What is a ‘Land Survey’?

Board of Surveying and Spatial Information

September 2018 v2

www.finance.nsw.gov.au

ONLY REGISTERED LAND SURVEYORS CAN SURVEY LAND BOUNDARIES IN NSW

History of land surveying in Australia

At the time of English settlement (1788) there were:

- No physically defined boundaries other than natural features
  - i.e. no fences, roads, walls …
- No existing survey marks, consequently land granted could only be defined by…
  - “Metes and Bounds” or measurements and limits of the boundary lines,
  - Relating a land parcel with respect to a recognisable feature, or, after some time, relating a land parcel to an existing parcel
- Descriptions of land were ambiguous, techniques of land measurement and standards were rudimentary and sometimes land was granted before it was even marked out on the ground.

All of the above shaped the way the laws for boundary definition evolved.

Land Titles in NSW

Four land titling systems currently exist in New South Wales:

- Torrens Title (being the majority of privately owned land),
- Old System Title (those lands granted before 1863 and not yet converted)
- Crown Title (being those lands held in the name of the State for which a certificate of title has not yet been created)
- Exploration and Mining Titles (not covered in this document)

It is a basic principle of the Torrens Title system that every current parcel be based on a plan of survey that defines its boundaries. Similarly any parcel of Old System or Crown Title intended to be converted to Torrens Title must also be based on a suitable plan upon which a first certificate of title can be issued.

Conversion of Old System to Torrens Title may involve limited title (boundaries not accepted by government) and qualified title (no guarantee of ownership) – be careful!!

The Cadastre

"… **a register of parcels to serve as a basis for taxation** …"

A **'cadastral survey'** is a **land boundary survey** and is therefore a survey made for the purpose of **forming** or **maintaining the cadastre**.

NSW Land Registry Services (LRS) is the organisation in NSW which maintains the register of titles (ownership) to land and the survey plans upon which ownership is based.

Cadastral layer of Digital Cadastral Database (DCDB)

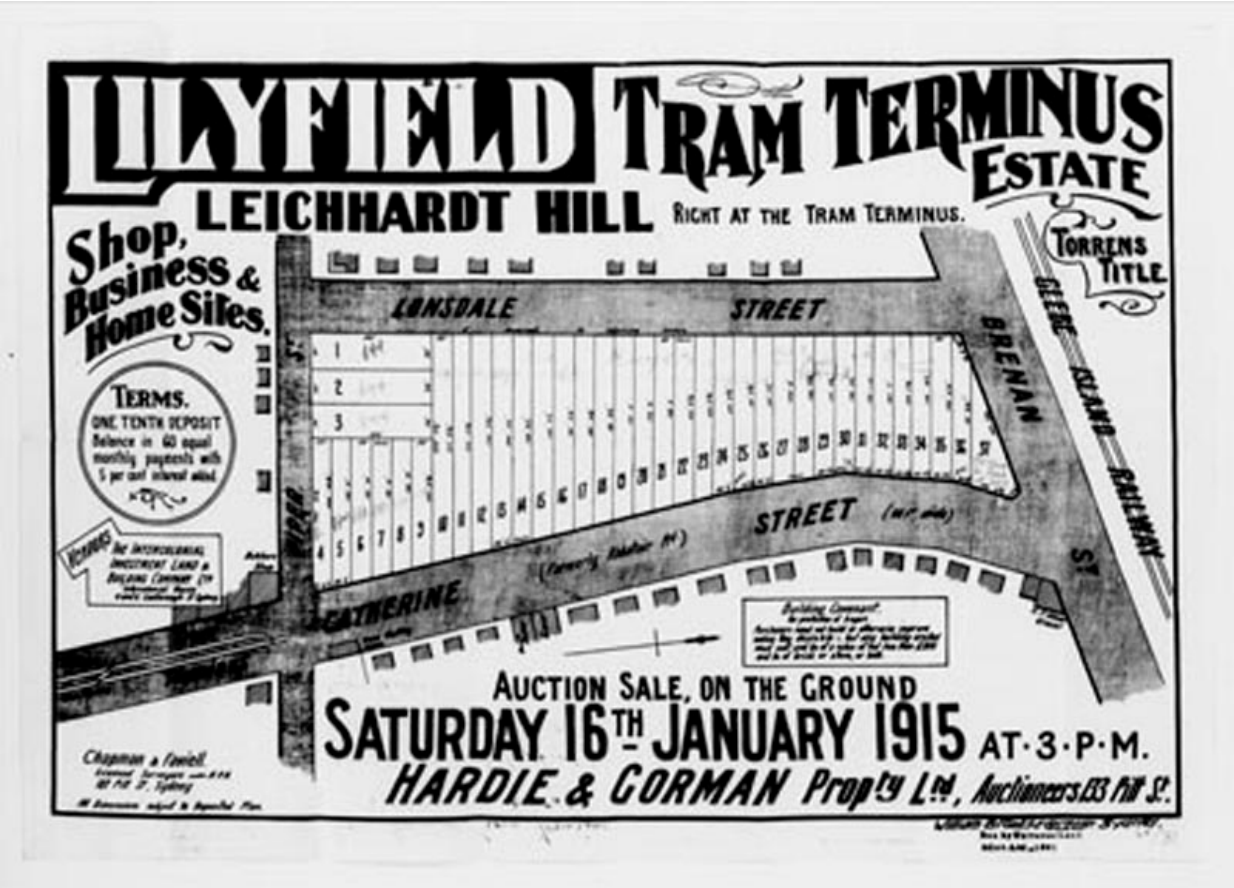
- In NSW, the cadastral layer of the DCDB was originally developed from paper maps and plans and is continually updated based on registration of land transactions in NSW.

- The DCDB has differing accuracy depending on the origins of the data.

The DCDB has no legal status to define property boundaries and is simply a geographical representation of the tenure

Cadastral Surveying

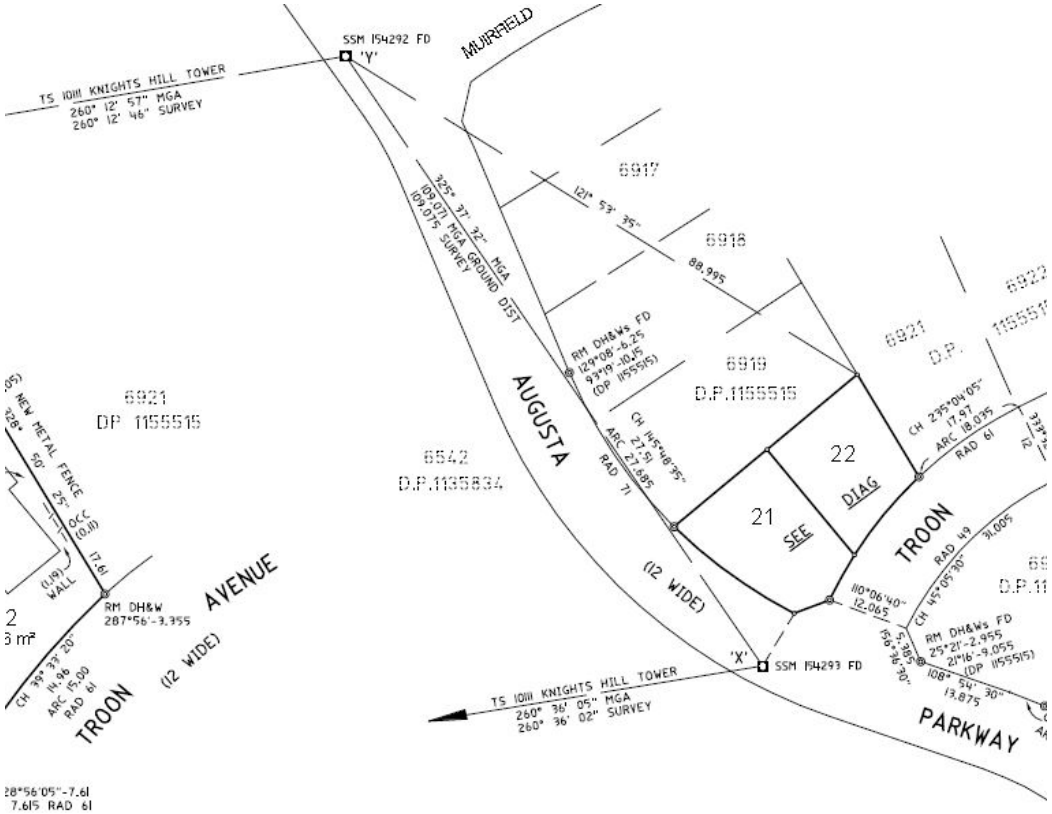
Cadastral surveying specialises in the establishment and re-establishment of property boundaries.



This can be difficult and ambiguous for older surveys

Cadastral Surveying

The fundamental role of the Registered Land Surveyor is to re-establish a parcel boundary as per the intent of the original survey or create a new boundary using modern survey methodology.



Registered Land Surveyors - RLS

- Registered under the Surveying & Spatial Information Act 2002
- Use their skills in measurement and interpretation of evidence to define the locations of corners/ boundaries of parcels of land, and to prepare a plan upon which the Title is based

***and* (just as importantly)**

- Use their understanding of the law associated with boundary definition to resolve ambiguities/ contradictions in the evidence for the locations of boundaries

RLS are the only surveyors sufficiently qualified, competent and capable to define and identify land boundaries

Qualifications of a Registered Land Surveyor

1. A recognised four year Bachelor's degree from an Australian University or an equivalent overseas qualification.
2. At least two years experience in Surveying under the supervision of a Registered Land Surveyor.
3. Undertake complex projects and pass examinations set by BOSSI in Urban Cadastral Surveying, Rural Cadastral Surveying, Strata and Community Title, Town Planning and Engineering, leading to a 'Certificate of Competency' and Registration as a Land Surveyor.
4. Maintain competence every year through Continuing Professional Development, monitored by BOSSI.

Versus

Qualifications of a Technician or Engineering Surveyor…

1. No minimum qualification required – could be a Cert III, diploma or bachelor degree.

A Bachelor's Degree is not enough, a TAFE Diploma is not enough

What is BOSSI?

- The NSW Board of Surveying & Spatial Information, created by the Surveying and Spatial Information Act 2002 (S&SI 2002).
  - The Surveyor–General of NSW is the President of the Board
  - Has between 10-12 members representing government, industry, education & the public

- BOSSI is the Statutory Body responsible for:
  - Administering the Act and the Regulation;
  - Ensuring that only appropriately qualified persons undertake land surveys; and
  - Providing advice to the Minister on matters related to the integrity of the State cadastre and spatial information

BOSSI complaints

- BOSSI investigates complaints against registered surveyors regarding professional incompetence or professional misconduct

- BOSSI investigates complaints against unregistered persons who:
  - Undertake land surveys for fee or reward, or
  - Advertise that they are willing to undertake land surveys for fee or reward

The majority of complaints received over the past few years relate to unregistered persons surveying land boundaries

What is a “survey”?

Under the S&SI Act:

“survey”, when used as a noun, means an activity that includes *any* of the following:

(a) the taking of measurements of distance, height, depth, level or direction in relation to land, including the air space above land and the subsurface below land and including land covered by water,

(b) the insertion of survey marks in or on any land,

(c) the recording of any measurements so taken and the location of any survey marks so inserted,

(d) the *collating* of any measurements and locations so recorded,

(e) the *preparation of plans* or other documents (whether in writing or in electronic form) to illustrate the results of any such measurements or the location of any such survey marks,

but does not include any activity involved in mapping or the preparation of navigational charts or any other activity declared by the regulations not to be a survey.

This means that a hardcopy survey plan or an electronic survey model is included in the definition of a “survey”

What is a “land survey”?

Under the S&SI Act:

land survey means a survey (other than a mining survey) that is carried out in connection with:

(a) the reservation or dedication of land for any purpose, or

(b) the creation, variation, transfer or extinguishment of any interest in land, or

(c) the preparation of a plan for lodgement under Division 3 of Part 23 of the Conveyancing Act 1919, or

(c1) the preparation of documents required to be prepared under the Strata Schemes Development Act 2015 by a registered land surveyor, or

(d) the identification or marking out, or both, of the boundaries of a parcel of land.

The definition includes *ANY* survey (plan or sketch) identifying boundaries

This definition has been tested & proven in court

Electronic survey plans

- A survey plan is a diagrammatic and/or hardcopy representation of an electronic survey model.
- An electronic survey file (eg dwg, pdf, LXML) is included in the definition of a “survey” under the Act. This is considered the primary source of information.
- If boundaries are shown on the plan, dimensions between fences, structures and boundaries can be obtained by interrogating the electronic model.
- Offsets to boundaries may not necessarily be shown on the plan as they can be obtained from the electronic model.

Was your electronic survey plan containing boundaries authorised by a Registered Land Surveyor?

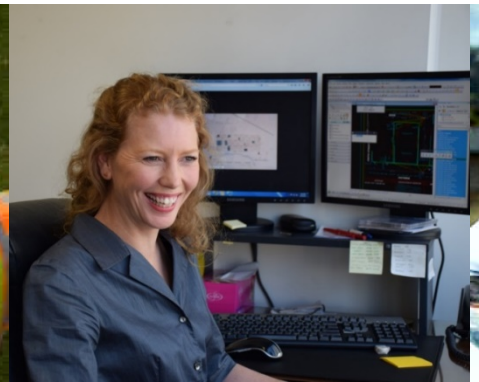
Who can undertake a “land survey”?

- A Registered Land Surveyor or someone acting under the supervision of a RLS, who takes full responsibility for the work. A RLS has an ID number allocated by BOSSI
- A Registered Land Surveyor engaged in the name of, or on behalf of, a firm.

Who cannot undertake a land survey without being supervised?

Anyone else, including those who call themselves a

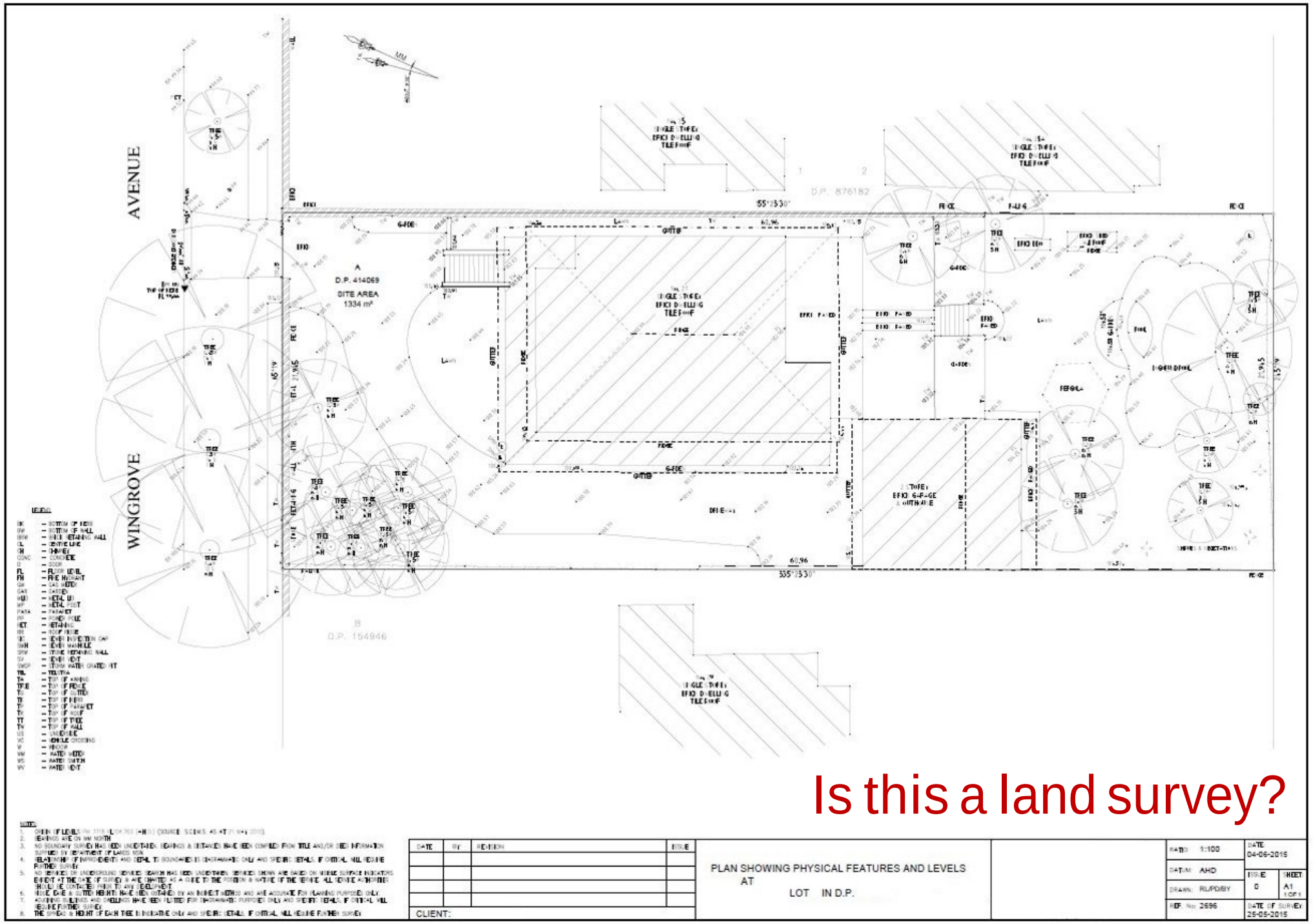
- Chartered Surveyor, Building Surveyor, Engineering Surveyor, Technician Surveyor, Graduate Surveyor, Registered Mining Surveyor, Mining Surveyor or just a “Surveyor”.



When is a survey, or part of a survey, a “land survey”?

- If you undertake a survey and prepare a plan that identifies land boundaries, that part of the survey and plan is a “land survey”.

- The identification of land boundaries means that the boundary is identified by, for example:
  - Bearings and distances
  - Offsets from structures or improvements such as fencing



Is this a land survey?

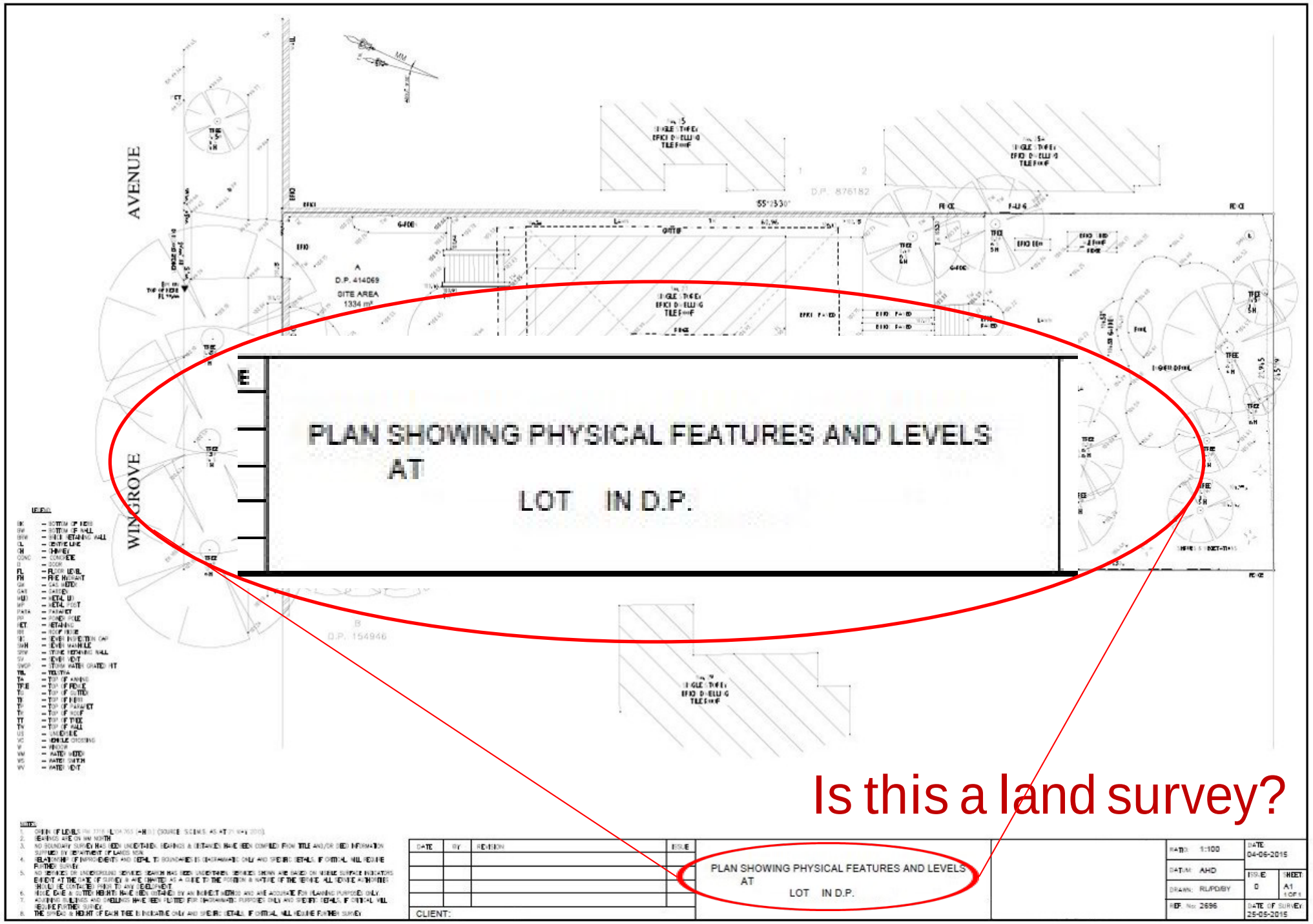
NOTES:
1. ORIGIN OF LEVELS [illegible] (SOURCE SCIMS AS AT [illegible])
2. BEARINGS ARE ON MM MERIDIAN
3. NO BOUNDARY SURVEY HAS BEEN UNDERTAKEN. BEARINGS & DISTANCES HAVE BEEN COMPILED FROM TITLE AND/OR DEED INFORMATION SUPPLIED BY DEPARTMENT OF LANDS NSW.
4. RELATIONSHIP OF IMPROVEMENTS AND DETAIL TO BOUNDARIES IS DIAGRAMATIC ONLY AND SPECIFIC DETAILS IF CRITICAL WILL REQUIRE FURTHER SURVEY.
5. NO SERVICES OR UNDERGROUND SERVICES SEARCH HAS BEEN UNDERTAKEN. SERVICES SHOWN ARE BASED ON VISIBLE SURFACE INDICATORS EXISTENT AT THE DATE OF SURVEY & ARE CHARTED AS A GUIDE TO THE POSITION & NATURE OF THE SERVICE. ALL SERVICE AUTHORITIES SHOULD BE CONTACTED PRIOR TO ANY DEVELOPMENT.
6. HOUSE EAVE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY AN INDIRECT METHOD AND ARE ACCURATE FOR PLANNING PURPOSES ONLY.
7. ADJOINING BUILDINGS AND OUTBUILDINGS HAVE BEEN PLOTTED FOR INFORMATION PURPOSES ONLY AND SPECIFIC DETAILS IF CRITICAL WILL REQUIRE FURTHER SURVEY.
8. THE SPREAD & HEIGHT OF EACH TREE IS INDICATIVE ONLY AND SPECIFIC DETAILS IF CRITICAL WILL REQUIRE FURTHER SURVEY.

DATE	BY	REVISION	ISSUE

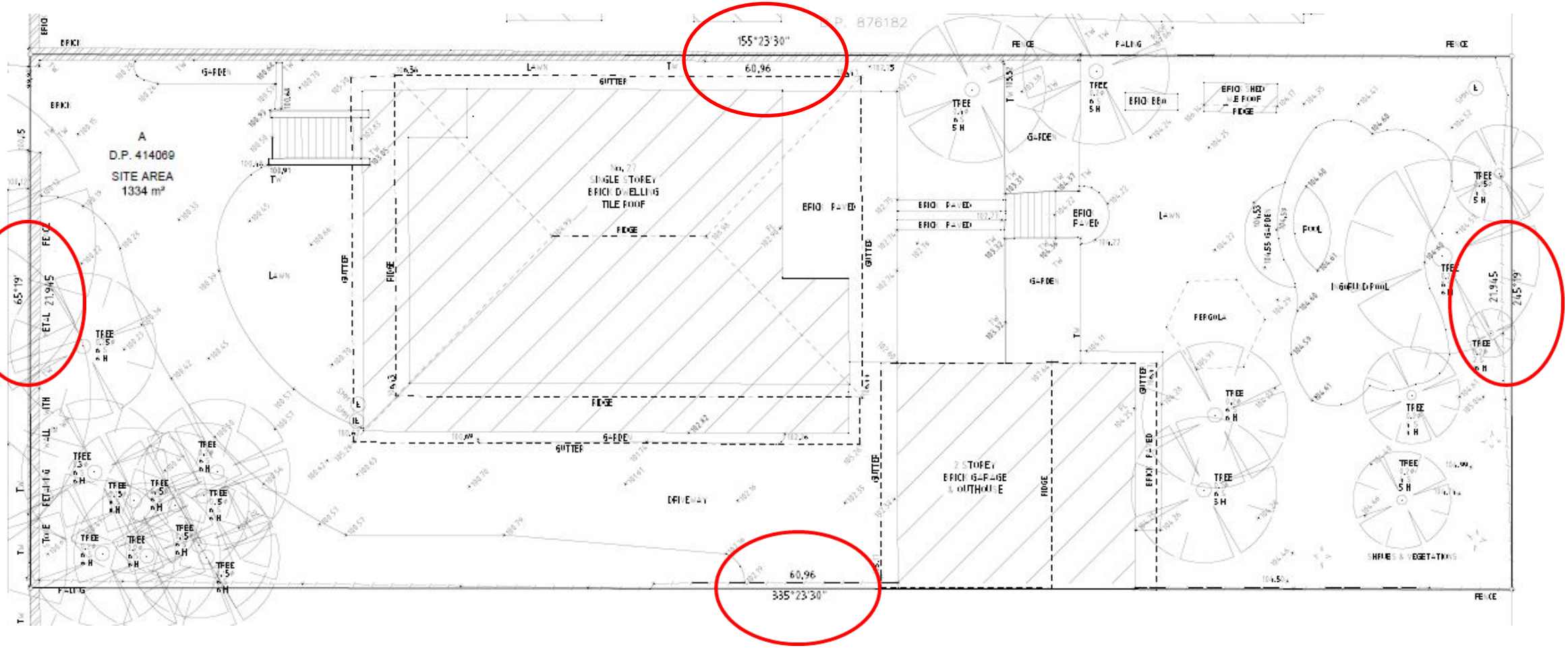
CLIENT:

PLAN SHOWING PHYSICAL FEATURES AND LEVELS
AT
LOT IN D.P.

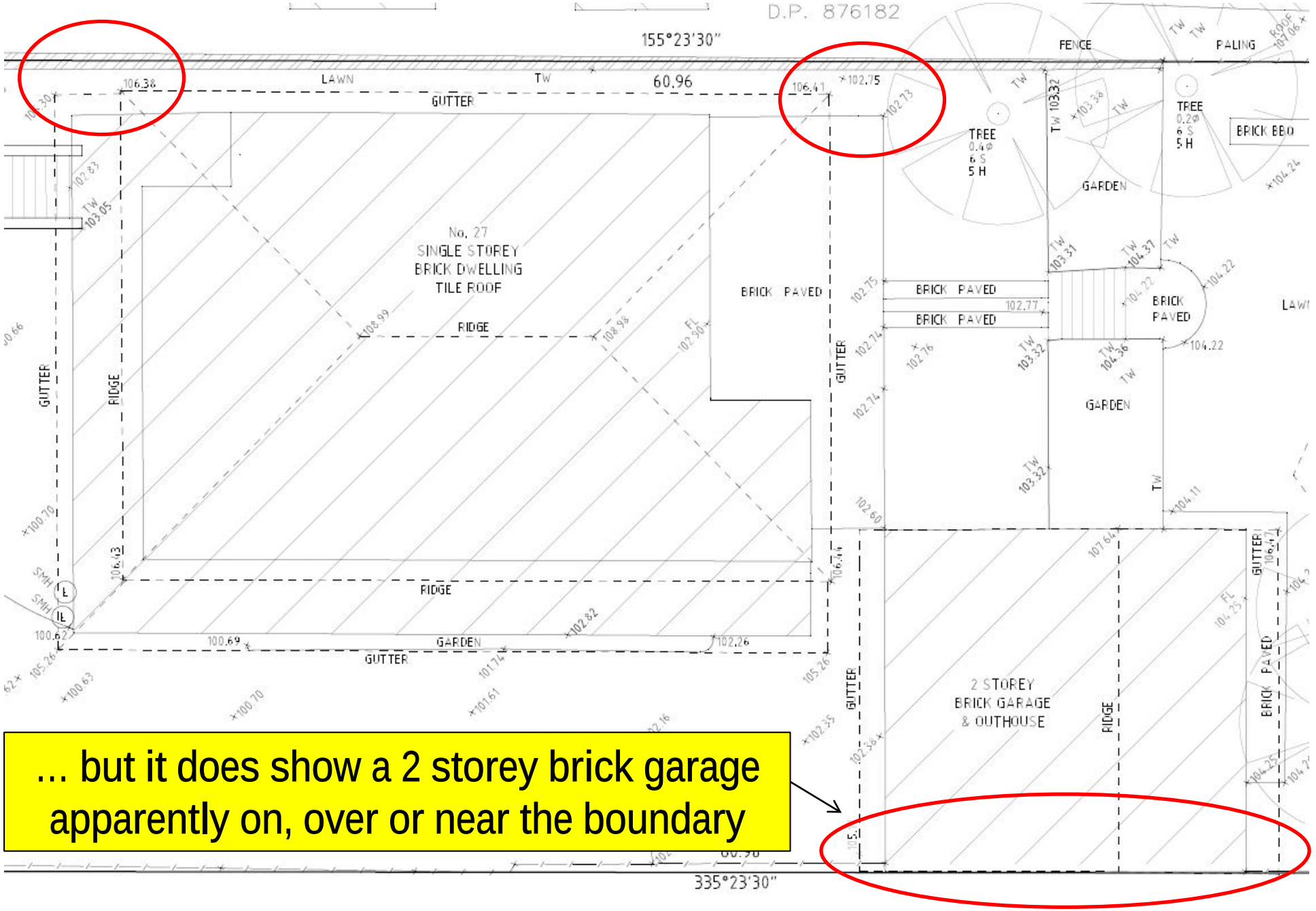
RATIO: 1:100	DATE: 04-05-2015
DATUM: AHD	ISSUE: 0 / SHEET: A1 1 OF 1
DRAWN: RL/PD/BY	
REF. No: 2696	DATE OF SURVEY: 25-05-2015


AVENUE
WINGROVE
PLAN SHOWING PHYSICAL FEATURES AND LEVELS
AT
LOT IN D.P.
Is this a land survey?

Plan shows Boundary dimensions …



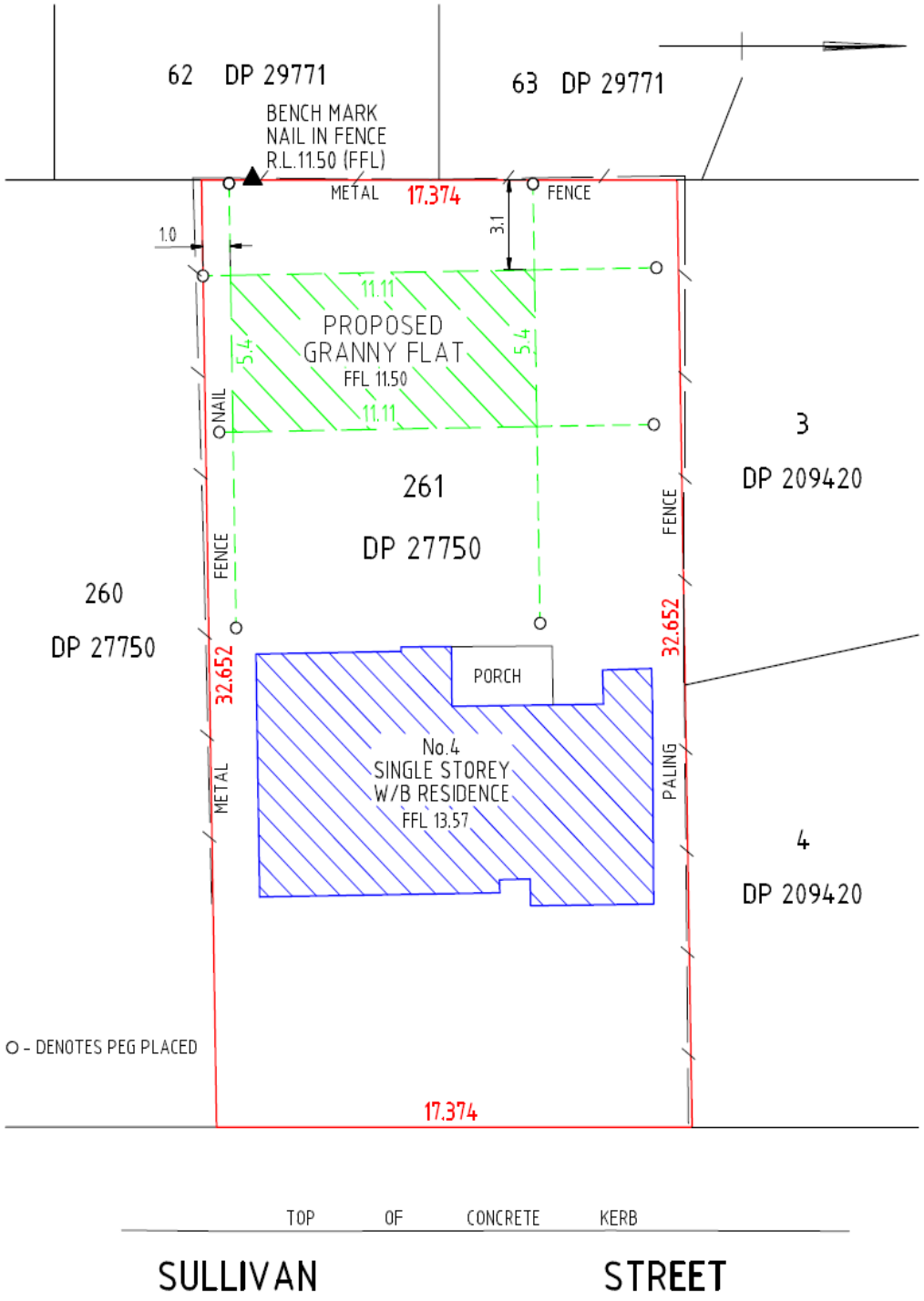
This plan does not show connections to boundaries …



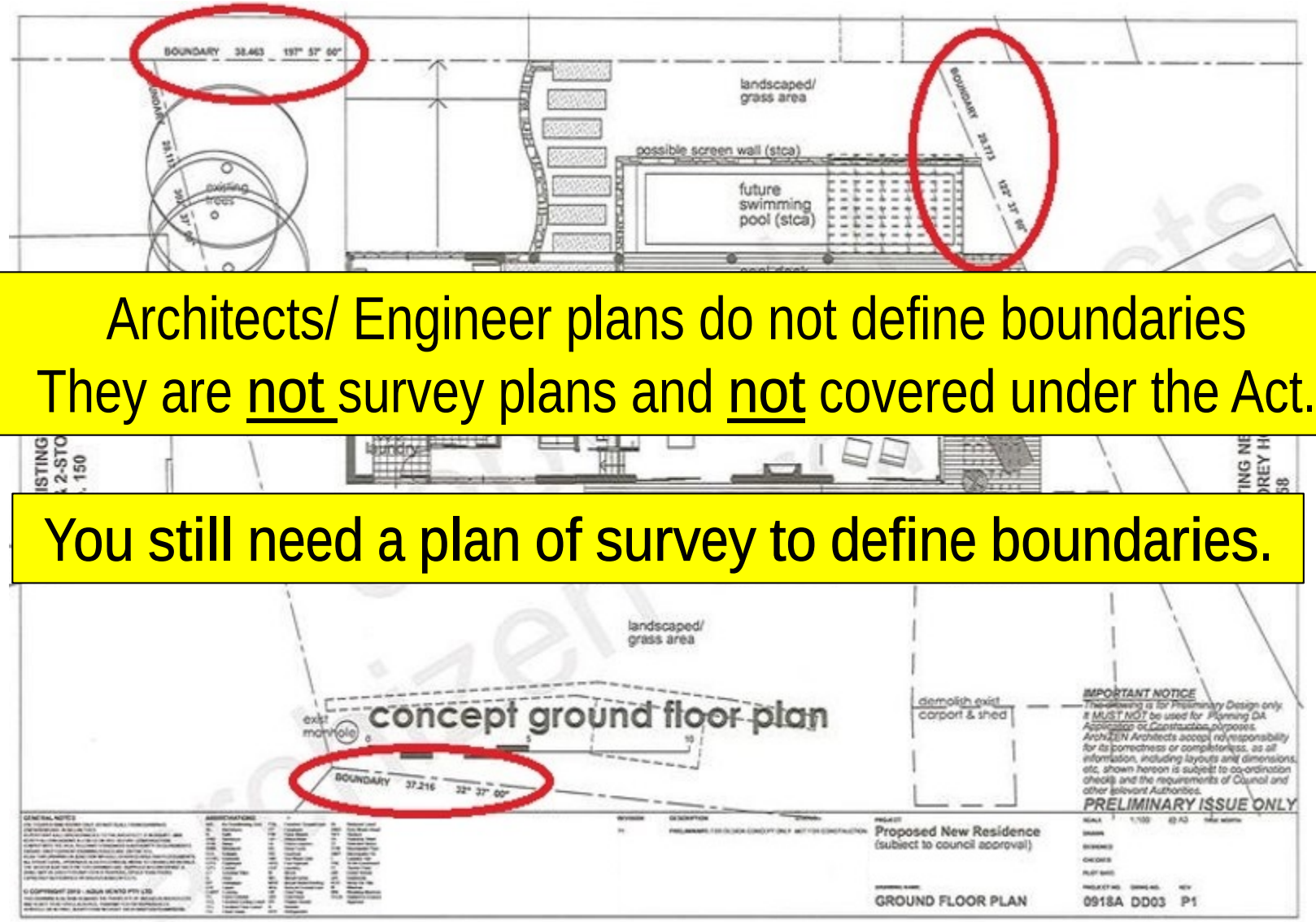
Is this a land survey?

- setting out proposed building at fixed offsets from boundaries

Yes….
Red lines indicate a boundary and offsets are shown to the red line.



Architect’s plan – not a land survey



Architects/ Engineer plans do not define boundaries
They are <u>not</u> survey plans and <u>not</u> covered under the Act.

You still need a plan of survey to define boundaries.

Plan headings are irrelevant

DRAWING	SITE SURVEY
SCALE	1 : 100
DATUM	AHD

PLAN SHOWING LEVELS & SITE DETAILS AT
No.28 KEPOS STREET,
REDFERN,NSW.

LOT 33 SECTION D IN DP 978876
TOTAL SITE AREA: 116m²
Client:RON BOVA

A2
1:100
units=metres

DRAWING DETAIL

Granny flat setout points

PROJECT: DETAIL CONTOUR SURVEY

NO 14 MYEE ROAD
MACQUARIE FIELDS

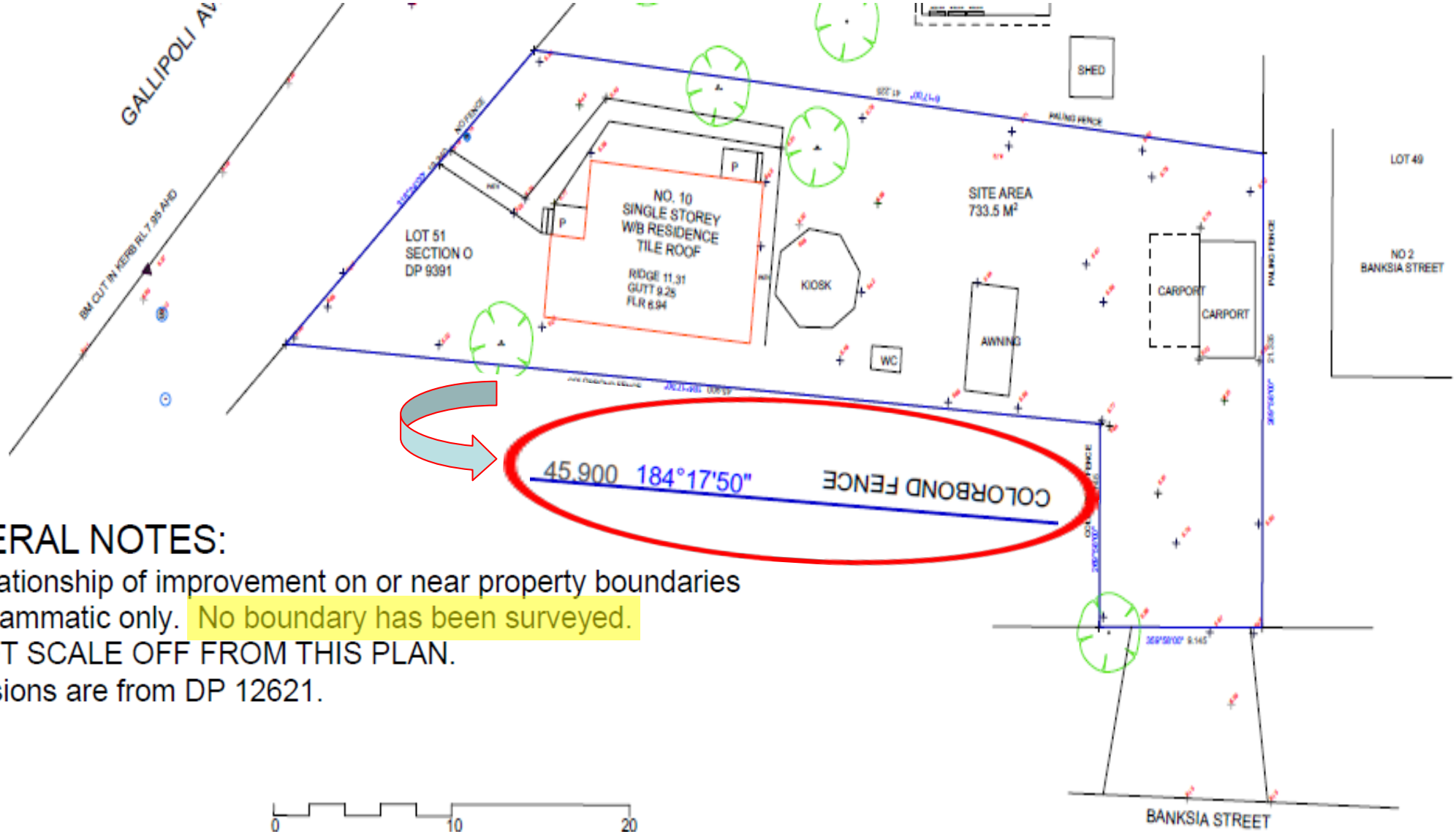
CLIENT:

Plan Showing Detail & Levels
No.10 Taffs Avenue, Lugarno
Lot R In D.P. 28839
Local Government Area Of Hurstville
Prepared For Mr N Petrevski

Scale 1: 100	Datum : A.H.D. Source : SSM 65060 (R.L. 62.332) S.C.I.M.S.

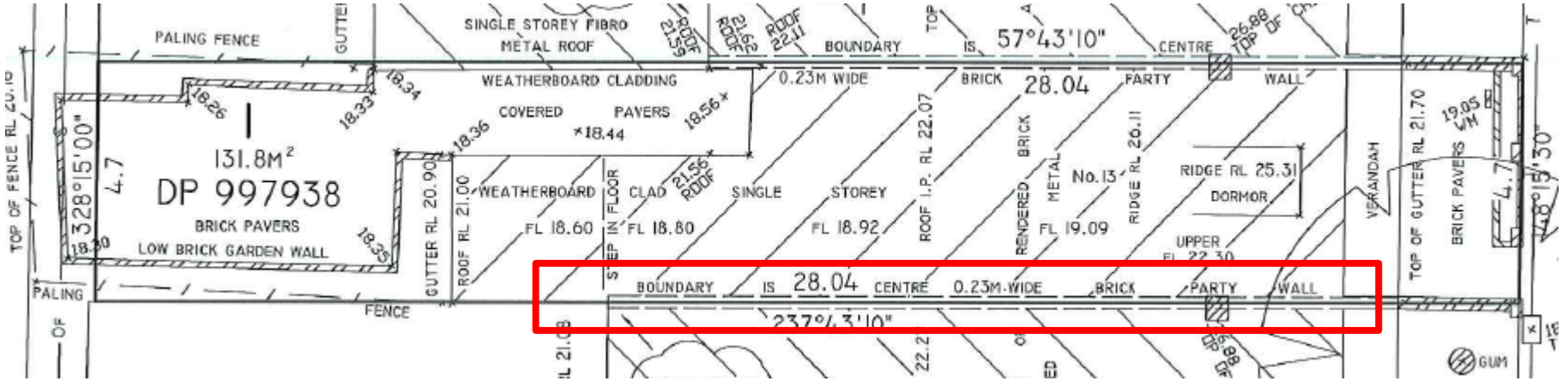
DETAIL SURVEY OF LOT 709 IN DP 234736
No.64 , ILLAWONG AVENUE PENRITH, NSW

Disclaimers & Explanatory notes on the survey plan



GENERAL NOTES:

The relationship of improvement on or near property boundaries is diagrammatic only. No boundary has been surveyed.
DO NOT SCALE OFF FROM THIS PLAN.
Dimensions are from DP 12621.



NOTES:

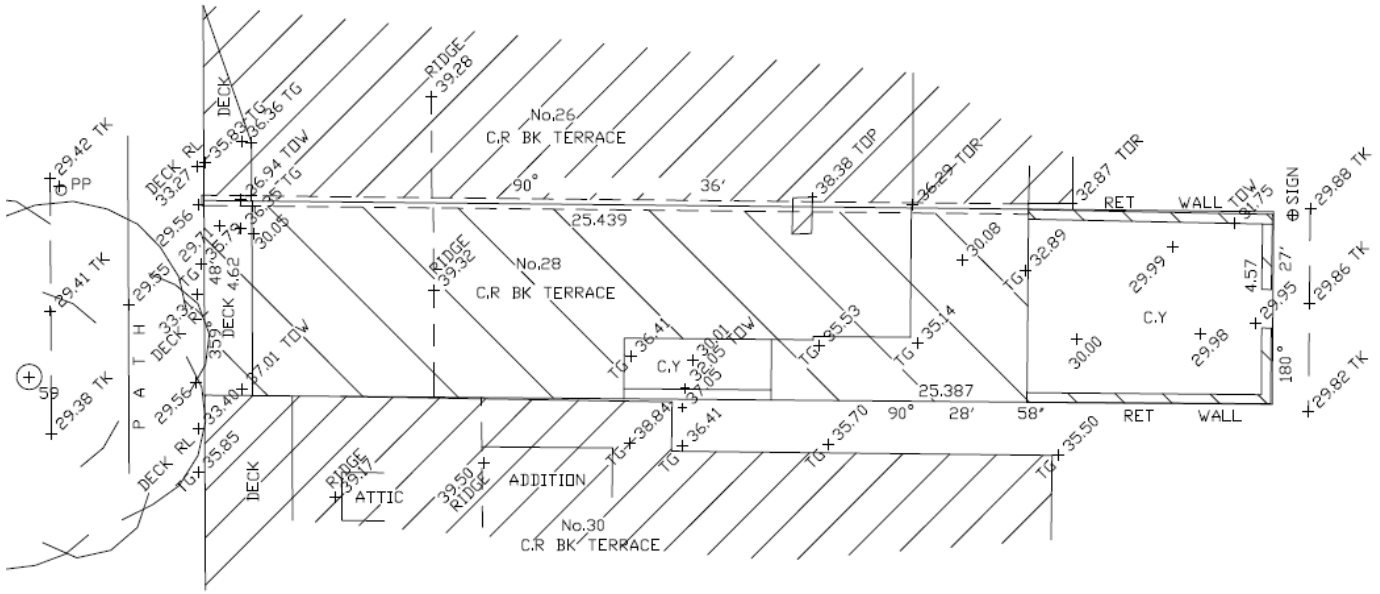
- THESE NOTES ARE AN INTEGRAL PART OF THIS DRAWING AND ARE NOT TO BE REMOVED.
- AUSTRALIAN HEIGHT DATUM WAS ESTABLISHED FROM S.S.M.51493 R.L.8.775 LOCATED AT THE INTERSECTION OF LAURA ST & EDGEWARE RD
- BOUNDARIES NOT MARKED.
- BOUNDARIES NOT SURVEYED.
- BEARINGS, DISTANCES AND AREAS OF BOUNDARIES HAVE BEEN COMPILED FROM PLANS MADE AVAILABLE AT LAND & PROPERTY INFORMATION AND ARE SUBJECT TO FINAL SURVEY - SEE NOTE BELOW. BEARINGS SHOWN RELATE TO MAGNETIC NORTH.
- DO NOT SCALE OFF THIS PLAN. WHERE RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES ARE CRITICAL THEY SHOULD BE CONFIRMED BY A BOUNDARY SURVEY.
- TREE TRUNKS, SPREADS AND HEIGHTS ARE DIAGRAMMATIC AND ESTIMATED ONLY. IF ANY OF THESE ELEMENTS ARE CRITICAL TO DESIGN, A FURTHER SURVEY SHOULD BE REQUESTED FOR ACCURATE LOCATION.
- THIS PLAN IS PREPARED FOR DEVELOPMENT APPLICATION PURPOSES ONLY & IS NOT TO BE USED FOR ANY OTHER PURPOSES.
- UNDERGROUND SERVICES LOCATIONS HAVE BEEN OBTAINED FROM DIAL BEFORE YOU DIG (DBYD) SEARCHING FACILITY AND SHOW THE EXISTENCE OF SERVICES ONLY. SERVICES SHOWN ARE BASED ON SURFACE INDICATORS EVIDENT AT THE DATE OF SURVEY DURING FIELD SURVEY AND CHARTED AS A GUIDE TO THE POSITION AND NATURE OF THE SERVICE. IF POSITION AND DEPTH OF A SERVICE IS CRITICAL TO DESIGN OR CONSTRUCTION THE SERVICE MUST BE EXPOSED BY "POTHOLING" CARRIED OUT BY A PERSON ACCREDITED BY THE RELEVANT SERVICE

Disclaimers and explanatory notes may limit liability but do not remove it. If there is a conflict between the disclaimer and the plan, the plan prevails.

OR ANY LOSS OR INJURY SO SUFFERED IF ENQUIRY AND VERIFICATION HAVE NOT BEEN COMPLETED IN ACCORDANCE WITH THIS NOTE.

- THIS DETAIL SURVEY IS NOT A "LAND SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT, 2002. IF CONSTRUCTION IS PROPOSED IN PROXIMITY OF BOUNDARY IT IS STRONGLY RECOMMENDED THAT A FURTHER SURVEY BE REQUESTED FOR MARKING OF RELEVANT BOUNDARY OR COMPLIANCE SETBACK LINE.
- THE SUBJECT LAND IS AFFECTED BY LIMITED TITLE. THE BOUNDARIES OF THE LAND HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL. THE LIMITATION MAY BE REMOVED BY THE LODGEMENT OF A PLAN OF SURVEY WHICH SATIFACTORILY DEFINES THE BOUNDARIES OF THE PARCEL.

Disclaimers on the survey plan



NOTES:

- Boundaries have not been investigated.
- Visible services located only.No underground search has been undertaken We recommend Dial 1100 before you Dig.
- Boundary dimensions shown are taken from DP 978876.
- The position of structures, services, trees, etc are diagrammatic only.

- The title boundaries as shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not field survey.

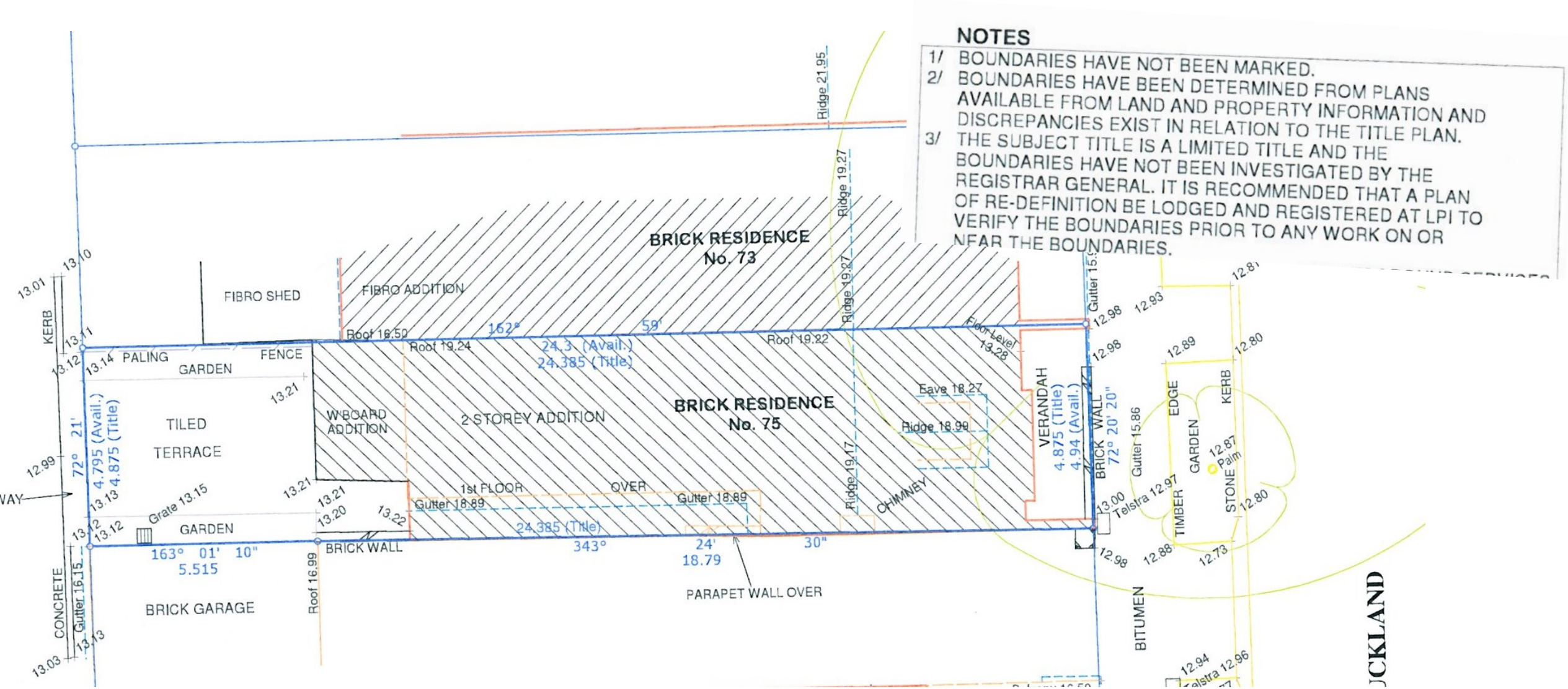
IT IS NOTED ON TITLE:

QUALIFIED TITLE.CAUTION PURSUANT TO SECTION 28J OF THE REAL PROPERTY ACT,1900.
ENTERED 15-8-2005 BK 3302 NO.453.

LIMITED TITLE.LIMITATION PURUANT TO SECTION 28(T) OF THE REAL PROPERTY ACT,1900.
THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.

IT APPEARS THAT THE NORTHERN BOUNDARY IS RUNNING THROUGH THE CENTER OF A PARTYWALL
ACCESS TO THE ADJOING PROPERTY WAS NOT AVAILABLE AT THE TIME OF THE SURVEY AND THE WIDTH CANNOT BE CONFIRMED.
CROSS EASEMENTS FOR SUPPORT HAVE NOT BEEN CREATED OR REGSITERED FOR THE PARTYWALL.

Disclaimers on the survey plan



Surveys not requiring strict accuracies – Cl 9 S&SI Reg 2017

(1) A surveyor may make a survey for a purpose not requiring strict accuracy under arrangements with a client, and in such a manner and with such marking as are agreed on between the surveyor and the client.

- If you undertake a survey not requiring strict accuracy then it is recommended that a signed certification be placed on the plan (and in the electronic file) identifying that it is a survey under Cl 9 of the S&SI Reg 2017

- This option is not available to surveyors who are not registered, as they are neither qualified nor competent to determine the location of a land boundary (at any level on accuracy).

Development Applications must abide by Schedule 1 Forms of the Environmental Planning & Assessment Regulation 2000

Schedule 1 Forms

Part 1 Development Applications

2 Documents to accompany development application

(1) A development application must be accompanied by the following documents:

(a) a site plan of the land,

(b) a sketch of the development,

(2) The site plan referred to in subclause (1) (a) must indicate the following matters:

(a) the location, boundary dimensions, site area and north point of the land,

(3) The sketch referred to in subclause (1) (b) must indicate the following matters:

(a) the location of any proposed buildings or works (including extensions or additions to existing buildings or works) in relation to the land's boundaries and adjoining development,

Council Requirements for DAs – City of Sydney Example

CITY OF SYDNEY 2030

How to prepare your DA

The following items need to be prepared and submitted for all development applications (DAs):

- completed DA form
- electronic copies
- statement of environmental effects
- required fees
- drawings
- contour and detail survey by registered surveyor.

SURVEY PLAN REQUIREMENTS FOR CONTOUR & DETAIL SURVEYS AND BOUNDARY SURVEYS - INFORMATION FOR SURVEYORS AND APPLICANTS.

It is recommended that applicants provide a copy of this information to their surveyor at the time of instruction.

A contour & detail survey plan and a single copy of the subject DP and a current (less than 6 months old) title in hard copy and electronic format must be submitted with all applications, ***except***:

a. where a change of use is proposed with no external works
b. where the application relates to an internal fitout
c. where the application relates to signage mounted on an existing structure

The contour & detail survey plan must be prepared by a registered surveyor and preferably signed by the registered surveyor or show their name and ID number. The surveyor should be instructed to provide a copy of the subject DP and title to the applicant, for submission to Council.

BOUNDARY SURVEY

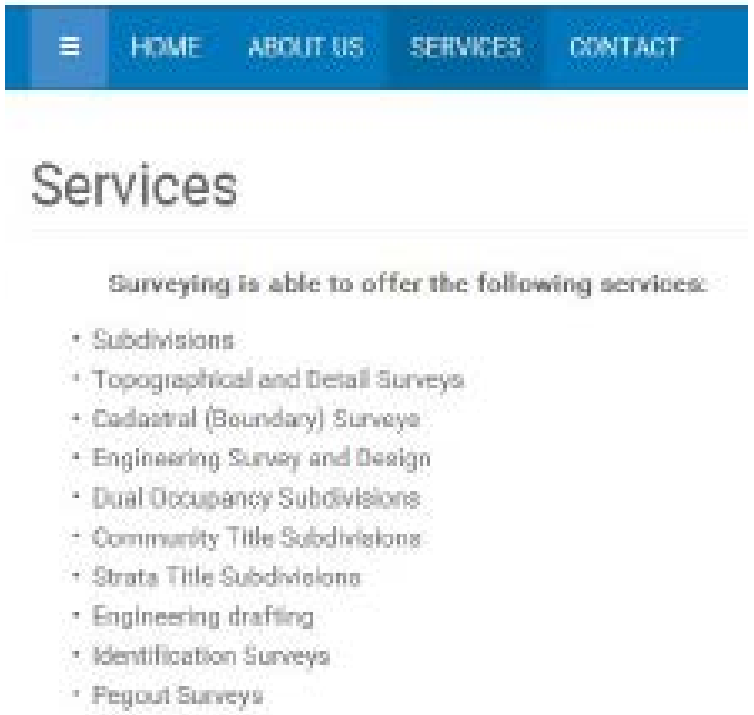
Where the proposed works are within 1 metre of side or rear boundaries, the contour & detail survey must be based upon a boundary survey. Offsets should be annotated clearly, showing the position of fences and walls in relation to boundaries. The plan should show a note confirming that a boundary survey has been made, by the registered surveyor, and include the surveyor's name and registration number.

Marking of the boundary corners is not required, however it should be noted that new buildings and additions will be required to be set out by a registered surveyor when the Construction certificate has been issued.

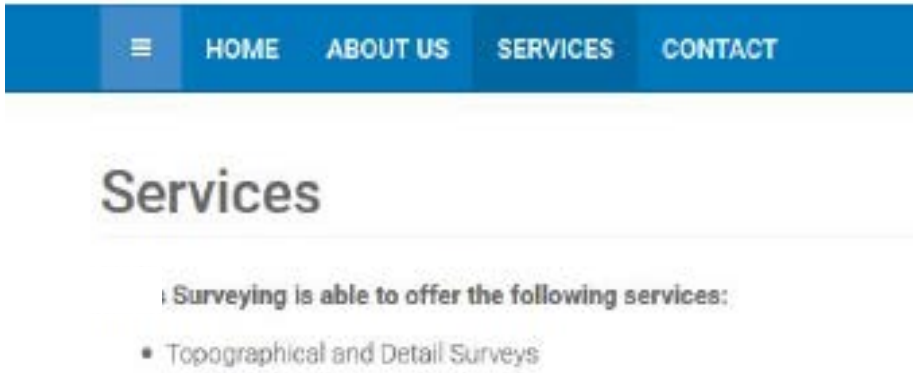
BOSSI Convictions

- BOSSI has been successful in taking legal action against unregistered persons either undertaking land surveys or advertising that they can undertake land surveys for fee or reward.
- BOSSI cannot undertake legal action if the complaint is lodged more than 6 months after the date of survey. BOSSI is preparing a submission to recommend an extension to this time period.
- Those taken to court include students who are part of their way through their tertiary qualification and set up an ABN and entity name.

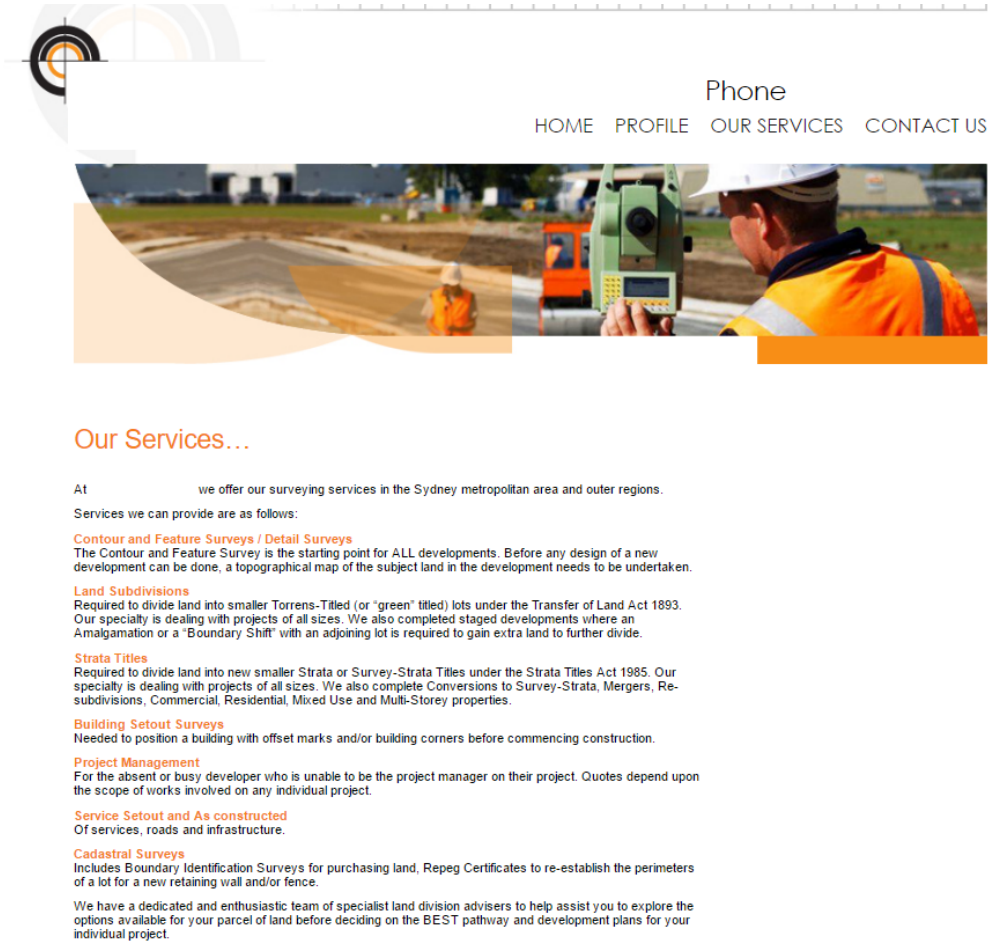
Advertising by unregistered persons



BOSSI letter to company



False advertising by unregistered persons



Phone

HOME PROFILE OUR SERVICES CONTACT US

Our Services…

At [redacted] we offer our surveying services in the Sydney metropolitan area and outer regions.

Services we can provide are as follows:

Contour and Feature Surveys / Detail Surveys
The Contour and Feature Survey is the starting point for ALL developments. Before any design of a new development can be done, a topographical map of the subject land in the development needs to be undertaken.

Land Subdivisions
Required to divide land into smaller Torrens-Titled (or "green" titled) lots under the Transfer of Land Act 1893. Our specialty is dealing with projects of all sizes. We also completed staged developments where an Amalgamation or a "Boundary Shift" with an adjoining lot is required to gain extra land to further divide.

Strata Titles
Required to divide land into new smaller Strata or Survey-Strata Titles under the Strata Titles Act 1985. Our specialty is dealing with projects of all sizes. We also complete Conversions to Survey-Strata, Mergers, Re-subdivisions, Commercial, Residential, Mixed Use and Multi-Storey properties.

Building Setout Surveys
Needed to position a building with offset marks and/or building corners before commencing construction.

Project Management
For the absent or busy developer who is unable to be the project manager on their project. Quotes depend upon the scope of works involved on any individual project.

Service Setout and As constructed
Of services, roads and infrastructure.

Cadastral Surveys
Includes Boundary Identification Surveys for purchasing land, Repeg Certificates to re-establish the perimeters of a lot for a new retaining wall and/or fence.

We have a dedicated and enthusiastic team of specialist land division advisers to help assist you to explore the options available for your parcel of land before deciding on the BEST pathway and development plans for your individual project.

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Penalties

If plead guilty and first offence

- May get a discretionary “Section 10” [of Crimes (Sentencing Procedure) Act 1999]: no conviction recorded, no penalty
- Good behaviour bond for maximum of 24 months
- Court costs for you and BOSSI. BOSSI’s costs are typically around $10k

Penalties

If (1) plead “not guilty” but found guilty in court & not first offence, or (2) plead guilty:

- Convicted of a criminal offence – may restrict your ability to travel overseas (e.g. USA)
- Maximum fine is $5,500
- Plus court costs for you and BOSSI. BOSSI’s costs are typically around $10k

Penalties

PUBLIC NOTICE

The Board of Surveying and Spatial Information is a Corporation constituted by the *Surveying and Spatial Information Act, NSW, 2002* ("the Act") and a statutory body representing the Crown.

On 7 March, 2013 , in breach of the Act, advertised in this newspaper on page 6 for surveying work in the Tumut area. has now been prosecuted by the Board and on 18 February 2014 has pleaded Guilty to being an unregistered surveyor and placing the advertisement referred to above.

The Board warns persons that the use of unqualified persons to carry out Surveying work places at risk the reliability of the definition of the boundaries of their real estate. Qualified Surveyors are the only persons permitted to carry out surveying work and are the only persons entitled to sign plans for lodgement at the Land Titles Office (now known as the NSW Land & Property Information office).

is not a Registered Surveyor with the Board of Surveying and Spatial Information and has never been so registered. He is not qualified to carry out surveying work in the State of NSW.

Find a registered surveyor

www.bossi.nsw.gov.au/about/find_a_registered_surveyor

Closing and Questions?

In closing, BOSSI's role is to ensure that;

- Only appropriately qualified persons undertake land surveys,
- The integrity of the State cadastre is maintained for the people of NSW.

Contact BOSSI@finance.nsw.gov.au

Document Control

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Disclaimer

This information is correct at the date of publication; changes after the time of publication may impact upon the accuracy of the material. Any enquiries relating to this publication may be addressed to the BOSSI Secretariat bossi@finance.nsw.gov.au.

Change History			
Version	Date	Authorised	Details
1	August 2018	BOSSI	Original issue
2	September 2018	Surveyor General	Penalties (37)