

OFFICE COPY HOLD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

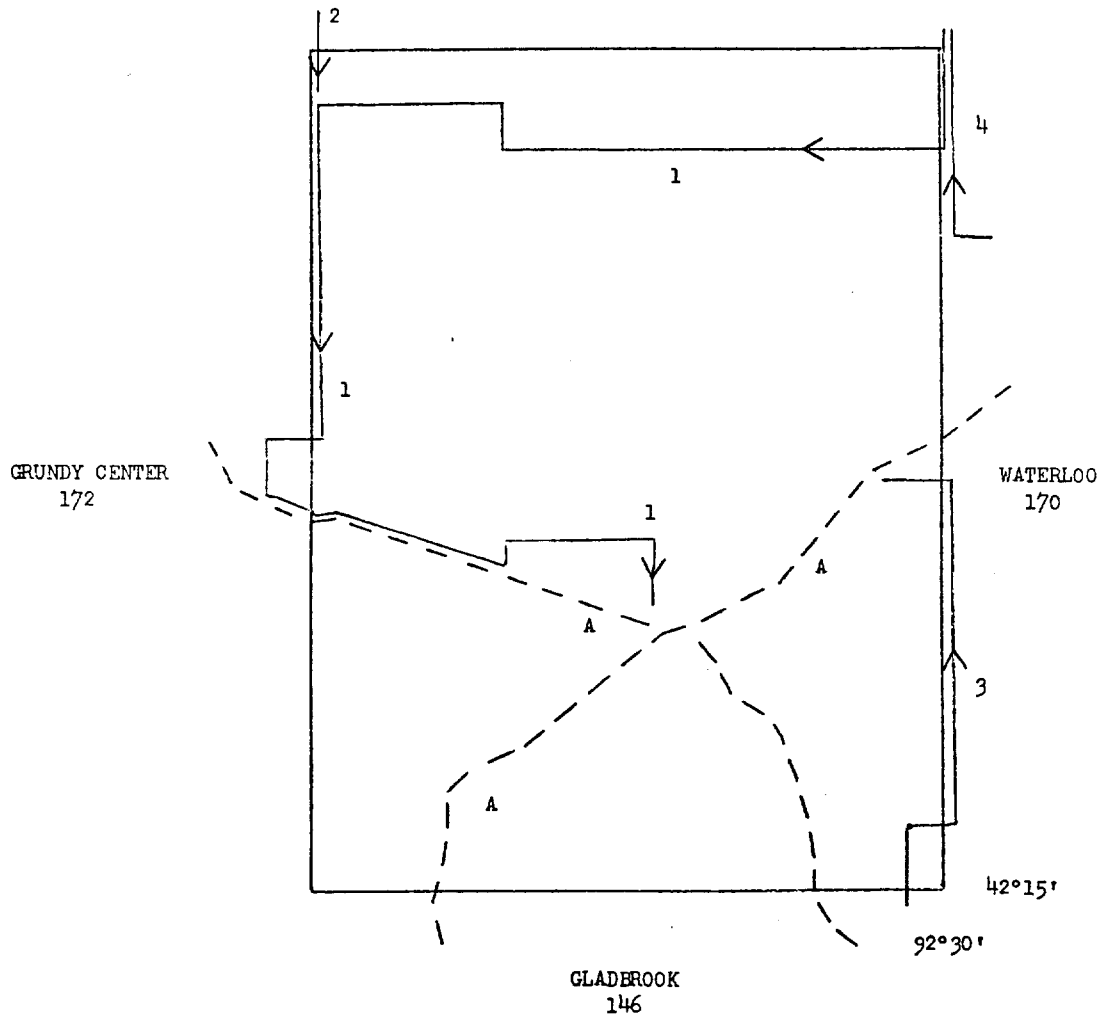
THIRD ORDER LEVELS  
SEA LEVEL DATUM OF 1929  
Final Adjustment of 1970  
Unless otherwise stated

REINBECK QUADRANGLE  
171 - IOWA  
N4215-W9230/15  
DIAGRAM NK 15-5  
WATERLOO

Grundy, Blackhawk, and Tama  
Counties

Edition of 10/14/70  
PR: ADP/GH/ph

SHELL ROCK  
195



USC&GS VERTICAL CONTROL DATA

A. Quadrangle No. 420923

171 B

LINE 1

FEET

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

CEDAR FALLS QUAD. - 194

NOTE: The elevations from "UE 66 B" to EM IHC (9.0 mi.) should be considered preliminary.

|   |   |     |                                                                                                                                                                                                                                          |         |
|---|---|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1 | 2 | 0.0 | Hudson, 6.75 mi N. and 2.0 mi W. of; T. 89 N., R. 14 W., near S. sixteenth cor. between secs. 21 and 22; 27 ft N. and 28 ft W. of driveway W.; a standard tablet in a concrete post set flush with ground and stamped "ET 1 JA 1961 972" | 971.993 |
|---|---|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|

WATERLOO QUAD. - 170

|   |     |                                                                                                                                                                                                                       |        |
|---|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 2 | 0.7 | UE 1 JA A; about 0.7 mi S. along gravel rd. from EM, at center of crossroads, (St. Hwy. 57 and N.-S. gravel rd.), a painted square, painted                                                                           | 956.8  |
| 2 | 1.3 | UE 12 RSH A; T. 89 N., R. 14 W., near cor. secs. 27, 28, 33 and 34; 10 ft S., 15 ft E. and 0.2 ft higher than center of bridge; chiseled square on top of SE. concrete wingwall, painted "UE 931.9" Water elev. 923.1 | 931.98 |
| 3 | 1.3 | UE 12 RSH A (Described above)                                                                                                                                                                                         | 931.98 |
| 3 | 2.3 | UE 1 JA B; about 2.35 mi S. along gravel rd. from EM, at center of T-rd. N. (gravel), painted                                                                                                                         | 977.9  |
| 4 | 2.4 | UE 1 JA BB; about 2.4 mi S. along gravel rd. from EM at center of T-rd. S. (gravel), painted                                                                                                                          | 980.2  |

REINBECK QUAD. - 171

|   |     |                                                                                                                                                                                                                                                                                                           |         |
|---|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 4 | 3.4 | UE 1 JA C; about 2.35 mi S., thence 1.0 mi W. along gravel rds. from EM, at center of T-rd. N. (gravel), painted                                                                                                                                                                                          | 1001.0  |
| 5 | 4.0 | Hudson, Blackhawk County, 4.5 mi N. and 3.3 mi W. of; Ts. 88 and 89 N., R. 14 W., near quarter cor. between secs. 6 and 32, 0.4 mi E. of crossroads, 23 ft S. and 2.7 ft lower than rd., on top, in center of a concrete box culvert; a USC&GS and State Survey disk "not stamped", painted Elev. by USGS | 987.573 |
| 6 | 4.4 | UE State Disk A, about 0.4 mi W. along gravel rd. from EM; at center of crossroads (gravel), painted                                                                                                                                                                                                      | 1011.6  |
| 7 | 5.4 | UE State Disk B; about 1.4 mi W. along gravel rd. and St. Hwy. 57 from EM; 1.5 ft N. and level with center of T-rd. N.; a metal rivet and painted square, painted                                                                                                                                         | 1003.80 |
| 8 | 6.4 | UE State Disk C; about 2.4 mi W. along gravel rd. and St. Hwy. 57 from EM; 20 ft N., 103 ft W., and 1.8 ft lower than T-rd. S., at offset crossroads, top, in center of a concrete box culvert, a chiseled plus sign, painted                                                                             | 992.89  |
| 9 | 7.5 | UE State Disk D; about 3.5 mi W. along gravel rd. and St. Hwy. 57 from EM; 21 ft N., 350 ft W., and 4.0 ft lower than T-rd. N., top, in center of N. headwall of a concrete box culvert, a chiseled square, painted                                                                                       | 963.61  |
| 9 | 7.5 | Hudson, Blackhawk County, 4.5 mi N. and 6.7 mi W. of; Ts. 88 and 89 N., R. 15 W., near cor. secs. 3, 4, 34 and 35, 420 ft N. and 14.5 ft E. of T-rd. N., in top, near N. end of E. headwall of a concrete box culvert; standard tablet stamped "65 PJH 1969", painted                                     | 967.869 |

LINE 1 (Cont'd)

FEET

REINBECK QUAD. - 171

- |      |      |                                                                                                                                                                                                                                                                                                    |          |
|------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| I 10 | 7.9  | UE State Disk E; about 3.9 mi W. along gravel rd. and St. Hwy. 57 from BM; at center of T-rd. S., a painted square, painted (NOTE: This mark is 0.5 mi W. of BM "65 PJH 1969")                                                                                                                     | 975.8    |
| 11   | 8.4  | UE State Disk F; about 4.4 mi W. along gravel rd. and St. Hwy. 57 from BM; at center of a T-rd. N., a metal rivet (NOTE: This mark is 1.0 mi W. of BM "65 PJH 1969")                                                                                                                               | 970.43   |
| 12   | 8.9  | UE State Disk G; about 4.9 mi W. along gravel rd. and St. Hwy. 57 from BM; 3.0 ft S. and level with center of T-rd. S., a metal rivet, painted (NOTE: This mark is 1.5 mi W. of BM "65 PJH 1969")                                                                                                  | 976.19   |
| 13   | 9.5  | UE State Disk H; about 5.4 mi W. along gravel rd. and St. Hwy. 57 from BM, at Dike, at center of T-rd. N., at offset crossroads, top of metal rod denoting sec. cor, painted                                                                                                                       | 953.78   |
| 13   | 9.5  | UE, center of concrete bridge on St. Hwy. 57 at W. limits of Dike, not painted                                                                                                                                                                                                                     | 955.4    |
| 14   | 10.4 | UE State Disk J; about 1.0 mi W. along St. Hwy. 57 from crossroads, at Dike, at center of T-rd. N., at offset crossroads, a painted square, painted                                                                                                                                                | 973.2    |
| 15   | 10.5 | Reference Mark, at grade crossing, 590 ft E. of BM; top of E. rail at center of St. Hwy. 57, painted                                                                                                                                                                                               | 970.83   |
| 15   | 10.7 | Stout, Blackhawk County, 4.0 mi S. and 2.75 mi E. of, Ts. 88 and 89 N., R. 16 W., near E. sixteenth cor. between secs. 1 and 31; at SW. cor. of a long concrete bridge, 15 ft S. and 0.5 ft higher than hwy., top of concrete curb; a brass plug with letters "I.H.C. - BM", painted Elev. by USGS | 957.55   |
| 16   | 11.5 | UE Brass Plug A; about 0.8 mi W. along St. Hwy. 57 from BM; at center of T-rd. N., at offset crossroads, a metal rivet, painted                                                                                                                                                                    | 962.79   |
| 17   | 12.5 | UE Brass Plug B; about 0.8 mi W. along St. Hwy. 57 thence 1.0 mi N. along gravel rd. from BM at center of crossroads (gravel), painted                                                                                                                                                             | 974.9    |
| 18   | 13.5 | UE Brass Plug C; about 0.8 mi W. along St. Hwy. 57, thence 1.0 mi N. and 1.0 mi W. along gravel rd. from BM, cor. secs. 25, 26, 35 and 36, at center of crossroads (gravel), painted                                                                                                               | 971.8    |
| 19   | 14.5 | Reference Mark, 26 ft W. of BM; 205 ft N. and 13.5 ft W. of crossroads, top, in center of W. headwall of a concrete box culvert, chiseled square, painted                                                                                                                                          | 1003.18  |
| 19   | 14.5 | Stout, Blackhawk County, 3.0 mi S. along Co. Rd. "H" from; T. 89 N., R. 16 W., near cor. secs. 26, 27, 34 and 35; 205 ft N., 13.5 ft E., and 1.9 ft lower than crossroads, in top and center of a concrete box culvert, standard tablet stamped "66 PJH 1969", painted                             | 1003.008 |
| 20   | 15.7 | UE 66 PJH A; about 1.15 mi W. along gravel rd. from BM; 36 ft N., 700 ft W. and 4.8 ft lower than crossroads, in S. base of a power pole at ground level; a rail spike, painted                                                                                                                    | 1059.42  |
| 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  |

LINE 1 (Cont'd)

FEET

REINBECK QUAD. - 171

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|----|------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1  | 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 (Description not 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., Rs. 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 "EM", 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., Rs. 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. - EM", painted Elev. by USGS | 980.59  |
| 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   |

LINE 1 (Cont'd)

FEET

REINBECK QUAD. - 171

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|---|----|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1 | 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   |
|   | 36 | 30.0 | Grundy Center, Grundy County, 3.95 mi E. along St. Hwy. 58 from; T. 87 N., R. 16 W., near the center of the NE $\frac{1}{4}$ of sec. 15, top of W. end of S. concrete curb of a concrete bridge, 16 ft S. and 0.8 ft higher than hwy., a brass plug with letters "I.H.C. - BM", painted Elev. by USGS | 955.18  |
|   | 37 | 31.2 | UE Morrison A; about 1.0 mi W. along St. Hwy. 58 from Morrison, near quarter cor. between secs. 14 and 15, at center of crossroads, a painted square, painted                                                                                                                                         | 956.1   |
|   | 37 | 31.3 | UE Morrison B; at the crossroads, at Morrison, near S. sixteenth cor. between secs. 13 and 14, at intersection of N.-S. gravel rd. and St. Hwy. 58, a painted square, painted                                                                                                                         | 948.40  |
|   | 38 | 31.5 | UE Morrison C; about 0.25 mi N. along gravel rd. from Morrison, near quarter cor. between secs. 13 and 14, top of N. end of W. concrete curb of a concrete bridge across Blackhawk Creek, on NW. wingwall curb, 14 ft W. and 0.8 ft higher than rd., a chiseled square, painted                       | 948.18  |
|   | 38 | 32.1 | UE Morrison D; about 0.8 mi N. along gravel rd. from Morrison, cor. secs. 11, 12, 13 and 14, at center of T-rd. E. (gravel), painted                                                                                                                                                                  | 980.5   |
|   | 39 | 33.1 | UE Morrison E; about 0.8 mi N., thence 1.0 mi E. along gravel rd. from Morrison, cor. secs. 7, 12, 13 and 18; 34 ft N., 93 ft W., and 6.9 ft lower than crossroads, in S. base of a power pole, painted "UE" and at ground level; a rail spike                                                        | 981.15  |
|   | 40 | 34.1 | Reference Mark, 29 ft S. of BM; on top near center of S. headwall of a concrete culvert, on the letter "A" in the word Mamming, painted                                                                                                                                                               | 973.12  |
|   | 41 | 34.1 | Reinbeck, Grundy County, 2.0 mi N. and 2.0 mi W. of; T. 87 N., R. 15 W., cor. secs. 7, 8, 17 and 18; 18 ft N., 33 ft W., and 0.9 ft lower than crossroads, in top and center of N. headwall of a concrete culvert; standard tablet stamped "69 PJH 1969", painted                                     | 973.389 |
|   | 41 | 35.2 | UE 69 PJH A; about 1.0 mi E. along gravel rd. from BM; 200 ft S., 14 ft E., and 2.7 ft lower than crossroads, top, near center of E. headwall of a concrete culvert, chiseled square, painted                                                                                                         | 966.60  |
|   | 42 | 36.1 | UE 69 PJH B; about 1.0 mi E., thence 1.0 mi S. along gravel rd. from BM; at center of rd. at E.-W. sec. line fence, painted                                                                                                                                                                           | 975.8   |
|   | 43 | 36.8 | UE 69 PJH C; about 1.0 mi E., thence 1.7 mi S. along gravel rd. from BM; on NW. wingwall of a concrete bridge, 11 ft W. and 0.8 ft higher than rd., top of N. end of W. concrete curb; chiseled square, painted                                                                                       | 930.58  |
|   | 44 | 37.1 | UE 69 PJH D; Reinbeck, 1.0 mi W. of along St. Hwy. 58 from; cor. secs. 20, 21, 28 and 29, at center of crossroads, painted                                                                                                                                                                            | 929.3   |

LINE 1 (Cont'd)

FEET

REINBECK QUAD. - 171

- 1 45 37.4 Reinbeck, Grundy County, 0.75 mi W. along St. Hwy. 58 from; T. 87 N., R. 15 W., near the W. sixteenth cor. between secs. 21 and 28, 40 ft N., 200 ft E., and 2.4 ft lower than grade crossing, 7.0 ft E. of a power pole, painted "BM", 1.5 ft W. of a witness sign, in concrete post, standard USC&GS disk stamped "E 11 1933" 929.509

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 EM; 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 EM; 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 EM; 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

R. S. Heglin, 1961; Book CV-1382

GLAD BROOK QUAD. - 146

- 0.0 Dinsdale, about 2.1 mi SE. along the Chicago, Rock Island, and Pacific RR. from the station at; about 24 poles NW. of MP 51, at a 5 x 6 ft stone box culvert, in the SE. end of the NE. stone headwall, 10 ft NE. of the center of the track, and about 1 ft lower than the rail, a standard USC&GS disk stamped "F 82 1934" 913.620
- 1.4 UE F 82 A; T. 86 N., R. 14 W., near cor. secs. 19, 20, 29 and 30; 34 ft N., 41 ft W., and 4.4 ft higher than T-rd. W., rail spike in telephone pole 976.88

REINBECK QUAD. - 171

- 2.7 Hudson, 10.5 mi S. and 2.75 mi W. of; T. 86 N., R. 14 W., near W. sixteenth cor. between secs. 17 and 20; 38 ft N. and 2 ft W. of center of rd. at fence N.; 4 ft N. of N. right-of-way fence; in SE. cor. of a pasture; a standard tablet in a concrete post, set flush with the ground and stamped "ET 5 JA 1961 998" 997.488
- 3.7 Reference Mark, 243 ft W. of tablet; 245 ft W., 32 ft N., and 4.6 ft lower than center of rd. at fence N., rail spike in power line pole 992.30
- 4.0 UE 5 JA A; T. 86 N., R. 14 W., near cor. secs. 7, 8, 17 and 18; 34 ft S., 30 ft E., and 2.0 ft lower than T-rd. E., rail spike in power line pole 980.44

WATERLOO QUAD. - 170

- 4.9 UE 5 JA B; T. 86 N., R. 14 W., near cor. secs. 8, 9, 16 and 17; 36 ft N., 32 ft W., and 0.7 ft higher than T-rd. N., rail spike in powerline pole 1001.34

LINE 3 (Cont'd)

FEET

WATERLOO QUAD. - 170

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 5.9 Hudson, 8.0 mi S. and 2.0 mi W. of; T. 86 N., R. 14 W., near cor. secs. 4, 5, 8 and 9; 23 ft N., 31 ft W., and 1.3 ft lower than crossroads; 4 ft NE. of fence cor. post; in concrete post, a standard tablet stamped "9 RSH 1961 1012"                                              | 1012.031 |
| 6.9 Reference Mark, 345 ft N. of tablet; 370 ft N., 34 ft W. of crossroads; 0.5 ft E. of fence line, a 1/2 in. steel reinforcing rod projecting 3 in. above ground                                                                                                                       | 1014.44  |
| 6.9 UE 9 RSH A; T. 86 and 87 N., R. 14 W., near cor. secs. 4, 5, 32 and 33; 2 ft N., 33 ft W., and 0.2 ft lower than rd. at fence E.-W.; rail spike in telephone pole                                                                                                                    | 994.56   |
| 7.9 UE 9 RSH B; T. 87 N., R. 14 W., near cor. secs. 28, 29, 32 and 33; 30 ft N., 36 ft W., and 0.7 ft lower than crossroads; rail spike in power line pole                                                                                                                               | 1007.66  |
| 8.5 Hudson, 6.0 mi S. and 2.0 mi W. of; T. 87 N., R. 14 W., near quarter cor. between secs. 28 and 29; 86 ft N., 31 ft E., of driveway E.; 4 ft SSE. of a telephone pole, a standard tablet in a concrete post set flush with the ground and stamped "ET 4 JA 1961 1020"                 | 1020.462 |
| 8.5 Reference Mark, 94 ft NW. of tablet; 155 ft N., 31 ft W., and 1.2 ft lower than rd. at drive E., rail spike in powerline pole                                                                                                                                                        | 1021.09  |
| 9.4 UE 4 JA A; T. 87 N., R. 14 W., near quarter cor. of secs. 20 and 21; 30 ft S., 30 ft E., and 2.2 ft lower than T-rd.E., rail spike in power line pole                                                                                                                                | 1018.15  |
| 10.3 Reference Mark, 122 ft SE. of tablet; 89 ft S. and 36 ft E. of RR. crossing; rail spike in powerline pole                                                                                                                                                                           | 977.04   |
| 10.3 Hudson, 3.5 mi S. and 2.0 mi W. of; T. 87 N., R. 14 W., near quarter cor. between secs. 16 and 17; 25 ft S., 37 ft W., and 1.0 ft higher than RR. crossing; 9 ft N. of a gate post and 3 ft W. of a telephone pole, in a concrete post, a standard tablet stamped "10 RSH 1961 982" | 981.775  |
| 10.9 UE 10 RSH A; T. 87 N., R. 14 W., near cor. secs. 8, 9, 16 and 17; 33 ft S., 34 ft E., and 0.8 ft lower than crossroads; rail spike in powerline pole                                                                                                                                | 948.95   |
| 12.1 Hudson, 2.25 mi S. and 2.0 mi W. of; T. 87 N., R. 14 W., near S. sixteenth cor. between secs. 4 and 5; 33 ft N. and 33 ft W. of field entrance E.; 13 ft N. and 33 ft W. of field entrance W., a standard tablet in a concrete post stamped "ET 3 JA 1961 906"                      | 905.804  |
| 12.1 Reference Mark, 118 ft NNW. of tablet; 150 ft N., 11 ft W., and 0.4 ft lower than rd. at field entrance E., chiseled square in top of concrete culvert headwall                                                                                                                     | 908.74   |

REINBECK QUAD. - 171

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 13.0 UE 3 JA A; T. 87 N., R. 14 W., near center of SW $\frac{1}{4}$ sec. 5; 40 ft N., 2 ft E., and 2.9 ft lower than rd. at fence N.-S., rail spike in powerline pole                                                                                                                                                                                             | 898.73  |
| 14.3 Hicks, about 0.25 mi N. along the C. and GW. RR. from its intersection with the C. and N.W. RR. at; 9 ft S. of pole 285+27 about 60 ft E. of a signal tower, 49 ft N. of the center of a rd. crossing, 44 ft E. of the center of the main track, and 4.5 ft W. of a fence cor.; a standard USC&GS disk stamped "J 11 1933" set in the top of a concrete post | 899.263 |

LINE 4

FEET

R. S. Heglin, 1961; Book CV-1382

WATERLOO QUAD. - 170

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 5.7 | UE 2 JA B; T. 88 N., R. 14 W., near cor. secs. 4, 5, 8 and 9; 33 ft S., 32 ft W., and 1.9 ft lower than crossroads; rail spike in powerline pole                                                                                               | 999.34  |
| 6.6 | Reference Mark, 147 ft NE. of tablet; 50 ft S. and 33 ft E. of T-rd. S., rail spike in powerline pole                                                                                                                                          | 978.38  |
| 6.6 | Hudson, 4.5 mi N. and 2.0 mi W. of; T. 88 and 89 N., R. 14 W., near cor. secs. 4, 5, 33 and 34; 50 ft N., 36 ft W., and 0.4 ft lower than T-rd. N., 2 ft SW. of fence cor. post; in concrete post, a standard tablet stamped "12 RSH 1961 977" | 977.518 |
| 7.7 | UE 12 RSH A; T. 89 N., R. 14 W., near cor. secs. 27, 28, 33 and 34; 10 ft S., 15 ft E. and 0.2 ft higher than center of bridge; chiseled square on top of SE. concrete wingwall Water elev. 923.1                                              | 931.98  |
| 8.6 | UE 12 RSH B; T. 89 N., R. 14 W., near cor. secs. 21, 22, 27 and 28; 5 ft N., 35 ft E., and 2.8 ft higher than rd. at fence W., rail spike in power line pole, painted                                                                          | 941.22  |

CEDAR FALLS QUAD. - 194

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 9.0 | Reference Mark, 79 ft SE. of tablet; 34 ft S., 27 ft W., and 2.1 ft lower than rd. at drive W., rail spike in powerline pole                                                                                                             | 971.04  |
| 9.0 | Hudson, 6.75 mi N. and 2.0 mi W. of; T. 89 N., R. 14 W., near S. sixteenth cor. between secs. 21 and 22; 27 ft N. and 28 ft W. of driveway W.; a standard tablet in a concrete post set flush with ground and stamped "ET 1 JA 1961 972" | 971.993 |