

General Requirements for Original, Resurveys, and Subdivisions

Survey Plat Requirements

1. Plats shall be made and provided indicating the results of the survey with seal and signature of surveyor in responsible charge.
2. Plat shall be drawn to a convenient scale on the type of material consistent with the purpose and permanency required. AutoCAD or Digital format plats required by client are allowed; however, a hard copy plat will be the official plat and take precedence over the digital data.
3. Name of person for whom the survey was made and date shall be noted on plat.
4. Multiple plats shall bear the seal and signature on each sheet provided to the client.
5. Lettering on plat shall be no smaller than 0.08 in height.
6. Boundary lines on plat shall be shown by direct angles, azimuths, or bearings. They shall be based on a bearing system that is retraceable and described on the plat.
7. Distances, directions, and curves shall be shown for all parcels surveyed or created.
8. A prominent north arrow shall be drawn on each sheet of the plat containing graphics.
9. Linear dimensions shall be horizontal in feet or meters at the ground's surface.
10. A written scale shall be noted on plat. Any plat 8 1/2" x 14" or larger shall also show a graphic scale.
11. Vertical dimensions shall be shown by elevations above an established or assumed datum.
12. Distances, angles, bearings, azimuths, and calculated areas will be shown on the plat to a number of significant figures representative of the actual precision of the measurements.
13. Curved lines shall show two elements of the curve; however, three is suggested including Radius, Central Angle and length of arc. When curves are not tangent to the preceding or succeeding boundary line the bearing, angle, and direction of the initial tangent, radial line, or long chord shall be shown.
14. The survey shall show sufficient data (distances and directions) to positively locate the parcel within the U.S.P.L.S.S or recorded subdivision. If the survey cannot be located

by either of these provisions, it must be referred to other lines and points established by record.

15. All controlling corner monuments, either found or set, shall be shown and described on the plat by symbol or note.
16. All controlling corners accepted or restored shall be shown or noted on the plat.
17. Accuracy class or property being surveyed shall be noted or shown on plat.
18. Any material variation between measured and record dimensions shall be noted on plat.
19. Plat shall identify title documents for ajoiners. Preference for source shall be by recording book-page.



10 CSR 30-2.030 General Land Surveying Requirements

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

(1) Research and Investigation.

(A) Every survey executed shall be based on the property description of the parcel or parent tract taken from the title of record. This property description should be provided by the client.

(B) Prior to making a survey the surveyor shall, insofar as necessary to define the property to be surveyed, acquire other data, such as adjoining deeds, maps, subdivision plats, original plats and original notes. This shall not be construed that the surveyor has an obligation to research the title of record.

(C) The surveyor shall compare and analyze all of the data obtained and determine the record title boundaries of such parcel or parent tract as reflected by the documents of record supplied or acquired by the surveyor.

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

(A) Search for and locate controlling corners and other physical monuments that may influence or are required to define the location of the exterior corners of the parcel to be surveyed;

(B) Search for and locate other real evidence, such as, where applicable, the location of streets, roads, lines of occupation, resident witness information, etc. which relates to the survey;

(C) Evaluate the reliability of the evidence and monuments that have been found;

(D) Obtain appropriate measurements to correlate all found evidence. Measurements will be taken to a precision compatible with the size and geometric shape of the parcel involved, and consistent with the accuracy desired for the class of property on which the survey is located, and in accordance with the accuracy standards as set out in this chapter;

(E) Correlate the facts obtained by the field survey with the record boundaries of the parcel or parent tract; and

(F) Reach a conclusion on the location of record title boundaries and set monuments as required.

(3) Publication of Results. A plat shall be made showing the results of the survey and a signed and sealed copy of the plat shall be furnished to the client. This survey plat shall conform to all of the following provisions, where applicable:

(A) The plat shall be a drawing made to a convenient scale on the type of material consistent with the purpose and permanency required. If the client requests the survey plat to be provided in digital format (AutoCAD, etc.), the surveyor shall also provide a signed and sealed drawing. The drawing shall be the official plat and shall take precedence over the digital data;

(B) The plat shall show the name of the person for whom the survey was made and the date of the survey;

(C) The plat or copy of the plat furnished the client shall bear the signature and seal of the surveyor in responsible charge. Whenever more than one (1) sheet must be used to accurately portray the survey, each sheet shall bear the signature and seal of the surveyor;

(D) Lettering on the plat presented to the client or recorder shall be no smaller than eight-hundredths inch (0.08") in height. All characters shall be open, well-rounded and of uniform width;

(E) The direction of boundary lines on the plat shall be shown by direct angles between established lines or by azimuths or bearings based upon a described direction reference system. The direction reference system shall be clearly described on the plat and must be retracable for future surveys;

(F) A north arrow shall be drawn on every sheet containing graphic survey data;

(G) Complete dimensions (distances, directions, and curve data) of all parcels surveyed and/or created shall be shown;

(H) All dimensions shall be shown in feet or meters. All plat dimensions shall be given as horizontal distances at the ground surface. A written scale shall be noted on all plats. Drawings eight and one-half inches by fourteen inches (8 1/2" x 14") or larger shall also show a graphic scale;

(I) All vertical dimensions shall be shown by elevations above an established or assumed datum and the source of the established or assumed datum shall be defined on the plat. Vertical dimensions shall be made at the same accuracy standard as property boundary surveys.

1. Type Urban Property Accuracy shall be one-tenth (0.10) of a foot or 1:20,000 for distances greater than two thousand feet (2,000') and shall apply to any property that is wholly or partly within the corporate limits of any city, town or village, and any commercial and industrial property, condominium property, town house property, apartments, and other multi-unit developments.

2. Type Suburban Property Accuracy shall be one-tenth (0.10) of a foot or 1:10,000 for distances greater than one thousand feet

(1,000') and shall apply to any property that is not Urban Property, that is or is intended to be primarily used for residential purposes or property lying between residential areas whose value is influenced by the presence of such nearby developed real estate.

3. Type Rural Property Accuracy shall be two-tenths (0.20) of a foot or 1:5,000 for distances greater than one thousand feet (1,000') and shall apply to all property that is not Urban Property or Suburban Property;

(J) Measurements and calculated areas will be shown on the plat to a number of significant figures representative of the actual precision of the measurements;

(K) Curved lines shall show at least two (2) elements of the curve and preferably these three (3): radius, central angle and length of arc. When not tangent to the preceding and/or succeeding course, the bearing or angle of either the initial tangent, radial line or long chord shall be shown. Pertinent information on compound curves shall be shown;

(L) The survey shall show sufficient data (distances and directions) to positively locate the parcel surveyed within the United States Public Land Survey, 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;

(M) All controlling corners accepted or restored shall be shown or noted on the plat;

(N) All controlling corner physical monuments either found or set shall be shown and described on the plat. A note or symbol shall show which were found and which were set;

(O) Any material variation between measured and record dimensions shall be noted on the plat; and

(P) The plat shall identify title documents for adjoining properties, as they appear of record, consistent with the research and investigation provisions of these standards. The source of said title documents shall be shown, preferably by recording book and page reference of the county records.

AUTHORITY: sections 60.510(7), 60.550 and 448.2-109, RSMo 2000. Original rule filed May 3, 1994, effective Dec. 30, 1994. Amended: Filed March 20, 2003, effective Oct. 30, 2003.*

**Original authority: 60.510(7), RSMo 1969; 60.550, RSMo 1969; and 448.2-109, RSMo 1983, amended 1988.*

10 CSR 30-2.040 Accuracy Standards for Property Boundary Surveys

PURPOSE: This rule prescribes the accuracy standards for all property boundary surveys.

