

BOARD NEWS

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November 1997

Volume IX

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To Seal Or Not To Seal

Dawn P. Bookhardt, Esq., Board Member

In February 1997, I agreed to serve on a Board committee whose mission it was to evaluate and review certain troubling issues that have arisen regarding Colorado's requirements for sealing engineering and land surveying documents. Others that worked on this committee attempting to clear up the confusion were: Diana Horner, a

structural engineer and another Board member; Bud Gaines, representing the interests of CECC and past chair of their Risk Management committee; Ken Brown, past President of PEC; Dave DiFulvio, past President of PLSC; Phil Goddard, legislative liaison for the local chapter of ICBO; Charlie Robertson, the Board's counsel and another

legal type; and the ever faithful Angie Kinnaird, Program Administrator for the Board. We rightfully referred to ourselves as the "sealing committee."

Changes to the Engineering Practice Act became effective on July 1, 1994, removing the prohibition to seal reproducible plans and documents and the requirement regarding record sets. As a consequence of these

changes, sealing either the reproducible or the reproduction became discretionary. In its current form, paragraph B of Board Rule VIII sets forth the following:

The seal shall be placed on each sheet of engineering drawings; on the cover, title page and table of contents of specifications bound in book form; on the title page of details bound in book form and prepared specifically to supplement project drawings; and on the title or signature page of all engineering reports.

Note the fact that this provision is silent regarding the sealing of the final reproducible or the final reproductions, allowing discretion to the individual registrant to seal either the final reproducible or reproductions.

Unfortunately, this "discretionary" sealing induced various interpretations and confusion among licensees, building officials, owners, and clients. There were several types of problems that had come about as a result of "discretionary" sealing. For example, Local Government "A" is the client of Engineer "A." The client requires that the engineer provide reproducible drawings for the client's use. The engineer doesn't want to provide reproducible because the drawings could be altered by some-

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Major Changes Made in Surveying Laws

Senate Bill 97-002, run by the Board, primarily concerns corrections to 38-51-107, C.R.S. With the many changes in the law in 1994, this portion was inadvertently changed, causing greater costs to the public unnecessarily. Since the Board needed to get this wording restored, it made sense to get some corrections made in the citations of surveying related statutes. This bill was

signed by the Governor on March 28, 1997 and went into effect at that time. Following are the pertinent portions of the bill showing deletions of language italicized and in brackets; the additions are underlined and in capital letters.

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Inside This Issue...

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**Have You
Moved
Lately?**

It's imperative that you notify the Board office of your new address when you move so that we can keep you informed. Send us your new



address in writing by mail or fax to 1560 Broadway, Suite 1370, Denver, Colorado 80202 FAX: 303/894-7790 The 1997 Annual



Report will be mailed next month.

We warmly welcomed two new Board members as of July 1, 1997 when the terms of Sol Chavez and Mary Anne Blish expired. The additions are Charles M. Schloss, PE, and Vukoslav Aguirre, PE.

As President of Schloss Engineered Equipment, Inc. in Aurora, Chuck Schloss built the family operation up to more than \$2,000,000 in sales of water, wastewater treatment and bulk material handling equipment. He has been very active in professional societies and local government, not the least of which has included stints as a city councilman, deputy mayor, and commissioner of police. His expertise covers not only mechanical engineering but industrial, civil and structural.

Vuk Aguirre is President of Aguirre Engineers, Inc. in Englewood, which he founded in 1977. His area of practice is civil engineering and he focuses in the geotechnical and environmental areas. He is licensed in a number of states in addition to Colorado and has also been quite active in professional associations as well as civic engagements such as the Greenwood Planning and Zoning Commission.

Michael W. Drissel, PLS, principal in his own firm, DH Surveys in Grand Junction, was re-appointed to the Board by



Pat's Corner

Pat Sullivan, PLS, Monument Records Clerk

Last spring, we mailed out 1,215 questionnaires to active Colorado Professional Land Surveyors with a Colorado address. The intent was to gather information to assist us with our effort to store the records electronically, make them available to anyone via computer modem, and thereby make them significantly more useful to the industry as well as the public. Amazingly, we had a 40% response return rate to the mailing.

Briefly summarizing the results, 96% of the respondents are using computers; 86% are using a Windows environment and another 6% plan on it; 66% use modems and an additional 20% intend to use modems in the future; 54% are using the Internet and 23% project using it in the next 5 years. Interestingly, we found a sore spot with our questions concerning research. We were trying to assess whether better access to the monument record system might have a significant effect, such as broader based research. The outcome was that 81% felt that there would be an increase in the use of the system if available via modem. A surprising 70% were willing to consider a

the Governor to serve a second four-year term. Mike has been an invaluable participant in the myriad of surveying issues that have faced the Board. In addition, he has willingly represented the Board at professional and association meetings, regional and national conferences concerning regulation, and he has been a dedicated member of the national committee that develops the professional land surveying examinations. We are happy to see that he will continue with the Board.

In July, Mike Drissel was elected Chairman of the Board for 1997-98. Diana Horner, PE, was elected Vice President and Dawn Bookhardt, Esq., public member, was elected Secretary of the Board.

The Board is also pleased to welcome new Assistant Attorney General, Denise DeForest, as its counsel. Denise replaces Charlie Robertson, who provided stellar legal services to the Board for the previous two years. Denise comes to the Attorney General's office from a highly respected private firm and has an impressive background as an investigator prior to obtaining her law degree.

Although we greatly appreciate the services of the retiring Board members and our previous attorney, and we will miss their friendship and camaraderie, we look forward to working with Chuck, Vuk and Denise.

fee for that service, depending in many cases on the size of the fee. As for the overall benefit from improved access, 87% agreed that it would be helpful, although 7% weren't sure.

The next step in the process is getting the Legislature to approve the funds for this project. Electronic storage of Monument Records is the Division of Registrations' number one priority in its request for technological upgrades. We will know the outcome of our request during the next Legislative session beginning in January 1998.



As noted in Mike Drissel's article on page 11 of this newsletter, new monument record forms and instructions have been approved and are available from the Board office. The new forms become mandatory to use beginning January 1, 1998, meaning that the old forms will no

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To Seal Or Not To Seal continued...

one in the client's organization who was not involved in the original project without Engineer "A's" knowledge. Engineer "A" has sealed the drawings and would remain liable for the documents without having the control to protect the integrity of his/her work product. Bad stuff.

Or, consider Local Government "B" which requires that all plans submitted for review be sealed. Engineer "B" does not want to seal the plans because they aren't the finished product and by doing so, may have an unfinished set of sealed plans "out there" that may be used inappropriately or inadvertently. More bad stuff.

It was definitely time to bring lucidity to this subject.

Our sealing committee met several times, forging through rousing discussions, finally collaborating on language that we believed was acceptable. Through the rule making process in July and September, the language was further fine-tuned to address building officials' concerns about old plans being reused. Without a current original signature and date, they have had problems determining whether the original engineer was involved in the plans being submitted.

The following language was approved and becomes effective on November 1, 1997. Deletions are shown italicized and in brackets; additions are in capital letters and underlined.

Rule VIII - Seal Requirements

1. For Professional Engineers

A. Pursuant to C.R.S. 12-25-117(1), the seal authorized by the State Board of Registration for Professional Engineers and Professional Land Surveyors for registrants is of the crimp type, *[and/or]* rubber stamp *[facsimile]* TYPE, AND/OR COMPUTER GENERATED TYPE. *[and]* THE SEAL shall be of a design and size shown below. The diameter of the outer circle shall be nominally $1\frac{5}{8}$ inches (44 mm) and the diameter of the inner circle shall be nominally $1\frac{1}{16}$ inches (24 mm). The registration number assigned shall be centered in the inner area of the seal in the space occupied by the word "NUMBER" and the size of the numbers shall be the same size of the letters in the word "NUMBER". The word "NUMBER" should not appear on the seal. Seals obtained prior to April 1, 1993 shall be deemed acceptable.

B. *[The seal shall be placed on each sheet of engineering drawings; on the cover, title page and table of contents of specifications bound in book form; on the title page of details bound in book form and prepared specifically to supplement project drawings; and on the title or signature page of all engineering reports.]*

A SEAL MUST BE APPLIED TO EITHER THE FINAL REPRODUCIBLE OR FINAL REPRODUCTION OF:

~~EACH SHEET OF ENGINEERING DRAWINGS;~~

~~THE COVER, TITLE PAGE AND TABLE OF CONTENTS OF SPECIFICATIONS BOUND IN BOOK FORM;~~

~~THE TITLE PAGE OF DETAILS BOUND IN BOOK FORM AND PREPARED SPECIFICALLY TO SUPPLEMENT PROJECT DRAWINGS; AND~~

~~THE TITLE OR SIGNATURE PAGE OF ENGINEERING REPORTS.~~

C. *[An original seal must be applied directly to all engineering documents by means of a*

crimp seal or rubber stamp. Computer generated seals are prohibited.] Through the ORIGINAL seal shall appear the original signature of the registrant and the date of signature. The use of a signature stamp OR A COMPUTER GENERATED SIGNATURE is prohibited.

A PUBLIC AGENCY MAY REQUIRE AN ORIGINAL SIGNATURE OF THE REGISTRANT ON REPRODUCTIONS.

D. WHEN A REGISTRANT SEALS ENGINEERING DOCUMENTS THAT ARE NOT FINAL, THE STATUS OF THE ENGINEERING DOCUMENTS MUST BE IDENTIFIED AS PRELIMINARY. FURTHER QUALIFYING DESCRIPTORS MAY BE ADDED, I.E. "FOR REVIEW," " NOT FOR CONSTRUCTION," "FOR BID ONLY."

"...this "discretionary" sealing induced various interpretations and confusion among licensees, building officials, owners, and clients."

[D] E. When a registrant signs and seals a document the registrant is responsible for the entire document unless the registrant limits *[his]* THE seal to one or more disciplines (i.e. civil, structural, mechanical, etc.) shown on the document. To limit the scope of responsibility for an engineering document to one or more disciplines, on the face of such document, the registrant must include a specific written statement adjacent to *[his]* THE seal which accurately reflects *[his]* THE scope of responsibility for the document.

All disciplines or aspects of the work shown on that document must be signed and sealed by the person(S) in responsible charge.

[E] E. Registrants may specify manufactured components which are exempted by statute as part of design documents. "Manufactured components" for the purposes of this rule shall consist of such items as a pump, motor, prefabricated truss or other type item that is manufactured in multiple units for selection and use in projects which must be designed by Professional Engineers. Systems of manufactured components which are specific to a particular use or application must also be designed by a Professional Engineer. The registrant may show the manufactured component on the drawing or document and is responsible for the correct selection and specification of the manufactured components, but is not responsible for the proper design and manufacture of the manufactured components selected.

[F] G. THE SEALED, SIGNED AND DATED REPRODUCIBLE, OR [A] A copy of all documents *[sealed by the registrant]* DISPLAYING THE REGISTRANT'S SEAL, SIGNATURE AND DATE, shall be retained by the registrant for a minimum of three years from the beginning of beneficial use.

2. For Professional Land Surveyors

A. Pursuant to C.R.S. 12-25-217(1), the seal authorized by the State Board of Registration for Professional Engineers and Professional Land Surveyors for registrants is of the crimp type, *[and/or]* rubber stamp *[facsimile]* TYPE, AND/OR COMPUTER GENERATED TYPE. *[and]* THE SEAL shall be of a design and size shown below. The diameter of the outer circle shall be nominally $1\frac{5}{8}$ inches (44 mm) and the diameter of the inner circle shall be nominally $1\frac{1}{16}$ inches (24 mm). The registration number assigned shall be centered in the inner area of the seal in the space occupied by the word "NUMBER" and the size of the numbers shall be the same size of the letters in the word "NUMBER". The word "NUMBER" should not appear on the seal. Seals obtained prior to April 1, 1993 shall be deemed acceptable.

B. Pursuant to 12-25-217, Colorado Revised Statutes, the Professional Land Surveyor's seal must be applied *[directly]* to the title page or signature page of all documents, plats and reports resulting from the practice of land surveying. *[An original]* A seal must be applied *[directly]* to all land surveying documents; *[by means of a crimp seal or rubber stamp. Computer generated seals are prohibited.]* Through the seal shall appear the original signature of the registrant. *[The signature must also be dated.]* AND THE DATE OF SIGNATURE. The use of a signature stamp OR A COMPUTER GENERATED SIGNATURE

(Continued on page 4)

To Seal Or Not To Seal continued...

TURE is prohibited.

C. WHEN A REGISTRANT SEALS SURVEYING DOCUMENTS THAT ARE NOT FINAL, THE STATUS OF THE SURVEYING DOCUMENTS MUST BE IDENTIFIED AS PRELIMINARY. FURTHER QUALIFYING DESCRIPTORS MAY BE ADDED, I.E. "FOR REVIEW."

[C] D. THE SEALED, SIGNED AND DATED REPRODUCIBLE, OR [A] A copy of all documents [sealed by the registrant] DISPLAYING THE REGISTRANT'S SEAL, SIGNATURE AND DATE, shall be retained by the registrant for a minimum of three years from the date such documents are tendered to the client.

Notice that the changes to Rule VIII also allow for the use of computer generated seals, unlike the previous language.

Also, as a part of our discussions surrounding the sealing guidelines, the sealing committee reviewed concerns that many licensees have shared regarding certification as required by some local government officials and/or owners or clients. This dialogue resulted in the sealing committee creating a new rule, Rule XVIII. It is prompted by numerous circumstances where licensees have been required to guarantee the integrity of a project beyond the services actually provided by the licensee; e.g. that the construction put in place is exactly what the engineer designed. This requirement can effectively nullify the licensee's liability coverage for the project, eliminating one form of civil recourse for the consumer and thereby causing a disservice to the public. Rule XVIII serves to clarify the definition of "certification" and when it is appropriate to sign such statements. This rule went into effect on September 1, 1997. The language follows.

Rule XVIII - Certification

A. Engineer's Certification

1. When an engineer is presented with a certification to be signed and/or sealed, the professional engineer should carefully evaluate that certification to determine if any of the following circumstances apply:

- a. matters which are beyond the professional engineer's competence, training or education; or,

- b. matters which are beyond the professional engineer's services actually provided; or,
- c. matters which were not prepared under the professional engineer's responsible charge.

If any of these circumstances apply, that engineer either:

- a. shall modify such certification to limit its scope to those matters which the professional engineer can properly sign and/or seal; or,
- b. shall decline to sign such certification.

2. Certification is defined as a statement that:

- a. is signed and/or sealed by a professional engineer representing that the engineering services addressed therein have been performed by the professional engineer or under the professional engineer in responsible charge; and,
- b. is based upon the professional engineer's knowledge, information and belief; and,
- c. is in accordance with applicable standards of practice; and,
- d. is not a guaranty or warranty, either expressed or implied.

B. Surveyor's Certification

1. When a professional land surveyor is presented with a certification to be signed and/or sealed, the professional land surveyor should carefully evaluate that certification to determine if any of the following circumstances apply:

- a. matters which are beyond the professional land surveyor's competence, training or education; or,
- b. matters which are beyond the professional land surveyor's services actually provided; or,
- c. matters which were not prepared under the professional land surveyor's responsible charge.

If any of these circumstances apply, that professional land surveyor either:

- a. shall modify such certification to limit its scope to those matters which the professional land surveyor can properly sign and/or seal; or,
- b. shall decline to sign such certification.

2. Certification is defined as a statement that:

- a. is signed and/or sealed by a professional land surveyor representing that the surveying services addressed therein have been performed by the professional land surveyor or under the professional land surveyor in responsible charge; and,
- b. is based upon the professional land surveyor's knowledge, information and belief; and,
- c. is in accordance with applicable standards of practice; and,
- d. is not a guaranty or warranty, either expressed or implied.

We're On-Line!

In May, we finally completed set-up of the first stage of the Board's homepage. Our intent is to provide information about the Board, the exams, the procedures and the deadlines, as well as relevant forms and data that can be useful to the public, licensees and applicants. We're short of our goal in a number of areas such as a direct link to the engineering and surveying statutes and having the actual application for a license on the Internet. But, as anyone who has worked with a homepage knows, this effort is a work in progress!

Other items that we hope to include in the future are Board meeting agendas, Board meeting minutes, disciplinary activity and up-to-date information that we would normally convey through newsletters. Since producing and mailing the newsletter is so costly, we hope to communicate primarily through the homepage in the future. For that reason, we hope you will consider connecting to the Internet if you haven't already done so.

Our homepage address is: http://dora.state.co.us/engineers_surveyors

Come visit us and if there is additional information that we can provide which would be helpful to you, let us know!

Homepage topics

- | | |
|-----------------------------|--------------------------------|
| • General Information | • Members |
| • Licensing Requirements | • Board Meeting Dates for 1997 |
| • How to Get an Application | • Fee Schedule |
| • Examination Information | • Board Rules |
| • License Renewals | • Board Policy Statements |
| • How to File a Complaint | • Board Activities |
| • Who to Call for Help | • How to Get a Mailing List |
| • Introducing Our Board | |

Changes in Surveying Laws continued...

38-51-107. Required plats. (2) No plat shall be required to be prepared if the monuments accepted OR SET are within a platted subdivision which was filed after July 1, 1975.

38-33.3-103. Definitions. (22.5) "Plat" means that part of a declaration that is a land survey plat as set forth in section [38-51-105] 38-51-106, depicts all or any portion of a common interest community in two dimensions, is executed by a person that is authorized by this title to execute a declaration relating to the common interest community, and is recorded in the real estate records in every county in which any portion of the common interest community is located. A plat and a map may be combined in one instrument.

38-33.3-209. Plats and maps. (2) In addition to meeting the requirements of a land survey plat as set forth in section [38-51-105] 38-51-106, each plat must show... (This statute continues without further changes.)

House Bill 97-1261

This put in place a new definition, "Geographic Information System Land Position" allowing the gathering of data by a Professional Land Surveyor while exempted from the requirements of 38-51-103, C.R.S., and by implication, enabling the location of those positions by unlicensed individuals. Relevant parts of the bill follow. Additions are shown capitalized and underlined; italicized portions with brackets around text indicate deletions from existing statutes.

38-51-102. Definitions. As used in this article, unless the context otherwise requires:

(7.5) "GEOGRAPHIC INFORMATION SYSTEM LAND POSITION" OR "GIS LAND POSITION" MEANS A LOCATION IN A GEOGRAPHIC INFORMATION SYSTEM INTENDED TO CONTROL THE MAPPING LOCATION OF THE BOUNDARIES OF A TRACT OR PARCEL OF LAND THAT MAY BE FIELD SURVEYED, SCALED, CALCULATED, PLOTTED BY PHOTOGRAMMETRIC OR REMOTE SENSING METHODS, OR LOCATED BY PHYSICAL OR CULTURAL FEATURES.

38-51-109.3. GEOGRAPHIC INFORMATION SYSTEM POSITIONS - PROFESSIONAL LAND SURVEYOR. (1) A PROFESSIONAL LAND SURVEYOR SHALL BE EXEMPT FROM THE REQUIREMENTS OF SECTION 38-51-103 WHEN MAKING A GIS LAND POSITION DETERMINATION. A GIS LAND POSITION MADE BY A PROFESSIONAL LAND SURVEYOR SHALL HAVE THE FOLLOWING LIMITATIONS:

(A) IT DOES NOT MEET THE REQUIREMENTS OF A LAND SURVEY AS DEFINED IN SECTION 38-51-102 (11).

(B) IT SHALL NOT ESTABLISH THE LOCATION OF ANY ALIQUOT OR CONTROL CORNER AS THEY ARE DEFINED IN SUBSECTIONS (2) AND (6) OF SECTION 38-51-102 UNTIL COMPLETE RESEARCH AND CORNER EVALUATION ARE PERFORMED TO MEET THE REQUIREMENTS AS PROVIDED IN ARTICLE 51 OF TITLE 38, C.R.S..

House Bill 97-1217

This bill affects the Land Surveying Practice Act and other related statutes. The major change is with the definition of land surveying. In the following text, additions are shown with capital letters and are underlined; brackets around italicized text indicate deletions from existing statutes.

12-25-202. Definitions. As used in this part 2, unless the context otherwise requires:

(6) (a) "Professional land surveying" means [any service or work, the

adequate performance of which involves: The application of special knowledge of the principles of mathematics; the related physical and applied sciences; and the relevant requirements of law for measuring and locating points, lines, angles, elevations, and nonnatural features in the air, on the surface of the earth, within underground workings, and on the beds of bodies of water for determining relative position and areas as they pertain to the monumenting of property boundaries, condominium measurements, and for the platting and layout of lands and subdivisions thereof, including the topography, alignment, and grades of streets and for the preparation and perpetuation of maps, record plats, field note records, and property or legal descriptions that represent these surveys. Professional land surveying may also include other types of surveying.] THE APPLICATION OF SPECIAL KNOWLEDGE OF PRINCIPLES OF MATHEMATICS, METHODS OF MEASUREMENT, AND LAW FOR THE DETERMINATION AND PRESERVATION OF LAND BOUNDARIES. "PROFESSIONAL LAND SURVEYING" SPECIFICALLY INCLUDES:

(1) RESTORATION AND REHABILITATION OF CORNERS AND BOUNDARIES IN THE UNITED STATES PUBLIC LAND SURVEY SYSTEM;

(2) OBTAINING AND EVALUATING BOUNDARY EVIDENCE;

(3) DETERMINATION OF THE AREAS AND ELEVATIONS OF LAND PARCELS;

(4) SUBDIVISION OF LAND PARCELS INTO SMALLER PARCELS AND LAYOUT OF ALIGNMENT AND GRADES FOR STREETS OR ROADS TO SERVE SUCH SMALLER PARCELS;

(5) MEASURING AND PLATTING UNDERGROUND MINE WORKINGS;

(6) PREPARATION OF THE BOUNDARY CONTROL PORTIONS OF GEOGRAPHIC INFORMATION SYSTEMS AND LAND INFORMATION SYSTEMS EXCEPT AS ALLOWED OTHERWISE BY 38-51-109.3;

(7) ESTABLISHMENT, RESTORATION, AND REHABILITATION OF LAND SURVEY MONUMENTS AND BENCH MARKS;

(8) PREPARATION OF LAND SURVEY PLATS, CONDOMINIUM PLATS, MONUMENT RECORDS AND SURVEY REPORTS;

(9) SURVEYING, MONUMENTING, AND PLATTING OF EASEMENTS AND RIGHTS-OF-WAY;

(10) GEODETIC SURVEYING; AND

(11) ANY OTHER ACTIVITIES INCIDENTAL TO AND NECESSARY FOR THE ADEQUATE PERFORMANCE OF THE SERVICES DESCRIBED IN THIS PARAGRAPH (A).

(b) An individual shall be construed as practicing or offering to practice "professional land surveying" within the meaning and intent of this part 2 if such individual engages therein or, by verbal claim, sign, letterhead, or card or in any other way holds himself or herself out to be a professional land surveyor or as being able to perform any professional land surveying service or if such individual does perform any professional land surveying service or work [or any other service designated by the practitioner which is recognized as "professional land surveying"].

(c) PROFESSIONAL LAND SURVEYING MAY INCLUDE OTHER TYPES OF SURVEYING.

12-25-209. Disciplinary proceedings - injunctive relief procedure. (7)

The board, the program administrator, or the administrative law judge may issue a subpoena compelling the attendance and testimony of witnesses and the production of books, papers, and records pursuant to an investigation or a hearing of the board. Any subpoena issued shall be served in the manner provided in the Colorado rules of civil procedure. THE REGISTRANT OR CERTIFICANT IN ANY ACTION BEFORE THE BOARD SHALL HAVE COMPARABLE RIGHTS OF SUBPOENA PURSUANT TO SECTION 24-4-105 (5), C.R.S.. If any person refuses to obey any subpoena so issued or to testify or produce any books, papers, or docu-

(Continued on page 6)



REMEMBER!

Your license expires every two years. We send you a renewal notice approximately one month in advance of expiration. But, if you don't let us know when you change your address, you may not receive the renewal notice. Regardless, it's **YOUR** responsibility to make sure that you renew on time.

If your license lapses for more than two years, you must formally re-apply to the Board for reinstatement. If you have been practicing engineering or surveying during the time that your license has been lapsed, the Board may take disciplinary action against you.

So, take the easy way out: remember to renew your license every two years and to let the Board know of any address changes.

Changes in Surveying Laws continued...

ments, the board may petition the district court having jurisdiction, setting forth the facts, and thereupon such district court, in a proper case, shall issue its subpoena. Failure to obey the court's subpoena shall constitute contempt of court and shall be punished as provided for in the Colorado rules of civil procedure.

12-25-209.5. Reconsideration and review of board actions. The board, on its own motion or upon application, at any time after the imposition of any discipline as provided in section 12-25-209, may reconsider its prior action and reinstate or restore such license or terminate probation or reduce the severity of its prior disciplinary action. The taking of any such further action, or the holding of a hearing with respect thereto, shall rest in the sole discretion of the board. THE REGISTRANT OR CERTIFICANT IN ANY ACTION BEFORE THE BOARD SHALL HAVE THE RIGHT TO APPEAL ANY DECISION OF THE BOARD TO A COURT OF COMPETENT JURISDICTION.

30-10-906. Disputed boundaries - notice - establishment of legal corner monument. (3) (c) Any corner monument established pursuant to this section shall be the true and legal monument defining the boundary corner as stated in the record of the survey; EXCEPT THAT, ANY AFFECTED PARTY MAY APPEAL THE RESULT WITHIN SIX MONTHS AFTER THE DATE THE CORNER MONUMENT IS ESTABLISHED IN ACCORDANCE WITH ARTICLE 44 OF TITLE 38, C.R.S.

38-44-113. Establishment of a boundary corner. THE ESTABLISHMENT OF A BOUNDARY CORNER THROUGH ACQUIESCENCE CONFIRMED BY A COURT OF COMPETENT JURISDICTION, OR BY WRITTEN AGREEMENT PURSUANT TO SECTION 38-44-112, SHALL NOT ALTER THE LOCATION OR VALIDITY OF ANY EXISTING OR PROPERLY RESTORED PUBLIC LAND SURVEY MONUMENT IN THE VICINITY. SUCH EXISTING OR PROPERLY RESTORED PUBLIC LAND SURVEY MONUMENT MAY BE USED TO CONTROL FUTURE LAND SURVEYS IN THE REGION WHEN SUCH SURVEYS ARE NOT RELATED TO THE BOUNDARY CORNER ESTABLISHED BY ACQUIESCENCE OR AGREEMENT.

38-50-101. Survey plat – records file and index system – informational purpose. (1) Survey plats required pursuant to section 38-51-107 and this section shall:
(c) Within [six] TWELVE months after the date the monument is accepted in the field

BY A PROFESSIONAL LAND SURVEYOR PERFORMING A MONUMENTED LAND SURVEY or is set by a professional land surveyor, be deposited with the public office designated by the county commissioners.

38-51-102. Definitions. As used in this article, unless the context otherwise requires:
(6) "Control corner" means any land survey [monument] CORNER the position of which controls the location of the boundaries of a tract or parcel of land.

(6.3) "CORNER" MEANS A POINT OF REFERENCE DETERMINED BY THE SURVEYING PROCESS.

(11) "Land survey" means a series of observations and measurements made [by a professional land surveyor] pursuant to sections 38-51-103, 38-51-104, and 38-51-105 for the purpose of locating or restoring any real property boundary.

(12.3) "MONUMENT" MEANS THE OBJECT OR PHYSICAL STRUCTURE THAT MARKS THE CORNER POINT.

38-51-110. Violations. (3) (b) Any person whose registration is revoked pursuant to paragraph (a) of this subsection (3) shall be entitled to a hearing on such revocation pursuant to article 4 of title 24, C.R.S., AND MAY APPEAL ANY DECISION OF THE BOARD TO A COURT OF COMPETENT JURISDICTION.

38-53-103. Definitions. As used in this article, unless the context otherwise requires:

(6) "Control corner" means any land survey [monument] CORNER the position of which controls the location of the boundaries of a tract or parcel of land.

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NCEES Eyes Computer Testing For Future PE & PLS Candidates

Harry L. Goff, PE-PLS, Board Member

Picture yourself ready to take the PE exam, with your son's little red wagon crammed full of text and reference books, trudging down to the local auditorium to sit at desks and tables with hundreds of other nervous, perspiring candidates. Maybe you have driven in the early morning hours from La Junta to get to the test site on time and your brain is still buzzing from I-25 traffic. Probably not the most conducive climate for "acing" a test that determines your future professional career.

Or...picture yourself grabbing a cup of coffee and telling your secretary to "hold my calls," and you wander into your office, close the door, sit down at your computer station and boot up. You log into the NCEES test center and stand ready for the first test question.

Too good to be true? Or, at least a whole lot better than when *you* had to take it? NCEES (National Council for Examiners for Engineering and Surveying) is looking into the feasibility of converting to computer based testing, or CBT, starting in approximately the year 2000. The first "baby steps" will be converting the PE exam to an objectively scored exam and conducting pilot programs with a sampling of states and disciplines. Based on the success of those, the Council will begin "computer linear testing" (CLT) of all candidates. The linear

testing approach administers the same exam to all candidates. This undoubtedly will not be held at the workplace at first, but rather at testing centers where computer banks of questions are available and security is assured. Eventually, there is the desire to progress to "computer mastery testing" (CMT). This method tests how well you do on the first portion of a question and then moves you to a more difficult portion or back to a simpler branch of the problem; and so on with each question until the time or questions run out, at which time your answers would be scored. The bonus: you would know your score immediately upon completion rather than the current 3-month wait.

Only after several interim exam periods and multiple review stages will the Council expect to reach such ease and individual access as depicted in this example. But the initial thought and movement in this direction have already begun.

Although you may not have to concern yourself with the future of the exams directly, it should still be in the interest of the industry that those who regulate the professions recognize that the workplace is changing and, since we are all involved in technology, why not put it to work in the arena of testing, too?

Board Rule XIII Fine-tuned

Physical Standards For Public Land Survey System Monuments

Earlier this year, the Board embarked on a revision to Rule XIII when it came to our attention that the rule didn't include center section corners and government lot corners in the requirements for physical standards. The previous rule did not include those corners because they were not usually set by the government originally. It became apparent that it was necessary to develop standards for these corners in order to perpetuate them for the public's benefit. At the same time, it made sense to try to clean up this rule to make it clearer. For that reason, representatives of the Professional Land Surveyors of Colorado were encouraged to provide input and assisted the Board directly in achieving what is hoped to be a better rule. The revised rule follows with deletions italicized and shown in brackets; the additions are in capital letters and underlined.

Rule XIII - Physical Standards for Public Land Survey System Monuments

A. Physical Standards for Establishing New Monuments or Upgrading Existing Monuments

(1) Whenever a Professional Land Surveyor [uses] monuments any section corner, **QUARTER SECTION CORNER, ONE-SIXTEENTH SECTION CORNER**, [or any other corner monumented in any] General Land Office [or] Bureau of Land Management [survey] **(GOVERNMENT) LOT CORNER OR ANY CORNER ESTABLISHED BY A PUBLIC LAND SURVEY MONUMENT (P.L.S.M.), AS DEFINED IN SECTION 38-53-103 (18), C.R.S. (1994)**, [as a control corner as defined in section 38-53-103(6), C.R.S. (1994)] the corner shall be [set] **MONUMENTED** with [, or upgraded to,] a metallic pipe or rod possessing a magnetic field and having a minimum outside diameter of 3/4 inch, a minimum length of 30 inches and a [two] **2** inch minimum diameter non-ferrous metallic cap.

[One-sixteenth section corners not established by any General Land Office or Bureau of Land Management survey shall be monumented with a solid rod possessing a magnetic field and having a minimum diameter of 5/8 inch, a minimum length of 30 inches and a 2 inch minimum diameter non-ferrous metallic cap.]

(2) WHENEVER A PROFESSIONAL LAND SURVEYOR USES AS A CONTROL CORNER, AS DEFINED IN SECTION 38-53-103 (6), C.R.S. (1994), ANY EXISTING MONUMENT WHICH REPRESENTS ANY OF THE CORNERS DESCRIBED IN PARAGRAPH A.(1) ABOVE AND SAID EXISTING MONUMENT IS SMALLER THAN 5/8 INCH DIAMETER, THE MONUMENT MUST UPGRADED TO THE MONUMENT SIZE DESCRIBED IN PARAGRAPH A.(1) ABOVE.

B. Exceptions to the Physical Standards for Establishing New Monu-

ments or Upgrading Existing Monuments

(1) If the [General Land Office or Bureau of Land Management monument] **P.L.S.M.** still exists in its originally set location and said monument is readily identifiable and reasonably durable, it does not have to be upgraded.

(2) Existing [section corner and quarter section corner] monuments [that have] **HAVING** a minimum outside diameter of [3/4] **5/8** inch do not have to be verified as to length or upgraded **SO LONG AS THEY ARE READILY IDENTIFIABLE AND REASONABLY DURABLE.**

[Existing one-sixteenth section corner monuments, not established by any General Land Office or Bureau of Land Management survey, that have a minimum outside diameter of 5/8 inch do not have to be verified as to length or upgraded.] If the found **EXISTING** monument;

(A) has no cap [.] ; **OR,**
(B) HAS A CAP OTHER THAN A NON-FERROUS METALLIC CAP [.] ;
OR,

(C) HAS A CAP HAVING A DIAMETER LESS THAN 1 1/2 INCHES, a PROPERLY STAMPED, 2 inch minimum diameter, non-ferrous metallic cap must be attached.

(3) A durable metal disk not less than 2 inches in diameter, on a stem not less than 3 inches long, is suitable for placing in rock outcroppings, concrete and for embedding in concrete posts (monuments).

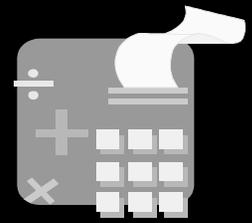
(4) In the event that [points (section corners, quarter corners or one-sixteenth corners)] **CORNERS DESCRIBED IN PARAGRAPH A.(1)**

ABOVE cannot practically be set because of steep terrain, water, marsh or existing structures, or if they would be lost as a result of a proposed street, road or other construction, one or more reference monuments shall be set. [Affixed to the monument, in addition to the specified markings and the surveyor's registration number, shall be the letters "RM" or "WC". Such reference monuments shall be set as close as practical to the true corner and shall meet the same physical standards for the corner monument, if it were set. If only one reference monument is used, it must be set on an actual aliquot line or a prolongation thereof. Otherwise, at least two reference monuments shall

be set.] **THE REFERENCE MONUMENTS SHALL BE SET ACCORDING TO SECTION 38-51-104(3)(B)(1), 38-51-104 (3)(B)(11), 38-51-104 (3)(C) AND 38-51-104 (3)(D) C.R.S., 1994.**

C. Physical Standards for Cap Markings

All caps shall be marked as set forth in Chapter IV of the ["] Manual of Instructions for the Survey of Public Lands of the United States, 1973 ["] , published by the United States Department of the Interior, Bureau of Land Management and **SHALL CONFORM WITH** C.R.S. 38-51-104, **(1994)**. This rule does not include any later amendments or editions to the ["] Manual of Instructions for the Survey of Public Lands of the United States, 1973 ["] , if available. A copy of the ["] Manual of Instructions for the Survey of Public Lands of the United States, 1973 ["] is available for public inspection. For information regarding how this material can be obtained or examined, contact the Board's Program Administrator, at 1560 Broadway, Suite 1370, Denver, Colo-



Board Statistics

Fiscal Year 1997

Active Licensees

16,984

Retired Licensees

1,658

New PE Registrants

735

New PLS Registrants

39

New Engineer Interns

1,203

New Land Surveyor Interns

52

Number of Examinees

2,141

Pass Rates

PE	Oct '96	46.48%
	Apr '97	58.36%
PLS	Oct '96	81.82%
	Apr '97	68.75%
EI	Oct '96	81.47%
	Apr '97	82.62%
LSI	Oct '96	41.67%
	Apr '97	65.91%
CO 1.5 hour surv. exam	Oct '96	51.72%
	Apr '97	76.47%

Disciplinary Actions

Complaints Filed	121
Dismissed	68
LOA	12
Cease & Desist	8
Stipulation	18
Suspension	0
Surrender	1
Revocation	1

Disciplinary Actions

The following are disciplinary actions taken by the Board from January, 1996 through September, 1997. Many thanks are in order for the professional assistance from Investigator Janet Audette with the Complaints and Investigations Unit, Charlie Robertson, the Board's former Assistant Attorney General, and Denise DeForest, the Board's new Assistant Attorney General. As a result of their efforts, the Board is able to vigorously pursue enforcement of the engineering and surveying licensing laws and rules. Disciplinary files are of public record and if you need additional information regarding any of the actions listed below, please contact Angie Kinnaird, Program Administrator, at the Board office.

Fawzy T. Abdelmalek, PE #20622, entered into a **Stipulation** with the Board on February 24, 1997 based on disciplinary action taken by the State of Illinois for exceeding the scope of his professional engineering license by signing and sealing plans that are required to be sealed by a structural engineer or architect. The Board's Order requires that Mr. Abdelmalek's license to practice engineering in the State of Colorado be put on probation coincident with the remainder of his Illinois period of probation; and, that he file quarterly reports with the Board confirming that he is fulfilling the requirements of the Illinois Order to which he consented.

James B. Ackerman, PLS #16364, entered into a **Stipulation** with the Board on August 16, 1997 as a result of failure to timely file monument records. Mr. Ackerman was fined \$100.

James E. Andrews, PLS #19585, entered into a **Stipulation** with the Board on May 9, 1997 for practicing land surveying with an expired license. The Board issued a Letter of Admonition to Mr. Andrews, and required that he revise the subject plat to the satisfaction of the Board and pay a fine of \$250.

Aquatic & Wetland Consultants, Inc., Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on November 15, 1996 for offering to practice engineering and practicing engineering without a licensed engineer in its upper management in violation of 12-25-104, C.R.S. and Board Policy 11. The company was fined \$500.

Richard A. Backlund, PLS #10847, entered into a **Stipulation** with the Board on March 14, 1997 as a result of his failure to timely deposit a land survey plat and timely file relevant monument records in conjunction with said plat. The Board's Order requires the filing of the appropriate monument records and the deposit of the land survey plat at issue. In addition, Mr. Backlund was fined \$100 and issued a Letter of Admonition.

Ronald L. Battles, Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on June 6, 1997 for offering to practice engineering and the unlawful use of an engineering seal. Mr. Battles was fined \$750.

Jerry Bauer, PLS #9009, entered into a **Stipulation** with the Board on May 9, 1997 for failure to prepare and timely deposit a plat and file monument records. The Board's Order requires that Mr. Bauer file the appropriate monument records, and complete and deposit the land survey plat at issue to the satisfaction of the Board.

Raymond W. Bayer, PLS #6973, entered into a **Stipulation** with the Board on September 13, 1996 as a result of failure to timely file monument records. Mr. Bayer was fined \$100.

David L. Bryant, Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on February 14, 1996 for practicing engineering without a license. Mr. Bryant was fined \$100.

Clyde H. Burnett, PE #17038, was issued a **Letter of Admonition** by the Board on March 8, 1996 based on disciplinary action taken by the State of Texas for failure to seal engineering reports.

Charles L. Camer, PLS #20128, was issued a **Letter of Admonition** by the Board on May 14, 1996 for failure to comply with 38-53-107 C.R.S., in that he did not properly complete, seal, and sign a monument record.

Thomas C. Caruso, PE # 19328, was issued a **Letter of Admonition** on February 19, 1997 for practicing engineering with an expired license.

Mark F. Corbridge, PLS #25619, entered into a **Stipulation** with the Board on June 14, 1996 as a result of failure to timely file a monument record. Mr. Corbridge was fined \$100.

Joel B. Crowe, PLS #25937, entered into **Stipulations** with the Board on June 14, 1996

and again on August 19, 1997 as a result of failure to timely file monument records. Mr. Crowe was fined \$100 in each instance.

James D. Deatherage, PE #28493, entered into a **Stipulation** with the Board on August 15, 1997 based on disciplinary action taken by the State of Arizona for substandard civil engineering. Mr. Deatherage's license to practice in Colorado has lapsed since the activity at issue occurred. Reinstatement of his license in Colorado will be contingent upon his successful completion of all requirements in the Arizona Decision by Consent.

Antoine J. Dib, PE #22610, was issued a **Letter of Admonition** on December 18, 1996 based on disciplinary action taken by the State of Texas for failure to provide a copy of his seal imprint and signature and to cooperate with the Board in its investigation of the matter.

Kenneth N. Dinges, PE #9200, entered into a **Stipulation** with the Board on November 15, 1996 based on disciplinary action taken by the State of Arizona for substandard engineering. Requirements of the Board's Order include probation until verification of his successful completion of the Arizona peer review process and a Letter of Admonition.

Michael W. Drissel, PLS #20677, entered into a **Stipulation** with the Board June 6, 1997 as a result of failure to timely file a monument record. Mr. Drissel was fined \$100.

Paul H. Durand, PE #29245, entered into a **Stipulation** with the Board on July 11, 1997 based on disciplinary action taken by the State of Arizona for the practice of land surveying without a license.

Norman B. Erthal, PE #17786, was issued a **Letter of Admonition** on August 26, 1996 for practicing engineering with an expired license.

Darry A. Ferguson, PE #14674, was issued a **Letter of Admonition** on May 14, 1996 for practicing engineering with an expired license.

Robert L. Feroldi, PLS #20136, entered into a **Stipulation** with the Board on May 10, 1996 as a result of failure to timely file a monument record. Mr. Feroldi was fined \$100.

Ronald W. Flanagan, PLS #26958, entered into a **Stipulation** with the Board on February 14, 1997 as a result of failure to timely file a monument record. Mr. Flanagan was fined \$100.

Thomas M. Flynn, PE #3964, was issued a **Letter of Admonition** on September 12, 1997 for practicing engineering with an expired license.

J. David Foley, PLS #24954, entered into a **Stipulation** with the Board on May 10, 1996 as a result of failure to timely file a monument record. Mr. Foley was fined \$100.

Timothy P. Fowler, PLS #23041, entered into a **Stipulation** with the Board on August 16, 1996 as a result of failure to timely file a monument record. Mr. Fowler was fined \$100.

Kenneth L. Frantz, PE #17700, was issued a **Letter of Admonition** on June 14, 1996 for practicing engineering with an expired license.

Homer B. Goff, PE #17303, was issued a **Letter of Admonition** on June 20, 1996 on the basis of disciplinary action taken by the State of Nevada for practicing engineering with an expired license.

Robert Gollick, Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on November 15, 1996 for practicing surveying and the unlawful use of a surveying seal. Mr. Gollick was fined \$500.

John J. Hall, PLS #15278, was issued a **Letter of Admonition** on March 14, 1997 for failure to prepare a land survey plat and monument records; failure to file monument records; and reliance on poor control, resulting in the erroneous setting of a center quarter corner.

Benjamin L. Harding, PE #16031, was issued a **Letter of Admonition** on May 14, 1997 for practicing engineering with an expired license.

Frank W. Harrington, PLS #19598, entered into a **Stipulation** with the Board on August 16, 1996 as a result of failure to timely file monument records. Mr. Harrington was fined \$100.

Stephen R. Harris, PLS #26960, entered into a **Stipulation** with the Board on November 15, 1996 as a result of failure to timely file monument records. Mr. Harris was fined \$100.

Thomas W. Hartmann, PE #20506, was issued a **Letter of Admonition** on May 13, 1996 for practicing engineering with an expired license.

John A. Hatfield, PE #11044, had his PE license **revoked** on November 15, 1996 after a hearing before an administrative law judge and the Board's consideration of the judge's Initial Decision in the matter. The case concerned a departure from generally accepted engineering standards; violation of Rule IV of the Rules of Professional Conduct concern-

(Continued on page 9)

Disciplinary Actions Continued...

ing conflicts of interest; performance of services beyond his area of competency; failure to sign and seal engineering documents within his responsible charge; and, failure to cooperate with the Board's investigation.

Michael D. Heimback, PLS #17488, entered into a **Stipulation** with the Board on May 9, 1997 for failure to upgrade monuments in the performance of a land survey plat and to deposit the plat. Mr. Heimback is required by the Board to upgrade the appropriate monuments, deposit the plat at issue and pay a fine of \$500.

Barney L. Hitt, III, PE #18553, entered into a **Stipulation** with the Board on September 16, 1996 based on disciplinary action taken by the State of Tennessee for sealing and signing engineering documents not prepared under his direct supervision. Mr. Hitt is not currently licensed in the State of Colorado, however, if he chooses to reinstate his license he will be subject to a one-year period of probation. If Mr. Hitt is found to have violated any relevant law or Board rule concerning the practice of engineering in Colorado or any other state during probation, his license to practice will be suspended for two years and subject to further discipline.

Billy G. Holloway, PLS #2853, entered into a **Stipulation** with the Board on February 14, 1997 for failure to properly upgrade existing monumentation in the course of performing a Subdivision Exemption Plat/Improvement Survey Plat and to file monument records. The Board's Order restricts Mr. Holloway's license to practice land surveying to the preparation of improvement location certificates, oil and gas certificates for the oil and gas industry and the location of boundaries only within platted subdivisions in and around Morgan County. His license is also placed on probation for a minimum of 2 years beginning February 14, 1997, during which and until 5 satisfactory land surveying projects have been submitted for review and he has corrected the plat at issue in this matter.

Merle D. Hoos, PLS #27269, entered into a **Stipulation** with the Board on September 19, 1997 as a result of failure to timely file monument records. Mr. Hoos was fined \$100.

William R. Jones, PE #16619, was issued a **Letter of Admonition** on December 20, 1996 for practicing engineering with an expired license.

Ronald L. Kamstra, PLS #12031, entered into an agreement with the Board in which the parties agreed to allow Mr. Kamstra to **no longer practice land surveying** in the State of Colorado as of March 23, 1997 rather than incur the cost of litigation.

Diane M. Kelly, PLS #25951, entered into a **Stipulation** with the Board on January 17, 1997 as a result of failure to timely file monument records. Ms. Kelly was fined \$100.

Marshall Keneipp, PE #31987, was issued a **Letter of Admonition** on July 17, 1997 for practicing engineering prior to his licensure as a professional engineer.

Brian R. Ladd, PE #29115, entered into a **Stipulation** with the Board on August 17, 1996 agreeing to cease and desist using any seal with the designation of "Colorado Registered LS" or the like until and unless he complies with the licensing requirements to practice land surveying. With that stipulation, the Jefferson County District Court formally ordered a permanent injunction in this matter enjoining Mr. Ladd from practicing or offering to practice land surveying; using the words "land surveyor", "land surveying", or "professional land surveyor"; using another's seal or registration number; or attempting to use an expired, revoked, suspended or nonexistent license.

Charles J. Lewis, PE-PLS #4571, voluntarily **surrendered** his license to practice professional land surveying on May 10, 1996 as a result of a complaint and investigation into substandard surveying.

Herbert K. Linn, PLS #12840, entered into a **Stipulation** with the Board on November 15, 1996 as a result of failure to timely file monument records. Mr. Linn was fined \$100.

Thomas H. Logan, PE #6679, was issued a **Letter of Admonition** on November 22, 1996 for practicing engineering with an expired license.

Charles L. Loyd, PE #27164, was issued a **Letter of Admonition** on March 20, 1996 for substandard engineering practice as a result of not maintaining responsible charge of the work at issue in this matter and for failure to seal final drawings.

David W. Mathews, PE #31436, entered into a **Stipulation** with the Board on May 9, 1997 for the unlawful use of an engineering seal while enrolled as an engineer-intern. Mr. Mathews' license to practice engineering has been placed on probation for a minimum of 5 years beginning August 16, 1996, during which he must comply with all legal requirements.

Steven C. McCormack, PLS #22574, entered into a **Stipulation** with the Board on June 14, 1996 as a result of failure to timely file monument records. Mr. McCormack was fined \$100.

Dexter N. McCulloch, Unlicensed, entered into a **Stipulation** with the Board on February 14, 1997 agreeing to cease and desist offering to practice or performing engineering in the State of Colorado until and unless he complies with the licensing requirements to

practice engineering. This action resulted from Mr. McCulloch signing an engineering report, which requires the signature and seal of a licensed Colorado engineer. Mr. McCulloch was also fined \$500.

Ray Melillo, PE #18588, was issued a **Letter of Admonition** on March 20, 1996 based on disciplinary action taken by the State of South Carolina for providing mechanical and electrical design engineering services without being licensed.

Glenn A. Merrell, Unlicensed, entered into a **Stipulation** with the Board on February 9, 1996 agreeing to cease and desist offering to practice or performing engineering in the State of Colorado until and unless he complies with the licensing requirements to practice engineering. The Board's action was the result of solicitations that improperly used the titles "engineer," "project engineer," "general engineering" and "Sr. control engineer." Mr. Merrell was also fined \$50.

Albert G. Mullin, PE-PLS #26870, entered into a **Stipulation** on June 6, 1997 with the Board for the substandard practice of land surveying. Mr. Mullin's license to practice land surveying was placed on probation for a minimum of 2 years beginning June 6, 1997 during which and until he has completed 40 Board-approved clock hours of continuing education and corrected the work at issue in this matter.

Martin J. Murphy, PE #26117, was issued a **Letter of Admonition** on July 16, 1997 for practicing engineering with an expired license.

Robert C. Naumann, PE #13892, was issued a **Letter of Admonition** on May 16, 1997 for enabling another to use his seal and forge his signature on work of which he was in responsible charge.

Terry D. Nichols, PLS #12093, entered into a **Stipulation** with the Board on November 15, 1996 as a result of failure to timely file monument records. Mr. Nichols was fined \$100.

Patrick C. O'Hearn, PLS #23515, entered into a **Stipulation** with the Board on September 13, 1996 for violating Rule IV of the Board Rules of Professional Conduct and 12-25-208 (1) (b) and (e) during the course of performing an improvement survey. Prosecution of the case was deferred for one year during which Mr. O'Hearn's license to practice land surveying was put on probation. Upon satisfactory completion of the probation, to be determined by the Board, the charges against Mr. O'Hearn will be dismissed with prejudice.

PanEnergy Field Services, Inc., Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on July 11, 1997 in which the company agreed to stop practicing professional land surveying as defined in 12-25-202 (6), C.R.S., until and unless the company comes into compliance with the requirements to practice professional land surveying. PanEnergy Field Services, Inc. was fined \$750.

Kevin W. Patterson, PE #28341, entered into a **Stipulation** with the Board on July 22, 1997 for failure to meet generally accepted engineering standards in the preparation and design of a residential foundation. Mr. Patterson's license to practice engineering was placed on probation for a minimum of 18 months and continues until requirements of the probation are completed, including the monitoring of at least three engineering projects related to foundations and structures and 8 hours of continuing education on the same subjects.

Curtis R. Payton, PLS #25960, was issued a **Letter of Admonition** on January 18, 1996, for substandard practice of land surveying in the performance of an Improvement Location Certificate on which access was incorrectly represented.

Gerard H. Pesman, PE-PLS #2376, entered into a **Stipulation** with the Board on May 10, 1996 as a result of violating a previous stipulation which required that his monitored work meet all statutory requirements and generally accepted standards of practice. The terms of the Board's Order require that Mr. Pesman's license be placed on probation for a minimum of 1 year beginning May 10, 1996 during which and until he has submitted 8 satisfactory land surveying projects for review and has corrected the work at issue in this matter.

Philip L. Petersen, PLS #12103, entered into a **Stipulation** with the Board on March 14, 1997 as a result of failure to timely file monument records. Mr. Petersen was fined \$100.

James R. Pettit, PE #8522, entered into a **Stipulation** with the Board on June 14, 1996 for offering to practice and practicing engineering with a license that expired January 31, 1987. Mr. Pettit was fined \$250, required to apply for reinstatement of his license and to pay the appropriate fees. In addition, his license to practice was suspended for one year, however, that discipline was held in abeyance while on probation for one year.

Norman L. Rabbers, PE #25163, was issued a **Letter of Admonition** on March 20, 1996 on the basis of disciplinary action taken by the State of Texas for using a signature

(Continued on page 10)



Pat's Corner continued...

longer be accepted. Phil Petersen, PLS, and former Board member, was kind enough to modify the Autocad Release 12 layout of the forms originally provided by Doyle Abrahamson, PLS. The new form is available on disk in Release 12 and Release 13. To procure this from the Board please send me a new 3 1/2" disk and a self-addressed disk mailer envelope with 55 cents in postage affixed. I will load the new form onto your disk and return it to you within a matter of days.



When you find an existing cap that is mismarked, but is otherwise acceptable, please note this on your record. In this manner, other users and I will be able to account for any apparent discrepancies on the record and this will remove any concern about misfiling.



Regarding witness corner reference numbers, please use the index reference number for the location of the corner being referenced and not for the location of the witness corner.

Policy #11 Revised

Forms of Organizations Permitted to Practice

Board Policy #11 clarifies who may own an engineering firm or a land surveying company. It became apparent that the policy needed revision when a situation arose in which an engineer was the sole proprietor of a land surveying company and there were no professional surveyors in upper management. That had not been the intent of the law or the policy, so it appeared that the policy could use some fine-tuning. Below is the revised policy with the deleted language italicized and shown in brackets; the added language is evidenced by all capitals and is underlined.

The Board of Registration for Professional Engineers and Professional Land Surveyors interprets the language of Section 12-25-104, C.R.S. and Section 12-25-204, C.R.S. to require similar things of all engineering or land surveying organizations whether they are organized as sole proprietorships, firms, partnerships, joint stock associations or corporations. Both practice acts require a licensee to be in responsible charge of the engineering or surveying activities of the organization. This language is reasonably interpreted to require that at a minimum, the sole proprietor, or at least one partner, director or officer of an engineering [or surveying] business must be a registered professional engineer [or

surveyor.] AND THAT THE SOLE PROPRIETOR, OR AT LEAST ONE PARTNER, DIRECTOR OR OFFICER OF A SURVEYING BUSINESS MUST BE A REGISTERED PROFESSIONAL LAND SURVEYOR, in order for the firm to lawfully practice or offer to practice engineering or surveying, RESPECTIVELY."

This statute and policy also means that you should not provide your services to a company which offers engineering or surveying services that does not have a licensee within the ownership or upper management of the company. If you do, you are essentially aiding and abetting the violation of this statute and policy. This includes reviewing work performed by others within that company, which would be inappropriate since you would not be in responsible charge.

This policy was revised December 13, 1996. If you have any questions about this policy and what it means for you or your firm, please call Angie Kinnaird, Program Administrator, at 303/894-7784.

Disciplinary Actions continued...

stamp.

Joseph W. Sallada, PE #1297, was issued a **Letter of Admonition** on March 25, 1997 for practicing engineering with an expired license.

Henry O. Santos, PE #25908, entered into a **Stipulation** with the Board on January 17, 1997 for practicing engineering with a license that had expired November 30, 1992. The Board ordered that Mr. Santos be fined \$700 and be issued a Letter of Admonition.

Karl G. Schakel, PE #19297, was issued a **Letter of Admonition** on March 25, 1997 for practicing engineering with an expired license.

Gary R. Shear, Unlicensed, entered into a **Stipulated Cease and Desist Order** with the Board on November 11, 1996 in which Mr. Shear agreed to stop offering to practice or practicing professional land surveying as defined in 12-25-202 (6), C.R.S., until and unless he comes into compliance with the requirements to practice professional land surveying. He was fined \$250.

Leo E. Seiling, PLS #11380, voluntarily **surrendered** his license to practice professional land surveying on May 10, 1996 after violating his stipulation which required that he perform remedial work.

Steven J. Sellars, PLS #27615, entered into a **Stipulation** with the Board on August 16, 1997 as a result of failure to timely file monument records. Mr. Sellars was fined \$100.

Brian W. Shear, PE #20262, was issued a **Letter of Admonition** on February 13, 1996 for not meeting generally accepted standards of care while investigating site conditions in the project at issue.

Thomas F. Stephenson, PLS #3553, entered into a **Stipulation** with the Board on February 14, 1997 for the substandard practice of land surveying. Mr. Stephenson's license to practice land surveying is placed on probation for a minimum of 2 years beginning February 14, 1997 during which and until he has submitted 5 satisfactory land surveying projects for review, completed 40 Board-approved clock hours of continuing education and has corrected the work at issue in this matter.

Gary L. Terry, PLS #12160, entered into a **Stipulation** with the Board on December 13, 1996 as a result of failure to timely file monument records. Mr. Terry was fined \$100.

Robert W. Thompson, PE #7078, was issued a **Letter of Admonition**

on November 22, 1996 on the basis of disciplinary action taken by the State of Iowa for practicing engineering prior to obtaining a license.

Donald G. Tjepkes, PLS #10108, entered into a **Stipulation** with the Board on May 9, 1997 for the substandard practice of land surveying. Mr. Tjepkes is required to correct the work at issue in this matter and pay a fine of \$100.

Robert M. Towner, PE #5396, was issued a **Letter of Admonition** on March 19, 1996 for failure to sign, seal and date drawings, maintain a copy of the drawings and maintain the design calculations for the project in this matter.

Timothy Wagner, PLS #14166, entered into a **Stipulation** with the Board on July 11, 1997 as a result of failure to timely file monument records. Mr. Wagner was fined \$100.

James L. Widger, PE #12492, was issued a **Letter of Admonition** on June 20, 1996 on the basis of disciplinary action taken by the State of Arizona for certifying incomplete and misleading percolation tests.

Kenneth Wilkinson, PE #28249, entered into a **Stipulation** with the Board on July 11, 1997 based on disciplinary action taken by the State of California concerning substandard structural engineering in the design of a parking deck. Requirements of the stipulation include suspension of Mr. Wilkinson's license to practice engineering in the State of Colorado for twenty days and subsequent probation of his license for three years during which he must demonstrate compliance with the terms of the California disciplinary order.

Randy Wilmore, PLS #25972, entered into a **Stipulation** with the Board on November 15, 1996 as a result of failure to timely file monument records. Mr. Wilmore was fined \$100.

Eric D. Zeimer, Unlicensed, entered into a **Stipulation** with the Board on February 14, 1997 agreeing to cease and desist offering to practice or performing engineering in the State of Colorado until and unless he complies with the licensing requirements to practice engineering. This action resulted from Mr. Zeimer signing an engineering report, which requires the signature and seal of a licensed Colorado engineer. Mr. Zeimer was also fined \$500.

Changes to Monument Record And Instructions

Michael W. Drissel, PLS, Board Member

Early this year, it was apparent that the monument record form did not fully reflect the statutory requirements necessary to establish the time limit for filing the monument record form with the Board.

The statute 38-53-104 (c) (2), C.R.S., states:

Monument records shall be filed within six months of the date on which the monument was used as control **OR** was established, restored, or rehabilitated. (Emphasis added.)

It is quite possible that the date on which a monument is *used as control* may be different from the date on which a monument is *established, restored or rehabilitated*. To better accommodate the work of professional land surveyors, preserve and maintain the monument record-keeping system, and more accurately reflect the statutory requirement, the Board amended the monument record form to clarify the filing requirement and add an additional date block.

The first date block on the new monument record form, now identified as "a. Date of Field Work to Establish, Restore or Rehabilitate Monument.," requests the date that the monument was *established, restored or rehabilitated* in the field. If the monument record that the professional land surveyor is filing is for a monument that he/she has *established, restored or rehabilitated*, then this is the date block that the land surveyor will use on the form and it will be the basis for determining the six-month filing requirement.

The second date block on the new monument record form, shown as "b. Date Monument was Used as Control.," will reflect the date the monument was *used as control*. If the monument has not been *established, restored or rehabilitated* and was only *used as control* by you, this is the date block that you will complete and will be used to determine the six-month filing deadline.

If the monument is not *established, restored or rehabilitated*, nor is it *used as control*, a monument record is not required to be filed. Nevertheless, it is the Board's position that if reference points are set for a monument in order to perpetuate the monument, whether it is used as control or not, it is appropriate for the land surveyor to file a monument record. Under this scenario, it is satisfactory to identify the monument as such under item number 2 on the new form, "Description of Monument Found:."

If the monument is *established, restored or rehabilitated* in the field and at a later date *used as control*, both date blocks should be filled in. Be advised that the six-month filing deadline requirement will be based on the earlier of the two dates on the form.

Another change is to the instructions in item #4. Your attention is called to the imperative that distances from the monument to reference points must be given to the nearest 0.1 feet, as opposed to the previously acceptable plus or minus measurements.

The revised monument record forms are available from the Board office. Please obtain new forms by calling Pat Sullivan, PLS, at the Board office (303/894-7793 – his direct line). If you have any questions concerning this change, you are welcome to call me at 970/245-8749.

Monument Records For Mineral Survey Corners

Wayne K. Clark, PLS, Board Member

Because there has been some confusion about the need to file monument records on mineral survey corners or patented mining claim corners, the Survey Quorum recently reviewed the statutes.

The Quorum found that the definition of "Public Land Survey Monument" in Section 38-51-102 (18), C.R.S., specifically refers to mineral survey monuments and as a result, they are included in that group of monuments on which records must be filed. In addition, they must meet the requirements of Board Rule XIII - Physical Standards for Public Land Survey System Monuments.

The Bureau of Land Management advises that mineral surveys do fall under their authority as they maintain the roster of the U.S. Mineral Surveyors and have the authority of approval for mineral surveys.

So remember, monument records must be filed on U.S. Mineral Survey corners; and, the requirements of Rule XIII must be met, meaning the monument must be reasonably durable/identifiable or upgraded to a 3/4" x 30" rod or pipe, possessing a magnetic field with a 2" minimum diameter nonferrous metallic cap.

IMPORTANT!

To comply with the *Federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996*, passed by Congress on August 22, 1996, the Colorado Legislature passed House Bill 97-1205. A portion of this state law focuses on denying applications for, and suspending current licenses of any person in default of court ordered child support. Therefore, all applications for new licensure and all license renewals shall require the applicant's social security number.

For your information, social security numbers are only being used to match data provided on court orders for unpaid child support under the new law. By law, access is limited to the Department of Human Services only for the purposes of establishing, modifying or enforcing child support.

Your licensing status may be in jeopardy if you do not provide your social security number on your next licensure renewal.

For a copy of the new law, contact the Legislative Bill Office at 303/866-3005.

**Colorado State Board of Registration for
Professional Engineers and Professional
Land Surveyors**
1560 Broadway, Suite 1370
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BOARD NEWS

License Required To Work In Colorado...

...Even If You Have A License In Another State

Jill S. Tietjen, PE, Board Member

Did you know that, with a few exceptions, you must be licensed in Colorado, or the person in responsible charge of the engineering or surveying work must be licensed in Colorado, in order to perform those services within the State of Colorado?

This may seem obvious, but surprisingly many don't realize this also means that even if you have a license in another state, you may not practice here or any other state without a license directly from that jurisdiction.

Section 12-25-105 (2) and 12-25-205 (2), C.R.S., from the engineering and surveying statutes specify that it is unlawful for any individual or company, regardless of the organizational structure, to offer to practice or to practice engineering or surveying unless licensed in Colorado.

"Responsible charge" as defined in the statutes means control and direction of the engineering or surveying work within the professional's scope of competence. The intent is that the person who is in responsible charge must be capable of answering questions relevant to the engineering or surveying decisions during the course of the project in sufficient detail to leave little doubt as to the professional's knowledge and involvement in the project. It is not enough to control the management of a project. Responsible charge relates to the engineering or surveying decisions being made.

If you have a license from another state but are performing or offering to perform engineering services within Colorado, you are not in compliance with the laws of Colorado. Noncompliance could result in disciplinary action from the Colorado Board and subsequently from any other Boards with whom one is licensed.

