DEGREE QUADRANGLE 34°-35°, 118°-119°

![Diagram of degree quadrangle 34°-35°, 118°-119°]

FIGURE 14.—Diagram of degree quadrangle 34°-35°, 118°-119°

CALABASAS QUADRANGLE

[Latitude 34°-34° 15'; longitude 118° 30'-118° 45']

LOS ANGELES AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1900

From Encino west along Chatsworth Park branch railroad to Canoga, thence north to Chatsworth

Reseda, 2.7 miles west of, 40 feet west of center of county road, near first telegraph pole west of road crossing, 50 feet south of track; iron post stamped "773 L. A." 774.269

From point near Canoga southwest along road to Grape Arbor

Calabasas, 38 feet east of northeast corner of calaboose building, at southeast corner of picket fence around vineyard, 60 feet northwest of west end of bridge; iron post stamped "928 L. A." 929.126

T. 1 N., R. 17 W., sec. 31, 4 feet north of southwest corner; iron post stamped "694 L. A." 695.258

90
Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Santa Susana quadrangle along Southern Pacific R. R. south to Chatsworth, thence southeast into Santa Monica quadrangle

Q-31, Chatsworth Junction, 0.2 mile north of, at railroad mileage 445.3, southeast center abutment of water tank, 5 meters west of center line of track, 0.3 meter below track; red metal disk

R-31, Chatsworth Junction, 2.1 miles southeast of, northeast end of northwest abutment of concrete culvert 447-C, 4 meters northeast of track; spike sunk in horizontal surface of concrete

S-31, Zelzah, 1.4 miles northwest of, in northeast end of northwest middle abutment of concrete culvert 448-B, 4 meters northeast of center of track, 0.5 meter below track, at railroad mileage 448.5; nail sunk in horizontal surface of concrete

T-31, Zelzah, 0.6 mile northwest of, in southeast end of southeast abutment of concrete culvert 449-A, at railroad mileage 449.3, 4 meters southwest of center line of track, 0.5 meter below; nail sunk in horizontal surface of concrete

U-31, Zelzah, 0.4 mile southeast of, in southwest end of northeast abutment of concrete culvert 450-A, at railroad mileage 450.3, 4 meters southwest of track, 0.5 meter below; spike sunk in horizontal surface of concrete

V-31, Zelzah, 1 mile southeast of, at railroad mileage 450.8, in southwest end of northeast abutment of concrete culvert 450-E, 4 meters southwest of track, 0.5 meter below; bolt sunk in horizontal surface of concrete

W-31, Zelzah, 1.5 miles southeast of, at railroad mileage 451.4, in northeast end of southeast abutment of concrete culvert 451-C, 0.4 meter northeast of center line of track, 0.5 meter below track; bolt sunk in horizontal surface of concrete

LOS ANGELES COUNTY SPECIAL SURVEY

CALABASAS AND SANTA SUSANA QUADRANGLES

[Latitude 34°-34° 30'; longitude 118° 30'-118° 45']

Primary leveling by R. B. Steele in 1924

From Pacoima 6' quadrangle west along highways through Zelzah 6' quadrangle to Chatsworth 6' quadrangle (an error of 0.404 foot has been adjusted in this line)

San Fernando, 4.5 miles west of, southwest angle of intersection of Chatsworth and Louise streets, on concrete box surrounding irrigation hydrant, at north edge of top; painted square, marked "U. S. 989.3 B. M." 989.03

Reference bench mark; San Fernando, 5.25 miles west of, at intersection of Chatsworth St. and Zelzah Ave., 20 feet south of P. B. M. R. S. 15; 2-inch iron pipe filled with concrete and centered with nail (not marked) 1,032.16

San Fernando, 5.25 miles west of, at intersection of Chatsworth St. and Zelzah Ave.; iron post stamped "1,031 L. A. R. S. 15 1924," marked "U. S. 1,032.3 P. B. M." 1,032.051

San Fernando, 6.0 miles west of, northeast angle of intersection of Zelzah Ave. and Devonshire St., at street marker; top of 4 by 4 inch post centered with nail, marked "985.8" 985.53
Chatsworth Park, 4.0 miles east of, north side of intersection of Devonshire St. and Reseda Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked “U. S. 987.3 B. M.”

Chatsworth Park, 3.4 miles east of, at Devonshire St. and crossroad; center of intersection, marked “964.8”

Chatsworth Park, 2.5 miles east of, on south side of Devonshire St., 4 feet west of a city water meter, in line with west edge of T road north, in concrete post; tablet stamped “R. S. 16 1924,” marked “U. S. 973.2 P. B. M.”

Reference bench mark; Chatsworth Park, 2 miles east of, 400 feet east of T road south, top of south end of concrete culvert; chiseled square, centered with wrought-iron nail, not marked

Chatsworth Park, 1.5 miles east of, southwest angle of intersection of Devonshire St. and Mason Ave., in root on north side of 18-inch cedar tree; copper nail and washer, marked “U. S. 956.2 B. M.”

Chatsworth Park, 1.0 mile east of, southwest angle of intersection of Devonshire St. and De Soto Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked “U. S. 955.5 B. M.”

Chatsworth Junction, 0.2 mile north of, southeast center abutment of water tank, 5 meters west of center line of track, 0.3 meter below track, railroad mileage 445.3; red metal disc stamped “Q 31 1920” (U. S. C. & G. S. b. m. Q-31)

Chatsworth Park, 0.25 mile north of Southern Pacific R. R. station, northwest angle of intersection of Devonshire St. and railroad track, top of concrete foundation of semaphore 4452, at southeast corner; chiseled square, marked “978.5”

Reference bench mark; Chatsworth Park, northwest angle of Devonshire St. and Santa Susanna Ave., near corner of sidewalk; chiseled square (not marked)

Chatsworth Park, at southeast corner of Chatsworth School building, in concrete post; bronze tablet stamped “R. S. 17 1924,” pole at street corner painted “U. S. 964.3 P. B. M.”

From Chatsworth along highways southwest and south to Calabasas, thence east to Encino

Chatsworth Park, 0.5 mile south of, northeast angle of intersection of Santa Susanna Ave. and Lassen St., west side of 36-inch oak tree, in root; copper nail and washer, marked “935.0”

Chatsworth Park, 1.5 miles southwest of, 500 feet south of main entrance to Oakwood Cemetery, on east side of road, on large boulder; chiseled square, marked “U. S. 966.6 B. M.”

Chatsworth Park, 2.0 miles southwest of, at intake of Chatsworth Reservoir, top of concrete head wall of intake, at west end; chiseled square, marked “U. S. 928.5 B. M.”

Chatsworth Park, 2.5 miles southwest of, 0.5 mile southwest of intake of Chatsworth Reservoir, 260 feet northwest of road fork, near abandoned ranch house, in center of road entrance to ranch, on boulder; chiseled square, marked “907.3”

Chatsworth Park, 2.75 miles southwest of, near northwest corner of Chatsworth Reservoir, about 380 feet southeast of gate, at angle in reservoir fence line, in concrete post; bronze tablet stamped “R. S. 18 1924,” marked “U. S. 885.6 P. B. M.”
Reference bench mark; Chatsworth Park, 2.75 miles southwest of, near northwest corner of Chatsworth Reservoir, about 380 feet northeast of “P. B. M. R. S. 18–1924,” at gate, on boulder; chiseled square (not marked)_________________ 887.88

Chatsworth Park, 3.5 miles southwest of, 0.5 mile west of Chatsworth Reservoir, on west side of Y road forks, on large boulder; chiseled square, marked “U. S. 896.7 B. M.”_________________ 896.14

Chatsworth Park, 4.25 miles southwest of, near southwest corner of Chatsworth Reservoir, on west side of road, 15 feet north of gate in east-west fence line, on boulder; chiseled square, marked “913.8” ________________________________ 913.27

Owensmouth, 4.0 miles northwest of, at intersection of Cohasset and Roscoe streets, 40 feet southeast of street marker, top of east edge of concrete irrigation pipe; chiseled square, marked “U. S. 901.1 B. M.”_________________________ 900.60

Owensmouth, 3.5 miles west of, on east side of intersection of Cohasset and Stagg streets, top of south side of concrete irrigation pipe; chiseled square, marked “U. S. 879.4 B. M.”_________________________ 878.92

Owensmouth, 4.0 miles west of, on north side of intersection of Breckenridge St. and Rainbow Drive, at pass in ridge, at entrance to residence, on bottom concrete step; chiseled square, marked “1,015.3” __________________________ 1,014.94

Reference bench mark; Owensmouth, 4.5 miles west of, 0.25 mile north of Bell Canyon, 200 feet southwest of gate entrance to old Escorpion Rancho, 200 feet southwest of P. B. M. “R. S. 19–1924,” north side of 6-inch oak tree, in root; copper nail and washer, not marked__________________________________ 937.06

Owensmouth, 4.5 miles west of, 0.25 mile northeast of Bell Canyon, on north side of gate entrance to old Escorpion Rancho, 50 feet west of main road, in concrete post; bronze tablet stamped “R. S. 19 1924,” marked “U. S. 938.5 P. B. M.”_________________________ 938.052

Calabasas, 3.4 miles northwest of, 0.5 mile south of Bell Canyon, 300 feet north of T road east, 20 feet east of north-south road, at west edge of George E. Platt Co.'s ranch, on west side of 40-inch oak tree, in root; copper nail and washer, marked “U. S. 896.0 B. M.”_________________________ 895.55

Calabasas, 2.2 miles northwest of, 0.5 mile east of Goodall ranch house, on old Escorpion grant line, 20 feet north of present road; top of 2-inch iron pipe, marked “U. S. 882.9 B. M.”_________________________ 882.40

Calabasas, 1.4 miles northwest of, at intersection of crossroads, in pasture, 0.25 mile west of a walnut grove; top of stone in place (not marked)__________________________________ 868.50

Calabasas, 1.1 miles northwest of, at southwest corner of walnut grove, 50 feet north of T road east; 8-inch iron pipe filled with concrete and centered with nail, stamped “12” (not marked)_________________________ 879.80

Calabasas, 0.5 mile north of, 300 feet north of crossing of road and Arroyo Calabasas, where irrigation pipe crosses, on west side of arroyo; top of 8-inch pipe filled with concrete and centered with nail, marked U. S. 905.3 B. M.”_________________________ 904.91

Reference bench mark; Calabasas, 250 feet southwest of general store, center of concrete highway; chiseled square (not marked)_________________________ 928.39

Calabasas, on east side of concrete highway, at northeast corner of general store, in concrete post 2 inches below ground surface; bronze tablet stamped “R. S. 20 1924,” marked “U. S. 828.9 P. B. M.”_________________________ 928.516
Calabasas, 1.0 mile northeast of, 300 feet east of intersection of Ventura Bvd. and Gomeres Road, at west edge of town of Girard, 40 feet south of telephone pole 36-28, 1 foot north of south edge of pavement, on concrete highway; chiseled square, marked "U. S. 896.2 B. M." 895.83

Calabasas, 1.8 miles northeast of, northeast angle of intersection of Ventura Bvd. and Shoup Ave., on southwest corner of concrete foundation of lamp post; chiseled square, marked "U. S. 874.8 B. M." 874.42

Calabasas, 2.4 miles northeast of, 100 feet east of intersection of Ventura Bvd. and Don Pio Road, center of culvert on concrete highway; chiseled square, marked "S91.3" 890.98

Reference bench mark; Calabasas, 2.75 miles east of, intersection of Ventura Bvd. and Canoga Ave., top of concrete head wall of culvert; chiseled square, centered with nail (not marked) 894.77

Calabasas, 2.75 miles east of, northeast angle of intersection of Ventura Bvd. and Canoga Ave., in concrete post; bronze tablet stamped "R. S. 21 1924," marked "U. S. 894.9 P. B. M." 894.556

Calabasas, 3.75 miles east of, at summit of Chalk Hill grade, center of concrete highway; chiseled square, "U. S. 982.6 B. M." punched on highway signpost 982.43

Calabasas, 4.35 miles east of, at east base of Chalk Hill grade, center of culvert on concrete highway; chiseled square, marked "S34.6" 834.23

Calabasas, 4.8 miles east of, at entrance to Knollgrove ranch, top of south head wall of concrete culvert; chiseled square, marked "U. S. 888.7 B. M." 888.34

Calabasas, 5.5 miles east of, 200 feet east of intersection of Ventura Bvd. and Tampa Ave., center of culvert on concrete highway; chiseled square, marked "U. S. 786.9 B. M." 786.56

Calabasas, 5.75 miles east of, center of intersection of Ventura Bvd. and Topeka Drive, center of concrete highway; chiseled square, marked "U. S. 796.3 B. M." 796.02

Calabasas, 6.4 miles east of, 140 feet west by 35 feet north of intersection of Ventura Bvd. and Reseda Ave., 3 feet north of telephone pole, in concrete post; bronze tablet stamped "R. S. 22 1924," marked "U. S. 786.8 P. B. M." 784.479

Reference bench mark; Calabasas, 6.4 miles east of, on south side of intersection of Ventura Bvd. and Reseda Ave., on concrete foundation of lamp post; chiseled square (not marked) 785.04

Calabasas, 7.0 miles east of, intersection of Ventura Bvd. and Lindley Ave., center of concrete highway; chiseled square, marked "S13.4" 813.14

Calabasas, 7.5 miles east of, 230 feet east by 20 feet north of intersection of Ventura Bvd. and Yarmouth Ave., top of concrete milepost; chiseled square, marked "U. S. 800.1 B. M." 799.79

Calabasas, 8 miles east of, at intersection of Ventura Bvd. and Louise Ave., center of concrete highway; chiseled square, marked "S14.8" 814.62

Calabasas, 8.5 miles east of, northwest angle of intersection of Ventura Bvd. and Balboa Ave., at telephone pole, in curb; chiseled square, marked "U. S. 770.4 B. M." 770.18

Van Nuys, 2.25 miles south by 2.5 miles west of, intersection of Ventura Bvd. and Havenhurst Ave., at entrance to Encino Country Club, center of concrete highway; chiseled square, marked "750.2" 749.99
Reference bench mark; Van Nuys, 2.25 miles south by 2.0 miles west of, northwest corner of Ventura Bvd. and Woodley Ave., in concrete base of lamp post; chiseled square. 729.66
Van Nuys, 2.25 miles south by 2.0 miles west of, 25 feet north by 35 feet west of intersection of Ventura Bvd. and Woodley Ave., in concrete post; bronze tablet stamped “A 19 1923”. 729.479

From Girard north along highways to Chatsworth
Owensmouth, 1.5 miles south of, southwest angle of intersection of Canoga Ave. and Oxnard St.; top of 2.5-inch iron pipe 2.5 feet high, marked “U. S. 883.1 B. M.”. 832.67
Owensmouth, 1.0 mile south of, northeast angle of intersection of Canoga Ave. and Topham St.; top of 4-inch iron pipe, marked “U. S. 799.3 B. M.”. 798.78
Owensmouth, northeast angle of intersection of Sherman Way and Canoga Ave., 2 feet southeast of telephone pole, in curb; chiseled square, marked “U. S. 793.8 B. M.”. 793.27
Reference bench mark; Owensmouth, 0.5 mile north of, northeast angle of intersection of Canoga Ave. and Saticoy St., 3 feet northeast of “P. B. M. R. S. 23 1924”; top of 2-inch iron pipe (not marked). 806.48
Owensmouth, 0.5 mile north of, northeast angle of intersection of Canoga Ave. and Saticoy St., in concrete post; bronze tablet stamped “R. S. 23 1924”, marked “U. S. 807.1 P. B. M.”. 806.555
Owensmouth, 1.3 miles north of, 20 feet west by 50 feet north of intersection of Canoga Ave. and Roscoe St., at water hydrant, in top of 4 by 4 inch post; copper nail, marked “U. S. 839.7 B. M.”. 839.20
Owensmouth, 1.9 miles north of, northeast angle of road crossing on Canoga Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked “U. S. 865 B. M.”. 864.99
Owensmouth, 2.4 miles north of, southeast angle of intersection of Canoga Ave. and Nordhoff St.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked “U. S. 888.7 B. M.”. 888.24
Owensmouth, 3.4 miles north of, 1.0 mile south of Chatsworth, northwest angle of intersection of Owensmouth Ave. and Marilla St., in base of telephone pole; railroad spike, marked “U. S. 934.8 B. M.”. 934.40

CAMULOS QUADRANGLE

[Latitude 34°-34° 30'; longitude 118° 30'-119°]
LOS ANGELES AND VENTURA COUNTIES
Primary leveling by H. S. Crowe in 1900

From Grape Arbor west along road to Russell Valley, thence north to Simi
Russell Valley, 2 miles east of, summit of pass between Vejor and Newbury Park ranch, north side of road where ledge of sandstone appears on surface, in center of most westerly slab of sandstone 10 by 4 by 1.5 feet; bronze tablet stamped “977 L. A.”. 978.281
Newbury Park ranch, in front of residence of W. H. Crowley, 30 feet south of wagon road, at west corner of fence; iron post stamped “859 L. A.”. 860.749
Summit of pass from Crowley's to Simi, south side of road, in flat sandstone; bronze tablet stamped "1289 L. A." 1,290.486
Simi, 1.3 miles southwest of, 18 feet east of marked corner of sec. 17, T. 2 N., R. 18 W., 24 feet east of center of road at fence post; iron post stamped "730 L. A." 731.453

From Simi northwest along road via Grimes Canyon to Fillmore, thence east along Southern Pacific R. R. to Camulos

Epworth, 39 feet east of center line of Buena Vista St., at corner of Broadway, 87 feet southeast of southeast corner of fruit packing house; iron post stamped "868 L. A." 869.898
Grimes ranch, sec. 7, T. 3 N., R. 19 W., 600 feet southwest of house, 100 feet east of corral, 30 feet east of small dry wash, 3 feet north of gatepost on wagon road; iron post stamped "642 L. A." 643.562
Fillmore, 125 feet southwest of southwest corner of station, 65 feet southeast of center of railroad and highway crossing, 1.5 feet north of fence corner; iron post stamped "469 L. A." (destroyed) 470.914
Buckhorn, 153 feet northeast of northeast corner of station, 50 feet north of track, 3 feet west of telegraph pole; iron post stamped "599 L. A." 599.493
Camulos, 200 feet south of southeast corner of station, 2.5 feet south of northwest corner of post office; iron post stamped "732 L. A." 732.437

From Fillmore west along Southern Pacific R. R. to Sespe

Brownstone, in front of station; top of north rail 449.3
Sespe, 1,300 feet north of station, 50 feet south of main entrance to San Cayetano schoolhouse, 1 foot north of fence; iron post stamped "501 L. A." 503.882
Sespe, in front of station; top of north rail 457.0

From Russel ranch west and north in Conejo Valley via Potrero to Somis, thence east to Simi

Pass from Conejo to Potrero, 150 feet west of road, on slope of rock ledge in field; bronze tablet stamped "1315 L. A." 1,316.549
Guadalasca, El Conejo, and Calleguas grants, joint corner of, 10 feet north of road, in pile of rocks, at summit of ridge; iron post stamped "778 L. A." (moved 26 feet N. E.) 779.904
Somis, 8 feet south of southeast corner of fence around public school, 15 feet west of public road; iron post stamped "288 L. A." 289.760
Moorpark, 20 feet southwest of southwest corner of station, 30 feet north of center of track; iron post stamped "511 L. A." (recovered by C. & G. S., 1920) 513.345

ELIZABETH LAKE QUADRANGLE

Feet
Semaphore 3851; top of concrete foundation 2,624.70
Milepost 386, opposite; top of rock 2,582.28
Milepost 387, 600 feet north of, at edge of railroad right of way; iron post stamped "2561 B 1902 28" 2,563.290

ELIZABETH LAKE QUADRANGLE

[Kern and Los Angeles Counties]
Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From Mojave quadrangle south along Southern Pacific R. R. to Tujunga quadrangle
Semaphore 3887 (or 3881?) top of concrete foundation; northwest corner

West side of track; top of rock

Rosamond, 4.4 miles north of, 800 feet north of milepost 390, on west side of track; iron post stamped “2543 B 1902 29”

Milepost 391, near; top of rock

Semaphore 3920, top of concrete foundation; southeast corner

Rosamond, 1.4 miles north of, 800 feet north of milepost 393, west side of track; iron post stamped “2407 B 1902 30”

Semaphore 3947, top of concrete foundation; northwest corner

Lancaster, 9.6 miles north of, 800 feet north of milepost 396, west of track; iron post stamped “2311 B 1902 31”

Semaphore 3978, top of concrete foundation; southeast corner

Concrete culvert 397-D, west side of; point

Lancaster, 6.6 miles north of, 800 feet north of milepost 399, west side of track; iron post stamped “2302 B 1902 32”

Semaphore 3993, top of concrete foundation; northwest corner

Semaphore 4005, top of concrete foundation; northwest corner

Lancaster, 3.6 miles north of, 800 feet north of milepost 402, west side of track; iron post stamped “2335 B 1902 34”

Semaphore 4027, top of concrete foundation; northwest corner

Culvert 403, on west end of; point

Lancaster, 0.6 mile north of, 800 feet north of milepost 405, west side of track; iron post stamped “2356 B 1902 35”

Semaphore 4059, top of concrete foundation; southwest corner

Semaphore 4099, top of concrete foundation; northwest corner

Palmdale, 2.9 miles north of, 800 feet north of milepost 411, west side of track; iron post stamped “2592 B 1902 37”

Semaphore 4119, top of concrete foundation; northwest corner

Semaphore 4130, top of concrete foundation; southeast corner

Palmdale, 150 feet north of station, east side of track; iron post stamped “2657 B 1902 38”

Palmdale, 600 feet west and 400 feet north of depot, at south side of east entrance to schoolhouse, set in wall, 5 feet above ground; bronze tablet stamped “2668 1914”

Semaphore 4146, top of concrete foundation; southeast corner

Harold, 165 feet north of water tank, at north end of section house fence; iron post stamped “2824 B 1902 39”

“Harold 1 mile” post; top of iron semaphore box at

Semaphore 4185, top of concrete foundation; northwest corner

Semaphore 4196, top of concrete foundation; southeast corner

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

Keller’s L line, 200 feet northwest of, station 821-50, north side of Antelope Valley; standard L. A. A. pipe No. 85, marked with red, white, and blue flag.
Keller's L line, 210 feet northwest of, station 981-00, north side of Antelope Valley; standard L. A. A. pipe No. 86, marked with red, white, and blue flag. 3,146.926

Keller's L line, 150 feet northwest of, station 1139-00, north side of Antelope Valley; standard L. A. A. pipe No. 87, marked with red, white, and blue flag. 3,143.112

Keller's L line, 150 feet north of, station 1263-00, north side of Antelope Valley; standard L. A. A. pipe No. 88, marked with red, white, and blue flag. 3,139.875

Keller's L line, 150 feet north of, station 1389-00, north side of Antelope Valley; standard L. A. A. pipe No. 89, marked with red, white, and blue flag. 3,131.954

Keller's L line, 100 feet north of, station 1483-50, on ridge at east end of Cottonwood Creek Siphon, north side of Antelope Valley; standard L. A. A. pipe No. 91, marked with red, white, and blue flag. 3,134.703

Keller's L line, 80 feet southeast of, station 1516-00, on ridge at west end of Cottonwood Creek Siphon, north side of Antelope Valley; standard L. A. A. pipe No. 91, marked with red, white, and blue flag. 3,123.504

Keller's L line, 325 feet north of, station 1557-00 near east portal of tunnel No. 1, on sand hills; standard L. A. A. pipe No. 92, marked with red, white, and blue flag. 3,129.832

Keller's L line, 300 feet north of, station 1571-00, between portals of tunnels Nos. 1 and 2, in sand hills; standard L. A. A. pipe No. 93, marked with red and blue flag. 3,125.368

Keller's L line, 170 feet north of, station 1609-00, between portals of tunnels Nos. 2 and 3, in sand hills; standard L. A. A. pipe No. 94, marked with red and blue flag. 3,142.475

Keller's L line, 200 feet north of, station 1628-00, between portals of tunnels Nos. 3 and 4, in sand hills; standard L. A. A. pipe No. 95, marked with red and blue flag. 3,129.314

Keller's L line, 325 feet north of, station 1639-00, between portals of tunnels Nos. 4 and 5, in sand hills; standard L. A. A. pipe No. 96, marked with red and blue flag. 3,127.091

Keller's L line, 200 feet north of, station 1662-00, between portals of tunnels Nos. 5 and 6, in sand hills; standard L. A. A. pipe No. 97, marked with red and blue flag. 3,132.850

Keller's L line, 200 feet north of, station 1690-00, between portals of tunnels Nos. 6 and 7, in sand hills; standard L. A. A. pipe No. 98, marked with red and blue flag. 3,126.257

Keller's L line, 600 feet north of, station 1705-00, between portals of tunnels Nos. 7 and 8, in sand hills; standard L. A. A. pipe No. 99, marked with red and blue flag. 3,123.733

Keller's L line, 300 feet north of, station 1723-50, near west portal of tunnel No. 8, in sand hills; standard L. A. A. pipe No. 100, marked with red and blue flag. 3,126.389

Keller's L line, 500 feet north of, station 2378-00, south side Antelope Valley; standard L. A. A. pipe No. 107 on knoll, marked with red and blue flag. 3,050.019

Elizabeth Lake Tunnel, on hillside northeast of north portal of; standard L. A. A. pipe No. 108, marked with red and blue flag. 2,963.008
Elizabeth Lake Tunnel, on hillside 55 feet south of shaft entrance
to, 5 feet east of hub Q on tunnel line; standard L. A. A. pipe No.
109, marked with red and blue flag___________________ 3,285.422
Elizabeth Lake Tunnel, 225 feet south of south portal of, across can­
yon; standard L. A. A. pipe No. 110, marked with red and
blue flag________________________________________________________________ 2,926.016

Precise leveling by L. F. Biggs in 1906
Along Atchisson, Topeka & Santa Fe Ry.
Muroc, 8 miles northwest of, 6 feet north of telegraph pole pole north of
milepost 806; iron post stamped “2420”__________________________ 2,420.755
Bissell, in front of station; top of rail__________________________ 2,451.0
Mojave, 9 miles southeast of, 6 feet north of pole north of milepost
809; iron post stamped “2462”__________________________ 2,462.509

Primary leveling by H. S. Crowe in 1900
From Manzana east along road to Fairmont, thence south to Elizabeth Lake,
thence southeast to Harold (Alpine)
Fairmont, 300 feet southeast of southeast corner of public school-
house, at southeast corner of fence; iron post stamped “2786
L. A”_________________________________________________________ 2,784.828
W. A. Spencer’s house, 75 feet southeast from corner of, 1 foot south
of fence corner; iron post stamped “2803 L. A”___________________ 2,801.951
Pedro Andrada’s house, 60 feet north of, 2 feet northeast of sign­
board at fork of road where it forks east and south; iron post
stamped “3403 L. A”__________________________________________ 3,401.666
Hill, on slope of, 25 feet south of road; iron post stamped “3177
L. A”_________________________________________________________ 3,175.513
J. G. Ritter’s house, 0.5 mile north of, 450 feet north of gate, 12
feet north of road, at summit of ridge at head of valley; iron post
stamped “3048 L. A”__________________________________________ 3,046.223
Signpost marked “Alpine, 5 miles,” 15 feet west of, 100 feet east of
road up canyon, 200 feet south of road to Palmdale; iron post
stamped “2831 L. A”__________________________________________ 2,829.299
Una Lake, sec. 3, lot 8, T. 5 N., R. 12 W., 1.5 feet southeast of south­
east corner of bunk house of South Antelope Valley Irrigation
Co.; iron post stamped “2820 L. A”_____________________________ 2,820.572
Harold siding (formerly Alpine), 1.5 feet west of northwest corner
of fence ground railroad section house, 9 feet east of center of
track; iron post stamped “2826 L. A” (recovered by U. S. C. &
G. S. precise leveling)________________________________________ 2,826.826

From Una Lake southeast to Little Rock
East Palmdale, 0.25 mile south of, in corner of fence, 40 feet north
of center of road to Little Rock from East Palmdale, in sec. 6,
T. 6 N., R. 11 W., 450 feet northwest of section corner; iron post
stamped “2682”______________________________________________ 2,682.439
Little Rock, inside of fence at Chaplin ranch, 54 feet east from post­
oice building, 25 feet east of quarter corner on west side of
sec. 13, T. 5 N., R. 11 W.; iron post stamped “2910”______________ 2,911.049.
DEGREE QUADRANGLE 34°–35°, 118°–119°

From Elizabeth Lake southwest to St. Francis ranch

P. Andrade’s house, 60 feet north of, 2 feet northeast of signboard at forks of road; iron post stamped “3403 L. A.” (C. & G. S.) ——— 3,401.666
Juan de Cellis’s house, 1 mile south of, at turn of road on top of first hill south of bridge; iron post stamped “2604 L. A.” (C. & G. S.) ——————————— 2,604.057
Canyon, at turn of road in, 15 feet below small ditch where it turns around point of hill; iron post stamped “1913 L. A.” (C. & G. S.) ——— 1,914.053

PASADENA QUADRANGLE

[Latitude 34°–34° 15’; longitude 118°–118° 15’]

LOS ANGELES COUNTY

Precise leveling by L. F. Biggs in 1914, fitted to U. S. C. & G. S. precise level line over same route

From Los Angeles south to Clement Junction

Los Angeles, at intersection of San Fernando road and Granada St., on north end of west curb; chiseled cross, marked “U. S. B. M.” ——— 342.96
Los Angeles, 6 inches from northeast corner of north abutment of Southern Pacific R. R. bridge No. 1 over Los Angeles River; lead plug with copper nail (R. R. bench mark), marked “U. S. B. M.” ——— 329.03
Los Angeles, Atchison, Topeka & Santa Fe Ry. bridge 140-A over, Los Angeles River, near north end of first pier from west end; lead plug with copper nail marked “U. S. B. M.” ——— 311.61
Los Angeles, Junction warehouse, brick building at junction of San Fernando and Olympia streets, in south wall; bronze tablet stamped “306” (recovered by C. & G. S.) ——— 306.450
Los Angeles, Alameda and Alizo streets, intersection point ——— 272.8
Los Angeles, Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum (old p. b. m.), marked “256” ——— 256.293
Los Angeles, Alameda and Fifteenth streets ——— 229.2
Clement Junction, east side of right of way, 500 feet north of railroad tower, at fence intersection; iron post stamped “220 No. 59” (recovered by C. & G. S.) ——— 220.570

Primary leveling by H. S. Crowe in 1897

From Clement Junction north via Los Angeles to Tropico (double-rodded line)

Clement Junction, Los Angeles, 500 feet north of railroad tower, at intersection of fence lines; iron post stamped “220” (recovered by U. S. C. & G. S., 1920) ——— 220.570
Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum, stamped “256” ——— 256.293
Post office, on Main St. between Winston and Fifth streets, in north stone buttress of main entrance; bronze tablet stamped “270” ——— 270.709
City Hall, on Broadway, about 3 feet above the northern steps to front entrance; bronze tablet stamped “286” ——— 286.699
County courthouse, at southeast corner of Broadway and Temple St., in granite buttress on right of main steps to building; bronze tablet stamped “338” ——— 338.592
Naud Junction, in concrete floor of alley to waiting room, 4 inches from side of baggage room and 8 inches from edge of concrete nearest railroad track; copper bolt stamped “282”------------------- 282.783
Naud Junction, 0.5 mile east of, at Los Angeles River, southwest corner of railroad bridge, in concrete pier; copper bolt stamped “294”----------------------------------------------- 294.640
Junction warehouse, brick building at junction of San Fernando and Olympia streets, in south wall; bronze tablet stamped “306”----
Buena Vista St. bridge over Los Angeles River, 0.5 mile north of station, second bent from south end, 18 feet from California Southern and 12 feet from Southern Pacific railroad tracks, in northeast granite post; copper bolt stamped “314”----------------------------- 314.504

From Los Angeles east along Southern Pacific R. R. to Bassett

East Lake Inn, northeast corner of Eastlake Ave. and Mission Road, on south side of building and 1.2 feet from steps, in concrete at top of foundation; bronze tablet stamped “333”----------------------------- 333.566
Aurant station, 0.75 mile west of, on west side of railroad, in top step of brick culvert; copper bolt stamped “399”----------------------------- 399.476
Shorb station, on south side of railroad yard, 99.5 feet southeast from corner of station, 55 feet west of signal tower; iron post stamped “464”------------------------------------------------------ 464.641
Alhambra station, in west corner of railroad park; iron post stamped “456”--------------------------------------------- 456.817
San Gabriel, 86.6 feet from northeast corner, and 94.9 feet from northwest corner of station building, 7.1 feet west from rain-gage post; iron post stamped “415”------------------------------------------------------ 416.220
Savannah, 1 foot from fence south of station and 75.9 feet from southeast corner of station; iron post stamped “300”---------------- 300.859
Savannah, in Western Union telegraph pole, 73.3 feet north of station; bronze tablet stamped “292” (destroyed)-------------------------- 292.516

LOS ANGELES COUNTY SPECIAL SURVEY

PASADENA, SAN FERNANDO, SANTA MONICA, AND TUJUNGA QUADRANGLES:

[Latitude 34°-34° 30'; longitude 118°-118° 30’]

Primary leveling by R. B. Steele in 1924

From Los Angeles courthouse west along Temple St. and Beverly Bvd. to Western Ave. (Preliminary adjustment)

Los Angeles County courthouse, at southeast corner of Broadway and Temple St., in granite buttress, on right of main steps to building; bronze tablet stamped “338 U. S. C. & G. S. B. M. S-32”------------------ 338.592
Los Angeles, opposite Broadway entrance to county courthouse, in center of concrete sidewalk; bronze tablet------------------------------- 327.256
Los Angeles, southeast corner of Temple St. and Grand Ave., in curb; brass bolt, marked “390.3”---------------------------------------- 390.88
Los Angeles, 15 feet west of southwest corner of Temple and Figueron streets, in curb; chiseled square, marked “U. S. 340.3 B. M.”---- 340.38
Los Angeles, northeast corner of Temple and Beaudry streets, at telephone pole, in curb; chiseled square centered with spike, marked “351.7”------------------------------------------- 351.76
Los Angeles, southeast corner of Temple and Boylston streets, at trolley pole, in curb; chiseled square centered with nail, marked “387.9”-------------------------------388.01

Los Angeles, southwest corner of Temple St. and Edwards Road, at fire hydrant, in curb; chiseled square, marked “U. S. 427.2 B. M.”-----------------------------427.30

Reference bench mark; Los Angeles, southeast corner of Temple St. and Glendale Blvd., in curb; chiseled square-----------------------------364.85

Los Angeles, 30 feet north of northeast corner of Temple St. and Glendale Blvd., between curb and sidewalk, in concrete post set flush with ground; bronze tablet stamped “R. S. 24 1924,” marked “U. S. 364.8 P. B. M.”-----------------------------------364.922

Los Angeles, northwest corner of Temple St. and Belmont Ave., at fire hydrant, in curb; chiseled square, marked “305.9”-----------------------------306.04

Los Angeles, 10 feet west of northwest corner of Temple and North Alvarado streets, in curb; chiseled square centered with nail, marked “U. S. 366.7 B. M.”-----------------------------366.80

Los Angeles, southwest corner of Temple St. and Rampart Blvd., at fire hydrant, in curb; chiseled square, marked “338.5”-----------------------------338.58

Los Angeles, northeast corner of Temple and Vendome streets, in curb; chiseled square centered with nail, marked “311.8”-----------------------------311.85

Los Angeles, northeast corner of Temple and Hoover streets, at telephone pole, in curb; chiseled square, marked “U. S. 286.1 B. M.”-----------------------------286.16

Los Angeles, southwest corner of Beverly Blvd. and Juanita Ave., at fire hydrant, in curb; chiseled square, marked “277.4”-----------------------------277.43

Los Angeles, southeast corner of Beverly Blvd. and Catalina St., at fire hydrant in curb; chiseled square, marked “272.0”-----------------------------272.00

Los Angeles, southwest corner of Beverly Blvd. and Mariposa St., at power pole, in curb; chiseled square, marked “U. S. 270.1 B. M.”-----------------------------270.07

Los Angeles, 15 feet south of southwest corner of Beverly Blvd. and Western Ave., in curb; chiseled square centered with nail, marked “U. S. 251.4 B. M.”-----------------------------------251.36

Los Angeles, southwest corner of Western Ave. and Third St., at fire hydrant, in curb; chiseled square, marked “227.9 U. S. B. M.”-----------------------------227.67

From corner of Temple St. and Glendale Blvd. north along boulevard to Glendale

Los Angeles, on east side of intersection of Glendale Blvd. and Reservoir St., at overhead crossing of Sunset Blvd., in curb; chiseled square, marked “U. S. 388.2 B. M.”-----------------------------388.30

Los Angeles, northwest corner of Glendale Blvd. and Alvarado St., at telephone pole, in curb; chiseled square marked “415.9”-----------------------------416.06

Los Angeles, southwest corner of Glendale Blvd. and Allesandro St., in curb; chiseled square, marked “U. S. 475.9 B. M.”-----------------------------476.03

Los Angeles, east side of intersection of Glendale Blvd. and Apex Ave., at summit of pass of Glendale Blvd, in Edendale, at telephone pole, in curb; chiseled square, marked “540.4”-----------------------------540.60

Los Angeles, northwest corner of Glendale Blvd. and Ayr St., center of return, in curb; chiseled square centered with nail, marked “U. S. 433.0 B. M.”-----------------------------------433.00

Los Angeles, northwest corner of Rowena and Lakewood avenues, at intersection of Glendale Blvd., 10 feet south of corner, in curb; chiseled square, marked “U. S. 426.8 B. M.”-----------------------------------426.91

Reference bench mark; Los Angeles, northeast corner of Glendale Blvd. and Riverside Drive, in curb; chiseled square, not marked-----------------------------393.01
Los Angeles, northwest corner of Glendale Bvd. and Riverside Drive, between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 25 1924," marked "U. S. 393.7 P. B. M." 393.759

Los Angeles, southeast corner of Riverside Drive and Los Feliz Road, on north side of 16-inch sycamore tree, in root; copper nail and washer, marked "U. S. 394.8 B. M." 394.80

Glendale (Old Tropico), 500 feet north of Southern Pacific R. R. station, 32.65 feet east of main track (west bound), 22 feet northeast of northeast corner of station platform curbing, 0.3 foot below ground, surrounded by concrete box with cast iron cover; iron post stamped "432 No. 57" (U. S. C. & G. S. b. m. J-32) 432.158

From Figueroa and Temple streets southwest along Figueroa St. to Pico St.

Los Angeles, southeast corner of Figueroa and — streets, center of return, in curb; chiseled square, marked "353.9" 353.94

Los Angeles, southeast corner of Figueroa and West Third streets, in curb; chiseled square, marked "U. S. 304.8 B. M." 304.86

Los Angeles, northwest corner of Figueroa and West Sixth streets, center of return, in curb; chiseled square centered with nail (not marked) 299.32

Los Angeles, southwest corner of Figueroa and West Seventh streets, at fire hydrant, in curb; chiseled square (not marked) 273.73

Los Angeles, southwest corner of Figueroa and West Ninth streets, at lamp post; iron nail in curb (not marked) 252.03

Los Angeles, southwest corner of Figueroa and West Eleventh streets, center of return, in curb; chiseled square centered with nail, not marked 238.92

Los Angeles, southwest corner of Figueroa and Pico streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 232.5" 232.60

Los Angeles, at northeast corner of building occupied by Bekins Fireproof Storage Co., at 1335 South Figueroa St., between north wall of building and paving of alley, in concrete post; bronze tablet stamped "S-77-1823" 231.307

From Los Angeles courthouse along highways and Brooklyn Ave. to Evergreen Ave., thence south to Hobart

Los Angeles, opposite Broadway entrance to county courthouse, in center of concrete sidewalk; bronze tablet 327.256

Los Angeles, northeast corner of Los Angeles and Aliso streets, at fire hydrant, in curb; chiseled square, marked "283.5" 283.46

Los Angeles, southwest corner of Aliso and Vignes streets, at telephone pole, in curb; chiseled square centered with nail, marked "U. S. 275.8 B. M." 275.71

Los Angeles, at east end of Aliso Street bridge over Los Angeles River, center of top of concrete abutment; chiseled square centered with nail, marked "282.1" 282.07

Los Angeles, southwest corner of Brooklyn Ave. and Warren St., in curb; chiseled square, marked "U. S. 356.8" 356.79

Los Angeles, northeast corner of Brooklyn and North Boyle avenues, center of return, in curb; chiseled square, marked "U. S. 349.5 B. M." 349.50
Los Angeles, northwest corner of Brooklyn Ave. and North Chicago St., in curb; chiseled square centered with nail, marked "332.5"—332.47
Los Angeles, southwest corner of Brooklyn Ave. and Soto St., at fire hydrant, in curb; chiseled square, marked "U. S. 342.8 B. M."—342.85
Los Angeles, southwest corner of Brooklyn Ave. and North Mott St., in curb; chiseled square centered with nail, marked "333.9"—333.89
Reference bench mark; Los Angeles, northwest corner of Brooklyn and Evergreen avenues, at fire hydrant, in curb; chiseled square, not marked—340.79
Los Angeles, southeast corner of Brooklyn and Evergreen avenues, between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 26 1924," marked "U. S. 340.6 P. B. M."—340.589
Los Angeles, northeast corner of Evergreen Ave. and First St., at fire alarm box, in curb; chiseled square, marked "306.2"—306.14
Los Angeles, northeast corner of Evergreen Ave. and East Fourth St., at trolley pole, in curb; chiseled square, marked "310.4"—310.37
Los Angeles, northwest corner of Euclid Ave. and Whittier Bvd., at fire hydrant, in curb; chiseled square, marked "U. S. 321.5 B. M."—321.47
Los Angeles, northwest corner of Whittier Bvd. and Lorena St., at lamp post, in curb; chiseled square, marked "U. S. 290.0 B. M."—289.92
Los Angeles, southeast corner of Lorena and Atlantic Sts., at fire hydrant, in curb; chiseled square, marked "238.9"—238.81
Los Angeles, northeast angle of intersection of South Lorena and Alosa Sts., on west side of 48-inch eucalyptus tree, in root; copper nail and washer, tree marked "U. S. 192.4 B. M."—192.24
Hobart, 100 feet south of Atchison, Topeka & Santa Fe Ry. station, west side of track, in concrete base of gate rods; chiseled square, marked "U. S. B. M. 192.0"—191.93

From Brooklyn Ave. northeast along Soto St., northwest along Marengo and Workman streets to Pasadena Ave.

Los Angeles, northeast corner of North Soto and Fairmount streets, in curb; chiseled square centered with nail, marked "379.8"—379.80
Los Angeles, southeast corner of North Soto and Marengo streets, at power pole, in curb; chiseled square centered with nail, marked "U. S. 345.1 B. M."—345.07
Los Angeles, southeast corner of Marengo and Britannia streets, 4 feet east of power pole, in curb; chiseled square centered with nail, marked "335.6"—335.60
Reference bench mark; Los Angeles, southwest corner of Mission Road and Marengo St., at power pole, in curb; chiseled square, not marked—321.80
Los Angeles, at Los Angeles County Hospital, northeast corner of Mission Road and Marengo St., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 27 1924," marked "U. S. 322.7 P. B. M."—322.609
Los Angeles, southwest corner of Workman and North Main streets, at fire hydrant, in curb; chiseled square, marked "318.9"—318.84
Los Angeles, northeast corner of North Broadway and North Workman streets, at power pole, in curb; chiseled square, marked "U. S. 341.0 B. M."—340.93
Los Angeles, east side of intersection of Pasadena Ave. and North Workman St., at power pole, in curb; chiseled square, marked "378.2"—378.17
SPIRIT LEVELING IN CALIFORNIA, 1896–1923

From Pasadena west along La Loma Road and Colorado Bvd. to Glendale
(leveled twice)

Feet

Pasadena, 30 feet south by 55 feet east of intersection of Orange Grove Ave. and California St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S-64–1923" 828.424

Pasadena, at southwest corner of Orange Grove Ave. and California St., at lamp post, in curb; chiseled square 828.30

Pasadena, southwest corner of La Loma Road and Arroyo Drive, at southeast corner of concrete bridge over Arroyo Seco, top of curb; chiseled square, marked "U. S. 724.0 B. M." 723.89

Pasadena, northwest angle of intersection of San Rafael Ave. and La Loma Road, at city water meter, in curb; chiseled square, marked "U. S. 821.6 B. M." 821.62

Pasadena, intersection of La Loma Road and North Avenue 64, Pacific Electric Ry. track; top of east rail, marked "787.3" 787.21

Pasadena, west limit of, at intersection of Colorado St. and Avenue 64, at Sullivans Gas & Service station, on top of concrete base of delivery pumps, at east end; chiseled square, marked "U. S. 899.6 B. M." 899.50

Eagle Rock, in east edge of, southwest angle of intersection of Colorado and Annandale boulevards, at street marker, in curb; chiseled square, marked "829.6" 829.48

Reference bench mark; Eagle Rock, southeast angle of intersection of Colorado Bvd., and Elmodena and Lauristinis avenues, 2 feet northwest of city water meter, in curb; chiseled square, not marked 714.91

Eagle Rock, southwest angle of intersection of Colorado Bvd. and Lauristinis Ave., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 1 1924," marked "U. S. 712.5 P. B. M." 712.241

Eagle Rock, northwest angle of intersection of Colorado and Eagle Rock boulevards, at lamp post, in curb; chiseled square, marked "U. S. 567.2 B. M." 566.80

Eagle Rock, in west edge of, east angle of intersection of Colorado Bvd. and Broadway, at corner light pole, in curb; chiseled square, marked "U. S. 583.5 B. M." 583.07

Glendale, northwest intersection of East Colorado Bvd. and South Verdugo Road, at guy post, in curb; chiseled square, marked "U. S. 568.5" 568.05

Reference bench mark; Glendale, northeast angle of intersection of Colorado Bvd. and Glendale Ave., at telephone pole 209 U. P., in curb; chiseled square, not marked 539.13

Glendale, southeast intersection of Colorado Bvd. and Glendale Ave. between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 2 1924," marked "U. S. 537.5 P. B. M." 537.040

Glendale, southwest angle of intersection of Glendale Ave. and East Los Feliz Road, at fire hydrant, in curb; chiseled square, marked "U. S. 459.8 B. M." 459.33

From Devil Gate dam along Michigan Ave. to La Canada, thence west and southwest to Glendale

Devils Gate dam, 40 feet northwest of west end of, 2.5 feet east of guardrail, in concrete post; bronze tablet stamped "568 1923" 1,073.648
La Canada, 2.0 miles southeast of, on north side of intersection of Michigan Ave. and La Canada St., 4 feet south of telephone pole 14981 T, in curb; chiseled square, marked “U. S. 1,186.9 B. M.”… 1,186. 96

La Canada, 1.0 mile southeast of, southwest angle of intersection of Michigan and Commonwealth avenues, in curb; chiseled square, marked “U. S. 1,251.8 B. M.”… 1,251. 99

Reference bench mark; 55.2 feet southeast of permanent bench mark R. S. 3 1924, north end of concrete culvert under Michigan Ave. top of southwest corner of head wall; wrought-iron spike embedded in concrete… 1,364. 22

La Canada, northwest angle of intersection of Michigan Ave. and La Canada Bvd. near west edge and 28 feet north of corner of sidewalk, in school yard, in concrete post set flush with ground; bronze tablet stamped “R. S. 3 1924,” marked “U. S. 1,351.8 B. M.”… 1,352. 15

Montrose, 0.6 mile east of, northeast angle of intersection of Verdugo Bvd. and Mt. La Granada St., in curb; chiseled square, marked “U. S. 1,351.8 B. M.”… 1,352. 15

Montrose, northeast angle of intersection of Vcldugo Bvd. and Mont­­­rose Ave., 8 feet south of highway signboard, in curb; chiseled square, marked “U. S. 1,224.0 B. M.”… 1,224. 20

Montrose, 0.8 mile south of, southeast angle of intersection of Verdugo Canyon Road and Harmon Pl., in Sparr Heights, east head wall of concrete culvert under Verdugo Canyon Road, north end of top; chiseled square, marked “U. S. 1,057.3 B. M.”… 1,057. 37

Reference bench mark; Montrose, 2.0 miles south of, northwest angle of intersection of Verdugo Canyon Road and Opechee Way, 48.15 feet northeast of p. b. m. R. S. 4, in curb; chiseled square, not marked… 906. 80

Montrose, 2.0 miles south of, southwest angle of intersection of Verdugo Canyon Road and Opechee Way, between curb and sidewalk, in concrete post; bronze tablet stamped “R. S. 4 1924,” marked “U. S. 905.3 P. B. M.”… 905. 225

Glendale, in Y of intersection of Verdugo Canyon Road and Canada Bvd., at lamp post, in curb; chiseled square, marked “U. S. 772.4 B. M.”… 772. 77

Glendale, north side of intersection of Verdugo Canyon Road and Glendale Bvd., west end of culvert, top of concrete head wall; chiseled square, marked “U. S. 693.1 B. M.”… 692. 81

Glendale, northeast angle of intersection of North Glendale Ave. and East Doran St., in curb; chiseled square, marked “U. S. 619.7 B. M.”… 619. 40

From La Canada northwest along highways to Mulholland St. and North Sherman Way, thence southwest to Pacoima, thence northwest to San Fernando (first 4.6 miles leveled three times and remainder twice)

La Canada, 0.5 mile northwest of, southeast angle of intersection of Michigan and Burr avenues, south end of culvert under Michigan Ave., top of north wing of concrete head wall; chiseled square, marked “U. S. 1,446.2 B. M.”… 1,446. 65

La Canada, 1.1 miles northwest of, 360 feet east of Olive Grove Ave., near summit of pass, opposite telephone pole 4731 T, in center of Michigan Ave. (concrete road); chiseled square, marked “U. S. 1,549.3 B. M.”… 1,549. 84
La Canada, 1.5 miles northwest of, intersection of center lines of Michigan and North Ocean View avenues, center of concrete road; chiseled square, marked “1,497.0”  
1,497.45

Reference bench mark; 33.45 feet southwest of p. b.m. “R. S. 5 1924,” at McCormick’s service station, on west end of concrete base of gasoline pumps; chiseled cross (Los Angeles County b. m.) not marked  
1,575.63

La Canada, 3.0 miles northwest of, southwest angle of intersection of Michigan and Pennsylvania avenues, in concrete post; bronze tablet stamped “R. S. 5 1924,” marked “U. S. 1,748.3 B. M.”  
1,750.11

Tujunga, 0.5 mile east of, at La Crescenta summit on Michigan Ave., 90 feet west of power pole 154547 E, center of concrete highway; chiseled square, marked “U. S. 1,838.1 B. M.”  
1,839.92

Tujunga, northwest intersection of Michigan Ave. and Sunset Blvd., 20 feet north of corner and inside curb, in concrete post; bronze tablet stamped “R. S. 6 1924,” marked “U. S. 1,712.5 P. B. M.”  
1,714.206

Sunland post office, 0.5 mile west of, center of intersection of Michigan Ave. and Sunland-Roscoe road, center of concrete highway; chiseled square, marked “1,330.1”  
1,331.38

Reference bench mark; Sunland post office, 1.25 miles northwest of, 40 feet south of northeast corner of Michigan Ave., in curb, concrete bridge over Big Tujunga Canyon; chiseled square, not marked  
1,199.32

Sunland post office, 0.5 mile southeast of, 800 feet east of intersection of Michigan Ave. and First St., center of concrete highway bridge; chiseled square, marked “1,400.9”  
1,402.34

Sunland post office, 0.1 mile south of, center of intersection of Michigan Ave. and Sherman St., center of concrete highway; chiseled square, marked “U. S. 1,348.3 B. M.”  
1,349.61

Sunland post office, 0.5 mile west of, center of intersection of Michigan Ave. and Sunland-Roscoe road, center of concrete highway; chiseled square, marked “1,330.1”  
1,331.38

Reference bench mark; Sunland post office, 1.25 miles northwest of, 40 feet south of northeast corner of Michigan Ave., in curb, concrete bridge over Big Tujunga Canyon; chiseled square, not marked  
1,199.32
Sunland post office, 1.25 miles northwest of, 25.5 feet north of northwest corner of Michigan Ave., on concrete bridge over Big Tujunga Canyon, 3.5 feet west of guard rail, in concrete post; bronze tablet stamped "R. S. 7-1924," marked "U. S. 1,107.3 P. B. M." 1,108.411

Sunland post office, 2.05 miles northwest of, 0.8 mile west of Michigan Ave., on concrete bridge over Big Tujunga Canyon, at intersection of Tujunga Ave. and Wheatland Ave., top of center of south head wall of concrete culvert; chiseled square, marked "U. S. 1,151.5 B. M." 1,152.64

Sunland post office, 2.50 miles northwest of, 210 feet west of Tujunga District School, top of west end of north head wall of concrete culvert; chiseled square, marked "U. S. 1,130.8 B. M." 1,131.83

Sunland post office, 2.90 miles northwest of, 0.5 mile west of Tujunga District School, intersection of center lines of Tujunga Valley and Oraes avenues, center of concrete highway; chiseled square, marked "1,094.95" 1,095.97

Pacoima, 4.0 miles northeast of, northwest angle of intersection of Osborne Ave. and Eldridge St., at street marker, top of concrete post; chiseled square, marked "U. S. 1,110.1 B. M." 1,111.18

Reference bench mark, Pacoima, 3.0 miles northeast of, 140 feet north of intersection of Osborne Ave. and Mulholland St., on south edge of curve, in concrete highway; chiseled square, not marked 1,046.62

Pacoima, 3.0 miles northeast of, northeast angle of intersection of Osborne Ave. and Mulholland St., 12 feet north of city water meter, in concrete post; bronze tablet stamped "R. S. 8 1924" marked "U. S. 1,041.7 P. B. M." 1,042.693

Pacoima, 2.5 miles northeast of, northeast angle of intersection of Mulholland St. and Terrabella Ave., on south corner of right angle in concrete head wall of culvert; chiseled square centered with nail, marked "1,111.2" 1,112.23

Pacoima, 2.0 miles northeast of, southwest angle of intersection of Mulholland St. and North Sherman Way, top of center of south head wall of concrete culvert; chiseled square, marked "U. S. 1,155.6 B. M." 1,156.70

Pacoima, 1.5 miles northeast of, northeast angle of intersection of North Sherman Way and Borden St., 20 feet northeast of street marker, concrete irrigation pipe; south edge of top, power pole 80 feet northwest marked "1,073.8" 1,074.77

Pacoima, near east edge of, at northwest entrance of Pacoima Grammar School, center of top step; chiseled square, power pole 120 feet northwest marked "U. S. 1,042.3 B. M." 1,043.27

Reference bench mark; Pacoima, southwest angle of intersection of Sherman Way and Southern Pacific R. R., on concrete base of crossing signal, northwest corner; chiseled square 1,013.65

Pacoima, 80 feet south of Southern Pacific R. R. station, 35 feet west of track, in southwest angle of intersection of Sherman Way, 5 feet south of telegraph pole, in concrete post; bronze tablet stamped "R. S. 9 1924," pole marked "U. S. 1,012.4 P. B. M." 1,013.290

Pacoima, 0.75 mile northwest of, Southern Pacific R. R. semaphore 4627, top of concrete foundation; northwest corner, pole southeast marked "U. S. 1,039.4" 1,040.3f
San Fernando, Industrial Arts Building, in top step of north side of west entrance of building; bronze tablet stamped "1,076 1914 52".  
San Fernando, on Porter Ave., at southeast corner of McClay & McClay Co.'s building, in wall; bronze tablet stamped "1,066 51"  
(Bull. 342, p. 72)  

San Fernando, 1.0 mile west of, northwest angle of intersection of Brand Bvd. and Webb St., on curb; chiseled square, marked "U. S. 1,016.8 B. M."  
San Fernando, 1.75 miles west of, at southwest corner of San Fernando Mission grounds, northeast angle of intersection of cross streets, in curb; chiseled square, marked "U. S. 969.2 B. M."  
San Fernando, 2.4 miles west of, southwest angle of intersection of Brand Bvd. and Chatsworth St., center of top of south head wall of concrete culvert; chiseled square, marked "U. S. 930.6 B. M."  
Reference bench mark; San Fernando, 2.5 miles west of, northeast angle of intersection of Chatsworth St. and Haskell Ave., center of top of concrete head wall of culvert; chiseled square, not marked  
San Fernando, 2.5 miles west of, southeast angle of intersection of Chatsworth St. and Haskell Ave., in concrete post; bronze tablet stamped "R. S. 14 1924," marked "U. S. 931.9 P. B. M."  
San Fernando, 3.0 miles west of, center of intersection of Chatsworth St. and Woodley Ave.; ground surface elevation, marked "932.9".  
San Fernando, 3.5 miles west of, northeast angle of intersection of Chatsworth St. and Havenhurst Ave., at street marker, in top of 6 by 6 inch post; nail, marked "U. S. 933.7 B. M."  
San Fernando, 4.0 miles west of, northeast angle of intersection of Chatsworth St. and Balboa Ave., at street marker; top of 2-inch iron pipe centered with nail, marked "957.9".  

Reference bench mark; Sylmar station on Southern Pacific R. R., northwest angle of intersection of San Fernando Road and Roxford Ave., in curb; chiseled square, not marked  
Sylmar station on Southern Pacific R. R., southwest angle of intersection of San Fernando Road and Roxford Ave., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 10 1924," marked "U. S. 1,242.8 P. B. M."
Sylmar, 0.75 mile northeast of, northwest angle of intersection of Rockford Ave. and Ramsen St., top of concrete box around city water meter; chiseled square, marked "U. S. 1,341.9 B. M." 1,342.13

Sylmar, 1.25 miles northeast of, at junction of Roxford Ave. and concrete road to Olive View Sanatorium, at southwest corner of concrete paving; chiseled square, marked "U. S. 1,418.6 B. M." 1,418.89

Sylmar, 1.6 miles northeast of, at power plant of Olive View Sanatorium, at east edge of main entrance to plant, on top of concrete post; painted square, marked "1,417.5" 1,417.78

Sylmar, 1.85 miles northeast of, 0.2 mile east of power plant of Olive View Sanatorium, on south side of road; iron post stamped "U. S. Forest Reserve boundary post No. 147 1905 S. F.," marked "1427.4" 1,427.768

Reference bench mark; San Fernando, 3.0 miles north of, 1.0 mile east of power plant of Olive View Sanatorium, southwest angle of crossroads; concrete monument, centered with brass cap and stamped "T. 3 N., R. 15 W. 22 and 23 S. F. R. O." 1,533.60

San Fernando, 3.0 miles north of, 1.0 mile east of power plant of Olive View Sanatorium, southwest angle of crossroads, at T. 3 N., R. 15 W., quarter corner between secs. 22 and 23; iron post stamped "U. S. Forest Reserve Boundary Post No. 146 S. F. 1905 R. S. 11 1924," marked "U. S. 1, 534.4 P. B. M." 1,534.816

San Fernando, 2.5 miles northeast of, northeast angle of intersection of Astoria Ave. and Eldridge St., at street marker; top of iron pipe filled with concrete, marked "1,465.7" 1,466.09

San Fernando, 3.0 miles northeast of, on east side of intersection of Hubbard Ave. and Eldridge St., 6 feet north of L. A. City water meter; top of 2-inch iron pipe extending about 2 feet above ground, marked "U. S. 1,383.2 B. M." 1,383.45

San Fernando, 2.0 miles northeast of, on west edge of Pacoima Canyon, 0.5 mile north of intersection of Mulholland St. and Brand Blvd., 70 feet south of right angle in road and 15 feet west of fence line, in field; 4-inch iron pipe filled with concrete and centered with nail, marked "U. S. 1,283.8 B. M." 1,283.94

San Fernando, 2.5 miles northeast of, 0.75 mile northeast of Mulholland St., concrete bridge over Pacoima Wash, on east side of Pacoima Canyon, 60 feet north of junction of Pacoima Canyon Road and private road east; iron post stamped "U. S. Forest Reserve Boundary Post No. 142 W. C. No. 10 1905 R. S. 12 1924," marked "U. S. 1,230.1 P. B. M." 1,230.151

Reference bench mark; San Fernando, 2.5 miles northeast of, 0.75 mile northeast of Mulholland St., on concrete bridge over Pacoima Wash, on east side of Pacoima Canyon, at intersection of Pacoima Canyon Road and private road east, in old concrete foundation; chiseled square 1,229.46

San Fernando, 2.75 miles northeast of, about 600 feet north of junction of Mulholland St. and Pacoima Canyon Road, 30 feet east of Pacoima Canyon Road; iron post stamped "U. S. Forest Reserve Boundary Post No. 140 W. C. No. 8 1905 S. F. R. S. 13 1924," marked "U. S. 1,152.1 P. B. M." 1,152.153
SPIRIT LEVELING IN CALIFORNIA, 1896-1923

PIRU QUADRANGLE

[Latitude 34° 15'-34° 30'; longitude 118° 45'-119°]

VENTURA COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Santa Paula quadrangle east along Southern Pacific R. R. through south part of Piru quadrangle into Santa Susana quadrangle

Feet

X-30, Somis, 0.3 mile northeast of, in center pier of southwest water tank, 4 meters northwest of and 0.8 meter above track, railroad mileage 420.2; red metal disk_______________________________ 273.113

Y-30, Somis, 2.3 miles northeast of, west end of north abutment of concrete culvert 422-A, 4 meters north of and 1.5 meters below track, railroad mileage 422.4; red metal disk_______________________________ 372.634

Moorpark, 1.6 miles west of, in south end of west abutment of concrete culvert 425-B, 4 meters south of center line of track, 0.5 meter below track, railroad mileage 425.4; red metal disk

B. M. E-31___________________________________ 469.714

F-31, Moorpark, 20 feet southwest of southwest corner of station, 30 feet north of center of track, railroad mileage 427.0; bronze cap on iron post stamped "511 L. A."----------------------------- 513.345

G-31, Moorpark, 2.6 miles east of, in pile of concrete poured on north side of highway, opposite block, signal 429.8, 15 meters south of center line of track, 2 meters below track, railroad mileage 429.6; red metal disk_______________________________ 606.406

H-31, Moorpark, 4 miles east of, in south end of west abutment of stone culvert 431-A, 4 meters south of center line of track, 0.5 meter below track, railroad mileage 431; red metal disk_______________________________ 686.423

I-31, Santa Susana, 2.9 miles west of, in south end of west abutment of concrete culvert 434-A, 4 meters south of center line of track, 0.7 meter below track, railroad mileage 434.1; red metal disk______ 841.114

SAN FERNANDO QUADRANGLE

[Latitude 34° 15'-34° 30'; longitude 118° 15'-118° 30']

LOS ANGELES COUNTY

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From Tujunga quadrangle west along Southern Pacific R. R. to Santa Susana quadrangle

Feet

Semaphore 4313, top of concrete foundation; northeast corner____ 2,281.82
Semaphore 4324, top of concrete foundation; southwest corner____ 2,204.07
Semaphore 4336, top of concrete foundation; northwest corner____ 2,091.00
Russ, 1,700 feet west of west end of switch, 800 feet west of west end of tunnel, on northeast abutment of bridge 434-I, 6 feet from cliff; bronze tablet stamped "1986 1914 44"_________________________ 1,987.080

Bridge No. 5, Santa Clara River, point on northeast corner of rock abutment; chiseled square, marked "U. S. B. M."____________________ 1,883.78
Semaphore 3368, top of concrete foundation; southwest corner______ 1,751.37
Lang semaphore, on southwest corner of cement foundation; chiseled cross, marked "U. S."______________________________ 1,690.27

Lang, 200 feet west of station, at north edge of railroad right of way; iron post stamped "1690"_______________________________ 1,690.198
DEGREE QUADRANGLE 34°-35°, 118°-119°

Lang, 1.1 miles west of, signal box south side of track; top of—1,678.69
Semaphore 4407, top of concrete foundation; northeast corner—1,626.89
Semaphore 4422, top of concrete foundation; southwest corner—1,540.72
Semaphore 4433, top of concrete foundation; middle of north side—1,480.02
Culvert 444-A (wooden), point on southwest corner of—1,423.76
Semaphore 4453, top of concrete foundation; 8 inches east of east corner—1,397.53
Semaphore 4466, top of concrete foundation; southwest corner—1,305.75

From Santa Susana quadrangle southeast along Southern Pacific R. R. to Santa Monica quadrangle

Semaphore 4583, top of concrete foundation; southwest corner—1,273.42
Semaphore 4598, top of concrete foundation; southeast corner—1,206.22
Semaphore 4610, top of concrete foundation; southeast corner—1,106.32
San Fernando, on Porter Ave., McClay & McClay Co.'s building, on wall at southeast corner of (Johnson Ave. is now Porter Ave.);
bronze tablet stamped “1066 51”—1,067.096
San Fernando Industrial Arts Building, north side of west entrance, in top step; bronze tablet stamped “1076 1914 52”—1,076.355
Semaphore 4627, top of concrete foundation; northwest corner—1,040.36
Pacoima, 80 feet west of railroad, at southwest corner of road intersection; iron post stamped “1013 53”—1,013.509
Milepost 19, concrete highway; top of—956.02

Primary leveling by H. S. Crowe in 1897-98

From Pacoima northwest along Southern Pacific R. R. to San Fernando, thence east up Tujunga Valley into Canyon

Pacoima, at corner of fence, 165 feet northwest of northwest corner of brick station building; 80 feet west of railroad; iron post stamped “1013” (beginning of precise line)—1,013.509
San Fernando, in southeast corner of brick wall of McClay & McClay Co.'s building on Johnson St.; bronze tablet stamped “1066,” recovered by precise levels—1,067.096
T. 2 N., R. 14 W., sec. 10, 0.3 mile west of road fork, 40 feet south from corner of old orchard, 4 feet north of crooked tree and 20 feet from center of wagon road; iron post stamped “1187”—1,188.407
T. 2 N., R. 13 W., sec. 6, 0.75 mile east of S. A. Johnson’s house, 10 feet south of wagon road on township line; iron post stamped “1470”—1,471.498

From Saugus east along Southern Pacific R. R. and highways to Ravenna (recovered by precise leveling)

T. 4 N., R. 15 W., 4.6 feet from common corner of secs. 13, 14, 23, and 24, road over tunnel, 15 feet from fence; iron post stamped “1565”—1,565.436
Lang's station, at north end of picket fence, 45 feet north of center of track, between hotel building and section house; iron post stamped “1690” (recovered by precise levels)—1,690.434
Steel bridge No. 11; on concrete pier bulkhead of, in Soledad Canyon, 11 miles south of Acton; copper bolt stamped “1822”—1,822.731
Steel bridge No. 5, on concrete pier bulkhead of, at northwest corner; copper bolt stamped “1913”—1,914.050
Spur north up Agua Dulce Canyon

T. 5 N., R. 14 W., sec. 34, 1.25 miles west of J. M. Talbot's house, 2 feet south of southeast corner of adobe house; iron post stamped "2258" ———————————————————————————————————— 2,258.840

Spur north up Mint Canyon

T. 4 N., R. 15 W., sec. 15, 2 miles north of railroad, on side of hill, about 30 feet north of spring, in flat rock 12 by 12 by 8 inches; copper bolt stamped "1556" ———————————————————————— 1,556.311

T. 4 N., R. 15 W., sec. 2, northwest corner of W. H. Thomas's cabin, 4.75 miles from mouth of canyon; iron post stamped "1778" ———— 1,778.521

SANTA MONICA QUADRANGLE

[Latitude 34°-34° 15'; longitude 118° 15'-118° 30']

LOS ANGELES COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Calabasas quadrangle southeast along Southern Pacific R. R. through north part of Santa Monica quadrangle into Pasadena quadrangle

X-31, Zelzah, 3.3 miles southeast of, in northeast end of northwest abutment of concrete culvert 453-A, 0.4 meter northeast of center line of track, 0.5 meter below track, railroad mileage 453.2; nail sunk in horizontal surface of concrete ———————————————————— 792.544

Z-31, Zelzah, 4 miles southeast of, in southwest end of northwest abutment of concrete culvert 453-D, 0.4 meter southwest of center line of track, 0.5 meter below, railroad mileage 453.9; spike sunk in horizontal surface of concrete ———— 789.129

A-32, Burbank, 8 miles northwest of, crossing of Pacific Electric and Southern Pacific railroads, 20 meters northeast of Raymer tower, in southwest end of northwest abutment of highway concrete culvert, 20 meters west of center line of Pacific Electric Ry. track, 15 meters northeast of center line of Southern Pacific R. R. track, railroad mileage 455; red metal disk ————————————————— 777.003

B-32, Burbank, 4.9 miles northwest of, in northeast end of southeast abutment of concrete culvert 458-B, 4 meters northeast of center line of track, 0.8 meter below, railroad mileage 458.1; nail sunk in horizontal surface of concrete ———— 746.793

Primary leveling by H. S. Crowe in 1897 and 1900

From Clement Junction, Los Angeles, west along Southern Pacific R. R. to Santa Monica (adjusted double-rod line)

University station, 65 feet south of southwest corner of station, 1 foot west of telegraph pole; iron post stamped "174" ———— 174.786

Clengana siding, at northwest corner of fence for cattle corral and 50 feet west of center of track; iron post stamped "118" ———— 118.734

Ivy station, in southwest corner of fence of cattle guard at road crossing, 150 feet northwest of station building; iron post stamped "103" (destroyed) ———— 103.250
Palms, in front brick wall at northwest corner of warehouse, fifth course of bricks above water table and in center of second course of bricks from north end; bronze tablet stamped "126".......................... 126.614

Home Junction, 80 feet east from center of railroad building, 48 feet east from center of track, near fence; iron post stamped "165"

Santa Monica, on northeast corner of Oregon and Third streets, in brick wall of building used as bank; bronze tablet stamped "79" (not found in 1923).......................... 79.400

Santa Monica, in concrete floor of railroad turntable foundation, 3.2 feet north of center of turntable, 6 inches west of center of track at end of Long Wharf; copper bolt stamped "17" (not found in 1923).......................... 17.510

Santa Monica, top surface of railroad turntable at inner end of wharf (the turntable has a well-laid concrete foundation); U. S. C. & G. S. bench mark No. 1 (elevation by U. S. C. & G. S.) (not found in 1923)......................................................... 17.42

From Glendale northwest along Southern Pacific R. R. to Pacoima (double-rodded line)

Glendale, 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post stamped "432" (U. S. C. & G. S., 1920).......................... 432.158

Burbank, on west side of railroad track, 51 feet from center, 117 feet northwest from northwest corner of station; iron post stamped "563" (not found in 1923).......................... 565.218

Dundee, 4.2 feet from eucalyptus tree, 600 feet west of railroad station; iron post (cap removed, edge elevation).......................... 760.05

From Burbank west along Chatsworth Park branch railroad to Encino

MacNeil siding; top of rail.............................................. 597.2

Garnsey siding; top of rail.............................................. 663.6

Garnsey siding, 300 feet west of, 3.5 feet east of telegraph pole 479, 50 feet south of railroad track; iron post stamped "665 L. A."........ 665.685

Trestle 483-C, opposite, 50 feet south of center of track, 4 feet east of telegraph pole 484; iron post stamped "704 L. A.".......................... 705.163

Precise leveling by L. F. Biggs in 1914, fitted to U. S. C. & G. S. precise level line over same route below Burbank

From point 1 mile south of Pacoima southeast along Southern Pacific R. R. to Los Angeles

Semaphore 4657, top of concrete foundation; northwest corner, marked "19"......................................................... 913.80

Concrete highway milepost 17; top of.................................. 875.83

Semaphore 4673, top of concrete foundation; northwest corner........ 828.68

Roscoe, 1,800 feet northwest of, 50 feet south of highway milepost 16, 50 feet west of railroad, on northeast corner of highway concrete culvert; bronze tablet stamped "826 1914 No. 55"........ 826.251

Semaphore 4687, top of concrete foundation; northwest corner........ 768.90

Dundee store, 0.9 mile northwest of, 600 feet west of railroad, near eucalyptus tree; iron post stamped (cap has been removed and building removed).......................... 760.243
Concrete highway milepost 14; top of______________________________ 711.14
Concrete highway milepost 13; top of______________________________ 642.14
Semaphore 4718, top of concrete foundation; southeast corner______ 573.77
Burbank Union High School, on top of fifth step at base of north column at west entrance to building; bronze tablet stamped "623 1914 No. 56"______________________________ 622.834
Semaphore 4729, top of concrete foundation; northwest corner______ 524.04
West Glendale Winery, 0.5 mile northwest of, in west end of small concrete highway culvert; lead plug with copper nail, marked "U. S. B. M."______________________________ 465.50
West Glendale Winery, at southwest corner of building; on north side of door sill; chiseled cross____________________ 469.40
Semaphore 4760, top of concrete foundation; southeast corner______ 453.02
Tropico (Glendale), 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post set flush with ground stamped "Elev. 432 No. 57" (recovered by C. & G. S. in 1920 as J 32)______________________________ 432.158
Culvert 478-A, on northwest corner of concrete abutment; chiseled cross, marked "U. S."______________________________ 374.40

SANTA SUSANA QUADRANGLE

[Latitude 34° 15'-34° 30'; longitude 118° 30'-118° 45']

LOS ANGELES AND VENTURA COUNTIES

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Piru quadrangle east along Southern Pacific R. R. through south part of Santa Susana quadrangle to point near Chatsworth, Calabasas quadrangle, thence south to Chatsworth

J-31, Santa Susana, 1.4 miles west of, in east end of west abutment of stone culvert 435-H, 4 meters north of center line of track, 1 meter below track, railroad mileage 435.6; red metal disk______________________________ 916.081
K-31, Santa Susana, 2 miles west of station, in northeast abutment of water tank, 5 meters south of center line of track, level with track, railroad mileage 437.2; red metal disk______________________________ 961.389
L-31, Santa Susana, 30 feet northeast from northeast corner of bunk house, 165 feet northeast of section house, at corner of fence; iron post stamped "961 L. A."; bronze cap on post______________________________ 962.265
M-31, Santa Susana, 0.9 mile east of, in south end of west abutment of stone culvert 438-C, 4 meters south of center line of track, 0.5 meter below, railroad mileage 438.4; red metal disk______________________________ 992.301
N-31, Santa Susana, 2.4 miles east of, 70 meters west of block signal 4400, 15 meters southeast of stone culvert 439-J, 15 meters south of center line of track, 1 meter below, railroad mileage 439.9, in high southeast point of protruding sandstone boulder; red metal disk______________________________ 1,003.462
O-31, tunnel 27, west end of, north end of concrete box culvert 442-B, 3 meters north of center line of track, 2 meters below track, railroad mileage 442.9; surface within an outlined square on masonry______________________________ 1,085.510
P-31, tunnel 28, west end of, south end of concrete box culvert 443-D, 3 meters south of center line of track, 0.4 meter below, railroad mileage 443.9; surface within an outlined square on masonry______________________________ 1,039.206
Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

Reaburn's L line, 100 feet west of, station 141-00 and 100 feet north of ○ 81, in Dry Canyon, 100 feet west of road where it enters Government property; standard L. A. A. pipe 115, marked with red and blue flag. 1,517.085

Reaburn's L line, on knoll 140 feet west of station 184-00 and 300 feet east of two old houses in bottom of Dry Canyon near dam site; standard L. A. A. pipe No. 116, marked with red and blue flag. 1,539.910

Reaburn's L line, on point of ridge 60 feet east of, station 201-00 and 70 feet northwest of ○ 246; standard L. A. A. pipe No. 117, marked with red and blue flag. 1,520.726

Reaburn's L line, 200 feet east of, station 221-50 and 150 feet west of ○ 258 on north side of canyon, on east side of Dry Canyon; standard L. A. A. pipe No. 118, marked with red and blue flag. 1,517.975

Reaburn's L line, 105 feet west of, station 258-60 and 100 feet east of ○ 298, near head of canyon on east side of Dry Canyon; standard L. A. A. pipe No. 119, marked with red and blue flag. 1,518.451

Reaburn's L line, 90 feet east of, station 282-25 and 50 feet south east of ○ 418, at head of canyon on west side of Haskell Canyon; standard L. A. A. pipe No. 120, marked with red and blue flag. 1,518.406

Reaburn's L line, on knoll on long ridge 60 feet east of, station 312-50 and 250 feet north of ○ 441, near south end of Deadman Canyon siphon; standard L. A. A. pipe No. 121, marked with red and blue flag. 1,535.551

U. S. Forest Reserve boundary post 159 (S. B. Res.), on south side of Deadman Canyon, at edge of road where it enters gate, standard L. A. A. pipe No. 122, marked with red and blue flag. 1,262.034

Reaburn's L line, on ridge 15 feet west of, station 365 and 250 feet north of ○ 441, near south end of Deadman siphon; standard L. A. A. pipe No. 123, marked with red and blue flag. 1,509.504

Reaburn's L line, on ridge 60 feet west of, station 386-75 and 8 feet south of ○ 446, near north end of Soledad Canyon siphon; standard L. A. A. pipe No. 124, marked with red and blue flag. 1,507.694

U. S. Forest Reserve boundary post 157 (S. B. Res.), on south side of bottom of Soledad Canyon, near railroad crossing; standard L. A. A. pipe No. 125, marked with white flag. 1,269.550

Reaburn's L line, on ridge 400 feet east of, station 468 and 50 feet east of ○ 472, near south end of Soledad Canyon siphon; standard L. A. A. pipe No. 126, marked with red and blue flag. 1,495.448

Reaburn's L line, on point of ridge 60 feet east of, station 504 and 2 feet east of ○ 493; standard L. A. A. pipe No. 127, marked with red and blue flag. 1,513.644

Reaburn's L line, on ridge 1,500 feet east of, station 537 and 75 feet southwest of ○ 509; standard L. A. A. pipe No. 128, marked with red and blue flag. 1,484.805

Reaburn's L line, 500 feet west of, station 572 and 150 feet west of ○ 517 near north end of Placerita Canyon; standard L. A. A. pipe near north end of Placerita Canyon; standard L. A. A. pipe No. 129, marked with red and blue flag. 1,480.671

Reaburn's L line, near station 605, at ○ 528; standard L. A. A. pipe No. 130, in bottom of canyon, marked with red and blue flag. 1,487.484
Reaburn's L line, on crest of sharp ridge 600 feet east of, station 631 near north end of Whitney Canyon siphon; standard L. A. A. pipe, No. 131, marked with red and blue flag.......................... 1,478.41
Reaburn's L line, 60 feet east of, station 665, and 60 feet north of 500, on west side of canyon, 100 feet south of house near north portal of Newhall tunnel; standard L. A. A. pipe No. 132, marked with red and blue flag.................................................. 1,494.28
J. S. Forest Reserve Boundary post No. 151 (S. B. Res.), near south portal of Newhall tunnel; No. 133, marked with red and blue flag... 1,497.74
Reaburn's L line, 220 feet west of, station 738.50 and 20 feet north of El 568 on north side of canyon; standard L. A. A. pipe No. 134, marked with red and blue flag............................................. 1,493.84
Fernando Reservoir No. 1, on knoll south of east end of dam site; standard L. A. A. pipe No. 135, marked with red and blue flag.............................. 1,227.18
Fernando Reservoir No. 2, on hill at east end of dam site; standard L. A. A. pipe No. 136, marked with red and blue flag.......................... 1,182.44

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From San Fernando quadrangle west along Southern Pacific R. R. to Saugus, thence southeast to San Fernando quadrangle

Saugus, 2.8 miles east of; at undertrack crossing of Los Angeles aqueduct, in northwest corner of concrete abutment; bronze tablet stamped "1239 1914 46".................................................. 1,238.91
Semaphore 4487; top of concrete foundation........................................ 1,217.33
Semaphore 4496; top of concrete foundation; southwest corner........ 1,186.86
Saugus (Surrey post office), 18 inches from north corner of pump house, 18 feet from center of track, 33 feet from south corner of station; iron post stamped "1171 47"................................. 1,170.83

Note.—This bench mark probably has been disturbed; its value by two previous lines from Newhall is 0.30 foot greater.

Semaphore 4517; top of concrete foundation; base of ladder........ 1,207.60
Newhall, 27 feet south of station, 30 feet west of track; iron post stamped "1273 48".................................................. 1,272.69
Semaphore 4542; top of concrete foundation; southeast corner.... 1,420.07
San Fernando tunnel, north end of, center of track; top of iron pin................................. 1,484.51
San Fernando tunnel, south end of, center of track; top of iron pin........ 1,436.10
San Fernando tunnel, 2 miles south of, at end of yard at a house, west side of track; iron post stamped "1417 49"............................. 1,416.82
San Fernando tunnel, 0.25 mile south of, in base of northeast concrete pier of wagon bridge over railroad, east side of track; bronze tablet stamped "1416 1914 50"................................. 1,416.58
San Fernando tunnel, 1.5 miles south of, on north end of concrete culvert of undertrack crossing of Los Angeles aqueduct; chiseled point on cross and letters "U. S. B. M."................................. 1,281.86

Primary leveling by H. S. Crewe in 1898 and 1900

From San Fernando north along Southern Pacific R. R. to Saugus (recovered by precise levels)

San Fernando tunnel, 0.25 mile south of south end of, at end of yard at section house, at south end of white fence; iron post stamped "1417"............................. 1,416.58
San Fernando Pass, road over tunnel, 50 feet south of north end of cut, east side of wall, 4 feet above road; bronze tablet stamped "1799". 1,799.737

Newhall, between tree and telegraph pole, 27 feet south of station, 30 feet from center of track; iron post stamped "1273". 1,272.689

Saugus, 18 inches from north corner of pump house, 18 feet from center of track, 33 feet from south corner of station building; iron post stamped "1171". 1,170.834

From San Fernando west along wagon road to Chatsworth Park

Chatsworth Park and Fernando, midway between, 5 feet south of fence corner, 37 feet south of center of road running east and west, and 45 feet east of road running north and south; iron post stamped "1031 L. A." (reset in 1924). 1,032.051

Chatsworth Park, at corner of Simi road and Devonshire Ave., 1 foot north from southeast corner of Santa Susana schoolhouse, 11.5 inches below base of building; bronze tablet stamped "962 L. A.". 963.754

From Chatsworth Park west along road over Santa Susana Pass to Simi

Santa Susana Pass, at summit and 50 feet north of road, 33 feet southwest of signpost, in large sandstone boulder 4.5 feet above ground; bronze tablet stamped "1604 L. A.". 1,605.321

Santa Susana, 30 feet southeast from southeast corner of bunk house, 165 feet southeast of section house, at corner of fence; iron post stamped "961 L. A." (Recovered by C. & G. S. 1920). 962.265

From Saugus west along Southern Pacific R. R. to Camulos

San Francisco ranch, 81 feet east from northeast corner of house of superintendent, in northeast corner of yard, 2 feet from junction of fence lines, 15 feet west of center of road; iron post stamped "1054 L. A.". 1,054.401

Los Angeles and Ventura counties, 3.5 feet south of iron signpost of, 6 feet south of fence line, 50 feet north of center of track, 12 feet south of county road; iron post stamped "858 L. A.". 858.573

From Saugus north along road to St. Francis ranch

T. 5 N., R. 16 W., sec. 34, south side of, in northwest corner of Edw. D. Kilchline's field, at foot of grade over mountain, 1 foot east of corner of fence; iron post stamped "1235 L. A.". 1,238.368

TEJON QUADRANGLE

[Latitude 34° 30'–35°; longitude 118° 30'–119°]

LOS ANGELES, KERN, AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1900 and 1901

At sec. 11, T. 5 N., R. 16 W.

Feet

T. 5 N., R. 16 W., sec. 11, 1 mile south of St. Francis ranch, 40 feet west of road, on small flat, 5 feet east of cottonwood tree; iron post stamped "1600 L. A." (C. & G. S.). 1,600.805

103248—25—0
From Castac northwest along wagon road and trail via Castac, Piru, and Grapevine creeks to Rose station

Carmichael's ranch, 1.5 feet west of northwest corner of fence, on north side of lane; iron post stamped "1172 L. A." 1,172.338

Victor Cordova's residence, west side of, at west corner of fence around garden, 500 feet north of wagon road, on mesa above creek; iron post stamped "1457 L. A." 1,457.650

House of Frank S. Randolph, 0.3 mile from, 12 feet east of trail to Oak Flats, at summit of ridge from Castac Creek; iron post stamped "2807 L. A." 2,807.940

Spring Creek, 1,500 feet north of where it empties into Piru Creek, 45 feet north of trail where it turns north up Piru Canyon, on flat side of rock 6 by 2 by 4 feet; bronze tablet stamped "2060 L. A." 2,060.376

Bainbridge's house, 250 feet northeast of, sec. 34, T. 7 N., R. 18 W., at north corner of fence around hog corral, at south end of and 30 feet east of center of wagon road to house; iron post stamped "2307 L. A." 2,307.466

Alamo ranch, in jog of fence around house of M. C. Bailey; iron post stamped "2796 L. A." 2,796.570

German ranch, Charles Schlesmayer's ranch, 1.5 feet west of corner, at intersection of fence lines, 45 feet south of road; iron post stamped "3463 L. A." 3,464.118

Tejon Pass, at summit, 6 feet south of brush fence and 40 feet north of wagon road; iron post stamped "4230 L. A." 4,231.433

Los Angeles and Kern counties; 6-penny wire nail in notch on post marking line 3,751.78

Los Angeles and Kern counties, 2.5 feet north of line post; iron post stamped "3744 L. A." 3,745.704

Fort Tejon, in front of gatepost at entrance to residence of superintendent of Castac ranch, 45 feet west of wagon road; iron post stamped "3174 L. A." 3,175.080

Rose station, 0.5 mile south of top of grade from, 20 feet east of road at top of hill where road runs across low place to the south; iron post stamped "2132 L. A." 2,133.185

T. 10 N., R. 19 W., near northwest corner sec. 4, 12 feet south of gate across road, 10 feet east of center of road, 2 feet south of post 6 by 8 inches; iron post stamped "1085 L. A." 1,087.419

From Lubec west to Soldiers' Home Camp

Soldiers' Home Camp, opposite deserted ranch house, 4 feet west of fence line, 6 feet south of wagon road; iron post stamped "4471." 4,473.421

From German east along road, via Quail and Neenach, to Manzana

McKenzie's house, 160 feet northeast of northeast corner of, at northeast corner of intersection of fences, 50 feet south of road; iron post stamped "3383 L. A." 3,393.490

La Liebre ranch, at corner of fence where road turns to east, 0.5 mile west of brick house on county road; iron post stamped "3001 L. A." 3,091.136

Henry Hatch's ranch (Vala Vista), at residence, 2 feet east of gate, in front of picket fence; iron post stamped "3039 L. A." (C. & G. S.) 3,038.486
Manzana, opposite driveway from main road to post office and store of A. E. Silvey, on east side of road, 1 foot south of fence post; iron post stamped “2870 L. A.” 2,888.950

Primary leveling by K. W. Trimble and G. L. Hagman in 1910

From point near southwest corner of sec. 4, T. 10 N., R. 19 W., south along highway to point 3.1 miles south of Rose station

Note.—No adjustment has been made of this line, owing to an excessive closure error of 1.159 feet upon Bull. 342 value.

T. 10 N., R. 19 W., near northwest corner of sec. 4, 20 feet west of center of road, just south of point where cut-off road to Bakersfield turns west near telephone pole 1368; iron post stamped “1085 L. A.” 1,087.119

Rose, 0.7 mile north of, west side of road where telephone line turns east, in base of telephone pole 1408, painted “U. S. B. M. 1199”; spike 1,190.29

Rose, 1.5 miles south of, power tower 308, on south lower brace, marked “U. S. B. M.”; chisel mark 1,535.23

Rose, 3.1 miles south of (see Bull. 342, p. 79) 2,132.888

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission, in 1907, adjusted by the U. S. Geological Survey in 1922

Keller’s L line, 410 feet north of, station 1873-50, north side of Antelope Valley; standard L. A. A. pipe No. 101, marked with red and blue flag 3,110.942

Keller’s L line, 175 feet north of, station 1975-50, north side of Antelope Valley; standard L. A. A. pipe No. 102, marked with red and blue flag 3,099.178

Keller’s L line, 300 feet north of, station 2060-59, at north end of siphon near Neenach across Antelope Valley; standard L. A. A. pipe No. 103, marked with red and blue flag 3,112.629

Keller’s L line, 300 feet north of, station 2267-00, near south end of Antelope Valley siphon at Neenach; standard L. A. A. pipe No. 104, marked with red and blue flag 3,052.084

Keller’s L line, 90 feet north of, station 2397-00, south side of Antelope Valley; standard L. A. A. pipe No. 105, marked with red and blue flag 3,053.688

Keller’s L line, 190 feet north of, station 2573-00, south side of Antelope Valley; standard L. A. A. pipe No. 106, marked with red and blue flag 3,044.215

Reaburn’s L line, 150 feet northwest of, station 0-00, on bench under sycamore trees, on west side of San Francisquito Canyon, near diversion point; standard L. A. A. pipe No. 111, marked with red and blue flag 1,523.369

Reaburn’s L line, 300 feet west of, station 46-000 at 145, on point of ridge on north side of first canyon south of old winery, on east side of San Francisquito Canyon; standard L. A. A. pipe No. 112, marked with red and blue flag 1,526.067
<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaburn's L line, station 75-00</td>
<td>400 feet west of, north side of open canyon just south of high cut bank on east side of San Francisquito Canyon</td>
<td>1,503.444</td>
</tr>
<tr>
<td>Reaburn's L line, station 100-00</td>
<td>150 feet west of, north side small canyon, east side of San Francisquito Canyon</td>
<td>1,527.606</td>
</tr>
<tr>
<td>TUJUNGA QUADRANGLE</td>
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<tr>
<td>Primary leveling by H. S. Crowe in 1897</td>
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<td></td>
<td>Up Tujunga Canyon east along road to Hoyt ranch, thence northeast along trail up canyon and over ridge to North Fork Tujunga Creek at mouth of Mill Creek, thence northeast 2 miles up Mill Creek to end of wagon road</td>
<td></td>
</tr>
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<td></td>
<td>Hoyt ranch, 0.7 mile northwest of, about 800 feet from creek crossing, on brushy flat, 6.5 miles northeast of Montevista, in face of rock 14 by 5 by 3 feet, 2.7 feet above surface of ground; bronze tablet stamped “1888”</td>
<td>1,889.645</td>
</tr>
<tr>
<td></td>
<td>Hoyt’s ranch, 2.75 miles northeast of, in rock at foot of slope, pine tree growing in rock; copper bolt stamped “2115”</td>
<td>2,116.315</td>
</tr>
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<td></td>
<td>Boulder 7 by 5 by 3 feet, on trail where it is in sight of Big Tujunga, about 1,500 feet up ridge; copper bolt stamped “2593”</td>
<td>2,594.905</td>
</tr>
<tr>
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<td>Small summit, 1.1 miles on trail, in flat granite slab; copper bolt stamped “3526”</td>
<td>3,527.291</td>
</tr>
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<td>Summit of ridge, 50 feet east of, in granite boulder 2 by 1 feet; copper bolt stamped “4938”</td>
<td>4,399.579</td>
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<td></td>
<td>Junction of North Fork and Mill creeks, 0.5 mile northwest of, in granite boulder 12 feet north of trail; copper bolt stamped “3935”</td>
<td>3,936.200</td>
</tr>
<tr>
<td></td>
<td>Junction of Mill Creek and North Fork of Big Tujunga, near trail from latter, in granite boulder; copper bolt stamped “3056”</td>
<td>3,057.473</td>
</tr>
<tr>
<td></td>
<td>Mill Creek, 2 miles above mouth, 20 feet from north end of wagon road, in rock on south bank of Mill Creek at point where trail goes over ridge to Big Tujunga Creek; copper bolt stamped “3463”</td>
<td>3,464.749</td>
</tr>
<tr>
<td></td>
<td>From mouth of Mill Creek southwest to mouth of North Fork of Tujunga Creek (single spur)</td>
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<td></td>
<td>Vertical Falls, on North Fork, 35 feet in height, in ledge of rock on north side of creek, about 6 feet above water and 20 feet north of falls; bronze tablet stamped “2879”</td>
<td>2,880.728</td>
</tr>
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<td></td>
<td>Falls where North Fork empties into Big Tujunga Creek, 40 feet south of, in granite boulder 6 by 5 by 4 feet on north side of North Fork; copper bolt stamped “2671”</td>
<td>2,671.977</td>
</tr>
<tr>
<td></td>
<td>From end of wagon road on Mill Creek southeast across ridge along trail to Tujunga Creek, thence up creek trail to southeast corner sec. 5, T. 2 N., R. 11 W. (single spur)</td>
<td></td>
</tr>
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<td></td>
<td>Wickiup Canyon, 0.3 mile east of, on south side of Big Tujunga Creek, in boulder 4 by 6 by 2 feet in bed of stream, 25 feet south of trail and 60 feet east of canyon, where trail goes down from ridge from Mill Creek, near dead willow tree in stream, in oak stake driven in bank marked “B M.”; copper bolt stamped “32”</td>
<td>3,267.066</td>
</tr>
<tr>
<td></td>
<td>Alder Creek, in bed of, at junction with Big Tujunga, in hole drilled in boulder 8 by 8 by 12 feet; copper bolt stamped “3415”</td>
<td>3,416.462</td>
</tr>
</tbody>
</table>
T. 2 N., R. 11 W., sec. 5, near southeast corner of, 40 feet east of trail between Barley Flats and Mount Wilson, in face of granite ledge facing Tujunga River 60 feet east of pine tree 18 inches in diameter; bronze tablet stamped “4046” 4,047.138

Up Mill Creek northeast over divide and northwest down Aliso Canyon to Acton

Divide between Mill Creek and Aliso Canyon, 10 feet east of road; iron post stamped “5030” 5,031.964

Smith’s stamp mill, 250 feet east of, in boulder 6 by 6 by 4 feet, at junction of roads going up Dump and Tie canyons; copper bolt stamped “4452” 4,453.095

Big Tujunga mines and Jones’s ranch, intersection of roads to, 6 miles east of Acton, 18 feet south of signboard; iron post stamped “3348” 3,349.151

Acton, 3 miles south of, 30 feet from northeast corner of stone house on big ridge; copper bolt stamped “3021” 3,022.701

Aliso Canyon, mouth of, 2 miles east of Acton, 1 foot west of signboard; iron post stamped “2829” (reset) 2,834.124

Acton, southeast corner of hotel, in brick wall; bronze tablet stamped “2700” (recovered by precise leveling) 2,701.503

From Acton southeast along Southern Pacific R. R. to Ravenna

Ravenna station, 58 feet east of door of office, on east side of track, 3.5 feet from gum tree; iron post stamped “2468” (recovered by U. S. C. & G. S.) 2,468.996

From Aliso Canyon northeast along Southern Pacific R. R. to Vincent

Vincent, 500 feet north of station, in corner of jog in fence, 500 feet west of center line of sec. 22, T. 5 N., R. 12 W.; iron post stamped “3219” (recovered by U. S. C. & G. S.) 3,219.834

LOS ANGELES COUNTY SPECIAL SURVEY

PASADENA, SAN FERNANDO, SANTA MONICA, AND TUJUNGA QUADRANGLES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

From Zelzah 6’ quadrangle southeast along Southern Pacific R. R. to Burbank

X-31, Zelzah, 3.3 miles southeast of, in northeast end of northwest abutment of concrete culvert 453-A, 0.4 meter northeast of center line of track, 0.5 meter below railroad mileage 453.2; nail sunk in horizontal surface of concrete. 792.544

Z-31, Zelzah, 4 miles southeast of, in southwest end of northwest abutment of concrete culvert 453-D, 0.4 meter southwest of center line of track, 0.5 meter below railroad mileage 453.9; spike sunk in horizontal surface of concrete. 789.129

A-32, Burbank, 8 miles northwest of, at crossing of Pacific Electric Ry. and Southern Pacific R. R. lines, 20 meters west of center line of Pacific Electric track, 15 meters northeast of center line of Southern Pacific track, 20 meters northeast of Raymer tower, at railroad mileage 455, in southwest end of northwest abutment of highway concrete culvert; red metal disk. 777.003

B-32, Burbank, 4.9 miles northwest of, in northeast end of southeast abutment of concrete culvert 458-B, 4 meters northeast of center line of track, 0.6 meter below, at railroad mileage 458.1; nail sunk in horizontal surface of concrete. 746.793
SPIRIT LEVELING IN CALIFORNIA, 1896–1923

C–32, Burbank, 4.2 miles northwest of, in southwest end of southeast abutment of concrete culvert 458–D, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 458.8; nail sunk in horizontal surface of concrete. 735.855

D–32, Burbank, 2.9 miles northwest of, in southeast end of southeast abutment of concrete culvert 460–A, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 460.1; nail sunk in horizontal surface of concrete. 709.369

E–32, Burbank, 1.9 miles northwest of, 4 meters northeast of center line of track, 0.5 meter below, at railroad mileage 461.1, in northeast end of northwest abutment of concrete culvert 461–A; nail sunk in horizontal surface of concrete. 662.200

F–32, Burbank, 1.1 miles northwest of, in southwest end of southeast abutment of concrete culvert 461–G, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 461.9; bolt sunk in horizontal surface of concrete. 618.276

H–32, Burbank, at main entrance of City Hall, in sidewalk, at foot of east footing, just north of northeast end of first step; red metal disk. 622.266

Precise leveling by U. S. Coast and Geodetic Survey in 1920 over precise leveling by L. F. Biggs in 1914

From Burbank south along Southern Pacific R. R. to Florence quadrangle in degree quadrangle 33°–34°, 118°–119°

I–32, Burbank, 2.1 miles southeast of, in south corner of curbing to pump house city of Glendale, 2 (200?) meters southeast of milepost 474 (San Joaquin Valley Route mileage used), 18 meters northeast of center line of track, level with track; red metal disk (wall found cracked in 1923 and elevation redetermined). 470.278

J–32, Glendale (Old Tropico), 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post set flush with ground, stamped “Elev. 432. No. 57.” 432.158

P–32, Glendale, 1.5 miles south of, 4 meters east of center line of track (west bound), 0.5 meter below, at railroad mileage 478.4, in south end of east abutment of concrete culvert 478–A; red metal disk. 374.389

T–32, Los Angeles, north of, on south abutment of first Southern Pacific R. R. crossing of Los Angeles River, on northern end of Southern Pacific yard, about 0.5 mile north of steel Santa Fe bridge, east of track; a rounded knob in top of stone abutment; square on masonry. 329.009

U–32, Los Angeles, about 2.7 miles north of, in top of curved surface on south end of concrete wing of west abutment of Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River; lead plug with copper nail. 317.102

Los Angeles, about 2.7 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River, near north end of first pier from west end; lead plug with copper nail, marked “U. S. B. M.” 309.949

Note.—This is the bench mark formerly given erroneously as U–32 and recovered by Senseney in 1923 with the value given as determined by two lines from V–32.
S-32, Los Angeles, county courthouse, at southeast corner of Broadway and Temple streets, in granite buttress on right side of main steps to building; Geological Survey bronze tablet stamped "338" (U. S. G. S. Bull. 342, p. 70) .................................................. 338.592

R-32, Los Angeles, city hall building on Broadway, about 3 feet above north steps to front entrance; Geological Survey tablet stamped "286" (U. S. G. S. Bull. 342, p. 70) .................................................. 286.699

X-32, Clement Junction near Los Angeles, on west side of Alameda St., 96 feet south of south curb of East Twenty-first St., at west edge of sidewalk; Geological Survey iron post stamped "220" (U. S. G. S. Bull. 342, p. 70) .................................................. 220.570

Additional bench marks on preceding route by L. F. Biggs

Burbank Union High School, on top of fifth step at west entrance to building, at base of north column; bronze tablet stamped "623 1914 No. 56" .......................................................... 622.834

Semaphore 4729, northwest corner of; top of concrete foundation ______ 524.04
West Glendale Winery, 0.5 mile northwest of, in west end of small concrete highway culvert; lead plug with copper nail marked "U. S. B. M." .......................................................... 465.50
West Glendale Winery, at southwest corner of building, on north side of door sill; chiseled cross .................................................. 469.44
Semaphore 4700, top of concrete foundation; southeast corner ...... 457.04
Culvert 479-A, on northwest corner of concrete abutment; chiseled cross marked "U. S." .......................................................... 374.40
Los Angeles, at intersection of San Fernando road and Granada St., on north end of west curb; chiseled cross marked "U. S. B. M." .......................................................... 342.96
Los Angeles, Southern Pacific Bridge No. 1 over Los Angeles River, 6 inches from northeast corner of north abutment; lead plug with copper nail (R. R. bench mark) marked "U. S. B. M." .......... 329.03
Los Angeles, Atchison, Topeka & Santa Fe Ry. bridge 140-A over Los Angeles River, near north end of first pier from west end; lead plug with copper nail marked "U. S. B. M." .......................................................... 311.61
Los Angeles, Alameda and Alizo streets, intersection point ........ 272.8
Los Angeles, Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum (old p. b. m.) marked "256" .......................................................... 256.293
Los Angeles, Alameda and Fifteenth streets .................. 229.2

Precise leveling by L. F. Biggs in 1914 over previous precise line by C. H. Semper

From Palmdale 6' quadrangle in Elizabeth Lake quadrangle along Southern Pacific R. R. into Saugus 6' quadrangle in Camulos quadrant

Vincent, 500 feet north of station, 500 feet west of center line of T. 5 N., R. 12 W., in corner of jog in fence; iron post stamped "3219 B 1902 40" .......................................................... 3,219.834
Semaphore 4209, top of concrete foundation; northeast corner .. 3,173.90
Semaphore 4218, top of concrete foundation; south corner .... 3,078.03
Semaphore box, south side of track; top of box .................. 2,981.69
Semaphore 4237, top of concrete foundation; northeast corner .. 2,864.93
Acton, 2 miles northeast of, north of road, opposite junction of Allso Canyon road; iron post stamped "2833 14 1914".---2,833.888

NOTE.—This bench mark was near wash and was reset in 1914 by L. F. Biggs, 2.983 feet higher than found; it had been formerly reset by Mr. Douglas, ranger at Acton, now stationed at Saugus, but it is uncertain whether or not he set it at its former elevation.

Semaphore 4249, top of concrete foundation; northeast corner.....2,781.94
Acton, southwest corner of hotel, in brick wall; bronze tablet stamped "2700 42".---2,701.503

Semaphore 4274, top of concrete foundation; northeast corner.....2,686.85

Semaphore 4297, top of concrete foundation; northeast corner.....2,387.50

Semaphore 4313, top of concrete foundation; northeast corner.....2,281.82
Semaphore 4324, top of concrete foundation; southwest corner.....2,204.07
Semaphore 4336, top of concrete foundation; northwest corner.....2,091.90

Semaphore 4347, top of concrete foundation; northeast corner.....2,040.89
Semaphore 4368, top of concrete foundation; southeast corner.....1,986.78

Semaphore 3388, top of concrete foundation; southeast corner.....1,751.37

Semaphore 4407, top of concrete foundation; northeast corner.....1,690.198
Semaphore 4422, top of concrete foundation; southwest corner.....1,540.72
Semaphore 4433, top of concrete foundation; middle of north side.....1,480.02
Semaphore 4443, top of concrete foundation; 8 inches west of east corner.....1,397.53
Semaphore 4466, top of concrete foundation; southwest corner.....1,305.75

Semaphore 4583, top of concrete foundation; southwest corner.....1,273.42
Semaphore 4598, top of concrete foundation; southeast corner.....1,206.22
Semaphore 4610, top of concrete foundation; southeast corner.....1,106.32

Semaphore 4627, top of concrete foundation; northwest corner.....1,040.36
Semaphore 4637, top of concrete foundation; north entrance; bronze tablet stamped "1076 1914 52".---1,076.355

Semaphore 4647, top of concrete foundation; northeast corner.....1,013.509

Concrete highway, milepost 19; top of.............................956.02
Semaphore 4657, top of foundation, northwest corner, marked "19". 913.80
Concrete highway, milepost 17; top of 875.83
Semaphore 4675, top of concrete foundation; northwest corner 828.63
Roscoe, 1,800 feet northwest of, 50 feet south of highway milepost 16, 50 feet west of railroad, northeast corner of highway concrete culvert; bronze tablet stamped "826 1914" 826.251
Semaphore 4685, top of concrete foundation; northwest corner 768.90
Dundee store, 0.9 mile northwest of, 600 feet west of railroad, near eucalyptus tree; iron post stamped (cap has been removed and building removed) 760.243
Concrete highway, milepost 14; top of 711.14
Concrete highway, milepost 13; top of 642.14
Semaphore 4718, top of concrete foundation; southeast corner 573.74

Precise leveling by the U. S. Coast and Geodetic Survey in 1929
Along Southern Pacific R. R. from Los Angeles to point about 3 miles beyond San Gabriel, thence along highways north and east to Pasadena base line, along the entire length of base, thence south to Ontario, and west to Pomona. Spur lines to Monrovia, Azusa, Covina, and San Dimas

Los Angeles, about 3.25 miles north of, in northern end of Southern Pacific R. R. yards, on top of east capstone of south abutment of first trestle over Los Angeles River, about 0.5 mile north of steel bridge of Atchison, Topeka & Santa Fe Ry.; a rounded knob (U. S. C. & G. S. b. m. T-32) 329.009
Los Angeles, about 2.75 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140-A over Los Angeles River, in top of curved surface on south end of concrete wing of west abutment; lead plug with copper nail (U. S. C. & G. S. b. m. U-32) 317.102
Los Angeles, about 2.75 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140-A over Los Angeles River, on north end of first pier from west end; lead plug with copper nail, marked "U. S. B. M." (mean by Senseney from V-32) 309.949
Los Angeles, at junction of North Spring and Baker streets, in west face of three-cornered brick building of Howard Auto Co., 1637 North Spring St.; a Geological Survey bronze tablet stamped "306" (U. S. C. & G. S. b. m. V-32) 306.450
Los Angeles, at entrance to train shed of Arcade Southern Pacific R. R. depot, inside the iron fence separating waiting room from train shed, in side wall where the fence joins the building and about 6 feet from main doorway to waiting room; brass disk (U. S. C. & G. S. b. m. W-32) 256.735
Shorb, on south side of railroad yards, 99.5 feet from southeast corner of Southern Pacific R. R. depot, 55 feet west of signal tower building; an iron post of Geological Survey stamped "464" (U. S. C. & G. S. b. m. T-36) 464.641
Alhambra, in west corner of Southern Pacific R. R. park; Geological Survey iron post stamped "456" (U. S. C. & G. S. b. m. E-36) 456.817
San Gabriel, 86 feet from northeast corner and 95 feet from northwest corner of Southern Pacific R. R. depot, 7.1 feet west of rainfall post; Geological Survey iron post stamped "415" (U. S. C. & G. S. b. m. C-36) 416.220
Savannah, 76 feet from southeast corner of Southern Pacific R. R. depot, which has been burned, 600 feet west of point where road north out of Savannah crosses railroad track, and 15 feet south of track; iron post stamped "300" (U. S. C. & G. S. b. m. E-36) 300.859

103248-25-10
Triangulation station Pasadena West Base, near corporate limit of Arcadia, 460 feet south of intersection of center lines of San Joaquin and Baldwin avenues, 60 feet east from center line of Baldwin Ave., in an open field; standard disk station mark set in concrete

Triangulation station Joaquin, in Arcadia, about 30 feet west of center of El Monte Ave., in line with south side of paving of Walnut St., at head of this street; standard disk station mark set in concrete

Arcadia, about 2.5 miles south of, 7 feet south of center line and 450 feet east of South Sixth Ave., on land owned by W. Phillips; concrete post with disk in top (U. S. C. & G. S. b. m. H-35)

From Los Angeles east along Southern Pacific R. R. into Puente 6' quadrangle in adjoining 1° quadrangle. A double-rodded line by H. S. Crowe in 1897, corrected to fit new U. S. Coast and Geodetic Survey precise line at Shorb, Alhambra, and Savannah

NOTE.—Bench mark 333 at East Lake Inn has been removed.

Aurant station, 0.75 mile west of, in top step of brick culvert, on west side of railroad; copper bolt stamped "399"

From Clement Junction, Los Angeles, west along Southern Pacific R. R. to Home Junction. Over this route a double-rodded line was run by H. S. Crowe in 1897, and additional leveling was done in 1923 as follows: Two lines between Clement Junction and Cienega by H. S. Senseney; two lines between Cienega and Palms by Senseney and Nessler; and three between Palms and Home Junction, two by Nessler and one by Senseney

Los Angeles, in west curb of Compton Ave., 75 feet south of East Twenty-seventh St., 15.1 feet south of south rail of east bound Pacific Electric Ry. track; chiseled square, marked "U. S. B. M. 212.7"

Los Angeles, at northwest corner of Central Ave. and East Thirty-second St., 3 feet south of fire hydrant, in curb; chiseled square, marked "U. S. B. M. 209.4"

Los Angeles, at southwest corner of San Pedro and East Thirtytieth streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 208.3"

Los Angeles, at southwest corner of Main and Jefferson streets, at fire hydrant, in sidewalk; chiseled square, marked "U. S. B. M. 200.6"

Los Angeles, at northeast corner of Exposition Bvd. and Figueroa St., in curb; chiseled square, marked "U. S. B. M. 187.0"

Los Angeles, 1.5 feet south of south curb of Exposition Bvd. and 30 feet west of west curb of Figueroa St., set flush in concrete post; bronze tablet stamped "S 71 1923"

Los Angeles, at southwest corner of Exposition Bvd. and Vermont Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 174.2"

Los Angeles, 55 feet west of old University station, at northwest corner of Exposition Bvd. and Vermont Ave., 19 feet north of north rail of west-bound Pacific Electric Ry. track; iron post stamped "174"

NOTE.—This post, described on page 71 of Bulletin 342, was found badly bent and was reset in 1923.
Los Angeles, at southwest corner of Exposition Bvd. and Normandie Ave., in curb; chiseled square, marked "U. S. B. M. 160.5" 160.54
Los Angeles, 30 feet east of northeast corner of Western Ave., and Exposition Bvd., between curb and Pacific Electric Ry. track, set flush in concrete post; bronze tablet stamped "A 2 1922" 147.451
Los Angeles, 30 feet south of southeast corner of Western Ave. and Exposition Bvd., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 146.4" 146.27
Los Angeles, 22 feet south of south rail of Pacific Electric Ry. main-line track, at Ninth Ave., 35 feet west of northwest corner of Moulding Supply Co.'s building; iron post stamped "118" 118.734
Airville siding, at northwest corner of concrete foundation of beet rack; head of nail 107.82
Sentous siding, 60 feet west of switch stand at east end of, north side of Pacific Electric Ry. track, in west end of concrete culvert; head of nail 103.43
Culver Junction, 188 feet southeast of center of railroad crossing, 115 feet southeast of station shed, at northeast corner of garden around Globe Flour Mills, on south edge of railroad right of way, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "13 1922" 108.084
Palms, in south brick wall at southeast corner of warehouse, fifth course of bricks above water table, in center of second brick from corner; bronze tablet stamped "126" (description on p. 71 in Bull. 342 is erroneous) 126.614
Home Junction (Talamantes), 410 feet west of Pacific Electric Ry. telephone booth, 45 feet south of main-line track; iron post stamped "185" (description on p. 71 in Bull. 342 is obsolete) 164.964
Note.—The three bench marks at Santa Monica given on page 71 of Bulletin 342 have been destroyed.

Primary leveling by C. W. H. Nessler in 1923
From Home Junction west along Southern Pacific R. R. to Santa Monica. See pages 122-124 for other bench marks in Santa Monica quadrangle
Home Junction, 1.5 miles west of, at Bergamot spur, 45 feet north of main-line track, 10 feet south of telegraph pole 448, on west side of road, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "1 1922" 152.682
Sunset spur, opposite east switch head, in base of trolley pole, painted "U. S. 154 B. M."; spike 154.02
Santa Monica, 1 mile east of Pacific Electric station, at Fourteenth St. crossing, in base of trolley pole; spike, painted "U. S. 112 B. M." 111.16
Santa Monica, Pacific Electric station, 83 feet west of west end, 60 feet south of center of main-line track, 180 feet east of Ocean Ave., in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "2 1922" 59.415
Santa Monica, at junction of Ocean Ave. and Pico Bvd., in northwest corner of streets; chiseled cross on curbstone, painted "U. S. 46 B. M." 45.18
SPIRIT LEVELING IN CALIFORNIA, 1896–1923

Ocean Park, 300 feet south of Southern Pacific ticket office, and Pacific Electric passenger station, at crossing of Navy St., with Trolley way, in base of trolley pole; spike, painted "U. S. 28 B. M." 27.74

From center of west line of Sawtelle 6' quadrangle, southeast to Southern Pacific R. R. 1.5 miles west of Home Junction

Santa Monica, at intersection of Twenty-third St. with San Vicente Bvd., 90 feet southeast of center of Twenty-third St., in base of trolley pole; spike, painted "U. S. 345 B. M." 344.75

Santa Monica, east city limit, at Junction of Twenty-sixth St. with San Vicente Bvd., in southwest corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet, stamped "4 1922". 347.779

Intersection of Twenty-sixth St. with Wilshire Bvd., in northwest corner of streets, in base of telegraph pole; spike, painted "U. S. 194 B. M." 193.67

Intersection of Anita Ave. or Cambridge St. with Santa Monica Bvd., in southeast corner of streets; painted square on curbstone, painted "U. S. 204 B. M." 203.95

From point 1.5 miles west of Home Junction south into Venice 6' quadrangle in adjoining 1° quadrangle

Bergamot spur, 1 mile south of, at right-angled bend east of National Building, in southwest corner of streets, in base of telegraph pole; spike, painted "U. S. 169 B. M." 168.82

Midway, at intersection of Venice Bvd. and Ballona Road, in southwest corner of streets, on south side of Pacific Electric Ry. tracks, in base of telegraph pole; spike, painted "U. S. 62 B. M." 61.51

From Topango Canyon 6' quadrangle in Camulos quadrangle northeast along highways to Glendale

Intersection of Bundy Drive and San Vicente Bvd., 45 feet east of Bundy Drive, in base of trolley pole; spike, painted "U. S. 314 B. M." 313.39

Old Soldiers' Home, at northeast corner of Company 5 barracks, on northeast corner of concrete manhole; chiseled square, painted "U. S. 358 B. M." 357.65

Sunset Cemetery, at northeast corner of, 0.75 mile east of Soldiers' Home, on south side of Wilshire Bvd., 3 feet north of cemetery signpost, in concrete post; bronze tablet stamped "5 1922". 332.151

Los Angeles Country Club, on east side of Wilshire Bvd. entrance and north side of Wilshire Bvd., in base of telephone pole; spike, painted "U. S. 354 B. M." 353.56

Junction of Santa Monica Bvd. and Benedict Canyon road, between Pacific Electric tracks; spike in base of trolley pole, painted "U. S. 268 B. M." 268.08

Junction of Benedict Canyon road with Sunset Bvd., in southwest corner of streets; chiseled square on curbstone, painted "U. S. 359 B. M." 358.41

Sunset Bvd., at east end of widest part of the boulevard, on north curb; chiseled square, painted "U. S. 399 B. M." 399.01
Sunset Bvd., 232.4 feet southwest of P. B. M., on south curb; chiseled cross: 344.40

Junction of Sunset Bvd., Holloway Drive, and Horn Ave., in northeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "6 1922": 345.042

Hollywood Hills, at junction of Harper Ave. with Sunset Bvd., in west corner of streets; chiseled square on curbstone, painted "U. S. 399 B. M.": 398.26

Gardener Junction, at intersection of Gardener St. with Sunset Bvd., on northeast corner of streets, east of car tracks; chiseled square on curbstone, painted "U. S. 351 B. M.": 350.37

Hollywood, at intersection of Franklin and Vista Del Mar avenues, in northwest corner of streets; spike in base of telegraph pole, painted "U. S. 440 B. M.": 440.12

Hollywood, at intersection of Western Ave. and Los Feliz Bvd., 800 feet north of Catholic school, in southeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "5 1922": 503.629

Glendale, 2.5 miles west of, at junction of Los Feliz Bvd. and North Vermont Ave., in northeast corner of streets, in base of power pole; spike, painted "U. S. 535 B. M.": 537.76

Glendale, 1.7 miles west of, on south side of Los Feliz Bvd., in base of telegraph pole; spike, painted "U. S. 535 B. M.": 534.54

Glendale, 0.8 mile west of, in south wing of southwest end of Los Feliz Bvd. bridge over Los Angeles River, in top of vertical wing timber; spike, painted "U. S. 396 B. M.": 396.01

From point near northwest corner of Hollywood quadrangle south along highways to Southern Pacific R. R.

Sherman, 0.5 mile west of, at west city limits, between Santa Monica Bvd. and Pacific Electric Ry. tracks, on east end of concrete culvert; chiseled cross, painted "U. S. 228 B. M.": 227.11

Sherman, 0.5 mile west by 1 mile south of, at junction of Doheny Drive with Wilshire Bvd., in northwest corner of streets, on curbstone; chiseled square, painted "U. S. 184 B. M.": 183.55

Sherman, 0.5 mile west by 2 miles south of, 2 miles north of Culver City, at junction of Arnes St. and Pico Bvd., in northeast corner of streets, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "12 1922": 133.720

Culver City, 1 mile north of, at junction of Guthrie and Arnes avenues, in northeast corner of streets, in base of telephone pole; spike, painted "U. S. 138 B. M.": 137.29

Reference mark, 18 feet east of P. B. M., in foundation of lamppost; chiseled square: 106.43

Culver Junction, 188 feet southeast of center of railroad crossing, 115 feet southeast of station shed, at northeast corner of garden around Globe Flour Mills, on south edge of railroad right of way, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "13 1922": 108.084

Culver Junction, 1.1 miles southwest of, 200 feet west of Culver City substation, on west side of highway and north side of car tracks, in base of power pole; spike, painted "U. S. 70 B. M.": 69.52
### Primary leveling by H. S. Senseney in 1923

#### From southeast corner of Burbank quadrangle south along highways to Southern Pacific R. R.

<table>
<thead>
<tr>
<th>Location</th>
<th>Height (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nessler's P. B. M. No. 8, 1922</td>
<td>503.629</td>
</tr>
<tr>
<td>Los Angeles, intersection of Western Ave. and Hollywood Bvd.; top of</td>
<td>391.45</td>
</tr>
<tr>
<td>traffic button</td>
<td></td>
</tr>
<tr>
<td>Los Angeles, at southwest corner of Western Ave. and Santa Monica Bvd., at fire hydrant, in curb; chiseled square, marked &quot;U. S. B. M. 324.1&quot;</td>
<td>323.89</td>
</tr>
<tr>
<td>Los Angeles, at southwest corner of Western Ave. and Third St., at fire hydrant, in curb; chiseled square, marked &quot;U. S. B. M. 227.9&quot;</td>
<td>227.67</td>
</tr>
<tr>
<td>Los Angeles, 60 feet north of northwest corner of Western Ave. and Wilshire Bvd., in curb; chiseled square, marked &quot;U. S. B. M. 198.3&quot;</td>
<td>198.06</td>
</tr>
<tr>
<td>Los Angeles, 50 feet north of northwest corner of Western Ave. and Wilshire Bvd., between curb and sidewalk, set flush in concrete post; bronze tablet stamped &quot;A 1 1922&quot;</td>
<td>197.925</td>
</tr>
<tr>
<td>Los Angeles, at northwest corner of Western Ave. and Pico St., at fire hydrant, in curb; chiseled square, marked &quot;U. S. B. M. 201.0&quot;</td>
<td>200.82</td>
</tr>
<tr>
<td>Los Angeles, 20 feet south of southwest corner of Western Ave. and Adans St., in curb; chiseled square, marked &quot;U. S. B. M. 182.8&quot;</td>
<td>182.60</td>
</tr>
<tr>
<td>Los Angeles, 30 feet south of southeast corner of Western Ave. and Exposition Bvd., at telephone pole, in curb; chiseled square, marked &quot;U. S. B. M. 146.4&quot;</td>
<td>146.26</td>
</tr>
<tr>
<td>Los Angeles, 30 feet east of northeast corner of Western Ave. and Exposition Bvd., between curb and Pacific Electric Ry. track, set flush in concrete post; bronze tablet stamped &quot;A 2 1922&quot;</td>
<td>147.451</td>
</tr>
</tbody>
</table>

#### From Southern Pacific R. R. near east border of Hollywood quadrangle south along highways into Inglewood 6' quadrangle, in adjoining 1° quadrangle

<table>
<thead>
<tr>
<th>Location</th>
<th>Height (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles, at southeast corner of Western and Vernon avenues, in curb; chiseled square, marked &quot;U. S. B. M. 139.3&quot;</td>
<td>139.17</td>
</tr>
</tbody>
</table>

#### From point near center of east line of Hollywood 6' quadrangle west along highways through center of that quadrangle

<table>
<thead>
<tr>
<th>Location</th>
<th>Height (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles, at northwest corner of Wilshire Bvd. and Rosamore Ave., in curb; chiseled square, marked &quot;U. S. B. M. 204.8&quot;</td>
<td>204.55</td>
</tr>
<tr>
<td>Los Angeles, at northwest corner of Wilshire Bvd. and Rosamore Ave., in curb; chiseled square, marked &quot;U. S. B. M. 193.3&quot;</td>
<td>193.51</td>
</tr>
<tr>
<td>Los Angeles, on south side of Wilshire Bvd., at north end of parking of McCarthy Vista, in curb; chiseled square, marked &quot;U. S. B. M. 150.5&quot;</td>
<td>150.18</td>
</tr>
<tr>
<td>Los Angeles, on east side of McCarthy Vista, 75 feet south of Wilshire Bvd., 0.9 foot east of curb, in concrete post; bronze tablet stamped &quot;A 12 1922&quot;</td>
<td>150.289</td>
</tr>
<tr>
<td>Los Angeles, at northwest corner of Wilshire Bvd. and Pruess Road, in concrete culvert; chiseled square, marked &quot;U. S. B. M. 161.5&quot;</td>
<td>161.10</td>
</tr>
<tr>
<td>Nessler's B. M., at Wilshire Bvd. and Doheny Drive</td>
<td>183.55</td>
</tr>
</tbody>
</table>
From point near northwest corner of Whittier 6° quadrangle in adjoining 1°

Montebello, 0.9 mile east of, on south side of Whittier Bvd., 30 feet
from Union Pacific R. R. crossing, in south end of east abutment of
cement culvert; chiseled square, marked "U. S. B. M. 179.3"—

Montebello, 20 feet east of South Cedar St., on south side of Union
Pacific tracks, in concrete base of electric warning signal; chiseled
square, marked "U. S. B. M. 204.2"—

Montebello, 0.9 mile west of, in northwest corner of concrete base
of semaphore "7.6"; chiseled square, marked "U. S. B. M. 192.1"—

Montebello, 0.9 mile west of, on south edge of Union Pacific right
of way, at semaphore "7.6," in concrete post; bronze tablet
stamped "A 17 1922"—

Montebello, 2.4 miles west of, in northwest corner of east abutment of
cement culvert "6.16"; chiseled square, marked "U. S. B. M.
160.5"—

Montebello, 2.9 miles west of, 60 feet east of Union Pacific crossing
of Telegraph Rd., in northwest corner of concrete base of semi-
aphore "5.8"; chiseled square, marked "U. S. B. M. 157.7"—

Montebello, 3.7 miles west of, at south end of Pasadena Ave., Bel-
vedere Gardens, in southeast corner of concrete base of semaphore
"4.9"; chiseled square, marked "U. S. B. M. 166.8"—

Belvedere Gardens, 1 mile west of south end of Pasadena Ave., on
south side of Union Pacific track, in northwest corner of concrete
base of semaphore "3.8"; chiseled square, marked "U. S. B. M.
183.0"—

Belvedere Gardens, 1 mile west of south end of Pasadena Ave., on
north side of Union Pacific track, 3.4 feet east of semaphore
"3.9," in concrete post; bronze tablet stamped "A 18 1922"—

Hobart, 100 feet south of Atchison, Topeka & Santa Fe R. station,
west side of track, in concrete base of gate rods; chiseled square
marked "U. S. B. M. 192.0"—

Los Angeles, in northwest corner of Twenty-sixth St. bridge over Los
Angeles River; chiseled square marked "U. S. B. M. 215.9"—

Los Angeles, intersection of Twenty-sixth St. and Santa Fe Ave.;
top of traffic button—

From northwest corner of Whittier quadrangle north along highway to
Southern Pacific R. R. near northeast corner of Alhambra 6° quadrangle

Ranchito, 2 miles north of, 1 mile south of Rio Hondo, on west
side of San Gabriel Bvd., 80 feet south of T road west, on north-
east corner of concrete irrigation ditch; chiseled square, marked
"U. S. B. M. 198.2"—

Rio Hondo, at southwest corner of crossroads, in northeast corner
of concrete foundation of Piuma & Briano's store; chiseled square
marked "U. S. B. M. 210.2"—

Rio Hondo, 150 feet west of crossroads, on north side of San
Gabriel Bvd., under center of steel tower of power line, in con-
crete post; bronze tablet stamped "A 15 1922"—
Rio Hondo, 0.5 mile west of, on west side of San Gabriel Bvd., directly in front of monument to Joseph L. Kaufman, in curb; chiseled square marked "U. S. B. M. 218.6" 218.62
Rio Hondo, 1.4 miles northwest of, on south side of San Gabriel Bvd., at road forks, in base of telegraph pole; spike, marked "U. S. B. M. 307.7" 307.77
Rio Hondo, 1.9 miles northwest of, on west side of San Gabriel Bvd., 150 feet north of road forks, in base of telegraph pole, spike, marked "U. S. B. M. 330.6" 330.62
Rio Hondo, 2.4 miles northwest of, at northeast corner of San Gabriel Bvd. and Old Mission-La Merced Road, in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 275.5" 275.60
Rio Hondo, 3 miles northwest of, 2.5 miles south of San Gabriel Bvd. and Garvey Ave., in southwest corner of curb, in front of service station; chiseled square, marked "U. S. B. M. 273.7" 273.79
Rio Hondo, 3 miles northwest of, 2.5 miles south of San Gabriel Bvd. and Garvey Ave., in concrete post; bronze tablet stamped "A 16 1922" 270.612
San Gabriel, at northwest corner of Pomona Bvd. and Del Mar Ave., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 339.6" 339.70
San Gabriel, at northwest corner of Del Mar Ave. and Mission Drive, in curb; chiseled square, marked "U. S. B. M. 395.7" 395.78

From Savannah on Southern Pacific R. R. in northwest part of El Monte 6' quadrangle along highways northeast into northeast quarter of Sierra Madre 6' quadrangle, thence west into Altadena 6' quadrangle and south to San Gabriel on Southern Pacific R. R.

Savannah, south of station, 75.9 feet from southeast corner of station, 1 foot from fence; iron post stamped "300" (U. S. C. & G. S. b. m. E-36) 300.859
Savannah, 0.5 mile northeast of, on Lower Azusa Road, at Baldwin Road, at residence of Mrs. M. Gross, in northwest corner of concrete porch; chiseled square, marked "U. S. B. M. 315.3" 315.42
Savannah, 1.5 miles northeast of, at bend in Elmonte Bvd., in curb; chiseled square, marked "U. S. B. M. 303.1" 303.27
Savannah, 2 miles northeast of, intersection of Elmonte Bvd. and Upper Azusa Road, at northwest corner, in curb; chiseled square, marked "U. S. B. M. 351.0" 351.23
Savannah, 2 miles northeast of, 25 feet north by 25 feet east of intersection of Elmonte Bvd. and Upper Azusa Road, in concrete post; bronze tablet stamped "A 12 1923" 352.323
Savannah, 3 miles northeast of, 2 miles southwest of Monrovia, on south side of Upper Azusa Road at Sixth Ave., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 344.1" 344.39
Gabriel triangulation station of the U. S. Coast and Geodetic Survey, 2.5 miles south of Monrovia, 1.3 miles south from intersection of Santa Fe Ry. with California Ave., on east edge of Monrovia dump grounds, 220 feet east of small stream, 39 feet east of center line of old asphalt pavement on Dalton County Road, 0.2 mile north of house owned by J. W. Kelley; standard disk in concrete post

366.315

Monrovia, at southwest corner of California and Euclid avenues, in curb; chiseled square, marked "U. S. B. M. 423.6"

423.95

Monrovia, at southeast corner of California and Olive avenues, at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 559.3"

559.74

Monrovia, at southwest corner of California and White Oak avenues, at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 618.9"

619.35

Monrovia, 25 feet south by 30 feet east of intersection of California and White Oak avenues, in concrete post; bronze tablet stamped "A 13 1923"

620.764

Monrovia, at southwest corner of White Oak and Violet avenues, in curb; leaded plug, marked "U. S. M. B. 528.7"

529.06

Monrovia, 1 mile west of, 1 mile north of Arcadia, on south side of Foothill Bvd., at northeast corner of parking in center of Santa Anita Bvd., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 543.3"

543.70

Monrovia, 2.2 miles west of, at northwest corner of Foothill Bvd. and Baldwin Road, in curb; chiseled square, marked "U. S. B. M. 635.1"

635.52

Monrovia, 2.2 miles west of, on south side of Foothill Bvd., in line with center of Baldwin Road, in concrete post; bronze tablet stamped "A 14 1923"

633.585

Monrovia, 3.1 miles west of, on south side of Foothill Bvd., at Sierra Madre Ave., in culvert; chiseled square, marked "U. S. B. M. 675.5"

675.95

Monrovia, 3.9 miles west of, 0.6 mile east of Lamanda, at northwest corner of Foothill Bvd. and Glen Ave., in root of pepper tree; copper nail and washer, marked "U. S. B. M. 714.2"

714.31

Lamanda, at southwest corner of Foothill Bvd. and Daisy Ave., in curb, at telegraph pole; chiseled square, marked "U. S. B. M. 740.3"

740.77

Lamanda, 40 feet south by 20 feet east of intersection of Foothill Bvd. and Daisy Ave., in concrete post; bronze tablet stamped "A 18 1923"

739.997

Lamanda, intersection of Colorado St. and Rose Ave.; top of traffic button

721.08

Lamanda, at southwest corner of San Gabriel Bvd. and San Pasqual St., in curb; chiseled square, marked "U. S. B. M. 665.7"

666.17

Lamanda, 0.7 mile south of, at southeast corner of San Gabriel Bvd. and Huntington Drive, in curb; chiseled square, marked "U. S. B. M. 595.8"

596.20
SPIRIT LEVELING IN CALIFORNIA, 1896–1923

Lamanda, 1.2 miles south of, 1 mile north of San Gabriel, 25 feet north by 20 feet west of intersection of San Gabriel Bvd. and Melville Ave., in concrete post; bronze tablet stamped “A 16 1923” ————————————- 531.357

San Gabriel, at northwest corner of San Gabriel Bvd. and Las Tunas Drive, in root of eucalyptus tree; spike and washer, marked “U. S. B. M. 434.0” ————————————- 434.27

From point near southwest corner of Sunland 6' quadrangle along highways south 4 miles (leveled twice), thence west across Van Nuys 6' quadrangle into Reseda quadrangle, thence north and east around northwest corner of Van Nuys quadrangle to North Sherman Way station

(Preliminary adjustment of 0.22 feet in east 17 miles of line. Line should be releveled)

Burbank, 4.9 miles northwest of, 4 meters northeast of center line of track, 0.6 meter below track, railroad mileage 458.1, in northeast end of southeast abutment of concrete culvert 458-B; nail sunk in horizontal surface of concrete (U. S. C. & G. S. h. m. B-32) —— 746.793

Van Nuys, 3 miles east of, on west side of Pacoima Ave., 230 feet north of Victory Bvd., in root of eucalyptus tree; copper nail and washer, marked “U. S. B. M. 694.9” ————————————- 694.83

Van Nuys, 3 miles east by 1 mile south of, at southeast corner of Pacoima Ave. and El Nido St., in root of pepper tree; spike and washer, marked “U. S. B. M. 659.1” ————————————- 659.06

Van Nuys, 3 miles east by 2 miles south of, at southeast corner of Pacoima Ave. and Camarillo St., in root of pine tree; copper nail and washer —— 632.52

Van Nuys, 3 miles east by 2 miles south of, 65 feet north by 20 feet east of intersection of Pacoima Ave. and Camarillo St., in concrete post; bronze tablet stamped “A 17 1923” ————————————- 632.572

Van Nuys, 3 miles east by 3 miles south of, at northeast corner of Pacoima Ave. and Ventura Bvd.; head of nail sunk in concrete culvert, marked “U. S. B. M. 619.0” ————————————- 618.93

Van Nuys, 2 miles east by 3 miles south of, at northeast corner of Ventura Bvd. and Diaz St.; head of nail sunk in concrete culvert, marked “U. S. B. M. 633.7” ————————————- 633.66

Van Nuys, 1 mile east by 2.75 miles south of, at northwest corner of Ventura Bvd. and Woodman Ave., on metal base of lamp-post; chiseled square ——— 640.53

Van Nuys, 1 mile east by 2.75 miles south of, 30 feet south by 25 feet east of intersection of Ventura Bvd. and Woodman Ave., in concrete post; bronze tablet stamped “A 18 1923” ————————————- 641.473

Van Nuys, 2.5 miles south of, at northeast corner of Ventura Bvd. and Sherman Way, in concrete culvert; chiseled square, marked “U. S. B. M. 657.2” ————————————- 657.09

Van Nuys, 2.5 miles south by 1 mile west of, at northeast corner of Ventura Bvd. and Saugus Ave., in concrete base of lamp-post; chiseled square, marked “U. S. B. M. 707.8” ————————————- 707.75

Van Nuys, 2.25 miles south by 2 miles west of, at northwest corner of Ventura Bvd. and Woodley Ave., in concrete base of lamp-post; chiseled square ——— 729.66
Van Nuys, 2.25 miles south by 2 miles west of, 25 feet north by 35
feet west of intersection of Ventura Bvd. and Woodley Ave., in
cement post; bronze tablet stamped "A 19 1923" 729.479
Van Nuys, 2 miles south by 3 miles west of, 30 feet south by 30 feet
east of intersection of Ventura Bvd. and Balboa Ave., on city
water meter; chiseled square, marked "U. S. B. M. 769.7" 769.61
Van Nuys, 1 mile south by 3 miles west of, at southwest corner of
Balboa Ave. and El Nido St., at sign post; top of iron pipe;
marked "714.8" 714.64
Van Nuys, 0.5 mile south by 3 miles west of, at Encino siding, 6.6
feet west of northeast corner of warehouse, in concrete post;
bronze tablet stamped "A 20 1923" 709.660
Van Nuys, 0.5 mile north by 3 miles west of, at southwest corner of
Balboa Ave. and Vanowen St., in concrete base of valve of water
main; chiseled square, marked "U. S. B. M. 736.4" 736.20
Van Nuys, 1 mile north by 3 miles west of, at southeast corner of
Balboa Ave. and Sherman Way, at lamp-post, in curb; chiseled
square, marked "U. S. B. M. 755.4" 755.28
Van Nuys, 1 mile north by 2 miles west of, at southeast corner of
Sherman Way and Woodley Ave., 3.3 feet east of lamp-post, in
curb; chiseled square 752.38
Van Nuys, 1 mile north by 2 miles west of, at southeast corner of
Sherman Way and Woodley Ave., 5.3 feet east of lamp-post and
2.4 feet south of curb, in concrete post; bronze tablet stamped
"A 21 1923" 752.781
Van Nuys, 1 mile north by 1 mile west of, at southwest corner of
Sherman Way and Saugus Ave., 4.4 feet west of end of curb, in
curb; chiseled square, marked "U. S. B. M. 755.7" 755.49
Van Nuys, 1 mile north of, 150 feet north by 25 feet west of North
Sherman Way station, 24 feet east of Pacific Electric track to
Owensmouth, 12 feet north of end of curb, in curb at telegraph
pole; chiseled square, marked "U. S. B. M. 742.6" 742.38
Burbank, 8 miles northwest of, railroad mileage 455; at crossing of
Pacific Electric Ry. and Southern Pacific R. R., in southwest end
of northwest abutment of highway concrete culvert, 20 meters
west of center line of Pacific Electric track, 15 meters northeast
center line of Southern Pacific track, 20 meters northeast of
Raymer tower; red metal disk (C. & G. S. b. m. A-32) 777.003

From point near center of east line of Van Nuys 6' quadrangle along highways
east to Universal City (leveled twice), thence northeast to Burbank

(Adjustment of 0.8 foot has been made in this line between the latter
points)

Universal City, 1 mile west of, at northwest corner of Ventura Bvd.
and Foster Ave., in west end of concrete culvert; head of nail,
marked "U. S. B. M. 590.9" 590.88
Universal City, 60 feet north of junction of Ventura and Lankershim
boulevards, in front of Walker's Tea Room, in concrete post; head
of copper nail, marked "U. S. B. M. 538.4" 588.36
Universal City, 0.5 mile north of, on north side of First St., 65 feet east of Lankershim Bvd., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 574.7" 574.71

Universal City, 0.5 mile north of, 15 feet north by 15 feet east of intersection of Lankershim Bvd. and First St., in concrete post; bronze tablet stamped "A 24 1923" 574.997

Universal City, 1 mile northeast of, 140 feet north of Second St., on east side of Lequna Ave., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 565.4" 565.38

Universal City, 1.25 miles northeast of, 3 miles southwest of Burbank, at northwest corner of Olive and Pass avenues, in root of second cedar tree west of corner; spike, marked "U. S. B. M. 547.7" 547.77

Burbank, 2 miles southwest of, at southwest corner of Olive Ave. and Buena Vista St., in top of stump; spike marked "U. S. B. M. 529.5" 529.67

Burbank, 2 miles southwest of, 25 feet south by 40 feet west of intersection of Olive Ave. and Buena Vista St., in concrete post; bronze tablet stamped "A 23 1923" (destroyed, 1924) 529.480

Burbank, at northeast corner of Olive Ave. and Main St., at fence corner, in top of stake driven in iron pipe, head of nail, marked "U. S. B. M. 547.4" 547.57

Burbank, in City Hall, at main entrance, just north of northeast end of first step, in sidewalk, at foot of east footing; red metal disk (U. S. C. & G. S. b. m. H-32) 622.266

At Santa Monica near east border of Topango Canyon 6' quadrangle

NOTE.—The old bench marks at Santa Monica had been destroyed.

Santa Monica, at junction of California and Ocean avenues, on west side of Ocean Ave.; chiseled square on curbstone, painted "U. S. 105 B. M." 104.23

Santa Monica, at junction of San Vicente Bvd. and Ocean Ave., in northeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30-inch concrete post; bronze tablet stamped "3 1922" 162.323

Santa Monica, at junction of Ninth St. and San Vicente Bvd., in southwest corner of streets; nail driven into crack between two adjoining curbstones in a painted square, "U. S. 226 B. M." painted on curbstone 225.75

Primary leveling by C. W. H. Nessler in 1923

From point near Ranchita, Whittier quadrangle, northeast along highways through southeast part of El Monte 6' quadrangle into Fuente 6' quadrangle of adjoining 1° quadrangle

Whittier, 3 miles north of, in southwest corner of T road west opposite northwest corner of cemetery, in concrete post; bronze tablet stamped "M 1 1923" 252.887

Reference mark, 50 feet east of bench mark; in west end of concrete culvert; chiseled square 252.99

Whittier, 3.75 miles northeast of, at road forks, 340 feet northwest of Mill District School, in concrete culvert; metal plug, marked "U. S. 230.4 B. M." 230.43
Whittier, 4.6 miles northeast of, in northeast end of concrete highway bridge over San Jose Creek, on guard rail; chiseled square, marked "U. S. 237.9 B. M." 237.91

Whittier, 5.3 miles northeast of, on west side of road to Puente, 45 feet southwest of Union Pacific R. R. crossing, on south edge of Union Pacific right of way, in concrete post; bronze tablet stamped "M 2 1923" 253.447

Reference mark is 75 feet northeast of B. M., white square painted on northwest corner of concrete foundation for semaphore 140 254.06

Hill Grove, 1.7 miles west of, at northwest end of Union Pacific R. R. steel bridge over San Jose Creek, in west end of northwest concrete retaining wall; chiseled square, marked "278.9 B. M." 278.94

Primary leveling by H. S. Senseney in 1923

From Lamanda Park along highways west and south through center of Altadena 6' quadrangle to Shorb in Alhambra 6' quadrangle

Pasadena, at northeast corner of Santa Anita Ave. and Villa St., in top of stump; copper nail and washer, marked "U. S. B. M. 798.8" 799.29

Pasadena, at northwest corner of Villa St. and Allen Ave., at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 831.3" 831.81

Pasadena, intersection of Villa St. and Hill Ave.; center of sewer trap 834.40

Pasadena, at southwest corner of Villa St. and Wilson Ave., in curb; chiseled square, marked "U. S. B. M. 850.3" 850.84

Pasadena, 15 feet south by 25 feet east of intersection of Villa St. and Lake Ave., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S 63 1923" (reset in 1924) 863.926

Pasadena, at southwest corner of Villa St. and Lake Ave., at telephone pole, in curb; chiseled square 869.05

Pasadena, intersection of Villa St. and Los Robles Ave.; center of sewer trap 885.60

Pasadena, at southwest corner of Villa St. and Fair Oaks Ave., in curb; chiseled square, marked "U. S. B. M. 892.4" 892.90

Pasadena, at southwest corner of Fair Oaks Ave. and Walnut St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 862.2" 862.66

Pasadena, at southwest corner of Orange Grove and Live Oaks avenues, at telephone pole, in curb; chiseled square, marked "U. S. B. M. 908.1" 908.65

Pasadena, 30 feet south by 55 feet east of intersection of Orange Grove Ave. and California St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S 64 1923" 828.424

Pasadena, at southwest corner of Orange Grove Ave. and California St., at lamp-post, in curb; chiseled square 828.30

Pasadena, on south side of Oliver St., and in line with east curb of Orange Grove Ave., in curb; chiseled square, marked "U. S. B. M. 762.4" 762.87

South Pasadena, at southeast corner of Mission St. and Meridian Ave., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 671.9" 672.38
South Pasadena, at southeast corner of Fremont Ave. and Oak St., at telephone pole, in curb; chiseled square.

South Pasadena, 25 feet south by 50 feet east of intersection of Fremont Ave. and Oak St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped “S 65 1923”.

Alhambra, at southwest corner of Fremont Ave. and Main St., at telephone pole, in curb; chiseled square, marked “U. S. B. M. 522.1”.

From point near Lamanda Park along highways north and northwest to Altadena, thence south to Pasadena in Altadena 6° quadrangle

Pasadena, on west side of Santa Anita Ave., at E road east to Preston rock crusher, in concrete culvert; head of nail, marked “U. S. B. M. 888.3”.

Pasadena, at northwest corner of Santa Anita and New York avenues, in north end of concrete culvert; head of nail, marked “U. S. B. M. 981.1”.

Altadena, 240 feet west of entrance to 2285 Foothill Bvd., on north side of road, in concrete culvert; head of nail, marked “U. S. B. M. 1,182.2”.

Altadena, 45 feet north of center of Altadena Drive and 1.3 feet west of west curb of Allen Ave., set flush in concrete post; bronze tablet stamped “S 66 1923”.

Altadena, at northwest corner of Altadena Drive and Allen Ave., in curb; chiseled square.

Altadena, at southeast corner of Foothill Bvd. and Holliston Ave., in concrete culvert; head of nail, marked “U. S. B. M. 1,377.3”.

Altadena, at southeast corner of Foothill Bvd. and Lake Ave., in concrete culvert; chiseled square, marked “U. S. B. M. 1,357.0”.

Altadena, at northwest corner of Piedmont and Marengo avenues, in concrete culvert; head of nail, marked “U. S. B. M. 1,344.6”.

Altadena, at northwest corner of Piedmont and Fair Oaks avenues, in concrete culvert; lead plug, marked “U. S. B. M. 1,329.0”.

Altadena, at northeast corner of Piedmont and Lincoln avenues, in parking in front of service station, in concrete post; bronze tablet stamped “S 67 1923”.

Reference mark, 135 feet southwest of bench mark “S 67,” in top of low stone wall; chiseled square.

Altadena, at southeast corner of Lincoln Ave. and Ventura St., in curb; chiseled square, marked “U. S. B. M. 1,178.7”.

Pasadena, at northwest corner of Lincoln Ave. and Atlanta St., in curb; chiseled square, marked “U. S. B. M. 1,087.7”.

Altadena, at southwest corner of Flintridge Bvd. and Windsor Ave., in concrete culvert; chiseled square, marked “U. S. B. M. 1,098.6”.

Devils Gate Dam, 40 feet northwest of west end of, 2.5 feet east of guard rail, in concrete post; bronze tablet stamped “S 66 1923”.

Reference mark, 40 feet southeast of bench mark “S 68,” at west end of dam, in curb; chiseled square.

Pasadena, on west side of Linda Vista Ave., 270 feet south of Inverness Drive, in curb, at fire hydrant; chiseled square marked “U. S. B. M. 1,012.4”.
Pasadena, on west side of Linda Vista Ave., 85 feet south of El Mirador Drive, in concrete sidewalk; chiseled square marked "U. S. B. M. 948.5" 949.05

Pasadena, 25 feet north by 30 feet west of intersection of Linda Vista Ave. and El Mirado Drive, in concrete post; bronze tablet stamped "S 69 1923" 952.209

Pasadena, at northwest corner of Linda Vista Ave. and Mira Vista Terrace, at telephone pole, in curb; chiseled square marked "U. S. B. M. 835.6" 836.09

From South Pasadena southwest along highways in Altadena and Los Angeles 6' quadrangles to Los Angeles

Los Angeles, in southeast corner of Pasadena Ave. bridge over Arroyo Seco; head of nail sunk in concrete marked "U. S. B. M. 532.0" 532.40

Los Angeles, at southeast corner of Pasadena Ave. and York Bvd., at fire hydrant, in curb; chiseled square marked "U. S. B. M. 587.2" 587.62

Los Angeles, in southeast corner of parking at Pasadena Ave. and York Bvd., set flush in concrete post; bronze tablet stamped "S 73 1923" 586.451

Los Angeles, at southeast corner of Pasadena Ave. and South Ave. 56, at fire hydrant, in curb; chiseled square marked "U. S. B. M. 532.1" 532.51

Los Angeles, at northeast corner of Pasadena Ave. and South Ave. 50, at fire hydrant, in curb; chiseled square marked "U. S. B. M. 501.0" 501.40

Los Angeles, at south end of parking at Pasadena Ave. and South Ave. 39, at telephone pole, in curb; chiseled square marked "U. S. B. M. 386.3" 386.75

Los Angeles, 1 foot north of north curb of Dayton Ave. and 200 feet west of center of Pasadena Ave., set flush in concrete post; bronze tablet stamped "S 72 1923" 386.380

Los Angeles, at northeast corner of Pasadena Ave. and Ave. 32, at telephone pole, in curb; chiseled square marked "U. S. B. M. 386.5" 386.97

Los Angeles, on south side of Pasadena Ave. at north end of North Daly St., between car tracks; top of traffic button 359.29

Los Angeles, at southwest corner of North Broadway and Daly St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 341.9" 342.28

From Belvedere Gardens north along highways through Alhambra 6' quadrangle to Shorb

Belvedere, at northwest corner of Whittier Bvd. and Pasadena Ave., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 196.8" 196.80

Belvedere, at southeast corner of Mountain View and Grand View avenues, in concrete culvert; chiseled square, marked "U. S. B. M. 314.7" 314.72

Belvedere, at southwest corner of Chicago and Ford avenues, in north end of concrete foundation of pumps of service station; chiseled square, marked "U. S. B. M. 315.1" 315.18
Belvedere, on west side of Chicago Ave., where it turns to enter Coyote Pass, in concrete post; bronze tablet stamped “S 53 1923”.

Belvedere, on west side of Chicago Ave., where it turns to enter Coyote Pass, in concrete culvert; chiseled square.

Coyote Pass, on north side of road, 150 feet east of refreshment stand, in concrete culvert; chiseled square, marked “U. S. B. M. 387.8”.

Coyote Pass, at east side of, on north side of road, at road forks, in concrete culvert; top of bolt, marked “U. S. B. M. 413.5”.

Granada Park, 70 feet east of intersection of Hellmen and Fremont avenues, in concrete foundation of gas pump; chiseled square, marked “U. S. B. M. 429.8”.

Alhambra, at northeast corner of Pomona Bvd. and Fremont Ave., at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 445.7”.

From Exposition Grounds, Los Angeles, north and west along Figueroa and Pico streets to Western Ave.

Los Angeles, at southwest corner of Figueroa and Adams streets, at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 201.1”.

Los Angeles, at southwest corner of Figueroa and Washington streets, at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 218.7”.

Los Angeles, at southwest corner of Figueroa and Pico streets, at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 232.5”.

Los Angeles, at northeast corner of building occupied by Bekins Fire Proof Storage Co., at 1335 S. Figueroa St., between north wall of building and paving of alley, in concrete post; bronze tablet stamped “S 77 1923”.

Los Angeles, at southwest corner of Pico St. and Union Ave., 1.2 feet west of fire hydrant, in curb; chiseled square, marked “U. S. B. M. 223.4”.

Los Angeles, at northwest corner of Pico and Hoover streets, 2.7 feet north of fire hydrant, in curb; chiseled square, marked “U. S. B. M. 227.8”.

Los Angeles, at northeast corner of Pico St. and Vermont Ave., at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 224.6”.

Los Angeles, northwest corner of Pico St. and Vermont Ave., 2.2 feet east by 4.8 feet south of northeast corner of building, set flush in concrete post; bronze tablet stamped “S 78 1923”.

Los Angeles, northeast corner of Pico St. and Normandie Ave., at fire hydrant, in curb; chiseled square, marked “U. S. B. M. 214.3”.

From west part of Hollywood north along highways to Universal City

[An adjustment of 0.3 foot has been made in this line]

Hollywood, at intersection of Hollywood Bvd. with Highland Ave., in northwest corner of streets, opposite southeast end of Hotel Hollywood, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped “7 1922” (Nessler’s b. m. before removing)
Los Angeles, 19 feet north of north curb of Hollywood Bvd., 210 feet west of west curb of Highland Ave., 20 feet west of main entrance to Hollywood Hotel, in concrete post; bronze tablet stamped “SS 1923” (after removing) ________________ 380.784

NOTE.—This b. m. was established from Nessler’s b. m. 7 1922 and his post was removed because of improvements in this vicinity.

Los Angeles, on east side of Highland Ave., 65 feet south of center of Cahuenga Ave., in curb; chiseled square, marked “U. S. B. M. 488.8” ______________________________ 488.68

Los Angeles, in angle between Cahuenga Ave. and Darien St., in curb; head of nail, marked “U. S. B. M. 728.00” ________________ 727.87

Los Angeles, on west side of road, at summit of Cahuenga Pass, in telephone pole; railroad spike, marked “U. S. B. M. 770.3” ________________ 770.17

Los Angeles, on south side of Pass Ave., 100 feet east of Cahuenga Ave., 28 feet north of Pacific Electric station Hollywood Knolls, in concrete culvert; head of nail, marked “U. S. B. M. 715.5” ________________ 715.29

Los Angeles, on north side of Pass Ave., 125 feet east of Cahuenga Ave., 25 feet east of east rail of Pacific Electric tracks, at Hollywood Knolls, in concrete post; bronze tablet stamped “S 70 1923” ________________ 714.018

Los Angeles, on north side of Cahuenga Ave., 100 feet west of Fredonia Drive, in telephone pole; railroad spike, marked “U. S. B. M. 616.8” ________________ 616.52

Universal City, 60 feet north of junction of Ventura and Lankershim boulevards, in front of Walker’s Tea Room, in concrete post; head of copper nail, marked “U. S. B. M. 588.4” ________________ 588.36