



Cadastral Surveyors
Licensing Board of
New Zealand

COMPETENCY ASSESSMENT GUIDELINE

**Competencies and evidence
requirements for an initial licence to
undertake cadastral surveys**

14 September 2026

TABLE OF CONTENTS

Competency Assessment Framework.....	2
1. Overview of Framework	2
2. Online Platform - Moodle.....	2
Competencies	3
3. Standards for Licensing of Cadastral Surveyors 2021	3
4. Competencies for an Initial Licence.....	4
Academic Qualification.....	5
Portfolio of Experience.....	5
5. Work Experience.....	6
6. Selected Work Projects	8
7. Covering Reports	8
8. Processing of Portfolio of Experience	10
9. Request for Further Information	10
10. Provisional Acceptance	10
11. Final Decision and Feedback	11
12. Competency Descriptions and Evidence	11
13. Flowchart for Portfolio of Experience	19
Professional Challenge	20
14. Format of Professional Challenge	20
15. Marking of Professional Challenge.....	20
16. Competency Descriptions for Professional Challenge	21
Professional Interview	24
17. Format of Interview.....	24
18. Requisitions and Decisions	24
19. Competency Descriptions for Professional Interview.....	25
20. Flowchart for Professional Interview	28

COMPETENCY ASSESSMENT FRAMEWORK

1. Overview of Framework

The Cadastral Surveyors Licensing Board (the Board) has developed a framework to assess the competence of applicants seeking an initial licence to undertake cadastral surveys. The framework involves four stages of assessment that are undertaken sequentially. The diagram below shows the four stages, with a summary of the requirements contained in each. The assessment stages build on one another, with each stage assessing the competencies and evidence requirements relevant to that stage. Applicants should refer to the relevant sections of this guideline when preparing for each stage of the assessment process.



2. Online Platform - Moodle

The Cadastral Surveyors Licensing Board uses Moodle to support the administration of the competency assessment framework. This online platform serves as the primary portal for communication between applicants and the Examinations Coordinator. It is also where applicable documentation for each stage is uploaded and stored throughout the initial licensing process.

All applicants seeking a Certificate of Competency for their initial licence must first register with the platform at the following link <https://lms.cslb.org.nz/>.

COMPETENCIES

3. Standards for Licensing of Cadastral Surveyors 2021

Schedule 1 of the Standards for Licensing Cadastral Surveyors 2021 (the Standards) lists the competencies that applicants are to be assessed against, broken down into the following eight broad categories.

Survey measurement	Land tenure systems	Boundary definition	Land information systems
The statutory planning process	Land development engineering principles	Professional conduct	Communication skills

The detailed list of sub-competencies listed in Schedule 1 of the Standards applies to all Licensed Cadastral Surveyors for the years that they hold a licence.

The Standards can be found here [Standards for Licensing Cadastral Surveyors 2021](#).

4. Competencies for an Initial Licence

An applicant for an initial licence is not expected to have the depth of experience to cover all the competencies listed in Schedule 1 of the Standards to an expert level. This document identifies the sub-competencies that an applicant for an initial licence is required to demonstrate proficiency in. The evidence requirements outlined in this document link to the applicable sub-competencies assessed at each stage of the process.

The following table outlines an aspirational statement of the skills a new licensed cadastral surveyor should have for each competency area. These statements provide context but do not replace the sub-competencies identified for each assessment stage.

Competency Area Aspirational Statement

Survey measurement	A new licensed cadastral surveyor is proficient in land surveying and will understand the various survey disciplines for collecting spatial data. They will be able to undertake accurate measurements, analyse and adjust the data correctly, and present the results in a clear format to suit the purpose of the survey.
Land tenure systems	A new licensed cadastral surveyor will understand the law and administrative systems relating to land. They will identify the current status of land and any rights and interests associated with it. When the tenure of the land needs to change or new rights and interests are to be created, they will choose the correct survey type and process to support those actions.
Boundary definition	A new licensed cadastral surveyor will correctly define cadastral boundaries. They will begin this process by gathering all the relevant evidence. They will then use sound judgement and established principles to analyse the evidence and arrive at the best boundary definition possible.
Land information systems	A new licensed cadastral surveyor will understand the data sources and inherent limitations of land information systems. They will utilise these systems appropriately for the purposes of cadastral surveying and subdividing land.
Statutory planning process	A new licensed cadastral surveyor will understand the entire subdivision process and the regulatory framework that controls it. They will be able to obtain subdivision consents and implement them by preparing the appropriate land transfer surveys and obtaining the necessary certifications to successfully support the issue of new titles.
Land development engineering principles	A new licensed cadastral surveyor will understand the information needed to determine if land is appropriate to subdivide. They will know the process for ensuring that new titles are accessible and serviceable. Most importantly, they will know how to correctly define new boundaries and rights relative to the constructed works.
Professional conduct	A new licensed cadastral surveyor will act honestly and maintain high standards of professionalism. They will acknowledge the limits of their expertise and take full responsibility for the surveys they undertake, as well as continue to develop their competence.
Communication	A new licensed cadastral surveyor will have good oral and written communication skills. They will be able to clearly convey information to a variety of audiences in a professional manner.

ACADEMIC QUALIFICATION

The academic qualification sets the foundation for competence. To begin the approval process, applicants will need to provide evidence of their qualification through one of the categories outlined below.

Applicants are to upload their evidence to Moodle for review and approval by the Examinations Coordinator.

PORTFOLIO OF EXPERIENCE

Applicants are to present a portfolio of work that demonstrates they have achieved the appropriate level of proficiency in each of the competencies specified below. The portfolio must directly indicate how the work completed addresses the competency requirements. The portfolio cannot be submitted until the applicant's academic qualification has been approved by the Examinations Coordinator.

Qualification	Qualification Description	Evidence needed
Compliant New Zealand or Australian Qualification	A four-year university qualification from New Zealand or Australia in surveying recognised by the Board. The current qualifications recognised by the Board are: Bachelor of Surveying degree from the University of Otago, with a pass in the advanced cadastral surveying paper SURV457 or its equivalent.	Copy of degree University transcript confirming critical cadastral surveying paper(s) passed
Compliant Qualifications outside New Zealand	A university qualification in surveying from outside New Zealand that is the equivalent of the compliant four-year degree	Copy of degree and university transcript Copy of advice from BAOQ ¹ confirming that qualification is equivalent
Non-compliant Qualification	A university qualification in surveying that is not the equivalent of the compliant four-year degree	Copy of degree and university transcript Copy of advice from Board specifying extra qualification(s) required University transcript confirming pass in extra qualification(s) specified

BAOQ = Bureau for Assessment of Overseas Qualifications. Contact the Examinations Coordinator for advice on how to have your qualification assessed by the BAOQ
examinations.coordinator@cslb.org.nz

5. Work Experience

The Standards outline the minimum post-graduate practical experience required for a certificate of competency. These minimum requirements are detailed in the table below.

For the purposes of this section, the post-graduation period starts on the date that the applicable university declares that the requirements of the degree, or any subsequent qualifications required by the Board, have been completed (not the date of graduation). This date will be indicated on the transcript of studies from the university. The practical experience timeframes mentioned shall be calculated at a rate of 40 hours per week and 4 weeks per month.

Notwithstanding these minimum timeframes, an applicant should not submit a Portfolio of Experience until they are confident that it demonstrates the required level of proficiency in the competencies. They also need to be confident that they are ready to progress to the subsequent stages to be tested against the competencies.

Experience	Experience description	Evidence needed
Summary of Work Experience	A summary of the applicant's post-graduate work experience outlining the: • Company of employment, location, • Start and finish dates for each place of employment (to the nearest month), accumulated time, • Role description(s), • Brief summary of range of work undertaken, • Names of Supervising Licensed Cadastral Surveyor(s).	Documented summary of post-graduate work experience in the required form.
Schedule of Experience	A schedule recording the accumulated post-graduation practical experience under the guidance of a licensed cadastral surveyor to the following standards: • Minimum 24 months total surveying experience. • Minimum 12 months on cadastral surveys involving the subdivision of land and boundary definition. • Minimum 4 months obtaining and implementing subdivision consents. This experience would cover competencies in the statutory planning process and land development engineering principles.	Schedule of accumulated post-graduate experience in the required form.
	Up to six months of suitable pre-graduate experience may be included in the summary of work experience. This can be approved by the Assessment Panel, under a delegation by the Board, in the following circumstances: • the applicant held a survey technician qualification during the pre-graduate period being claimed; and • the work was done under the supervision of an LCS.	Details of compliant pre-graduate experience, including copies of: • Technician qualification • Schedule and summary of accumulated pre-graduate experience in the required forms • Attestation by supervising LCS in the required form
	Applicants with pre-graduate experience that does not align with the above criteria can submit a request to the Board for consideration and approval.	Copy of advice from Board approving pre-graduate experience, including start and end dates and total accumulated time involved.

Attestations	The applicant must provide a formal declaration that: • The summary of work experience is true and accurate • That each covering report supplied with the selected work projects is entirely their own work • Any parts of the covering reports prepared using artificial intelligence have been verified by them • That the descriptions of the extents of their involvement in each of the projects submitted are accurate.	Attestation by applicant in the required form(s).
	Each Supervising Licensed Cadastral Surveyor (LCS) must attest to the extents of the experience obtained by the applicant while under their supervision.	Attestation by each Supervising LCS in the required form.

6. Selected Work Projects

A portfolio of selected work projects must demonstrate proficiency in the competency areas specified below. While individual projects are not expected to cover every sub-competency, the portfolio will be assessed as a whole. Collectively, the selected projects must provide sufficient evidence across all relevant sub-competencies.

It is anticipated that the information submitted would be the documentation produced as part of the project deliverables. Examples of this might include calculation sheets or copies of any referenced survey plans. However, further background information will need to be included to fully explain the competency areas being demonstrated.

Some projects may be used to demonstrate proficiency in more than one competency area. However, the project file, with applicable background information, will need to be loaded into each competency area where it is used.

It is important that the filename convention used for the projects is unambiguous to ensure easy cross-referencing in the covering reports. The files are to be saved in PDF format and uploaded into Moodle.

7. Covering Reports

Each group of projects in a competency area must be supported by a single covering report for that competency area. It is important that the covering reports focus on and address each sub-competency within the main competency area. The reports must clearly describe how the projects demonstrate proficiency in all the individual sub-competencies. However, no report is required for the Communication competency area.

The report should focus on the applicant's own role, actions, decisions and professional judgement. Where work was undertaken as part of a wider team, applicants should clearly identify their own contribution. Applicants should avoid simply describing what was done. The report should explain the reasoning behind relevant decisions and how the applicant's actions demonstrate the relevant sub-competency.

The covering report is the critical link between the projects contained in the portfolio and the sub-competencies. The assessor can understand WHAT an applicant did by looking at the project information provided. However, the report must explain HOW and WHY a submitted project demonstrates a particular sub-competency. For example, a boundary recalculation in a project shows that an anomaly or conflict in the cadastre was resolved, but the covering report needs to go deeper and demonstrate that the applicant is competent to do this. It might explain what evidence was searched for, analysed and discussed in order to reach a decision. It might discuss what alternatives were considered, or what the potential consequences of an incorrect decision might be.

The covering reports are to be presented to a high professional standard. The reports should include a table of contents, graphical cues, captioned photographs and contextual images to effectively communicate the information.

The discussion in the covering report should be supported by evidence such as drawings, maps, emails, calculations, photos or other documents that have been submitted as part of the portfolio. References to evidence in supporting documents must be unambiguous so that the assessor can easily find the information. Images or diagrams embedded in the body of the report can make it much easier for the assessor to quickly understand what is being explained.

Applicants are encouraged to keep the covering reports focussed on the relevant information that demonstrates their proficiency in a competency area. Long project descriptions or technical detail should not be necessary.

The covering reports must follow the broad structure outlined below:

1. **Projects:** Include a brief explanation of each project being submitted for the competency area. There is no need to go into detail, just enough information to set the context. Applicants can assume that the assessor reading the report will be a subject matter expert with a good understanding of technical terms and concepts. For each project the applicant should provide the following information:
 - a. Project name, location and date
 - b. A description of the project
 - c. The role(s) of the applicant in the project
2. **Sub-Competencies:** Structure the report by using the sub-competencies as section headings. This will be the main part of the report, and it is important that it explains how a project demonstrates proficiency in the sub-competency. In some cases, it might be appropriate to group some of the sub-competencies together to avoid repetition. Applicants should make it clear how their projects demonstrate their competence.
3. **Reflections:** Reflections are an opportunity for an applicant to demonstrate that they understand the 'why' behind the competencies. This section should be used to explain what went well, or what difficulties were encountered and resolved, to articulate their professional learning in the competency area.
4. **Artificial Intelligence Disclosure Statement:** The applicant must state whether artificial intelligence (AI) tools have been used in the creation of the covering report. The AI disclosure statement must contain information about the AI assistance methods used and how the AI generated content has been verified by the applicant. The disclosure statement is not included in the word count of the covering report.

8. Processing of Portfolio of Experience

Once an applicant has uploaded all the required information in Moodle and pressed the 'submit' button, the Examinations Coordinator will undertake a check to confirm that all the required documents are there and readable. The Examinations Coordinator will contact the applicant if any document is missing. The determination of the quality of the content uploaded will be undertaken by the assessors.

When the portfolio is deemed complete, an invoice will be sent to the applicant for payment. Once the payment has been received, the Examinations Coordinator will release the portfolio to the members of the Assessment Panel.

The assessors will review the information that has been uploaded to the Moodle platform for each applicant they are to assess. They will read through the covering report that links the projects to the sub-competencies for each competency area. They will decide if the portfolio submitted adequately demonstrates the proficiency of the applicant in the competencies.

Any exemptions that may have been sought by an applicant in consultation with the Examinations Coordinator and/or Board should be uploaded as part of the portfolio material. As an example, this could include any pre-graduate experience being claimed.

9. Request for Further Information

An assessor can request further information of a minor nature if it is needed to fully understand if the evidence provided adequately demonstrates the proficiency of the applicant in the competency area. This further information could be in the form of missing project documentation (e.g. field notes) or minor alterations to the covering report. The applicant would respond by uploading the required information within a short timeframe (likely to be 1-2 weeks).

The ability for an assessor to request further information of a minor nature should not be viewed as an opportunity for an extension of time. The initial documentation uploaded should be viewed as the final best submission for the demonstration of competence.

10. Provisional Acceptance

The Assessment Panel may choose to grant a provisional acceptance of a portfolio where it is subject to some further evidence being provided. It could apply in a situation where there is a matter of process that is outside the applicant's control and can be satisfied before the Certificate of Competency is issued. A provisional acceptance would allow an applicant to at least progress to the next stage. An example could be accepting an unapproved mandatory cadastral survey used as a project, on the proviso that it be approved before the applicant passes the Professional Interview. The grounds for any provisional acceptance will be clearly defined. A provisional acceptance is different to a request for further information, which is of a minor nature and required earlier in the process. It will not be used if the evidence provided by the applicant is insufficient to demonstrate their proficiency in the competency area.

11. Final Decision and Feedback

Once all the competencies for the candidates have been assessed, the Assessment Panel will convene to make an overall decision on each applicant. The deliberations of the Assessment Panel will result in one of three possible outcomes:

- **Accepted** (a pass)
- **Provisional acceptance** (a pass)
- **Not accepted** (competence not yet demonstrated)

Feedback from the assessors to an applicant may also be provided, which will highlight potential gaps or areas of weakness demonstrated in their portfolio. Applicants are strongly advised to use this feedback to strengthen their skills as they prepare for the latter stages of the competency assessment framework. This feedback will also be available to the assessors, which may inform the question topics during the Professional Interview.

12. Competency Descriptions and Evidence

The following tables are structured into two main columns to guide applicants in preparing their portfolios:

- The left-hand column outlines the main competency areas, providing detailed descriptions of the sub-competencies to be achieved at this assessment stage.
- The right-hand column details the evidence required to demonstrate proficiency in those sub-competencies.

This evidence must comprise a selection of work projects (including any mandatory projects) and a detailed covering report for each competency area. Where example projects are included in the tables, they are provided solely to indicate the expected level of complexity and should not be treated as a prescriptive list. Applicants are free to choose any projects from their work experience that clearly demonstrate their proficiency in the sub-competencies.

Competency Description

Survey Measurement

Conducting survey measurements

- Demonstrate an understanding of cadastral, geodetic, and topographical surveying principles and how they influence the planning and conduct of surveys.
- Identify and justify suitable surveying methods and tools based on the survey objectives, site conditions, and accuracy requirements.
- Describe the functions and limitations of different types of survey equipment, how to use them correctly, and how to ensure calibration is checked and maintained.
- Interpret and determine topographic and/or hydrographic features relevant to the definition or location of boundaries.
- Record measurements and other survey observations accurately, unambiguously, and with sufficient detail to support validation and audit processes.
- Undertake appropriate independent checks during field work to identify, manage and eliminate errors.

Analysing survey measurements

- Apply appropriate mathematical reductions, statistical analysis and adjustments to horizontal and vertical survey measurements, and control networks.
- Undertake coordinate transformations and/or verify survey data to ensure correct alignment with geodetic reference systems and vertical datums.
- Interpret and incorporate historical survey information relevant to the purpose of the survey, articulating the potential limitations of the information and resolving inconsistencies.
- Present spatial data correctly and unambiguously using appropriate conventions, annotations and formatting.
- Apply appropriate quality assurance procedures across all post-field stages to ensure defensible, unambiguous and fit-for-purpose outputs.

Evidence needed

A: A selection of work projects (in horizontal and vertical dimensions) that demonstrate the sub-competencies for survey measurement to an appropriate level of complexity.

Complexity can be determined by a combination of factors such as:

- Area or size
- Varied topography
- Multiple buildings / structures
- Varied accuracy requirements
- Combinations of equipment, methods or data
- Level of detail presented
- Logistical constraints

Two mandatory projects are required:

1. Topographical survey and deliverable plan that relates the measurements to relevant cadastral boundaries and legal interests.
2. Survey control network design, measurement, adjustment and analysis.

The two mandatory projects can be covered within a single job, as long as the two elements are demonstrated to a sufficient level of complexity. If the mandatory projects do not demonstrate all the required sub-competencies, an applicant must submit further projects. These could include:

- Construction set-out of buildings or infrastructure relative to relevant cadastral boundaries and interests
- As-built survey of building or infrastructure relative to relevant cadastral boundaries and interests
- Earth/structure/building position monitoring
- Any other project that clearly demonstrates proficiency in the survey measurement competencies to a suitable level of complexity

B: A covering report of between 5,000 to 10,000 words which explains how the projects submitted demonstrate each of the sub-competencies.

Competency Description

Land Tenure Systems

- Explain the different land tenure systems in New Zealand and the different central and local government regulatory processes that affect them.
- Explain the different legislation that affects rights and interests in land, land use, subdivision, and cadastral surveying in New Zealand.
- Determine the status of land and the associated interests, rights and restrictions, and how these affect the use and development of the land.
- Apply the correct types of surveys and their purposes in relation to the existing and proposed land tenure types and the subdivision of land.

Evidence needed

A: A selection of work projects that demonstrate the sub-competencies for land tenure systems.

Projects could include:

- A survey to support unit titles, leases, licences, legalisation actions, rentable areas or defining land in the tidal area
- Surveys of different types of subdivisions that do not involve a land transfer plan (e.g. Crown land, Māori land partition)
- Documented research into ad medium filum aquae properties of a title to support an accretion claim
- Land status investigation or research (e.g. Crown land, land held under the Deeds system, land subject to a claim of adverse possession)
- Plan graphic showing encumbrances, rights and restrictions on a parcel of land
- Any other project that clearly demonstrates proficiency in the land tenure systems competencies

B: A covering report of between 5,000 to 10,000 words which explains how the projects submitted demonstrate each of the sub-competencies. The first two sub-competencies can be addressed in essay form within the covering report.

Competency Description

Boundary Definition

Evidence gathering

- Research all relevant existing survey, title and land information records and databases.
- Explain the information required, and the processes involved, in determining the spatial extents of rights to land, including any claim of ownership.
- Gather all the relevant physical evidence in the field, including old survey marks, occupation and natural boundaries.

Interpretation

- Interpret cadastral survey datasets, field notes, reports, and other supporting documentation from the cadastral record.
- Analyse field measurements and evidence to determine what will be relevant for the definition of existing and new boundaries.
- Apply the principles of boundary definition and the hierarchy of evidence.
- Correctly resolve anomalies and conflicts in the cadastre.
- Interpret building design and construction as far as they relate to the definition of cadastral boundaries and rights associated with buildings, services and structures.

Determination of boundaries

- Determine the position of all boundaries, with respect to existing boundaries, lines of occupation, interests, and rights.
- Determine the positions of natural boundaries (water or irregular).
- Describe the process to correctly define permanent structure boundaries.
- Describe the process to correctly define the position of height limited boundaries, interests, and rights with reference to a vertical datum.
- Present a range of cadastral survey datasets, reports and supporting evidence that are appropriate for their intended purposes.
- Conduct cadastral surveys that comply with the Surveyor-General's rules for cadastral surveys.

Evidence needed

A: A selection of work projects that demonstrate the sub-competencies for boundary definition. At least one must be in an urban context and at least one must be in a rural context.

One mandatory project is required:

1. An approved survey containing a complex boundary definition, for example, supporting accretion or adverse possession claim, removal of limitation as to parcels, resolving significant conflict, re-defining earlier diagram on transfer subdivisions, or defining (not adopting) natural boundaries (water or irregular).

At least one other project, which could include:

- A survey that involves the definition of permanent structure boundaries or boundaries relative to permanent structures
- A survey that involves strata or height-limited boundaries
- A survey that involves resolving the effect of land movement on boundaries
- Any other cadastral survey that clearly demonstrates proficiency in the boundary definition competencies.

It is expected that cadastral datasets submitted as non-mandatory projects will be approved as to survey. However, if approval cannot be obtained in time, the project must be accompanied by an attestation from the signing surveyor that the dataset has been thoroughly checked and is ready for lodgement. The dataset will need to be approved before a pass in the Professional Interview will be given.

B: A covering report of between 5,000 to 10,000 words which explains how the projects submitted demonstrate each of the sub-competencies.

Competency Description

Land Information Systems

- Apply knowledge of survey information, survey data sources and systems to access, retrieve, and interpret land information relevant to cadastral surveying and the subdivision of land.
- Merge and transfer digital spatial and attribute data into and between other formats or systems.
- Determine the inherent limitations of different sources of data, interpret the data correctly, and apply methods of analysis to determine if the sourced data is correct.
- Use digital spatial and attribute data effectively and present it unambiguously.

Evidence needed

A: Work project(s) that demonstrate the sub-competencies for land information systems.

Projects could include:

- Plan graphic for a specific purpose that utilizes different sources of spatial data (with appropriate attributions and disclaimers)
- Documented advice to a client or landowner on the positions of their boundaries relative to publicly available aerial mapping
- Maps or visualisations using GIS to show land boundaries, regulatory overlays, natural features etc.
- Any other project that clearly demonstrates proficiency in the land information systems competencies

B: A covering report of between 2,000 to 5,000 words which explains how the projects submitted demonstrate each of the sub-competencies.

Competency Description

Statutory Planning Process

- Identify legal interests in land that may affect the subdivision process and the issue of records of title.
- Interpret regulatory planning documents as they relate to the subdivision of land.
- Design boundaries and rights to enable the use and development of land.
- Interpret all types of planning consents that require the definition of spatial rights to give effect to them.
- Interpret the conditions of a subdivision consent and understand the processes and evidence required to satisfy them.

Evidence needed

A: A selection of work projects that demonstrate the sub-competencies for the statutory planning process.

Two mandatory projects are required:

1. **EITHER** preparation of the application documentation, including application plan, for which a subdivision consent has been granted,
OR
an essay of at least 2500 words critiquing an approved subdivision consent and application plan, covering the entire planning process through to the issue of the decision by the territorial authority.
2. A land transfer subdivision plan that gives effect to a subdivision consent (that has obtained at least the s.223 RMA certificate from the relevant territorial authority). It must include new boundaries, as well as some other complexity to be spatially defined as a condition of consent such as multiple easements, a covenant, consent notice area or land to vest.

The two mandatory projects can be covered within a single job, as long as the two elements are demonstrated to a sufficient level of complexity. If the mandatory projects do not demonstrate all the required sub-competencies, an applicant must submit further projects. These could include:

- Successful application to territorial authority for formal confirmation that all the conditions of a subdivision consent have been satisfied
- Documented feasibility report on the development potential of a piece of land for a client or landowner
- Report outlining the hierarchy of planning documents from the national to local level and their relative influences on the subdivision of a piece of land.
- Any other project that clearly demonstrates proficiency in the statutory planning process competencies

B: A covering report of between 3,000 to 7,500 words which explains how the projects submitted demonstrate each of the sub-competencies.

Competency Description

Land Development Engineering Principles

- Describe the basic principles of soil properties, land stability, inundation, and other natural hazards, as they relate to the ability to subdivide land.
- Describe the basic principles of earthworks, access, roads, wastewater and stormwater drainage, water supply systems, and the provision of utility services as they relate to the subdivision of land.
- Describe the different regulatory documents that control the provision of access and services to a subdivision.
- Determine the spatial extent of restrictions to prevent the inappropriate use and development of land.
- Interpret an engineering design to the extent necessary to identify where a design may be incompatible with either the topography, subdivision consent, existing rights and interests, or existing cadastral boundaries.
- Correctly define the boundaries of all titles, easements and other rights or restrictions to ensure the proper extent of ownership and protection of rights associated with the constructed works.

Evidence needed

A: Work project(s) that demonstrate the sub-competencies of land development engineering principles.

Two mandatory projects are required:

1. Land transfer survey of a subdivision involving boundaries and rights associated with constructed works and/or natural hazards.
2. As-built survey of infrastructure such as roading, access, structures, pipelines or services that is used to define new title and easement boundaries

The two mandatory projects can be covered within a single job, as long as the two elements are demonstrated to a sufficient level of complexity. If the mandatory projects do not demonstrate all the required sub-competencies, an applicant must submit further projects. These could include:

- Documented feasibility report for a proposed development covering factors such as access, drainage, services, natural hazards, construction constraints, regulatory framework etc.
- Engineering investigation and testing to support the subsequent design of land development roading, drainage and services
- An engineering design of access, drainage and services approved or accepted by a territorial authority to satisfy conditions of a subdivision consent
- Documented clearance certificate application to Council where access, drainage or services works have been undertaken to give effect to a subdivision consent, accompanied by the s.224 RMA certificate
- Any other project that clearly demonstrates proficiency in the land development engineering principles competencies
- An essay of at least 2500 words critiquing an engineering design by others

B: A covering report of between 3,000 to 7,500 words which explains how the projects submitted demonstrate each of the sub-competencies.

Competency Description

Professional Conduct

- Describe what it means to always act professionally and honestly to maintain public confidence in the cadastral survey and land tenure systems. This includes acknowledging limits of personal knowledge or expertise and seeking help when required.
- Describe what it means to actively supervise, and be responsible for, work undertaken on a cadastral survey by any other person under the direction of a licensed cadastral surveyor.
- Describe the benefits of professional development in relation to cadastral surveying and how to apply systems to ensure this remains ongoing.
- Apply systems of professional practice management and effective quality assurance to all aspects of a cadastral survey to ensure compliance with the Surveyor-General's Rules.

Communication

- Write clear, logical, and unambiguous documents and reports to a professional standard that can be easily understood by the recipient.

Evidence needed

A: Work project(s) that demonstrate the sub-competencies of professional conduct. Any documented quality assurance process that is submitted must be for a project that is already part of the Portfolio of Experience.

Projects could include:

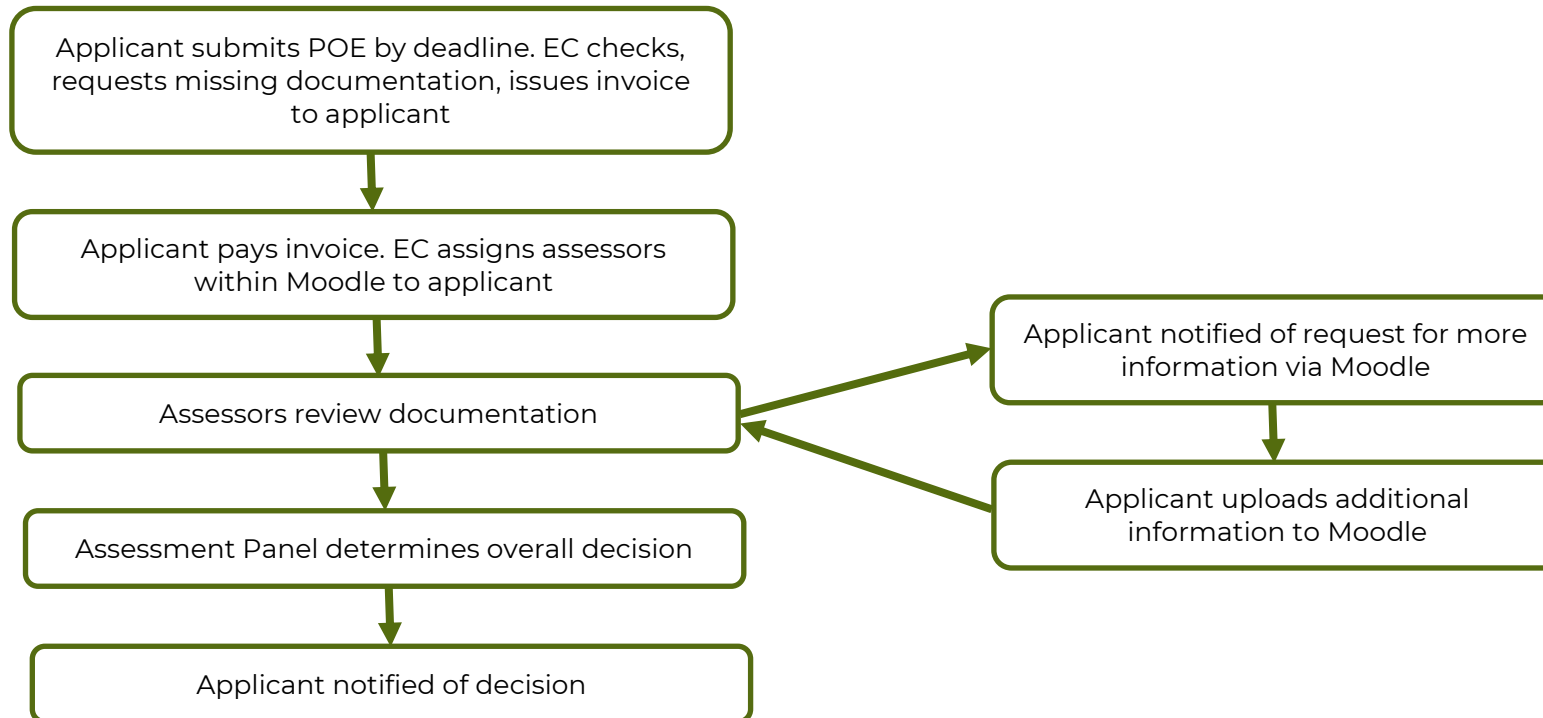
- A documented quality assurance process completed for all stages of a cadastral survey and supporting documentation, including a response to any requisitions received
- A documented quality assurance process completed for all stages of any other type of survey
- Documented instructions to staff
- Reflections on a situation where a conflict of interest was encountered and how it was resolved
- Recent CPD record of training applicable to the competency areas
- Any other project that clearly demonstrates proficiency in the professional conduct competencies

B: A covering report of between 2,000 to 5,000 words which explains how the projects submitted demonstrate each of the sub-competencies. The first three sub-competencies can be addressed in essay form within the report, supported by real-world examples experienced or undertaken by the applicant.

There is no separate project to be submitted under this competency in the Portfolio of Experience. The ability to communicate unambiguously to a professional standard must be demonstrated in the reporting for the other competency areas.

13. Flowchart for Portfolio of Experience

The flowchart below illustrates the process for the review of the Portfolio of Experience.



PROFESSIONAL CHALLENGE

The purpose of the Professional Challenge is to independently test the applicant's knowledge, understanding, and abilities in the applicable competencies specified below.

The pre-requisite to attend the Professional Challenge is to have had the Portfolio of Evidence accepted by the Assessment Panel within the previous two years.

The Examinations Coordinator, in consultation with the Assessment Panel, will determine and communicate the date and location of each Professional Challenge.

14. Format of Professional Challenge

The Professional Challenge will be conducted over a day and will be divided into four separate challenges. The first challenge will be an examination focussed on cadastral survey law and the current Cadastral Survey Rules. This will be followed by three further challenges that will involve real-world scenarios to test the practical application of the competency areas.

An exemption to the examination component of the Professional Challenge will be granted to applicants who have passed the Cadastral Law Exam within the previous 5 years.

15. Marking of Professional Challenge

The marking of the Professional Challenge will result in one of the following outcomes:

- **A pass** - the applicant can progress to the Professional Interview.
- **Not yet competent** - the applicant will need to re-sit the entire Professional Challenge at some future time.

Where required, feedback from the Assessment Panel will be provided to an applicant by the Examinations Coordinator through the Moodle platform. The feedback will identify areas of competency weakness so that these can be improved by the applicant prior to attending their Professional Interview. The assessors may also use this feedback to inform some of the question topics during the Professional Interview for that applicant.

An applicant who is deemed 'Not yet competent' will also receive feedback to guide them in their preparation for any future Professional Challenge.

This stage will be completed once a pass in the Professional Challenge has been awarded by the Assessment Panel.

NOTE: Copies of previous Professional Challenges will not be made available to applicants.

16. Competency Descriptions for Professional Challenge

The individual sub-competencies described below are potential areas for testing by this assessment method. However, not all the sub-competencies will be covered in every Professional Challenge. The Assessment Panel will release information in advance of a Professional Challenge about the sub-competency areas that are likely to be tested. This will allow applicants to focus their preparation.

Competency Description

Survey Measurement

Conducting survey measurements

- Demonstrate an understanding of cadastral, geodetic, and topographical surveying principles and how they influence the planning and conduct of surveys.
- Identify and justify suitable surveying methods and tools based on survey objectives, site conditions and accuracy requirements.
- Describe the functions and limitations of different types of survey equipment, how to use them correctly, and how to ensure calibration is checked and maintained.

Analysing survey measurements

- Apply appropriate mathematical reductions, statistical analysis and adjustments to horizontal and vertical survey measurements and control networks.
- Undertake coordinate transformations and/or verify survey data to ensure correct alignment with geodetic reference systems and vertical datums.
- Interpret and incorporate historical survey information relevant to the purpose of the survey, articulating the potential limitations of that information and resolving inconsistencies.

Quality assurance

- Present spatial data correctly and unambiguously using appropriate conventions, annotations and formatting.
- Apply appropriate quality assurance procedures across all post-field stages to ensure defensible, unambiguous and fit-for-purpose outputs.

Land Tenure Systems

- Explain the different land tenure systems in New Zealand and the different central and local government regulatory processes that affect them.
- Explain the different legislation that affects rights and interests in land, land use, subdivision, and cadastral surveying in New Zealand.
- Describe the Registrar-General of Land's role and responsibilities so far as they interact with cadastral surveying.
- Describe the roles and responsibilities of the Surveyor General, Land Information NZ and the Cadastral Surveyors Licensing Board in the cadastral survey system.
- Determine the status of land and the associated interests, rights and restrictions, and how these affect the use and development of the land.
- Describe the role of the Māori Land Court and the survey requirements applicable to Māori land surveys.

Boundary Definition

Evidence gathering

- Research all relevant existing survey, title and land information records and databases.
-

Competency Description

- Explain the information required, and the processes involved, in determining the spatial extents of rights to land, including any claim of ownership.

Interpretation

- Interpret and apply all Acts, legislative instruments, rules, and case law relating to cadastral boundaries (including Māori land court orders).
- Interpret cadastral survey datasets, field notes, reports, and other supporting documentation from the cadastral record.
- Apply the principles of boundary definition and the hierarchy of evidence.
- Correctly resolve anomalies and conflicts in the cadastre.
- Interpret building design and construction as far as they relate to the definition of cadastral boundaries and rights associated with buildings, services and structures.

Determination of boundaries

- Determine the position of all boundaries, with respect to existing boundaries, lines of occupation, interests, and rights.
- Determine the positions of natural boundaries (water or irregular).
- Describe the process to correctly define permanent structure boundaries.
- Describe the process to correctly define the position of height limited boundaries, interests, and rights with reference to a vertical datum.
- Explain the need to balance the interests of all affected parties in relation to boundary definition when defining and describing interests in land.
- Conduct cadastral surveys that comply with the Surveyor-General's Rules.

Land Information Systems

- Determine the inherent limitations of different sources of data, how to interpret the data correctly, and how to apply methods of analysis to determine if the sourced data is correct.
- Use digital spatial and attribute data effectively and present it unambiguously.

Statutory Planning Process

- Explain the current legislation, and the relevant statutory and regulatory documents, that affect the subdivision of land.
- Identify legal interests in land that may affect the subdivision process and the issue of records of title.
- Interpret regulatory planning documents as they relate to the subdivision of land.
- Design boundaries and rights to enable the use and development of land.
- Interpret all types of planning consents that require the definition of spatial rights to give effect to them.
- Interpret the conditions of a subdivision consent and understand the processes and evidence required to satisfy them.

Land Development Engineering Principles

- Describe the basic principles of soil properties, land stability, inundation, and other natural hazards, as they relate to the ability to subdivide land.
- Describe the basic principles of earthworks, access, roads, wastewater and stormwater drainage, water supply systems, and the provision of utility services as they relate to the subdivision of land.
- Describe the different regulatory documents that control the provision of access and services to a subdivision.
- Interpret an engineering design and constructed works to the extent necessary to identify where a design or constructed work may be incompatible with either the topography, subdivision consent, existing rights and interests, or existing cadastral boundaries.

Competency Description

- Correctly define the boundaries of all titles, easements and other rights or restrictions to ensure the proper extent of ownership and protection of rights associated with the constructed works.
-

Professional Conduct

- Describe what it means to always act professionally and honestly to maintain public confidence in the cadastral survey and land tenure systems. This includes acknowledging limits of personal knowledge or expertise and seeking help when required.
 - Describe what it means to actively supervise, and be responsible for, work undertaken on a cadastral survey by any other person under the direction of a licensed cadastral surveyor.
-

Communication

(written only)

- Write clear, logical, and unambiguous documents and reports to a professional standard that can be easily understood by the recipient.
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PROFESSIONAL INTERVIEW

The purpose of the Professional Interview is to confirm that an applicant has achieved proficiency in the competencies.

The pre-requisite to attend the Professional Interview is to have passed the Professional Challenge within the previous two years.

The Examinations Coordinator, in consultation with the Assessment Panel, will determine and communicate the date and location of each Professional Interview.

Applicants will liaise with the Examinations Coordinator and the Moodle platform to register for the Professional Interview and pay the requisite fee to the CSLB.

17. Format of Interview

Each applicant will attend one interview 1.0 to 1.5 hours long. The interviews will be held in person unless there are extenuating circumstances.

The Professional Interview will be conducted face to face with three members of the Assessment Panel. The assessors will have between them significant expertise across all the competency areas. The assessors may utilise the applicant's Portfolio of Experience and Professional Challenge results to help shape the discussion.

18. Requisitions and Decisions

Once an interview has concluded, the panel members will deliberate and come to a decision. The decision will be relayed directly to each applicant at a time advised in advance, which will normally be within 24 hours of the interview.

The decision will result in one of three possible outcomes:

- **A full pass**
- **A requisition(s)** to be attended to before a **pass** is given
- **Not yet competent (a fail)**, with the applicant having to re-attend a future Professional Interview

Requisitions

The basis for requisitions will be at the discretion of the panel members. The requisitions will directly address an identified shortfall in the proficiency of the applicant in one or more competency areas. They will be specific and measurable and come with an expected deadline for completion. The requisition requirements are lodged by a panel member within the applicant's profile in Moodle. This allows the applicant to then upload their response in Moodle to be reviewed by the panel members who undertook the interview. Once the requisition has been satisfied, the applicant will be notified of a pass in the Professional Interview stage.

Not Yet Competent (A Fail)

If an applicant is considered significantly short of the standard expected, the panel members may decide to fail the applicant. The applicant does not have to start the process again, but they would need to undertake the Professional Interview again at a later date. The reasons for the failure, and the competency areas that need to be addressed, will be clearly articulated to the applicant.

Completion of the Assessment Stage

The Professional Interview stage is officially complete once a full pass has been awarded by the Assessment Panel (either immediately following the interview or after any requisitions have been satisfactorily completed).

Once the pass is applied to the applicant's profile in Moodle, a Certificate of Competency will be generated. The applicant can then download this certificate to submit with their application to the CSLB for their first licence

19. Competency Descriptions for Professional Interview

Assessors may interview applicants across the range of competencies where they have identified areas that need further exploration. This may mean that not all sub-competencies will be covered during the interview. Therefore, apart from the highlighted professional conduct sub-competencies in **bold**, none of the individual sub-competencies are identified as high-priority areas for this assessment method. The applicant should come prepared to answer questions across the full range of sub-competencies outlined below.

Competency Description

Survey Measurement

Conducting survey measurements

- Demonstrate an understanding of cadastral, geodetic, and topographical surveying principles and how they influence the planning and conduct of surveys.
- Identify and justify suitable surveying methods and tools based on survey objectives, site conditions and accuracy requirements.
- Describe the functions and limitations of different types of survey equipment, how to use them correctly, and how to ensure calibration is checked and maintained.
- Undertake appropriate independent checks during field work to identify, manage and eliminate errors.

Analysing survey measurements

- Apply mathematical reductions, statistical analysis and adjustments to horizontal and vertical survey measurements and control networks, using appropriate map projections and vertical datums.
- Interpret and incorporate historical survey data relevant to the purpose of the survey.

Quality assurance

- Apply appropriate quality assurance procedures across all post-field stages to ensure defensible, unambiguous and fit-for-purpose outputs.
- Present spatial data correctly and unambiguously.

Land Tenure Systems

- Explain the different land tenure systems in New Zealand and the different central and local government regulatory processes that affect them.
- Explain the different legislation that affects rights and interests in land, land use, subdivision, and cadastral surveying in New Zealand.
- Describe the Registrar-General of Land's role and responsibilities so far as they interact with cadastral surveying.
- Describe the roles and responsibilities of the Surveyor General, Land Information NZ and the Cadastral Surveyors Licensing Board in the cadastral survey system.

Competency Description

- Determine the status of land and the associated interests, rights and restrictions, and how these affect the use and development of the land.
 - Apply the correct types of surveys and their purposes in relation to land tenure and the subdivision of land.
 - Describe the role of the Māori Land Court and the survey requirements applicable to Māori land surveys.
-

Boundary Definition

Evidence gathering

- Explain the information required, and the processes involved, in determining the spatial extents of rights to land, including any claim of ownership.
- Gather all the relevant physical evidence in the field, including old survey marks, occupation and natural boundaries.

Interpretation

- Correctly resolve anomalies and conflicts in the cadastre.
- Interpret and apply all Acts, legislative instruments, rules, and case law relating to cadastral boundaries (including Māori land court orders).
- Apply the principles of boundary definition and the hierarchy of evidence.
- Interpret building design and construction as far as they relate to the definition of cadastral boundaries and rights associated with buildings, services and structures.

Determination of boundaries

- Determine the position of all boundaries, with respect to existing boundaries, lines of occupation, interests, and property rights.
 - Determine the positions of natural boundaries (water or irregular).
 - Describe the process to correctly define permanent structure boundaries.
 - Explain the need to balance the interests of all affected parties in relation to boundary definition when defining and describing interests in land.
-

Land Information Systems

- Apply knowledge of survey information, survey data sources and systems to access, retrieve, and interpret land information relevant to cadastral surveying and the subdivision of land.
 - Determine the inherent limitations of different sources of data, how to interpret the data correctly, and how to apply methods of analysis to determine if the sourced data is correct.
 - Use digital spatial and attribute data effectively and present it unambiguously.
-

Statutory Planning Process

- Explain the current legislation, and the relevant statutory and regulatory documents, that affect the subdivision of land.
 - Interpret regulatory planning documents as they relate to the subdivision of land.
 - Interpret the conditions of a subdivision consent and discuss the processes and evidence required to satisfy them.
-

Competency Description

Land Development Engineering Principles

- Describe the basic principles of soil properties, land stability, inundation, and other natural hazards, as they relate to the ability to subdivide land.
 - Describe the basic principles of earthworks, access, roads, wastewater and stormwater drainage, water supply systems, and the provision of utility services as they relate to the subdivision of land.
 - Describe the different regulatory documents that control the provision of access and services to a subdivision.
 - Correctly define the boundaries of all titles, easements and other rights or restrictions to ensure the proper extent of ownership and protection of rights associated with the constructed works.
-

Professional Conduct

- **Describe what it means to always act professionally and honestly to maintain public confidence in the cadastral survey and land tenure systems. This includes acknowledging limits of personal knowledge or expertise and seeking help when required.**
 - **Describe what it means to actively supervise, and be responsible for, work undertaken on a cadastral survey by any other person under the direction of a licensed cadastral surveyor.**
 - **Describe the benefits of professional development in relation to cadastral surveying and how to apply systems to ensure this remains ongoing.**
 - Apply systems of professional practice management and effective quality assurance to all aspects of a cadastral survey to ensure compliance with the Surveyor-General's Rules.
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Communication *(oral only)*

- Communicate clearly and concisely in English.
 - Communicate professionally at a level appropriate to the audience.
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20. Flowchart for Professional Interview

The flowchart below illustrates the process for the Professional Interview.

