woods ferrer limited

transportation, traffic, and highways

WARWICK DISTRICT COUNCIL VILLAGE HOUSING OPTIONS AND SETTLEMENT BOUNDARIES CONSULTATION

RADFORD SEMELE

<u>TRANSPORTATION</u> <u>STATEMENT</u> (Prepared on behalf of a residents' group in the Offchurch Lane area of <u>Radford Semele</u>)

17 January 2014

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INTRODUCTION

- 1. Woods Ferrer Limited has been instructed by a group of residents in Radford Semele to provide advice relating to traffic issues, and to make representations in connection with the Local Plan Village Housing Options and Settlement Boundaries Consultation. This Transportation Statement (TS) has been written and looks at the highways and transportation implications of the proposed allocation of land for residential development in Radford Semele.
- 2. Warwick District Council had given consideration to a number of sites in Radford Semele for residential land allocation. A shortlist of four sites was generated and the sites were included in the final consultation document. Of the remaining sites being considered for allocation, a site fronting Southam Road (A425) and Offchurch Lane is preferred by the Council as the location for new housing in Radford Semele.
- 3. Two other sites included in the final consultation document are located further east, one to the south of Southam Road, and one to the north of Southam Road. The Council's preferred site is shown as site 1 on Map 2 in Appendix A, and the two discounted sites further east are shown as sites 2 and 3 on Map 2.
- 4. The residents' group is vigorously opposed to the development of site 1, and objects to the allocation of site 1 on a number of grounds including traffic reasons. The same residents' group has suggested that development should instead be carried out on land at site 2, or 3, or both.
- 5. This TS considers whether there are valid objections on highways and transportation grounds to residential development on site 1. The TS also demonstrates that there is an opportunity to develop sites 2 and 3.

QUALIFICATIONS AND EXPERIENCE

6. Stephen Woods is a director of Woods Ferrer and has prepared this TS. He has a Masters Degree in Transport from Imperial College, London University. He is also a Bachelor of Science with Honours in Town Planning Studies. He is a Chartered Fellow of the Chartered Institute of Logistics and Transport in the UK, a Member of the Institution of Highways and Transportation, and a Member of the Royal Town Planning Institute. 7. He has been a Director of Woods Ferrer traffic, transportation, and highways consultants since 2002. He is a transport planner and has nearly 25 years of experience working in the field of traffic, transportation, and highways, in both the private and the public sectors. In the private sector, some of the work he has provided has been to assist with objections to planning applications. He also worked for a number of years for a local highway authority. There, he examined planning applications to ensure that the interests of the public highway and its users were met, and to maintain the continued free and safe flow of both pedestrian and vehicular traffic on the highway network.

DESCRIPTION AND LOCATION OF SITES 1, 2, AND 3

- 8. Radford Semele is located less than a mile to the south-east of Leamington Spa. Leamington Spa and Radford Semele are linked by the A425 Southam Road. The location map, Map 1 at Appendix A, shows the location of Radford Semele. The Council's preferred site for residential development at Offchurch Lane and Southam Road, and two sites discounted by the Council but which are being considered in this TS, are shown as sites 1, 2, and 3 on Map 2 at Appendix A.
- 9. Site 1 is 3.55 hectares and it has been suggested that 130 dwellings could be built on the site. A vehicular access to the site directly from Southam Road opposite the White Lion public house had been suggested, but it is understood that the Local Highway Authority (LHA) objected to such an access. Instead, the site would be accessed from Church Lane, a very narrow road of only 3 metres in width. Those favouring the development of the site have suggested that the road could be widened.
- 10. Church Lane meets Southam Road at an unfortunate location opposite School Lane forming a crossroads. School Lane is also very narrow at only 4 metres in width. On-street parking occurs along much of School Lane, and it is very busy with both vehicular and pedestrian traffic including children at times when Radford Semele primary school starts and ends each day. There is a pelican crossing near the crossroads. During traffic surveys carried out by Woods Ferrer at the crossroads junction, vehicular traffic was observed stacking back across the road junction and for a distance of 200 metres towards the west when the pedestrian crossing had been called.
- 11. Traffic surveys were carried out on Southam Road and at the Church Lane / School Lane crossroads. The results of the surveys are provided at Appendix B, Tables 2 and 3.

- 12. Site 2, which is one of the discounted sites, is located further to the east as indicated in Appendix A. It is located to the south of Southam Road and would link into the existing built-up area of the village, whereas site 1 is located to the north of Southam Road.
- 13. Site 2 could accommodate approximately 125 dwellings. This would provide almost all of the housing requirements for the village.
- 14. There is a public footpath that runs from the site to Southam Road and is only 70 metres long. Another public footpath runs from the site to Lewis Road and is only 120 metres long.
- 15. Traffic surveys were carried out on Southam Road in the vicinity of site 2, and the results are provided in Table 5 in Appendix B. Traffic volumes are not high, and traffic tends to platoon with long gaps between groups of vehicles.
- 16. Part of Southam Road along the frontage of the site is restricted to 30 mph and is lit with street lighting. Part of the road is restricted to 50 mph, although traffic along this part of Southam Road appears to travel at well below 50 mph. Double unbroken white lines run along the whole length of Southam Road in the vicinity of site 2. This restricts overtaking.
- 17. Site 3 is located to the north of site 2 and Southam Road. This site is smaller than site 2 and could accommodate approximately up to 40 dwellings.

OBSERVATIONS AND ANALYSIS

18. <u>Site 1</u>

- 19. Site 1 is located between Offchurch Lane and the A425 Southam Road. It extends to the rear of existing housing on Offchurch Lane. (See Map 2).
- 20. Any development to the north of the A425 in this vicinity is on the wrong side of the main road, and on the opposite side of the main road, to the services and facilities in the village. In 1994 the Council said of the preferred site that it was detached from the village and severed by the main road. It argued that the site was separated from the main part of the village which is south of Southam Road.

- 21. The village centre is south of the A425. Services there include the Radford Semele primary school, shops, a post office, and a sports and social centre. With any new residential development, sustainable travel would be encouraged by the Local Authority, and new residents would be encouraged to walk to facilities rather than use the car. However, given that village facilities are located to the south of the main road, the development of site 1 would force pedestrians to have to cross the busy A425.
- 22. Although there is an existing pedestrian crossing on the A425, near to Church Lane, pedestrians including school children are likely to cross Southam Road elsewhere too, instead of waiting for the pelican crossing green stage. Some pedestrians are likely to cross near the School Lane crossroads. Others might risk crossing near the Offchurch Lane / Southam Road junction. The footway on the north-east side of this road junction is narrow and only extends approximately 10 metres beyond the road junction. Pedestrians returning at the same location and crossing Southam Road from south to north, would not have a clear view of traffic on Southam Road. Visibility when looking to the east from the south side of the main road is only 32 metres and inadequate. To the west visibility is only 47 metres.
- 23. Gaining vehicular access to the site is also problematic. Opposite the site, Southam Road is 9 metres in width but there is a vehicular access to the White Lion public house, and there is a bus stop. It is understood that the LHA has already indicated that it is opposed to a vehicular access from site 1 directly to the A425.
- 24. The Council has suggested that vehicular access could be taken from Church Lane. Another suggestion has been to take access from Offchurch Lane. However, there are traffic concerns with both these options.
- 25. If a vehicular access were provided from Offchurch Lane, poor junction spacing would result. An access here would be less than 30 metres from the Offchurch Lane / A425 junction, and less than 30 metres from the Offchurch Lane / Chance Fields junction. Traffic surveys showed that during the AM morning background traffic peak, traffic on Offchurch Lane already queues across the Chance Fields junction. This is indicated at Table 1 at Appendix B.
- 26. An access on Offchurch Lane would also have to cope with traffic travelling at speed when turning left into Offchurch Lane from the A425. The kerb radius on the corner of Offchurch Lane and the A425 is very large at over 15 metres, and the angle of the junction is approximately 135 degrees and encourages fast moving turning vehicles through the junction.

- 27. Traffic generated by 130 dwellings on site 1 would increase turning traffic movements during the PM peak hour by approximately 81. Traffic generation was calculated as shown in the table in Appendix C. An additional 81 turning movements in this location is undesirable.
- 28.An access to site 1 from Church Lane would require Church Lane to be widened considerably because it is currently only 3 metres in width. All site traffic would then pass through the crossroads junction with School Lane and the A425. Again, the traffic likely to be generated by 130 dwellings would increase turning traffic during the PM peak hour by 81 vehicles. Given the existence of the crossroads, the school traffic, the pedestrian crossing, and the narrow roads, an additional 81 turning movements in the peak hour is undesirable.

29.<u>Site 2</u>

- 30. The residents' group would prefer the development of site 2 and possibly site 3. There appear to be no traffic reasons why site 2 should not be developed.
- 31. Site 2 is located to the south of the A425. A development here would link into the existing built-up area of the village and could accommodate 125 dwellings. The site is directly adjacent to the main part of the village.
- 32. Not only does site 2 abut the main part of the village as clearly seen on the map at Appendix A, but site 2 also links well to the village. The site is in a sustainably accessible location. An existing public footpath only 120 metres long, runs between the site and Lewis Road. There are a number of facilities very close to the site. A hair and beauty salon on Lewis Road is only 175 metres from the site. A food store and off- licence on Lewis Road is only 170 metres from the site. A newsagent and post office on Lewis Road is only 140 metres from the site. The Baptist church in Lewis Road is only 190 metres from the site. The sports and social community centre off Lewis Road is only 220 metres from the site. School children could walk from site 2 to the primary school in School Lane without having to cross Southam Road, and without having to even travel on Southam Road. There are also good public transport services available.

- 33. A vehicular access to site 2 would be taken directly from the A425. The speed limit on the A425 along the frontage of site 2 is 30 mph along the western part of the frontage, and 50 mph along the eastern part of the frontage. A vehicular access could be provided almost anywhere along the site frontage, but an access at the point where the speed limit changes from 30 mph to 50 mph is suggested.
- 34. Adequate vehicular visibility is available in both directions. Vehicular visibility relates to what the driver of a vehicle exiting a minor road can see in terms of traffic on the carriageway of the major road.
- 35. Based on the more onerous requirements of Design Manual for Roads and Bridges, well over 70 metres visibility to the west where the 30 mph speed limit applies, is available. To the east where the 50 mph speed limit applies, well over 160 metres vehicular visibility is available. Visual observations made during traffic surveys suggest that traffic travels well below 50 mph anyway. It is also worth noting that the Manual for Streets document requires shorter visibility splays. Existing street lighting is also available at the suggested access point.
- 36. In addition, overtaking is not an issue because of the unbroken white lines along the full length of Southam Road which restrict overtaking.
- 37. Traffic likely to be generated by the full development of site 2 during the peak hour would be 77 vehicles. Details of the traffic generation calculation are provided at Appendix C. This amount of traffic could easily be accommodated at a new simple priority junction at the location suggested above. During the AM peak, traffic would likely be distributed as indicated by the results of a traffic survey carried out at the road junction of Lewis Road and Southam Road. Details of the survey are shown in Table 4 at Appendix B. It shows that of the 34 vehicles observed exiting Lewis Road, 10 vehicles turned to the east away from the village centre. This is approximately 30%. It can be assumed that traffic generated from site 2 would also have a similar distribution pattern, with 30% of the traffic not passing through the congested village centre.
- 38. The new junction would meet all the requirements of the LHA in terms of geometry both horizontal and vertical.

- 39. In addition to the public footpath that links the site to services in Lewis Road as explained above, there is an additional public footpath that already links the site to the bus stops on Southam Road. The bus stop is only 150 metres from the site. Public footpaths could be upgraded and improved as part of a development on site 2.
- 40.An additional pedestrian connection from the site could be provided as part of the development of the site. A footway runs along both sides of Southam Road to the extent of the existing dwellings along the A425. Thereafter, wide highway verges are available, and there is sufficient space to provide a new footway to the site frontage and as far along the site frontage as the LHA would like. The footway would provide an additional link to the village and to bus stops.
- 41. These good pedestrian links provide access to existing bus stops. However, if necessary, additional bus stops could be provided with laybys, near to the proposed site vehicular access.
- 42. A good bus service operates along the A425. Bus services include the 63 and 64. Both services are operated by Stagecoach. The 63 runs between Leamington and Rugby via Southam. The 64 runs between Leamington and Long Itchington. The combined 63 / 64 service runs past site 2 every half an hour. Services begin at 0655 Hours, and continue until 1927 Hours. On Friday evenings there are an additional three services which operate until 2319 Hours.
- 43. On Saturdays, services are from 0810 Hours until 2338 Hours. There are five services on Sundays starting at 1026 Hours and with the last one at 1826 Hours.

44. <u>Site 3</u>

- 45. Site 3 is located opposite site 2 on the northern side of the A425. It is a smaller site than site 2, but is also available for development, and could accommodate approximately 40 dwellings. Again, there appear to be no traffic reasons why site 3 should not be developed.
- 46. A vehicular access to site 3 would be taken directly from the A425. The access could be located at the point where the speed limit on the A425 changes from 50 mph to 30 mph. If an access were created at that location, the vehicular access to site 2 could be located further to the east to ensure adequate junction spacing.

- 47. Vehicular visibility splays for the access are already available to the west. To achieve the necessary visibility to the east, the hedgerow along the site frontage would need to be set back further into the site. This would be possible because it would be within the ownership of the site owner. The existing hedgerow appears to be of poor quality and a new hedge would be an improvement.
- 48.As with site 2, site 3 is also in a sustainably accessible location and a footway could be provided along the A425 to connect to the existing footway network with links to facilities in the village, and nearby bus services. The nearest bus stop is less than 200 metres away, but a new bus layby could be provided if desired.

SUMMARY AND CONCLUSIONS

- 49. Woods Ferrer Limited has been instructed by a group of residents in Radford Semele to provide advice relating to traffic issues, and to make representations in connection with the Local Plan Village Housing Options and Settlement Boundaries Consultation.
- 50. A site fronting Southam Road and Offchurch Lane is preferred by Warwick District Council as the location for new housing in Radford Semele. The residents' group is vigorously opposed to the development of this site, and objects to its allocation. The same residents' group has suggested that development should instead be carried out on land further to the east which could accommodate approximately 125 dwellings and provide almost all of the housing requirements for the village.
- 51. Any development to the north of the A425 in the vicinity of the preferred site would be on the wrong side of the main road, and on the opposite side of the main road to the services and facilities in the village. Given that village facilities are located to the south of the main road, the development of the preferred site would force pedestrians to have to cross the busy A425. Although there is an existing pedestrian crossing on the A425, near to Church Lane, pedestrians are likely to cross Southam Road elsewhere too. This is undesirable in highway safety terms.
- 52. If a vehicular access were provided to the preferred site from Offchurch Lane, poor junction spacing would result, and queues would worsen. An access on Offchurch Lane would also have to cope with traffic travelling at speed when turning left into Offchurch Lane from the A425.

- 53. It would be undesirable for all of the traffic likely to be generated by the development of the preferred site to pass through the Offchurch Lane junction. It would be equally undesirable for the other access option at Church Lane to have all site traffic passing through the crossroads junction with School Lane and the A425.
- 54. In contrast, there appear to be no traffic reasons why the discounted site further east, and favoured by the residents, should not be developed. Not only does the site abut the main part of the village, but it also links well to the village and is in a very sustainably accessible location. Village facilities are very close, as are bus stops and a very good public transport service. In addition, school children could walk from site to the primary school without having to cross Southam Road, and without having to even travel on Southam Road. Pedestrian routes could be improved and upgraded.
- 55. The site favoured by the residents could be easily accessed. Adequate vehicular visibility would be provided in both directions at a simple priority junction on the A425. Existing street lighting is also available. Traffic likely to be generated would be easily accommodated. Generated traffic that would be going eastbound would not have to pass through the village.
- 56. An additional, but smaller site to the east is also available for development, and could accommodate approximately 40 dwellings. Again, there appear to be no traffic reasons why this site should not be developed. It is in a sustainably accessible location and a footway could be provided along the A425 to connect to the existing footway network with links to facilities in the village, and nearby bus services.
- 57. This TS maintains that there appear to be no traffic reasons why sites 2 and/or 3 should not be developed. It suggests that the village boundary in the Village Housing Options and Settlement Boundaries Consultation is amended to delete the preferred option at site 1, and to include discounted sites 2 and 3.

APPENDIX A: MAPS

er Stree ugb Offchurch Leamington Spa Radford Road Sydenham Industrial Estate Radford Semele southam Road Tachbrook Park Spa Business eamington Spa Dark Ind Est-Warwick Trident Park Whitnash

MAP 1: LOCATION OF RADFORD SEMELE

MAP 2: SITES 1, 2, AND 3



APPENDIX B: RESULTS OF TRAFFIC SURVEYS

Tuble 1. Existing Venicular Traine at the 14-57 offenaren Lane vanetion							
Date and Time	A425	A425	Offchurch	Offchurch	From West	From East	
	Westbound	Eastbound	Lane	Lane	in to	in to	
			out to A425	out to A425	Offchurch	Offchurch	
			Westbound	Eastbound	Lane	Lane	
Monday 16	105	155	27	7	62	8	
December 2013							
1745-1800 Hours							
Tuesday 14	-	-	40	1	31	13	
January 2014							
0800-0815 Hours							

Table 1: Existing Vehicular Traffic at the A425 / Offchurch Lane Junction

No counts were taken of A425 westbound and eastbound traffic on 14 January between 0800 and 0815 hours. The longest queue observed on 14 January on Offchurch Lane was 12 vehicles.

Table 2: Existing Vehicular Traffic Flows on the A425 Between Offchurch Lane and Church Lane at The White Lion PH

Date and Time	Westbound Traffic	Eastbound Traffic
Tuesday 14 January 2014	249	144
0830-0845 Hours		

Table 3: Vehicular Turning Movements at the A425 / Church Lane / School Lane Junction

			T	_		D 1 · · ·
Date and Time	School	School	From West	From East	Church	Pedestrian
	Lane	Lane	in to	in to	Lane	Crossing
	out to	out to	School	School	out to	Called
	Westbound	Eastbound	Lane	Lane	Westbound	
Tuesday	20	4	5	6	0	1
14 January 2014						
0815-0830 Hours						
Tuesday	23	4	28	5	1	3
14 January 2014						
0845-0900						
Hours						

Table 4: Vehicular Turning Movements at the A425 / Lewis Road Junction

Tuble 4. Venicular Turning movements at the 1425/ Lewis Road Suffetion						
Date and Time	Lewis Road	Lewis Road	From West	From East		
	out to	out to	in to	in to		
	Westbound	Eastbound	Lewis Road	Lewis Road		
Tuesday 14	7	2	1	1		
January 2014						
0723-0728 Hours						
Tuesday 14	17	8	3	1		
January 2014						
0746-0756 Hours						

Table 5: Existing Vehicular Traffic Flows on the A425Near to Sites 2 and 3

Date and Time	Eastbound Traffic	Westbound Traffic
Monday	120	172
13 January 2014		
1730-1745 Hours		
Monday	108	134
13 January 2014		
1745-1800 Hours		
Tuesday	145	91
14 January 2014		
0730-0745 Hours		

APPENDIX C: TRAFFIC GENERATION ANALYSIS

	Arrivals (Trips per House)	Departures (Trips per House)	Total (Trips per House)	Site 1 130 Dwellings (Total Trips including Arrivals and Departures)	Site 2 125 Dwellings (Total Trips including Arrivals and Departures)
0700-0800 Hours	0.08	0.34	0.42		
0800-0900 Hours	0.12	0.46	0.58	75	73
1700-1800 Hours	0.42	0.20	0.62	81	77
1800-1900 Hours	0.36	0.24	0.60		
24 Hours	3.33	3.31	6.64		

Trip rates are based on surveys for mixed private houses.

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