

ARKANSAS REGISTER

Proposed Rule Cover Sheet



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Name of Department _____

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Newspaper Name _____

Date of Publishing _____

Final Date for Public Comment _____

Location and Time of Public Meeting _____

DRAFT 09-03-2019 by DLS

MARK-UP

Department of Transformation and Shared Services

Arkansas Geographic Information System Office

Division of Land Surveys

Commented [Ivan1]: Add agency information.

~~STANDARDS OF PRACTICE NO. 1~~

~~August 18, 1982~~

~~Revised May 8, 1992~~

~~Revised March 14, 1996~~

~~Revised (May 21, 2009)~~

~~Updated 1-24-08~~

~~Updated 8-25-08~~

Updated Effective 7-29-19 (to be determined)

Commented [Ivan2]: Put at bottom of cover sheet



~~STANDARDS OF PRACTICE NO. 1~~

Commented [Ivan3]: Licensure Board has updated their rules to include this title.

~~ARKANSAS~~

Arkansas Standards of Practice For Property Boundary Surveys and Plats

~~Butch Calhoun, Secretary~~

~~Arkansas Agriculture Department~~

~~Everett Rowland~~

~~State Surveyor~~

~~Land Survey Division~~

Effective (to be determined)

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General Comments

1. Remove all unnecessary underlines
2. Correct bullet formatting/indent
3. Correct Line Spacing
4. Correct unnecessary capitalization
5. Make font styles uniform

PREFACE

A legal notice to inform the public of the State Surveyor's proposed revisions to the Arkansas Minimum Standards for Property Boundary Surveys and Plats (Standards of Practice No. 1) for the general practice of land surveying in the State of Arkansas, Pursuant to the Administrative Procedure Act and Act 583 of 1973 as amended review of Arkansas Code Volume, 7, 10-03-309 of 1987 and that a public hearing would be held December 4, 1991, was published in the Arkansas Democrat once a week for five weeks beginning October 17, 1991 and ending on November 14, 1991. Latest revision (May 21, 2009) were published in the Arkansas Democrat Gazette once a week for five weeks beginning October 31, 2008 and ending November 30, 2008.

A public hearing was held December 4, 1991, at 9:30a.m. In the conference room of the State Surveyor's office. The revised standards were filed for record in the office of the Secretary of State on March 31, 1992.

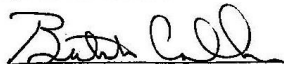
These revised standards were reviewed and approved by the Administrative Rules and Regulations Committee of the Arkansas Legislative Council, on May 8, 1992 and May 21, 2009.

The Land Survey Division of the Arkansas Department of Agriculture office and the State Surveyor office that these revised standards of practice for all property's boundary surveys and plats are now in effect.

These Standards will be used as a guideline by the Arkansas State Board of Registration for Professional Engineers and Land Surveyors in determining the professionalism of land surveyors performing surveys in the State of Arkansas.

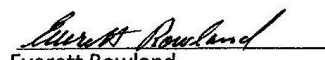
Standards of Practice Committee

Robert C. Wynn, PS #1033
Donald W. Brooks, PS #0005
Clovis W. Satterfield, PS #0147
Troy L. Sheets, PS #0596
Phillip Sloan, PS #0947
Tim P. Tyler, PS #1243



Butch Calhoun

Secretary of the Arkansas
Agriculture Department



Everett Rowland
Arkansas State Surveyor

Commented [Ivan5]: Need to ask the Advisory Board AG attorney if this is required or something similar.

~~STANDARDS OF PRACTICE FOR ARKANSAS BOUNDARY SURVEYS AND PLATS~~

Commented [DP6]: Remove title

INTRODUCTION

The purpose of these standards is to set minimum accuracies for land boundary surveys and minimum requirements for research, investigation, monumentation, and plat preparation, and the subsequent recording and distribution of the plat upon completion of a survey.

A.C.A. § 17-48-103 states ~~that the purpose of the registration of professional surveyors is to~~ “in order to safeguard the life, health, or property of the public, ~~the~~ the practice of land surveying in this state ~~was thereby~~ is declared to be subject to regulation in the public interest”. These standards will promote the public interest.

Commented [Ivan7]: ILH Changed to match language in statute

These standards are binding upon any ~~professional surveyor~~ person duly ~~registered~~ licensed to practice within the State of Arkansas performing surveying services as defined herein. It is not the intent of these standards to limit the application of more stringent standards required by code, ordinance, or contractual specification. It is the responsibility of professional surveyors to stay informed on current rules and regulations pertaining to the practice of land surveying. When professional judgment necessitates deviation from these standards, the deviation shall be noted and explained by the surveyor on the plat.

Commented [AW8]: ASPS would like to see “professional surveyor” remain.

Commented [DP9R8]: LSAB agreed that “person” should be left in place as professional surveyor is assumed by the description in this sentence.

Commented [Ivan10]: ILH Changed to match language used in the licensure board rules. Registered has been removed from the board rules.

SECTION 1

DEFINITIONS

1.1 Survey

A. “Land Surveying” means any service comprising the determination of the location of land boundaries and land boundary corners; the preparation of plats showing the shape and areas of tracts of land and their subdivision into smaller tracts; the preparation of plats showing the location of streets, roads, and rights-of-way of tracts to give access to smaller tracts; and, the preparation of official plats or maps of land thereof in this state (A.C.A. § 17-48-101 ~~et. seq. (2) (A))~~;

Commented [DP11]: Refer to statute section only

1. In these standards, land surveying is also defined to mean the setting or resetting of monuments that mark or reference the position of said corners and boundaries.

2. ~~Subdivision plats are boundary surveys creating parcels, and are required to be filed for record.~~

Commented [Ivan12]: I believe this for municipal subdivisions and rural subdivision, Any parcel of land divided into smaller parcel. Also included in Section 4.

~~B. C. A survey shall be deemed to be complete when the survey plat has been dated, sealed, signed, and the surveyor has been paid.~~

Commented [Ivan13]: ILH Moved to Section 4. This has to do with plat filing

~~C. D. Revised Plat or Re plat. A plat that corrects or changes information shown on a previously recorded survey or subdivision plat and is required to be filed for record. The revised plat shall clearly indicate the portions revised and the document reference for the original plat.~~

Commented [Ivan14]: ILH Moved to Section 4. This has to do with plat filing

1.2 Area Designations

A. Urban Area (Class A Property) - any municipality within the state having a population of 500 or more. Class A property shall also include the surveys of commercial and industrial properties, condominiums, townhouses, residential subdivisions, apartments and other multiunit residential lot developments.

B. Suburban Area (Class B Property) - all that area within three miles of a city having a population of 2000 or more, or within one mile of a city having a population between 500 and 2000, or any area which, because of its location or natural resources, may become a developed area.

C. Rural Area (Class C Property) - any area where land is used predominantly for agricultural purposes and which shows no signs of becoming a developed area.

D. Mountain or Marsh Area (Class D Property) - surveys of lands, which normally lie in remote areas with difficult terrain and usually have limited potential for development.

Commented [Ivan15]: In the future the Property class and definitions need to review to see if they comply with standard municipal and county planning definitions

1.3 Relative Positional Accuracy or Positional Tolerance. The linear horizontal distance without regard to direction by which a measured position of a monumented survey marker differs from its computed location.

Commented [Ivan16]: Added a Section Number and need to Remove underline

SECTION 2

MINIMUM RELATIVE POSITIONAL ACCURACY STANDARDS

- 2.1 **Determination of Area and Property Type.** The area designation and property type for the land being surveyed shall be determined, using the definitions given in Section 1, paragraphs 1.2 and 1.3. The maximum allowable Positional Tolerance of property corners with respect to each other within a given Survey is listed in Table 1 below.

Table 1
DETERMINATION OF RELATIVE POSITIONAL ACCURACY BY AREA DESIGNATION

<u>Area Designation</u>	<u>Property Class</u>	<u>Relative Positional Accuracy (+/-feet)</u>
<u>Urban</u>	<u>A</u>	<u>±(0.25)</u>
<u>Suburban</u>	<u>B</u>	<u>±(0.50)</u>
<u>Rural</u>	<u>C</u>	<u>±(0.75)</u>
<u>Mountain or Marsh</u>	<u>D</u>	<u>±(1.50)</u>

SECTION 3

GENERAL PROCEDURES

3.1 Research, Investigation, and Procedure. Prior to a boundary survey, the surveyor shall obtain information from the following, as applicable: field notes and plats of the original government survey and subsequent surveys, deeds, maps, county and state records. ~~The~~ surveyor shall analyze the information obtained to determine, to the best of his or her ability, the boundaries that were requested to be located.

Commented [DP17]: Gender neutral

A. Surveys based on the U.S. Public Land Survey System shall be tied to the section and/or quarter section corners, which control position in accordance with the current BUREAU OF LAND MANAGEMENT (BLM) MANUAL OF SURVEYING INSTRUCTIONS. ~~Except that~~ However, if a survey is to be performed within a section previously subdivided the surveyor may tie to and rely on any well-defined corners found therein. This exception in no manner relieves the surveyor from any liability resulting from his or her reliance on said corners in the performance of the survey.

Commented [AW18]: This is a dependent clause making the sentence incomplete. It needs to tie to the previous sentence or be reworded. 'Surveys shall be tied to the section, except when...'

Commented [DP19]: Discussed in LSAB meeting and added in response to ASPS comment regarding grammar

Commented [DP20]: Gender Neutral

B. The current BUREAU OF LAND MANAGEMENT (BLM) MANUAL OF SURVEYING INSTRUCTIONS shall be used as the guide for the restoration of lost or obliterated corners and subdivision of sections.

C. Lot and Block subdivision surveys shall conform to the minimum accuracy standards as set forth in Section 2, and to local subdivision ordinances (standards and regulations) provided the accuracy does not exceed Section 2. Lot surveys and plats within such subdivisions shall be tied to sufficient monumentation within the subdivision required to verify the correctness of the survey.

Commented [DP21]: Comment from Ivan "Added, if local standards exceed Section 2 you cannot conform to Section 2 the way this is written."

3.2 Field Work

A. Execution. The surveyor shall, under ~~his~~ his or her ~~personal~~ direction, locate and make measurements to all available monuments appropriate or necessary for the location of boundaries and corners, and coordinate the results of this field research and investigation.

Commented [DP22]: Change to gender neutral

Commented [Ivan23]: Personal implies the surveyor is onsite. Removing does not change the requirement.

B. Measurement Techniques. Survey measurement techniques shall be designed to eliminate mistakes and minimize or compensate for instrumental, environmental, and operator error. All measurements shall be made to a precision compatible with the size and geometric shape of the parcel, and shall be consistent with the accuracy required for the class of property being surveyed.

C. Monumentation. The surveyor shall cause monuments marking the corners of a parcel to be set as follows:

1. Location. The surveyor shall locate or confirm the prior location of permanent monuments at each boundary corner of the lot, parcel, tract or line being surveyed. When the placement of a required monument at its proper location is impractical, an offset monument may be set. The location of said offset monument shall be clearly shown on the plat, dimensioned, and incorporated into the surveyed land boundary description. The correctness or incorrectness of previously placed (existing) monuments shall be confirmed by the surveyor, and they shall be shown and referenced on the plat.
2. Type of Monument. The surveyor shall select a type of monument that provides a reasonable degree of permanency consistent with the physical features of the terrain and the intended use of the monument. The following guidelines shall be followed as closely as is practically possible.
 - a. All the monuments shall be clearly marked with ~~registration license~~ number of the surveyor setting or responsible for setting the monument.
 - b. Iron pipe shall be one-half inch (1/2") in (inside diameter) diameter or larger and steel rods (e.g. rebar) shall be at least one-half inch (1/2") in diameter. The minimum length for monuments shall be 18 inches where applicable.
 - c. Any monument set to mark the location of, a quarter-corner, or a section corner shall be marked with the precise corner position, the proper identification of the corner in accordance with the current BLM manual, and the year of monumentation. Letters and numerals on survey monument caps shall be neatly stamped with 1/8" or 3/16" steel dies and oriented to read from the south.
3. Monument Accessories. For any monument found or set marking the location of a quarter (1/4) corner, or a section corner, as well as any other corner for which the surveyor desires accessory evidence, shall be referenced by at least two (preferably four) permanent or semi-permanent ~~witness reference~~ objects (sound trees, when available). Horizontal measurements shall be made from the monumented corner position to the center of the base of reference trees at ground level, and to a readily identifiable point or mark on any other ~~witness reference~~ objects. On steep sites where a horizontal distance cannot be easily obtained, slope distance may be used and noted with the accessory information. It is encouraged, but not required, to include quarter (1/4) corner and section corner geographic coordinates to the thousandth of a second or Arkansas State Plane coordinates to the hundredth of a foot with an accuracy meeting or exceeding accuracies given in Section 2, with coordinate system fully described.

Commented [DP24]: Added in response to complaints regarding lack of offset monument information on some plats

Commented [Ivan25]: By practice all monuments set are not being marked with the surveyors license number which is mandated by the word "SHALL". Railroad Spikes, Cotton Picker Spindles, Bridge Spikes, etc. are being set, typically in the asphalt surface of county roads, No way to provide Licensee number that I am aware of. If these type monuments are set for a boundary corners perhaps surveyors should always set a reference monument at the road row or at a distance that will provide a reasonable degree of permanency. However brass cap or aluminum cap monuments could be set which increases field time and expense. Also chisel marks are being placed on concrete surfaces. With power tools we have today you could drill a hole and set a P.K. Nail with washer and PD number.. Needs discussion. My preference is Magnetic P.K. nails with an aluminum washer with PS number which I typically do. However, Magnetic P.K. nails are being set with no license number. I find them all the time with no license number.

Commented [Ivan26]: ILH Changed to match language used in the licensure board rules. Registered has been removed from the board rules.

Commented [DP27]: Updated

Commented [DP28]: Updated

Commented [DP29]: Per LSAB meeting

4. Existing monuments verified or relied on for survey control, which are not considered permanent (such as a loose mound of stones) should be replaced or supplemented using monumentation standards in Section 3.2-C-2. Large permanent monuments, such as stone or concrete monuments, should have the precise corner position marked by a chiseled "X" or cross.

SECTION 4

PLATS

4.1 Publication of Results. A plat showing the results of each survey shall be prepared and distributed as follows:

A. Preparation of Plats. A scale drawing of the property with the following information shall be part of every plat:

1. Boundaries with distances (horizontal ground) and directions (bearing or azimuths). When circular curves are platted the following four (4) curve elements shall be shown: radius, arc length, chord bearing, and chord distance.
2. Ties to corners, monuments, corner accessories, and other relevant reference witness information, which control the location of a boundary or corner, the surveyor's basis for acceptance thereof, and the originating source of any monument or accessory.
3. Record title lines including record deed distance and direction calls and/or document (book and page) references.
4. Reasonably observed encroachments and possession lines.
5. Type and dimension description of monuments found and monuments set during the course of the survey. Pertinent inscriptions should also be included.
6. Point of Commencement (if separate from the Point of Beginning) and Point of Beginning for metes and bounds surveys.
7. Client's name.
8. Business address of surveyor.
9. North arrow with basis of direction. ~~A statement shall be made to explain how direction was obtained, and should include document (book and page) references if based on deed or survey record bearings. When the basis of direction is derived from the Arkansas Coordinate System 1983 (geodetic or grid system), the convergence angle and, if the distances on the plat have been converted to ground, the Combination Adjustment Factor shall be shown with a notation specifying the location where the calculations were made.~~

Commented [DP30]: According to Ivan, surveyors are using grid distances and calculating acre/square feet based on grid. Acreage is to be calculated on ground distances. I spoke to Dr. Elgin and he also strongly agrees it should be horizontal ground distance

Commented [DP31]: Updated

Commented [DP32]: Added per LSAB meeting

Commented [Ivan33]: Need add as normally there is a POC.

a. The directional reference system and methods used shall be clearly described on the plat.

i. Include document (book and page or other instrument number) references if based on a deed or survey plat record bearing or azimuth and shall specify which boundary line depicts the basis for direction.

ii. When the basis of direction is derived from the Arkansas Coordinate System identify as geodetic or grid. The year of the system adjustment shall be shown with a notation specifying the geographic location (Arkansas State Plane coordinates to the nearest ten feet or latitude and longitude to the tenth of a second) to where the calculation was made.

Commented [Ivan34]: The original text was a run on sentences and changed as follows..

Commented [Ivan35]: Need to identify which boundary line was used as the originating bearing line.

Commented [Ivan36]: I believe it is important to add info about the ASPCS as the majority of plats are based on this on grid or true based on a GPS observation.. There are other direction methods such as magnetic, solar, Polaris, and assumed but are not used enough to spell out and are covered under 9.a.

10. Bar scale.

11. Legend. A legend may not be required when all symbols, lines, and other graphics are described individually.

12. ~~Tract~~ Surveyed Land Boundary Description.

Commented [Ivan37]: Added

13. Surveyor's seal with dated signature and the Certificate of Authorization seal when required (A.C.A. § 17-48-207 et. seq.). Any additional sheets shall include required seal(s) with dated signature.

Commented [Ivan38]: Added as surveyors are not adding their plats.

Commented [Ivan39]: Required by licensure board

Commented [DP40]: Added

14. Date of survey.

15. A.C.A. § 17-48-107 et. seq. requires every survey of a parcel of real property made after March 30, 1981, shall include a statement of the number of acres or parts of acres included in the parcel surveyed. If the parcel surveyed includes lands situated in more than one quarter-quarter, the approximate number of acres of the parcel lying in each quarter-quarter shall be shown separately.

Commented [DP41]: Added per LSAB meeting of 9-3-19.

Commented [AW42]: Reword... 'the act requires every survey to include' or 'the act states that every survey shall include'.

Commented [DP43R42]: Discussed in the LSAB meeting, decided to leave as is because this is a quote from the statute

16. The appropriate index code from the State Surveyor's current "Survey Plat Coding Instructions" shall be placed on each plat. The plat code shall be legible, located in the lower right portion of the plat, placed horizontally, and include the client name.

Commented [DP44]: Added per LSAB meeting to improve State Surveyor's Office filing efficiency.

B. Distribution of ~~All~~ Plats.

Commented [Ivan45]: Remove underline. I changed up this section

1. Survey shall be deemed to be complete when the survey plat has been dated, sealed, signed, and the surveyor has been paid.

Commented [DP46]: Unnecessary word

2. Revised Plat or Re-plat. A plat that corrects or changes information shown on a previously recorded survey or subdivision plat and is required to be filed for

Commented [Ivan47]: Moved for Section 1.

- record at the State Surveyor's office. The revised plat shall clearly indicate the portions revised and the document reference for the original plat.
3. Subdivision plats are boundary surveys creating parcels (e.g. lots, lots and block, tracts, easements, right of ways, etc.) and are to be filed with the State Surveyor's office after any recording requirements with City and/or County government.
 - a. Filing is not required, but may be submitted, for survey plats made of subdivided property located in a municipality where property has previously been surveyed and a plat filed (A.C.A. § 17-48-106 et. seq. ~~(c)~~)
 4. Copies of the plat shall be distributed within 30 days of completion as follows:
 - a. State Surveyor's office (A.C.A. § 17-48-106 et. seq. ~~(c)~~)
 - b. Client.

Commented [Ivan48]: Added

Commented [DP49]: Moved from Section 1

Commented [Ivan50]: Needs some cleanup language

Commented [Ivan51]: See my comments in Section 1

Commented [Ivan52]: Remove underline. I take this to mean lot surveys in a recorded municipal or county subdivision where title is transferred by lot, lot and block.

Commented [DP53]: Reference only to the statute section

Commented [DP54]: Moved from "Distribution of Plats" to it's on subsection

Commented [DP55]: Reference only to the statute section

SECTION 5 ENFORCEMENT

5.1 Enforcement. Enforcement of these regulations is vested in the Arkansas State Board of ~~Registration~~ Licensure for Professional Engineers and Professional Land Surveyors, as prescribed in A.C.A. § 17-48-101 et. seq.

Commented [DP56]: Add subsection number and title

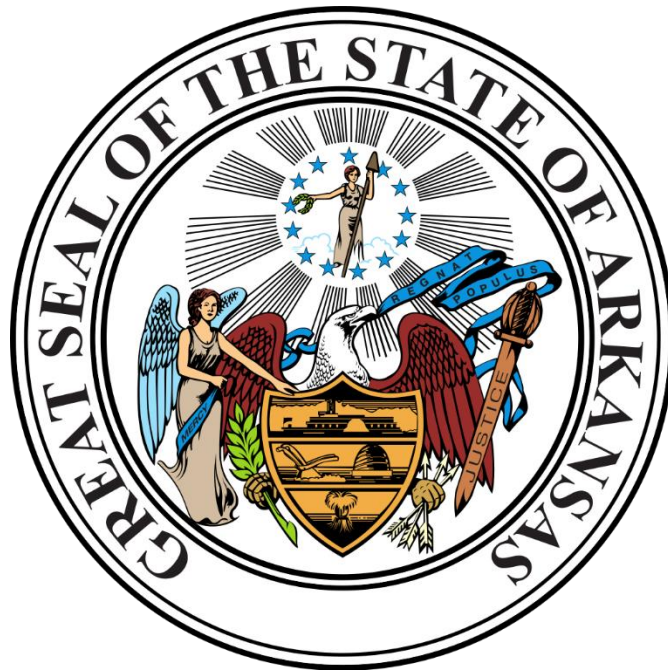
Commented [Ivan57]: To be consistent and as in licensure board rules.

Commented [DP58]: To match ACA 17-48-101

Department of Transformation and Shared Services

Arkansas Geographic Information System Office

Division of Land Surveys



Standards of Practice No. 1

Arkansas Standards of Practice for Property Boundary Surveys and Plats

Effective (to be determined)

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Introduction

The purpose of these standards is to set minimum accuracies for land boundary surveys and minimum requirements for research, investigation, monumentation, and plat preparation, and the subsequent recording and distribution of the plat upon completion of a survey.

A.C.A. § 17-48-103 states “in order to safeguard the life, health, or property of the public, the practice of land surveying in this state is declared to be subject to regulation in the public interest”. These standards will promote the public interest.

These standards are binding upon any person duly licensed to practice within the State of Arkansas performing surveying services as defined herein. It is not the intent of these standards to limit the application of more stringent standards required by code, ordinance, or contractual specification. It is the responsibility of professional surveyors to stay informed on current rules and regulations pertaining to the practice of land surveying. When professional judgment necessitates deviation from these standards, the deviation shall be noted and explained by the surveyor on the plat.

Section 1 – Definitions

1.1 Survey

- A. “Land Surveying” means any service comprising the determination of the location of land boundaries and land boundary corners; the preparation of plats showing the shape and areas of tracts of land and their subdivision into smaller tracts; the preparation of plats showing the location of streets, roads, and rights-of-way of tracts to give access to smaller tracts; and, the preparation of official plats or maps of land thereof in this state (A.C.A. § 17-48-101 et. seq.).
 - 1. In these standards, land surveying is also defined to mean the setting or resetting of monuments that mark or reference the position of said corners and boundaries.

1.2 Area Designation

- A. Urban Area (Class A Property) - any municipality within the state having a population of 500 or more. Class A property shall also include the surveys of commercial and industrial properties, condominiums, townhouses, residential subdivisions, apartments and other multiunit residential lot developments.
- B. Suburban Area (Class B Property) - all that area within three miles of a city having a population of 2000 or more, or within one mile of a city having a population between 500 and 2000, or any area which, because of its location or natural resources, may become a developed area.
- C. Rural Area (Class C Property) - any area where land is used predominantly for agricultural purposes and which shows no signs of becoming a developed area.
- D. Mountain or Marsh Area (Class D Property) - surveys of lands, which normally lie in remote areas with difficult terrain and usually have limited potential for development.

1.3 Relative Positional Accuracy or Positional Tolerance. The linear horizontal distance without regard to direction by which a measured position of a monumented survey marker differs from its computed location.

Section 2 – Minimum Relative Positional Accuracy Standards

2.1 Determination of Area and Property Type. The area designation and property type for the land being surveyed shall be determined, using the definitions given in Section 1, paragraphs 1.2 and 1.3. The maximum allowable Positional Tolerance of property corners with respect to each other within a given Survey is listed in Table 1 below.

Table 1. Determination of Relative Positional Accuracy by Area Designation

Area Designation	Property Class	Relative Positional Accuracy (+/-feet)
Urban	A	$\pm(0.25)$
Suburban	B	$\pm(0.50)$
Rural	C	$\pm(0.75)$
Mountain or Marsh	D	$\pm(1.50)$

Section 3 – General Procedures

3.1 Research, Investigation, and Procedure. Prior to a boundary survey, the surveyor shall obtain information from the following, as applicable: field notes and plats of the original government survey and subsequent surveys, deeds, maps, county and state records. The surveyor shall analyze the information obtained to determine, to the best of his or her ability, the boundaries that were requested to be located.

- A. Surveys based on the U.S. Public Land Survey System shall be tied to the section and/or quarter section corners, which control position in accordance with the current *Bureau of Land Management (BLM) Manual of Surveying Instructions*. However, if a survey is to be performed within a section previously subdivided the surveyor may tie to and rely on any well-defined corners found therein. This exception in no manner relieves the surveyor from any liability resulting from his or her reliance on said corners in the performance of the survey.
- B. The current *Bureau of Land Management (BLM) Manual of Surveying Instructions* shall be used as the guide for the restoration of lost or obliterated corners and subdivision of sections.
- C. Lot and Block subdivision surveys shall conform to the minimum accuracy standards as set forth in Section 2, and to local subdivision ordinances (standards and regulations) provided the accuracy does not exceed Section 2. Lot surveys and plats within such subdivisions shall be tied to sufficient monumentation within the subdivision required to verify the correctness of the survey.

3.2 Field Work

- A. Execution. The surveyor shall, under his or her direction, locate and make measurements to all available monuments appropriate or necessary for the location of boundaries and corners, and coordinate the results of this field research and investigation.
- B. Measurement Techniques. Survey measurement techniques shall be designed to eliminate mistakes and minimize or compensate for instrumental, environmental, and operator error. All measurements shall be made to a precision compatible with the size and geometric shape of the parcel, and shall be consistent with the accuracy required for the class of property being surveyed.
- C. Monumentation. The surveyor shall cause monuments marking the corners of a parcel to be set as follows:
 - 1. Location. The surveyor shall locate or confirm the prior location of permanent monuments at each boundary corner of the lot, parcel, tract or line being surveyed. When the placement of a required monument at its proper location is impractical, an offset monument may be set. The location of said offset monument shall be clearly

- shown on the plat, dimensioned, and incorporated into the surveyed land boundary description. The correctness or incorrectness of previously placed (existing) monuments shall be confirmed by the surveyor, and they shall be shown and referenced on the plat.
2. Type of Monument. The surveyor shall select a type of monument that provides a reasonable degree of permanency consistent with the physical features of the terrain and the intended use of the monument. The following guidelines shall be followed as closely as is practically possible.
 - a. All the monuments shall be clearly marked with the license number of the surveyor setting or responsible for setting the monument.
 - b. Iron pipe shall be one-half inch (1/2") in (inside diameter) diameter or larger and steel rods (e.g. rebar) shall be at least one-half inch (1/2") in diameter. The minimum length for monuments shall be 18 inches where applicable.
 - c. Any monument set to mark the location of, a quarter-corner, or a section corner shall be marked with the precise corner position, the proper identification of the corner in accordance with the current BLM manual, and the year of monumentation. Letters and numerals on survey monument caps shall be neatly stamped with 1/8" or 3/16" steel dies and oriented to read from the south.
 3. Monument Accessories. For any monument found or set marking the location of a quarter (1/4) corner, or a section corner, as well as any other corner for which the surveyor desires accessory evidence, shall be referenced by at least two (preferably four) permanent or semi-permanent reference objects (sound trees, when available). Horizontal measurements shall be made from the monumented corner position to the center of the base of reference trees at ground level, and to a readily identifiable point or mark on any other reference objects. On steep sites where a horizontal distance cannot be easily obtained, slope distance may be used and noted with the accessory information. It is encouraged, but not required, to include quarter (1/4) corner and section corner geographic coordinates to the thousandth of a second or Arkansas State Plane coordinates to the hundredth of a foot with an accuracy meeting or exceeding accuracies given in Section 2, with coordinate system fully described.
 4. Existing monuments verified or relied on for survey control, which are not considered permanent (such as a loose mound of stones) should be replaced or supplemented using monumentation standards in Section 3.2-C-2. Large permanent monuments, such as stone or concrete monuments, should have the precise corner position marked by a chiseled "X" or cross.

Section 4 – Plats

4.1 Publication of Results. A plat showing the results of each survey shall be prepared and distributed as follows:

- A. Preparation of Plats. A scale drawing of the property with the following information shall be part of every plat:
 1. Boundaries with distances (horizontal ground) and directions (bearing or azimuths). When circular curves are platted the following four (4) curve elements shall be shown: radius, arc length, chord bearing, and chord distance.
 2. Ties to corners, monuments, corner accessories, and other relevant reference information, which control the location of a boundary or corner, the surveyor's basis for acceptance thereof, and the originating source of any monument or accessory.
 3. Record title lines including record deed distance and direction calls and/or document (book and page) references.
 4. Reasonably observed encroachments and possession lines.
 5. Type and dimension description of monuments found and monuments set during the course of the survey. Pertinent inscriptions should also be included.
 6. Point of Commencement (if separate from the Point of Beginning) and Point of Beginning for metes and bounds surveys.
 7. Client's name.
 8. Business address of surveyor.
 9. North arrow with basis of direction.
 - a. The directional reference system and methods used shall be clearly described on the plat.
 - i. Include document (book and page or other instrument number) references if based on a deed or survey plat record bearing or azimuth and shall specify which boundary line depicts the basis for direction.
 - ii. When the basis of direction is derived from the Arkansas Coordinate System identify as geodetic or grid. The year of the system adjustment shall be shown with a notation specifying the geographic location (Arkansas State Plane coordinates to the nearest ten feet or latitude and longitude to the tenth of a second) to where the calculation was made.
 10. Bar scale.

11. Legend. A legend may not be required when all symbols, lines, and other graphics are described individually.
12. Surveyed Land Boundary Description.
13. Surveyor's seal with dated signature and the Certificate of Authorization seal when required (A.C.A. § 17-48-207 et. seq.). Any additional sheets shall include required seal(s) with dated signature.
14. Date of survey.
15. A.C.A. § 17-48-107 et. seq. requires every survey of a parcel of real property made after March 30, 1981, shall include a statement of the number of acres or parts of acres included in the parcel surveyed. If the parcel surveyed includes lands situated in more than one quarter-quarter, the approximate number of acres of the parcel lying in each quarter-quarter shall be shown separately.
16. The appropriate index code from the State Surveyor's current "Survey Plat Coding Instructions" shall be placed on each plat. The plat code shall be legible, located in the lower right portion of the plat, placed horizontally, and include the client name.

B. Distribution of Plats.

1. Survey shall be deemed to be complete when the survey plat has been dated, sealed, signed, and the surveyor has been paid.
2. Revised Plat or Re-plat. A plat that corrects or changes information shown on a previously recorded survey or subdivision plat and is required to be filed for record at the State Surveyor's office. The revised plat shall clearly indicate the portions revised and the document reference for the original plat.
3. Subdivision plats are boundary surveys creating parcels (e.g. lots, lots and block, tracts, easements, right of ways, etc.) and are to be filed with the State Surveyor's office after any recording requirements with City and/or County government.
 - a. Filing is not required, but may be submitted, for survey plats made of subdivided property located in a municipality where property has previously been surveyed and a plat filed (A.C.A. § 17-48-106 et. seq.).
4. Copies of the plat shall be distributed within 30 days of completion as follows:
 - a. State Surveyor's office (A.C.A § 17-48-106 et. seq.).
 - b. Client.

Section 5 – Enforcement

5.1 Enforcement. Enforcement of these regulations is vested in the Arkansas State Board of Licensure for Professional Engineers and Professional Surveyors, as prescribed in A.C.A. § 17-48-101 et. seq.