LC004635

## 2018 -- S 2335

# STATE OF RHODE ISLAND

### IN GENERAL ASSEMBLY

#### JANUARY SESSION, A.D. 2018

### AN ACT

#### RELATING TO BUSINESSES AND PROFESSIONS -- LAND SURVEYORS

Introduced By: Senators Sosnowski, Lynch Prata, Crowley, Felag, and Coyne

Date Introduced: February 15, 2018

Referred To: Senate Commerce

It is enacted by the General Assembly as follows:

- SECTION 1. Section 5-8.1-9 of the General Laws in Chapter 5-8.1 entitled "Land
   Surveyors" is hereby amended to read as follows:
- 3

# 5-8.1-9. Board of registration for professional land surveyors -- Application and

- 4 **<u>qualification for registration.</u>**
- 5 (a) (1) Application for registration as a professional land surveyor or certification as a

6 surveyor-in-training shall be made, in writing, on a form prescribed and furnished by the board of

- 7 land surveyors. The application shall:
- 8 (i) Contain statements made under oath;
- 9 (ii) Show the applicant's education;

10 (iii) Contain a detailed summary of the applicant's technical and professional experience;

11 and

12 (iv) Designate references as described in this section.

(b) The fee established in § 5-8.1-11 must accompany each application. Failure to include
this fee will result in the application being returned to the applicant without consideration by the
board.

16 (c) To be eligible for registration as a professional land surveyor, an applicant must be of 17 good character and reputation. Additionally, the applicant must submit five (5) references with 18 his or her application, three (3) of which are from registered professional land surveyors having 19 personal knowledge of his or her land surveying experience. No person seeking his or her initial registration as a professional land surveyor shall be granted the certificate without first completing a surveyor-in-training program as prescribed and approved by the board <u>and pass an</u> examination in the fundamentals of land surveying. Upon passing that examination the applicant is granted a surveyor-in-training certificate in this state.

5 (d) To be eligible for certification as a surveyor-in-training, an applicant must be of good 6 character and reputation substantiated by an interview with a quorum of the board of registration 7 and additionally must submit three (3) character references one of which must be from a 8 professional land surveyor.

9 (e) One of the following shall be considered as minimum evidence to the board that the 10 applicant is qualified for registration as a professional land surveyor or for certification as a land-11 surveyor-in training, respectively:

12 (i) Graduation from a four (4) year survey degree program, experience and examination. 13 A graduate of a four (4) year survey degree program may be admitted to an examination in the 14 fundamentals of land surveying. Upon passing that examination the applicant is granted a 15 surveyor in training certificate in this state. After receiving the surveyor in training certificate the 16 applicant will need a specific record of a minimum four (4) years of experience in land surveying. 17 This verified experience shall be under the direct supervision of a registered professional land 18 surveyor, satisfactory to the board and shall be broken down as follows. At a minimum twenty 19 percent (20%) shall be field experience, twenty percent (20%) shall be research, deed evidence, 20 reconciliation, etc. and twenty percent (20%) shall be property line calculations and 21 determination. Once the experience has been deemed satisfactory to the board, the applicant may 22 be admitted to an examination in the principles and practice of land surveying plus an additional 23 Rhode Island legal portion. Upon passing that examination, the applicant is granted a certificate 24 of registration to practice land surveying in this state, provided the applicant is qualified.

25 (ii) Graduation from a four (4) year degree program, experience and examination. A 26 graduate of a four (4) year degree program applicant who has also fulfilled the four (4) year core 27 curriculum (see paragraph (iii) below subsection (h) of this section) may be admitted to an 28 examination in the fundamentals of land surveying. Upon passing that examination the applicant 29 is granted a surveyor-in-training certificate in this state. After receiving the surveyor in-training 30 certificate the applicant will need a specific record of a minimum five (5) years of experience in 31 land surveying. This verified experience shall be under the direct supervision of a registered 32 professional land surveyor, satisfactory to the board and shall be broken down as follows: At a 33 minimum twenty percent (20%) shall be field experience; twenty percent (20%) shall be research, 34 deed evidence, reconciliation, etc. and twenty percent (20%) shall be property line calculations and determination. Once the experience has been deemed satisfactory to the board, the applicant may be admitted to an examination in the principles and practice of land surveying plus an additional Rhode Island legal portion. Upon passing that examination, the applicant is granted a certificate of registration to practice land surveying in this state, provided the applicant is qualified.

(iii) Four (4) year core curriculum. An applicant with a four (4) year degree as described 6 in paragraph (ii) above may need to take additional courses to fulfill, at a minimum, the following 7 8 core curriculum. For the following list of classes any equivalent class may be taken and any 9 survey related course may be substituted upon approval of the board: 10 (A) Surveying I (3 credit hours), Surveying II (3 credit hours). 11 (B) GPS & Geodetic control (3 credit hours). 12 (C) Photogrammetry and remote sensing (3 credit hours). 13 (D) Boundary adjustment computations (3 credit hours). 14 (E) Land development/planning (3 credit hours). 15 (F) Geographic/land information systems (3 credit hours). 16 (G) Physics I with lab (4 credit hours). 17 (H) Calculus I (4 credit hours), Calculus II (4 credit hours). 18 (I) Statistical analysis (3 credit hours). 19 (J) Law (12 credit hours): boundary law, law of contracts, law of property, estates & 20 trusts, professional ethics. 21 (K) Business (9 credit hours): Quantitative business analysis I, business administration, 22 small business management, micro economics. 23 (L) Science (9 credit hours): geology, astronomy, soils, dendrology, chemistry, biology, 24 ecology. 25 (M) Computer usage (12 credit hours): introduction to computers, computer science, 26 computer programming, AutoCAD basics, AutoCAD advanced. 27 (N) English composition (3 credit hours). 28 (O) Advanced communication (6 credit hours): technical writing, creative writing or 29 speech. 30 (iv)(iii) Graduation from a two (2) year survey degree program, experience, and 31 examination. A graduate of a two (2) year survey degree program may be admitted to an 32 examination in the fundamentals of land surveying. Upon passing that examination the applicant 33 is granted a surveyor in training certificate in this state. After receiving the surveyor in training 34 certificate the applicant will need a specific record of a minimum six (6) five (5) years of verified

1 experience in land surveying. (Four (4) of the years of experience shall be after receiving a 2 surveyor in training certificate). All six (6) five (5) years of experience shall be under the direct 3 supervision of a registered professional land surveyor, satisfactory to the board and shall be 4 broken down as follows: At a minimum twenty percent (20%) shall be field experience, twenty 5 percent (20%) shall be research, deed evidence, reconciliation, etc. and twenty percent (20%) shall be property line calculations and determination. Once the experience has been deemed 6 7 satisfactory to the board, the applicant may be admitted to an examination in the principles and 8 practice of land surveying plus an additional Rhode Island legal portion. Upon passing that 9 examination, the applicant is granted a certificate of registration to practice land surveying in this 10 state, provided the applicant is qualified.

11 (v)(iv) Graduation from a two (2) year degree program, experience, and examination. A 12 graduate of a two (2) year degree program applicant who has also fulfilled the two (2) year core 13 curriculum (see paragraph (vi) below subsection (h) of this section) may be admitted to an 14 examination in the fundamentals of land surveying. Upon passing that examination the applicant 15 is granted a surveyor in training certificate in this state. After receiving the surveyor in training 16 certificate the applicant will need a specific record of a minimum seven (7) five (5) years of 17 verified experience in land surveying. (Four (4) of the years of experience shall be after receiving 18 a surveyor-in-training certificate). All seven (7) five (5) years of experience shall be under the 19 direct supervision of a registered professional land surveyor, satisfactory to the board and shall be 20 broken down as follows: At a minimum twenty percent (20%) shall be field experience; twenty 21 percent (20%) shall be research, deed evidence, reconciliation, etc. and twenty percent (20%) 22 shall be property line calculations and determination. Once the experience has been deemed 23 satisfactory to the board, the applicant may be admitted to an examination in the principles and 24 practice of land surveying plus an additional Rhode Island legal portion. Upon passing that 25 examination, the applicant is granted a certificate of registration to practice land surveying in this 26 state, provided the applicant is qualified.

(vi) Two (2) year core curriculum. An applicant with a two (2) year degree as described
in paragraph (v) above may need to take additional courses to fulfill, at a minimum, the following
core curriculum. For the following list of classes any equivalent class may be taken and any
survey related course may be substituted upon approval of the board:

31 (A) Surveying I (3 credit hours), Surveying II (3 credit hours).

32 (B) Mathematics (12 credit hours): advanced algebra, analytical trigonometry, analytical
 33 geometry, spherical trigonometry, statistical analysis or quantitative business analysis I,
 34 Analytical trigonometry and analytical geometry are mandatory classes to fulfill the (12 credit

- 1 hours).
- 2 (C) Business and law (6 credit hours): legal principles, business administration, law of
   3 contracts, law of property, estates & trusts, professional ethics.
- 4 (D) Science (6 credit hours): physics, geology, astronomy, soils, dendrology, chemistry,
  5 biology, ecology.
- 6 (E) Computer usage (6 credit hours): introduction to computers, computer science,
   7 computer programming, AutoCAD basics, AutoCAD advanced.
- 8

(F) English composition (3 credit hours).

9 (G) Advanced communication (6 credit hours): technical writing, creative writing or
 10 speech.

11 (vii) Graduation from a two (2) year program, experience and examination. Any person 12 obtaining a minimum of five (5) years experience under the supervision of a registered professional land surveyor, and is satisfactory to the board, may be admitted to an examination in 13 14 the fundamentals of land surveying. Upon passing that examination the applicant is granted a 15 surveyor in training certificate (LSIT), in this state provided the applicant is qualified. Upon 16 obtaining a specific record of a minimum of an additional five (5) years of experience of combined office and field experience satisfactory to the board in land surveying, which 17 18 experience was under the direct supervision of a registered professional land surveyor, and which 19 experience indicates to the board that the applicant may be competent to practice land surveying, 20 and the person is a graduate of a land surveying or related curriculum of satisfactory standing, of 21 two (2) years or more approved by the board, who has obtained an associates degree in land surveying or related curriculum, the applicant may be submitted to an examination in the 22 23 principles and practice of land surveying plus an additional Rhode Island legal portion. Upon 24 passing that examination, the applicant is granted a certificate of registration to practice land 25 surveying in this state, provided the applicant is qualified. This subsection expires at midnight, 26 December 31, 2009.

27 (viii) In certain instances in which an applicant presents an experience of unusually high 28 quality, the board, at its complete discretion, may allow an applicant, having acquired six (6) 29 verified years of active office and field experience in land surveying, which experience has been 30 under the direct supervision of a professional land surveyor, to be admitted to an examination in 31 the fundamentals of land surveying. Upon passing those examinations, the applicant is granted a 32 surveyor in training certificate in the state. This subsection does not exempt the applicant from the required degree or the experience after obtaining the surveyor in-training certificate (LSIT). 33 (v) Experience, and examination. An applicant that has recorded a minimum of seven (7) 34

1 years verified experience and who has also fulfilled the core curriculum (see subsection (h) of this 2 section) will need a specific record of a minimum of seven (7) years of verified experience in 3 land surveying. All seven (7) years of experience shall be under the direct supervision of a 4 registered professional land surveyor, satisfactory to the board and shall be broken down as 5 follows: At a minimum twenty percent (20%) shall be field experience; twenty percent (20%) shall be research, deed evidence, reconciliation, etc. and twenty percent (20%) shall be property 6 7 line calculations and determination. Once the experience has been deemed satisfactory to the 8 board, the applicant may be admitted to an examination in the principles and practice of land 9 surveying plus an additional Rhode Island legal portion. Upon passing that examination, the 10 applicant is granted a certificate of registration to practice land surveying in this state, provided 11 the applicant is qualified .

(ix)(vi) Surveying teaching. Teaching of advanced land surveying subjects in a college or
 university offering an approved land surveying curriculum may be considered as land surveying
 experience satisfactory to the board.

15 (x)(y) Registration by comity or endorsement. A person holding a current certificate of 16 registration to engage in the practice of land surveying issued to him or her by a proper authority 17 of a state, territory, or possession of the United States, or the District of Columbia must have, at 18 the time they were licensed, met the existing Rhode Island requirements for licensure. All 19 applicants applying under this section must have passed the written examinations in the 20 fundamentals of land surveying and the principles and practice of land surveying. If, based upon 21 verified evidence and the opinion of the board, the applicant meets all appropriate requirements 22 of this section, the applicant will be allowed to take the Rhode Island legal portion. Upon passing 23 this examination the applicant shall be granted a certificate of registration to practice land 24 surveying in this state, provided the applicant is qualified.

(f) The passing grade on all examinations offered by the land surveyors is not less than seventy percent (70%). An applicant failing any examination may apply for re-examination upon payment of the appropriate fees. An applicant who scores less than fifty percent (50%) on any examination may not apply for re-examination for at least one year.

(g) An applicant who fails any of the exams three (3) times shall be interviewed by the board, before any further application can be acted upon. It is the applicant's responsibility to show the board that he or she will be successful if allowed to take the exam again. If in the board's opinion the applicant can not satisfactorily demonstrate that he or she is qualified to re-take the exam, the board may require that the applicant acquire additional knowledge, education, and or experience, satisfactory to the board before the applicant may sit for another exam.

1	(h) Core curriculum. An applicant with a four (4) year degree as described in subsection
2	(e)(ii) of this section, a two (2) year degree as described in subsection (e)(iv) of this section, or
3	experience as described in subsection (e)(v) of this section may need to take additional courses to
4	fulfill at a minimum, the following core curriculum. For the following list of classes any
5	equivalent class may be taken and any survey related course may be substituted upon approval of
6	the board:
7	(1) Surveying (six (6) credit hours). Surveying I or equivalent, Surveying II or equivalent.
8	Courses must cover topics of GPS & Geodetic control and boundary adjustment computations.
9	(2) Mathematics (nine (9) credit hours). Qualifying courses: Algebra, Trigonometry, Pre-
10	Calculus, or higher.
11	(3) Business and law (six (6) credit hours). Qualifying courses: boundary law, contract
12	law, property law, trusts and estates, professional ethics, quantitative business analysis I, business
13	administration, small business management, micro economics, accounting principles or related
14	<u>courses.</u>
15	(4) Science (nine (9) credit hours). Qualifying courses: physics, geology, astronomy,
16	soils, dendrology, chemistry, biology or ecology.
17	(5) Computer Usage (three (3) credit hours). Qualifying courses: introduction to
18	computer, computer science, computer programing, AutoCad basics, AutoCAD advantage,
19	geographic/land information systems, introduction to spreadsheets, or word processing.
20	(6) English composition, English composition II, technical writing, creative writing, or
21	speech (six (6) credit hours).

22 SECTION 2. This act shall take effect upon passage.

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### EXPLANATION

### BY THE LEGISLATIVE COUNCIL

### OF

# AN ACT

## RELATING TO BUSINESSES AND PROFESSIONS -- LAND SURVEYORS

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1 This act would streamline the application and examination process as well as the 2 educational and experience standards for applicants seeking registration as professional land 3 surveyors.

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This act would take effect upon passage.

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