Chapter 1
Planning and Design Framework
## Manual Contents

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### Chapter 1 Amendments

#### Revision Register

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<tr>
<td>1</td>
<td></td>
<td>First Release</td>
<td>D.Hicks</td>
<td>Mar 2003</td>
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<td>2</td>
<td>New Section 1.6</td>
<td>The Business Model Framework has been included to provide linkages to the Road System Manager.</td>
<td>D.Hicks</td>
<td>Jan 2004</td>
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<td>3</td>
<td>New Sections: 1.11, 1.12 and 1.13</td>
<td>The chapter has been expanded to include sections on legislative Accountability, Hierarchy of Queensland Roads, and Strategic Vision</td>
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<td></td>
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<td>D.Hicks</td>
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<td>5</td>
<td>New Chapter 1</td>
<td>The chapter has been revised to set the context and align the preconstruction processes with the recently developed state-wide planning process, program and project management framework.</td>
<td>J Worrall</td>
<td>July 2009</td>
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1.1 General

The Department is a key stakeholder in the development of Queensland’s public road network and its integration with the overall transport system. Other key stakeholders are the Commonwealth Government for the declared 'National' roads, local governments for roads under their jurisdiction, the community, other government departments and the private sector.

The Department is responsible for the stewardship of the state-controlled road system, which involves the system’s operation and the delivery of projects for enhancement and MPO (maintenance, preservation and operation). These activities encompass the following State Government priorities as defined in the Department’s visioning document “Roads Connecting Queenslanders” –

- Safer roads to support safer communities;
- Efficient and effective transport to support industry competitiveness and growth;
- Fair access and amenity to support liveable communities; and
- Environmental management to support environmental conservation.

The Preconstruction Processes Manual has been developed to guide the project management of new and the improvement of existing state-controlled road infrastructure. This project management is based on a road network management system (operating, planning, design and delivery) which provides for consistent decisions, policy development and supporting systems, and state-wide processes.

The purpose of the manual is –

*To ensure that the planning, design and provision of roads infrastructure contributes to State government outcomes, meets stakeholders’ needs and is consistent with sound project management principles.*

The Preconstruction Processes Manual provides the corporate methodology to identify and manage appropriate projects in planning and design to achieve strategic outcomes and value for money. Sufficient flexibility is incorporated within the planning and design framework to enable planners and designers to tailor each project to the outcomes desired.

To this end, project planning and design is undertaken within a broader planning context encompassing –

- The local community, through community accessibility analysis and consultation;
- The natural and built environment;
- Cultural heritage;
- Regional land use and infrastructure planning, as well as Local Government and industry land use decisions;
- Road route and link planning; and
- The Department’s strategic objectives and planned investment strategies.

1.2 Manual Structure

The Preconstruction Processes Manual is structured so as to guide the user in the development of appropriate projects through the planning and design and to achieve required approval.

Chapter 1 (Planning and Design Framework) describes the context in which project planning and design takes place.

Chapter 2 (Pre-Project Planning) describes the strategic and route/link planning framework which identifies road infrastructure needs to guide the subsequent identification of the majority of potential projects.
Chapter 3 (Business Requirements) describes the project management process as well as the procedures and approvals required.

Chapter 4 (Design Development Process) describes the process of concept design, options analysis and business case development of the preferred option.

Chapter 5 (Project Scoping) describes scope development, management and risk analysis.

Chapter 6 (Design Management) describes the initiation and management of the design process, contract preparation and supplier selection, design review, auditing, and document control, contract documentation, tendering process and project closeout.

### 1.3 Relationship with Other Manuals/Documents

In the Preconstruction Processes Manual, references to other Departmental documents and standards are minimised. In order to reduce repetition and duplication, some detailed external references have been removed as the topics are now being addressed elsewhere or are irrelevant. Some of these related documents and standards are –

- **RIP Development Guidelines** (This document can be found in Junction under Program Development and Delivery Group, RIP Business Processes);
- Road Planning and Design (RPD) Manual;
- Project Cost Estimating Manual (This document can be found in MR Publication Series);
- Guide to the Road System Manager (RSM) Framework (Contact the Principal Manager (RSM) for more information);
- Guidelines for Strategic Road Network (SRNP) Planning (This document can be found in MR Publication Series);
- Program Management Framework; and
- OnQ Project Management.

The RSM Framework is an over-arching document describing the way the Department operates. The framework provides –

- A consistent state-wide approach for the Department as a modern state road agency;
- A high level view of the Department’s end-to-end processes in meeting government priorities and community outcomes;
- An environment for decision-making, policy development and support; and
- A description of what each group does in the Department so all groups have a unified view of the part they each play in this networked organisation.

The RSM will not be discussed in detail in this manual. For more information, refer to “Guide to Road System Manager Framework” and the RSM Portal.

Table 1 is a guide which provides an indication of where each manual/document applies to the various stages of preconstruction work.

### 1.4 Planning and Design Framework

A terminology convention aligned with the OnQ project management framework has been adopted to provide a uniform understanding and application of the project planning and design process throughout the Department.

Integral to the planning, design and delivery activities is a set of standard project reporting templates, roles and responsibilities, as well as milestone approval points.

#### 1.4.1 Templates

Part of the project management rigour is derived from the consistent documentation of the project planning, progress and history. The Department has tailored the OnQ methodology to road projects and includes a series of generic project management templates addressing discretionary and mandatory activities within project planning.

It should be noted that although there are common activities to project development, there are alternative templates within some phases. The different templates relate to the scope of works. Generally, the more complex and extensive the project, the more planning, issues resolution and risk involved, and consequently the greater degree of project documentation that is required.
1.4.2 Approval Process

The planning and design framework incorporates a number of mandatory hold points where a project cannot proceed until the necessary approvals have been obtained.

For more information, refer to the OnQ intranet site and the “RIP Development Guidelines”.
Table 1 – Department of Transport and Main Roads’ Key Infrastructure Planning Documents

Transport Coordination Plan (TCP), Road Connecting Queenslander (R CQ), State-Wide Plan (SWP), Queensland Road System Performance Plan (QRSPP), Strategic Road Network Planning (SRNP), Preconstruction Processes Manual (PPM), Road Planning and Design Manual (RPD), Roads Implementation Plan (RIP)