

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Final Adjustment of 1974

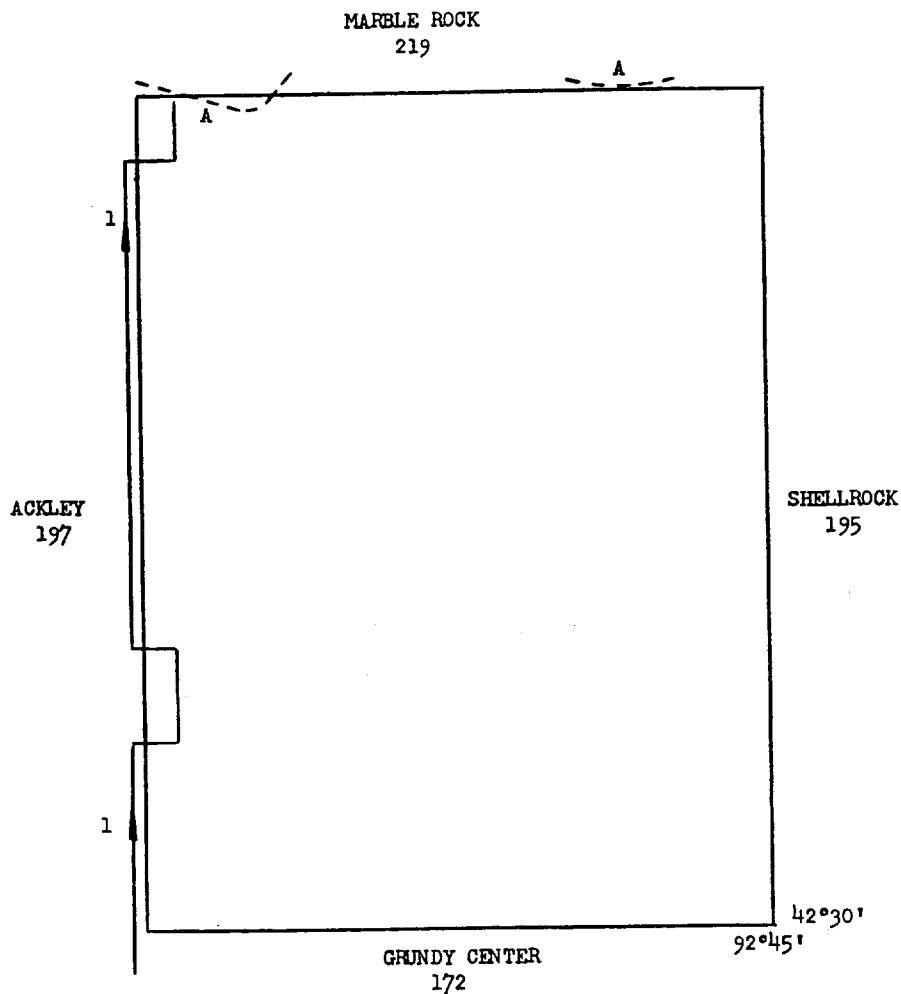
Grundy and Butler Counties

Edition: 1-1-75

PR: ADP/cb

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

42-092-43
PARKERSBURG QUADRANGLE
196 - IOWA
N4230-W9245/15
DIAGRAM NK 15-5
WATERLOO



N.G.S. (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle No. 420924

196 B

LINE 1

FEET

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

ELDORA QUAD. - 173 IA.

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| 23 | 5.2 | UE 2 LAP A, about 0.1 mi W. and 1.0 mi N. of BM, at crossroads, 55 ft N. and 50 ft E. of, a painted square 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 BM, 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 |
| 28 | 6.8 | Reference mark, 357 ft S. of BM, 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 | BM, Cleves, Hardin County, 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 ₄ corner 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 |
| 33 | 7.2 | UE 3 LAP A, about 0.4 mi N. along gravel road from BM, 73 ft N. and 57 ft W. of crossroads, on top of SE. corner of NE. headwall of an erosion control structure, a chiseled square | 1044.06 |
| 37 | 8.3 | UE 3 LAP B, about 1.4 mi N. of tablet, 85 ft N., 21 ft W. and 2.4 ft lower than crossroads, top of W. end of culvert, a painted square | 1046.00 |
| 40 | 9.3 | Reference mark, about 270 ft E. of tablet, center of N. headwall of concrete box culvert, a chiseled square | 1087.87 |
| 41 | 9.4 | Ackley, Hardin County, about 0.5 mi S. and 2.5 mi E. of, T. 89 N., R. 18 W., SE. cor. sec. 6, 73.5 ft N., 46 ft W. and 0.7 ft lower than crossroads, 21 ft NE. of SE. corner of bldg., 29 ft SE. of NE. corner of building, 3.8 ft SW. of well pump, 1 ft W. of USGS witness post, a standard rod supported tablet welded to 0.5-in copper coated rod driven 17.5 ft to refusal set in 6-in. tile filled with gravel and stamped "4 LAP 1974" | 1087.166 |
| 43 | 10.3 | UE 4 LAP A, about 0.9 mi N. of tablet at crossroads, U.S. Hwy. 20 E.-W., county gravel N.-S.; a painted plus | 1080.36 |

PARKERSBURG QUAD. - 196 IA.

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| 46 | 11.3 | UE 4 LAP B, 1 mi N. and 1 mi E. from BM, 15.5 ft N. and 52.4 ft E. of crossroads, center of N. headwall of concrete box culvert, a chiseled square | 1062.88 |
| 48 | 12.0 | Reference mark, 20 ft S. of BM, 16.5 ft W. of centerline of road, top of W. end of 18-in. steel culvert, a painted square | 1058.41 |
| 50 | 12.0 | Ackley, Hardin County, about 3.5 mi E. and 0.75 mi N. of in Butler County, T. 90 N., R. 18 W., NE. cor. SE ₄ -NE ₄ sec. 32, 9 ft S., 41 ft W. and 3.9 ft higher than road at entrance W.; 13 ft NNW. of power pole, 2.8 ft W. of fence corner post, 3.8 ft W. of USGS witness post, a standard disk welded on copper coated rod driven 9 ft to refusal, set in 6-in. tile filled with gravel and stamped "5 LAP 1974" | 1064.914 |
| 51 | 12.3 | UE 5 LAP A, about 0.2 mi N. along gravel road from BM; at RR. crossing, head of bolt, with painted square | 1028.51 |
| 55 | 13.3 | UE 5 LAP B, about 1.25 mi N. along gravel road from BM, 20 ft N., 20 ft E. and 4.9 ft lower than crossroads, NE. end of 24-in. steel culvert, a painted square | 1056.76 |

ACKLEY QUAD. - 197 IA.

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| 59 | 14.3 | Reference mark, 48 ft N., 9 ft E. and 5.2 ft lower than BM, top of N. end of 4 ft concrete pipe, a chiseled square | 1058.55 |
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LINE 1 (Cont'd)

ACKLEY QUAD. - 197 IA.

FEET

2	61	14.3	BM, Austinville, Butler County, about 2.5 mi W. of; T. 90 N., R. 18 W., near NW. cor. sec. 29, 118 ft E. of and 6.2 ft lower than T-rd. N., (offset crossroads), 17 ft S. centerline of road and drain, 0.8 ft N. of S. edge and 0.6 ft E. of W. end of concrete headwall, a standard tablet stamped "6 LAP 1974"	1063.738
	64	15.3	UE 6 LAP A, about 1 mi N. along gravel from BM; at field entrance E., centerline of road at centerline entrance E.	1021.33
	67	16.3	UE 6 LAP B, about 2 mi N. of BM along gravel road, centerline of crossroads	1067.98
	69	16.8	Reference mark, about 345 ft S. of BM at road at drive W., top of N. end of 18-in. steel culvert; a painted square	1065.68
	71	16.9	Austinville, Butler County, about 2.5 mi W. and 2.6 mi N. of, about 0.1 mi N. of E ₄ cor. sec. 7, T. 90 N., R. 18 W.; 12 ft W. and 0.9 ft higher than centerline of road at drain, 9.2 ft above the drain, in center of W. headwall of concrete box culvert, a standard disk stamped "7 LAP 1974"	1058.885
	74	17.4	UE 7 LAP A, about 0.46 mi N. of BM along gravel road; 150 ft N. and ft W. of crossroads, top of W. end of concrete culvert, a chiseled square	1082.77
	77	18.4	UE 7 LAP B, about 1.6 mi N. of BM along gravel road; about 670 ft N. of crossroads, top of W. end of steel culvert, a chiseled plus and painted square	1106.63
	80	19.3	Reference mark, about 370 ft W. of BM 8 LAP 1974; 18.5 ft N. and 60 ft W., and 4.6 ft lower than crossroads, a chiseled square on top of N. of concrete culvert	1073.65
3	1	19.4	BM, Austinville, Butler County, 5 mi N. and 2.5 mi W. of; near SW. cor. sec. 29, T. 19 N., R. 18 W., 34 ft N. & 310 ft E. of crossroads, 2 ft W. of T-fence N., 1 ft WSW. of power pole, and 1 ft N. of USGS witness post, a standard rod supported tablet welded to 0.5 in copper coated rod driven 25 ft to refusal set in 6-in. concrete drain tile filled with gravel and stamped "8 LAP 1974"	1080.910
	6	20.4	UE 8 LAP A, about 0.9 mi N. along gravel road from BM, 8.5 ft W. of centerline of road at N. end of bridge, 10.5 ft above water, on top of head of bridge bolt, a chiseled plus	1056.61
	9	21.4	UE 8 LAP B, about 2 mi N. of BM, 18.5 ft W. of centerline of culvert on top of W. end of 3 ft concrete culvert, a chiseled square	1035.45
	15	22.5	BM, Dumont, Butler County, about 1.75 mi W., 3.5 mi S. of; near SE. corner of sec. 7, T. 91 N., R. 18 W., 23 ft N., 34 ft W., 4.6 ft higher than, of T-rd. E., 0.5 ft E. of W. right-of-way fence, 1.5 ft S. of power pole, 1.5 ft N. of USGS witness post, a standard rod supported tablet, welded to 0.5 in. copper coated steel rod driven 10 ft to refusal, set in 6-in. concrete drain tile filled with gravel and stamped "9 LAP 1974"	1013.666
	16	22.5	Reference mark, 87 ft SE. of BM, 35 ft S., 35 ft E. and 2.3 ft lower than T-rd. E., 0.7 ft W. of corner fence post, 1.5 ft E. of 2.5-in. iron pipe, top of rebar projecting 1-in.	1006.79
	19	23.6	UE 9 LAP A, about 1 mi N. of BM, near SW. cor. sec. 5, T. 91 N., R. 18 W., 30 ft N., 30 ft E. of T-rd. E.; top of S. edge of 2.5 -in. iron pipe, a chiseled plus	1009.43
	21	23.9	UE 9 LAP B, about 1.3 mi N. along gravel road from BM, at bridge, head of bolt on NW. corner of bridge, stamped "UE"	994.56
	22	24.6	UE 9 LAP C, about 2 mi N. along gravel road from BM, centerline of T-rd. E., top of rock	1018.51

LINE 1 (Cont'd)

PARKERSBURG QUAD. - 196 IA.

FEET

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| 3 | 23 | 24.9 | Reference mark, 24.8 ft N. of BM, a chiseled square center of N. head of concrete box culvert | 1008.39 |
| 24 | 24.9 | | BM, Dumont, Butler County, about 1.5 mi S. and about 1.4 mi W. of; T. 91 N., R. 18 W., about 0.3 mi E. of NW. corner of sec. 5; 12.4 ft S. and 0.8 ft below centerline of road at drain, set in centerline of S. headwall of concrete box culvert, a standard tablet stamped "10 LAP 1974" | 1007.526 |
| 26 | 25.6 | | UE 10 LAP A, about 0.7 mi along gravel road from BM, centerline of crossroads | 1037.83 |
| 29 | 26.6 | | UE 10 LAP B, about 0.7 mi E. and 1.0 mi N. of BM, along gravel road at jct. State Hwy. 3, 44 ft S. and 27 ft W. and 2.7 ft lower than crossroads; top of SE. end of concrete head-wall, a chiseled square | 979.44 |

MARBLE ROCK QUAD. - 219 IA.

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| 33 | 27.3 | Dumont, Butler County, 0.65 mi W. along Chicago and North Western RR. (formerly Chicago Great Western RR.) from jct. in; about 110 yards E. of culvert 306, 53 ft NE. of field road crossing, 43.7 ft N. of N. rail, 16 ft E. of right-of-way fence corner, 1 ft W. of NGS witness post, a standard USC&GS tablet set in concrete post projecting 5-in. and stamped "K 29 1934" | 990.480 |
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