THE PROPOSED A848 IMPROVEMENT SCHEME INTO SALEN

A Report for the Road Action Group Salen (R.A.G.S)

Background

The current proposals for the realignment and improvement of the A848 from Gualan Dhubh to Salen are designed to upgrade the road from single track to a double track road. The sections of road from Salen to the ferry terminal at Craignure, and from Tobermory to Gualan Dhubh, have already been upgraded, and the need for improvements on the final Gualan Dhubh to Salen section is generally accepted on Mull.

There are nevertheless objections to various aspects of the current scheme, and to the ways in which it would affect the village of Salen in particular. The RAGS group was set up to oppose the proposals as they approach and impact on the village of Salen. There are two main areas of concern for RAGS; one is the environmental impact of the proposals on Salen Bay, particularly the saltings, and the other is their road safety impact on the village.

This report is an assessment of the southernmost part of the planned scheme, as it would enter Salen only. The proposals as they affect areas further to the north have not been examined. The analysis is based on studies of the technical statement report and design drawings made available by Argyll and Bute Council, a brief examination of the Environmental Impact Study report, discussions with officials and residents, and a site visit to Salen to examine the route in company with members of RAGS on Saturday 21st June 2008.

The Design Approach

In keeping with the key aim of reducing travel times the design approach for the proposed scheme has been to aim for as high a design speed as is practical. The initial design was based on a 60mph design speed, corresponding with the maximum speed limit on single carriageway roads, and this was later reduced to 50mph because the costs and environmental impacts associated with a 60mph design speed were deemed to be unacceptable.

This trade off between higher design speeds and increased monetary and environmental costs is a general one. Inevitably it becomes more expensive to accommodate higher speeds safely, and more difficult to blend higher speed roads into the landscape. It follows that a more flexible approach to design speed, with further reductions to 40mph, 30mph (or even less over sensitive sections of the route, if appropriate) would result in further cost savings and less visual and other environmental intrusion.

An alternative route section following the line of the existing road into Salen was considered and rejected, principally on the basis of visibility standards, in favour of the recommended embankment route. This apart there appears to have been no attempt to incorporate more flexibility in terms of departures from the 50mph design speed in order to reduce costs and environmental impacts, and no comparative analysis of the costs and benefits associated with such an alternative to the recommended scheme. Even where the alternative route sections were considered in approaching Salen no such comparative analysis appears to have been undertaken. This is an important point since costs and environmental considerations are inevitably and rightly of vital importance to the prospects for implementation of road improvements.

In this context it is noteworthy that a very large proportion of KSI (killed and seriously injured) road casualties in Scotland arise on single carriageway two track roads, that better speed management is essential on these roads, and that the blanket 60mph speed limit on such roads (outside built up areas) is now seen to be unrealistic and inappropriate. Local authorities in Scotland have been asked to review the speed limits on all their A and B class roads by 2011, with a view to introducing reduced speed limits where appropriate. (1)

The proposed scheme has been designed in accordance with the central government Design Manual for Roads and Bridges (DMRB). This was originally developed for trunk roads and its use has been extended as guidance for the design of new local authority roads. As stated in the introduction to the DMRB it is for the local roads authority to decide to what extent the manual documents are appropriate in any particular situation. The DMRB is intended to be used in conjunction with other design guidance, and it was not developed for road design or redesign within built up areas. It does not cover traffic calming for example. There is other more relevant design guidance available for situations such as that in Salen where the road becomes a village through route. See for example references 2, 3 and 4 below.

Time Savings and the Mull Economy

The time savings resulting from the road improvement scheme arise principally from the replacement of the single track with a double track road. Over and above that a relatively higher design speed for the double track road will enable further time savings but these will be relatively small. A ten miles per hour increase in average speed over a 7 mile distance (from say 40 to 50 mph for instance) would save just over a minute. Any reductions in the design speed to less than 50 mph over sections of the proposed scheme would therefore be unlikely to extend journey times by more than a minute.

Such additional time savings would be of importance to some local trips but it is difficult to envisage that they are of any real economic significance. Trips to the mainland for instance inevitably involve much longer and less predictable delays at the ferry terminals, which have to be allowed for. The most important industry on Mull is now tourism, but for visitors touring the island speed is clearly not a priority. Indeed one of the chief pleasures of a visit to Mull is to enjoy its spectacular scenery while driving along slowly, and many tourists may even have a preference for single track roads!

It is surprising in this context that as yet no economic appraisal of the proposed scheme appears to have been done, with no assessment of how the preferred scheme performs by comparison with any alternatives. One would expect to see a comparison at least with a less costly, ‘do-minimum’ type of alternative.

Traffic Volumes

Traffic volumes on the A848 and A849 into and through Salen are generally light but data appears to be in short supply. An annual average daily (AAD) flow of 697 vehicles was recorded on the A849 between Salen and Craignure in 2002, and it was anticipated that AAD traffic flows would be likely to exceed 800 by 2009, and to be above the accepted limit for a single track road to operate well. The 2002 count did not record traffic levels over the Salen Bridge, however, and it is unfortunate that there seems to be have been no more recent monitoring of trends.

Some partial counts of traffic levels in Salen have been taken more recently by members of RAGS. These confirm that traffic levels over the bridge on peak days do now regularly exceed 800 vehicles a day. This is as would have been expected at the 2002 AAD flow level. Current flow levels, whatever the actual figures and their comparison with theoretical capacity limits, from personal observation and the views of residents, do not yet appear to be giving rise to significant problems with the operation of the existing single track section of road.

Moreover single track narrowings or pinch points are proven traffic calming measures that are in use in many traffic calming schemes; on roads carrying many times the volume of traffic through Salen. They are a particularly valuable traffic calming tool for use in village high street schemes, on through routes such as that in Salen, where vertical measures such as humps or speed tables are often seen as unacceptable. One well known and very successful example is the scheme through Stratton-on-the-Fosse on the A367 in Somerset, where 16 hour traffic flows are in excess of 5000 vehicles a day. This scheme was a village speed control

demonstration project featured in a national (GB) study, and in the traffic calming practice guide prepared by the County Surveyors' Society (2).

Speed and Road Safety Policies

It is now fully acknowledged in central government policies that speed kills and that speed management to eliminate excessive speeds is of fundamental importance to achieving road safety objectives. Within built up areas this means bringing speeds down to levels that allow for safe interaction between vehicular traffic and pedestrians. The '20 is plenty' and similar campaigns, and the introduction of traffic calming, 20mph zones and 20mph speed limits in residential and other sensitive areas, are in recognition of the critical relationship between speed and the seriousness of the consequences for collisions with pedestrians. The fact that at 20mph speeds or less very few collisions will result in serious injuries or fatalities provides the underlying rationale for 20mph speed limits in residential areas, outside schools, and on high streets or other streets where there are concentrations of pedestrian activity.

This is recognised in Ch 6 of Argyll and Bute Council's *Road Safety Plan* (3), where there are strong commitments to the introduction of speed reduction measures and reduced speed limits in settlements where appropriate. It also includes a specific commitment to the drawing up of action plans 'with particular reference to the needs of communities on through traffic routes' (p 29).

Village high streets are sensitive areas where pedestrian activity is concentrated and where there are often conflicts between the needs of pedestrians and through traffic. Consequently there are many traffic calming schemes on village high streets and many more are in demand. The A848/849 route through Salen exemplifies this type of conflict.

The northern part of Salen around the bridge would appear to meet the criteria for the introduction of a 20 mph speed limit as set out in Scottish Executive Circular 1/93, *Speed Limits (Guidance for Local Authorities)*, and in SEDD Circular 6/2001, *20mph Speed Limits*.

Visibility standards at junctions and around bends have been a contentious issue in terms of road safety, and have given rise to many conflicts between professionals. As speeds are reduced, however, the need for high visibility standards (such as those advised in the DMRB) is correspondingly reduced, and within traffic calming schemes features are often introduced which restrict visibility, thereby increasing driver uncertainty and promoting further speed reduction. Recent research as reported in the Dept. of Transport's 2007 *Manual for Streets* (4) confirms that the high visibility standards recommended in DMRB are not required at the lower design speeds of residential areas. These findings are also included in the consultation draft of *Designing Streets* (5), which will provide updated design guidance for Scotland. This advice is seen to be applicable also to high streets in towns and villages, potentially even on trunk roads.

Road Safety and Traffic Calming in Salen Village

As proposed the A848 improvement scheme would cross the saltings and enter Salen as a near straight road on an embankment. It would bypass several properties but require the demolition of the public toilets and some garden landtake. Vehicles travelling at up to 50mph or more would approach the Salen Bridge, where a new set of traffic signals would introduce priority working over the bridge, and would be set to red in the absence of traffic. Approaching vehicles would be slowed by the red light which would presumably be set to trigger a green for speeds of 30mph or under. The bridge would remain single track and provide a traffic calming pinch point as an entry into the village.

This arrangement would not be as effective as the current road layout in calming traffic entering Salen. Drivers can be expected to be crossing the bridge at 30mph or more with priority working, and some will no doubt be tempted to charge the light before it turns from green. Road narrowings or pinch points generally work more effectively as traffic calming measures where there is no priority signing or signals. The absence of priorities

creates additional uncertainties for drivers and this leads them to slow down more than they otherwise would. This is seen to good effect by the way in which the bridge and other existing single track road sections currently slow traffic entering the village down to speeds of around 20mph.

There are also reported to be no significant delays to traffic at present even at peak times, and certainly traffic was flowing unimpeded through the middle of the day on the Saturday of my site visit. Longer delays from some increase in platooning might therefore be expected to arise from the introduction of traffic light operation. There are also fears among residents, including the local policeman, that the traffic lights would result in queues and interfere with the junction with the Gruline road within the village. This risk may be small with appropriate settings for the traffic lights and given the generally low traffic levels, but it would appear to warrant some further consideration before any commitment to light controls is made, since there is space for very few vehicles to queue before backing up to reach the junction.

Environmental Impacts

The proposed embankment scheme would be much more visually intrusive than a route along the existing road alignment, and would effectively eliminate the attractive saltings area of the bay.

It would also impact adversely on wildlife in the bay, and I am given to understand that there are presently some of the best vantage points from which to view otters and seals alongside the road approaching Salen.

These impacts do not appear to figure in the Environmental Impact Assessment undertaken by the consultants Scott Wilson in 2006. It seems from a cursory examination of their report that the study was a broad brush one, and perhaps not attuned with sufficient sensitivity to the delicate landscape and wildlife considerations of the Mull coastline. The report also does not address any interactions between environmental considerations and economic ones.

Conclusions

There is scope for modifications to the proposed A848 improvement scheme that would meet the main objections raised by RAGS without compromising the effectiveness of the scheme.

Some reductions in the design speed and associated speed limit on sections of the scheme would save costs and help to resolve the issues raised by RAGS, and possibly other conflicts along the route (e.g. the trade off between intrusion into the Aros estuary or the Salen Show field area).

On entering Salen village higher speeds are incompatible with concern for the safety of pedestrians and other vulnerable road users. Salen Bridge would result in increased vehicle speeds through this part of the village.

Reverting to the alignment of the existing road (alternative route 1) on the approach into Salen, and retaining a second single track pinch point as a traffic calming measure at Highwater (in addition to the one at the bridge), would ensure that speeds at this end of the village remained low, as at present. [They would be compatible with a 20mph speed limit should it be seen as appropriate to introduce one.] At current and foreseeable levels of traffic no priority signing would be necessary or desirable. A traffic calmed design on this basis would also allay any concern over horizontal radii and the visibility restrictions at The Craig.

The introduction of a gateway feature where the 30mph speed limit commences on entry into the village would also be appropriate, and in line with Argyll and Bute Council's road safety policies. The road safety plan includes a commitment to 'introduce village gateways as finance permits' (3, p32).

Elsewhere along the existing road alignment it would for the most part be possible to accommodate an 8 metre wide dual track design similar to that of the current proposed scheme. Once within the village, however, at speeds below 30mph, there is less need for segregated provision for cycling and walking on both sides or even one side of the road, and carriageway widths could also be reduced to as little as 5 metres where space is at a

premium (see for example reference 6 with regard to carriageway widths in traffic calmed streets). There would be cost savings and environmental gains to be expected from such design flexibility.

The proposed scheme on an embankment would adversely impact on the environment of the bay and the wildlife there. It would eliminate the attractive saltings area and can be expected to cause wildlife such as otters to relocate.

Assuming the existing road alignment route is preferred to the embankment scheme, then a lower design speed of 40 rather than 50mph along the bay on the approach to Salen would be more compatible with the provision of turn offs to viewpoints (e.g. at the old pier) from which to observe the wildlife in the bay. The provision of improved viewpoints would add to the attractions of the route for visitors.

Although no casualties have occurred to date there are concerns among residents over speeding vehicles in the southern part of Salen, where the 1970s A849 road layout is conducive to excessive speed. The local policeman confirmed this concern and affirmed that all incidences of speeding occurred in this part of the village. There is potential for the introduction of a traffic calming scheme through this part of the village, involving a gateway, road narrowings and/or chicane features. It would be appropriate if some of the savings to be made from adopting a less ambitious approach to the design speed for the A848 improvements could be used to fund such traffic calming within Salen.

References

1. ETLLD, Circular No. 1/2006, *Setting Local Speed Limits: Guidance for Local Authorities*, Scottish Executive, August 2006

2. County Surveyors' Society, Dept. of Transport and others, *Traffic Calming in Practice,* Landor Publishing, 1994

3. Argyll and Bute Council, *Road Safety Plan,* 1999

4. Dept. for Transport, *Manual for Streets*, Thomas Telford, 2007

5. Scottish Government, *Designing Streets,* Consultation Draft, July 2008

6. Devon County Council, *Traffic Calming Guidelines,* 1991

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