- TITLE 16 OCCUPATIONAL AND PROFESSIONAL LICENSING CHAPTER 39 ENGINEERING AND SURVEYING PRACTITIONERS
- PART 5 SURVEYING--APPLICATIONS, EXAMINATIONS, PRACTICE OF SURVEYING, SEAL OF LICENSEE
- **16.39.5.1 ISSUING AGENCY:** State Board of Licensure for Professional Engineers and Professional Surveyors, 2550 Cerrillos Road, Santa Fe, NM 87505, telephone no. (505) 476-4565. [16.39.5.1 NMAC Rp, 16 NMAC 39.5.1, 1/01/2002; A, 7/01/2006; A, 7/1/2015]
- **16.39.5.2 SCOPE:** Provisions for Part 5 apply to any person certified as a Surveyor Intern, licensed as a professional surveyor, or to anyone applying for certification as a Surveyor Intern or licensure as a professional surveyor in New Mexico.

[16.39.5.2 NMAC - Rp, 16 NMAC 39.5.2, 1/01/2002]

16.39.5.3 STATUTORY AUTHORITY: Subsection B of Section 61-23-10 NMSA 1978 prescribes that "the board shall have the power to adopt and amend all bylaws and rules of procedure consistent with the constitution and the laws of this state that may be reasonable for the proper performance of its duties and the regulation of its procedures, meeting records, examinations and the conduct thereof. The board shall adopt and promulgate rules of professional responsibility for professional engineers and professional surveyors that are not exclusive to the practice of engineering or exclusive to the practice of surveying." Subsection D of 61-23-10 NMSA 1978 states "the professional surveying committee shall adopt and promulgate rules of professional responsibility exclusive to the practice of surveying. All such bylaws and rules shall be binding upon all persons licensed pursuant to the Engineering and Surveying Practice Act."

[16.39.5.3 NMAC - Rp, 16 NMAC 39.5.3, 1/01/2002; A, 7/01/2006; A, 12/28/2017]

16.39.5.4 DURATION: Permanent.

[16.39.5.4 NMAC - Rp, 16 NMAC 39.5.4, 1/01/2002]

- **16.39.5.5 EFFECTIVE DATE:** January 1, 2002, unless a later date is cited at the end of a section. [16.39.5.5 NMAC Rp, 16 NMAC 39.5.5, 1/01/2002]
- **16.39.5.6 OBJECTIVE:** The objective of Part 5 of Chapter 39 is to clearly define the application and examination procedures, practice of surveying, and seal of licensee. [16.39.5.6 NMAC Rp, 16 NMAC 39.5.6, 1/01/2002]

16.39.5.7 DEFINITIONS:

- **A.** "ABET" is defined as the accreditation board for engineering and technology.
- **B.** "Augment", as it relates to curriculum in this part, shall refer to classes taken as a part of or in addition to a formal degree program.
- **C.** "Authoritative location" is defined as an accurately and precisely established location of a feature, object or boundary sufficient for use in establishing property rights, legal proceedings, or to protect the welfare and safety of the public.
 - **D.** "Board-approved, four year curriculum in surveying" is defined as:
- surveying curriculum of four years that has been accredited by ABET within at least three years of the applicant's graduation with a bachelor's degree in surveying;
- (2) curriculum not accredited by ABET but with a minimum number of surveying credits required for accreditation by ABET;
 - **E.** "Board-approved related science degree" is defined as:
- (1) A four year bachelor of arts or science degree that is augmented by a minimum of 18 core curriculum hours in surveying, 12 hours of higher mathematics and six hours of basic science.
- (2) Core surveying classes shall include a minimum of a three hour semester course in each of the following areas:
 - (a) boundary law/ legal principles of land surveying;
 - **(b)** public land surveying system (PLSS);
 - (c) plane surveying;
 - (d) geodesy or photogrammetry.

- (3) The remainder of the 18 core curriculum hours in surveying may include classes in route surveying, geographic information systems, land development, global positioning systems, photogrammetry or geodesy, remote sensing, mapping, or professional ethics.
- (4) 12 hours of higher mathematics may include college algebra, trigonometry, analytical geometry, differential and integral calculus, linear algebra, numerical analysis, probability and statistic and advanced calculus.
- (5) Six hours of basic science may include physics, chemistry, geology, physical geography, biology, and astronomy.
- **F. "Four year"**, as it relates to a minimum course of academic study in this part, means a program of study normally associated with a university, college or other accredited academic course of study that includes a minimum 120 semester hours.
- **G.** "Geomatics", as it relates to curriculum as discussed in these rules, will be considered synonymous with surveying.
- **H.** "NCEES" referes to the national council of examiners for engineering and surveying. [16.39.5.7 NMAC Rp, 16 NMAC 39.5.7, 1/01/2002; A, 7/1/2015; A, 12/28/2017; A, xx/xx/20xx]

16.39.5.8 APPLICATION - SURVEYOR INTERN AND PROFESSIONAL SURVEYOR:

- **A.** Types of application licensure as a professional surveyor or certification as a survey intern require that an applicant present his or her qualifications on forms prescribed by this board.
- **B.** Any application, to be complete, must include acceptable replies from references, official transcript(s) provided directly from the university; and if applicable, verification(s) of prior examinations taken in other state(s).
 - **C.** Board members shall not be used as references.
- **D.** Applications for surveying intern certification will be accepted after an applicant has passed the fundamentals of surveying exam and has graduated from a board-approved, four year surveying curriculum, or if a graduate of an approved four year curriculum in a related science as defined by [Subsection D] Subsection E of Section 16.39.5.7 NMAC [above] and augmented with the required two-year combined office and field board approved surveying experience obtained under the direction of a licensed professional surveyor. Class time will not be counted in the required years of experience, but work prior to or while attending school may be counted toward the required experience at the discretion of the board.
- **E.** Applicants for the principles and practices of surveying examination having graduated with a board-approved four year surveying curriculum of four years or more, or with a related-science degree, as determined by the board shall have a minimum of four years of experience acceptable to the professional surveying committee at the date of application and shall have passed the fundamentals of surveying examination.
- **F.** No applicant will be eligible to take the professional surveying examination whose application for eligibility has not been completed, reviewed and approved by the board, as set forth in 16.39.5.8 NMAC.
- G. Applicants for the professional surveying license will be accepted after applicant has passed the professional surveying exam and has fulfilled the education and experience requirements. Successful passing of the professional surveying exam does not ensure licensure as a professional surveyor. To satisfy the statutory requirement for board-approved surveying experience prior to licensure, a candidate with a board-approved surveying curriculum of four years or more as determined by the board shall have four years of experience acceptable to the professional surveying committee. This experience may be acquired before or after certification as a surveying intern. A candidate with a related science degree shall have four years of surveying experience acceptable to the professional surveying committee [subsequent to certification as a surveying intern] pursuant to the Engineering and Surveying Practice Act, Subsection A of Section 61-23-27.4 NMSA 1978. After successfully completing the professional surveying examination, an applicant, if necessary to meet the licensing requirements in the New Mexico Engineering and Surveying Practice Act, shall update the application as provided by [Subsection H of 16.39.5.8 NMAC] Subsection H of 16.39.5.8 NMAC.
- **H.** To update a professional survey (PS) application file in relation to experience, the applicant must complete an application update form and provide references acceptable to the professional surveying committee to verify each additional experience record.
- **I.** Applications for licensure or certification by examination, comity or endorsement which have been approved by the professional surveying committee shall remain valid for two years from the date of approval.
- **J.** An applicant with foreign credentials requesting licensure by examination or endorsement shall provide to the professional surveying committee's satisfaction, evidence that the applicant's qualifications are equal to or exceed the qualifications for licensure in effect in New Mexico at the time of application.

- **K.** All applicants for professional surveyor license shall show proficiency in the English language and shall have a minimum of four years of experience if a graduate of a board approved, four year surveying curriculum or eight years if a graduate of a board approved related science curriculum, working in the United States, or for a United States corporation, under the direction of a licensed professional surveyor who can attest to the applicant's ability and knowledge as a competent surveyor.
- **L.** When considering surveying applicants who are graduates of educational programs from a school, college or university outside of the United States and its jurisdictions, or considering applicants from related science programs, the board will evaluate and approve the degrees on an individual basis. The Board may require an independent evaluation of the education and such evaluation shall be done through an organization approved by the board and at the expense of the applicant.

[16.39.5.8 NMAC - Rp, 16 NMAC 39.5.8, 1/01/2002; A, 7/01/2006; A, 7/1/2015; A, 1/1/2016; A, 12/28/2017; A, xx/xx/20xx]

16.39.5.9 EXAMINATIONS--SURVEYOR INTERN AND PROFESSIONAL SURVEYOR:

- **A.** Regularly scheduled examinations shall be held in accordance with NCEES examination schedules. Other examinations may be held at times and places as determined by the professional surveying committee.
- **B.** An applicant that fails the New Mexico state specific surveying examination will be notified of the next available examination sessions. A written request to retake the examination and payment of the examination fee shall be on or before the specified date set by the board. Any applicant that fails a NCEES examination will be notified by NCEES.
- An applicant that has not achieved a passing score on the principles and practice of surveying examination after three unsuccessful attempts, shall only be eligible to take the next scheduled examination after waiting a period of 12 months. The applicant shall provide documentation to the board of further study in preparation of the exam. If an applicant has not achieved a passing score on the principles and practice of surveying examination within the two year application period shall only be eligible to take the next scheduled examination after re-submitting a new application and providing detailed documentation to the board of further study in preparation of the exam.
- **D.** The type of examination will be disclosed to the examinee at a time to be set by the NCEES. The examination type will be one of the following:
- an "open book" examination shall be an examination during which the examinee may use reference material as specified by the national council of examiners for engineering and surveying;
- (2) a "closed book" examination shall mean that absolutely no reference material of any shape or form may be used by the examinee except as provided by the board during the examination; or
 - (3) a "computer based" examination.
- **E.** Only calculators specified by the NCEES shall be admitted in the examination room during the administration of the licensing examinations.
- **F.** An applicant who has a question regarding the New Mexico state specific surveying examination shall put the question in writing to the professional surveying committee. The question will be considered at the next professional surveying committee meeting. The committee's answer to the examinee shall be in writing. Questions regarding the completed fundamental of surveying examination or the principles and practice surveying examination shall be directed to NCEES.

[16.39.5.9 NMAC - Rp, 16 NMAC 39.5.9, 1/01/2002; A, 7/01/2006; A, 7/1/2015; A, 12/28/2017]

16.39.5.10 PRACTICE OF SURVEYING:

- **A.** A person or any business entity shall not advertise or offer to practice surveying work or accept such work unless that person or a member of the business entity is licensed by the board and is legally able to bind that business entity by contract.
 - **B.** Neither persons nor business entities shall circumvent these rules.
- **C.** Nothing in this section is intended to prevent the existence of an association of professionals in different disciplines.
- **D.** The board will consider the use of the terms, "surveyor", "surveying" or any modification or derivative of such terms, in the title of a firm or business entity to constitute the offering of surveying services. The board also considers the use of these terms or any modification or derivative of such terms in a domestic corporation's articles of incorporation or in a foreign corporation's certificate of authority as published by the New Mexico's secretary of state to constitute the offering of surveying services.

- **E.** In the case of practice through a business entity offering or providing services or work involving the practice of surveying, an authorized company officer and the professional surveyor who is employed by the business entity and in responsible charge shall place on file with the board a signed affidavit within 30 days, as prescribed by board rule. The affidavit shall be kept current, and, if there is any change in the professional surveyor or authorized company officer, the affidavit shall be revised within 30 days and resubmitted to the board.
- **F.** Inclusions and exclusions to the practice of surveying.

 Land surveying does not encompass work products which represent only a generalized location of a feature, object, or boundary upon which the public would not reasonably rely as the precise location of that feature, object, or boundary.
- (1) Activities included within the practice of surveying activities that must be accomplished by or under the responsible charge of a professional surveyor (unless specifically exempted in Subsection B of this Section) include, but are not limited to, the following:
- (a) The creation of maps and georeferenced databases representing authoritative locations for boundaries, the location of fixed works, or topography. This includes maps and georeferenced databases prepared by any person or government agency where that data is provided to the public as a survey product.
- **(b)** Original data acquisition, or the resolution of conflicts between multiple data sources, when used for the authoritative location of features within the following data themes: geodetic control, orthoimagery, elevation and hydrographic, fixed works, private and public boundaries, and cadastral information.
 - (c) Certification of positional accuracy of maps or measured survey data.
 - (d) Adjustment or authoritative interpretation of raw survey data.
- (e) Geographic information system (GIS)-based parcel or cadastral mapping used for authoritative boundary definition purposes wherein land title or development rights for individual parcels are, or may be, affected.
- (f) Authoritative interpretation of maps, deeds, and other land title documents to resolve conflicting data elements.
- (g) Acquisition of field data required to authoritatively position fixed works or cadastral data relative to geodetic control.
- (h) Analysis, adjustment or transformation of cadastral data of the parcel layers with respect to the geodetic control layer within a geographic information system (GIS) resulting in the affirmation of positional accuracy.
- (2) Activities excluded from the practice of surveying. A distinction must be made in the use of electronic systems between making or documenting original measurements in the creation of survey products, versus the copying, interpretation, or representation of those measurements in such systems. Further, a distinction must be made according to the intent, use, or purpose of measurement products in electronic systems to determine a definitive location versus the use of those products as a locational reference for planning, infrastructure management, and general information. The following items are not to be included as activities within the definition of the practice of surveying:
 - (a) The creation of general maps:
- (i) Prepared by private firms or government agencies for use as guides to motorists, boaters, aviators, or pedestrians.
 - (ii) Prepared for publication in a gazetteer or atlas as an educational tool or

reference publication.

(iii) Prepared for or by education institutions for use in the curriculum of

any course of study.

(iv) Produced by any electronic or print media firm as an illustrative guide to the geographic location of any event.

(v) Prepared by laypersons for conversational or illustrative purposes. This includes advertising material and user guides.

- (b) The transcription of previously georeferenced data into a geographic information system (GIS) or land information systems (LIS) by manual or electronic means, and the maintenance thereof, provided the data are clearly not intended to indicate the authoritative location of property boundaries, the precise definition of the shape or contour of the earth, and/or the precise location of fixed works of humans.
- (c) The transcription of public record data, without modification except for graphical purposes, into a GIS- or LIS-based cadastre (tax maps and associated records) by manual or electronic

means, and the maintenance of that cadastre, provided the data are clearly not intended to authoritatively represent property boundaries. This includes tax maps and zoning maps.

- (d) The preparation of any document by any federal government agency that does not define real property boundaries. This includes civilian and military versions of quadrangle topographic maps, military maps, satellite imagery, and other such documents.
- (e) The incorporation or use of documents or databases prepared by any federal agency into a Geographic information system (GIS)/ land information systems (LIS), including but not limited to federal census and demographic data, quadrangle topographic maps, and military maps.
- (f) Inventory maps and databases created by any organization, in either hard-copy or electronic form, of physical features, facilities, or infrastructure that are wholly contained within properties to which they have rights or for which they have management responsibility. The distribution of these maps and/or databases outside the organization must contain appropriate metadata describing, at a minimum, the accuracy, method of compilation, data sources and dates, and disclaimers of use clearly indicating that the data are not intended to be used as a survey product.
- (g) Maps and databases depicting the distribution of natural resources or phenomena prepared by foresters, geologists, soil scientists, geophysicists, biologists, archeologists, historians, or other persons qualified to document such data.
- **(h)** Maps and georeferenced databases depicting physical features and events prepared by any government agency where the access to that data is restricted by statute. This includes georeferenced data generated by law enforcement agencies involving crime statistics and criminal activities.
- G. In the case of an employee of a business entity who performs only the engineering services involved in the operation of the business entity's business, the extent to which the engineering services can be provided without licensure is limited to only the legal boundaries of the property owned or leased by that business. Practice beyond this extent or within off-premises easements is considered within public space and is subject to the Engineering and Surveying Practice Act.

[16.39.5.10 NMAC - Rp, 16 NMAC 39.5.10, 1/01/2002; A, 7/01/2006; A, 7/1/2015; A, 12/28/2017; A, xx/xx/20xx]

16.39.5.11 SEAL OF LICENSEE:

- **A.** Each licensed professional surveyor shall obtain a seal/stamp which must be impressed on all plats, reports, etc., prepared by the licensee in responsible charge. Adjacent to the seal/stamp shall appear the original signature of the licensee along with the date the signature was applied. Rubber stamps and all facsimiles of signatures are not acceptable. Electronic signature as provided by law and board's policy shall be acceptable.
- **B.** The seal/stamp shall be either the impression type seal, the rubber type, or a computer-generated facsimile. Computer-generated seals shall be bona fide copies of the actual seal/stamp specific to the work being presented.
 - **C.** The design of the seal/stamp shall consist of either:
- (1) three concentric circles, the outermost circle being one and one-half inches in diameter, the middle circle being one inch in diameter, and the innermost circle being one-half inch in diameter. The outer ring shall contain the words, "professional surveyor" and the licensee's name. The inner ring shall contain the words "New Mexico". The center circle shall contain the license number issued by the board. Any border pattern used by the manufacturer is acceptable; or
- (2) a design approved by the board which contains the words "professional surveyor", the licensee's name, "New Mexico", and the license number issued by the board each in text no less than 0.2 inches in height.
- **D.** Professional surveyors who were licensed prior to the enactment of these current rules and who have maintained that license without lapse, may retain and use the seals, stamps, and wall certificates previously approved.
- **E.** The seal and signature shall be placed on work only when it was under the licensee's responsible charge. The licensee shall sign and seal only work within the licensee's area of discipline.
- **F.** When the document contains more than one sheet, the first or title page shall be sealed and signed by the licensee who was in responsible charge. Two or more licensees may affix their signatures and seals provided it is designated by a note under the seal the specific subject matter for which each is responsible. In addition, each sheet shall be sealed and signed by the licensees responsible for that sheet. When a firm performs the work, each sheet shall be sealed and signed by the licensee or licensees who were in responsible charge of that sheet and, in the case of multiple licensees, explicitly identify the portion of work attributable to each licensee.
 - **G.** An electronic signature, as an option to a permanently legible signature, is acceptable for

professional documents. The licensee shall provide adequate security regarding the use of the seal and signature. <u>If</u> the document contains more than one licensee and is electronically transmitted as specified under the preceding <u>paragraph</u>, each signature must contain an independent electronic signature.

[16.39.5.11 NMAC - Rp, 16 NMAC 39.5.11, 1/01/2002; A, 7/01/2006; A, 7/1/2015; A, 12/28/2017; A, xx/xx/20xx]

- **16.39.5.12 ENDORSEMENTS:** For the purpose of New Mexico licensees by endorsement from other states, or possessions, the professional surveying committee will only recognize licensure granted by those authorities when the professional surveying committee has determined that the applicant possesses qualifications which "do not conflict with the provisions of the Engineer and Surveying Practice Act and are of standard not lower than that specified in Sections 61-23-27.3 and 61-23-27.4 NMSA 1978". Conditions establishing eligibility for licensure by endorsement shall have been met at the time of initial licensure. Additionally, the applicant must have a current license in another state, the District of Columbia, a territory or a possession of the United States, or in a foreign country. Conditions for endorsement for licensure as a professional surveyor shall be as follows:
- **A.** Graduation from a four year board-approved surveying curriculum, four years of experience satisfactory to the professional surveying committee, and passing of the fundamentals of surveying and professional surveying examinations (1995 law).
- **B.** Graduation from an engineering or related science curriculum that are approved by the committee and augmented with 18 semester hours of surveying, eight years of experience satisfactory to the professional surveying committee, and passing of the eight hour fundamentals and eight hour professional examinations (1995 law).
- C. Licensure prior to July 1, 1995, by graduation from a two year board-approved surveying or associated curriculum, eight years of experience satisfactory to the professional surveying committee and passing of the eight hour fundamentals and eight hour professional examination.
- **D.** Licensure prior to July 1, 1995, by graduation from a board- approved surveying or associated curriculum of at least 45 semester hours, eight years of experience satisfactory to the professional surveying committee, and passing of the eight hour fundamentals and eight hour professional examination;
- **E.** Licensure prior to July 1, 1979, eight years of experience satisfactory to the professional surveying committee and passing of the eight hour fundamentals and eight hour professional examinations. [16.39.5.12 NMAC N, 7/1/2015; A, 12/28/2017]

HISTORY OF 16.39.5 NMAC:

Pre-NMAC History: The material in this part is derived from that previously filed with the state records center & archives under: PELS 79-1, New Mexico Engineering Practice Act, filed 6-22-67; PELS 79-1 New Mexico Engineering and Land Surveying Practice Act, filed 10-29-79; PELS 67-2, By-Laws of State Board of Registration for Professional Engineers and Land Surveyors, filed 06-22-67; PELS 68-1, By-Laws of State Board of Registration for Professional Engineers and Land Surveyors, filed 10-07-68; PELS 69-1, By-Laws of State Board of Registration for Professional Engineers and Land Surveyors, filed 07-03-69; PELS 71-1, Rules of Procedure Manual, filed 01-14-71; PELS 73-1, Rules of Procedure Manual, filed 01-04-73; PELS 75-1, Rules of Procedure Manual, filed 12-15-75; PELS 80-1, Regulations and Rules of Procedure, filed 01-28-80; PE/PS Rule No. 89-1, Regulations and Rules of Procedure, filed 08-15-89; Rule No. 400.1, Regulations and Rules of Procedure - Application - Surveyor Intern and Professional Surveyor, filed 10-28-94; Rule No. 400.2, Regulations and Rules of Procedure - Examinations - Surveyor Intern and Professional Surveyor, filed 10-28-94; Rule No. 400.4, Regulations and Rules of Procedure - Seal of Registrant licensee, filed 10-28-94.

History of Repealed Material:

16 NMAC 39.5, Surveying--Applications, Examinations, Practice of Surveying, Seal of Registrant (filed 03-31-98) repealed 01-01-2002).

Other History:

Rule No. 400.1, Regulations and Rules of Procedure - Application - Surveyor Intern and Professional Surveyor (filed 10-28-94); Rule No. 400.2, Regulations and Rules of Procedure - Examinations - Surveyor Intern and Professional Surveyor (filed 10-28-94); Rule No. 400.3, Regulations and Rules of Procedure - Practice of Surveying (filed 10-28-94); Rule No. 400.4, Regulations and Rules of Procedure - Seal of Registrant licensee (filed 10-28-94) were all renumbered, reformatted and replaced by 16 NMAC 39.5, Surveying--Applications, Examinations, Practice of Surveying, Seal of Registrant, effective 04-15-1998.

16 NMAC 39.5, Surveying--Applications, Examinations, Practice of Surveying, Seal of Registrant (filed 03-31-98) was renumbered, reformatted and replaced by 16.39.5 NMAC, Surveying--Applications, Examinations, Practice of Surveying, Seal of Licensee, effective 01-01-2002.