

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Final Adjustment of 1974

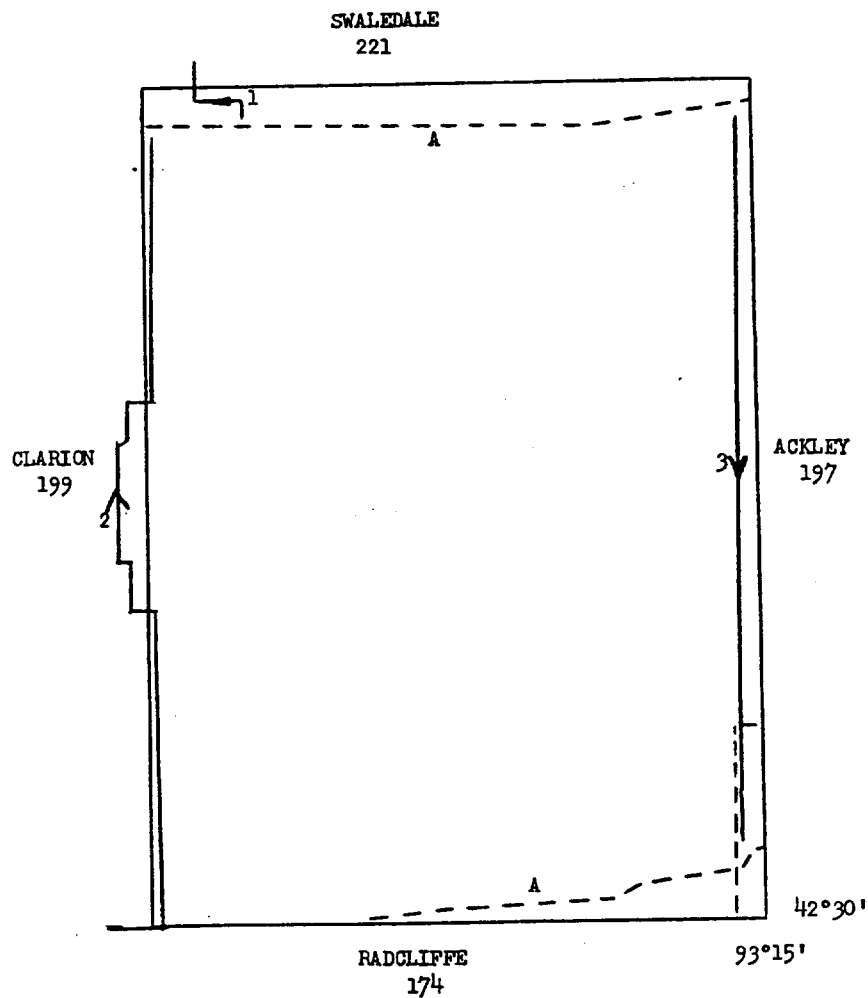
Franklin and Hardie Counties

PR: AKH/cb

Edition of: 1-1-75

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42-093-13
POPEJOY QUADRANGLE
198 - IOWA
N4230-W9315/15
DIAGRAM NK 15-5
WATERLOO



N.G.S. (US&GS) VERTICAL CONTROL DATA
A. Quadrangle 420931

198 B

LINE 1

FEET

G. Sandul, 1972; Book CV-2850

POPEJOY QUAD. - 198

- | | | | | |
|---|-----|--|---|----------|
| 4 | 1 | 0.0 | Coulter, 4.4 mi W. along the Chicago Great Western RR. from the station at, near quarter cor. between secs. 32 and 33, T. 92 N., R. 22 W., 117 ft E. along RR. from centerline of N.-S. gravel rd. grade crossing 52.4 ft N. of the N. rail, 85 ft E. of a right-of-way fence corner, 2.0 ft S. of fence, and 0.4 ft S. of white witness sign, set on the top of concrete post flush with ground, a standard disk stamped "V 28 1934" | 1250.713 |
| | | | | |
| 1 | 0.5 | UE V 28 A, 0.5 mi N. of BM along gravel rd., near cor. secs. 28, 29, 32 and 33, T. 92 N., R. 22 W., 14 ft N. and 62 ft W. of centerline of crossroads, (E.-W. State Hwy. 3), on top in center of N. guard rail of concrete box culvert, a chiseled square; painted "UE" | 1249.07 | |
| | | | | |
| 2 | 1.5 | Rowan No. 2 1938, 126.1 ft SE. of triangulation station, 16.5 ft SW. of SW. edge of storage bin (round metal), 2.7 ft NE. of 12-in. tree and 4.8 ft SE. of white snow fence, top of concrete post projecting 5-in., a standard disk stamped "ROWAN NO. 2 1938" | 1278.455 | |
| | | | | |
| 3 | 1.5 | Rowan No. 1 1938, 65.8 ft NE. of triangulation station, 83.8 ft E. along fence from hedge S. and power pole, 0.6 ft S. of fence, top of concrete post projecting 3-in., a standard disk stamped "ROWAN NO. 1 1938" | 1281.374 | |
| | | | | |
| 4 | 1.5 | Rowan 1938 Triangulation station. Alexander, 4.0 mi S. of, about 0.15 mi NE. of SW. cor. of sec. 29, T. 92 N., R. 22 W., 208 ft NW. of NW. corner of large white house, 42.8 ft S. and 30.0 ft E. of E.-W. fence at hedge S. and power pole at NW. corner of yard, 19.0 ft NW. of 36-in. maple tree, top of concrete post, a standard disk stamped "ROWAN 1938" NOTE: Projecting 4-in. | 1281.680 | |

SWALEDALE QUAD. - 221

- | | | | |
|---|-----|--|----------|
| 5 | 2.4 | UE Rowan A, 0.8 mi N. of station along State Hwy. 107, near corner secs. 19, 20, 29 and 30, T. 92 N., R. 22 W., about 700 ft S. of T-rd. E., 23 ft normal and on E. side of centerline of hwy., in top in center of E. headwall of concrete box culvert, a brass bolt stamped "I.H.C. BM"; painted "UE" | 1240.03 |
| | | | |
| 6 | 3.5 | UE Rowan B, 1.9 mi N. of BM, along State Hwy. 107, cor. secs. 17, 18, 19 and 20, T. 92 N., R. 22 W., centerline of crossroads, top of RR. spike | 1262.10 |
| | | | |
| 7 | 4.1 | Alexander, 1.4 mi S. of, about 700 ft N. of E.-W. fence at quarter cor. between secs. 17 and 18, T. 92 N., R. 22 W., on State Hwy. 107, 23 ft normal and on E. side of centerline of hwy., set on top in center of E. headwall of 7 ft concrete box culvert, a standard tablet stamped "34 SAN 1972", painted "BM" | 1249.622 |

LINE 2

C.D. Lien, 1974; Book CV-3126

JEWELL QUAD. - 175

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|----|-----|---|--|----------|
| 1 | 10 | 2.5 | BM, Williams, jct. U.S. Hwy. 20 and county road 23, 1 mi N., 1.5 mi E. of; T. 89 N., R. 23 W., sec. cors. 23, 24, 25 and 26, 219.8 ft S., 12 ft W. of; and 6.5 ft lower than centerline of road at T-rd. S., at offset crossroads, cemented in the center of the W. headwall of a concrete box culvert, a standard tablet stamped "1 CDL 1974" | 1159.973 |
| | | | | |
| 11 | 2.5 | Reference mark, 68.9 ft N., 49.2 ft E. of tablet, 150.9 ft S., 26 ft E. of centerline of road, at T-rd. S., 9 ft N., 4 ft W. of a telephone pole and 2 ft W. of a right-of-way fence, a chiseled square on rock | 1159.26 | |

LINE 2 (Cont'd)

POPEJOY QUAD. - 198

FEET

1	14	3.6	UE 1 A, 1 mi E. along road from tablet, 21 ft E., 15 ft S. of; and 2.4 ft lower than centerline of road at T-rd. W., a chiseled square on a concrete culvert	1142.71
16		4.6	UE 1 B, 1 mi E., 1 mi N. of tablet, a copper nail and washer in centerline of road at T-rd. S. at offset crossroads	1149.45
20		5.6	Williams at the jct. of U.S. Hwy. 20 and county road D-23, 3 mi N., 2.5 mi E. of, T. 89 N., R. 22 and 23 W., sec. cors. 1, 6, 7 and 12, 26.2 ft S., 62 ft W. of, and 2.9 ft lower than crossroads, 26.2 ft S. of centerline of the W. end of a bridge over drainage ditch and 8.2 ft N. of a fence post, with a witness sign, set on top of a 0.5 in. copper coated steel rod encircled by a 6-in. tile set flush with ground on W. bank of drainage ditch, a standard tablet stamped "2 CDL 1974"	1144.436
21		5.6	Reference mark, 20 ft N., 25 ft W. of crossroads, 20 ft N. of the centerline of the E. end of bridge over drainage ditch and 46.2 ft N., 37 ft E. of tablet, a copper nail and washer on top of a bridge piling in the NE. cor. of bridge	1145.64
23		6.6	UE 2 A, 1 mi N. along road from tablet, 34 ft S., 22 ft E. of; and 2.3 ft lower than crossroads, a chiseled square on a concrete culvert	1146.06
27		7.6	UE 2 B, 2 mi N. along road from tablet, 52.5 ft N., 39.4 ft E. of; and 2.3 ft lower than centerline of T-rd. E. on top of a 0.5 in. steel rod which projects 0.2 ft above ground	1152.16
31		8.8	Reference mark, 27 ft E. of centerline of road at E. and W. fence lines and 41.4 ft E., 19.7 ft N. of tablet, a chiseled square on the S. end of a concrete culvert under field entrance E.	1146.73
32		8.8	Williams at the jct. of U.S. Hwy. 20 and county road D-23, 6.25 mi N., 2.5 mi E. of; Dows at RR. crossing main Street, 5.75 mi S. of; T. 90 N., R. 22 W., and 23 W., near the S. sixteenth cor. between secs. 25 and 30, 19.7 ft S., 14.4 ft W. of, and 0.4 ft lower than centerline of road at E.-W. fence lines, cemented in the center of headwall for concrete culvert, a standard tablet stamped "3 CDL 1974"	1148.971
35		9.9	UE 3 A, 1.04 mi N. along road from tablet, 45.9 ft N., 32.8 ft E. of; and 2.3 ft lower than T-rd. E. and 1.5 ft N., 0.4 ft W. of a fence corner on top of a 0.5 in. iron rod which projects 0.3 ft above ground	1152.87
<u>CLARION QUAD. - 199 IA.</u>				
38		10.8	UE 3 B, 1.50 mi N., 0.5 mi W. along road from tablet, a copper nail and washer in centerline of bridge	1141.82
40		11.6	Dows, Main street at RR. crossing, 3.5 mi S., 0.5 mi W. of; T. 90 N., R. 23 W., at the center of sec. 13, 19 ft N., 27 ft E. of; and 0.6 ft lower than T-rd. S. cemented in the center of a round 3 ft concrete culvert, a standard tablet stamped "4 CDL 1974"	1139.989
41		11.6	Reference mark, 10 ft N., 21 ft E. of tablet and 29 ft N., 48 ft E. of T-rd. S., a punched hole in a metal culvert	1138.37
44		12.7	UE 4 A, 0.8 mi N. and 0.33 mi W. of tablet, 15 ft N., 17.6 ft E. of; and 0.3 ft higher than centerline of bridge and 30 ft S., 17.6 ft E. of centerline of road at drive W. a chiseled square on the NE. cor. of bridge	1142.77
46		13.7	UE 4 B, 1.7 mi N., 0.33 mi W. of tablet, a copper nail and washer centerline of road at T-rd. W.	1154.20

LINE 2 (Cont'd)

CLARION QUAD. - 199 IA.

FEET

- 1 50 14.6 Dows, Main Street at RR. crossing, 0.75 mi S., 0.5 mi W. of, T. 91 N., R. 23 W., near the quarter cor. between secs. 1 and 36, 558 ft NE. of T-rd. W., 45.5 ft E. of; and 5.4 ft lower than centerline of road over drain, and 288 ft N. of centerline of road at a private drive S. cemented in the top of a round 6 ft concrete culvert, a standard tablet stamped "5 CDL 1974" 1147.074
- 51 15.3 UE 5 A, 0.7 mi N. along road, from tablet, a copper nail and washer in centerline of road at T-street E. Burrows Street and Shepherd Street 1166.76

POPEJOY QUAD. - 198 IA.

- 53 16.6 UE 5 B, 1.4 mi N., 0.5 mi E. of tablet and 0.7 mi N. of Dows at Main Street and RR. crossing, a chiseled square in the centerline of road at T-rd. E. 1153.80
- 55 17.1 Dows Main Street and RR. crossing, 1.25 mi N. of, T. 91 N., R. 22 and 23 W., near the S. sixteenth cor. between secs. 19 and 24, 102 ft N., 12 ft E. of; and 0.6 ft higher than centerline of bridge over the Iowa River cemented in the NE. cor. of bridge, a standard tablet stamped "6 CDL 1974" 1152.598
- 56 17.3 Reference mark, 633 ft N., 45 ft W. of tablet and 33 ft W. of centerline of road over drain, a punched hole in a metal culvert 1140.55
- 58 18.1 UE 6 A, 0.96 mi N. along road from tablet, a copper nail and washer in centerline of crossroads 1201.01
- 60 18.8 UE 6 B, 2 mi N. along road from tablet, 52.5 ft S., 29.5 ft W. of; and 3.8 ft lower than centerline of road at a private drive W., a chiseled square on a concrete footing 1212.79
- 64 19.7 Dows, Main Street at RR. crossing, 4 mi N. of; T. 91 N., R. 22 and 23 W., sec. cors. 1, 6, 7 and 12, 321.5 ft W., 12.5 ft S. of and 2.2 ft lower than crossroads cemented in the center of a headwall for 4 ft concrete box culvert, a standard tablet stamped "7 CDL 1964" (Maybe erroneously stamped-should be "1974") 1226.520
- 65 19.8 Reference mark, 39 ft S., 19 ft W. of crossroads, and 26.5 ft S., 303 ft E. of tablet, a chiseled square on a concrete culvert 1224.83
- 68 20.8 UE 7 A, 1 mi N. along road from tablet, 23.0 ft N., 42.7 ft W. of and 3.8 ft lower than crossroads; a chiseled square on a concrete culvert 1229.36
- 69 21.4 EM, in Franklin County, about 2.7 mi E. along the Chicago Great Western RR. from the station at Rowan, Wright County, 150 yards W. of milepost 332, 185 yards E. of overpass of a N.-S. section road crossing, 44.7 ft S. of the S. rail and 1.5 ft N. of a right-of-way fence, a standard USC&GS disk set in the top of a concrete post projecting 0.2 ft stamped "U 28 1934" 1238.501

LINE 3

C.D. Lien, 1974; Book CV-3126

POPEJOY QUAD. - 198 IA.

- 3 39 0.0 EM, 2.7 mi W. along the Chicago Great Western RR. from the station at Hampton, 45 yards NW. of a old section road crossing, 40 yards W. of a right-of-way fence corner, 44.7 ft N. of the N. rail and 2 ft S. of a fence, set on top of a concrete post which projects 0.5 ft above ground, a standard disk stamped "B 29 1934" 1195.296
- 41 1.0 UE B 29 A, 0.9 mi S. along road from tablet, T. 91 and 92 N., R. 20 and 21 W., sec. cors. 1, 6, 31 and 36, a bolt centerline of crossroads 1214.95

LINE 3 (Cont'd)

POPEJOY QUAD. - 198 IA.

FEET

3 44	1.8	Hampton, 1.25 mi S. and 2 mi W. of; T. 91 N., R. 20 and 21 W., near the S. sixteenth cor. between secs. 1 and 6, 32.2 ft E. of; and 0.1 ft lower than centerline of road at fence line E., 229 ft S. and 32.2 ft E. of centerline of road at a drive E., 1.5 ft N. of a telephone pole and 0.5 ft S. of a fence corner set on top of a concrete post which projects 0.6 ft above ground, a standard disk stamped "KLOUSIA R.M. NO. 2 1926"	1267.439
45	1.8	Reference mark No. 1, 311.6 ft E. and 17.5 ft N. of R.M. 2, 17.5 ft S. of a fence corner the SE. cor. of barnyard and 45 ft N. and 31 ft E. of the NE. cor. of a corn crib, set on top of a concrete post which projects 0.6 ft above ground, a standard USC&GS disk stamped "KLOUSIA R.M. NO. 1 1926"	1272.426
46	2.0	UE Klousia A, 0.25 mi S. along from tablet, T. 91 N., R. 20 and 21 W., sec. cors. 1, 6, 7 and 12, on top of a bolt centerline of crossroads	1248.93
48	3.0	UE Klousia B, 1.25 mi S. along rd. from tablet, T. 91 N., R. 20 and 21 W., sec. cors. 7, 12, 13 and 18, on top of bolt centerline of road at crossroads	1241.01
51	4.0	UE Klousia C, 2.25 mi S. along road from tablet, T. 91 N., R. 20 and 21 W., sec. cors. 13, 16, 19 and 24, 29.5 ft N. and 45.9 ft E. of; and 3 ft lower than crossroads, a chiseled square on a concrete culvert	1217.75
55	5.6	Iowa Falls, jct. of U.S. Hwy. 20 and U.S. Hwy. 65, 10 mi N. of; T. 91 N., R. 20 and 21 W., near the quarter cor. between secs. 25 and 30, 29 ft S. and 18.5 ft W. of; and 0.6 ft higher than centerline of bridge and 162.3 ft N. and 12.5 ft W. of centerline of road at a private drive NW. cemented in the SW. cor. of a concrete bridge, a standard tablet stamped "30 CDL 1974"	1160.448
56	5.7	Reference mark, 145 ft S. and 34.6 ft W. of tablet, 17 ft S. and 45.6 ft W. of centerline of bridge and 17.3 ft N. and 45.6 ft W. of centerline of road at private drive NW. a chiseled square on a concrete culvert	1154.59
57	6.1	UE 30 A, 0.45 mi S. along road from tablet, T. 91 N., R. 20 and 21 W., sec. cors. 25, 30, 31 and 36, on top of a bolt centerline of crossroads	1202.92
60	7.1	UE 30 B, 1.45 mi S. along road from tablet, T. 90 and 91 N., R. 20 and 21 W., sec. cors. 1, 6, 31 and 36, 22 ft S. and 44.8 ft W. of; and 4 ft lower than centerline of crossroads, a chiseled square on a concrete culvert	1256.48
61	7.8	UE 30 C, 2.16 mi S. along road from tablet, T. 90 N., R. 20 and 21 W., near the S. sixteenth cor. between secs. 1 and 6 on top of a bolt centerline of road at T-rd. E.	1258.99
63	8.1	Reference mark, 22.4 ft N. and 47.6 ft E. of crossroads and 82.4 ft N. and 97.5 ft E. of tablet; a chiseled square on a concrete culvert	1249.49
64	8.1	Iowa Falls, at the jcts. of U.S. Hwy. 20 and U.S. Hwy. 65, 7.5 mi N. of; T. 90 N., R. 20 and 21 W. sec. cors. 1, 6, 7 and 12, 1 mi W. and 0.25 mi S. of the community of Bradford, 60 ft S. and 58 ft W. of and 3.9 ft lower than crossroads, 3 ft S. of the E. leg of a sign, and 3.6 ft W. of a telephone pole, set on top of a 0.5 in. copper coated rod which is encircled by a 6-in. tile, a standard tablet stamped "31 CDL 1974"	1248.689
66	9.1	UE 31 A, 1 mi S. along road from tablet, T. 90 N., R. 20 and 21 W., sec. cors. 7, 12, 13 and 18, a bolt centerline of road at T-rd. W.	1233.89
69	10.1	UE 31 B, 2 mi S. along road from tablet, T. 90 N., R. 20 and 21 W., sec. cors. 13, 18, 19 and 24, 24 ft S. and 50 ft E. of; and 3.1 ft lower than crossroads a chiseled square on a concrete culvert	1206.51
71	11.1	Iowa Falls at the jct. of U.S. Hwy. 20 and U.S. Hwy. 65, 4.5 mi N. of; T. 90 N., R. 20 and 21 W., sec. cors. 19, 24, 25 and 30, 337.8 ft N. and 24.1 ft E. of, and 2.5 ft lower than crossroads, cemented in the top of a round 5 ft concrete culvert, a standard tablet stamped "32 CDL 1974"	1183.299

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42-093-13
POPEJOY QUADRANGLE
198 - IOWA

LINE 3 (Cont'd)

POPEJOY QUAD. - 198 IA.

FEET

- | | | | | |
|----|------|------|---|----------|
| 3 | 72 | 11.1 | Reference mark, 364.1 ft S. and 5.4 ft E. of tablet and 32.8 ft S. and 29.5 ft E. of crossroads, a chiseled square on a concrete culvert | 1181.98 |
| 75 | 12.1 | | UE 32 A, 1 mi S. along road from tablet, T. 90 N., R. 20 and 21 W. sec. cors. 25, 30, 31 and 36, a bolt in centerline of crossroads | 1176.07 |
| 78 | 13.2 | | UE 32 B, 2 mi S. along road from tablet, T. 89 and 90 N., R. 20 and 21 W. sec. cors. 1, 6, 31 and 36, 39.4 ft N. and 32.8 ft E. of; and 3.9 ft lower than centerline of crossroads, a chiseled square on a concrete culvert | 1152.59 |
| 80 | 14.1 | | Reference mark, 255.8 ft N. and 9.3 ft W. of, tablet, 39.8 ft W. of centerline of road, 0.5 ft SW. of a white witness post, 2.3 ft S. of under ground telephone cable post and 5.9 ft N. and 8.3 ft E. of a cedar tree, on top of a rail used for hwy. right-of-way marker | 1151.91 |
| 4 | 1 | 14.2 | Iowa Falls, at the jct. of U.S. Hwy. 20 and U.S. Hwy. 65, 1.5 mi N. of; and 0.3 mi N. of the Iowa Falls Motel, T. 89 N., R. 20 and 21 W., near sec. cors. 1, 6, 7 and 12, 20.5 ft W. of; and 1.4 ft lower than centerline of road opposite, 50.3 ft S. of a speed zone sign, 1.2 ft S. of a round black and white post and 20 ft N. of U.S. Hwy. 20, milepost 175, cemented in the top of a headwall of a 2 ft box culvert, a standard tablet stamped "33 CDL 1974" | 1151.223 |
| 3 | 15.2 | | UE 33 A, 1 mi S. along hwy. 65 from tablet, a copper nail and washer; in centerline of cross streets crescent drive and oak street | 1100.71 |
| 5 | 15.9 | | At Iowa Falls, Hardin County, at the intersection of Stevens and Estes Streets, 15 ft W. of the W. curb of Stevens Street, 15 ft S. of the S. curb of Estes Street, 17.5 ft N. and 7 ft E. of the NE. corner of the City Hall and 1.1 ft NE. of the base of a monument to the founders of Iowa Falls, a standard USC&GS disk set in the top of a concrete post projecting 1-in. above side walk stamped "IOWA FALLS 1934" | 1113.072 |

X