

This an amendment to 12.8.2 NMAC, Sections 7 and 9, effective 3/12/2022.

12.8.2.7 DEFINITIONS:

A. Professional competency and performance: A surveyor shall provide competent representation to the client, their employer and the public interest. Competent surveying practice requires the knowledge, skill, thoroughness, and preparation reasonably necessary for the engagement including the assessment of which his/her skills, knowledge and experience befits the needs of the client and to advise or otherwise direct or decline the work based on that assessment of their personal and professional competency.

B. Types of Surveying:

(1) Boundary surveying is the determination, description, portraying, measuring or monumentation of the boundaries of a tract of land and reflecting the relationship of the boundaries of the surveyed property (i.e. contiguity, gaps, or overlaps) with its adjoining, where ascertainable from record documents or from field evidence gathered during the process of conducting the survey of the property being surveyed. If the surveyed property is composed of multiple parcels, the extent of any gaps or overlaps between those parcels shall be identified.

(2) Improvement location reporting is the preparation of a report which complies with all of the requirements and limitations of an improvement location report as set forth in 12.8.2.10 NMAC, and which is issued to a title, abstract or escrow company or a lending institution for their exclusive use in determining such things as insurability or value of a tract of land.

(3) Topographic surveying is the measurement and portrayal of the configuration of the ground or the location and description of objects thereon. It can include the plotting and description of property boundary monuments and property lines on a topographic map. Unless a boundary survey is being conducted simultaneously, only existing monuments found at the time of the survey are shown, and no boundary monuments are set; and the following words are prominently shown on the topographic map: THIS IS NOT A BOUNDARY SURVEY OR A RIGHT-OF-WAY SURVEY. APPARENT PROPERTY CORNERS, RIGHT-OF-WAY LINES, OR PROPERTY LINES AS SHOWN ARE DERIVED FROM RECORD SURVEY PLATS, RIGHT-OF-WAY MAPS, OR DEEDS REFERENCED HEREON AND ARE NOT GUARANTEED OR TO BE RELIED ON FOR THE ESTABLISHMENT OF PROPERTY LINES.

(4) Easement surveying is the description, portrayal, or monumentation of easement(s) only.

(5) Right-of-way surveying is boundary surveying of existing right-of-way lines, which may include the boundary survey of adjoining property lines, for locating existing or proposed right-of-way.

(6) Condominium surveying - when performing or preparing a survey that falls under the Condominium Act (Article 7B), the survey requirements (Article 47-7B-9 or subsequent amendments) of said act shall be the standards to which the survey shall be held.

(7) Preparation of legal descriptions - the preparation of legal descriptions is a form of surveying and, other than the citing of a lot or parcel for reference or identification purposes of a duly recorded plat, must be performed by a licensed professional surveyor.

(8) An ALTA/ NSPS survey is a boundary survey. Therefore, a plat of survey must be recorded. The filed survey can be a separate plat and need not include all the detail of the ALTA/NSPS survey but only the improvements affecting the boundary are required to be shown (See Subsection J of 12.8.2.9 NMAC).

(9) Control surveying is the establishment of horizontal or vertical controls which will be the basis for future phases of a project including, but not limited to: extraction of geospatial data, engineering design projects, construction staking, surveys to layout horizontal and vertical alignments, topographic surveys using field methods, collection of topographic and planimetric data using photogrammetric methods and construction surveys of engineering or architectural public works projects.

(10) Unclassified surveying is surveying not defined above.

C. "Dimensions means" the direction, expressed either as a bearing or an azimuth, and the length of a survey line.

D. "Easement means" a right that the public, a person or an entity holds in the land of another.

E. "Monument means" an object intended to mark a property boundary or a point of reference.

F. "Surveyor means" a professional surveyor licensed under the Engineering and Surveying Practice Act.

G. “Tract or lot means” a parcel of land in separate ownership, where a unique parcel identification number(s) has been or will be assigned by the county in which the tract or lot is situated. It can also be a leasehold set off for separate ownership or a leasehold for other uses.

H. “Supplemental surveying work means” surveying work performed in order to densify, augment and enhance previously performed surveying work or site information but excludes the surveying of real property for the establishment of land boundaries, rights of way, easements and the dependent or independent surveys or resurveys of the public land system.

I. “GPS” is global positioning system, a.k.a. GNSS.

J. “Classes of surveys”:

(1) **“Urban means”** a survey within or adjoining a municipality or a survey, regardless of location, of land zoned for or intended for use for multifamily, commercial or industrial purposes.

(2) **“Suburban means”** a survey, which is not an urban survey, of land zoned for or intended for use for residential purposes.

(3) **“Rural means”** a survey, which is neither an urban nor suburban survey.

K. “Positional error means” the error inherent in setting or measuring from a monument and is added to the error expressed as a ratio for a closed traverse.

L. “Positional accuracy” is an assessment of the closeness of the location of spatial objects in relation to their true positions geospatially.

M. “GNSS” is global navigational satellite system, a.k.a. GPS or global positioning by satellites.

N. “Geospatial” is the relative position of features on, above, or below the earth’s surface defined by a localized or globalized system.

O. “OPUS” is the online positioning user service as provided by the national geodetic survey, national oceanic atmospheric administration, United States (U.S.) government.

P. “Digital geospatial data” is data in addition to, or as an alternative to, written or drawn media containing geospatially referenced electronic or computerized data, including land information systems (LIS) and geographic information systems (GIS). It includes data such as produced by optical and digital photographic comparison, scanners, lidar or radar, laser, infrared or ultrasonic measuring and UAV/UAS/airborne sensors

Q. “Basis of Bearing” is the basis of bearings or azimuth used in the survey and required to be depicted for boundary surveys, easement surveys, right-of-way surveys, ALTA/NSPS surveys and control surveys and shall be shown and based upon:

(a) New Mexico (NM) state plane grid coordinates with specifics to horizontal datum, zone, and convergence angle if pertinent;

(b) a specific line between two points either found or re-established set points as shown on an existing filed plat or included as part of a deed description;

(c) measured and published geodetic control values based upon an online position user service (OPUS) solution or geodetic control stations;

(d) a longitudinal line is acceptable using GPS or GNSS observations or other means for determining the longitude of a basis of bearings as long as the longitudinal value is published on the survey with the method used in determining the longitude;

(e) “GPS North” or similar notations without explanation as described above is unacceptable; and the use of “assumed bearings” is prohibited.

A basis of bearings for legal descriptions and unclassified surveys is required only if the performing surveyor determines it is necessary for others to retrace the survey.

[12.8.2.7 NMAC - Rp, 12.8.2.7 NMAC, 5/01/2007; A, 7/24/2016; A, 3/12/2022]

12.8.2.9 BOUNDARY SURVEYING: When performing a boundary survey, the surveyor shall be responsible for accomplishing all of the following.

A. Obtain copies of relevant documents necessary to perform the survey.

B. Review recorded plats and plats known to and available to the surveyor that are germane to the tract being surveyed.

C. Make a site visit and inspect the subject property and look for evidence of existing monuments and for evidence of possession and usage.

D. Determine the relative location on the ground of all found existing monuments which pertain to the survey using procedures which achieve the minimum accuracy standards in 12.8.2.16 NMAC.

E. Tag found monuments which are accepted by the surveyor and pertain to the boundary being surveyed with a metal tag, bearing the surveyor's license number, attached to the monument with a metal wire or strap; monuments set by a government agency which are clearly identified by their markings need not be tagged.

F. Set new monuments in conformance with 12.8.2.17 NMAC at all corners of the tract being surveyed using procedures which achieve the minimum accuracy standards in 12.8.2.16 NMAC, unless a permanent monument already exists.

G. Follow the rules and procedures, except for the accuracy and monumentation standards, in the applicable *manual of surveying instructions* for the survey of the public lands of the U.S., prepared by the United States bureau of land management, if the tract being surveyed pertains to the United States survey of public lands in any way including the following:

- (1) is a section or an aliquot part of a section;
- (2) is a small holding claim, private claim, land grant, mining claim or any other tract described in the manual of instructions for the survey of the public lands of the United States (*manual of surveying instructions*);
- (3) has a boundary which is a boundary of a tract described in [~~Subsection G of 12.8.2.9 NMAC, paragraphs (1) or (2) above~~] Paragraph (1) and (2) of Subsection G of 12.8.2.9 NMAC;
- (4) prior surveys and physical evidence within and adjacent to the section being surveyed should be carefully considered as evidence of original corner locations.

H. Never move, remove nor obscure an existing monument unless it is first properly referenced and all dimensions necessary to preserve its location are reported on a recorded plat.

I. Updating a prior survey - If an existing survey is updated for any reason, the surveyor shall comply with the minimum standards in effect at the time of the update unless the update is only to correct a minor scrivener's error. If the update is solely to bring the survey into compliance with the minimum standards and the location of the boundary has not changed, remonumentation is not required unless the original monumentation was not in compliance with the minimum standards in effect at the time the original survey was performed.

J. Prepare a plat of the survey, unless the survey is only the re-monumentation of corners of a tract, shown on a recorded plat, where some of the existing corners of the tract are recovered, whose measured dimensions on the ground are reasonably close to the record dimensions. A plat of survey must be recorded only if it is a survey of a parcel for which no previously recorded plat exists or, in the case of remonumentation, the surveyor finds that field measurements are significantly different from record dimensions. The plat may contain as many sheets as required, which meet the size and material requirements of the state statute and shall contain at least the following:

- (1) the name, address and registration number of the surveyor responsible for the survey;
- (2) a certificate followed by the dated signature and seal of the surveyor responsible for the survey stating that the surveyor conducted an actual survey on the ground and is responsible for the survey and that the survey and plat meet the minimum standards for surveying in New Mexico; only one surveyor's signature and seal shall appear on a plat; and the following model certification is considered to be an example of the minimum that the surveyor should certify to:

I, _____ (surveyor's name) _____, New Mexico Professional Surveyor No. (surveyors' license number), do hereby certify that this Boundary Survey Plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the Minimum Standards for Surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this instrument is a Boundary Survey Plat of an existing tract or tracts.

(Surveyor's Name) _____ PS No. _____ Date _____;

- (3) a title which shall include the county in which the survey is located and at least the following:
 - (a) the lot, block or tract number and subdivision or district name if the survey is within a subdivision or conservancy district;
 - (b) the city, grant, small holding, mining or private claim, or similar area in which the survey is located;
 - (c) if neither subparagraph (a) nor (b) applies, then the section(s), township(s) and range(s) in which the survey is located; if the survey is not within a section, then the projected section(s) shall be stated and designated as such if required by the county clerk;

- (4) a north arrow, equivalent scale and graphic scale for each sheet of the main drawing;

- (5) a description of all monuments found or set, which shall include identifying characteristics such as the material, shape and all pertinent information stamped or printed on any cap or tag and the

diameter (or the equivalent if other than round) when possible; a found monument which the surveyor has rejected as a true property corner shall be designated as such;

- (6) the basis of bearings used in the survey; ~~[which shall be based upon:~~
~~(a) New Mexico (NM) state plane coordinates with specifics to elevation, vertical datum, horizontal datum, zone, mapping angle, ground to grid factor used if using a modified ground system;~~
~~(b) a specific line between two points either found or re-established set points as shown on an existing filed plat;~~
~~(c) measured and published geodetic control values based upon an online position user service (OPUS) solution or geodetic control stations;~~
~~(d) a longitudinal line is acceptable based off GPS observation or other means for determining the longitude of a basis of bearings as long as the longitudinal value is published on the survey with the method used in determining the longitude; "GPS North" or similar notations without explanation as described above is unacceptable; "assumed bearings" are prohibited.]~~
- (7) a description of pertinent documents, including filing information as applicable, used to determine the boundaries and to prepare the plat of survey; if a particular document is not of record, this fact shall be so stated and all information used from the document shall be shown on the plat; if significant discrepancies exist between the documents used to determine the boundaries, the surveyor shall disclose the same and shall disclose which document was ultimately relied upon to determine the boundaries;
- (8) the boundary being surveyed including the dimensions as measured on the ground and the record dimensions unless the two are equivalent in which case it shall be so stated; all dimensions which pertain to the determination of the tract boundaries, and a tie to a suitable, permanent, existing monument;
- (9) all dimensions which pertain to the restoration of a lost or obliterated corner or the subdividing of a section under Subsection G of 12.8.2.9 NMAC;
- (10) the location and description of any evidence of a boundary or line of occupation including such things as a fence, building, wall or the remains thereof which is on a boundary or close enough to a boundary to be confused with the boundary;
- (11) the location and description of all easements known or disclosed to the surveyor which cross, adjoin or serve a surveyed tract together with the recording data for the document that created the easement and the location and description of any visible structures which encroach upon said easement;
- (12) the radius, central angle, length and chord dimensions for all curves;
- (13) the lot number, tract number, other designation or the apparent owner of all adjoining tracts with the recording data of the last recorded plat;
- (14) the relationship of the boundaries of the surveyed property (i.e. contiguity, gaps, or overlaps) with its adjoining, where ascertainable from record documents and from field evidence gathered during the process of conducting the survey of the property being surveyed; if the surveyed property is composed of multiple parcels, the extent of any gaps or overlaps between those parcels shall be identified;
- (15) the location and description of any evidence of use by a nonowner of the surveyed tract including such things as a road, trail, path, pipeline or utility which crosses a boundary of the tract;
- (16) a letter or number providing a unique designation of each surveyed tract on a plat with more than one tract;
- (17) access easement; if the surveyed tract is not contiguous to a public right-of-way, any access easement of record which is known to the surveyor shall be described on the plat and its location shall be determined; if no easement is known to the surveyor, a note prominently shown shall disclose that fact;
- (18) the area of each surveyed tract.

K. Record the plat prepared under Subsection J of 12.8.2.9 NMAC with the county clerk of the county or counties in which the survey is located. A plat of survey must be recorded only if it is a survey of a parcel for which no previously recorded plat exists or, in the case of remonumentation, the surveyor finds that field measurements are significantly different from record dimensions. The plat shall be recorded within sixty days of completion. A plat which requires the approval of a government agency is complete upon final approval. Any other plat is complete when the surveyor signs or seals it.

[12.8.2.9 NMAC - Rp, 12.8.2.9 NMAC, 5/01/2007; A, 7/24/2016; A, 3/12/2022]