

THIRD-ORDER LEVELS
SEA LEVEL DATUM OF 1929

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

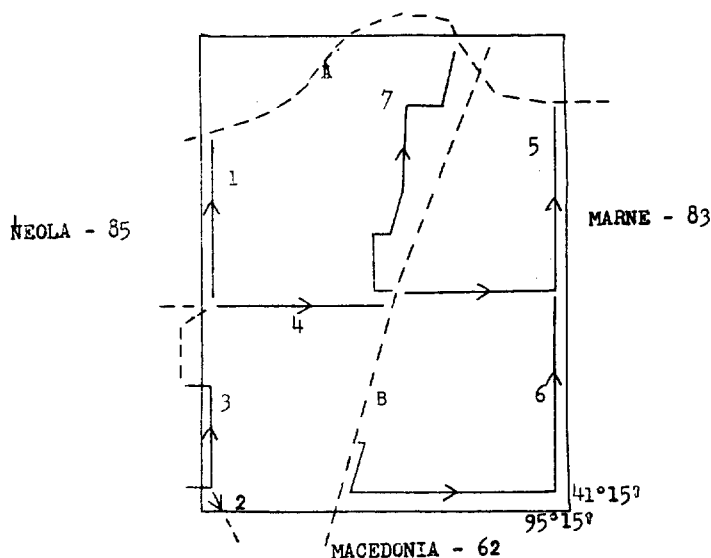
AVOCA QUADRANGLE
84 - IOWA
N4115-W9515/15

HARLAN - 107

Pottawattamie County

Edition of 9/11/62

PR: AH/mrk



USC&GS LEVELING LINES

- A. Council Bluffs to Des Moines, Iowa, First Order
1949, Line 19
- B. Henderson Area, Iowa, Second order,
1949, Line 99

LINE 1

NORTH ALONG NORTH PORTION OF WEST BORDER (R. E. Carey, 1955, Book GV 676)

NEOLA QUAD. - 85

FEET

- 13.3 Minden, 6.5 mi S. and 2.0 mi E. of, 482 ft S. and 32 ft E. of T-rd. W. which is near cor. secs. 13, 18, 19 and 24, T. 76 N., Rs. 40 and 41 W., 375 ft N. and 32 ft E. of RR. crossing, 3 ft N. and 1 ft W. of telephone pole, 1 ft W. of fence line, in concrete post; standard tablet stamped "73 RC 1955 1240" 1239.875
- 13.7 T. 76 N., Rs. 40 and 41 W., near quarter cor. between secs. 13 and 18, center of rd. at T-fence E. 1271.3
- 14.2 T. 76 N., Rs. 40 and 41 W., near cor. secs. 7, 12, 13 and 18, center of rd. at T-rd. E., 1293.7
- 14.5 T. 76 N., Rs. 40 and 41 W., near S. sixteenth cor. between secs. 7 and 12, center of bridge, nail and washer (18 ft above water level 6-14-55) 1226.3
- 14.8 T. 76 N., Rs. 40 and 41 W., center of rd. at private drive N. 1290.0
- 15.3 T. 76 N., Rs. 40 and 41 W., near cor. secs. 1, 6, 7, and 12, center of crossroads 1262.9
- 15.8 T. 76 N., Rs. 40 and 41 W., near quarter cor. between secs. 1 and 6, center of rd. at T-lane W. 1241.6
- 16.1 Minden, 3.5 mi S. and 2.0 mi W. of, 445 ft S. and 29 ft W. of rd. forks, which is near cor. secs. 1, 6, 31 and 36, Tps. 76 and 77 N., Rs. 40 and 41 W., 2 ft S. and 1 ft E. of cor. fence post of T-fence W., in concrete post; standard tablet stamped "74 RC 1955 1219" 1218.562
- 16.2 RM, about 450 ft N. and 100 ft W. of tablet, in the center of wooden floor of bridge; copper nail and washer (14.9 ft above water level 6/14/55) 1214.87

84 C

<u>LINE 1 (Cont)</u>	<u>NEOLA QUAD. 85</u>	<u>FEET</u>
16.5 Center of bridge, about 1000 ft E. of quarter cor. between secs. 1 and 36, Tps. 76 and 77 N., R. 41 W. (14.9 ft above water level 6/14/55)		1227.9
16.9 Tps. 76 and 77 N., R. 41 W., near quarter cor. between secs. 1 and 36, center of rd. at T-rd. N.		1256.2
17.2 T. 77 N., R. 41 W., near the center of sec. 36, center of rd. at E.-W. fence line		1295.2
17.7 T. 77 N., R. 41 W., near quarter cor. between secs 25 and 36, center of crossroads		1327.8
18.2 T. 77 N., R. 41 W., near the center of sec. 25, center of rd. at T-fence W.		1328.9
18.7 T. 77 N., R. 41 W., near quarter cor. between secs 24 and 25, center of Δ formed by rd. forks at T-rd. S.		1327.7
19.2 RM, 64 ft N. and 98 ft W. of tablet, 32 ft N. and 20 ft E. of private drive N., in root on S. side of a 12 in. elder tree; copper nail and washer		1315.95
19.2 Minden, 1.5 mi S. and 2.0 mi E. of, 32 ft S. and 242 ft W. of T-rd. N. which is near cor. s secs. 19, 24, 25 and 30, T. 77 N., Rs. 40 and 41 W., 32 ft S. and 118 ft E. of a private drive N., 1 ft N. of fence line, in concrete post; standard tablet stamped "75 RC 1955 1317"		1316.886
19.2 Center of rd. at T-rd. N., 32 ft N. and 242 ft E. of "75 RC"		1289.4
19.9 T. 77 N., Rs. 40 and 41 W., near quarter cor. between secs. 19 and 24, center of rd. at E.-W. fence line		1327.4
20.3 T. 77 N., Rs. 40 and 41 W., near cor. secs 13, 18, 19 and 24, center of crossroads		1345.2
20.8 T. 77 N., Rs. 40 and 41 W., near quarter cor. between secs. 13 and 18, center of rd. at T-fence E.		1324.3
21.3 T. 77 N., Rs. 40 and 41 W., near cor. secs. 12, 13, 7 and 18, center of Hwy. 64 at T-rd. S.		1344.3
21.6 3.0 mi NE. along the Chicago, Rock Island and Pacific RR. from the station at Minden, Pottawattamie County, 3.5 mi SW. of the station at Shelby, 0.2 mi N. along a dirt rd. from State Hwy. 64, 6 poles E. of milepost 471, at a rd. crossing, 84 ft S. of the S. rail of the track, 28 ft E. of the center of the rd., 22 ft S. of the center of a gate 1.1 ft W. of a fence and 1.4 ft N. of a white wooden witness post. A standard disk stamped "L 146 1949" and set in the top of a concrete post projecting 0.4 ft above ground (RECOVERED IN GOOD CONDITION 6/15/55)		1304.548

LINE 2

SOUTH IN SW. COR. OF QUAD. (R. E. Carey, 1955, Book CV 676)

NEOLA QUAD. 85

4.9 RM, 12 ft S. and 213 ft E. of tablet, 20 ft N. and 25 ft E. of crossroads; on N. end pipe culvert, painted square	1224.43
4.9 Carson, 1.8 mi N. and 4.0 mi W. of, 2.0 mi N. and 6.0 mi E. of Treynor, 32 ft N. and 188 ft W. of crossroads which are near cor. secs. 25, 30, 31 and 36, T. 75 N., Rs. 40 and 41 W., 3 ft E. of telephone pole, 1 ft S. of farmyard fence, in concrete post; standard tablet stamped "80 RC 1955 1215"	1215.208
5.4 T. 75 N., R. 41 W., near quarter cor. between secs. 25 and 36, center of rd. at T-fence S.	1280.0

LINE 3

N. ALONG S. PORTION OF W. BORDER (R. E. Carey, 1955, Book CV 676) <u>NEOLA QUAD. - 85</u>		<u>FEET</u>
0.0	USGS "80 RC 1955" (Described in Line 2)	1215.208
0.5	T. 75 N., Rs. 40 and 41 W., near quarter cor. between secs. 25 and 30, center of rd. at E.-W. fence line	1263.1
1.0	T. 75 N., Rs. 40 and 41 W., near cor. secs. 19, 24, 25 and 30, center of crossroads	1191.8
1.4	T. 75 N., Rs. 40 and 41 W., about 0.15 mi S. quarter cor. between secs. 19 and 24, center of bridge; copper nail and washer	1147.2
1.5	T. 75 N., Rs. 40 and 41 W., near quarter cor. between secs. 19 and 24, center of rd. at T-fence W.	1170.0
2.0	T. 75 N., Rs. 40 and 41 W., near cor. secs. 13, 18, 19 and 24, center of Hwy. 92 and 6, in line with rd. S.	1157.0
2.3	Center of rd. at telephone line crossing near quarter cor. between secs. 13 and 18, T. 75 N., Rs. 40 and 41 W., and 1050 ft S. of "83 RC"	1202.1
2.8	RM, about 50 ft SW. of tablet, 30 ft W. center of rd., in forks of a 4 in. twin box elder tree; copper nail and washer	1265.55
2.8	Carson, 4.5 mi N. and 4.0 mi W. of, 1050 ft N. and 29 ft E. of center of rd. at telephone line crossing which is near quarter cor. between secs. 13 and 18, T. 75 N., Rs. 40 and 41 W., 103 ft S. and 29 ft E. of crown of hill and field drive E., 1 ft W. of fence line, in concrete post; standard tablet stamped "83 RC 1955 1265"	1265.089
3.1	T. 75 N., Rs. 40 and 41 W., near cor. secs. 7, 12, 13 and 18, center of crossroads	1252.7
3.6	T. 75 N., Rs. 40 and 41 W., near quarter cor. between secs. 7 and 12, center of rd. at T-fence W.	1209.0
3.8	T. 75 N., Rs. 40 and 41 W., about 0.15 mi N. quarter cor. between secs. 7 and 12 center of bridge, nail and washer (15.6 ft above water level 6/23/55)	1171.9

LINE 4

E. THROUGH CENTER OF WEST PORTION OF QUADRANGLE Book CV 676) (R. E. Carey, 1955, <u>NEOLA QUAD. - 85</u>		
0.0	USGS "73 RC 1955" (described in Line 1)	1239.875
0.5	T. 76 N., R. 40 W., near quarter cor. between secs. 18 and 19, center of bridge (9.6 ft above water level 6/17/55)	1170.6
1.0	T. 76 N., R. 40 W., near cor. secs. 17, 18, 19 and 20, center of crossroads	1211.9
1.2	Center of bridge, about 710 ft E. cor. secs. 17, 18, 19 and 20, T. 76 N., R. 40 W., (16.7 ft above water level 6/27/55)	1164.0
1.4	T. 76 N., R. 40 W., about 0.15 mi W. quarter cor. between secs. 17 and 20, crown of hill at field entrances N.-S.	1239.8
1.7	Center of bridge, about 0.2 mi E. quarter cor. between secs. 17 and 20, T. 76 N., R. 40 W. (18.2 ft above water level 6/27/55)	1176.7
2.0	T. 76 N., R. 40 W., near cor. secs. 16, 17, 20 and 21, center of crossroads	1189.0

4
 AVOCA QUADRANGLE
 84 - IOWA

<u>LINE 4 (Cont'd)</u>	<u>AVOCA QUAD. - 84</u>	<u>FEET</u>
2.3 Center of bridge near W. sixteenth cor. between secs. 16 and 21, T. 76 N., R. 40 W., (25 ft above water level 6/27/55)		1152.6
2.5 Hancock, 1.0 mi S. and 4.5 mi W. of, near quarter cor. between secs. 16 and 21, T. 76 N., R. 40 W., 31 ft S., 46 ft W. and 2.5 ft lower than center of rd. at T-fence N., 31 ft S. and 15 ft E. of center of rd. at field entrance S., 1 ft N. of fence line, in concrete post; standard tablet stamped '86 RC 1955 1210"		1210.306
2.5 Center of rd. at T-fence N., 31 ft N. and 46 ft E. of '86 RC"		1212.8
3.0 T. 76 N., R. 40 W., near cor. secs. 15, 16, 21 and 22, center of crossroads		1238.3
3.6 T. 76 N., R. 40 W., near quarter cor. between secs. 15 and 22, center of rd. at T-fence N.		1206.0
4.1 T. 76 N., R. 40 W., near cor. secs. 14, 15, 22 and 23, center of crossroads		1232.3
4.6 T. 76 N., R. 40 W., near quarter cor. between secs. 14 and 23, center of rd. at T-fence N.		1237.4
4.9 RM, 88 ft E. of tablet, 37 ft S. center of rd., in E. side of an 18 in. walnut tree about 2 ft above ground, a RR. spike marked 'BM 1200.66" NOTE: Hwy. of RR. B.M. Painted 'RM"		1200.71
4.9 Hancock, 1.0 mi S. and 2.25 mi W. of, near E. sixteenth cor. between secs. 14 and 23, T. 76 N., R. 40 W., 199 ft N. of the center of the Rock Island RR. track, 36 ft S. and 20 ft E. of rd. at T-fence N., 5 ft S. and 1 ft E. of fence corner, in concrete post; standard tablet stamped '87 RC 1955 1200"		1199.446
5.7 T. 76 N., R. 40 W., near S. central sixteenth cor. of sec. 13, center of R. I. RR. overpass No. 4603 over sec. rd.; copper nail and washer in cross tie		1165.4
6.6 T. 76 N., R. 39 W., in SW $\frac{1}{4}$ of sec. 18, center of R. I. RR. bridge over Nishnabotna River, copper nail and washer in cross tie		1128.9
7.1 Center of Hwy. 59 under R. I. overpass, 320 ft N. and 110 ft W. of "J 147"		1114.1
7.1 0.8 mi SW. along U. S. Hwy. No. 59 from the Hancock School at Hancock, 111 ft SE. of the center of the hwy., 137 ft S. of the S. cor. of bridge No. 54, 15 ft NE. of the center of a field rd. leading SE. into a field, 1.5 ft NW. of the SE. right-of-way fence, 1.5 ft SW. of a reference post, set in the top of a concrete post projecting 0.5 ft above the ground; a USC&GS standard disk stamped "J 147 1949"		1108.397

LINE 5

E. THROUGH CENTER OF E. PORTION OF QUAD. THENCE N..(A. J. Keepes, 1962, Book CV 1448)

AVOCA QUAD. 84

1 4 0.0 H 147 RESET 1.2 mi E. along Hwy. 59 from Hancock School at Hancock at the S. entrance to the Oak Hill Cemetery, 41 ft N., 25 ft E. of driveway N. leading into cemetery, 2 ft S. of cemetery fence, set in a concrete post, a standard disk stamped "H 147 RESET 1954"		1216.956
4 0.5 UE H 147 A, 0.5 mi E. of disk center of crossroads, painted "Centerline 1255.2"		1255.2

<u>LINE 5 (Cont'd)</u>		<u>AVOCA QUAD. 84</u>	<u>FEET</u>
1	5	1.5 UE H 147 B, 1.5 mi E. of disk, 34 ft N., 23 ft E. and 3.2 ft lower than crossroads; on E. end of a 36 in. metal culvert, a punched hole painted "UE 1235.3"	1235.26
7	2.6	Reference mark, 6 ft N. of, 127 ft E. of tablet at N. base of a 36 in. elm tree, a RR. spike painted "RM"	1326.60
7	2.6	Hancock, 0.5 mi N., 3.9 mi E. of, T. 76 N., R. 39 W., near cor. secs. 11, 12, 13 and 14, 40 ft S., 309 ft W. and 2.3 ft lower than center of crossroads, 40 ft S., 12 ft W. of field entrance S., 5 ft S., 2 ft W. of a fence cor.; set in a concrete post, a standard tablet stamped "1 KEE 1962"	1323.314
9	3.6	UE 1 KEE A, 1.0 mi E. of tablet at NE. cor. of concrete bridge, 17 ft N., 47 ft E. and 0.1 ft higher than center of bridge; a chiseled square painted "UE 1217.6"	1217.57
10	4.6	UE 1 KEE B, 2.0 mi E. of tablet, 33 ft S., 33 ft W. and 2.7 ft lower than crossroads, on W. end of a 24 in. metal culvert, a punched hole painted "UE 1283.2"	1283.13
11	4.9	R. M. 60 ft S., 65 ft E. of tablet, at W. base of a telephone pole, a RR. spike painted "RM"	1325.51
11	4.9	Hancock, 0.7 mi N., 6.0 mi E. of, 5.8 mi S., 1.5 mi W. of Walnut tree, T. 76 N., R. 38 W., near S. sixteenth cor. secs. 7 and 8, 81 ft S., 34 ft W. and 3.3 ft lower than private drive E., 21 ft S., 24 ft W. of fence W., 6 ft S. of S. gate post; set in a concrete post, a standard tablet stamped "2 KEE 1962"	1331.349
12	5.6	UE 2 KEE A, 0.7 mi N. of tablet, center of crossroads painted "Centerline 1290.4"	1290.3
13	6.5	UE 2 KEE B, 1.7 mi N. of tablet, 17 ft N., 38 ft E. and 1.2 ft higher than crossroads, on N. end of a 24 in. metal culvert, a punched hole painted "UE 1328.2"	1328.12
15	7.5	UE 2 KEE C, 2.7 mi N. of tablet, 19 ft N., 32 ft E. and 2.8 ft lower than crossroads, on N. end of a 24 in. metal culvert, a punched hole painted "UE 1258.9"	1258.82
16	7.9	Reference mark, 74 ft S., 67 ft E. of tablet at N. base of a telephone pole, a RR. spike painted "RM"	1297.25
16	7.9	Walnut, 2.7 mi S., 1.5 mi W. of, T. 77 N., R. 38 W., near S. sixteenth cor. secs. 29 and 30, 167 ft N., 33 ft W. and 5.3 ft higher than field approach W.; a crossroad, (W.) from a small tree, 1.5 ft E. of N.-S. fence, set in a concrete post, a standard tablet stamped "3 KEE 1962"	1301.443
17	8.6	UE 3 KEE A, 0.7 mi N. of tablet, 50 ft N., 27 ft E. and 2.7 ft lower than ** a 18 in. metal culvert, at a field approach E.; a punched hole painted "UE 1345.9" ** crossroad on N. end of	1345.86
18	9.6	UE 3 KEE B, 1.7 mi N. of tablet, center of T-rd. S., painted "Centerline 1348.6"	1348.6
20	11.1	Walnut, 1.2 mi W. along C. R. I. RR. from station at, at a rd. crossing, 97 ft SE. of center of State Hwy. 83; 30 ft NW. of NW. rail; 35 ft N. of center of E.-W. rd.; 31 ft E. of N.-S. rd.; 14 ft NW. of a pole; 16 ft SE. of another pole and 1.5 ft E. of a witness post, a standard disk stamped "A 148 1949" and set in top of a concrete post.	1300.962

LINE 6

FEET

E. ALONG E. PORTION OF S. BORDER, THENCE N. ALONG E. BORDER (A. J. Keepes, 1962, Book CV 1448)

- | | | | | |
|----|-----|-----|---|----------|
| 1 | 23 | 0.0 | Oakland, 1.9 mi S. along U. S. Hwy. 59 from Citizens State Bank, 0.6 mi S. of junction of U. S. Hwy. 59 and 6; at T-junction Hwy. and private drive E. to a farm house, 80 ft E. of center of Hwy. 76.5 ft SE. of center of E. end of culvert # 37, 21 ft S. of center of private drive E., about 3.0 ft below rd. level (Hwy.) 1.3 ft W. of W. right-of-way fence; set in a concrete post projecting 0.2 ft above ground. USC&GS disk stamped "Q 149 1949" | 1074.187 |
| 1 | 24 | 1.2 | Oakland, 3.1 mi S. along U. S. Hwy. 59 from Citizens State Bank at, about 1.5 mi N. of a farm house on W. side of Hwy. 0.1 mi S. of pipe line crossing, 51 ft W., of and 25 ft S. of center of field rd. leading W. into a field, 1.4 ft S. of a reference post, set in a concrete post. USC&GS disk stamped "P 149 1949" | 1139.012 |
| 25 | 1.5 | | UE P 149 A, 0.3 mi S. of disk, center of Hwy. 59 at gravel rd. crossing, a copper nail and washer painted "Centerline 1133.3" | 1133.30 |
| 27 | 2.5 | | UE P 149 B, 0.3 mi S., 1.0 mi E. of disk center of crossroads, painted "Centerline 1243.0" | 1243.0 |
| 29 | 3.5 | | UE P 149-C, 0.3 mi S., 2.0 mi E. of disk, 17 ft N., 93 ft W. and 5.5 ft lower than T-rd. N., at offset crossroads, on N. end of a 9 ft metal culvert, a punched hole painted "UE 1124.7" | 1124.73 |
| 30 | 3.8 | | Carson, 1.7 mi N., 3.1 mi E. of, 3.5 mi S., 2.0 mi E. of Oakland, T. 75 N., R. 39 W., near W. sixteenth cor. secs. 29 and 32, 37 ft N., 2 ft W. and 2.6 ft higher than rd. at fence N., 1 ft N., 1 ft W. of fence corner, set in a concrete post, a standard tablet stamped "4 KEE 1962" | 1192.364 |
| 31 | 4.6 | | UE 4 KEE A, 0.8 mi E. of tablet, 18 ft N., 25 ft E. and 2.3 ft lower than crossroads on N. end of a 24 in. metal culvert, a punched hole painted "UE 1241.5" | 1241.59 |
| 33 | 5.5 | | UE 4 KEE B, 1.8 mi E. of tablet, center of crossroads painted "Centerline 1235.3" | 1235.4 |
| 35 | 6.5 | | Oakland, 3.5 mi S., 4.5 mi E. of, T. 75 N., R. 39 W., at cor. secs. 26, 27, 34 and 35, 37 ft N., 67 ft W. and 5.2 ft higher than crossroads, 1.5 ft S., 38 ft W. of a fence corner post, set in a concrete post, a standard tablet stamped "5 KEE 1962" | 1249.745 |
| 36 | 7.2 | | UE 5 KEE A, 0.5 mi E. of tablet, 13 ft N., 236 ft E. of crossroads, at a metal culvert, the point of a piece of iron painted "UE 1231.6" | 1231.7 |
| 37 | 7.6 | | UE 5 KEE B, 1.0 mi E. of tablet, 86 ft S., 18 ft E. and 2.8 ft lower than T-rd. S., on E. end of a 36 in. metal culvert, a punched hole painted "UE 1210.3" | 1210.35 |
| 39 | 8.5 | | UE 5 KEE C, 2.0 mi E. of tablet, 25 ft S., 6 ft W. and 2.1 ft lower than T-rd. N., on W. end of a 24 in. metal culvert, a punched hole painted "UE 1256.4" | 1256.46 |
| 40 | 9.6 | | Reference mark, 150 ft NW. of tablet, 5 ft S., 5 ft W. of SW. cor. of abandoned school building, 1.0 ft S. of a water pump, on concrete foundation, a chiseled square painted "RM 1304.8" | 1304.96 |
| 40 | 9.6 | | Oakland, 3.5 mi S., 7.5 mi E. of, T. 75 N., R. 38 W.; at cor. secs. 30, 31, 29, and 32, 36 ft S., 131 ft E. and 2.2 ft higher than crossroads, 1.5 ft S., 100 ft E. of a fence corner post, set in a concrete post, a standard tablet stamped "6 KEE 1962" | 1301.761 |

<u>LINE 6 (Cont'd)</u>		<u>AVOCA QUAD. 84</u>	<u>FEET</u>
1 41 10.6	UE 6 KEE A, 1.0 mi N. of tablet 18 ft N., 22 ft W. and 1.7 ft lower than crossroads, on N. end of a 24 in. metal culvert, a punched hole painted "UE 1306.8"		1306.95
42 11.6	UE 6 KEE B, 2.1 mi N. of tablet, 177 ft N., 24 ft W. and 14.2 ft lower than crossroads, on S. end of a 24 in. metal culvert, at a field approach W.; a punched hole painted "UE 1255.7"		1255.81
43 12.5	Oakland, 0.5 mi S., 7.5 mi E. of, 5.6 mi S., 6.5 mi E. of Hancock, T. 75 N., R. 38 W.; near cor. secs. 7, 8, 17 and 18, 26 ft N., 48 ft W. and 0.2 ft higher than private drive W.; 2 ft S., 17 ft W. of a fence corner post; 18 ft E. of a power pole painted "BM 1303.3" set in a concrete post, a standard tablet stamped "7 KEE 1962"		1303.453
45 13.6	UE 7 KEE A, 1.1 mi N. of tablet, approximately 630 ft E. of hwy. 6 at gravel rd. crossing, 18 ft N. and 1.0 ft lower than center of hwy.; in center of N. headwall of a concrete box culvert, a chiseled square painted "UE 1281.7"		1281.85
46 14.6	UE 7 KEE B, 2.1 mi N. of tablet, 23 ft N., 18 ft W. and 4.5 ft lower than crossroads; on W. end of a 24 in. metal culvert, a punched hole painted "UE 1330.0"		1330.18
48 15.7	UE 7 KEE C, 3.1 mi N. of tablet, 140 ft N., 69 ft W., and 14.6 ft higher than crossroads, 9 ft N., 8 ft E. of SE. cor. of abandoned school; on SE. cor. of bottom concrete step, a chiseled square painted "UE 1316.5"		1316.66
49 16.1	Hancock, 2.6 mi S., 6.5 mi E. of, T. 76 N., R. 38 W.; near S. sixteenth cor. secs. 29 and 30, 26 ft N., 30 ft E. and 3.7 ft lower than private drive W.; 3 ft W. of a fence; 1.5 ft W. of a telephone pole painted "BM 13360" set in a concrete post, a standard tablet stamped "8 KEE 1962"		1336.233
50 16.7	UE 8 KEE A, 0.6 mi N. of tablet, 317 ft N., 23 ft E. and 11.8 ft lower than rd. at E.-W. fence, on E. end of a 24 in. metal culvert, a punched hole painted "UE 1313.6"		1313.79
51 17.8	UE 8 KEE B, 1.6 mi N. of tablet, 14 ft N., 64 ft E. and 1.7 ft lower than crossroads; on N. end of a 24 in. metal culvert, a punched hole painted "UE 1311.3"		1311.49
52 18.6	UE 1 KEE B, (Described in Line 5)		1283.13

LINE 7

NORTH THROUGH CENTER OF N. PORTION OF QUAD. (A. J. Keepes, 1962, Book CV 1448)

1 54 0.0	H 147 RESET (Described Line 5)	<u>AVOCA QUAD. 84</u>	1216.956
59 1.8	Gauging Station West Nishnabotna River at Hancock, Iowa, B. M. No. 3, chiseled square on curb on left downstream end of bridge (SE. cor. of bridge) painted "UE 1116.2"		1115.920
59 1.8	Hancock Iowa, about 0.6 mi W. of, at Gauging station, on W. Nishnabotna River on curb on right downstream end of bridge (SW. cor. of bridge) B. M. No. 1, a chiseled square painted "UE 1115.8"		1115.76
60 3.2	Hancock, 1.5 mi N., 1.25 mi W. of; T. 76 N., R. 39 W., $\frac{1}{4}$ mi W. of cor. secs. 5, 6, 7 and 8, 125 ft N., 15 ft W. and 2.9 ft lower than private drive S. at N. end of curve in rd.; on W. end of a 24 in. metal culvert, a punched hole painted "UE 1128.1"		1128.10

LINE 7 (Cont'd)	AVOCA QUAD. 84	FEET
1 61 3.7 UE T 149 B, 2.0 mi N. 0.6 mi W. of disk; 22 ft S., 32 ft W. and 1.6 ft lower than T-rd. S., on S. end of an 18 in. metal culvert, a punched hole painted "UE 1133.2"		1133.21
62 4.9 UE T 149 C, 3.0 mi N. and 0.6 mi W. of disk; 20 ft N., 20 ft W. and 0.1 ft lower than T-rd. W., on NW. end of a 36 in. metal culvert, a punched hole painted "UE 1123.2"		1123.26
63 5.4 Reference mark, 41 ft N., 64 ft W. of tablet, on N. end of an 18 in. metal culvert, at drive W., a punched hole painted "RM"		1122.44
63 5.4 Hancock, 3.5 mi N. of, 3.0 mi S., 1.5 mi W. of Avoca, T. 77 N., R. 39 W., near cor. secs. 29, 30, 31 and 32, 19 ft S., 49 ft E. and 5.8 ft lower than drive W.; 2.5 ft N., 14 ft E. of fence corner, 1.5 ft N. of an anchor of a brace pole, set in a concrete post, a standard tablet stamped "9 KEE 1962"		1120.130
64 6.5 UE 9 KEE A, 1.0 mi N. of tablet, 16 ft S., 26 ft W. and 1.4 ft lower than T-rd. W. on S. end of a 24 in. metal culvert, a punched hole painted "UE 1132.2"		1132.19
65 7.5 UE 9 KEE B, 2.0 mi N. of tablet, 20 ft N., 20 ft W. and 1.3 ft lower than T-rd. W.; on W. end of a 24 in. metal culvert, a punched hole painted "UE 1128.3"		1128.33
66 8.0 UE 9 KEE C, 2.5 mi N. of tablet, center of T-rd. E. painted "Centerline 1141.2"		1141.3
67 8.6 UE 9 KEE D, 2.5 mi N. 0.5 mi E. of tablet, at a steel bridge over West River, the top of bolt at SE. cor. of bridge painted "UE 1131.2"		1131.20
68 9.5 Avoca, 0.2 mi W. along C. R. I. and P. RR. from station, 59.4 ft SW. of SW. cor. of sec. house; at a rd. crossing, 148 ft S. of S. rail of main track, 65 ft SE. of a crossing warning sign; 52 ft E. of center of Pine Street, 1.1 ft N. of a fence, a standard disk stamped "R 146 1946" and set in a concrete post.		1137.681