

Institutional Affiliate of American Congress on Surveying and Mapping

The California Surveyor

THE VOICE OF THE LAND SURVEYORS OF CALIFORNIA

No. 28

SPRING EDITION

1973

PRESIDENT'S CORNER

Eugene Lockton, L.S.

When one considers the long period following the advent of the automobile during which there still remained the law requiring all 'Horseless Carriages' passing through midwest towns to be preceded by a man on foot, ringing a bell, it becomes easier to reconcile oneself to present-day legislative lag. Particular reference is had to the field of civil engineering.

The burdens of technological development were minimal for many centuries following the creation of the Priest-Surveyor dichotomy in ancient Egypt. Only in relatively recent time has the expansion of interest in this specialty broadened from a field that was primarily earth-measurement to matters related to earth-structures. Two requirements immediately became apparent. One was for some form of assurance to the public of capability of the practitioner inasmuch as his functions had become abstruse to the layman. The State met this demand with a license (simply a franchise awarded in exchange for accomplishing a satisfactory level of qualification). The second arose from the sudden increase in available specialized knowledge, without which a complete service under the franchise could not be delivered.

(Continued on page 14)

NEWSLETTER?

The newsletter of C.L.S.A. is published between issues of "The California Surveyor." The Newsletter of February 1, 1973 contained information about these items of interest to Surveyors:

- 1. Political Muscle and The Surveyor
- 2. C.L.S.A. Committee Charges
- 3. Professional Development For Surveyors Through C.L.S.A.
- 4. New Laws Affecting The Practicing Surveyor If you are not receiving the newsletter, contact:

NEWSLETTER P.O. Box 1363 Santa Rosa, Ca. 95403

NOTICE OF PROPOSED CHANGES IN THE REGULATIONS OF THE STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Notice is hereby given that the State Board of Registration for Professional Engineers, pursuant to authority vested by Sections 6716 and 8710 of the Business and Professions Code, and to implement or make specific said sections and Sections 6799, 8747 (as amended) and 8805 of said Code, and Section 11003 of the Government Code, proposes to amend its regulations in Title 16 of the California Administrative Code as follows:

(1) Amend Section 407 to read:

407. Fees. (a) All fees required by provisions of the code and rules of the board shall be transmitted by money order, bank draft or check, payable to the Department of Consumer Affairs, at Sacramento.

(b) The following is the prescribed application fee for:

	(1)	Authority to use the title "structural	
		engineer"	\$75
	(2)	Registration as a professional engineer.	\$60
	(3)	License as a land surveyor	\$60
	(4)	Authority to use the title "consulting	
		engineer" pursuant to Section 6732.2.	\$60
	(5)	Certification as an engineer-in-training.	\$40
	(6)	Certification as a land surveyor-in-	
		training	\$40
(c)	The f	following is the prescribed renewal fee, par	yable
		r before June 30 of each even numbered	
	for:		
	(1)	Authority to use the title "structural	
			\$20
	(2)	Registration as a professional	
		engineer	\$20
	(3)		\$20
	(4)	License as a photogrammetric surveyor	\$20
	(5)	Authority to use the title "consulting	

engineer" pursuant to Sections 6732.1

(Continued on page 14)

Shortest Distance From The Field To Your Seal On The Plat Is Through Hewlett-Packard Surveying Systems.



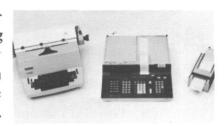
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093/71

For new standards in Surveying Systems, think Hewlett-Packard.



BOARD OF DIRECTORS MEETING **ABSTRACTS OF MINUTES**

Harold B. Davis, L.S. Secretary-Treasurer

The Board of Directors met at the Royal Inn of San Francisco Airport on January 13, 1973, at 10:10 A.M.

ATTENDANCE

Board	of	Directors	
Down a	US	Duccions	

President, C.A. Wooldridge	Precent
Vice President, James E. Adams	Present
Secretary-Treasurer, Harold B. Davis	Present
Immediate Past President, Bob Curtis	Absent
Director, Homer Banks, Jr	Present
Edward A. Boris, Jr	Absent
Lawrence J. Cloney	Present
Paul W. Lamoreaux, Jr	Present
Eugene Lockton	Present

Chapter Representatives

Chapter Representatives	
Bakersfield, Don Ward	Present
Central Coast, Bob Leger	Present
	Present
Eastern Sierra, Bob Baron	Present
Feather River, Gary T. Lippincott	Present
Lake-Mendocino, Joe Scherf	Absent
	Present
Marin, Eugene Lockton for George Colson	Present
Mother Lode, Frederick W. Kett	Present
Sacramento, Dan Radman	Present
Sacramento, George W. Bridges	Absent
San Fernando Valley, Leonard Lindenbaum	Present
San Joaquin Valley, William O. Gentry	Present
Santa Clara-San Mateo, Hank Young	Present
Santa Clara-San Mateo, George Stock	Present
Santa Clara-San Mateo, Charles Randall, Jr	Present
Sonora County, Rod Pitts	Present
Tahoe, Jerry W. Tippin	Present

Non-Voting Guests, Members & Committee Chairmen

Bill Marum - Tahoe Chap. Pres. Joe Switzer – San Diego Bob Carpenter - San Fernando

Ed Griffin - East Bay

John Pedri - Mother Lode, Bd. of Reg.

President Wooldridge reported on the activities and accomplishments of 1972.

The Secretary-Treasurer presented an interim financial report for 1972, showing total expenditures of \$13,000+ or -, with a balance of 3,000.00 + or -, subject to final tabulation. A tentative budget was submitted, with the final budget to the adopted at the February meeting.

Ed. Griffin reported for the Legislative Committee. He gave this committee's recommendation that the association forgo interim study at this time. After considerable discussion, the board voted to accept this recommendation, with the full details to be sent to the full membership by newsletter. The board then discussed various ideas pertaining to legislation, and then directed the Legislative Committee to prepare a program for submission to the board at the February meeting.

The other committee chairmen then reported on 1972 activities. The Board directed the Education Committee to prepare a program of seminars on various surveying programs for submission to the board by the February meeting. Roy Watley, the Editor of the California Surveyor, requested that all copy be complete, and submitted prior to the published deadlines. He also requested all interested members to submit articles. Joe Carey, chairman of the Seismic Effects Committee, reported on the Cullen Act, stating that this committee is reviewing this legislation with a goal of recommending certain amendments. The several liaison committees have been meeting with the various engineering societies, and feel that C.L.S.A. has established a fair rapport.

The nominating Committee presented the results of the election with the following results:

President - Eugene Lockton Vice-President - James E. Adams Secretary-Treasurer - Harold B. Davis Directors-at-large - Homer Banks, Jr. Laurence J. Cloney Paul W. Lamoreaux, Jr. Robert W. Carpenter A. E. Griffin

1972 President Wooldridge then passed the gavel to 1973 President Lockton, who made a short speech.

President Lockton then called for new business. John Pedri, requested that any member interested in preparing a four hour S.I.T. examination for the N.C.E.E. contact President Lockton. Roy Watley presented a request from Alameda County that C.L.S.A. study the problem of monumentation of new road construction.

The meeting adjourned at 4:00 P.M.

New C.L.S.A. Members — First Quarter 1973

Regular Members
Frank Bellecci Martinez
Fred Wayne Crowe Elsinore
Joseph M. Dietrich Inglewood
Ronald M. Grider Arroyo Grande
Frank A. Heid Napa
Robert R. Hiatt Saugus
John N. Hulderman Granada Hills
Jimmy Dean Jones Sacramento
Ronald A. Kosin Long Beach
Kenneth L. Kreeger Nipomo
Edward R. Sanborn Hollywood
Samuel L. Taylor, Sr Los Osos
Affiliat - Moush one
Affiliate Members
Edward L. Gorton Bishop
Lance Hinek Bishop
Gordon C. Holmes
Charles M. Macauley Independence
Joel Readio Carmel Valley
Associate Members
Associate Members
Jerry L. Bowser Arroyo Grande

Neal P. Campbell San Rafael

Robert H. Elliott, Jr. Berkeley

Andrew K. Holmes Bishop John W. Ritter Bishop

Thomas W. Stoutenburg Bishop

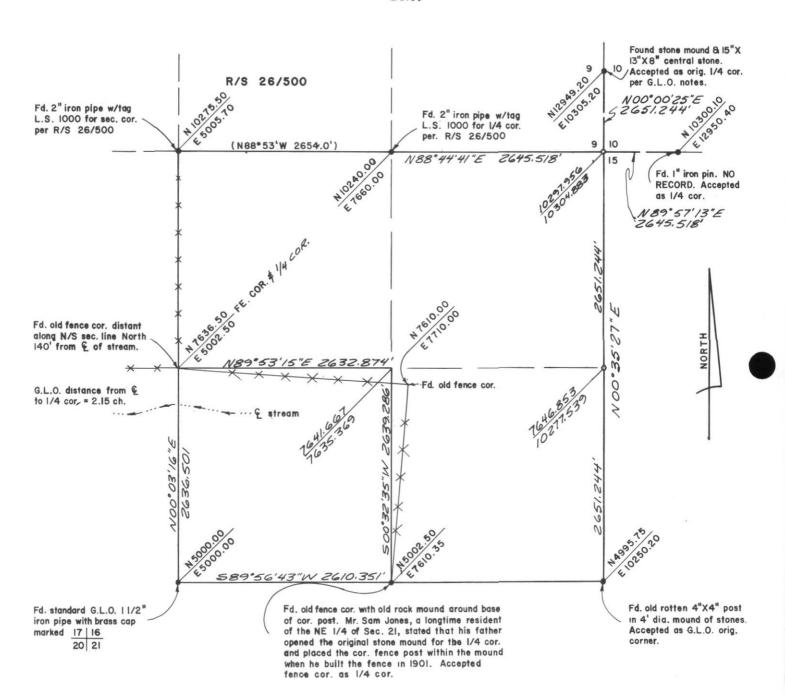
DETAIL

NE COR. SEC. 16

"ASTRONOMICAL"

SEC. 1033'

COR. 1033'



Basis of bearings: True as determined by solar observation.

- Monuments found.
- Dimensional point nothing found
- () Record per R/S 26/500

Roger Swink, L.S.

Problem D3-Wt 25 (LS Part D, August 1970)

Distances and coordinates are shown to the nearest 1/1000 of a foot in hopes of aiding anyone checking the solution. Alan Brooks submitted a correct answer using the "astronomical" corner.

(1) The existing fence corner at the W 1/4 corner is acceptable from the information supplied in the problem.

(2) The lost NE corner of section 16 should be replaced by double proportionate measurement since no evidence is given in the problem allowing a better solution.

Beginning on page 203 in Boundary Control and Legal Principles, Brown demonstrates a commonly used method of restoring section corners. He sets a proportionate point F on the line between the N ¼ corner of section 16 and the N ¼ corner of section 15. He also sets a proportionate point E on the line between the E 1/4 corner of section 9 and the SE corner of section 16. "From the proportionate point F a line is run due north (astronomical) and from the point E a line is run due west; their point of intersection determines the restored position for the lost section corner." This corner is shown as the "astronomical" corner in the detail.

In retracements of U.S. government surveys, distance is superior to angle and this method doesn't achieve proportionate distances between the existing corners. Admittedly, the difference is minor in this case. In mountainous land where the bearings of the original lines were not close to North and East, the difference can be large.

Quoting from section 368 of the Manual of Surveying Instructions, 1947:

"In order to restore a lost corner of four townships, a retracement will be made between the nearest known corners of the meridional line, north and south of the missing corner, and upon that line a temporary stake will be placed at the proper proportionate distance; this will determine the latitude of the lost corner.

Next, the nearest corners on the latitudinal line will be connected, and a second point will be marked for the proportionate measurement east and west; this point will determine the position of the lost corner in departure (or longitude).

Then, through the first temporary stake run a line east or west, and through the second temporary stake a line north or south, as relative situations may determine; the intersection of these two lines will fix the position for the restored corner."

The key for my solution is in the last paragraph. The lines from the temporary stakes are run north or south and east or west "as relative situations may determine."

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- (3) The E 1/4 corner is then set by single proportionate measure and the determination of the dimensions of the SW ¼ is a matter of mathematics.
- (4) Mr. Smith should be advised of any possible rights to title he has acquired in the SE 1/4. He should also be adivsed of any rights to title his adjoiner in the NW 1/4 has acquired through adverse possession.
- (5) The NE corner, the E 1/4 corner, and the center 1/4 of section 16 should all be set and a record of survey should be recorded.

THE L.S. EXAM PROBLEM *

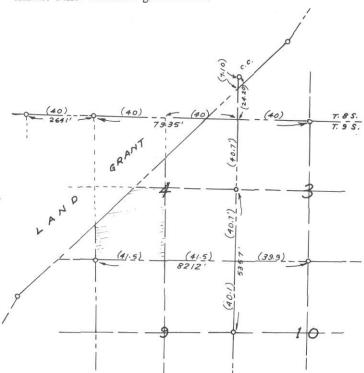
Roger Swink, L.S.

Each edition will carry the best answers for the previous edition's problem with credit given to the persons submitting the best answers. We invite all interested surveyors or their employees to submit answers.

Problem DI - Wt. 25 (L.S. Part D, August 1970)

In the plat shown below the corners circled indicate the original corners found, or acceptable replacements thereof. All other corners are considered lost.

The values shown in parenthesis are original distances in chains. Other values are given in feet.



REQUIRED:

Describe your method for setting all the corners for the fractional SW ¼ of section 4. Identify each point in turn and delineate clearly how you would establish each point. Do not calculate the numerical values.

*Note: The examination problems from the 1970 Licensed Surveyors Examination are copyrighted by the Board of Registration for Professional Engineers and may not be reproduced without written permission from the Board. The Board is not involved in authorship of the solution.



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surveying equipment

P. O. Box 820 - VENTURA, CALIFORNIA 93001 TELEPHONE (805) 643-8673 ANYTIME The branches of professional engineering in land surveying and civil engineering are governed by separate acts of the Legislature, but the administration of each act rests with a single board — the Board of Registration for Professional Engineers.

The basic distinction between the two professions can generally be said that the Land Surveyor is concerned with the location of points on the face of the earth relative to boundary lines and structures, and the Civil Engineer is concerned with the design and construction of projects.

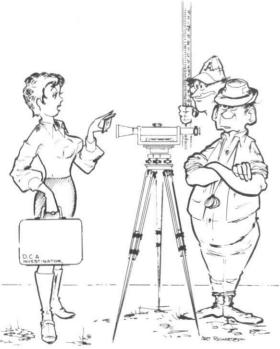
Both professions have common and overlapping areas of responsibility to the public welfare, as well as uncommon and distinctly separate areas of responsibility to the public welfare.

One of the common and overlapping areas of responsibility is land surveying which may be performed by either a Licensed Land Surveyor or a Registered Civil Engineer.

While the Registered Civil Engineer may practice land surveying under his engineering license, he is primarily interested in land surveying in relation to data accumulation for the feasibility, design and construction of projects, and while the Land Surveyor may practice feasibility, design and construction relative to the subdivision of land, he is primarily interested in the land surveying in connection with boundaries or location of points in relation to such boundaries.

Specifications dealing with projects requiring Land Surveying would be most proper to have provisions specifying that such work be performed by a Licensed Land Surveyor. However, since the law provides that Registered Civil Engineers may also perform Land Surveying, the provisions may specify such work to be performed by either a Licensed Land Surveyor or a Registered Civil Engineer.

Presented to East Bay Chapter of American Institute of Architects by the Interprofessional Relations Committee, CLSA.



I'm the Investigator from the Department of Consumer Affairs.

For land surveyors the magnetic compass is still considered one of the tools of the trade even though nowadays it is used less and less for approximate direction or the retracement of old surveys. What most people think of as a compass really consists of two separate things which have had a different development, namely the compass needle and the compass card.

The compass needle is that part that aligns itself with the earth's magnetic lines of force. Because the lines go generally north-south the needle can be used as an indicator of geodetic north. Of course only where the 0 degree isogonic line is traced on the earth's surface is the approximation close and the compass needle pointing due north.

The recorded history of the use of a compass needle goes back only to 1187 A.D. The legendary mention in 2634 B.C. in China of a south-pointing chariot is now generally discredited as being a magnetic compass and the earliest written Chinese record of a compass is near the end of the 11th century A.D. Alexander Neckham is the Western European writer in 1187 who actually described the use of the mariner's compass in his "Deutensibus." This is earlier than the 1232 A.D. Arabic reference and the 1300 A.D. Scandinavian reference.

The actual compass needle itself has been little changed through the centuries; possibly the first was the use of a piece of lodestone itself floated on a piece of board. The liquid compass has continued to the present day in its usage aboard ship and many of the refinements were made for the British Navy in the 1800's. Better quality steel, pivots and damping devices are now included in both the liquid and dry compasses.

The compass card is actually something separate and is much older than the compass needle. The Latin name is "rosa ventorum" or wind rose and the concept goes back to the Temple of the Winds in Athens. The Latin names of the eight winds in order clockwise from north are tramontana, greco, levanter, sirocco, ostro, africo (or libeccio). ponente and maestro. The old Mediterranean charts show the 8 points marked with those initials. The north point which was marked on some of the oldest wind roses by an arrowhead or spear point as well as T for tramontana gradually developed into a fleur-de-lis about 1492. This became almost universal and it is interesting to note the correspondence and variations of the north point on the maps and charts up to the present day.

H.I.'s & P.I.'s AARLS The West Virginia Surveyor



REPORTER?

Anyone wanting to be a reporter for "The California Surveyor" contact:

Reporter P.O. Box 3707 Hayward, Calid. 94540

COMMENTS AND LETTERS, From In, Out, and Around

A PRIVATE SURVEYOR SPEAKS UP

Walter J. Hanna, Jr.

Our civilization, and this state in particular, is growing complicated at a rate most of us would have considered impossible at the end of Worl War II. Whether you are in public service or in private practice the frustrations created by the increasing complexities of our day to day problems sometimes seem to be more than we can cope with. Every problem that arises seems to create the necessity, in some peoples minds, for another rule, restriction or additional legislation. We no longer seem able to sit down and arrive at a solution where a designated official says "This is a reasonable solution to this problem" and signs his approval. The hordes of "Do Gooders," mis-guided elected officials, etc., on the back of the public servant make it impossible for him to accept this kind of responsibility, as in the past, without fear of his job. He is therefore forced to work within the framework of an increasing multiplicity of red tape, rules, ordinances, legislation and directives in order to survive. I believe it important for the private practitioner to recognize this fact when his frustrations begin to boil over. On the other hand I do believe there is much many officials could do in the way of expediting decisions and accepting the responsibility for them.

With this preamble I would now like to speak to some of the specific points that occur to me in connection with the opportunity for a private surveyor to speak up. At first blush it seems an opportunity to "Give em hell' but this is not the purpose of my being here. Hopefully I would like to have the Public Official have a look from the other side of the counter or from the eyes of the public.

I: MAP CHECKING

- (a) Many offices check survey and parcel maps with help that is not qualified through education and experience to perform this duty. As a consequence the professional is subjected to considerable harrassment and cost from a source that should not exist. Maps are returned requesting repetitive changes that do not add one iota to the quality of the map. Arbitrary rejections and changes are indicated where the checker does not have the background the Surveyor had.
- (b) The basis of bearings is one of my own particular grips. I repeatedly have had maps rejected with the statement "Must have two found monuments" on the line used as the basis of bearings. Now this is the decision of the man with the License who bear the ultimate responsibility for the job. Only he knows why he selected a certain basis of bearings and it does not necessarily depend on two found monuments. It may be a deed reference for a certain line on which no monuments were found but is perfectly logical when the new map is recorded and the map is of record. Regardless, it is not the responsibility of the public official. The law only requires the map to show a basis of bearing.
- (c) The law specifically requires that the monumentation be sufficient to enable the survey to be retraced. I

(Continued on page 10)

KNOW YOUR LOCAL SURVEYOR

Roy Watley, Jr., L.S.

"What kind of work do you engage in?"

"I am a land surveyor."

"What is a land surveyor? Oh, I know, you are the person who looks into a camera and takes a picture of the other person with the stick. Why do you charge so much for putting sticks in the ground? I was of the impression that pine was cheap. Why do surveyors wear such shabby clothes? I never see surveyors on Sesame Street. Why don't they survey streets on television? What did you say a land surveyor does?"

If the above statements sound familiar, you must agree that the image of the land surveyor can stand some improvement. Land surveyors, for too many years, have attempted to "let George do it" and George has not been doing it. The time is now for each land surveyor to do his share to educate the public as to the definition, status, and necessity of land surveyors to the community.

When was the last time you visited your local grammer school, high school, community college, or any community group to speak or relate any information regarding land surveyors or surveying? Imagine the excitment which could be created by the demonstration of an electronic distance measuring device, or a display of some historical equipment.

Try it, you'll like it and they'll like it too!

Editor's Note:

If anyone has information of classes or speeches on surveying given for the purpose of exposing the field of surveying to the public, please contact any member of "The California Surveyor" staff.

PHOTOGRAMMETRY COURSE OFFERED

"Applied Numerical Photogrammetry" will be the subject of an intensive five-day course offered June 18-22, 1973, by the University of California at Berkeley in cooperation with the American Congress on Surveying and Mapping and the American Society of Photogrammetry. Cosponsors for the university are Continuing Education in Engineering and the College of Engineering. The instructors are Francis H. Moffitt and James M. Anderson, of the civil engineering faculty at Berkeley.

The course registration fee is \$300. Further details may be obtained from Continuing Education in Engineering, University of California Extension, Berkeley, CA 94720; phone (415) 642-4151.

DEADLINE DATES FOR THE CALIFORNIA SURVEYOR

Summer Edition May 12, 1973

Fall Edition August 11, 1973

Articles, Reports, Letters, etc., received after the above mentioned date will be placed in the next Edition.

Editor

UTILIZING THE SERVICES OF THE LAND SURVEYOR

Meet the Registered Professional Land Surveyor

The laws of the State of Washington provide that only a duly licensed surveyor may perform surveys for the public. The requirements for licensing are six years of experience under a licensed surveyor, good moral reputation, and successful completion of a two day examination administered by the Board of Registration for Engineers and Land Surveyors.

2. Who employs a Land Surveyor?

a. Private Land Owners

Home owner

Rural land owner

b. The Professional Real Estate Community

Real Estate brokers

Contractors and builders

Mortgage companies

Title companies

Escrow companies

Commercial and Residential developers

Attorneys

Architects

Planners

3. What types of surveys are performed?

- a. Lots: Staking and mapping of both unimproved and improved residential lots for the purpose of anticipated new construction or locating existing improvements.
- b. Lane Development Survey: The survey mapping and planning of a tract of land for roads, lots, recreational areas and commercial sites.
- c. Title Insurance or Mortgage survey: These surveys are usually requested by a lending institution for the purpose of assurance that the improvements which provide the basis for the mortgage are located within the particular tract of land described in the mortgage.
- d. Topographic and Land Management survey: The large scale study of unimproved lands for the purpose of management analysis, planning and agriculture.
- e. Court Exhibit survey: Analysis of various descriptions, monuments and physical features for the purpose of visual factual display for the Courtroom.

4. Why are there conflicting boundaries?

It is generally true that boundary disputes and overlaps are a result of legal descriptions which were originally written and recorded without the benefit of the services of competent land surveyors. It is important to have lines properly surveyed when land is being segregated or divided.

Boundary surveys are based upon recorded documents; however in some instances actual long established occupation on the ground will take precedence over recorded descriptions. In such cases of "adverse possession" the surveyor will usually refer the land owner to his attorney for advice. The solution to this type of problem is in either mutual agreement between adjoiners or in a decision by the courts.

5. What does the surveyor charge?

The surveyor must base the fees for most of his work upon the time required for him and his staff to complete the job. Routine survey work can be estimated as to cost but the client must realize that in many situations the surveyor cannot predict the time that will be required to uncover monuments,

restore lost or obliterated corners, research legal descriptions, conduct field work and complete the mathematical analysis necessary to establish corners and draw a map of the property.

One of the most undertain areas relating to the cost of a survey is recovery of various type of monuments. It is important for land owners, contractors and the general public to be aware that careless treatment and destruction of survey monuments adds greatly to the cost of subsequent survey

Generally the surveyor will discuss his schedule of fees for different types of surveys with his client.

6. The Surveyor's Work

Today's surveyor has access to highly scientific instruments as well as the traditional transit, tape and calculator to take field measurements and compute the boundaries of real property. He takes pride in being able to use the most efficient tools to accomplish the desired results.

Land Surveyors Assoc. of Washington

WHAT'S IN A MEASUREMENT?

CUPIT - First known measurement. About 20 inches, the length of forearm from point of elbow to end of middle finger.

YARD - King Henry I decreed the distance from the point of his nose to the end of his thumb as the lawful yard.

THE FOOT – The Roman foot was two-thirds of the Olympic Cubit or 12.16 inches. It was divided into 12 thumbnail breadths called uncriae by the Romans, and inches by the British.

FATHAM – In Britain, the Anglo-Saxon measure was the fathom, the length across two arms outstretched to equal four cupits or six feet.

THE INCH - Three barleycorns taken from the center of the ear, placed end-to-end equal one inch, decreed by King Edward, II in the year 1324.

ROD - Sixteenth Century. The lawful rod was the length of the left feet of 16 men lined up as they left church on Sunday morning.

The West Virginia Surveyor

THERE'S MORE TO SEE AT



Mission Bay, San Diego

have had several cases where there has been an attempt to force me to set all corners or angle points indicated on the map. This again is the responsibility of the surveyor and I am not advocating inadequate monumentation. There are many factors entering into this question such as topography, economics and future plans for the property which can have a bearing on the adequacy of monumentation.

(d) The Record of Survey Map is now used almost entirely as a record of retracement but can still be used for the Division of Land in some cases. If Assembly Bill 118 is passed into law it will probably be finally excluded from the field of land division. It is strictly a record of what the surveyor did and is placed on record as a public service at the expense of the taxpayer. The law requires a "Reasonable Check" on the part of the County Surveyor. Every effort should be made to expedite the recording of these maps with as little red tape as possible. Remember, the responsibility rests with the Private Surveyor. I have yet to hear of a County Surveyor being held liable because a Survey Map he approved was found to be in error.

II. PARCEL MAPS

(a) Parcel Maps are a different story from Record of Survey Maps as they are for the express purpose of Division of Land and are recognized as "mini-subdivision Map." The comments made above in regards to Record of Survey Maps are still applicable.

In addition I would comment that many Public Officials appear to have missed the legislative intent when the Parcel Map provision was added to the law. I was very active in the production of this legislation and the intent was to keep it simple. Many offices keep the pressure on to require dedications, etc., on the map; refuse to accept "Compiled" maps; there is a very logical case for a compiled map, as outlined in the statute. It be a real money saver for the owner and an actual complete survey would do little, if anything, in the way of protecting the public, which is the Legislative intent. Here again AB 118 may make anything I say on this subject obsolete.

III: MONUMENTS

(a) The preservation and perpetuation of survey monuments is a responsibility of both the public and private surveyor. There is a great improvement in our area in the approach of the County Department of Public Works to this problem. I would like still to see a field surveyor carefully inspect all roads prior to resurfacing or seal coating. Existing flush monuments, spikes, etc., should be referenced and re-set. A can lid of piece of roofing paper glued down over flush monuments in advance of a seal coat will rapidly peel off under traffic use revealing the monument.

The County Surveyor has no authority to set or reestablish lost or obliterated corners and then require a private surveyor to recognize these corners even if his work and judgment indicate an alternate solution. The Record of Survey should indicate the area of the controversy and the statement should be signed by

the County Surveyor. In the final analysis, I don't believe the County Surveyor really wants this responsibility nor am I sure the liability insurance of the County would cover him in case of error, where he has exceeded his authority.

IV: FIELD CHECKS

(a) Field checking of parcel maps is of dubious value and it is controversial as to whether a field check is required by law. Be that as it may, if a field check is to be made, the crew doing the checking should be of exceedingly high standard and should be at least as proficient as the crew being checked. I believe that field checks should be limited to "Spot Checks" and be pointed towards eliminating poor work and bringing those doing shoddy work to task. My recent experience has been 80% of our Maps being field checked were, in fact correct. Recording was delayed, considerable cost was involved in re-checking our work and the taxpayer was paying the bill for checking private work. Something doesn't add up here. We do make mistakes and I am happy to have them brought to our attention. On the other hand, I am sure the taxpayer does not like paying the bill to do police work on private survey work. In the final analysis the man with signature and seal on the map is the only one actually responsible for the work when the chips are down. What is the responsibility of the County Surveyor when work of a poor quality is

(Continued on next page)



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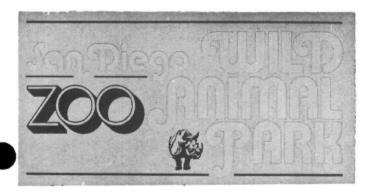
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brought to his attention? My rectnt experience has been that nothing happens when we have found very sad surveying practice on the ground when we have had work to perform in the same area. Monuments not even searched for and whole new land divisions laid out on erroneous work. Two notable cases I have in mind were brought to the attention of the County staff responsible for checking. Not only has nothing been done about correcting the old work but new work has been laid out on the same erroneous boundaries. Should the County Surveyor refer the matter to Board of Registration or should he be a policeman and call the practitioner to terms on a local level? Should the Private Surveyor call situations such as this to the attention of the County Surveyor or the Board of Registration? If the County Surveyors is going to field check then I believe he has some responsibility in this field.

OFFICES PRACTICES:

- (a) Mathematical checking should be performed from an accepted machine computation form furnished by the Surveyors. The taxpayer should not have to support a computer used for checking private work nor should mathematical checking be used as a make-work project to help justify a computer the County may own or have avilable.
- (b) Moonlighting by Public Employees should always be discouraged by whatever means available by responsible public officials. This is a practice that is unfair to the taxpayer, the private practitioner and is very often productive of sub-standard results.

I am sure many of the above subjects have been discussed during this seminar so I have not pursued any particularly subject at length. You are all aware of the increasing availability of new tools at prices even a small office can begin to afford. I would venture to say that even a one man surveying office can afford to be without some kind of electronic distance measuring equipment and some kind of "In House" computer that will at least compute functions and print out a traverse. Our two most recent subdivisions are being finish drafted directly from the computer. We will simply add the certificates, notes, etc. I sincerely believe every piece of equipment we buy is obsolete the next morning but we have no choice. Labor costs force us to take the next step if it will save time and do a better job.



TITLE TIPS

Prepared by the Legal Staff of Title Insurance and Trust Company

> By Paul L. Crudker Associate Counsel

From the use of the word "grant" in any conveyance by which an estate of inheritance or fee simple is passed, Section 1113 of the Civil Code provides that the following covenants and none other, on the part of the grantor and his heirs, are implied, unless restrained by express terms in the conveyance:

"1. That previous to the time of the execution of such conveyance, the grantor has not conveyed the same estate, or any right, title or interest therein, to any person other than the grantee; 2. That such estate is at the time of the execution of such conveyance from from encumbrances done, made, or suffered by the grantor, or any person claiming under him.'

The above simply means that the grantor has not previously conveyed or encumbered, or suffered to be encumbered, the property. It is not a warranty that the grantor is the owner of the property or that it is not encumbered. For example, suppose the grantor received his title by a forged deed and they conveyed it to the grantee. In such a case, the grantor would not be liable to the grantee for a breach of the implied covenants, even though the grantor had no title, because the grantor had not previously made any conveyance. In other words, there is no implied covenant that the grantor has any title, only that the grantor has not previously conveyed his title to another. The implied covenant is only breached if the grantor has previously conveyed it to another. Gaffey v. Weik, 54 C. A. 385.

Encumbrances are divisible into two general categories: 1) encumbrances that affect title to the lands, such as a deed of trust or a lease, and, 2) Encumbrances that affect the physical condition of the land, such as a public road or other servitude. When an encumbrance of the first category exists, the grantee is entitled to rely on the implied covenant contained in his deed even if he had actual knowledge of the encumbrance before he received the deed. Evans v. Faught, 231 C.A. 2d 698. When an encumbrance of the second category exists, a different rule prevails. If the burden is visible, the grantee cannot rely on the implied covenant and takes his title subject to any interests disclosed by the physical condition of the

Although these covenants are implied in every grant deed, they are only implied when the grant deed conveys an estate of inheritance or fee simple. They do not apply to a lease of the property or to any other lesser estate or interest in the property.

COVENANT OF SEISIN

By William F. Hunter Senior Associate Counsel

One of the differences between a Quitclaim Deed and a Grant Deed in California is that the latter includes a statutory implied covenant of seisin that, "previous to the time of the execution of such conveyance, the grantor has not conveyed

(Continued on page 12)

the same estate, or any right, title, or interest therein, to any person other than the grantee." (C.C. 1113 (1)) Note that this is not a general covenant of seisin that the grantor is the owner of the property. The grantor covenants only that he himself has not previously conveyed the estate, and does not covenant that he owns the property or ever did own it.

In California if the buyer wishes a general covenant of seisin that the grantor is the owner of the property described, he must be sure that it is specifically inserted in the deed.

The statutory covenant refers only to prior transfers of estates in the land. For example, a previously issued license does not breach the covenant because it is not an estate in land. Shaw v. Caldwell (1911) 16 C. A. 1

The courts have held however, that a water right is an interest in land and a previously executed deed to water rights would violate the statutory covenant. Lyles v. Perrin (1901) 134 C. 417.

Only the covenantee may enforce a breach of the covenant as it does not run with the land. Lawrence v. Montgomery (1869) 37 C. 183.

Further, if a title defect is caused by a party other than the grantor, the statutory covenant is not breached. Gaffey v. Welk (1920) 46 C. A. 385.

The statute of limitations on a covenant of seisin begins to run on the date the instrument is executed. Hotaling v. Hotaling (1924) 193 C. 368.

The covenant of seisin, whether statutory or general, is not usually relied on in California. The wide use of title insurance provides broader coverage, a better indication of the status of title and in most instances sounder financial protection than does recourse to the grantor under the covenant.

Nonetheless, the purchase of title insurance does not limit the covenant of seisin which may provide additional protection in the event it is breached. (See generally California Real Estate Sales Transactions, Chap. 16, C.E.B. 1967)



DEED OF TRUST RECORDED PRIOR TO DEED

By William F. Hunter Senior Associate Counsel

Occasionally in his haste and eagerness to begin construction on a parcel of property that a purchaser is acquiring, he may inadvertently record the deed of trust securing his construction or purchase money loan prior to the time he records the deed to his newly acquired property. If such is the case the deed of trust is not in the chain of title, and would not impart constructive notice of its existence to subsequent purchasers or encumbrancers. Ludy v. Zumwalt, (1927) 85 Cal. App. 119; 16 Cal. L. Rev. 341

The reason that there is no constructive notice is that it has been considered an unnecessary burden under the recording system to compel a possible purchaser or encumbrancer to search the grantor index for instruments executed and recorded by his grantor prior to the time said grantor acquired title. If such a search for prior recorded documents were required, the intending purchaser would have to search the grantor index from the very beginning of the system. OGDEN, California Real Property Law, Section 6.10.

To correct this situation it would be necessary for the deed of trust to be re-recorded after the acquisition of title. Constructive notice of the deed of trust would then be imparted from the time of re-recordation. However, should the new owner have dealt with or encumbered the property between the time his deed was recorded and the re-recordation of the deed of trust, a new problem would arise as to the priority of the deed of trust. The determination of priority would depend, at least in part, on whether or not the subsequent encumbrancer or purchaser had actual notice of the earlier deed of trust.

Before the deed of trust may be offered for re-recordation, it is necessary that it be re-executed and reacknowledged. The recorder will usually request that a notation be placed on the document to the effect that the instrument is being recorded to place it in the chain of title.



NEW YORK SUPREME COURT DEFINES LAND SURVEYOR

Minnesota Land Surveyors Nov. '71 DIS-CLOSURES

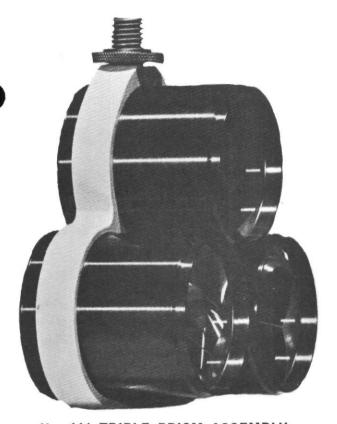
A succinct and precise opinion in a decision of the Supreme Court of the State of New York in a case involving the enforcement of the State's registration law for engineers and land surveyors is worthy of dissemination to members of MSPE, in the opinion of William S. Kelley, Jr., vice-chairman of the Minnesota Board of Registration for Architects, Engineers and Land Surveyors, who suggested that excerpts be published in "Engineering Contracts, MSPE."

New York Supreme Court Justice Arthur M. Cromarty noted that the county clerk had accepted maps certified by licensed professional engineers, as well as maps certified by licensed land surveyors.

The litigation developed from a proceeding to prohibit the Suffolk County (N.Y.) clerk from accepting subdivision maps which were not signed, sealed, and certified by a licensed land surveyor.

Justice Cromarty wrote that "the public interest demands that subdivisions of land be accomplished with the greatest possible standards of accuracy. Failure to achieve that aim can only result in the overlapping of maps, breaks in the continuity of adjoining subdivisions and misalignment of streets, to name a few of the potential land problems that inaccuracies can create. These defects necessarily lead to confusion in titles, real property, assessment uncertainties, road maintenance difficulties and disorderly land development.

"In his brief, respondent (clerk of Suffolk Co.) with commendable candor, acknowledges that the 'surveyor' referred to in Real Property Law 335 does not mean 'anyone with a tape and transit.' He does say that it 'means, without a doubt, someone duly licensed to act as a land surveyor.' An engineer is not, simply because he is an engineer, eligible to take the test for a land surveyor's license. His educational and experience backgrounds do not meet the standards for admission to the surveyor's examinations. No one may practice land surveying without a license; that prohibition includes engineers who are not licensed surveyors."



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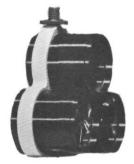
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- (d) Fees required under provisions of this rule transmitted through the United States mail shall be deemed filed on the date shown by the post office cancellation mark stamped on the envelope containing it, or on the date mailed if satisfactory proof is made that mailing occurred on an earlier date.
- (e) Renewal applications filed with the Sacramento office more than thirty (30) days after 12 p.m., June 30 of each even numbered year, not accompanied by the prescribed delinquent penalty fee, shall be returned by the executive secretary with a statement of the reason therefor.
- (f) Refund of fees submitted to the board shall be made only as follows:
 - Any application fees, renewal fees or penalties imposed and collected illegally, by mistake, inadvertence or error shall be refunded in full.
 - (2) An applicant for registration as a professional engineer, for license as a land surveyor or for permission to use the title "structural engineer" found not eligible for admission to the examination requested shall have one-half of his application fee refunded.

Except as provided in (f) (1) above, no portion of any application fee for certification as an engineer-in-training or land surveyor-in-training, or for granting of any title or authority without examination may be refunded.



PROFESSIONAL CODE

It shall be considered professional and consistent with honorable and dignified professional conduct for any member of the California Land Surveyors Association:

To devote effort and support programs to raise the professional, ethical and social status of Land Surveying.

To maintain a campaign for public recognition of professional contribution to the ethical, economical and social well-being

of citizens of California and of the United States.

To accept and maintain standards of professional conduct of the highest order to win the respect and admiration of all citizens.

 To protect the profession of Land Surveying and the public against the unqualified.

5. To promote an effective program of exchange, communication and cooperation amongst its professional

 To maintain a constant effort of understanding between professionals in government service and private consulting, recognizing the common aims and philosophies and mutual respect of the professional society.

To promote and stimulate leadership in public service on a community, state and national level.

 To promote and maintain an effective and continuous program of expanding our knowledge of social and technical advances.

To protect the professional reputation, prospects and practice
of another professional with the same vigor and determination
as he would his own.

10. To manage his professional ethics with the courage to uphold his integrity over all other considerations.

11. To publish thoughtful and subdued public announcements free from ostentatious complimentary or laudatory implications. Professional cards, brochures, posted projects, press releases of worthy news items and project participation notices are acceptable forms of public announcements. Our universities rose to the occasion and assumed the responsibility for the latter. As the field expanded so did the curriculum, reaching a point at which new material was adde and other required subjects had to be dropped. As of now, the virtual complete elimination of surveying and its concommitant study of land law has been achieved in most of our State's major universities. The academic community no longer recognizes these disciplines as essential to the service to be provided by its civil engineering graduates.

At the State level, a scrutiny of the licensing examinations given over the past ten years indicates a similar attitude. The State has faced a harsh dilema. It has seemed to have recognized either the lack of need by the civil engineer for expertise in surveying or the injustice of testing an applicant on a subject which our principal universities have denied him the opportunity to study.

The obverse side of the coin is viewed by the university. If surveying is not a requisite, demanded by the State, for the practice of civil engineering, then it can be displaced to make room for other subjects. Asking whose decision came first, as with the 'chicken or the egg' question, the answer solves nothing. It is the mores of our time which has changed 'Civil Engineer' from a synonym for 'Surveyor' to the name of a classification in which but one in fifty subsists by surveying practice.

We see an analogy with the horseless carriage situation at the turn of the century. It was the improvement of the automobile that negated the law. The man on foot with his bell quietly passed from the scene, not from his ineptitude but from the increased potential of the vehicle behind him.

The changes evolving today offer the surveyor tremendous opportunity to perform a better service to the public. He has the room to expand his training in related surveying subjects; the civil engineer has already topped out. When the preparation of a surveyor changes from apprenticeship training to a baccalaureate degree, he will no longer be regarded as a 'country cousin' in the professional family. When this time comes the 'exemption' problem will resolve itself.

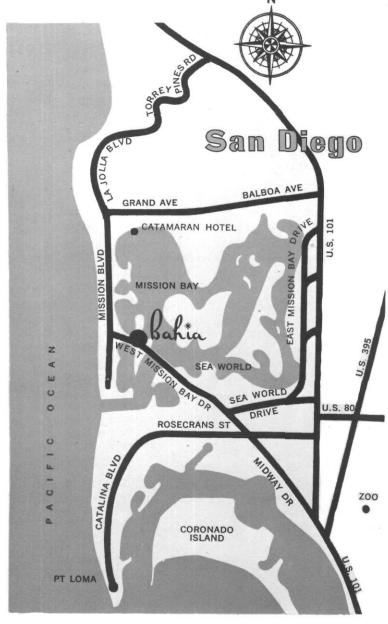
SHAKESPEARE COMMENTS ON THE SURVEYOR

William Shakespeare, Stratford-on-Avon, 1598 (From Henry IV, Part Two, Act One, Scene Three)

When we mean to build
We first survey the plot, then drawer the model;
And when we see the figure of the house,
Then we must rate the cost of the erection;
Which, if we find outweighs ability,
What do we do then but drawer anew the model
In fewer offices, or at least desist
To build at all. Much more then in this great work,
Which is almost to pluck a kingdom down
And set another up, must we survey
The plot of situation in the model,
Consent upon a sure foundation,
Question surveyors, know our true estate,
How able such a work to undergo.



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