

## **A24 Horsham Road**

### **Proposed Road Safety Improvements Between Clarks Green Roundabout, Capel And The A24/A2003 North Holmwood Roundabout**

**MOLE VALLEY LOCAL COMMITTEE,  
23 October 2002**

#### **KEY ISSUE:**

To approve the A24 road safety infrastructure improvements in Mole Valley District.

#### **SUMMARY:**

This report seeks approval for modification to the A24 from North Holmwood to Clarks Green roundabouts, as part of a road safety improvement aimed at reducing the considerable numbers of Personal Injury Accident occurring.

#### **OFFICER RECOMMENDATIONS:**

The Committee is asked to agree

- (i) approval to progress detailed design and construction of the revised A24 improvements (detailed in Annexes 4-7) subject to the completion of statutory procedures and the availability of adequate funding, in conjunction with the approval of local Elected Members.
- (ii) to authorise Officers to use the appropriate statutory procedures to progress any appropriate Traffic Regulation Orders and/or acquisition of land necessary for each aspect of the scheme, subject to consultation with local elected Members.

**REPORT BY:**  
SIMON HALL

**SURREY ATLAS REF:**  
pg 136,157,178.

**MOLE VALLEY DISTRICT WARD:**  
Holmwood, Beare Green, Capel

**COUNTY ELECTORAL DIVISION:**  
Dorking South/ Rural.

## **1. INTRODUCTION AND BACKGROUND**

- 1.1 In June 2001, The Stillwell Partnership, were commissioned by Surrey County Council, Local Transportation Services, Mole Valley to undertake a study into the potential for Road Safety Improvements along the A24 Horsham Road, between North Holmwood and Clarks Green.
- 1.2 The aim of the study was to:-
- a) Identify road safety problems
  - b) To consult with the public to identify further problems
  - c) To involve residents in devising acceptable solutions
  - d) To finalise a set of proposals

## **2. ANALYSIS AND COMMENTARY**

- 2.1 The accident problem, detailed by location in the following paragraphs is significantly related to the number of gaps in the central reservation of the A24.
- 2.2 Fundamentally, and in accordance with advice directed from the Highways Agency, the County Council wishes to close all gaps in the central reservation. The effect of these closures and subsequent redistribution of traffic movements has necessitated the provision of several new roundabout schemes.
- 2.3 The accident patterns identify that between January 1996 and July 2001, 228 people have been injured (in 157 accidents) along the study length. 6 people have been killed. Of the 157 accidents 36 occurred at the gaps, 49 occurred on the existing 3 roundabouts and 14 at the numerous side roads. The principal cause of accidents with motorists joining or crossing the carriageway was their failure to gauge the speed of approaching vehicles. The actual speed of the approaching vehicles was relevant in only a small percentage of accidents.
- 2.4 Technical Design (note 42/95 (TD42/95) Chapter 4 from the Highways Agency details safety at road junctions between major and minor roads. Section 4.2 (K) recommends that: On high speed dual carriageways, right turn crossing manoeuvres are prevented at the junction and instead a roundabout or grade separated crossing close to the major/minor priority junction for the purpose of U-turns by diverted traffic is used. Such methods eliminate the 2 manoeuvres contributing most to accidents at major/minor priority junctions.

## **3. CONSULTATION**

- 3.1 To establish public opinion and viability of the options for improvement along the A24, a public consultation was undertaken. This included the distribution of 4,500 leaflets/questionnaires throughout the study area and four separate, manned exhibitions. Approximately 2000 people attended the 4 exhibitions and 875 questionnaires were returned. The detailed consultation responses are included within this report as **ANNEXES 1- 3**. A summary of responses to the specific questions asked is detailed below:

Q.1. To reduce the speed differentials and make it easier to join the A24 we proposed to remodel the layout at 3 existing roundabouts. Do you agree with the proposals at:

	North Holmwood		Beare Green		Clarks Green	
Yes	577	76%	647	85%	537	71%
No	113	15%	79	10%	127	17%
Don't know	68	9%	37	5%	87	12%
N/A	117		112		124	
Total	875		875		875	

(Percentages calculated after removal of replies designated Not Applicable).

**ANNEXE 1** contains a summary of consultation responses received in response to question 1.

Q.2. Do you support the proposals to close all of the gaps in the central reservation and provide new turning facilities at Mill Road and Old Horsham Road?

Yes	548	74%
No	171	23%
Don't know	19	3%
N/A	137	
Total	875	

**ANNEXE 2** contains a summary of consultation responses received in response to Question 2.

Q.3. In addition to the key proposals, we intend to carry out general safety improvements throughout the study length. Are there any specific problems you would like us to consider?

3.2 The detailed responses to this question are attached as **ANNEXE 3**. The principle points raised concern reducing the current speed limit, excessive speeding/racing by motorcycles and further requests for Safe Routes to School improvement/crossing facilities.

## 4 OPTIONS FOR IMPROVEMENT

4.1 The original drawings placed before the public have been altered, to take into account the concerns raised by those returning comment on the proposals. Revised drawings of each location are enclosed as an Annexe, with the following paragraphs detailing the extent of the problem, the proposed solution and amendments made following the consultation.

## 5 NORTH HOLMWOOD

5.1 The principle cause of accidents at this roundabout is the high vehicle entry and circulating speeds. A tracked roundabout scheme was displayed at the exhibition, which would have the benefit of improving lane discipline and

reducing circulatory speeds. Increased deflection on the approaches to the roundabout would also reduce entry speeds.

- 5.2 In accordance with National Guidance, it was also proposed to close the gap in the central reservation at Spook Hill. This proposal was part of the overall gap closure programme, fundamental to the route as a whole. Diverted traffic would be required to continue Northbound to North Holmwood roundabout and enter Spook Hill from the opposite end. This would also prevent vehicles using Spook Hill to avoid queuing along the main A24.
- 5.3 The consultation raised concerns regarding the bus service which runs the length of Spook Hill. The closure of the gap at the southern end would increase journey times and was not well received by some residents. To overcome this issue, the proposal has been amended to maintain the closure, but as an “except for buses and emergency services” restriction that could possibly be enforced through the introduction of a bus gate.
- 5.4 The amended proposal is detailed in **ANNEXE 4**.

## **6 MID HOLMWOOD**

- 6.1 Many residents raised concerns regarding the closure of the gap at Mid Holmwood, without the provision of a suitable alternative route. Provision for pedestrians was also an area of great concern. Bus stops are located on either side of the road and serve as pick up/drop off points for local school children.
- 6.2 In order to accommodate the wishes of those living in the area, an outline design has been developed that would allow the construction of a roundabout to maintain access. This would reduce vehicle speed and enable the provision of footways and clear locations for pedestrians to cross the road. The revised drawing can be seen in **ANNEXE 5**.
- 6.3 If the roundabout were deemed to be unacceptable, the only alternative to accommodate pedestrians would be grade separation, via a subway or overbridge. Either of these options would not meet the demands of the whole community and are likely to be under-utilised. For example, subways located at North and South Holmwood are not used by all residents, the Personal Injury Accident (PIA) history shows a number of pedestrian casualties, including fatalities within a short distance of the subways.

## **7 SOUTH HOLMWOOD**

- 7.1 Probably the most radical of all the conceptual proposals developed, was the new roundabout proposal at Mill Road. There are currently some very congested and well used gaps, several busy side roads and private residential properties accessing directly onto the main carriageway.

- 7.2 The original proposal for this junction included the construction of a new, large roundabout (partially on National Trust land) and the provision of a new service road to accommodate demand from residential properties. All gaps in the vicinity of Mill Road, were to be closed and U-turning traffic would be accommodated at the new junction or at a further new junction proposed for Old Horsham Road.
- 7.3 During the consultation, it became apparent that residents living further south than the limit of the service road, wished the service road to be extended to at least Warwick Road and if possible, to Betchetts Green Road. An amended scheme is shown in **ANNEXE 6**.
- 7.4 Another issue related to the use of the National Trust land to the North East of the junction. Some residents felt that an improvement of this type would be a good use of the land as it is currently redundant and only used by travellers. However others felt that it should not be used as the rural environment of the area would be lost as a result. (Paragraphs 15.1 and 15.2 relates specifically to the National Trust and land ownership issues).

## **8 BEARE GREEN**

- 8.1 In order to accommodate additional U-turning traffic, as a result of the gap closure programme, it was proposed to construct a new roundabout at the junction of Old Horsham Road (North).
- 8.2 The large gyratory system at Newdigate Road and the A24 junction has a very poor accident record. People from side roads find joining the junction difficult due to high approach and circulating speeds.
- 8.3 A scheme was shown at the exhibitions, which effectively removed the eastern arm of the gyratory. The overall junction was then split into 2 smaller roundabouts with the western arm of the gyratory becoming a two-way link (Refer to **ANNEXE 7**.)
- 8.4 In addition, it was proposed that the junction of Old Horsham Road (south) would become a left turn junction only with the central reserve closed. This was identified in the consultation as an area of concern to residents, due to the effect on bus services. The bus could however use the new Beare Green roundabout to enter the village from the south and then make use of the new roundabout at the northern end of Old Horsham Road (**ANNEXE 7A**) to rejoin the southbound A24.
- 8.5 The second concern in Beare Green, was over vehicles entering/exiting the Esso petrol station at slow speeds and over Large Goods Vehicles (LGV's) stopping on the inside lane to use facilities at the garage. It is possible to install a deceleration/acceleration lane for the garage. This is detailed in **ANNEXE 8**.

## **9 CAPEL BY-PASS**

- 9.1 The newer section of dual carriageway has good horizontal and vertical alignment and consequently, few accidents except for the gap at Coles Lane, which has a very poor accident record. The difficulty at this location is that the A24 serves the communities of Ockley and Capel. The diversion routes if the gaps were to be closed would be long and therefore public support is unlikely.
- 9.2 Consequently, further options have been investigated to resolve the issues at Coles Lane. The most preferable is for a grade separated 'underpass' but this unfortunately requires quite considerable 3<sup>rd</sup> party land take. The detail is shown as **ANNEXE 9**.

## **10 CLARKS GREEN**

- 10.1 Clarks Green roundabout is currently similar in shape to Beare Green in terms of its unorthodox shape and entry/exit arrangements. The proposal developed for presentation to the public included reshaping the roundabout to a more traditional shape and size. It would also be possible to return some existing carriageway to open grassland/landscaping.
- 10.2 Comments received at the exhibition related specifically to the revised junction of Rusper Road with the A24. Following these comments, amendments have been made to the drawing and are detailed in **ANNEXE 10**.

## **11 GENERIC PROPOSALS**

- 11.1 In addition to the specific proposals detailed in previous sections, it is clear that the needs of cyclists, pedestrians and equestrians must be accommodated. It is proposed that the detail of specific schemes be included within the detailed design.
- 11.2 Throughout the study length, measures to address road safety problems need to be considered. This will include a package of measures to upgrade lighting, studs, markings, and signing.

## **12 PETITIONS RECEIVED IN RESPONSE TO CONSULTATION**

*P1. Ms Elaine Rush, Secretary of Norfolk Lane Residents Association presented a petition to MVLTC on 24 July, containing 200 signatures.*

- 12.1 In essence the petition requested that Surrey County Council do not close the gaps, but provide for easier access to and from the A24. A request for a reduced speed limit and camera enforcement was made together with provision of a bridge crossing between the 2 sites. Petitioners also requested that signage of the village be improved and low noise resurfacing of the carriageway be undertaken.

*P2. Mrs Isobel Gowan, Fiona Eagle and Maureen Silvester delivered a petition signed by 960 residents and parents of children at the Weald Junior School.*

- 12.2 The petition specifically requested that the signatories were concerned for the safety of children and wish to see improved safety measures on the A24 and a reduction in the speed limit between North Holmwood and Capel. The group were well aware of the ongoing work by Safe Routes to School officer, Jo Hills and indeed, were highly supportive. However they feel that more significant measures need to be implemented as soon as possible.
- 12.3 In response, to the petitions paragraphs 6.2 details the amendments to the original proposals for Mid Holmwood. This addresses many of the concerns of the petitioners and removes the need to provide either an expensive subway or unsightly overbridge. Signage would be improved under this new scheme and as part of any maintenance requirements, modern technologies are looked at as a matter of course.
- 12.4 Opportunities for school safety improvements are inherently detailed in paragraph 8.3 and by the generic requirements for provision of cycle lanes along the A24 in its entirety.
- 12.5 Both petitions have mentioned the requirement to reduce speed limits further on the A24 and to enforce the new limits with the aid of Speed Cameras.

### **13 COUNTY SPEED LIMITS AND POLICE ENFORCEMENT**

- 13.1 In 1995 Surrey County Council reduced the speed limit on the A24 from derestricted to 60mph. There has been no significant reduction in the numbers of accidents since this occurred. The County Speed Limit policy aim to set speed limits as being appropriate for the road conditions on which they are imposed. To impose a limit lower than that which drivers perceive as safe to drive at will result in high levels of disobedience and a reluctance by the police to enforce. Consequently, in line with the County Speed Limit policy, Surrey Police will not support a speed limit lower than the current 60mph on the A24.

Surrey County Council will support the installation of Police Enforcement Cameras where:-

- i) There are substantial numbers of accidents being caused by violation of speed restrictions or red light signals.
  - ii) For speed sites where the 85%tile speed is in excess of 10mph above the posted speed limit, and that the posted speed limit is considered appropriate by both the Police and Surrey County Council .
  - iii) Where a camera installation is supported by the Police.
  - iv) Where all other traffic management measures have been considered inappropriate.
- 13.2 Obviously, in consideration of the criteria regarding accidents and speeds, camera installation could be considered. However, as detailed in this report the cause of the majority of accidents is the speed differential, between those on the main carriageway and those turning across the carriageway.



- 13.3 On a 60mph road a camera threshold would be set at approximately 67-70mph. This is the level at which 85%ile speeds have been measured throughout the study length and is consequently unlikely to result in a significant accident reduction.

## **14 FINANCIAL IMPLICATIONS**

- 14.1 Clearly any package of schemes of this nature will require significant investment. This section of the report identifies likely costs (excluding the cost of underground plan relocation and excessive demands for the acquisition of third party land) for each element of the overall schemes, in order that a programme, possibly spanning several years, can be developed and funded through Surrey County Council's Local Transport Plan. The costs at this stage are very much indicative.

### **North Holmwood**

- North Holmwood Roundabout Improvements - £135.000
- Spook Hill and improvements to northbound approach to roundabout - £95.000

### **Mid Holmwood**

- Proposed new roundabout - £300.000.

### **South Holmwood**

- Proposed new roundabout with extended service road £750.00.

### **Beare Green**

- Proposed Old Horsham Road Roundabout - £250.000.
- Beare Green Roundabout Improvements - £350.000.
- Improvements at Petrol Filling Station – £200.000.  
(Partnership funding from Esso may be available for this improvement)

### **Capel By-Pass**

- Coles Lane Underpass – significant third party land required - £ unknown.

### **Clarks Green**

- Clark's Green Roundabout split A24 flow - £300,000.

### **Overall**

- General Improvements to signing, road markings, road studs and cycle facilities - £575.000.

**The total cost of the schemes is likely to be in excess of £3million.**



**15 LAND OWNERSHIP ISSUES**

- 15.1 All land throughout the study area affected by the proposals, belongs either to The Highway Authority or the National Trust (NT). Following the consultation, land belonging to a third party near Coles Lane has been identified as part of a possible improvement. Of greater concern initially however, is the view of the National Trust, particularly regarding the potential land requirement adjoining the Mill Lane junction.
- 15.2 **ANNEXE 11** a letter, sent informally and without prejudice, detailing the likely concerns to be raised by the National Trust on the proposals. It is apparent that they would wish the Highway Authority to explore other areas prior to undertaking large scale construction. However, it is certain that the NT are open to sensible discussion on any issues to do with public safety. This approach was followed favourably in the negotiation surrounding the Coldharbour Landslip and it would be hoped that similar dialogue could be established again, were it required.

**16 SUMMARY**

To comprehensively address the road safety problems of this dual carriageway, to maintain access and to improve facilities for pedestrians, cyclists and pedestrians will require a multi-million pound programme phased over several years.

**17 CONCLUSION AND REASONS FOR RECOMMENDATIONS**

- 17.1 There is a significant number of Personal Injury Accidents along the A24 between North Holmwood and Clarks Green Roundabouts. The likelihood is that the accident levels will continue unabated unless significant investment is made in the highway infrastructure.
- 17.2 The professional judgement of Engineers associated with the project is that as a matter of urgency, the gaps at the more prevalent accident sites should be closed and traffic forced to use those where vehicle sightlines and visibility are more adequate.
- 17.3 It is understood that there are political constraints to closing the gaps in advance of turning facilities being provided, within both the local and wider community. However, as Engineers, Officers must put forward the proposal to reduce the loss of life and injury at these gaps, in the belief that the rationale behind such decisions can be tolerated by the public.
- 17.4 Greater acceptance to these proposals would be established if the public were informed that bids had been made for design and construction of elements of the proposed improvement schemes for the forthcoming financial year.

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**BACKGROUND PAPERS:**

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