# UNITED STATES DEPARTMENT OF THE INTERIOR <br> Harold L. Ickes, Secretary <br> GEOLOGICAL SURVEY <br> w. C. Mendenhall, Director 

## Bulletin 889

# SPIRIT LEVELING IN KANSAS 

1896-1935

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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1938

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# SPIRIT LEVELING IN KANSAS, 1896-1935 

J. G. Staack, Chief Topographic Engineer

## INTRODUCTION

Scope of report.-This bulletin contains the results of all spirit leveling in Kansas by the United States Geological Survey, including those heretofore published. ${ }^{1}$ Descriptions of the points for which figures of elevation have been determined are listed according to the quadrangles in which the points occur, and the quadrangles are arranged alphabetically. (See p. 5.) Results of spirit leveling other than that done by the Geological Survey are not included.

Classification of leveling.-Spirit leveling is classified according to the degree of refinement in the instruments and methods used and according to the closure errors.
First-order leveling ${ }^{2}$ consists of leveling done with the most improved instruments, all sections being leveled twice, in opposite directions, under varying conditions. Closures are not allowed to exceed the amount in feet represented by the formula
$0.017 \sqrt{\text { length of section in miles. }}$
All corrections for rod error, temperature, and unbalanced sights are applied, as well as the orthometric corrections for convergence toward the poles of level surfaces of different elevations.
Second-order leveling, according to regulations of the United States Geological Survey, comprises lines leveled twice with reliable instruments, though not necessarily of the most improved type. Closures are not allowed to exceed $0.035 \sqrt{\text { length of section in miles. }}$

Third-order leveling is made up of lines that are run, either with first-order equipment or with an engineer's wye level and rods of the New York type, in single-line circuits that are required to close within the limits, in feet, of $0.05 \sqrt{\text { length of circuit in miles. }}$ This is equivalent to $0.071 \sqrt{\text { length of section if the line is leveled twice. }}$

All leveling done by the United States Geological Survey in Kansas is of third-order accuracy except as otherwise stated.

[^0]Adjustments.-The adjustment of a net of leveling begins with the first-order lines. Most of these lines in both the United States and Canada have already been combined in a general net, and the orthometric differences derived from the observed values by correction for the convergence of level planes toward the north have been adjusted to remove accidental closure errors by the mathematical method known as least squares. The latest adjustment of this kind was made in 1929 by the United States Coast and Geodetic Survey and is known as the " 1929 general adjustment of first-order leveling." This adjustment included the first-order lines in Kansas, and the elevations thus derived are the fundamental references for elevations determined by second- and third-order nets. The third-order leveling of the United States Geological Survey in Kansas bas been adjusted by determinaing weighted mean elevations for new junction points and prorating the errors of each link. The weights are taken as the reciprocals of lengths of links. The third-order net has thus been brought into agreement with the best information available for the results of the fundamental first-order leveling, although the published figures of elevation may be changed slightly by future adjustments of the level net.

Benchmarks.-The benchmarks used by the United States Geological Survey (pl. 1) are of two general classes-principal and supplementary. Principal benchmarks are placed at more or less regular intervals along a level line and are established with the aim of making them as nearly permanent as practicable. They are usually bronze or aluminum tablets, iron posts, or copper bolts. Supplementary or auxiliary benchmarks are less formal in design and are placed between the principal benchmarks. Some of the supplementary benchmarks in common use are copper nails fitted with washers, spikes, and marks cut with a chisel on rock or masonry.
The tablets are circular in shape, measure $37 / 8$ inches in diameter, and taper from a thickness of three-eighths of an inch at the center to about a quarter of an inch near the rounded edge. During a short period in the earlier years of the Survey's leveling the tablets set were made of aluminum. The softness of this metal, however, made them susceptible to damage, so that aluminum as a material for tablets was soon discarded. The earliest tablets set and those now being placed are made of bronze, and bronze is the material now specified for standard tablets. Each tablet is cast with a 3 -inch shank extending from the center of its reverse side, by means of which it is cemented in place, and each bears an inscription on its face. The inscriptions on the tablets already placed differ in many details, because of changes in design at various times. The face of every tablet, however, is cast with the words "U. S. Geological Survey", a cross at the center, which indicates the fiducial point for position or elevation, and the words


GEOLOGICAL SURVEY BENCHMARKS.
$A$ and $B$, Standard tablets, principal benchmarks, used where masonry or rock is available to hold them. $A$ is used in cooperating States; the State name is inserted at $a . C$, Under side of $A$ and $B$, showing shank used to hold tablet in place. $D$ and $E$, Two views of copper nail and copper washer, a supplementary benchmark, used for points lying between those marked by standard tablets, $F$, Standard iron post fitted with bronze cap similar in design to the standard tablet, formerly used where no rock or masonry was available; superseded by concrete post with tablet set in top.
"Elevation above sea." On some tablets the inscription indicates that they were set in connection with a project in which a State or other organization cooperated; on some the inscription includes a triangle, which signifies a located point, enclosing the cross at the center. Tablets bearing a triangle enclosing a cross may be used not only as benchmarks but also as triangulation- or traverse-station marks. The inscription on most of the tablets already set includes the warning " 250 dollars fine for disturbing this mark", but the latest design omits this phrase and adds the sentence "For information write the Director, Washington, D. C."

If the tablet is to mark a transit-traverse station the traverseman stamps it with letters indicating this use of it, such as "Prim. Trav. Sta.", "P. T. S.", "T. T.", as well as his own identifying letter or letters, the serial number of the station, and the year, using steel dies. If the tablet is set as a benchmark, the levelman stamps it with his identifying letter or letters, the serial number, and the year. He may at the same time stamp upon it with steel dies the figures of elevation to the nearest foot, or these figures may be added later. Tablets that serve as benchmarks may have been set as such, or they may have been set to mark traverse stations. Thus some of them serve a dual' purpose, but each has stamped upon it the date and the identifying designation of only the engineer who established it.

The figures of elevation that appear on a tablet are usually those determined by field computation only. It is sometimes found, therefore, that they do not represent the latest information. This has happened either because they refer to some independent datum temporarily adopted before first-order trunk lines made standard datum available, or because a later adjustment made in the office bas rendered necessary an appreciable change in the figures as determined in the field. It is assumed that engineers and others who require accurate figures of elevation for the marks will use those printed in a bulletin such as this one, instead of accepting the stamped figures. If the appropriate bulletin is not conveniently accessible, a request for the desired information may be addressed to the Director of the United States Geological Survey, Washington, D. C.

The tablets, of whatever style, are cemented into holes drilled in solid rocks or in the walls of public buildings, bridge abutments, or other masonry structures. Where masonry or rock is not available, the tablets are set in the tops of reinforced concrete posts, which may be either precast or mixed and molded at the selected site. The posts are about 8 inches square or 8 inches in diameter at the top and larger at the base. They are generally set so as to project about 6 inches above ground and are made sufficiently long to reach below the frost line.

Antedating the concrete posts which are now constructed to hold the tablets, in places where masonry or rock is not available, are wrought-iron posts, to the tops of which are riveted bronze caps of similar design to the tablets. These iron posts measure 4 feet in length and $31 / 2$ inches in outer diameter and are set about 3 feet in the ground. The bottom of the post spreads out to a width of about 10 inches in order to give it a firm footing in the earth. No iron posts have been set in recent years. They have proved impracticable, as they are easily disturbed and are subject to rust at the ground level, which eventually destroys them.

The third form of principal benchmark, set only in the early leveling, is a copper bolt, designed to be wedged into a drill hole in rock or masonry and perhaps further secured with lead or cement. This bolt measures 4 inches in length and 1 inch in diameter and has a slot at one end into which fits a brass wedge. The wedge serves to expand the bottom end of the bolt, so that after the bolt has been driven to almost its full length into the hole, it cannot be easily removed. The exposed end of the bolt bears an appropriate inscription, stamped upon it with steel dies. This inscription is made up of the letters "U S G S", the letters indicating the datum used, the abbreviation "Ft.", and the figures of elevation.

Supplementary benchmarks are of many kinds. One kind consists of a copper nail $1 \frac{1}{2}$ inches long supplied with a copper washer seveneighths of an inch in diameter, through which the nail is driven into the root of a tree or some timber structure or cemented into rock after bending the point. The designation "U S G S B M" is stamped on each washer, and on some washers the abbreviation of the name of the cooperating State is added. Another kind of supplementary benchmark is a chiseled square, used on the horizontal surface of rocks or masonry structures, or a chiseled cross, used on a vertical surface. Nails, track spikes, and small capped iron pipes also serve as supplementary benchmarks, and occasionally easily described and recognized points, such as doorsills and tops of hydrants, are so used.

Preservation and restoration of benchmarks.-Any person who finds that a principal benchmark has been damaged, disturbed, or destroyed or that it should be reset or redescribed on account of highway or other improvements will render a public service by communicating the facts to the Director, United States Geological Survey, Washington, D. C., before taking any action affecting the location or elevation of the mark. A proper form, accompanied by a return-addressed, franked envelope, will be sent for use in reporting the action taken and in recording the revised description of the mark, if any, and the notes made in obtaining the revised elevation.

Datum.-All elevations determined by the United States Geological Survey and those determined by the United States Coast and Geodetic Survey for inland mapping are referred to mean sea level, which is the level that the sea would assume if the influence of winds, tides, and currents were eliminated. This level is not the elevation determined from the mean of the highest and lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. Mean sea level is the average height of the water, all stages of the tide being considered. It is determined from observations made by means of tidal gages placed at stations where local conditions, such as those due to long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations made in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean. ${ }^{3}$

Index maps.-For convenience in representing the lines of leveling of the United States Geological Survey in Kansas, the State has been divided into three sections-eastern, central, and western. The accompanying index maps of the eastern and western sections (figs. 1 and 2) show the relative position of the quadrangle areas which make up these sections and which are of two sizes, designated $15-$ minute and 30 -minute quadrangles. No map for the central section is included, because no leveling has been done by the United States Geological Survey in that section. A quadrangle is the unit of topographic survey adopted by the United States Geological Survey for dividing the area of the United States. Each of the 15 -minute quadrangles measures 15 minutes in latitude by 15 minutes in longitude. Each of the 30 -minute quadrangles measures 30 minutes in latitude by 30 minutes in longitude and is equal in area to four 15minute quadrangles. Maps of many of the quadrangles in Kansas may be purchased at 10 cents each retail or 6 cents each in lots of 50 or more. Prepayment is required and may be made by money order, payable to the Director of the United States Geological Survey, or in cash-the exact amount, at sender's risk. Postage stamps should not be sent. These maps are of nearly uniform size regardless of the size of the areas they represent, because they are drawn on different scales. For the Armourdale and Bonner Springs ( 15 -minute) quadrangles there are no corresponding maps, but maps of subdivisions of

[^1]
$10 \quad 0 \quad 10 \quad 40$ MLLES

Figure 1.-Index map of eastern Kansas showing the quadrangles into which that section of the State has been divided. - United States Geological Survey lines of leveling; ...... United States Coast and Geodetic Survey lines of leveling.


Figure 2.-Index map of western Kansas showing the quadrangles into which that section of the State has been divided. ——United States Geological Survey lines of leveling; ....... United States Coast and Geodetic Survey lines of leveling.
these quadrangles are availaible. The Armourdale quadrangle is fully represented by maps of the four $71 / 2$-minute quadrangles into which it has been divided, and the east half of the Bonner Springs quadrangle is represented by maps of the two $7 \frac{1}{2}$-minute quadrangles which make up that half. The names of these $7 \frac{1}{2}$-minute quadrangles do not appear on the index map of eastern Kansas (fig. 1), but they are given in the footnotes that accompany the lists of benchmark descriptions for the Armourdale and Bonner Springs quadrangles. (See pp. 9 and 13.) The Mound City, Olathe, and Oskaloosa 30-minute quadrangles have been subdivided into 15 -minute quadrangles numbered $1,2,3$, and 4 , as indicated on the map, except that Oskaloosa no. 1 has been renamed the Oak Mills quadrangle.

The heary black lines on the index map indicate the routes followed by the third-order leveling of the United States Geological Survey in Kansas. The light dashed lines indicate the routes followed by the first-and second-order leveling of the United States Coast and Geodetic Survey.

Personnel.-The leveling of the United States Geological Survey in Kansas was done under the supervision of the chief geographers or chief topographic engineers who were in administrative charge of the topographic branch during the years when the lines were run. The name of the levelman who ran a particular line and the date when it was run immediately follow the designation of the route of that line and form part of the heading which precedes the descriptions of benchmarks. The adjustment of the third-order level net, the revision, correlation, and compilation of the descriptions and elevations of benchmarks, and the assembling of lists were done mainly by $\mathrm{E} . \mathrm{W}$. Tibbott, computer, under the supervision of R. M. Wilson, chief of the section of computing, under the general direction of J. G. Staack, chief topographic engineer.

# THIRD-ORDER LEVELING 

# ARMOURDALE QUADRANGLE 4 

## [Latitude $39^{\circ}-39^{\circ} 15^{\prime}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ]

JOHNSON AND WYANDOTTE COUNTIES

## From Kansas City near Wyandotte-Johnson county line south and southwest along roads near Kansas-Missouri State line into Olathe No. 1 quadrangle (by L. V. Johnson in 1933)

Kansas City, 90 ft . N. and 30 ft . E. from intersection of 47 th Street
and Booth Avenue, at St. Agnes School, on SW. corner of second concrete step; chiseled square

Feet
965. 83
T. 12 S., R. 25 E., near center of SE $1 / 4 \mathrm{sec} .3,148 \mathrm{ft}$. N. and 22 ft E. from junction of U.S. Highway 50 and T-rd. N., in line with T-rd. S., 2 ft . E. of corner fence post, in concrete post; standard tablet stamped "16 J 1933 934"
933. 815

Reference mark, 30 ft . E. and 21 ft . N. from junction of U. S. Highway 50 and T-rd. N., on concrete curb; chiseled square
936. 09
T. $12 \mathrm{~S} .$, R. $25 \mathrm{E} ., 0.2 \mathrm{mi}$. E. of approximate center of sec. $10,30 \mathrm{ft}$. N. and 30 ft . W. from junction of rd. fork N., in root on NE. side of $24-\mathrm{in}$. walnut tree; copper nail and washer
864.08
T. 12 S., R. 25 E., at cor. secs. 9,10 , 15, and 16, 30 ft . W. and 10 ft . N. from crossroads, on N . head wall of concrete culvert; chiseled square
Superior (Prairie?) School, about 100 ft . SE. of SE. corner of, at quarter cor. between secs. 15 and 16, T. 12 S., R. 25 E., 50 ft . W. and 20 ft . N. from junction of Shawnee Mission Road and T-rd. W. (67th Street), on top of fire hydrant; top of E. nut

From Olathe No. 1 quadrangle north along Callahan Road to its junction with 67th Street, thence west and south along roads near south border of Armourdale quadrangle into Olathe No. 2 quadrangle (by L. v. Johnson in 1933)

Antioch Church, about 1 mi . N. of, at quarter cor. between secs. 13 and 18, T. 12 S., Rs. 24 and 25 E., 70 ft . S. and 30 ft . W. from junction of T-rd. W. (67th Street), in root on NE. side of $24-\mathrm{in}$. elm tree; copper nail and washer

1, 027.03
T. 12 S., R. 24 E., 0.2 mi . W. of center of sec. $13,170 \mathrm{ft}$. W. and 35 ft . S. from junction of 67th Street and T-rd. S., in root on N. side of 24 -in. elm tree; copper nail and washer
Shawnee, 1.0 mi . S. of, in center of sec. 14, T. 12 S., R. 24 E., 23 ft . N. and 76 ft . E. from intersection of 67 th Street and U. S. Highway 50 , 1 ft . S. of fence line, in concrete post; standard tablet stamped "T T 101933 1029"

1, 029. 200
T. 12 S., R. 24 E., at cor. secs. 14, 15, 22, and 23, 22 ft. N. and 18 ft . E. from junction of Sheets Road and T-rd. W., in root on W. side of 18-in. tree; copper nail and washer.

1, 046.09
T. 12 S., R. 24 E., at cor. secs. 15, 16, 21, and 22, 30 ft . S. and 30 ft . W. from center of crossroads, in root on N. side of $30-\mathrm{in}$. oak tree; copper nail and washer

[^2]
## From Bonner Springs quadrangle near Morris northeast and east along road and streets of Kansas City to 5th Street bridge over Kansas River (by L. V. Johnson in 1933)

Morris, about 0.8 mi . E. of, 350 ft . E. of large rock crusher, 60 ft . N. of center line of rd., under R. R. spur, on W. head wall of concrete culvert; chiseled square

Feet
T. 11 S., R. 24 E., at approximate cor. secs. 22, 23, 26, and $27,80 \mathrm{ft}$. S. and 20 ft . E. from center of crossroads, at NE. corner of concrete highway bridge, on abutment; chiseled square
847. 62

Turner, 1.0 mi . S. of, at approximate cor. secs. $23,24,25$, and 26 , T. 11 S., R. $24 \mathrm{E} ., 28 \mathrm{ft}$. N. and 129 ft . W. from intersection of paved roads, in concrete post; standard tablet stamped "T T 50 1933 919"
774. 37
919. 189

Reference mark, 60 ft . W. and 13 ft . N. from center of crossroads, on W. end of concrete curb; chiseled square
916. 19
T. 11 S., R. 24 E., at quarter cor. between secs. 24 and $25,10 \mathrm{ft}$. W. and 17 ft . N. from junction of Metropolitan Avenue and T-rd. S., on W. concrete head wall of culvert; chiseled square
899. 99

Kansas City, 20 ft . W. and 15 ft . S. from intersection of Metropolitan Avenue and Carlisle rd., at quarter cor. between secs. 19 and 30 , T. 11 S., R. 25 E., on concrete head wall of culvert; chiseled square:-
829. 22

Kansas City, at junction of 34th Street and Metropolitan Avenue, on fire hydrant; nut (city B. M.)
807. 25

Kansas City, at junction of 36 th Street and Metropolitan Avenue, at S. entrance to Stanley School, in second stone step at point near its W. end; standard tablet stamped "T T 6 O 1933 812"
812. 128

Kansas City, 14 ft . N. and 18 ft . E. from intersection of Metropolitan Avenue and South 18th Street, on concrete curb; chiseled square.-
Kansas City, on W. side of 14 th Street near its intersection with Metropolitan Avenue, 43.1 ft . S. of NE. corner of E. retaining wall around grounds of Franklin School, on top of concrete street curb; standard tablet stamped "T T 7 O 1933 789"
789. 267

Reference mark, $1,200 \mathrm{ft}$. E. of tablet, at center of S . end of 12 th Street bridge over Kansas River, on top of concrete block; chiseled square
788. 84

Kansas City, at NE. corner of 5th Street bridge over Kansas River, on concrete abutment; chiseled square

In Kansas City-from 39th Street and Kansas-Missouri State line west and northwest along streets and across Kansas River to corner of Third Street and Minnesota Avenue (by L. V. Johnson in 1933)

Kansas City, on Kans.-Mo. State line, 28 ft . W. and 12 ft . N. from intersection of West 39 th Street and State line rd., on concrete curb; chiseled square
961. 10

Kansas City, at Seminary Street entrance to Columbian School, in NE $1 / 4$ sec. 27, T. 11 S., R. 25 E., $325 \mathrm{ft} . \mathrm{N}$. and 35 ft . E. from intersection of Rainbow Boulevard and Seminary Street, in coping on N. side of front steps to school; standard tablet stamped "T T 9 BO 1933 811"
810. 885

Reference mark, 4.2 ft . below tablet, on concrete step; chiseled square
806. 67

Kansas City, at W. end of 5th Street bridge over Kansas River, on S. abutment; outer edge of W . wing wall (city B. M.)
Kansas City, 88 ft . E. and 28.5 ft . S. from intersection of 6 th Streetand Shawnee Avenue, in NW $1 / 4 \mathrm{sec} .22$, T. 11 S., R. 25 E., 17.6 ft . N.and 12.2 ft . W. from NW. corner of John J. Ingalls School, 24 ft . S.of flagpole, in concrete post; standard tablet stamped "T T 10 BO1933 744"

Feet
743. 724
743.44

Reference mark, 15 ft . N. of tablet, on concrete curb; chiseled square.-
Kansas City, 85 ft . S. and 22 ft . W. from intersection of 7 th Street and Montana Avenue, at NW. corner of 7th Street viaduct, on concrete base of rail support; chiseled square
785. 81 .

Kansas City, 22 ft . S. and 22 ft . W. from intersection of 5th Street and Central Avenue, on concrete curb; chiseled square
761.02

Missouri River Commission copper bolt designated "P. B. M. 235"--
Missouri River Commission chiseled square designated "T. B. M. 484"-
740. 743
739. 001
776. 75.
777. 62:

## From Bonner Springs quadrangle near Mill Creek east along U. S. Highway 40 and streets of Kansas City to Stowe School (by L. V. Johnson in 1838)

T. 11 S., R. 24 E., in NW. cor. sec. 3, 430 ft . E. of junction of U. S. Highway 40 and T-rd. S., 18 ft . N. and 12 ft . W. from junction of private T-rd. N. to residence of P. H. Ludwic, on W. concrete head wall of culvert; chiseled square
918. 90
T. 10 S., R. 24 E., at S. cor. secs. 33 and $34,18 \mathrm{ft}$. N. and 18 ft . E. from junction of highway and T-rd. N., on E. concrete head wall of culvert; chiseled square
914. 30
T. 11 S., R. 24 E., 0.2 mi . W. of NE. cor. sec. $3,17 \mathrm{ft}$. S. and 8 ft . E. from junction of highway and T-rd. S., on concrete head wall of culvert; chiseled square
T. 10 S., R. 24 E., near S. cor. secs. 34 and 35, about 400 ft . W. of junction of highway and T-rd. N., in NE. corner of concrete highway bridge over Brenner Heights Creek, on concrete wing wall; chiseled square
850.41

Welborn, 1.0 mi . S. of, at approximate S. cor. secs. 35 and 36, T. 10 S., R. $24 \mathrm{E} ., 31 \mathrm{ft}$. N. and 35 ft . E. from junction of highway and Welborn rd., 1.0 ft . N. and 14 ft . E. from corner fence post on private estate of U.S. Guyer, in concrete post; standard tablet stamped "T T 10 O 1933 923"
923. 309

Reference mark, on concrete head wall of culvert; chiseled square.-.-
T. 11 S., R. 25 E., in NW. cor. sec. 6, 70 ft . E. and 22 ft . S. from junction of highway and T-rd. S., on concrete head wall of culvert; chiseled square
920. 47
889. 68
T. 10 S., R. 25 E., about 0.2 mi . E. of SW. cor. sec. $31,40 \mathrm{ft}$. S. and 30 ft . W. from intersection of Parallel Avenue (State Highway 73) and 34th Street (State Highway 5), on concrete sewer top; chiseled square
997. 24

Kansas City, at junction of 33d Street and Parallel Avenue, on top of fire hydrant; W. nut (city B. M.)
931. 36

Kansas City, 35 ft . E. and 15 ft . S. from E. junction of Parallel Avenue and North 27th Street, on concrete curb; chiseled square
906. 60

Kansas City, near junction of 18 th Street and Parallel Avenue, 159 ft . W. of 18th Street, 53.5 ft . N. of Parallel Avenue, in public park, 12 ft . W. of center of granite drinking fountain, in concrete post; standard tablet stamped "T T 11 O 1933 820"

Reference mark, 12 ft . NE. of tablet, at NE. corner of above-men-
Feet
820.86

Kansas City, 70 ft . E. and 45 ft . S. from junction of Richmond and
Garfield Avenues, on concrete curb; chiseled square
798. 92

Kansas City, near Stowe School, 31 ft . S. and 45 ft . E. from intersection of 2 d Street and Richmond Avenue, 30.5 ft . N. and 7 ft . W. from NW. corner of school building, in concrete post; standard tablet stamped "T T 11 BO 1933 795"
794. 828

Reference mark, 18 ft . N. of tablet, on concrete curb; chiseled square.-

> From point on U. S. Highway 40 about 0.4 mile east of Victory Hills Golf Club north along road to Missouri Paciffc Railroad, thence southeast, west, and south along roads and streets to intersection of 34th Street (State Highway 5) and Parallel Avenue (State Highway 73) in Kansais City (by L. V. Johnson in 1933)

Vance (Grandview?) Church, at cor. secs. 27, 28, 33, and 34, T. 10 S., R. 24 E., about 0.2 mi . S. of Kansas City, Leavenworth \& Western Electric Ry., 100 ft . E. and 25 ft . N. from center of crossroads, at entrance to church, on first concrete step; chiseled square

1, 026.93
Vance School, 0.3 mi . N. of, at cor. secs. 21, 22, 27, and 28, T. 10 S., R. 24 E., 10 ft . S. and 18 ft . E. from center of crossroads, on E. end of tile culvert; top of culvert
983.87

Tanks triangulation sta. of Missouri River Commission; cap of iron pipe
$1,017.01$
Nearman sta., 1.7 mi . W. of, 1.8 mi . E. of Pomeroy, on Mo. Pac. R. R., near center of sec. 22, T. 10 S., R. 24 E., at SE. corner of concrete base of electric control box; chiseled square
761. 55

Nearman sta., 1.1 mi . W. of, on N. side of tracks, at W. end of sidetrack, on SE. corner of concrete base of electric control box; chiseled square.
Nearman sta., 0.5 mi . W. of, 125 ft . W. of crossing of private rd. and R. R., at SW. corner of concrete base of electric control box; chiseled square
Nearman sta., near quarter cor. between secs. 23 and 24, T. 10 S., R. 24 E., 125 ft . E. of rd. crossing, 20 ft . SE. of tool shed, on N. side of tracks, on SE. corner of electric control box, on concrete base; chiseled square 762. 28

Nearman sta., 0.5 mi . E. of, at approximate center of sec. 24, T. 10 S., R. 24 E., 23 ft . W. and 38 ft . S. from main R. R. track at rd. crossing, at NE. corner of small concrete highway bridge, in concrete wall; standard tablet stamped "T T 25 J 1933 761"
760.829

Nearman sta., 0.9 mi . E. of, at E. end of sidetrack and on N. side of main track, on SE. corner of concrete base of electric control box; chiseled square
762. 04

Nearman sta., 1.5 mi . E. of, in SW.1/4 sec. 19, T. 10 S., R. 25 E., 20 ft. E. of "bell" rd. crossing, on N. side of tracks, at SW. corner of concrete base of electric control box; chiseled square
766. 17
T. 10 S., R. 25 E., at approximate center sec. $30,60 \mathrm{ft}$. E. and 10 ft . S. from junction of rd. marking western limits of Kansas City and rd. NW., in root on N. side of $24-\mathrm{in}$. walnut tree; copper nail and washer.
883. 97

Kansas City, 25 ft . N. and 25 ft . E. from intersection of Brown Avenue (Leavenworth rd.) and N-N, strect marking city limits, on concrete curb; chiseled square $\qquad$
Kansas City, 25 ft . N. and 15 ft . W. from intersection of 34th Street (State Highway 5) and Leavenworth rd., on concrete curb; chiseled square

## From Kansas City at crossing of Quindaro Avenue and city boundary line north along Fairlax Road to Missouri River (by L. V. Johnson in 1933)

Kansas City, at northeastern city limits, 25 ft . N. and 25 ft . W. from
intersection of Quindaro Avenue and Missouri Pacific R. R., at SE. corner of concrete base of electric signal post; chiseled square ......

Feet
753.81

Kansas City, about 1.9 mi . along Fairfax Road N. of city limits, in center of sec. 27, T. 10 S., R. 25 E., near Fairfax Landing Field, 485 ft . E. of iron pin at junction of Clark and Reimer rds. (marking center of sec. 27), 31.9 ft . W. and 37.7 ft . N. from intersection of Fairfax and Reimer rds., in concrete post; standard tablet stamped "T T 17 BO 1933"
744. 811

Reference mark, 70 ft . S. of tablet, on top of fire hydrant; S. nut....

Kansas City, at Kansas end of intercity viaduct, at end of approach slab of lower deck, near rail post, on curb; chiseled square

# BONNER SPRINGS QUADRANGLE ${ }^{\text {S }}$ 

[Latitude $39^{\circ}-39^{\circ} 15^{\prime}$; longitude $94^{\circ}-45^{\prime}-95^{\circ}$ ]
JOHNSON, LEAVENWORTH, AND WYANDOTTE COUNTIES

> From Olathe No. 2 quadrangle along roads generally north by way of Quivera Lake and across Kansas River to point on J. S. Highway 40 near crossing of Mill Creek, thence east along highway into Armourdale quadrangle (by L. V. Johnson in 1933)

Greenwood School, 50 ft . W. and 20 ft . N. from NW. corner of, at cor. secs. 8, 9, 16, and 17, T. 12 S., R. 24 E., 100 ft . E. and 100 ft. S. from rd. forks, in root on SW. side of $30-\mathrm{in}$. oak tree; copper nail and washer
Quivera Lake dam, 1.5 mi . S. of, 1.5 mi . NW. of Greenwood School, at quarter cor. between secs. 7 and 8, T. 12 S., R. 24 E., 100 ft . N. and 23 ft . E. from junction of T-rd. W., in concrete post; standard tablet stamped "T T 301933 994"
Quivera Lake dam, 0.8 mi . S. of, about 0.7 mi . S. of Johnson-Wyandotte county line, 0.2 mi . N. of cor. secs. $5,6,7$, and 8, T. 12 S ., R. 24 E., 30 ft . E. of junction of T-rd. W., in root on SW. side of 18 -in. oak tree; copper nail and washer.
985. 33

Quivera Lake dam, 0.3 mi . N. of, 1.8 mi . SW. of Morris, 0.3 mi . N. of Wyandotte-Johnson county line, 0.2 mi . S. of Kansas River, about 500 ft . N. of cor. secs. 5, 6, 31, and 32, Tps. 11 and 12 S ., R. 24 E., at NW. corner of concrete highway bridge over drain, on concrete head wall; chiseled square
767. 94

Morris, about 0.8 mi . SW. of, 0.3 mi . S. of cor. secs. 28, 29, 32, and 33, T. 11 S., R. 24 E., 450 ft: E. of crossroads, at SE. corner of concrete culvert; chiseled square
775. 45

Morris, about 0.4 mi . S. of, 22 ft . W. and 7 ft . N. from center of crossroads, on $N$. concrete head wall of culvert; chiseled square
768. 45

Morris, 0.2 mi . N. of, at approximate center of sec. 28 , T. 11 S ., R. 24 E., 94 ft . S. and 20 ft . W. from junction of T-rd. S., $2 \mathrm{ft} . \mathrm{W}$. of fence line, in concrete post; standard tablet stamped "T T 40 1933 763"
763. 436

[^3]Reference mark, 350 ft . S. of tablet, at fire hydrant; center of top of plug ..... 767. 16
T. 11 S., R. 24 E., near cor. secs. 20, 21, 28, and 29, 10 ft . N. and 20ft. W. from junction of State Highway 32 and rd. NW. (GrinterRoad), 50 ft . SW. of waiting room of Kansas City, Kaw Valley \&Western Ry. (electric), on W. head wall of concrete culvert; chis-eled square781. 44
Grinter Chapel, 0.1 mi . E. of, 1.0 mi . S. of village of Stony Point, onGrinter Road 0.5 mi . N. of its junction with State Highway 32, atquarter cor. between secs. 20 and 21, T. 11 S., R. 24 E., 15 ft . S.and 15 ft . W. from center of crossroads, on W. end of corrugated-iron culvert; chiseled square833. 14
Stony Point village, near quarter cor. between secs. 16 and 17, T. 11 S., R. 24 E., 47 ft . S. and 21 ft . E. from SE. corner of schoolhouse, 30 ft . W. of center line of N.-S. rd., in schoolyard, 3 ft . W. of retain- ing wall, in concrete post; standard tablet stamped "T T 80 1933 901" ..... 900. 490
Reference mark, 3 ft . E. of tablet, on concrete retaining wall; chiseled square ..... 901.05
Stony Point village, 0.5 mi . N. of, on Grinter Road, at cor. secs. 8 ,9,16 , and 17, T. 11 S., R. 24 E., 20 ft . W. and $15 \mathrm{ft} . \mathrm{N}$. from cen-ter of crossroads, on N . end of $24-\mathrm{in}$. concrete culvert; chiseledsquare864. 54

Stony Point village, 1.5 mi N. of, at cor. secs. 4, 5, 8, and 9, T. 11 S., R. 24 E., 40 ft . S. and 20 ft . W. from junction of Reidy Road and T-rd. S., in root on E. side of 18 -in. elm tree; copper nail and washer
Stony Point village, 1.5 mi . N., thence 0.5 mi . W. from, 1.6 mi E. of Wyandotte County Home, at quarter cor. between secs. 5 and 8 , T. 11 S., R. 24 E., 42 ft . N. and 15 ft . E. from junction of Reidy Road and T-rd. N., on N. corner of E. head wall of concrete culvert; chiseled square
Victory Hills Golf Club, about 1.5 mi . along U. S. Highway 40 W . of, at NW. cor. NE $1 / 4 \mathrm{sec} .5, \mathrm{~T} .11 \mathrm{~S} ., \mathrm{R} .24 \mathrm{E} ., 0.4 \mathrm{mi}$. W. of crossing of Mill Creek, 35 ft . E. and 15 ft . S. from junction of highway and T-rd. S., on concrete head wall of culvert; chiseled square $\qquad$
Victory Hills Golf Club, 0.8 mi . along U. S. Highway 40 W . of, about 900 ft . E. of N. cor. secs. 4 and 5, T. 11 S., R. 24 E., about 0.2 mi . E. of crossing of Mill Creek, 35 ft . N. and 24 ft . E. from junction of highway and T-rd. N., 3 ft . N. and 15 ft . E. from corner fence post, in concrete post; standard tablet stampod "T $\boldsymbol{T}$ o 0 910".Reference mark, at junction of T-rd. N., on concrete head wall of culvert; chiseled square
910. 117
911.94

From Olathe No. 2 quadrangle northwest along old State Highway 10 to Zarah, thence southwest, northwest, and north along roads to point on U. S. Highway 40 about 3 miles west of Maywood, thence east along highway to road forks 2.5 miles west of Victory Hills Golf Club (by L. V. Johnson in 1933)
[Line jogs into Olathe No. 2 quadrangle]
Zarah, 1.6 mi . SE. of, near cor. secs. 13, 18, 19, and 24, T. $12 \mathrm{~S} .$, Rs. 23 and $24 \mathrm{E}, 15 \mathrm{ft}$. V. and 50 ft . E. from center of erossroads, on W. end of concrete head wall of culvert; chiseled square 827. 31

Zarah, about 1 mi . SE. of, near approximate center of sec. 13, T. 12 S., R. 23 E., 15 ft . E. and 25 ft . S. from junction of highway and rd. fork NE., on W. end of concrete head wall of culvert; chiseled square

Fect
799. 89

Zarah, about 500 ft . W. of post office, 50 ft . W. of rd. forks, on concrete head wall of culvert; chiseled square
840.87

Zarah, 0.5 mi . S. of, about 350 ft . W. and 150 ft . N. from quarter cor. between secs. 14 and 23, T. 12 S., R. 23 E., at junction of T-rd. N., 25 ft . W. of center line of route rd., in concrete post; standard tablet stamped "T T 12 O 1933824 "
823. 941

Reference mark, 140 ft . N. of tablet, 15 ft . W. of center line of rd., on S. end of W. head wall of concrete culvert; chiseled square
T. 12 S., R. 23 E., near quarter cor. between secs. 8 and 17, 25 ft . S. and 20 ft . W. from rd. forks, on W. concrete head wall of culvert; chiseled square
T. 12 S., R. 23 E., at approximate cor. secs. 7, 8, 17, and 18, 320 ft . N. of rd. corner, 20 ft . E. of bank of Kansas River, 12 ft . W. of center line of rd., in root on NE. side of giant maple tree; copper nail and washer

Reference mark, 36 ft . N. of tablet, 27 ft . N. of intersection of Front and Cedar Streets, on concrete curb; chiseled square
801.36

Bonner Springs, in NW. part of, near village limits, near quarter cor. between secs. 29 and 30, T. 11 S., R. 23 E., at SE. corner of Lakewood Park grounds, 20 ft . W. and 40 ft . N. from junction of rd. fork N., in root on W. side of $12-\mathrm{in}$. oak tree; copper nail and washer. -

Bonner Springs, about 1 mi . by rd. N. of, about 400 ft . E. of cor. secs. $19,20,29$, and 30 , T. 11 S., R. 23 E., 55 ft. E. and 15 ft. S. from junction of rd. fork SE., at SW. corner of large concrete culvert, on wing wall; chiseled square
854.39

Bonner Springs, 2.0 mi . N. and 0.5 mi . W. from, near cor. secs. 17, 18, 19 , and 20 , T. 11 S., R. 23 E., 140 ft. N. and 20 ft . E. from cross roads, in concrete post; standard tablet stamped "T T 14 O 1933 970 "
970. 184

138259-38-2

Reference mark, in NW. corner of crossroads, on N. end of corrugated


Feet 977. 79
T. 11 S., R. 23 E., near cor. secs. 7, 8, 17, and 18, 70 ft . S. and 18 ft . E. from center of crossroads, in fence line, in root on W. side of $6-\mathrm{in}$. oak tree; copper nail and washer
$1,003.07$
.T. 11 S., R. 23 E., at approximate cor. secs. 5, 6, 7, and 8, 600 ft . S. of crossroads, 22 ft . E. of center line of rd., on S. end of E. head wall of large concrete culvert over drain; chiseled square
904. 88

Maywood, 3.0 mi . W. of, 30 ft . S. and 72 ft . W. from NE. cor. sec. 6, T. 11 S., R. 23 E., at junction of U. S. Highway 40 and T-rd. S., in concrete post; standard tablet stamped "T T 1501933 973".-.--
Reference mark, 20 ft . S. and 15 ft . E. from above-mentioned rd. forks, on concrete head wall of culvert; chiseled square
972. 472
966. 74

Maywood, 2.6 mi . W. of, at N. cor. secs. 4 and 5, T. 11 S., R. 23 E., 15 ft . E. and 25 ft . S. from junction of U. S. Highway 40 and T-rd. S. (State Highway 7), on E. concrete head wall of culvert; chiseled

Maywood, 2.1 mi . W. of, at S. cor. secs. 32 and 33, T. 10 S., R. 23 E., 80 ft . E. and 18 ft . S. from junction of U. S. Highway 40 and T-rd. N., on E. concrete head wall of culvert; chiseled square $\qquad$
Maywood, 1.2 mi . W. of, near S. cor. secs. 33 and 34, T. 10 S., R. 23 E., 40 ft . E. and 20 ft . S. from junction of U. S. Highway 40 and T-rd. N., on E. concrete head wall of culvert; chiseled square
988.37

Maywood Church, in yard of, in NE. cor. sec. 3, T. 11 S., R. 23 E., 0.8 mi. W. of Maywood, on U. S. Highway 40, 9 ft . N. and 2 ft . NW. from church, in concrete post; standard tablet stamped "T T 160 1933 1037"

1, 036.624
Reference mark, 0.3 mi . E. of tablet, 100 ft . S. and 25 ft . W. from junction of highway and T-rd. S., on W. end of circular concrete culvert; chiseled square
$1,028.15$
Maywood, in village of, 0.2 mi . W. of S. cor. secs. 34 and 35, T. 10 S ., R. 23 E., 20 ft N . and 20 ft . E. from junction of U. S. Highway 40 and T-rd. N., on concrete head wall of culvert; chiseled square....-
Maywood, 0.9 mi. E. of, at S. cor. secs. 35 and 36, T. 10 S., R. 23 E., 30 ft . N. and 30 ft . E. from junction of U. S. Highway 40 and T-rd. N., on E. concrete head wall of culvert; chiseled square
970.65

Maywood, about 2 mi . E. of, 2.5 mi . W. of Victory Hills Golf Club, at approximate SE. cor. sec. 36, T. 10 S., R. 23 E., 31 ft . N. and 77 ft . E. from junction of U.S. Highway 40 and T-rd. N., in concrete post; standard tablet stamped "T T 1701933 957"
956. 687

Reference mark, 18 ft . S. of tablet, on N. edge of paving; chiseled square
956. 19

From Bonner Springs northeast and east along State Highway 32 to its junction with Grinter Road at point just across Kansas River from Morris (by L. V. Johnson in 1933)

Bonner Springs, 0.7 mi . NE. of, 12 ft . E. of SW. corner of highway bridge over drain, on concrete base of guard rail; chiseled square Bonner Springs, 1.2 mi . NE. of, about 400 ft . E. of entrance to Lone Star cement plant, 100 ft . N. and 15 ft . E. from jundtion of T-rd. N., at SE. corner of highway bridge over West Mission Creek, on concrete base of guard rail; chiseled square

Bonner Springs, 1.7 mi . NE. of, near E. $1 / 4$ cor. sec. 28, T. 11 S., R. 23 E., 65 ft . N. and 12 ft . W. from junction of T-rd. N. to Camp Theodore Naish (Boy Scouts), at SW. corner of concrete bridge, on base of guard rail; chiseled square
Edwardsville, 1.0 mi . W. of, in NE $14 \mathrm{SE} 1 / 4 \mathrm{sec} .27$, T. $11 \mathrm{~S} ., \mathrm{R} .23$ E., 40 ft . S. and 32 ft . E. from junction of highway and rd. N. to Lake of the Forest Club, 1.0 ft . W. of fence line, in concrete post; standard tablet stamped " 23 J 1933 775"
775. 280

Edwardsville, at E. edge of, 12 ft . N. and 15 ft . E. from junction of highway and T-rd. N., on E. concrete head wall of culvert; chiseled square
783. 58

Edwardsville, 1.0 mi . E. of, in SE14 sec. 25, T. 11 S., R. 23 E., 40 ft. NW. of Crestwood sta. of Kansas City, Kaw Valley \& Western Ry. (electric), 70 ft . N. and 15 ft . W. from junction of T-rd. N., on SW. corner of concrete culvert, on base of guard rail; chiseled square...
Edwardsville, 1.9 mi . E. of, in SE $1 / 4 \mathrm{sec} .30$, T. 11 S., R. 24 E., 82 ft . N. and 9 ft . W. from center of crossroads, 16 ft . N. and 9 ft . W. from N. rail of interurban electric $R$. R., at center of rd. crossing, at SW. corner of bridge over drain, in concrete abutment; standard tablet stamped " 24 J 1933 772".
771. 822

Reference mark, at SW. corner of crossroads, on concrete head wall of culvert; chiseled square
770. 14

Edwardsville, 2.6 mi . E. of, in NW $1 / 4 \mathrm{sec} .29$, T. 11 S., R. 24 E., 0.8 mi . SW. of junction of highway and Grinter Road, at NW. corner of concrete highway bridge over Little Turkey Creek, on base of guard rail; chiseled square

From rd. forks 3 miles west of Maywood west along U. S. Highway 40 into Oskaloosa No. 4 quadrangle (by R. F. Gallup in 1934)
Maywood, 3.6 mi . W. of, 60 ft . S. of center line of U. S. Highway 40, at Old Dutch Mill filling sta., on top of concrete foundation of 'gasoline pump; chiseled square
952. 80
T. 11 S., R. 22 E., in NE. cor. sec. 1, 175 ft . W. and 12 ft . S. from junction of U. S. Highway 40 and T-rd. S., on top of SW. wing wall of bridge over creek; chiseled square
863.63
T. 10 S., R. 22 E., 225 ft . W. and 28 ft . N. from E. $1 / 10$ cor. on S. side of sec. 36 , in root on N. side of 24 -in. elm tree; nail and washer
919. 94

Basehor, near E. $1 / 16$ cor. on N. side of sec. 2, T. 11 S., R. 22 E., at NE. corner of Red Rock filling sta., on top of concrete pedestal; chiseled square
969.82

Basehor, 1 mi . S. of, near S. cor. secs. 34 and 35, T. 10 S., R. 22 E., $98 \mathrm{ft} . W$. and $25 \mathrm{ft} . \mathrm{N}$. from center of crossroads, at turn in U. S. Highway 40, in concrete post; standard tablet stamped "T T 190 1934"
962. 189

Reference mark, 70 ft . S. and 64 ft . E. from tablet, on N. side of NW $1 / 4$ sec. 2 , T. 11 S., R. 22 E., 34 ft . W. and 45 ft . S. from crossroads, in root on W. side of $24-\mathrm{in}$. elm tree; nail and washer $\qquad$
T. 10 S., R. 22 E., near SW. cor. sec. $34,475 \mathrm{ft}$. E. and 20 ft . N. from crossroads, in root on S. side of cottonwood tree on fence line; nail and washer
960.47
T. 11 S., R. 22 E., near NW. cor. NW 34 sec .4 , in root on S. side of elm tree; nail and washer
857.87
T. 10 S., R. 22 E., near S. cor. secs. 32 and $33,30 \mathrm{ft}$. N. and 80 ft . E. from center of crossroads, in root on N. side of smooth-bark hickory tree; nail and washerT. 11 S., R. 22 E., 342 ft . E. and 20 ft . S. from quarter cor. betweensecs. 4 and 5 , in root on $S$. side of 28 -in. walnut tree; nail andwasher
T. 11 S., R. 22 E., about 230 ft . S. and 16 ft . W. from center of sec. 5 , in root on $N$. side of large forked sycamore tree; nail and washer. ..... 851. 20
From Oskaloosa No. 4 quadrangle southeast along roads across southwest corner of Bonner Springs quadrangle into Olathe No: 2 quadrangle (by R. F. Gallup in 1934)
T. 12 S., R. 22 E., near quarter cor. between secs. 5 and 8, 40 ft. N. and 15 ft . W. from junction of T-rd. N., at fence corner, on top of tree stump in hedge; nail and washer- ..... 973.96
T. 12 S., R. 22 E., near cor. of secs. 4, 5, 8, and $9,125 \mathrm{ft}$. N. and 80 ft . E. of center of crossroads, in root on S . side of $10-\mathrm{in}$. box-elder tree; nail and washer ..... 964. 19
T. 12 S., R. 22 E., about 140 ft . S. and 250 ft . E. from quarter cor. between secs. 8 and 9, in root on E. side of box-elder tree; nail and washer ..... 932. 10
T. 12 S., R. 22 E., about 900 ft . N. and 20 ft . W. from center of sec. 9, on W. head wall of concrete culvert; chiseled square ..... 930. 23
From Olathe No. 2 quadrangle northeast along Union Pacific Railroad to Loring, thence generally east along road to point just east of Kansas River (by R. F. Gallup in 1934)

Lenape, 1.1 mi . NE. of, 1.6 mi . SW. of Loring, on Union Pacific R. R., near quarter cor. between secs. 13 and 14, T. $12 \cdot$ S., R. 22 E., at semaphore 224, on top of NW. corner of foundation; chiseled square788.60

Loring, 0.6 mi . SW. of, near center sec. 13, T. $12 \mathrm{~S} .$, R. 22 E., at semaphore 214, on top of NW. corner of foundation; chiseled square787. 56

Loring, in town of, in sec. 13, T. 12 S., R. 22 E., 13 ft . W. of center line of county-line rd. (between Leavenworth and Wyandotte Counties), 10 ft . SE. of SE. rail of four tracks of Union Pacific R. R., in concrete post; standard tablet stamped "T T 2301934 785".-
Reference mark, 225 ft . N. of tablet, in SW. angle of crossroads, at concrete bridge, in S. end of E. abutment; chiseled square785. 500

[^4]Loring (at Leavenworth-Wyandotte county line), 0.7 mi . by rd. NE. of, near center sec. 7, T. 12 S., R. 23 E., 30 ft . N. and 15 ft . W. from junction of T-rd. N., on W. head wall of concrete culvert; chiseled square
786. 38

Loring, 1.2 mi . by rd. E. of, on N. bank of Kansas River, in root on E. side of cottonwood tree; nail and washer
771. 36

From point on U.S. Highway 40 (Parallel Avenue) near center of west border of Bonner Springs quadrangle north and northeast along roads into Leavenworth quadrangle (by R. F. Gallup in 1934)

Basehor, 2 mi . W. and 1 mi . S. from, near S. cor. secs. 32 and 33, T. 10 S., R. $22 \mathrm{E}_{1,} 133 \mathrm{ft}$ N, and 18 ft . E. from crossroads, 158 ft . N. of hedge fence on Parallel Avenue, 18 ft . E. of N.-S. rd., in concrete post; standard tablet stamped "T T 250 1934".
846. 764
T. 10 S., R. 22 E., about 17 ft . N. and 14 ft . E. from quarter cor. between secs. 32 and 33, in root on $W$. side of hedge stump; nail and washer.
887. 86
T. 10 S., R. 22 E., at cor. secs. $28,29,32$, and 33,20 ft. S. and 14 ft . E. ..... Feetfrom junction of T-rd. S., in W. side of hedge tree; nail and washer .-916. 46
T. 10 S., R. 22 E., at quarter cor. between secs. 29 and $32,42 \mathrm{ft}$. N. and28 ft . W. from junction of E.-W. rd. and T-rd. N., in root on S. sideof oak tree; nail and washer875. 18
T. 10 S., R. 22 E., at cor. secs. 29, 30, 31, and 32, 19 ft. N. and 28 ft . E.from junction of route rd. and T-rd. N., in root on W. side of $24-\mathrm{in}$.elm tree; nail and washer874.66
T. 10 S., R. 22 E., 60 ft . N. and 22 ft . E. from quarter cor. between secs. 29 and 30 ; top of wild-cherry stump ..... 939. 70Basehor, 3 mi . W. and 1 mi . N. from, at approximate cor. secs. 19, 20,29 , and 30 , T. 10 S., R. 22 E., 25 ft . W. and 68 ft . N. from center ofcrossroads, 2 ft . W. of fence, in concrete post; standard tabletstamped "T T 26 O 1934 950"949. 461
Reference mark, about 65 ft . N. and 50 ft . E. from tablet, in root on E. side of 18 -in. oak tree; nail and washer ..... 943.79
T. 10 S., R. 22 E., 2,010 ft. S. and 30 ft . E. from cor. secs. 17, 18, 19, and 20, at concrete steps to house, in lower step; chiseled square ..... 847. 26
T. 10 S., R. 22 E., at cor. secs. $17,18,19$, and $20,180 \mathrm{ft}$. W. and 16 ft . S.from center of crossroads, on top of head wall of concrete culvert;chiseled square853. 72
T. 10 S., R. 22 E., 155 ft . S. and 25 ft . W. from quarter cor. betweensecs. 17 and 18 , on W. side of rd., in root on N. side of box-elder tree;nail and washer894. 60
T. 10 S., R. 22 E., at cor. secs. 7, 8, 17, and $18,20 \mathrm{ft}$. W. and 20 ft . S.from junction of E.-W. rd. and T-rd. S., in root on E. side of $36-\mathrm{in}$.elm tree; nail and washer862. 95T. 10 S., R. 22 E., $1,475 \mathrm{ft}$. N. and 10 ft . W. from quarter cor. betweensecs. 8 and 17 , on top of $W$. head wall of concrete culvert; chiseledsquare906. 23Fairmount, 2.5 mi . W. of, at approximate quarter cor. between secs. 5and 8, T. 10 S., R. 22 E., $1,270 \mathrm{ft}$. S. and 25 ft . E. from crossroads,in concrete post; standard tablet stamped "T T 27 O 1934"961. 457
Reference mark, 8 ft . N. and 144 ft . E. from center of above-mentioned crossroads, on N. end of steel culvert pipe; chiseled square948. 71
T. $10 \mathrm{~S} .$, R. 22 E., 28 ft . N. and 30 ft . W. from center of sec. 5 , in root on E. side of twin elm tree; nail and washer962. 54
T. 10 S., R. 22 E., in NW $1 / 4 \mathrm{sec} .5$, at point $1,637 \mathrm{ft}$. N. and 20 ft . W. from center of section, in root on E. side of elm tree; nail and washer987. 45
T. 9 S., R. 22 E., in NW $1 / 4$ sec. $32,275 \mathrm{ft}$. N. and 30 ft . W. from junction of N.-S. highway and T-rd. W., in root on E. side of cottonwood tree; nail and washer
T. 9 S., R. 22 E., about 430 ft . S. and 20 ft . E. from sixteenth cor. between $\mathrm{SW} 1 / 4$ and $\mathrm{SE} 1 / 4 \mathrm{sec}$. 29, on top of E . head wall of concrete culvert; chiseled square

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1,010.59
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Little Stranger Church, about 0.5 mi . S. of, at quarter cor. between secs. 28 and 29, T. 9 W., R. 22 E., 18 ft . S. and 30 ft . W. from junction of T-rd. W.; iron post stamped " 1043 "
1, 041.234
Reference mark, 30 ft . E. of above-mentioned post, on concrete culvert; chiseled square ..... 1, 040.97
Little Stranger Church, 0.05 mi . W. of, about 4 mi . (air line) W. ofLansing, at approximate cor. secs. 20, 21, 28, and 29, T. 9 S., R.22 E., 41 ft . N. and 43 ft . W. from center of crossroads, in concretepost; standard tablet stamped "T T 28 O 1934"1, 038.992

Reference mark, 76 ft . S. and 332 ft . W. from tablet, 30 ft . S. and 375 ft . W . from center of crossroads, on N. side of residence, in NE. corner of concrete floor of porch; chiseled square
Little Stranger Church, 0.5 mi . E. of, 1.4 mi . SW. of Hazel Dell School, about 10 ft . S . and 42 ft . E. from quarter cor. between secs. 21 and 28, T. 9 S., R. 22 E., in root on N. side of elm tree; nail and washer.-

> In northwest corner of quadrangle on east-west road between Iittle Stranger Church and Central (District 9) School (by R. F. Gallup in 1934; part of double-run tie line west and north to point in Oak Mills quadrangle)

Little Stranger Church, 1.1 mi . W. of, 0.3 mi . E. of Little Stranger Creek, 20 ft . S. and 510 ft . W. from crossroads at cor. secs. 19, 20, 29, and 30, T. 9 S., R. 22 E., in top of 24 -in. oak stump; nail
925. 01

> From Lansing, Leavenworth quadrangle, southeast along State Highway and Missouri Pacific Railroad into Armourdale quadrangle (by R. F. Gallup in 1934)

Lansing, at Kansas State Penitentiary, on S. side of depot and rest room, in SE. corner of concrete step; chiseled square
852. 07

Kansas State Penitentiary, 0.4 mi . SE. of, near quarter cor. on S. side of sec. 19, T. 9 S., R. 23 E., on S. side of rd. leading to Union Pacific R. R. sta., in root on N. side of oak tree; nail and washer
834. 32

Kansas State Penitentiary, 0.6 mi . SE. of, near quarter cor. on S. side of sec. 19, T. 9 S., R. 23 E., at highway bridge E. of Union Pacific R. R. pile trestle, in S. end of E. pier; chiseled square
775. 30
T. 9 S., R. 23 E., about 0.2 mi . E. of cor. secs. 19 and 20, in root on E. side of walnut tree; nail and washer
875. 23
T. 9 S., R. 23 E., near quarter corner between secs. 20 and 29,26 ft. N. and 25 ft . W. from junction of State Highway 5 and T-rd. SW., in root on E. side of maple tree; nail and washer
877. 15

Delaware triangulation sta. of Missouri River Commission; cap of iron pipe
958. 765

Delaware triangulation sta., about 120 ft . W. and 4 ft . N. from, in root on N. side of oak tree; nail and washer
950. 52
T. 9 S., R. 23 E., near center sec. 29, on W. side of State Highway 5, in root on $N$. side of elm tree; nail and washer
910. 88
T. 9 S., R. 23 E., at cor. secs. $28,29,32$, and $33,20 \mathrm{ft}$. W. and 20 ft . S. from junction of State Highway 5 and T-rd. W., at fence corner, in root on E. side of large oak tree; nail and washer
894. 75

Williams School, 1.3 mi W. of, at S. cor. between secs. 32 and 33, T. 9 S., R. 23 E., 1.0 mi . N. of Leavenworth-Wyandotte county line, 35 ft . S. and 27 ft . W. from crossroads, in root on E. side of elm tree; copper nail and washer
880. 56

Williams School, 0.8 mi . W. of, at quarter cor. on S. side of sec. 33, T. 9 S., R. 23 E., at right-angle bend in State Highway 5, 18 ft . N. and 18 ft . E. from junction of highway and rd. W., on stone head wall of culvert; chiseled square
832. 40

Williams School, 0.1 mi . NW. of, near NW. cor. sec. 3, T. 10 S., R. 23 E., on State Highway 5, about 500 ft . S. of T-junction, at concrete bridge over Little Snell Creek, on S. end of curb of E. girder; chiseled square
775. 75

Williams School, in yard of, near NW. cor. sec. 3, T. 10 S., R. 23 E., 0.1 mi. SE. of Little Snell Creek, 103 ft . S. and 60 ft . E. from SE. corner of schoolhouse, in concrete post; standard tablet stamped "3 G 1934 817"

Reference mark, at concrete steps to above-mentioned schoolhouse, 14
ft . W. and 7 ft . S. from SE. corner of building, on $W$. end of second


Feet
809.60

Williams School, 0.4 mi . SE. of, about 0.2 mi . NW. of center of sec. 3, T. 10 S., R. 23 E., at top of hill, on top of concrete foundation of gasoline pump; chiseled square
916. 46

Williams School, about 1.3 mi . SE. of, near NW cor. sec. 11, T. 10 S. , R. 23 E., 25 ft . W. of end of concrete pavement, on W. end of concrete pipe, chiseled square
787. 13

Williams School, 1.3 mi. SE. of, near NW. cor. sec. 11, T. 10 S., R. 23 E., 72 ft . E. and 21 ft . N. from junction of State Highway 5 and T- rd. S., on N. side of highway, on top of W. head wall of concrete culvert; chiseled square
773. 87

Wolcott, 1.3 mi . by R. R. NW. of, 1.7 mi . SE. of Williams School, at Missouri Pacific R. R. bridge over Island Creek (bridge 78), on W. end of S. abutment; chiseled square

Wolcott, 0.8 mi . NW. of, near NE. cor. of $\mathrm{SE} 1 / 4 \mathrm{sec} .11, \mathrm{~T} .10 \mathrm{~S} ., \mathrm{R}$. 23 E., at electric semaphore 299.4, on top of NE. anchor bolt; chiseled square
759. 90

Wolcott, in addition known as Connor, in SW $1 / 4$ sec. 12, T. 10 S., R. 23 E., 106 ft . E. and 23 ft . S. from crossing of Elm Street and main track of R. R., in yard of Alfred Davis, in concrete post; standard tablet stamped "4 G 1934 758"
757. 797

Wolcott, in sta. park, at semaphore 298.6 R , on top of NE. anchor
bolt; chiseled square
Wolcott, 0.7 mi. by R. R. SE. of, near NE $1 / 4 \mathrm{sec} .13$, T. 10 S., R. 23 E., at SW. corner of concrete base of electric signal box; chiseled' square
762. 30

Wolcott, 1.2 mi . SE. of, 1.4 mi . NW. of Pomeroy, at semaphore 297.6 L., on top of NE. anchor bolt; chiseled square
756. 40

Pomeroy, 0.5 mi . NW. of, at Mo. Pac. R. R. bridge over Marshall Creek (bridge 76), on E. end of S. floor beam; chiseled square...-
Pomeroy, in village of, on R. R. tracks just S. of wooden pile trestle 75 A , at semaphore 296 A , on top of NW. corner of concrete foundation; chiseled square
757. 48

Pomeroy, in village of, near quarter cor. on N. side of sec. 20, T. 10 S., R. 24 E., just W. of R. R. tracks, 265 ft . E. and 17 ft . S. from SE. corner of old stone flour mill, in concrete post; standard tablet stamped " 5 G 1934 754"
Reference mark, 30 ft . S. of tablet, on W. side of R. R. right of way, in root on E. side of large maple tree; copper nail and washer
753. 943

Pomeroy, 0.8 mi . by R. R. SE. of, near NW. cor. sec. 21, T. 10 S. , R. 24 E., at electric signal box, on top of SE. corner of concrete foundation; chiseled square
754. 46
758.60

## From point on U.S. Highway 40 about 2 miles west of May wood north along road to its intersection with east-west road at point 1.3 miles west of Williams School (by R. F. Gallup in 1934)

Piper, 0.6 mi . S. of, just S. of quarter cor. between secs. 32 and 33 , T. $10 \mathrm{~S} .$, R. $23 \mathrm{E} ., 0.4 \mathrm{mi}$. N. of junction of route rd. with U. S. Highway 40, on W. head wall of concrete culvert; chiseled square -
Piper, at cor. secs. 28, 29, 32, and 33, T. 10 S., R. 23 E., 18 ft . N. and 22 ft . E. from crossroads, on concrete foundation of gasoline pump; chiseled square

Piper, 1.0 mi . N. of, near cor. secs. 20, 21, 28, and 29, T. 10 S., R. 23 E., 245 ft . N. and $20 \mathrm{ft} . \mathrm{W}$. from crossroads, on top of tree stump; copper nail and washer.

Feet 951. 25

Piper, 1.5 mi . N. of, near E. quarter cor. séc. 20, T. 10 S., R. 23 E., on W. side of rd., in root on $E$. side of walnut tree; nail and tin washer
971. 09

Piper, 1.9 mi . N. of, near NE. cor. sec. 20 (NW. cor. sec. 21?), T. 10 S., R. 23 E., 658 ft . S. and 23 ft . W. (E.?) from crossroads, in concrete post; standard tablet stamped "T T 29 O 1934"
945. 642

Reference mark, $33 \mathrm{ft} . \mathrm{N}$. and 18 ft . W. from tablet, in root on E. side of 8 -in. walnut tree; copper nail and washer
944. 70
T. 10 S., R. 23 E., at cor. secs. $16,17,20$, and $21,16 \mathrm{ft}$. E. and 20 ft . S. from crossroads, on granite block; chiseled square
900. 03

Piper, 2.5 mi . N. of, at quarter cor. between secs. 16 and 17, T. 10 S ., R. 23 E., 78 ft . W. of junction of T-rd. E., on W. head wall of concrete culvert; chiseled square
Piper, 2.8 mi . N. of, near cor. secs. 8, 9, 16, and 17, T. 10 S., R. 23 E., $0.2 \mathrm{mi} . \mathrm{S}$. of crossroads, at steel highway bridge over Island Creek, on N . end of W . truss; top of post supporting hand rail
843. 90

Piper, 3.0 mi . N. of, at cor. secs. 8, 9, 16, and 17, T. 10 S., R. 23 E., 0.2 mi . N. of Island Creek, 18 ft . E. and 16 ft . N. from crossroads, in root on W. side of elm tree; copper nail and washer
856. 39

Piper, 3.4 mi . N. of, 0.6 mi . S. of Wyandotte-Leavenworth county line, about 65 ft . S. and 18 ft . E. from NW. cor. SW $1 / 4 \mathrm{sec} .9, \mathrm{~T} .10$ S., R. 23 E., on E. head wall of concrete culvert; chiseled square. -

Wallula, 2 mi . E. and 1 mi . N. from, 3.7 mi . N. of Piper, $1,304 \mathrm{ft}$. S. and 23 ft . E. from N. cor. secs. 8 and 9 , T. 10 S., R. 23 E., 0.2 mi . S. of Wyandotte-Leavenworth county line, at top of hill, 23 ft . E. of center line of $\mathrm{N} .-\mathrm{S}$. rd., 11 ft . N. of hedge-fence line, in concrete post; standard tablet stamped "T T 30 O 1934"
895. 02
964. 297
T. 10 S., R. 23 E., near N. cor. secs. 8 and 9, on Wyandotte-Leavenworth county line, 50 ft . S . and 15 ft . E. from junction of T-rd., on E. head wall of concrete culvert; chiseled square
888. 18
T. 9 S., R. 23 E., about 20 ft . E. of NW. cor. of $\mathrm{SW} 1 / 4 \mathrm{sec} .4,0.5 \mathrm{mi}$. S. of intersection of route rd. and E.-W. rd. (E. to Williams School), 0.5 mi . N. of Leavenworth-Wyandotte county line, on knot near ground on corner post; nail and washer
869. 98

## CHEROKEE QUADRANGLE

[Latitude $37^{\circ} 15^{\prime}-37^{\circ} 30^{\prime}$; longitude $94^{\circ} 45^{\prime}-95^{\circ}$ ]
CHEROKEE AND CRAWFORD COUNTIES

> From Columbus quadrangle at point near its north west corner north along road about 0.2 mile to crossroads, thence east along road near south border of Cherokee quadrangle into Pittsburg quadrangle (by F. L. Whaley in 1916; Ieveled twice)
T. 32 S., R. 22 E., 25 ft . S. and 18 ft . W. from cor. secs. $15,16,21$, and 22, at SW. corner of crossroads; iron post stamped "Prim Trav Sta No 181916 874"'
870. 923
T. 32 S., R. 22 E., 10 ft S. and 27 ft . W. from center of crossroads at cor. secs. $14,15,22$, and 23 , in SE. wing wall of concrete culvert; chiseled square
868.56
T. 32 S., Rs. 22 and 23 E., 15 ft . N. and 150 ft . E. from center of crossroads at cor. secs. $13,18,19$, and 24 , on N. side of E.-W. rd.; iron post stamped " 880 1916"

Reference mark, 8 ft . S. and 135 ft . W. from above-mentioned iron
post, 7 ft . N. and 15 ft . E. from center of crossroads, on top of square sandstone rock in N . end of stone culvert; chiseled square

Feet
873. 75
T. 32 S., R. 23 E., at SW. cor. sec. 17, about 0.3 mi . W. of Cherry Creek, 10 ft . N. and 25 ft . E. from junction of T-rd. N., at N. end of concrete culvert, on top of guard wall; chiseled square
857.06

Cherry Creek, under iron bridge; surface of water July 22, 1916
T. $32 \mathrm{~S} ., \mathrm{R} .23$ E., 9 ft . N. and 18 ft . E. from center of crossroads at cor. secs. 16, 17, 20, and $21,0.7 \mathrm{mi}$. E. of Cherry Creek, on top of N. guard wall of concrete culvert; chiseled square
869.36
T. 32 S., R. 23 E., 20 ft . S. and 25 ft . E. from cor. secs. 15, 16, 21, and 22, at SE. corner of crossroads; iron post stamped "Prim Trav Sta No 171916 900"
897. 521
T. $32 \mathrm{~S} ., \mathrm{R} .23 \mathrm{E} ., 15 \mathrm{ft}$. N. and 50 ft . W. from center of crossroads at cor. secs. $14,15,22$, and $23,0.5 \mathrm{mi}$. W. of Little Cherry Creek, in root of $14-\mathrm{in}$. wild-cherry tree; copper nail and washer
T. 32 S., R. 23 E., 12 ft . N. and 21 ft . E. from center of crossroads at cor. secs. 13, 14, 23, and $24,0.5 \mathrm{mi}$. E. of Little Cherry Creek, on top of N. guard wall of concrete bridge; chiseled square .-.........
Skidmore, in NW. cor. sec. 19, T. 32 S., R. 24 E., in NW. cor. of schoolyard; iron post stamped "914 1916" (tied to U. S. C. \& G. S. line in 1935)
886.53
911. 575

Reference mark, 500 ft . E. of SW. cor. sec. 18, T. 32 S., R. 24 E., at NW. corner of highway crossing of interurban railway, in base of transmission-line pole; rail spike driven horizontally
916.06

Skidmore, 3 mi . E. of, in SE. cor. sec. 16, T. 32 S., R. 24 E., 24 ft . N. and 20 ft . W. from center of crossroads; iron post stamped " 927.4 "-
Reference mark, 12 ft . S. and 7 ft . E. from above-mentioned iron post, 12 ft . N. and 13 ft . W. from crossroads, at N. end of concrete culvert; chiseled square
924. 648
922. 78

Skidmore, 4 mi . E. of, 14 ft . N. and 12 ft . W. from center of crossroads at cor. secs. 14, 15, 22, and 23, T. 32 S., R. 24 E., in W. end of concrete culvert; chiseled square
893. 30

COLUMBUS QUADRANGLE
[Latitude $37^{\circ}-37^{\circ} 15^{\prime}$; longitude $94^{\circ} 45^{\prime}-95^{\circ}$ ]
CEEROKEE COUNTY
From Galena quadrangle near Baxter Springs west and south along roads into Wyandotte quadrangle (by F. L. Whaley in 1918)

Baxter Springs, about 1.5 mi . W. of city hall, 0.8 mi . NE. of Mount Hope School, 30 ft . W. and 12 ft . N. from center of crossroads at quarter cor. between secs. 2 and 3, T. 35 S., R. 24 E., in root of hard-maple tree; copper nail and washer
840.85

Mount Hope School, 1.7 mi . W. of, near NE. corner of crossroads at cor. secs. 4, 5, 8, and 9, T. 35 S., R. 24 E., at E. end of concrete culvert; chiseled square
836. 70

From Wyandotte quadrangle near Squaw and Slow Creeks north along road by way of Hallowell into Cherokee quadrangle (by F. I. Whaley in 1918; second half of line leveled twice)

Fairview School, 1.0 mi . S. of, 280 ft . S. of center of crossroads at cor. secs. $9,10,15$, and 16, T. 35 S., R. 22 E., on E. side of N.-S. rd., in root of large hard-maple tree; copper nail and washer

Fairview School, in NE. cor. sec. 9, T. 35 S., R. 22 E., at SW. corner of crossroads, at entrance of school, in N. end of concrete floor; chiseled square

Feet
Fairview School, 1.0 mi . N. of, 1.0 mi . S. of Pleasant Valley School, in NW. corner of crossroads at cor. secs. 33, 34, 3, and 4, Tps. 34 and $35 \mathrm{~S} .$, R. 22 E., at corner of fence, in root of hedge tree; copper nail and washer
809.65

Pleasant Valley School, in NW. cor. sec. 34, T. 34 S., R. 22 E., at crossroads, at entrance to school, in N. end of second concrete step; chiseled square
807.87

Pleasant Valley School, 1.0 mi . N. of, at crossroads at NE. cor. sec. 28, T. 34 S., R. 22 E., in corner of field; iron post stamped " 823 1916" -

Pleasant Valley School, 2.0 mi . N. of, 4.0 mi . S. of Globe School, 0.7 mi. S. of Fly Creek, 21 ft . E. and 18 ft . S. from center of crossroads at cor. secs. $15,16,21$, and 22 , T. 34 S., R. 22 E., in root of forked hard-maple tree; copper nail and washer
818. 27

Fly Creek, under iron bridge; surface of water Aug. 18, 1916.........
Globe School, 3.0 mi . S. of, about 0.3 mi . N. of Fly Creek, 200 ft . SE. of center of crossroads at cor. secs. $9,10,15$, and $16, \mathrm{~T} .34 \mathrm{~S}$., R. 22 E., in front yard of Steven dwelling, in root of $24-\mathrm{in}$. pine tree; copper nail and washer
816. 44

Globe School, 2.0 mi . S. of, at cor. secs. 3, 4, 9, and 10, T. 34 S., R. 22 E., in SE. corner of crossroads; iron post stamped " 833 1916".-
Globe School, in T. 33 S., R. 22 E., 25 ft . S. and 25 ft . E. from cor. secs. 27, 28, 33, and 34, at SE. corner of crossroads; iron post stamped "Prim Trav Sta 191916 839"
793.7
830. 231

Cherry Creek, under iron bridge; surface of water July 20, 1916
836. 768

Hallowell at cor secs 9, 10, 15, and 16 T. 33 S., P 22 corner of crossroads, at school, in NE. corner of schoolyard; iron post stamped "850 1916" (recovered by U. S. C. \& G. S. in 1933) --
847. 541

Reference mark, at entrance to school, in concrete floor of porch; chiseled square
848. 23

Crossroads School, at cor. secs. 3, 4, 33, and 34, T. 33 S., R. 22 E., 35 ft . N. and 24 ft . W. from center of crossroads, 6 ft . N. and 2 ft . E. from SE. corner of schoolyard; iron post stamped "875 1916"-...
Reference mark, 7 ft . S. and 33 ft . E. from above-mentioned iron post, 27 ft . N. and 9 ft . E. from center of crossroads, at N. end of concrete culvert, in top of guard wall; chiseled square
873.09

Crossroads School, 1.0 mi . N. of, 40 ft . S. and 9 ft . W. from center of crossroads at cor. secs. 27, 28, 33, and 34, T. 32 S., R. 22 E., at N. end of concrete culvert, in top of guard wall; chiseled square $\qquad$
Crossroads School, 2.0 mi . N. of, 1.0 mi . W. of Rising Sun School, 0.5 mi. N. of Deer Creek, 22 ft . N. and 6 ft . W. from center of crossroads at cor. secs. $21,22,27$, and 28 , T. 32 S., R. 22 E., in W. end of concrete culvert; chiseled square
872. 239
850.84
865.04

From Cherokee quadrangle near Little Shawnee Creek south along road to Quaker station (by F. L. Whaley in 1916; leveled twice)

Sharon School, 3.0 mi . N. of, about 4 mi . E. of Skiamore, 0.6 mi . S. of Little Shawnee Creek, 18 ft . S . and 12 ft . E. from center of crossroads at cor. secs. $22,23,26$, and 27 , T. 32 S ., R. 24 E., in E. end of small concrete culvert; chiseled square
910. 94

Sharon School, 2.0 mi . N. of, 15 ft . S. and 8 ft . E. from center of crossroads at cor. secs. 26, 27, 34, and 35, T. 32 S., R. 24 E., in E. end of concrete culvert; chiseled square

Sharon School, 1.0 mi . N. of, at SE. cor. sec. 34, T. 32 S., R. 24 E., at NW. corner of crossroads, at corner of hedge fence, in root of 18in. maple tree; copper nail and washer

Feet
874.59

Sharon School, 180 ft . NW. of center of crossroads at cor. secs. 2, 3, 10, and 11, T. 33 S., R. 24 E., at entrance to school, on N. end of bottom concrete step; chiseled square
898. 85

Sharon School, 1.0 mi . S. of, about 3 mi . N. of Quaker sta. on Missouri-Kansas-Texas R. R., in SE. corner of crossroads at cor. secs. 10, 11, 14, and 15, T. 33 S., R. 24 E., 3 ft . S. and 2 ft . W. from NW. corner of yard in front of dwelling of S. J. Hannon; iron post stamped "909 1916" (tied to U. S. C. \& G. S. line in 1935) .......
Reference mark, 160 ft . S. of center of above-mentioned crossroads, on E. side of N.-S. rd., in root of $16-\mathrm{in}$. hedge tree; copper nail and washer
907. 068

Quaker sta., 2.1 mi . N. of, 14 ft . N. and 10 ft . E. from center of crossroads at cor. secs. $14,15,22$, and 23, T. $33 \mathrm{~S} .$, R. 24 E ., in top of large sandstone block used as capstone for E . end of iron culvert; chiseled square
Quaker sta., 1.1 mi . N. of, 210 ft . S. of center of crossroads at cor. secs. $22,23,26$, and 27 , T. 33 S., R. 24 E., on top of guard wall in E. end of concrete culvert; chiseled square
907. 32

From Galena quadrangle just south of Timbered Hills west along road to Globe School (by F. L. Whaley in 1916; second half of line leveled twice)
Quaker sta. (on Joplin branch of Missouri-Kansas-Texas R. R.), about 1.2 mi . N. of, at NE. corner of crossroads at cor. secs. 26, 27, 34 , and 35, T. 33 S., R. 24 E., on top of N. guard wall of concrete culvert; chiseled square
871. 99

Capron School, 0.3 mi . E. of, 1 mi . W. of Quaker sta., 100 ft . E. of S . cor. secs. 27 and 28, T. 33 S., R. 24 E., at junction of E.-W. rd. and T-rd. N., on S. side of E.-W. rd., in top of flat rock near small drain; chiseled square
840.61

Capron School, 0.7 mi . W. of, about 0.3 mi . E. of crossing of Brush Creek, at S. cor. secs. 28 and 29, T. 33 S., R. 24 E., at NE. corner of junction of route rd. and T-rd. N., at E. end of concrete culvert, on top of guard wall; chiseled square
845. 24

Brush Creek, at iron bridge over; surface of water July 15, 1916
831.8

Brush Creek, 0.8 mi . W. of, 3.0 mi . E. of Mitchell School, 15 ft . S. and 170 ft . W. from center of crossroads at cor. secs. 29, 30, 31, and 32, T. 33 S., R. 24 E., on S. side of E.-W. rd.; iron post stamped " 892 1917"
889. 759

Reference mark 1, 15 ft . SE. of center of above-mentioned crossroads, on top of sandstone ledge; chiseled square
885. 53

Reference mark 2, 23 ft . NE. of center of above-mentioned crossroads, on top of sandstone ledge near drain; chiseled square
883.64

Mitchell School, 2.0 mi . E. of, about 2.5 mi . S. of Columbus, 0.5 mi . N. of Morrow School, 30 ft . NW. of center of crossroads at cor. secs. $25,30,31$, and 36 , T. 33 S., Rs. 23 and 24 E., on N. guard wall of concrete culvert; chiseled square
896. 10

Mitchell School, 60 ft . SW. of center of crossroads at cor. secs. 26, 27, 34, and 35, T. 33 S., R. 23 E., 30 ft . S. of SW. corner of school building, in base of catalpa tree at point 3 ft . above ground; copper nail and washer.
888.04

Mitchell School, 1.0 mi . W. of, 25 ft . S. and 35 ft . E. from cor. secs. 27,

28,33 , and 34, T. 33 S., R.. 23 E., at SE. corner of crossroads; iron

Feet
881.425

Mitchell School, 2.0 mi . W. of, 1.0 mi . S. of Jenesse School, 260 ft . E. of crossroads at cor. secs. $28,29,32$, and 33, T. 33 S., R. 23 E., on N. guard wall of concrete culvert over small drain; chiseled square
863. 97

Globe School, 3.0 mi . E. of, at NW. cor. sec. 31, T. 33 S., R. 23 E., in SE. corner of crossroads; iron post stamped "889 1916"
886. 486

Reference mark, NW. of above-mentioned iron post, in SE. cor. sec. 25, T. 33 S., R. 22 E., 42 ft . N. of E.-W. rd., on E. side of driveway to residence of John Sales, in root of $14-\mathrm{in}$. maple tree; copper nail and washer.
887. 40

Globe School, 2.0 mi . E. of, 15 ft . N. and 8 ft . E. from center of crossroads at cor. secs. $25,26,35$, and 36 , T. 33 S., R. 22 E., at E. end of wooden bridge, on top of flat sandstone rock; chiseled square $\qquad$
Globe School, 1.0 mi . E. of, 10 ft . N. and 25 ft . W. from center of crossroads at cor. sees. $26,27,34$, and 35, T. 33 S., R. 22 E., in N. end of concrete culvert; chiseled square

> From Galena quadrangle south of Joplin branch of Missouri-Kansas-Texas Railroad west along road to point 0.9 mile south of Quaker station, thence south to point 1 mile south of Pleasant View School, thence west to point 1 mile north of Pleasant Valley School (by F. L. Whaley in 1916)

Quaker sta., 1.0 mi . S. of, about 1 mi . N. of Brush Creek School, 48 ft . E. and 12 ft . S. from junction of T-rd. E. at cor. secs. 2, 3, 34, and 35, Tps. 33 and 34 S., on top of brown-sandstone rock; chiseled square_-
Brush Creek School, 230 ft . S. of center of crossroads at cor. secs. 2, 3, 10, and 11, T. 34 S., R. 24 E., at entrance to schoolhouse, on S. end of bottom step; chiseled square
949.32
860.51

Brush Creek School, 1 mi . S. of, 1.0 mi . N. of Pleasant View School, at SW. corner of crossroads at cor. secs. 10, 11, 14, and 15, T. 34 S., R. 24 E., on bank of drain, in root of 18 -in. elm tree; copper nail and washer
808. 77

Brush Creek, at ford near quarter cor. between secs. 14 and 15, T. 34 S ., R. 24 E.; surface of water August 3, 1916
793. 7

Pleasant View School, 200 ft . NW. of center of crossroads at cor. secs. $14,15,22$, and 23, T. 34 S., R. 24 E., at entrance to schoolhouse, on E. side of concrete platform; chiseled square
846. 34

Pleasant View School, 1.0 mi . S. of, 0.3 mi . E. of Frisco Ry., at SW. corner of crossroads at cor. secs. 22, 23, 26, and 27, T. 34 S., R. 24 E., 10 ft . W. of fence corner; iron post stamped " 853 1917"
850. 340

Reference mark, 960 ft . W. of above-mentioned crossroads, at SE. corner of yard of dwelling of C. W. Shank, in root of $12-\mathrm{in}$. walnut tree; copper nail and washer
854. 06
T. 34 S., R. 24 E., in SW. corner of crossroads at cor. secs. 21, 22, 27, and $28,0.7 \mathrm{mi}$. W. of Frisco Ry., in root of $24-\mathrm{in}$. hard-maple tree; copper nail and washer
846. 92

Elm Tree School, 0.6 mi . S. of, in NE. corner of crossroads at cor. secs. $20,21,28$, and 29, T. 34 S., R. 24 E., in guard wall at E. end of concrete culvert; chiseled square
856. 05
T. 34 S., R. 24 E., 10 ft . W. of SW. corner of crossroads at cor. secs. 19, 20, 29 , and $30,2 \mathrm{ft}$. N. of E.W. fence; iron post stamped "866 1917"
863. 816

Reference mark, in SW. corner of above-mentioned crossroads, 10 ft . S. of fence corner, in root of tall 18 -in. poplar tree; nail and washer. -
T. 34 S., Rs. 23 and $24 \mathrm{E} ., 900 \mathrm{ft}$. W. of center of crossroads at cor. secs.$19,24,25$, and 30 , in front of dwelling of Gage Stusse, on S. side ofE.-W. rd., in root of $14-\mathrm{in}$. hedge tree; copper nail and washer
Feet
897.09
Tar Valley School, 2.7 mi . N. of, on rd. from Columbus, 21 ft . S. and 7 ft . W. from center of crossroads at cor. secs. $23,24,25$, and 26 , T. 34 S., R. 23 E., in W. end of concrete culvert; chiseled square...
T. 34 S., R. 23 E., in SW. corner of crossroads at cor. secs. 22, 23, 26, and 27 , in S. end of concrete culvert; chiseled square
902. 88

T. 34 S., R. 23 E., 45 ft . E. and 15 ft . N. from center of crossroads at cor. secs. 21, 22, 27, and 28; iron post stamped "884 1916"--.-.-
Mount Pisgah School, 1.0 mi . E. of, in SW. corner of crossroads at cor. secs. $20,21,28$, and 29, T. $34 \mathrm{~S} ., \mathrm{R} .23 \mathrm{E}$., in root of $18-\mathrm{in}$. catalpa tree; copper nail and washer
868. 37
Mount Pisgah School, 16 ft . N. and 9 ft . W. from center ${ }_{H}$ of crossroads at cor. secs. 19, 20, 29, and 30, T. 34 S., R. 23 E., in W. end of concrete culvert; chiseled square
846. 41
Mount Pisgah School, 1.0 mi . W. of, in SW. corner of crossroads at cor. secs. 19, 30, 24, and 25, T. 34 S., Rs. 22 and 23 E., 4 ft . W. of corner fence post; iron post stamped "887 1916"
Melrose, 2 mi . N. of, 18 ft . S. and 10 ft . E. from center of crossroads at cor. secs. $23,24,25$, and 26 , T. 34 S., R. 22 E., at E. end of stone culvert, on top of sandstone block in N. wing wall; chiseled square . -
T. 34 S., R. 22 E., 500 ft . E. of cor. secs. 22, 23, 26, and 27, 190 ft . E. of mail box in front of dwelling of A. R. Nash, on top of N. guard wall of small concrete bridge; chiseled square
915.93
881.943
884. 069
847.06
817.57

From Cherokee quadrangle at point 1 mile west of Skidmore School south along road by way of Columbus to point 1 mile east of Mitchell School (by F. L. Whaley in 1916)

Belleview School, about 0.3 mi. E. of, 1.5 mi . S. and W. from Skidmore, 181 ft . S. and 4 ft . W. from center of crossroads at cor. secs. 23, 24 , 25 , and 26, T. 32 S., R. 23 E., in W. guard wall of concrete bridge; chiseled square
887. 95

Stippville, 1.0 mi . W. of, 24 ft . E. and 24 ft . S. from center of crossroads at cor. secs. $25,26,35$, and 36, T. 32 S., R. 23 E., near fence corner; iron post stamped "905 1917"
902. 523

Center Star School, 1.0 mi . E. of, 2.5 mi . N. of Columbus, at cor. secs. $1,2,35$, and 36 , Tps. 32 and $33 \mathrm{~S} ., \mathrm{R} .23$ E., at SW. corner of crossroads, in fork projection of corner fence post; copper nail and. washer
895. 38

Columbus, 1.5 mi . N. of, 33 ft . S. and 8 ft . E. from center of crossroads at cor. secs. 1, 2, 11, and 12, T. 33 S., R. 23 E., in top of E. guard wall of concrete culvert; chiseled square
900.33

Columbus, about 0.5 mi . N. of, at cor. secs. 11, 12, 13, and 14, T. 33 S ., R. $23 \mathrm{E} ., 300 \mathrm{ft}$. N. of sandstone marker of section corner, at concrete bridge over Brush Creek, on top of S. end of W. guard wall; chiseled square
894. 82

Columbus, 0.5 mi . W. of courthouse, 50 ft . SE. of quarter cor. between secs. 13 and 14, T. 33 S., R. 23 E., at SE. corner of Maple and High School Streets, in concrete sidewalk; chiseled square
903. 49

Columbus, 0.5 mi . W. of courthouse, at NE. corner of Maple and High School Streets, on top of fire plug; head of bolt in S. side of top plate_
Columbus, at courthouse, in SW. corner of stone floor of N. porch; standard tablet stamped "922 1916" (recovered by U. S. C. \& G. S. in 1933)
906.03
918. 942

Columbus, about 1.5 mi . S. of, 80 ft . SE. of center of crossroads at cor.
secs. 23, 24, 25, and 26, T. 33 S., R. 23 E., in NW. corner of yard in

Feet
912. 84

## From point 1 mile east of Mitchell School and 2.5 miles south of Columbus south along road to point 2.7 miles north of Tar Valley School (by F. L. Whaley in 1016)

Tps. 33 and 34 S., R. 23 E., 19 ft . N. and 6 ft . W. from center of crossroads at cor. secs. $1,2,35$, and 36 , at $W$. end of concrete culvert, on top of guard wall; chiseled square $\qquad$
T. 34 S., R. 23 E., at cor. secs. 1, 2, 11, and 12, in SW. corner of crossroads; iron post stamped "939 1916" $\qquad$
Potter School, about 0.5 mi . E. of, 19 ft . S. and 13 ft . E. from center of crossroads at cor. secs. 11, 12, 13, and 14, T. 34 S., R. 23 E., at E. end of concrete culvert, on top of guard wall; chiseled square
T. $34 \mathrm{~S} .$, R. $23 \mathrm{E} ., 30 \mathrm{ft}$. N. and 60 ft . W. from center of crossroads at cor. secs. $13,14,23$, and $24,100 \mathrm{ft}$. S. of dwelling of J. B. Martin, in root of hard-maple tree; copper nail and washer
925. 99
936. 353
920.06
979. 29

From point 2.7 miles north of Tar Valley School south along road into Wyandotte quadrangle (by F. L. Whaley in 1916)
T. 34 S., R. 23 E., 65 ft . S. and 23 ft . W. from center of crossroads at cor. secs. 25, 26, 35, and 36 ; iron post stamped " 867 1916"
865. 011

Tar Valley School, 0.3 mi . S. of, about 1.2 mi . N. of Kansas-Oklahoma State line, 31 ft . N. and 22 ft . W. from center of crossroads at cor. secs. 1, 2, 11, and 12, T. 34 S., R. 23 E., in yard in front of dwelling of C. L. Pickering at point 20 ft . N. of its SE. corner, in root of hardmaple tree; copper nail and washer
844. 96

## GALENA QUADRANGLE 0

[Latitude $37^{\circ}-37^{\circ} 15^{\prime}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ]
CHEROKEE COUNTY
From Columbus quadrangle near Baxter Springs east along road 4.8 miles, thence north by way of Galena to point on Missouri-Kansas State line in fractional sec. 12, T. 38 S., R. 25 E. (by D. C. Wray in 1800)

Baxter Springs, 51 ft . W. of SE. corner of city hall, in third course of stone below water table; aluminum tablet stamped " 842 CRTHG".-
T. 35 S., R. 25 E., in NE. cor. sec. 11, 24 ft . W. of corner stone; iron post stamped "1016 CRTHG" (on spur line)

1, 013.520
Galena, on W. side of Euclid Avenue, between 7th and 8th Streets, in foundation of school at point 2 ft . N. of its SE. corner; aluminum tablet stamped "976 CRTHG"
973. 650
911. 474

[^5]From NE. cor. T. 34 S., R. 24 E., west and north along roads to N. quarter cor. sec. 35, T. 38 S., thence west into Columbus quadrangle (by F. I. Whaley in 1916; leveled twice)
Quaker, 0.6 mi . E. of, 20 ft . N. of quarter cor. between secs. 26 and 35 , T. 33 S., R. 24 E., 0.3 mi . N. of Joplin branch of Missouri-Kansas- Texas R. R., at junction of E.-W. rd. and T-rd. S., on N. side of E.-W. rd.; iron post stamped "Prim Trav Sta No 151916 902"--

Feet

899. 715
900. 48

From NE. cor. T. 34 S., R. 24 E., north along road into Pittsburg quadrangle (by D. C. Wray in 1900 ; releveled by F. L. Whaley in 1916)
T. 34 S., R. 24 E., in NE. cor. sec. 1, about 0.03 mi . NE. of Missouri-Kansas-Texas R. R. tracks, 40 ft . S. and 30 ft . W. from sectioncorner stone in center of crossroads; iron post stamped " 862 CRTHG"
859.114
T. 33 S., Rs. 24 and 25 E., at cor. secs. 25, 30, 36, and 31,12 ft. N. and 6 ft . E. from center of crossroads, in top of sandstone rock supporting E. end of wooden culvert; chiseled square
880.83
T. 33 S., Rs. 24 and 25 E., 18 ft . N. and 6 ft . W. from center of crossroads, at cor. secs. $19,24,25$, and 30 , on top of sandstone rock at W. end of stone culvert; chiseled square
933. 76
T. $33 \mathrm{~S} .$, Rs. 24 and $25 \mathrm{E} ., 15 \mathrm{ft}$. E. and 9 ft . S. from center of crossroads, at cor. secs. $13,18,19$, and $24,0.5 \mathrm{mi}$. S. of crossing of St . Louis \& San Francisco Ry., on S. end of concrete culvert; chiseled square
899. 74
T. 33 S., Rs. 24 and 25 E., 15 ft . S. and 8 ft . W. from center of crossroads, at cor. secs. 7, 12, 13, and 18, 0.9 mi . S. of Shawnee Creek, 0.5 mi . N. of crossing of St. Louis \& San Francisco Ry., on W. end of concrete culvert; chiseled square
T. 33 S., R. 24 E., in NE. cor. sec. 1, 1.2 mi . N. of Shawnee Creek, 0.7 mi . S. of Little Shawnee Creek, 40 ft . S. and 15 ft . W. from section-corner stone in center of crossroads; iron post stamped " 893 CRTHG"
890. 702

From NE. cor. T. 33 S., R. 24 E., west along road into Columbus quadrangle (by F. L. Whaley in 1916)

Tps. 32 and 33 S., R. 24 E., at cor. secs. 1, 2, 35, and 36, 135 ft. E. and 15 ft . N. from center of crossroads, in root of hard-maple tree; nail

From iron post stamped " 914 CRTHG", on Missouri-Kansas State line, southeast along road to U. S. C. \& G. S. B. M. designated "P 20 1833", in Smithfield, Mo. (by A. C. McCutchen in 1935; double-run tie line)

Smithfield, Mo., about 1 mi . NW. of, on Kansas-Missouri State line, about 0.4 mi . S. of State Highway 34 (Missouri Highway 16), 43 ft . N. and 17 ft . E. from junction of center lines of State-line rd. and T-rd. E., in root on SW. side of 12 -in. elm tree; copper nail and washer (in Mo.)

# From Garden City west along Atchison, Topeka \& Santa Fe Railway into Lakin quadrangle (by J. C. Barber in 1896) 

Garden City, in front of telegraph office, on R. R. tracks; top of rail_- 2, 835.7
Garden City, on main street, in wall of old county courthouse, now occupied by George W. Finnup Land Co., at point 6 in. E. of its SE. corner and 2 ft . above sidewalk; standard tablet stamped "G 0 2832" (as recovered by U. S. C. \& G. S. in 1933)

2, 838.705
Garden City, on Grant Avenue, in S. wall of First National Bank building, 4 ft . W. of S . entrance, 1 ft . above sidewalk; standard tablet stamped "G 1 2830" (as recovered by U. S. C. \& G. S. in 1933)

2, 838. 157
Garden City, 3 mi . W. of, 3.8 mi . SE. of Holcomb, near N. quarter cor. sec. 15, T. 24 S., R. $33 \mathrm{~W} ., 48 \mathrm{ft}$. S. of R. R. track; iron post stamped "G 2 2853"

2, 861.022
Holcomb, 0.8 mi . SE. of, 450 ft . N. and 70 ft W. from E. quarter cor. sec. 7, T. 24 S., R. 33 W., about 200 yd . W. of milepost 408, 35 ft . S. of center line of R. R. tracks; iron post stamped "G 32870 " (as recovered by U.S. C. \& G. S. in 1934)
$2,877.993$

## GRANADA QUADRANGLE ?

# [Latitude $38^{\circ}-38^{\circ} 30^{\prime}$; longitude $102^{\circ}-102^{\circ} 30^{\prime}$ ] <br> GREELEY AND HAMILTON COUNTIES 

From Tribune quadrangle west along Atchison, Topeka \& Santa Fe Railway to Colorado-Kansas State line (by M. C. McFarlane in 1897)

Coolidge, 1.4 mi . W. of sta., in T. 23 S., R. 43 W., on W. side of sec. 22 and 23 ft . S. of its NW. cor., about 0.2 mi . E. of ColoradoKansas State line, 0.2 mi . W. of milepost $470,45 \mathrm{yd}$. S. of U. S. Highway 50, 40 ft . S. of center line of track; iron post stamped " G $223353^{\prime \prime}$ (as recovered by U. S. C. \& G. S. in 1934)

# HIAWATHA QUADRANGLE 

[Latitude $39^{\circ} 30^{\prime}-40^{\circ}$; longitude $95^{\circ} 30^{\prime}-96^{\circ}$ ]
ATCHISON, BROWN, JACKSON, AND NEMAHA COUNTIES

> From point on Kansas-Nebraska State line 2.5 miles south of Preston, Nebr., west along State-line road to point near SW. cor. sec. 35, T. 1 N., R. 15 E. (Nebr.) (by R. R. Monbeck in 1913)
Preston, Nebr., 2.5 mi . S., thence 0.3 mi . W. from, in $\mathrm{SE} 1 / 4 \mathrm{sec} .32$,
T. 1 N., R. 17 E. (Nebr.), 250 ft . N. of State-line rd., at barn on
Ingold farm, in S. wall of foundation; standard tablet stamped
1028 Prim Trav Sta No 22 Nebr 1913'' (in Nebr.) _-.................. 1, 026. 635.
T. 1 N., R. 17 E. (Nebr.), near S. quarter cor. sec. 36, at crossing of
Mo. Pac. R. R.; top of rail (in Nebr.).-.................................
893. 4
T. 1 S., R. 16 E., 0.2 mi . W. of NE. cor. sec. $3,30 \mathrm{ft}$. S. of State-line
rd., at dwelling of Fred Zorn, in base of limestone hitching post;
standard tablet stamped "1027 Prim Trav Sta 21 Nebr 1913"...... 1, 025. 528

[^6]T. 1 S., R. 16 E., near NE. cor. sec. 4, 0.7 mi . E. of Pony Creek, 50 ft .

T. 1 S., R. 16 E., near NE. cor. sec. $5,20 \mathrm{ft}$. S. and 140 ft . W. from junction of State-line rd. and T-rd. N., in root of elm tree; copper nail
935.02
T. 1 N., R. 16 E. (Nebr.), in SE $1 / 4$ sec. 31, 30 ft . N. and 500 ft . W. from junction of State-line rd. and T-rd. N., 150 ft . SW. of dwelling of William Boothe, in base of stone gatepost; standard tablet stamped "999 Prim Trav Sta 20 Nebr 1913" (in Nebr.)
997. 708
T. 1 N., R. 15 E. (Nebr.), in SW $1 / 4 \mathrm{sec} .35,200 \mathrm{ft}$. N. and $1,200 \mathrm{ft}$ E. from junction of State-line rd. and T-rd. N., on Amos Thompson farm, in W. foundation wall of barn at point 8 ft . N. of its SW . corner and 1.5 ft . above ground; standard tablet stamped " 1102 Prim Trav Sta No 19 Nebr. 1913 (in Nebr.)

1, 100. 835
From sec. 35, T. 1 N., R. 15 E. (Nebr.), west along State-line road into Humboldt quadrangle (by S. H. Birdseye in 1915)
T. 1 N., R. 15 E. (Nebr.), about 0.1 mi . W. of SE. cor. sec. 33, at NW. corner of bridge over Peedee Creek, in stringer; copper nail (in Nebr.)

1, 059.45
T. 1 S., R. 15 E., about 0.2 mi . E. of NW. cor. sec. $4,500 \mathrm{ft}$. W. of white house, in center of S. side of bridge over Peedee Creek, on planking; copper nail

1, 101.55
T. 1 N., R. 15 E. (Nebr.), near SE. cor. sec. 32, in NW. corner of junction of State-line rd. and T-rd. N.; top of flat rock (in Nebr.). 1, 133. 96

# HUMBOLDT QUADRANGLE ${ }^{\text {® }}$ 

[Latitude $40^{\circ}-40^{\circ} 15^{\prime}$; longitude $95^{\circ} 45^{\prime}-96^{\circ}$ ]
BROWN AND NEMAHA COUNTIES
From point on Kansas-Nebraska State line at middle of north border of Biawatha quadrangle west along State-line road to point between Honey and Rattlesnake Creeks (by S. H. Birdseye in 1915)
Salem, Nebr., 5.0 mi . S., thence 2.8 mi . W. from, in $\mathrm{SW} 1 / 4 \mathrm{sec} .32$, T. 1 N., R. 15 E. (Nebr.), in NE. corner of junction of State-line rd. and T-rd. N. to Littles Farm, 30 ft . N. of State-line rd., 25 ft . E. of T-rd.; iron post stamped " 1188 Prim Trav Sta 15 Nebr 1915" (in Nebr.)
$1,188.014$
T. 1 N., R. 15 E. (Nebr.), near S. quarter cor. sec. 31, 0.5 mi . E. of Brown-Nemaha county line, in NW. corner of bridge over Rabbit Creek; copper nail (in Nebr.)
$1,133.93$
T. 1 N., R. 14 E. (Nebr.), near SE. cor. sec. 36, 1,500 ft. E. of residence of Charnock Williamson, in NW. corner of junction of State-line rd. and T-rd. N., in brace of corner fence post at point 1.5 ft . above ground; copper nail (in Nebr.)
T. 1 N., R. 14 E. (Nebr.), in SW $1 / 4 / \mathrm{sec} .36$, in NE. corner of bridge over Rock Creek; bolt (in Nebr.)

1, 070.95
T. 1 N., R. 14 E. (Nebr.), near SE. cor. sec. 35, 0.7 mi . W. of residence of Charnock Williamson, 0.3 mi . W. of bridge over Rock Creek, in NE. corner of junction of State-line rd. and T-rd. N., on brace of corner fence post at point 0.5 ft . above ground; copper nail (in Nebr.)

[^7]T. 1 S., R. 14 E., 15 ft . S. and 50 ft . E. from N. quarter cor. sec. 3, 1.8 mi . W. of bridge over Rock Creek, 0.2 mi . E. of bridge over Honey Creek, at junction of State-line rd. and T-rd. N., on S. side of State-line rd., 5 ft . W. of telephone pole; iron post stamped " 1186 Prim Trav Sta 14 Nebr 1915"
Feet ..... $1,185.058$
T. 1 N., R. 14 E., 0.2 mi . W. of S. quarter cor. sec. 34, on N. side of W. end of bridge over Honey Creek, on iron brace beam; top of rivet (in Nebr.) ..... 1, 144. 51
T. 1 N., R. 14 E., 0.2 mi W. of SE. cor. sec. $33,0.6 \mathrm{mi}$. W. of bridge over Honey Creek, 0.4 mi . E. of Rattlesnake Creek, 50 ft . E. of point where rd. leaves State line and turns N., on N. side of rd.; top of stone culvert (in Nebr.) ..... $1,185.45$
INDEPENDENCE QUADRANGLE
[Latitude $37^{\circ}-37^{\circ} 30^{\prime}$; longitude $95^{\circ} 30^{\prime}-96^{\circ}$ ]
CHAUTAUQUA, ELK, LABETTE, MONTGOMERY, NEOSHO, AND WILSON COUNTIES
From Coffeyville west along road to point near Dearing, thence north to Buff Mound, thence east 5 miles, thence south and back to Coffeyville (by Fox Wood in 1908)
Coffeyville, in wall of Ried Building; standard tablet stamped "731 Independence" (recovered by U. S. C. \& G. S. in 1933) ..... 734. 054
Coffeyville, 4 mi . W. of, on township line, on S. side of bridge across Onion Creek, in E. pier; chiseled cross ..... 738. 76
Dearing, in wall of store building of H. L. Towles at its SW. corner; aluminum tablet stamped " 763 Independence" (recovered by U. S. C. \& G. S. in 1933) ..... 765. 366
T. 34 S., R. 16 E., in NW. cor. sec. 6, in wall of Meyers dwelling at its NW. corner; aluminum tablet stamped " 882 Independence" ..... 883. 309
Independence, in NW. corner of courthouse; aluminum tablet stamped "824 Independence" (recovered by U. S. C. \& G. S. in 1933) ..... 826. 186
Sycamore, in wall of schoolhouse at its SE. corner; aluminum tablet stamped "829 Independence" (recovered by U. S. C. \& G. S. in 1933) ..... 831.029
Neodesha, at SE. corner of Fourth and Main Streets, in N. wall of brick building serving as store of Dr. F. T. Allen; aluminum tablet stamped " 817 Independence". ..... 819. 393
Tps. 29 and 30 S., R. 16 E., on line between secs. 4 and 33, 12 ft . from E. rail of Mo. Pac. R. R. tracks, in E. end of concrete R. R. culvert; aluminum tablet stamped " 842 Independence" ..... 844.835
T. 30 S., R. 17 E., near N. quarter cor. sec. 7, in wall of house of Mrs. Ann Clegg at its NE. corner; aluminum tablet stamped "871 Independence" ..... 873.073
T. 31 S., R. 17 E., 0.3 mi . E. of NW. cor. sec. 6 (a long section), in wall of schoolhouse (old District 80) at its NE. corner; aluminum tablet stamped "901 Independence" ..... 903. 354
T. 32 S., R. 16 E., in NE. cor. sec. 12, in wall of school; aluminum tablet stamped, erroneously, "843 Independence" ..... 894.416
T. 33 .S., R. 16 E., in NW. cor. sec. 1, in wall of church at its NW. corner; aluminum tablet stamped "758 Independence" (probably destroyed) ..... 760. 205
T. 33 S., R. 16 E., in NW. cor. sec. 1,40 ft. S. and 75 ft. E. from cross- roads, in root on N . side of 28 -in. elm tree; 60 -penny spike ..... 759.98
Liberty, in wall of Methodist Church at its SE. corner; aluminum tab- let stamped " 757 Independence" ..... 759. 318

## From point near Dearing west along road to Tyro, thence along roads generally north to NE. cor. sec. 2, T. 30 S., R. 14 E., thence west and south west to Buxton (by Fox Wood in 1903)

Tyro, in wall of schoolhouse at its NE. corner; aluminum tablet stamped "896 Independence" (reported in 1909 as destroyed) ...........-

Feet
896. 885
832. 216

Quaker School, in NE. cor. sec. 25, T. 32 S., R. 14 E., in stone foundation of schoolhouse at point 1 ft . S. of its NW. corner; aluminum tablet stamped "821 Independence" (tied to U. S. C. \& G. S. in 1935)
822.690
T. 31 S., R. 14 E., 0.2 mi . N. of SE. cor. sec. 23, in wall of schoolhouse at its SE. corner; aluminum tablet stamped " 918 Independence" (reported in 1935 as destroyed)
919. 783

Lafontaine, in wall of schoolhouse at its SE. corner; aluminum tablet stamped "918 Independence"
919. 917
T. 30 S., R. 14 E., near NE. cor. sec. 2, 1 mi . W. of Fall River, 0.5 mi . E. of Mo. Pac. R. R., in wall of schoolhouse at its SW. corner; aluminum tablet stamped "928 Independence" (recovered by U. S. C. \& G. S. in 1933)
929. 788

Buxton, in SW $1 / 4$ sec. 7, T. 30 S., R. 14 E., in wall of Christian Church at its NE. corner; aluminum tablet stamped "979 Independence" (on spur line)
980. 632

From Buxton along roads generally south to point about 2 miles northeast of Caney, thence east to Tyro (by Fox Wood in 1903)

Lafontaine, about 4 mi . SW. of, 0.2 mi . S. of W. quarter cor. sec. 33, T. 30 S., R. 14 E., in wall of dwelling of Henry Cox at its NW. corner; aluminum tablet stamped "891 Independence"
892. 878

Elk City, at schoolhouse (brick), in wall of wing; aluminum tablet stamped "833 Independence" (recovered by U. S. C. \& G. S. in 1933)
835. 139
T. $32 \mathrm{~S} .$, R. $14 \mathrm{E} ., 0.3 \mathrm{mi}$. S. of center of sec. 30 , at dwelling of C. Curtis, in W. foundation of front porch; aluminum tablet stamped "853 Independence"
854.579

Havana, in wall of schoolhouse; aluminum tablet stamped "762 Independence"
763. 098

Caney, about 2 mi. NE. of, in $\mathrm{SE} / 4 \mathrm{sec} .31$, T. $34 \mathrm{~S} ., \mathrm{R} .14 \mathrm{E}$. , in S. wall of house of M. M. Freidlin; aluminum tablet stamped "757 Independence" (tied to U. S. C. \& G. S. in 1935)
758. 421

Near Caney (double-run tie line by A. C. McCutchen in 1985)
Caney, about 2.4 mi . NE. of, 0.1 mi . S. of quarter cor. between secs. 5 and 6, T. 35 S., R. 14 E., at oil-pumping sta., 31 ft . E. of center line of N.-S. rd. and 35 ft . S. of concrete driveway to sta., 1 ft . NW. of iron pipe, on E. wing wall of concrete culvert; chiseled square. -
U. S. C. \& G. S. standard disk stamped "S 16 1933"
767. 99
778. 269

From Quaker School along roads east and north to point on Atchison, Topeka \&
Santa Fe Railway 2.3 miles southeast of Crane (double-run tie line by A. C.
McCutchen in 1935)
T. 32 S., R. 15 E., at N. cor. secs. 29 and $30,25 \mathrm{ft}$. S. and 15 ft . W. from junction of center lines of U. S. Highway 160 and T-rd. S., 6 -in. N. of concrete guard post; chiseled square
808. 21
T. 32 S., R. 15 E., about 0.2 mi . E. of cor. secs. 20, 21, 28 , and 29,20 ft. N . and 13 ft . W. from junction of center lines of U.S. Highway 160 and T-rd. N., on W. head wall of concrete culvert at point 1.3 ft .
 Feet 800.95
U. S. C. \& G. S. standard disk stamped "A 244 1935" -------------- 808.355

# IOLA QUADRANGLE 

## [Latitude $37^{\circ} 30^{\prime}-38^{\circ}$; longitude $95^{\circ}-95^{\circ} 30^{\prime}$ ]

## ALLEN, BOURBON, CRAWFORD, AND NEOSHO COUNTIES


#### Abstract

From Parsons quadrangle north along Missouri-Kansas-Texas Railroad to Erie, thence north on roads to NW. cor. sec. 7, T. 24 S., R. 20 E. (by Fox Wood in 1903; leveled twice)


Erie, in E. wing of old courthouse; standard tablet stamped "892
Iola" (tied to U. S. C. \& G. S. in 1935)
T. 26 S., R. 20 E., in NE. cor. sec. 31, in N. end of stone pier at S. end of iron bridge over Big Creek; aluminum tablet stamped " 940 Iola"- ..... 940. 284
T. 25 S., R. 19 E., in SE. cor. sec. 36, in S. wall of schoolhouse; stand- ard tablet stamped "1068 Iola" ..... $1,068.544$
La Harpe, about 2 mi . E. of, in SE. cor. sec. 36, T. 24 S., R. 19 E.; iron post stamped " 1032 Iola" ..... $1,032.520$
Waverly School, at NW. cor. sec. 7, T. 24 S., R. 20 E., in NW. corner of school building; standard tablet stamped "1059 Iola" ..... 1, 059. 294
From Erie along road east 4 miles, thence east, north, west, and south along roads bounding Tps. 27 and 28 S., R. 21 E., thence west and back to Erie (by Fox Wood in 1930)

Erie, about 4 mi . E. of, 0.2 mi . E. of NW. cor. sec. 6, T. 29 S., R. 21 E., on N. side of schoolhouse; standard tablet stamped " 896 Iola"-

[^8]
Walnut, 1 mi . E., thence 3 mi . N. from, in SE. cor. sec. 36, T. 27 S ., R. 21 E.; iron post stamped " 952 Iola" ..... 952. 675
Porterville, in NE. corner of schoolhouse; aluminum tablet stamped "1008 Iola". ..... $1,009.110$
Savonburg, in wall of schoolhouse; standard tablet stamped "1057 Iola" (as reset about 1918; tied to U. S. C. \& G. S. in 1935) -...-- ..... 1, 057.234
Kimbal, 1 mi . S. of, in SE. cor. sec. 36, T. 27 S., R. 20 E.; iron post stamped " 1022 rola" (tied to U. S. C. \& G. S. in 1935) ..... 1, 022.884
From Erie along roads west to point near west border of quadrangle, thencenorth and east by way of Humboldt and along north side of T. 26 S., R. 19E., to NE cor. sec. 1 (by Fox Wood in 1903)
Urbana, in wall of church at its SE. corner; aluminum tablet stamped "954 Iola" ..... 954. 350
Urbana, 5 mi w. of, 1 mi . W., thence 2 mi . S. from Earleton, in SE. cor. sec. 36, T. 28 S., R. 17 E.; iron post stamped " 957 Iola" ----- ..... 957. 258
Chanute, 2 mi . W., thence 2 mi . S. from, in SE. cor. sec. 36, T. 27 S .,R. 17 E.; iron post stamped " 981 Iola" (tied to U. S. C. \& G. S.in 1935)
981. 111
T. 26 S., R. 18 E., in SW. cor. sec. $30,1 \mathrm{mi}$. N. of Allen-Neoshocounty line, in wall of schoolhouse at its SW. corner; aluminumtablet stamped "953 Iola".953. 032
Humboldt, 3 mi . E. of, in wall of Central Avenue School at its NW. ..... Feet corner; standard tablet stamped " 976 Iola" ..... 976. 851
From Erie along road west 1.5 miles, thence north to NE. cor. T. 27 S., R. 19 E., thence west along Allen-Neosho county line to cor. secs. 1, 6, 31, and 36, Tps. 26 and 27 S., Rs. 18 and 19 E., thence south to point 1 mile east of Orbana (by Fox Wood in 1903)
T. 27 S., R. 19 E., in SE. cor. sec. 36, in wall of church at its NW. corner; standard tablet stamped "1004 Iola" ..... 1, 003.657
T. $26^{\prime}$ S., R. 18 E., in SE. cor. sec. 36, at Allen-Neosho county line; iron post stamped " 997 Iola" ..... 997. 331
North Valley School, in SE. cor. sec. 36, T. 27 S., R. 18 E., in wall of schoolhouse at its SE. corner; standard tablet stamped "909 Iola" (tied to U. S. C. \& G. S. in 1935) ..... 908. 305
From point near La Harpe east, north, and west along roads bounding T. 24 S., Rs. 20 and 21 E., to Waverly School (by Fox Wood in 1903)
Moran, 1.5 mi . SE. of, in SE. cor. sec. 36, T. 24 S., R. 20 E.; iron post stamped "1091 Iola" (tied to U. S. C. \& G. S. in 1935) _-..-.-.-.-. 1, 091.613Bronson, about 2 mi . NE. of, in SE. cor. sec. 36, T. 24 S., R. 21 E.;iron post stamped "1062 Iola"1, 062.248
T. 23 S., R. 21 E., in SE. cor. sec. 36 ; iron post stamped " 1043 Iola". ..... 1, 042.962
Bayard, about 0.3 mi . E. of, in NE. cor. sec. 1, T. 24 S., R. 20 E., inN. wall of schoolhouse; standard tablet stamped "1024 Iola"1, 024.398
From point near La Harpe along roads generally west to point 5 miles west of Iola, thence northeast and north to Waverly School (by Fox Wood in 1903)
Iola, in NW. corner of Northup National Bank building; standard tablet stamped "968 Iola" ..... 968. 745
Piqua, 2.3 mi . E. of, 5 mi . W. of Iola, in SE. cor. sec. 25 , T. 24 S .,R. 17 E.; iron post stamped " 1010 Iola"1, 009.977
Carlyle, 3 mi W. of, in SE. cor. sec. 32, T. 23 S., R. 18 E.; iron poststamped "1050 Yola"1, 050.099
Carlyle, 1 mi . E. of, in NE. cor. sec. 1, T. 24 S., R. 19 E., in wall ofschoolhouse at its NE. corner; standard tablet stamped "1022Iola"1, 022.077
Near Chanute (by L. V. Johnson in 1935; double-run tie line)Chanute, about 3 mi . SW. of, 10 ft . N. and 17 ft . E. from center ofcrossroads at SW. cor. sec. 30, T. 27 S., R. 18 E., on concrete headwall of culvert; chiseled square993. 98
U. S. C. \& G. S. standard disk stamped "V 245 1934" ..... 965.691
Near Walnut, on Atchison, Topeka \& Santa Fe Railway (by L. V. Johnson in 1935)
Walnut, 1.2 mi . E. of, 10 ft . S. and 30 ft . W. from crossing of Ry. and rd., at Ry. culvert 26 A , on S . concrete head wall; chiseled square
Walnut, 1.5 mi . E. of, 12.5 ft . S. of tracks, at Ry. bridge 26 B , in W . end of concrete head wall at point 1 ft . below base of rail; chiseled cross and circle (Ry. B. M. 26 B)

# LAKIN QUADRANGLE 

[Latitude $37^{\circ} 30^{\prime}-38^{\circ}$; longitude $101^{\circ}-101^{\circ} 30^{\prime}$ ]

## FINNEY, GRANT, HASKELL, AND KEARNY COUNTIES

> From Garden City quadrangle west, southwest, and northwest along Atchison, Topeka \& Santa Fe Railway into Syracuse quadrangle (by J. C. Barber in 1898)

Holcomb, 2.2 mi . W. of, 5.8 mi . E. of Deerfield, $1,100 \mathrm{ft}$. S. and slightly W. of E. quarter cor. sec. 3, T. 24 S., R. $34 \mathrm{~W} ., 1 \mathrm{ft}$. N. of wire fence on S. side of track; iron post stamped "G 4 2892"--..
Deerfield, 2.8 mi . E. of, $1,417 \mathrm{ft}$. S. of E. quarter cor. sec. 6, T. 24 S., R. $34 \mathrm{~W} ., 1 \mathrm{ft}$. N. of wire fence on S . side of track; iron post stamped "G 5 2908"

2, 916. 104
Deerfield, $2,200 \mathrm{ft}$. W. of sta., 6 ft . W. of line between secs. 10 and 11, T. 24 S., R. 35 W., 49 ft. S. of track; iron post stamped "G 6 2940"- 2, 948.158

Deerfield, 3.5 mi . SW. of, 3.7 mi . NE. of Lakin, at Ry. mileage $420.62,6 \mathrm{ft}$. W. of line between secs. 17 and 18, T. 24 S., R. $35 \mathrm{~W} .$, 70 ft . S. of center line of private rd. N. of track, 40 ft . S. of main track; iron post stamped "G 7 2969" (as recovered by U. S. C. \& G. S. in 1934)

2, 977. 028
Lakin, $1,700 \mathrm{ft}$. NE. of Ry. sta., 60 ft . E. of line between secs. 26 and 27, T. 24 S., R. 36 W., 45 ft . SE. of track; iron post stamped "G 8 2991"

2, 998.968
Lakin, in front of telegraph office (as situated in 1896); top of rail_-- 3, 001.0
Lakin, 3.2 mi . SW. of, about 4 mi . NE. of Hartland, $1,050 \mathrm{ft}$. S. of NW. cor. sec. 5 , T. 25 S., R. $36 \mathrm{~W} ., 48 \mathrm{ft}$. NW. of track; iron post stamped "G 9 3013",

3, 021.008
Hartland, about 0.5 mi . E. of, 600 ft . N. of SE. cor. sec. 10, T. 25 S ., R. 37 W ., on N. side of fence, 52 ft . N. of tracks; iron post stamped "G $10 \quad 3040$ " (tied to U. S. C. \& G. S. in 1935)

3, 047.928
Hartland, in front of telegraph office (as situated in 1896); top of rail. 3, 050.0
Hartland, 2.8 mi . NW. of, 3.2 mi . SE. of Sutton, on line between secs.
7 and 8, T. 25 S., R. 37 W., 65 ft . N. of track, on E. side of N.-S. wire fence; iron post stamped "G $11 \quad 3063$ "

3, 071.162
Sutton, about 0.3 mi . W. of, 4.6 mi . SE. of Kendall, 650 ft . W. of E. side of sec. 3, T. 25 S., R. $38 \mathrm{~W} ., 45 \mathrm{ft}$. S. of track; iron post stamped "G 12 3112"

3, 120. 129
From Lakin north 3 miles (by M. C. McFarlane in 1897; unchecked spur line)
T. 24 S., R. 36 W., in SE. cor. sec. 3; iron post stamped "G 69 3125"' 3, 133. 547

> From Lakin along road south 2 miles, thence east along township-line road to Finney-Kearny county line (by M. C. McFarlane in 1897 and Nat Tyler, Jr., in 1898; unchecked spur line)

Lakin, opposite Lakin Hotel, 275 ft. NE. of A., T. \& S. F. Ry. sta., at E. side of street crossing, 145 ft . N. of center line of track, near curb; iron post stamped " 2993 " (as recovered by U. S. C. \& G. S. in 1934)

3, 001. 431
T. 25 S $_{1}$ R. 36 W., 40 ft . SE. of NW. cor. sec. 2; iron post stamped "G 70 2990"

2, 997.852
T. 25 S., R. 35 W., in NW. cor. sec. 6; iron post stamped " 2975 " $-\ldots-$ - $2,983.411$
T. 25 S., R. 35 W., in NW. cor. sec. 3; iron post stamped " 2984 ".-.- 2, 992.448
T. 25 S., R. 34 W., in NW. cor. sec. 6; iron post stamped " 2967 ".-.- 2, 974.955
Hartland triangulation sta., about 2.5 mi . N: of village of Hartland, 35 ft . N. and 9 ft . E. from W. quarter cor. sec. 34, T. 24 S., R. 37 W .; iron post stamped "G 44 3249"iron post stamped "G 44 3249"3, 256. 967
T. 24 S., R. 37 W., at NE. cor. sec. 21; iron post stamped "G 45 3244" ..... 3, 251. 978
T. 24 S., R. 38 W., at SE. cor. sec. 13 ; iron post stamped "G 46 3267 " ..... 3, 275. 169
From Syracuse quadrangle east along U. S. Highway 160 to Ulysses, thence north along State Highway 25 and other roads to Hartland (by M. C. McFar- lane in 1897; double-rodded)
Ulysses, about 7 mi . W. of, at SE. cor. sec. 33, T. 28 S., R. 38 W.; iron post stamped "G 35 3106" (recovered by U. S. C. \& G. S. in 1935) ..... 3, 113. 324
Ulysses, 4 mi. SW. of, at SE. cor. sec. 36, T. 28 S., R. 38 W.; iron post stamped "G 36 3049" ..... 3, 055.930
Ulysses, 1 mi W. of, at SE. cor. sec. 29, T. 28 S., R. 37 W.; iron poststamped "G 37 3050" (tied to U. S. C. \& G. S. in $1935^{\circ}$ ) $\ldots$.-- 3, 056.523Ulysses, 2.5 mi . N. of, at SE. cor. sec. 9, T. 28 S., R. $37 \mathrm{~W} ., 50 \mathrm{ft}$.from center line of rd.; iron post stamped "G 38 3053" (as resetin 1934 by Kansas Highway Commission)${ }^{10} 3,060.795$
Ulysses, 4.5 mi . N. of, at SE. cor. sec. 33, T. 27 S., R. 37 W. ; iron post stamped "G 39 3060" ${ }^{11}$ ..... 3, 067.409
T. 27 S., R. 37 W., at NW. cor. sec. 22, 50 ft . from center line of rd;iron post stamped "G 40 3055" (as reset in 1934 by A. L.Baller)3, 061.045
T. 26 S., R. 37 W., at SE. cor. sec. 33, on Kearny-Grant county line; iron post stamped "G 41 3069" ..... 3, 075.948
T. 26 S., R. 37 W., near SE. cor. sec. 16, 120 ft . W. of highway; iron post stamped "G 42 3048" ..... $3,055.577$
T. $25 \mathrm{~S} .$, R. $37 \mathrm{~W} .$, near S. side of sec. 35 , W. of highway; iron post stamped "G 43 3039" ..... 3, 045.929
From intersection of Grant-Kearney county line and State Highway 25 east along Grant-Kearny and Finney-Haskell county lines to sec. 34, T. 28 S., R. 34 W. (by M. C. McFarlane in 1897; unchecked spur line)
T. 26 S., R. 36 W., at SW. cor. sec. 31 ; iron post stamped "G 47 3080" ..... 3, 086.835
T. 26 S., R. 36 W., at SW. cor. sec. 33; iron post stamped "G 48 3084" ..... 3, 090.826
T. 26 S., R. 35 W., near SW. cor. sec. 31 ; iron post stamped "G 49 3098" ..... 3, 104. 986
T. 26 S., R. 35 W., near SW. cor. sec. 34; iron post stamped "G 66 3026" ..... 3, 033.438
T. 26 S., R. 34 W., about 620 ft . E. of SW. cor. sec. 31 ; iron post stamped "G 67 3010" ..... 3, 017.108
T. 26 S., R. 34 W., near SW. cor. sec. 34; iron post stamped "G 68 2990" ..... 2, 997. 238

[^9]
# From intersection of Grant-Kearny county line and State Highway 25 west along county line to sec. 38, T. 26 S., R. 38 W. (by M. C. McFarlane in 1897; unchecked spur line) 

T. 26 S., R. 38 W., at SE. cor. sec. 36 ; iron post stamped "G 50 ..... Feet3089"3, 096. 193
T. 26 S., R. 38 W., at SE. cor. sec. 33 ; iron post stamped "G 51 3177" $3,184.377$
From point on State Highway 254.5 miles north of Ulysses east along township line 18 miles (by M. C. McFarlane in 1897; unchecked spur line)
T. 27 S., R. 36 W., at SW. cor. sec. 31 ; iron post stamped "G 52 3016" ..... 3, 023.155
T. 27 S., R. 36 W., at SW. cor. sec. 34 ; iron post stamped "G 53 3094" ..... 3, 100. 834
T. 27 S., R. 35 W., at SW. cor. sec. 31 ; iron post stamped " G 54 3119" ..... 3, 125. 566
T. 27 S., R. 35 W., at SW. cor. sec. 34 ; iron post stamped "G 63 3076" ..... 3, 083.050
T. 27 S., R. 34 W., at SW. cor. sec. 31 ; iron post stamped "G 64 3054" ..... 3, 061. 294
T. 27 S., R. 34 W., at SW. cor. sec. 34; iron post stamped "G 65 3074" ..... 3, 080.896

From point on State Highway 254.5 miles north of Ulysses west along townshipline road into Syracuse quadrangle (by M. C. McFarlane in 1897; part of unadjusted line closing 1.475 ft . low at point 1 mile south of Floto)
T. 27 S., R. 38 W., at SE. cor. sec. 36; iron post stamped "G 55 3078" ..... 3, 085. 254
T. 27 S., R. 38 W., at SE. cor. sec. 33 ; iron post stamped "G 56 3092" ..... 3, 098.814
From Ulysses east along U. S. Highway 160 (township-line road) 18 miles(by M. C. McFarlane in 1897; partially checked spur line)
T. 28 S., R. 36 W., at SW. cor. sec. 31 ; iron post stamped "G 57 3059" ..... 3, 066. 156
T. 28 S., R. 36 W., at SW. cor. sec. 34; iron post stamped "G 583048"3, 054. 591
T. 28 S., R. 35 W., at SW. cor. sec. 31 ; iron post stamped "G 59 3048" ..... $3,054.564$
T. 28 S., R. 35 W., at SW. cor. sec. 34; iron post stamped "G 60 3020" ..... 3, 027. 336
T. 28 S., R. 34 W., at SW. cor. sec. 31; iron post stamped " $G 61$ 3007" ..... 3, 013. 714
T. 28 S., R. 34 W., at SW. cor. sec. 34 ; iron post stamped " $G 62$ 2999" ..... 3, 006. 291
From intersection of U. S. Highway 160 and Grant-Haskell county line south along county line 3 miles, thence west 9 miles, thence north to point on U . S. Highway 160 about 8 miles east of Ulysses (by Nat Tyler, Jr., in 1898)
T. 29 S., R. 34 W., near SW. cor. sec. 18; iron post stamped ' 3020 " -- ${ }^{13} 3$ 3, 027.186
T. 29 S., R. 35 W., at SE. cor. sec. 16; iron post stamped " 3010 " ..... 3, 016.932
T. 29 S., R. 35 W., at SW. cor. sec. 18; iron post stamped " 3023 " ..... 3, 029.875
T. 29 S., R. 36 W., at SE. cor. sec. 16 ; iron post stamped " 3016 "- ..... 3, 022.617

[^10]
# From point on U.S. Highway 160 about 3 miles east of Ulysses south along road 3 miles (by Nat Tyler, Jr., in 1898; unchecked spur line) 

Feet

T. 29 S., R. 36 W., in SW. cor. sec. 18; iron post stamped " 2978 " -- 2 , 984.676

> From point on U. S. Highway 160 about 3 miles west of Ulysses south along range line 3 miles (by Nat Tyler, Jr., in 1898)
T. 29 S., R. 37 W., in SW. cor. sec. 18; iron post stamped " 3098 "--- 3, 104. 889

LAWRENCE QUADRANGLI
[Latitude $38^{\circ} 30^{\prime}-39^{\circ}$; longitude $95^{\circ}-95^{\circ} 30^{\prime}$ ]
DOUGLAS, JOHNSON, AND LEAVENWORTH COUNTIES

> From Olathe No. 2 quadrangle near De Soto west and south along roads to point 1 mile south of Prairie Center, thence east along Olathe road and back into Olathe No. 2 quadrangle (by T. B. Matthews in 1935)

Morning Star School, 1.0 mi . N. of, 1.6 mi . SW. of De Soto, at cor. secs. 29,30 , 31 , and 32 , T. 12 S., R. 22 E., 25 ft . N. and 30 ft . E. from center of crossroads, 6 ft . E. and 1 ft . S. from SW. corner of fence around yard, in root on E. side of 20 -in. elder tree; copper nail and washer
886. 57

Morning Star School, at cor. secs. 5, 6, 31, and 32, Tps. 12 and 13 S., R. $22 \mathrm{E} ., 50 \mathrm{ft}$. N. and 200 ft . E. from center of crossroads, in school yard, in concrete post; standard tablet stamped "M 91935 932". 931. 628

Reference mark, 250 ft . W. and 110 ft . N. from tablet, 3 ft . W. of wire fence, in root on E. side of 18 -in. elm tree; copper nail and washer
930. 96

Morning Star School, 1.0 mi . S. of, 1.5 mi . NE. of Lexington Cemetery, at cor. secs. 5, 6, 7, and 8, T. $13 \mathrm{~S} ., \mathrm{R} .22 \mathrm{E} ., 10 \mathrm{ft}$. N. of junction of State Highway 10 and T-rd. N., on N. lip of curb of concrete pavement of highway; chiseled square
944.68

Lexington Cemetery, 1.0 mi . N. of, at quarter cor between secs. 6 and 7, T. 13 S., R. 22 E., 10 ft . N. of junction of State Highway 10 and T-rd. S., on N. lip of curb of concrete pavement of highway; chiseled square
932.14

Lexington Cemetery, at quarter cor. between secs. 7 and 18, T. 13 S., R. 22 E., 70 ft . N. and 215 ft . E. from center of crossroads, in cemetery at point 2 ft . E. of its W. fence, in concrete post; standard tablet stamped "M 101935 938".
938. 189

Reference mark, 670 ft . S. and 205 ft . W. from tablet, 10 ft . E. of center line of rd., on E. head wall of concrete culvert; chiseled square
924. 98

Lexington Cemetery, about 1 mi . S. of, 340 ft . S. and 10 ft . W. from approximate quarter cor. between secs. 18 and 19, T. $13 \mathrm{~S} ., \mathrm{R}$. $22 \mathrm{E} ., 10 \mathrm{ft}$. W. of center line of rd., on $W$. head wall of concrete culvert; chiseled square 906. 29

Lexington Cemetery, 1.3 mi . S. of, 1.6 mi . N. of Prairie Center, at approximate center of sec. 19, T. $13 \mathrm{~S} .$, R. 22 E., $220 \mathrm{ft} . \mathrm{N}$. of junction of T-rd. W., 15 ft . W. of center line of $\mathrm{N} .-\mathrm{S}$. rd., on W. head wall of concrete culvert; chiseled square
909.08

Prairie Center, 1.0 mi . N. of, at quarter cor. between secs. 19 and 30, T. 13 S., R. 22 E., 30 ft . N. and 20 ft . E. from center of crossroads, in base of 6 -in. hedge tree; copper nail and washer

Prairie Center, at quarter cor. between secs. 30 and 31, T. 13 S., R. 22 E., in yard surrounding dwelling of W. G. Rice, 110 ft . S. and 30 ft . W.
from center of crossroads, in concrete post; standard tablet stamped "M 111935 936"

Feet
936. 474
936. 12

Prairie Center, 1.0 mi . S. of, at quarter cor. between secs. 6 and 31, Tps. 13 and 14 S., R. 22 E., 35 ft . S. and 10 ft . W. from junction of T-rd. N., in hedgerow, in root on E. side of 16 -in. hedge tree; copper nail and washer

From Olathe No. 2 quadrangle west and south along roads to point near Edgerton, thence east along Edgerton-Ocheltree road and back into Olathe No. 2 quadrangle (by T. B. Matthews in 1935)

Gardner, 4.0 mi . W. of, about 3.5 mi . N. and E. from Edgerton, at cor. secs. 19, 20, 29, and 30, T. 14 S., R. 23 E., 90 ft . N. and 20 ft . W. from center of crossroads, 3 ft . E.of wire fence, in root on SE. side of $24-\mathrm{in}$. walnut tree; copper nail and washer

1, 028.07
Edgerton, 2.5 mi . N. and E. from, at cor. secs. 29, 30, 31, and 32, T. 14 S., R. 22 E., $45 \mathrm{ft} . \mathrm{N}$. and 30 ft . E. from center of crossroads, 3 ft . E. of hedge fence around yard, in root on W. side of $16-\mathrm{in}$. walnut tree; copper nail and washer

1, 059.06
Edgerton, 1.5 mi . N. and E. from, at cor. secs. 5, 6, 31, and 32, Tps. 14 and $15 \mathrm{~S} .$, R. $22 \mathrm{E} ., 310 \mathrm{ft}$. N. and 10 ft . W. from center of crossroads, on $W$. head wall of concrete culvert; chiseled square
$1,015.98$
Edgerton, about 0.5 mi . along Atchison, Topeka \& Santa Fe Ry. NE. of, 126 ft . N. and 12 ft . E. from grade crossing of E.-bound main-line tracks, 45 ft . S. and 200 ft . E. from intersection of U. S. Highway 50 and N.-S. rd., 1 ft . S. of right-of-way fence line, in concrete post; standard tablet stamped " 16 M 1935981 "

## LEAVENWORTE QUADRANGLE 4

[Latitude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}$; longitude $94^{\circ} 45^{\prime}-95^{\circ}$ ]

## atchison and leavenworth counties

From Leavenworth northwest along Union Pacific Railroad to Hund (by G. E. Heebink in 1808)

Leavenworth, on SE. corner of 3d and Cherokee Streets, on Cherokee Street side of brick building occupied by Rohlfing Bros., grocers, on W. end of stone window sill; U. S. C. E. copper bolt designated " 252 "
Hund, $40 \mathrm{ft} . \mathrm{S}$. of Union Pacific R. R. track, 20 ft . W. of wagon rd.; iron post stamped " 834 "
832. 011

From Bonner Springs quadrangle near Little Stranger Church northeast and east along roads to Richardson, thence south along road by way of Lansing and back into Bonner Springs quadrangle (by R. F. Gallup in 1934)
Hazel Dell School, 0.6 mi . SW. of, 1.2 mi . NE. of Little Stranger Church, about 300 ft . W. and 880 ft . S. from quarter cor. between secs. 21 and 22, T. 9 S., R. 22 E., in root on S. side of wild-cherry tree, nail and washer.
Hazel Dell School, 0.1 mi . NE. of, about 465 ft . N. of S. line of sec. 15 , T. 9 S., R. 22 E., in root on E. side of elm tree; nail and washer
891. 56

[^11]Hazel Dell School, 0.5 mi . NE. of, 2.5 mi . W. of Richardson, in center
of sec. 15, T. 9 S., R. 22 E., about 40 ft . E. and 55 ft . S. from center of crossroads, on hedge stump in E . fence line; nail and washer.-.-

Feet
946.15

Richardson, 2 mi . W. of, 0.9 mi . N. of Brighton, at quarter cor. between secs. 14 and 15, T. 9 S., R. 22 E., about 22 ft . W. and 28 ft. S. from junction of T-rd. S. to Brighton, inside fence corner, in concrete post; standard tablet stamped "1 G 1934 900"
900. 153

Reference mark, about 28 ft . N. and 10 ft . E. from tablet, on N. end of culvert; chiseled square
900. 38
934. 31
940. 29
880. 25
838. 40

Richardson, 0.5 mi . S. of, 0.5 mi . N. of Lansing, about 95 ft . N. and 18 ft . E. from SW. cor. sec. 18, T. 9 S., R. 23 E., on top of concrete curb; chiseled square
832.85
795. 457
804.92

MOUND CITY NO. 1 QUADRANGLE 16
[Latitude $38^{\circ} 15^{\prime}-38^{\circ} 30^{\prime}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ]
LINN aNd mIAMI COUNTIES
From point on Kansas-Missouri State line near Amsterdam, Mo., south along State-line road into Mound City No. 4 quadrangle (by H. P. Jones in 1934)
T. 41 N., R. 33 W. (Mo.), at W. closing cor. fractional secs. 19 and 30, 25 ft . N. and 126 ft . E. from junction of center lines of State-line rd. and T-rd. E., 2 ft . N. and 3 ft . $W$. from telephone pole, in concrete post; standard tablet stamped "CWA 3161934 896" (in Mo.).-
T. 41 N., R. 33 W. (Mo.), about 600 ft . N. of W. closing cor. fractional secs. 30 and 31, in E. head wall of concrete culvert; chiseled square (in Mo.)
896. 148
T. 20 S., R. 25 E., near E. closing cor. secs. 11 and 14, 20 ft . S. and 10 ft . W . from junction of center lines of State line rd. and T-rd. W., on top of head wall of concrete culvert; chiseled square
T. 40 N., R. 33 W. (Mo.), about 0.2 mi . N. of S. line of fractional sec. $6 ; 35 \mathrm{ft}$. N. and 18 ft . E. from junction of center lines of Stateline rd. and T-rd. W., 2 ft . E. of fence, in concrete post; standard tablet stamped "CWA $301 \quad 1934 \quad 875$ " (in Mo.)

[^12]T. 40 N., R. 33 W. (Mo.), at W. closing cor. fractional secs. 7 and 18, 115 ft . S. and 10 ft . E. from junction of center lines of State-line rd. and T-rd. E., on top of head wall of concrete culvert; chiseled square (in Mo.)

Feet
834.98
T. 20 S., R. 25 E., in fractional sec. 35 [T. 40 N., R. 33 W. (Mo.), a'bout 0.2 mi . N. of W. closing cor. sec. 18 and long sec. 20], 10 ft . N. and 12 ft . W. from junction of center lines of State-line rd. and T-rd. W., on top of head wall of concrete culvert; chiseled square
e-------.--
T. 40 N., R. 33 W . (Mo.), near W. closing cor. long secs 20 and 29, 60 ft . N. and 29 ft . E. from junction of center lines of Missouri Highway 52 [Kansas Highway 56] and State-line rd., $3 \mathrm{ft} . \mathrm{N}$. and 3 ft . E. from corner fence post, in concrete post; standard tablet stamped "CWA $315 \quad 1934$ 825" (in Mo.)

## MOUND CITY NO. 4 QUADRANGLE 16

[Latitude $38^{\circ}-38^{\circ} 15^{\prime}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ]

## BOURBON AND LINN COUNTIES

> From Mound City No. 1 quadrangle south along Missouri-Kansas State-line road to its junction with road east across Duncans Creek, thence east along latter road into Missouri (by H. P. Jones in 1934)
T. 21 S., R. 25 E., near E. closing cor. fractional secs. 1 and 12 [T. 40 N., R. 33 W. (Mo.), about 0.2 mi . N. of closing cor. long secs. 29 and 32], 10 ft . S. and 15 ft . W. from junction of State-line rd. and T-rd. W., on top of head wall of concrete culvert; chiseled square

Tps. 39 and 40 N., R. 33 W . (Mo.), at W. closing cor. of township line, 50 ft . N. and 20 ft . E. from junction of State-line rd. and T-rd. E., in root on W . side of $14-\mathrm{in}$. elm tree; copper nail and washer (in Mo.)
T. 39 N., R. 33 W . (Mo.), 1.1 mi . S. of NW. cor. large sec. 6, $36 \mathrm{ft} . \mathrm{S}$. and 119 ft . W. from SW. corner of farmhouse of Mrs. Zella Hall, 16 ft . S. and 41 ft . W. from $30-\mathrm{in}$. cottonwood tree, 29 ft . E. of center line of State-line rd., in concrete post; standard tablet stamped "CWA 3081934 785" (in Mo.)
T. 39 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 6 and 7, $20 \mathrm{ft} . \mathrm{S}$. and 15 ft . E. from center of crossing of State-line rd. and Missouri Pacific R. R., at base of crossing signpost, 1 ft . above ground; horizontal spike (in Mo.)
T. 39 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 19 and $30,26 \mathrm{ft}$. S. and 19 ft . E. from junction of center lines of State-line rd. and T-rd. E., 3 ft . S. and 3 ft . E. from corner fence post, in concrete post; standard tablet stamped "CWA 30171934 905" (in Mo.)
T. 22 S., R. 25 E., in sec. 13 [T. 39 N., R. 33 W. (Mo.), near W. closing cor. wide secs. 30 and 31 ], 80 ft . S. and 50 ft . W. from junction of State-line rd. and T-rd. E., 30 ft . W. of hedgerow, in root on SE. side of 12-in, elm tree; copper nail and washer
T. 22 S., R. 25 E., near SE. cor. fractional sec. 13 [T. 39 N., R. 33 W. (Mo.), near W. quarter cor. sec. 31], 100 ft . N. and 10 ft . W. from junction of State-line rd. and T-rd. W., in top of head wall of concrete culvert; chiseled square
786. 82

[^13]T. 22 S., R. 25 E., near SE. closing cor. fractional sec. 34 [T. 38 N., R. 33 W . (Mo.), at W. quarter cor. sec. 6], 15 ft . N. and 10 ft . W.
from junction of State-line rd. and T-rd. W., in top of head wall of concrete culvert; chiseled square

Feet
869. 84
T. 38 N., R. 33 W . (Mo.), at W. closing cor. wide secs. 6 and 7, 23 ft . S. and 22 ft . E. from junction of center lines of State-line rd. and T-rd. E., 3 ft . S. and 3 ft . E. from corner fence post, in concrete post; standard tablet stamped "CWA 2871934 863" (in Mo.).-
863. 469
T. 38 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 7 and 18, 15 ft. S. and 25 ft . E. from junction of State-line rd. and T-rd. E., in top of head wall of concrete culvert; chiseled square (in Mo.)
905. 29
T. 38 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 18 and 19, 20 ft . N. and 20 ft . E. from junction of State-line rd. and T-rd. E., in root on S. side of 18 -in. maple tree; copper nail and washer (in Mo.) -
T. 38 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 19 and 30, 24 ft . S. and 20 ft . E. from junction of center lines of State-line rd. and right-of-way of closed T-rd. E. (along Bates-Vernon county line), 3.5 ft . S. and 3.5 ft . E. from corner fence post, in concrete post; standard tablet stamped "CWA $314 \quad 1934$ 875" (in Mo.)
873.62
T. 23 S., R. 25 E., in sec. 13 [T. 38 N., R. 33 W. (Mo.), at W. closing cor. wide secs. 30 and 31], 40 ft . S. and 25 ft . W. from junction of State-line rd. and T-rd. E., in root on N. side of $16-\mathrm{in}$. maple tree; copper nail and washer
850. 59
T. 23 S., R. 25 E., in sec. 24 [Tps. 37 and 38 N., R. 33 W. (Mo.), near W. closing cor. wide secs. 6 and 31], 100 ft . S. and 15 ft . W. from junction of State-line rd. and T-rd. E., in root on E. side of 14 -in. mulberry tree; copper nail and washer
T. 37 N., R. 33 W . (Mo.), at W. closing cor. wide secs. 6 and 7, 22 ft. N. and 28 ft . E. from junction of center lines of State-line rd. and T-rd. E., 3 ft . N. and 4 ft . E. from corner fence post, in concrete post; standard tablet stamped "CWA 3041934 834" (in Mo.)--
T. 37 N., R. 33 W. (Mo.), at W. quarter cor. wide sec. 7, 35 ft . N. and 15 ft . E. from junction of State-line rd. and T-rd. E., in root on N. side of $9-\mathrm{in}$. willow tree; copper nail and washer (in Mo.) .........
875. 198
833. 943
788.21

# OAK MILLS QUADRANGLE ${ }^{17}$ 

[Latitude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}$; longitude $95^{\circ}-95^{\circ} 15^{\prime}$ ]
ATCHISON, JEFFERSON, AND LEAVENWORTH COUNTIES
From Oskaloosa No. 4 quadrangle near Murray Creek along roads generally north to Oak Mills (by S. K. Atkinson in 1906)

Gospel Tabernacle, 0.4 mi . N. of, about 6.7 mi . NW. of Lansing and 6.9 mi . SW. of Richardson, 1.0 mi . S. of High Prairie School, in NE. cor. sec. 24, T. 9 S., R. 21 E., at crossroads, 50 ft . W. of bridge 92, on S. side of rd.; iron post stamped " 972 " (reported by R. F. Gallup in 1934 as disturbed)
971. 704

Reference mark, 80 ft . E. of above-mentioned iron post, on W. end of SW. wing wall of concrete arch bridge (over Murray Creek?); chiseled square (by R. F. Gallup in 1934)
968. 96

High Prairie School, at crossroads near, in NW. cor. sec. 18, T. 9 S., R. 22 E., on limestone; chiseled square 1, 073.46

[^14]High Prairie School, 2.0 mi . N. of, about 4.7 mi W. of Leavenworth, in NW. cor. sec. 31, T. 8 S., R. 22 E., at intersection of rds. in hollow, in stone; aluminum tablet stamped " 924 "

Feet
923. 975

Lowemont, about 0.4 mi . NW. of, about 0.3 mi . W. and 0.2 mi . S. from Atchison, Topeka \& Santa Fe Ry., in center of sec. 3, T. 8 S., R. 21 E., at center of crossroads, in limestone marker at NE. corner of Squire's place; aluminum tablet stamped "1098" (reported disturbed)

1, 096.933
Lowemont, 1.2 mi . N. of, 0.8 mi . N. of A., T. \& S. F. Ry., in center of sec. 34, T. 7 S., R. 21 E., on W. side of rd., on piece of limestone; chiseled square

1, 084.60
Oak Mills, 2.2 mi . SW. of, 0.7 mi . S. of School 38, at quarter cor. between secs. 23 and 24, T. 7 S., R. 21 E., in NW. corner of Joe Adams place, at SE. corner of crossroads; iron post stamped " 1008 " 1, 006. 561
Oak Mills, at place of John Davitz, in front yard, 19 ft . below store and 2 ft . inside tight board fence; cap on iron pipe (Missouri River Commission B. M. designated "264 821 1")

> From Oskaloosa No. 4 quadrangle near Murray Creek north along road to point near bridge 92 over same creek (by R. F. Gallup in 1934; double-run tie line)

Gospel Tabernacle, about 6.5 mi . W. of Lansing, near quarter cor. on W. side of sec. 19, T. 9 S., R. 22 E., about 0.4 mi . S. of concrete arch bridge (over Murray Creek?), at approximate center of junction of T-rd. E., on top of W. end of N. step of church; chiseled square.-.Gospel Tabernacle, about 0.4 mi . N. of, in SW. cor. sec. 18, T. 9 S., R. 22 E., 67.7 ft . NW. of concrete arch bridge (over Murray Creek?) 68 ft . NE. of iron post stamped " 972 ", in concrete post; standard tablet stamped " 6 G 970 1934"
976. 09

Reference mark, 90 ft . NE. of tablet, in root on E. side of elm tree; copper nail and washer to point 2 miles west of Lee (by G. E. Heebink in 1809)

Easton, at intersection of Riley Street and main N.-S. rd., on SW. corner of property of H. Boyle; iron post stamped " 904 "
902. 231

Easton, 0.3 mi . W. of intersection of Riley Street with main N.-S. rd., at end of Riley Street, in stone step of Methodist Episcopal Church; aluminum tablet stamped " 909 "
907. 382

Lee, 2 mi . W. of, about 7 mi . W. of Easton, at quarter cor. between secs. 18 and 19, T. 8 S., R. 20 E.; iron post

1, 170.119

> From Oak Mills southwest along roads to point 2 miles east of Potter, thence south along main road near Stranger Creek into Oskaloosa No. 4 quadrangle (leveled twice; by S. K. Atkinson in 1908 and G. E. Heebink in 1909)

Easton, about 1 mi . S. of, on SE. corner of bridge 179 (over Dawson ..... Feet
Creek?); bolt886. 17
Easton, about 2.5 mi . S. of, 4 mi . N. of Springdale, at dwelling of W. A. Hastey; SW. corner of front door step ..... 922. 33
Springdale, 2.1 mi . by rd. N. of, on W. side of rd., on NW. side of white house on E . side of rd., in root of tree; 40-penny nail ..... 879.92
Springdale, on N. side of main E.-W. rd., in front of residence of John McQuillan; iron post stamped " 1048 " ..... 1, 044.961
From Oskaloosa No. 4 quadrangle north along roads near west border of Oak Mills quadrangle into Sugar Lake quadrangle (by G. E. Heebink in 1908 and 1909)
Edmunds Church, 50 ft . from corner fence post, in root of 7 -in. elm tree; 40-penny nail ..... $1,062.40$
T. 9 S., R. 20 E., 35 ft . N. and 15 ft . E. from quarter cor. between secs. 18 and 19, on E. side of N.-S. rd.; iron post stamped "Prim Trav Sta No 7 1906" (tied to U.S. C. \& G. S. line in 1935) ..... $1,090.942$
Tps. 8 and 9 S., R. 20 E., at quarter cor. between secs. 6 and 31; iron post. ..... $1,088.867$
Tps. 8 and 9 S., Rs. 19 and 20 E., at cor. secs. 1, 6, 31, and 36, at cross- roads; top of corner stone ..... 1, 098.97
T. 8 S., Rs. 19 and 20 E., at cor. secs. 25, 30, 31, and 36; top of corner stone ..... 1, 122.19
T. 8 S., R. 20 E., at quarter cor. between secs. 18 and 19 ; iron post ..... 1, 170.119Corpus Christi Church, 1 mi. W. of, in Tps. 7 and 8 S., Rs. 19 and 20 E.;iron post stamped "Prim Trav Sta No 9 1906"1, 091.013
T. 7 S ., Rs. 19 and 20 E ., at cor. secs. 19, 24, 25, and 30, at junction of T-rd., in root of 8 -in. locust tree; 40-penny nail ..... 1, 044.80
T. 7 S., R. 19 E., at quarter cor. between secs. 13 and 24, on E. side of N.-S. rd., 10 ft . from corner fence post; iron post ..... 990.625
T. 7 S., R. 19 E., at quarter cor. between secs. 12 and 13 , in root on W. side of tree; 40-penny nail ..... $1,085.81$Cummings, 1 mi . N. of, at quarter cor. between secs. 1 and 36, Tps. 6and 7 S., R. 19 E., in yard adjoining house, at junction of T-rd.; ironpost1, 062.557
Near southwest corner of quadrangle (by L. V. Johnson in 1935)
T. $9 \mathrm{~S} .$, R. $19 \mathrm{E} ., 0.3 \mathrm{mi}$. E. of cor. secs. $13,14,23$, and $24,35 \mathrm{ft}$. N. of center line of rd., at bottom of draw, in center of N. concrete head wall of culvert; chiseled square

1, 093.90

# OLATEE NO. 1 QUADRANGLE ${ }^{18}$ 

[Latitude $38^{\circ} 45^{\prime}-39^{\circ}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ]

## JOHNSON COUNTY

From Armourdale quadrangle at point on Shawnee Mission Road near Prairie School south along roads near Kansas-Missouri State line to Oxford School, on Olathe Road (by L. V. Johnson in 1933; leveled twice)
Prairie School, 1.0 mi . S. of, 1.0 mi . N. of Corinth School, at quarter cor. between secs. 21 and 22 , T. 12 S., R. 25 E., 44 ft . E. and 22 ft . S. from center of crossroads (intersection of 75th Street and Shawnee Mission Road), inside fence, in field, in concrete post; standard tablet stamped " 17 J 1933 1018"

[^15]Reference mark, 55 ft . N. and 30 ft . E. from center of crossroads, in ..... Feetroot on W. side of $30-\mathrm{in}$. maple tree; copper nail and washer.......... $1,015.29$
Corinth School, about 120 ft . NW. of corner of, at quarter cor. between secs. 27 and 28, T. 12 S., R. 25 E., 20 ft . S. and 23 ft . W. from center of crossroads, in root on E. side of giant tree; copper nail and washer
Corinth School, about 0.5 mi . S. of, 1.6 mi . N. of Linwood School, at cor. secs. 27, 28, 33, and 34, T. 12 S., R. 25 E., 15 ft . E. of junction of route rd. and rd. fork W. (83d Street), on S. end of concrete head wall of culvert; chiseled square
Linwood School, 0.5 mi . N. of, at cor. secs. 3, 4, 33, and 34, Tps. 12 and $13 \mathrm{~S} ., \mathrm{R} .25 \mathrm{E} ., 70 \mathrm{ft}$. N. and 30 ft . W. from center of crossroads (intersection of route rd. and 87 th Street), in root on E. side of $36-\mathrm{in}$. maple tree; copper nail and washer
962. 46
Linwood School, 23 ft . S. and 55 ft . E. from SE. corner of, at quarter cor. between secs. 3 and 4, T. 13 S., R. 25 E., 200 ft . S. and 34 ft . W. from junction of T-rd. W., in concrete post; standard tablet stamped "18 J 1933 955"
Reference mark, at NW. corner of junction of T-rd. W.; top of S. end of corrugated-iron culvert
948. 04
Linwood School, 0.5 mi . S. of, at cor. secs. 3, 4, 9, and 10, T. $13 \mathrm{~S} .$, R. $25 \mathrm{E} ., 40 \mathrm{ft}$. N. and 30 ft . W. from center of crossroads, on N. end of 30 -in. corrugated-iron culvert; chiseled square
919.57
Linwood School, 1.3 mi . S. of, 0.2 mi . S. of quarter cor. between secs. 9 and 10 , T. $13 \mathrm{~S} .$, R. 25 E., 20 ft . S. and 15 ft . E. from rd. corner, in root on N. side of giant elm tree; copper nail and washer.
T. 13 S., R. 25 E., at quarter cor. between secs. 9 and $16,20 \mathrm{ft}$. S. and 190 ft . E. from junction of T-rd. S., in root on S. side of $24-\mathrm{in}$. elm tree; copper nail and washer
914.67
T. 13 S., R. 25 E., at quarter cor. between secs. 16 and 21, in SW. corner of yard adjoining dwelling of Homer Mann, 19 ft . N. and 26 ft . E. from junction of T-rd. N., in concrete post; standard tablet stamped "19 J 1933 908"
909. 519
Reference mark, 16 ft . N. and 24 ft . E. from junction of T-rd. N., on concrete base of corner fence post; chiseled square
909. 26
Oxford School, 2.1 mi . N. of, at cor. secs. 15, 16, 21, and 22, T. 13 S. , R. 25 E., 30 ft . S. and 50 ft . E. from junction of T-rd. S., in root on W. side of 8 -in. oak tree; copper nail and washer
Oxford School, 1.0 mi . N. of, at cor. secs. 21, 22, 27, and 28, T. 13 S., R. $25 \mathrm{E} ., 15 \mathrm{ft} . \mathrm{S}$. and 21 ft . W. from junction of T-rd. W., 1 ft . W. of corner fence post, on sandstone block; chiseled square
Oxford School, 72 ft . S. and 42 ft . E. from SE. corner of, at cor. secs. 27, 28,33 , and 34, T. 13 S., R. 25 E., 31 ft . N. and 31 ft . W. from center of crossroads (Olathe rd. and N.-S. rd.), in concrete post; standard tablet stamped " 20 J 1933 1002".
1, 003. 125
Reference mark, 50 ft . N. of NE. corncr of schoolhouse, in root on SE. side of 30 -in. elm tree; copper nail and washer.
1, 004.68

## From intersection of 75th Street and Shawnee Mission Road west and north along roads into Armourdale quadrangle (by L. V. Johnson in 1933)

T. 12 S., R. 25 E., at quarter cor. between secs. 20 and $21,18 \mathrm{ft}$. N. and 50 ft . E. from center of crossroads (75th Street and Nall Avenue), at NW. corner of concrete highway bridge, on concrete abutment; chiseled square
T. 12 S., R. 25 E., at quarter cor. between secs. 19 and $20,18 \mathrm{ft}$. N. and 18 ft . W. from center of intersection of 75th Street and U. S. Highway 73 E ., on S. end of concrete head wall of culvert; chiseled square - 1, 040.41
Marty triangulation sta. of U. S. C. \& G.S. (top of marble post) _--.-. 1, 088.919
Marty triangulation sta., $1,200 \mathrm{ft}$. N. of, 20 ft . S. and 10 ft . W. from center of crossroads, on W. head wall of culvert; chiseled square.... 1, 074.62
Antioch Church, at quarter cor. between secs. 19 and 24, T. 12 S., Rs. 24 and 25 E., 110 ft . N. and 45 ft . W. from center of crossroads, 30 ft . E. of front entrance to church, on concrete block; chiseled square

1, 028.70

## On Kansas-Missouri State line near crossing of Indian Creek (by A. V. Ferry in 1933)

Dallas (Mo.), about 0.2 mi . W. of, near W. quarter cor. sec. 31, T. 47 N., R. 33 W., at Kansas-Missouri State line, 30 ft . S. and 25 ft . E. from center of crossroads, on concrete head wall of culvert; chiseled square

In Kansas City-at Meadow Lake Golf Club (by R. F. Gallup in 1933)
Kansas City, near Kansas-Missouri State line, 245 ft . W. and 20 ft . S. from junction of 75th Street and State-line rd., at driveway to Meadow Lake Golf Club; top of bottom hinge on W. gatepost

1, 009. 36
From Olathe No. 2 quadrangle east along road to Linwood School (by T. B.
Matthews in 1035)
T. 13 S., R. 24 E., at quarter cor. between secs. 3 and 4, 240 ft . N. and 12 ft . W. from junction of T-rd., on S. end of W. head wall of concrete culvert; chiseled square

1, 003.96
T. $13 \mathrm{~S} .$, R. 24 E. , in sec. $4,15 \mathrm{ft}$. N. and 10 ft . W. from junction of T-rd., in S. end of W. head wall of concrete culvert; chiseled square_ -
T. 13 S., R. 24 E., at cor. secs. 2, 3, 10, and 11, 23 ft . N. and 27 ft . E. from center of crossroads, 3 ft . NE. of fence, in concrete post; standard tablet stamped "T T 2 K 1935 971"
971. 260

Reference mark, 12 ft . S. and 200 ft . E. from tablet, on N. head wall of concrete culvert; chiseled square
960.77
T. 13 S., R. 24 E., at cor. secs. 1, 2, 11, and 12, 190 ft. S. and 25 ft . W. from center of crossroads, in root on SE. side of $24-\mathrm{in}$. elm tree; copper nail and washer
991. 91
T. 13 S., Rs. 24 and 25 E., at cor. secs. 1, 6, 7, and 12, 100 ft . N. and 20 ft . W. from center of crossroads, in root on S. side of $36-\mathrm{in}$. elm tree; copper nail and washer
922. 58
T. 13 S., R. 25 E., at cor. secs. 5, 6, 7, and 8, 70 ft . S. and 27 ft . W. from center of junction of U. S. Highway 73 E. and T-rd. W., on center line of T-rd. E. produced, 135 ft . S. of S. end of bridge over Indian Creek, 2 ft . inside right-of-way fence, in concrete post; standard tablet stamped "T T 1 K 1935"
868. 577

Reference mark, 260 ft . N. and 18 ft . E. from tablet, at N. abutment of above-mentioned bridge, on $W$. end of parapet wall; chiseled square
870. 85
T. 13 S., R. 25 E., at cor. secs. 4, 5, 8, and 9, 15 ft . N. and 45 ft . W. from center of crossroads, on N . head wall of concrete culvert; chiseled square

Linwood School, 1.0 mi W. of, at quarter cor between secs. 4 and 5,
T. 13 S., R. $25 \mathrm{E} ., 80 \mathrm{ft}$. N. and 30 ft . W. from junction of T-rd., in root on S . side of $16-\mathrm{in}$. walnut tree; copper nail and washer

Feet
944.15

From Olathe No. 2 quadrangle near Olathe east along road to Oxford School (by T. B. Matthews in 1935)

Olathe; about 3.5 mi . E. of, at cor. secs. 3, 4, 33, and 34, Tps. 13 and $14 \mathrm{~S} .$, R. $24 \mathrm{E} ., 15 \mathrm{ft}$. N. and 15 ft . W. from center of crossroads, on NE. end of wing wall of concrete culvert; chiseled square.......
Olathe, 4.5 mi . E., thence 1 mi . S. by rd. from, at cor. secs. 34, 35, 2, and 3, Tps. 13 and 14 S., R. 24 E., 22 ft. N. and 128 ft . E. from center of crossroads, 2 ft . N. and 5 ft . W. from telephone pole, in concrete post; standard tablet stamped "T T 10 K 1935 1035"..
Reference mark, 40 ft . S. and 170 ft . W. from tablet, in root of $6-\mathrm{in}$. ash tree; copper nail and washer
Tps. 13 and 14 S., R. 24 E., at cor. secs. 1, 2, 35, and $36,35 \mathrm{ft}$. N. of junction of T-rd., in base of $10-\mathrm{in}$. hedge tree; copper nail and washer.
T. 13 S., R. 25 E., at approximate SW. cor. sec. $31,60 \mathrm{ft}$. N. and 20 ft.
E. from center of crossroads, in root of $10-\mathrm{in}$. hedge tree; copper nail and washer

1, 012.06
$1,035.370$
1, 041. 70
$1,003.80$
960. 80
T. 13 S., R. 25 E., at W. cor. secs. 30 and $31,1 \mathrm{mi}$. W. of intersection of Olathe (Kans.)-Martin City (Mo.) rd. and U. S. Highway 73 E., $33 \mathrm{ft} . \mathrm{N}$. and 27 ft . E. from center of crossroads, in concrete post; standard tablet stamped "T T 1111935 948" 948. 690

Reference mark, $2,300 \mathrm{ft}$. E. of tablet, in N. end of E. abutment of bridge across Tomahawk Creek; chiseled square
913. 20

Oxford School, 2.0 mi . W. of, at cor. secs. 29, 30, 31, and 32, T. 13 S., R. $25 \mathrm{E} ., 90 \mathrm{ft}$. N. and 50 ft . E. from center of intersection of OlatheMartin City rd. and U. S. Highway 73 E., on E. side of highway, on concrete head wall; chiseled square
Oxford School, 1.0 mi . W. of, at cor. secs. 28, 29, 32, and 33, T. 13 S., R. 25 E., 10 ft . N. and 100 ft . E. from center of crossroads (OlatheMartin City rd. and N.-S. rd.), on N. head wall of concrete culvert; chiseled square
949. 12

From point near southeast corner of Olathe No. 2 quadrangle east along road near south border of Olathe No. 1 quadrangle to Kansas-Missouri State line (by. T. B. Matthews in 1935)
T. 15 S., R. 24 E., at cor. secs. $9,10,15$, and $16,25 \mathrm{ft}$. N. and 50 ft . E. from center of crossroads, on SW. corner of concrete well curb; chiseled square

1, 087.31
T. 15 S., R. 24 E., at cor. secs. $10,11,14$, and $15,20 \mathrm{ft}$. N. and 20 ft . E. from center of crossroads, in root on S. side of 24 -in. maple tree; copper nail and washer

1, 121. 11
T. 15 S., R. 24 E., at cor. secs. 11, 12, 13, and 14, 25 ft . S. and 26 ft . E. from center of crossroads, 5 ft . S. and 5 ft . E. from fence post at NW. corner of orchard, in concrete post; standard tablet stamped "T T 1 H 1935"

1, 106. 638
Reference mark, $3,400 \mathrm{ft}$. E. of tablet, on $S$. head wall of concrete culvert; chiseled square

1, 043.83
T. 15 S., Rs. 24 and 25 E., at cor. secs. 1, 6, 7, and 12, 20 ft . N. and 20 ft . E. from center of crossroads, at SW. corner of hedge fence, in root on S. side of $10-\mathrm{in}$. hedge tree; copper nail and washer

1, 072.44
T. 15 S., R. 25 E., at cor. secs. 5, 6, 7, and 8, 20 ft . N. and 10 ft . E. from center of crossroads, in concrete pavement of highway, at point 4 ..... Feetin. W. of its E. edge, in line with hedge fence W.; chiseled square_ . $1,106.78$T. 15 S., R. 25 E., at cor. secs. 8, 9, 16, and 17, 31 ft . N. and 21 ft . W.from center of crossroads, 47 ft . N. and 15 ft . E. from $16-\mathrm{in}$. elmtree, in concrete post; standard tablet stamped "T T 2 H 1935"--- 1, 092. 162
Reference mark, 540 ft . W. of tablet, on N. head wall of concrete culvert; chiseled square ..... 1, 084, 17
T. 15 S., R. 25 E., at cor. secs. $9,10,15$, and $16,18 \mathrm{ft}$. N. and 18 ft . E. from center of crossroads, at SW. corner of hedge fence, in root on SW. side of 12 -inch hedge tree; copper nail and washer ..... 1, 055.71
T. $15 \mathrm{~S} .$, R. $25 \mathrm{E} ., 425 \mathrm{ft}$. W. of approximate quarter cor. between secs. 10 and $15,9 \mathrm{ft}$. N. of center line of E.-W. rd., on N. head wall of concrete culvert; chiseled square ..... 1, 029. 02
T. 15 S., R. 25 E., near E. sixteenth cor. between secs. 10 and 15, at crossing of E . fork of creek; center of concrete low-water bridge_ ..... 987.7T. 15 S., R. 25 E., about 0.2 mi. E. of cor. secs. 10, 11, 14, and 15,150ft. S. and 30 ft . E. from junction of State line rd. with T-rd. W., inroot on W. side of lone $14-\mathrm{in}$. elm tree; nail and washer1, 032.08
From Kansas-Missouri State line at point south of Blue River west and north along roads to Oxford School (by C. T. Shepherd in 1934)
Woodland School, in yard of, in sec. 22, T. 14 S., R. 25 E., 76 ft. NW. of $24-\mathrm{in}$. elm tree, 63.5 ft . W. of NE. corner of schoolhouse, in concrete post; U. S. C. \& G. S. and State Survey standard disk. .--
Woodland School, in yard of, 60 ft . W. of above-described U. S. C. \& G. S. and State Survey disk, 8 ft . E. of NE. corner of schoolhouse, on N . side of walk; chiseled square
Woodland School, 0.8 mi . N. of, near SW. cor. sec. 15, T. 14 S., R. 25 E., on N. end of W. abutment of bridge over Blue River; chiseled square
885. 71
Woodland School, 1.5 mi . N. of, 3.1 mi . S. of Oxford School, near NW. cor. sec. 15 , T. 14 S., R. 25 E., 350 ft . S. and 15 ft . W. from crossroads, in root of $24-\mathrm{in}$. oak tree; nail and washer
Oxford School, 1.0 mi . S. of, 15 ft . N. and 9 ft . E. from SW. cor. sec. 34, T. 13 S., R. 25 E., at crossroads, on N. end of E. wall of culvert; chiseled square
948. 50

## OLATEE NO. 2 QUADRANGLE

[Latitude $38^{\circ} 45^{\prime}-39^{\circ}$; longitude $94^{\circ} 45^{\prime}-95^{\circ}$ ]
LEAVENWORTH AND JOHNSON COUNTIES
From Olathe No. 1 quadrangle near village of Greenwood along roads generally west to point west of Monticello, thence north along road into Bonner Springs quadrangle (by L. V. Johnson in 1933)
[Line jogs into Bonner Springs quadrangle]
Greenwood village, 0.7 mi . along State Highway 10 E. of, 3.5 mi . SW. of Shawnee, about 850 ft . S. of cor. secs. 16, 17, 20, and 21, T. 12 S., R. 24 E., 37 ft . S. and 50 ft . E. from junction of State Highway 10 and N.-S. rd., in concrete post; standard tablet stamped "T T 20 1933 885"
885. 298
Reference mark, $2,000 \mathrm{ft}$. NE. of tablet, 35 ft . E. and 15 ft . S. from center of crossroads, on E. end of concrete head wall of culvert; chiseled square
Greenwood, 0.2 mi . W. of, 2.5 mi . SE. of Zarah, at approximate cor. secs. $17,18,19$, and 20 , T. 12 S., R. 24 E., 15 ft . S. and 25 ft . W.
from center of crossroads, on E. end of concrete head wall of culvert; chiseled square

Feet
867. 40

Monticello village, near quarter cor. between secs. 15 and 22, T. 12 S., R. 23 E., 35 ft . S. and 35 ft . W. from junction of T-rd. S., in root on NW. side of $30-\mathrm{in}$. walnut tree; copper nail and washer

1, 011.35
Monticello, 0.7 mi . W. of, 1.0 mi . W. of Virginia School, at cor. secs. $15,16,21$, and 22 , T. 12 S., R. 23 E., 25 ft . N. and 200 ft . W. from center of crossroads, in root on S. side of $18-\mathrm{in}$. walnut tree; copper nail and washer
973. 17

Virginia School, in yard of, at cor. secs. 16, 17, 20 and 21, T. 12 S., R. 23 E., $20 \mathrm{ft} . N$. and 177 ft . W. from crossroads, 22 ft . E. of hedge at W. side of school grounds, in concrete post; standard tablet stamped "T T 13 O 1933 931"
930. 752

Reference mark, at SW. corner of above-mentioned crossroads, on W. concrete head wall of culvert; chiseled square
938.72

Virginia School, 0.5 mi . W. of, at quarter cor. between secs. 17 and 20, T. 12 S., R. 23 E., 22 ft . S. and 35 ft . W. from junction of T-rd. E., in root on E. side of $24-\mathrm{in}$. oak tree; copper nail and washer
936. 44

## Along Union Pacific Railroad near Lenape-jog from Bonner Springs quadrangle (by R. F. Gallup in 1934)

Lenape, 1.5 mi . W. of, near quarter cor. between secs. 16 and 21 , T. 12 S., R. 22 E., 58.7 ft . N. of N. rail of S. track of Union Pacific R. R. main line, 1 ft . S. of right-of-way fence, in line with rd. N., in concrete post; standard tablet stamped "T T 21 O 1934 784".-
783. 824

Reference mark, 60 ft . S. and 90 ft . W. from tablet, on concrete foundation of electric signal post; chiseled square
790.58
T. 12 S., R. 22 E., on W. side of $\mathrm{NW} 1 / 4 \mathrm{sec}$. 22, about 150 ft . E. of section line, on S. side of Union Pacific R. B. tracks, on top of concrete foundation of " S " post; chiseled square
787.90

Lenape, 500 ft . E. of Union Pacific R. R. sta., 45 ft . E. of center line of N.-S. wagon rd., 25 ft . E. of N.-S. fence line extending N., 11.5 ft . S. of S. rail of main R. R. track, in concrete post; standard tablet stamped "T T 2201934 786"
786. 362

Reference mark, 190 ft . S. and 25 ft . W. from tablet, at intersection of N.-S. fence line and S. right-of-way fence of Union Pacific R. R., in root on E. side of elm tree; nail and washer
780. 38

Lenape, 0.6 mi. E. of, near SW. cor. sec. 14, T. 12 S., R. 22 E., on Union Pacific R. R., on top of NW. anchor bolt of electric semaphore 228; chiseled square
788. 20

From village of Greenwood south and west along roads to Spring Hill, thence west and north along roads and U. S. Highway 50 to olathe (by T. B. Matthews in 1935)
Greenwood, 1.5 mi . SE. of, at cor. secs. 20, 21, 28, and 29, T. $12 \mathrm{~S} .$, R. $24 \mathrm{E} ., 30 \mathrm{ft}$. N. and 15 ft . E. from center of crossroads, on N. end of head wall of concrete culvert; chiseled square
942.77

Greenwood, 2.0 mi . SE. of, 350 ft . S. and 15 ft . E. from W. quarter
 chiseled square988. 92

Greenwood, 2.5 mi . SE. of, 1.5 mi 'by rd. NW. of Lenexa, at cor. secs. $28,29,32$, and 33, T. 12 S., R. 24 E., 24 ft . S. and 42 ft E. from center of crossroads, 1 ft . N. of fence, in concrete post; standard tablet stamped "T T 12 K 1935 1024"

Feet
1, 023.794
Reference mark, 160 ft . N. and 80 ft . W. from tablet, in root of $12-\mathrm{in}$. apple tree; copper nail and washer
T. 12 S., R. 24 E., 730 ft . S. of cor. secs. 28, 29, 32, and $33,12 \mathrm{ft}$. E. of center line of rd., on masonry head wall of culvert; chiseled square

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1, 030.50
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T. 12 S., R. 24 E., 40 ft . E. of quarter cor. between secs. 32 and 33 , in hedge stump; copper nail and washer.
995. 79

Tps. 12 and 13 S., R. 24 E., at cor. secs. 4, 5, 32, and $33,25 \mathrm{ft}$. N. and 20 ft . W. from center of crossroads, in concrete base of fence corner; chiseled square
T. 13 S., R. 24 E., at quarter cor. between secs. 4 and $5,25 \mathrm{ft}$. S. and 25 ft . E. from junction of T-rd. E., in base of $12-\mathrm{in}$. ash tree; copper nail and washer

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1, 042.53
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T. 13 S., R. 24 E., about 100 ft . W. of center of sec. $4,20 \mathrm{ft}$. N. and 25 ft . W. from center of intersection of U. S. Highway 50 and E.-W. rd., on W. side of highway, on W. end of concrete head wall; chiseled square
Lackmans, about 1 mi . N. of, at quarter cor. between secs. 8 and 9, T. $13 \mathrm{~S} .$, R. $24 \mathrm{E} ., 22 \mathrm{ft}$. S. and $74 \mathrm{ft} . \mathrm{W}$. from junction of T-rd. W., 1 ft . S. of fence, in concrete post; standard tablet stamped "T T 3 K 1935 1055"
$1,055.052$
Reference mark, 22 ft . N. and 150 ft . E. from tablet, 75 ft . E. of junction of T-rds., in base of 12 -in. hackberry tree; copper nail and washer $1,050.58$
Lackmans, 0.3 mi . N. of, 940 ft . S. of cor. secs. 8, 9,16 , and 17, T. 13 S., R. 24 E., at intersection of U. S. Highway 50 and N.-S. rd., 15 ft. W. of center line of N.-S. rd., 20 ft . SE. of center line of highway, in wing wall of concrete culvert; chiseled square

1, 051.14
Lackmans, 0.5 mi . S. of, at cor. secs. 16, 17, 20, and 21, T. 13 S ., R. 24 E., 25 ft . N. and 36 ft . E. from center of crossroads, 3 ft . NE. of corner of hedge, in root of 12 -in. thorny-locust tree; copper nail and washer

1, 041. 22
Lackmans, 1.5 mi . S. of, at cor. secs. 20, 21, 28, and 29, T. 13 S. , R. $24 \mathrm{E} ., 20 \mathrm{ft} . \mathrm{N}$. and 10 ft . W. from center of crossroads, in W. head wall of concrete culvert; chiseled square
977. 70

Green Springs School, 2.5 mi . E. of Olathe, at cor. secs. 28, 29, 32, and 33, T. 13 S., R. 24 E., 32 ft . S. and 73 ft . W. from center of crossroads, 49 ft . N. and 19 ft . E. from NE. corner of schoolhouse, 3 ft . S. of iron rail fence, in concrete post; standard tablet stamped "T T 9 K 1935 1055"

1, 055.044
Reference mark, 500 ft . S. and 85 ft . E. from tablet, on W. wall of concrete culvert; chiseled square

1, 039.25
Green Springs School, 1.0 mi . S. of, about 2.5 mi . SE. of Olathe, near cor. secs. 4, 5, 32, and 33, Tps. 13 and 14 S., R. 24 E., 200 ft . S. and 20 ft . W. from center of crossroads, in root on N. side of $20-\mathrm{in}$. ash tree; copper nail and washer.
Olathe, about 3.5 mi . SE. of, near cor. secs. 4, 5, 8, and 9, T. 14 S ., R. 24 E., 120 ft . S. and 20 ft . E. from center of crossroads, in root on W. side of $10-\mathrm{in}$. elm tree; copper nail and washer.

Olathe, about 4.5 mi . SE. of, at cor. secs. 8, 9,16 , and 17 , T. 14 S ., R. $24 \mathrm{E} ., 25 \mathrm{ft}$. N. and 145 ft . E. from center of crossroads, in pasture, 3 ft . N. of wire fence, in concrete post; standard tablet stamped "M 11935 1049"

Feet
1, 049. 243
Reference mark, 680 ft . N. and 155 ft . W. from tablet, 10 ft . W. of center line of rd., on NW. wing wall of concrete abutment; chiseled square

1, 016. 32
T. 14 S., R 24 E., 510 ft . S. of approximate cor. secs. 16, 17, 20, and 21, 10 ft . W. of center line of N.-S. rd., on NW. concrete wing wall of small bridge over Coffee Creek; chiseled square

1, 002. 30
T. 14 S., R. 24 E., 10 ft . W. of approximate quarter cor. between secs. 20 and 21, in line with E.-W. fence, on W. head wall of concrete culvert; ch.seled square

1, 036.30
Bonita, 3 mi. E. of, at cor. secs. 20, 21, 28, and 29, T. 14 S., R. 24 E., 40 ft . N. and $25 \mathrm{ft} . \mathrm{W}$. from center of crossroads, in hedge fence, at base of $12-\mathrm{in}$. hedge tree, on top of 2 -in. hedge stump; copper nail and washer
$1,067.39$
T. 14 S., R. 24 E., 230 ft . N. of quarter cor. between secs. 28 and 29 , on E . head wall of concrete culvert; chiseled square

1, 025.97
Bonita, 3 mi . E. and 1 mi . S. from, 2.0 mi . N. and 3.0 mi . E. from Ocheltree, at cor. secs. 28, 29, 32, and 33, T. 14 S., R. 24 E., 20 ft . S. and 80 ft . E. from center of crossroads, 3 ft . S. of wire fence, in field, in concrete post; standard tablet stamped "M 21935 1004"
$1,003.940$
Reference mark, $1,250 \mathrm{ft}$. S. and 70 ft . W. from tablet, in E. end of S. concrete abutment of steel-truss bridge; chiseled square
997.87

Ocheltree, 3.0 mi . E. and 1.0 mi . N. from, at cor. secs. 4, 5, 32, and 33, Tps. 14 and 15 S., R. 24 E., 20 ft . S. and 20 ft . W. from center of crossroads, in root on E. side of 14 -in. hackberry tree; copper nail and washer

1, 061.85
Ocheltree, 3.0 mi . E. of, 3.0 mi . E. and 1.5 mi . N. from Spring Hill, at cor. secs. 4, 5, 8, and 9, T. 15 S., R. 24 E., 40 ft . S. and 20 ft . E. from center of crossroads, in wire-fence line, 15 ft . S. of fence corner, in root on N . side of $12-\mathrm{in}$. hedge tree; copper nail and washer
$1,094.59$
Spring Hill village, 3 mi . E. and 0.5 mi . N. from, in SE. cor. sec. 8, T. $15 \mathrm{~S} ., \mathrm{R} .24 \mathrm{E} ., 90 \mathrm{ft}$. N. and 25 ft . W. from center of crossroads, in field, 10 ft . S. of $24-\mathrm{in}$. hedge tree, 2 ft . W. of wire fence, in concrete post; standard tablet stamped "M 31935 1057".

1, 057. 702
Reference mark, 580 ft . N. and 20 ft . E. from tablet, on W. end of S. concrete abutment; chiseled square

1, 043.76
Tuckerville School, 230 ft . W. and 50 ft . S. from, 2 mi . E. and 0.5 mi . N. from Spring Hill, at cor. secs. 7, 8, 17, and 18, T. 15 S., R. 24 E., 15 ft . N. and 12 ft . E, from center of crossroads, on N . head wall of concrete culvert; chiseled square

1, 043.27
Spring Hill, 1 mi . E. and 0.5 mi . N. from, 50 ft . N. of approximate cor. secs. 7, 12, 13, and 18, T. 15 S., Rs. 23 and 24 E., in old lane, in root on S. side of $10-\mathrm{in}$. elm tree; copper nail and washer-.........-
Spring Hill, 0.5 mi . N. of, at cor. secs. 11, 12, 13, and 14, T. 15 S., R. 23 E., 10 ft . N. and 30 ft . W. from center of crossroads, 360 ft . E. of Frisco R. R., on N. head wall of concrete culvert; chiseled square. Spring Hill, on N. edge of, on N. side of sec. 14, T. 15 S., R. 23 E., 20 ft. $N$. and 100 ft . W. from junction of T-rd. W., on W. side of State Highway 7 (also 16 ), 2 ft . N. of hedge fence, in row of $14-\mathrm{in}$. walnut trees, in concrete post; standard tablet stamped "M 41935 1050"- 1, 050. 356

Reference mark, 90 ft . N. and 150 ft . E. from tablet, 70 ft . S. of junc-
tion of T-rd. E., on E. head wall of concrete culvert under highway; chiseled square

Feet
1, 049.47
Spring Hill, in NW. part of, at cor. secs. 10, 11, 14, and 15, T. 15 S., R. 23 E., at bend in rd., 180 ft . S. and 10 ft . W. from junction of T-rd. W., 230 ft . W. of junction of T-rd. S., on top of $24-\mathrm{in}$. thorny-locust stump; copper nail and washer

1, 043.52
Beckley School, 1.0 mi . W. of Spring Hill, at cor. secs. 9, 10, 15, and 16, T. 15 S., R. 23 E., 15 ft . N. and 10 ft . E. from center of crossroads, 100 ft . N. and 35 ft . W. from NW. corner of schoolhouse, on E. head wall of concrete culvert; chiseled square
, 008. 92
Beckley School, 1.0 mi . N. of, 2.0 mi . W. of Ocheltree, at cor. secs. 3, 4,9 , and 10 , T. 15 S., R. 23 E., 18 ft . N. and 14 ft . W. from center of crossroads, on W. head wall of concrete culvert; chiseled square...-
Ocheltree, 2.5 mi . W. of, 150 ft . W. of approximate quarter cor. between secs. 4 and 9, T. 15 S., R. 23 E., 10 ft . S. of center line of rd., on concrete hand rail; chiseled square
993.02

Ocheltree, 3.0 mi . W. of, 4.0 mi . S. of Clare sta. on Atchison, Topeka \& Santa Fe Ry., in NW. cor. sec. 9, T. 15 S., R. 23 E., 25 ft. S. and 150 ft . E. from junction of T-rd. N., 3 ft . S. and 3 ft . W. from NE. corner of fence around yard, in concrete post; standard tablet stamped "M 51935 1032"

1, 032.041
Reference mark, 900 ft . N. and 160 ft . W. from tablet, on W. head wall of concrete culvert; chiseled square

1, 020.36
Clare sta., 3.0 mi . S. of, at cor. secs. 4, 5, 32, and $33, \mathrm{Tps}$.14 and 15 S. , R. 23 E., 10 ft . S. and 20 ft . W. from center of crossroads, on S. head wall of concrete culvert; chiseled square
$1,006.26$
Clare sta., 2.5 mi . S. of, 25 ft . W. of approximate quarter cor. between secs. 32 and 33, T. 14 S., R. 23 E., at E. end of hedge fence, in root on N . side of $12-\mathrm{in}$. hedge tree; copper nail and washer

1, 037.60
Clare sta., 2.0 mi . S. of, at cor. secs. $28,29,32$, and 33 , T. 14 S., R. 23 E., 20 ft . S. and 50 ft . E. from center of crossroads, in root on E. side of $10-\mathrm{in}$. hedge tree; copper nail and washer

1, 042.14
Clare sta., 1.5 mi . S. of, 260 ft . S. of approximate quarter cor. between secs. 28 and 29, T. 14 S., R. 23 E., on W. head wall of concrete culvert; chiseled square
$1,030.60$
Clare sta., 1.1 mi. S. of, at cor. secs. $20,21,28$, and 29 , T. 14 S., R. 23 E., 30 ft . N. and 90 ft . W. from center of crossroads, 3 ft . N. of hedge fence, in concrete post; standard tablet stamped "M 61935 1062"
i1, 062.504
Reference mark, 380 ft . N. and 40 ft . E. from tablet, in NE. corner of yard, at N . end of row of trees, on E . side of $20-\mathrm{in}$. walnut tree; copper nail and washer
$1,065.90$
Clare sta., 600 ft . W. of, at cor. secs. 16, 17, 20, and 21, T. 14 S., R. 23 E., 560 ft . N. of center of crossroads, 120 ft . N. of center line of Atchison, Topeka \& Santa Fe Ry., on W. head rail of concrete bridge; chiseled square

1, 027.99
Clare sta., 1.0 mi. N. of, at cor. secs. 8, 9, 16, and 17, T. 14 S., R. 23 E., 70 ft . N. and 15 ft . W. from center of intersection of U. S. Highway 50 and E.-W. rd., on W. side of highway, on W. head wall of concrete culvert; chiseled square

1, 044.64

Sunflower School, 3.0 mi . by rd. SW. of Olathe, at cor. secs. 4, 5, 8, and 9, T. 14 S., R. 23 E., near bend in U. S. Highway 50, 210 ft . S. and 40 ft . W . from center of crossroads, in schoolyard at point 2 ft . N. of its S. fence, in concrete post; standard tablet stamped "M 71935 1070"

Feet
Reference mark, 225 ft . N. and $2,550 \mathrm{ft}$. E. from tablet, 90 ft . E. of approximate quarter cor. between secs. 4 and 9, T. 14 S., R. 23 E., on N. side of U. S. Highway 50 , on N. head wall of concrete culvert; chiseled square

1, 016.86
Olathe, 2.0 mi . SW. of, in $\mathrm{SE}_{1} 1 / \mathrm{sec} .4$, T. $14 \mathrm{~S} ., \mathrm{R} .23 \mathrm{E}$. , on U. S. Highway 50 at bridge over Cedar Creek, on E. end of N. concrete curb; chiseled square
972. 35
T. 14 S., R. 23 E., in NE $1 / 4 \mathrm{sec} .3$, on U. S. Highway $50,380 \mathrm{ft}$. SW. of intersection of center line of highway with line between sec. 3, T. $14 \mathrm{~S} .$, and sec. $34, \mathrm{~T} .13 \mathrm{~S} ., 15 \mathrm{ft}$. E. of center line of concrete pavement, on E . head wall of concrete culvert; chiseled square

1, 042.62
Olathe, 12 ft . S. and 12 ft . E. from intersection of U. S. Highway 50 and Wabash Street, in S. head wall of concrete culvert; chiseled square

From Bonner Springs quadrangle south and east along roads to point 1 mile north of Lackmans station (by T. B. Matthews in 1985)

Virginia School, 1.5 mi . SW. of, at quarter cor. between secs. 20 and 29, T. 12 S ., R. $23 \mathrm{E} ., 290 \mathrm{ft}$. N. and 10 ft . W. from junction of T-rd. E., on W. head wall of concrete culvert; chiseled square
916. 62
T. 12 S., R. 23 E., at approximate center of sec. $29,45 \mathrm{ft} . \mathrm{N}$. and 20 ft . W. from center of intersection of State Highway 10 and route rd., on N. side of highway, on W. head wall of concrete culvert, chiseled square
971. 62
T. 12 S., R. 23 E., at quarter cor. between secs. 29 and 32, in SE. corner of old Murphy Cemetery, 35 ft . W. of center line of N.-S. rd., in root on E. side of 16 -in. cedar tree; copper nail and washer_. $1,000.18$
T. 12 S., R. 23 E., in center sec. 32, 410 ft . N. of junction of E.-W. rd. and T-rd. N., 310 ft . NW. of farmhouse of William Holmquist, 24 ft . W. of center line of rd., $6 \mathrm{ft} . \mathrm{W}$. of fence line, in concrete post; standard tablet stamped "T T 6 K 1935979 "
979. 354

Reference mark, 460 ft . SE. of tablet, 200 ft . E. of junction of T-rd. N., 6 ft . S. of center line of E.-W. rd., on S. head wall of concrete culvert; chiseled square
T. 12 S., R. 23 E., at quarter cor. between secs. 32 and $33,60 \mathrm{ft}$. N. and 65 ft . W. from junction of T-rd. W., at S. corner of tower of airway revolving beacon light, on concrete base of tower; chiseled square

1, 016. 40
Tps. 12 and 13 S., R. 23 E., at approximate cor. secs. 4, 5, 32, and 33, 10 ft . S. and 10 ft . E. from junction of T-rd. N., on S. head wall of concrete culvert; chiseled square
$1,006.39$
Prairie Star School, at approximate cor. secs. 3, 4, 33, and 34, Tps. 12 and $13 \mathrm{~S} .$, R. $23 \mathrm{E} ., 100 \mathrm{ft}$. S. and 60 ft . W. from junction of State Highway 7 and T-rd. W., 8 ft . E. of NE. corner of schoolhouse, on NE. corner of concrete curb to well; chiseled square
Prairie Star School, 1.0 mi . S. of, 4.0 mi . N. and 1.0 mi . W. from Olathe on State Highway 7, at approximate cor. secs. 3, 4, 9, and 10, T. $13 \mathrm{~S} .$, R. 23 E., 24 ft . N. and 28 ft . W. from center of crossroads, 4 ft . N. and 5 ft . W. from hedge-fence corner, in concrete post; standard tablet stamped "T T 5 K 1935 1053"

Reference mark, $1,580 \mathrm{ft} . \mathrm{N}$. of tablet, 10 ft . W. of center line of

State Highway 7, on W. head wall of concrete culvert; chiseled square

Feet
$1,038.43$
T. 13 S., R. 23 E., at approximate cor. secs. 2, 3, 10, and 11, 24 ft . N. of junction of T-rd. S., on point of intersection of curve on State Highway 7, in root on S. side of $14-\mathrm{in}$. hedge tree; copper nail and washer

1, 054.26
T. 13 S., R. 23 E., 1,050 ft. E. of quarter cor. between secs. 2 and 11, 23 ft . N. of center line of E.-W rd., in yard of William Anderson, in root on SW. side of $30-\mathrm{in}$. maple tree; copper nail and washer-....-. $1,027.00$
T. 13 S., R. 23 E., $1,150 \mathrm{ft}$. N. of cor. secs. 11, 12, 13, and 14, 50 ft. W. of center line of N.-S. rd., 60 ft . N. of center of iron gate at entrance to driveway to house of G. E. Hoff, 25 ft . W. of woven-wire fence, in root on E. side of $36-\mathrm{in}$. maple tree; copper nail and washer
Olathe, 2.5 mi . N. of, at cor. secs. 11, 12, 13, and 14. T. 13 S., R. 23 E., 21 ft . S. and 78 ft . W. from center of crossroads, 4 ft . S. and 38 ft. W. from large rock gatepost, in concrete post; standard tablet stamped "T T 4 K 1935 982"
982. 091

Reference mark, $1,330 \mathrm{ft}$. E. of tablet, 10 ft . N. of center line of rd., on NW. wing wall of concrete bridge; chiseled square 936. 58
T. 13 S., R. 23 E., 700 ft . E. of quarter cor. between secs. 12 and 13, 200 ft . W. of center line of Atchison, Topeka \& Santa Fe Ry., 40 ft. S. of E.-W. rd., in root on N. side of $20-\mathrm{in}$. oak tree; copper nail and washer
924. 42
T. 13 S., Rs. 23 and 24 E., at cor. secs. 7, 12, 13, and 18, 15 ft . N. and 12 ft . W. from center of crossroads, in concrete base of corner fence post; chiseled square
$1,006.55$
T. 13 S., R. 24 E., at cor. secs. 7, 8, 17, and $18,1,060 \mathrm{ft}$. W. of center of crossroads, 10 ft . S. of center line of E.-W. rd., on S. head wall of concrete culvert; chiseled square
Lackmans, about 2 mi . NW. of, at approximate quarter cor. between secs. 7 and 8, T. 13 S., R. 24 E., 18 ft. S. and 18 ft . E. from junction of T-rd. E., on NW. corner of base of stone post; chiseled square -

> From point on State High way 7 about 1 mile south of Prairie School west, south, and east along roads to Olathe (by T. B. Matthews in 1935 ; leveled twice)

Twin Springs School, 1.0 mi . NW. of, 2 mi . by rd. SW. of Prairie School, in SE. cor. sec. 5, T. 13 S., R. 23 E., 15 ft . N. and 20 ft . W. from junction of T-rd. S., in root on SW. side of $12-\mathrm{in}$. walnut tree; copper nail and washer.
$1,005.23$
Twin Springs School, 120 ft . N. and 85 ft . W. from, at cor. secs. 8, 9, 16, and 17, T. 13 S., R. 23 E., 10 ft . S. and 20 ft . W. from center of crossroads, on S . head wall of concrete culvert; chiseled square
Twin Springs School, 1 mi . S. of, at cor. secs. 16, 17, 20, and 21, T. $13 \mathrm{~S} ., \mathrm{R} .23 \mathrm{E} ., 25 \mathrm{ft}$. S. and $12 \mathrm{ft} . \mathrm{W}$. from junction of T-rd. N., 175 ft . S. and E. from farmhouse of T. N. Atkinson, 5 ft . S. and 8 ft . W. from fence corner, in concrete post; standard tablet stamped "T T 7 K 1935 869"
Reference mark, 180 ft . N. and 12 ft . W. from tablet, in yard of T. N. Atkinson, 2 ft . W. of fence, in root on S. side of triple elm tree; copper nail and washer.
T. 13 S., R. 23 E., near cor. secs. 20, 21, 28, and 29, 20 ft . S. and 70 ft. E. from center of crossroads, in root on W. side of 14 -in. elm tree; copper nail and washer
$1,000.89$

From Olathe east along road to Green Springs School (by T. B. Matthews in 1935)
U. S. C. \& G. S. standard disk stamped "E 222 1934"--.-.-......- 1, 034.758

Olathe, at SE. corner of city hall, on top of stone water table; chiseled square

1, 030.14
Olathe, on E. edge of, at cor. secs. 25, 30, 31, and 36, T. 13 S., Rs. 23 and $24 \mathrm{E} ., 30 \mathrm{ft}$. S. and 15 ft . W. from center of crossroads, on W. head wall of concrete culvert; chiseled square
Olathe, 1.0 mi . E. of, 1.0 mi . W. of Green Springs School, T. $13 \mathrm{~S} .$, R. 24 E., at cor. secs. $29,30,31$, and $32,15 \mathrm{ft}$. S. and 10 ft . E. from center of crossroads, on limestone ledge; chiseled square

## From Bonner Springs quadrangle south across Kansas River to De Soto, thence southwest along roads into Lawrence quadrangle (by T. B. Matthews in 1935)

De Soto, across Kansas River from, 1.2 mi . SW. of Lenape, 7 ft . S. and 15 ft . E. from intersection of center line of S . track of Union Pacific R. R. with center line of wagon rd. between secs. 21 and $22, \mathrm{~T} .12 \mathrm{~S}$., R. 22 E., in W. edge of cattle guard; copper nail and washer.
789. 14

De Soto, 120 ft . N. of N. end of bridge over Kansas River, 15 ft . W. of center line of N.-S. rd., in root on SE. side of $24-\mathrm{in}$. ash tree; copper nail and washer
790. 04

De Soto, at main entrance to high school, on E. end of limestone doorsill; standard tablet stamped "M 81935 842"
842. 030

Reference mark, 350 ft . W. of tablet, 12 ft . N. of center line of 3 d Avenue, on N. head wall of concrete culvert; chiseled square
826. 36

De Soto, 0.6 mi . SW. of, in $\mathrm{SW}^{1 / 4}$ sec. 28, T. 12 S ., R. 22 E., on W. side of State Highway 10, 200 ft . S. of residence of Dr. R. W. Boone, on head wall of concrete culvert; chiseled square
866. 44

De Soto, 1.1 mi . SW. of, 325 ft . E. of approximate quarter cor. between secs. 29 and 32, T. 12 S ., R. 22 E., 8 ft . N. of center line of E.-W. rd., on head wall of concrete culvert; chiseled square
873. 77

## From Lawrence quadrangle near village of Prairie Center east along road to ${ }^{*}$ point near Olathe (by T. B. Matthews in 1985)

Prairie Center, 0.9 mi . E. of, on line between secs. 29 and 32 , T. 13 S ., R. 22 E., at bridge over Spoon Creek, on S. end of E. pier; chiseled square

Prairie Center, 1.1 mi . E. of, at cor. secs. 28, 29, 32, and 33, T. 13 S ., R. $22 \mathrm{E} ., 15 \mathrm{ft}$. N. and 280 ft . W. from center of crossroads, on N . head wall of concrete culvert; chiseled square -.-------------------T. 13 S., R. 22 E., 2,450 ft. E. of cor. secs. 28, 29, 32, and 33, on N. end of E. abutment of steel bridge over Kill Creek; chiseled square...-
T. 13 S., R. 22 E., at cor. secs. 27, 28, 33, and $34,15 \mathrm{ft}$. N. and 70 ft . W. from junction of T-rd. N., on N. head wall of concrete culvert; chiseled square

Feet
950.80
877.93

Weaverly School, 0.5 mi . W. of, 6.5 mi . W. of Olathe, $1,000 \mathrm{ft}$. W. of approximate quarter cor. between secs. 27 and 34, T. 13 S., R. 22 E., 50 ft . S. and 20 ft . W. from SW. cor. of house of Leo Barthol, 30 ft . N. of center line of E.-W. rd., in concrete post; standard tablet stamped "M 121935 968"
968. 347

Reference mark, $1,120 \mathrm{ft}$. E. and 15 ft . S. from tablet, on N. head wall of concrete culvert; chiseled square
987.09

Weaverly School, at cor. secs. 26, 27, 34, and 35, T. 13 S., R. 22 E., 35 ft . N. and 80 ft . E. from center of crossroads, on SE. corner of concrete curb to school cistern; chiseled square
991. 87

Weaverly School, 1.0 mi . E. of, 1.0 mi . W. of Moonlight School, at cor. secs. 25, 26, 35, and 36, T. 13 S., R. 22 E., 20 ft . N. and 12 ft . E. from center of crossroads, on E. head wall of concrete culvert; chiseled square
$1,017.46$
Moonlight School, about 0.5 mi . W. of, 350 ft . E. of approximate quarter cor. between secs. 25 and 36, T. $13 \mathrm{~S} ., \mathrm{R} .22 \mathrm{E} ., 15 \mathrm{ft}$. S. of center line of $\mathrm{E} .-\mathrm{W}$. rd., on S . head wall of culvert, on top of E . concrete post; chiseled square

1, 011.21
Moonlight School, 4 mi . W. of Olathe, at cor. secs. 25, 30, 31, and 36, T. 13 S., Rs. 22 and 23 E., 55 ft . N. and 200 ft . E. from center of crossroads, in SE. corner of schoolyard, in concrete post; standard tablet stamped "M 131935 1040"
$1,040.613$
Reference mark, 70 ft . S. and 170 ft . W. from tablet, on S. head wall of concrete culvert; chiseled square

1, 039.17
Moonlight School, about 0.8 mi . E. of, on line between secs. 30 and 31, T. 13 S., R. 23 E., on N. steel truss of bridge over Little Cedar Creek, on first joint in top chord from E. end; head of rivet
Moonlight School, 1.0 mi . E. of, 3.0 mi . W. of Olathe, at cor. secs. 29, 30, 31, and 32, T. 13 S., R. 23 E., 18 ft . N. and 18 ft . E. from junction of T-rd. S., in root on S. side of $14-\mathrm{in}$. elm tree; copper nail and washer

From Lawrence quadrangle near village of Prairie Center east, south, and west along roads and back into Lawrence quadrangle (by T. B. Matthews in 1985)
Prairie Center, 1.0 mi . S. and 1 mi . E. from, at quarter cor. between secs. 5 and 32 , Tps. 13 and 14 S., R. 22 E., 25 ft . S. and 10 ft . E. from junction of T-rd. S., on E. head wall of concrete culvert; chiseled square
T. 14 S., R. 22 E., at quarter cor. between secs. 5 and $8,153 \mathrm{ft}$. N. and 31 ft . W. from center of crossroads, $3 \mathrm{ft} . W$. of fence line of pasture, in concrete post; standard tablet stamped " 14 M 1935951 " 950.903

Reference mark, $1,020 \mathrm{ft}$. N. of tablet, on SE. wing wall of concrete bridge; chiseled square
943. 84
T. 14 S., R. 22 E., at quarter cor. between secs. 8 and 17, 10 ft . N. and 20 ft . E. from center of crossroads, on N. head wall of concrete culvert; chiseled square


#### Abstract

T. 14 S., R. 22 E., at quarter cor. between secs. 17 and $20,20 \mathrm{ft}$. S. and 10 ft . E.from center of crossroads, on E. head wall of concrete culvert; chiseled square Gardner, 3.5 mi . by direct rd. W. of, about 3 mi . N. and 1 mi . E. from Edgerton, at quarter cor. between secs. 20 and 29, T. 14 S., R. 22 E., $116 \mathrm{ft} . \mathrm{N}$. and $42 \mathrm{ft} . \mathrm{W}$. from crossroads, 86 ft . N . and $18 \mathrm{ft} . \mathrm{W}$. from fence post, at SE. corner of yard surrounding dwelling of George M. Rankin, in and at S. end of row of cedar trees, in concrete post; standard tablet stamped " 15 M 1935 1052" 1, 052.141 Reference mark, 700 ft . N. and 10 ft . E. from tablet, on E. head wall of concrete culvert; chiseled square $1,048.07$


> From Lawrence quadrangle east along Edgerton-Ocheltree road to point 3 miles west of Ocheltree and 3 miles north and west from Spring Hill (by T. B. Matthews in 1935 )

Edgerton, about 0.7 mi . by rd. E. of, $2,300 \mathrm{ft}$. E. and about 300 ft . S. from standard tablet stamped " 16 M 1935981 ", 9.5 ft . S. of center line of W.-bound main-line tracks of Atchison, Topeka \& Santa Fe Ry., at center of N. side of concrete battery box; top of anchor bolt
Edgerton, 1.5 mi . E. of, 600 ft . E. and 6 ft . S. from approximate cor. secs. 4, 5, 8, and 9, T. 15 S., R. 22 E., 630 ft . E. of grade crossing over W.-bound tracks of A., T. \& S. F. Ry., at bridge over Bull Creek, in S. end of E. concrete abutment; chiseled square.
Edgerton, 2 mi. E. of, at quarter cor. between secs. 4 and 9, T. 15 S. , R. 22 E., 30 ft . N. and 30 ft . E. from junction of T-rd. N., in root on S . side of $26-\mathrm{in}$. hedge tree; copper nail and washer-

1, 006.13
Edgerton, 2.5 mi. E. of, at cor. secs. 3, 4, 9, and 10, T. 15 S., R. 23 E., 30 ft . N. and 25 ft . W. from center of crossroads, in yard surrounding dwelling of B. J. Fluri, in fence line, in concrete post: standard tablet stamped "M 171935 1004"

1, 004. 488
Reference mark, $1,200 \mathrm{ft}$. E. of tablet, 25 ft . N. of center line of E.-W. rd., at SW. corner of hedge fence, in root on S. side of 16 -in. hedge tree; copper nail and wasber
$1,040.34$
Edgerton, 3.6 mi . E, of, 35 ft . S. and 90 ft . E. of center of crossroads, in yard surrounding dwelling of Roll Maye, in root on N. side of $26-\mathrm{in}$. maple tree; copper nail and washer
$1,006.39$
Gardner, 3 mi . S. of, 4.5 mi . E. of Edgerton, at cor. secs. 1, 2, 11, and 12, T. 15 S., R. 22 E., 30 ft . S. and 240 ft . W. from center of crossroads, in NW. corner of yard surrounding dwelling of Stella M. Marshall, 2 ft . S. and 8 ft . E. from 18 -in. walnut tree; in concrete post; standard tablet stamped "M 181935 1059"

1, 059.502
Reference mark, $2,260 \mathrm{ft}$. E. of tablet, 10 ft . S. of center line of E.-W. rd., on S. head wall of concrete culvert; chiseled square $1,059.54$
Ocheltree, 5 mi . W. of, 5.5 mi . E. of Edgerton, at cor. secs. 1, 6, 7, and 12, T. 15 S. , Rs. 22 and 23 E., 136 ft . S. and 28 ft . E. from center of crossroads, 6 ft . S. of N. end of hedge fence, in hedge stump at point flush with surface of ground; copper nail and washer-.......- 1, 056.03
Ocheltree, 4 mi . W. of, at cor. secs. 1, 6, 7, and 12, T. 15 S., R. 23 E., $1,400 \mathrm{ft}$. E. of center of crossroads, 12 ft . N. of center line of E.-W. rd., on E. end of N. head wall of concrete culvert; chiseled square_- 1, 031. 21
Ocheltree, 4 mi. W. of, at cor. secs. 5, 6, 7, and 8, T. 15 S., R. 23 E., 27 ft . N. and 35 ft . E. from center of crossroads, 1 ft . N. of wire fence, in root on W. side of $20-\mathrm{in}$. ash tree; copper nail and washer-- 1, 035. 75

Ocheltree, 3.5 mi . W. of, 3.5 mi . by route rd. NW. of Spring Hill, 290
ft. E. of approximate quarter cor. between secs. 5 and 8, T. 15 S., R. 23 E., at steel bridge over Nile Creek, on E. end of top chord of S. truss; head of rivet.

Feet
967. 64

# OSKALOOSA NO. 3 QUADRANGLE 

[Latitude $39^{\circ}-39^{\circ} 15^{\prime}$; longitude $95^{\circ} 15^{\prime}-95^{\circ} 30^{\prime}$ ]
DOUGLAS AND JEFFERSON COUNTIES
From Oskaloosa No. 2 quadrangle near its southeast corner south along road to point 3 miles east of Oskaloosa (by L. V. Johnson in 1935; leveled twice)
T. 9 S., R. 19 E., about 400 ft . N. of cor. secs. $23,24,25$, and $26,25 \mathrm{ft}$.
$W$. of center line of rd., on S. end of $W$. concrete head wall of culvert; chiseled square
$1,104.92$
T. 9 S., R. 19 E., at quarter cor. between secs. 25 and $26,205 \mathrm{ft}$. N. and 160 ft . W. from center of crossroads, 110 ft . SW . of windmill, 19 ft . N. of center line of rd., in N. concrete head wall of large culvert over drain; standard tablet stamped " 2 J 1935 "

1, 108. 751
Tps. 9 and 10 S., R. 19 E., at cor. secs. 1, 2, 35, and 36, 28 ft. E. and 12 ft . S. from center of crossroads, on S . end of corrugated-iron culvert; chiseled cross
$1,112.99$
T. 10 S., R. 19 E., at cor. secs. $1,2,11$, and $12,75 \mathrm{ft}$. W. and $20 \mathrm{ft} . \mathrm{N}$. from junction of T-rd., W., on N. concrete head wall of culvert; chiseled square

1, 110. 18
Oskaloosa courthouse, 3.2 mi . E. of, on State Highway 92, in draw, in N. head wall of highway culvert; standard tablet stamped "Y 121 1934" 1, 125. 162

## OSKALOOSA NO. 4 QUADRANGLE

[Latitude $39^{\circ}-39^{\circ} 15^{\prime}$; longitude $95^{\circ}-95^{\circ} 15^{\prime}$ ]

## DOUGLAS, JEFFERSON, AND LEAVENWORTH COUNTIES

From Oak Mills quadrangle south along road to Ackerland, thence east and
northeast along old railroad bed by way of Boling into Bonner Springs quadrangle (by S. K. Atkinson in 1908; releveled by G. E. Heebink in 1908)
Springdale, 1.5 mi . S. of,' 2 mi . N. of Ackerland, at crossroads near mail box 60, in root on N. side of forked oak tree; nail---.-.-.....
Ackerland, 1 mi. N. of, at NE. cor. sec. 36, T. 9 S., R. 20 E.; corner stone.
947. 00

Ackerland, 300 ft . E. of abandoned sta., at intersection of old R. R. track with main N.-S. pike; point on track

1, 038.86
Ackerland, 1 mi . E. of, 2 mi . W. of Jarbalo, on SW. corner of R. R. bridge 32 ; bolt
969.67

Jarbalo, 120 ft . E. of abandoned sta., 30 ft . S. of tracks; iron post stamped " 871 "
869. 440

Jarbalo, 1 mi . E. of, on SW. corner of R. R. bridge 29; bolt $\ldots$.......- 855.53
Jarbalo, 2 mi . E. of, in SE. corner of R. R. bridge 26; bolt.........-- 863.83

> From Bonner Springs quadrangle at point on U.S. Highway 40 west, south, and east along roads and back into Bonner Springs quadrangle (by R. F. Gallup in 1934 )

Tonganoxie, 4.5 mi . E. and 1 mi . N. from, near quarter cor. between secs. 5 and 6, T. 11 S., R. 22 E., 96 ft . S. of junction of route rd. and T-rd. N., 2 ft . E. of hedge, in concrete post; standard tablet stamped "T T 20 O 1934 897".

Reference mark, 95 ft . S. and 40 ft . W. from tablet, in root on E. side
Feet
894.60
T. 11 S., R. 22 E., near cor. secs. $5,6,7$, and $8,270 \mathrm{ft}$. S. and 18 ft . E. from center of intersection of route rd. and E.-W. rd., in root on W. side of elm tree; nail and washer
827. 10
T. 11 S., R. 22 E., 170 ft . N. and 135 ft . W. from quarter cor. between secs. 7 and 8 , in dooryard, in root on $S$. side of hackberry tree; nail and washer
885. 62
T. 11 S., R. 22 E., at cor. secs. 7, 8, 17, and 18, 2 ft . E. and 39 ft . N. from intersection of U. S. Highway 40 and E.-W. rd., on head wall of concrete culvert; chiseled square
865. 34

Tonganoxie, about 4 mi . E. of, 10 ft . W. and 30 ft . S. from quarter cor. between secs. 17 and 18 , T. $11 \mathrm{~S} .$, R. 22 E ., in root on S . side of elm tree; nail and washer
858. 61

Tonganoxie, 4.5 mi . E. and 1.5 mi . S. from, in $\mathrm{SE} 1 / 4$ sec. 18 , T. 11 S ., R. $22 \mathrm{E} .$, near junction of route rd. and T-rd. E., 21 ft . W. of center line of highway, $210 \mathrm{ft} . \mathrm{N}$. of center line of T-rd. E., $2 \mathrm{ft} . \mathrm{E}$. of hedge fence, in concrete post; standard tablet stamped "T T 180 1934 896"
895. 713

Reference mark, about 18 ft . N . and 20 ft . W. from cor. secs. $17,18,19$, and 20 , on W . side of highway, in root on S. side of 24 -in. hedge tree; nail and washer
887. 79
T. $11 \mathrm{~S} .$, R. 22 E., about 20 ft . W. of quarter cor. between secs. 19 and 20 , on N. side of $18-\mathrm{in}$. hedge tree; nail and washer.
910. 99

Daffer School, at cor. secs. 19, 20, 29, and 30, T. 11 S., R. 22 E., 30 ft . E. and 32 ft . N. from center of crossroads, in SW . corner of school yard, in root on E. side of $12-\mathrm{in}$. oak tree; nail and washer
874. 46
T. 11 S., R. 22 E., near quarter cor. between secs. 29 and 30, on S. end of $W$. curb of concrete bridge; chiseled square
T. 11 S., R. 22 E., at cor. secs. 29, 30, 31, and 32, 16 ft. S. and 12 ft . E. from center of crossroads, on E. head wall of concrete culvert; chiseled square
905. 54
T. 11 S., R. $22 \mathrm{E} ., 0.2 \mathrm{mi}$. N. of quarter cor. between secs. 31 and 32 , on E . side of rd., on top of hill, in W. side of stump of cherry tree; nail
969. 04
T. 12 S., R. 22 E., at N. cor. secs. 5 and 6 , at crossroads, about 20 ft . S. and 20 ft . E. from fence corner, in root of elm tree; nail and washer. -
956. 96

Eckman triangulation sta. of U. S. C. \& G. S. (standard dish in top of marble post)

1, 004. 358
Eckman triangulation sta., 135 ft . SE. of, near NW. cor. sec. 5 , in root on $W$. side of maple tree; $1 / 2$-in. carriage bolt

1, 007.41
T. 12 S., R. 22 E., near quarter cor. between secs. 5 and 6 , on E. side of of rd., in root on W. side of cherry tree; copper nail and washer_...
T. 12 S., R. 22 E., near cor. secs. 5, 6, 7, and 8, 30 ft . E. and 80 ft . S. from center of crossroads, in root on $N$. side of twin oak tree; nail and washer
954. 24
912. 36

From Bonner Springs quadrangle near Little Stranger Creek west and north along roads into Oak Mills quadrangle (part of double-run tie line by R. F. Gallup in 1934)

Central (District 9) School, 0.2 mi . W. of Little Stranger Creek and 0.6 mi . E. of Murray Creek, at quarter cor. between secs. 19 and 30, T. $9 \mathrm{~S} .$, R. 22 E. , at junction of route rd. and T-rd. S., about 26 ft . S. and 68 ft . E. from school building, in N. end of concrete step; chiseled square

# Central School, 0.5 mi . W. of, 0.6 mi . S. of Gospel Tabernacle, at W. cor. secs. 19 and 30, T. 9 S., R. 22 E., about 28 ft . S. and 8 ft . E. from junction of T-rd., in E. wing wall of N. abutment, at steel highway bridge (over Murray Creek?); chiseled square <br> PARSONS QUADRANGLE <br> [Latitude $37^{\circ}-37^{\circ} 30^{\prime}$; longitude $95^{\circ}-95^{\circ} 30^{\prime}$ ] <br> CHEROKEE, CRAWFORD, LABETTE, AND NEOSHO COUNTIES <br> From Columbus quadrangle west along Baxter Springs-Coffeyville road (U.S. Highway 168) to Chetopa (by F. I. Whaley in 1918) <br> Chetopa, about 3 mi . E. of, 3 mi . W. of Melrose, on line between secs. 32 and 5, Tps. 34 and 35 S., R. 22 E., at iron bridge over stream, in N . end of W. abutment; chiseled square <br> 785. 23 <br> Chetopa, 2 mi. E. of, at W. cor. secs. 6 and 31, Tps. 34 and 35 S., R. 22 E., in NW. corner of crossroads, on W. end of concrete culvert; chiseled square <br> 789. 22 <br> Chetopa, at NE. corner of electric-light plant; U. S. Dept. Agr. iron post stamped "Drainage Office Experiment Sta., U. S. Dept. Agri. 801.25" <br> 803. 031 <br> Chetopa, in wall of school building at point 1 ft . W. of its SE. corner and 1 ft . above ground; standard tablet stamped " 823.646 " <br> 825. 348 

## PITTSBURG QUADRANGLE ${ }^{10}$

## [Latitude $37^{\circ} 15^{\prime}-37^{\circ} 30^{\prime}$; longitude $94^{\circ} 30^{\prime}-94^{\circ} 45^{\prime}$ ] <br> CHEROKEE AND CRAWFORD COUNTIES

From Cherokee quadrangle east along road near south border of Pittsburg quadrangle to sec. 14, T. 32 S., R. 25 E., thence south into Galena quadrangle (by D. C. Wray in 1900 and F. L. Whaley in 1916)
T. 32 S., R. 24 E., 20 ft . S. and 30 ft . W. from cor. secs. 13, 14, 23, and 24, at SW. corner of crossroads; iron post stamped "Prim Trav Sta No 161916 916"
913. 645
T. 32 S., R. 25 E., in NW. cor. sec. 19, SE. of crossroads, 4 ft . E. of corner fence post; iron post stamped " 904 CRTHG"
901.621

SUGAR LAKE QUADRANGLE 19
[Latitude $39^{\circ} 30^{\prime}-39^{\circ} 45^{\prime}$; longitude $95^{\circ}-95^{\circ} 15^{\prime}$ ]
atchison and doniphan counties
From Oak Mills quadrangle northeast along Atchison, Topeka \& Santa Fe Railway to Atchison, thence southeast 9 miles along Missouri Pacific Railroad (by S. K. Atkinson in 1908 and G. E. Heebink in 1908-9; leveled twice)

Parnell, 35 ft . W. of general store (formerly post office); iron post (as recovered by U. S. C. \& G. S. in 1935)

1, 053. 286
Parnell, 3 mi . NE. of, about $3 \mathrm{mi} . \mathrm{SW}$. of Atchison, between A., T. \& S. F. Ry. bridges 7 and 8, near Ry. crossing; iron post
906. 485

Atchison, 3 mi . SE. of, 130 ft . S. of Missouri Pacific R. R. milepost $327,59 \mathrm{ft}$. W. of center of track, near bluff, 10 ft . above grade, 16 ft . toward river from old wagon rd., 8 ft . SE. of $10-\mathrm{in}$. crab-apple tree; cap of iron pipe (Missouri River Commission B. M. designated " 267 ")

[^16]
# GYRACUSE QUADRANGLE 

## [Latitude $37^{\circ} 30^{\prime}-38^{\circ}$; longitude $101^{\circ} 30^{\prime}-102^{\circ}$ ]

## GRANT, HAMILTON, KEARNY, AND STANTON COUNTIES

## From Lakin quadrangle northwest along Atchison, Topeka \& Santa Fe Railway into Tribune quadrangle (by J. C. Barber in 1886 and M. C. McFarlane in 1897)

Kendall, $1,500 \mathrm{ft}$. E. of sta., 137 ft . E. of W. side of sec. 30, T. 24 S., R. 38 W., between Ry. and rd., 53 ft . S. of center line of rd., 49 ft . N. of center line of tracks; iron post stamped "G 13 3123" (tied to U. S. C. \& G. S. in 1935)

Feet

Kendall, 3 mi . NW. of, 3 mi . SE. of Mayline, 12 ft . W. of line between secs. 21 and 22, T. 24 S., R. $39 \mathrm{~W} ., 49 \mathrm{ft}$. S. of center line of tracks, 20 ft . W. of crossing of private rd.; iron post stamped "G $14 \quad 3152$ ". $3,160.363$
Mayline, 15 ft . E. and 10 ft . S. from NW. cor. sec. 19, T. 24 S., R. 39 W., on S. side of track; iron post stamped "G 15 3175" 3, 183. 412
Syracuse, 2.5 mi . E. of, 3.2 mi . W. of Mayline, 40 ft . N. and 15 ft . E. from quarter cor. between secs. 15 and 16, T. 24 S., R. 40 W., at mileage $451.3,50 \mathrm{ft}$. S. of center line of track, 25 ft . E. of center of crossing of private rd.; iron post stamped "G16 3198" (as recovered by U. S. C. \& G. S. in 1934)

3, 205. 574

Syracuse, in western part of, 1,765 ft. S. and 30 ft . E. from NW. cor. sec. 7, T. 24 S., R. $40 \mathrm{~W} ., 475 \mathrm{ft}$. S. of center line of track; iron post stamped "G 17 3230"

3, 238. 492
Syracuse, 3.8 mi . W. of, 10 ft . E. of fence between secs. 3 and 4, T. 24 S., R. $41 \mathrm{~W} ., 47 \mathrm{ft}$. S. of center line of track; iron post stamped "G 18 3254"

3, 262.495
From Kendall south across Arkansas River (by M. C. McFarlane in 1897; unchecked spur line)

Near Kendall (by Nat Tyler, Jr., in 1898; unchecked spur line)
Kendall, about 3 mi . SW. of, in NE. cor. sec. 4, T. 25 S., R. 39 W.; iron post stamped " 3176 "

3, 183.640
Near Syracuse (by Nat Tyler, Jr., in 1898; unchecked spur line)
Syracuse, about 2 mi . NW. of, about 0.3 mi . N. of A., T. \& S. F. Ry., 200 ft . E. of center of sec. 2, T. 24 S ., R. $41 \mathrm{~W} ., 150 \mathrm{ft}$. W. of intersection of half-section line with irrigation ditch; iron post stamped "3247"

3, 254. 791
On Arkansas River west of Syracuse (by Nat Tyler, Jr., in 1898; unchecked spur line)

Syracuse, about 7 mi . W. of, on line between secs. 1 and 6, T. 24 S ., Rs. 41 and $42 \mathrm{~W} ., 50 \mathrm{ft}$. S. of bank of Arkansas River, at fence colner", iron post stamped "3267"

## From Syracuse south along State Highway 27 to Johnson, thence east along J. S. Highway 160 into Lakin quadrangle (by M. C. McFarlane in 1897; double-rodded)

| Syracuse, 5.5 mi . by rd. S. of, in SE $1 / 4 \mathrm{sec} .1$, T. $25 \mathrm{~S} ., \mathrm{R} .41 \mathrm{~W} .$, |  |
| :---: | :---: |
| S Syracuse triangulatio |  |
| T 25 S P $41 \mathrm{~W}^{\text {a }}$ |  |
|  |  |
| 25 S., R. 40 W., in SW. cor. sec. 31 ; iron post stamped "G 253489 |  |
| T. 26 S., R. 41 W., 52 ft . W. and 19 ft . S. from NE. cor. sec. 23; iron post stamped "G 26 3362" (reset by Kansas Highway Dept. in |  |
| Floto, 5.0 mi . N. of, in SW. cor. sec. 36, T. 26 S., R. 41 W., on E. side of highway; iron post stamped "G $27 \quad 3265$ " |  |
| Floto, 2.0 mi . N. of, in SW. cor. sec. 13, T. 27 S., R. 41 W., on E. side of highway; iron post stamped "G 28 3284" |  |
| Floto, 1.0 mi . S. of, 6 mi . by rd. N. of Johnson, 58 ft . N. and 47 ft . E. from SW. cor. sec. 36, T. 27 S., R. 41 W., 51.5 ft . E. of highway; iron post stamped "G 29 3304" (as reset in 1935 by Kansas Highway Dept.) 3, 311. 872 |  |
| Johnson, 3 mi. by rd. W. and N. from, in SW. cor. sec. 13, T. 28 S., R. <br> 41 W., on E. side of highway; iron post stamped "G 30 3341".--- 3, 348. 516 |  |
| Johnson, 0.5 mi . SE. of, on U. S. Highway 160, in SE. cor. sec. 36, T. 28 S., R. 41 W.; iron post stamped "G 31 3329"----------- 3, 335. 642 |  |
| Johnson, 3.5 mi . S. and E. from; in SE. cor. sec. 33 , T. 28 S., R. 40 W.; <br>  |  |
| Johnson, 6.5 mi. E. of, in SE. cor. sec. 36, T. 28 S., R. 40 W.; iron post stamped "G 33 3222" (recovered by U. S. C. \& G. S. in 1935) _-- 3, 228. 843 |  |
| Johnson, 9.5 mi . E. of, about 13 mi . W. of Ulysses, in SE. cor. sec. 33, <br> T. 28 S., R. 39 W.; iron post stamped "G 34 3187" |  |
| Ulysses, about 10 mi . W. of, in SE. cor. sec. 36, T. 28 S., R. 39 W.; iron post stamped "G 35 3117" (recovered by U. S. C. \& G. S. in 1935) $\qquad$ 3, 124. 29 |  |
|  |  |

## From intersection of U. S. Highway 160 and Stanton-Grant county line south along county-line road 3 miles (by Nat Tyler, Jr., in 1898; unchecked spur line)

T. 29 S., R. 38 W., in SW. cor. sec. 18; iron post stamped " 3139 ".-... 3, 145.745

> From Lakin quadrangle about 2.5 miles south of Bear Creek west along township-line road to point 1 mile south of Floto (by Nat Tyler, Jr., in 1888 ; part of unadjusted line from point 4.5 miles north of Ulysses closing 1.475 ft . low)
T. 27 S., R. 39 W., in SE. cor. sec. 36; iron post stamped " 3126 "---- 3, 133.278
T. 27 S., R. 39. W., in SE. cor. sec. 33; iron post stamped " 3164 " - --- 3, 171. 091
T. 27 S., R. 40 W., in SE. cor. sec. 36; iron post stamped " 3193 ".--.- 3, 199. 667
T. 27 S., R. 40 W., in SE. cor. sec. 33 ; iron post stamped " 3264 "---- 3, 271.346
T. 27 S., R. 40 W., in SE. cor. sec. 31; iron post stamped " 3296 ".-.- 3, 303. 349

> From point 1 mile south of Floto west along township-line road 8 miles, thence south 6 miles, thence east along U. S. Highway 160 to Johnson (by Nat Tyler, Jr., in 1898)
T. 27 S., R. 41 W., in SE. cor. sec. 33; iron post stamped " 3351 " --.- 3, 358. 752
T. 27 S., R. 42 W., in SE. cor. sec. 36 ; iron post stamped " 3396 ".--- 3, 403.743
T. 27 S., R. 42 W., in SE. cor. sec. 33; iron post stamped " 3477 "---- 3, 484. 248
T. 28 S., R. 42 W., in SE. cor. sec. 33; iron post stamped " 3446 ".-... 3, 453.594

138259-38-5
T. 28 S., R. 42 W., in SE. cor. sec. 36 ; iron post stamped ' 3408 ", --- 3, 414. 833
T. 28 S., R. 41 W., at E. $1 / 4$ cor. sec. 33 ; iron post stamped " 3375 " --. 3, 382.559

| From point 11 miles south of Syracuse on State Highway 27 west along road 9 miles, thence north 6 miles, thence east 3 miles (by Nat Tyler, Jr., in 1898; unchecked spur line) |  |
| :---: | :---: |
| T. 25 S., R. 41 W. , in SE. cor. sec. 33 ; iron post stampe | 938 |
| T. 25 S., R. 42 W., in SE. cor. sec. 36; iron post stamped ' 3430 ' | 3, 438. 123 |
| T. 26 S., R. 42 W., in NE. closing cor. sec. 5 ; iron post stamped " 3434 " $\qquad$ | $\text { 41. } 480$ |
| T. 25 S., R. 42 W., in NE. cor. sec. 21; iron post stamped " 3522 " | 3, 529.871 |
| T. 25 S., R. 42 W., in NE. cor. sec. 4; iron post stamped " 3489 ' | , 497. 199 |
| T. 24 S., R. 42 W., in SE. cor. sec. 36; iron post stamped ' 3435 ' | 3. 189 |
| From point 11 miles south of Syracuse on State Highway 27 east along township line to point near Hamilton-Kearny county line, thence south 2.5 miles (by Nat Tyler, Jr., in 1898; unchecked spur line) |  |
| T. 26 S., R. 40 W., in NW. closing cor. sec. 5 ; iron post stamped "3470" | $\text { 3, 478. } 006$ |
| T. 25 S., R. 40 W., at SW. cor. sec. 36; iron post stamped " 3437 ' | 3, 444. 682 |
| T. 25 S., R. 39 W., in SE. cor. sec. 31 ; iron post stamped " 3409 " | 3, 416. 301 |
| T. 26 S., R. 39 W., in NE. closing cor. sec. 5; iron post stamped " 3381 "' | 3, 388.786 |
| T. 26 S., R. 39 W., in NW. closing cor. sec. 1; iron post stamped " 3254 " $\qquad$ | $3,262.059$ |
| T. 26 S., R. 39 W., at E. quarter cor. sec. 14; iron post stamped "3322" | $3,329.350$ |

## TRIBUNE QUADRANGLE

[Latitude $38^{\circ}-38^{\circ} 30^{\prime}$; longitude $101^{\circ} 30^{\prime}-102^{\circ}$ ]

## GREELEY, HAMILTON, KEARNY, AND WICHITA COUNTIES

From Syracuse quadrangle northwest along Atchison, Topeka \& Santa Fe Railway into Granada quadrangle (by M. C. McFarlane in 1897)
Syracuse, about 7 mi . NW. of, about 7.5 mi . SE. of Coolidge, 12 ft . E. of line between secs. 31 and 36 , T. $23 \mathrm{~S} .$, Rs. 41 and $42 \mathrm{~W} ., 47 \mathrm{ft}$. S. of center line of track; iron post stamped "G 19 3278"----- $3,286.066$ Coolidge, 4.7 mi . SE. of, $1,848 \mathrm{ft}$. S. of NW. cor. sec. 27, T. $23 \mathrm{~S} .$, R. 42 W. , at mileage 464.0, 47 ft . S. of center line of track; iron post stamped "G $20 \quad 3303$ " (as recovered by U. S. C. \& G. S. in 1934) _- 3, 311. 398
Coolidge, 1.8 mi . E. of sta., 12 ft . E. of W. side of sec. 19, T. 23 S., R. $42 \mathrm{~W} ., 48 \mathrm{ft}$. S. of tracks; iron post stamped "G 213337 "..... $3,345.206$

WYANDOTTEE QUADRANGLE ${ }^{20}$
[Latitude $36^{\circ} 30^{\prime}-37^{\circ}$; longitude $94^{\circ} 30^{\prime}-95^{\circ}$ ]
CHEROKEE COUNTY
From point on Kansas-Oklahoma State line 2 miles south of Baxter Springs west along road at State line to west border of quadrangle (by F. W. Hughes in 1906 and F. L. Whaley in 1916)
Baxter Springs, about 2 mi . S. of city hall, 3.8 mi . N. and E. from Lincolnville (Okla.), 2 ft . N. of E.-W. wire fence, S. of State-line rd.; iron post stamped "Prim Trav Sta No 11845 1906" (in Okla.)

[^17]Quapaw (Okla.), 2.9 mi . by direct rd. N. of, about 5 mi . by rd. SW. of Baxter Springs, at NE. cor. sec. 15, T. 29 N., R. 23 E. (Okla.); iron post stamped " 841 " (in Okla.)

Feet
837. 946
T. 29 N., R. 23 E. (Okla.), 200 ft . W. of N. closing cor. secs. 15 and 16, 30 ft . S. of junction of State-line rd. and T-rd. N., in base of transmission pole at point about 1.5 ft . above ground; copper nail and washer (in Okla.)
837. 97

Treece, 0.6 mi . E. of, at N. cor. secs. 16 and 17, T. 29 N., R. 23 E. (Okla.), 150 ft . E. of junction of State-line rd. and T-rd. S., in base of transmission pole; copper nail and washer
846. 81

Treece, 0.3 mi . W. of, in NW. cor. sec. 17, T. 29 N., R. 23 E. (Okla.); iron post stamped "823" (in Okla.)
819. 974

Fourmile Creek, 0.6 mi . E. of, in NW. cor. sec. 15, T. 29 N., R. 22 E. (Okla.); iron post stamped " 836 " (in Okla.)
833.313

Fourmile Creek, 0.5 mi . W. of, at S. cor. fractional secs. 13 and 18, T. 35 S., Rs. 22 and 23 E., at NW. corner of junction of State-line rd. and T-rd. N., in root of 18 -in. hard-maple tree; copper nail and washer
T. 35 S., R. 22 E., at S. cor. fractional secs. 14 and 15 , at W. end of wooden bridge at junction of State-line rd. and T-rd. N., in top of bridge floor; copper nail and washer
Fairview School, 1.2 mi . S. of, 630 ft . W. of junction of State-line rd. and T-rd. S. at N. cor. secs. 13 and 14, T. 29 N., R. 21 E. (Okla.), 20 ft. S. of S. cor. fractional secs. 15 and 16, T. 35 S., R. 22 E. (Kans.), on S. side of rd., opposite T-rd. N.; iron post stamped "Prim Trav Sta No 211916 798" (in Okla.)

## SUPPLEMENTAL ELEVATIONS

The table below shows the altitudes of stations along the railroads in Kansas, the top of the rail at each being chosen to represent that station. The figures of elevation were compiled originally by Henry Gannett, ${ }^{21}$ mostly from railroad profiles. They are approximate only and should not be used for accurate work.

Supplemental elevations in Kansas

| Location | County | Elevation |
| :---: | :---: | :---: |
| Abbyville, A., T. \& S. F. Ry | Reno. | 1, 656 |
| Abilene, U. P. R. R | Dickinson | 1,155 |
| Ada, A., T. \& S. F. Ry | Ottawa- | 1, 284 |
| Admire, M. P. R. R - | Lyon. | 1,228 |
| Agenda, C., R. I. \& P. Ry | Republic | 1, 409 |
| Agra, C., R. I. \& P. Ry | Phillips | 1, 856 |
| Agricola, A., T. \& S. F. Ry | Coffey | 1, 137 |
| Aikins, U. P. R. R- | Pottawatomi | 1, 170 |
| Alameda, M. P. R. R | Kingman_ | 1, 581 |
| Alamota, A., T. \& S. F. Ry | Lane.. | 2, 607 |
| Albert, A., T. \& S. F. Ry | Barton_ | 1, 909 |
| Albion, A., T. \& S. F. Ry | Harper | 1, 264 |
| Alden, A., T. \& S. F. Ry | Rice. | 1, 680 |
| Alexander, A., T. \& S. F. Ry | Rush | 2, 072 |
| Alida, U. P. R. R | Geary | 1, 103 |
| Allen, M. P. R. R | Lyon. | 1, 314 |
| Alma, A., T. \& S. F. Ry | Wabaunsee | 1, 059 |
| Almena, C., B. \& Q. R. R | Norton. | 2, 157 |
| Altair, U. P. R. R - | Thomas. | 3, 160 |
| Alta Vista, C., R. I. \& P. Ry | Wabaunsee | 1, 430 |
| Altamont, St. L.-S. F. Ry | Labette. | 909 |
| Alton, M. P. R. R | Osborne | 1, 637 |
| Amador, A., T. \& S. F. Ry | Butler | 1, 137 |
| Americus, M.-K.-T. R. R | Lyon | 1, 152 |
| Ames, M. P. R. R | Cloud | 1, 308 |
| Amiot, M. P. R. R | Anderson | 1, 048 |
| Andale, M. P. R. R | Sedgwick | 1, 437 |
| Andover, St. L.-S. F. Ry | Butler | 1, 350 |
| Angola, M.-K.-T. R. R | Labette | 792 |
| Anna, St. L.-S. F. Ry | Bourbon | 980 |
| Annelly, M. P. R. R | Harvey | 1,380 |
| Anness, A., T. \& S. F. Ry | Sedgwick | 1,382 |
| Anson, M. P. R. R | Sumner. | 1,294 |
| Antelope, C., R. I. \& P. Ry | Marion | 1, 369 |
| Anthony, A., T \& S. F. Ry | Harper | 1, 343 |
| Appleton, U. P. R. R | Doniphan | 996 |
| Arcadia, St. L.-S. F. Ry | Crawford | 818 |
| Arcola, U. P. R. R | Ellsworth | 1, 432 |
| Argentine, A., T. \& S. F. Ry | Wyandotte | 751 |
| Argonia, A., T. \& S. F. Ry . | Sumner..- | 1,247 |
| Arkalon, C., R. I. \& P. Ry | Seward | 2, 607 |

[^18]| Location | County | Elevation |
| :---: | :---: | :---: |
| Arkansas City, St. L.-S. F. Ry | Cowley | 1, 075 |
| Arlington, C., R. I. \& P. Ry | Reno-- | 1,594 |
| Arma, M. P. R. R | Crawford | 1, 017 |
| Armstrong, U. P. R. R | Wyandotte | 757 |
| Arnold, M. P. R. R | Ness---.- | 2, 567 |
| Arrington, U. P. R. R | Atchison | 930 |
| Ascot, A., T. \& S. F. Ry | Harper | 1,421 |
| Asherville, U. P. R. R- | Mitchell | 1,347 |
| Ashland, A., T. \& S. F. Ry | Clark | 1,950 |
| Ashley, St. L.-S. F. Ry | Greenwood | 996 |
| Ashton, A., T. \& S. F. Ry | Sumner | 1,216 |
| Assaria, U. P. R. R--- | Saline. | 1, 285 |
| Astor, M. P. R. R | Greeley | 3,759 |
| Atchison, union station | Atchison | , 795 |
| Athol, C., R. I. \& P. Ry | Smith | 1,786 |
| Atlanta, St. L.-S. F. Ry | Cowley | 1, 433 |
| Attica, A., T. \& S. F. Ry | Harper | 1,446 |
| Atwood, C., B. \& Q. R. R | Rawlins | 2, 845 |
| Augusta, A., T. \& S. F. Ry | Butler | 1,223 |
| Aulne, C., R. I. \& P. Ry | Marion | 1,399 |
| Aurora, A., T. \& S. F. Ry | Cloud. | 1, 481 |
| Austin, M.-K.-T. R. R | Neosho. | 906 |
| Axtell, U. P. R. R | Marshall | 1,361 |
| Azua, M. P. R. R | Bourbon | , 818 |
| Bailey, St. L.-S. F. Ry | Wilson- | 1,202 |
| Baileyville, U. P. R. R | Nemaha | 1,293 |
| Baker, M. P. R. R | Brown | 1, 161 |
| Bala, C., R. I. \& P. Ry | Riley | 1,266 |
| Balta, U. P. R. R | Russell | 1,880 |
| Bandera, M. P. R. R- | Bourbon | 849 |
| Bangor, M.-K.-T. R. R | Miami | 846 |
| Barber, St. L.-S. F. Ry | Crawford | 971 |
| Barclay, A., T. \& S. F. Ry | Osage | 1, 178 |
| Barnard, A., T. \& S. F. Ry | Lincoln | 1,325 |
| Barnes, M. P. R. R | Washington | 1, 334 |
| Barrett, M. P. R. R | Marshall | 1, 130 |
| Bartlett, M. P. R. R | Labette | 888 |
| Barush, M. P. R. R | Rush_ | 2, 028 |
| Basil, A., T. \& S. F. R | Kingman | 1,597 |
| Batesville, M. P. R. R | Woodson | 1, 059 |
| Bavaria, U. P. R. R- | Saline | 1,272 |
| Baxter Springs, St. L.-S. F. Ry | Cherokee | 1, 825 |
| Bayard, M.-K.-T. R. R | Allen | 1, 023 |
| Bayneville, M. P. R. R | Sedgwick | 1,300 |
| Bazaar, A., T. \& S. F. Ry | Chase.-. | 1, 22.5 |
| Bazine, A., T. \& S. F. Ry | Ness. | 2, 120 |
| Beagle, M.-K.-T. R. R | Miami | 2, 952 |
| Beardsley, C., B. \& Q. R. R | Rawlins | 3, 197 |
| Beattie, U. P. R. R | Marshall | 1, 293 |
| Beaumont, St. L.-S. F. Ry | Butler | 1, 589 |
| Bedford, M. P. R. R | Stafford | 1, 844 |
| Beeler, A., T. \& S. F. Ry | Ness. | 2, 484 |
| Bellaire, C., R. I. \& P. Ry- | Smith. | 1, 868 |
| Belle Plaine, A., T. \& S. F. Ry | Sumner | 1, 205 |
| Bellefont, A., T. \& S. F. Ry | Ford. | 2, 348 |
| Belleville, U. P. R. R | Republic | 1, 544 |
| Belmont, M. P. R. R | Kingman | 1, 574 |
| Beloit, M. P. R. R | Mitchell | 1, 380 |
| Belpre, A., T. \& S. F. Ry | Edwards | 2, 082 |
| Belvidere, A., T. \& S. F. Ry | Kiowa | 1, 840 |
| Belvue, U. P. R. R | Pottawatomie | , 960 |
| Bendena, C. R. I. \& P. Ry | Doniphan. | 1, 109 |
| Benedict, A., T. \& S. F. Ry | Wilson. | 865 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Benedict Junction, A., T. \& S. | Wilson. | 843 |
| Bennington, U. P. R. R | Ottawa | 1, 223 |
| Bentley, St. L.-S. F. Ry | Sedgwick | 1,392 |
| Benton, M. P. R. R | Butler | 1,366 |
| Bern, C., R. I. \& P. Ry | Nemaha | 1, 280 |
| Berryton, M. P. R. R- | Shawnee | 992 |
| Berwick, C., R. I. \& P. Ry | Nemaha | 1,358 |
| Bethel, K. C., L. \& W. Ry | W yandotte | 998 |
| Beulah, St. L.-S. F. R. R | Crawford | 970 |
| Bevard, U. P. R. R | Jackson. | 952 |
| Beverly, U. P. R. R | Lincoln | 1, 326 |
| Big Bend, M. P. R. R | Phillips | 1,849 |
| Big Hill, St. L.-S. F. Ry | Labette. | 823 |
| Big Stranger, U. P. R. R | Leavenworth | 847 |
| Bigelow, M. P. R. R | Marshall. | 1,118 |
| Bird City, C., B. \& Q. R. | Cheyenne. | 3, 454 |
| Bishop, C., R. I. \& P. Ry | Shawnee | 885 |
| Bison, M. P. R. R | Rush. | 2, 015 |
| Black Wolf, U. P. R. | Ellsworth | 1,568 |
| Blaine, U. P. R. R | Pottawatomie | 1,507 |
| Blair, U. P. R. R.-- | Doniphan | 897 |
| Blakeman, C., B. \& Q. R | Rawlins | 2, 899 |
| Blodgett, St. L.-S. F. Ry | Greenwood. | 1,455 |
| Bloom, C., R. I. \& P P Ry | Ford | 2, 586 |
| Bloomington, M. P. R. R | Osborne | 1,603 |
| Blue Mound, M. P. R. R | Linn. | 1, 046 |
| Blue Rapids, U. P. R. R | Marshall | 1,119 |
| Bluff City, A., T. \& S. F. Ry | Harper | 1,202 |
| Bogue, U. P. R. R | Graham | 2, 039 |
| Boicourt, St. L.-S. F. Ry | Linn- | 801 |
| Bolton, A., T. \& S. F. Ry | Montgomery | 825 |
| Bonita, St. L.-S. F. Ry | Johnson. | 1, 105 |
| Bonner Springs, A., T. \& S. F | W yandotte | 785 |
| Boyd, M. P. R. R | Barton. | 1,854 |
| Boyle, U. P. R. R | Jefferson | 1,200 |
| Braddock, A., T. \& S. F. Ry | Harvey | 1, 404 |
| Brainerd, M. P. R. R | Butler- | 1,372 |
| Brazilton, A., T. \& S. F. Ry | Crawford | 1, 013 |
| Bremen, U. P. R. R | Marshall | 1, 328 |
| Brenham, C., R. I. \& P. Ry | Kiowa | 2, 197 |
| Brenner, C., B. \& Q. R. R | Doniphan | 972 |
| Brewer, A., T. \& S. F. Ry | Ottawa | 1,268 |
| Brewster, C., R. I. \& P. Ry | Thomas | 3, 420 |
| Bridgeport, M. P. R. R | Saline | 1,303 |
| Bristol, M.-K.-T. R. R | Coffey. | 1, 072 |
| Bronson, M. P. R. R | Bourbon | 1,071 |
| Brooks, St. L.-S. F. Ry | Wilson | 882 |
| Brookville, U. P. R. R | Saline | 1,354 |
| Brosseau, U. P. R. R | Cloud | 1,332 |
| Broughton, U. P. R. R | Clay | 1, 170 |
| Brownell, M. P. R. R | Ness. | 2, 419 |
|  | Crawford | 8899 |
| Buck Creek, U. P. R. R. Ry | Ford | $\begin{array}{r}\text { 2, } \\ \text { 2 } \\ \hline 143\end{array}$ |
| Bucyrus, M. P. R. R- | Miami | 1, 116 |
| Buffalo Park, U. P. R. R | Gove. | 2,749 |
| Buhler, St. L.-S. F. Ry | Reno | 1, 480 |
| Bunkerhill, U. P. R. R | Russell. | 1, 862 |
| Burden, A., T. \& S. F. Ry. | Cowley | 1, 375 |
| Burdett, A., T. \& S. F. Ry | Pawnee. | 2, 113 |
| Burdick, A., T. \& S. F. Ry | Morris_ | 1, 460 |
| Burgess, St. L.-S. F. Ry- | Butler | 1, 426 |
| Burlingame, A., T. \& S. F. Ry | Osage | 1, 057 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Burlington, A., T. \& S. F. Ry | Coffey | 1, 037 |
| Burlington Junction, A., T. \& S. | Franklin | 934 |
| Burns, A., T. \& S. F. Ry $\ldots$.-. | Marion | 1, 498 |
| Burr Oak, M. P. R. R | Jewell | 1, 664 |
| Burrton, St. L.-S. F. Ry | Harvey | 1, 455 |
| Bushong, M. P. R. R.- | Lyon_ | 1, 382 |
| Bushton, M. P. R. R. | Rice | 1, 772 |
| Buxton, A., T. \& S. F. Ry | Wilson | 977 |
| Cairo, A., T. \& S. F. Ry | Pratt. | 1, 731 |
| Caldwell, C., R. I. \& P. Ry | Sumner | 1,116 |
| Calista, A., T. \& S. F. Ry | Kingman. | 1, 607 |
| Calvert, C., R. I. \& P. Ry | Norton | 2, 202 |
| Cambridge, A., T. \& S. F. Ry | Cowley | 1, 245 |
| Cameron City, M. P. R. R | Cowley | 1, 090 |
| Campus, U. P. R. R | Gove | 2, 988 |
| Caney, M. P. R. R | Montgomery | 740 |
| Canton, A., T. \& S. F. Ry | McPherson | 1,593 |
| Carbondale, A., T. \& S. F. Ry | Osage | 1, 090 |
| Carlton, M. P. R. R | Dickinson | 1,330 |
| Carlyle, A., T. \& S. F. Ry | Allen. | 990 |
| Carmean, M.-K.-T. R. R | Coffey | 987 |
| Carneiro, U. P. R. R | Ellsworth | 1,551 |
| Carona, M. P. R. R | Cherokee. | 920 |
| Carvel, A., T. \& S. F. Ry | Kingman | 1, 632 |
| Castleton, A., T. \& S. F. Ry | Reno..- | 1, 469 |
| Cawker City, M. P. R. R | Mitchell | 1, 478 |
| Cedar, M. P. R. R | Smith. | 1, 630 |
| Cedar Bluffs, C., B. \& Q. R. R | Decatur | 2, 551 |
| Cedar Point, A., T. \& S. F. Ry | Chase | 1,247 |
| Cedar Vale, M. P. R. R | Chautauqua | 909 |
| Celia, C., R. I. \& P. Ry | Wabaunsee. | 1,226 |
| Centerville, M.-K.-T. R. | Linn. | , 885 |
| Centralia, M. P. R. R | Nemaha | 1,256 |
| Chanute, A., T. \& S. F. Ry | Neosho. | , 943 |
| Chapman, U. P. R. R- | Dickinson | 1, 114 |
| Charleston, A., T. \& S. F. Ry | Gray | 2, 706 |
| Chase, A., T. \& S. F. Ry | Rice_...-- | 1,718 |
| Chautauqua, A., T. \& S. F. Ry | Chautauqua | - 934 |
| Cheney, A.s T. \& S. F. Ry... | Sedgwick.- | 1,390 |
| Cherokee, St. L.-S. F. Ry- | Crawford | 924 |
| Cherokee Junction, M.-K.-T. R. | Labette. | 838 |
| Cherryvale, A., T. \& S. F. Ry | Montgomery | 837 |
| Chetopa, M.-K.-T. R. R | Labette..-- | 824 |
| Chicopee, M. P. R. R | Crawford | -920 |
| Chiles, M. P. R. R | Miami_ | 1, 099 |
| Choteau, A., T. \& S. F. Ry | Johnson | , 768 |
| Cicero, A., T. \& S. F. Ry | Sumner. | 1,293 |
| Cimarron, A., T. \& S. F. Ry | Gray | 2, 618 |
| Circleville, U. P. R. R. | Jackson | 1, 102 |
| Claflin, M. P. R. R- | Barton- | 1, 806 |
| Clare, A., T. \& S. F. R. R | Johnson | 1, 022 |
| Clarendon, A., T. \& S. F. Ry | Barton- | 1, 752 |
| Clarksburg, St. L.-S. F. Ry | Bourbon | 1,900 |
| Clay Center, U. P. R. R- | Clay. | 1, 198 |
| Clayton, C., R. I. \& P. Ry | Norton- | 2, 423 |
| Clearwater, M. P. R. R.- | Sedgwick | 1,269 |
| Cleburne, U. P. R. R | Riley | 1, 081 |
| Clements, A., T. \& S. F. Ry | Chase.-.- | 1, 229 |
| Clifton, U. P. R. R | Washington. | 1, 265 |
| Climax, A., T. \& S. F. Ry- | Greenwood. | 1, 029 |
| Clonmell, A., T. \& S. F. Ry | Sedgwick | 1, 366 |
| Clyde, U. P. R. R | Cloud.- | 1, 297 |
| Coalvale, St. L.-S. F. Ry | Crawford | 826 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Coats, A., T. \& S. F. Ry | Pratt. | 1,962 |
| Codell, U. P. R. P | Rooks | 1, 982 |
| Coffeyville, M. P. R | Montgomery | 747 |
| Cokedale, M.-K.-T. R. R | Cherokee.. | 892 |
| Colby, U. P. R. R | Thomas | 3, 141 |
| Coldwater, A., T. \& S. F. Ry | Comanche. | 2, 089 |
| Colfax, M. P. R. R | Chautauqua | 868 |
| Collyer, U. P. R. R | Trego | 2, 579 |
| Colony, A., T. \& S. F. Ry | Anderson. | 1,124 |
| Columbus, M.-K.-T. R. R | Cherokee | 893 |
| Colwich, M. P. R. R | Sedgwick | 1,384 |
| Comiskey, M. P. R. R | Lyon | 1,244 |
| Concordia, M. P. R. R | Cloud. | 1,366 |
| Condon, M.-K.-T. R. R | Labette_ | 842 |
| Conner, St. L.-S. F. Ry | Montgomery | 760 |
| Conway, A., T. \& S. F. Ry | McPherson. | 1,537 |
| Conway Springs, M. P. R. R | Sumner | 1,350 |
| Coolidge, A., T. \& S. F. Ry | Hamilton | 3, 355 |
| Corbin, C., R. I. \& P. Ry | Sumner | 1,156 |
| Corlett, M. P. R. R | Cowley | 1, 048 |
| Corliss, A., T. \& S. F. Ry | Johnson | 783 |
| Cornell, M. P. R. R. | Crawford | 947 |
| Corning, M. P. R. R | Nemaha | 1,358 |
| Coronado, M. P. R. | Wichita | 3, 277 |
| Corral, U. P. R. R | Leavenworth | 784 |
| Corwin, M. P. R. R | Harper- | 1, 274 |
| Costello, M. P. R. R | Montgomery | 886 |
| Cottonwood Falls, A., T. \& S. | Chase. | 1,194 |
| Council Grove, M.-K.-T. R. R | Morris | 1,232 |
| Courtland, A., T. \& S. F. Ry-- | Republic. | 1, 504 |
| Cowley, M. P. R. R----- | Phillips. | 1,754 |
| Coyville, A., T. \& S. F. Ry | Wilson. | 888 |
| Craig, A., T. \& S. F. Ry | Johnson_ | 845 |
| Crane, A., T. \& S. F. Ry | Montgomery | 780 |
| Crawford, M. P. R. R | Rice | 1,695 |
| Crestline, St. L.-S. F. Ry | Cherokee | , 869 |
| Crisfield, A., T. \& S. F. Ry | Harper | 1,342 |
| Crystalsprings, A., T. \& S. F. | Harper | 1, 434 |
| Cuba, C., B. \& Q. R. R | Republic | 1,578 |
| Cullison, C., R. I. \& P. Ry | Pratt. | 2, 038 |
| Culver, U. P. R. R | Ottawa | 1,267 |
| Cummings, A., 'T. \& S. F. Ry | Atchison | 983 |
| Dalbey, M. P. R. R. R ${ }_{\text {D }}$ R S. ${ }^{\text {d }}$ | Atchison. | 783 |
| Dale, A., T. \& S. F. Ry- | Cowley | 864 |
| Dalton, A., T. \& S. F. Ry | Sumner | 1, 201 |
| Damar, U. P. R. R | Rooks, | 2, 113 |
| Dana, St. L.-S. F. Ry Re, | ${ }_{\text {Miami }}$ | 2, 1 1,341 |
| Darlow, A., T. \& S. F. Ry | Reno.- | 1, 558 |
| Dartmouth, A., T. \& S. F. Ry | Barton | 1, 811 |
| Day, M. P. R. R | Washington. | 1,316 |
| Dearing, M. P. R. R | Montgomery | 758 |
| Deavers, A., T. \& S. F. Ry | Osage.- | 956 |
| Deerfield, A., T. \& S. F. Ry | Kearney | 2, 936 |
| De Graff, A., T. \& ${ }_{\text {Delavan, }}^{\text {S }}$ S. F. Ry | Butler- | 1, 390 |
| Delavan, M. P. R. R. | Morris | 1,502 |
| Delia, U. P. R. R. | Jackson. | 973 |
| Dellvale, C., R. I. \& P. Ry | Norton. | 2, 341 |
| Delphos, U. P. R. R | Ottawa | 1,300 |
| Dennis, St. L.-S. F. Ry | Labette | 919 |
| Densmore, M. P. R. R | Norton | 2, 064 |
| Denton, C., R. I. \& P. Ry- | Doniphan | 1,073 |
| De Soto, A., T. \& S. F. Ry | Johnson | 795 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Detroit, U. P. R. R | Dickinson | 1, 136 |
| Devon, M. P. R. R | Bourbon | 852 |
| Dexter, M. P. R. R | Cowley | 900 |
| Diamond Springs, A., T. \& S. | Morris | 1, 344 |
| Dighton, A., T. \& S. F. Ry. | Lane | 2, 754 |
| Dillwyn, A., T. \& S. F. Ry | Stafford | 1,984 |
| Dodge City, A., T. \& S. F. Ry | Ford | 2, 480 |
| Doniphan, C., B. \& Q. R. R - | Doniphan | -897 |
| Dorrance, U. P. R. R .-.- | Russell | 1,730 |
| Double, U. P. R. R | Doniphan | 1, 123 |
| Douglass, A., T. \& S. F. Ry | Butler.- | 1, 204 |
| Downing, M.-K.-T. R. R_- | Morris | 1, 313 |
| Downs, M. P. R. R | Osborne | 1, 484 |
| Drake, U. P. R. R- | Jackson. | - 973 |
| Dresden, C., R. I. \& P. Ry | Decatur. | 2, 736 |
| Drew, M. P. R. R- | Osage. | 1, 089 |
| Drury, A., T. \& S. F. Ry | Sumner | 1, 093 |
| Drywood, M. P. R. R | Crawford | 859 |
| Dudley, M.-K.-T. R. R | Neosho. | 929 |
| Dundee, A., T. \& S. F. Ry | Barton | 1,897 |
| Dunlap, M.-K.-T. R. R-- | Morris | 1, 180 |
| Duquoin, A., T. \& S. F. Ry | Harper | 1, 583 |
| Durand, M. P. R. R | Woodson | 1, 002 |
| Durham, C., R. I. \& P. Ry | Marion | 1,376 |
| Dwight, C., R. I. \& P. Ry | Morris | 1, 499 |
| Earlton, A., T. \& S. F. Ry | Neosho.-. | 963 |
| Easton, U. P. R. R | Leavenworth | 906 |
| Eaton, M. P. R. R | Cowley | 1,035 |
| Edgerton, A., T. \& S. F. Ry | Johnson_ | 966 |
| Edna, M. P. R. R | Labette | 979 |
| Edson, C., R. I. \& P. Ry | Sherman. | 3, 578 |
| Edward, St. L.-S. F. Ry | Bourbon | 934 |
| Edwardsville, U. P. R. R | Wyandotte | 780 |
| Effingham, M. P. R. R | Atchison.- | 1, 132 |
| Clbing, C., R. I. \& P. Ry | Butler | 1, 436 |
| Eldorado, A., T. \& S. F. Ry | Butler | 1,292 |
| Elgin, A., T. \& S. F. Ry | Chautauqua | - 788 |
| Elk City, A., T. \& S. F. Ry | Montgomery | 825 |
| Elk Falls, A., T. \& S. F. Ry | Elk------- | -930 |
| Ellinor, A., T. \& S. F. Ry | Chase. | 1, 152 |
| Ellinwood, A., T. \& S. F. Ry | Barton | 1, 788 |
| Ellis, U. P. R. R.---- | Ellis. | 2, 120 |
| Ellsworth, U. P. R. R | Ellsworth | 1,538 |
| Elm, M. P. R. R | Labette | 1,900 |
| Elmdale, A., T. \& S. F. Ry | Chase | 1, 202 |
| Elmer, M. P. R. R | Reno. | 1, 538 |
| Elmo, M. P. R. R | Dickinson | 1, 352 |
| Elmont, C., R. I. \& P. Ry | Shawnee | - 945 |
| Elsmore, M.-K.-T. R. R- | Allen_-- | 1, 055 |
| Elwood, C., R. I. \& P. R | Doniphan | , 816 |
| Elyria, M. P. R. R- | McPherson. | 1, 485 |
| Emmett, U. P. R. R | Pottawatomi | 1, 024 |
| Emmons, C., B. \& Q. R. | Washington. | 1, 283 |
| Empire, St. L.-S. F. Ry | Cherokee. | 881 |
| Empire Junction, St. L.-S. F. | Cherokee. | 865 |
| Emporia, A., T. \& S. F. Ry | Lyon. | 1, 140 |
| Emporia Junction, A., T. \& S. | Lyon--. | 1, 138 |
| Englevale, M. P. R. R | Crawford | 1,963 |
| Englewood, A., T. \& S. F. Ry | Clark. | 1, 961 |
| Enterprise, A., T. \& S. F. Ry | Dickinson | 1, 140 |
| Erie, A., T. \& S. F. Ry--- | Neosho | , 902 |
| Esbon, C., R. I. \& P. Ry | Jewell | 1, 832 |
| Eskridge, A., T. \& S. F. Ry | Wabaunsee | 1, 405 |



| Location | County | Elevation |
| :---: | :---: | :---: |
| Gilbert, M. P. R. R | Mitchell | 1,430 |
| Girard, St. L.-S. F. R. R | Crawford | 980 |
| Glade, M. P. R. R | Phillips. | 1, 794 |
| Gladstone, A., T. \& S. F. Ry | Chase | 1, 171 |
| Glasco, U. P. R. R | Cloud | 1,320 |
| Glen Elder, M. P. R. R | Mitchell | 1, 424 |
| Glendale, A., T. \& S. F. Ry | Saline. | 855 |
| Glenloch, M. P. R. R | Anderson. | 975 |
| Goddard, A., T. \& S. F. Ry | Sedgwick | 1,470 |
| Godfrey, St. L.-S. F. Ry | Bourbon | 954 |
| Goff, M. P. R. R | Nemaha | 1,201 |
| Goodland, C., R. I. \& P. Ry | Sherman | 3, 698 |
| Goodrich, M.-K.-T. R. R | Linn | 894 |
| Gorham, U. P. R. R | Russell | 1,946 |
| Grainfield, U. P. R. R | Gove. | 2, 814 |
| Grand Summit, A., T. \& S. F. | Cowley | 1, 438 |
| Grantville, U. P. R. R | Jefferson | 877 |
| Gray, A., T. \& S. F. Ry- | Hodgeman | 2, 123 |
| Great Bend, A., T. \& S. F. Ry | Barton | 1, 843 |
| Green, U. P. R. R | Clay | 1,392 |
| Greenleaf, M. P. R. R- | Washington | 1, 414 |
| Greensburg, C., R. I. \& P. Ry | Kiowa- | 2, 230 |
| Greenwich, M. P. R. R | Sedgwick | 1,398 |
| Grenola, A., T. \& S. F. Ry | Elk | 1,109 |
| Gretna, C., R. I. \& P. Ry | Phillips | 1, 864 |
| Gridley, A., T. \& S. F. Ry | Coffey. | 1, 131 |
| Grinnell, U. P. R. R | Gove. | 2, 909 |
| Grove, U. P. R. R | Shawnee_ | 940 |
| Groveland, C., R. I. \& P. Ry | McPherson | 1,485 |
| Grover, A., T. \& S. F. Ry | Douglas | 856 |
| Gypsum, M. P. R. R--- | Saline.- | 1,232 |
| Haddam, C., B. \& Q. R. R | Washington | 1, 389 |
| Halcyon, M. P. R. R | Wichita_ | 3, 182 |
| Hale, M. P. R. R | Chautauqua | 973 |
| Half Mound, U. P. R. | Jefferson_ | 938 |
| Halford, U. P. R. R | Thomas | 3, 082 |
| Hallowell, St. L.-S. F. Ry-- | Cherokee | 847 |
| Halls Summit, A., T. \& S. F. R | Coffey | 1,210 |
| Hallville, M. P. R. R | Saline | 1,395 |
| Halstead, A., T. \& S. F. Ry | Harvey | 1, 388 |
| Hamburg, A., T. \& S. F. Ry | Pawnee | 2, 029 |
| Hamlin, U. P. R. R | Brown | 983 |
| Hammond, St. L.-S. F. Ry | Bourbon | 874 |
| Hamner, A., T. \& S. F.Ry | Kingman. | 1,348 |
| Hampson, A., T. \& S. F. Ry | Marion | 1,368 |
| Hannum, A., T. \& S. F. Ry | Cloud. | 1,370 |
| Hanover, C., B. \& Q. R. R | Washington | 1,234 |
| Harding, M. P. R. R | Bourbon- - | , 858 |
| Hargrave. M. P. R. R | Rush. | 2, 181 |
| Harlan, M. P. R. R | Smith | 1, 580 |
| Harper, A., T. \& S. F. Ry | Harper | 1, 417 |
| Harris, M. P. R. R- | Anderson | 1, 000 |
| Hartford, M.-K.-T. R. R | Lyon | 1, 082 |
| Harvey ville, A., T. \& S. F. Ry | Wabaunsee | 1, 106 |
| Havana, A., T. \& S. F. Ry | Montgomery | 762 |
| Haven, M. P. R. R ${ }_{\text {- }}$ | Reno | 1,480 |
| Havensville, U. P. R. R- | Pottawatomi | 1,168 |
| Haverhill, St. L.-S. F. Ry Haviland, C., R. I. \& P. Ry | Butler | 1,324 |
| Haviland, C., R. I. \& P. Ry | Kiowa | 2, 155 |
| Haworth, C., B. \& Q. R. R ${ }_{\text {Hawthorne, }}$ | Republic | 1,440 |
| Hawthorne, A., T. \& S. F. Ry | Atchison | 962 |
| Hays, U. P. R. R | Ellis | 2,000 |
| Haysville, C., R. I. \& P. Ry | Sedgwick | 1,268 |


| Location | Ccunty | Elevation |
| :---: | :---: | :---: |
| Hazelton, A., T. \& S. F. Ry | Barber | 1,364 |
| Healy, M. P. R. R | Lane | 2, 858 |
| Heizer, A., T. \& S. F. Ry | Barton | 1, 881 |
| Helmick, M. P. R. R | Morris | 1,366 |
| Henson, St. L.-S. F. R | Miami. | 865 |
| Hepler, M.-K.-T. R. R | Crawford | 999 |
| Herington, C., R. I. \& P. Ry | Dickinson | 1,326 |
| Herkimer, U. P. R. R- | Marshall | 1,237 |
| Herndon, C., B. \& Q. R. R | Rawlins | 2, 663 |
| Hertha, M.-K.-T. R. R | Neosho | 941 |
| Hesston, M. P. R. R | Harvey | 1, 483 |
| Hewins, A., T. \& S. F. R | Chautauqua | 882 |
| Hiattville, M.-K.-T. R. R | Bourbon. | 999 |
| Hiawatha, U. P. R. R | Brown. | 1, 094 |
| Hill City, U. P. R. R | Graham | 2, 134 |
| Hillsboro, A., T. \& S. F. Ry | Marion | 1,434 |
| Hillsdale, St. L.-S. F. Ry | Miami | 906 |
| Hilltop, A., T. \& S. F. Ry | Greenwood | 1,019 |
| Hilton, U. P. R. R | McPherson | 1,521 |
| Hinton, M. P. R. R | Harper | 1,313 |
| Hoag, St. L.-S. F. Ry | Cherokee | 824 |
| Hog Back, U. P. R. R | Ellis. | 2, 079 |
| Hoge, U. P. R. R | Leavenworth | 857 |
| Hoisington, M. P. R. R | Barton. | 1,829 |
| Hollenberg, U. P. R. R | Washington. | 1,256 |
| Holliday, A., T. \& S. F. Ry | Johnson. | 761 |
| Hollis, U. P. R. R | Cloud | 1,329 |
| Holton, C., R. I. \& P. Ry | Jackson | 1, 042 |
| Holyrood, A., T. \& S. F. Ry | Ellsworth | 1, 805 |
| Home, U. P. R. R | Marshall | 1,338 |
| Homer, U. P. R. R | Russell | 1, 870 |
| Homewood, A., T. \& S. F. Ry | Franklin | 1, 039 |
| Hooser, M. P. R. R | Cowley | 1,367 |
| Hope, M. P. R. R | Dickinson | 1,382 |
| Hopkins, M. P. R. R | Butler | 1, 430 |
| Horace, M. P. R. R | Greeley | 3, 644 |
| Horners, A., T. \& S. F. Ry | Marion | 1,336 |
| Horton, C., R. I. \& P. Ry | Brown | 1,014 |
| Howard, A., T. \& S. F. Ry | Elk | 1, 017 |
| Howell, A., T. \& S. F. Ry | Ford | 2, 539 |
| Hoxie, U. P. R. R | Sheridan | 2, 654 |
| Hoyt, C., R. I. \& P. Ry | Jackson | 1,165 |
| Hudson, M. P. R. R | Stafford | 1, 862 |
| Hull, U. P. R. R- ${ }^{\text {Humboldt }}$ A ${ }^{\text {S }}$ | Marshall | 1, 176 |
| Humboldt, A., T. \& ${ }_{\text {Hend }}$ | Allen. | 961 |
|  | Leavenworth | 833 |
| Hunter, A., T. \& S S. F. Ry Huron, M. P. R. R | Mitchell -- | 1,339 |
| Huscher, A., T. \& S. F. Ry | Atchison. | 1, 1,465 |
| Hutchinson, A., T. \& S. F. Ry | Reno | 1, 531 |
| Hymer, A., T. \& S. F. Ry | Chase | 1,263 |
| Idana, U. P. R. R R- | Clay | 1, 259 |
| Imes, M. P. R. R- | Franklin | 8888 |
| Independence, A., T. \& S. F. R | Montgomery | 773 |
| Ingalls, A., T. \& S. F. Ry | Gray.- | 2,674 |
| Inman, C., R. I. \& P. Ry | McPherson | 1, 522 |
| Iola, A., T. \& S. F. Ry | Allen. | 957 |
| Iowa Point, C., B. \& Q. R. R | Doniphan | 826 |
| Irving, U. P. R. R | Marshall | 1,105 |
| Isabel, A., T. \& S. F. Ry | Barber. | 1,847 |
| Jaggard, A., T. \& S. F. Ry | Leavenworth | 810 |
| Jamestown, M. P. R. R- | Cloud. | 1, 420 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Jennings, C., R. I. \& P. Ry | Decatur. | 2, 496 |
| Jetmore, A., T. \& S. F. Ry | Hodgeman | 2, 261 |
| Jewell, M. P. R. R | Jewell.- | 1, 564 |
| Johnstown, U. P. R. R | McPherson | 1,393 |
| Junction City, U. P. R. R | Geary | 1, 079 |
| Kackley, A., T. \& S. F. Ry | Republic. | 1, 513 |
| Kanona, C., B. \& Q. R. R | Decatur | 2, 732 |
| Kanopolis, U. P. R. R | Ellsworth | 1,585 |
| Kanorado, C., R. I. \& P. Ry | Sherman | 3, 911 |
| Kansas City, M. P. R. R_. | Wyandotte | 748 |
| Kansas Falls, U. P. R. R | Geary | 1, 100 |
| Keats, C., R. I. \& P. Ry | Riley. | 1, 124 |
| Kechi, C., R. I. \& P. Ry | Sedgwick | 1, 368 |
| Keighley, St. L.-S. F. Ry | Butler. | 1, 526 |
| Kellogg, A., T. \& S. F. Ry | Cowley | 1, 171 |
| Kenneth, M. P. R. R | Johnson | 874 |
| Kensington, C., R. I. \& P. Ry | Smith. | 1, 773 |
| Kickapoo, M. P. R. R | Leavenworth | - 802 |
| Kilmer, A., T. \& S. F. Ry | Shawnee. | 937 |
| Kimbal, M.-K.-T. R. R | Neosho. | 1, 050 |
| Kincaid, M.-K.-T. R. R | Anderson. | 1, 048 |
| Kingman, A., T. \& S. F. Ry | Kingman_ | 1, 506 |
| Kings, M. P. R. R | Labette. | 730 |
| Kingsdown, C., R. I. \& P. Ry | Ford. | 2,515 |
| Kingsville, U. P. R. R-_.-. | Shawnee | 917 |
| Kinsley, A., T. \& S. F. Ry | Edwards | 2, 164 |
| Kiowa, M. P. R. R | Barber. | 1,320 |
| Kiro, U. P. R. R | Shawnee | 1,903 |
| Kirwin, M. P. R. R | Phillips | 1, 696 |
| Kismet, C., R. I. \& P. Ry | Seward | 2, 774 |
| Kniveton, K. C. S. Ry-- | Cherokee. | 916 |
| Knox, U. P. R. R | Leavenworth | 887 |
| Koch, M.-K.-T. R. R | Miami | 956 |
| Kramer, St. L.-S. F. Ry | Crawford. | 926 |
| Labette, M.-K.-T. R. R | Labette | 863 |
| Lackmans, St. L.-S. F. Ry | Johnson. | 1,056 |
| La Crosse, M. P. R. R | Rush. | 2, 061 |
| La Cygne, St. L.-S. F. R | Linn. | 828 |
| Ladore, M.-K.-T. R. R. | Neosho | 902 |
| Lafontaine, M. P. R. R | Wilson | 918 |
| La Harpe, M. P. R. R | Allen. | 1,038 |
| Laird, A., T. \& S. F. Ry | Ness. | 2, 406 |
| Lakeview, A., T. \& S. F. Ry | Douglas. | 831 |
| Lakin, A., T. \& S. F. Ry | Kearney | 2, 991 |
| Lancaster, M.P. R. R | Atchison | 1, 126 |
| Laneville, St. L.-S. F. Ry | Labette | 1, 838 |
| Lang, A., T. \& S. F. Ry | Lyon. | 1, 199 |
| Langdon, C., R. I. \& P. Ry | Reno--- | 1, 692 |
| Langley, M. P. R. R | Ellsworth.- | 1, 521 |
| Lansing, A., T. \& S. F. Ry | Leavenworth | -817 |
| Larned, A., T. \& S. F. Ry | Pawnee. | 1,995 |
| Lashmet, A., T. \& S. F. Ry | Kingman | 1, 514 |
| Lasita, U. P. R. R | Riley -- | 1, 423 |
| Latham, St. L.-S. F. Ry | Butler | 1, 463 |
| Latimer, C., R. I. \& P. Ry | Morris | 1, 410 |
| Lawrence, A., T. \& S. F. Ry | Douglas | -824 |
| Lawrenceburg, U. P. R. R | Cloud. | 1; 326 |
| Lazarus, St. L.-S. F. Ry. | Wilson. | 835 |
| Leavenworth, union station | Leavenworth | 765 |
| Leavenworth Junction, U. P. | Leavenworth | 763 |
| Lebanon, C., R. I. \& P. Ry | Smith | 1,818 |
| Lebo, A., T. \& S. F. Ry | Coffey | 1, 15.5 |
| Lecompton, A., T. \& S. F. Ry | Douglas. | 849 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Lee, U. P. R. R | Jefferson | 1, 041 |
| Lehigh, A ${ }_{\text {c }}$, T. \& S. F. Ry | Marion | 1,530 |
| Le Loup, A., T. \& S. F. Ry | Franklin | 951 |
| Lenape, U. P. R. R | Leavenworth | 788 |
| Lenexa, St. L.-S. F. Ry | Johnson. | 1, 052 |
| Lenora, M. P. R. R | Norton. | 2, 261 |
| Lento, M. P. R. R | Miami | 966 |
| Leon, St. L.-S. F. Ry | Butler | 1, 335 |
| Leona, U. P. R. R-- | Doniphan | 920 |
| Leonardville, U. P. R. R | Riley | 1, 378 |
| Leoti, M. P. R. R | Wichita | 3, 302 |
| Levant, C., R. I. \& P. Ry | Thomas | 3, 316 |
| Lewis, A., T. \& S. F. Ry | Edwards | 2, 142 |
| Liberal, C., R. I. \& P. Ry | Seward. | 2, 839 |
| Lincoln Center, U. P. R. R | Lincoln | 1, 376 |
| Lincolnville, C., R. I. \& P. Ry | Marion | 1, 427 |
| Lindsborg, U. P. R. R....-. | McPherson | 1, 332 |
| Lindsey, U. P. R. R | Ottawa_ | 1,243 |
| Linn, M. P. R. R | Washington | 1, 460 |
| Linton, St. L.-S. F. Ry | Linn...-- | 1) 903 |
| Linwood, U. P. R. R- | Leavenworth | 798 |
| Lisbon, U. P. R. R | Logan. | 3, 118 |
| Little River, A., T. \& S. F. Ry | Rice | 1, 582 |
| Logan, M. P. R. R | Phillips | 1, 954 |
| Lomax, M, P. R. R | Osage | 935 |
| Lone Oak, St. L.-S. F. Ry | Crawford | 947 |
| Long Island, C., B. \& Q. R. R | Phillips | 2,076 |
| Longford, A., T. \& S. F. Ry | Clay | 1, 336 |
| Longton, A., T. \& S. F. Ry | Elk. | 918 |
| Lorena, St. L.-S. F. Ry | Butler | 1, 340 |
| Loring, U. P. R. R | Wyandotte | 788 |
| Lorraine, St. L.-S. F. Ry | Ellsworth | 1, 782 |
| Lost Springs, A., T. \& S. F. Ry | Marion_ | 1, 479 |
| Louisburg, M.-K.-T. R. R. | Miami | 1,030 |
| Lovewell, A., T. \& S. F. Ry | Jewell | 1,546 |
| Lowe, M. P. R. R | Chautauqua | 1,039 |
| Lowemont, A., T. \& S. F. Ry | Leavenworth | 1,097 |
| Lucas, U. P. R. R-_---- | Russell | 1, 494 |
| Ludell, C., B. \& Q. R. R | Rawlins | 2,772 |
| Luray, U. P. R. R | Russell | 1, 578 |
| Lyndon, M. P. R. R | Osage. | 1, 122 |
| Lyons, A., T. \& S. F. Ry | Rice. | 1, 702 |
| McAllaster, U. P. R. R | Logan | 3, 158 |
| McCracken, M. P. R. R | Rush. | 2, 143 |
| McCrea, C., R. I. \& P. Ry | Harper | 1, 369 |
| McCune, St. L.-S. F. Ry | Crawford | , 914 |
| McDonald, C., B. \& Q. R. R | Rawlins | 3, 371 |
| McFarland, C., R. I. \& P. Ry | Wabaunsee. | 1, 020 |
| McGraw, A., T. \& S. F. Ry | Harvey | 1,407 |
| McLains, M. P. R. R | Harvey | 1,497 |
| McPherson, U. P. R. R | McPherson | 1, 495 |
| Mackie, St. L.-S. F. Ry | Cherokee | 917 |
| Macksville, A., T. \& S. F. Ry | Stafford. | 2,025 |
| Madaline, M. P. R. R | Osage | 1,119 |
| Madison, A., T. \& S. F. Ry | Greenwood | 1, 078 |
| Madison Junction, A., T. \& S. | Greenwood. | 1, 092 |
| Mahaska, C., R. I. \& P. Ry. | Washington | 1,608 |
| Maize, M. P. R. R. | Sedgwick | 1,352 |
| Manchester, A., T. \& S. F. Ry | Dickinson | 1,294 |
| Manhattan, U. P. R. R - - | Riley. | 1, 013 |
| Mankato, M. P. R. R | Jewell | 1,724 |
| Manning, M. P. R. R | Scott | 2,922 |
| Manvil, U. P. R. R | Brown | 997 |



| Location | County | Elevation |
| :---: | :---: | :---: |
| Mortimer, St. L.-S. F. Ry | Labette_ | 895 |
| Mound City, M. P. R. R | Linn | 847 |
| Mound Valley, M.-K.-T. R. R | Labette | 820 |
| Moundridge, M. P. R. R | McPherson | 1, 488 |
| Mount Hope, M. P. R. R | Sedgwick | 1, 442 |
| Mount Zion, U. P. R. R | Ellsworth | 1, 658 |
| Mulberry, St. L.-S. F. Ry | Crawford | 906 |
| Mullinville, C., R. I. \& P. Ry | Kiowa | 2, 334 |
| Mulvane, A., T. \& S. F. Ry | Sumner | 1, 223 |
| Muncie, U. P. R. R | Wyandotte | 779 |
| Munden, C., R. I. \& P. Ry | Republic.- | 1,630 |
| Murdock, A., T. \& S. F. Ry | Kingman | 1, 474 |
| Muscotah, M. P. R. R | Atchison. | 962 |
| Narka, C., R. I. \& P. Ry | Republic | 1, 587 |
| Nashville, A., T. \& S. F. Ry | Kingman. | 1, 749 |
| Natoma, U. P. R. R | Osborne | 1, 836 |
| Natrona, C., R. I. \& P. Ry | Pratt | 1, 875 |
| Navarre, A., T. \& S. F. Ry | Dickinson_ | 1, 353 |
| Neal, M. P. R. R | Greenwood | 948 |
| Nearman, M. P. R. R | Wyandotte. | 753 |
| Nekoma, A., T. \& S. F. Ry | Rush -- | 2, 031 |
| Nelson, K. C. S. Ry | Crawford | 944 |
| Nemo, M. P. R. R | Osage. | 1, 079 |
| Neodesha, St. L.-S. F. Ry | Wilson | 806 |
| Neola, M. P. R. R | Stafford | 1, 796 |
| Neosho Falls, A., T. \& S. F. Ry | Woodson | 973 |
| Neosho Rapids, A., T. \& S. F. Ry | Lyon | 1, 092 |
| Ness City, A., T. \& S. F. Ry | Ness. | 2, 253 |
| Netawaka, M. P. R. R | Jackson | 1, 149 |
| Nettleton, A., T. \& S. F. Ry | Edwards. | 2, 114 |
| Neutral, St. L.-S. F. Ry. | Cherokee. | 859 |
| Neva, A. T. \& S. F. Ry | Chase_ | 1, 189 |
| New Albany, St. L.-S. F. Ry | Wilson | , 893 |
| New Cambria, C., R. I. \& P. Ry | Saline. | 1, 201 |
| New Salem, A., T. \& S. F. Ry | Cowley | 1, 238 |
| Newman, U. P. R. R---- | Jefferson | 1, 863 |
| Newton, A. T. \& S. F. Ry | Harvey | 1, 447 |
| Nichols, A., T. \& S. F. Ry | Jefferson | 1, 003 |
| Nickerson, A., T. \& S. F. Ry | Reno. | 1, 593 |
| Niles, U. P. R. R | Ottawa | 1, 192 |
| Ninnescah, A., T. \& S. F. Ry | Pratt. | 1, 711 |
| Niotaze, M. P. R. R | Chautauqua | 1.752 |
| Noble, M. P. R. R | Rice | 1, 732 |
| Norcatur, C., B. \& Q.R.R | Decatur. | 2, 633 |
| North Wichita, A., T. \& S. F. Ry | Sedgwick | 1, 301 |
| Norton, C., R. I. \& P. Ry. | Norton. | 2, 275 |
| Nortonville, A., T. \& S. F. Ry | Jefferson | 1,160 |
| Norway, M. P. R. R | Republic_ | 1, 412 |
| Norwich, A., T. \& S. F. Ry | Kingman | 1, 489 |
| Oak Mills, M. P. R. R- | Atchison | 781 |
| Oak Valley, A., T. \& S. F. Ry | Elk. | 861 |
| Oakhill, A., T. \& S. F. Ry | Clay | 1, 261 |
| Oakland, A., T. \& S. F. Ry | Shawnee | 1, 406 |
| Oakley, U. P. R. R | Logan. | 3, 051 |
| Oakwood, M.-K.-T. R. R | Linn.- | 997 |
| Oatville, M. $\mathbf{P}$. R. R ${ }_{\text {R }}$ | Sedgwick | 1,284 |
| Oberlin, C., B. \& Q. R. R | Decatur | 2, 563 |
| O'Brien, M. P. R. R | Miami. | 885 |
| Ocheltree, St. L.-S. F. Ry | Johnson | 1, 081 |
| Offerle, A., T. \& S. F. Ry | Edwards | 2, 263 |
| Ogallah, U. P. R. R- | Trego. | 2, 377 |
| Ogdensburg, U. P. R. R | Riley | 1, 051 |
| $\mathrm{O}^{\prime} \mathrm{Herin}, \mathrm{M} .-\mathrm{K} .-\mathrm{T} . \mathrm{R} . \mathrm{R}$ | Montgomery | 769 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Oketo, U. P. R. R | Marshall. | 1,181 |
| Olathe, A., T. \& S. F. Ry | Johnson | 1, 026 |
| Olcott, M. P. R. R | Reno | 1, 681 |
| Olds, M.-K.-T. R. R | Miami | 1, 116 |
| Olive, M.-K.-T. R. R | Labette | 854 |
| Olivet, A., T. \& S. F. Ry | Osage | 1,136 |
| Olmitz, M. P. R. R | Barton | 2, 012 |
| Olney, A., T. \& S. F. Ry | Hodgeman | 2, 152 |
| Olpe, A., T. \& S. F. Ry | Lyon- . | 1, 197 |
| Olsburg, U. P. R. R | Pottawatomi | 1, 430 |
| Onaga, U. P. R. R | Pottawatomi | 1, 101 |
| Oneida, U. P. R. R | Nemaha | 1,217 |
| Oneonta, A., T. \& S. F. Ry | Cloud.- | 1, 398 |
| Opolis, St. L.-S. F. Ry | Crawford | 919 |
| Oronoque, C., B. \& Q. R. R | Norton | 2, 330 |
| Osage City, A., T. \& S. F. Ry | Osage | 1, 084 |
| Osawatomie, M. P. R. R. | Miami | 859 |
| Osborne, M. P. R. R | Osborne | 1, 559 |
| Osgood, M. P. R. R | Ness. | 2, 461 |
| Osro, M. P. R. R | Chautauqua | 875 |
| Oswego, St. L.-S. F. R | Labette. | 907 |
| Otego, C., R. I. \& P. Ry | Jewell | 1, 794 |
| Otis, M. P. R. R | Rush | 2, 039 |
| Ottawa, A., T. \& S. F. Ry | Franklin | 897 |
| Overbrook, M. P. R. R | Osage | 1, 178 |
| Oxford, A., T. \& S. F. Ry | Sumner | 1, 156 |
| Padonia, M. P. R. R | Brown | 917 |
| Page City, U. P. R. R | Logan | 3, 239 |
| Palco, U. P. R. R- | Rooks | 2, 282 |
| Palmer, M. P. R. | Washington | 1, 326 |
| Paola, M. P. R. R | Miami | 1.864 |
| Paradise, U. P. R. R | Russell | 1,699 |
| Parker, M.-K.-T. R. R | Linn. | 1, 008 |
| Parkerville, M.-K.-T. R. R | Morris | 1,341 |
| Parnell, A., T. \& S. F. Ry | Atchison | 1, 046 |
| Parsons, M.-K.-T. R. R- | Labette | 1.900 |
| Partridge, A., T. \& S. F. Ry | Reno | 1, 612 |
| Patterson, St. L.-S. F. Ry | Harvey | 1, 440 |
| Pauline, A., T. \& S. F. Ry | Shawne | 1, 029 |
| Pawnee Rock, A., T. \& S. F. | Barton. | 1, 941 |
| Paxico, C., R. I. \& P. Ry.- | Wabaunsee | 1,991 |
| Paxton, A., T. \& S. F. Ry | Harvey | 1,431 |
| Peabody, A., T. \& S. F. Ry | Marion | 1, 359 |
| Peacock, St. L.-S. F. Ry-.. | Cherokee | 1,841 |
| Peck, C., R. I. \& P. Ry | Sedgwick | 1, 270 |
| Penalosa, M. P. R. R | Kingman | 1, 721 |
| Pendennis, M. P. R. R | Lane | 2, 728 |
| Penfield, M.-K.-T. R. R | Labette | 818 |
| Penokee, U. P. R. R | Graham | 2, 227 |
| Perry, U. P. R. R | Jefferson. | 852 |
| Pershing, St. L.-S. F. Ry | Cherokee. | 886 |
| Perth, C., R. I. \& P. Ry | Sumner-- | 1,208 |
| Peru, M. P. R. R | Chautauqua | 1,787 |
| Peterton, A., T. \& S. F. Ry | Osage | 1, 064 |
| Petrolia, M.-K.-T. R. R-- | Allen. | 1,925 |
| Phillipsburg, C., R. I. \& P. Ry | Phillips | 1,939 |
| Picton, M. P. R. R | Crawford.- | , 867 |
| Piedmont, St. L.-S. F. Ry | Greenwood. | 1,201 |
| Pierce Junction, C., R. I. \& P. | Brown- | 1, 166 |
| Pierceville, A., T. \& S. F. Ry Piqua, M.-K.-T. R. R. | Winney Woodson | 2,751 1,030 |
| Pittsburg, St. L.-S. F. Ry | Crawford |  |
| Plains, C., R. I. \& P. Ry | Meade. | 2, 761 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Plainville, U. P. R. R | Rooks | 2, 157 |
| Pleasant Ridge, U. P. R. R | Leavenworth | 1, 050 |
| Pleasanton, St. L.-S. F. Ry | Linn | 863 |
| Plevna, A., T. \& S. F. Ry | Reno | 1,689 |
| Plymouth, A., T. \& S. F. Ry | Lyon. | 1, 132 |
| Pollard, St. L.-S. F. Ry | Rice | 1, 737 |
| Pomeroy, M. P. R. R | Wyandotte | 755 |
| Pomona, M. P. R. R | Franklin | 916 |
| Pontiac, M. P. R. R | Butler | 1, 420 |
| Pope, M. P. R. R | Leavenworth | 762 |
| Portis, M. P. R. R | Osborne. | 1, 540 |
| Portland, A., T. \& S. F. Ry | Sumner | 1, 188 |
| Potter, A., T. \& S. F. Ry | Atchison | 933 |
| Potwin, M. P. R. R | Butler | 1, 330 |
| Powhattan, C., R. I. \& P. Ry | Brown | 1, 205 |
| Prairie View, C., R. I. \& P. Ry | Phillips | 2, 181 |
| Pratt, A., T. \& S. F. Ry | Pratt. | 1, 887 |
| Prescott, St. L.-S. F. Ry | Linn- | 888 |
| Preston, C., R. I. \& P. Ry | Pratt | 1, 838 |
| Pretty Prairie, A. T. \& S. F. Ry | Reno. | 1,574 |
| Price, U. P. R. R | Nemaha. | 1, 350 |
| Princeton, A., T. \& S. F. Ry | Franklin. | 969 |
| Protection, A., T. \& S. F. Ry | Comanche | 1, 845 |
| Purcell, C., R. I. \& P. Ry-- | Doniphan | 1, 156 |
| Putnam, A., T. \& S. F. Ry | Harvey | 1, 400 |
| Quaker, M.-K.-T. R. R | Cheroke | 865 |
| Quenemo, A., T. \& S. F. Ry | Osage. | 941 |
| Quincy, A., T. \& S. F. Ry. | Greenwood | 943 |
| Quindaro, M. P. R. R-_ | Wyandotte | 875 |
| Quinter, U. P. R. R- | Gove | 2, 665 |
| Ragle, M. P. R. R | Rush. | 2, 139 |
| Rago, A., T. \& S. F. Ry | Kingman- | 1, 449 |
| Ramapo, M. P. R. R- | Wyandotte | 751 |
| Ramona, C., R. I. \& P. Ry | Marion. | 1,435 |
| Ramsey, A., T. \& S. F. Ry | Butler | 1, 331 |
| Randall, M. P. R. R | Jewell | 1, 450 |
| Randolph, U. P. R. R | Riley | 1, 065 |
| Ransom, M. P. R. R | Ness | 2, 522 |
| Ransomville, A., T. \& S. F. Ry | Franklin | 1, 138 |
| Rantoul, M. P. R. R | Franklin | 886 |
| Rapp, M. P. R. R. | Osage.- | 1, 124 |
| Ray, M. P. R. R | Pawnee | 1, 974 |
| Raymond, A., T. \& S. F. Ry | Rice | 1,725 |
| Reading, A., T. \& S. F. Ry | Lyon | 1, 083 |
| Redel, M. P. R. R | Johnso | 886 |
| Redfield, M. P. R. R Redwing, M. P. R. R | Bourbon Barton. | 854 1,810 |
| Reece, M. P. R. R | Greenwood | 1, 222 |
| Reno, U. P. R. R | Leavenworth | 1, 849 |
| Republic, M. P. R. R | Republic. | 1,494 |
| Reserve, M. P. R. R | Brown-- | 885 |
| Rexford, C., R. I. \& P. Ry | Thomas | 2,960 |
| Rice, M. P. R. R | Cloud.- | 1, 338 |
|  | Shawnee | 1,908 |
| Richmond, A., T. \& S. F. Ry | Franklin | 1, 020 |
| Richter, M. P. R. R | Franklin | 923 |
|  | Trego. | 2, 224 |
| Riley, C., R. Y. \& P. Ry | Riley. | 1,274 |
| Riverdale, M.P. R. R | Sumner-- | 1, 320 |
| Riverton, St. L.-S. F. Ry | Cherokec. | 818 |
| Robinson, U. P. R. R | Brown- | +949 |
| Rock Creek, A., T. \& S. F. Ry | Jefferson. | 1, 059 |
| Rockland, A., T. \& S. F. Ry | Chase.- | 1, 231 |
| Rogers, M. P. R. R. | Chautauqua | 908 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Roland, A., T. \& S. F. Ry | Sumner | 1,254 |
| Rollin, A., T. \& S. F. Ry | Neosho | 911 |
| Rome, A., T. \& S. F. Ry | Sumner | 1,221 |
| Ronald, M.-K.-T. R. R. | Bourbon | 913 |
| Roper, M. P. R. R | Wilson- | 862 |
| Rosalia, M. P. R. R | Butler | 1, 510 |
| Rose, M. P. R. R | Woodson | 1, 024 |
| Rose Hill, A., T. \& S. F. Ry | Butler | 1, 329 |
| Rosedale, St. L.-S. F. Ry - - | Wyandotte | 792 |
| Rosemont, M. P. R. R | Osage. | 1, 114 |
| Ross, A., T. \& S. F. Ry | Lyon. | 764 |
| Rossville, U. P. R. R | Shawnee | 929 |
| Rozel, A., T. \& S. F. Ry | Pawnee | 2, 065 |
| Ruella, M. P. R. R | Harper | 1, 318 |
| Ruleton, C., R. I. \& P. Ry | Sherma | 3, 793 |
| Runnymede, A., T. \& S. F. Ry | Harper | 1,377 |
| Rush Center, A., T. \& S. F. Ry | Rush. | 1,997 |
| Russell, U. P. R. R | Russell | 1, 829 |
| Rydal, C., R. I. \& P. Ry | Republic | 1, 574 |
| Sabetha, C., R. I. \& P. Ry | Nemaha | 1, 300 |
| Saffordville, A., T. \& S. F. Ry | Chase. | 1, 149 |
| St. Francis, C., B. \& Q. R. R. | Cheyenne | 3, 293 |
| St. George, U. P. R. R | Pottawatomi | 994 |
| St. John, A., T. \& S. F. Ry | Stafford | 1, 908 |
| St. Mary, U. P. R. R | Pottawatomi | 958 |
| St. Paul, M.-K.-T. R. R | Neosho. | 884 |
| Salina, C., R. I. \& P. Ry | Saline. | 1, 224 |
| Sallyards, M. P. R. R | Greenwood | 1, 432 |
| Salter, A., T. \& S. F. Ry | Butler. | 1, 253 |
| Sand Spring, U. P. R. R | Dickinson. | 1, 173 |
| Savannah, U. P. R. R- | Pottawatomi | 1, 108 |
| Savonburg, M.-K.-T. R. | Allen. | 1, 056 |
| Sawyer, M.-K.-T. R. R | Pratt. | 1,913 |
| Saxman, St. L.-S. F. Ry | Rice. | 1, 633 |
| Scammon, St. L.-S. F. Ry | Cherokee | 898 |
| Scandia, C., R. I. \& P. Ry | Republic | 1, 431 |
| Schroyer, U. P. R. R | Marshall | 1, 138 |
| Schulte, A., T. \& S. F. R | Sedgwick | 1, 321 |
| Scipio, A., T. \& S. F. Ry | Anderson | - 947 |
| Scott City, M. P. R. R | Scott. | 2, 970 |
| Scott Junction, St. L.-S. F. Ry | Bourbon | 802 |
| Scottsville, M. P. R. R-- | Mitchell | 1, 562 |
| Scranton, A., T. \& S. F. Ry | Osage | 1, 117 |
| Sears, A., T. \& S. F. Ry- | Ford..... | 2, 516 |
| Sedan, M. P. R. R | Chautauqua | -823 |
| Sedgwick, A., T. \& S. F. Ry | Harvey - | 1, 379 |
| Selden, C., R. I. \& P. Ry- | Sheridan | 2, 842 |
| Selkirk, M. P. R. R | Wichita | 3, 444 |
| Selma, M.-K.-T. R. R | Anderson | 1, 073 |
| Seneca, U. P. R. R- | Nemaha. | 1, 152 |
| Severance, U. P. R. R | Doniphan | - 903 |
| Severy, A., T. \& S. F. Ry | Greenwood | 1, 109 |
| Seward, M. P. R. R | Stafford | 1, 909 |
| Sexton, M. P. R. R | Wilson. | , 901 |
| Shady Bend, U. P. R. R | Lincoln | 1,349 |
| Shallow, U. P. R. R- | Scott- | 2, 951 |
| Shannon, M. P. R. R | Atchison | 1, 089 |
| Sharon, A., T. \& S. F. Ry | Barber | 1, 449 |
| Sharon Springs, U. P. R. R | Wallace | 3, 441 |
| Sharpe, A., T. \& S. F. Ry | Coffey | 1, 171 |
| Shaw, A., T. \& S. F. Ry | Neosho- | , 911 |
| Sherdahl, M. P. R. R | Republic. | 1, 461 |
| Sherman City, M.-K.-T. R. R_ | Cherokee. | 845 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Sherwin, St. L.-S. F. Ry | Cherokee. | 859 |
| Shields, M. P. R. R | Lane. | 2, 785 |
| Shipton, U. P. R. R | Saline | 1, 245 |
| Silica, A., T. \& S. F. Ry | Rice | 1,789 |
| Silver Lake, U. P. R. R | Shawnee | 914 |
| Silverdale, M. P. R. R | Cowley | 1, 077 |
| Simpson, U. P. R. R | Mitchell | 1,335 |
| Sitka, A., T. \& S. F. Ry | Clark.--- | 1, 878 |
| Six Corners, U. P. R. R | Leavenworth | , 879 |
| Skiddy, M.-K.-T. R. R | Morris_ | 1,221 |
| Smith Center, C., R. I. \& P. Ry | Smith. | 1, 805 |
| Smolan, M. P. R. R | Saline | 1, 286 |
| Soldier, U. P. R. R | Jackson. | 1, 187 |
| Solomon, U. P. R. R | Dickinson | 1, 174 |
| Solomon Rapids, M. P. R. R | Mitchell | 1,394 |
| Somena, U. P. R. R | Wallace | 3, 326 |
| Somerset, M.-K.-T. R. R | Miami | 895 |
| South Haven, A. T. \& S. F. Ry | Sumner | 1, 123 |
| South Mound, M.-K.-T. R. R. | Neosho | 988 |
| Sparks, C., R. I. \& P. Ry | Doniphan | 887 |
| Spearville, A., T. \& S. F. Ry | Ford-... | 2, 451 |
| Spence, U. P. R. R | Washington | 1, 221 |
| Spencer, A., T. \& S. F. Ry | Shawnee. | - 864 |
| Spica, U. P. R. R | Thomas_ | 3, 090 |
| Spivey, A., T. \& S. F. Ry | Kingman. | 1,497 |
| Spring Hill, St. L.-S. F. Ry | Johnson- | 1,031 |
| Springvale, A., T. \& S. F. Ry | Pratt.- | 1, 951 |
| Stafford, M. P. R. R | Stafford | 1, 861 |
| Stanley, St. L.-S. F. Ry | Johnson | 976 |
| Star Valley, M.-K.-T. R. | Cherokee | 837 |
| Stark, M.-K.-T. R. R | Neosho. | 1, 040 |
| Sterling, A., T. \& S. F. Ry | Rice. | 1, 640 |
| Stilwell, M. P. R. R | Johnson. | 1, 034 |
| Stockdale, U. P. R. R | Riley | 1, 040 |
| Stockton, M. P. R. R | Rooks | 1,771 |
| Stout, U. P. R. R | Doniphan | 910 |
| Stover, St. L.-S. F. Ry | Labette | 839 |
| Straight Creek, C., R. I. \& P. R | Jackson | 992 |
| Strauss, St. L.-S. F. Ry | Labette | 842 |
| Strawn, M.-K.-T. R. R | Coffey | 1, 040 |
| Strong, A., T. \& S. F. Ry | Chase | 1, 174 |
| Studley, U. P. R. R | Sheridan | 2, 381 |
| Stuttgart, C., R. I. \& P. Ry | Phillips | 2, 009 |
| Sumnerville, U. P. R. RSwanson, M. P. R. R | Ottawa <br> McPherson | $\text { 1, } 287$ |
| Swanson, M. P. R. R Swayne, M. P. R. R | McPherson Dickinson. | 1,350 1,266 |
| Swayne, M. P. R. R Swissvale, M. P. R. R | Dickins <br> Osage. | 1,266 1,002 |
| Sylvan Grove, U. P. R. R | Lincoln | 1, 448 |
| Sylvan Park, M.-K.-T. R. R | Morris | 1, 325 |
| Sylvia, A., T. \& S. F. Ry | Reno. | 1, 738 |
| Syracuse, A., T. \& S. F. Ry | Hamilton | $3,232$ |
| Talmage, A., T. T $_{\text {\& }}$ S. F. Ry | Dickinso Republic | $\begin{aligned} & 1,213 \\ & 1,360 \end{aligned}$ |
| Talmo, U. $\mathrm{P}_{\text {P }} \times \mathrm{R}$. R - | Republic Marion | $\begin{aligned} & 1,360 \\ & 1.428 \end{aligned}$ |
| Tampa, C., R. I. \& P. Ry | Marion.Anderson | $\begin{array}{r}1,428 \\ \\ \\ \hline\end{array}$ |
| Tasco, U. P. T. \&. R. F. Ry | Anderson | 2, 494 |
| Taussig, M. P. R. R | Cowley- | 1, 042 |
| Tecumseh, A., T. \& S. F. R | Shawnee_ | 863 |
| Tennis, A., T. \& S. F. Ry | Finney | 2, 896 |
| Terra Cotta, U. P. R. R | Ellsworth. | 1, 480 |
| Tescott, U. P. R. R- | Ottawa- | 1, 299 |
| Tevis, M. P. R. R | Shawnee. | , 957 |
| Thayer, A., T. \& S. F. Ry | Neosho. | 1, 047 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Timken, A., T. \& S. F. Ry_ | Rush_ | 1,956 |
| Tisdale, M. P. R. R | Cowley | 1, 007 |
| Tolerville, M. P. R. R | Sedgwick. | 1, 378 |
| Tonganoxie, U. P. R. R | Leavenworth | 854 |
| Tonovay, M. P. R. R | Greenwood. | 1, 056 |
| Topeka, A., T. \& S. F. Ry | Shawnee | 881 |
| Toronto, A., T. \& S. F. Ry | Woodson | 933 |
| Toulon, U. P. R. R. | Ellis. | 2, 004 |
| Towanda, M. P. R. R | Butler | 1,226 |
| Traer, C., B. \& Q. R. R | Decatur | 2, 596 |
| Trent, A., T. \& S. F. Ry | Neosho | 962 |
| Trenton, U. P. R. R | Saline. | 1, 230 |
| Tresham, St. L.-S. F. Ry | Cowley | 1, 159 |
| Tribune, M. P. R. R | Greeley | 3, 622 |
| Trilby, M. P. R. R- | Anderson | 1, 072 |
| Trousdale, W. N. Ry | Edward. | 1, 457 |
| Troy, U. P. R. R | Doniphan | 1, 091 |
| Troy Junction, C., B. \& Q. R. | Doniphan | 1, 142 |
| Turck, St. L.-S. F. Ry---- | Cherokee. | - 925 |
| Turkey Creek, U. P. R. R | Wallace | 3, 235 |
| Turner, A., T. \& S. F. Ry | Wyandotte | 766 |
| Turon, M. P. R. R | Reno...-- | 1, 747 |
| Tyro, M. P. R. R | Montgomery | 898 |
| Udall, A., T. \& S. F. Ry | Cowley | 1, 282 |
| Uniontown, M. P. R. R | Bourbon | 890 |
| Upola, A., T. \& S. F. Ry | Elk. | 991 |
| Urbana, M.-K.-T. R. R. | Neosho_ | 925 |
| Utica, M. P. R. R | Ness. | 2, 620 |
| Valeda, M. P. R. R | Labette | 862 |
| Valencia, C., R. I. \& P. Ry | Shawnee | 904 |
| Valley Center, St. L.-S. F. Ry | Sedgwick | 1, 348 |
| Valley Falls, A., T. \& S. F. Ry | Jefferson. | 909 |
| Vance, M.-K.-T. R. R | Linn... | 1, 062 |
| Varner, A., T. \& S. F. Ry | Kingman | 1, 524 |
| Vassar, M. P. R. R | Osage | 1, 099 |
| Vera, C., R. I. \& P. Ry | Wabaunsee | 1977 |
| Verdi, U. P. R. R | Ottawa | 1, 202 |
| Vermilion, M. P. R. | Marshall | 1, 184 |
| Vesper, U. P. R. R | Lincoln | 1, 400 |
| Victoria, U. P. R. R | Ellis | 1, 920 |
| Vilas, A., T. \& S. F. Ry | Wilson. | -982 |
| Vine Creek, A., T. \& S. F. Ry | Ottawa | 1, 331 |
| Vining, U. P. R. R | Clay.- | 1, 275 |
| Vinton, M. P. R. R-- | Cowley | 1, 112 |
| Viola, A., T. \& S. F. Ry | Sedgwick. | 1, 340 |
| Virgil, A., T. \& S. F. Ry | Greenwood | , 980 |
| Vliets, M. P. R. R | Marshall_ | 1, 164 |
| Volland, C., R. I. \& P. Ry | Wabaunsee | 1, 180 |
| Wabaunsee, C., R. I. \& P. Ry- | Wabaunsee | 1, 044 |
| Waconda Springs, M. P. R. R | Mitchell | 1, 429 |
| Wade, M. P. R. R | Leavenworth | + 770 |
| Wagner, A., T. \& S. F. Ry | Marion | 1, 318 |
| Wagstaff, M. P. R. R | Miami | 1, 091 |
| Wakarusa, A. T. \& S. F. Ry | Shawnee | , 956 |
| Wakeeney, U. P. R. R | Trego | 2, 457 |
| Wakefield, U. P. R. R | Clay.-. | 1, 148 |
| Waldeck, C., R. I. \& P. Ry | Marion. | 1, 558 |
| Waldo, U. P. R. R | Russell. | 1, 721 |
| Waldron, C., R. I. \& P. Ry | Harper. | 1, 250 |
| Walker, U. P. R. R | Ellis. - | 1, 942 |
| Wallace, U. P. R. R | Wallace | 3, 311 |
| Walnut, A., T. \& S. F. Ry | Crawford. | 925 |
| Walsburg, U. P. R. R | Riley | 1,349 |


| Location | County | Elevation |
| :---: | :---: | :---: |
| Walton, A., T. \& S. F. Ry | Harvey | 1,538 |
| Wamego, U. P. R. R | Pottawatomi | 990 |
| Waring, M. P. R. R | Ness_ | 2, 241 |
| Warwick, M. P. R. R | Republic | 1,540 |
| Washington, C., B. \& Q. R. R | Washington | 1, 337 |
| Waterville, M. P. R. R_-. | Marshall. - | 1, 166 |
| Wathena, U. P. R. R | Doniphan | 818 |
| Wauneta, M. P. R. R | Chautauqua | 946 |
| Waverly, A., T. \& S. F. Ry | Coffey | 1, 129 |
| Wayne, C., B. \& Q. R. R-- | Republic | 1, 408 |
| Wayside, A., T. \& S. F. Ry | Montgomery | 886 |
| Weaver, A., T. \& S. F. Ry | Douglas.-.- | 800 |
| Webber, A., T. \& S. F. Ry | Jewell.- | 1, 669 |
| Weir City, St. L.-S. F. Ry | Cherokee | 914 |
| Weir Junction, S. L.-S. F. Ry | Crawford. | 921 |
| Welborn, K. C., L. \& W. Ry | Wyandotte | 925 |
| Welda, A., T. \& S. F. Ry | Anderson. | 1, 101 |
| Wellington, A., T. \& S. F. Ry | Sumner. | 1, 211 |
| Wells, A., T. \& S. F. Ry | Ottawa | 1,372 |
| Wellsford, C., R. I. \& P. Ry | Kiowa | 2, 120 |
| Wellsville, A., T. \& S. F. Ry | Franklin. | 1, 043 |
| Weskan, U. P. R. R | Wallace | 3, 842 |
| Wetmore, M. P. R. R | Nemaha | 1, 088 |
| Wettick, A., T. \& S. F. Ry | Gray -- | 2, 590 |
| Wheaton, U. P. R. R | Pottawatomi | 1, 496 |
| Wheeler, C., B. \& Q. R. | Cheyenne. | 3, 486 |
| Wherry, St. L.-S. F. Ry | Rice. | 1, 606 |
| White, A., T. \& S. F. Ry | Butler | 1, 246 |
| White City, C., R. I. \& P. Ry | Morris | 1, 467 |
| White Cloud, C., B. \& Q. R. R | Doniphan | 837 |
| White Water, M. P. R. R | Butler.-- | 1, 346 |
| Whitelaw, M. P. R. R | Greeley | 3, 544 |
| Whiteside, C., R. I. \& P. Ry | Reno. | 1, 583 |
| Whiting, M. P. R. R | Jackson | 1, 113 |
| Wichita, M. P. R. R | Sedgwick | 1, 293 |
| Wichita Heights, St. L.-S. F. Ry | Sedgwick | 1, 336 |
| Wiggam, A., T. \& S. F. Ry --- | Lyon.-- | 1, 086 |
| Wilbur, M. P. R. R | Greenwood | 1, 123 |
| Wilder, A., T. \& S. F. Ry | Johnson_ | 775 |
| Willard, C., R. I. \& P. Ry | Shawnee | 912 |
| Williams, M. P. R. R | Marshall | 1, 104 |
| Williamsburg, A., T. \& S. F. Ry | Franklin | 1, 144 |
| Williamstown, U. P. R. R_ | Jefferson | 852 |
| Willis, M. P. R. R | Brown | 1, 132 |
| Wilmore, A., T. \& S. F. Ry | Comanche. | 2, 018 |
| Wilmot, St. L.-S. F. Ry | Cowley | 1, 330 |
| Wilroads, C., R. I. \& P. Ry | Ford.- | 2, 431 |
| Wilsey, M. P. R. R | Morris | 1, 509 |
| Wilson, U. P. R. R | Ellsworth | 1, 688 |
| Wilsonton, M.-K.-T. R. R | Labette | 918 |
| Winchester, U. P. R. R | Jefferson | 1, 161 |
| Winfield, A., T. \& S. F. Ry | Cowley | 1, 121 |
| Wingate, St. L.-S. F. Ry- | Butler. | 1, 500 |
| Winona, U. P. R. R | Logan | 3, 323 |
| Wolcott, M. P. R. R | Wyandotte | 757 |
| Woodbine, C., R. I. \& P. Ry | Dickinson. | 1,255 |
| Woodruff, C., B. \& Q. R. R. | Phillips. | 2, 009 |
| Woodston, M. P. R. R | Rooks | 1, 708 |
| Wreford, M.-K.-T. R. R | Geary | 1, 083 |
| Wright, A., T. \& S. F. Ry | Ford. | 2, 516 |
| Wyckoff, M.-K.-T. R. R | Lyon. | 1,069 |
| Yaggy, M. P. R. R. | Reno. | 1, 560 |
| Yale, M. P. R. R-_ | Crawford. | 969 |


| Location | County | Elevatiou |
| :---: | :---: | :---: |
| Yates Center, M. P. R. R | Woodson | 1, 099 |
| Yoder, M. P. R. R. | Reno. | 1, 540 |
| Yoro, M. P. R. R | Linn. | 1, 078 |
| Yuma, M. P. R. R | Cloud | 1, 376 |
| Zarah, A., T. \& S. F. Ry | Johnson- | 796 |
| Zeandale, C., R. I. \& P. Ry | Riley | 1, 007 |
| Zenith, A., T. \& S. F. Ry | Stafford | 1, 809 |
| Zimmerdale, M. P. R. R. | Harvey | 1, 466 |
| Zurich, U. P. R. R | Rooks | 2, 212 |
| Zyba, C., R. I. \& P. Ry | Sumner | 1, 232 |

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[^0]:    ${ }^{1}$ For the results of spirit leveling in Kansas previously published see Triangulation and spirit levelingKansas: U. S. Geol. Survey 20th Ann. Rept., pt. 1, pp. 408-411, 1899; Results of spirit leveling, fiscal year 1900-1901-Missouri-Kansas: U. S. Geol. Survey Bull. 185, pp. 111-113, 1901; Results of spirit leveling in Kansas and Nebraska, 1896 to 1809, inclusive: U. S. Geol. Survey Bull. 473, pp. 8-22, 1911; Results of spirit leveling in Kansas from 1896 to 1913, inclusive: U. S. Geol. Survey Bull. 571, 47 pp., 1914.
    ${ }^{2}$ See Avers, H. G., Manual of frst-order leveling: U. S. Coast and Geodetic Survey Special Pub. 140, 1929.

[^1]:    ${ }^{8}$ See Jones, E. L., Hypsometry-Use of mean sea level as the datum for elevations: U. S. Coast and Geodetic Survey Special Pub. 41, 1917; Manual of tide observations: U. S. Coast and Geodetic Survey Special Pub. 196, 1935.

[^2]:    4 This 15 -minute quadrangle, part of which lies in Missouri, is made up of the Kansas City, North Kansas City, Quindaro, and Shawnee 71/2-minute quadrangles.

[^3]:    ${ }^{5}$ This 15 -minute quadrangle, part of which lies in Missouri, includes the Edwardsville and Wolcott 71/2 minute quadrangles.

[^4]:    786. 76
[^5]:    - Part of this quadrangle lies in Missouri.

[^6]:    ${ }^{7}$ Most of this quadrangle lies in Colorado, the Kansas portion consisting of a strip about 1.8 miles wide lying west of longitude $102^{\circ}$.

[^7]:    ${ }^{8}$ Nearly all of this quadrangle lies in Nebraska, the Kansas portion consisting of only a tiny strip of territory lying just north of latitude $40^{\circ}$.

[^8]:    896.637

[^9]:    'In 1935, when this tie was made, the top of the cap on the iron post was slightly bent.
    ${ }^{10}$ The elevation of this benchmark as reset is 0.635 ft . higher than its original elevation.
    ${ }^{11}$ A. L. Baller reported in 1934 that this post had been removed.
    ${ }^{12}$ The elevation of this benchmark as reset is 0.881 ft . lower than its original elevation. The post was loose when Mr. Baller found it, necessitating its resetting.

[^10]:    ${ }^{10}$ The accuracy of these figures is doubtful.

[^11]:    ${ }^{14}$ Part of this quadrangle lies in Missouri。

[^12]:    ${ }^{18}$ Part of this quadrangle lies in Missouri.

[^13]:    ${ }^{10}$ Part of this quadrangle lies in Missouri.

[^14]:    ${ }^{17}$ Part of this quadrangle lies in Missouri.

[^15]:    ${ }^{18}$ This 15 -minute quadrangle, part of which lies in Missouri, includes the Grandview and Belton 732-minute quadrangles.

[^16]:    ${ }^{10}$ Part of this quadrangle lies in Missouri.

[^17]:    ${ }^{20}$ The larger part of this quadrangle lies in Oklahoma and most of the remainder in Missouri. The Kansas portion consists of only a narrow strip of territory extending along the north border of the quadrangle for about three-quarters of its length and lying just south of latitude $37^{\circ}$.

[^18]:    ${ }^{21}$ Gannett, Henry, A dictionary of altitudes in the United States (fourth edition): U. S. Geol. Survey Bull. 274, pp. 333-360, 1905.

