21 NCAC 56 .0101 IDENTIFICATION
The North Carolina State Board of Examiners for Engineers and Surveyors is hereinafter referred to as "the Board."

History Note: Authority G.S. 89C-10;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; April 1, 1989; January 1, 1982.

21 NCAC 56 .0102 GENERAL PURPOSE OF BOARD

History Note: Authority G.S. 89C-2; 89C-10; 89C-13 to 89C-17; 89C-20 to 89C-23;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. January 1, 1982;

21 NCAC 56 .0103 ORGANIZATION
(a) Board Committees. The Board shall be organized into an engineering committee, a land surveying committee and a continuing professional competency (CPC) committee. The engineering committee shall consist of the four engineer members and one public member. The land surveying committee shall consist of the three land surveyor members and one public member. The CPC committee shall consist of one engineer member, one land surveyor member and one public member. The Board chair shall appoint the chairs and members of each committee.
(b) Executive Director. The executive director may be authorized by the Board or the chair to represent the Board before professional or governmental organizations when such representation serves to further and support the purposes of the Board and is made within the expressed policies of the Board or these Rules.
(c) Actions by the Board. Actions taken by the Board shall be by majority vote of a quorum of the Board.

History Note: Authority G.S. 89C-4; 89C-8; 89C-9; 89C-10; 89C-11;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. September 1, 2009; August 1, 2000; August 1, 1998; April 1, 1989; January 1, 1982.

21 NCAC 56 .0104 DESCRIPTION OF SEAL
The official seal adopted by the Board is the Great Seal of the State of North Carolina with the inscription of the Board name on the perimeter.

History Note: Authority G.S. 89C-10(b);
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; August 1, 1998; January 1, 1982.

SECTION .0200 - BOARD PERSONNEL POLICIES AND WORK PLAN
21 NCAC 56 .0208  SICK LEAVE
21 NCAC 56 .0209  COMPENSATORY TIME
21 NCAC 56 .0210  HOSPITALIZATION COVERAGE AND BENEFITS
21 NCAC 56 .0211  RETIREMENT COVERAGE AND BENEFITS
21 NCAC 56 .0212  SUBJECT TO CHANGE

History Note:  Authority G.S. 89C-4; 89C-5; 89C-6; 89C-9; 89C-11;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;

SECTION .0300 - INSTRUCTIONAL PROGRAMS

21 NCAC 56 .0301  POLICY
21 NCAC 56 .0302  FINANCES

History Note:  Authority G.S. 89C-10(g); 89C-11;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. January 1, 1982;

21 NCAC 56 .0303  DISBURSEMENT OF FUNDS
Funds for educational programs will be allocated and dispensed in the following manner:
   (1) Funds will be dispensed by vote of the Board after study and recommendation of each specific request
       by the appropriate committee of the Board.
   (2) The Board will consider requests for funds only from approved schools or professional organizations.
   (3) Requests will be considered for any use that will directly further engineering or surveying education
       and competence.
   (4) Requests for money shall be in writing and provide the following information:
       (a) The amount needed, or appropriate limits thereof;
       (b) Intended uses to be made of the requested monies;
       (c) Subject material to be presented with qualifications of instructors to be employed;
       (d) Itemized estimate of the total expected costs;
       (e) Source and amount of assistance being given by any other person or organization.

History Note:  Authority G.S. 89C-10(g); 89C-11;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;

SECTION .0400 - RECORDS AND REPORTS OF BOARD: RETENTION AND DISPOSITION

21 NCAC 56 .0401  RECORDS OF BOARD PROCEEDINGS
Records of all proceedings of the Board such as rule-making proceedings, declaratory rulings and contested cases and all
other records are retained at the office of the Board or are disposed of in accordance with the records retention and
disposition schedule filed with the Department of Cultural Resources.

History Note:  Authority G.S. 89C-10(a); 89C-12;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2011; August 1, 1998; April 1, 1989; January 1, 1982.

21 NCAC 56 .0402  RECORDS OF APPLICATIONS
All records of applications for licensure which are active are retained at the office of the Board. However, application files once submitted to the Board are Board property and are not returnable. During the time records are physically held in the Board office an applicant can obtain a copy of the application form by request to the Board office. Inactive applications shall be destroyed after one year after giving 30 day notice to the last known address of the applicant, upon approval of the Department of Cultural Resources in accordance with G.S. 121-5.

History Note: Authority G.S. 89C-10(a); 89C-12; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. July 1, 2009; August 1, 2000; January 1, 1982.

21 NCAC 56 .0403 APPLICATION FILES

History Note: Authority G.S. 89C-10(a); 89C-12; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. May 1, 1994; April 1, 1989; January 1, 1982; Repealed Eff. August 1, 1998.

21 NCAC 56 .0404 DESTRUCTION OF APPLICATION FILES
21 NCAC 56 .0405 REACTIVATION OF APPLICATION FILE

History Note: Authority G.S. 89C-10(a); 89C-12; Eff. February 7, 1976; Readopted Eff. September 29, 1977; Amended Eff. April 1, 1989; January 1, 1982; Repealed Eff. August 1, 1998.

SECTION .0500 - PROFESSIONAL ENGINEER

21 NCAC 56 .0501 REQUIREMENTS FOR LICENSING

(a) Education. The education of an applicant shall be considered in determining eligibility for licensing as a Professional Engineer. The terms used by the Board for the specific educational requirements to be eligible to be licensed as a Professional Engineer are defined as follows:

(1) “Engineering curriculum of four or more years approved by the Board” is defined as a program that has been accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET). This program is incorporated by reference including subsequent amendments and editions. This material is available at www.abet.org/accreditation-criteria-policies-documents/ or for inspection at the office of the North Carolina Board of Examiners for Engineers and Surveyors. Copies may be obtained at the Board office at a cost of five dollars ($5.00) per copy.

(2) “Engineering or related science curriculum of four or more years other than ones approved by the Board” is defined as a curriculum, although not accredited by ABET, of technical courses which contains engineering or scientific principles.

(3) “Equivalent education satisfactory to the board” is defined as:

(A) A graduate degree in Engineering from an institution in which the same discipline undergraduate engineering program has been accredited by ABET (EAC) shall be considered equivalent to an engineering curriculum of four or more years approved by the Board.

(B) A bachelor’s degree in Engineering Technology, whether or not accredited by the Technology Accreditation Commission (TAC) of ABET, shall be considered equivalent to an engineering or related science curriculum of four or more years other than one approved by the Board.

(C) Until June 30, 2016, an associate degree in an engineering related curriculum with an additional two years of progressive engineering experience shall be considered equivalent to an engineering or related science curriculum of four or more years other than one approved by the Board and may be used until that date as a basis for admission to the principles and
practice of engineering examination. Once admitted to the examination, an applicant may continue to re-take the examination until required to submit a new application as set out in Rule .0503 of this Section. After June 30, 2016 an associate degree shall no longer be used as a basis for admission to that examination, unless the individual has passed the fundamentals of engineering examination prior to June 30, 2016, in which case the individual may continue the process to take the principles and practices exam based upon the associate degree and it will not be necessary to qualify for admission to the principles and practice of engineering examination prior to June 30, 2016.

(D) Foreign degrees are considered equivalent only after receipt of an evaluation report that the degree is substantially equivalent to an EAC/ABET accredited engineering curriculum from the Center for Professional Engineering Education Services, an affiliate of the National Council of Examiners for Engineering and Surveying (NCEES), or from the American Association of Collegiate Registrars and Admissions Officers (AACRAO). The Board shall equate the degree to an EAC/ABET accredited engineering curriculum of four or more years approved by the Board in Subparagraph (a)(1) of this Rule if it receives a substantially equivalent evaluation.

(b) Experience. The experience of an applicant shall be considered in determining whether an applicant is eligible to be licensed as a Professional Engineer.

(1) Required Experience. In evaluating the work experience required, the Board shall consider the total experience record and the progressive nature of the record. Not less than half of required engineering experience shall be of a professional grade and character, and shall be performed under the responsible charge of a licensed Professional Engineer, or if not, a written explanation shall be submitted showing why the experience should be considered acceptable and the Board shall approve if satisfied of the grade and character of the progressive experience. Experience gained under the technical supervision of an unlicensed individual shall be considered if the appropriate credentials of the unlicensed supervisor are submitted to the Board. Experience gained in the armed services, usually while serving in an engineering or engineering related group, shall be considered if of a character equivalent to that which would have been gained in the civilian sector doing similar work.

(2) Definition. The terms "progressive nature of the record," "progressive engineering experience" or "progressive experience on engineering projects" mean that during the period of time that an applicant has made a practical utilization of acquired knowledge, continuous improvement, growth and development have been shown in the utilization of that knowledge as revealed in the complexity and technical detail of the work product or work record. The applicant shall show continuous assumption of greater individual responsibility for the work product over that period of time. The progressive experience on engineering projects shall be of a grade and a character that indicates to the Board that the applicant is competent to practice engineering.

(3) Specific Credit for Experience. In evaluating progressive engineering experience, the Board shall give credit for experience in the following areas of work:

(A) Graduate schooling or research in an engineering program resulting in award of a master's degree from an institution that offers EAC/ABET-accredited programs – one year;

(B) Graduate schooling or research in an engineering program resulting in award of an earned doctoral degree in engineering from an institution that offers EAC/ABET-accredited programs – two years, with or without a master's degree, but includes the one year for the master's degree, if obtained;

(C) Progressive land surveying - maximum two years; and

(D) Teaching of engineering subjects at the university level in an engineering program offering a four year or more degree approved by the Board.

The Board shall not accept combinations of the categories in this Subparagraph as fulfilling all the necessary statutory experience requirements. Every applicant for licensure as a Professional Engineer, as part of the total experience requirement, shall show a minimum of one year experience of a progressive engineering nature in industry, government, or under a licensed Professional Engineer offering service to the public. Full-time engineering faculty members who teach in an engineering program offering a four year or more degree approved by the Board, may request and shall be granted waiver of the minimum one year experience in industry, government, or private practice if they demonstrate consulting or research work of at least one year's
duration, which was pursued to fruition, and which is of a progressive engineering nature. The faculty applicant shall document the work and demonstrate that the work meets the Board's requirement.

(5) Other experience is considered if it is:
(A) Experience obtained prior to graduation as part of an ABET accredited engineering program shown on the transcript, with a maximum credit of one year; or
(B) Experience obtained in a foreign country that is performed under direct supervision of a Professional Engineer licensed with a member Board of the National Council of Examiners for Engineering and Surveying (NCEES).

History Note: Authority G.S. 89C-10; 89C-13; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2014; August 1, 2011; May 1, 2009; August 1, 2002; August 1, 2000; August 1, 1998; November 2, 1992; April 1, 1989; January 1, 1982.

21 NCAC 56 .0502 APPLICATION PROCEDURE: INDIVIDUAL
(a) General. A person desiring to become licensed as a Professional Engineer must make application to the Board on a form prescribed and furnished by the Board.
(b) Request. A request for an appropriate application form may be made to the Board office or obtained from the website.
(c) Applicable Forms:
(1) Engineer Intern Certification Form. After passing the fundamentals of engineering examination an applicant may make application to the Board to become certified as an "Engineer Intern." This form requires the applicant to set forth personal history, educational background, engineering experience, and character references. A passport-type photographic quality portrait that is adequate for current identification purposes is also required.
(2) Professional Engineer Form:
(A) All persons, including comity applicants and certified Engineer Interns, shall apply for licensure using the Professional Engineer form. The submission of this form shall signify that the applicant seeks licensure, and shall result in seating for the principles and practice of engineering examination, when the applicant has met the requirements as set out in Rule .0501 of this Section. This form requires the applicant to set forth personal and educational background, engineering experience and character references. A passport-type photographic quality portrait that is adequate for current identification purposes is required.
(B) Persons who previously completed the fundamentals examination by use of the Engineering Intern Certification Form shall submit the Professional Engineer Certification Form to request licensure when qualified to take the examination.
(3) Supplemental Form. Persons who initially applied for the fundamentals of engineering exam using the Professional Engineer form shall supplement the initial application with this form upon applying for the principles and practice examination. The supplemental form requires that engineering experience from the date of the initial application until the date of the supplemental application be listed. Five references shall be submitted that are current to within one year of the examination date.
(4) Reference Forms:
(A) Persons applying for certification as an Engineer Intern shall submit to the Board names of three individuals who are familiar with the applicant's work, character and reputation, one of whom is a professional engineer. Persons applying to take the examination for principles and practice of engineering shall submit to the Board names of five individuals who are familiar with the applicant's work, character and reputation. Three of these individuals shall be Professional Engineers.
(B) In addition to the applicant submitting names to the Board of individuals familiar with the applicant's work, character and reputation, those individuals listed shall submit to the Board their evaluations of the applicant on forms supplied to them by the applicant.
(C) The reference form requires the individual evaluating the applicant to state the evaluating individual's profession, knowledge of the applicant and information concerning the applicant's engineering experience, character and reputation.
The Board shall provide the reference forms to the applicant with the application. The reference forms shall then be distributed by the applicant to the persons listed on the application as references. The applicant shall ensure that the individuals listed as references return the reference forms to the Board prior to the filing deadline for the examination.

(d) Fees:

(1) Engineer Intern Certification Form. Once the applicant passes the examination on the fundamentals of engineering and makes application to the Board to become certified as an "Engineer Intern" the application fee of one hundred dollars ($100.00) is payable.

(2) Professional Engineer Form. The application fee of one hundred dollars ($100.00) is payable with the filing of the application.

(3) Comity. The licensure fee of one hundred dollars ($100.00) is payable with the filing of the application.

(4) Examination. The examination fee for any applicant is payable to the National Council of Examiners for Engineering and Surveying (NCEES) at the time of registering to take the exam in accordance with G.S. 89C-14.

(e) The Board shall accept the records maintained by the National Council of Examiners for Engineering and Surveying (NCEES) as evidence of licensure in another state. For comity licensure, the NCEES record shall be accepted in lieu of completing the experience, education and references sections of the application. A comity application, with or without a NCEES record, shall be administratively approved by the Executive Director based upon evidence of current licensure in another jurisdiction based on comparable qualifications, required references and no record of disciplinary action, without waiting for the next regular meeting of the Board at which time the action shall be reported to the Board for final approval.

(f) Model Law Engineer. The term "Model Law Engineer" refers to a person who meets the requirements of this Section by meeting the requirements of NCEES and has a current NCEES record on file and is designated as a "Model Law Engineer." A "Model Law Engineer" application shall be administratively approved by the Executive Director based upon the designation, without waiting for the next regular meeting of the Board at which time the action shall be reported to the Board for final approval.

(g) Personal interview. During the application process, the applicant may be interviewed by the Board members if the members have questions regarding the applicant's education, experience or character, based upon the information submitted in the application.

History Note: Authority G.S. 89C-10; 89C-13; 89C-14; 89C-15; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. May 1, 1994; November 2, 1992; April 1, 1989; December 1, 1984; RRC Objection due to lack of Statutory Authority Eff. November 17, 1994; Amended Eff. August 1, 2014; May 1, 2009; August 1, 2002; August 1, 2000; August 1, 1998; January 1, 1995.

21 NCAC 56 .0503 EXAMINATIONS

(a) Fundamentals of Engineering. This examination is designed to test the applicant's proficiency and knowledge of the fundamentals of engineering.

(b) Principles and Practice of Engineering. This examination is designed to test the applicant's proficiency and knowledge of engineering principles and practices.

(c) Examination Aids. Examinees may utilize examination aids as specified by the exam preparer.

(d) Preparation of Examination. The examinations in the fundamentals of engineering and in the principles and practice of engineering are national examinations provided by the National Council of Examiners for Engineering and Surveying (NCEES), of which the Board is a member.

(e) Examination Sequence. Before the applicant shall be permitted to be examined on the principles and practice of engineering, the applicant shall pass the examination on the fundamentals of engineering, unless the applicant can evidence 20 years of progressive engineering experience, or as a full-time engineering faculty member, or possesses an earned doctoral degree in engineering to be exempt from taking the fundamentals of engineering exam. NCEES administers the fundamentals of engineering examination as a computer-based exam. Application shall be made directly to NCEES to take the exam.
(f) Examination Filing Deadline. The applicant who wishes to take the principles and practice of engineering examination shall deliver the completed application, including all necessary references, transcripts, and verifications, to the Board office prior to August 1 for Fall examinations and January 2 for Spring examinations.

(g) Seating Notice. After approval of an application the applicant shall be sent a seating notice. This notice shall inform the applicant of the date, time and location of the examination and the seat number assigned.

(h) Unexcused Absences. After a seating notice has been issued for a scheduled examination by the Board, if the applicant fails to appear, that applicant's record shall reflect "unexcused absence," unless the absence was for jury duty or the applicant was not physically able to be present, as indicated by a doctor's certificate. The examination fee shall be forfeited.

(i) Re-Examination. A person who failed an examination may apply to take the examination again at the next regularly scheduled examination period by making written request and submitting the required exam fee. A person having a combined record of three failures or unexcused absences shall be eligible only after submitting a new application with appropriate application fee, and shall be considered by the Board for reexamination at the end of 12 months. After the end of the 12-month period, the applicant may take the examination no more than once every calendar year. The applicant shall demonstrate to the Board that actions, such as additional courses of study, have been taken to improve the applicant's chances for passing the exam.

(j) Reasonable Accommodation. An applicant may make a written request, before the application deadline, for reasonable accommodation for the exam. Reasonable accommodation shall be granted based upon meeting the Guidelines for Requesting Religious and ADA Accommodations published by the National Council of Examiners for Engineering and Surveying (NCEES), which are hereby incorporated by reference, including subsequent amendments and editions. Copies are available at no cost at www.ncees.org.

(k) Exam Results. Exam results shall be supplied in writing as pass or fail. No results will be given in any other manner.

(l) Review of Failed Exams. An applicant who fails to make a passing score on an exam shall receive an exam analysis by NCEES.

**History Note:** Authority G.S. 89C-10; 89C-13; 89C-14; 89C-15; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2014; September 1, 2009; May 1, 2009; April 1, 2001; August 1, 1998; November 2, 1992; April 1, 1989; January 1, 1982.

**21 NCAC 56 .0504 CERTIFICATES**

**History Note:** Authority G.S. 89C-3; 89C-13; 89C-15; 89C-16; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. January 1, 1982; Repealed Eff. April 1, 1989.

**21 NCAC 56 .0505 EXPIRATIONS AND RENEWALS OF CERTIFICATES**

(a) Professional Engineer Licensure. An annual renewal fee of seventy-five dollars ($75.00) for certificates of licensure for Professional Engineers shall be payable to the Board. The Board shall provide each licensed Professional Engineer a form that requires the licensee to provide the Board the physical places of business and residential addresses, report compliance with continuing education requirements, and report criminal convictions or disciplinary actions. The licensee shall give notice to the Board of a change of business or residential address within 30 days of the change. The licensee shall give notice to the Board of any criminal convictions, including DWI but not including minor traffic offenses (offenses that are not a misdemeanor or felony) or of any disciplinary actions in any jurisdiction on any license, within 30 days of the conviction or disciplinary action. A nolo contendere plea is equated to a conviction for reporting purposes.

(b) Engineering Intern Certificate. The Engineering Intern certificate does not expire and, therefore, does not have to be renewed.

(c) "Professional Engineer, Retired." The Board shall approve the application for use of the title for a person who has been duly licensed as a professional engineer by the Board, who chooses to relinquish or not to renew a license and has had no disciplinary action or criminal conviction that would support a determination that the licensee is not of good character and reputation.
21 NCAC 56 .0506 WAIVER FOR LICENSEES SERVING ON ACTIVE DUTY IN THE ARMED FORCES OF THE US

(a) All Professional Engineers currently licensed by and in good standing with the Board (whose license is not suspended or revoked) who are serving in the armed forces of the United States and who are eligible for an extension of time to file a tax return pursuant to G.S. 105-249.2 are granted a waiver of their mandatory continuing education requirements and annual renewal fee for the time period disregarded pursuant to the Internal Revenue Code 26 U.S.C. 7508.

(b) Request for waiver by an eligible licensee, meeting requirements in Paragraph (a) of this Rule, of renewal fee and waiver of continuing education requirements:

1. The licensee shall notify the Board of eligibility before the current license expires. Upon such notification, the Board shall maintain the license in active status through the extension period.

2. If the licensee fails to notify the Board of eligibility for the extension period before the current license expires, upon receipt and acceptance of a renewal application within the extension period and presentation of proof that the licensee was eligible on the date that is the deadline for renewal, the expired license or registration shall be deemed retroactively to have not expired.

3. The licensee who submits a renewal application within the extension period shall not be deemed to hold a lapsed license subject to reinstatement fees.

4. The licensee may renew the license within the extension period despite failing to complete the specified continuing education requirements.

5. A licensee shall provide proof of eligibility for the extension period when the licensee or registrant submits the renewal application.

History Note: Authority G.S. 89C-10; 89C-17; 89C-3(8a); Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2011; July 1, 2010; July 1, 2009; December 4, 2002; August 1, 2000; August 1, 1998; May 1, 1994.

SECTION .0600 - PROFESSIONAL LAND SURVEYOR

21 NCAC 56 .0601 REQUIREMENTS FOR LICENSING

(a) Education. The terms used by the Board for the specific education requirements to be eligible to be licensed as a Professional Land Surveyor are defined as follows:

1. "B.S. in surveying or other equivalent curriculum." These degrees shall contain a minimum of 45 semester hours, or their quarter-hour equivalents, of subjects directly related to the practice of surveying. Of the 45 semester hours, a minimum of 12 semester hours of surveying fundamentals, 12 semester hours of applied surveying practice and 12 semester hours of advanced or theoretical surveying courses are required. The remainder of the required surveying courses may be elective-type courses directly related to surveying; and

2. "Associate degree in surveying technology." This degree shall contain a minimum of 20 semester hours, or quarter-hour equivalents, of subjects directly related to the practice of surveying. Courses in surveying practices, subdivision design and planning, surface drainage and photogrammetry must be completed with a passing grade.

(b) Experience:

1. Definition. As used in the North Carolina Engineering and Land Surveying Act, the term "progressive practical surveying experience" means that during the period of time in which an applicant has made a practical utilization of the knowledge of the principles of geometry and trigonometry in determining the shape, boundaries, position and extent of the earth's surface, continuous improvement, growth and development in the utilization of that knowledge have been shown. In addition, the applicant shall show the continuous assumption of greater individual responsibility for the work product over that period of time.

2. Experience Accepted. In evaluating the work experience required, the Board shall consider the total experience record and the progressive nature of the record. Half or more of the required land
surveying experience shall be of a professional grade and character, performed under the responsible charge of a Professional Land Surveyor. If the work was not under the responsible charge of a Professional Land Surveyor, the applicant shall submit a written explanation to the Board explaining why the experience should be considered acceptable and the Board shall approve if satisfied of the grade and character of the progressive experience.

(3) Other Experience. Work done in the following areas requires evidence to the Board of its equivalency to land surveying:
(A) construction layout;
(B) engineering surveying; or
(C) part-time surveying work.

(c) Exhibits, Drawings, Plats:
(1) Required Exhibit Before Principles and Practice of Surveying Examination:
(A) General. The applicant shall submit, along with the application, an actual plat of a boundary survey of an actual project prepared by, or under the direct supervision of, the applicant that shows that applicant is knowledgeable of the contents of the Standards of Practice for Land Surveying in North Carolina as set forth in Section .1600 of this Chapter, and is able to apply this knowledge by preparing a plat in accordance with the various legal and professional requirements of land surveying.
(B) Physical Requirement. The map submitted shall be a clean, clear, legible print of an original map in the file of a Professional Land Surveyor.

(2) Specific Requirements. The specific details that shall be evaluated are those applicable to the particular project as described in the Standards of Practice for Land Surveying in North Carolina as set forth in Section .1600 of this Chapter, and as described in G.S. 47-30. In addition, the exhibit shall contain a statement that the field work, calculation and mapping were performed by the applicant under the supervision of a Professional Land Surveyor, attested to by that Professional Land Surveyor.

(3) Requirements for Comity Applicant. The map submitted by an applicant under comity may be a sample plat of a project or work performed in the state of licensure. It shall be evaluated in accordance with legal requirements of North Carolina.

History Note: Authority G.S. 47-30; 89C-10; 89C-13;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2014; July 1, 2009; August 1, 2000; August 1, 1998; November 2, 1992; April 1, 1989; December 1, 1984; January 1, 1982.

21 NCAC 56 .0602 APPLICATION PROCEDURE: INDIVIDUAL
(a) General. A person desiring to become a Professional Land Surveyor must make application to the Board on a form prescribed and furnished by the Board.
(b) Request. A request for the application form may be made to the Board office or obtained from the website.
(c) Application Forms:
(1) Surveyor Intern Certification Form. After passing the fundamentals of surveying examination an applicant may make application to the Board to become certified as a “Land Surveyor Intern.” This form requires the applicant to set forth personal history, educational background, surveying experience, character references and exhibit. A passport-type photographic quality portrait that is adequate for current identification purposes is also required.
(2) Professional Land Surveyor Form:
(A) All persons, including comity applicants and certified Land Surveyor Interns, shall apply for licensure using the Professional Land Surveyor form. The submission of this form shall signify that the applicant seeks licensure, and shall result in seating for the principles and practice of surveying examination, when the applicant has met the requirements as set out in Rule .0601 of this Section. This form requires the applicant to set forth personal and educational background, surveying experience, character references and exhibit. A passport-type photographic quality portrait that is adequate for current identification purposes is also required.
Persons who have previously completed the fundamentals examination by use of the Land Surveying Intern Application Form shall submit the Professional Land Surveyor Application Form to request licensure when qualified to take the examination.

Supplemental Form. Persons who applied for licensure as a land surveyor, but were not eligible to be admitted to the examination for principles and practice of surveying shall supplement their initial applications upon applying for the examination. The applicant shall supplement the initial application by using the supplemental form, which requires the listing of land surveying experience from the date of the initial application to the date of the supplemental application. Five references shall be submitted that are current to within one year of the examination date.

Reference Forms:

(1) Persons applying to be certified as a Surveyor Intern or to take the examination for principles and practice shall submit to the Board names of individuals who are familiar with the applicant's work, character and reputation. The names shall be submitted by the applicant on the application form.

(2) Persons applying for certification as a Surveyor Intern must submit three references, one of whom shall be a Professional Land Surveyor. Persons applying for the principles and practice examination shall submit five references, three of whom shall be Professional Land Surveyors.

(3) In addition to the applicant submitting names to the Board of such individuals, those individuals shall submit to the Board their evaluations of the applicant on reference forms supplied them by the applicant.

(4) The reference form requires the individual evaluating the applicant to state the evaluating individual's profession, knowledge of the applicant and information concerning the applicant's land surveying experience, character and reputation.

(5) The Board shall provide the reference forms to the applicant along with the application for licensure. The reference forms shall then be distributed by the applicant to the persons listed on the application as references. The applicant shall ensure that the individuals listed as references return the forms to the Board prior to the filing deadline for the examination applied for by the applicant.

Fees:

(1) Land Surveyor Intern Certification Form. Once the applicant passes the examination on the fundamentals of surveying and makes application to the Board to become certified as a "Land Surveyor Intern" the application fee of one hundred dollars ($100.00) is payable.

(2) Professional Land Surveyor Form. The application fee of one hundred dollars ($100.00) and examination fee for those applying for licensure based upon examination, experience, character and exhibit are payable with the filing of the application.

(3) Comity. The licensure fee of one hundred dollars ($100.00) and appropriate examination fee for those applying for licensure based upon comity are payable with the filing of the application.

(4) Examination. The examination fee for any applicant shall be payable to the National Council of Examiners for Engineering and Surveying (NCEES) at the time of registering to take the exam in accordance with G.S. 89C-14.

The Board shall accept the records maintained by the National Council of Examiners for Engineering and Surveying (NCEES) as evidence of licensure, in another state. For comity licensure the NCEES record shall be accepted in lieu of completing the experience, education and references sections of the application. A comity application, with or without a NCEES record, shall be administratively approved by the Executive Director based upon evidence of current licensure in another jurisdiction based on comparable qualifications, required references, and having passed the two-hour North Carolina portion of the exam and no record of disciplinary action, without waiting for the next regular meeting of the Board. At that time the action shall be reported to the Board for final approval.

Personal Interview. During the application process, the applicant may be interviewed by Board members if the members have questions regarding the applicant's education, experience or character, based upon the information submitted in the application.

History Note: Authority G.S. 89C-10; 89C-13; 89C-14; 89C-15; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2014; May 1, 2009; August 1, 2002; August 1, 2000; August 1, 1998; May 1, 1994; April 1, 1989; January 1, 1982.

21 NCAC 56 .0603 EXAMINATIONS
(a) Fundamentals of Surveying. This examination is designed to test the applicant's proficiency and knowledge of the fundamentals of surveying. Reference to Fundamentals of Surveying is the revised name of the national exam that is the Fundamentals of Land Surveying in G.S. 89C.

(b) Principles and Practice of Surveying. This examination is designed to test the applicant's proficiency and knowledge of land surveying practices and procedures generally and specifically within North Carolina.

(c) Examination Aids. Examinees may utilize examination aids as specified by the national exam preparer.

(d) Preparation of Examination. The examination in the fundamentals of surveying and of the examination in the principles and practice of surveying are national examinations provided by the National Council of Examiners for Engineering and Surveying (NCEES), of which the Board is a member, or other examinations as adopted by the Board. The North Carolina portion of the principles and practice of surveying examination shall be provided by the Board. NCEES administers the fundamentals of surveying examination as a computer-based exam. Application is made directly to NCEES to take the exam.

(e) Examination Filing Deadline. The applicant who wishes to take the principles and practice of surveying examination shall deliver the completed application, including all necessary references, transcripts, and verifications, to the Board office prior to August 1 for Fall examinations and January 2 for Spring examinations.

(f) Seating Notice. After approval of an application, the applicant shall be sent a seating notice by NCEES. This notice shall inform the applicant of the date, time and location of the examination and the seat number assigned.

(g) Unexcused Absences. After a seating notice for a scheduled examination has been issued, if applicant fails to appear, the applicant's record shall reflect "unexcused absence," unless the absence was for jury duty or the applicant was not physically able to be present, as indicated by a doctor's certificate. The examination fee shall be forfeited.

(h) Re-Examination. A person who failed an examination may apply to take the examination again at the next regularly scheduled examination period by making written request and submitting the required exam fee. A person having a combined record of three failures or unexcused absences shall be eligible only after submitting a new application with appropriate application fee, and shall be considered by the Board for re-examination at the end of 12 months. After the end of the 12-month period, the applicant may take the examination no more than once every calendar year. The applicant shall demonstrate to the Board that actions, such as additional courses of study, have been taken to improve the applicant's chances for passing the exam.

(i) Reasonable Accommodation. An applicant may make a written request, before the application deadline, for reasonable accommodation for the exam. Reasonable accommodation shall be granted based upon meeting the Guidelines for Requesting Religious and ADA Accommodations published by the National Council of Examiners for Engineering and Surveying (NCEES).

(j) Exam Results. Exam results shall be supplied in writing as pass or fail. No results shall be given in any other manner.

(k) Review of Failed Exams. An applicant who fails to make a passing score on an exam shall receive an exam analysis. An applicant who fails to make a passing score on the two-hour North Carolina portion of the exam may request in writing within thirty days of receiving the result to have an opportunity to review that portion of the exam. The review shall be done in the Board Office under supervision of staff and is limited to one hour.

**History Note:** Authority G.S. 89C-10; 89C-15;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2014; May 1, 2009; April 1, 2001; August 1, 1998; November 2, 1992; April 1, 1989; January 1, 1982.

**21 NCAC 56 .0604 STANDARDS OF PRACTICE**

**History Note:** Authority G.S. 89C-10; 89C-21;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. January 1, 1982;

**21 NCAC 56 .0605 CERTIFICATES**

**History Note:** Authority G.S. 89C-3; 89C-13; 89C-15; 89C-16;
21 NCAC 56 .0606  EXPIRATIONS AND RENEWALS OF CERTIFICATES

(a) Professional Land Surveyor Licensure. An annual renewal fee of seventy-five dollars ($75.00) for certificates of licensure for Professional Land Surveyors is payable to the Board. The Board shall provide each Professional Land Surveyor a form that requires the licensee to provide to the Board the physical places of business and residential addresses, report compliance with continuing education requirements, and report criminal convictions or disciplinary actions. The licensee shall give notice to the Board of a change of business or residential address within 30 days of the change. The licensee shall give notice to the Board of any criminal convictions, including DWI but not including minor traffic offenses (offenses that are not a misdemeanor or felony) of any disciplinary actions in any jurisdiction on any license, within 30 days of the conviction or disciplinary action. A nolo contendere plea is equated to a conviction for reporting purposes.

(b) Surveyor Intern Certificate. The surveyor intern certificate does not expire and, therefore, does not have to be renewed.

(c) "Professional Land Surveyor, Retired." The Board shall approve the application for use of the title for a person who has been duly licensed as a Professional Land Surveyor by the Board, who chooses to relinquish or not to renew a license and has had no disciplinary action that would support a determination that the licensee is not of good character and reputation.

History Note: Authority G.S. 89C-17; 89C-3(9a);
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. January 1, 1982;

21 NCAC 56 .0607  WAIVER FOR LICENSEES SERVING ON ACTIVE DUTY IN THE ARMED FORCES OF THE US

(a) All Professional Land Surveyors currently licensed by and in good standing with the Board (whose license is not suspended or revoked) who are serving in the armed forces of the United States and who are eligible for an extension of time to file a tax return pursuant to G.S. 105-249.2 are granted a waiver of their mandatory continuing education requirements and annual renewal fee for the time period disregarded pursuant to the Internal Revenue Code 26 U.S.C. 7508.

(b) Request for waiver by an eligible licensee, meeting requirements in Paragraph (a) of this Rule, of renewal fee and waiver of continuing education requirements:

(1) The licensee shall notify the Board of eligibility before the current license expires. Upon such notification, the Board shall maintain the license in active status through the extension period.

(2) If the licensee fails to notify the Board of eligibility for the extension period before the current license expires, upon receipt and acceptance of a renewal application within the extension period and presentation of proof that the licensee was eligible on the date that is the deadline for renewal, the expired license or registration shall be deemed retroactively to have not expired.

(3) The licensee who submits a renewal application within the extension period shall not be deemed to hold a lapsed license subject to reinstatement fees.

(4) The licensee may renew the license within the extension period despite failing to complete the specified continuing education requirements.

(5) A licensee shall provide proof of eligibility for the extension period when the licensee or registrant submits the renewal application.

History Note: Authority G.S. 89C-10; 89C-17; 93B-15;
Eff. August 1, 2011.
21 NCAC 56 .0701 RULES OF PROFESSIONAL CONDUCT

(a) In order to safeguard the life, health, property and welfare of the public and to establish and maintain a high standard of integrity, skills, and practice in the professions of engineering and land surveying, the Rules of Professional Conduct in this Rule are adopted in accordance with G.S. 89C-20 and are binding upon every person holding a certificate of licensure as a Professional Engineer or Professional Land Surveyor (licensee), and on all business entities authorized to offer or perform engineering or land surveying services in this state. All persons licensed under the provisions of Chapter 89C of the General Statutes are charged with having knowledge of the Board Rules, including the Rules of Professional Conduct, and are deemed to be familiar with their provisions and to understand them.

(b) A licensee shall conduct the practice in order to protect the public health, safety and welfare. The licensee shall at all times recognize the primary obligation to protect the public in the performance of the professional duties. If the licensee's engineering or land surveying judgment is overruled under circumstances where the safety, health and welfare of the public are endangered, the licensee shall inform the employer, the client, the contractor, other affected parties and any appropriate regulatory agency of the possible consequences of the situation.

(c) A licensee shall perform services only in areas of the licensee's competence and:

(1) Shall undertake to perform engineering and land surveying assignments only when qualified by education or experience in the specific technical field of professional engineering or land surveying involved;

(2) May accept an assignment or project requiring education or experience outside of the licensee's own field of competence, but only to the extent that the services are restricted to those portions or disciplines of the project in which the licensee is qualified. All other portions or disciplines of such project shall be performed by associates, consultants, or employees who are licensed and competent in those portions or disciplines;

(3) Shall not affix the signature or seal to any engineering or land surveying plan or document dealing with subject matter for which the licensee lacks competence by virtue of education or experience, nor to any such plan or document not prepared under the licensee's direct supervisory control. Direct supervisory control (responsible charge) requires a licensee or employee to carry out all client contacts, provide internal and external financial control, oversee employee training, and exercise control and supervision over all job requirements to include research, planning, design, field supervision and work product review. Direct supervisory control may be accomplished face to face or by other means of communication. A licensee shall not contract with a non-licensed individual to provide these professional services. Research, such as title searches and soil testing, may be contracted to a non-licensed individual, provided that individual is qualified or licensed to provide such service and provided the licensee reviews the work. The licensee may affix the seal and signature to drawings and documents depicting the work of two or more professionals provided it is designated by a note under the seal the specific subject matter for which each is responsible; and

(4) In circumstances where a licensee in responsible charge of the work is unavailable to complete the work, or the work is a design plan signed and sealed by an out-of-jurisdiction licensee (not a site adaptation of a standard design plan under Rule 21 NCAC 56 .1106) a successor licensee may take responsible charge by performing and documenting all professional services to include developing a design file including work or design criteria, calculations, code research, and any necessary and appropriate changes to the work. The non-professional services, such as drafting, need not be redone by the successor licensee but must distinguish in a clean and obvious manner and accurately reflect the successor licensee's work. The burden is on the successor licensee to show such compliance. The successor licensee shall have control of and responsibility for the work product and the signed and sealed originals of all documents.

(d) A licensee shall issue public statements only in an objective and truthful manner and:

(1) Shall be objective and truthful in all professional reports, statements or testimony. The licensee shall include all relevant and pertinent information in such reports, statements or testimony;

(2) When serving as an expert or technical witness before any court, commission, or other tribunal, shall express an opinion only when it is founded upon adequate knowledge of the facts in issue, upon a background of technical competence in the subject matter, and upon honest conviction of the accuracy and propriety of the licensee's testimony;

(3) Shall issue no statements, criticisms, or arguments on engineering or land surveying matters connected with public policy which are inspired or paid for by an interested party, or parties, unless the licensee has prefaced the comment by explicitly identifying the licensee's name, by disclosing the identities of...
the party or parties on whose behalf the licensee is speaking, and by revealing the existence of any pecuniary interest the licensee may have in the matters; and

(4) Shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice or employment of another engineer or land surveyor, nor indiscriminately criticize another engineer or land surveyor's work in public. Indiscriminate criticism includes statements without valid basis or cause or that are not objective and truthful or that fail to include all relevant and pertinent information. If the licensee believes that another engineer or land surveyor is guilty of misconduct or illegal practice, such information shall be presented to the North Carolina Board of Examiners in the form of a complaint.

(e) A licensee shall avoid conflicts of interest and:

(1) Shall inform the employer or client, and any reviewing agency, of any business association, interests, or circumstances which could influence judgment or the quality of services;

(2) Shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are disclosed to, and agreed to, in writing, by all interested parties;

(3) Shall not solicit or accept financial or other valuable considerations from material or equipment suppliers for specifying their products;

(4) Shall not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties dealing with the client or employer in connection with work for which the licensee is responsible;

(5) When in public service as a member, advisor, or employee of a governmental body or department, shall not participate in considerations or actions with respect to services provided by the licensee or the licensee's firm in private engineering and land surveying practices;

(6) Shall not solicit or accept an engineering or land surveying contract from a governmental body on which a principal or officer of the licensee's firm serves as a member; and

(7) Shall not attempt to supplant another engineer or land surveyor in a particular employment after becoming aware that the other has been selected for the employment.

(f) A licensee shall solicit or accept work only on the basis of qualifications and:

(1) Shall not offer to pay, either directly or indirectly, any commission, political contribution, gift, or other consideration in order to secure work, exclusive of securing salaried positions through employment agencies;

(2) Shall compete for employment on the basis of professional qualification and competence to perform the work. The licensee shall not solicit or submit proposals for professional services containing a false, fraudulent, misleading, deceptive or unfair statement or claim regarding the cost, quality or extent of services to be rendered;

(3) Shall, with regard to fee bidding on public projects, comply with the provisions of G.S. 143-64.31 et seq., (or for federal projects, the Brooks Act, 40 U.S. Code 541 et seq.) and shall not knowingly cooperate in a violation of any provision of G.S. 143-64.31 et seq. (or of 40 U.S. Code 541 et seq.); and

(4) Shall not falsify or permit misrepresentation of academic or professional qualifications and shall only report educational qualifications when a degree or certificate was awarded, unless it is stated that no degree or certificate was awarded. The licensee shall not misrepresent degree of responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures, or past accomplishments with the intent and purpose of enhancing qualifications and work.

(g) A licensee shall perform services in an ethical manner, as required by the Rules of Professional Conduct (21 NCAC 56 .0701), and in a lawful manner and:

(1) Shall not knowingly associate with or permit the use of the licensee's name or firm name in a business venture by any person or firm which the licensee knows, or has reason to believe, is engaging in business or professional practices of a fraudulent or dishonest nature or is not properly licensed; and

(2) If the licensee has knowledge or reason to believe that another person or firm may be in violation of the Board Rules (21 NCAC 56) or of the North Carolina Engineering and Land Surveying Act (G.S. 89C), shall present such information to the Board in writing in the form of a complaint and shall cooperate with the Board in furnishing such further information or assistance as may be required by
the Board. The licensee shall timely respond to all inquiries and correspondence from the Board and shall timely claim correspondence from the U. S. Postal Service, or other delivery service, sent to the licensee from the Board. Timely is defined as within the time specified in the correspondence, or if no time is specified, within 30 days of receipt. Certified mail is timely claimed if prior to being returned by the Post Office to the Board office.

(h) A Professional Engineer or Professional Land Surveyor who has received a reprimand or civil penalty or whose professional license is revoked, suspended, denied, refused renewal, refused reinstatement, put on probation, restricted, or surrendered as a result of disciplinary action by another jurisdiction is subject to discipline by the Board if the licensee’s action constitutes a violation of G.S. 89C or the rules adopted by the Board.

History Note: Authority G.S. 89C-17; 89C-20; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. September 1, 2011; May 1, 2009; August 1, 2002; August 1, 2000; August 1, 1998; November 2, 1992; April 1, 1989; January 1, 1982; March 1, 1979.

21 NCAC 56 .0702 RULES OF CONDUCT OF ADVERTISING
(a) The Professional Engineer or Professional Land Surveyor shall not make exaggerated, misleading, deceptive or false statements or claims about professional qualifications, experience or performance in brochures, correspondence, listings, or other public communications.
(b) The prohibitions listed in Paragraph (a) of this Rule include, but are not limited to, the use of statements containing a material misrepresentation of fact or omitting a material fact necessary to keep the statement from being misleading; statements intended or likely to create an unjustified expectation; and statements containing a prediction of future success.
(c) Consistent with the foregoing, the Professional Engineer or Professional Land Surveyor may advertise for recruitment of personnel.
(d) Consistent with the foregoing, the Professional Engineer or Professional Land Surveyor may prepare articles for the lay or technical press. Such articles shall not imply credit to the author for work performed by others.

History Note: Authority G.S. 89C-20; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended August 1, 2000; August 1, 1998; April 1, 1989; March 1, 1979.

SECTION .0800 - FIRM REGISTRATION

21 NCAC 56 .0801 REQUIREMENTS


21 NCAC 56 .0802 PROCEDURE
(a) Professional Corporations and Limited Liability Companies:
   (1) Request. A request for an application for licensure as a professional corporation or professional limited liability company engaged in the practice of engineering or land surveying may be made at the Board office at 4601 Six Forks Road, Suite 310, Raleigh, NC 27609 or obtained from the website at www.ncbels.org.
   (2) Applicable Form. All professional corporations and professional limited liability companies complying with the statutory requirements of G.S. 89C, G.S. 55B and G.S. 57D that desire to practice
engineering or land surveying shall apply by using a form prepared by the Board. This form shall require the applicant, by and through an officer, director and shareholder of the professional corporation or limited liability company who is licensed with the North Carolina Board of Examiners for Engineers and Surveyors in a profession of the services to be offered, to certify that it and the stockholders of the corporation or members of the limited liability company have complied with the provisions of the applicable provisions of the General Statutes. The form shall also require that the officers, directors, shareholders, members and professional employees be listed on that application.

(3) Certificate of Licensure:

(A) Upon receiving the application with application fee of one hundred dollars ($100.00), the Board, after determining that the firm has complied with the statutory requirements, shall issue a certificate of compliance.

(B) The firm shall forward the certificate of compliance to the Secretary of State along with its articles of incorporation or articles of organization.

(C) Upon approval by the Secretary of State, the firm shall forward to the Board a certified copy of its articles of incorporation or articles of organization.

(D) Upon receipt of the certified copy of the articles of the firm, if all statutory requirements have been met, the Board shall approve the application and issue the firm a certificate of licensure.

(b) Business Firms and Chapter 87 Corporations:

(1) Request. A request for an application for licensure as a business firm or Chapter 87 corporation, as defined in G.S. 55B-15(a)(2), engaged in the practice of engineering or land surveying may be made at the Board office or obtained from the website. A sole proprietorship owned and operated by the individual licensee in the licensee's name as reflected in the Board's records is exempt from firm licensure.

(2) Applicable Form. All business firms or Chapter 87 corporations that desire to practice engineering or land surveying shall apply by using a form prepared by the Board. The form shall require the applicant, through a principal officer, partner or owner, to certify that the business firm will be operated in compliance with the laws of the State of North Carolina and the rules of the North Carolina Board of Examiners for Engineers and Surveyors.

(3) Certificate of Licensure. Upon receiving the application with application fee of one hundred dollars ($100.00), the Board, after determining that the firm has complied with the statutory requirements, shall issue a certificate of licensure.

History Note:
Authority G.S. 55B-4; 55B-10; 55B-15; 57D-2-02; 89C-10; 89C-24; 89C-10; 89C-24;
Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; February 1, 1996; May 1, 1994; April 1, 1989; January 1, 1982.

21 NCAC 56 .0803 FEES

History Note: Authority G.S. 89C-10; 89C-24;

21 NCAC 56 .0804 ANNUAL RENEWAL

(a) Renewal. The certificate of licensure for a business entity, including a professional corporation, limited liability company, Chapter 87 corporation, or business firm shall be renewed annually.

(b) Expiration. The certificate of licensure expires on the last day of June following its issuance by the Board and becomes invalid on that date unless renewed.

(c) Written Application. Upon written application on a renewal form provided by the Board that requires the physical place of business address and report of disciplinary actions accompanied by a fee of seventy-five dollars ($75.00) the Board shall renew the certificate of licensure providing that the firm has complied with all Rules of the Board and applicable General Statutes of North Carolina. The form shall be provided to all licensees in good standing no later than June 1st. The licensed entity shall give notice to the Board of a change of business address within 30 days of the change.
The firm shall give notice to the Board of any disciplinary actions in any jurisdiction on any license within 30 days of the disciplinary action.

(d) If a firm fails to renew its certificate of licensure within one year of the expiration date, the firm shall submit a new application for a new certificate of licensure in accordance with all requirements of 21 NCAC 56 .0802.

(e) If any business entity that holds a current certificate of licensure ceases business because the professional licensee receives a waiver from paying the individual renewal fee under 21 NCAC 56 .0506 or 21 NCAC 56 .0607 the annual renewal fee for the business shall be waived for the same time period.

History Note: Authority G.S. 55B-11; 57C-2-01; 89C-10; 89C-14; 89C-17; 89C-24;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2011; July 1, 2010; July 1, 2009; December 4, 2002; April 1, 2001; February 1, 1996; May 1, 1994.

21 NCAC 56 .0805 REGISTRATION NOT REQUIRED

History Note: Authority G.S. 55b-15; 89C-10; 89C-24;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;

SECTION .0900 - BUSINESS ENTITIES: GENERAL

21 NCAC 56 .0901 OFFICES

(a) Professional Engineering Services. Every firm, partnership, corporation or limited liability company that performs or offers to perform engineering services in the State of North Carolina shall have a resident Professional Engineer in responsible charge in each separate office located in North Carolina where professional engineering services are performed or offered to be performed. Out-of-state office locations where engineering services are performed or offered to be performed for North Carolina projects shall have Professional Engineers in responsible charge of only the specific projects in compliance with Rule .0701(c)(3) of this Chapter.

(b) Land Surveying Services. Every firm, partnership, corporation or limited liability company that performs or offers to perform land surveying services in the State of North Carolina shall have a resident Professional Land Surveyor in responsible charge in each separate office located in North Carolina where land surveying services are performed or offered to be performed. Out-of-state office locations where surveying services are performed or offered to be performed for North Carolina projects are only required to have Professional Land Surveyors in responsible charge of the specific projects in compliance with Rule .0701(c)(3) of this Chapter.

(c) Resident. The terms "resident Professional Engineer" or "resident Professional Land Surveyor" as used in this Rule, means a licensee who spends a majority of the licensee's normal working time in that office. Such time shall not be less than a majority of the operating hours of the business. A Professional Engineer or Professional Land Surveyor shall be the resident licensee at only one place of business at one time unless each business is at least one-third owned by the resident professional. This arrangement shall be specifically approved by the Board after a determination that the businesses are integrated in operation, ownership, office location and that the licensee will be in responsible charge of the professional services.

(d) No firm, partnership, corporation or limited liability company shall practice, offer to practice, or market either land surveying or engineering unless there is a licensed resident for that service in responsible charge at that office. Advertisements, signs, letterheads, business cards, directories, or any other form of representation shall avoid any reference to any service that cannot be provided under the responsible charge of a properly qualified resident professional. The licensed entity shall give notice to the Board of a change of resident professional within 30 days after the change and shall not practice, offer to practice, or market the professional service during any period of time without a resident professional.

History Note: Authority G.S. 57D-2-02; 89C-10; 89C-24;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
21 NCAC 56 .0902  TITLES OF BUSINESS ENTITIES

(a) Companies, partnerships, corporations, limited liability companies or any other business organization providing professional engineering or land surveying services in North Carolina shall not practice under a name that is misleading. Except as provided below, the titles of engineering or land surveying companies, partnerships, corporations, limited liability companies or any other business organization organized primarily to provide such professional services shall not contain the name of an individual not licensed to provide the professional services offered or eligible for licensure under the provisions of G.S. 89C-13.

(b) A firm may include in its title the name or names of one or more deceased or retired former members of the firm, provided that the firm submits a letter of request and explanation with its application to the Board, and that the Board finds as fact that the use of the name is not misleading.

(c) A business organization shall not change its title, or operate under an assumed name, without first applying to the Board for a determination that the proposed title meets the requirements of Paragraph (a) of this Rule. Requests for name changes shall be made in writing on forms provided by the Board for this purpose.

History Note:  Authority G.S. 55B-5; 57C-2.01; 89C-10; 89C-24;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; August 1, 1998; May 1, 1994; April 1, 1989; April 1, 1980.

SECTION .1000 - TEMPORARY PERMIT

21 NCAC 56 .1001  GENERAL

21 NCAC 56 .1002  APPLICATION PROCEDURE

21 NCAC 56 .1003  SEAL

History Note:  Authority G.S. 89C-10; 89C-25;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; April 1, 1989; January 1, 1982;
Repealed Eff. February 1, 2013.

SECTION .1100 - SEAL

21 NCAC 56 .1101  GENERAL

It is misconduct for a Professional Engineer or Professional Land Surveyor to seal work done by another individual unless the work is performed under the “responsible charge” of the Professional Engineer or Professional Land Surveyor.

History Note:  Authority G.S. 89C-3(10); 89C-10; 89C-16;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; April 1, 1989; December 1, 1984; January 1, 1982.

21 NCAC 56 .1102  DESIGN

The standard design of the seal shall be two concentric circles in which North Carolina and the name of the licensee are placed within the outermost circle and in which the license number of the licensee and either "Professional Engineer" or "Professional Land Surveyor," is placed within the innermost circle. The size shall be 1 ½ to 1 ¾ inches in diameter.

History Note:  Authority G.S. 89C-10; 89C-16;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. May 1, 2009; August 1, 2000; August 1, 1998; April 1, 1989; January 1, 1982.
21 NCAC 56 .1103   STANDARD CERTIFICATION REQUIREMENTS

(a) Certification of Final Drawings. Drawings or maps not subject to the exceptions in Paragraph (c) of this Rule shall conform to the following:
   (1) Certification is required on reproducibles or original drawings;
   (2) The seal may be a rubber stamp, embossed seal, computer-generated seal, or other facsimile that becomes a permanent addition to a plan sheet or map;
   (3) The licensee's written signature must be placed over, or adjacent to, the seal on the original document. A facsimile signature is not acceptable;
   (4) The date of signing must be annotated on the original document;
   (5) All sheets of engineering and surveying drawings must be certified;
   (6) The name, address and license number of the licensee's firm shall be included on each sheet of engineering drawings. For surveys, the name, address and license number of the licensee's firm shall be included on the first sheet of the survey or title sheet. The individual license number of the sole proprietor shall be used as the license number for an exempt sole proprietorship that meets the requirements of 21 NCAC 56 .0802(b)(1); and
   (7) Any revision on a drawing after a licensee's certification is affixed shall be described and dated and if not done under the responsible charge of the same licensee shall be separately certified.

(b) Certification of Specifications and Reports. All specifications, reports, or other documents, including letter reports and calculations, not subject to the exceptions in Paragraph (c) of this Rule shall conform to the following:
   (1) Certification is required on original specifications, reports, or other documents, including letter reports and calculations;
   (2) The seal may be a rubber stamp, or other facsimile;
   (3) The licensee's written signature must be placed over, or adjacent to, the seal on the original document. A facsimile signature is not acceptable;
   (4) The date of signing must be annotated on the original document;
   (5) The title sheet of engineering specifications or other reports must be certified and bear the name, address and license number of the licensee's firm. The title sheet of any survey report or written description of property shall include the name, address and license number of the licensee's firm. The individual license number of a sole proprietor shall be used as the license number for an exempt sole proprietorship that meets the requirements of 21 NCAC 56 .0802(b)(1); and
   (6) Any revision in the document after a licensee's certification is affixed shall be described and dated and if not done under the responsible charge of the same licensee shall be separately certified.

(c) Exceptions to Required Certification. The certification of a licensee on a map, drawing, plan, specification, plat, document, or report shall signify that it is the final work of the licensee unless the work is stamped or marked substantially as follows so as to put the public on notice not to use as a final product, in which case certification is optional:
   (1) "Preliminary - Do not use for construction";
   (2) "Progress Drawings - Do not use for construction";
   (3) "Preliminary Plat - Not for recordation, conveyances, or sales";
   (4) "Final Drawing - Not released for construction";
   (5) "Final Drawing - For Review Purposes Only";
   (6) "Not a Certified Document – This document originally issued and sealed by (name of licensee), (license number), on (date of sealing). This document shall not be considered a certified document";
   (7) "Not a Certified Document as to the Original Document but Only as to the Revisions - This document originally issued and sealed by (name of licensee), (license number), on (date of sealing). This document is only certified as to the revisions".

(d) Electronically Transmitted Documents. Documents, including drawings, specifications and reports, that are transmitted electronically beyond the direct control of the licensee shall have the computer-generated seal removed from the original file, unless signed with a digital signature as defined in Paragraph (e) of this Rule. After removal of the seal the electronic medium shall have the following inserted in lieu of the signature and date: "This document originally issued and sealed by (name of sealer), (license number), on (Date of sealing). This medium shall not be considered a certified document." Hardcopy documents containing the original seal, signature and date of the licensee may be duplicated by photocopy or electronic scanning processes and distributed either in hardcopy or electronic medium. The scanned digital files of certified documents are not subject to the requirements of this Paragraph. The electronic transmission beyond the direct control of the licensee of CAD, vector or other files subject to easy editing are subject to the requirements of this
paragraph. Easy editing is based on the file consisting of separate elements that can be individually modified or deleted. Documents that are excepted from certification by a statement meeting the requirements of Subparagraphs (c)(1) through (c)(5) of this Rule are not subject to the requirements of this Paragraph.

(e) Documents to be electronically transmitted beyond the direct control of the licensee that are signed using a digital signature, shall contain the authentication procedure in a secure mode and a list of the hardware, software and parameters used to prepare the document(s). Secure mode means that the authentication procedure has protective measures to prevent alteration or overriding of the authentication procedure. The term "digital signature" shall be an electronic authentication process that is attached to or logically associated with an electronic document. The digital signature shall be:

1. Unique to the licensee using it;
2. Capable of verification;
3. Under the sole control of the licensee; and
4. Linked to a document in such a manner that the digital signature is invalidated if any data in the document is changed.

(f) A digital signature process may be submitted to the Board for approval that it meets the criteria set forth in Subparagraphs (e)(1) through (4) of this Rule. The licensee shall confirm that if another process is used, that it meets the criteria.

History Note: Authority G.S. 89C-10; 89C-16; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2011; July 1, 2009; May 1, 2009; August 1, 2002; August 1, 2000; August 1, 1998; February 1, 1996; May 1, 1994; April 1, 1989; December 1, 1984.

21 NCAC 56 .1104 CERTIFICATION WITH TEMPORARY PERMIT

History Note: Authority G.S. 89C-10; 89C-16; 89C-25; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2000; August 1, 1998; February 1, 1996; April 1, 1989; January 1, 1982; Repealed Eff. February 1, 2013.

21 NCAC 56 .1105 FIRM SEAL

The use of a seal by a firm is not required for certification. A firm seal is not authorized for use in lieu of the required seal of a Professional Engineer or Professional Land Surveyor. When a firm seal is used, it does not relieve the individual licensee of the requirements and responsibilities pertaining to the individual's seal.

History Note: Authority G.S. 89C-10; 89C-16; 89C-25; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2000; August 1, 1998; May 1, 1994; January 1, 1982.

21 NCAC 56 .1106 CERTIFICATION OF STANDARD DESIGN PLANS

Standard design plans that were initially prepared and certified by an individual who is a licensed engineer in the state of origin of such plans (including North Carolina) may then be reviewed by a North Carolina Professional Engineer for code conformance, design adequacy, and site adaptation for the specific application within North Carolina. The reviewing Professional Engineer who is licensed in North Carolina assumes responsibility for such standard designs. Standard plans, which bear the seal of the original design engineer who is a licensed engineer in another state, or North Carolina, shall be sealed by the reviewing North Carolina Professional Engineer who is assuming responsibility. In addition to the seal, a statement shall be included as follows: "These plans have been properly examined by the undersigned. I have determined that they comply with existing local North Carolina codes, and have been properly site adapted for use in this area."

History Note: Authority G.S. 89C-10; 89C-16; Eff. February 1, 1976;
21 NCAC 56 .1107  CERTIFICATION OF PLANS FOR BUILDING AND STRUCTURE PERMITS
21 NCAC 56 .1108  LAND SURVEYING

History Note:  Authority G.S. 89C-10; 89C-16; 89C-21;  
Eff. January 1, 1982;  
Amended Eff. December 1, 1984;  

SECTION .1200 - RULEMAKING PROCEDURES

21 NCAC 56 .1201  PETITIONS
(a) Any person wishing to submit a petition requesting the adoption, amendment or repeal of a rule by the Board shall send the petition to the executive director at the Board's office in Raleigh, North Carolina.
(b) The petition shall contain the following information:
   (1) a draft of the proposed rule;
   (2) reason for proposal;
   (3) effect on existing rules;
   (4) any data supporting proposal;
   (5) effect of the proposed rule on existing practices in the area involved, including cost factors;
   (6) names of those most likely to be affected by the proposed rule, with addresses if reasonably known; and
   (7) name and address of each petitioner.
(c) A review committee made up of one member of the Board, the executive director and the legal counsel for the Board, on behalf of the Board, shall determine, based on a study of the facts stated in the petition, whether the public interest will be served by granting it. It shall consider all the contents of the submitted petition, plus any additional information it deems relevant.
(d) The executive director, on behalf of the review committee, shall make a recommendation to the Board for the denial of the petition or the institution of rulemaking proceedings, as the case may be.
(e) Within 120 days of submission of the petition, the Board shall render a final decision.
(f) If the decision is to deny the petition, the executive director, on behalf of the Board, will notify the petitioner in writing, stating the reasons therefore. If the decision is to grant the petition, the Board shall publish notice of rulemaking proceedings.

History Note:  Authority G.S. 89C-10; 150B-20;  
Eff. February 1, 1976;  
Readopted Eff. September 29, 1977;  
Amended Eff. August 1, 2000; August 1, 1998; April 1, 1989; January 1, 1982.

21 NCAC 56 .1202  NOTICE

History Note:  Authority G.S. 89C-10; 150A-12(c); 150A-12;  
Eff. February 1, 1976;  
Readopted Eff. September 29, 1977;  
Amended Eff. December 1, 1984;  

21 NCAC 56 .1203  HEARINGS
(a) Unless otherwise stated in a particular rulemaking notice, hearings before the Board shall be held in the Board office.
(b) Presentations may not exceed 10 minutes unless, upon request, either before or at the hearing, the Board grants an extension of time, for a fuller explanation.
(c) Upon receipt of a request to make an oral presentation the executive director shall acknowledge receipt of the request, and inform the person making the request of the imposition of any limitations deemed necessary to the end of a full and effective public hearing on the proposed rule.

(d) Any person may file a written submission containing data, comments or arguments after publication of a rulemaking notice as allowed by G.S. 150B-21.2(f). Written submissions, except when otherwise stated in the particular rulemaking notice, shall be sent to the Board. Such submissions shall clearly state the proposed rule(s) to which the comments are addressed.

(e) Upon receipt of such written comments, prompt acknowledgment shall be made by the Board.

(f) The presiding officer at the hearing shall have complete control of the proceedings, including extensions of any time requirements, recognition of speakers, time allotments for presentations, direction of the flow of the discussion and the management of the hearing. The presiding officer, at all times, shall take care that each person participating in the hearing is given a fair opportunity to present views, data and comments.

(g) A record of all rulemaking proceedings shall be maintained at the Board's office.

**History Note:**
Authority G.S. 89C-10; 150B-21.2;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2000; August 1, 1998; April 1, 1989; January 1, 1982.

**21 NCAC 56 .1204**
**EMERGENCY RULES**

**History Note:**
Authority G.S. 89C-10; 150A-13;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;

**21 NCAC 56 .1205**
**DECLARATORY RULINGS**

(a) Any person substantially affected by a statute administered or rule promulgated by the Board may request a declaratory ruling as to whether or how the statute or rule applies to a given factual situation or whether a particular agency rule is valid.

(b) All requests for declaratory rulings shall be written and mailed to the Board.

(c) All requests for a declaratory ruling must include the following information:

(1) name and address of petitioner;
(2) statute or rule to which petition relates;
(3) concise statement of the manner in which petitioner is aggrieved by the rule or statute or its potential application to petitioner;
(4) a statement of whether an oral hearing is desired, and if so, the reasons for such an oral hearing.

(d) Whenever the Board believes for good cause that the issuance of a declaratory ruling is undesirable, it may refuse to do so. When good cause is deemed to exist, the Board shall notify the petitioner of its decision in writing stating reasons for the denial of a declaratory ruling.

(e) Where a declaratory ruling is deemed appropriate, the Board shall issue the ruling within 60 days of receipt of the petition.

(f) A declaratory ruling procedure may consist of written submissions, oral hearings, or such other procedure as may be appropriate in a particular case.

**History Note:**
Authority G.S. 89C-10; 150B-4;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;

**SECTION .1300 – BOARD DISCIPLINARY PROCEDURES**

**21 NCAC 56 .1301**
**IMPROPER PRACTICE BY A LICENSEE**

(a) General. Alleged practice that may violate the rules in this Chapter or G.S. 89C by a licensee is subject to Board investigation and disciplinary action by the Board.
(b) Preferring Charges. Any person who believes that any licensed Professional Engineer, Professional Land Surveyor or firm holding a certificate of authorization is in violation of the provisions of G.S. 89C or the rules in this Chapter may prefer charges against that person or firm by setting forth in writing those charges and swearing to their authenticity, along with providing corroborative evidence. The charges shall be filed with the Board's office in Raleigh, North Carolina.

(c) Preliminary Review:

(1) Upon receipt of a properly filed charge, a case shall be opened.

(2) A field investigation may be performed if determined necessary by the Executive Director.

(3) If the Executive Director determines that the charges are corroborated by evidence, a written notice and explanation of the charge shall be forwarded to the person or firm against whom the charge is made and a response is requested of the person or firm so charged to show compliance with all lawful requirements for retention of the license. Notice of the charge and of the alleged facts or alleged conduct shall be given personally or by certified mail, return receipt request.

(4) After preliminary evidence has been obtained, the matter shall be referred to the Board's review committee which is made up of the following individuals:

(A) one member of the Board who is licensed in the respective profession,

(B) the legal counsel of the Board, and

(C) the Executive Director of the Board or Assistant Executive Director if designated by the Executive Director.

(5) Upon review of the available evidence, the review committee shall present to the Board a written recommendation that:

(A) the charge be dismissed as unfounded or trivial;

(B) when the charge is admitted as true, the Board accept the admission of guilt by the person charged and order that person not to commit in the future the specific act or acts admitted and also not to violate any of the provisions of the Board Rules or the statutes at any time in the future;

(C) the charge, whether admitted or denied, be presented to the full Board for a hearing and determination by the Board on the merits of the charge in accordance with the substantive and procedural requirements of the provisions of Section .1400 of this Chapter and the provisions of G.S. 150B; or

(D) whether the charge is admitted or denied, the Board give notice to the licensee of a contemplated action as set out in Rule .1403(b) of this Chapter.

(d) Consultant. A consultant to the review committee shall be designated by the Board Chair if a board member is a complainant, witness or respondent in a case. The consultant shall be a licensed professional engineer or professional land surveyor, depending on the nature of the case, and selected from a list provided by the Executive Director of former Board members or other licensed professionals who are knowledgeable with the Board's processes. The consultant shall review all case materials and make a recommendation for consideration by the review committee as to the merits of the case. The consultant shall review any new information presented in the event of a settlement conference and make a recommendation to the settlement conference committee.

(e) Board Decision. Notice of the decision by the Board on recommendations of the review committee shall be given to the party against whom the charges have been brought and the party submitting the charge. Though it is not forbidden to do so, the Board is not required to notify the parties of the reasons of the Board in making its determination.

(f) Settlement Conference. When the Board issues a citation for hearing or notice of a contemplated action, the licensee may request in writing a settlement conference to pursue resolution of the issue(s) through informal procedures. If, after the completion of a settlement conference, the licensee and Board's settlement committee do not agree to a resolution of the dispute for the full Board's consideration, the original administrative proceeding shall commence. During the course of the settlement conference, no sworn testimony shall be taken nor shall any witnesses be cross-examined.

(1) The Board's settlement committee shall be made up of the following individuals:

(A) the member of the Board who served on the review committee or the replacement if the member is not available,

(B) one public member from the Board,

(C) the legal counsel of the Board, and

(D) the Executive Director of the Board or Assistant Executive Director if designated by the Executive Director.
(2) Upon review of the available evidence, the settlement committee shall present to the Board a written recommendation that:

(A) the charge be dismissed as unfounded or trivial;

(B) when the charge is admitted as true, the Board accept the admission of guilt by the person charged and order the person not to commit in the future the specific act or acts admitted and, also, not to violate any provisions of the Board Rules or the statutes at any time in the future;

(C) the charge, whether admitted or denied, be presented to the full Board for a hearing and determination by the Board on the merits of the charge in accordance with the substantive and procedural requirements of the provisions of Section .1400 of this Chapter and the provisions of G.S. 150B; or

(D) whether the charge is admitted or denied, the Board give notice to the licensee of a contemplated action as set out in Rule .1403(b) of this Chapter.

History Note: Authority G.S. 89C-10; 89C-21; 89C-22;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2011; July 1, 2009; May 1, 2009; August 1, 2000; August 1, 1998; March 1, 1996; April 1, 1989; December 1, 1984; January 1, 1982.

21 NCAC 56 .1302 UNLAWFUL PRACTICE BY AN UNLICENSED PERSON

(a) General. Alleged unlawful practice by an unlicensed person shall be subject to Board investigation and referral to an agency of the state for appropriate legal action.

(b) Preferring Charges. Any person who believes that any person or firm is in violation of the acts specified in G.S. 89C may prefer charges against that person or firm by setting forth in writing those charges and swearing to their authenticity. The charges shall be filed at the Board's office in Raleigh, North Carolina.

(c) Preliminary or Threshold Determination:

(1) Upon receipt of a properly filed charge, an investigation shall be initiated,

(2) At the discretion of the executive director, a field investigation may be performed without notifying any of the parties involved,

(3) After preliminary evidence has been obtained, the matter shall be referred to the Board’s review committee which is made up of the following individuals:

(A) one member of the Board;

(B) the legal counsel of the Board; and

(C) the Executive Director of the Board or Assistant Executive Director if designated by the Executive Director.

(4) The review committee shall recommend to the Board whether there is probable cause to believe that a party against whom a charge has been brought in fact has violated the provisions of G.S. 89C.

(5) Upon review of the available evidence, the review committee shall make a threshold determination of the charges brought. The review committee shall then present to the Board written recommendations that:

(A) The investigation be continued;

(B) The charge be dismissed as unfounded or trivial; or

(C) The matter be referred to an appropriate agency for necessary legal action.

(d) Board Decision. Notice of decision by the Board on recommendations of the review committee shall be given to the party submitting the charge.

History Note: Authority G.S. 89C-10; 89C-23;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2011; August 1, 2000; August 1, 1998; May 1, 1994; April 1, 1989; January 1, 1982.

SECTION .1400 - CONTESTED CASES
21 NCAC 56 .1401  GENERAL RULES
Whenever the Board, by its official action, acts in such a way as to affect the rights, duties, or privileges of a specific identified party, that party, upon request, will be given an administrative hearing.

History Note:  Authority G.S. 89C-10; 89C-21; 89C-22; 150B-38;
Eff. February 1, 1976;

21 NCAC 56 .1402  OPPORTUNITY FOR LICENSEE OR APPLICANT TO HAVE HEARING
Every licensee or applicant for a license shall be afforded notice and an opportunity to be heard on any action, where the effect would be:

(1) to deny permission to take an examination for licensing for which application has been duly made;
(2) to deny a license based on comity;
(3) to deny a license after an applicant has taken and passed an examination;
(4) to require re-examination for licensing;
(5) to withhold the renewal of a license for any cause other than failure to pay a statutory renewal fee;
(6) to suspend a license;
(7) to revoke a license;
(8) to impose a civil penalty;
(9) to issue a reprimand;
(10) to refuse to renew;
(11) to refuse to reinstate; or
(12) to require additional education.

History Note:  Authority G.S. 89C-10; 89C-21; 89C-22; 150B-38;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 2014; April 1, 1989; January 1, 1982.

21 NCAC 56 .1403  NOTICE OF CONTEMPLATED BOARD ACTION: REQUEST FOR HEARING
(a) When the Board takes action of a type specified in Subparagraphs (1), (2) or (3) of Rule .1402 of this Section, it shall give to the applicant a written notice containing a statement:

(1) that the applicant has failed to satisfy the Board of the qualifications to be examined or to be issued a license, as the case may be;
(2) indicating in what respects the applicant has so failed to satisfy the Board; and
(3) that unless the applicant, within 20 days after service of said notice, deposits in the mail a certified letter addressed to the Board and containing a request for a hearing, the Board's action will become final.

In any Board proceeding involving the denial of a duly made application to take an examination, or refusal to issue a license after an applicant has taken and passed an examination, the burden of satisfying the Board of the applicant's qualifications shall be upon the applicant.

(b) When the Board contemplates taking any action of a type specified in Subparagraphs (4), (5), (6), (7), (8), or (9) of Rule .1402 of this Section, it shall give to the licensee a written notice containing a statement:

(1) that the Board has sufficient evidence which, if not rebutted or explained, will justify the Board in taking the contemplated action;
(2) indicating the general nature of the evidence; and
(3) that unless the license, within 20 days after service of said notice, deposits in the mail a certified letter addressed to the Board and containing a request for a hearing or settlement conference, the Board will take the contemplated action.

History Note:  Authority G.S. 89C-10; 89C-21; 89C-22; 150B-38;
Eff. February 1, 1976;
Readopted Eff. September 29, 1977;
Amended Eff. August 1, 1998; December 1, 1984; January 1, 1982.
21 NCAC 56 .1409  CONDUCT OF CONTESTED CASE

(a) Failure to Appear:

(1) If a party served with notice requests a hearing within the time required and fails to appear without having notified the Board, and no continuance or adjournment is ordered, the party is considered to have waived the right to appear at the hearing and the Board may proceed with the hearing in the party's absence.

(2) If the absent party is the only party other than the Board, the Board may proceed with the hearing and make its decision in the party's absence.

(3) Continuances and adjournments shall be granted to a party only in compelling circumstances and for hardship noted.

(4) If a hearing is conducted or a decision reached in the absence of a party, that party may petition the Board for a reopening of the case. Petitions will not be granted, except when petitioner can show that the reasons for the failure to appear were justifiable and that fairness requires reopening of the case. The decision made by the Board will be in writing. A copy will be sent to the petitioner and made a part of the record of the contested case.

(b) Simplification of Issues. The parties to a contested case may agree in advance to simplify the hearing by eliminating issues to be contested at the hearing, accepting the validity of certain proposed evidence, accepting the findings in some other case with relevance to the case at hand, or agreeing to such other matters as may expedite the hearing.

(c) Subpoenas:

(1) The executive director shall issue subpoenas in the Board's name.

(2) Subpoenas requiring the attendance of witnesses, or those to produce documents, evidence, or things, will be issued by the executive director within five business days of the receipt of a request from a party to the case for such subpoena.

(3) Any person receiving a subpoena from the Board may object thereto by filing a written objection to the subpoena with the Board. Such objection must include a concise, but complete statement of reasons why the subpoena should be revoked or modified. These reasons may include lack of relevancy of the evidence requested, lack of particularity in the description of the evidence sought, or any other reasons sufficient in law for holding the subpoena invalid, such as that the evidence is privileged, that appearance or production would be so disruptive as to be unreasonable in light of the significance of the evidence sought, or other undue hardships.

(4) The objecting witness shall serve the objection on the party who requested the subpoena as soon as the objection is filed with the Board.

(5) The party requesting the subpoena, within five days, may file a written response to the objection. The response shall be served in like manner as the objection.

(6) After receipt of the objection and response thereto, if any, the Board shall issue a notice to the party who requested and the party challenging the subpoena, and may notify all other parties of an open hearing, to be scheduled as soon as practicable, at which time evidence and testimony may be presented limited to the questions raised by the objection and response, if any.

(7) Promptly after the close of such hearing, the Board will rule on the challenge and issue a written decision. A copy of this decision will be issued to all parties and made a part of the record.
21 NCAC 56 .1410 DISCOVERY

History Note: Authority G.S. 89C-10; 89C-21; 89C-22; 150A-28; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 2000; August 1, 1998; April 1, 1989; December 1, 1984; January 1, 1982.

21 NCAC 56 .1411 DEPOSITIONS
Depositions shall be taken in accordance with the North Carolina Rules of Civil Procedure.

History Note: Authority G.S. 89C-10; 89C-21; 89C-22; 150B-39(a); Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. August 1, 1998.

21 NCAC 56 .1412 CONDUCT OF HEARING

History Note: Authority G.S. 89C-10; 89C-21; 89C-22; 150A-25; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. January 1, 1982; Repealed Eff. April 1, 1989.

21 NCAC 56 .1413 DECISION OF BOARD
(a) Manner and Time of Rendering Decision. After a hearing has been completed the Board shall proceed to consider the case and as soon as practicable shall render their decision. The decision must be rendered within 90 days after the hearing.
(b) Service of Written Decision. The Board shall serve upon each party a written copy of the decision, either personally or by certified mail. If the decision is sent by certified mail it shall be deemed to have been served on the date borne on the return receipt.
(c) Final Decision. The final decision of the Board shall be in the manner and form prescribed by G.S. 150B-42(a).
(d) Official Record. The official record shall be prepared in all contested cases in accordance with the requirements of G.S. 150B-42(b).

History Note: Authority G.S. 89C-10; 89C-21; 89C-22; 150B-42; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. May 1, 2009; April 1, 1989; January 1, 1982.

SECTION .1500 - FEES

21 NCAC 56 .1501 GENERAL
Fees for returned checks shall be in the maximum amount established by G.S. 25-3-506.

History Note: Authority G.S. 89C-14; 89C-17; 89C-18; Eff. May 1, 1989; Amended Eff. August 1, 2000.

SECTION .1600 – STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA

21 NCAC 56 .1601 GENERAL
In order to better serve the general public in regulating the practice of land surveying in North Carolina, the minimum standards of practice set forth in this Section are established, and shall be observed by Professional Land Surveyors in the practice of land surveying.

History Note: Authority G.S. 89C-10; 89C-20; Eff. July 1, 1989; Amended Eff. August 1, 2000.

21 NCAC 56 .1602 SURVEYING PROCEDURES
(a) A Professional Land Surveyor shall spend the necessary time and effort to make investigation to determine if there are encroachments, gaps, lappages, or other irregularities along each line surveyed. Points may be placed on the line from closed or verified traverses and the necessary investigations made from these points. If these investigations are not made, then the surveyor shall not certify to an actual survey of that line and the plat shall contain the appropriate qualifications in accordance with the rules in this Section.
(b) Any and all visible or determined encroachments or easements on the property being surveyed shall be accurately located and indicated.
(c) With respect to investigation of property boundaries and recorded easements, the surveyor shall examine the most recent deeds and recorded plats adjacent to the subject property as well as all deeds and plats recorded after the date of the deed or plat upon which the survey is being based (the survey reference deed or plat).
(d) Except as provided in Paragraph (e) of the Rule, metal stakes or materials of comparable permanence shall be placed at all corners.
(e) Where a corner falls in a right-of-way, tree, stream, or on a fence post, boulder, stone, or similar object, one or more monuments or metal stakes shall be placed in the boundary so that the inaccessible point may be located accurately on the ground and the map.
(f) The results of a survey shall be reported to the user of that survey as a map or report of survey and, whether in written or graphic form, shall be prepared in a clear and factual manner. All reference sources shall be identified. Artificial monuments called for in such reports shall be described as found or set. When no monument is found or set for points described in Paragraph (e) of this Rule, that fact shall be noted.
(g) Tie lines defined. Where the results of a survey are reported in the form of a plat or a written description, one or more corners shall, by a system of azimuths or courses and distances, be accurately tied to and coordinated with a horizontal control monument of some United States or State Agency survey system, such as the North Carolina Geodetic Survey, where such monument is within 2000 feet of the subject property, right-of-way, easement or other surveyed entity. Where the North Carolina grid system coordinates of said monument are on file in the Department of Public Safety, Emergency Management, Geodetic Survey office, the coordinates of both the referenced corner or point and the monument(s) shall be shown in X (easting) and Y (northing) coordinates on the plat or in the written description or document. The coordinates shall be identified as based on "NAD 83," indicating North American Datum of 1983 or as "NAD 27," indicating North American Datum of 1927. The datums of the National Geodetic Survey (NGS) are incorporated by reference including subsequent amendments and editions, and may be accessed free of charge at www.ngs.noaa.gov. The tie lines to the monuments shall be sufficient to establish true north or grid north bearings for the plat or description if the monuments exist in pairs. Control monuments within a previously recorded subdivision may be used in lieu of grid control. In the interest of bearing consistency with previously recorded plats, existing bearing control may be used where practical. In the absence of grid control, other natural or artificial monuments or landmarks shall be used. In all cases, the tie lines shall be sufficient to accurately reproduce the subject lands from the control or reference points used.
(h) Area is to be computed by double meridian distance or equally accurate method and shown on the face of the plat, written description, or other document. Area computations by estimation, by planimeter, by scale, or by copying from another source are not acceptable methods, except in the case of tracts containing inaccessible areas and in these areas the method of computation shall be stated.

History Note: Authority G.S. 89C-10; 89C-20; Eff. July 1, 1989; Amended Eff. August 1, 2014; August 1, 2012 (see S.L. 2012-143, s.1.(f)); September 1, 2011; May 1, 2009; August 1, 2000; August 1, 1998; February 1, 1996.

21 NCAC 56 .1603 CLASSIFICATION OF BOUNDARY SURVEYS
"Boundary surveys" are defined as surveys made to establish or to retrace a boundary line on the ground, or to obtain data for constructing a map, plat, or report showing a boundary line. For the purpose of this Rule, the term refers to all surveys, including "loan" or "physical" surveys, that involve the determination or depiction of property lines. For the purpose of specifying minimum allowable surveying standards for boundary surveys, the following four general classifications of lands in North Carolina are established from the standpoint of their real value, tax value, or location. Each map shall contain a statement of the calculated ratio of precision before adjustments or a statement of positional accuracy.

1. Local Control Network Surveys (Class AA). Local control network surveys are traverse networks utilizing permanent points for the purpose of establishing local horizontal control networks for future use by local surveyors. For Class AA boundary surveys in North Carolina, the angular error of closure shall not exceed ten seconds times the square root of the number of angles turned. The ratio of precision shall not exceed an error of closure of one foot per 20,000 feet of perimeter of the parcel of land (1:20,000). When using positional accuracy standards for Class AA control and boundary surveys, neither axis of the 95 percent confidence level error ellipse for any control point or property corner shall exceed 0.05 feet or 0.015 meters measured relative to the position(s) of the horizontal control points used and referenced on the survey.

2. Urban Land Surveys (Class A). Urban surveys include lands that normally lie within a town or city. For Class A boundary surveys in North Carolina, the angular error of closure shall not exceed 20 seconds times the square root of the number of angles turned. The ratio of precision shall not exceed an error of closure of one foot per 10,000 feet of perimeter of the parcel of land (1:10,000). When using positional accuracy standards for Class A control and boundary surveys, neither axis of the 95 percent confidence level error ellipse for any control point or property corner shall exceed 0.10 feet or 0.030 meters measured relative to the position(s) of the horizontal control points used and referenced on the survey.

3. Suburban Land Surveys (Class B). Suburban surveys include lands in or surrounding the urban properties of a town or city. For Class B boundary surveys in North Carolina, the angular error of closure shall not exceed 25 seconds times the square root of the number of angles turned. The ratio of precision shall not exceed an error of closure of one foot per 7,500 feet of perimeter of the parcel of land (1:7,500). When using positional accuracy standards for Class B control and boundary surveys, neither axis of the 95 percent confidence level error ellipse for any control point or property corner shall exceed 0.12 feet or 0.037 meters measured relative to the position(s) of the horizontal control points used and referenced on the survey.

4. Rural and Farmland Surveys (Class C). Rural and farmland surveys include lands located in rural areas of North Carolina and generally outside the suburban properties. For Class C boundary surveys in North Carolina, the angular error of closure shall not exceed 30 seconds times the square root of the number of angles turned. The ratio of precision shall not exceed an error of closure of one foot per 5,000 feet of perimeter of the parcel of land (1:5,000). When using positional accuracy standards for Class C control and boundary surveys, neither axis of the 95 percent confidence level error ellipse for any control point or property corner shall exceed 0.15 feet or 0.046 meters measured relative to the position(s) of the horizontal control points used and referenced on the survey.

History Note: Authority G.S. 89C-10; 89C-20; Eff. July 1, 1989; Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; August 1, 1998; November 2, 1992; January 1, 1992.

21 NCAC 56 .1604 MAPPING REQUIREMENTS FOR BOUNDARY SURVEYS
(a) The size of a map shall be such that all details are legible on a copy.
(b) Any lines that are not actually surveyed shall be indicated on the map and a statement included revealing the source of information from which the line is derived.
(c) All surveys based on the North Carolina grid system shall contain a statement identifying the coordinate system referenced datum used.
(d) All plats (maps), unless marked as "Preliminary Plat - Not for recordation, conveyances, or sales" shall be sealed, signed and dated by the Professional Land Surveyor and shall contain the following:
An accurately positioned north arrow coordinated with any bearings shown on the plat. Indication shall be made as to whether the north index is true, magnetic, North Carolina grid (NAD 83' and realization (date of adjustment of coordinate system) or NAD27), or is referenced to old deed or plat bearings. If the north index is magnetic or referenced to old deed or plat bearings, the date and the source (if determined) shall be indicated.

The azimuth or courses and distances of every property line surveyed shall be shown. Distances shall be in feet or meters and decimals thereof. The number of decimal places shall be appropriate to the class of survey required in Rule .1603 of this Section.

All plat lines shall be horizontal or grid measurements. All lines shown on the plat shall be correctly plotted to the scale shown. Enlargements of portions of a plat are acceptable in the interest of clarity, where shown as inserts. Where the North Carolina grid system is used, the combined grid factor shall be shown on the face of the plat. If grid distances are used, they shall be shown on the plat.

Where a boundary is formed by a curved line, the following data must be given: actual survey data, or as a series of subchords with bearings and distances around the curve. If standard curve data is used, the bearing and distance of the long chord (from point of curvature to point of tangency) must be shown on the face of the plat.

Where a subdivision of land is set out on the plat, all streets and lots shall be accurately plotted with dimension lines indicating widths and all other information pertinent to retracing all lines in the field. This shall include bearings and distances sufficient to form a continuous closure of the entire perimeter.

Where control corners have been established in compliance with G.S. 39-32.1, 39-32.2, 39-32.3, and 39-32.4, as amended, the location and information as required in the referenced statute shall be shown on the plat. All other corners that are marked by monument or natural object shall be so identified on all plats, and where practical, all corners of adjacent owners along the boundary lines of the subject tract that are marked by monument or natural object shall be shown.

The surveyor shall show one of the following where they could be determined:

(A) The names of adjacent land owners;
(B) The lot, block, parcel and subdivision designations; or
(C) Other legal reference where applicable.

All visible and apparent rights-of-way, easements, watercourses, utilities, roadways, and other such improvements shall be accurately located where crossing or forming any boundary line of the property shown.

Tie lines as required and defined in Rule .1602(g) of this Section shall be accurately shown on the face of the plat, whether or not the plat is to be recorded.

A vicinity map (location map) shall appear on the face of the plat.

Each map shall contain:

(A) the property designation;
(B) the name of owner or prospective owner;
(C) the location (including township, county, and state);
(D) the date or dates the survey was conducted;
(E) a scale of the drawing listed in words or figures;
(F) a bargraph;
(G) the title source; and
(H) a legend depicting nomenclature or symbols not otherwise labeled.

Any map not certified for recording under G.S. 47-30, and all reports of survey, shall contain this certificate signed by the Professional Land Surveyor in substantially the following form:

"I certify that this map was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book ______, page ______ or other reference source ________________________); that the boundaries not surveyed are indicated as drawn from information in Book ______, page ______ or other reference source _______________________; that the ratio of precision or positional accuracy is ______________________; and that this map meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56. 1600)."

This ______ day of ______________, 2_____.

Seal

______________________________

Professional Land Surveyor
21 NCAC 56 .1605  CLASSIFICATION OF VERTICAL CONTROL SURVEYS

(a) General. Vertical control surveys are defined as measurements taken by surveying methods (differential leveling, trigonometric leveling, and global positioning surveys) to determine elevation with respect to vertical datum, usually National Geodetic Vertical Datum of 1929 (NGVD29) or North American Vertical Datum of 1988 (NAVD88). Global Position Surveys shall only be used to obtain Class C surveys. For the purpose of specifying minimum allowable surveying standards, the following three general classifications of vertical control surveys are established.

1. For Class A vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.10 times the square root of the number of miles run from the reference datum.

2. For Class B vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.20 times the square root of the number of miles run from the reference datum.

3. For Class C vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.30 times the square root of the number of miles run from the reference datum.

The vertical error in global position surveys shall not exceed five centimeters relative to the referenced benchmark(s) at the 95 percent confidence level (2 sigma) accuracy as defined in Federal Geographic Data Committee Standards.

(b) A certificate, substantially in the following form, shall be affixed to all maps or reports:

"I, ______________________, certify that this vertical control survey was completed to the Class ___ standard ([21 NCAC 56.1605(a)]) under my direct and responsible charge from a..."

History Note:  Authority G.S. 89C-10; 89C-16; 89C-20;
Eff. July 1, 1989;
Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; August 1, 1998; February 1, 1996;

21 NCAC 56 .1606  SPECIFICATIONS FOR TOPOGRAPHIC AND PLANIOMETRIC MAPPING, INCLUDING GROUND, AIRBORNE, AND SPACEBORNE SURVEYS

(a) General.

1. "Topographic surveys" are defined as surveys that have as their major purpose the determination of the configuration (relief) of the earth (ground) and the location of natural or artificial objects thereon.

2. "Planimetric mapping" is defined as producing a map that presents the horizontal positions only for the features represented. This is distinguished from a topographic map by the omission of relief in measurable form.

3. "Airborne and spaceborne surveys" are defined as the use of photogrammetry, LIDAR, IFSAR, or other similar measurement technologies for obtaining reliable information about physical objects and the environment, including terrain surface, through the process of recording, measuring, and interpreting images and patterns of electromagnetic radiant energy and other phenomena. This Rule establishes minimum allowable photogrammetric production procedures and standards for photogrammetric mapping and digital data production.

(b) Production procedures for topographic and planimetric mapping surveys shall be in accordance with the standards established by Part 3 of the Federal Geographic Data Committee (FGDC) Geospatial Positioning Accuracy Standard and applicable extensions and revisions. These standards are incorporated by reference including subsequent amendments and editions. The material is available from the FGDC at www.fgdc.gov at no cost. Reporting accuracy shall be in accordance with Part 1 of the FGDC geospatial standards.

(c) Topographic or planimetric maps, orthophotos, and related electronic data, unless marked as "Preliminary Map," shall meet one of the below classes, as contractually specified to FGDC Standards, or National Agriculture Imagery Program of the US Department of Agriculture (NAIP) Standards, or to State adopted base mapping standards for horizontal and vertical accuracies. The NAIP imagery standards are incorporated by reference including subsequent amendments and editions and may be accessed free of charge at http://www.fsa.usda.gov/Internet/FSA_File/naip_info_sheet_2013.pdf. In the absence of a specified standard, the surveyor shall conform the survey to the requirements for a Class B survey.
(1) For horizontal accuracy, the five general classifications are:
(A) Class AA surveys. For Class AA surveys in North Carolina, the relative accuracy shall be equal to or no less than 0.033 meter (0.10 feet);
(B) Class A surveys. For Class A surveys in North Carolina, the relative accuracy shall be equal to or less than 0.5 meter (1.64 feet);
(C) Class B surveys. For Class B surveys in North Carolina, the relative accuracy shall be equal to or less than 1.0 meter (3.28 feet);
(D) Class C surveys. For Class C surveys in North Carolina, the relative accuracy shall be equal to or less than 2 meters (6.56 feet); and
(E) Class D surveys. For Class D surveys in North Carolina, the relative accuracy shall be equal to or less than 5 meters (16.40 feet).

(2) For vertical accuracy, the three general classifications are:
(A) Urban and suburban vertical control surveys (Class A). Urban and suburban vertical control surveys include lands that lie within or adjoin a town or city. For Class A vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.10 times the square root of the number of miles run from the reference datum.
(B) Other vertical control surveys (Class B). Other vertical control surveys include all lands which are not covered by Class A as described in Part (A) of this Subparagraph. For Class B vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.20 times the square root of the number of miles run from the reference datum.
(C) Trigonometric vertical control surveys (Class C). Trigonometric vertical control surveys shall be used for vertical control for aerial and topographic mapping. The vertical error in feet shall not exceed 0.3 times the square root of the number of miles run from the reference datum.

(d) When the resulting product is a digital (electronic) data set, or a map or document that consists of more than one sheet or otherwise cannot be certified, a project report shall be certified. The report shall be marked "Preliminary" if applicable.

(e) Ground control for topographic and planimetric mapping projects shall be in North Carolina State Plane Coordinate System grid coordinates and distances when the project is tied to grid. A minimum of one permanent project vertical control point shall be shown.

(f) The project map or report shall contain the following information:
   (1) Date of original data acquisition;
   (2) Altitude of sensor and sensor focal length, as applicable;
   (3) Date of document or data set compilation;
   (4) If hard copy product is produced, the maps shall contain a north arrow, map legend, final document scale, including bargraph, and contour interval, as applicable;
   (5) Coordinate system for horizontal and vertical denoting SI or English units (i.e., NAD83, assumed, or other coordinate system);
   (6) A list or note showing the control points used for the project. The minimum data shown for each point shall include: physical attributes (e.g. iron rod, railroad spike), latitude and longitude (or X and Y Grid coordinates), and elevation, as applicable;
   (7) If other data is included, the source and accuracy of those items shall be indicated;
   (8) For topographic maps or data sets, contours in areas obscured by man-made or natural features shall be uniquely identified or enclosed by a polygon identifying the obscured area. The accuracies of the contours or of features in this obscured area shall be noted "No reliance is to be placed on the accuracy of these contours;"
   (9) A vicinity map depicting the project location on the first sheet of all hard copy maps or in the report accompanying digital files; and
   (10) The name of the client for whom the project was conducted.

(g) Nothing in this Rule shall be construed to negate or replace the relative accuracy standards found in Rules .1601 through .1608 of this Section.

(h) A certificate, substantially in the following form, shall be affixed to all maps or reports:
"I, ______________________, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this______________ (insert as appropriate: ground, airborne or spaceborne) survey was performed at the ___ percent confidence level to meet Federal Geographic Data Committee
Standards; that this survey was performed to meet the requirements for a topographic/planimetric survey to the accuracy of Class ____ and vertical accuracy when applicable to the Class ___ standard, and that the original data was obtained on ____(date)_________; that the survey was completed on ___(date)_______; that contours shown as [broken lines] may not meet the stated standard; and all coordinates are based on 'NAD 83' and realization (date of adjustment of coordinate system) or 'NAD 27' and all elevations are based on ________________ (NGVD 29, NAVD 88, or other).

Documents transmitted electronically shall have the computer-generated seal removed from the original file and a copy of the project report shall be certified and sent to the client. The electronic data shall have the following inserted in lieu of the signature and date:

"This document originally issued and sealed by (name of sealer), (license number), on (date of sealing). This electronic media shall not be considered a certified document. See the project report for certificate and seal."

History Note:  Authority G.S. 89C-10; 89C-16; 89C-20;
Eff. November 2, 1992;
Amended Eff. August 1, 2014; August 1, 2011; May 1, 2009; August 1, 2002; August 1, 2000.

21 NCAC 56 .1607 GLOBAL POSITIONING SYSTEMS SURVEYS
(a) General. Global Positioning Systems (GPS) are defined as the navigation and positioning systems that comprise the Global Navigation Satellite System (GNSS), which includes NAVSTAR, GLONASS, GALILEO, COMPASS, and any other satellite-based navigation and positioning systems.
(b) The Professional Land Surveyor in responsible charge of the GPS survey shall certify all prepared documents. When a map or document consists of more than one sheet, only one sheet must contain the certificate and all others must be certified. The certificate or metadata notes shall contain the following information:

1. Class of GPS survey as defined in the Standards of Practice (or list the sections);
2. Type of GPS field procedure, such as Static, Kinematic, Pseudo-Kinematic, Real-time Kinematic, Real-time Kinematic networks, and Online Position User Service;
3. Positional accuracy;
4. Dates of survey;
5. What datum and epoch coordinates or geographic positions are based on;
6. Designation of fixed-control stations and their positional data;
7. Geoid model used;
8. Combined grid factor(s); and
9. Units.

The certificate shall be substantially in the following form:
"I, ____________________, certify that this map was drawn under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

1. Class of survey: __________________
2. Positional accuracy: __________________
3. Type of GPS field procedure: __________________
4. Dates of survey: __________________
5. Datum/Epoch: __________________
6. Published/Fixed-control use: __________________
7. Geoid model: __________________
8. Combined grid factor(s): __________________
9. Units: __________________"

(c) GPS surveys performed to provide control networks shall be performed in such a manner that a 95 percent confidence level of the positional accuracy of each point relative to the published positions of the control points used and shall meet the accuracy standards of a Class AA survey as set out in Rule .1603.
(d) GPS surveys performed to provide local horizontal or vertical Grid control on a parcel of land where the boundary or topography of that parcel will be shown relative to NC Grid horizontal or vertical datum shall be performed using techniques that will provide the standards of accuracy for the class of survey being performed while determining the horizontal or vertical positions of objects as set out in Rule .1603 or Rule .1606 as applicable.
(e) Fixed station(s) used for the project shall appear on the map, plat, or report. The minimum data shown for each fixed station shall be station name, horizontal position (northing and easting) or latitude, longitude, elevation (ellipsoid or orthometric), and datum and epoch.
21 NCAC 56 .1608  CLASSIFICATION/LAND INFORMATION SYSTEM/GEOGRAPHIC INFORMATION SYSTEM SURVEYS

(a) General: "Land Information System/Geographic Information System (LIS/GIS)" surveys are defined as the measurement of existing surface and subsurface features for the purpose of determining their accurate geospatial location for inclusion in an LIS/GIS database. All LIS/GIS surveys as they relate to property lines, rights-of-way, easements, subdivisions of land, the position for any survey monument or reference point, the determination of the configuration or contour of the earth's surface or the position of fixed objects thereon, and geodetic surveying that includes surveying for determination of the size and shape of the earth both horizontally and vertically and the precise positioning of points on the earth utilizing angular and linear measurements through spatially oriented spherical geometry, shall be performed by a Land Surveyor who is a licensee of this Board unless exempt by G.S. 89C-25. For the purpose of specifying minimum allowable surveying standards, five general classifications of LIS/GIS surveys are established, any of which may be specified by the client. In the absence of a specified standard, the surveyor shall conform the survey to the requirements for a Class B survey.

(1) For horizontal accuracy, the five general classifications are:
   (A) Class AA LIS/GIS Surveys. For Class AA LIS/GIS surveys in North Carolina, the relative accuracy shall be equal to or no less than 0.033 meter (0.10 feet);
   (B) Class A LIS/GIS surveys. For Class A LIS/GIS surveys in North Carolina, the relative accuracy shall be equal to or less than 0.5 meter (1.64 feet);
   (C) Class B LIS/GIS surveys. For Class B LIS/GIS surveys in North Carolina, the relative accuracy shall be equal to or less than 1.0 meter (3.28 feet);
   (D) Class C LIS/GIS surveys. For Class C LIS/GIS surveys in North Carolina, the relative accuracy shall be equal to or less than 2 meters (6.56 feet); and
   (E) Class D LIS/GIS surveys. For Class D LIS/GIS surveys in North Carolina, the relative accuracy shall be equal to or less than 5 meters (16.40 feet).

(2) For vertical accuracy, the three general classifications are:
   (A) Urban and suburban vertical control surveys (Class A). Urban and suburban vertical control surveys include lands that lie within or adjoin a town or city. For Class A vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.10 times the square root of the number of miles run from the reference datum.
   (B) Other vertical control surveys (Class B). Other vertical control surveys include all lands which are not covered by Class A as described in Part (A) of this Subparagraph. For Class B vertical control surveys in North Carolina, the vertical error in feet shall not exceed 0.20 times the square root of the number of miles run from the reference datum.
   (C) Trigonometric vertical control surveys (Class C). Trigonometric vertical control surveys shall be used for vertical control for aerial and topographic mapping. The vertical error in feet shall not exceed 0.3 times the square root of the number of miles run from the reference datum. The vertical error in Global Navigation Satellite System (GNSS) surveys shall not exceed five centimeters relative to the referenced benchmark(s) at the 95 percent confidence level (2 sigma) accuracy as defined in Federal Geographic Data Committee Standards.

(b) Nothing in this Rule negates or replaces the relative accuracy standards found in Rules .1601 through .1607 of this Section.

(c) The Professional Land Surveyor in responsible charge of the LIS/GIS boundary or geodetic control survey shall certify all of the following in either written or digital form:

(1) Class of LIS/GIS survey. The method of measurement used to evaluate the accuracy shall be described as either statistical testing or least squares adjustment results, comparison with values of higher accuracy, and repeat measurements. The reporting standard in the horizontal component is the radius of a circle of uncertainty, such that the true or theoretical location of the point falls within that circle 95 percent of the time;

(2) Method of measurement (i.e. global navigation satellite systems, electronic scanners, theodolite and electronic distance meter, transit and tape);
(3) Date(s) of the survey; and
(4) Datum used for the survey.

(d) A certificate, substantially in the following form, shall be affixed to all maps or reports:
"I, ______________________, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this survey was performed to meet the requirements for an LIS/GIS survey [21 NCAC 56.1608] to the accuracy of Class ____ and vertical accuracy; when applicable to the Class ___ standard method used to evaluate the accuracy was _______________; method of measurement ______________; date(s) of survey ___________; datum used for survey __________; and all coordinates are based on ______________ [‘NAD 83’ and realization (date of adjustment of coordinate system) or ‘NAD 27’] and all elevations are based on ______________ (NGVD 29, NAVD 88, or other)."

History Note: Authority G.S. 89C-10; 89C-20;
Eff. February 1, 1996;
Amended Eff. August 1, 2014; August 1, 2011; July 1, 2009; May 1, 2009; August 1, 2002; August 1, 2000.

21 NCAC 56 .1609 MINIMUM PHOTOGRAMMETRIC PRODUCTION STANDARDS

History Note: Authority G.S. 89C-10; 89C-20;
Eff. August 1, 2000;

SECTION .1700 – CONTINUING PROFESSIONAL COMPETENCY

21 NCAC 56 .1701 INTRODUCTION
Every licensee shall meet the continuing professional competency requirements of this Section for professional development as a condition for licensure renewal.

History Note: Authority G.S. 89C-10(a); 89C-17;
Eff. December 1, 1994;

21 NCAC 56 .1702 DEFINITIONS
Terms used in this Section are defined as follows:

(1) Professional Development Hour (PDH) - A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit.
(2) Continuing Education Unit (CEU) - Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 contact hours of instruction or presentation.
(3) College/Unit Semester/Quarter Hour - Credit for Accreditation Board for Engineering and Technology approved course or other related college course.
(4) Course/Activity - Any course or activity with a purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's field of practice.
(5) Dual Licensee - A person who is licensed as both an engineer and a land surveyor.
(6) Sponsor - Organization or individual that has supplied information on a form prescribed and furnished by the Board with respect to the organization or individual's ability to provide instruction in "for credit" courses. Courses offered by those designated as "Sponsor" must contain a purpose and objective, and result in the maintenance, improvement, or expansion of skills and knowledge relevant to a licensee's field of practice.

History Note: Authority G.S. 89C-10(a); 89C-17;
Eff. December 1, 1994;
Amended Eff. May 1, 2009; August 1, 2000.

21 NCAC 56 .1703 REQUIREMENTS
Every licensee shall obtain 15 PDH units during the renewal period. If a licensee exceeds the annual requirement in any renewal period, a maximum of 15 PDH units may be carried forward into the subsequent renewal period. Selection of courses and activities that meet the requirements of Rule .1702(4) of this Section is the responsibility of the licensee. Licensees may select courses other than those offered by sponsors. Post evaluation of the courses may result in non-acceptance by the Board. PDH units may be earned as follows:

1. Completion of college courses;
2. Completion of continuing education courses, seminars, or workshops;
3. Completion of correspondence, televised, Internet, videotaped, audiotaped, and other courses or tutorials, provided an exam is required for completion. No exam is required for attendance at a webinar presentation if attendance is documented;
4. Presenting or attending seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions or conferences;
5. Teaching or instructing in Items (1) through (4) of this Rule;
6. Authoring published papers, articles, or books;
7. Active participation in professional or technical societies as defined in Rule .1705(f) of this Section;
8. Patents;
9. Authoring exam questions accepted for use in the engineering or land surveying exams; or
10. Active participation on boards, commissions, committees or councils of private, local, state or federal government entities as defined in Rule .1705(g) of this Section.

History Note: Authority G.S. 89C-10(a); 89C-17;
Eff. December 1, 1994;
Amended Eff. August 1, 2014; August 1, 2011; May 1, 2009; August 1, 2000; August 1, 1998.

21 NCAC 56 .1704 UNITS

The conversion of units of credit set forth in Rule .1703 of this Section to PDH units is as follows:

1. 1 College or unit semester hour. 45 PDH
2. 1 College or unit quarter hour. 30 PDH
3. 1 Continuing Education Unit. 10 PDH
4. 1 Contact hour of professional development in course work, seminars, or professional or technical presentations made at meetings, conventions or conferences, and for correspondence, televised, Internet, videotaped, audiotaped, and other courses or tutorials. Contact hours equal the actual time of instruction and shall be credited to the nearest one-third of an hour. 1 PDH
5. For teaching in Items (1) – (4) of this Rule, PDH credits are doubled. Teaching credit is valid for teaching a course or seminar for the first time only. Teaching credit does not apply to full-time faculty, as defined by the institution where a licensee is teaching.
6. Each published paper, article or book. 10 PDH
7. Active participation in professional and technical society. (Each society) 2 PDH
8. Each patent. 10 PDH
9. Each question used. 2 PDH
10. Active participation on boards, commissions, committees or councils of private, local, state or federal government entities. (Each entity) 2 PDH

History Note: Authority G.S. 89C-10(a); 89C-17;
Eff. December 1, 1994;
Amended Eff. August 1, 2014; May 1, 2009; August 1, 2000; August 1, 1998.

21 NCAC 56 .1705 DETERMINATION OF CREDIT

(a) The Board of Examiners has final authority with respect to approval of courses, sponsors, credit, PDH value for courses, and other methods of earning credit. Such determination shall meet Rule .1702(4) of this Section.
(b) Credit for college or community college courses shall be based upon course credit established by the college.
(c) Credit for continuing education courses, seminars and workshops shall be based on one PDH unit for each hour of attendance. Attendance at programs presented at professional and technical society meetings shall earn PDH units for the actual time of each program.
(d) Credit for correspondence, televised, Internet, videotaped, audiotaped, and other courses or tutorials, provided an exam is required for completion, shall be based upon one PDH unit for each hour assigned to the course, provided such hours are a reasonably estimated time for an average professional to complete the course.

(e) Credit determination for published papers, articles and books and obtaining patents is the responsibility of the licensee.

(f) Credit for active participation in professional and technical societies (limited to 2 PDH per society), requires that a licensee serve as an officer or participate in a committee of the society. PDH credits are not earned until the end of each year of service is completed.

(g) Credit for active participation on boards, commissions, committees or councils of private, local, state or federal government entities (limited to 2 PDH per entity) requires utilizing engineering or land surveying knowledge (as applicable) in the active participation. PDH credits are not earned until the end of each year of service is completed.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff. December 1, 1994; Amended Eff. August 1, 2014; August 1, 2011; May 1, 2009; August 1, 2000; August 1, 1998.

21 NCAC 56 .1706 RECORDKEEPING

The licensee shall maintain the following records to be used to support credits claimed:

(1) a log showing the type of activity claimed, title or specific subject, sponsoring organization, location, duration, date, instructor's or speaker's name, and PDH credits earned, and other information on a form as prescribed by the Board; and

(2) attendance verification records in the form of completion certificates, or other documents supporting evidence of attendance.

These records must be maintained for a period of three years and copies may be requested by the board for audit verification purposes. The Board shall approve other records that contain the information required by this Rule.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff. December 1, 1994; Amended Eff. May 1, 2009; August 1, 2000.

21 NCAC 56 .1707 EXEMPTIONS

A licensee is exempt from the professional development educational requirements for the following reasons:

(1) New licensees by way of examination or comity are exempt for their first renewal period.

(2) If currently licensed by and in good standing (license is not suspended or revoked) with the Board a licensee who is serving in the armed forces of the United States and who is eligible for an extension of time to file a tax return pursuant to G.S. 105-249.2 is granted a waiver of the mandatory continuing education requirements for the time period disregarded pursuant to the Internal Revenue Code 26 U.S.C. 7508.

The licensee shall request the waiver as follows:

(a) The licensee shall notify the Board of eligibility before the current license expires. Upon such notification, the Board shall maintain the license in active status through the extension period.

(b) If the licensee fails to notify the Board of eligibility for the extension period before the current license expires, upon receipt and acceptance of a renewal application within the extension period and presentation of proof that the licensee was eligible on the date that is the deadline for renewal, the expired license or registration shall be deemed retroactively to have not expired.

(c) The licensee who submits a renewal application within the extension period shall not be deemed to hold a lapsed license subject to reinstatement fees.

(d) The licensee may renew the license within the extension period despite failing to complete the specified continuing education requirements.

(e) A licensee shall provide proof of eligibility for the extension period when the licensee or registrant submits the renewal application.
The Board shall exempt a licensee if the Board determines that the licensee is experiencing physical disability, illness, or other extenuating circumstances that prevent the licensee from obtaining professional development hours. Supporting documentation must be furnished to the Board.

Licensees who list their occupation as "Inactive" on the Board approved renewal form and who are no longer providing professional engineering or land surveying services are exempt from the professional development hours required. In the event such a person elects to return to active practice of professional engineering or land surveying, professional development hours must be earned in accordance with the requirements of Rule .1708 in this Section before returning to active practice for each year exempted not to exceed the annual requirement for two years.

History Note: Authority G.S. 89C-10(a); 89C-17; 93B-15; Eff. December 1, 1994; Amended Eff. August 1, 2011; May 1, 2009; August 1, 2000; February 1, 1996.

21 NCAC 56 .1708 REINSTATEMENT
A licensee may bring an inactive license to active status by obtaining all delinquent PDH units. However, if the total number required to become current exceeds 30, then 30 shall be the maximum number required. Reinstatement of a license that was not renewed within 12 months after expiration (archived license), in addition to a new application, requires obtaining all delinquent PDH units as required to reinstate an inactive license.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff., December 1, 1994; Amended Eff. August 1, 2002; August 1, 2000; February 1, 1996.

21 NCAC 56 .1709 COMITY/OUT-OF-JURISDICTION RESIDENT
Licensees who are residents of jurisdictions other than North Carolina shall meet the CPC requirements of their resident jurisdiction. If the licensee resides in a jurisdiction that has no continuing professional competency (CPC) requirement, or the licensee is exempt from the CPC requirement in the licensee's resident jurisdiction, the licensee must meet the requirements of North Carolina.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff. December 1, 1994; Amended Eff. May 1, 2009; August 1, 2000.

21 NCAC 56 .1710 DUAL LICENSEES
The number of PDH units required shall remain the same for persons who hold a second license as engineer or land surveyor. Holders of a second license must obtain a minimum of one-third of the total PDH requirements in each field. The remaining one-third requirement may be obtained in either field at the sole discretion of the licensee.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff. December 1, 1994; Amended Eff. July 1, 2009.

21 NCAC 56 .1711 FORMS
Renewal applications may require the completion of a continuing education form specified by the board outlining PDH credit claimed. The licensee must supply sufficient detail on the form to permit audit verification, must certify and sign the continuing education form, and submit the form with the renewal application and fee.

History Note: Authority G.S. 89C-10(a); 89C-17; Eff. December 1, 1994; Amended Eff. July 1, 2009; August 1, 1998.

21 NCAC 56 .1712 COMPLIANCE
(a) Compliance with annual Continuing Professional Competency (CPC) requirements shall be determined through an audit process conducted by the Board. Determination of individuals to be audited shall be accomplished through a
random selection process or as the result of information available to the Board. Individuals selected for auditing shall provide the Board with the following documentation of the CPC activities claimed for the renewal period:

(1) Attendance verification records in the form of transcripts, completion certificates, other documents supporting evidence of attendance, and a log as defined in Rule .1706 of the Section; and

(2) Information regarding course content, instructors and sponsoring organization, for activities presented by other than approved sponsors as defined in Rule .1713 of this Section.

(b) Attendance records shall be maintained by individual licensees for a period of three years for audit verification purposes.

History Note: Authority G.S. 89C-10(a); 89C-17;
Eff. December 1, 1994;
Amended Eff. May 1, 2009; February 1, 1996.

21 NCAC 56 .1713 Sponsors
(a) The Board shall approve sponsors of Continuing Professional Competency (CPC) activities. The Board shall maintain a list of sponsors which have agreed to conduct programs in accordance with the standards of CPC activities set forth in 21 NCAC 56. 1700. Such sponsors shall indicate their agreement with the requirements by executing a Sponsor Agreement on a form provided by the Board. These sponsors shall be designated as "Approved Sponsors" based upon approval by the Board of the sponsor application and payment of a one hundred fifty dollar ($150.00) application fee.

(b) By entering into an agreement with the Board to be designated as an "Approved Sponsor," the sponsor shall agree to:

(1) Allow persons designated by this Board to attend any or all courses, without fee or charge, for the purpose of determining that said course meets the standards of the Board;

(2) Allow persons designated by this Board to review course material for the purpose of determining that the course meets the standards of the Board;

(3) State in every brochure, publication or announcement concerning the course, the general content of the course and the specific knowledge or skill to be taught or addressed, as well as the credit to be earned in Professional Development Hours (PDH);

(4) Ensure that the instructors or presenters of the course or program are qualified to teach the subject matter;

(5) Provide persons completing the course with written documentation attesting to that person's attendance to the course, as well as the name of the course, the date and location held, the instructor's name and the number of PDHs earned;

(6) Provide attendees an evaluation form as provided by the Board that is to be collected and retained for audit by the Board;

(7) Have a visible, continuous and identifiable contact person who is charged with the administration of the sponsor's CPC program and who has the responsibility for assuring and demonstrating to the Board compliance with this Rule, as well as for any other organization working with the sponsor for the development, distribution or presentation of CPC courses or activities; and

(8) Retain for a period of three years a copy of the documentation required by this Paragraph.

(c) Sponsors shall renew annually on a form provided by the Board.

(d) Failure of an approved sponsor to comply with the terms of the CPC sponsor agreement is grounds for the Board to revoke, suspend or terminate the agreement, to remove the sponsor's name from the list of approved sponsors and to notify the public of such action. A sponsor that is given notice of revocation, suspension or termination may request an administrative hearing to be conducted as provided in 21 NCAC 56 .1400 Contested Cases.

(e) Approval of a sponsor is equivalent to the language of licensing a sponsor in G.S. 89C-10(h).

History Note: Authority G.S. 89C-10; 89C-17;
Eff. February 1, 1996;
Amended Eff. August 1, 2011; July 1, 2009; August 1, 2002.