Survey Audit Program
Organisational Structures
- Land Use Victoria (LUV)
- Office of Surveyor-General Victoria (OSGV)
- Surveyors Registration Board of Victoria (SRBV)

Why surveyors are audited
- Legislation and Directives
- Land Use Victoria
- Program objectives

How the program works
- Selection of surveys for audit
- Audit process
- Audit assessment and result

Key Points and Observations
- Audit statistics
- Extent of serious non-conformances
- Tips and advice
Office of Surveyor-General Victoria

OSGV’s six distinct operational responsibilities:

- **Cadastral Infrastructure and Standards:** Provision of land surveying services and the regulation and monitoring of cadastral surveys in Victoria.
- **Crown Survey Approval:** Provision of drafting services for major Government infrastructure projects and land transactions.
- **Geodesy:** Provision and maintenance of the State’s GNSS CORS and survey control mark network.
- **Digital Cadastre Modernisation Project:** Upgrade of the spatial accuracy of Victoria’s digital cadastre.
- **Geographic Names:** Maintenance of Victoria’s Registrar of Geographic Names.
- **Surveyors Registration Board of Victoria:** Provision of executive and secretarial support for the Surveyors Registration Board of Victoria.
Legislation and Directives

- **Surveying Act 2004**
  - s. 42 Functions and powers of Surveyor-General
  - “to set and monitor standards for surveying and survey information”

- **Surveying (Cadastral Surveys) Regulations 2015**
  - sets minimum standards for cadastral surveys
  - Need to monitor field practices

- Practice Directives
  - How to meet legislative requirements when undertaking cadastral surveys

Land Use Victoria (LUV)

- Reduced Government examination resources
- Maintain the standard and accuracy of surveys lodged with LUV

Program objectives

- Improve the quality and standard of cadastral surveys
- Ensure the integrity of the cadastre is not diminished
- Protect the community
Selection of surveys for audit

- Selected generally based on surveyor, not survey
- Typically performed “pre-registration”
- Random and targeted sampling
- Six-level priority system for targeted audits
  1. Surveyors who continually perform below standard
  2. Surveyors whose last audit was unsatisfactory
  3. Surveyors from interstate who receive a licence under reciprocal arrangements
  4. Surveyors who have never been audited
  5. Newly Licensed Surveyors
  6. Surveyors who have not been audited for 3 years

- Surveys for plans of subdivision of less than 10 lots are mostly audited
- Also audited are:
  - Application surveys
  - Crown surveys
  - Records of having re-established a cadastral boundary
  - Supplementary abstracts of field records (or lack thereof)

OK in 2016-17

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<th>Percentage</th>
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Selection of surveys for audit

- Victorian Online Title System (VOTS)
- Survey Audit Database
  - Imports daily lodgement data from VOTS
  - Enables selection of surveys for audit at lodgement and prior to registration

### Surveys lodged in past 7 days

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<tr>
<th>Lodged</th>
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<th>First name</th>
<th>Surname</th>
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**Codes**

- OK
- NEXT
- UNS
- INT
- REC
- NON-PRACT
- UNREG
- DEC
• Field audit by OSGV
  - Performed by OSGV/DELWP licensed surveyors based in Melbourne and Bendigo
  - Utilises the Survey Audit Checklist
  - 47 items covering:
    • Abstract of Field Records
    • Re-establishment
    • MGA connection
    • Licensed Surveyor’s Report
    • Field check
Plan exam by Land Registry Services (LRS)

- Performed by a Plan Registration Officer
- Utilises the Audit Plan Exam Checklist
- 29 items covering:
  - General drafting
  - Notations
  - Plan diagram
  - Easements
  - Building Boundaries
Audit Process

• Field audit performed at the same time as the Plan Exam
• Generally completed within 10 working days from date of lodgement
• Letter to surveyor advising of the audit findings
• Report on re-establishment emailed to Land Registry Services for inclusion in the Examination Report
• Registration occurs following attention by surveyor to non-conformances
Non-conformances

- Classified as either serious or non-serious
- Serious non-conformances
  - adverse impact on the cadastre
    - cadastral datum/re-establishment unsatisfactory
    - buildings used to define lot boundaries located inaccurately
    - missing/incorrect plan dimensions
    - easement information incorrect
    - measurements incorrect
    - mathematically incorrect
  - failure to connect to MGA94 or MGA2020 where practicable
  - failure to connect to the required number of PMs and PCMs
  - Non or inaccurate marking of the boundaries where practicable
  - Inadequate explanation of adoptions in the report

- Full list of Categories of Audit Non-Conformances available on the Survey Audit Program webpage (link at end of presentation)
Satisfactory audit result
• Survey contains less than 10 non-serious non-conformances

Unsatisfactory audit result
• Survey contains at least one serious non-conformance, or
• Survey contains 10 or more non-serious non-conformances

Consequences of an unsatisfactory audit result:
• Follow-up audit of surveyor’s work to take place soon afterwards (generally next lodgement certified after the date of audit)
• two consecutive unsatisfactory audits:
  – discussion with the Manager Cadastral Infrastructure & Standards
• three consecutive unsatisfactory audits:
  – referred to the SRBV for investigation, or
  – complaint to the SRBV under Section 18(1), Surveying Act 2004
• Update of Survey Audit Database
• Final letter to surveyor advising of completion and result of audit
Final Audit Letter

Dear Mr. Adam Rossado,

RE: AUDIT OF SURVEY PS123456A
29 Long Street, Narrabri.

I refer to the amended version of the plan, checked and reported on by you on 15th March 2018. As the amended documents were found to materially address the audit report, Land Registry Services was advised to proceed with their registration with consent on 31st May 2018.

The audit of PS123456A is now completed. No non-conformances were noted during the audit, and there were no issues with the survey. The audit was satisfactory.

A summary of the audit findings is attached for your information and indicates which of the audit findings were considered to be non-conformances.

A survey is generally considered unsatisfactory if there are 10 or more non-conformances or a maximum of one serious non-conformance. The list of non-conformances and whether or not these are serious is available at www.lre.dpi.nsw.gov.au/survey

Thank you for your co-operation and prompt attention to the audit matters.

Yours sincerely,

Eddie Chischold
Manager, Cartographic Infrastructure and Standards
Office of the Surveyor General Victoria

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SURVEY AUDIT ASSESSMENT SUMMARY

File No: 201812
Surveyor: Adam Rossado
Plan No: PS123456A
Property Address: 29 Long Street, Narrabri
Surveyor’s Ref: 67526
Date of Audit Letter to Surveyor: 15 May 2018

<table>
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<th>Audit Letter Item No</th>
<th>Description of Non-Conformance</th>
<th>Regulation / Standards</th>
<th>Level of Non-Conformance</th>
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<td>F - 1</td>
<td>Plan Error: Missing from Title area</td>
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<td>F - 1.2</td>
<td>&quot;4&quot; missing from MGA reference</td>
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<tr>
<td>F - 1.4</td>
<td>Unconditioned from bearing in map diagram</td>
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Surveyor's Notes:

1. No serious or significant issues identified.

Licensing Section Report

Surveyor’s Ref: 67526
Date: 15 May 2018

Number of Non-Conformances: 0

Result: Satisfactory

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Abbreviations

Surveying (Cadastrel) Survey Regulations 2015
SDR: Surveyor General of Economic Practice Standards: September 2015
SSR: Survey Practice Handbook
CDR: Surveyor Co-ordinating Regulations 2014
CDR: Surveyor Co-ordinating Regulations 2014
Task Note: Technical Note: Applicant Training Surveying Document - SPCR
Example 3: Building Surveyor: Geodetic Infrastructure in Height and Depth

Office of the Surveyor General Victoria
Level 11, Lonsdale Street, Melbourne, Victoria 3000
Audit Statistics

• Since the program started in 1995:
  – 2583 audits have been performed
  – 470 LSs have been audited

• OSGV aims to audit 120 surveys per financial year

• This number generally fits the program objective to audit every practising Licensed Surveyor at least once every 3 years
  – 408 practising LSs on the Register (103 non-practising) - 15/5/18
  – 359 LSs lodged surveys with Land Use Victoria in 2016-17 FY
• In 2016-17:
  – 120 surveys were audited
  – 111 LSs were audited
  – The overall satisfactory rate (random and targeted audits) was 71%
  – The random satisfactory rate (random audits only) was 91%

• In the last decade:
  – The overall satisfactory rate (random and targeted audits) is 72%
  – The random satisfactory rate (random audits only) is 83%

• Another objective of the program is to increase the satisfactory rate to better than 90%
Listed below are the serious non-conformances encountered in 2016-17 and the percentage of surveys audited that contained them.

- Buildings used to define lot boundaries located inaccurately: 3.5%
- Boundaries not/inaccurately marked on the ground: 3.5%
- Measurements incorrect: 2.5%
- Re-establishment unsatisfactory: 2.5%
- Easement information incorrect: 2.5%
- Missing/incorrect plan dimensions: 2.5%
- Mathematically incorrect: 2.5%
- Non compliance with Regs 11(3), 11(4) & 11(5): 1%
- Survey not connected to MGA94 where practicable: 1%
- > 10 non-serious non-conformances: 17.5%
• Keep up-to-date with plan and survey requirements
  – Acts, regulations and Practice Directives
  – SPEAR, ePlan developments

• Check your work
  – Utilise checking procedures, both in the field and office
  – Minimise omissions and transcription errors

• Re-establish the parent survey of the subject land
  – Assess surveys used as datum for their veracity
  – Look at the fit with fencing to confirm adoptions
  – Re-establish surveys of adjoining parcels of land

• Licensed Surveyor’s Report
  – Conform with the requirements of Regulation 15 and the Practice Directives
  – Adequate explanation of adoptions

• Always do your best work
  – Be professional - the legacy that you leave
  – Appropriate supervision of survey staff

• When you are audited:
  – Approach the matters raised with a positive attitude
  – Don’t be afraid to challenge any of the audit findings or recommendations
  – Attend to the matters promptly – remember your client
  – Learn from the auditor’s comments to improve the quality and standard of your future surveys
  – Review and update procedures as appropriate
Conclusion

• Further information:
  

• Questions ?
Background
• What are Surveyor-General Consents
• “PO” File system

Types of Consents
• Government Road alignments
• High Water Mark determinations
• State Border determinations

Availability as Survey Information
• LASSI
• SG Consent Case Imaging Project
• Image Files

General Advice
• Requests for SG’s Consent
• Process

Further Information
What are Surveyor-General Consents

- **Surveying Act 2004**
  - s. 42 Functions and powers of Surveyor-General
  - “to be responsible for the correct positioning of Crown boundaries of land…”
  - “to maintain records of the status of land in Victoria and verify and certify the status of that land”

- Surveyor-General’s consent is primarily sought when:
  - Government Road widths cannot be maintained
  - Title dimensions cannot be maintained to adjoining Crown land
  - Parcels are defined by a relationship to a water feature
  - State Border Determinations
  - Crown land status and abuttals require confirmation

“PO” File system

- Commenced in the early 1900s
- Files originally assigned a “P” number because they required a Professional decision
- Became known as “PO” files
- Approximately 13000 PO files in existence
Primarily sought when insufficient land exists to maintain Government Road widths
High Water Mark Determinations

- Different descriptions on titles indicating a direct abuttal to coastal waters
  - Port Phillip Bay, Margin of Port Phillip Bay, Southern Ocean
- Can be generally regarded as referring to High Water Mark (HWM)
- The Doctrine of Accretion applies to these boundaries
- Process of re-establishment to include:
  - Sufficient tidal observations to determine the position of mean HWM (over at least 30 days)
- Documents to be provided:
  - Abstract of field records
  - Licensed Surveyor’s Report describing how the position of HWM was determined and if the movement of the boundary has been considered to be gradual and natural and conforming with the Doctrine of Accretion
  - Where there have been significant changes, a report from a suitable expert (coastal engineer) that confirms the nature of the movement of HWM
The Coastal Waters (State Title) Act 1980.
Where land has been invaded by the sea, as defined by the High Water Mark, then the land so invaded is lost to the freehold.

1. The high water mark (HWM) is the average HWM between the neap and spring tides.
   Neap tide = HWM soon after the moons 1st and 3rd quarters.
   Spring tide = HWM soon after the new and full moon.
State Border Determinations

- **Surveying Act 2004**
  - s. 42 Functions and powers of Surveyor-General
  - “to advise on the position of the State borders”

- State border determinations are to be presented for acceptance by the respective Surveyors-General
  - Plan of Survey / Plan of Crown Allotment
  - Abstract of field Records
  - Licensed Surveyor’s Report

- Plan to include
  - Panel for Certification by Surveyors-General
  - If the NSW –VIC Border along the Murray River:
    - Cross sections showing the high bank and water’s edge

- Murray River border determination to be based on guidelines issued by the Surveyors-General of NSW and VIC
- Survey to graphically compare the current watercourse and that which was originally surveyed
State Border Determinations
SG Consent Case Imaging Project

- Performed in 2016-17 to:
  - Reconcile the 13000 PO Files
  - Check the accuracy of their notings on LASSI
  - Generate an image file for each PO File noted on LASSI

- The files were relocated to Land Use Victoria’s archive at Laverton prior to the move to 2 Lonsdale Street
  - Can be retrieved for perusal if further information is required from them

Image Files

- 6760 image files created
- Not all PO Files are noted on LASSI
- Some relate to major Government projects, separate dimensions, land status investigations
- Change request in-progress for new survey information category type “SGV Consents” to be created for PO notings
- Hopefully available by the end of the year!
Availability as Survey Information
Surveyor-General Consent File

PO-07199

The Surveyor-General has provided his consent in dealing:

AP1771 560

Refer to the above dealing for further details.
Requests for SG’s Consent

- Formal request by letter or email containing:
  - Background information
  - Draft survey documents (plan, abstract and report)
  - Other supporting evidence
    - Photos
    - Aerial overlays

Process

- Recommended that the SG’s consent is sought prior to plans being lodged with Land Use Victoria for registration
- Consent may involve investigation similar to that of an application lodged under the TLA
- Free service
- OSGV has a service delivery target of responding to SG Consent requests within 45 days
- OGSV typically receives 20-30 SG Consent requests per annum
• Section 9 of the **Victorian Cadastral Surveys Practice Directives July 2018**

• OSGV website at:
    • Ambulatory boundaries, and
    • Re-establishment principles

• Email to:
  – sgv.surveyors@delwp.vic.gov.au