

# A Land Surveyor's Manual

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About a year ago the president of the Indiana Society of Professional Land Surveyors, C. B. Wood, asked me, as chairman of the publications committee of the society, to consider the task of preparing an Indiana surveyor's manual. The members of the publications committee were contacted and asked to report their opinions concerning such an assignment. One member of the committee was kind enough to reply, but, since there was no interest shown, the subject was promptly dropped and nothing has been done to date toward the preparation of a manual for Indiana land surveyors.

There have been efforts made in several states to prepare and publish manuals of practice for land surveying, namely, Missouri, Virginia, and North Carolina, and there may be others which are not known to me at this time.

The Missouri Association of Registered Land Surveyors has taken the initiative in preparing a surveyor's handbook which was released in February 1960. The information I have is that copies may be obtained from the Missouri Association of Registered Land Surveyors, P.O. Box 355, Jefferson City, Mo. The Virginia Association of Surveyors jointly with the Virginia Board of Registration is attempting to compile a manual of practices for land surveying.

The Property Survey Division of the American Congress on Surveying and Mapping felt that a means of coordinating the efforts of the various states might well be in order. The chairman of the Property Survey Division appointed a Committee on Land Surveyors State Manual with W. Thompson Cox, P.E. as chairman. The purpose of the committee was to obtain information as to the interest and activities in the various states and territories concerning this matter. A report consolidating the information obtained in response to a questionnaire submitted to members will be made at the 1961 annual meeting of the American Congress on Surveying and Mapping.

In North Carolina, Senate Bill Number 64, enacted into law by the General Assembly during the 1959 legislature directs that the North

Carolina State Board of Registration for Engineers and Land Surveyors shall publish a "manual of practice for land surveying." This manual is a set of rules and regulations which establishes definitions, standards, and procedures governing the practice of land surveying in North Carolina. The law further stipulates that "the Board shall review the manual annually and shall revise same if revisions are deemed advisable or necessary."

From the North Carolina Land Surveying Manual, July 1, 1960, introductory remarks are as follows: . . . "In compliance with the Statute this Board does hereby respectfully submit to the General Assembly of North Carolina, to the property owners in North Carolina, and to the Engineers and Land Surveyors who are engaged in the practice of surveying land boundaries and preparing maps and descriptions, the following rules and regulations which are compiled and adopted by the Board and which establish hereby minimum standards to be rigidly observed by those engaged in the practice of Land Surveying in this State.

"In preparing this manual it is anticipated that it will be of considerable value to property owners in North Carolina in engaging the services of qualified personnel to establish corners and boundaries to their respective properties with a degree of accuracy which will stand the test of time. It is further anticipated that this manual will assist the Clerks of Court, and Registers of Deeds in the several counties of North Carolina in receiving and accepting maps for recordation, which maps, in complying with the rules of this manual will be accurate and complete in detail.

"It is further anticipated that this manual, in establishing and printing standards which are generally accepted by the professions, will be of assistance to the Engineers and Land Surveyors in North Carolina insofar as meeting the needs of their clients or satisfying the requirements of the Mapping Law, and that property surveyed henceforth can be readily located, be described in a manner such that, if a corner or marker is destroyed, it can be readily replaced and mapped in such a manner that it can be readily read and understood.

It is lastly anticipated that this manual will be of considerable interest and value to other professions, most notably the Legal and Real Estate professions." . . .

The table of contents of the manual is as follows:

Introductory

I, General; II, Nomenclature; III, Definitions; IV, Requirements for Registration; V, Classification of Surveys; VI, Maps and Mapping;

VII, Land Descriptions; VIII, Monuments and Markers; IX, Classification of Leveling Surveys; X, Engineering Surveys; XI, Magnetic Declination; XII, Instruments and Apparatus; XIII, Reference Books; XIV, Appendix.

The appendix contains the following topics:

- A. Typical Surveying Agreement
- B. Typical Monuments and Markers
- C. Typical Tabulation and Calculation for Error of Closure
- D. Typical Boundary Survey Map
- F. Typical Subdivision Survey Map

Curtis M. Brown of Daniels, Brown & Hall, Civil Engineering and Land Surveys, San Diego, California has recommended to the Land Surveyors State Manual Committee, Property Survey Division of the American Congress on Surveying and Mapping, the following recommendations for a manual of practice for land surveying:

- (1) Loose leaf—articles must be added as the need arises.
- (2) Contents:
  - (a) Organization's constitution, by-laws, and like information.
  - (b) Code of ethics.
  - (c) Standards of practice.
  - (d) State laws, statute and common.
    - 1. Registration and direct laws.
    - 2. Statutes affecting land boundary location.
    - 3. Court cases of importance.
  - (e) Methods of charging fees (not necessarily a minimum schedule).
  - (f) Business forms.

Brown further states that "the manual should not be a textbook explaining how to survey, how to do office work, or how to do field work. Books already adequately cover these subjects. . . . A manual is not a textbook—it is an accumulation of *bare facts*. . . . Items peculiar to a state, not covered by general texts, belong in a state manual."

I heartily agree with these statements. A textbook is for student use, and this term includes everyone who is learning how to become proficient as a surveyor, while a manual is for educated professional land surveyors, and is not for the purpose of educating them. The concept of the purpose of a land surveyor's manual should be a uniformity of understanding or uniformity of what is acceptable and what is not.

The Iowa Engineering Society in 1943 published a book entitled, *Original Instructions Governing Public Land Surveys of Iowa*—(a guide to their use in resurveys of public lands). In the introduction to chapter one of this book we find the following statement, “When *Public Land Surveys—History, Instruction, Methods* by L. O. Stewart (former professor and head of Civil Engineering, Iowa State College), was published (1935, Collegiate Press, Inc., Ames, Iowa) it was hoped that someone in each of the public land surveys states might become interested in the project of compiling the original instructions for his state. This book on the Iowa surveys is the first of that sort.”

In the *Quarterly Journal of the Surveying and Mapping Division of the American Congress on Surveying and Mapping*, 1949, Vol. IX, No. 1 is a paper by John P. Goggin, professional engineer and land surveyor, entitled, “Surveyors Need Special Handbook,” in which he states, “The need for a single book, written solely for the property surveyor and dealing exclusively with his problems, has been felt among competent surveyors for some time, and the Property Surveys Division of the American Congress on Surveying and Mapping has taken upon itself the program of compiling a table of contents for this unique volume.”

Goggin was appointed chairman of the committee responsible for this project. His above mentioned paper contains subject matter to be included in such a book and should be an excellent guide for any group taking upon themselves the task of compiling a manual for land surveyors. The need for a manual for land surveyors for Indiana must be determined by the state association. This report summarizes what has been done by several organizations in other states and should be of benefit if the preparation of a manual for Indiana is undertaken.