

**Title 20—DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND
PROFESSIONAL REGISTRATION**

**Division 2030—Missouri Board for Architects, Professional Engineers,
Professional Land Surveyors, and Professional Landscape Architects
Chapter 16—Missouri Standards for Property Boundary Surveys**

PROPOSED RULE

20 CSR 2030-16.030 General Land Surveying Requirements

PURPOSE: This rule sets forth standards that apply to all property boundary surveys.

(1) Records Research.

- (A) Every survey executed shall be based on the property description of the parcel or parent tract taken from the public records; and
- (B) Prior to performing the fieldwork, the professional land surveyor shall acquire sufficient data to ascertain the record title boundary of the parcel(s) to be surveyed (such as, adjoining deeds, maps, right-of-way plans, subdivision plats, original plats and notes, and subsequent surveys). This requirement does not obligate the professional land surveyor to search the entire chain of title.

(2) Field Investigation. The professional land surveyor or a person under his/her direct personal supervision shall—

- (A) Search thoroughly for monuments and accessories at the necessary controlling corners and any other physical evidence that may be required to define the location of the exterior corners of the parcel surveyed (such as location of streets, roads, lines of occupation, and parole information);
- (B) Obtain appropriate and sufficiently redundant measurements to correlate all found evidence;
- (C) Evaluate the reliability of the evidence and monuments found and apply the proper theory of location in accordance with surveying precedent; and
- (D) Reach a conclusion on the location of the boundary and set monuments as defined herein.

(3) Monumentation.

- (A) The professional land surveyor shall establish semi-permanent or confirm existing monuments at every exterior corner of the tract being surveyed, except for lines running along streams or lakes where witness monuments must be set along the connected sidelines. When it is impractical to set a monument at a required corner, a witness monument shall be set along a line of the survey or the prolongation thereof; and
- (B) Existing monuments shall be evaluated for permanency by the professional land surveyor. Those needing restoration, preservation, or replacement shall receive the due care necessary to ensure that their permanency is secured in accordance with the requirements set forth herein.

(C) Additional Monumentation for Subdivision Surveys.

1. In addition to meeting the requirements set forth above, the professional land surveyor shall, prior to the recording of the subdivision plat, establish at least two (2) permanent monuments for every four (4) acres of land developed by the subdivision. This requirement is waived if the survey does not create more than four (4) lots or parcels; and
2. The permanent monuments required in paragraph (3)(C)1. shall be set prior to the recording of the plat or, if likely to be destroyed by construction, may be installed upon completion of the construction and must be set no later than twelve (12) months after the recording of the plat. The professional land surveyor shall also monument all lot corners in the subdivision with semi-permanent or witness monuments within the same twelve (12) month period.
3. When the subdivision is a cemetery, the requirements of paragraph (3)(C)1. for installation of permanent monuments shall be increased to include four (4) permanent monuments per block, and the monumentation of all lot corners required in paragraph (3)(C)2. shall not be required.

(D) Condominium surveys shall meet the requirements for subdivisions.

(4) Publication of Results. A plat shall be made showing the results of the survey or subdivision and shall conform to all of the following provisions:

- (A) The plat shall include a drawing that shall be made to a convenient scale on a reasonably permanent and dimensionally stable material;
- (B) The plat shall include the name of the person or entity for whom the survey was made and the date of the survey;
- (C) Lettering shall be no less than eight-hundredths of an inch (0.08") in height. All characters shall be open, well-rounded, and of uniform width;
- (D) The direction of boundary lines shall be shown by angles, azimuths, or bearings with the directional reference system clearly described on the plat;
- (E) A north arrow, a written scale, and a graphic scale shall be shown on every sheet containing graphic survey data;
- (F) Complete dimensions (distances, directions, and curve data) of all parcels surveyed or created. All linear measurements shall be shown as horizontal distances at the ground surface in feet or meters. Curved lines shall show at least two (2) elements. For non-tangential curves, a directional component shall be included to help define the direction of the curve (preferably the chord bearing);
- (G) All vertical measurements shall be shown as elevations above an established or assumed datum in feet or meters. When elevations are shown, a clearly defined elevation datum shall be shown, including the location and elevation of the benchmark used to establish the project datum;
- (H) Measurements and calculated areas will be shown on the plat to a number of significant figures representative of the actual precision of the measurements;
- (I) The plat shall display either a property description for the parcel(s) and/or parent tract surveyed or a reference to the source document from which the property description was taken. Any new parcel created by survey shall have its property description shown on the

plat and must be complete enough so that the parcel can be located and clearly identified. Subdivision plats shall identify all lots for sale by numbers, as set forth in section 445.010, RSMo;

- (J) The plat shall show sufficient data (distances and directions) to positively locate the parcel surveyed within the United States Public Land Survey System (USPLSS) or within the recorded subdivision. If the survey cannot be located by either of the previously mentioned provisions, it must be referenced to other lines and points sufficiently established by record;
 - (K) All controlling corner monuments that were found and exterior corners that were found or set shall be identified on the plat;
 - (L) Any material variation between record and measured dimensions, and any material variation and the extent of such variation between surveyed lines and lines of possession at all exterior corners, shall be shown on the plat. Material variation will include, but is not limited to, survey monuments, fences, obvious occupation (i.e., mowed) lines, walls, or other structures whether on the property surveyed or on adjacent property;
 - (M) The plat shall reference the source document(s) for any pertinent data obtained during the records research provision set forth above. The plat shall also reference the property type (urban or rural);
 - (N) The identity of the record title documents for adjoining properties, consistent with the records research provision set forth above, shall be shown on the plat, including the record source;
 - (O) In addition to the above, all condominium surveys shall show the pertinent information required in section 448.2-109, RSMo, and the legally sufficient descriptions of easements serving or burdening the condominium; and
 - (P) The plat shall include a statement that the survey and or subdivision were executed in accordance with the Missouri Standards for Property Boundary Surveys as set forth herein. The statement on a condominium plat shall also include a declaration that the plat contains all information required by section 448.2-109, RSMo.
- (5) Deliverables: The professional land surveyor shall furnish to the client a plat containing the drawing and other pertinent information identified above. Each sheet of the plat shall bear the signature and seal of the professional land surveyor in responsible charge. This signed and sealed plat shall be the official plat and shall take precedence over any other formatted data that may be delivered to the client or his/her representatives, successors, or assigns.

AUTHORITY: sections 327.041 and 327.272, RSMo 2016. Original rule filed May 3, 1994, effective Dec. 30, 1994. Amended: Filed March 20, 2003, effective Oct. 30, 2003. Moved to 20 CSR 2030-16.030, effective Aug. 28, 2006. Rescinded and readopted: Filed November 18, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Board of Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects, PO Box 184, Jefferson City, MO 65102, via facsimile at (573)751-8046, or via email at moapels@pr.mo.gov. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*