

11.2 Detailed Checklists

CHECKLIST 1: FEASIBILITY STAGE AUDIT

Issue	Yes	No	Comment
1.1 General topics			
1.1.1 Scope of project; function; traffic mix			
What is the intended function of the scheme?			
Is the design consistent with the function of the road?			
Will the proposed scheme/redesign safely cater for: <ul style="list-style-type: none"> ▪ cars? ▪ motorcyclists? ▪ Cyclists ▪ pedestrians? ▪ heavy vehicles? ▪ buses? 			
Is the expected mix of traffic adequately catered for?			
Will the proposed scheme be consistent with adjacent roads, land forms and traffic management?			
1.1.2 Type and degree of access to property and developments			
Is the degree of access control consistent with the road's function and with other sections of the road?			
Will sight distances be satisfactory: <ul style="list-style-type: none"> ▪ at intersections? ▪ at property accesses? 			
Is the design speed (or the likely vehicle speeds) compatible with the number and type of intersections/property accesses present?			
Does the width of the right of way satisfy access needs?			
1.1.3 Major generators of traffic			
Are all major generators of traffic (including housing or shopping centres) far enough away to avoid unsafe influences on the form of the design?			
Have existing or alternative accesses been arranged to ensure existing suburbs/areas are not cut off by the development of the scheme/works?			
Are the accesses for significant traffic generators far enough away from intersections for safety?			

Issue	Yes	No	Comment
Is sight distance to and from accesses to significant traffic generators adequate?			
Will the proposed scheme be consistent with adjacent roads, land forms and traffic management?			
1.1.4 Staging requirements			
Will this design be implemented in one stage only?			
If the design is to be implemented in more than one stage, has safety been given a high priority <ul style="list-style-type: none"> ▪ in transitions between stages? ▪ in transitions to existing roads? 			
Will the work avoid problems with safety standards elsewhere during construction?			
1.1.5 Future works			
Will the route be free of compromises in safety if there is to be: <ul style="list-style-type: none"> ▪ future widening? ▪ the addition of a complete second carriageway? ▪ after realignments? ▪ major geometric changes at intersections? ▪ linear extensions of the scheme? 			
1.1.6 Wider network effects			
Have all harmful safety effects of this scheme upon the surrounding road network been identified? Have they been adequately dealt with?			
1.2 Design issues (general)			
1.2.1 Route choice			
Are all aspects associated with the location of the route and/or its alignment safe?			
If the route follows existing roads what are the effects of this? (comment)			
If the route is in 'green fields' (undeveloped corridor), is the alignment safe? Could it be safer? (comment)			
Does the scheme fit in with the physical constraints of the landscape?			
Does the scheme take account of major network considerations?			
1.2.2 Impact of continuity with the existing network			
Are all sections/transitions where the proposed road scheme connects with the existing network free of potential problems?			

Issue	Yes	No	Comment
1.2.3 Broad design standards			
Have the appropriate design standards been used? (having regard to the scope of the project and its function in relation to the traffic mix)			
Does the geometric plan and profile meet design guidelines?			
Have the appropriate design vehicle and check vehicle been used?			
1.2.4 Design speed			
<p>Has the appropriate design speed been selected with regard to:</p> <ul style="list-style-type: none"> ▪ horizontal and vertical alignment? ▪ visibility? ▪ merging? ▪ weaving? ▪ decelerating or accelerating at intersections? 			
<p>Is sight distance generally satisfactory:</p> <ul style="list-style-type: none"> ▪ at intersections? (if not, what implications?) ▪ at entry and exit ramps? ▪ at property entrances? ▪ at emergency vehicle access points? 			
Can any sudden change in the speed regime or posted speed limit be safely accommodated?			
Is the designated speed limit, if any, on the proposed road appropriate?			
Is the designated or intended speed limit consistent with the design speed?			
1.2.5 Design volume and traffic characteristics			
Is the design appropriate with regard to the design volume and traffic characteristics (including the effects of unusual proportions of heavy vehicles, cyclists and pedestrians, or side friction effects)?			
Will the scheme safely cope with unforeseen or large increases in traffic volume?			
Will the scheme safely cope with unforeseen changes in the traffic characteristics?			

Issue	Yes	No	Comment
1.3 Intersections			
1.3.1 Number and type of intersections			
<p>Are all aspects of intersections (for example, spacing, type, layout, etc.) appropriate with respect to:</p> <ul style="list-style-type: none"> ▪ the broad concept of the project ▪ the function of this road and intersecting roads ▪ the traffic mix on this road and intersecting roads ▪ types which are consistent within the scheme, ▪ and consistent with adjacent sections? 			
<p>Is the frequency of intersections appropriate (neither too high nor too low):</p> <ul style="list-style-type: none"> ▪ for safe access? ▪ to avoid impacts on the surrounding network? ▪ for emergency vehicle access? 			
<p>Have all physical, visibility or traffic management constraints which would influence the choice or spacing of intersections been considered?</p>			
<p>Has the vertical and/or horizontal alignment been taken into account with regard to the style or spacing of intersections?</p>			
<p>Are all of the proposed intersections necessary or essential?</p>			
<p>Can any unnecessary intersections be removed? Can access safety be improved by changes on the surrounding road network?</p>			
<p>Will the angle of the intersecting roads and the sight lines be adequate for the safety of all road users?</p>			
1.4 Environmental constraints			
1.4.1 Safety aspects			
<p>Is the surrounding terrain free of physical or vegetation defects which could affect the safety of the scheme? (for example, heavy planting, forestry, deep cuttings, steep or rocky bluffs which constrain the design)</p>			
<p>Do the gradients, curves and general design approaches fit in with the likely weather or environmental aspects of the terrain? (for example, fog-prone areas)</p>			
<p>Has safety been considered in the location of environmental features? (for example, noise fences)</p>			
<p>Does the scheme deal adequately with potential animal conflicts? (for example, kangaroos, wombats, cattle, etc.)</p>			

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Will the scheme perform safely at night when it is wet, or there is fog?			
Are visual distractions (for example, scenic vistas) adequately dealt with? (for example, by providing areas for people to stop safely)			
Has the issue of unstable country been considered? (for example, mine subsidence)			
1.5 Any other matters			
1.5.1 Safety aspects not already dealt with			
Has the possibility of flooding been adequately dealt with?			
Have any railway level crossings been identified and are they treated adequately?			
Have other distractions (for example, low-flying aircraft, advertising, etc.) been adequately dealt with?			
Has the need for laybys or parking (for example, for tourist routes, trucks, picnic or rest areas) been considered?			
Has the potential of the location to attract roadside stalls been considered?			
Have all unusual or hazardous conditions associated with special events been considered?			
Have all classes of pedestrians that could be seriously affected by the proposal been catered for? (for example, school children, elderly, etc.)			
Have any safety or accident problems on the existing network been addressed? (not carried over to the new scheme)			
Has the issue of providing lighting for the design been considered?			
Has the need for drivers to stop been considered? (for example, generally, rest areas, truck parking, enforcement)			
Have all other matters which may have a bearing on safety been addressed?			