

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Dugald Ley, Development Engineer
DATE: 23 July 2007
REFERENCE: E362
SUBJECT: **ENGINEERING STANDARDS 2007**

1 PURPOSE

The purpose of this report is to present the draft Tasman District Council Engineering Standards and Policies for discussion and adoption.

2 COMMENT AND BACKGROUND

The present standards were approved by Council in January 2004. As technology and advancements in the way we do our business improve, so is the need to review our standards. In June 2006 Council requested from interested parties (Surveyors, Engineers etc.) preliminary comments to the 2004 Standards. Some comments were received and have been included in the preparation of the revisions.

The draft Engineering Standards 2007, subject of this report, is the result of Council's three-yearly review of this document.

3 DISCUSSION

The 2007 review process has resulted in a number of improvements. The re-drafted document has been re-structured so that it is easier to follow. New design objectives have been drafted so that it is clear what Council is trying to achieve with the management of each Asset. These objectives are tied in with the Activity Management Plans, and levels of service.

The new structure sets out a more formal overview, document requirements, legal objectives, definitions, certification and designs at the front followed by each of the infrastructural sections:

Each section is followed by the respective appendices and engineering plans which have been updated to reflect new advances in each infrastructure.

Some of the technical changes affecting Council's infrastructure include:

- 3.1 An alternative assessment framework for alternative designs.
- 3.2 New products and installation techniques.
- 3.3 Global warming and potential sea level rise assessment.
- 3.4 Formal training requirements for personnel working on Council's future assets.
- 3.5 Clear guidance on accepted certificate of completed works and liability.
- 3.6 Controls on erosion and sedimentation of ground that has been opened up.

- 3.7 Standards of information submitted to Council.
- 3.8 Consistency with the Tasman Resource Management Plan.

The hotly debated topic of climate change and subsequent sea level rise is set out in section 7.2. The 2004 Engineering Standards had a 0.3m sea level rise criteria. Following recent NIWA/IPCC information and a number of storm events around the country, especially in the North Island, Council has revised this figure to 0.5m.

This results in restricting development of coastal land (Richmond) to RL 4.06 TDC datum.

No doubt this restriction on development will be discussed at the Environment and Planning workshop/meeting on Richmond West on 1 August 2007.

In addition to this the Stormwater and Drainage, and Streetworks sections now also include an "alternative assessment framework". The new section in each sets out an assessment framework that can be used to assess alternative designs put forward to Council. Provided that the alternative design meets the objectives set out at the beginning of the document and the design criteria in the assessment framework, Council will approve alternative designs.

An example is in the stormwater section where there are now many forms of low impact stormwater disposal including rain gardens, swales and retention areas that may be assessed as acceptable alternative design solutions (two examples in Halswell, Christchurch were included in the Development Engineering report presented at the 21 June 2007 meeting).

4 FUTURE PROCESS

Should the committee provide a favourable review to the draft document we intend the following process be undertaken for public consultation:

- 4.1 Set up a sub-group comprising two Councillors and Engineering Service staff.
- 4.2 Circulate the draft document to interest* groups and the general public for feedback and comment.
- 4.3 Meet and gain feedback from the community boards.
- 4.4 Hold public consultation meetings in various locations.
- 4.5 Receive written submissions and hear submissions.
- 4.6 Finalise submissions
- 4.7 Print final document and distribute.

* Interest groups include:

- NZ Institute of Surveyors
- Consulting engineers
- Planners
- Legal advisors
- Network Tasman
- Telecom
- Plumbers and Drainlayers
- MWH (New Zealand) Ltd
- Works EDI Downer
- Fulton Hogan
- Sicon
- Nelson City Council
- Marlborough District Council
- NZ Contractors' Federation

5 ACKNOWLEDGEMENT

I wish to acknowledge Sonya Leusink-Sladen, David Stephenson and Robyn Scherer for their assistance in bringing this document to the committee.

6 RECOMMENDATION

- 6.1 THAT the draft Engineering Standards and Policies 2007 be circulated for public consultation, and**
- 6.2 THAT a working group consisting of the Engineering Manager, the Development Engineer and two Councillors be given delegated authority to review and consider public submissions and subsequently adopt the Engineering Standards and Policies 2007.**

Dugald Ley
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