

Traffic Signal Design Flow Chart

Task No.	Task Name	Task Description	Task to be completed by	Task Outputs to be delivered to
1	Undertake Consultation re proposal to install traffic signals with; <ul style="list-style-type: none"> • Public • Roothing Peer Group • Adjacent residents/ Businesses • Telecom, • Power company • DCC telecommunications Administrator 	<ul style="list-style-type: none"> • Written submissions 	Assess submissions and incorporate into brief	Transportation Planning
2	Design (Draft) brief	<ul style="list-style-type: none"> • Brief • Locality Plan • Concept Plans 	DCC Transportation Planning	DCC Roothing
3	Design (Confirmed) brief describing the traffic signal work required	<ul style="list-style-type: none"> • Ditto 	DCC Roothing	Signals Consultant
4	Preliminary Phase Report and Plan - Delivery	<ul style="list-style-type: none"> • A site plan with the preliminary design superimposed, including details of; <ul style="list-style-type: none"> - Posts & lanterns - Detectors - Controller - Road marking - Phasing diagram 	Signals Consultant	DCC Roothing
5	Preliminary Phase Report and Plan - Review	<ul style="list-style-type: none"> • Review Confirmation of project scope 	Transportation Planning/ Roothing	Signals Consultant
6	Confirm Scope	<ul style="list-style-type: none"> • Signals Consultant 	<ul style="list-style-type: none"> • Assess DCC Scope change and clarify if necessary 	DCC
7	Design Phase Report and Plan - Delivery	<ul style="list-style-type: none"> • Site inspection including photographs. • Design plan - full drawing with all the required information (Appendix A) • Consultation with all service authorities, signal operations and SCATS staff, planning section. • Report on design features. 	<ul style="list-style-type: none"> • Signals consultant 	Roothing/ DCC Transportation Planning

	Controller Information Sheets	PROM requirements on suitable sheets and design plans to signal contractor. shall include: <ul style="list-style-type: none"> • Lane layout • Detectors • Phasing • Signal group numbering • Timing details both vehicle and pedestrian • Flexilink details • Special facility requirements • SCATS requirements 	Signals Consultant	Nominated contractor
9	Design Phase Report and Plan – Design Review (Signals), Controller Information Sheets (Review)	<ul style="list-style-type: none"> • Peer review by suitably experienced signal designer of: <ul style="list-style-type: none"> - Design plan. - Full input and design report. - Reviewer to supply letter of approval with plan number once any amendments have been discussed and noted. • Peer review of CIS 	Signals Design reviewer (or nominated consultant)	DCC Rooding (DCC Transportation Planning)
10	Design Phase Report and Plan – Review	<ul style="list-style-type: none"> • Forward copy to Signals Design Reviewer 	DCC Transportation Planning/ Rooding	Signals Design Reviewer
11	Design Phase Report and Plan – Audit	<ul style="list-style-type: none"> • Audit Report - Undertake Design Audit in accordance with Land Transport procedures 	Auditor	DCC Rooding (DCC Transportation Planning)
12	Design Phase - Review	<ul style="list-style-type: none"> • Review recommendations of Signals Design Reviewer. • Confirm project Scope 	DCC Transportation Planning/ Rooding	Signals Consultant
13	Construction Phase working drawings, schedule and cost estimate	<ul style="list-style-type: none"> • Final design plan including cable diagram. • Schedule of quantities including cable charts. • Cost estimate. • Final design report. 	Signals consultant	DCC Rooding
14	Construction Phase working drawings, schedule and cost estimate	<ul style="list-style-type: none"> • Final Construction Drawings 	Signals Consultant	Audit Team Leader
15	Liaison	<ul style="list-style-type: none"> • Set up meeting with Signals consultant and DCC Telecommunications Administrator. • Incorporate any requirements agreed to in 11) into Tender Documentation 	DCC Rooding	Signals Consultant
16	Tender documents	<ul style="list-style-type: none"> • Schedule, equipment and installation specification 	Signals Consultant	DCC Rooding
17	Award Tender	<ul style="list-style-type: none"> • Advise successful tenderer. • Confirm construction of projects to Transportation Planning, DCC 	DCC Rooding	Signals Contractor

		Telecommunications Administrator, DCC Electricity Advisor		
18	Preliminary PROM	<ul style="list-style-type: none"> • Electronic copy of PROM • Hardcopy of PROM 	Nominated Contractor	Signals Consultant
19	Test PROM	<ul style="list-style-type: none"> • Provide document approval including PROM *.sft file • Copy of document approval to be forwarded to DCC Operations • Undertake full test of PROM operation using WinTraff program or similar. Copy of CIS required. Test to include the following modes: <ul style="list-style-type: none"> - Isolated - Flexilink - SCATS (if applicable) 	Signals Consultant	Signals Contractor
20	Final PROM	<ul style="list-style-type: none"> • Final electronic copy of PROM • Hardcopy of PROM 	Nominated Contractor	Signals Consultant
21	Construction Timeline	<ul style="list-style-type: none"> • Produce construction timeline 	Signals Contractor	DCC Roding
22	Construction supervision		Signals consultant	DCC Roding
23	Signals commissioning and initial monitoring	<ul style="list-style-type: none"> • Pre-commission checks and initial operation monitoring as per Austroads Part 7 Section 14. 	Signals Consultant	DCC Operations
24	Set up SCATS data and/or linking and monitor	<ul style="list-style-type: none"> • SCATS intersection related data and linking requirements. • Set up and monitor 	Signals consultant	DCC Operations
25	Sign off and hand over of new/upgraded signals to DCC signal maintenance contractor	Traffic Signals Certificate of compliance <ul style="list-style-type: none"> • Transferal of ownership responsibility letter (as appropriate) • Certificate of Electrical Compliance • Name of electrical supplier • design plans, ducting plans and controller information sheets (as builts) • maintenance contractor • maintenance period • schedule of equipment (as builts) • signals installer • full as built documentation 	Signals consultant	DCC Operations
26	Traffic Signal Monitoring	Monitor on site operation during the AM, interpeak and PM peaks and arrange for modifications to phasing as required	DCC	Signals Consultant

Reference documents shall include:

- (1) Traffic Signals installation process flow chart RTA Traffic Signal Practice - Design
- (2) Traffic Signals design process flow chart RTA Traffic Signal Practice - Design
- (3) Austroads Guide to Traffic Engineering Practice Part 7 (2003) - Traffic Signals
- (4) National Traffic Signal Committee draft document Traffic Signals Peer Review
- (5) National Traffic Signals Specification, Revision 2, 1 September 2005.
- (6) Austroads Guide to Traffic Engineering Practice Part 7 (2003)- Traffic Signals Chapter 14