridge, it would seem justified that the traffic implications should have been considered on a wider area than the five junctions identified. The existing congestion on the approaches to Abingdon and at the A34 Milton Interchange will also be increase, albeit on a minor level with this particular development. However, these increases will become more significant when taken into consideration alongside the Pye Homes application.

3.5.5 The junction capacity assessments undertaken suggest that of the five junctions only the High Street / Milton Road junction will exceed capacity by 2023. The TA then goes on to suggest that as the overall uplift in traffic, related to the proposed development, at the junctions are considered minimal and as such no mitigation measures are proposed. Given that there will be an increase and that other developments, such as Pye Homes, will also be adding to the overall traffic levels then the impact will be higher. Again the overall

cumulative effects of the proposed developments need to be considered together rather than individually to ensure a realistic impact is identified.

3.6 Mitigation

3.6.1 Section 10 of the TA discusses proposed mitigation measures. The main focus is on providing uncontrolled pedestrian crossings on Milton Road and Bradstock Way. These proposals will not assist in reducing the vehicle speeds along Milton Road, which are a potential safety concern given the likely increase in pedestrian movements, particularly school children to and from the local primary school.

3.6.2 The proposed Travel Plan will be of limited value as residential Travel Plans are only effective in areas of high public transport and as also reliant on the end destination of the commuter. The offer of application forms for bus passes is highly unlikely to encourage persons to use the current infrequent services. The provision of cycle parking is a standard requirement for all new developments and should not be seen as a 'Travel Plan' initiative.

3.6.3 There are no mitigation measures proposed for the local highway network, even though the TA does identify that there is a least one local junction which will be operating over capacity by 2023. The existing congestion at Culham Bridge and on the approaches to surrounding towns have also been ignored, both of which cause significant delay to existing road users.

3.7 Summary

3.7.1 The proposed development is located in an unsustainable location given the limited public transport services which would be available to any new residents.

3.7.2 The proposed development would result in significant increases in existing traffic levels which will have a detrimental effect on the local area and increase delay and congestion at existing pinch points in the village and on the approaches to the surrounding towns and trunk road network.

3.7.3 The existing excessive vehicle speeds along Milton Road have not been considered and as such any increase in pedestrian and cycle movements in the area will potentially result in an increased risk to highway safety.

3.8 Conclusion

3.8.1 As with the proposed Pye Homes development, the proposed development will have a detrimental impact on the local highway network in terms of additional vehicle movements. This will in turn add to the existing congestion which is experienced at key locations in the village and on the approaches to the surrounding towns and trunk road network. This will be further exacerbated if this and the Pye Homes development are both permitted.

3.8.2 Given the findings set out above it is considered that the proposed development should not be recommended for approval due to highways and transport concerns.

4 Cumulative Effects

4.1 Introduction

4.1.1 Although developers are only required to consider committed developments to ensure robust junction capacity assessments are undertaken, it is often common practice to consider other possible developments which local authorities may be aware of in the area.

4.1.2 Based on the supporting Transport documents, it would appear that only the Redrow Homes applicants have undertaken any formal discussions with VWHDC or OCC. This may therefore explain the exclusion of reviewing the effects of the cumulative impact that the two developments would have on the local area.

4.2 Cumulative Impact

4.2.1 The two ATC's which were conducted in late 2012 recorded similar traffic flows along Milton Road. These are set out below in Table 1.

Table 1: Recorded ATC Data

	Pye Homes		**Redrow Homes**		**Average**	
	Eastbound	**Westbound**	**Eastbound**	**Westbound**	**Eastbound**	**Westbound**
AM Peak	114	81	116	64	**115**	**73**
PM Peak	85	114	80	107	**83**	**111**

4.2.2 The above data suggests that there are on average 188 vehicle movements along Milton Road in the AM peak and 194 in the PM peak.

4.2.3 Using the data provided within the two supporting reports, during the peak hours the two proposed developments will generate the vehicle movements as set out in Table 2.

Table 2: Suggested Generated Trips

	Pye Homes		**Redrow Homes***		**Total**
	Arrivals	**Departures**	**Arrivals**	**Departures**	
AM Peak	6	14	10	40	**70**
PM Peak	13	8	26	13	**60**

*Assume 70 units rather than 80

4.2.4 From the data provided in Tables 1 and 2, if the two proposed developments are permitted then there will be an increase in traffic in the AM and PM peaks of 37.2% 30.9% respectively.

4.2.5 If the Pye Homes generated traffic were to be included within the junction capacity assessments undertaken in the Redrow Homes application then all the junctions would operate at a higher level of capacity than currently demonstrated. This would also result in the queuing and delay on the High Street arm of the Milton Road / High Street junction increasing exponentially, due to the nature of the modelling.

4.2.6 As previously discussed within this report, there is already existing congestion within Sutton Courtenay due to queues backing up from Culham Bridge. In addition, there are is queuing and delay on the approaches to both Abingdon and Didcot during the peak hours. The additional traffic which will be generated as a result of these two developments will exacerbate these queues and delays, not only for those travelling from Sutton Courtenay but also the wider public.

4.3 Sustainability

4.3.1 The overall level of development will not generate sufficient demand in terms of retail spend or public transport use to justify any further shops being introduced to the village or an enhancement in local bus services.

4.3.2 Therefore, if the proposed developments are permitted then the residents will have very little option but to travel to the surrounding towns to undertake their regular shopping needs by private vehicle.

4.3.3 The limited social facilities in the village will also result in additional traffic movements to enable residents to participate in the majority of recreational activities.

5 Summary and Conclusion

5.1 Summary

5.1.1 The proposed developments, if granted planning permission, will be located in a village which has limited public transport services and local facilities, resulting in a very high reliance on the private car for new residents. Therefore the applications should be considered to be unsustainable in terms of transport accessibility.

5.1.2 The development proposals would result in significant increases in traffic along Milton Road and subsequently to a lesser extent on the wider highway network. Both applications have failed to address existing traffic congestion within the village at Culham Bridge.

5.1.3 A significant proportion of existing vehicles using Milton Road exceed the signed speed limit. However, both applications ignore this and have not proposed any mitigation measures to ensure that speeds will be reduced in the future.

5.2 Conclusion

5.2.1 Both applications independently will have a detrimental impact on the local area and the highway network, which will be intensified should both applications be approved.

5.2.2 Given the findings set out in this report it is considered that both of the proposed developments should not be recommended for approval on highways and transport grounds.