

CHAPTER 616

H.B. No. 1613

AN ACT

relating to the adoption of the Texas Coordinate System of 1983 for designating the geographic position of points on the surface of the earth.

Be it enacted by the Legislature of the State of Texas:

SECTION 1. Section 21.041, Natural Resources Code, is amended to read as follows:

Sec. 21.041. FIELD NOTES OF A SURVEY OF PUBLIC LAND. The field notes of a survey of public land shall state:

- (1) the county in which the land is located;
- (2) the authority under which the survey is made and a true description of the survey;
- (3) the land by proper field notes with the necessary calls and connections for identification, observing the Spanish measurement by varas;
- (4) a diagram of the survey;
- (5) the State Plane *Coordinates* [~~Co-ordinates~~] based on the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* values for the beginning point on the survey with appropriate reference to zone, mapping angle, grid distances, acreage and the N.G.S. Station to which the survey is tied;
- (6) the names of the field survey personnel;
- (7) the date the survey was made; and
- (8) the signature of the surveyor.

SECTION 2. The heading of Subchapter D, Chapter 21, Natural Resources Code, is amended to read as follows:

SUBCHAPTER D. TEXAS *COORDINATE SYSTEMS* [~~CO-ORDINATE SYSTEM~~]

SECTION 3. Section 21.071, Natural Resources Code, is amended to read as follows:

Sec. 21.071. ADOPTION OF *COORDINATE SYSTEMS* [~~CO-ORDINATE SYSTEM~~].

(a) The *systems of plane coordinates which have* [~~system of plane rectangular co-ordinates which has~~] been established by the National *Oceanic Survey/National Geodetic Survey* [~~Oceanic and Atmospheric Administration~~] for defining and stating the positions or locations of points on the surface of the earth within the State of Texas *are* [~~is~~] adopted and will be known and designated as the *Texas Coordinate System of 1927 and the Texas Coordinate System of 1983*. [~~"Texas Co-ordinate System."~~]

(b) *Each system is a separate system and must be used as a separate system.*

SECTION 4. Section 21.072, Natural Resources Code, is amended to read as follows:

Sec. 21.072. PURPOSE AND LIMITATIONS OF *COORDINATE SYSTEMS* [~~CO-ORDINATE SYSTEM~~]. (a) The only purpose for adopting the Texas *Coordinate System of 1927 and the Texas Coordinate System of 1983* [~~Co-ordinate System~~] is to recognize a [~~the~~] system for use in the State of Texas to definitely ascertain positions on the surface of the earth.

(b) Except as provided in Section 21.041 of this code, the use of a [~~the~~] system is not required, and the provisions of this subchapter shall not be construed to set aside or disturb any corner or survey already established.

(c) The use of the term "Texas *Coordinate* [~~Co-ordinate~~] System" on a map, report, survey, or other document is limited to *coordinates* [~~co-ordinates~~] based on a [~~the~~] Texas *Coordinate* [~~Co-ordinate~~] System as defined in this subchapter.

SECTION 5. Section 21.073, Natural Resources Code, is amended to read as follows:

Sec. 21.073. DIVISION OF STATE INTO ZONES. For the purpose of using a [~~the~~] system, the state is divided into five zones:

- (1) the North Zone;
- (2) the North Central Zone;
- (3) the Central Zone;
- (4) the South Central Zone; and
- (5) the South Zone.

SECTION 6. Section 21.075, Natural Resources Code, is amended to read as follows:

Sec. 21.075. ZONE NAMES IN LAND DESCRIPTION. (a) As established for use in the North Zone, the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* shall be named, and in any land description in which it is used it shall be designated, the "Texas *Coordinate System of 1927, North Zone*" or "Texas *Coordinate System of 1983* [~~Co-ordinate System~~], North Zone."

(b) As established for use in the North Central Zone, the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* shall be named, and in any land description in which it is used it shall be designated, the "Texas *Coordinate System of 1927, North Central Zone*" or "Texas *Coordinate System of 1983* [~~Co-ordinate System~~], North Central Zone."

(c) As established for use in the Central Zone, the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* shall be named, and in any land description in which it is used it shall be designated, the "Texas *Coordinate System of 1927, Central Zone*" or "Texas *Coordinate System of 1983* [~~Co-ordinate System~~], Central Zone."

(d) As established for use in the South Central Zone, the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* shall be named, and in any land description in which it is used it shall be designated, the "Texas *Coordinate System of 1927, South Central Zone*" or "Texas *Coordinate System of 1983* [~~Co-ordinate System~~], South Central Zone."

(e) As established for use in the South Zone, the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 or the Texas *Coordinate System of 1983* shall be named, and in any land description in which it is used it shall be designated, the "Texas *Coordinate System of 1927, South Zone*" or "Texas *Coordinate System of 1983* [~~Co-ordinate System~~], South Zone."

SECTION 7. Section 21.076, Natural Resources Code, is amended to read as follows:

Sec. 21.076. [~~CO-ORDINATE SYSTEM~~] DEFINITIONS. (a) For the purpose of precisely defining the Texas *Coordinate* [~~Co-ordinate~~] System of 1927 and the Texas *Coordinate System of 1983*, the following definitions [~~by the National Oceanic and Atmospheric Administration~~] are adopted:

- (1) The Texas *Coordinate System of 1927, North Zone, and the Texas Coordinate System of 1983* [~~Co-ordinate System~~], North Zone, is a Lambert conformal projection [~~of the Clarke spheroid of 1866~~], having standard parallels at north latitudes 34° 39' and 36° 11', along which parallels the scale shall be exact. The origin of *coordinates* [~~co-ordi-~~

nates] is at the intersection of the meridian 101° 30' west longitude and the parallel 34° 00' north latitude. The [This] origin of the 1927 coordinate system is given the coordinates [co-ordinates]: $x = 2,000,000$ feet (720,000 varas) and $y = 0$ feet (0 varas). The origin of the 1983 coordinate system is given the coordinates: $x = 200,000$ meters (236,220 varas) and $y = 1,000,000$ meters (1,181,100 varas).

(2) The Texas Coordinate System of 1927, North Central Zone, and the Texas Coordinate System of 1983 [Co-ordinate System], North Central Zone, is a Lambert conformal projection [of the Clarke spheroid of 1866], having standard parallels at north latitudes 32° 08' and 33° 58', along which parallels the scale shall be exact. The origin of coordinates for the 1927 coordinate system [co-ordinates] is at the intersection of the meridian 97° 30' west longitude and the parallel 31° 40' north latitude. This origin is given the coordinates [co-ordinates]: $x = 2,000,000$ feet (720,000 varas) and $y = 0$ feet (0 varas). The origin of coordinates for the 1983 coordinate system is at the intersection of the meridian 98° 30' west longitude and the parallel 31° 40' north latitude. This origin is given the coordinates: $x = 600,000$ meters (708,660 varas) and $y = 2,000,000$ meters (2,362,200 varas).

(3) The Texas Coordinate System of 1927, Central Zone, and the Texas Coordinate System of 1983 [Co-ordinate System], Central Zone, is a Lambert conformal projection [of the Clarke spheroid of 1866], having standard parallels at north latitudes 30° 07' and 31° 53', along which parallels the scale shall be exact. The origin of coordinates [co-ordinates] is at the intersection of the meridian 100° 20' west longitude and the parallel 29° 40' north latitude. The [This] origin of the 1927 coordinate system is given the coordinates [co-ordinates]: $x = 2,000,000$ feet (720,000 varas) and $y = 0$ feet (0 varas). The origin of the 1983 coordinate system is given the coordinates: $x = 700,000$ meters (826,770 varas) and $y = 3,000,000$ meters (3,543,300 varas).

(4) The Texas Coordinate System of 1927, South Central Zone, and the Texas Coordinate System of 1983 [Co-ordinate System], South Central Zone, is a Lambert conformal projection [of the Clarke spheroid of 1866], having standard parallels at north latitudes 28° 23' and 30° 17', along which parallels the scale shall be exact. The origin of coordinates [co-ordinates] is at the intersection of the meridian 99° 00' west longitude and the parallel 27° 50' north latitude. The [This] origin of the 1927 coordinate system is given the coordinates [co-ordinates]: $x = 2,000,000$ feet (720,000 varas) and $y = 0$ feet (0 varas). The origin of the 1983 coordinate system is given the coordinates: $x = 600,000$ meters (708,660 varas) and $y = 4,000,000$ meters (4,724,400 varas).

(5) The Texas Coordinate System of 1927, South Zone, and the Texas Coordinate System of 1983 [Co-ordinate System], South Zone, is a Lambert conformal projection [of the Clarke spheroid of 1866], having standard parallels at north latitudes 26° 10' and 27° 50', along which parallels the scale shall be exact. The origin of coordinates [co-ordinates] is at the intersection of the meridian 98° 30' west longitude and the parallel 25° 40' north latitude. The [This] origin of the 1927 coordinate system is given the coordinates [co-ordinates]: $x = 2,000,000$ feet (720,000 varas) and $y = 0$ feet (0 varas). The origin of the 1983 coordinate system is given the coordinates: $x = 300,000$ meters (354,330 varas) and $y = 5,000,000$ meters (5,905,500 varas).

(b) The position of the Texas Coordinate [Co-ordinate] System of 1927 and the Texas Coordinate System of 1983 shall be as marked on the ground by triangulation or traverse stations established in conformity with the standards adopted by the National Oceanic and Atmospheric Administration for first-order and second-order work, whose geodetic positions have been rigidly adjusted on the North American datum of 1927 or 1983, and whose coordinates [co-ordinates] have been computed on the system defined in this subchapter. Any of these stations may be used for establishing a survey connection with the Texas Coordinate [Co-ordinate] System of 1927 or the Texas Coordinate System of 1983.

SECTION 8. Section 21.078, Natural Resources Code, is amended to read as follows:

Sec. 21.078. TERMS "X COORDINATE [CO-ORDINATE]" AND "Y COORDINATE [CO-ORDINATE]". (a) The plane coordinate values for [rectangular co-ordinates of] a point on the earth's surface, to be used in expressing the position or location of the point in the appropriate zone, of either [this] system, shall consist of two distances, expressed

in *U.S. Survey Feet* [~~feet~~] and decimals of a foot *when using the Texas Coordinate System of 1927 and expressed in meters and decimals of a meter when using the Texas Coordinate System of 1983.*

(b) One of these distances, to be known as the "x coordinate [~~co-ordinate~~]," shall give the position in an east-and-west direction; the other, to be known as the "y coordinate [~~co-ordinate~~]," shall give the position in a north-and-south direction.

(c) These *coordinates* [~~co-ordinates~~] shall be made to depend on and conform to the plane rectangular *coordinate values for the monumented points of the North American Horizontal Geodetic Control Network as published by the National Oceanic Survey/National Geodetic Survey, or its successors, and whose plane coordinates have been computed on the systems defined in this subchapter.*

(d) *Any station described in this section may be used for establishing a survey connection to either the Texas Coordinate System of 1927 or the Texas Coordinate System of 1983 [~~co-ordinates of the triangulation and traverse stations of the National Oceanic and Atmospheric Administration within the State of Texas, as those co-ordinates have been determined by the survey].~~*

SECTION 9. Section 21.079, Natural Resources Code, is amended to read as follows:

Sec. 21.079. **LAND IN MORE THAN ONE ZONE.** If a tract of land to be defined by a single description extends from one zone into another of the *coordinate* [~~co-ordinate~~] zones, the positions of all points on its boundaries may be referred to by either of the zones, the zone which is used being specifically named in the description.

SECTION 10. This Act takes effect September 1, 1987.

SECTION 11. The importance of this legislation and the crowded condition of the calendars in both houses create an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days in each house be suspended, and this rule is hereby suspended.

Passed by the House on April 23, 1987, by a non-record vote. Passed by the Senate on May 23, 1987, by the following vote: Yeas 30, Nays 0.

Approved June 19, 1987.

Effective Sept. 1, 1987.