

# NOVA SCOTIA LAND SURVEYORS

## HANDBOOK FOR CANDIDATE MEMBERS



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The aim of this handbook is to identify the requirements that must be satisfied to gain a license as a Nova Scotia Land Surveyor.

Herein are set out:

- a. A brief introduction to land surveying and the role of the Association of Nova Scotia Land Surveyors;
- b. The examination and qualifying structure as dictated by the land Surveyors Act & Regulations, Association legislation, by the Council & Board of Examiners of the Association and the Canadian Board of Examiners for Professional Surveyors (CBEPS);  
[www.cbeps-cceag.ca](http://www.cbeps-cceag.ca).
- c. The syllabus of the CBEPS examinations;
- d. The syllabus of jurisdictional examinations;
- e. Matters relating to the articling process and the admission of candidates as members of the Association.

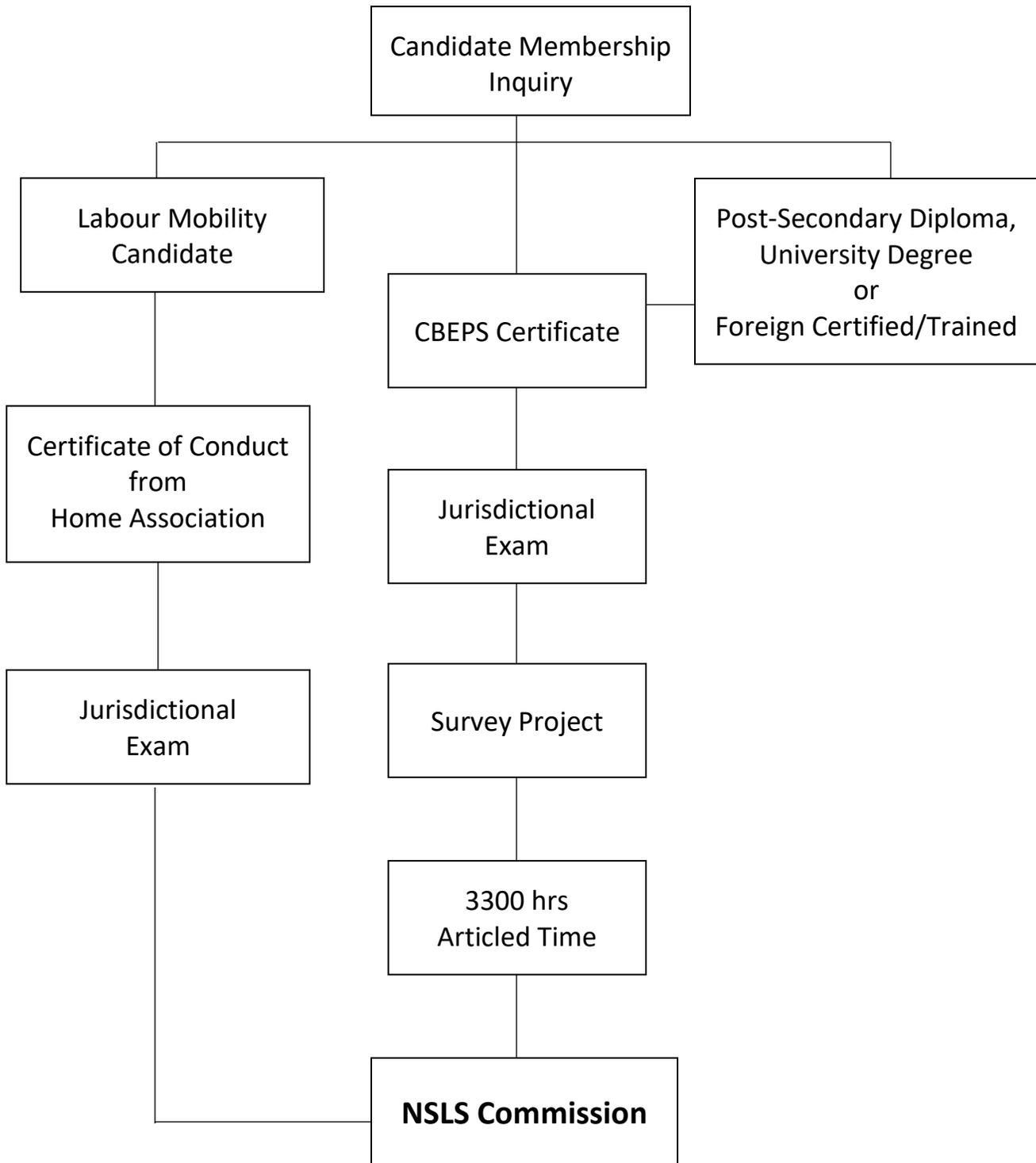
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### **FORMS**

- Candidate Membership Application
- Articling Agreement
- Affidavit of Articled Training

# BECOMING A NOVA SCOTIA LAND SURVEYOR



## **SURVEYING**

1. Surveying is a multidisciplinary occupation that offers an individual a challenging and rewarding career.
2. Surveyors are involved in property, deformation, control, topographic, hydrographic, aerial, construction, and as-built surveys. They determine differences in elevation over long distances, layout streets and roads, determine extent of title, gather land-related information, and manage geographic information systems.
3. Surveyors are employed with various Government departments at the Municipal, Provincial and Federal levels. Many work for large organizations, such as petroleum or utility corporations. Others operate their own businesses, which provide corporate or individual clients with a variety of services.
4. Surveyors in this province can qualify as Nova Scotia Land Surveyors under the authority of the Land Surveyors Act and are required to be members of the Association. A Land Surveyor is one with expertise related to land boundaries, the extent of real property, and development issues. He or she is consulted on matters involving boundaries, and may be retained by property owners, lawyers, engineers, planners, architects, or developers to advise and assist with various types of projects.
5. You must be a member in good standing with the Association of Nova Scotia Land Surveyors to offer an opinion on extent of title or place survey markers to position property boundaries.

## QUALIFICATIONS

1. The Association of Nova Scotia Land Surveyors, incorporated in 1951, is a self-governing body under the authority of the *Land Surveyors Act*, (Act), Chapter 38 of the Acts of 2010 (Section 3).
2. The Association is responsible for establishing and maintaining the standards of knowledge, skill and practice of its members in order to serve and protect the public interest (Section 4 of the Act).
3. Under the authority of Council of the Association, the Board of Examiners (Board) is established (Section 16 of the Act) and responsible for the registration of candidate members (Section 9, Regulations):  
*“The Board must register and record the name of a person in the candidate roster who does all of the following:*
  - a. *Pays the applicable registration fee;*
  - b. *Successfully completes an approved education program;*
  - c. *Enters an articling agreement.”*
4. Currently, the most direct route to become a licensed Nova Scotia Land Surveyor is as follows:
  - a) obtain a bachelor's degree in survey engineering or in survey science from a Canadian university that qualifies for a “certificate of completion” from CBEPS;
  - b) serve a stipulated period of articling time with a land surveyor practicing in Nova Scotia to the satisfaction of the Board; (section 41 (1 & 2) and Schedule “C” of the By-laws;
  - c) fulfil the jurisdictional examination requirements; and
  - d) complete a “survey project” as assigned and approved by the Board.
5. An applicant for admission as an active member of the Association must complete all the requirements as set out in item 4 above but in no particular order.
6. The routes open to those who wish to become Nova Scotia Land Surveyors are as follows:
  - a. Obtaining a university degree from an accredited university that would qualify for a “certificate of completion” from CBEPS; or,
  - b. Graduation from a technology-level program in surveying (eg. Geomatics Engineering Technology, NSCC Centre of Geographic Sciences, Annapolis Valley Campus, Lawrencetown, Annapolis County, NS) and completion of CBEPS examinations through home study; or
  - c. Application for membership via the Canadian Free Trade Agreement and the labour Mobility Agreement signed by the Canadian survey associations.
7. The candidate seeking a university degree should chose a university survey/geomatics program that has been accredited by CBEPS. A “certificate of completion” from CBEPS is still required to illustrate compliance with the academic requirements of the Board.

8. One graduating from a technology program might be able to receive some credit for advanced standing by an accredited university surveying program. This route should be investigated carefully by the student to ensure that the program credits are appropriate at all levels of academic training.
9. The Nova Scotia Board of Examiners has delegated to CBEPS the assessment of candidates in respect to the academic requirements for a certificate of completion.
10. The scheduling of examinations required by CBEPS normally takes place in March and October of each year. ([www.cbeps-cceag.ca](http://www.cbeps-cceag.ca))

## **CBEPS SYLLABUS**

### **Core Examinations**

C1 – Mathematics
C2 – Least Squares Estimation & Data Analysis
C3 – Advanced Surveying
C4 – Coordinate Systems & Map Projections
C5 – Geospatial Information Systems
C6 – Geodetic Positioning
C7 – Remote Sensing & Photogrammetry
C8 – Cadastral Studies
C9 – Survey Law
C10 – Land Use Planning & Economics of Land Development
C11 – Business Practices & the Profession
C12 - Hydrography

### **Elective Examinations (1 required)**

E1 – Spatial Databases & Land Information Systems
<del>E2 – Hydrography, now moved to Core Examinations</del>
E3 - Environmental Management
E4 – Advanced Remote Sensing
E5 – Advanced Photogrammetry

11. A copy of the schedule and syllabus of examinations, and information about registration and fees, may be obtained from:  
The Registrar  
Canadian Board of Examiners for Professional Surveyors  
900 Dynes Road, Suite 100E  
Ottawa, ON, K2C 3L6  
[www.cbeps-cceag.ca](http://www.cbeps-cceag.ca)

12. Examinations listed above are those which have been delegated to CBEPS pursuant to Regulation 12(b).
13. CBEPS issues a “certificate of completion” to candidates who have passed or received exemption from the syllabus of examinations.
14. Candidates who have university degrees or university credits should submit their transcripts to CBEPS for evaluation. Credits may be given for university courses successfully completed that satisfy the CBEPS syllabus.
15. Candidates wishing to article with a Nova Scotia Land Surveyor need to apply for candidate membership and enter into an articling agreement with a land surveyor.
16. If a Certificate of Completion from CBEPS has not been completed prior to articling, the candidate is advised that priority be given to completing the CBEPS syllabus.

#### Surveyors Commissioned in Other Jurisdictions

17. An applicant possessing a valid and subsisting license from a professional survey association in Canada should communicate directly with the NS Board of Examiners. Professional Surveyors Canada, under the Free Trade Agreement, has developed a Mutual Recognition Agreement on Labour Mobility for Land Surveyors in Canada which establishes a uniform standard within Canada for registration as a land surveyor. Land surveyors who are registered in one province may seek registration in another province by making an application, being in good standing in their home association and passing a jurisdictional examination. (Regs. Section 13).

#### Formal Training

18. In Canada there are presently three accredited degree-programs in surveying which offer academic training at the professional level for CBEPS accreditation, of which are:
  - University of Calgary -- Geomatics Engineering
  - University of New Brunswick, Fredericton -- Geodesy and Geomatics Engineering
  - York University - Lassonde School of Engineering, Toronto
19. There are other universities, technical and community colleges which provide academic training in surveying at the technician and the technologist level. The NSCC Centre of Geographic Sciences, Annapolis Valley Campus, Lawrencetown, is the only one in Nova Scotia. It offers a 1-year technician and a two-year technologist diploma in the Geomatics Engineering Technology program.

#### Continuing Education

20. A commission as a land surveyor is not the end of professional education and training. Changes in technology, law and professional practice require continuous study and attention.
21. The Association of NS Land Surveyors maintains a professional development program as outlined in section 36 of the By-Laws.

# **JURISDICTIONAL EXAMINATION AND SURVEY PROJECT**

## General

1. The Association exams includes:
  - Jurisdictional (Statute Law of Nova Scotia, Land Surveyors Act, Regulations, By-laws and Code of Ethics & Standards of Practice)
  - Survey Project
2. The syllabus of each examination and the requirements pertaining to such are in the pages that follow.
3. Candidates must have the approval of the Board before sitting the jurisdictional examination.

## Frequency and Location

4. Examinations are held at least once a year or as demand requires.
5. They are normally written in the Association boardroom.

## Notice

6. Candidates are provided with at least two months' notice of a writing date.

## Fees

7. Examination and review fees are set by the Secretary of the Board and payable to the Association.
8. There is no fee associated with the survey project, however, the candidate must bear the costs of the project.

## Review

9. A request for the review of an examination can be made with the Secretary of the Board.

## **JURISDICTIONAL EXAMINATION**

### Purpose

1. This examination enables the Board to verify that the candidate has an understanding and knowledge of those statutes of Nova Scotia which relate to the practice of land surveying as well as Association legislation.

### Method

2. The examination refers to Statute Law of Nova Scotia with text provided, Land Surveyors Act, Regulations, By-laws and Code of Ethics & Standards of Practice is written in a 3-hour sitting.
3. The examination is of the open-book variety; that is, the candidate is permitted to bring and use any reference material he or she wishes, including a laptop, but no outside contact is permitted.
4. The candidate's answer to each question must be supported by quoting the applicable Act or legislation with section, subsection and all or a portion of the text to support the reference.
5. A sample question with the proper answer thereto is:
  - Q. What are the survey requirements relating to blueberry commons?
  - A. Such area or areas ..... by the Department of Natural Resources.  
  
Blueberry Associations Act, Sec. 3(2)
6. No value will be given an answer, however correct otherwise, which is lacking the correct supporting authority.

### Pass Mark

7. Candidates must achieve a percentage of **70** or better to be successful in this examination.

### Credit

8. This examination is unique in its application to Nova Scotia. Credit for an equivalent examination in another jurisdiction will not be given.

## Open-Book Exam

9. This kind of examination more closely approaches real life practice. One looks up the law, particularly as it relates to detail -- one does not attempt to memorize.
10. The candidate should ensure that he or she understands the principles upon which the open-book examination is based: more questions can be asked in greater detail and a broader coverage of the topic can be obtained than with the closed-book approach.
11. The much larger number of questions ensures that the candidate who is unprepared cannot succeed by reading or studying the necessary material at the last minute. The open-book examination tends to reward the candidate who has read widely for understanding rather than memorizing.

## Syllabus

12. **Association related:** (as found on [www.ansls.ca](http://www.ansls.ca))  
Land Surveyors Act  
Regulations,  
By-laws,  
Code of Ethics  
Standards of Practice
13. **Provincial statutes** that have sections deemed relevant to land surveying (compiled April 2019). Notes: A detailed listing of the applicable sections along with text of the following Statutes, on which a candidate may be examined, are available in PDF format from the Association office.

## Reference

The following articles are somewhat dated but do refer directly to the surveying community. More information on professional ethics can be found on the internet.

Allred, G.K., "Professional Ethics -- The Missing Link to a Complete Education", The Canadian Surveyor, Vol. 39, No. 4, 1985, pp. 385-390.

Allred, G.K., "The Surveying Profession", Chapter 11 of Canadian Institute of Surveying and Mapping, Survey Law in Canada, (Toronto, Carswell Co., 1989), ISBN 0-459-33191-4.

Weir, C.H., "Professional Practice", The Canadian Surveyor, Vol. 40, No. 1, 1986, pp. 3-12

Available at ANSLS office in PDF

## Statute Index – April 2020

Age of Majority Act  
Agricultural Marshland Conservation Act  
Agriculture and Marketing Act  
Angling Act  
Apology Act  
Assessment Act  
Beaches Act  
Beaches and Foreshores ACT  
Blueberry Association Act  
Canadian Free Trade Agreement Implementation Act  
Cemetery and Funeral Services Act  
Common Fields Act  
Companies Act  
Condominium Act  
Conservation Easements Act  
Conveyancing Act  
Crown Lands Act  
Ditches and Water Courses Act  
Electronic Commerce Act  
Engineering Profession Act  
Environment Act  
Escheats Act  
Evidence Act  
Expropriation Act  
Fair Registration Act  
Land Actions Venue Act  
Land Titles Clarification Act  
Land Registration Act  
Marketable Titles Act  
Matrimonial Property Act  
Mineral Resources Act  
Mining Companies Easements Act  
Municipal Government Act  
Notaries and Commissioners Act  
Nova Scotia Power Privatization Act  
Occupational Health and Safety Act  
Partition Act  
Petroleum Resources Act  
Pipeline Act  
Private Ways Act  
Provincial Parks Act  
Public Highways Act  
Public Trustee Act  
Public Utilities Act  
Quieting Titles Act  
Railways Act  
Registry Act  
Regulations Act  
Sale of Land under Execution  
Special Places Protection Act  
Statute of Frauds  
Survivorship Act  
Trails Act  
Wharves and Public Landings Act  
Wills Act

**Subject to edits as revised by NS legislature.**

## **SURVEY PROJECT**

### **Assignment and Presentation**

1. The survey project is assigned by the Board towards the end of the candidate's period of articulated training and the candidate has two years to complete the survey project. This 2-year period begins on the date the Board issues an “order of survey” for the candidate’s project. The candidate should also submit an update to the Board on the progress of the survey within the first year or upon 50% completion.
2. Selection of the project site will be at the discretion of the Board.
3. The lands assigned may be either publicly or privately owned but shall be charitable or non-profit in nature, e.g. church, public lands, cemetery, park, community center or similar.
4. Prior to starting the project, the candidate will provide to the Board a detailed estimate of;
  - i. the number of hours to complete the survey,
  - ii. the estimate cost to complete the survey as if the candidate is carrying out the survey for profit and
  - iii. the deliverables that will be provided to the Board upon completion of the project (four copies in binders).
5. Survey markers shall not be placed during the course of the retracement survey.
6. The owners and abutters of the property shall be notified by the candidate that a candidate survey project, not a legal survey, is proposed.
7. The report of survey should be an exposition of methods employed, evidence found and the sources of same, searches made and with what success, and decisions taken with the reasons for same.
8. The survey, the resulting plan(s) and the report must be the candidate's work, not a reflection of the views and ideas of others who have been invited to express an opinion or to suggest approaches.
9. A property description of the subject area as well as well as a final invoice for the project is required
10. The candidate is responsible for any costs incurred during the survey for materials, labour, transportation, searching fees, etc.
11. The survey will be conducted in accordance with the provisions of the Act, Regulations thereunder and Standards of Practice.

12. The project will be reviewed and rated by three special examiners appointed by the Board.
13. The candidate will furnish the Board with four complete sets of the plan(s), description(s), report of the completed project and supporting documentation
14. The candidate will provide to the board, as part of the report, a representative invoice for the survey services associated with the survey. The invoice will show in detail the number of hours for each segment of the survey, the rates charged for the various classifications of service providers, the rates charged for equipment used and for all consumables. The report will include justification of the rates and incorporate all direct and overhead costs.
15. The Board, in appointing special examiners, will specify the senior member who will be responsible to the Board for organizing and coordinating the work to be done.
16. The special examiners should be prepared to meet as a group within one month of being designated to review a candidate's project. At this meeting, the candidate will be present and be prepared to defend the survey and report.
17. Candidates are encouraged to contact the Association office to review previous projects, so that they are made aware of what is expected to be presented.

## EXAMINATION INSTRUCTIONS

1. No persons other than candidates and the presiding officer are permitted in the examination room.
2. No candidate will be allowed to enter the examination room and commence writing after the commencement of the examination without the consent of the presiding officer.
3. No candidate shall be permitted to commence writing after another candidate has left the examination room unless the presiding officer is satisfied that there has been no communication between the candidates.
4. The presiding officer may assign seats.
5. No material is to be brought into the examination by any candidate except by the direction of the examiner.
6. Candidates shall not communicate with each other during the writing of the any examination.
7. Candidates will use only the individual identifying number assigned to them by the presiding officer. This number will apply to all examinations written at one sitting.
8. Candidates should ensure their number is placed prominently in the upper right corner of any tables or pages enclosed in the examination booklets.
9. Candidates shall identify themselves only by the number assigned to them.
10. Extension of time, owing to late arrival, may be granted a candidate at the discretion of the presiding officer.
11. Candidates who accept an examination paper will be considered to have attempted the examination even though they may write nothing.
12. If any question in an examination appears to be lacking in an essential, the candidate may repair the deficiency by means of an assumption, providing the assumption is stated at the beginning of the solution or answer.
13. Warning will be given fifteen minutes before the time fixed for closing the examination. When the papers are later called for, candidates must immediately cease writing.

## EXAMINATION TECHNIQUES

1. The following guidelines or suggestions are not intended to be a substitute for knowledge of a subject.
2. They are designed to help candidates deal with formal written examinations in such a way as to demonstrate to best advantage their understanding of the matters at issue. These techniques relate to method and system, not to content.
  - a. Make an assessment of the time available:
    - (i) allocate time for read-in, for response to questions and for review;
    - (ii) divide the response period according to the value of the individual questions;
    - (iii) mark opposite each section how much time you can afford to respond to it.
  - b. Check periodically that you are following the time schedule.
  - c. Follow examination instructions, eg. if "right-hand pages are for answers and the left for rough work," then conform. Ignoring instructions will probably not alone cause failure on an examination, but it may put the examiner in an unsympathetic frame of mind.
  - d. Respond first to the easy questions or those you know best. Leave the others for later.
  - e. Answer the question that has been asked, not the question you wish had been asked.
  - f. Organize your answer using rough notes before responding to a question. This is what left-hand pages are normally for.
  - g. Make sure you understand the words and phrases used in the questions.
  - h. Don't run overtime by answering at length a question that appeals to you. Having answered fully, more information will not give you more marks.
  - i. On the other hand, don't leave too much to the examiner's imagination. He or she cannot be expected to interpret cryptic phrases or obscure or indirect references. Examiners are normally on your side, but you've got to give them something to work with.
  - j. Keep to your time schedule; don't get bogged down on a difficult or complex point.
  - k. If time begins to run out, say so and sketch your answer to a particular question in outline; then come back if time permits and expand it.
  - l. Make sure all "add-on" sheets bear your identifier and that all are placed in the examination booklet.

- m. Check the total of your examination booklets; be sure you hand in all your work.
  - n. Leave time for review.
  - o. Spend some time before the examination addressing questions on previous examinations and study the form of the exams.
  - p. Unless you know this pays off for you, don't stay up late cramming and reviewing the night before. Most people do better (assuming regular study and thought ahead of time) by watching a movie or indulging in some other harmless diversion.
3. Most importantly, take a positive attitude toward examinations. Look at them as an opportunity to demonstrate mastery of a subject.

## ARTICLED TRAINING

### General

1. A candidate must be a candidate member of the Association in order to become articulated.
2. It is the candidate's responsibility to find a practicing land surveyor to whom he or she can be articulated. Opportunities for articling exist among surveyors in private practice, in corporations, and in government employ at federal, provincial or municipal levels.
3. The fundamentals of articling are set out in the By-Laws Section 41 (2) & Schedule "C"
4. A Candidate Membership Application for registration is made to the Secretary. It must be accompanied by a copy of the Articling Agreement, unless this form has been forwarded beforehand, and evidence of both the educational standing and good character of the applicant.
5. An official transcript of marks, diploma or degree is normally acceptable as verification of education standing. An official transcript is one that has been sent directly to the Secretary by the educational institution at the request and at the expense of the applicant.
6. Two letters of reference are normally acceptable as evidence of good character. The persons writing the letters should state their connection with the applicant and say something of their own background or occupation, eg. family friend, member of clergy, professional associate.
7. A Candidate Membership Application and the Articling Agreement should be submitted promptly after having been completed. The Board will only count as articulated training time a period not exceeding 30 days before the receiving date of the Articling Agreement.

### License in Other Association

8. An applicant with a valid license from another professional survey association in Canada may apply for membership under the labour Mobility Agreement as directed by the Canadian Free Trade Agreement. The host association will require a certificate of conduct from the applicant's home association. The applicant will also be required to write the Jurisdictional Examination. No articulated time is required.

### Length of Articled Training

9. **Candidate members, other than those described in item 8 above, must serve articulated training as described in Schedule "C" of the Association's By-laws. Section 41(1) & (2) of the By-laws also deals with the Board's responsibilities and articles.**

10. A candidate member may article with successive members, but only one member at time.

#### Commencement of Articled Training

11. Prior to the commencement of articled training, the following matters should be discussed by the prospective candidate member and the surveyor:
  - a. The articling and training process;
  - b. The additional responsibilities, beyond those normally existing between employer and employee, which apply to those joined by the Articling Agreement;
  - c. The surveyor's capacity to provide the range of experience needed; and
  - d. The candidate's capacity to meet expectations.

#### Surveyor's Responsibilities

12. The candidate must receive adequate training and experience in the fields of surveying in which the surveyor is competent.
13. The surveyor is personally responsible for the day-to-day training activities of the candidate.
14. The surveyor must assist the candidate to obtain well-rounded training and experience. This may require the transfer of articled training to another surveyor if deemed appropriate.
15. The surveyor has a duty to instruct and inform the candidate member which goes beyond providing the minimum information needed to get a particular job done.
16. The surveyor should be aware that articling presents an opportunity to improve his or her understanding of matters in which the candidate member may be particularly proficient by reason of academic training or previous experience.

#### Candidate Member's Responsibility

17. The candidate member must develop the capacity to accept increasing responsibility as articled training progresses.
18. The individual's academic training should be related to the practicalities of surveying, technical expertise must be related to problems at hand, and logical, informed decisions must be made both in the office and in the field.

19. As articulated training progresses, the candidate member will find that his or her responsibilities will require thought, action and attention beyond a nine-to-five routine.
20. A daily journal of work done must be kept for the preparation of the report of articulated training and the Affidavit of Articled Training form.
21. Each page of the report of articulated training must bear the imprint of the surveyor's stamp and/or initials of the member to whom he or she is articulated with. A spreadsheet program can be useful in the tabulation of time.

#### Guidelines for Work Experience

22. In addition to instruction in the principles and practice of surveying, the surveyor should help the candidate member develop a progressive appreciation and understanding of the elements involved in operating a business. The principal ones are noted below.
23. Record keeping: filing; retrieval; database management and the like.
24. Public relations: communication with clients, members of the public, other members of the profession, members of other professions and employees.
25. Finances: job estimating; cash flow; federal and provincial taxes; overhead; depreciation; Work-in-progress; fixed assets; profit margin; elements of the professional fee.
26. Management: scheduling office and field activities; group life and medical insurance; workers' compensation; equipment and project insurance; leasing; liability insurance; quality control; safety; staff relations.

#### Admission to Membership

27. Once all parts of the candidate's training and examinations have been completed, the candidate member will be informed by the Board of the eligibility of active membership.
28. If not done beforehand, a copy of the applicant's birth certificate or photo identification must be furnished to the Board as proof that the age of majority has been attained.
29. The fee payable shall be the active membership fee for the current year, pro-rated for the balance of the fiscal year plus any assessment or levy payable under the by-laws,
30. The oath prescribed for a Nova Scotia Land Surveyors shall be administered by a member of the Board of Examiners or by a member of the Association specifically designated by the Board for that purpose.

## Schedule "C" from By-laws

### TERMS OF REFERENCE FOR ARTICLES

#### **General**

The period of articles shall include 24 months of acceptable professional land surveying work experience based on the *Guidelines* and *Elements* stated below. The 24 months of experience assumes a minimum of 3300 hours that must be totaled, signed off by the Nova Scotia Land Surveyor and submitted to the Board. The Nova Scotia Land Surveyor only signs off on the articles when he/she feels that the candidate has acquired the appropriate level of experience to obtain active membership. For a minimum of 50% of the 24 months a Candidate shall be in a supervisory position or role. The objective of this work experience is to ensure that all candidates gain acceptable experience that is practical and varied, and to allow them to progress to the level of maturity required to make reliable professional judgments

#### **Guidelines**

##### 1. Application of Theory

The skillful application of theory is an important component of professional land surveying. Experience should include active participation in and supervision of:

- (a) project research and analysis, including scope and operating conditions, safety and environmental issues, economic feasibility, technical merit;
- (b) collection and assessment of field evidence;
- (c) applying technical and legal solutions;
- (d) making final project decisions in a practical and timely manner;
- (e) delivering final product and managing finances/budget.

##### 2. Practical Experience

The Candidate may gain experience by:

- (i) Attending work sites, locating and assessing evidence, taking measurements, setting out positions, dealing with clients, regulatory authorities and the public;
- (ii) Conducting research at relevant locations, and applying statutes and regulations to projects;
- (iii) Observing and participating in all record keeping requirements and practices including field notes and project files;
- (iv) Reading and understanding the legal aspects of relevant contracts and ensuring the terms are followed;
- (v) Achieving an understanding of professional and business ethics and applying this understanding in his/her business practices;
- (vi) Gaining an insight into the importance of being part of a team and participating in a team environment.

3. Management

It is important that the candidate gain firsthand knowledge of management techniques by:

- (i) Ensuring that all aspects of a project assigned to him/her are effectively managed including cost, time, human resources, material, and equipment;
- (ii) Accurately estimating project costs, resources, and time,
- (iii) Dealing effectively with issues as they arise during the course of a project such as cost overruns, resource changes, and project/company priorities;
- (iv) Participating in the analysis of the collected information, the determination of conclusions and decisions on appropriate action to be taken.

4. Communications

The Candidate must learn to communicate (both oral and written) effectively with management, colleagues, clients, government regulators and the general public by:

- a. Presenting project status reviews and reports to management and peers;
- b. Actively participating in meetings;
- c. Preparing daily correspondence, record keeping, descriptions and final project reports;
- d. Becoming involved in Association activities.

5. Professional Practice

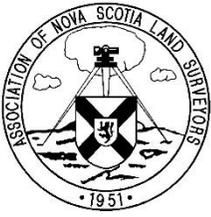
The Candidate should become familiar with the objects and purpose of the Association of Nova Scotia Land Surveyors and the societal role of Nova Scotia Land Surveyors by:

- a. Understanding the responsibilities in providing professional services;
- b. Understanding the benefits that the profession provides to the public;

**Elements of Experience**

The Candidate must gain experience in the following elements of professional land surveying using the associated minimum time (percentage) criteria. The Guidelines should be applied to these elements as applicable.

Element	Minimum Time Percentage
Boundary Retracement	20
Boundary Establishment	10
Technical Surveys (eg. Site, control, location certificates, etc)	10
Research and Analysis of Evidence	5
Preparation of Description of reports	5
Professional Development (eg. Client interaction, estimates, business management, etc)	5
Discretionary Practice (determined by the candidate and the member)	45
	<u>Total</u> 100



# THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

325-A Prince Albert Road, Dartmouth, Nova Scotia B2Y 1N5  
Tel: (902) 469-7962 E-mail: admin@ansls.ca

## CANDIDATE MEMBERSHIP APPLICATION

### PERSONAL

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_ Cell: \_\_\_\_\_

Email address: \_\_\_\_\_

Date of Birth: \_\_\_\_\_ Place of Birth: \_\_\_\_\_

### EDUCATION

School / University Attended	Location	Grade / Course Completed	Year
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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Diploma or Degree Attained \_\_\_\_\_

**ARTICLED CANDIDATE**  **LABOUR MOBILITY CANDIDATE**

Name and Address of Person Articled To:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## ARTICLING AGREEMENT

**Between** \_\_\_\_\_ The Nova Scotia Land Surveyor

**And** \_\_\_\_\_ The Candidate

### The Candidate agrees:

- to faithfully, and to the best of his/her ability, serve the Nova Scotia Land Surveyor in the practice of professional land surveying.
- to always act in accordance with the Code of Ethics.
- to keep confidential, the business and affairs of the Nova Scotia Land Surveyor and his/her clients.

### The Nova Scotia Land Surveyor agrees:

- to instruct the candidate, or cause him/her to be instructed, in the practice and professional land surveying in accordance with the Land Surveyors Act, Regulations, By-laws and Standards with the approval of the Board of Examiners.
- to be personally responsible for the training given and experience received as required by the Board of Examiners.
- to review and verify any terms of articles completed in part or in whole for approval by the Board of Examiners.

### The Nova Scotia Land Surveyor and the Candidate agree that:

This agreement does not preclude any other arrangements between the Nova Scotia Land Surveyor and the Candidate as to employment or such additional terms as the parties may agree to, in writing, and do not contradict the above provisions.

SIGNED in the presence of:

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Nova Scotia Land Surveyor

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Candidate

Approved by the Board of Examiners

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
For the Board of Examiners

# Affidavit of Articled Training

## Affidavit by the Surveyor

1. I, \_\_\_\_\_, Nova Scotia Land Surveyor, of \_\_\_\_\_ do solemnly swear that \_\_\_\_\_ has served regularly and faithfully with from the \_\_\_\_\_ day of \_\_\_\_\_, that he/she has been engaged with me in field and office practice related to the surveys listed on the attached sheet(s) which bear(s) the imprint of my professional stamp and /or my initials, and that the said \_\_\_\_\_ has always conducted himself / herself with all due diligence and honesty on the said surveys.

Subscribed and sworn to

before me at \_\_\_\_\_

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Commissioner of Oaths **or**  
Nova Scotia Land Surveyor

\_\_\_\_\_  
Nova Scotia Land Surveyor

**Affidavit by the Articled Candidate**

2. I, \_\_\_\_\_, of \_\_\_\_\_,  
make oath and say:

- a. That I am of the age of majority.
- b. That I have served regularly and faithfully with \_\_\_\_\_,

Nova Scotia Land Surveyor as an articled candidate from the

\_\_\_\_ day of \_\_\_\_\_, 20\_\_ to the

\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

- c. That I have been engaged with the said \_\_\_\_\_ in  
field and office practice related to the surveys herein set out.

Subscribed and sworn to

before me at \_\_\_\_\_

this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Commissioner of Oaths ***or***  
Nova Scotia Land Surveyor

\_\_\_\_\_  
Candidate member

**Confirmation by the Board**

3. These affidavits have been accepted by the Board of Examiners

this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Chairman or Secretary