

## **6 CONCLUSIONS**

### **6.1 Results and Findings**

Nine sections of eight roads were identified for further study on providing direct noise mitigation measures by using “the Working Tool”.

A database spreadsheet was set up to summarize the study findings including the rationales for providing or not providing direct technical remedies for the investigated at-grade roads.

Appropriate direct technical remedies were recommended to each identified at-grade road. The likely noise reduction and number of dwellings benefited with measures in place were estimated. Cost Estimates (unit and total) of the direct practicable technical remedies were calculated.

Based on the above recommendation, the priority for implementation of the works has been presented in Table 5.1 and a preliminary timetable for implementation of the proposed measures has been presented in Figure 5.1.

### **6.2 Evaluation of the Working Tool**

“The Working Tool” uses a logical and structured approach with general objective criteria to assess the potential of a given road section for retroactive noise mitigation. It is simple and easy to use and basically requires no or little noise modelling for the evaluation. However, without the aid of traffic data and noise modelling, it cannot be used to determine precisely: (a) whether the given road section is the dominant source of noise at the identified NSRs, (b) the effect of any topographical barriers, e.g. noise tolerant building, footbridges, hill-slopes, etc. on the NSRs, (c) the effect of angle of view of the road under consideration and other roads in close vicinity.

Barrier effect of topographical barriers and existing non-tolerant structures should be considered. Otherwise, the identified noise sensitive receivers may be over protected.

As this is a desk-top study, involving no detailed noise modelling, no traffic data, and presumably no site visits, chances are that: (a) the effect of other nearby roads can be discriminated; (b) the site conditions are unidentified from the site plans; and (c) the latest residential developments are missed out because the site plans are not updated. In view of these constraints, the previous noise calculations and information collected at the Scoping Study will be referenced where appropriate as supplement. Furthermore, limited site visits will be carried out and building plans within the last two years will be collected from Buildings Department where necessary.