

OFFICE COPY HOLD

THIRD ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

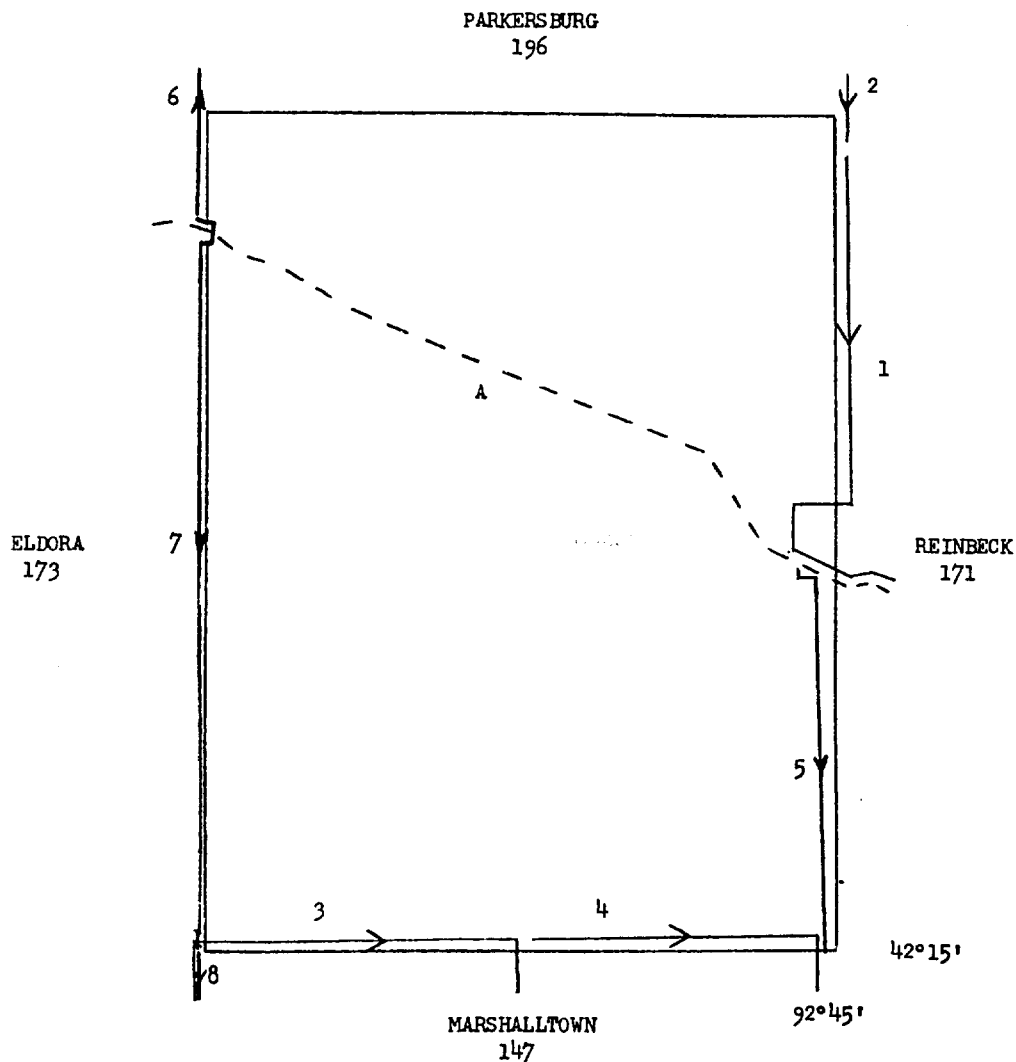
Final Adjustment of 1970 unless
otherwise stated

Grundy County

Edition of: 1-1-75
PR: ADP/ob

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

42-092-34
GRUNDY CENTER QUADRANGLE
172 - IOWA
N4215-W9245/15
DIAGRAM NK 15-5
WATERLOO



USC&GS VERTICAL CONTROL DATA

A. Quadrangle No. 420923

172 B

LINE 1

FEET

P. J. Hohenberger, 1969; Book CV-2436

REINBECK QUAD. - 171

NOTE: Elevations in this line from "UE 66 B" to BM IHC (9.0 mi.) should be considered preliminary.

- | | | | |
|---|---------|---|----------|
| 1 | 21 16.6 | UE 66 PJH B; about 2.0 mi W. along gravel rd. from BM; 37 ft S., 19 ft E., and 3.0 ft lower than crossroads, top of E. end of a 3.0 ft cement pipe culvert; chiseled square, painted | 1037.71 |
| | 22 17.6 | Reference Mark, 790 ft N. of BM; 20 ft S., 50 ft W., and 1.5 ft lower than T-rd. S., at offset crossroads, top, in center of S. headwall of a concrete box culvert under the hwy., chiseled plus sign, painted | 1037.40 |
| | 23 17.8 | Stout, Blackhawk County, 4.0 mi S. and 2.0 mi W. of; T. 89 N., R. 16 W., cor. secs. 5, 6, 32 and 33; 800 ft S. and 14 ft W. of T-rd. S., in top and center of W. headwall of a concrete culvert, standard tablet stamped "67 PJH 1969", painted | 1030.441 |
| | 23 18.6 | UE 67 PJH A; about 0.85 mi S. along gravel rd. from BM; at center of crossroads (gravel), painted | 1022.8 |
| | 24 19.6 | UE 67 PJH B; about 1.85 mi S. along gravel rd. from BM, at center of T-rd. W. (gravel), painted | 1010.8 |
| | 25 20.6 | Reference Mark, 830 ft N. of BM, at center of crossroads, set flush with pavement, rail spike, painted | 1031.54 |
| | 26 20.9 | Grundy Center, Grundy County, 4.35 mi N. and 1.0 mi E. of; T. 88 N., R. 16 W., cor. secs. 17, 18, 19 and 20; 830 ft S. and 14 ft W. of crossroads; in top and center of W. headwall of a concrete culvert, standard tablet stamped "68 PJH 1969", painted | 1015.893 |
| | 26 21.0 | USGS Triangulation Station HOLLAND, 1970 (No description available) | 1074.674 |
| | 26 21.8 | UE 68 PJH A; about 1.1 mi S. along gravel rd. from BM; 16 ft W., and 2.0 ft lower than rd., top of W. end of a 2.0 ft corrugated pipe culvert, punch mark, painted circle, painted | 1057.73 |
| | 27 22.6 | UE 68 PJH B; 1.8 mi S. along gravel rd. from BM; at center of crossroads, (gravel), painted | 1067.2 |
| | 28 23.0 | UE 68 PJH C; about 2.3 mi S. along gravel rd. from BM; 70 ft N., 21 ft W., and 1.7 ft lower than T-rd. N., top of W. end of a 3.5 ft cement pipe culvert, chiseled square, painted | 1048.57 |

GRUNDY CENTER QUAD. - 172

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|----|---------|--|---------|
| 29 | 24.0 | Grundy Center, Grundy County, 2.0 mi N. along St. Hwy. 57 from; T. 88 N., R. 16 and 17 W., at quarter cor. between secs. 31 and 36; 52 ft N., 38 ft E., and 1.6 ft lower than T-rd. E., in top and center of a concrete box culvert, a round iron bolt stamped "BM", painted | 1029.17 |
| | 30 25.1 | UE Iron Bolt A; about 1.0 mi S. along St. Hwy. 57 from BM; at center of T-rd. E., a painted square, painted | 1006.08 |
| | 31 25.6 | Grundy Center, Grundy County, 0.5 mi N. along St. Hwy. 57 from; T. 87 N., R. 16 and 17 W., cor. secs. 1, 6, 7 and 12; SE. wingwall of a concrete bridge across Blackhawk Creek, in top and center of; 16.5 ft E. and 2.8 ft higher than hwy.; a brass plug with letters "I.H.C. - BM", painted Elev. by USGS | 980.59 |

LINE 1 (Cont'd)

FEET

GRUNDY CENTER QUAD. - 172

- 1 32 26.6 UE Grundy A; about 0.5 mi E. along St. Hwy. 58 from Grundy Center, at the center of sec. 7, at center of T-rd. S., at fence N. (E.-W. gravel - Hwy. W. and dead end rd. E. - and paved rd. S.), center of gravel at fence N., painted 981.6

REINBECK QUAD. - 171

- 33 26.9 Grundy Center, Grundy County, 0.85 mi E. along St. Hwy. 58 from; T. 87 N., R. 16 W., near the center of the SE $\frac{1}{4}$ of sec. 7, in top of W. end of N. concrete curb of a concrete bridge, 10 ft N. and 0.7 ft higher than hwy., a hex-head bolt, stamped "BM", painted 971.02
- 34 28.1 UE Hex-head A; about 1.2 mi E. along St. Hwy. 58 from BM, at center of crossroads, a painted square, painted 971.1
- 35 29.2 UE Hex-head B; about 2.3 mi E. along St. Hwy. 58 from BM; at center of T-rd. S., a painted square, painted 969.3

LINE 2

P. J. Hohenberger, 1969; Book CV-2436

SHELL ROCK QUAD. - 195

- 1 73 24.1 UE 75 PJH B; about 0.5 mi S., thence 1.0 mi W. along gravel rd. from BM; cor. secs. 16, 17, 20 and 21; at center of crossroads (gravel), painted 1055.5
- 74 24.6 UE 75 PJH C; about 1.0 mi S. and 1.0 mi W. of BM; quarter cor. between secs. 20 and 21, 12 ft W. and 3.5 ft higher than rd., top, in center of W. headwall of a concrete bridge, chiseled square, painted 1032.35
- 75 25.1 UE 75 PJH D; about 1.5 mi S. and 1.0 mi W. of BM; cor. secs. 20, 21, 28 and 29, 33 ft N., 13 ft W., and 0.3 ft higher than crossroads, top in center of W. headwall of a concrete culvert, chiseled square, painted 1035.30

REINBECK QUAD. - 171

- 76 26.1 UE 66 PJH B (Described in Line 1) 1037.71

LINE 3

F. J. Heintz, 1958; Book CV-1064

STATE CENTER QUAD. - 148

- 8.0 Witten, 2.6 mi S. of along Co. Rd. K, T. 86 N., Rs. 18 and 19 W., near cor. secs. 25, 30, 31 and 36, 144 ft S. and 40 ft W. of center crossroads; in concrete post, standard tablet stamped "TT 1 FJH 1958" 929.111
- 8.0 Reference Mark, rail spike in pole 45 ft N. and 54 ft E. center crossroads 931.50
- 8.8 UE, center concrete bridge 942.9

GRUNDY CENTER QUAD. - 172

- 10.3 UE, rail spike in power pole, 27 ft N. and 54 ft W. of center crossroads, T. 86 N., Rs. 18 and 19 W., near cor. secs. 13, 18, 19 and 24 1033.6
- 11.3 UE, center crossroads, T. 86 N., R. 18 W., near cor. secs. 17, 18, 19 and 20 1025.6
- 11.7 Witten, 0.8 mi S. and 1.5 mi E. of; T. 86 N., R. 18 W., near the NE. cor. of NW $\frac{1}{4}$ of sec. 20, 109 ft N. and 91 ft W. of center RR. crossing, 2 ft S. of fence; in concrete post, standard tablet stamped "TT 36 FJH 1957" 990.033

<u>LINE 3 (Cont'd)</u>	<u>GRUNDY CENTER QUAD. - 172</u>	<u>FEET</u>
11.8 Reference Mark, rail spike in pole, 42 ft W. along road and 27 ft S. (normal) road		985.88
12.4 UE, top NW. and concrete high headwall of concrete culvert, T. 86 N., R. 18 W., near cor. secs. 16, 17, 20 and 21		976.6
14.2 Whitten, 1.0 mi S. and 4.0 mi E. of; T. 86 N., R. 18 W., near the cor. of secs. 22, 23, 24 and 25; 34 ft N. and 85 ft E. of center private drive N., 2 ft S. of T-fence in concrete post; standard tablet stamped "10 FJH 1958"		1037.227
14.2 Reference mark, spike in pole approx. 110 ft E. of tablet		1039.77
14.5 UE, center of bridge		1019.5
15.4 UE, center crossroads at State Hwy. 14 and Co. Road W.		1044.5
16.0 UE, top center N. concrete wall at culvert		1013.9
17.0 Reference Mark, spike in pole, approx. 30 ft S. and 80 ft E. of crossroads		1053.97
17.0 Conrad, 2.0 mi N. of; T. 86 N., R. 17 W., near the SW. cor. of SE $\frac{1}{4}$ sec. 18, 32 ft N. and 355 ft E. of center crossroads, 2 ft S. of T-fence N.; in concrete post, standard tablet stamped "TT 4 FJH 1958"		1053.310

MARSHALLTOWN QUAD. - 147

9.3 Conrad, near the NW. cor. of the NE $\frac{1}{4}$ of sec. 31; T. 186 N., R. 17 W., approx. 390 ft W. and 38 ft N. of RR. crossing at Conrad, 4 ft E. power pole, 37 ft N. of the N. rail main track; in concrete post, standard tablet stamped "TT 33 FJH 1957"	993.092
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LINE 4

F.J. Heintz, 1958; Book CV-1064

GRUNDY CENTER QUAD. - 172

0.0 "TT 4 FJH 1958" (Described in Line 3)	1053.310
0.8 UE, top center concrete headwall culvert	1050.3
3.2 Conrad, 2.0 mi N. and 3.0 mi E. of; T. 86 N., R. 17 W., near the SW. cor. of SE $\frac{1}{4}$ sec. 15, 30 ft N. and 196 ft E. of private drive S., 2 ft S. T-fence N.; in concrete post, standard tablet stamped "TT 5 FJH 1958"	1069.710
3.2 Reference mark, spike in pole 160 ft E. of tablet	1065.12
6.3 Conrad, 2 mi N. and 6 mi E. of, T. 86 N., R. 16 W., near the SW. cor. of SE $\frac{1}{4}$ of sec. 18; 345 ft S. and 30 ft E. of center of crossroads, 2 ft W. of T-fence E., in concrete post, standard tablet stamped "TT 6 FJH 1958"	1045.598
6.3 Reference mark, spike in pole 100 ft S. of tablet	1054.37

MARSHALLTOWN QUAD. 147

8.4 Conrad, 0.5 mi S. and 6 mi E. of; T. 86 N., R. 16 W., near center sec. 31; 13 ft N. and 30 ft E. center road at field approach E., 2 ft W. of fence, in concrete post, standard tablet stamped "TT 7 FJH 1958"	1046.595
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LINE 5

FEET

L.A. Perry, 1974; Book CV-3128

GRUNDY CENTER QUAD. - 172

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|----|-----|-------------------------------|--|----------|
| 1 | 4 | 0.0 | Grundy Center, Grundy County, about 180 yards E. of Chicago, Rock Island and Pacific RR. station, 23 ft N. of N. rail of main line, 16 ft S. of S. rail of sidetrack, 105 ft E. of centerline road and at RR. crossing, 42 ft SW. of SW. cor. of building, 0.6 ft S. of standard N.G.S. witness sign, a standard USC&GS disk in top of concrete post stamped "N 30 1934" | 981.983 |
| 7 | | 0.7 | Grundy Center, Grundy Co., at jct. of State Hwy. 14 and State Hwy. 175, (T-street N., G Ave. and 4th St.), S. rim of manhole, chiseled plus | 1025.83 |
| 8 | 1.2 | UE 30 B, | about 0.5 mi E. along State Hwy. 175 from jct. State Hwy. 14 and 175 in Grundy Center, at center of sec. 7, T. 87 N., R. 16 W., at T-rd. S., center of State Hwy. 175 and paved road S., a copper nail and washer | 982.56 |
| 9 | 1.6 | UE 30 C, | jct. State Hwys. 14 and 175, about 0.5 mi E. and 0.4 mi S. of; near N $\frac{1}{4}$ cor. sec. 18, T. 87 N., R. 16 W., at a steel bridge across small drain, 10.3 ft W. of centerline of road, 2.3 ft SW. of NW. cor. of bridge, a chiseled plus on head of NW. most of rivet, painted | 976.14 |
| 13 | 2.3 | Grundy Center, Grundy Co., | about 1.0 mi SE. of; 0.5 mi E. along State Hwy. 175 from the jct. of State Hwy. 14 and State Hwy. 175, thence 1.1 mi S. along county asphalt road, T-45; about 0.1 mi S. of center sec. 18, T. 87 N., R. 16 W., 21 ft N. and 48 ft E. of center of road at field entrance E., 1.8 ft W. of E. right-of-way fence, 1.8 ft W. of USGS witness post; a standard rod supported USGS reference mark crimped on 0.5 in. copper coated rod in 6-in. tile filled with gravel, stamped "GRUNDY NO. 2 1970". | 1058.495 |
| 14 | 2.3 | Grundy Center, Grundy Co., | about 1 mi SE. of; 0.5 mi E. along State Hwy. 175 from jct. of State Hwy. 14 and State Hwy. 175, thence 1.1 mi S. along county asphalt road T-45., about 0.1 mi S. of center of sec. 18, T. 87 N., R. 16 W., 43 ft S. and 48 ft E. of center of road at field entrance E., 1.6 ft W. of E. right-of-way fence; a standard rod supported reference mark crimped on 0.5 in. copper coated rod in 6-in. tile filled with gravel, stamped "GRUNDY NO 1 1970" | 1060.578 |
| 15 | 2.7 | UE GRUNDY A, | about 0.4 mi S. of tablet at S $\frac{1}{4}$ cor. sec. 18, T. 87 N., R. 16 W., centerline of crossroads, a copper nail and washer | 1045.42 |
| 16 | 3.7 | UE, GRUNDY B, | about 1.4 mi S. of tablet along county road T-45, 54 ft N. and 23 ft W. of T-rd. E., top of NW. end of 4 ft concrete culvert, a chiseled square | 1023.63 |
| 18 | 4.1 | UE GRUNDY C, | about 1.7 mi S. of tablet, along county asphalt road T45 at drain crossing; 14.8 ft S. of N. end of W. headwall, 15 ft W. of centerline of road, 10 ft above drain; and 0.4 ft above centerline of road at drain; a chiseled square | 1022.30 |
| 20 | 4.7 | Reference mark, | 193 ft N. and 74 ft W. of BM, 78 ft N., 25 ft W. and about 4 ft lower than crossroads, top of W. end of 24-in. concrete pipe culvert, a chiseled square | 1045.44 |
| 22 | 4.7 | Grundy Center, Grundy County, | about 3.5 mi S. and 0.5 mi E. of; near N $\frac{1}{4}$ cor. sec. 31, T. 87 N., R. 16 W., 115 ft S., 48.5 ft E. and 4.1 ft lower than crossroads, 1 ft W. of E. right-of-way fence, 2 ft SW. of power pole and 1 ft N. of USGS witness post; a standard rod supported bench mark welded to copper coated rod driven 15 ft to refusal set in 6-in. concrete tile filled with gravel and stamped "1 LAP 1974" | 1045.137 |
| 25 | 5.7 | UE 1 LAP A, | about 0.9 mi S. along county asphalt road from BM, 6.2 ft S. of N. end of W. headwall, 14 ft W. of centerline of road, and 1.1 ft lower than road at drain, a chiseled square | 1028.19 |

LINE 5 (Cont'd)

GRUNDY CENTER QUAD. - 172

FEET

- 1 27 6.3 Grundy Center, Grundy County, about 5 mi SSE. of; 0.5 mi E. along State Hwy. 175 from jct. of State Hwy. 14, thence 5.1 mi S. along county asphalt road, T 45, to road at fence E.; in Tama County about 0.1 mi S. of center sec. 6, T. 86 N., R. 16 W.; 16 ft S., 31 ft W. and 1.1 ft lower than road at fence E.; 1.5 ft E. of W. right-of-way fence, 1.5 ft E. of USGS witness post; a standard rod supported reference mark tablet crimped on 0.5 in. copper coated rod in 6-in. tile filled with gravel, stamped "WASH NO. 1 1974" 1067.827
- 28 6.4 Reference mark, Grundy Center, Grundy County, about 5.0 mi SSE. of; 0.5 mi E. along State Hwy. 175 from jct. with State Hwy. 14, thence S. along county asphalt road, about 0.1 mi S. of center sec. 6, T. 86 N., R. 16 W., 22 ft S., 32 ft E. and 1.1 ft lower than road at fence E., 1 ft W. of E. right-of-way fence, a standard rod supported reference mark tablet crimped on 0.5 in. copper coated rod in 6-in. tile filled with gravel, stamped "WASH NO 2 1970" 1067.798
- 32 7.0 UE WASH A, about 0.6 mi S. along gravel road from tablet; 10.2 ft W. of centerline of road at S. end of bridge and 0.6 ft above centerline of road at drain, on top of SW. curb of bridge, a chiseled square 1013.90
- 33 7.5 UE WASH B, about 1.2 mi S. along gravel road from tablet at road at drain; 19.3 ft E. and 2.4 ft lower than road at drain, 4.5 ft above the drain, on top of 4 ft by 6-in. steel culvert; a painted square 1023.70
- 39 8.9 Reference mark, spike in pole 100 ft S. of "EM TT 6 FJH 1958" 1054.38
- 40 8.9 Conrad, Grundy County, 2 mi N. and 6 mi E. of; in Tama County, T. 86 N., R. 16 W., near the NW. cor. of NE $\frac{1}{4}$ of sec. 19, 345 ft S. and 30 ft E. of center of crossroads, 2 ft W. of fence, in concrete post; standard tablet stamped "TT 6 FJH 1958" 1045.598

LINE 6

L.A. Perry, 1974; Book CV-3128

ELDORA QUAD. - 173

- 2 17 4.0 EM, Cleves, Hardin County, about 2 mi E. of; Wellsburg, Grundy Co. about 4 mi W. and 2.5 mi N. of; near NE. cor. sec. 1, T. 88 N., R. 19 W., about 320 ft W. of T-rd. S., 15.8 ft S. and 0.4 ft above centerline of road at drain, a standard tablet set in top of SE. head-wall of concrete box culvert, stamped "2 LAP 1974" 1048.749
- 19 4.2 Reference mark, 41 ft N. and about 630 ft W. of EM, 25 ft N. and 55 ft E. of T-rd. N., a punched hole in top of 4 ft steel culvert 1048.98
- 23 5.2 UE 2 LAP A, about 0.1 mi W. and 1.0 mi N. of EM, at crossroads, 55 ft N. and 50 ft E. of, a painted square on top of SE. end of steel culvert under entrance to cemetery 1094.81
- 25 6.2 UE 2 LAP B, about 0.1 mi W. and 2.0 mi N. of EM, 142 ft S., 26.5 ft W. and 7.3 ft lower than crossroads, top of N. end of 18-in. concrete pipe culvert under driveway W., a chiseled square 1094.74

ACKLEY QUAD. - 197

- 28 6.8 Reference mark, 357 ft S. of EM, 14.5 ft S. and 25.5 ft W. of road at drive W., a painted square on top of S. end of 18-in. steel culvert 1057.76
- 29 6.9 EM, Cleves, Hardin^{Co.} about 2 mi E. and 2.7 mi N. of; Ackley, Hardin County, about 2.5 mi E. and 2.3 mi S. of; in Grundy County, about 0.16 mi N. of E $\frac{1}{4}$ cor. sec. 19, T. 89 N., R. 18 W.; 6.7 ft above drain, 14.5 ft W. and 0.8 ft above centerline of road at drain in center of W. headwall of concrete culvert, a standard tablet stamped "3 LAP 1974" 1052.679

LINE 7

FEET

L.A. Perry, 1974; Book CV-3128

ELDORA QUAD. - 173

4	3	0.0	BM, Cleves, Hardin Co. about 2 mi E. of; Wellsburg, Grundy Co., about 4 mi W. and 2.5 mi N. of; near NE. cor. sec. 1, T. 88 N., R. 19 W.; about 320 ft W. of T-rd. S.; 158 ft S. and 0.4 ft above centerline of road at drain, a standard tablet set in top of E. end of S. headwall of concrete box culvert, stamped "2 LAP 1974"	1048.749
7		0.7	UE 2 LAP AA, about 0.7 mi S. along county line road between Hardin and Grundy Co. from BM, 12 ft W. and 0.2 ft lower than centerline of road at drain, center of W. headwall; a chiseled square	1052.77
9		1.1	UE 2 LAP BB, about 1.1 mi S. along county line road from BM, 31 ft S. and 42 ft E. and 1.9 ft lower than crossroads, top S. end of 18-in. concrete culvert, a chiseled square	1071.28
12		2.0	UE 2 LAP CC, about 1.9 mi S. along county line road from BM; 13.5 ft N., 11 ft W. and 1.7 ft above centerline of road at center of bridge, 8 ft above water, top of NW. rail, a chiseled square	1072.52
14		2.6	BM, Wellsburg, Grundy County about 4 mi W. of; in Hardin County, T. 88 N., R. 19 W., near E. cor. sec. 13, about 60 ft N., 33 ft W. and 2.4 ft lower than crossroads; 14.3 ft N. of fence corner, 0.5 ft E. of W. right-of-way fence, 2.0 ft N. of power pole with two transformers, 0.8 ft S. of USGS witness post, a standard rod supported tablet welded to 0.5-in. copper coated rod driven 23 ft to refusal, set in 6-in. concrete drain tile filled with gravel and stamped "11 LAP 1974"	1102.628
16		2.6	Reference mark, 98 ft S. and 8 ft E. and across road from BM; top of W. end of concrete culvert, a chiseled square	1102.04
18		3.6	UE 11 A, about 1 mi S. along county line road from BM, centerline of T-rd. E.	1117.96
21		4.6	UE 11 B, about 2 mi S. along county line from BM at jet. with county road D-35; 27 ft S. and 24 ft E. of and about 3 ft lower than crossroads; top of S. end of concrete culvert, a chiseled square	1101.87
22		5.1	Reference mark, about 390 ft N. and 125 ft W. of BM; 96 ft N. and 19 ft W. of T-rd. N., top of W. end of concrete culvert, a chiseled square	1082.67
25		5.2	BM, Steamboat, Rock, Hardin County, about 3.25 mi E. and 1 mi S. of; Wellsburg, Grundy County, 4 mi W. and 2.5 mi S. of; in Grundy County, T. 88 N., R. 18 W. near NW. cor. sec. 31, 15 ft N., 106 ft E. of and 5 ft lower than road at drive E.; 2.5 ft W. of power pole, 1.2 ft E. of USGS witness post, 1 ft S. of fence, a standard rod supported tablet welded to 0.5-in. copper coated rod driven 10 ft to refusal, set in 6-in. concrete drain tile filled with gravel and stamped "12 LAP 1974"	1084.615
26		5.5	UE 12 A, about 0.3 mi S. along county line road from BM, 10 ft W. of centerline of road at N. end of bridge, top of curb NW. cor. of bridge; a chiseled square	1048.36
30		6.1	UE 12 LAP B, about 0.8 mi S. along county line road from BM; 16 ft E. of centerline of road, 1 ft above road SW. cor. of E. headwall, a chiseled square	1059.50
33		6.7	UE 12 LAP C, about 1.5 mi S. along county line road from BM; 206 ft N. and 15 ft E. of T-rd. W., SE. cor. of E. headwall, a chiseled square	1091.95

LINE 7 (Cont'd)

ELDORA QUAD. - 173

FEET

- 4 36 7.3 UE 12 LAP D, about 2.1 mi S. along county line road from EM; about 380 ft S. of crossroads at NW. corner sec. 7, T. 87 N., R. 18 W.; 11 ft centerline of road, 10 ft above drain, 2.3 ft higher than road at center of N. and of E. culvert rail, a chiseled square 1070.05
- 39 8.2 BM, Eldora, Hardin County about 5 mi E. along State Hwy. 175 from; at jct. of State Hwy. 175 and county road S-75 on county line between Hardin and Grundy Counties; 124 ft N., 74 ft W. and 120 ft N. and 0.5 ft lower than crossroads, 22 ft SW. of telephone pole, 1 ft NE. of hwy. RM (4x4 concrete post), 1 ft S. of USGS witness post, a standard rod supported tablet welded to copper coated rod driven 23 ft refusal, set in 6-in. concrete drain filled with gravel and stamped "13 LAP 1974" 1083.843
- 40 8.3 Reference mark, 232 ft S. and across State Hwy. 175 from EM, top of 4 x 4 concrete post with steel pin projecting from top 1089.18
- 44 9.3 UE 13 LAP A, about 1.1 mi S. along county line road S-75 from EM; 22 ft W. and 1.7 ft below center of road, 9 ft above water, NW. cor. W. headwall, a chiseled square 1033.92
- 49 10.3 UE 13 LAP B, about 2 mi S. along county line road S-75 from EM, 22 ft N., 33 ft E. and 3.6 ft lower than crossroads, top of N. end 2 ft concrete culvert, a chiseled square 1068.56
- 52 11.4 BM, Whitten, Hardin County about 3.25 mi N. of; in Grundy County, T. 87 N., R. 18 W., near NW. cor. sec. 31; about 260 ft E. of crossroads (jct. county road S-75 and D-53), 22 ft S. center road, a standard tablet set in W. end of S. headwall double box culvert and stamped "14 LAP 1974" 1016.893
- 53 11.5 Reference mark, about 285 ft W. and 490 ft S. of EM; 20.5 ft W. and 1.8 ft lower than centerline of road at drain, 7.5 ft above water, centerline of W. headwall double box culvert, a chiseled square 1013.31
- 57 12.4 UE 14 LAP A, about 1 mi S. along county line road S-75, 27 ft S., 48.8 ft E. and 3 ft lower than crossroads, top of S. end of 18-in. concrete culvert, a chiseled square 1047.23
- 59 13.3 UE 14 LAP B, about 2 mi S. along county line road S-75 from EM, 14 ft W. and 0.7 ft above centerline of road at drain, top of NW. curb of bridge, a chiseled square 994.75
- 71 14.4 BM, Whitten, Hardin County, at NE. cor. of corporate limits; T. 86 N., R. 19 W. near NE. cor. sec. 13; 49 ft W., 2.1 ft lower and in line with centerline of T-rd. E., 2 ft NE. of fence cor. post, 1.5 ft E. of W. right-of-way fence, 1.5 ft NW. of sign post and 1.2 ft E. of USGS witness post, a standard rod supported tablet welded to copper coated rod driven 19 ft to refusal, set in 6-in. concrete drain tile and stamped "15 LAP 1974" 1035.516
- 72 14.4 Reference mark, 20 ft S. and 16 ft E. of EM, top of S. end of 18-in. concrete culvert, a chiseled square 1034.04
- 74 14.8 BM, Whitten County, in the town of; about 160 ft S. of RR. crossing, 99 ft S. and 26.5 ft W. of T-rd. W., 31 ft N. of power pole, 52 ft N. of NE. corner of small wooden frame building, a standard State Survey disk set in top of concrete post set flush and stamped "42 STA NO. 135" 1038.807
- 77 15.5 BM, Whitten, Hardin County about 0.5 mi S. of; in Grundy County, near SW. cor. sec. 18, T. 86 N., R. 18 W.; 57 ft N., 74.5 ft E. and 1.8 ft lower than crossroads, 3 ft NE. of power pole, 1.8 ft W. of fence corner and in line with N. right-of-way fence, 1.5 ft SE. of USGS witness post, a standard rod supported tablet welded to 0.5 in. copper coated rod driven 18.5 ft to refusal, set in 6-in. concrete drain tile filled with gravel and stamped "16 LAP 1974" 1032.452

LINE 8

FEET

L.A. Perry, 1974; Book CV-3128

ELDORA QUAD. - 173

4 77 15.5 BM 16 LAP 1974" (Described in Line 7)

1032.452

STATE CENTER QUAD. - 148

80	0.8	UE 16 LAP A, about 0.7 mi S. along County line road from BM, 47.5 ft W. and 4.5 ft lower than centerline of road at drain, top of W. end of 10 ft steel culvert, a chiseled square	957.93
5	1	1.3 UE 16 LAP B, about 1.25 mi S. along county line road from BM; 15 ft N. and 16 ft E. of centerline of road at N. end of bridge, 2.8 ft above centerline of road at drain; top of NE. rail abutment, head of bolt	948.58
5	2.1	Whitten, Hardin County, about 2.6 mi S. along the county line road from, T. 86 N., Rs. 18 and 19 W., near corner secs. 25, 30, 31 and 36; 9 ft N. and 318 ft W. of centerline of crossroads, cemented in the E. end of the N. concrete curb of bridge, a standard tablet stamped "1 FJH 1958 RESET 1972"	936.010