Master Specification Part RD-GM-D2

Road Safety Audits

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RD-GM-D2 Road Safety Audits

1 General

- a) This Master Specification Part sets out requirements for Road Safety Audits conducted as part of the design of road infrastructure and for pre-opening and post-opening audits, including:
 - i) the documentation requirements, as set out in section 2;
 - ii) the key features of RSAs, as set out in section 3;
 - iii) the RSA management framework requirements, as set out in section 4;
 - iv) the operating environment requirements, as set out in section 5;
 - v) the safe system requirements, as set out in section 6;
 - vi) the RSA strategy requirements, as set out in section 7;
 - vii) the types of RSAs, as set out in section 8;
 - viii) the RSA processes, as set out in section 9;
 - ix) the commissioning phase requirements, as set out in section 10;
 - x) the conducting phase requirements, as set out in section 11;
 - xi) the completion and implementation phase requirements, as set out in section 12; and
 - xii) the Hold Point requirements, as set out in section 13.
- b) South Australia's Road Safety Strategy to 2031 (available on the internet) details the Department's vision and ten-year targets to reduce road trauma and provide safer road infrastructure for all road users.
- c) This Master Specification Part does not apply to Road Safety Audits relating to temporary traffic arrangements, which must instead comply with the requirements of PC-SM1 "Traffic and Pedestrian Management".
- d) Road Safety Audits must comply with the Reference Documents, including:
 - i) AGRS Part 6: Road Safety Audit (being the primary technical reference to be adopted for undertaking Road Safety Audits);
 - ii) AP-R509 Safe System Assessment Framework; and
 - iii) Department List of External Prequalified Senior Road Safety Auditors and Restricted Access Vehicle Route Assessors (available from <u>https://www.dit.sa.gov.au/contractor_documents/prequalification</u>).
- e) AGRS Part 6 Road Safety Audit must be read as if modified in accordance with this Master Specification Part.

2 Documentation

2.1 Design Documentation

In addition to the requirements of PC-EDM1 "Design Management", the Design Documentation must include Road Safety Audit reports prepared in accordance with the requirements of section 11 for the design stages set out in section 7.2.

3 The key features of RSA (section 2 of AGRS Part 6)

The Principal has no supplementary requirements for section 2 of AGRS Part 6 Road Safety Audit.

4 RSA within a road safety audit management framework (section 3 of AGRS Part 6)

Road Safety Audits must be integrated into stages 3 and 4 of the road safety network management framework (as set out in Figure 3.1 of AGRS Part 6 Road Safety Audit) in accordance with Figure RD-GM-D2 4-1.

Figure RD-GM-D2 4-1 Road Safety Audits in integration with the road safety network

Road Safety Network Management Framework						ent of South Australia Int for Infrastructure Port			
	Concept Design	Stage		Detailed Design St	age				Project Delivery
	Long List	Short List		Reference (if required)	Preliminary Design	Detailed Design	Final Design	IFA	Construction
					Safe Sy	stem Principles		1	
Safety Vision		!!!		Safe	ty In Design				
Predictive Techniques	ANRAM or AusRAP Safe Syst	tems Assessment	pt Selected						
Proactive Techniques			Preferred Concept	Feasibility Audit (Section 7.1)	Preliminary Audit (Section 7.2) Designers Review Design reviews	Road Safety Audit Pro Detailed Audit (Section 7.3) Designers Review and Independent Design Ce	Completion of the audit including completion meeting and Principal acceptance.	Final Audit Report	Construction Audit(s) (Section 7.4)
					<u> </u>)	i i	

5 The operating environment (section 4 of AGRS Part 6)

The Principal has no supplementary requirements for section 4 of AGRS Part 6 Road Safety Audit.

6 RSA within the safe system (section 5 of AGRS Part 6)

The safe system principles must be adopted in Road Safety Audits with a particular focus on reducing the risk of fatality and serious injury, in accordance with the AP-R509 Safe System Assessment Framework.

7 A strategy for RSA (section 6 of AGRS Part 6)

7.1 General

Projects that involve a permanent infrastructure change to the Department's road network must have Road Safety Audits at a frequency commensurate with the size, complexity, and risk to road users.

7.2 Department projects

- a) The Contractor must undertake Road Safety Audits in accordance with the schedule specified in Table RD-GM-D2 7-1 and this Master Specification Part, including sections 7.2b) and 7.4a).
- b) The Contractor must undertake Road Safety Audits as part of Preliminary Design, Detailed Design and Final Design for all Works within 200 m of a school or a facility used by vulnerable users.

	Table RD-GM-D2 7-1 Road Salety Addit Schedule					
Project value	Reference Design	Preliminary Design	Detailed Design	Pre-opening	Post-opening	
<\$1 million		(1)	(1)			
\$1 million to \$20 million	(1)	\checkmark	\checkmark	(1)		
\$20 to \$ 75 million	✓ (feasibility)	\checkmark	\checkmark	\checkmark		
>\$75 million	✓ (feasibility)	\checkmark	\checkmark	\checkmark	\checkmark	

Table RD-GM-D2 7-1 Road Safety Audit schedule

Table notes:

(1) At the discretion of the Principal.

7.3 Projects managed by other clients on the Department's roads

- a) Subject to section 7.3b), Projects managed by other clients (e.g. land developers, builders, councils etc.) that interact with the Department's roads must include a Road Safety Audit schedule as detailed in Table RD-GM-D2 7-1.
- b) The Department may consider relaxation of the Road Safety Audit schedule required by Table RD-GM-D2 7-1 where a Project managed by other clients meets any of the following conditions:
 - i) projects that include no material change to the roadway;
 - ii) land development subdivisions with less than 6 additional dwellings; or
 - iii) developments that are likely to generate less than 20 traffic movements per day.

7.4 Changes to the RSA schedule

- Proposed changes to the minimum road safety audit schedule detailed within this Master Specification Part must be endorsed by Department's Principal Road Design Engineer or delegate.
- b) Following receipt of the Department's endorsement in accordance with section 7.4a), any proposed change to the Road Safety Audit schedule required by section 7.2 must be submitted to the Principal and will constitute a **Hold Point**. The Contractor must not amend the Road Safety Audit schedule until the Hold Point has been released by the Principal.

8 Types of RSA (section 7 of AGRS Part 6)

The Principal has no supplementary requirements for section 7 of AGRS Part 6 Road Safety Audit.

9 The RSA process (section 8 of AGRS Part 6)

9.1 General

Road Safety Audits must address the attributes of the safest road environments as documented in section 2.3 of AGRS Part 6 Road Safety Audit.

9.2 Client team (section 8.2.1 of AGRS Part 6)

- a) The Commissioner of Highways is "the Client" for roads vested in or under the care, control, and management of the Commissioner of Highways.
- b) The following responsibilities have been delegated to Department personnel:
 - the Department's technical services road design section is responsible for:
 - A. setting the policy and procedure governing Road Safety Audits;
 - B. reviewing Road Safety Audit findings; and

i)

- C. endorsing (or otherwise) the Road Safety Audit findings and recommendations; and
- ii) the Department (including its assigned project managers) is responsible for:
 - A. ensuring road safety auditors are undertaking their responsibilities in accordance with the Contract Documents;
 - B. accepting (or rejecting) the Road Safety Audit findings and recommendations; and
 - C. responding to the Road Safety Audit in accordance with section 11.4 of AGRS Part 6 Road Safety Audit.

10 Commissioning phase (section 9 of AGRS Part 6)

10.1 Selecting the audit team (section 9.4 of AGRS Part 6)

- a) The Road Safety Audit team must:
 - i) be independent of the Designer and the organisation undertaking the design being audited, in accordance with section 9.6 of AGRS Part 6 Road Safety Audit;
 - ii) meet the minimum auditor competence requirements in accordance with section 9.5 of AGRS Part 6 Road Safety Audit;
 - iii) comprise a minimum of 2 members per Road Safety Audit; and
 - iv) for each Road Safety Audit include at least one senior road safety auditor prequalified in accordance with the Department List of External Prequalified Senior Road Safety Auditors and Restricted Access Vehicle Route Assessors.
- b) The Independent Design Certifier may be engaged to also undertake Road Safety Audits.

11 Conducting phase (section 10 of AGRS Part 6)

11.1 General

- a) Road Safety Audit findings and recommendations must be submitted to the Department, Contractor, Principal and Independent Design Certifier (where relevant):
 - i) where conducted as part of Preliminary Design, Detailed Design or Final Design, as part of the relevant Design Documentation submission; and
 - ii) in all other cases, within 5 Business Days of the Road Safety Audit being carried out.
- b) The Contractor must ensure any relevant findings and recommendations of the Road Safety Audit are integrated into the Safety in Design process to ensure the holistic management of safety.
- c) Risk assessments conducted in accordance with section 10.5.1 of AGRS Part 6 Road Safety Audit must be aligned to the Austroads Safe Systems Assessment Framework exposure of a road user to a potential crash in addition to the likelihood and consequence.
- d) The Road Safety Audit must be reassessed, updated and resubmitted to the Principal if any of the following apply:
 - i) any instance of a material design change post Road Safety Audit report acceptance which could impact road user safety; or
 - ii) the previous Road Safety Audit for the relevant stage is more than 3 years old.

11.2The audit report (section 10.7 of AGRS Part 6)

a) Road Safety Audit reports must:

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- i) be prepared in accordance with the minimum requirements of section 10.7 of AGRS Part 6 Road Safety Audit; and
- ii) include the Road Safety Audit recommendations documented in accordance with the form shown in Figure RD-GM-D2 11-1.
- b) Each Road Safety Audit report in accordance with section 11.2a) must be submitted to the Principal, which will constitute a Hold Point. The Issued for Acceptance Design Documentation associated with the Road Safety Audit report must not be submitted until this Hold Point is released.
- c) Following the release of the Hold Point in accordance with section 11.2b) the finalised Road Safety Audit must be included as part of the relevant Issued for Acceptance Design Documentation submission.

Figure RD-GM-D2 11-1 Road Safety Audit recommendations form

		Government of South Australia
Road Safety Audit Recommendations	OFFICIAL	Department for Infrastructure and Transport

Project mormation							
Project Name		Auditor's Organisation		Designer's organisation			
Road Name		Lead Auditor		Lead Designer			
Road Number		Auditor(s)		DIT Project Manager			

No	Finding - Report Ref #)	Recommendation	Risk Leve	Designer's Response	Decision
_	artment's Aco				

Deparamente o Accoptante							
	Representative	Record of Endorsement or approval	Date				
Endorsed by DIT Road Design Section / or RTEP		Can use digital approvals					
Approved by DIT Project Manager							

12 Completion and implementation phase (section 11 of AGRS Part 6)

- a) The Detailed Design Documentation and Final Design Documentation submissions must include the following documented responses from the Designer in relation to the Road Safety Audit report including:
 - i) details of action taken in response to the Road Safety Audit report recommendations;
 - ii) further actions proposed to address issues of concern in the Final Design stage (where applicable); and
 - iii) if the Designer considers that no further action is necessary to address the recommendation, a full explanation for not undertaking such action.

- b) The Contractor must coordinate a completion meeting in accordance with the requirements of section 11.2 of AGRS Part 6 Road Safety Audit with the Designer, road safety auditor, the Department, the Independent Design Certifier (where relevant) and the Principal to review:
 - i) the Road Safety Audit findings;
 - ii) auditor's recommendations; and
 - iii) the Designer's responses.
- c) Following the completion meeting, the Department will review the Road Safety Audit recommendations and the Designer's comments, to endorse or otherwise the decision on individual recommendations.
- d) Following receipt of the Department's endorsement in accordance with section 12c), the Contractor must obtain the endorsement and acceptance by the Principal of the Road Safety Audit recommendation and Designer's responses, which will constitute a **Hold Point**. The Issued for Acceptance Design Documentation associated with the Road Safety Audit report must not be submitted until this Hold Point is released.

13 Hold Points

Table RD-GM-D2 13-1 details the review period or notification period, and type (documentation or construction quality) for each Hold Point referred to in this Master Specification Part.

Table	RD-GM-D2	13-1	Hold	Points
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Section reference	Hold Point	Documentation or construction quality	Review period or notification period
7.4b)	Proposal to change the Road Safety Audit schedule	Documentation	5 Business Days review
11.2b)	Road Safety Audit reports	Documentation	7 Business Days review
12d)	Acceptance of Road Safety Audit recommendations	Documentation	5 Business Days review