CITY OF SANTA ROSA

DIVISION H

STANDARDS FOR SURVEYS, MAPS & PLANS

SECTION I - GENERAL

It is the purpose of these Standards to provide for uniformity in the making of surveys, the preparation of subdivision maps, parcel maps, records of survey and other maps, plats or plans as they pertain to public rights of way within the jurisdiction of the City of Santa Rosa, and to establish standard requirements for the guidance of those engaged in this class of work.

SECTION II - SURVEYS

A. General

Standard recognized and adopted practice for the detailed operations of surveying shall be used. At a minimum, all rear yard and front yard lot corners (with the exception of corners located at pedestrian ramps) shall be monumented or witnessed.

B. Horizontal Control

1. Basis

   Horizontal control shall be tied to the City of Santa Rosa Coordinate System, which is based on the California Coordinate System, Zone 2, 1927 Datum, which system is hereinafter referred to as the City Coordinate System.

   All surveys for street or road alignment and for each subdivision subject to the requirements of the State Subdivision Map Act shall be tied to numbered City Coordinate System monuments unless it is determined by the City Engineer that the location of such survey is so far removed from existing
numbered City Coordinate System monuments as to make such ties impractical.

All maps and plats submitted shall show the basis of bearings used in a large bold font, that is clearly labeled “Basis of Bearings.”

2. Standards of Accuracy

(a) Class A - Lots, blocks, parcels, and centerline street monuments shall be set to a linear error of precision of no less than 1 part in 10,000. Subdivision boundaries and ties to the City Coordinate System shall be set to a linear error of precision of no less than 1 part in 20,000. The exception being, wherein points having a distance of 300 feet or less between them shall fall within a circle of precision (the circle of precision is defined as a circle having a specified radius, the center of which is the mathematical position of a certain point) having a radius of 0.03 feet or as set forth in the latest ACSM - ALTA specifications for urban surveys, whichever is more stringent.

(b) Class B - All other points within subdivisions shall fall within a circle of precision having a radius of 0.10 feet.

(c) Positional precision shall be as called for in the latest ACSM ALTA Specifications for urban surveys.

(d) No angular error will be allowed in final computations for boundary and lot closures.

(f) All latitudes, departures, coordinates, and resultant corrected lengths of courses in traverse computations shall be recorded to a minimum of three decimal places.

(g) Central angles, bearings and azimuths shall be recorded to the nearest whole second.
(h) Distances shall be recorded to the nearest one-hundredth of a foot on the map of record.

3. Stationing - Centerline/Construction

In general, centerline stationing shall increase from south toward north and from west toward east and shall tie to existing survey monuments and other pertinent survey points.

4. Ties to Coordinate System

All subdivision ties to the numbered City of Santa Rosa Coordinate System monuments will be made by connection to at least two (2) existing numbered City Monuments in a closed traverse configuration. The City Engineer shall, at his option, specify which two of the numbered City of Santa Rosa Coordinate System Control Points will be used to coordinate the horizontal control. A copy of the computations made in establishing the coordinate ties shall be submitted to the City Engineer and filed in his office. The City Coordinates and their designated numbers used shall be shown on the subdivision map and the coordinates (northings and eastings) listed.

No City of Santa Rosa Coordinate System monument shall be set and no monuments shall be marked with the City Coordinate System designation or number except by the City Engineer or his authorized agents. Coordinates shall not be shown for subdivision monuments on a filed map.

C. Vertical Control

1. Basis

The basis for vertical control shall be the City Bench Level System which system is based on USC & GS datum of 1929.

2. Standards of Accuracy
The maximum allowable error in feet, of any level circuit shall not exceed $\pm 0.05$ foot multiplied by the square root of the length of the circuit expressed in miles.

Every level circuit shall start and shall close on established bench marks of the City Bench Level System.

No City Bench Level monument shall be set and no monuments shall be marked with City Bench Level designation or number except by the City Engineer or his authorized representative.

SECTION III - PLATS & DESCRIPTIONS

A. GENERAL

Recognized and adopted Standards of Practice for the writing of legal descriptions and associated plats shall be used.

B. STANDARD REFERENCE SHEET FORMAT

The Reference Sheet (R-Sheet) or plat made a part of the legal description shall be on a form provided by the City Engineer and shall incorporate the following minimum features: a North arrow, the authority for the taking (Conditional Use Permit, Utility Certificate, Building Permit, etc.), the basis of bearings used, a location map (unless the intersection of two City streets is shown), the parcel with its assessor’s parcel number (APN), adjoining properties (APN’s at a minimum), the scale used, and the point of beginning and/or point of commencement. The plat shall show the calls made on the legal description (i.e., if a course, monument or geographical feature is called out in the legal description, it shall be shown on the plat).

C. STANDARD LEGAL DESCRIPTION AND DEED FORMAT
The legal description shall make, calls to senior adjoining properties where appropriate. The description shall be signed and sealed (expiration date required) by the licensed surveyor or registered civil engineer authorized to practice Land Surveying. The deed shall have the signature and notaries for all owners, with the name and title (if any) of each owner printed under the signature lines.

THE FOLLOWING EXCERPTS FROM THE CITY’S SUBDIVISION ORDINANCE ALSO APPLY TO MAP PRODUCTION:

19-28.070 Size, material and scale of map.
The final map or parcel map shall be clearly and legibly drawn in a form and on materials approved by the County Recorder and City Engineer. The outside dimensions of each sheet of said map shall be eighteen (18) inches by twenty-six (26) inches [two hundred three (203) millimeters by six hundred sixty (660) millimeters)]. A marginal line shall be drawn completely around each sheet, leaving an entirely blank margin of one inch. The scale of the map shall be sufficient to show all details clearly, and shall not be less than one inch to 100 feet. Each sheet of the map shall show the date of the survey, north arrow, and a written and graphic scale. The map shall be so made and shall be in such condition when filed that good legible prints and negatives can be made therefrom. (Ord. 2622 § 1 (part), 1987)

19-28.080 Subdivision boundary clearly designated
The boundary of the subdivision shall be designated by a distinctive border approved by the City Engineer applied to the final map or parcel map. Such border shall not interfere with the legibility of figures or other data. (Ord. 2622 § 1 (part), 1987)

19-28.090 Title of sheets.
The title of each sheet of said final map or parcel map shall consist of the approved name and subdivision number of the subdivision, if appropriate, conspicuously placed on the lower right-hand corner of the sheet, followed by the words, "City of Santa Rosa, County of Sonoma, State of California." (Ord. 2622 § 1 (part), 1987)
19-28.100 Certificates, acknowledgments, and descriptions required.

The following certificates, acknowledgments and descriptions shall appear where possible on the title sheet of the final map or parcel map; whenever appropriate the certificates may be combined:

(A) Certificates by Parties Holding Title. A certificate signed and acknowledged by all parties having any record, title or interest in the land subdivided, consenting to the preparation and recordation of said map. Signatures of parties owning the types of interest indicated in Government Code Section 66436 may be omitted as allowed by this section of the Subdivision Map Act providing their name(s) and the nature of their interest(s) are set forth on the map;

(B) Dedication Certificates. The certificate may state that a certain parcel or parcels are not offered for dedications. However, as a condition precedent to the approval of any final map or parcel map, any or all of the parcels of land or dedication of vehicular access rights shown thereon and intended for any public use or benefit shall be offered for dedication for public use except those parcels intended for the exclusive use of lot owners in the subdivision, their licensees, visitors, tenants and servants. In the event the streets or any of them shown on a subdivision map are not offered for dedication, the certificate may contain a statement to this effect. If such statement appears on the map, and if the map is approved by the City Council, the use of any such street or streets by the public shall be permissive only;

(C) Engineer’s (Surveyor’s) Certificate. A certificate by the Civil Engineer who is authorized to practice land surveying or Land Surveyor responsible for the survey and final map or parcel map. The signature of each Civil Engineer or Land Surveyor, shall be accompanied by his seal and the expiration date of license or registration;

(D) Certificates for execution by each of the following in the format on file in the Department of Community Development, Engineering Division;

(1) City Engineer,
(2) City Clerk,
(3) City Auditor,
(4) County Recorder,
(5) Clerk of the Board of Supervisors,
(6) County Tax Collector Redemption Officer;

(E) Such other affidavits, certificates, acknowledgments, endorsements, and notarial seals as may be required by law and by this title. (Ord. 2622 § 1 (part), 1987)

19-28.110 Survey data.
Sufficient data must be shown on the map to determine the exact bearing and length of every lot line, block line and boundary line. Dimensions of lots shall be shown in feet and hundredths of feet. No ditto marks shall be used. Lots containing one acre or more shall show net acreage to the nearest hundredth. Bearings and distances of straight lines and radii and arc length for all curves, and such information as may be necessary to determine the location of the centers of curves, shall be shown. (Ord. 2622 § 1 (part), 1987)

19-28.120 Coordinate and/or record ties.

The subdivision shall be tied into the City of Santa Rosa Coordinate System by the method and standards shown in the City survey standards on file in the Department of Public Works. If no City coordinate system monument exists within a reasonable distance, as determined by the City Engineer, a tie to a monument established by the National Geodetic Survey shall be shown in accordance with the requirements of Section 8771.5 of the Business and Professions Code. Coordinate values of any monuments used to establish coordinate ties shall be shown on the final map or parcel map. If no coordinate monuments of either the City coordinate system or the California Coordinate System exist within a reasonable distance from the survey shown on the final map or parcel map, a tie to a map recorded in the County Recorder's Office shall be made, in accordance with the City survey standards, as approved by the City Engineer. (Ord. 2622 § 1 (part), 1987)

19-28.130 Centerlines of streets and alleys to be shown.

Whenever the City Engineer has established the monument or centerline of a street or alley adjoining to, or within the proposed subdivision, the data shall be shown on the subdivision map. All dimensions relative to the right-of-way widths, relationship to other control lines, easements and/or sidelines shall also be shown on the subdivision map. (Ord. 2622 § 1 (part), 1987)

NOTE: Current City policy dictates that along curves of the centerline, the monuments shall be located at the Beginning of the Curve (BC) Stationing and End of the Curve (EC) Stationing. However, along short curves (curves with a radius of 100 feet or less), consideration shall be given to placing the monument at the Point of Intersection (PI) Stationing. In order for the monument to be placed at the PI Stationing, the PI shall be within the travelway and not in the Parking Lane of the roadway.

19-28.140 Existing monuments.
The maps shall clearly show what existing monuments or other evidence was found on the ground in determining the boundary of the subdivision. The adjoining corners of all adjoining subdivisions shall be identified by lot, and where applicable, block numbers, subdivision name and recording data or other property designation. (Ord. 2622 § 1 (part), 1987)

19-28.150 Lots and parcels.

All lots and parcels offered for dedication shall be particularly delineated and designated with all dimensions, boundaries and courses clearly shown and defined in every case. Parcels offered for dedication other than for streets or easements shall be designated by number or letter. Sufficient linear, angular and curve data shall be shown to determine the bearing and length of the boundary lines of every block, lot and parcel which is a part thereof. Sheets shall be arranged so that no lot is split between two or more sheets unless otherwise approved by the City Engineer. Lot numbers shall begin with a numerical "1" and continue consecutively throughout the tract with no omissions or duplications. No block designation shall be used. (Ord. 2622 § 1 (part), 1987)


The sidelines and/or centerlines of all existing and proposed easements shall be shown by fine dashed lines. If any easement already on record cannot be definitely located, a statement of the existence, the nature thereof, and its recorded reference must appear on the title sheet. Distance and bearings on the lot lines which are cut by an easement shall be dimensioned so that the map will clearly show the actual length of the lot lines. The widths of all easements and sufficient ties thereto to locate definitely the same, with respect to the subdivision, must be shown. All easements must be clearly labeled and identified. If an easement shown on the map is already of record, its recorded reference must be given. If an easement is being dedicated on the map, it shall be set out in the owner's certificate for dedication. (Ord. 2622 § 1 (part), 1987)

19-28.170 Location map.

All final maps shall have a location map relating the subdivision to the general layout of the City, and it shall be placed on the first map sheet, or key map, rather than on the certificate sheets. (Ord. 2622 § 1 (part), 1987)

19-28.180 Key map.

When the final map or parcel map consists of more than two map sheets, the legend and a key map showing the relationship of each sheet shall be placed on the first map sheet. Every sheet comprising the map shall bear the scale, north
point, title, sheet number, and number of sheets comprising the map. (Ord. 2622 § 1 (part), 1987)

19-28.190 Reference to additional information.
On and after January 1, 1987, no requirements shall be included on a final map or parcel map which do not affect record title interests. However, the map shall contain a notation or reference to additional information as required in this title. The map shall contain the following in bold print:

"NOTICE"
See Sheet No. ___ for all local agency-required information.

(Ord. 2622 § 1 (part), 1987)

19-28.200 Additional information.
Additional information, as set forth in this section, shall be required to be submitted on an additional map sheet which shall be identified as an additional information sheet and which shall indicate its relationship to the final or parcel map, and shall contain a statement that the additional information is for informational purposes, describing conditions as of the date of filing, and is not intended to affect record title interest. The supplemental data sheet shall contain the following:

(A) The full title block;
(B) A graphic scale;
(C) A north arrow;
(D) All required notes and all required additional survey and map information, including but not limited to, building setback lines, building envelopes, flood hazard zones, seismic lines and setbacks, geologic mapping, archeological sites, creek setback lines, and applicable fees. The additional information need not be provided at the same scale as on the map if, in the opinion of the City Engineer, the result is plainly and readily legible. In no case, shall a scale of greater than one inch to 100 feet be utilized. Typical representations may also be utilized if, in the opinion of the City Engineer, they adequately communicate the desired information. (Ord. 2622 § 1 (part), 1987)

19-28.210 Documents to be submitted with final map or parcel map.
The subdivider shall submit the following documents along with the final map or parcel map:
(A) Calculation Sheets. Electronically computed calculation sheets, in a form approved by the City Engineer, giving plane coordinates of the boundary of the subdivision, blocks, lots, parcels, easements, and street centerlines therein;

(B) Report and Guarantee of Clear Title. The final map or parcel map shall be accompanied by a preliminary title report prepared by a duly authorized title company naming the persons whose consent is necessary to the preparation and recordation of said map and to the dedication of the streets, alleys, and other public places shown on the map, and certifying that, as of the date of the preparation of the report, the persons therein named are all the persons necessary to give clear title to said subdivision;

(C) Deed Restrictions. The final map or parcel map shall be accompanied by three copies of all proposed covenants, conditions and restrictions;

(D) Preliminary Soils Report. Along with, or prior to, the submission of the final subdivision map, the subdivider shall file a preliminary soils report, prepared by a Civil Engineer, based upon adequate test borings or excavations of the subdivision. The preliminary soils report may be waived if the Chief Building Official determines that critically expansive soils or other soils problems which could lead to structural defects do not exist;

(E) Soil Investigation. If the preliminary soils report indicates the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural damage, a soils report considering each lot in the subdivision shall be prepared by a Civil Engineer. The soils report shall recommend corrective action which is likely to prevent structural damage to each main structure proposed to be constructed. The report shall be filed with the Chief Building Official, who shall approve the soil investigation report if he determines that the recommended corrective action is likely to prevent structural damage to any main structure to be constructed on any lot in the subdivision. Subsequent building and planning permits shall be conditioned upon the incorporation of the latest approved recommended corrective action in the construction of each building.

(F) Restricted Access Deed. Whenever required, a deed signed by the owner relinquishing the right of vehicular access over the side line or lines of a highway, freeway, parkway, or street. (Ord. 2622 § 1 (part), 1987)