Paperless e-surveying with Mr Laptop Surveyor

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Presented on eve of 32nd year attaining surveying license

INTRODUCTION.
THE BIRTH OF THE TORRENS TITLE
Dr Ulrich Hubbe & Robert Richard Torrens

Real Property Act

• indefeasible title
• central register
• state-guaranteed registration

Torrens Title System

LAND SERVICES GROUP

Central managing authority responsible for

• land titling
• land and property valuation
• cadastral and geodetic survey framework
• management and provision of land information
PLANNING IN SOUTH AUSTRALIA

Central planning authority
• land use planning, development of policy and strategy

Development Assessment Commission
• central registry authority for all land division applications

CO-REGULATION SURVEYING SYSTEM

1992 co-regulation system
• regulatory responsibility shared between government and surveying profession
• financially independent as revenue is raised from a plan levy.
THE LAPTOP e-JOURNEY

From
• the first email from a client requesting a land division

To
• the issue of new electronic titles

with out using a single sheet of paper

ELECTRONIC PLAN LODGEMENT

Two components
• textual sheet(s)
  – tabulated data
• diagram sheet(s)
  – plan

minimum two A3 sheets
Textual sheet

narrative text includes
• plan purpose
• area name
• map sheet reference
• council name
• subject land’s last plan reference
• development application number
• sheet of total sheets
• version number

Textual sheet (cont)

• agent details
• surveyors certification
• subject land title reference(s)
• other title(s) affected
• easement details
• annotations.

two significant changes
• tabulation of easement
• plan certification without a signature
Plan sheet

- TIFF file of CAD generated survey diagram
- drafted in accordance with LTO plan presentation guidelines
- uploaded on the EPL plan lodgement site.
LODGE EPL FINAL PLAN

- electronic payment of EPL plan lodging fee
- electronically certified and lodged by LS entering unique identification code and password
THAT ONE SHEET OF PAPER

…..in this land division process is
the print out of down loaded
RTU form

…..because the signed consent by
the registered proprietor(s) to the
land division is required……..

ELECTRONIC TITLES ISSUED

• Registrar General deposits the
plan of division
• order made for the issue of
electronic titles.
• deposited plan information of
division used in CT production
Front page of CT

contains
- ownership details
- registered mortgage(s)
- encumbrance information, eg
- existing, proposed or varied easements, rights of way, liens.

Second page of CT

contains
- copy of the boundary diagram
- title boundary data
- allotment identification number
FINALLY................IN AN IDEAL WORLD......

Efficient, friendly paperless e-surveying

- saves trees
- at environmental cost in manufacturing, distributing and operating the e-equipment
- asset of e-surveying is entire job file within convenient laptop reach
- facilitating e-interaction with clients, authorities and surveying equipment
South Australia’s system of land surveying, land division and land title evolved from
• orderly colonization
• subsequent forward planning associated with technological development
The pioneers never envisaging the magnitude of their contribution to e-surveying

• The government guaranteed land ownership
• central plan register
• coordinated reference marks
• emphasis on education
• e-planning procedure system
• e-plan lodgement
• advent of the laptop computer
• internet
• electronic surveying equipment
provides an ideal base for today’s GIS world
Yearn for the establishment of a single site

• for land division to submit a CT reference for associated information and an interactive boundary plan
• On approval lodge electronic CAD drawing with interactive AMG coordinates for boundary corners and reference marks

In the almost 40 years since graduation the writer, has been extremely fortunate in his professional career to have “hung ten” riding the greatest technological survey wave ever experienced by land surveyors.

I suspect that in another 40 years that today’s yearning will be as archaic as surveying in 2010 with a Gunter chain.